

Remedial Investigation/Interim Remedial Measures/Alternatives Analysis Work Plan

1155 Main Street Site
Buffalo, New York

January 2019

0481-019-001

Prepared For:

Main & Dodge LLC



Prepared By:



**WORK PLAN
FOR
REMEDIAL INVESTIGATION/INTERIM
REMEDIAL MEASURES/ALTERNATIVES
ANALYSIS**

**1155 MAIN STREET SITE
BUFFALO, NEW YORK**

January 2019

0481-019-001

Prepared for:

Main & Dodge LLC

Prepared by:



In Association With:



Certification

I, Thomas H. Forbes, certify that I am currently a NYS registered professional engineer and that this January 2019 Remedial Investigation/Interim Remedial Measures/Alternatives Analysis (RI/IRM/AA) Work Plan for the 1155 Main Street Site was prepared in accordance with applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

2-26-19

Date



RI/IRM/AA WORK PLAN

1155 Main Street Site Buffalo, New York Table of Contents

1.0	INTRODUCTION.....	1
1.1	Site Background.....	1
1.2	Project Objectives.....	2
1.3	Project Organization and Responsibilities.....	3
2.0	SITE DESCRIPTION.....	5
2.1	General.....	5
2.2	Site Topography and Drainage.....	5
2.3	Geology and Hydrogeology.....	5
2.3.1	Overburden.....	5
2.3.2	Bedrock.....	6
2.3.3	Hydrogeology.....	6
2.4	Climate.....	6
2.5	Population and Land Use.....	7
2.6	Utilities and Groundwater Use.....	7
2.7	Wetlands and Floodplains.....	7
2.8	Previous Investigations.....	7
2.8.1	January 2014 – Phase I Environmental Site Assessment.....	8
2.8.2	March 2014 – Phase II Environmental Site Assessment.....	8
2.8.3	September 2018 – Phase II Environmental Investigation.....	9
2.9	Primary Constituents of Potential Concern (COPCs).....	9
3.0	REMEDIAL INVESTIGATION SCOPE OF WORK.....	10
3.1	Preparation Activities.....	10
3.1.1	Utility Clearance.....	10
3.2	RI Soil/Fill Investigation.....	11
3.2.1	Surface Soil/Fill Investigation.....	11
3.2.2	Subsurface Soil/Fill Investigation.....	11
3.2.3	Soil/Fill Sample Collection and Analysis.....	12
3.3	Groundwater Investigation.....	12
3.3.1	Monitoring Well Installation.....	12
3.3.2	Well Development.....	13
3.3.3	Groundwater Sample Collection.....	14
3.3.4	Groundwater Sample Analyses.....	15
3.4	Field Specific Quality Assurance/Quality Control Sampling.....	16
3.5	Decontamination and Investigation-Derived Waste Management.....	16
3.6	Site Mapping.....	17
4.0	INTERIM REMEDIAL MEASURES.....	19
4.1	Utility Clearance.....	20
4.2	Waste Characterization.....	20
4.3	Removal of Impacted Soil/Fill.....	20
4.4	Excavation Confirmation Sampling.....	21

RI/IRM/AA WORK PLAN

1155 Main Street Site Buffalo, New York Table of Contents

4.5	Groundwater Management.....	21
4.6	Excavation Backfill	22
5.0	QUALITY ASSURANCE PROJECT PLAN.....	23
5.1	Scope of the QAPP	23
5.2	QAPP Organization and Responsibility	24
5.2.1	Volunteer	24
5.2.2	Environmental Consultant.....	25
5.3	Quality Assurance (QA) Responsibilities	27
5.4	Field Responsibilities	27
5.5	Quality Assurance Objectives for Measurement Data	27
5.6	Level of QC Effort for Sample Parameters	28
5.7	Sampling and Analysis Plan	29
5.7.1	Custody Procedures	29
5.7.2	Sample Storage.....	30
5.7.3	Sample Custody	30
5.7.4	Sample Tracking	31
5.7.5	Split Sampling	31
5.8	Calibration Procedures and Frequency	32
5.8.1	Field Instrument Calibration	32
5.9	Analytical Procedures	32
5.9.1	Field Analytical Procedures	32
5.10	Data Usability Evaluation	32
5.10.1	Procedures Used to Evaluate Field Data Usability.....	32
5.10.2	Procedures Used to Evaluate Laboratory Data Usability	33
6.0	INVESTIGATION SUPPORT DOCUMENTS.....	34
6.1	Health and Safety Protocols	34
6.1.1	Community Air Monitoring.....	34
6.2	Citizen Participation Activities	35
7.0	REPORTING AND SCHEDULE.....	36
7.1	Remedial Investigation Reporting	36
7.2	IRM Reporting.....	37
7.3	Alternatives Analysis Report	38
8.0	PROJECT SCHEDULE.....	39
9.0	REFERENCES	40

RI/IRM/AA WORK PLAN

1155 Main Street Site
Buffalo, New York

LIST OF TABLES

Table 1	Phase II Analytical Soil/Fill Sample Results
Table 2	Summary of Sampling and Analytical Program
Table 3	Criteria for Use of Off-Site Soil
Table 4	Summary of Field Operating Procedures
Table 5	Sample Container, Volume, Preservative & Holding Time Requirements

LIST OF FIGURES

Figure 1	Site Location and Vicinity Map
Figure 2	Site Plan (Aerial)
Figure 3	Investigation Locations & Areas of Concern
Figure 4	Remedial Investigation Locations
Figure 5	Preliminary Project Schedule

LIST OF APPENDICES

Appendix A	Resumes of Project Personnel
Appendix B	Previous Investigations
Appendix C	Project Documentation Forms
Appendix D	Health and Safety Plan (HASP) including CAMP
Appendix E	Field Operating Procedure (FOPs)

1.0 INTRODUCTION

This document presents the proposed scope of work and implementation procedures for completion of a Remedial Investigation (RI) and planned Interim Remedial Measures (IRM) at the 1155 Main Street Site (Site), located at 1155 Main Street, Buffalo, New York (see Figures 1 and 2).

The Applicant, Main & Dodge LLC, (M&D) acting as a Volunteer has elected to pursue cleanup and redevelopment of the Site under the New York State Brownfield Cleanup Program (BCP) and has submitted a BCP Application to the New York State Department of Environmental Conservation (NYSDEC) in conjunction with this work plan. The planned redevelopment is to develop the Site with a 5-story mixed-use building with residential (student housing) use on floors 1 through 5 and minor commercial space on the 1st floor. The RI/IRM will be completed by Benchmark Environmental Engineering & Science, PLLC (Benchmark) in association with TurnKey Environmental Restoration, LLC (TurnKey), on behalf of the Applicant. The work will be completed in accordance with NYSDEC DER-10 guidelines (Ref. 1).

1.1 Site Background

The Site totals ± 1.55 acres, at the southeast corner of Main Street and Dodge Street, in the City of Buffalo, Erie County, New York and formerly consisted of three (3) parcels. A request was made to the City of Buffalo to combine the three (3) parcels addressed 1159 Main Street (± 1.25 acres), 11 Dodge Street (± 0.19 -acres), and 19 Dodge Street (± 0.11 -acres) parcels into a single separate legal tax parcel addressed as 1155 Main Street. The City of Buffalo Department of Assessment & Taxation issued a Pre-Approval for Combination of Parcel on September 25, 2018, which has also received Planning Board approval. The combined 1155 Main Street parcel will appear on the City of Buffalo's preliminary tax roll on December 1, 2018.

The Site consists of asphalt, crushed stone and vegetative surface cover. The northern portion of the Site vegetated and vacant, and the central and southern portion is crushed stone and asphalt and used for parking.

The Site has a long history of being utilized for various residential and commercial uses since the late 1800s including a gasoline station, an auto service station, used auto sales and motel.

Previous environmental investigations completed at the Site have identified elevated levels of semi-volatile organic compounds (SVOCs) and metals at concentrations exceeding applicable regulatory guidelines, specifically Part 375 Restricted-Residential Soil Cleanup Objectives (RRSCOs). Details of the previous investigations are presented in Section 2.8 below.

1.2 Project Objectives

For sites entering the BCP at the point of investigation, NYSDEC requires completion of a RI. However, due to the timing of the project schedule, an IRM component has been included in this work plan to address the known contamination and that identified during the RI. The primary objectives of this RI/IRM are to:

- Collect additional on-Site media samples, under appropriate quality assurance/quality control criteria, to better delineate the nature and extent of contamination; and determine if contamination has and/or has potential to migrate off-site
- Determine if the concentrations of constituents of concern in soil, groundwater, and/or soil gas pose potential unacceptable risks via on-site and off-site qualitative exposure assessment in accordance with DER-10 Appendix 3b; and,
- Provide the data needed to evaluate potential remedial measures and determine appropriate actions to address potential significant risks.

As part of the RI/IRM, sampling data will be used to evaluate whether remedial alternatives can meet the cleanup objectives. The intended uses of these data dictate the confidence levels. Two (2) data confidence levels will be employed in the RI: screening level data and definitive level data. In general, screening level confidence will apply to field measurements, including PID measurements, groundwater elevation measurements, and field analyses (i.e., pH, temperature, dissolved oxygen, specific conductivity, and turbidity). Definitive level confidence will apply to samples for chemical analysis. The applicability of these levels of data will be further specified in the Quality Assurance Project Plan (QAPP) in Section 5.0. Sampling and analytical acceptance and performance criteria such as precision, accuracy, representativeness, comparability, completeness, and sensitivity, are defined in the QAPP.

An IRM will be completed to immediately address known environmental impacts at the Site and those identified during the RI. An IRM will quickly mitigate risks to public health and the environment. In general, IRM activities may include: excavation of impacted soil/fill; removal of above or underground storage tanks, if identified, along with any associated impacted soil/fill; and, off-Site disposal of impacted soil/fill. This Work Plan presents the scope of anticipated IRM activities based on current information and may be modified, subject to NYSDEC approval, immediately after the RI fieldwork is completed.

The Volunteer's intent is for the planned IRM to substantially constitute the final remedy for those areas of the Site, and as such will strive to achieve 6NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives (USCOs). The final remedial objectives for the Site will be presented in the Alternatives Analysis Report (AAR) based on the findings of the RI and IRM(s).

Details of anticipated IRM activities are included in Section 4.0.

1.3 Project Organization and Responsibilities

The Applicant, M&D, has applied to the New York State BCP as a non-responsible party (volunteer) per ECL§27-1405. Benchmark, in association with TurnKey, herein referred to jointly as Benchmark-TurnKey, will complete the remedial investigation and manage the brownfield cleanup on behalf of the Applicant. Benchmark-TurnKey will also be responsible to verify and certify that the brownfield remedial action was completed in conformance with the approved IRM work plan and NYSDEC DER-10 requirements. The NYSDEC Division of Environmental Remediation (Region 9), in consultation with the New York State Department of Health (NYSDOH) shall monitor the remedial investigation and remedial actions to be performed in accordance with the Brownfield Cleanup Agreement, the approved RI/IRM Work Plan, and NYSDEC DER-10 guidance (May 2010) by Benchmark-TurnKey.

Benchmark-TurnKey personnel as well as subcontractors for this project have not been determined at this time. Once pricing is secured, subcontract agreements are in place, and a field schedule determined, resumes for the selected project team will be provided to the Department, if requested. Benchmark-TurnKey's Project Manager's résumé, however, has been included in Appendix A.

The table below presents the planned project team.

Company	Role	Name	Contact Information
Main & Dodge LLC	Applicant Contact	Dr. Fadi Dahger	(716) 217-9105
Benchmark/TurnKey	Project Officer	Thomas H. Forbes, P.E.	(716) 856-0599
Benchmark/TurnKey	Project Manager	Christopher Boron	(716) 856-0635
TBD	Analytical Testing	TBD	TBD
TBD	Drilling Services	TBD	TBD
TBD	Excavation Services	TBD	TBD
Data Validation Services	Data Validation	Judy Harry	518-251-4429

2.0 SITE DESCRIPTION

2.1 General

The Site is located in a highly developed mixed use commercial and residential area, being bound by Dodge Street to the north, Main Street to the west, commercial use to the south, and vacant and manufacturing use to the east. The Site is currently a vacant parking lot.

2.2 Site Topography and Drainage

The Site is generally flat lying with topographic relief sloping away from the central portion of the Site to the north, south, east and west. The surface of the Site is covered with asphalt, crushed stone, and vegetation. Precipitation (i.e., rain or melting snow) which does not infiltrate the ground moves to the storm drains in the roadways via overland flow. Surface and shallow groundwater flow are likely affected by various cycles of development and filling, as well as utilities and foundations.

2.3 Geology and Hydrogeology

2.3.1 Overburden

The Site is located within the Lake Erie-Niagara River major drainage basin, which is typified by little topographic relief that gently slope westward towards Lake Erie and the Niagara River, except in the immediate vicinity of major drainage ways. According to the United States Department of Agriculture (USDA) Web soil survey (Ref. 2), Site soils are characterized as Urban Land (Ud) and Urban Land-Colonie Complex (UnB). Soils within the City of Buffalo are characterized as urban land (Ud) with surface covered by asphalt, concrete, buildings, or other impervious structures, typical of an urban environment. The Urban Land-Colonie complex is described as gently sloping areas of urban land and sandy, somewhat excessively drained to well drained Colonie soils. Some areas of the complex have been graded, cut, filled, or otherwise disturbed during urbanization.

The presence of overburden fill material is widespread and common throughout the City of Buffalo. Previous investigations have identified the Site geology below the surface cover (asphalt, crushed stone, or vegetative), as fill ranging in thickness from approximately

1.5 to 8 fbs, underlain by native soils consisting of silty fine sands and silty clay. Bedrock was not reencountered during the previous investigations.

The geology of the Site will be further investigated as part of the RI activities.

2.3.2 *Bedrock*

Based on the bedrock geologic map of Erie County, the Site is situated over the Onondaga Formation of the Middle Devonian Series. The Onondaga Formation is comprised of a varying texture from coarse to very finely crystalline with a dark gray to tan color and chert and fossils within. The unit has an approximate thickness of 110 to 160 feet. Structurally, the bedrock formations strike in an east-west direction and exhibit a regional dip that approximates 40 feet per mile (0.4 degrees) toward the south and southwest. Depth to and type of bedrock below the Site is assumed to be greater than 50 feet and Onondaga limestone, respectively, and will be confirmed by investigation activities.

2.3.3 *Hydrogeology*

The Site is located within the Lake Erie-Niagara River major drainage basin, which is typified by little topographic relief, except in the immediate vicinity of major drainage ways. In the Erie-Niagara Basin, the major areas of groundwater are within coarser overburden deposits and limestone and shale bedrock. Groundwater flow in the area of the Site is likely northwesterly, towards the Niagara River and Lake Erie, which are located west and flow to the north. Local groundwater flow is likely influenced by subsurface features, such as utilities, and localized subgrade development conditions. Localized on-Site groundwater flow will be investigated during the RI, if encountered in overburden soil.

2.4 Climate

The City of Buffalo has a cold continental climate, with moisture from Lake Erie causing increased precipitation. Average annual precipitation is reportedly 40.5 inches and snowfall is 94 inches. Average temperature is 48.3 degrees Fahrenheit. The ground and lakes typically remain frozen from December to March. Winds are generally from the southwest (USClimateData.com).

2.5 Population and Land Use

The City of Buffalo, encompassing 40.38 square miles, has a population of 261,310 (2010 US Census Bureau). The Site is located in Census Tract 63.02, in the area of the city zoned for commercial/residential use.

The current zoning for the Site is N-1C: Mixed-Use Core (Mixed-use, mid-rise developments at edges of downtown).

The surrounding land-use is mixed use, including commercial, industrial, community services, and residential. Properties adjacent to the Site primarily include commercial, industrial, and community services.

2.6 Utilities and Groundwater Use

The subject property has access to all major public and private utilities, including potable water (Buffalo Water Authority), sanitary and storm sewers (Buffalo Sewer Authority), electric (National Grid), and natural gas (National Fuel).

Groundwater at the Site is assigned Class “GA” by 6NYCRR Part 701.15. Currently, there are no deed restrictions on the use of groundwater at the Site; however, the City of the Buffalo does not allow the use of groundwater within the City limit and there are no groundwater supply wells on the property. Regionally, groundwater in the area has not been developed for industrial, agriculture, or public supply purposes. Municipal potable water service is provided on-site and areas surrounding the Site.

2.7 Wetlands and Floodplains

There are no State or Federal wetlands or floodplains located on Site or adjacent to the Site.

2.8 Previous Investigations

A summary of the investigations that have occurred at the Site are presented below. Pertinent information is attached in Appendix B.

2.8.1 *January 2014 – Phase I Environmental Site Assessment*

Empire Geo-Services, Inc. completed a Phase I Environmental Site Assessment on the former 1159 Main Street portion of the Site in January 2014. Findings of the Phase I investigation are detailed below:

- A gasoline filling station existed on the Site from approximately 1924 to approximately 1947. Three (3) UST's were removed in June 1962 but there is no evidence to suggest that soils in the UST grave were not contaminated, or information on the condition of the USTs. This contamination is considered a Recognized Environmental Concern (REC) for the Site.
- The adjacent site is Osmos, Inc, an industrial manufacturing facility, and is a State Hazardous Waste Site (SHWS). This is due to the presence of contaminants, including creosote and #2 fuel oil, in the groundwater and soil due to a UST leak in 1989. The site has been remediated to necessary standards, and groundwater monitoring is ongoing. There was also no off-site migration of contaminants from the leak. Therefore, this is classified as a Controlled Recognized Environmental Concern (CREC), but it does not present a REC to the current Site due to effective Engineering Controls.
- No Historical Recognized Environmental Concerns (HRECs) were discovered.

2.8.2 *March 2014 – Phase II Environmental Site Assessment*

Empire Geo-Services, Inc. completed a Phase II Environmental Site Assessment on the former 1159 Main Street portion of the Site in March 2014. Findings of the Phase II investigation are detailed below:

- Two (2) soil samples from investigation locations, DP-3 and DP-7, were submitted for laboratory testing. One (1) sample was from the western portion of the property near the location of the former USTs and one (1) sample was from the western portion of the property near the Osmose property.
- Samples were analyzed for VOCs and SVOCs via Method 8260 and Method 8270, respectively, for NYSDEC CP-51 list parameters. Both samples were collected from 8 to 12 feet below ground surface and appear to be native soil.
- No VOCs or SVOCs were detected above the Unrestricted Soil Cleanup Objectives (USCOs) in the two (2) samples submitted for analysis.
- Fill material was identified to depths ranging from ground surface to 3 to 8 feet below ground surface (fbgs).

2.8.3 September 2018 – Phase II Environmental Investigation

TurnKey completed a Phase II Environmental Investigation on the Site in October 2018. Findings of the Phase II investigation are detailed below:

- The Site, located at the southeast corner of Main and Dodge Streets, is in a mixed-use area in the Masten Park section of the City of Buffalo.
- SVOCs were detected at or above their respective Part 375 RRSCOs (i.e., the applicable SCOs for the intended Site reuse) at six (6) investigation locations, SB-4, SB-10, SS-3, TP-4, TP-14, and TP-18. Benzo(a)anthracene, benzo(a) pyrene, benzo(a) fluoranthene, dibenzo(a,h)anthracene, and Ideno(1,2,3-cd)pyrene were also detected at one (1) location (TP-18) in exceedance of their Industrial SCOs (ISCOs).
- Metal analytes were detected above their respective RRSCOs at four (4) investigation locations, TP-4, TP-15, TP-16, and TP-18.
 - Barium exceeded its CSCO at one (1) location (TP-15).
 - Lead exceeded its CSCO at three (3) locations (TP-15, TP-16, and TP-18).
 - Nickel exceeded its CSCO at one (1) location (TP-4).

A summary of previous investigation analytical results, described above, is provided on the Table 1 and Figure 3.

2.9 Primary Constituents of Potential Concern (COPCs)

Based on findings to date, the Constituents of Potential Concern (COPCs) are presented by media below:

- **Soil:** SVOCs and metals

3.0 REMEDIAL INVESTIGATION SCOPE OF WORK

The RI scope of work is focused on defining the nature and extent of contamination on-site and potential for off-site migration, identifying the source of contamination, defining chemical constituent migration pathways, qualitatively assessing human health and ecological risks (if necessary), and obtaining data of sufficient quantity and quality to perform the alternatives analysis report.

Field team personnel will collect environmental samples in accordance with the rationale and protocols described in the QAPP in Section 5. USEPA and NYSDEC-approved sample collection and handling techniques will be used. Samples for chemical analysis will be analyzed in accordance with USEPA SW-846 methodology with an equivalent Category B deliverable package to meet the definitive-level data requirements. Analytical results will be evaluated by a third-party data validation expert in accordance with provisions described in the QAPP. Data submittals will be provided to the NYSDEC in accordance with the most current electronic data deliverables (EDD) protocols.

During intrusive outdoor RI activities, a Community Air Monitoring Plan (CAMP) will be followed. The CAMP is consistent with the requirements for community air monitoring at remediation sites as established by the New York State Department of Health (NYSDOH) and NYSDEC. Accordingly, it follows procedures and practices outlined under NYSDEC's DER-10 (May 2010) Appendix 1A (NYSDOH's Generic Community Air Monitoring Plan) and Appendix 1B (Fugitive Dust and Particulate Monitoring).

The investigation approach is described below. The proposed RI sample locations are presented on Figure 4 and the planned sampling and analytical program is identified on Table 2.

3.1 Preparation Activities

3.1.1 *Utility Clearance*

Prior to any intrusive activities, Dig Safely New York (Call 811) will be contacted by the site contractor a minimum of three (3) business days in advance of the work and informed of the intent to perform excavation work at the Site. If underground utilities are present on the property and are anticipated to interfere with intrusive activities, the Applicant and the NYSDEC will be contacted to discuss mitigating measures.

3.2 RI Soil/Fill Investigation

A soil/fill investigation will be completed across the Site to further assess whether additional impact exists beyond the limits of, and to assess the extent of, known historical contamination. The subsurface soil/fill investigation will include the completion of test pits to allow for characterization of subsurface soil/fill material and sample collection. The proposed RI sample locations are presented on Figure 4 and the sampling and analytical program is presented on Table 2.

3.2.1 *Surface Soil/Fill Investigation*

No surface soil/fill sampling is proposed as part of the RI. Based on the historic investigations, the soil/fill present above the native soil is impacted and will be removed during the IRM to achieve the planned cleanup objectives (Unrestricted Track 1 cleanup). Additionally, the majority of the Site will be covered with building footprint and/or asphalt parking lot and the limited greenspace/vegetative areas will be constructed during redevelopment.

3.2.2 *Subsurface Soil/Fill Investigation*

Thirty (30) subsurface soil/fill exploratory locations will be completed across the Site using a 50-foot by 50-foot grid system as shown on Figure 4. One (1) test pit will be completed within each 50-foot by 50-foot grid across the Site. These investigation locations, identified as TP-19 through TP-48, will be completed to depths up to 5 feet into native soil, with up to 10 of the test pits extending 15 feet below ground surface (fbgs) or refusal, whichever comes first.

Soil/fill samples retrieved from the test pits will be field screened for the presence of volatile organics using a calibrated photoionization detector (PID) with a 10.6 eV lamp, as a procedure for ensuring the health and safety of personnel at the Site, and to identify potential impacts in soil samples for laboratory analysis. Upon reaching the completion depth of each location, field visual/olfactory and PID results will be reviewed. If significant field evidence of impact is encountered, test pits will be expanded, or supplemental step-back test pits will be completed in an attempt to delineate the extent of the impacts.

3.2.3 Soil/Fill Sample Collection and Analysis

Table 2 summarizes the proposed sample collection and analytical program. The soil/fill samples will be collected to supplement existing Site data and to identify additional impacted areas (i.e., greatest PID scan result and/or evidence of visual/olfactory impacts). Ten (10) samples are proposed to be collected from the fill material present across the Site to further characterize the fill material. Thirty (30) soil samples are proposed to be collected from the upper native soil present below the fill material to assist with delineating the impacted soil/fill volumes that will be removed in their entirety as part of the planned IRM. SVOCs and metals have been identified as the compounds of concern based on the previous investigation and will be the focus of the delineation sampling/post-excavation sampling unless other parameters are identified as a concern during the RI.

As an IRM is proposed to be completed as part of this work plan, waste characterization samples will also be collected for analysis during the test pit activities for landfill waste characterization requirements.

En-core samplers will be used to collect RI VOC soil samples as described in Method 5035. Remaining samples will be collected and placed into pre-cleaned laboratory provided sample bottles, cooled to 4°C in the field, and transported under chain-of-custody command to a NYSDOH Environmental Laboratory Approval Program (ELAP)-certified analytical laboratory. Soil samples will be analyzed in accordance with the Sampling and Analysis Plan presented on Table 2.

3.3 Groundwater Investigation

Four (4) groundwater monitoring wells, identified as MW-1 through MW-4, will be advanced at the Site to assess groundwater quality data and flow direction. The groundwater wells will be installed into the upper most water bearing zone. Proposed groundwater monitoring well locations are identified on Figure 4. Monitoring well installation, well development, and groundwater sample collection details are discussed in the following sections.

3.3.1 Monitoring Well Installation

The monitoring wells will be installed following the advancement of four (4) soil borings at the locations of MW-1 through RI-MW-4 with a rotary drill rig. Each well boring will be advanced to a target minimum depth of five (5) feet below the first encountered

groundwater. In the absence of groundwater contact during boring advancement in overburden soil, the soil boring will be advanced into bedrock, if necessary. All non-dedicated drilling tools and equipment will be decontaminated between boring locations using potable tap water and a phosphate-free detergent (e.g., Alconox).

Each well will be constructed with two (2)-inch diameter Schedule (SCH) 40 PVC with a minimum five (5)-foot flush joint SCH 40 PVC 0.010-inch machine-slotted well screen. Each well screen and attached riser will be placed at the bottom of each borehole and a silica sand filter pack (size #0) will be installed from the base of the well to a maximum of two (2)-feet above the top of the screen. A bentonite chip seal will then be installed and allowed to hydrate sufficiently to mitigate the potential for downhole grout contamination. The newly installed monitoring wells will be completed with keyed-alike locks, a lockable J-plug, and a steel flush mounted road box.

Drill cuttings will be redeposited on-Site unless gross contamination (i.e., visible product) is encountered, in which case they will be placed in sealed NYSDOT-approved drums and labeled for subsequent characterization and disposal, if necessary.

3.3.2 Well Development

After installation, but not within 24 hours, newly installed monitoring wells will be developed in accordance with Benchmark-TurnKey and NYSDEC protocols. Development of the monitoring wells will be accomplished with dedicated disposable polyethylene bailers via surge and purge methodology. Field parameters including pH, temperature, turbidity, dissolved oxygen, oxidation-reduction potential (ORP) and specific conductance will be measured periodically (i.e., every well volume or as necessary) during development. Field measurements will continue until they became relatively stable. Stability will be defined as variation between measurements of approximately 10 percent or less with no overall upward or downward trend in the measurements. A minimum of three (3) well volumes will be evacuated from each monitoring well. Development water from the monitoring wells will be discharged to the ground surface in the vicinity of the monitoring well being developed. If impacts are noted during development including odors, sheen, light non-aqueous phase liquid (LNAPL), dense non-aqueous phase liquid (DNAPL), well development water will be containerized in NYSDOT-approved drums and labeled per monitoring well location. Based on the RI groundwater analytical results, it will be determined, in consultation with the

Department, if the containerized development water is acceptable for surface discharge or requires subsequent on-Site treatment and/or off-Site disposal.

3.3.3 Groundwater Sample Collection

Prior to sample collection, static water levels will be measured and recorded from all on-Site monitoring wells to facilitate the preparation of a Site-wide isopotential map. Following water level measurement, field personnel will purge and sample monitoring wells using a submersible pump with dedicated pump tubing following low-flow/minimal drawdown purge and sample collection procedures. In the event of pump failure or the saturated unit does not permit the proper implementation of low-flow sampling, a dedicated polyethylene bailer will be used to purge and sample the well. Prior to sample collection via low-flow methodology, groundwater will be evacuated from each well at a low-flow rate (typically less than 0.1 L/min) while maintaining a generally consistent water level. Field measurements for pH, temperature, turbidity, DO, ORP, specific conductance and water level, as well as visual and olfactory field observations will be periodically recorded and monitored for stabilization. Low-flow purging will be considered complete when field parameters stabilize and when turbidity measurements fall below 50 Nephelometric Turbidity Units (NTU) or become stable above 50 NTU regardless of volume purged. Purging via disposable bailer, if necessary, will be considered complete following the removal of three well volumes and field parameter stabilization or to dryness, whichever occurs first. In general, stability is defined as variation between field measurements of 10 percent or less and no overall upward or downward trend in the measurements. Upon stabilization of field parameters, groundwater samples will be collected and analyzed as discussed below.

Sample collection methods that will be implemented during the RI include:

- **Submersible Pump with Dedicated Pump Tubing**

All monitoring wells will be purged and sampled using a non-dedicated submersible pump and dedicated pump tubing following low-flow (minimal drawdown) purge and sample collection procedures, as described above. Non-dedicated pumps will require decontamination prior to use at each well location and the collection of an equipment blank.

- **Polyethylene Disposable Bailer**

If low flow is not feasible (e.g., due to depth to groundwater), wells of any depth (up to 100 fbs) may be purged and sampled using a polyethylene disposable bailer via direct grab. In general, a bottom filling dedicated polyethylene bailer is attached to a length of dedicated hollow-braid polypropylene rope and lowered into the well smoothly and slowly as not to agitate the groundwater or damage the well. Purging continues until a predetermined volume of water has been removed (typically three well volumes) or to dryness. Measurements for pH, temperature, specific conductance, dissolved oxygen and turbidity are recorded following removal of each well volume. The well is purged until the readings for indicator parameters stabilize or the well is purged to dryness.

Prior to, and immediately following collection of groundwater samples, field measurements for pH, specific conductance, temperature, dissolved oxygen, turbidity and water level, as well as visual and olfactory field observations will be recorded. All collected groundwater samples will be placed in pre-cleaned, pre-preserved laboratory provided sample bottles, cooled to 4°C in the field, and transported under chain-of-custody command to a NYSDOH-approved laboratory for analysis.

3.3.3.1 Emerging Contaminant Groundwater Sample Collection

Sampling personnel will wear nitrile gloves while handling empty sample containers, filling sample containers, sealing sample containers, and placement into sample coolers. Samples will be placed on ice prior to transportation to the laboratory.

If sampling equipment and/or sampling personnel's hands come in contact with PFC materials, a standard two (2) step decontamination process using detergent and clean water rinse will be performed on the equipment prior to reuse or the sampling personnel's hands prior to continuing with the sampling. It is recommended that clean nitrile gloves be worn while handling sample containers, during the groundwater sampling, and sealing/placement of samples into the laboratory supplied cooler. The NYSDEC's July 2018 emerging contaminant sampling guidance is included electronically in Appendix E.

3.3.4 Groundwater Sample Analyses

The four (4) groundwater wells will be sampled for Target Compound List (TCL) plus CP-51 List VOCs plus tentatively identified compounds (TICs), TCL SVOCs plus

TICs, Target Analyte List (TAL) Metals, PCBs, pesticides and herbicides. Groundwater samples will be collected and analyzed in accordance with USEPA SW 846 methodology with equivalent NYSDEC Category B deliverables to allow for independent third-party data usability assessment.

Two (2) monitoring well locations (one upgradient and one downgradient based on the RI groundwater gauging) will be selected in consultation with the Department for emerging contaminant sampling as part of the NYSDEC's State-wide initiative to better understand the risk posed by 1,4-dioxane and per- and polyfluoroalkyl substances (PFAS). Samples collected for 1,4-dioxane will be analyzed via EPA Method 8270 Selective Ion Monitoring (SIM) mode and samples collected for PFAS analysis will be analyzed via a modified EPA Method 537 to achieve reporting limits of 2 nanograms per liter (ng/l) (see Table 5).

3.4 Field Specific Quality Assurance/Quality Control Sampling

In addition to the soil/fill and groundwater samples described above, field-specific quality assurance/quality control (QA/QC) samples will be collected and analyzed to ensure the reliability of the generated data as described in the QAPP (see Section 5.0) and to support the required third-party data usability assessment effort. Site-specific QA/QC samples will include matrix spikes, matrix spike duplicates, blind duplicates, and trip blanks.

3.5 Decontamination and Investigation-Derived Waste Management

Every attempt will be made to utilize dedicated sampling equipment during the RI, however if non-dedicated equipment is required and/or used, the equipment will be decontaminated, at a minimum, with a non-phosphate detergent (i.e., Alconox®) and potable water mixture, rinsed with distilled water, and air-dried before each use in accordance with Benchmark-TurnKey's field operating procedures presented in Appendix E. All decontaminated sampling equipment will be kept in a clean environment prior to sample collection. Heavy equipment, such as an excavator (if used) and drilling tools, will be decontaminated by the subcontractor, as necessary.

RI generated drilling spoils, groundwater, decontamination rinse water, or other Investigative-Derived Waste (IDW) not exhibiting gross contamination (i.e., visible product,

odor, sheen, etc.) will be either returned to the borehole from which it was removed (soil/fill) or discharged to the ground surface (groundwater and rinse water) if it can infiltrate the ground in the vicinity from which it was generated. IDW materials exhibiting gross contamination will be placed in sealed NYSDOT-approved drums and labeled for subsequent characterization and disposal. All generated IDW drums will be labeled alpha-numerically with regard to contents, origin, and date of generation using a paint stick marker on two sides and the top of each drum. Characterization analytical results of containerized IDW material will be used to determine if spoils can be returned to the ground surface, utilized on-Site, or require treatment and/or off-Site disposal. Drums will be securely staged on-site pending characterization analyses and remedial measures assessment. Field personnel will coordinate the on-site handling and temporary storage of IDW drums, including transportation, characterization sampling, and offsite disposal arrangements, as necessary.

Discarded personal protective equipment (PPE) (i.e., latex gloves, Tyvek, paper towels, etc.) and disposable sampling equipment (i.e., bailers or stainless-steel spoons) will be placed in sealed plastic garbage bags and disposed of as municipal solid waste.

3.6 Site Mapping

A Site map will be developed during the field investigation. Sample points and relevant Site features will be located on the map. Benchmark-TurnKey will employ a handheld GPS unit to identify the locations of test pit and monitoring wells relative to State planar grid coordinates. Monitoring well elevations will be measured by Benchmark-TurnKey's surveyor. An isopotential map showing the general direction of groundwater flow will be prepared based on water level measurements relative to USGS vertical datum. Maps will be provided with the RI report.

3.7 Documentation

Remedial Investigation and IRM field activities will be documented in a Project Field Book and/or handheld Rugged Reader® PDA. This logbook/PDA will provide a record of activities conducted at the Site. Entries will be signed and dated at the end of each day of fieldwork (or as produced) by the Field Team Leader. Field notes will include, at a minimum, the: date and time of all entries, names of personnel on site, weather conditions (temperature, precipitation, etc.), location of activity, and description of activity. Sampling

activities will be logged and photographed as necessary to document the activities at the Site. Progress photographs from a set location will be collected to document development activities and intrusive construction activities. Field personnel will, at a minimum, complete the following standard field forms (see Appendix C):

- Chain of Custody Form (per selected laboratory)
- Equipment Calibration Log
- Field Activity Daily Log (FADLs)
- Field Borehole/Monitoring Well Log
- Groundwater Field Form
- Investigative-Derived Waste Container Log (if necessary)
- Photographic Log
- Real-Time Air Monitoring Log
- Tailgate Safety Meeting Form
- Test Pit Excavation Log
- Problem Identification Report (as necessary)
- Corrective Measures Report

4.0 INTERIM REMEDIAL MEASURES

An IRM will be completed to address known environmental concerns previously identified (SVOCs and metals present in the historic fill) and other environmental concerns identified during the RI to expedite the remedial activities and overall project schedule. Specifically, the planned IRM will address the historic soil/fill present at the Site with contaminants present above the Part 375 Unrestricted Soil Cleanup Objectives (USCOs).

This Work Plan includes planned IRM activities based on current information and may be modified, subject to NYSDEC approval, after the RI fieldwork is completed. The planned IRM includes the following tasks:

- Removal and landfill disposal of approximately 15,000 tons of soil/fill from across the Site; and
- Collection of post-excavation confirmatory samples.

The collection of post-excavation confirmatory samples will be from the extent of contamination excavation and/or BCP Site limits. As discussed in Section 3.2.2, samples will be collected during the RI to determine the estimated depth and extents of the IRM excavation. Native soil samples or non-impacted fill material samples with concentrations below the USCOs will serve dual purpose as confirmatory sample results assuming all USCOs are met. Additional IRM post-excavation samples will be collected to supplement RI samples and meet the sampling frequency and characterization requirements of NYSDEC DER-10. Post-excavation IRM samples along the property boundaries will also be used to assess if contamination is present off-site.

It has been estimated that approximately 15,000 tons of soil/fill will be removed from across the Site. Based on previous investigations, the depth of fill ranged from approximate 1 foot to greater than 5 feet. We estimated an average 4-foot cut across the 1.55-acre Site (67,518 square feet) and used a conversion of 1.5 tons per cubic yard to estimate the tonnage. Additionally, any former concrete foundations and footers encountered within the upper 15 foot will also be removed to verify the underlying soil meet the IUSCOs. The extent and depth of excavation may change based on the findings of the RI, actual field conditions encountered during the IRM and results of the confirmation samples.

The planned IRM is intended to constitute the NYSDEC-approved final remedy for the Site. We do not anticipate the need for an environmental easement or post-remedial

requirements as the objective is to achieve a Track 1 Unrestricted cleanup. The final remedy for the Site will be determined in the Alternatives Analysis Report (AAR) for the project.

4.1 Utility Clearance

Prior to any intrusive activities, Dig Safely New York (Call 811) will be contacted by the site contractor a minimum of three business days in advance of the work and informed of the intent to perform excavation work at the Site. If underground utilities are present on the property and are anticipated to interfere with intrusive activities, the Applicant and the NYSDEC will be contacted to discuss mitigating measures. The location of identified subgrade utilities will be recorded and included on base drawings as part of the RI-IRM-AA Report.

4.2 Waste Characterization

Waste characterization samples will be collected in accordance with the disposal and/or recycling facilities requirements (typically one (1) for the first 500 tons and one (1) per 1,000 tons thereafter). Pre-characterization of the soil/fill will allow for direct loading and off-site transportation at the time of the impacted soil removal. Based on the results of the waste characterization sampling, impacted soil will be managed according to all federal, state and local waste disposal regulations.

4.3 Removal of Impacted Soil/Fill

The soil/fill present across the entire approximate 1.55-acre Site will be excavated and removed for proper landfill disposal. Remedial excavation work will be directed by an experienced Benchmark-TurnKey professional to remove impacted soil/fill material. A PID and visual/olfactory observations will be used to screen soil/fill materials and assist in verifying removal of impacted soil/fill. Vertical excavation will continue, as described above, until the impacted soil/fill is removed and the Part 375 USCOs are achieved. The lateral extents of the remedial excavation will be to the boundary of the Site. These criteria will be satisfied unless excavation has reached the property line or NYSDEC agrees that no further excavation is required.

4.4 Excavation Confirmation Sampling

Post excavation confirmatory samples will be collected from the excavated areas, with bias toward material exhibiting evidence of visual and olfactory contamination, if remaining. Post-excavation confirmatory sample locations from the excavated areas will include samples from excavation sidewalls and bottom in accordance with DER-10. A minimum of one (1) sample per 30 linear feet of sidewall and one (1) sample for each 900 square feet of excavation bottom will be collected in accordance with DER-10. Soil samples collected during the RI that meet the USCOS will be used to supplement the post-excavation IRM sample requirements. If the excavation is completed to bedrock, no bottom samples will be collected.

Based on previous investigation results, samples from the IRM excavation will be analyzed for TCL SVOCs and TAL metals (unless additional contaminant classes are identified during the RI, and 1 per 5 samples (20%) will be completed for the full list of Part 375 compounds), in accordance with USEPA Methodology with an equivalent Category B deliverables package to facilitate data evaluation by a third-party validation expert. Expedited turnaround times may be requested for the analytical results to minimize the time that the excavation(s) remains open. Additional analytical parameters may be analyzed from post-excavation confirmatory samples, based on the results of the RI and consultation with the Department.

Sample results will be compared to USCOS; non-conformant sample locations within the BCP boundary will necessitate additional excavation and resampling to confirm USCOS are met. Sidewall samples collected at or off the BCP boundary will serve as documentation samples to assess offsite conditions. The data will be summarized and provided to the NYSDEC project manager as it is received.

4.5 Groundwater Management

If encountered, water removed from excavations and surface water run-in to excavations during the impacted soil removal will be handled on-site prior to discharge to the municipal sewer. In general, water removed from excavations will be stored/settled in a portable storage tank, and if deemed necessary, will be pumped through a bag or cartridge filter prior to treatment using granular activated carbon (GAC). Following completion of

excavation work, settled solids remaining in the tank and spent filter bags will be disposed of off-site.

If the accumulated waters require treatment, the spent GAC will be characterized and regenerated off-site, or disposed at a permitted disposal facility in accordance with applicable federal and state regulations. The storage tank will be decontaminated via pressure washing. Benchmark-TurnKey or the Site owner will coordinate with the City of Buffalo/Buffalo Sewer Authority to obtain any necessary temporary sewer discharge permits. A copy of the permit will be provided to NYSDEC prior to discharging.

4.6 Excavation Backfill

As the goal of the remedial activities is to achieve the USCOs and allow redevelopment activities begin immediately upon reaching that goal, backfill at the Site will not likely occur until subsurface redevelopment activities are complete. Materials brought to the Site for use during redevelopment will be in accordance with DER-10 requirements.

The imported materials will be placed in accordance with redevelopment requirements to achieve design grades necessary to facility redevelopment activities (e.g., geotechnical requirements). Table 3 includes the chemical criteria for import of backfill material to the Site. Backfill will comply with DER-10 guidance.

5.0 QUALITY ASSURANCE PROJECT PLAN

A Quality Assurance Project Plan (QAPP) has been prepared in support of the RI/IRM activities. The QAPP dictates implementation of the investigation tasks delineated in this Work Plan. A Sampling and Analysis Plan (SAP) identifying methods for sample collection, decontamination, handling, and shipping, is provided as below.

The QAPP will assure the accuracy and precision of data collection during the Site characterization and data interpretation periods. The QAPP identifies procedures for sample collection to mitigate the potential for cross-contamination, as well as analytical requirements necessary to allow for independent data validation. The QAPP has been prepared in accordance with USEPA's Requirements for Quality Assurance Project Plans for Environmental Data Operations (Ref. 3); the EPA Region II CERCLA Quality Assurance Manual (Ref. 4), and NYSDEC's DER-10 Technical Guidance for Site Investigation and Remediation (May 2010).

5.1 Scope of the QAPP

This QAPP was prepared to provide quality assurance (QA) guidelines to be implemented during the RI/IRM activities. This document may be modified for subsequent phases of investigative work, as necessary. The QAPP provides:

- A means to communicate to the persons executing the various activities exactly what is to be done, by whom, and when.
- A culmination to the planning process that ensures that the program includes provisions for obtaining quality data (e.g., suitable methods of field operations).
- A historical record that documents the investigation in terms of the methods used, calibration standards and frequencies planned, and auditing planned.
- A document that can be used by the Project Manager's and QA Officer to assess if the activities planned are being implemented and their importance for accomplishing the goal of quality data.
- A plan to document and track project data and results.

- Detailed descriptions of the data documentation materials and procedures, project files, and tabular and graphical reports.

The QAPP is primarily concerned with the quality assurance and quality control aspects of the procedures involved in the collection, preservation, packaging, and transportation of samples; field testing; record keeping; data management; chain-of-custody procedures; laboratory analyses; and other necessary matters to assure that the investigation activities, once completed, will yield data whose integrity can be defended.

QA refers to the conduct of all planned and systematic actions necessary to perform satisfactorily all task-specific activities and to provide information and data confidence as a result of such activities. The QA for task-specific activities includes the development of procedures, auditing, monitoring and surveillance of the performance.

QC refers to the activity performed to determine if the work activities conform to the requirements. This includes activities such as inspections of the work activities in the field (e.g., verification that the items and materials installed conform to applicable codes and design specifications). QA is an overview monitoring of the performance of QC activities through audits rather than first time inspections.

5.2 QAPP Organization and Responsibility

The principal organizations involved in verifying achievement of data collection goals for the 1155 Main Street Site include: the NYSDEC, NYSDOH, M&D (Volunteer), Benchmark Environmental Engineering and Science, PLLC and TurnKey Environmental Restoration, LLC (Volunteer's Consultants), the test pit and drilling subcontractor(s), the independent environmental laboratory, and the independent third-party data validator. Roles, responsibilities, and required qualifications of these organizations are discussed in the following subsections. Resumes are included in Appendix A.

5.2.1 *Volunteer*

M&D ("Volunteer") will be responsible for complying with the QA requirements as specified herein and for monitoring and controlling the quality of the Brownfield cleanup construction either directly or through their designated environmental consultant and/or legal counsel. The Applicants will also have the authority to select Remedial Action Contractor(s) to assist them in fulfilling these responsibilities. The designated Project

Manager is responsible for implementing the project and has the authority to commit the resources necessary to meet project objectives and requirements.

5.2.2 *Environmental Consultant*

Benchmark Environmental Engineering & Science, PLLC (Benchmark) in association with TurnKey Environmental Restoration, LLC (TurnKey), are the prime engineering and scientific consultants, respectively, on this project and are responsible for the implementation of the RI/IRM Work Plan, including, but not limited to, field operations, laboratory testing, data management, data analysis and reporting. Any one member of Benchmark's or TurnKey's staff may fill more than one of the identified project positions (e.g., field team leader and site safety and health officer). The various quality assurances, field, laboratory, and management responsibilities of key project personnel are defined below.

- Project Officer (PO): *Thomas H. Forbes, P.E.*

The PO has the responsibility for ensuring conformance with the BCP program requirements. The PO will report directly to the Applicant and the NYSDEC/NYSDOH Project Coordinators and is responsible for project oversight. The PO will:

- o Define project objectives and develop a detailed work plan schedule.
- o Acquire and apply technical and corporate resources as needed to assure performance within budget and schedule constraints.
- o Review the work performed on the project to assure its quality, responsiveness, and timeliness.
- o Certify deliverables before their submission to NYSDEC.

- Project Manager (PM): *Christopher Boron, P.G.*

The PM has the responsibility for ensuring that the project meets the Work Plan objectives. The PM will report directly to the Applicant Project Coordinator and the NYSDEC/NYSDOH Project Coordinators and is responsible for technical and project oversight. The PM will:

- o Define project objectives and develop a detailed work plan schedule.

- o Establish project policy and procedures to address the specific needs of the project as a whole, as well as the objectives of each task.
 - o Develop and meet ongoing project and/or task staffing requirements, including mechanisms to review and evaluate each task product.
 - o Review the work performed on each task to assure its quality, responsiveness, and timeliness.
 - o Review and analyze overall task performance with respect to planned requirements and authorizations.
 - o Review all deliverables before their submission to NYSDEC.
 - o Develop and meet ongoing project and/or task staffing requirements, including mechanisms to review and evaluate each task product.
 - o Ultimately be responsible for the preparation and quality of interim and final reports.
 - o Represent the project team at meetings.
- FTL/SSHO: *Christopher Boron, P.G.*

The Field Team Leader (FTL) has the responsibility for implementation of specific project tasks identified at the Site and is responsible for the supervision of project field personnel, subconsultants, and subcontractors. The FTL reports directly to the Project Manager. The FTL will:

- o Define daily work activities.
- o Orient field staff concerning the project's special considerations.
- o Monitor and direct subcontractor personnel.
- o Review the work performed on each task to ensure its quality, responsiveness, and timeliness.
- o Assure that field activities, including sample collection and handling, are carried out in accordance with this QAPP.

For this project the FTL will also serve as the Site Safety and Health Officer (SSHO). As such, he is responsible for implementing the procedures and required components of the Site Health and Safety Plan (HASP), determining levels of protection needed during field tasks, controlling site entry/exit, briefing the field team and subcontractors on site-specific health and safety issues, and all other responsibilities as identified in the HASP.

5.3 Quality Assurance (QA) Responsibilities

The QA Officer will have direct access to corporate executive staff as necessary, to resolve any QA dispute, and is responsible for auditing the implementation of the QA program in conformance with the demands of specific investigations and Benchmark-TurnKey policies, and NYSDEC requirements. The QA Officer has sufficient authority to stop work on the investigation as deemed necessary in the event of serious QA issues.

- Project QA Officer: *Lori E. Riker*

Specific function and duties include:

- o Performing QA audits on various phases of the field operations
- o Reviewing and approving QA plans and procedures
- o Providing QA technical assistance to project staff
- o Reporting on the adequacy, status, and effectiveness of the QA program on a regular basis to the Project Manager for technical operations
- o Responsible for assuring third party data review of all sample results from the analytical laboratory

5.4 Field Responsibilities

Benchmark-TurnKey field staff for this project is drawn from a pool of qualified resources. The Project Manager will use staff to gather and analyze data, and to prepare various task reports and support materials. All of the designated technical team members are experienced professionals who possess the degree of specialization and technical competence required to effectively and efficiently perform the required work.

5.5 Quality Assurance Objectives for Measurement Data

The overall objectives and criteria for assuring quality for this effort are discussed below. This QAPP addresses how the acquisition and handling of samples and the review and reporting of data will be documented. The objectives of this QAPP are to address the following:

- The procedures to be used to collect, preserve, package, and transport groundwater samples.
- Field data collection.
- Record keeping.
- Data management.
- Chain-of-custody procedures.
- Precision, accuracy, completeness, representativeness, decision rules, comparability and level of quality control effort conformance for sample analysis and data management by laboratory under EPA analytical methods.

5.6 Level of QC Effort for Sample Parameters

Field blank, method blank, trip blank, field duplicate, laboratory duplicate, laboratory control, standard reference materials (SRM) and matrix spike samples will be analyzed to assess the quality of the data resulting from the field sampling and analytical programs. QC samples are discussed below.

- Field and trip blanks consisting of distilled water will be submitted to the analytical laboratories to provide the means to assess the quality of the data resulting from the field-sampling program. Field (equipment) blank samples are analyzed to check for procedural chemical constituents at the facility that may cause sample contamination. Trip blanks are used to assess the potential for contamination of samples due to contaminant migration during sample shipment and storage.
- Method blank samples are generated within the laboratory and used to assess contamination resulting from laboratory procedures.
- Duplicate samples are analyzed to check for sampling and analytical reproducibility.
- MS/MSD and MS/Duplicate samples provide information about the effect of the sample matrix on the digestion and measurement methodology. Depending on site-specific circumstances, one MS/MSD or MS/Duplicate should be

collected for every 20 or fewer investigative samples to be analyzed for organic and inorganic chemicals of a given matrix (see Table 4).

The general level of QC effort will be one field (blind) duplicate and one field blank (when non-dedicated equipment is used) for every 20 or fewer investigative samples of a given matrix. Additional sample volume will also be provided to the laboratory to allow one site-specific MS/MSD or MS/Duplicate for every 20 or fewer investigative samples of a given matrix. One trip blank consisting of distilled, deionized water will be included along with each sample delivery group of aqueous VOC samples.

5.7 Sampling and Analysis Plan

Methods and protocol to be used to collect environmental samples (i.e., soil/fill and groundwater) for this investigation are described in the Benchmark-TurnKey Field Operating Procedures (FOPs), summarized on Table 4 and presented electronically in Appendix E.

The number and types of environmental samples to be collected is summarized on Table 2. Sample parameter lists, holding times and sample container requirements are summarized on Table 5. The sampling program and related site activities are discussed below. To the extent allowed by existing physical conditions at the facility, sample collection efforts will adhere to the specific methods presented herein. If alternative sampling locations or procedures are implemented in response to facility specific constraints, each will be selected on the basis of meeting data objectives. Such alternatives will be approved by NYSDEC before implementation and subsequently documented for inclusion in the project file.

5.7.1 Custody Procedures

Sample custody is controlled and maintained through the chain-of-custody procedures. Chain of custody is the means by which the possession and handling of samples will be tracked from the source (field) to their final disposition, the laboratory. A sample is considered to be in a person's custody if it is in the person's possession or it is in the person's view after being in his or her possession or it was in that person's possession and that person has locked it in a vehicle or room. Sample containers will be cleaned and preserved at the laboratory before shipment to the Site. The following section and FOPs for

Sampling, Labeling, Storage, and Shipment, located in Appendix E, describe procedures for maintaining sample custody from the time samples are collected to the time they are received by the analytical laboratory.

5.7.2 *Sample Storage*

Samples are stored in secure limited-access areas. Walk-in coolers or refrigerators are maintained at 4°C, \pm 2°C, or as required by the applicable regulatory program. The temperatures of all refrigerated storage areas are monitored and recorded a minimum of once per day. Deviations of temperature from the applicable range require corrective action, including moving samples to another storage location if necessary.

5.7.3 *Sample Custody*

Sample custody is defined by this document as when any of the following occur:

- It is in someone's actual possession.
- It is in someone's view after being in his or her physical possession.
- It was in someone's possession and then locked, sealed, or secured in a manner that prevents unsuspected tampering.
- It is placed in a designated and secured area.

Samples are removed from storage areas by the sample custodian or analysts and transported to secure laboratory areas for analysis. Access to the laboratory and sample storage areas is restricted to laboratory personnel and escorted visitors only; all areas of the laboratory are therefore considered secure. If required by the applicable regulatory program, internal chain-of-custody is documented in a log by the person moving the samples between laboratory and storage areas.

Laboratory documentation used to establish COC and sample identification may include the following:

- Field COC forms or other paperwork that arrives with the sample.
- The laboratory COC.
- Sample labels or tags are attached to each sample container.

- Sample custody seals.
- Sample preparation logs (i.e., extraction and digestion information) recorded in hardbound laboratory books that are filled out in legible handwriting and signed and dated by the chemist.
- Sample analysis logs (e.g., metals, GC/MS, etc.) information recorded in hardbound laboratory books that are filled out in legible handwriting and signed and dated by the chemist.
- Sample storage log (same as the laboratory COC).
- Sample disposition log, which documents sample disposal by a contracted waste disposal company.

5.7.4 Sample Tracking

All samples are maintained in the appropriate coolers prior to and after analysis. The analysts remove and return their samples as needed. Samples that require internal COC are relinquished to the analysts by the sample custodians. The analyst and sample custodian must sign the original COC relinquishing custody of the samples from the sample custodian to the analyst. When the samples are returned, the analyst will sign the original COC returning sample custody to the sample custodian. Sample extracts are relinquished to the instrumentation analysts by the preparatory analysts. Each preparation department tracks internal COC through their logbooks/spreadsheets.

Any change in the sample during the time of custody will be noted on the COC (e.g., sample breakage or depletion).

5.7.5 Split Sampling

The Department may split any soil, groundwater, or collect additional air samples at the Department's expense, during this RI/IRM. Benchmark-TurnKey personnel will cooperate with the Department to facilitate split sampling, as requested.

5.8 Calibration Procedures and Frequency

This section describes the calibration procedures and the frequency at which these procedures will be performed for both field and laboratory instruments.

5.8.1 *Field Instrument Calibration*

Quantitative field data to be obtained during groundwater sampling include pH, turbidity, specific conductance, temperature, and depth to groundwater. Quantitative water level measurements will be obtained with an electronic sounder or steel tape, which require no calibration. Quantitative field data to be obtained during soil sampling include screening for the presence of volatile organic constituents using a PID.

FOPs located in Appendix E describe the field instruments used to monitor for these parameters and the calibration methods, standards, and frequency requirements for each instrument. Calibration results will be recorded on the appropriate field forms and in the Project Field Book.

5.9 Analytical Procedures

Samples collected during this investigation field sampling activities will be analyzed by a NYSDOH-approved laboratory.

5.9.1 *Field Analytical Procedures*

Field procedures for collecting and preserving groundwater and soil samples are described in FOPs located in Appendix E. A summary of the FOPs is presented on Table 4.

5.10 Data Usability Evaluation

Data usability evaluation procedures shall be performed for both field and laboratory operations as described below.

5.10.1 *Procedures Used to Evaluate Field Data Usability*

Procedures to validate field data for this project will be facilitated by adherence to the FOPs identified in Appendix E. The performance of all field activities, calibration checks on all field instruments at the beginning of each day of use, manual checks of field calculations, checking for transcription errors and review of field log books is the responsibility of the Field Team Leader.

5.10.2 *Procedures Used to Evaluate Laboratory Data Usability*

Data evaluation will be performed by the third-party data validator using the most current methods and quality control criteria from the USEPA's Contract Laboratory Program (CLP) *National Functional Guidelines for Organic Data Review* (Ref. 5), and Contract Laboratory Program, *National Functional Guidelines for Inorganic Data Review* (Ref. 6). The data review guidance will be used only to the extent that it is applicable to the SW-846 methods; SW-846 methodologies will be followed primarily and given preference over CLP when differences occur. Also, results of blanks, surrogate spikes, MS/MSDs, and laboratory control samples will be reviewed/evaluated by the data validator. All sample analytical data for each sample matrix shall be evaluated. The third-party data validation expert will also evaluate the overall completeness of the data package. Completeness checks will be administered on all data to determine whether deliverables specified in this QAPP are present. The reviewer will determine whether all required items are present and request copies of missing deliverables.

6.0 INVESTIGATION SUPPORT DOCUMENTS

6.1 Health and Safety Protocols

Benchmark-TurnKey has prepared a Site-Specific Health and Safety Plan (HASP) for use by our employees in accordance with 40 CFR 300.150 of the NCP and 29 CFR 1910.120. The HASP, provided in Appendix D, includes the following site-specific information:

- A hazard assessment.
- Training requirements.
- Definition of exclusion, contaminant reduction, and other work zones.
- Monitoring procedures for site operations.
- Safety procedures.
- Personal protective clothing and equipment requirements for various field operations.
- Disposal and decontamination procedures.

The HASP also includes a contingency plan that addresses potential site-specific emergencies, and a Community Air Monitoring Plan that describes required particulate and vapor monitoring to protect the neighboring community during intrusive site investigation and remediation activities.

Health and safety activities will be monitored throughout the field investigation and IRM. A member of the field team will be designated to serve as the on-site Health and Safety Officer throughout the field program. This person will report directly to the Project Manager and the Corporate Health and Safety Coordinator. The HASP will be subject to revision as necessary, based on new information that is discovered during the field investigation and/or remedial activities.

6.1.1 *Community Air Monitoring*

Real-time community air monitoring will be performed during the RI and IRM activities at the Site. A CAMP is included within Benchmark-TurnKey's HASP (see HASP Appendix D). Particulate and VOC monitoring will be performed along the downwind perimeter of the work area during subgrade excavation, grading and soil/fill handling activities in accordance with this plan. The CAMP is consistent with the requirements for

community air monitoring at remediation sites as established by the New York State Department of Health (NYSDOH) and NYSDEC. Accordingly, it follows procedures and practices outlined under NYSDEC's DER-10 (May 2010) Appendix 1A (NYSDOH's Generic Community Air Monitoring Plan) and Appendix 1B (Fugitive Dust and Particulate Monitoring).

6.2 Citizen Participation Activities

NYSDEC will coordinate and lead community relations throughout the course of the project. Benchmark-TurnKey will support NYSDEC's community relations activities, as necessary. A Citizen Participation Plan will be prepared by TurnKey and submitted to NYSDEC under separate cover. The Citizen Participation Plan will follow NYSDEC's Citizen Participation Plans template for Brownfield Cleanup Program sites entering the BCP at the point of site investigation.

7.0 REPORTING AND SCHEDULE

Upon completion of the RI and IRM fieldwork, a comprehensive RI/IRM/AAR will be completed summarizing the RI and IRM tasks completed as described below.

7.1 Remedial Investigation Reporting

The RI section of the RI/IRM/AA report will include the following information and documentation, consistent with the NYSDEC's DER-10 Technical Guidance for Site Investigation and Remediation (May 2010).

- Introduction and background;
- A description of the site and the investigation areas;
- A description of the field procedures and methods used during the RI;
- The collection of geospatial data and presentation of investigation drawings detailing the investigation locations, IRM activities, potential areas of concern, presence of buildings, and subgrade utilities.
- A discussion of the nature and rationale for any significant variances from the scope of work described in this RI Work Plan;
- The data obtained during the RI and historical investigations, considered by Benchmark-TurnKey to be of useable quality, including geochemical data, field measurements, validated analytical results, etc;
- Comparative criteria that may be used to calculate cleanup levels during the AA process, such as NYSDEC Soil Cleanup Objectives and other pertinent regulatory standards or criteria;
- A discussion of contaminant fate and transport. This will provide a description of the hydrologic parameters of the Site, and an evaluation of the lateral and vertical movement of groundwater;
- Conclusions regarding the extent and character of environmental impact in the media being investigated;

- The conclusions of the on-site and off-site qualitative human health and environmental exposure assessment completed in accordance with DER-10; and
- Supporting materials for RI data. These will include boring logs, monitoring well construction diagrams, laboratory analytical reports, and similar information.

In addition, Benchmark-TurnKey will require third-party analytical data review by a qualified, independent data validation expert for the RI and historic investigation data. Specifically, a Data Usability Summary Report (DUSR) will be prepared, with appropriate data qualifiers added to the results. The DUSR will follow NYSDEC format per the NYSDEC's September 1997 DUSR guidelines and May 2010 DER-10 guidance. The DUSR and any necessary qualifications to the data will be appended to the RI report.

7.2 IRM Reporting

A qualified environmental professional (QEP) will be on-Site to document IRM activities. Such documentation will include, at minimum, daily reports of IRM activities, community air monitoring results, photographs and corrective measures report, if necessary.

A summary of the IRM activities will be included in the RI/IRM/AAR submitted to the NYSDEC, with full details of the IRM activities included in the Final Engineering Report. At a minimum, the IRM section of the report will include:

- A Site or area planimetric map showing the parcel(s) remediated;
- A map showing the lateral limits of excavation;
- Summaries of unit quantities, including: volume of soil/fill excavated; disposition of excavated soil/fill and collected ground/surface water; volume/type/source of backfill; and volume of ground/surface water pumped and treated;
- Planimetric map showing location of all verification and other sampling locations with sample identification labels/codes;
- Tabular comparison of verification and other sample analytical results to SCOs. An explanation shall be provided for all results exceeding acceptance criteria; and
- Text describing that the excavation activities were performed in accordance with this Work Plan.

7.3 Alternatives Analysis Report

An AAR is typically developed to provide a forum for evaluating and selecting a recommended remedial approach, in accordance with DER-10. However, the planned IRM will effectively remove contaminants from the Site. If additional contamination is discovered during RI site characterization activities, the AAR may need to evaluate additional remedial measures beyond the IRM activities (e.g., additional soil removal and/or cover placement). If the IRM effectively removes site contaminants, the AAR will evaluate the IRM as the final remedy.

A list of remedial action objectives will be developed based on findings of the RI and IRM and the requirement for the selected remedial measures to be protective of human health and the environment under the proposed future use scenario. Proposed soil cleanup objectives (SCOs) for the property will also be presented based on the proposed future use of the Site. SCOs will be based on published standards, criteria, and guidance (SCGs) and other NYSDEC and NYSDOH-accepted values.

Based on the remedial action objectives and SCOs, volumes and areas of media potentially requiring additional remediation will be calculated. General response actions will then be delineated to address each of the site problem areas. These response actions will form the foundation for the development and screening of applicable remedial alternatives against the following criteria as described in 6NYCRR 375-1.8(f) and DER-10-4.2:

- Overall Protection of Human Health and the Environment
- Compliance with Standards, Criteria, & Guidance (SCGs)
- Long-term Effectiveness & Permanence
- Reduction of Toxicity, Mobility, or Volume
- Short-term Effectiveness
- Implementability
- Cost Effectiveness
- Land Use

In addition, the criteria of community acceptance will be considered based on public comments on the AAR and proposed remedial action. Following the screening of alternatives, a comparative analysis will be performed against the above criteria. The comparative analysis will allow for better understanding of the relative advantages and disadvantages of each of the alternatives and will facilitate identification of a recommended remedial approach.

8.0 PROJECT SCHEDULE

A tentative project schedule for the major tasks to be performed in support of the RI/ IRM/AAR is presented as Figure 5.

9.0 REFERENCES

1. New York State Department of Environmental Conservation. *DER-10; Technical Guidance for Site Investigation and Remediation*. May 2010.
2. United States Department of Agriculture (USDA), Soil Conservation Service. *Soil Survey of Erie County, New York*. December 1986.
3. U.S. Environmental Protection Agency. *Requirements for Quality Assurance Project Plans for Environmental Data Operations (EPA QA/R-5)*. October 1998.
4. U.S. Environmental Protection Agency, Region II. *CERCLA Quality Assurance Manual, Revision I*. October 1989.
5. U.S. Environmental Protection Agency. National Functional Guidelines for Organic Data Review (EPA-540/R-94-012), 1994a.
6. U.S. Environmental Protection Agency. National Functional Guidelines for Inorganic Data Review (EPA-540/R-94-013), 1994b.

TABLES

TABLE 1

SUMMARY OF PHASE II INVESTIGATION SOIL/FILL SAMPLE ANALYTICAL RESULTS
 REMEDIAL INVESTGATION/INTERIM REMEDIAL MEASURE/ALTERNATIVE ANALYSIS WORK PLAN
 1155 MAIN STREET SITE
 BUFFALO, NY

PARAMETER ¹	Unrestricted Use SCOs ²	Restricted Residential Use SCOs ²	Commercial Use SCOs ²	Industrial Use SCOs ²	SB-1	SB-4	SB-5	SB-7	SB-8	SB-9	SB-10	SB-11	SB-12	SB-14	TP-1	TP-4	TP-8	TP-12	TP-14	TP-15	TP-16	TP-18	SS-1	SS-2	SS-3	
					1-4 ft	0-3 ft	8-12 ft	1-4 ft	0-4 ft	5-8 ft	0-3 ft	2-4 ft	0-2 ft	4-6 ft	0.5-3.5 ft	1-4 ft	1-3 ft	3-5 ft	6-7 ft	3-4 ft	3-4 ft	0-4 in	0-4 in	0-4 in		
Volatile Organic Compounds (VOCs) - mg/Kg³																										
Acetone	0.05	100	500	1000	NT	NT	ND	NT	NT	1.7 J	NT	NT	ND	0.002 J	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
Methylcyclohexane	--	--	--	--	NT	NT	ND	NT	NT	ND	NT	NT	0.00025 J	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg³																										
2-Methylnaphthalene	--	--	--	--	ND	0.072 J	NT	ND	ND	NT	0.06 J	ND	ND	NT	ND	ND	0.063 J	0.052 J	0.043 J	ND	ND	ND	ND	ND	ND	
2-Nitrodiphenylamine (NDPA/DPA)	--	--	--	--	ND	ND	NT	ND	ND	NT	0.039 J	ND	ND	NT	NT	NT	NT	NT	ND	ND	ND	NT	NT	NT	NT	
Acenaphthene	20	100	500	1000	ND	0.092 J	NT	ND	ND	NT	0.12 J	ND	ND	NT	ND	0.065 J	0.022 J	0.036 J	0.027 J	ND	6	ND	0.4 J	0.067 J		
Acenaphthylene	100	100	500	1000	ND	0.051 J	NT	ND	0.061 J	NT	0.07 J	0.12 J	ND	NT	ND	0.12 J	0.16	0.04 J	0.066 J	ND	4.2	ND	0.053 J	0.06 J		
Anthracene	100	100	500	1000	ND	0.32	NT	0.094 J	0.11	NT	0.35	0.14	0.076 J	NT	ND	0.19 J	0.27	0.19	0.14	0.13	ND	18	ND	0.14 J	0.19	
Benzo(a)anthracene	1	1	5.6	11	0.36	1.2	NT	0.18	0.36	NT	0.93	0.47	0.19	NT	0.062 J	1.3	0.89	0.44	0.63	0.36	0.1 J	35	0.16	0.46	1.1	
Benzo(a)pyrene	1	1	1	1.1	0.31	1.1	NT	0.18	0.33	NT	0.84	0.52	0.18	NT	0.082 J	1	0.75	0.42	0.63	0.38	0.11 J	26	0.18	0.44	1.3	
Benzo(b)fluoranthene	1	1	5.6	11	0.46	1.4	NT	0.23	0.45	NT	1.1	0.62	2.2	NT	0.088 J	1.5	1.1	0.61	1.1	0.54	0.18	38	0.29	0.64	2.3	
Benzo(ghi)perylene	100	100	500	1000	0.18	0.56	NT	0.12 J	0.18	NT	0.44	0.44	0.11 J	NT	0.064 J	0.63 J	0.43	0.6	0.54	0.3	0.14 J	13	0.14 J	0.31	1.2	
Benzo(k)fluoranthene	0.8	3.9	56	110	0.18	0.54	NT	0.071 J	0.14	NT	0.47	0.21	0.088 J	NT	ND	0.52	0.34	0.21	0.34	0.15	0.075 J	12	0.089 J	0.2	0.65	
Bis(2-ethylhexyl) phthalate	--	--	--	--	0.084 J	0.11 J	NT	0.41	0.24	NT	ND	ND	ND	NT	ND	ND	ND	0.25	ND	ND	ND	ND	ND	0.34	0.57	
Butyl benzyl phthalate	--	--	--	--	ND	ND	NT	0.057 J	ND	NT	ND	ND	ND	NT	ND	ND	ND	1.3	ND	ND	ND	ND	ND	0.079 J	0.1 J	
Carbazole	--	--	--	--	0.056 J	0.18 J	NT	0.047 J	0.032 J	NT	0.17 J	0.063 J	0.045 J	NT	ND	0.25 J	0.16 J	0.074 J	0.16 J	ND	ND	ND	0.077 J	0.2 J	2.2 J	
Chrysene	1	3.9	56	110	0.34	1.1	NT	0.17	0.35	NT	0.89	0.47	0.18	NT	0.057 J	1.4	0.94	0.47	0.83	0.4	0.12 J	33	0.2	0.51	1.6	
Dibenzo(a,h)anthracene	0.33	0.33	0.56	1.1	0.045 J	0.14	NT	ND	0.046 J	NT	0.11	0.084 J	0.026 J	NT	ND	0.21 J	0.13	0.083 J	0.13	0.089 J	ND	3.9	0.034 J	0.088 J	0.26	
Di-n-butyl phthalate	--	--	--	--	ND	ND	NT	0.064 J	ND	NT	ND	ND	ND	NT	ND	ND	ND	0.13 J	ND	ND	ND	ND	ND	ND	ND	
Dibenzofuran	7	59	350	1000	ND	0.075 J	NT	ND	ND	NT	0.079 J	ND	ND	NT	ND	ND	0.072 J	0.029 J	0.044 J	0.023 J	ND	6	ND	0.024 J	0.035 J	
Fluoranthene	100	100	500	1000	0.5	2	NT	0.38	0.79	NT	2	0.88	0.36	NT	0.1 J	2.1	1.9	ND	1.7	0.7	0.18	72	0.37	1	3	
Fluorene	30	100	500	1000	ND	0.11 J	NT	0.039 J	ND	NT	0.14 J	0.04 J	0.027 J	NT	ND	ND	0.1 J	0.034 J	0.045 J	0.032 J	0.032 J	8.5	ND	0.053 J	0.067 J	
Indeno(1,2,3-cd)pyrene	0.5	0.5	5.6	11	0.2	0.65	NT	0.1 J	0.2	NT	0.5	0.33	0.11 J	NT	0.057 J	0.74	0.49	0.44	0.59	0.29	0.1 J	16	0.15 J	0.33	1.3	
Naphthalene	12	100	500	1000	ND	0.076 J	NT	ND	ND	NT	0.059 J	ND	ND	NT	ND	0.13 J	0.076 J	0.67 J	0.095 J	0.032 J	0.026 J	3.9	ND	0.031 J	0.047 J	
Pentachlorophenol	0.8	6.7	6.7	--	ND	ND	NT	ND	ND	NT	ND	ND	ND	NT	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	
Phenanthrene	100	100	500	1000	0.088 J	1.2	NT	ND	0.35	NT	1.5	0.43	0.28	NT	0.080 J	0.25 J	1.3	0.39	0.78	0.39	0.1 J	68	0.12 J	0.57	1.1	
Pyrene	100	100	500	1000	0.41	1.6	NT	0.3	0.67	NT	1.6	0.78	0.29	NT	0.092 J	1.8	1.6	0.66	1.4	0.59	0.15	59	0.29	0.81	2.4	
Total Metals - mg/Kg																										
Arsenic	13	16	16	16	NT	NT	NT	3.1	2	NT	4.2	15	9.7	NT	3.77	9.15	3.94	10.9	8.09	5.61	5.32	6.8	3.75	5.28	2.36	
Barium	350	400	400	10000	NT	NT	NT	75	46	NT	36	67	77	NT	82	66.4	85	62.6	115	712	69.7	192	44	79.2	67.4	
Beryllium	7.2	72	590	2700	NT	NT	NT	0.22 J	0.26	NT	0.24	0.35	0.17 J	NT	0.397	0.167 J	0.383	0.332	0.376	0.18 J	0.176 J	0.421	0.352	1.1	1.7	
Cadmium	2.5	4.3	9.3	60	NT	NT	NT	ND	ND	NT	0.07 J	ND	ND	NT	0.344 J	1.03	0.413 J	2.11	0.838	3.01	1.26	1	0.546	0.845	0.932	
Chromium	30	180	1500	6800	NT	NT	NT	6.5	5.7	NT	5.2	10	4.4	NT	11.1	31.6	9.77	13.5	12.5	12.7	388	9.9	12.5	10.2	17.7	
Copper	50	270	270	10000	NT	NT	NT	12	61	NT	9.3	38	21	NT	17.5	98.4	18.1	55.3	49.2	35.1	21.9	27.1	21.5	27.1	23.2	
Lead	63	400	1000	3900	NT	NT	NT	260	55	NT	17	150	58	NT	152	373	105	318	267	2710	2680	1070	39.5	144	100	
Manganese	1600	2000	10000	10000	NT	NT	NT	200	180	NT	230	220	250	NT	335	236	241	332	572	202	171	398	314	423	496	
Mercury	0.18	0.81	2.8	5.7	NT	NT	NT	0.29	0.28	NT	0.06 J	0.37	0.33	NT	0.655	0.127	0.134	0.254	0.387	0.64	0.697	0.676	0.103	0.304	0.074 J	
Nickel	30	310	310	10000	NT	NT	NT	6.1	4.8	NT	5.1	11	5.3	NT	11.9	630	10.3	16.5	16.4	6.68	6.7	11.5	9.82	10.9	9.31	
Selenium	3.9	180	1500	6800	NT	NT	NT	0.5 J	0.49 J	NT	0.54 J	0.92 J	0.57 J	NT	0.408 J	0.771 J	0.557 J	1.62	1.1	0.554 J	0.704 J	0.530 J	0.578 J	1.13 J	1.3	
Silver	2	180	1500	6800	NT	NT	NT	ND	ND	NT	ND	ND	ND	NT	ND	ND	ND	0.146 J	ND	0.237 J	0.479 J	0.549	ND	ND	0.418	
Zinc	109	10000	10000	10000	NT	NT	NT	100	49	NT	24	110	99	NT	61.2	979	78.2	263	358	1120	571	343	81.5	161	115	
Polychlorinated biphenyls (PCBs) - mg/Kg³																										
Total PCBs	0.1	1	1	25	NT	NT	NT	NT	NT	NT	NT	NT	ND	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	

- Notes:
- Only those parameters detected at a minimum of one sample location are presented in this table; other compounds were reported as non-detect.
 - Values per NYSDEC Part 375 Soil Cleanup Objectives (SCOs).
 - Sample results were reported by the laboratory in ug/kg and converted to mg/kg for comparisons to SCOs.

Definitions:

ND = Parameter not detected above laboratory detection limit.
 NT = Parameter not analysed for.
 "--" = No value available for the parameter.
 J = Estimated value; result is less than the reporting limit but greater than method detection limit.

Bold	= Result exceeds Unrestricted Use SCOs.
Bold	= Result exceeds Restricted Residential Use SCOs.
Bold	= Result exceeds Commercial Use SCOs.
Bold	= Result exceeds Industrial use SCOs.

**TABLE 2
SAMPLING AND ANALYSIS PLAN
REMEDIAL INVESTIGATION/INTERIM REMEDIAL MEASURES/ALTERNATIVE ANALYSIS WORK PLAN
1155 MAIN STREET SITE
BUFFALO, NEW YORK**

Location	Number of Proposed Locations	Matrix	Parameter ¹						
			TCL VOCs ²	TCL SVOCs ²	TAL Metals	PCBs	Herbicides	Pesticides	PFASs
Subsurface Soil									
Test Pits (Fill Material)	10	Soil	5	10	10	5	5	5	--
Test Pits (Native)	30	Soil	5	30	30	5	5	5	--
Blind Duplicate ³	2	Soil	1	2	2	1	1	1	--
MS/MSD ³	2	Soil	1	2	2	1	1	1	--
Soil Subtotal			12	44	44	12	12	12	0
Groundwater									
Monitoring Well	4	Groundwater	4	4	4	4	4	4	3
Blind Duplicate ³	1	Groundwater	1	1	1	1	1	1	1
MS/MSD ³	1	Groundwater	1	1	1	1	1	1	1
Trip Blank ⁴	-	Water	1	-	-	-	-	-	-
Equipment Blank ⁵	-	Water	-	-	-	-	-	-	1
Field Blank ⁶	-	Water	-	-	-	-	-	-	1
Groundwater Subtotal			7	6	6	6	6	6	7
Sampling Totals			19	50	50	18	18	18	7

Notes:

1. Analyses will be performed via USEPA SW-846 methodology with equivalent Category B deliverables package.
2. 1,4 Dioxane (groundwater, via USEPA Method 8270 SIM) will also be reported in monitoring well locations.
3. Blind duplicate and MS/MSD samples will be collected at a frequency of 1 per 20 samples/media collected.
4. Trip blanks will be submitted to the laboratory each day aqueous volatile organic samples are collected.
5. One equipment blank will be submitted to the laboratory for the six monitoring wells to be sampled.
6. Field blanks will be submitted to the laboratory each day groundwater samples are collected.

Acronyms:

- VOCs = volatile organic compounds
- SVOCs = semi-volatile organic compounds
- TCL = Target Compound List
- TAL = Target Analyte List
- PCBs = Polychlorinated Biphenyls
- PFASs = per- and polyfluoroalkyl substances

TABLE 3

**CRITERIA FOR USE OF OFF-SITE SOIL AS BACKFILL
RI/IRM/AA WORK PLAN
1155 MAIN STREET SITE
BUFFALO, NEW YORK**

Parameter	Allowable Concentration for Use of Off-Site Soil ¹
Volatile Organic Compounds (mg/kg)	
1,1,1-Trichloroethane	0.68
1,1-Dichloroethane	0.27
1,1-Dichloroethene	0.33
1,2-Dichlorobenzene	1.1
1,2-Dichloroethane	0.02
1,2-Dichloroethene(cis)	0.25
1,2-Dichloroethene(trans)	0.19
1,3-Dichlorobenzene	2.4
1,4-Dichlorobenzene	1.8
1,4-Dioxane	0.1
Acetone	0.05
Benzene	0.06
Butylbenzene	12
Carbon tetrachloride	0.76
Chlorobenzene	1.1
Chloroform	0.37
Ethylbenzene	1
Hexachlorobenzene	0.33
Methyl ethyl ketone	0.12
Methyl tert-butyl ether	0.93
Methylene chloride	0.05
Propylbenzene-n	3.9
Sec-Butylbenzene	11
Tert-Butylbenzene	5.9
Tetrachloroethene	1.3
Toluene	0.7
Trichloroethene	0.47

TABLE 3

**CRITERIA FOR USE OF OFF-SITE SOIL AS BACKFILL
RI/IRM/AA WORK PLAN
1155 MAIN STREET SITE
BUFFALO, NEW YORK**

Parameter	Allowable Concentration for Use of Off-Site Soil ¹
Volatile Organic Compounds (mg/kg)	
Trimethylbenzene-1,2,4	3.6
Trimethylbenzene-1,3,5	8.4
Vinyl chloride	0.02
Xylene (mixed)	0.26
Semi-Volatile Organic Compounds (mg/kg)	
Acenaphthene	20
Acenaphthylene	100
Anthracene	100
Benzo(a)anthracene	1
Benzo(a)pyrene	1
Benzo(b)fluoranthene	1
Benzo(g,h,i)perylene	100
Benzo(k)fluoranthene	0.8
Chrysene	1
Dibenz(a,h)anthracene	0.33
Fluoranthene	100
Fluorene	30
Indeno(1,2,3-cd)pyrene	0.5
m-Cresol(s)	0.33
Naphthalene	12
o-Cresol(s)	0.33
p-Cresol(s)	0.33
Pentachlorophenol	0.8
Phenanthrene	100
Phenol	0.33
Pyrene	100

TABLE 3

**CRITERIA FOR USE OF OFF-SITE SOIL AS BACKFILL
RI/IRM/AA WORK PLAN
1155 MAIN STREET SITE
BUFFALO, NEW YORK**

Parameter	Allowable Concentration for Use of Off-Site Soil¹
Metals (mg/kg)	
Arsenic	13
Barium	350
Beryllium	7.2
Cadmium	2.5
Chromium, Hexavalent ²	1
Chromium, Trivalent ²	30
Copper	50
Cyanide	27
Lead	63
Manganese	1600
Mercury (total)	0.18
Nickel	30
Selenium	3.9
Silver	2
Zinc	109
PCBs/Pesticides (mg/kg)	
2,4,5-TP Acid (Silvex)	3.8
4,4'-DDE	0.0033
4,4'-DDT	0.0033
4,4'-DDD	0.0033
Aldrin	0.005
Alpha-BHC	0.02
Beta-BHC	0.036
Chlordane (alpha)	0.094
Delta-BHC	0.04
Dibenzofuran	7
Dieldrin	0.005
Endosulfan I	2.4
Endosulfan II	2.4

TABLE 3

**CRITERIA FOR USE OF OFF-SITE SOIL AS BACKFILL
RI/IRM/AA WORK PLAN
1155 MAIN STREET SITE
BUFFALO, NEW YORK**

Parameter	Allowable Concentration for Use of Off-Site Soil ¹
PCBs/Pesticides (mg/kg)	
Endosulfan sulfate	2.4
Endrin	0.014
Heptachlor	0.042
Lindane	0.1
Polychlorinated biphenyls	0.1

Notes:

1. Values per DER-10 Appendix 5 - Allowable Constituent Levels for Imported Fill or Soil for Unrestricted Use.
2. The SCO for Hexavalent or Trivalent Chromium is considered to be met if the analysis for the total species of this contaminant is below the specific SCO for Hexavalent Chromium.

SUMMARY OF FIELD OPERATING PROCEDURES
REMEDIAL INVESTIGATION/INTERIM REMEDIAL MEASURES/ALTERNATIVE ANALYSIS WORK PLAN
1155 MAIN STREET SITE
BUFFALO, NEW YORK

FOP No.	Procedure
001.1	Abandonment of Borehole Procedures
002.0	Abandonment of Monitoring Wells Procedure
007.0	Calibration and Maintenance of Portable Dissolved Oxygen Meter
008.0	Calibration and Maintenance of Portable Field pH/Eh Meter
009.0	Calibration and Maintenance of Portable Field Turbidity Meter
011.1	Calibration and Maintenance of Portable Photoionization Detector
012.0	Calibration and Maintenance of Portable Specific Conductance Meter
013.0	Composite Sample Collection Procedure for Non-Volatile Organic Analysis
015.0	Documentation Requirements for Drilling and Well Installation
017.0	Drill Site Selection Procedure
018.0	Drilling and Excavation Equipment Decontamination Procedures
021.0	Establishing Horizontal and Vertical Control
022.0	Groundwater Level Measurement
023.1	Groundwater Purging Procedures Prior to Sample Collection
024.1	Groundwater Sample Collection Procedures
026.1	Hollow Stem Auger (HSA) Drilling Procedures
031.2	Low Flow (Minimal Drawdown) Groundwater Purging & Sampling Procedure
032.1	Management of Investigation-Derived Waste (IDW)
033.0	Monitoring Well Construction for Hollow Stem Auger Boreholes
036.0	Monitoring Well Development Procedures
039.1	NAPL Detection and Sample Collection Procedure
040.1	Non-Disposable and Non-Dedicated Sampling Equipment Decontamination
041.0	Overburden Casing Installation Procedure
046.0	Sample Labeling, Storage and Shipment Procedures
047.0	Screening of Soil Samples for Organic Vapors During Drilling Activities
048.0	Screening of Soil Samples for Organic Vapors During Impacted Soil Removal Activities
054.2	Soil Description Procedures Using The Visual-Manual Method
058.0	Split-Spoon Sampling Procedures
063.2	Surface and Subsurface Soil Sampling Procedures
065.1	Test Pit Excavation and Logging Procedures
073.2	Real-Time Air Monitoring During Intrusive Activities
078.0	Geoprobe Drilling Procedure
079.0	Stockpile Sampling Procedures for Chemical Analysis
080.0	Stockpile & Borrow Source Sampling Procedures for Physical Analysis
082.0	Waste Sampling Procedures
084.0	Calibration and Maintenance of Portable Particulate Meter
085.0	Field Quality Control Procedures

TABLE 5

**SAMPLE CONTAINER, VOLUME, PRESERVATION & HOLDING TIME REQUIREMENTS
REMEDIAL INVESTIGATION/INTERIM REMEDIAL MEASURE/ALTERNATIVE ANALYSIS WORK PLAN
1155 MAIN STREET SITE
BUFFALO, NEW YORK**

Matrix	Parameter ¹	Method ¹	Container Type	Minimum Volume	Preservation (Cool to 2-4 °C for all samples)	Holding Time from Sample Date
Soil	TCL + CP-51 VOCs	8260B	EnCore/WMG	5 gm / 4 oz.	Cool to 2-4 °C, Zero Headspace	48 - hours / 14 days
	TCL SVOCs	8270C	WMG	16 oz.	Cool to 2-4 °C	14 days extrac./40 days
	TAL Metals ²	6010	WMG	4 oz.	Cool to 2-4 °C	6 months/Hg 28 days
	Pesticides	8081	WMG	8oz	Cool to 2-4 °C	14 days extrac./40 days
	Herbicides	8151	WMG	8oz	Cool to 2-4 °C	14 days extrac./40 days
	PCBs	8082	WMG	4 oz.	Cool to 2-4 °C	14 days extrac./40 days
Groundwater	TCL + CP-51 VOCs	8260B	glass vial	3 - 4 oz.	HCl to pH<2, Zero Headspace, Cool to 2-4 °C	14 days
	Per- and Polyfluoroalkyl Substances (PFAS)	modified 537	HDPE/Polypropylene	2 - 500 mL	Trizma, Cool to 2-4 °C	14 days
	1,4-Dioxane	8270 SIM	8270 SIM	2 - 500 mL	Cool to 2-4 °C	7 days extrac/40 days
	TCL SVOCs	8270C	amber glass	1000 ml	Cool to 2-4 °C	7 days extrac/40 days
	TAL Metals ²	6010	plastic	600 ml	HNO ₃ to pH<2, Cool to 2-4 °C	6 months/Hg 28 days
	Pesticides	8081B	amber glass	1000 ml	Cool to 2-4 °C	14 days extrac./40 days
	Herbicides	8151A	amber glass	1000 ml	Cool to 2-4 °C	14 days extrac./40 days
	PCBs	8082	amber glass	1000 ml	Cool to 2-4 °C	7 days extrac/40 days

References:

1. Test Methods for Evaluating Solid Wastes, USEPA SW-846, Update III, 1991.

Notes:

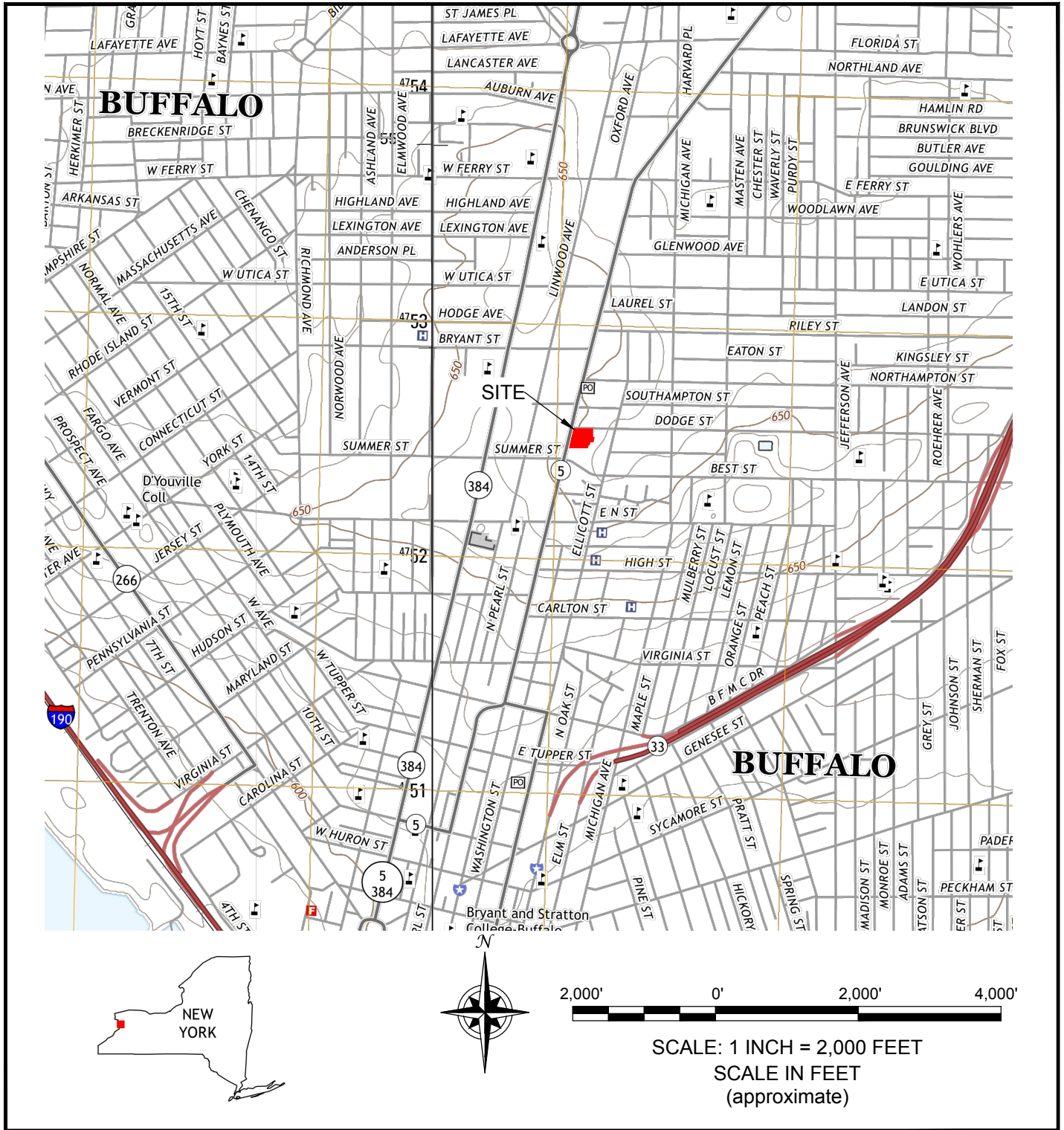
1. EPA-approved methods published in Reference 1 above may be used. The list of analytes, laboratory method and the method detection limit for each parameter are included in Tables 1 and 2 of the QAPP.
2. Mercury sampling in soil/groundwater via EPA methods 7471/7470 respectively.

Acronyms:

VOCs = Volatile Organic Compounds
 SVOCs = Semi-Volatile Organic Compounds
 TCL = Target Compound List
 TAL = Target Analyte List
 WMG = Wide Mouth Glass

FIGURES

FIGURE 1



BENCHMARK
 ENVIRONMENTAL
 ENGINEERING &
 SCIENCE, PLLC

2558 HAMBURG TURNPIKE
 SUITE 300
 BUFFALO, NY 14218
 (716) 856-0599

SITE LOCATION AND VICINITY MAP

RI/IRM/AA WORK PLAN
1155 MAIN STREET SITE
 BUFFALO, NEW YORK
 PREPARED FOR
MAIN & DODGE LLC

PROJECT NO.: 0371-018-001
 DATE: SEPTEMBER 2018
 DRAFTED BY: CMC

DISCLAIMER:
 PROPERTY OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC. IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC.

LEGEND:

— BCP SITE BOUNDARY



SITE PLAN (AERIAL)

RI/IRM/AA WORK PLAN
1155 MAIN STREET SITE
BUFFALO, NEW YORK
PREPARED FOR
MAIN & DODGE LLC

FIGURE 2



2556 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0599

PROJECT NO.: 0371-018-002

DATE: OCTOBER 2018

DRAFTED BY: CMC

DISCLAIMER:
PROPERTY OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC. IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC.

F:\CAD\Turnkey\Cedaland Development Group\Main & Dodge\RI\RM-AA Work Plan\Figure 3: Investigation Locations & Areas of Concern.dwg, 10/16/2018 5:10:54 PM, DWG To PDF.pc

LEGEND:

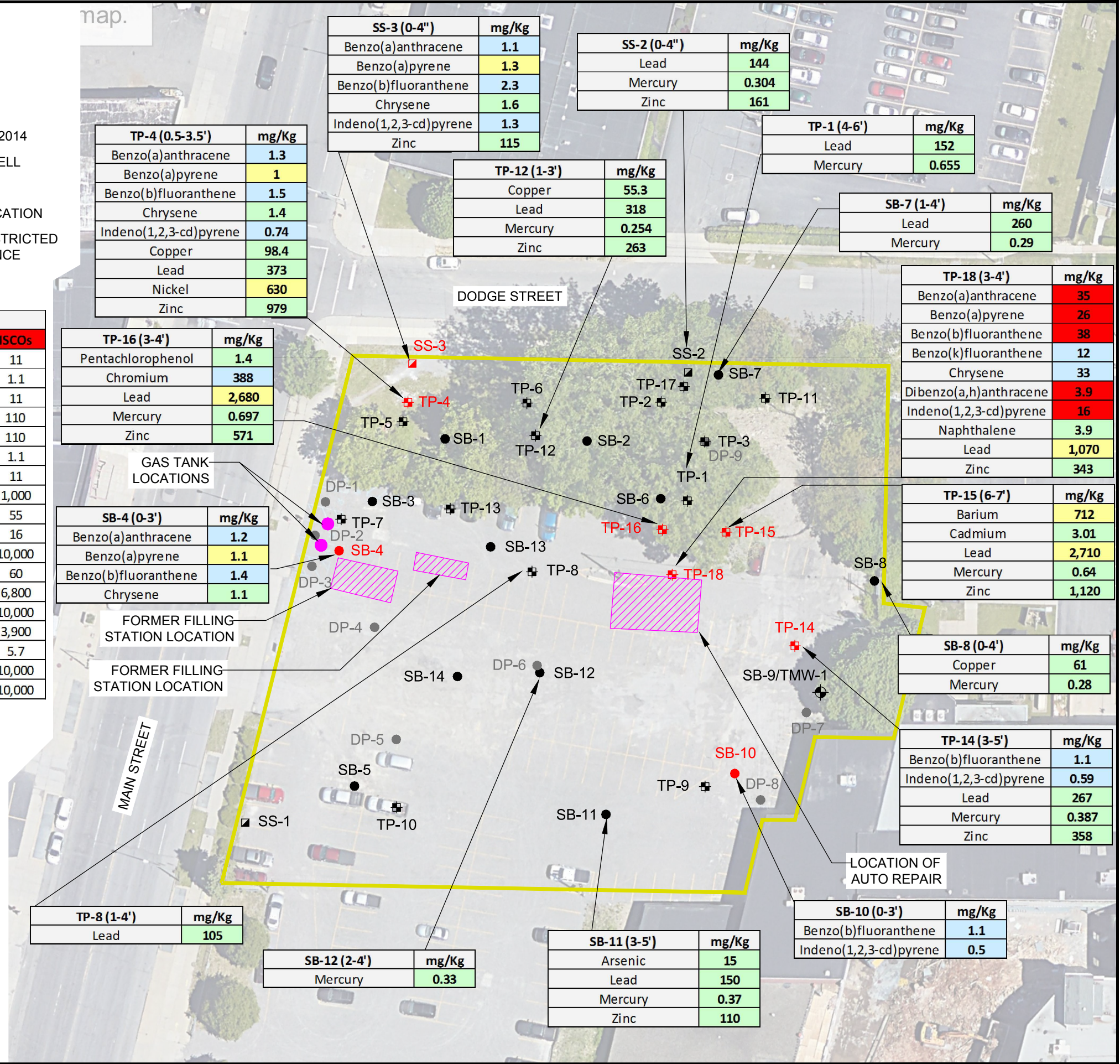
- BCP SITE BOUNDARY
- SB-1 SOIL BORING
- DP-6 SOIL BORING - PHASE II FEB. 2014
- ⊕ SB-9/TMW-1 TEMPORARY MONITORING WELL
- SS-2 SURFACE SOIL SAMPLE
- ⊕ TP-2 TEST PIT INVESTIGATION LOCATION
- ⊕ TP-8 SAMPLE LOCATION WITH RESTRICTED RESIDENTIAL SCO EXCEEDANCE

Part 375 Soil Cleanup Objectives				
	USCOs	RRSCOs	CSCOs	ISCOs
Benzo(a)anthracene	1	1	5.6	11
Benzo(a)pyrene	1	1	1	1.1
Benzo(b)fluoranthene	1	1	5.6	11
Benzo(k)fluoranthene	0.8	3.9	56	110
Chrysene	1	3.9	56	110
Dibenzo(a,h)anthracene	0.33	0.33	0.56	1.1
Indeno(1,2,3-cd)pyrene	0.5	0.5	5.6	11
Naphthalene	12	100	500	1,000
Pentachlorophenol	0.8	6.7	6.7	55
Arsenic	13	16	16	16
Barium	350	400	400	10,000
Cadmium	2.5	4.3	9.3	60
Chromium	30	180	1,500	6,800
Copper	50	270	270	10,000
Lead	63	400	1,000	3,900
Mercury	0.18	0.81	2.8	5.7
Nickel	30	310	310	10,000
Zinc	109	10,000	10,000	10,000

Note:
 USCO = Unrestricted Soil Cleanup Objective
 RRSCO = Restricted - Residential Soil Cleanup Objective
 CSCO = Commercial Soil Cleanup Objective
 ISCO = Industrial Soil Cleanup Objective



SCALE: 1 INCH = 50 FEET
 SCALE IN FEET
 (approximate)



TP-4 (0.5-3.5')	mg/Kg
Benzo(a)anthracene	1.3
Benzo(a)pyrene	1
Benzo(b)fluoranthene	1.5
Chrysene	1.4
Indeno(1,2,3-cd)pyrene	0.74
Copper	98.4
Lead	373
Nickel	630
Zinc	979

SS-3 (0-4")	mg/Kg
Benzo(a)anthracene	1.1
Benzo(a)pyrene	1.3
Benzo(b)fluoranthene	2.3
Chrysene	1.6
Indeno(1,2,3-cd)pyrene	1.3
Zinc	115

SS-2 (0-4")	mg/Kg
Lead	144
Mercury	0.304
Zinc	161

TP-1 (4-6')	mg/Kg
Lead	152
Mercury	0.655

SB-7 (1-4')	mg/Kg
Lead	260
Mercury	0.29

TP-18 (3-4')	mg/Kg
Benzo(a)anthracene	35
Benzo(a)pyrene	26
Benzo(b)fluoranthene	38
Benzo(k)fluoranthene	12
Chrysene	33
Dibenzo(a,h)anthracene	3.9
Indeno(1,2,3-cd)pyrene	16
Naphthalene	3.9
Lead	1,070
Zinc	343

TP-15 (6-7')	mg/Kg
Barium	712
Cadmium	3.01
Lead	2,710
Mercury	0.64
Zinc	1,120

SB-8 (0-4')	mg/Kg
Copper	61
Mercury	0.28

TP-14 (3-5')	mg/Kg
Benzo(b)fluoranthene	1.1
Indeno(1,2,3-cd)pyrene	0.59
Lead	267
Mercury	0.387
Zinc	358

SB-10 (0-3')	mg/Kg
Benzo(b)fluoranthene	1.1
Indeno(1,2,3-cd)pyrene	0.5

SB-11 (3-5')	mg/Kg
Arsenic	15
Lead	150
Mercury	0.37
Zinc	110

SB-12 (2-4')	mg/Kg
Mercury	0.33

TP-8 (1-4')	mg/Kg
Lead	105

TP-16 (3-4')	mg/Kg
Pentachlorophenol	1.4
Chromium	388
Lead	2,680
Mercury	0.697
Zinc	571

SB-4 (0-3')	mg/Kg
Benzo(a)anthracene	1.2
Benzo(a)pyrene	1.1
Benzo(b)fluoranthene	1.4
Chrysene	1.1

INVESTIGATION LOCATIONS & AREAS OF CONCERN

RI/RM/AA WORK PLAN
 1155 MAIN STREET SITE
 BUFFALO, NEW YORK
 PREPARED FOR
 MAIN & DODGE LLC

BENCHMARK
 ENVIRONMENTAL
 ENGINEERING &
 SCIENCE, PLLC
 2558 HAMBURG TURNPIKE
 SUITE 300
 BUFFALO, NY 14218
 (716) 856-0599

JOB NO.: 0371-018-002

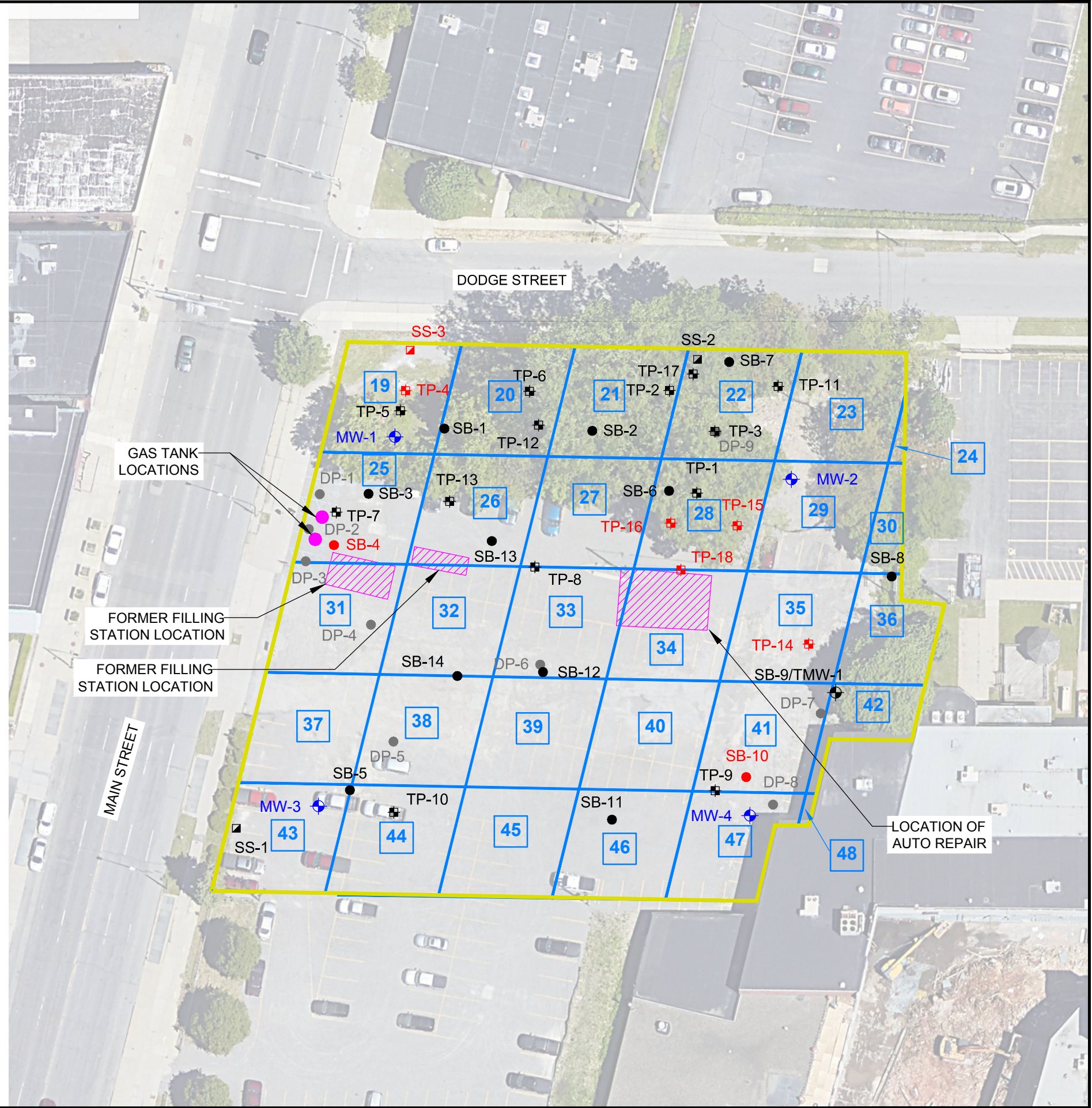
FIGURE 3

DISCLAIMER: PROPERTY OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC. IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC.

DATE: OCTOBER 2018
 DRAFTED BY: CMC

LEGEND:

- BCP SITE BOUNDARY
- SB-1 ● SOIL BORING
- DP-6 ● SOIL BORING - PHASE II FEB. 2014
- SB-9/TMW-1 ⊕ TEMPORARY MONITORING WELL
- SS-2 ▣ SURFACE SOIL SAMPLE
- TP-2 ⊕ TEST PIT INVESTIGATION LOCATION
- TP-8 ⊕ SAMPLE LOCATION WITH RESTRICTED RESIDENTIAL SCO EXCEEDANCE
- MW-1 ⊕ RI MONITORING WELL LOCATION
- 19 50' X 50' GRID AND TEST PIT LOCATION AND ID



SCALE: 1 INCH = 50 FEET
SCALE IN FEET
(approximate)

BENCHMARK
ENVIRONMENTAL
ENGINEERING &
SCIENCE, PLLC

2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0599

JOB NO.: 0371-018-002

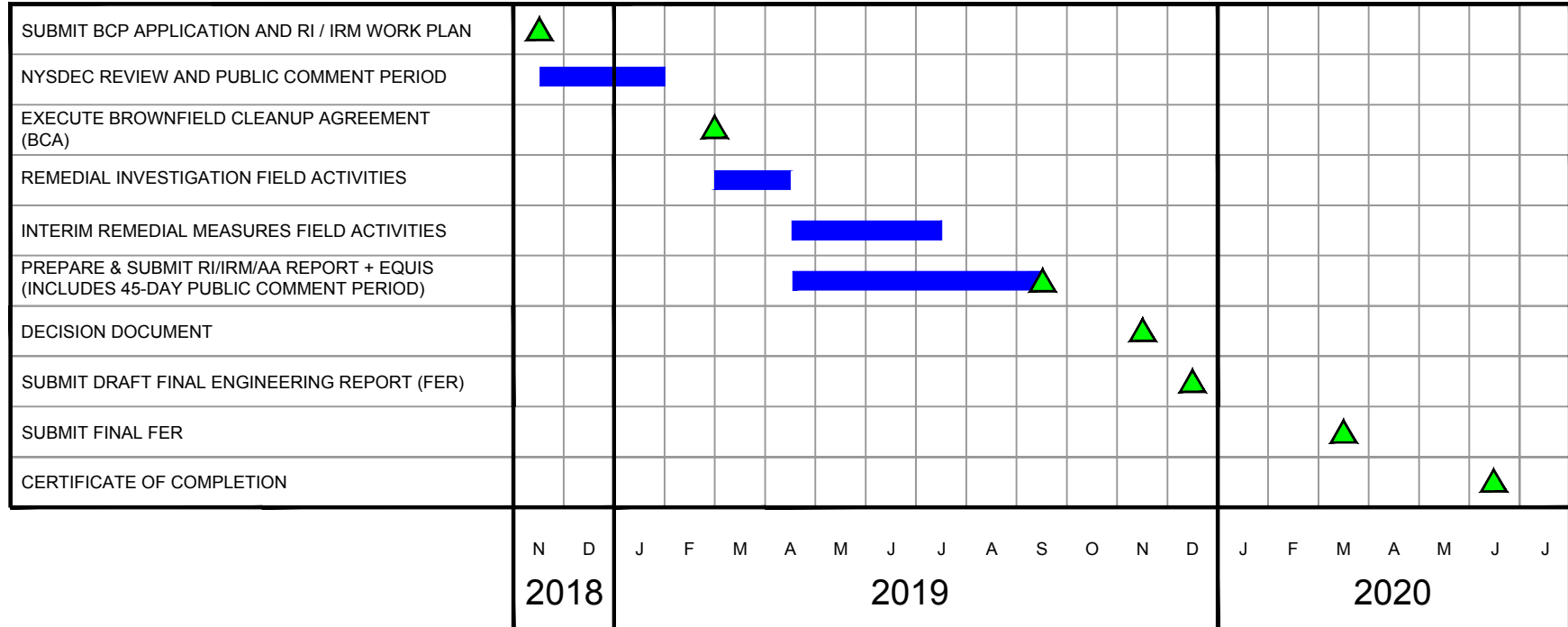
REMEDIAL INVESTIGATION LOCATIONS

RI/IRM/AA WORK PLAN
1155 MAIN STREET SITE
BUFFALO, NEW YORK
PREPARED FOR
MAIN & DODGE LLC

FIGURE 4

DISCLAIMER: PROPERTY OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC. IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC.

PROJECT TASKS:



2558 HAMBURG TURNPIKE
 SUITE 300
 BUFFALO, NY 14218
 (716) 858-0599

PROJECT NO.: 0371-018-002

DATE: OCTOBER 2018

DRAFTED BY: CMC

PRELIMINARY PROJECT SCHEDULE

RI/IRM/AA WORK PLAN
1155 MAIN STREET SITE
 BUFFALO, NEW YORK
 PREPARED FOR
 MAIN & DODGE LLC

FIGURE 5

DISCLAIMER: PROPERTY OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC. IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC.

APPENDIX A

RESUMES



THOMAS H. FORBES, P.E.
PRINCIPAL ENGINEER

EDUCATION

BS (Chemical Engineering) 1988; State University of New York at Buffalo
Graduate of State University of New York at Buffalo School of Management Center for Entrepreneurial Leadership; 2002
Graduate-level courses in Biological Principles of Engineering and Hazardous Waste Management through the State University of New York at Buffalo Department of Environmental Engineering

REGISTRATION AND AFFILIATIONS

Professional Engineer, New York
Professional Engineer, Ohio
ISO 14000 Certified Lead Auditor - April 1998
Member - American Institute of Chemical Engineers
Member – New York Water Environment Association, Inc.

SUMMARY OF EXPERIENCE

Mr. Forbes has over 26 years of environmental engineering experience, with a particular focus on brownfield and hazardous waste site investigation and remediation; petroleum-impacted site remediation; due diligence for environmentally-impaired properties; groundwater and industrial wastewater treatment; and environmental regulatory compliance. Investigations and cleanups Mr. Forbes has directed have included well over 100 sites contaminated with a wide range of materials, including chlorinated solvents, PCBs, dioxins, heavy metals, cyanide, radioactive isotopes, and petroleum contamination. He has evaluated and successfully implemented on a conventional and design-build basis cost-saving and innovative treatment technologies (e.g. in-situ and ex-situ physical-chemical, thermal, and biological treatment) as well as removal and containment methods for remediation.

REPRESENTATIVE PROJECT EXPERIENCE

June 1998 to Present: **Benchmark Environmental Engineering & Science, PLLC**

- Served as project manager for the investigation and hydrogeological assessment of the 2001 Webster Block site on behalf of the City of Buffalo. Work included a Phase II Site investigation, underground storage tank removal, groundwater pump test, and utility capacity evaluation performed under USEPA Pilot grant.
- Currently serving as Project Officer for NYSDEC Brownfield Cleanup Program (BCP) investigation and remediation of the former Millard Fillmore Gates Circle hospital complex in Buffalo, NY.
- Project officer for NYSDEC BCP investigation and cleanup of 154 South Ogden Street in concert with construction of the South Buffalo Charter School.
- Serving as project manager for remedial investigation, alternatives analysis, and remedial construction to facilitate redevelopment of over 450-acres of former steel manufacturing site property encompassing 33 separate BCP sub-parcel sites in Lackawanna, New York. Contaminants of concern primarily include petroleum organics/solvents and heavy metals.

REPRESENTATIVE EXPERIENCE (CONT.)

THOMAS H. FORBES, P.E.

- Project manager for RI/FS, remedial design and remedial construction at the Sycamore Village Site, a 4-acre NY State Environmental Restoration Program (ERP) site in Buffalo, NY. Responsible for all technical and administrative aspects of the project, involving removal of over 18,000 cubic yards of soil from an impacted residential neighborhood and site restoration.
- Assisted western NY client's legal counsel prepare legal defense related to a multi-PRP suit by Orange County Water District, Fullerton, CA for primary drinking water aquifer contamination by chlorinated solvents and emergent organic contaminants. Served as technical consultant during mediation and settlement discussions; prepared expert report and lead technical arguments on behalf of defendant to support bankruptcy claim dismissal.
- Served as project manager and supervising contractor for design-build remedial activities at the Markhams National Priority List (NPL) site in Dayton, NY. Successfully implemented remedial measures leading to USEPA-designated Preliminary Site Closeout status in October 2008 and delisting in 2009.
- Served as project manager representing multiple potential responsible party (PRP)-led remedial construction activities to address heavy metal and chlorinated solvent impacts at the Peter Cooper Landfill NPL site. Responsible for oversight and coordination of RI/FS planning and implementation activities, lead technical contact with USEPA, and remedial measures design and construction. Achieved site closeout in 2011.
- Served as project manager for design-build cleanup of the Urbana Landfill Site, a Class 2 Hazardous Waste Landfill Site. Designed and successfully implemented a Soil Vapor Extraction system to address source area chlorinated organics in soils, achieving soil cleanup goals with 12 months. Also responsible for design, startup and continued operation of a downgradient perimeter groundwater extraction well system and groundwater remediation utilizing advanced oxidation treatment.
- Assisted in the development of a voluntary cleanup plan for remediation of a 120-acre former steel manufacturing site in Buffalo, NY which was contaminated with volatile organic compounds, heavy metals, poly-nuclear aromatic hydrocarbons. Specific assistance involved design of a soil vapor extraction (SVE) system to address VOC and SVOC source area impacts proximate to a residential neighborhood and development and implementation of a Community Air Monitoring Plan involving quantitative monitoring (Summa Canister and respirable particulate analysis) and qualitative monitoring (field instruments).
- Served as Project Manager for RI/FS and cleanup activities related to solvent releases from a former paint and specialty coatings manufacturing facility in Buffalo, NY. The work, carried out under NY State Superfund program, included insitu treatment of soils and groundwater impacted by chlorinated and non-chlorinated volatile organics and heavy metals.
- Assisted confidential client's legal counsel negotiate a consent decree with New Mexico Environment Department related to cleanup of chlorinated solvent releases to the fractured bedrock aquifer from a former manufacturing operation in Albuquerque, NM. Presently managing insitu groundwater cleanup and monitoring work.
- Currently serving as Project Manager for NY State Voluntary Cleanup efforts for chlorinated solvent cleanup at a former degreasing and electroplating facility in Rochester, NY. Designed and implemented interim remedial measures involving low-profile air stripping and insitu hydrogen infusion.

REPRESENTATIVE EXPERIENCE (CONT.)

THOMAS H. FORBES, P.E.

- Served as Project Manager for multiple EPA Pilot-Grant funded investigations for City of Buffalo Department of Strategic Planning.
- Project manager for remedial investigation, alternatives analysis, and remedial construction to facilitate redevelopment of over 450-acres of former steel manufacturing site property in Lackawanna, New York. Contaminants of concern primarily include petroleum organics and heavy metals.
- Managed design-build cleanup of former New 7th Street Brownfield Cleanup Program Site in Buffalo, New York. The project involved design-build removal of several hundred tons of petroleum-impacted soil and fill material and preparation of related engineering reports resulting in Certificate of Completion issuance.
- Led remedial efforts for petroleum releases at a Western New York refinery and major oil storage facility, achieving site inactivation within 3 months of the release.
- Managed spill site investigation and cleanup work including underground storage tank removal work at numerous petroleum and chemical spill sites in Western New York.
- Led design-build construction of a 5 MGD capacity cooling water pH adjustment system for PVS Chemical Corporation. The project included design of feed forward pH control system, adjustment tank and mixer construction, process and chemical feed piping modifications to neutralize sulfuric acid discharges. Successfully implemented startup and demonstration testing.
- Designed a 75 gpm groundwater treatment system and served as quality assurance officer for remedial efforts at the Steelfields site (former LTV Steel/Hanna Furnace Site), Buffalo, NY. The treatment system removes petroleum-based volatile organic and semi-volatile organic compounds prior to discharge to the Buffalo Sewer Authority.

June 1988 to June 1998

Malcolm Pirnie, Inc.

- Assisted the City of Buffalo Department of Community Development in implementing an emergency PCB-contaminated soil removal effort from a residential neighborhood in Buffalo, NY. Responsibilities included coordination of hazmat excavation contractor and secure landfill, preparation of an emergency excavation and confirmatory sampling plan, and oversight of community air monitoring during the removal work.
- Designed and successfully implemented an innovative groundwater treatment system for the Mercury Aircraft, Inc. Class 2 hazardous waste site in Dresden, New York. Responsibilities included preparation of design plans and specifications for an advanced oxidation process and low profile air stripper, construction oversight and treatment system start-up.
- Performed a Feasibility Study and prepared an Engineering Design Report for remediation of PCB-contaminated soils and sediments at the Columbus McKinnon Corporation, Tonawanda, New York. Responsibilities included detailed evaluation of several remedial processes, completion of design calculations and remedial cost estimates, and preparation of a final report for submission to NYSDEC.
- Assisted in performance of a Feasibility Study for the West Valley Nuclear Demonstration Site. The Feasibility Study evaluated alternatives for remediation of groundwater contaminated with radioactive isotopes from a former containment area release.

REPRESENTATIVE EXPERIENCE (CONT.)

THOMAS H. FORBES, P.E.

- Assisted in the design and performed start-up of a groundwater remediation system for Moog, Inc., an aerospace parts manufacturer. The project, performed on a design-build basis, involved preparation of design plans, securing contractor bids for construction, and start-up of the remediation system, which incorporates filtration and air stripping to remove chlorinated volatile organic contaminants from groundwater.
- Designed and implemented groundwater monitoring well decommissioning procedures for the Love Canal site, Niagara Falls NY. The project was performed on behalf of NYSDEC and included abandoning of monitoring wells no longer used in the Love Canal landfill or in adjoining neighborhoods.
- Prepared an environmental monitoring plan for remediation of PCB-contaminated sediments in the St. Lawrence River along the General Motors, Inc. Powertrain Division facility in Massena, New York.
- Assisted in the performance of a Feasibility Study for remediation of volatile organic, PCB and heavy metal-contaminated soils and ground water at the Rochester Fire Academy, Rochester, New York.

PUBLICATIONS/PRESENTATIONS

Forbes, Thomas H. and Frappa, Richard H. "Innovative Remedial Measures for the Mercury Aircraft Site" Proceedings of the Purdue University 50th Annual Industrial Waste Conference, May 1995.

Frappa, Richard H., Forbes, Thomas H. and McManus, Anne Marie "A Blast to Remediate" Industrial Wastewater, July/August 1996.

Forbes, Thomas H. and McManus, Anne Marie "Advanced Oxidation Technology and Application" Proceedings of the University at Buffalo 28th Mid-Atlantic Industrial and Hazardous Waste Conference, July 1996.

Forbes, Thomas H. et al - "Pay to Throw in Buffalo" Proceedings of 1997 Solid Waste Association of North America annual conference.

Forbes, T.H. & Werthman, P.H. "Development of Site-Specific Cleanup Levels for Commercial Redevelopment of a Large Former Steel Works," presented at the Brownfields 2000 Conference, Atlantic City NJ, October 2000.

Forbes, Thomas H. and Frappa, Richard H. "Innovative Remedial Measures Almost 10 Years Later at the Former Mercury Aircraft Site" Proceedings of the National Groundwater Association Northeast Conference, October 2002.

Forbes, Thomas H. "Ins and Outs of the New York State Brownfield Cleanup Program" Air & Waste Management Association, Niagara Frontier Section, Annual Environmental Seminar (presentation), April 2006.

Forbes, Thomas H. "Brownfield Redevelopment" Proceedings of Half Moon Seminar's "New York Environmental Compliance for Design Professionals" conference, September 2008.

Forbes, Thomas H. "New York State Brownfield Cleanup Program Update" Air & Waste Management Association Annual Environmental Seminar (presentation), April 2009.



CHRISTOPHER Z. BORON, P.G.
SENIOR PROJECT MANAGER

EDUCATION

Bachelors of Science (Geology) 1995; State University of New York, College at Fredonia

REGISTRATION AND AFFILIATIONS

Professional Geologist #001017, University of the State of New York, Education Department, 2018

Certified Professional Geologist #11624, American Institute of Professional Geologists, 2013

Professional Geoscientist #692, Louisiana Board of Professional Geoscientists, 2016

Hazardous Waste Safety Training (OSHA) – 1999

Annual Hazardous Waste Safety Refresher Training (OSHA) - 2000-Present

SUMMARY OF EXPERIENCE

Mr. Boron has 20 years of experience in the environmental field on a variety of projects involving environmental assessment/due diligence, site investigation and remediation within various regulatory programs. His experience includes Phase I and II Environmental Site Assessments (ESAs) for property transaction due diligence following ASTM 1597-13 and USEPA All Appropriate Inquiry (AAI); vapor intrusion investigations of industrial, commercial and residential structures following New York State Department of Health (NYSDOH) guidance for evaluating soil vapor intrusion into buildings; all aspects of remedial investigations, feasibility studies/alternatives analysis and site remediation under NYSDEC Inactive Hazardous Waste Site (Superfund) Program, Voluntary Cleanup Program, New York State Brownfield Cleanup Program and Environmental Restoration Program; all aspects of investigation and remediation involving petroleum spill sites regulated by the New York State Department of Environmental Conservation (NYSDEC) Petroleum Spills Division; solid waste facility construction management and construction quality assurance monitoring and testing following the NYSDEC Division of Solid Waste regulations.

REPRESENTATIVE PROJECT EXPERIENCE

July 2014 to Present:

TurnKey Environmental Restoration, LLC

- **Environmental Oversight, Voluntary Cleanup Program Project, RiverBend Site, Buffalo, New York.** Approximately 87-acres of the RiverBend Voluntary Cleanup Program (VCP) Site has undergone redevelopment for the construction of a 1.2 million square foot manufacturing facility. The Site was historically owned and operated by two steel manufacturing companies from 1906 until the late 1980s. The Site was remediated under the NYSDEC VCP in 2007 to remove contamination source area materials and address groundwater contamination. Part of the remedial strategy was the development and implementation of a Site Management Plan (SMP) to manage soil/fill and contamination encountered redevelopment activities to protect both human health and the environment.

TurnKey worked on the project for 26 months (August 2015 to September 2017). Responsibilities included: oversight of subsurface activities to assess soil/fill for potential impacts, on-site reuse or off-site disposal; verify import materials used for construction of the cover system (engineering control) were suitable for use; assistance with interior water damage/mold related issues during building construction;



**CHRISTOPHER Z. BORON
SR. PROJECT MANAGER**

stormwater pollution prevention plan (SWPPP) inspections and reporting; implementation of the community air monitoring program (CAMP); observation the cover system installation; and assistance with management of technology enhanced naturally occurring radioactive material (TENORM) that was encountered, as discussed below.

During the subsurface redevelopment activities, slag (a byproduct of iron and steel manufacturing) containing low-levels of TENORM were encountered. The radionuclide of concern was Radium-226 and to a lesser extent Radium-228. Upon completion of the subsurface activities, 34,000 cubic yards of slag-containing fill material with TENORM was generated based on the gamma radiation field screening activities that were implemented with concurrence from NYSDEC. NYSDEC regulation 6NYCRR Part 380) does not allow land disposal of radiological material. Due to the financial implications associated with the disposal of TENORM out-of-state (estimated to be greater than \$15 million), NYSDEC allowed a Part 380 Variance Request and TENORM Reuse Work Plan to be prepared to allow on-site reuse of the material a fill material to achieve project design grades. A Residual Radiation (RESRAD) model Radiological Impact Assessment (RIA) were completed as part of the Variance Request.

A 10-acre area within Area I was identified for TENORM reuse in accordance with the NYSDEC-approved work plan. The TENORM material was placed in 6-inch lifts, evaluated for the gamma radiation via field screening, and sampled to prove conformance with the Part 380 Variance (Radium-226 concentrations cannot exceed 15 picocuries per gram). The area was covered with a minimum of 1-foot crushed stone cover system, which was demonstrated to provide adequate protection through field screening evaluation and reassessment of the RESRAD/RIA with data collected during the reuse project.

Approximately 9,260 tons of TENORM material was identified as unacceptable for reuse and properly dispose in an out of out-of-state landfill facility. My role as project manager included oversight of the technical field staff involved with the redevelopment activities and implementation of the SMP, NYSDEC-issued Variance, and TENORM Reuse Work Plan. A revised SMP was prepared to address the TENORM identified at the Site as well as a Construction Completion Report (CCR) documenting the various activities conducted during the 26 months of oversight. This was the first Variance Request and TENORM Reuse Work Plan approved by NYSDEC in the New York State.

1176 South Park Site 3, Brownfield Cleanup Program Project, Buffalo, New York. The 9-acre Site was formerly owned by LTV Corp./Republic Steel and used for pig-iron storage and No. 6 fuel oil storage via two, 5.5 million gallon ASTs. The fuel oil was used for the blast furnaces located on the LTV Corp./Republic Street facility, south of the Site, across South Park Avenue. The ASTs were removed in 1981 and subject to a partial cleanup. The property was entered into BCP in 2016 to investigate, remediate and redevelop the Site. My role is project manager and I have been responsible for preparation and implementation of the Remedial Investigation and Interim Remedial Measures Work Plans, oversight of technical field staff, implementation of the RI and IRM, and preparation of the RI/IRM/AA Report.

The Site is being cleaned up to a restricted-commercial use which will involve completion of IRMs to address sources of contamination, preparation of an environmental easement restricting site usage and SMP, and installation of a cover system to prevent exposure to remaining contamination. Remedial action to date involved excavation of 500 tons of impacted soil (PCB, SVOC, and petroleum impacted soil). Additional remedial actions are scheduled for 2018. Redevelopment activities to date include construction of a 9,000 square foot, commercial/retail building which opened in November 2017,



**CHRISTOPHER Z. BORON
SR. PROJECT MANAGER**

construction of a site road, installation of subsurface stormwater drainage system, and installation of a portion of the final engineered cover system. Redevelopment activities are expected to continue for the next 5 years.

- **Former Trico Building, Brownfield Cleanup Program Project, Buffalo, New York.** A developer has purchased an approximate 2.1 acre property containing a 617,000 square foot manufacturing building that was formerly used for windshield wiper manufacturing in the City of Buffalo. The property was entered into BCP in 2013 to investigate, remediate and redevelop the Site. My role is project manager and I have been responsible for implementation of the Remedial Investigation Work Plans, oversight of technical field staff, preparation of the RI/AA Report, Remedial Action Work Plan (RAWP) and Preliminary Active Depressurization System Design Report.

The RAWP has been approved by NYSDEC and the remedial action will involve the installation of sub-slab depressurization system to address 60,000 square feet of the building footprint across 5 interconnected buildings, injection of groundwater amendments to further aid in the breakdown of chlorinated-VOCs present in the groundwater, removal of hydraulic lifts and the associated petroleum impacted soils, treatment and discharge of approximately 150,000 gallons of water present in a sub-basement, and management of impacted soil/fill generated during redevelopment (building foundation alterations). The remedial action are schedule to begin in 2018.

- **Hotel Redevelopment Site, Inactive Hazardous Waste Program, Corning New York.** A developer purchased a vacant hotel on a 1.35 acres Site in downtown Corning, which was demolished to construct a new hotel. During redevelopment, fill material deemed unsuitable for construction of the hotel was identified. This fill materials (ash, slag, glass cullet, refractory brick) was associated with glass manufacturing waste that have been identified throughout the City of Corning as it has historically been used as fill material.

This fill material containing glass waste was inadvertently excavated from the Site and taken to eight (8) off-site properties for reuse. Subsequent testing at the Site determined that the fill material contained hazardous levels of metals and elevated SVOCs and could not be used as fill material. NYSDEC, though an Order on Consent, required the extent of on-site fill material investigated and materials taken off-site would require excavation and landfill disposal. My responsibilities as project manager included: preparation and implementation of the on-site Site Investigation Work Plan; oversight of field staff and subcontractors; preparation of the Site Investigation/Alternatives Analysis (SI/AA) Report; preparation and implementation of the On-Site and Off-Site IRM Work Plans; preparation of the on-site SMP and Final Engineering Report (FER); implementation and documentation of the SMP activities during redevelopment activities, and preparation of the Off-site CCRs documenting remediation of the 8 off-site properties (e.g., excavation/removal/landfill disposal of over 5,000 tons fill material contain glass manufacturing waste). The NYSDEC Consent Order for the Site has been terminated. Hotel construction activities are expected to continue for the next 6-12 months.

- **Due Diligence Portfolio, Multi-National Quick Service Restaurant, Rochester Area, New York.** A private equity firm is looking to acquire a series of quick service restaurants and further expand into the Rochester area market. The due diligence work included the completion of Phase I ESAs and Property Condition Assessments (PCAs). To date, this due diligence work has included 12 Phase I ESAs, 22



**CHRISTOPHER Z. BORON
SR. PROJECT MANAGER**

PCAs, 1 Phase II ESA, and 1 soil vapor intrusion assessment. As the project manager, my responsibilities included project coordination with selling entity, purchaser, individual restaurant owners/lessees; management of the work, including oversight and technical review.

- **NYSDEC Petroleum Spill Project Cleanup, Former Gasoline Station, Williamsville, New York.** A local optometrist was looking to purchase a commercial building from the current owner/franchise from which he currently leased. During the due diligence period (Phase I and II ESAs), it was identified that a former gasoline station occupied the Site in the 1950s and 60s and that petroleum contamination was present in the vicinity of the former pump islands. TurnKey delineated the extent of the petroleum contamination and prepared a remedial action work plan that was approved by the owner and NYSDEC. Approximately 600 tons of petroleum impacted soil was removed from the Site. Confirmation sampling indicated that the extent of contamination was removed with the exception of northern end which extended in the public right-of-way where underground utilities were location. The excavation was backfilled and work area repaved. The Site received an inactive status from NYSDEC. As Project Manager, my responsibilities included preparation of the remedial action work plan, budget, remedial contractor bid documentation, preparation of subcontract agreements, waste profile preparation, management of TurnKey staff and remedial contractors during remedial implementation, and closure report preparation.
- **Brownfield Cleanup Program Project, Former Millard Fillmore Gates Hospital, City of Buffalo, New York.** A local development group has taken ownership of the former Millard Fillmore Gates Hospital for redevelopment. The property was entered into Brownfield Cleanup Program (BCP) to investigate, remediate, and redevelop the 6.9-acre Site located in the City of Buffalo. The property is was formerly operated as a commercial/medical facility with 13 interconnecting buildings covering most of the Site. My role is project manager responsible for implementation of the Remedial Investigation Work Plan, preparation of the Remedial Investigation/Alternatives Analysis (RI/AA) Report, implementation of remedial actions, preparation of the Site Management Plan (SMP) and Final Engineering Report (FER), implementation and documentation of the SMP activities during redevelopment activities.

The project involved assessing Site geology; assessing Site hydrogeology; evaluating the areal and vertical extent of contamination; evaluating transport mechanisms; assessing the source(s) of contamination and impact to soil and groundwater, completing a qualitative risk assessment; identifying SCGs, identifying proposed cleanup goals and remedial objectives for contaminants of concern at the Site; developing remedial alternatives; implementing the remedial strategy and documenting post-remedial Site conditions. The Site was cleaned up to restricted-residential use.

Remedial action involved excavation of over 3,000 tons of impacted soil (SVOC, mercury and No. 6 fuel oil impacts) and groundwater management/treatment during excavation activities. I prepared the NYSDEC-approved Final Engineering Report (FER) and the Site received a Certificate of Completion (COC). The project is under redevelopment and subject to the NYSDEC-approved SMP, which I prepared. Redevelopment activities have included a 5-story assisted living facility, construction of two roads, and installation of a portion of the final engineered cover system. Redevelopment activities are expected to continue for the next 5 to 10 years.

September 1998 to July 2014:

GZA GeoEnvironmental of New York

- **Brownfield Cleanup Program Project, Central Park Plaza, City of Buffalo, New York.** A local developer obtained access to complete a Phase I and II ESA at the dilapidated Central Park Plaza, a vacant 27 acre commercial facility on the east side of the City of Buffalo. Contaminants identified during the investigation allowed the property to be accepted in to the BCP. Once in the BCP, a RI was complete under approved work plans which identified extensive backfilling of the former Buffalo Cement Co. Ltd. quarry which operated from 1877 to 1948. The Central Park Plaza was constructed in 1958 and in operation until 2011. The Remedial Investigation/Alternative Analysis report, along with the Remedial Action Work Plan (RAWP) were completed and submitted to NYSDEC for review in June 2014. As Project Manager, I was responsible for the oversight of the Phase I/II ESA, BCP application, preparation of the BCP work plans, oversight of the RI activities and preparation of the RI/AA Report and RAWP.
- **Environmental Restoration Project, Batavia Iron & Metal, City of Batavia, New York.** This project involved vacant industrial property previously used to reclaim iron, metal and wire materials. As Project Manager, responsibilities included negotiating the scope of work, developing the work plan, budget preparation, on-Site and off-Site soil and groundwater sampling, IRM implementation and data analysis. A Site Investigation and Remedial Alternatives Report (SI/RAR) was prepared and approved by NYSDEC in June 2012. Due to the significant volume of contaminated soil present (over 4,000 tons of PCB and metal impacted soil), the City of Batavia opted not to foreclose and take ownership. The Proposed Remedial Action Plan (PRAP) was released in February 2013. The Record of Decision (ROD) was in released in Summer 2013 and the site was transferred in the NYSDEC Superfund Program.
- **NYSDEC Superfund & Brownfield Cleanup Programs, Confidential Automotive Components Manufacturer, Lockport, New York.** Assisted an automotive parts manufacturing facility with various environmental issues at their facility for the over 15 years. Responsibilities have included:
 - Completing a Remedial Investigation and Feasibility Study (RI/FS) for a trichloroethylene (TCE) and tetrachloroethene (PCE) plume migrating in bedrock groundwater from a former AST spill. The RI/FS Reports were approved by NYSDEC, a Record of Decision (ROD) has been issued and the remedial alternative selected based on the FS is Monitored Natural Attenuation (MNA). The Record of Decision was issued by NYSDEC in March 2005 identifying monitored natural attenuation as the groundwater remedy. The MNA groundwater sampling has been conducted annually since 2005. The Site Management Plan (September 2011) and Final Engineering Report (March 2012) were approved by NYSDEC and the Certificate of Completion was issued in March 2012.
 - Application and acceptance of three individual sites of the 342 acre facility into the NYSDEC Brownfield Cleanup Program in February 2010. These sites have been investigated under NYSDEC approved work plans to assess contaminated media (soil, groundwater and indoor air) and develop remedial strategies to address the various impacted media. Based on the RI findings these three sites are currently being combined into one BCP Site. Chlorinated solvent groundwater contamination has been identified beneath and connecting the three sites.
 - Conducted a site-wide investigation of the storm sewer system to evaluate for chlorinated solvent groundwater contamination infiltration. The investigation involved: the review of existing plant

drawings, collecting storm sewer structure measurements, completing video inspections and reviewing existing storm sewer videos, and storm water sampling during low-flow and high-flow events. Areas of contaminated groundwater infiltration were identified and recommendations were made to the NYSDEC for repair, with their concurrence.

- Managed the assessment of former manufacturing and warehouse building being converted to use as vendor/supplier park. An environmental assessment identified chlorinated solvents (primarily PCE and TCE) in soil, groundwater and air samples that required remediation. After delineating the extent of soil contamination and completing a pilot-study, a soil vapor extraction and sub-slab depressurization systems (SVE/SSDS) was put into operation to remediate the soil within an approximate 14,000 square foot area and mitigate exposure to vapor intrusion from the impacted soil and groundwater. The building has been repurposed for use as a vendor/supplier park.
- Completion and management of annual groundwater sampling and compliance reporting for their NYSDEC Major Oil Storage Facility permit.
- Conducted a soil vapor intrusion assessment prior to the transmittal of a site building to another entity/tenant. The SVI work was completed to determine if the nearby TCE groundwater plume was impacting indoor air of the building for sale. The SVI assessment determined the nearby groundwater plume was not impacting indoor air or sub-slab vapors that required mitigation.
- **NYSDEC Brownfield Cleanup Program, Peters Dry Cleaners, Lockport, New York.** Peter's Dry Cleaning was located in a residential neighborhood in the City of Lockport. The property was contaminated from historic dry cleaning operations conducted at the site. A Phase II ESA was conducted on the property to determine the extent of contamination in the overburden soils and groundwater. An IRM was undertaken to remove an abandoned UST and associated petroleum contamination. Tetrachloroethene (PCE) contaminated soil was also encountered during the IRM, which changed the IRM waste profile. Peter's Dry Cleaning entered into the Brownfield Cleanup Program (BCP) in February 2007. NYSDEC Approved work plans were prepared that included the installation of bedrock groundwater monitoring wells, soil probes to delineation off-site soil and groundwater contamination and vapor intrusion sampling at the subject property and adjoining residential structures. The Site Investigation/Remedial Alternative Report was prepared and submitted to NYSDEC. The property owner opted to leave the BCP program and allow NYSDEC take on the responsibility of remediation, which will be completed under the NYS Superfund Program. My responsibilities as project manager included the oversight of the remedial investigation, remedial alternative evaluation/analysis and report preparation.
- **NYSDEC Order on Consent, Remedial Investigation & Feasibility Study, Confidential Client, Dunkirk, New York** – During a building expansion for the installation of a new rotoforge press, and under the guidance of the Site Management Plan, polychlorinated biphenyls (PCBs) were detected in soil and free product was encountered. Under an Order on Consent with the NYSDEC, an RI, IRM and FS were initiated. The IRM entailed the excavation and removal of approximately 6,000 tons of PCB-impacted soil at hazardous levels. The RI/IRM/FS Report has been approved by NYSDEC. A Site Management Plan was developed and approved to ensure institutional and engineering controls are



CHRISTOPHER Z. BORON
SR. PROJECT MANAGER

monitored and maintained. My responsibilities as project manager included the oversight of the remedial investigation, preparation of the RI/FS report and SMP.

- **NYSDEC Spills Program, Contract to Closure, Remedial Activities, Commercial Facility, Rochester, New York.** Soil and groundwater at two adjacent properties have been contaminated with petroleum from former gasoline stations which occupied the properties as far back as the early 1950's. The client wanted to develop the Site for commercial use as a credit union. Site activities included soil and groundwater sampling investigations, building demolition, preparation of NYSDEC approved work plan to remediate the soil and groundwater, removed soil impacted with free product, performed in-situ chemical oxidation injections to remediate Site groundwater to achieve NYSDEC inactive status. My responsibilities included performing the Site investigations, work plan and budget preparation, remedial implementation of the chemical injections, confirmatory sampling and closure report preparation. The Site received an "inactive" status from NYSDEC and a Credit Union facility had been constructed.
- **Voluntary Cleanup - Commercial Facility, Hamburg, New York.** Responsible for investigation at multi-unit commercial facility with identified chlorinated solvent contamination from a former dry cleaner in one of the units. Tetrachloroethene (PCE) was identified in soil and groundwater samples at the facility at concentrations exceeding NYSDEC regulatory standards. A source area, likely a former drum storage area, was identified outside the building in the shallow soil in the alleyway. Shallow and deep groundwater samples identified shallow groundwater contamination, but a clay confining layer appeared to limit the depth of the contamination. An IRM was completed which included soil removal and disposal and the installation of sub-slab vapor mitigation system to prevent contaminated vapor intrusion into the building.
- **NYSDEC Superfund Standby Contract, Remedial Investigation, Grove Cleaners, Hewlett, New York.** Groundwater at a former dry cleaners site was contaminated with chlorinated solvents. As part of a Remedial Investigation performed a comprehensive gas chromatograph field screening of subsurface soils and groundwater samples to delineate the source of contamination during the on-site characterization studies and collected groundwater samples during off-Site characterization. Responsible for conducting an existing monitoring well assessment, groundwater sampling and interpretation of the hydrogeologic and analytical data for the RI report preparation. This work was completed in accordance with NYSDEC approved site- specific work plans under the NYSDEC Superfund Program.
- **NYSDEC Superfund Standby Contract, Preliminary Site Assessment, Crusher Road Site, Bedford, New York.** Site groundwater was previously found to be contaminated with PCE from an unknown source. Responsible for field investigations which identified that the source of the PCE was unauthorized disposal at the former town dump, which is currently utilized as the town highway department. Field screening with a portable gas chromatograph of subsurface soil and groundwater samples helped delineate the source of contamination during the on and off-site characterization studies.

EDUCATION

BASc (Civil Engineering) 1992; University of Waterloo, Ontario, Canada
MASc (Environmental Engineering) 1994; University of Guelph, Ontario, Canada

REGISTRATION AND AFFILIATIONS

Professional Engineer, New York
Certified OSHA 40-Hour Hazardous Waste Site Training
Air and Waste Management Association, Member

SUMMARY OF EXPERIENCE

Ms. Riker has 20 years of environmental and civil engineering experience that has focused on industrial regulatory compliance assistance; Phase I environmental site assessments; hazardous waste site investigations and remedial evaluations; detailed design; and construction administration. Ms. Riker's regulatory compliance experience includes: petroleum bulk storage (PBS) and chemical bulk storage (CBS) auditing and the associated spill prevention reporting; Emergency Planning and Community Right-to-Know Act (EPCRA) Tier II and Toxic Release Inventory (Form R) reporting; Title V air permitting (Title V, State facility, minor facility registrations), compliance reporting, and emission statement preparation; Resource Conservation and Recovery Act (RCRA) hazardous waste reporting; storm water permitting and preparing discharge monitoring reports (DMRs), storm water pollution prevention plans (SWPPPs), and Best Management Practices (BMP) Plans; and hazardous waste annual reporting and reduction plans. Ms. Riker's site investigation and remediation experience has been under various New York State Department of Environmental Conservation (NYSDEC) remedial programs including the: Brownfield Cleanup Program (BCP); RCRA Corrective Action Program; and Voluntary Cleanup Program (VCP).

REPRESENTATIVE PROJECT EXPERIENCE

May 2003 to Present	Benchmark Environmental Engineering & Science, PLLC
Nov 1997 to May 2002	Malcolm Pirnie, Inc.
Feb 1995 to Oct 1997	ENVIRON Corporation

- Assisted in the RCRA Corrective Measures Study (CMS) for the Former Bethlehem Steel Coke Oven Division Site located in Lackawanna, NY. Duties included preparing work plans for Interim Corrective Measures (ICMs); reviewing analytical data obtained for the solid waste management units (SWMUs) and water courses; reviewing reports/assessments prepared by other consultants retained by NYSDEC and other agencies; and evaluating numerous slag/fill and groundwater remedial alternatives and recommending a final remedial approach in the CMS Report.
- Assisted former steel manufacturing facility with regulatory compliance during shutdown of operations in Lackawanna, NY. Current activities for former steel manufacturing company in Lackawanna, NY include: SPDES permitting; Industrial Water System compliance, including successfully obtaining a Water Withdrawal Permit for 50 MGD and implementing required upgrades to the water metering system; and preparing annual RCRA Hazardous Waste Reports.

REPRESENTATIVE PROJECT EXPERIENCE (CONT.)

LORI E. RIKER, P.E.

- Assisted with environmental regulatory compliance audits at Gibraltar Steel's NY facilities, and coordinated audits at Gibraltar Steel's other facilities nationwide. The audits covered major existing environmental regulatory programs, as well as applicable local or state regulations and potential upcoming regulatory requirements.
- Assisted in preparing numerous successful NYSDEC BCP applications for former steel plant sites and industrial/commercial properties in western NY. Prepared Remedial Investigation (RI) Work Plans, RI Reports, Remedial Action Work Plans, Final Engineering Reports, and Site Management Plans. Contaminants of concern primarily include petroleum organics/solvents and heavy metals.
- Providing/managing on-going environmental compliance assistance to scrap metal recycling facilities in NY and PA including: permitting, sampling, inspection, and reporting requirements under the Multi-Sector General Permit (MSGP) for Storm Water Associated with Industrial Activity and NYSDEC State Pollutant Discharge Elimination System (SPDES) Permits; PBS inspections and preparing SPCC Plans; EPCRA Tier II reporting; preparing landfill disposal application; preparing Water Treatment Chemical notifications; hazardous waste annual reporting; and air permitting modifications, compliance reporting, and annual emission statement preparation.
- Providing/managing on-going environmental compliance assistance to industrial facilities including: air permit applications and modifications; storm water permitting, BMP Plan/SWPPP preparation, compliance monitoring, and DMR preparation; water withdrawal and sewer metering reports; PBS registration, SPCC Plan preparation, and tank inspection; and annual hazardous waste reporting.
- Providing environmental compliance assistance to NOCO Energy Corp. for its major petroleum distribution terminal and warehouse in Tonawanda, NY and multiple retail gasoline stations in NY and VT. Specific projects include: storm water permitting and preparation of a SWPPP; preparation of Spill Response, Control & Countermeasure (SPCC) Plans and a Spill Prevention Report (SPR); Title V air permitting assistance and emission statement preparation; EPCRA Form R reporting; review of and recommendations for updating the USCG Facility Response Plan; and permitting and conceptual design for upgrades to a PBS warehouse facility.
- Served as the environmental compliance manager for a porcelain insulator manufacturing facility and completed regulatory reporting requirements including TP550 forms, Form R reports, Tier II reports, hazardous waste reports, storm water permitting, and DMRs.
- Performed environmental compliance audits of multiple retail gasoline station and lube oil shops in western NY, focusing on the NYSDEC PBS regulations, and preparing SPCC Plans and an overall BMP Plan.
- Assisted in performing environmental regulatory compliance audits for numerous active industrial facilities. Responsibilities included researching and interpreting applicable environmental regulations, and preparing reports to summarize the findings and prioritize corrective measures.
- Prepared PBS and CBS applications for tank registration under NYSDEC's bulk storage programs and prepared the associated SPCC Plans and SPRs for industrial facilities.
- Assisted in preparing an SPCC Plan for General Electric Company's Tonawanda facility. Work included review of numerous federal and state regulations pertaining to PCB-contaminated oil and waste.

PUBLICATIONS/PRESENTATIONS

- Riker, L. E., McManus, A. C., “Energize Your Business,” presented at the Fall Seminar of the New York Water Environment Association, Genesee Valley Chapter, Industrial Issues Committee, Webster NY, November 1, 2001.
- Riker, L. E., McManus, A. C., Sanders, L. A., “Life After Registration: Integrating Environmental Management Systems into Business and Operating Cultures,” Proceedings, 94th Annual Conference and Exhibition of the Air & Waste Management Association, Orlando FL, June 26, 2001.
- Riker, L. E., McManus, K. R., Kreuz, D. E., Mistretta, M. V., “Trash to Treasure: Revitalization of Buffalo’s Waterfront,” presented at a Conference of the New York State Society of Professional Engineers, Erie/Niagara Chapter, Environmental Affairs Committee, Buffalo NY, January 10, 2001.
- Secker, L. E., Talley, J. W., “Bioremediating a Buffalo Brownfield: A Comparison of Bench-Scale Soil Biotreatability Results to Full-Scale Remediation,” Proceedings, Thirtieth Mid-Atlantic Industrial & Hazardous Waste Conference, Villanova University, Philadelphia PA, July 12, 1998.

APPENDIX B

PREVIOUS INVESTIGATION
(PROVIDED ELECTRONICALLY)

PHASE I ENVIRONMENTAL SITE ASSESSMENT

SLEEP INN
1159 MAIN STREET
BUFFALO, NEW YORK 14202

TAX ID NUMBER:
100.63-3-33



**CORPORATE/
BUFFALO OFFICE**

5167 South Park Avenue
Hamburg, NY 14075
Phone: (716) 649-8110
Fax: (716) 649-8051



ALBANY OFFICE

PO Box 2199
Ballston Spa, NY 12020

5 Khabner Road
Mechanicville, NY 12118
Phone: (518) 899-7491
Fax: (518) 899-7496

PREPARED FOR:

SLEEP INN
1159 MAIN STREET
BUFFALO, NY 14202



CORTLAND OFFICE

60 Miller Street
Cortland, NY 13045
Phone: (607) 758-7182
Fax: (607) 758-7188

PREPARED BY:

EMPIRE GEO-SERVICES INC.
5167 SOUTH PARK AVENUE
HAMBURG, NEW YORK 14075



ROCHESTER OFFICE

535 Summit Point Drive
Henrietta, NY 14467
Phone: (585) 359-2730
Fax: (585) 359-9668

EMPIRE PROJECT NUMBER: BE-14-003

JANUARY 2014

MEMBER

ACEC New York

American Council of Engineering Companies of New York

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
1.0 INTRODUCTION	3
2.0 REVIEW OF PREVIOUS ENVIRONMENTAL STUDIES	3
3.0 SITE DESCRIPTION	4
3.1 Location and Legal Description	4
3.2 Current Site Utilization	4
3.3 Site and Vicinity General Characteristics	4
3.4 Description of Structures Roads and Improvements	4
3.5 Current Uses of Adjoining Properties	5
3.6 Topography, Surface Water Bodies and Drainage	5
3.7 Utilities	5
4.0 USER AND OWNER PROVIDED INFORMATION	6
4.1 Methodology	6
4.2 Title Records	6
4.3 Environmental Liens and AULs	6
4.4 Specialized Knowledge	6
4.5 Commonly Known or Reasonably Ascertainable Information	7
4.6 Valuation Reduction for Environmental Issues	7
4.7 Owner, Property Manager and Occupant Information	7
4.8 Reasons for Performing the ESA	7
5.0 PHYSICAL SETTING INFORMATION	8
5.1 Soil Conditions	8
5.2 Bedrock Geology	8
5.3 Groundwater Conditions	8
6.0 HISTORICAL INFORMATION	9
6.1 Historical Information Used	9
6.2 Aerial Photographs	9
6.3 Topographic Quadrangles	10
6.4 City Directories	10
6.5 Sanborn Fire Insurance Maps	12
6.6 Historical Site Utilization Summary	12
6.7 Municipal Records	12

7.0	SITE RECONNAISSANCE	13
7.1	Description of Site Improvements and Processes	13
7.2	Hazardous Substances Usage and Storage	13
7.3	Petroleum Products Usage and Storage other than Storage Tanks	14
7.4	USTs/ASTs/Chemical Storage	14
7.5	Drums and Containers	14
7.6	PCBs	14
7.7	Staining, Corrosion, Stressed Vegetation	14
7.8	Filled Areas	14
7.9	Solid Waste Disposal	14
7.10	Wastewater and Stormwater Discharges	14
7.11	Sewage Disposal	15
7.12	Drains and Sumps	15
7.13	Pits, Ponds and Lagoons	15
7.14	Wells	15
7.15	Heating and Cooling Systems	15
7.16	Source of Drinking Water	15
7.17	Odors	15
8.0	GOVERNMENTAL REGULATORY AGENCY INFORMATION	16
8.1	State / Federal Database Information	17
9.0	INTERVIEWS	24
9.1	Interview with User / Owner	24
9.2	Interview with Local Governmental Officials	24
10.0	FINDINGS	25
11.0	CONCLUSIONS	26
12.0	DATA GAPS	26
13.0	DEVIATIONS	26
14.0	ENVIRONMENTAL PROFESSIONAL STATEMENT	27
15.0	REFERENCES	28
17.1	Publications	28
17.2	Interviews	28

APPENDICES

Appendix A Site Drawings

Appendix B Site Reconnaissance Photographs

Appendix C Regulatory Review

Appendix D Environmental Questionnaire

Appendix E Municipal Property Information

Appendix F Sanborn Maps

PHASE I ENVIRONMENTAL SITE ASSESSMENT

SLEEP INN
1159 MAIN STREET
BUFFALO, NEW YORK 14202

TAX IDENTIFICATION NUMBER:
100.63-3-33

EXECUTIVE SUMMARY

As authorized by Sleep Inn, Empire Geo Services, Inc. (Empire) has completed a Phase I Environmental Site Assessment (ESA) of the parcel of land located at 1159 Main Street within the City of Buffalo, New York. For the purposes of this report, the parcel of property shall be referred to as “the subject property” or “the site”.

The ESA was completed in conformance with ASTM Standard E1527-13. The scope of services, objectives, extent and limitations of the ESA are described in greater detail in the text of this report. Empire’s findings regarding the site relative to E1527-13 are summarized below.

It is Empire’s professional opinion that the foregoing environmental site assessment of 1159 Main Street in the City of Buffalo, New York *has* revealed the presence of ASTM *recognized environmental conditions (RECs)* in connection with the property as listed below:

- The subject property has historically operated as a gasoline filling station from at least 1924 to 1947. Information obtained from the City of Buffalo Office of Fire Prevention concluded three (3) USTs were removed from the subject property in June of 1962. However, no details were provided on the condition of the USTs. In addition, no information was obtained to suggest the UST grave was free of contaminated soils as a result of a petroleum release. Based on the historical presence of underground petroleum storage tanks during a period of non-regulation, it is Empire’s opinion that a REC exists on the subject property as defined by ASTM Standard E1527-13.

It is Empire’s professional opinion that the foregoing environmental site assessment of 1159 Main Street in the City of Buffalo, New York *has* revealed the presence of ASTM *controlled recognized environmental conditions (CRECs)* in connection with the property as listed below:

- The adjacent property to the east of the subject property was identified as a State Hazardous Waste Site (SHWS). The property is currently owned and operated by Osmose, Inc. and is zoned as an industrial / manufacturing facility. The facility is listed in the SHWS for contaminated soil and groundwater from multiple historical USTs previously existing on the

site containing creosote, #2 fuel oil and other chemicals, which were found leaking in 1989. The site has since undergone remediation efforts to remove the contaminants from the groundwater and soil. To date, the soil has been remediated to the satisfaction of the applicable state regulators while the groundwater continues to undergo remediation efforts. As part of the operation and maintenance plan, the on site groundwater and surrounding sewers are continually monitored for contamination. Furthermore, information provided in the EDR report indicated the remedial action is preventing off site migration of groundwater contamination. Based on the previously discussed information, a CREC is present on the subject property as defined by ASTM E1527-13. *However, it is Empire's opinion that it does not represent a REC because Engineering Controls are in place to prevent migration of contamination in the groundwater and the adjacent property is located approximately 10 feet lower than the subject property.*

It is Empire's professional opinion that the foregoing environmental site assessment of 1159 Main Street in the City of Buffalo, New York has not revealed the presence of ASTM *historical recognized environmental conditions (HRECs)* in connection with the property.

1.0 INTRODUCTION

Empire has completed a Phase I Environmental Site Assessment (ESA) of the referenced subject property pursuant to a site-specific agreement for such work between Sleep Inn and Empire. In addition to the case narrative, this ESA report includes attachments which include site maps, photographs, historical land use information, and documentation of Federal, state and local government municipal regulatory agency database review and inquiry.

This report is an instrument of service of Empire and includes the results of limited research, a review of specified and reasonably ascertainable (available) listings and a site reconnaissance, all of which have as their combined goal the identification of *recognized environmental conditions* in connection with the site as defined by ASTM Standard E1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. Recognized environmental conditions are defined in the ASTM standard as “*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 minimus conditions are not recognized environmental conditions*”. This assessment may reflect additional or reduced services or service enhancements requested by the client.

Empire’s ESA of the subject property was completed in accordance with generally-accepted practices of the profession undertaken in similar studies at the same time and in the same geographical area, and Empire observed that degree of care and skill generally exercised by the profession under similar circumstances and conditions.

2.0 REVIEW OF PREVIOUS ENVIRONMENTAL STUDIES

No previous environmental studies were available to Empire for review during completion of this Phase I Environmental Site Assessment.

3.0 SITE DESCRIPTION

3.1 Location, Legal Description and Ownership

The subject property is located near the southeast corner of the intersection of Main Street and Dodge Street in the City of Buffalo - Erie County, New York. The property is legally addressed at 1159 Main Street - Buffalo, New York 14202.

According to the City of Buffalo assessor's office, 1159 Main Street has a legal frontage of 213.83 feet along Main Street with a legal depth of 245.00 feet. The subject property also has an unconfirmed legal frontage of approximately 70 feet along Dodge Street. The subject property reportedly has a total area of approximately 1.25 acres. The tax ID number for the subject property is 100.63-3-33.

A site location map is included in Appendix A as Figure No 1.

3.2 Current use of site

The subject property is currently used by the owner as the Buffalo Tourist Lodge motel. The property contains two 2-story buildings utilized as motels.

3.3 Site and Vicinity General Characteristics

An Empire environmental professional conducted an inspection of the subject property and locality on January 28, 2014. A survey map of the subject property was not available to Empire during the site reconnaissance. As such, aerial photographs, tax maps and owner provided information was utilized by Empire to determine the property limits during the site walkover.

The subject property is located in a densely populated urban area with mixed commercial and residential properties. Commercial properties are located to the north, south, east and west. Residential homes are also located further to the north and east.

3.4 Description of Structures, Roads & Improvements on the Site

Two 2-story commercial structures of typical concrete foundation and masonry construction are currently present on the subject property. According to the assessor's office, the building located near the northern property limits has approximately 11,420 ft² of floor area, which was constructed in 1971. A small portion of this building is utilized by the owner as private living space.

The building located near the southern property limits has approximately 18,540 ft² of floor area and was constructed in 1965. Both buildings are in average to poor physical condition and are currently utilized as a motel.

3.5 Current Uses of Adjoining Properties

Properties which immediately adjoin the site were examined by Empire from public access points in order to make an overall evaluation of their current uses and the potential for those uses to represent *recognized environmental conditions* which could impact the site. Reconnaissance of adjacent properties was performed by noting land use apparent from legal boundaries or by walkover of those portions of such properties which are legally accessible to the general public. For the purposes of this ESA the term “adjoining property” means any parcel which borders or is contiguous with the site, or would be so but for a street, road, or other public thoroughfare separating them. Land uses adjacent to the site are as follows:

North: Vacant undeveloped land.

South: Vacant undeveloped land

East: A large industrial-manufacturing building occupied by Osmose Inc.

West: Main Street. On the opposite side of Main Street are various commercial buildings occupied by medical centers.

Based on Empire’s site visit and area inspection, parcels which adjoin the subject property are not at the present time considered by Empire to represent ASTM *recognized environmental conditions* relative to the subject property. However, the property located to the east of the subject property is considered to represent ASTM *controlled recognized environmental condition* as discussed and evaluated in the Executive Summary as well as section 8.1.5.

3.6 Topography, Surface Water Bodies and Drainage

The subject property and the surrounding land are generally flat. Based on topographic maps, the local topography gradually decreases in elevation from the West to East.

Stormwater runoff was not observed. However, stormwater is presumed to naturally infiltrate into the ground surface in the vegetated areas and as runoff from the impervious surfaces (roof, driveway, etc) to vegetated areas or to the local municipal storm sewer system.

3.7 Utilities

According to the assessor’s records, the subject property has access to public water and sanitary sewer services as well as gas and electric utilities.

4.0 USER & OWNER-PROVIDED INFORMATION

4.1 Methodology

Empire prepared and submitted an ASTM E1527-13 User/Owner Questionnaire to Mr. Fred Bou-Jaoude, President of Sleep and Save Inc. and owner of the property, pertaining to the subject property in order to obtain the user and owner provided information required as part of inquiry into site environmental conditions and history. The ASTM E1527-13 standard defines the “user” as the party seeking to use Practice E1527 to complete an environmental site assessment of the property. A “user” may include, without limitation, a potential purchaser of the property, a potential tenant of the property, an owner of the property, a lender, or a property manager.

Mr. Bou-Jaoude is the user and owner of this Phase I ESA, which according to him is being performed for a construction loan. Therefore, the questionnaire included both “user” and “owner” provided information. Information provided by the completed User/Owner indicated no knowledge of environmental impairment associated with the subject property. The completed User/Owner Questionnaire is included in Appendix D.

4.2 Title Records

Empire reviewed the Erie County property ownership records at the Erie County Clerks Office located in Buffalo, NY with regards to the current and previous ownership for the subject property. The ownership summary for 1159 Main Street is presented below. Empire’s review of title records should not be considered a substitute for a legal title records search.

<u>Owner of Record</u>	<u>Recorded Dates</u>
Sleep and Save Inc.	3-5-87 to PRESENT
Zem-Aly Inc.	5-14-82 to 3-5-87
Sleep Tight Inc.	7-18-77 to 5-14-82
1159 Main St Inc.	9-24-69 to 7-18-77
Ben Kape	10-23-64 to 9-24-69

4.3 Environmental Liens or Activity and Use Limitations (AULs)

No Environmental Liens or AULs were identified by Empire during the research and preparation of this Phase I ESA.

4.4 Specialized Knowledge

The completed User/Owner questionnaire did not indicate specialized knowledge of the subject property.

4.5 Commonly Known or Reasonably Ascertainable Information

The completed User/Owner questionnaire did not indicate commonly known or reasonably ascertainable information for the subject property.

4.6 Valuation Reduction for Environmental Issues

Based on publicly available data, the assessed value of the parcel located at 1159 Main Street is \$515,000. There does not appear to be value reduction associated with the subject property. The completed User/Owner questionnaire did not indicate a value reduction.

4.7 Owner, Property Manager and Occupant Information

According to the City of Buffalo assessor's office, the current owner of the property is Sleep and Save Inc. with a mailing address of 1159 Main Street - Buffalo, New York 14209. The property is currently occupied by the owner, which operates the property as a motel service.

4.8 Reason for Performing the Phase I Environmental Site Assessment

According to information included in the completed User/Owner Questionnaire, this ESA is being conducted for environmental due diligence for the assessment of on site conditions as well as a construction loan.

5.0 PHYSICAL SETTING INFORMATION

5.1 Soil Conditions

A review of the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) website <http://websoilsurvey.nrcs.usda.gov> identifies soils on the subject property as 56% Urban Land and 44% Urban Land - Colonie Complex. According to information provided by the website, Urban Land - Colonie Complex are generally somewhat excessively drained while the Urban Land have no discernable characteristics without an on site subsurface investigation.

5.2 Bedrock Geology

According to the Geologic Map of New York, Western Sheet, the subject property is underlain by middle Devonian-aged limestone of the Onondaga formation.

5.3 Groundwater Conditions

Based upon topographical relationships at and near the site and assuming that the overall flow of groundwater mimics the same, groundwater flow beneath the subject property is anticipated to be to the east. However, directional groundwater flow is difficult to assume without an on site investigation with monitoring wells.

6.0 HISTORICAL INFORMATION

6.1 Historical Sources Used

Past land uses at the site and its vicinity were assessed by Empire through review of reasonably ascertainable historical sources such as aerial photographs, city directories, Sanborn maps and topographic quadrangles. Uses of the site are referenced from the present back to the “first developed use” of the site (including agricultural uses) or to 1940, whichever is earlier, per the requirements of ASTM E1527-05, insofar as possible employing the standard historical sources.

6.2 Aerial Photographs

Aerial photographs (“aerials”) which depict site and vicinity developments at various times are frequently reviewed during the ESA process in order to evaluate historical site and vicinity land uses which post-date the earliest aerials. Such review is also made in order to note features which may indicate material storage or disposal (clearings, dead end trails, land scars, etc.).

Empire reviewed aerial photographs maintained at the USDA Natural Resources Conservation Service (NRCS) center located in East Aurora, NY. Aerial photos for the years of 1938, 1942, 1951, 1958, 1966, 1978, 1985, and 1990 were available for review. A description of findings is listed below. It should be noted that interpretation of air photos is a function of their clarity and scale.

YEAR	SUBJECT PROPERTY	ADJACENT SURROUNDING PROPERTIES
1938	Commercial-type buildings appear to be present (poor clarity).	Multiple buildings to the NORTH, SOUTH, EAST and WEST. Area is highly urbanized (poor clarity).
1942	One structure is present with canopy (possible filling station).	Large commercial-type buildings to the EAST, WEST and SOUTH. Residential-type houses to the NORTH.
1951	Multiple cars parked on the property. Building located at the northwest corner of the site.	Similar to the 1942 aerial photograph.
1958	Similar to the 1951 Aerial Photograph.	Similar to the 1951 Aerial Photograph.
1966	Two long rectangular structures present. (similar to the present day conditions)	Commercial buildings are present to the EAST and WEST. Vacant land to the NORTH. Houses to the SOUTH.
1978	Similar to the 1966 Aerial Photograph.	Best Street is extended to Main Street to the SOUTH. Remainder of surrounding properties appears similar to the 1966 Aerial Photograph.
1985	Similar to the 1978 Aerial Photograph.	Similar to the 1978 Aerial Photograph.
1990	Similar to the 1985 Aerial Photograph.	Similar to the 1985 Aerial Photograph.

An aerial photograph from 2011 was obtained by Empire via online sources. The features from the 2011 aerial photograph were similar to the 1990 aerial photograph.

6.3 Topographic Quadrangles

Historical topographic quadrangle maps prepared by the U.S. Geological Survey (USGS) are available for public review at <http://store.usgs.gov>. These included USGS 7.5 minute quadrangle maps for Buffalo, New York for the following years: 1948, 1950 and 1965. A description of the findings is presented in the following table.

YEAR	SUBJECT PROPERTY	ADJACENT SURROUNDING PROPERTIES
1948	Property is tinted RED indicating an area where only landmark buildings are depicted. (Urban area)	Surrounding properties are tinted RED indicating areas where only landmark buildings are depicted. (Urban area)
1950	Similar to the 1948 topography map.	Similar to the 1948 topography map.
1965	Similar to the 1950 topography map.	Similar to the 1950 topography map.

6.4 City Directories

City directories consist of alphabetical listings of residences and businesses, which in books of the modern era are also cross-referenced by street address. Reviewing of historical directories assists in establishing site development history and occupancy.

Empire searched for city directories at the Central Library of the Buffalo and Erie County Public Library system located in downtown Buffalo, NY. The library maintains a collection of city directories for the City of Buffalo dating to the early 1800's. The subject property has had historical addresses ranging from 1157 to 1171 Main Street. Therefore, Empire recorded all available listings in this range of street addresses. A summary of Empire's findings are included below.

<u>Year</u>	<u>Address (Main Street)</u>	<u>Listing</u>
1930	1157 1159 1169	Lovern Rivers Raymond Whedon Hygrade Petroleum Filling Station
1936	1159 1169	Vacant Store and Frank Rowell Ryan Thomas filling station
1940	1169	Harold Klinck filling station

1946	1159 1169	Townsend Motor Sales Michael Conrad filling station
1950	1159 1165	Engels Inc (used car lot) JC Crosby Co Inc (used car lot)
1955	1159 1165	Vacant King Cole Motors Inc. (used cars)
1960	1159 1165	Best Motors (used cars) Auto Land Inc (used cars)
1965	1159-1175	under construction
1970	1159	Imperial 400 Motel
1975	1159	Imperial 400 Motel
1980	1159	Imperial Budget Motel
1985	1159	Imperial Budge Motel
1990	1159	Red Carpet Inn Motel
1996	1159	Red Carpet Inn Motel
2000	1159	Red Carpet Inn Motel
2004	1159	Buffalo Tourist Lodge
2010	1159	Buffalo Tourist Lodge

6.5 Sanborn Fire Insurance Maps

The Sanborn Map Company began its preparation of atlases of cultural maps for urban centers in the United States in the latter part of the 1800s for use by insurance firms offering fire insurance on structures and facilities. Typically, these maps indicate the construction materials of major buildings as well as storage areas of combustible or otherwise potentially hazardous materials. With the advent of retail filling stations and petroleum product outlets in the early 1900s for the motoring public and commerce, Sanborn maps often included above ground and underground petroleum storage tank locations. The fire insurance maps were updated and expanded geographically by the Sanborn Map Company into the late 1990s.

Empire reviewed Sanborn Fire Insurance Maps available online at the Buffalo and Erie County Public Library website. Sanborn maps for the years of 1899, 1925 and 1951 were reviewed by Empire. A summary of the findings are presented in the following table.

YEAR	SUBJECT PROPERTY	ADJACENT SURROUNDING PROPERTIES
1899	A total of 6 dwellings and 4 garages are present on the subject property.	Private residential dwellings are present to the NORTH, SOUTH and WEST. A lumber sales and storage company are present to the EAST.
1925	A total of 4 dwellings and 2 garages are on site. 2 of the dwellings previously observed are gone and replaced by a gasoline filling station with gas tanks. 2 other buildings are present and identified as “auto repairing” and “windshield shop”. A “greasing pit” is also present.	Residential dwellings are present to the NORTH and WEST. Commercial businesses are present to the EAST as a building materials yard and SOUTH as an automotive sales center.
1951	1 structure is present as a “Used auto sales” lot. 2 dwellings are still present to the north along Dodge Street.	Appears similar to the 1925 Sanborn Map.

6.6 Historical Site Utilization Summary

The subject property was utilized by private residential dwellings from at least 1899 to approximately 1924. From approximately 1924 to 1947 the subject property operated as a gasoline filling station. From 1947 to 1965 the subject property was utilized as a used car lot. Finally, the property has operated as a motel from 1965 to the present.

The date of the “first developed use” of the site (ASTM terminology inclusive of agricultural use) was not established with certainty by Empire through review of the standard historical sources identified herein during historical research for this Phase I ESA. The lack of information regarding the date of the first developed use of the property represents a “data failure” per ASTM E1527-13 Section 8.3.2.3. However, it is Empire’s opinion that this data failure does not adversely affect the ability of the Empire Environmental Professional to identify *recognized environmental conditions* at the site prior to the earliest known development identified.

6.7 Municipal Records

Empire reviewed any and all records for the subject property at various City of Buffalo departments including the Permit and Code Enforcement Office, Fire Prevention Office and Building Department. Records reviewed in the Permit and Code Enforcement Office and Building Department indicated typical building and demolition permits. The Fire Prevention Office provided records of the removal of the UST’s on site. According to their records, 3 UST’s (2-550 and 1-1000 gallon) were removed in June of 1962.

7.0 SITE RECONNAISSANCE

A reconnaissance (walkover) of the site was conducted on January 28, 2014 by an environmental professional from Empire's staff. This individual possesses relevant EPA qualifications for conducting Phase I ESAs as noted in Section 14.0 of this report. The objective of the walkover is to obtain information which might assist in the identification of ASTM recognized environmental conditions associated with the site, to the extent that the site reconnaissance is not limited by bodies of water, adjacent structures or other obstructions, or unsafe site conditions. The intent of the walkover was to note any visual or other evidence of recognized environmental conditions on the subject property or adjoining and nearby properties, the latter within the limits of legal right of entry to those properties. The Empire Environmental Professional was escorted by Mr. John Clapp, the real estate broker of the subject property, during the indoor portion of the site reconnaissance.

The grounds of the subject property were walked by the Empire Environmental Professional with attention paid to any outdoor features which could potentially indicate the presence of underground storage tanks, drywells or pipeline outfalls (discharge points). Any such features were observed for unusual odors or discolorations, and vegetation was observed for signs of environmental stress. The site was also examined for unusual landforms such as mounds or depressions which might respectively indicate potential material disposal locations or filled and covered excavations. It should be noted that snow was covering most of the site making it difficult to observe ground conditions.

A Site Plan is provided as Figure No. 2 in Appendix A. Also, photographs taken of the subject property during the site reconnaissance are included in Appendix B.

7.1 Description of Site Improvements

Two 2-story commercial structures of typical concrete foundation and masonry construction are currently present on the subject property. According to the assessor's office, the building located near the northern property limits has approximately 11,420 ft² of floor area, which was constructed in 1971. A small portion of this building is utilized by the owner as private living space.

The building located near the southern property limits has approximately 18,540 ft² of floor area and was constructed in 1965. Both buildings are in average to poor physical condition and are currently utilized as a motel.

The subject property is also improved by asphalt pavement for customer parking. Public water and sanitary sewer service is available as well as gas and electric utilities.

7.2 Hazardous Substances Usage and Storage

No hazardous substances other than common household cleaning products are currently used or stored on the subject property.

7.3 Petroleum Products Usage and Storage Other Than Storage Tanks

Empire observed no petroleum products being used or stored on the subject property.

7.4 Underground and Above Ground Petroleum and/or Chemical Storage Tanks

At the time of the site visit, no evidence of underground storage tanks (USTs), such as, fill ports, piping, or vent pipes, was observed on site. Also, aboveground storage tanks (ASTs) were not observed on the subject property during the walkover.

7.5 Drums and Containers

No drums or containers were observed by Empire during the site reconnaissance.

7.6 Polychlorinated Biphenyls (PCBs)

No electrical equipment (i.e. transformers) was observed by Empire during the site reconnaissance, which may contain PCBs.

7.7 Staining, Corrosion, Stressed Vegetation

No staining, corrosion or stressed vegetation was observed during Empire's walkover. It should be noted much of the subject property was covered with snow with no visible access to the on site vegetation.

7.8 Filled Areas

No filled areas were observed during Empire's walkover.

7.9 Solid Waste Disposal

Solid waste generated on the site is stored in a garbage dumpster located along the east edge of the property. The solid waste is collected on a weekly basis by a local disposal service.

7.10 Wastewater and Stormwater Discharges

Empire did not observe the migration of on site stormwater and/or wastewater transport. However, based on site features, Empire assumes the stormwater (i.e. rain and snow) runoff infiltrates into the ground surface or flows to the on site storm sewer system.

7.11 Sewage Disposal

The subject property is serviced by the local municipal sanitary sewer. As such, all sewage wastewater is disposed of through the municipal sewer.

7.12 Drains and Sumps

No sumps or drains were observed by Empire during the site walkover.

7.13 Pits, Ponds, Lagoons

No open pits, ponds or waste lagoons were observed during the site walkover.

7.14 Wells

No water supply wells were noted on the subject property during the site walkover.

7.15 Heating and Cooling Systems

The building is heated by a gas-fired forced air furnace. Individual electric air conditioning units were observed for each motel room.

7.16 Source of Drinking Water

The subject property is supplied water by the local municipal water supply.

7.17 Odors

No unusual odors were noted by the Empire environmental professional during the site reconnaissance.

8.0 GOVERNMENT REGULATORY AGENCY INFORMATION

The purpose of the governmental regulatory agency records review is to obtain and evaluate reasonably ascertainable information which could assist in identifying recognized environmental conditions relative to the site. To assist in completing the records review at the Federal and State levels, a Radius Map Report was obtained from Environmental Data Resources, Inc. (EDR) of Milford, Connecticut. The maximum search distance (MSD) from the site for each of the databases reviewed by EDR in this regard is listed in the EDR “Map Findings Summary” tabulation.

Inclusion of a facility within a government agency database does not necessarily indicate environmental impairment associated with that facility, but rather serves as a means of tracking, reporting and documenting regulated activities. In addition, it should be noted that the summary tabulation below may differ from the similar “Map Findings Summary” in the EDR report based upon Empire’s research and reconnaissance, which could allow inclusion of facilities additional to those identified or improperly plotted by EDR and/or similar deletions or consolidations (such as multiple incidents listed at a single facility). For the purpose of this report, the closest distance of the identified facility to office building property or the parking lot is listed. A summary of the identified sites included in the EDR database search follows:

MSD	DATABASE	SITES
1.000 mile	CORRACTS	1
0.500 mile	RCRA-LQG	1
0.500 mile	RCRA-SQG	3
0.500 mile	RCRA-CESQG	1
1.000 mile	NY SHWS	3
0.500 mile	NY SWF/LF	1
0.500 mile	LTANKS	31
0.250 mile	NY UST	5
0.250 mile	NY CBS UST	1
0.250 mile	NY AST	2
0.250 mile	NY CBS AST	1
0.250 mile	NY CBS	1
0.500 mile	NY ENG CONTROLS	1
0.500 mile	NY INST CONTROL	1
0.500 mile	NY BROWNFIELDS	2
0.500 mile	NY SWRCY	1
0.250 mile	NY HIST UST	1
0.125 mile	NY Spills	4
0.250 mile	RCRA NonGen / NLR	14
0.250 mile	NY MANIFEST	17
0.250 mile	NJ MANIFEST	1
0.250 mile	EDR US Historical Auto Stations	60

0.250 mile	EDR US Historical Cleaners	12
1.000 mile	NY RGA HWS	3
-	Orphan (Unplottable Facilities)	34

The subject property was not listed in any of the federal or state databases.

8.1 State / Federal Database Information

8.1.1 CORRACTS

This database provides a list of handlers with the Resource Conservation and Recovery Act (RCRA) corrective action activity. All handlers requiring corrective action will appear in this database. A review of the EDR report identifies 1 site listed on the RCRA CORRACTS database within 1.0 mile of the subject property. Information provided in the EDR report indicated the listed property is situated at a lower elevation at a distance of approximately 0.655 mile from the subject property. Based on the location of the listed site in relation to the subject property, Empire does not believe this site represent a recognized environmental condition to the subject property.

8.1.2 RCRA - LQG

RCRA Generators List is the USEPA's comprehensive information system that includes information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984.

Large Quantity Generators (LQG) are facilities that generate over 1,000 kg of hazardous waste per month or over 1 kg of acutely hazardous waste per month. This database indicated 1 LQG within 0.25 mile of the subject property. Information provided in the EDR report indicated the listed facility has received no violations. Therefore, Empire does not consider this listing to represent a recognized environmental condition to the subject property.

8.1.3 RCRA - SQG

Small Quantity Generators (SQG) are facilities that generate between 100 kg and 1,000 kg of hazardous waste per month. This database indicated 1 small quantity generator (SQG) within 0.25 mile of the subject property. Information provided in the EDR report indicates one of the listed sites has received a total of 4 violations. However, all 4 violations received a date of compliance indicating they were corrected and resolved to the satisfaction of the regulators. Therefore, Empire does not consider these listings to represent a recognized environmental condition to the subject property.

8.1.4 RCRA - CESQG

Conditionally Exempt Small Quantity Generators (CESQG) are facilities that generate less than 100 kg of hazardous waste or less than 1 kg of acutely hazardous waste per month. This database indicated 1 CESQG within 0.25 mile of the subject property. Information provided in the EDR report indicated the listed facility has received no violations. Therefore, Empire does not consider this listing to represent a recognized environmental condition to the subject property.

8.1.5 NY SHWS

The State Hazardous Waste Site (SHWS) records are the states' equivalent to the federal CERCLIS. These sites may already be registered on the federal CERCLIS list. Review of the EDR report identified 3 sites in the SHWS database within 1.0 mile of the subject property. Two of the listed properties are located at a lower elevation and at least 0.719 miles from the subject property. Based on the distance from the subject property and the continued monitoring of two of the listed sites, it is Empire's opinion that they do not represent a recognized environmental condition to the subject property.

The remaining site is located adjacent to the subject property. The property is currently owned and operated by Osmose, Inc. and is zoned as an industrial / manufacturing facility. The facility is listed in numerous environmental databases as well as the SHWS for contaminated soils and groundwater from multiple historical USTs previously existing on the site containing creosote, #2 fuel oil and other chemicals, which were found leaking in 1989. The site has since undergone remediation efforts to remove the contaminants from the groundwater and soil. To date, the soil has been remediated to the satisfaction of the applicable state regulators while the groundwater continues to undergo remediation efforts. As part of the operation and maintenance plan, the on site groundwater and surrounding sewers are continually monitored for contamination. Furthermore, information provided in the EDR report indicated the remedial action is preventing off site migration of groundwater contamination. As outlined in the Executive Summary, this listed site is considered a CREC in relation to the subject property as defined by ASTM E1527-13. However, it is not considered a REC in relation to the subject property.

8.1.6 NY SWF/LF

The Solid Waste Facility / Landfill database contain an inventory of solid waste disposal facilities or landfills in a particular state. This database identified 1 site within 0.5 mile of the subject property. The listed facility is located approximately 0.277 mile from the subject property and is classified as "inactive". Based on the location and inactive status of the solid waste facility, Empire does not consider this listing to represent a recognized environmental condition to the subject property.

8.1.7 NY LTANKS

The LTANKS database contains an inventory of reported leaking storage tank incidents reported from April 1986 through the most recent update. The listings 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. The database listed 31 sites within 0.50 mile of the subject property. All the listings included a “Closed Date” indicating each situation was addressed to the satisfaction of the regulators. Therefore Empire does not consider these listings to represent recognized environmental conditions with regard to the subject property.

8.1.8 NY UST

A UST site is an underground storage tank site that is registered with the Department of Commerce, Division of State Fire Marshal’s Facility File. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). Information provided in the EDR report identified 5 UST facilities. According to the EDR report all UST’s have been closed and removed from 3 of the 5 listed sites. The remaining 2 sites have active USTs. One of these sites is adjacent to the subject property to the east (Osmose Inc) and has been previously discussed and evaluated. The other is located approximately 0.203 mile from the subject property. Empire does not consider any sites listed in this database to represent a recognized environmental condition to the subject property.

8.1.9 NY CBS UST

The Chemical Bulk Storage (CBS) UST database includes facilities storing hazardous substances listed in 6 NYCRR Part 597, in aboveground tanks with capacities of 185 gallons or greater, and/or in underground tanks of any size. The database includes facilities registered since the effective date of CBS regulations (July 15, 1988) through the date request is processed. Information provided in the EDR report identified 1 CBS UST site within 0.25 mile from the subject property. The listed facility, Osmose Inc., is adjacent to the subject property. This listed facility is duplicated in multiple databases and ultimately discussed and evaluated in section 8.1.5.

8.1.10 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. Information provided in the EDR report identified 2 AST facilities listed in this database within 0.25 mile of the subject property. According to information in the EDR report, both listed sites are active. One listed facility, Osmose Inc., is adjacent to the subject property. This listed facility is duplicated in multiple databases and ultimately discussed and evaluated in section 8.1.5. The other listed database is located 0.203 mile from the subject property

and contains 2 small used oil ASTs. This facility is not considered to represent a recognized environmental condition to the subject property.

8.1.11 NY CBS AST

This database lists facilities storing regulated hazardous substances in aboveground storage tanks with capacities of 185 gallons or greater, or in underground tanks of any size. This database includes facilities registered (and closed) since the effective date of CBS regulations through the date the request is processed. A review of the CBS AST list, as provided by EDR, has revealed 1 site within approximately 0.25 mile of the subject property.

The listed site, Osmose Inc., is adjacent to the subject property. This listed facility is duplicated in multiple databases and ultimately discussed and evaluated in section 8.1.5.

8.1.12 NY CBS

This database lists facilities storing regulated hazardous substances in aboveground storage tanks with capacities of 185 gallons or greater, or in underground tanks of any size. A review of listings in EDRs report revealed 1 site listed within 0.25 miles of the subject property. The listed site, Osmose Inc., is adjacent to the subject property. This listed facility is duplicated in multiple databases and ultimately discussed and evaluated in section 8.1.5.

8.1.13 NY ENG CONTROLS

The Engineering Controls database contains a list of environmental remediation sites that have engineering controls in place. A review of the EDR report reveals 1 site within 0.5 mile of the subject property. The listed site, Osmose Inc., has had a non-aqueous phase liquid (NAPL) extraction and ozone treatment systems operating on site. This listed facility is duplicated in multiple databases and ultimately discussed and evaluated in section 8.1.5.

8.1.14 NY INST CONTROL

The Institutional Controls database contains a list of environmental remediation sites that have institutional controls in place. A review of the EDR report reveals 1 site within 0.5 mile of the subject property. The listed site, Osmose Inc., has numerous institutional controls including Land Use Restrictions, Groundwater Use Restrictions, Deed Restriction, Operating and Maintenance Plan and Monitoring Plan. This listed facility is duplicated in multiple databases and ultimately discussed and evaluated in section 8.1.5.

8.1.15 NY BROWNFIELDS

This database contains a listing of Brownfield properties from the Cleanups in My Community program, which provides information on Brownfield properties for which information is reported back to the EPA, as well as areas served by Brownfield grant

programs. A review of this database indicated 2 sites within 0.5 mile of the subject property. Information provided in the EDR report concluded both of the sites are located at a distance of at least 0.30 mile from the subject property. Empire does not consider these sites to represent a recognized environmental condition to the subject property.

8.1.16 NY SWRCY

The State Waste and Recycling Facility (SWRCY) database is obtained from the Department of Environmental Conservation. A review of the database, as provided by EDR, includes 1 facility within 0.50 mile of the subject property. The listed facility is across the street from the subject property. During the site reconnaissance Empire observed the facility and determined it does not represent a recognized environmental condition to the subject property.

8.1.17 NY HIST UST

This database contains a list of registered UST's prior to 2002 when the DEC stopped updating the UST list from registered UST's. A review of the HIST UST list in EDRs report revealed 1 site listed within 0.25 miles of the subject property. The listed site is a duplicate of the updated UST database, which do not represent recognized environmental conditions to the subject property as discussed and evaluated in section 8.1.8.

8.1.18 NY Spills

The New York State Spills (NY Spills) database lists all spills reported to the NYSDEC. The list includes spills occurring from April of 1986 to the date of the EDR report publication. A review of the NY Spills list in EDRs report reveals 4 sites within approximately 0.125 mile of the subject property. Information in the EDR report includes a "Spill Closed Date" for all 4 sites, which indicates that the spills were addressed to the satisfaction of the state regulators. Therefore Empire does not consider these spills to represent a recognized environmental condition to the subject property.

8.1.19 RCRA - Non Generators

This database includes information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the RCRA of 1976. The non-generators list reveals sites which do not presently generate hazardous waste.

The EDR report revealed 14 sites on the RCRA-NonGen list within 0.25 mile of the subject property. Information provided in the EDR report showed "No Violations Found" under the Violation Status for 13 of the sites. The remaining site, located 0.249 mile from the subject property had four violations that were later complied to. Therefore Empire does not consider these listings to represent a recognized environmental condition to the subject property.

8.1.20 NY and NJ MANIFEST

Manifest is a document that lists and tracks hazardous waste from the generator through transporters and disposal. A review of the NY MANIFEST and NJ MANIFEST databases in EDRs report revealed 17 sites and 1 site, respectively, within 0.25 mile of the subject property. Empire does not consider the facilities listed on this database to represent a recognized environmental condition to the subject property.

8.1.21 EDR US Historical Auto Stations

Sites listed in this database were collected by EDRs search of selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR. A review of the EDR report reveals 60 sites listed within 0.25 mile of the subject property in this database. Based on the site reconnaissance and the historical research performed by Empire for this Phase I ESA, it is Empire's opinion that 59 of the 60 listings do not represent a recognized environmental condition to the subject property.

However, due to the different historical addresses of the subject property, Empire believes 1 of the 60 listings is located on the subject property. The listing indicates the Harold Klinck filling station was on the subject property in 1940. This database listing is confirmed through Empire's city directory and Sanborn Map research. Based on the former presence of a gasoline filling station on the subject property, it constitutes a recognized environmental condition as discussed in the Executive Summary.

8.1.22 EDR US Historical Cleaners

Sites listed in this database were collected by EDRs search of selected national collections of business directories and has collected listings of potential dry cleaners, cleaners, laundry, laundry-mat, cleaning/laundry, etc. that were available to EDR. A review of the EDR report revealed 12 sites listed within 0.25 mile of the subject property in this database. Based on the site reconnaissance and the historical research performed by Empire for this Phase I ESA, it is Empire's opinion that the listings in this database do not represent a recognized environmental condition to the subject property.

8.1.23 NY RGA HWS

The EDR Recovered Government Archive State Hazardous Waste (RGA HWS) database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. A review of this database by EDR reveals 3 sites within 1.00 mile of the subject property. All of the listings are duplicates of the updated SHWS listings discussed and evaluated in section 8.1.5.

8.1.18 Unplottable (“Orphan”) Sites

The EDR report includes 34 site listings that are considered “orphans”, meaning that they are unmappable due to insufficient address information or other unavailable information. Some orphan facilities may be listed more than once due to more than one regulated activity at their location and/or variations in a facility name.

Empire reviewed all the orphan sites with attention to the proximity and elevation orientation to the subject property. On the basis of Empire’s reconnaissance of the site vicinity conducted for this ESA and Empire’s general knowledge of the locations of the orphan sites, they appear to have low potential to impact the subject property at this time, and therefore are not considered to represent recognized environmental conditions to the subject property.

9.0 INTERVIEWS

9.1 Interview with User / Owner

Empire interviewed Mr. Fred Bou-Jaoude, the President of Sleep and Save Inc and owner of the subject property during the site reconnaissance. Mr. Bou-Jaoude provided no information that would indicate any environmental impacts to the subject property. In addition, Mr. Bou-Jaoude completed a User/Owner Questionnaire as required by ASTM E1527-13. The questionnaire indicated no known environmental impairment associated with the subject property. The completed questionnaire is included in Appendix D.

9.2 Interviews with Local Government Officials

Empire interviewed an employee from the City of Buffalo Fire Prevention office with regards to the subject property. The employee was unaware of any environmental impacts associated with the site.

10.0 FINDINGS

It is Empire's professional opinion that the foregoing environmental site assessment of 1159 Main Street in the City of Buffalo, New York has revealed the presence of ASTM *recognized environmental conditions (RECs)* in connection with the property as listed below:

- The subject property has historically operated as a gasoline filling station from at least 1924 to 1947. Information obtained from the City of Buffalo Office of Fire Prevention concluded three (3) USTs were removed from the subject property in June of 1962. However, no details were provided on the condition of the USTs. In addition, no information was obtained to suggest the UST grave was free of contaminated soils as a result of a petroleum release. Based on the historical presence of underground petroleum storage tanks during a period of non-regulation, it is Empire's opinion that a REC exists on the subject property as defined by ASTM Standard E1527-13.

It is Empire's professional opinion that the foregoing environmental site assessment of 1159 Main Street in the City of Buffalo, New York has revealed the presence of ASTM *controlled recognized environmental conditions (CRECs)* in connection with the property as listed below:

- The adjacent property to the east of the subject property was identified as a State Hazardous Waste Site (SHWS). The property is currently owned and operated by Osмосе, Inc. and is zoned as an industrial / manufacturing facility. The facility is listed in the SHWS for contaminated soil and groundwater from multiple historical USTs previously existing on the site containing creosote, #2 fuel oil and other chemicals, which were found leaking in 1989. The site has since undergone remediation efforts to remove the contaminants from the groundwater and soil. To date, the soil has been remediated to the satisfaction of the applicable state regulators while the groundwater continues to undergo remediation efforts. As part of the operation and maintenance plan, the on site groundwater and surrounding sewers are continually monitored for contamination. Furthermore, information provided in the EDR report indicated the remedial action is preventing off site migration of groundwater contamination. Based on the previously discussed information, a CREC is present on the subject property as defined by ASTM E1527-13. *However, it is Empire's opinion that it does not represent a REC because Engineering Controls are in place to prevent migration of contamination in the groundwater and the adjacent property is located approximately 10 feet lower than the subject property.*

It is Empire's professional opinion that the foregoing environmental site assessment of 1159 Main Street in the City of Buffalo, New York has not revealed the presence of ASTM *historical recognized environmental conditions (HRECs)* in connection with the property.

11.0 CONCLUSIONS

In Empire's professional opinion, the Phase I Environmental Site Assessment *did* indicate the presence of ASTM *recognized environmental conditions* as a former gasoline filling station. Based on the period of time in which the gas station operated (1924-1947), Empire recommends further investigation of the subsurface to determine the presence, if any, of petroleum impacts from a release associated with the former gasoline filling station.

In Empire's professional opinion, the Phase I Environmental Site Assessment *did* indicate the presence of ASTM *controlled recognized environmental conditions*. The property adjacent to the east is listed in the State Hazardous Waste Site database and has undergone decades of remedial work. However, information obtained by Empire concluded the remedial actions on site prevent the migration of groundwater contamination off site. Based on the engineering controls in place and the listed site being downgradient of the subject property, Empire does not believe a recognized environmental condition is warranted on the subject property and no additional subsurface investigation is necessary.

In Empire's professional opinion, the Phase I Environmental Site Assessment *did not* indicate the presence of ASTM *historical recognized environmental conditions*.

12.0 DATA GAPS


The absence of specific information regarding the date and character of the "first developed use" of the subject property represents a data gap and "data failure" as defined in ASTM E1527-13. The "first developed use" includes agricultural purposes as defined in ASTM E1527-13. However, it is Empire's opinion that this data failure is not significant considering the historic information obtained, and therefore does not materially impair the ability of the Empire Environmental Professional to identify ASTM recognized environmental conditions relative to the site.

13.0 DEVIATIONS

To the best of Empire's knowledge, no deviations from ASTM Practice E1527-13 have been involved in the completion of this ESA.

14.0 ENVIRONMENTAL PROFESSIONAL STATEMENT

The undersigned declares that, to the best of his professional knowledge and belief, that individual meets the definition of an Environmental Professional as defined in Section 312.10 of 40 CFR Part 312, and that he has the specific qualifications based on education, training and experience necessary to assess a property of the nature, background and setting of the subject site. The undersigned has developed and performed the "all appropriate inquiry" for this ESA in conformance with the standards and practices promulgated in 40 CFR Part 312.



EMPIRE GEOSERVICES, INC.
Jacob C Metzger, PE
Environmental Engineer

15.0 REFERENCES

15.1 Publications

Aerial Photographs; United States Department of Agriculture - Natural Resources Conservation Services Center; East Aurora, New York.

ASTM 2013 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, E 1527-13; American Society for Testing and Materials; Philadelphia, Pennsylvania.

City Directories; Buffalo and Erie County Library (Central Library); Buffalo, New York.

Deeds; Erie County Clerks Office; Buffalo, New York.

EDR Radius MapTM Report; Environmental Data Resources, Inc. (EDR); Milford, Connecticut.

Geologic Map of New York - Finger Lakes Sheet; The University of the State of New York - Education Department; 1970.

Historical Topographic Quadrangles; United States Geological Survey (USGS) website; <http://usgs.gov>

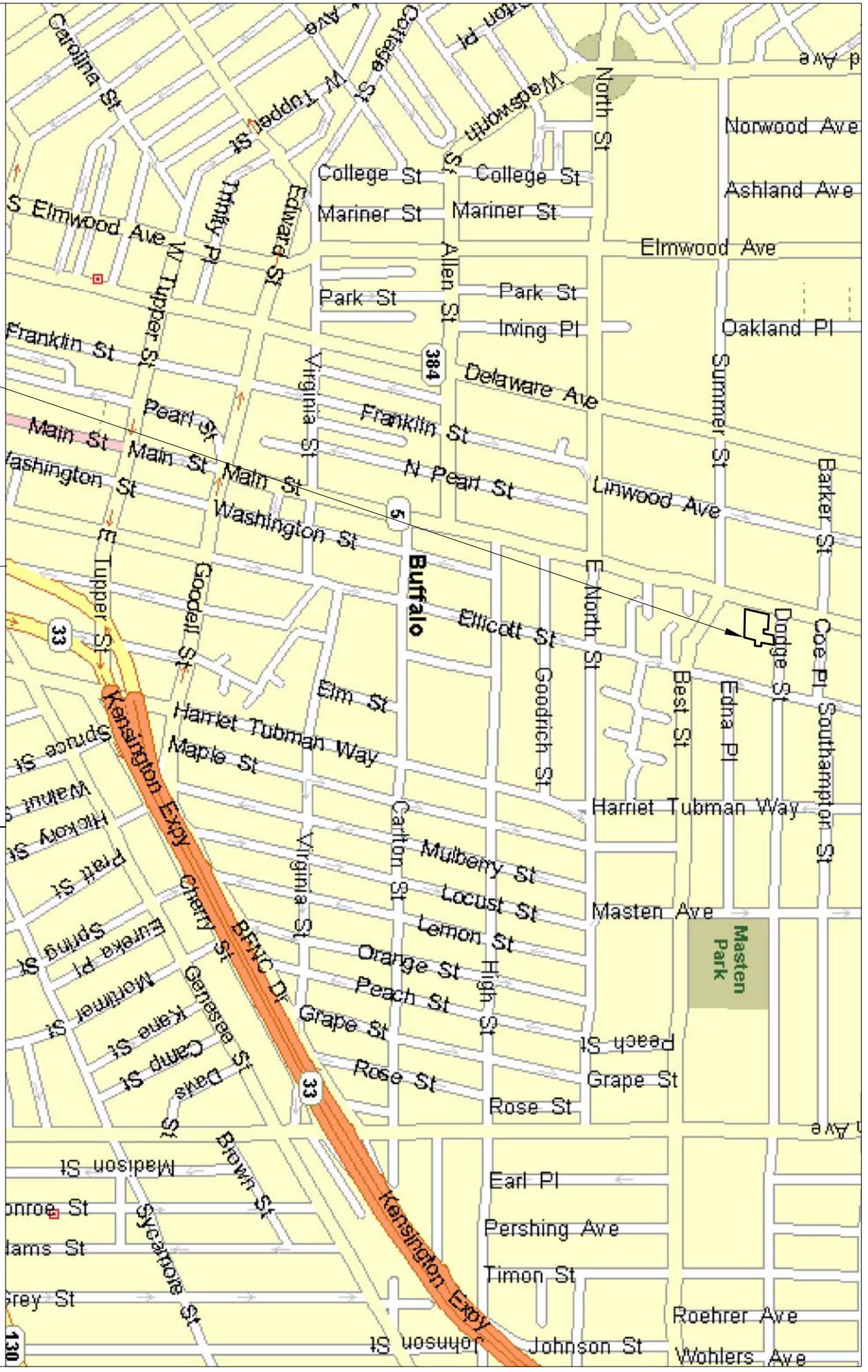
Sanborn Maps; Buffalo Public Library website; www.buffalolib.org.

15.2 Interviews

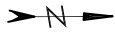
Interviews with people knowledgeable with the site are discussed in Section 9.

APPENDIX A

Site Drawings



APPROXIMATE SITE LOCATION



NOTE:
 SITE LOCATION PLAN DEVELOPED
 FROM MICROSOFT STREETS & TRIPS 2006



SITE LOCATION MAP

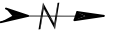
PHASE I ENVIRONMENTAL SITE ASSESSMENT


SLEEP INN
 1159 MAIN STREET
 BUFFALO, NEW YORK

DR BY: JCM	SCALE: NTS	PROJ NO.: BEV-14-003
CHKD BY: DRS	DATE: 01-27-14	FIGURE NO.: 1



NOTE:
 SITE PLAN DEVELOPED FROM GOOGLE MAPS



 <small>a subsidiary of SJB Services, Inc.</small>		PHASE I ENVIRONMENTAL SITE ASSESSMENT SLEEP INN 1159 MAIN STREET BUFFALO, NEW YORK	
DR BY: JCM	APPROX. SCALE: NTS	DATE: 01-28-14	
CHKD BY: DRS	PROJ NO.: BEV-14-003	FIGURE NO.: 2	

APPENDIX B

Site Reconnaissance Photographs



Photo 1: West edge of the property looking south along Main Street.



Photo 2: Front (south) side of the motel building located on the north half of the property.



Photo 3: Back (north) side of the motel building located on the north half of the property.



Photo 4: Motel building on the south half of the property looking west toward Main Street.



Photo 5: Motel building on the north half of the property looking west toward Main Street.



Photo 6: Garage used for storage attached on the east side of the south motel building.



Photo 7: Vacant portion of the property along Dodge Street.



Photo 8: Garbage dumpster located along the east edge of the property limits in the parking lot area.



Photo 9: Vacant portion of the property looking south from Dodge Street.



Photo 10: Front (north) side of the motel building located on the south half of the property.



Photo 11: Typical interior space of a motel room.



Photo 12: Typical interior conditions of the restrooms in the motel rooms.

APPENDIX C

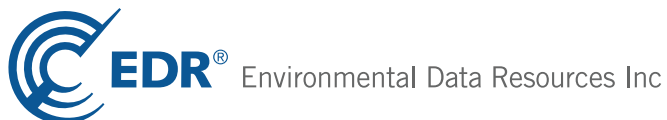
Regulatory Review

Motel Site

1159 Main Street
Buffalo, NY 14209

Inquiry Number: 3834633.2s
January 21, 2014

The EDR Radius Map™ Report



440 Wheelers Farms Road
Milford, CT 06461
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	8
Orphan Summary	466
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

GeoCheck - Not Requested

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2014 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

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 (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

1159 MAIN STREET
BUFFALO, NY 14209

COORDINATES

Latitude (North): 42.9053000 - 42° 54' 19.08"
Longitude (West): 78.8673000 - 78° 52' 2.28"
Universal Transverse Mercator: Zone 17
UTM X (Meters): 674107.5
UTM Y (Meters): 4752290.5
Elevation: 649 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 42078-H7 BUFFALO NE, NY
Most Recent Revision: 1965

West Map: 42078-H8 BUFFALO NW, NY CA10
Most Recent Revision: 1965

AERIAL PHOTOGRAPHY IN THIS REPORT

Photo Year: 2011
Source: USDA

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

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

Federal NPL site list

NPL..... National Priority List

EXECUTIVE SUMMARY

Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

CERCLIS..... Comprehensive Environmental Response, Compensation, and Liability Information System
FEDERAL FACILITY..... Federal Facility Site Information listing

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal institutional controls / engineering controls registries

US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROL..... Sites with Institutional Controls
LUCIS..... Land Use Control Information System

Federal ERNS list

ERNS..... Emergency Response Notification System

State- and tribal - equivalent CERCLIS

NY VAPOR REOPENED..... Vapor Intrusion Legacy Site List

State and tribal leaking storage tank lists

NY HIST LTANKS..... Listing of Leaking Storage Tanks
INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

NY TANKS..... Storage Tank Facility Listing
NY MOSF UST..... Major Oil Storage Facilities Database
NY MOSF AST..... Major Oil Storage Facilities Database
NY MOSF..... Major Oil Storage Facility Site Listing
INDIAN UST..... Underground Storage Tanks on Indian Land
FEMA UST..... Underground Storage Tank Listing

State and tribal institutional control / engineering control registries

NY RES DECL..... Restrictive Declarations Listing

State and tribal voluntary cleanup sites

NY VCP..... Voluntary Cleanup Agreements
INDIAN VCP..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

NY ERP..... Environmental Restoration Program Listing

EXECUTIVE SUMMARY

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

ODI..... Open Dump Inventory
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations
NY SWTIRE..... Registered Waste Tire Storage & Facility List
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL..... Clandestine Drug Labs
NY DEL SHWS..... Delisted Registry Sites
US HIST CDL..... National Clandestine Laboratory Register

Local Land Records

LIENS 2..... CERCLA Lien Information
NY LIENS..... Spill Liens 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
NY SPILLS 80..... SPILLS 80 data from FirstSearch

Other Ascertainable Records

DOT OPS..... Incident and Accident Data
DOD..... Department of Defense Sites
FUDS..... Formerly Used Defense Sites
CONSENT..... Superfund (CERCLA) Consent Decrees
ROD..... Records Of Decision
UMTRA..... Uranium Mill Tailings Sites
US MINES..... Mines Master Index File
TSCA..... Toxic Substances Control Act
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing
ICIS..... Integrated Compliance Information System
MLTS..... Material Licensing Tracking System
RADINFO..... Radiation Information Database
RAATS..... RCRA Administrative Action Tracking System
RMP..... Risk Management Plans
NY HSWDS..... Hazardous Substance Waste Disposal Site Inventory
NY UIC..... Underground Injection Control Wells
NY DRYCLEANERS..... Registered Drycleaners
NY SPDES..... State Pollutant Discharge Elimination System

EXECUTIVE SUMMARY

NY E DESIGNATION.....	E DESIGNATION SITE LISTING
INDIAN RESERV.....	Indian Reservations
SCRD DRYCLEANERS.....	State Coalition for Remediation of Drycleaners Listing
NY Financial Assurance.....	Financial Assurance Information Listing
NY COAL ASH.....	Coal Ash Disposal Site Listing
LEAD SMELTERS.....	Lead Smelter Sites
EPA WATCH LIST.....	EPA WATCH LIST
COAL ASH DOE.....	Steam-Electric Plant Operation Data
PRP.....	Potentially Responsible Parties
COAL ASH EPA.....	Coal Combustion Residues Surface Impoundments List
2020 COR ACTION.....	2020 Corrective Action Program List
PCB TRANSFORMER.....	PCB Transformer Registration Database
US FIN ASSUR.....	Financial Assurance Information

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP..... EDR Proprietary Manufactured Gas Plants

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

Federal RCRA CORRACTS facilities list

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 09/10/2013 has revealed that there is 1 CORRACTS site within approximately 1 mile of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>CENTURY CENTRE I</i>	<i>817 WASHINGTON ST</i>	<i>SSW 1/2 - 1 (0.655 mi.)</i>	<i>137</i>	<i>440</i>

EXECUTIVE SUMMARY

Federal RCRA generators list

RCRA-LQG: 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.

A review of the RCRA-LQG list, as provided by EDR, and dated 09/10/2013 has revealed that there is 1 RCRA-LQG site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
NATIONAL GRID MANHOLE 119 BEST	119 BEST ST	ESE 1/8 - 1/4 (0.199 mi.)	M69	187

RCRA-SQG: 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.

A review of the RCRA-SQG list, as provided by EDR, and dated 09/10/2013 has revealed that there are 3 RCRA-SQG sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SCHUELE PAINT CO	12 SUMMER ST	WSW 0 - 1/8 (0.082 mi.)	D24	127
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>OSMOSE, INC</i>	<i>ELLCOTT ST</i>	<i>SE 0 - 1/8 (0.061 mi.)</i>	<i>C17</i>	<i>45</i>
UNIVERSITY AT BUFFALO - CTRC	875 ELLICOTT ST	S 1/8 - 1/4 (0.233 mi.)	Q91	230

RCRA-CESQG: 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). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-CESQG list, as provided by EDR, and dated 09/10/2013 has revealed that there is 1 RCRA-CESQG site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>DELTA SONIC - MAIN STREET</i>	<i>1264 MAIN ST</i>	<i>N 1/8 - 1/4 (0.163 mi.)</i>	<i>L61</i>	<i>173</i>

EXECUTIVE SUMMARY

State- and tribal - equivalent CERCLIS

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 11/13/2013 has revealed that there are 3 NY SHWS sites within approximately 1 mile of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
OSMOSE, INC Class Code: Site is properly closed - requires continued management.	ELLCOTT ST	SE 0 - 1/8 (0.061 mi.)	C17	45
1542 MAIN STREET	1542 MAIN STREET	NNE 1/2 - 1 (0.719 mi.)	138	448
DIARSENOL COMPANY Class Code: Site is properly closed - requires continued management.	84 KINGSLEY STREET	ENE 1/2 - 1 (0.869 mi.)	Z139	449

State and tribal landfill and/or solid waste disposal site lists

NY SWF/LF: The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the list.

A review of the NY SWF/LF list, as provided by EDR, and dated 10/08/2013 has revealed that there is 1 NY SWF/LF site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
ERNST STEEL SLF	1280 MAIN ST	N 1/8 - 1/4 (0.227 mi.)	S86	222

State and tribal leaking storage tank lists

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 09/25/2013 has revealed that there are 31 NY LTANKS sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MIDCITY OFFICE EQUIPMENT INC Spill Number/Closed Date: 9707872 / 11/28/1997	1220 MAIN ST	N 0 - 1/8 (0.122 mi.)	I53	162
AGASSIZ HOLDINGS INC Spill Number/Closed Date: 0500859 / 3/21/2006	1235 - 1245 MAIN STREET	N 1/8 - 1/4 (0.133 mi.)	I55	166
NIRELLI'S GULF STATION Spill Number/Closed Date: 8808014 / 10/2/1989	1038 MAIN & NORTH	SSW 1/8 - 1/4 (0.226 mi.)	R85	221
A.R.G. TRUCKING CO. Spill Number/Closed Date: 8607168 / 2/24/1987	MAIN AND NORTH ST.	SSW 1/8 - 1/4 (0.230 mi.)	T88	225
GULF SERVICE STATION #176476 Spill Number/Closed Date: 8803956 / 8/8/1988	1038 MAIN ST	SSW 1/8 - 1/4 (0.243 mi.)	T102	236

EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
AMERICAN RED CROSS BLOOD SERVI Spill Number/Closed Date: 9404334 / 12/12/1995	786 DELAWARE AVE	W 1/8 - 1/4 (0.245 mi.)	106	245
BUFFALO GENERAL HOSPITAL Spill Number/Closed Date: 9310029 / 12/16/1994	NORTH STREET	SSE 1/4 - 1/2 (0.284 mi.)	113	273
WESTMINSTER PRESBYTERIAN Spill Number/Closed Date: 8805542 / 11/10/1988	724 DELAWARE AVENUE	WSW 1/4 - 1/2 (0.289 mi.)	114	274
TANKS AT APARTMENT COMPLE Spill Number/Closed Date: 0075007 / 6/22/2000	905 DELAWARE AVENUE	NW 1/4 - 1/2 (0.298 mi.)	116	276
KULBACK CONSTRUCTION Spill Number/Closed Date: 9403219 / 10/4/1994	DELAWARE AT NORTH	SW 1/4 - 1/2 (0.302 mi.)	117	277
SINCLAIR RADIO OF BUFFALO Spill Number/Closed Date: 9709172 / 12/2/1998	695 DELAWARE AVENUE	WSW 1/4 - 1/2 (0.322 mi.)	118	278
925 DELAWARE AVE INC Spill Number/Closed Date: 0906378 / 1/6/2010	925 DELAWARE AVE	NW 1/4 - 1/2 (0.324 mi.)	119	280
WESTBROOK 675 DELAWARE Spill Number/Closed Date: 9308986 / 4/20/1994	675 DELAWARE AVENUE	SW 1/4 - 1/2 (0.327 mi.)	120	283
CMX LABORATORIES Spill Number/Closed Date: 0705382 / 9/13/2007	50 HIGH STREET	S 1/4 - 1/2 (0.341 mi.)	121	285
FORMER MOBIL SERVICE STATION 9 Spill Number/Closed Date: 8806781 / 1/25/1989	979 MAIN STREET	SSW 1/4 - 1/2 (0.350 mi.)	122	287
BUFFALO GENERAL HOSPITAL Spill Number/Closed Date: 0075587 / 2/27/2001 Spill Number/Closed Date: 8909904 / 7/10/1990	100 HIGH STREET	SSE 1/4 - 1/2 (0.352 mi.)	123	290
ROSWELL PARK #6 OIL Spill Number/Closed Date: 8907884 / 12/12/1989	HIGH & MICHIGAN AVENUES	SSE 1/4 - 1/2 (0.409 mi.)	124	350
NATIONAL GUARD BUILDING Spill Number/Closed Date: 9709636 / 3/30/1998 Spill Number/Closed Date: 9305872 / 8/27/1993 Spill Number/Closed Date: 8904853 / 11/14/1990	27 MASTEN AVE	ESE 1/4 - 1/2 (0.411 mi.)	125	351
TIMON TOWERS APTS. Spill Number/Closed Date: 0550932 / 5/8/2006	1015 DELAWARE AVENUE	NNW 1/4 - 1/2 (0.436 mi.)	127	359
NYSDEC Spill Number/Closed Date: 9503691 / 5/7/1998 Spill Number/Closed Date: 9404468 / 8/15/1994	600 DELAWARE AVE	SW 1/4 - 1/2 (0.455 mi.)	128	360
ROSWELL PARK CANCER INST. Spill Number/Closed Date: 9504008 / 7/1/1996 Spill Number/Closed Date: 9875428 / 3/1/1999	MICHIGAN AND HIGH STREE	SSE 1/4 - 1/2 (0.470 mi.)	Y130	384
ROSWELL PARK CANCER INSTITUTE Spill Number/Closed Date: 8905775 / 11/22/1989	ELM & CARLTON STREETS	SSE 1/4 - 1/2 (0.470 mi.)	Y131	387
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
OSMOSE, INC Spill Number/Closed Date: 8903194 / 9/12/1989 Spill Number/Closed Date: 9975243 / 8/17/1999	ELLCOTT ST	SE 0 - 1/8 (0.061 mi.)	C17	45
MAIN - SUMMER CORPORATION Spill Number/Closed Date: 8908322 / 4/2/1990	MAIN & SUMMER STREETS	S 0 - 1/8 (0.067 mi.)	20	123
ABANDONED AUTO REPAIR Spill Number/Closed Date: 0175489 / 10/3/2002	63 E. UTICA	NNE 1/4 - 1/2 (0.427 mi.)	126	357

EXECUTIVE SUMMARY

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MASTEN SERVICE INC Spill Number/Closed Date: 9601741 / 5/3/1996	247 MASTEN AVE	ENE 1/4 - 1/2 (0.466 mi.)	129	376
BENDERSON DEVELOPMENT Spill Number/Closed Date: 8808966 / 11/10/1989	584 DELAWARE AVENUE	SW 1/4 - 1/2 (0.477 mi.)	132	399
CHILDRENS HOSPITAL Spill Number/Closed Date: 8707780 / 4/12/1988	219 BRYANT ST	WNW 1/4 - 1/2 (0.480 mi.)	133	400
ROSWELL PARK Spill Number/Closed Date: 0750760 / 11/15/2007	ELM AT CARLTON	SSE 1/4 - 1/2 (0.483 mi.)	134	429
ENGINE #16 1416 MAIN Spill Number/Closed Date: 9213701 / 10/15/1993	1416 MAIN ST. AT UTICA	N 1/4 - 1/2 (0.486 mi.)	135	431
HEYMAN LABORATORIES INC Spill Number/Closed Date: 9311171 / 1/30/1996	325 ELMWOOD AVE	W 1/4 - 1/2 (0.498 mi.)	136	432

State and tribal registered storage tank lists

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, and dated 11/13/2013 has revealed that there are 5 NY UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PROPERTY	75 BARKER ST.	NW 1/8 - 1/4 (0.164 mi.)	62	177
MAYFLOWER APARTMENTS	66 SUMMER ST	WSW 1/8 - 1/4 (0.190 mi.)	67	184
DELTA SONIC MAIN ST	1264 MAIN ST	N 1/8 - 1/4 (0.203 mi.)	O73	190
CUMBERLAND FARMS #176476	1038 MAIN ST	SSW 1/8 - 1/4 (0.243 mi.)	T103	242
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
OSMOSE INC	980 ELLICOTT ST	SE 0 - 1/8 (0.061 mi.)	C14	20

NY CBS UST: Chemical Bulk Storage Database. Registration data collected as required by 6 NYCRR Part 596. It includes facilities storing hazardous substances listed in 6 NYCRR Part 597, in aboveground tanks with capacities of 185 gallons or greater, and/or in underground tanks of any size. Includes facilities registered (and closed) since effective date of CBS regulations (July 15, 1988) through the date request is processed.

A review of the NY CBS UST list, as provided by EDR, and dated 01/01/2002 has revealed that there is 1 NY CBS UST site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
OSMOSE, INC	ELLICOTT ST	SE 0 - 1/8 (0.061 mi.)	C17	45

EXECUTIVE SUMMARY

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, and dated 11/13/2013 has revealed that there are 2 NY AST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>DELTASONIC</i>	<i>1264 MAIN STREET</i>	<i>N 1/8 - 1/4 (0.203 mi.)</i>	<i>O74</i>	<i>199</i>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>OSMOSE INC</i>	<i>980 ELLICOTT ST</i>	<i>SE 0 - 1/8 (0.061 mi.)</i>	<i>C18</i>	<i>93</i>

NY CBS AST: Chemical Bulk Storage Database. Registration data collected as required by 6 NYCRR Part 596. It includes facilities storing hazardous substances listed in 6 NYCRR Part 597, in aboveground tanks with capacities of 185 gallons or greater, and/or in underground tanks of any size. Includes facilities registered (and closed) since effective date of CBS regulations (July 15, 1988) through the date request is processed.

A review of the NY CBS AST list, as provided by EDR, and dated 01/01/2002 has revealed that there is 1 NY CBS AST site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>OSMOSE, INC</i>	<i>ELLICOTT ST</i>	<i>SE 0 - 1/8 (0.061 mi.)</i>	<i>C17</i>	<i>45</i>

NY CBS: These facilities store regulated hazardous substances in aboveground tanks with capacities of 185 gallons or greater, and/or in underground tanks of any size

A review of the NY CBS list, as provided by EDR, and dated 11/13/2013 has revealed that there is 1 NY CBS site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>OSMOSE, INC</i>	<i>ELLICOTT ST</i>	<i>SE 0 - 1/8 (0.061 mi.)</i>	<i>C17</i>	<i>45</i>

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 11/13/2013 has revealed that there is 1 NY ENG CONTROLS site within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>OSMOSE, INC</i>	<i>ELLICOTT ST</i>	<i>SE 0 - 1/8 (0.061 mi.)</i>	<i>C17</i>	<i>45</i>

EXECUTIVE SUMMARY

Environmental Remediation sites that have institutional controls in place.

A review of the NY INST CONTROL list, as provided by EDR, and dated 11/13/2013 has revealed that there is 1 NY INST CONTROL site within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>OSMOSE, INC</i>	<i>ELLCOTT ST</i>	<i>SE 0 - 1/8 (0.061 mi.)</i>	<i>C17</i>	<i>45</i>

State and tribal Brownfields sites

NY BROWNFIELDS: Brownfields Site List

A review of the NY BROWNFIELDS list, as provided by EDR, and dated 11/13/2013 has revealed that there are 2 NY BROWNFIELDS sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>BUFFALO CITY MISSION (E. NORTH FORMER MOBIL SERVICE STATION 9</i>	<i>150 EAST NORTH STREET 979 MAIN STREET</i>	<i>SE 1/4 - 1/2 (0.296 mi.) SSW 1/4 - 1/2 (0.350 mi.)</i>	<i>115 122</i>	<i>275 287</i>

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

Registered Recycling Facility List from the Department of Environmental Conservation.

A review of the NY SWRCY list, as provided by EDR, and dated 10/08/2013 has revealed that there is 1 NY SWRCY site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>OLMSTEAD CENTER</i>	<i>1170 MAIN STREET</i>	<i>WNW 0 - 1/8 (0.033 mi.)</i>	<i>A2</i>	<i>8</i>

Local Lists of Registered Storage Tanks

NY HIST 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 HIST UST list, as provided by EDR, and dated 01/01/2002 has revealed that there is 1 NY HIST UST site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>MAYFLOWER APARTMENTS</i>	<i>66 SUMMER ST</i>	<i>WSW 1/8 - 1/4 (0.190 mi.)</i>	<i>67</i>	<i>184</i>

EXECUTIVE SUMMARY

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 09/25/2013 has revealed that there are 4 NY Spills sites within approximately 0.125 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
FORMER SARABETH BLDG Spill Number/Closed Date: 0600379 / 10/26/2006 Spill Number/Closed Date: 0485354 / 1/27/2005 Spill Number/Closed Date: 0485478 / 1/27/2005	1219-1233 MAIN AND	N 0 - 1/8 (0.099 mi.)	E35	136

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
OSMOSE, INC Spill Number/Closed Date: 9505668 / 8/11/1995 Spill Number/Closed Date: 0750740 / 8/24/2007 Spill Number/Closed Date: 0750741 / 1/15/2008 Spill Number/Closed Date: 9608362 / 10/11/1996	ELLICOTT ST	SE 0 - 1/8 (0.061 mi.)	C17	45
ABANDONED MEDICAL WASTE Spill Number/Closed Date: 9910017 / 11/18/1999	1003 ELLICOTT STREET	E 0 - 1/8 (0.086 mi.)	26	133
NIAGARA MOHAWK Spill Number/Closed Date: 8603091 / 10/16/1986 Spill Number/Closed Date: 9303440 / 10/12/1995	45 BEST STREET	SSE 0 - 1/8 (0.100 mi.)	G36	140

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 09/10/2013 has revealed that there are 14 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
AUTOPIA INC	1176 MAIN ST	NW 0 - 1/8 (0.035 mi.)	A5	9
PRECISION ABRASIVES CORP	11 SUMMER ST	WSW 0 - 1/8 (0.080 mi.)	D22	125
NIAGARA MOHAWK A NATIONAL GRID	1229 MAIN ST	N 0 - 1/8 (0.120 mi.)	I49	159
MIDCITY OFFICE EQUIPMENT INC	1220 MAIN ST	N 0 - 1/8 (0.122 mi.)	I53	162
M J GRASS SCREW & MACHINE	19 NORTHAMPTON ST	NNE 1/8 - 1/4 (0.169 mi.)	65	180
YERACARIS BERNICE	1280 MAIN ST	N 1/8 - 1/4 (0.227 mi.)	S87	223
GULF SERVICE STATION #176476	1038 MAIN ST	SSW 1/8 - 1/4 (0.243 mi.)	T102	236
AMERICAN RED CROSS BLOOD SERVI	786 DELAWARE AVE	W 1/8 - 1/4 (0.245 mi.)	106	245
SAVAGE PRINTING CO	1291 MAIN ST	N 1/8 - 1/4 (0.249 mi.)	S112	255

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
DEGUSSA CORP	980 ELLICOTT ST - WAREH	SE 0 - 1/8 (0.061 mi.)	C19	120

EXECUTIVE SUMMARY

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
STATION 49	45 BEST ST	SSE 0 - 1/8 (0.103 mi.)	G39	143
WORLD AUTO PAINT SHOPS OF BUFF	1114 MAIN ST	SSW 0 - 1/8 (0.103 mi.)	H40	146
BISHOP LESLIE	1059 ELLICOTT ST	NE 1/8 - 1/4 (0.148 mi.)	58	169
DEL-RICH PROPERTIES	35 EDNA PL	ESE 1/8 - 1/4 (0.154 mi.)	59	170

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 11/01/2013 has revealed that there are 17 NY MANIFEST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
AUTOPIA INC	1176 MAIN ST	NW 0 - 1/8 (0.035 mi.)	A5	9
SCHUELE PAINT CO	12 SUMMER ST	WSW 0 - 1/8 (0.082 mi.)	D25	128
NIAGARA MOHAWK A NATIONAL GRID	1229 MAIN ST	N 0 - 1/8 (0.120 mi.)	I50	160
MIDCITY OFFICE EQUIPMENT INC	1220 MAIN ST	N 0 - 1/8 (0.122 mi.)	I53	162
DELTA SONIC - MAIN STREET	1264 MAIN ST	N 1/8 - 1/4 (0.163 mi.)	L61	173
M J GRASS SCREW & MACHINE	19 NORTHAMPTON ST	NNE 1/8 - 1/4 (0.169 mi.)	65	180
YERACARIS BERNICE	1280 MAIN ST	N 1/8 - 1/4 (0.227 mi.)	S87	223
GULF SERVICE STATION #176476	1038 MAIN ST	SSW 1/8 - 1/4 (0.243 mi.)	T102	236
AMERICAN RED CROSS BLOOD SERVI	786 DELAWARE AVE	W 1/8 - 1/4 (0.245 mi.)	106	245
SAVAGE PRINTING CO	1291 MAIN ST	N 1/8 - 1/4 (0.249 mi.)	S112	255

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
OSMOSE, INC	ELLICOTT ST	SE 0 - 1/8 (0.061 mi.)	C17	45
DEGUSSA CORP	980 ELLICOTT ST - WAREH	SE 0 - 1/8 (0.061 mi.)	C19	120
STATION 49	45 BEST ST	SSE 0 - 1/8 (0.103 mi.)	G39	143
WORLD AUTO PAINT SHOPS OF BUFF	1114 MAIN ST	SSW 0 - 1/8 (0.103 mi.)	H40	146
DEL-RICH PROPERTIES	35 EDNA PL	ESE 1/8 - 1/4 (0.154 mi.)	59	170
NIAGARA MOHAWK A NATIONAL GRID	119 BEST ST.	ESE 1/8 - 1/4 (0.199 mi.)	M70	189
UNIVERSITY AT BUFFALO - CTRC	875 ELLICOTT ST	S 1/8 - 1/4 (0.233 mi.)	Q90	227

NJ MANIFEST: Hazardous waste manifest information.

A review of the NJ MANIFEST list, as provided by EDR, and dated 11/01/2013 has revealed that there is 1 NJ MANIFEST site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
OSMOSE WOOD PRESERVING INC	980 ELLICOTT ST	SE 0 - 1/8 (0.061 mi.)	C16	24

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: EDR has searched selected national collections of business directories and has collected

EXECUTIVE SUMMARY

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 US Hist Auto Stat list, as provided by EDR, has revealed that there are 60 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
KLINCK HAROLD FILLING STATION	1169 MAIN ST	WNW 0 - 1/8 (0.031 mi.)	A1	8
J C CROSBY CO INC AUTO SALES	1170 MAIN ST	WNW 0 - 1/8 (0.033 mi.)	A3	8
JUSTICE MOTOR CORP AUTOS	1164 MAIN ST	W 0 - 1/8 (0.034 mi.)	A4	9
Not reported	1176 MAIN ST	NW 0 - 1/8 (0.035 mi.)	A6	18
ROOT DELOSE AUTO REPR	1152 MAIN ST	WSW 0 - 1/8 (0.044 mi.)	B7	18
G & L AUTO COLLISION	1148 MAIN ST	SW 0 - 1/8 (0.049 mi.)	B8	19
GENL TIRE CO OF BUFFALO INC SE	1146 MAIN ST	SW 0 - 1/8 (0.051 mi.)	B9	19
REAR ALLISON & SEIBOLD AUTO RE	1137 MAIN ST	SW 0 - 1/8 (0.054 mi.)	B10	19
SIEGEL EDW J FILLING STA	1142 MAIN ST	SW 0 - 1/8 (0.057 mi.)	B11	19
GIBSON BROS AUTO REPRS	10 COE PL	N 0 - 1/8 (0.090 mi.)	E27	134
RAYFIELD SIDNEY J AUTO REPR	20 SUMMER ST	WSW 0 - 1/8 (0.097 mi.)	D34	136
SUMMER STREET GARAGE	22 SUMMER ST	WSW 0 - 1/8 (0.100 mi.)	D38	143
KAR AUTOMOTIVE TRANSMISSION &	16 BARKER ST	NNW 0 - 1/8 (0.105 mi.)	42	157
MINER S W INC AUTOS	1227 MAIN ST	N 0 - 1/8 (0.116 mi.)	I44	158
ERHART MOTOR CAR CO	1218 MAIN ST	N 0 - 1/8 (0.118 mi.)	I47	159
GREAT ARROW TRUCK & AUTO REPAI	31 BARKER ST	NNW 0 - 1/8 (0.120 mi.)	48	159
DOWNTOWN MOTORS INC AUTOS	1100 MAIN ST	SSW 1/8 - 1/4 (0.130 mi.)	J54	166
1094 1100 BUICK MOTOR CO	1094 MAIN ST	SSW 1/8 - 1/4 (0.142 mi.)	J56	168
BUFFALO MOTORS INC AUTOS	1247 MAIN ST	N 1/8 - 1/4 (0.158 mi.)	L60	172
Not reported	172 LINWOOD AVE	NW 1/8 - 1/4 (0.167 mi.)	64	179
MEEKS AUTO REPAIR	1253 MAIN ST	N 1/8 - 1/4 (0.171 mi.)	L66	183
Not reported	196 LINWOOD AVE	NNW 1/8 - 1/4 (0.195 mi.)	68	187
MORRISON AUTO HOSPITAL	1059 MAIN ST	SSW 1/8 - 1/4 (0.200 mi.)	N71	189
Not reported	1264 MAIN ST	N 1/8 - 1/4 (0.203 mi.)	O72	190
MEICHT RALPH L AUTO REPR	36 NORTH ST E	S 1/8 - 1/4 (0.215 mi.)	P75	218
BENZLER WM AUTO REPR	30 NORTH ST E	S 1/8 - 1/4 (0.216 mi.)	P78	219
ROBERTS NASH SERVICE	28 NORTH ST E	S 1/8 - 1/4 (0.216 mi.)	P79	219
MORRISONS AUTO HOSPITAL	26 NORTH ST E	S 1/8 - 1/4 (0.217 mi.)	P80	219
BAKER SHELDON MOTOR CORP	1274 MAIN ST	N 1/8 - 1/4 (0.218 mi.)	O81	220
MARKS V DUB INC FOREIGN CAR RE	22 NORTH ST E	SSW 1/8 - 1/4 (0.219 mi.)	R82	220
CLEVE HILL TIRE & AUTO GAS	1050 MAIN ST	SSW 1/8 - 1/4 (0.221 mi.)	N83	220
RADIO GARAGE AUTO REPR	11 NORTH ST	SSW 1/8 - 1/4 (0.239 mi.)	T92	232
FISHER MOYNIHAN COLLISION SERV	1040 MAIN ST	SSW 1/8 - 1/4 (0.239 mi.)	T93	233
NIRELLIS N S I SERVICE CENTER	1038 MAIN ST	SSW 1/8 - 1/4 (0.243 mi.)	T101	235
Not reported	1291 MAIN ST	N 1/8 - 1/4 (0.249 mi.)	S111	254
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
JUSTICE MOTOR CORP USED CAR DE	1133 MAIN ST	SW 0 - 1/8 (0.059 mi.)	B12	20
BRUNN AUTO BODY SERVICE	1140 MAIN ST	SW 0 - 1/8 (0.059 mi.)	B13	20
BRUNN & CO INC AUTO BODY MFRS	980 ELLICOTT ST	SE 0 - 1/8 (0.061 mi.)	C15	24
G & M GARAGE AUTO REPR	967 ELLICOTT ST	SE 0 - 1/8 (0.091 mi.)	F30	135
SCHWAB FRED O AUTO REPR	966 ELLICOTT ST	SE 0 - 1/8 (0.094 mi.)	F31	135
MELCO AUTO SERV AUTO REPR	961 ELLICOTT ST	SE 0 - 1/8 (0.095 mi.)	F33	136
AUTO ROW GARAGE	1114 MAIN ST	SSW 0 - 1/8 (0.103 mi.)	H41	156

EXECUTIVE SUMMARY

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
HETTRICH ELECTRIC SERV INC AUT	1032 ELLICOTT ST	ENE 0 - 1/8 (0.112 mi.)	43	157
NEBRICH & CO AUTO ELEC REPRS	935 ELLICOTT ST	SSE 0 - 1/8 (0.118 mi.)	G46	158
STPAUL AUTO REPAIR SHOP	931 ELLICOTT ST	SSE 0 - 1/8 (0.121 mi.)	G51	162
KEVRA BROS AUTO REPRS	938 ELLICOTT ST	SSE 1/8 - 1/4 (0.146 mi.)	K57	168
FIKE THEO AUTO REPR	908 ELLICOTT ST	SSE 1/8 - 1/4 (0.165 mi.)	K63	178
NORTH ELLICOTT GARAGE INC	52 NORTH ST E	S 1/8 - 1/4 (0.215 mi.)	Q76	218
NORTH ELLICOTT GARAGE INC	54 NORTH ST E	S 1/8 - 1/4 (0.216 mi.)	Q77	219
BLAIR CLARENCE J AUTO LNDRY	883 ELLICOTT ST	S 1/8 - 1/4 (0.222 mi.)	Q84	220
FEUERSTEIN JOHN H AUTO RE DR	1184 MICHIGAN AVE	E 1/8 - 1/4 (0.241 mi.)	U94	233
HOLZER JOHN F FILL STA	1166 MICHIGAN AVE	E 1/8 - 1/4 (0.241 mi.)	V95	233
FIRESTONE JOHN H AUTO REPR	1188 MICHIGAN AVE	E 1/8 - 1/4 (0.241 mi.)	U96	233
FRONTIER OIL SERVICE FILLING S	1160 MICHIGAN AVE	E 1/8 - 1/4 (0.242 mi.)	V98	234
M & S AUTO SERV	1164 MICHIGAN AVE	E 1/8 - 1/4 (0.242 mi.)	V99	234
BLATNER NORMAN FILLING STA	145 BEST ST	ESE 1/8 - 1/4 (0.243 mi.)	W100	234
DIXON & ADAMS AUTO REPRS	1152 MICHIGAN AVE	E 1/8 - 1/4 (0.244 mi.)	X104	245
WILCOX FRANK C FILLING STA	150 BEST ST	ESE 1/8 - 1/4 (0.246 mi.)	W108	252
TUTTON ELECTRIC CO INC AUTO RE	1148 MICHIGAN AVE	ESE 1/8 - 1/4 (0.246 mi.)	X109	253
ROBERTS & RICE CO AUTO REPR	1144 MICHIGAN AVE	ESE 1/8 - 1/4 (0.248 mi.)	X110	253

EDR US Hist 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.

A review of the EDR US Hist Cleaners list, as provided by EDR, has revealed that there are 12 EDR US Hist Cleaners sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SCHWARTZ SOL DRY CLNR	11 SUMMER ST	WSW 0 - 1/8 (0.080 mi.)	D21	124
MAYFLOWER CLEANERS CLO CLNRS	22 SUMMER ST	WSW 0 - 1/8 (0.100 mi.)	D37	142
LEE LIM 1 LNDRY	1037 MAIN ST	SSW 1/8 - 1/4 (0.232 mi.)	T89	226

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
BILLUPS BROTHERS CLEANERS	53 DODGE ST	ENE 0 - 1/8 (0.081 mi.)	23	127
MCMAHON WILFORD M CLO CLNR	970 ELLICOTT ST	SE 0 - 1/8 (0.090 mi.)	F28	134
UNIVERSAL CARPET	967 ELLICOTT ST	SE 0 - 1/8 (0.091 mi.)	F29	134
WILL BEE DRY CLEANERS	963 ELLICOTT ST	SE 0 - 1/8 (0.094 mi.)	F32	135
WYNOT LOUIS W DCLO CLNR	68 BEST ST	SE 0 - 1/8 (0.118 mi.)	45	158
CRISSY EMERSON J LINOLEUM LAYE	73 DODGE ST	ENE 0 - 1/8 (0.122 mi.)	52	162
RAU LOUIS CLO CLNR	1188 MICHIGAN AVE	E 1/8 - 1/4 (0.241 mi.)	U97	234
FIDELITY FOUR HOUR CLEANERS	1152 MICHIGAN AVE	E 1/8 - 1/4 (0.244 mi.)	X105	245
TOWN & COUNTRY CLEANERS	1199 MICHIGAN AVE	E 1/8 - 1/4 (0.245 mi.)	107	252

EXECUTIVE SUMMARY

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

NY RGA HWS: 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.

A review of the NY RGA HWS list, as provided by EDR, has revealed that there are 3 NY RGA HWS sites within approximately 1 mile of the target property.

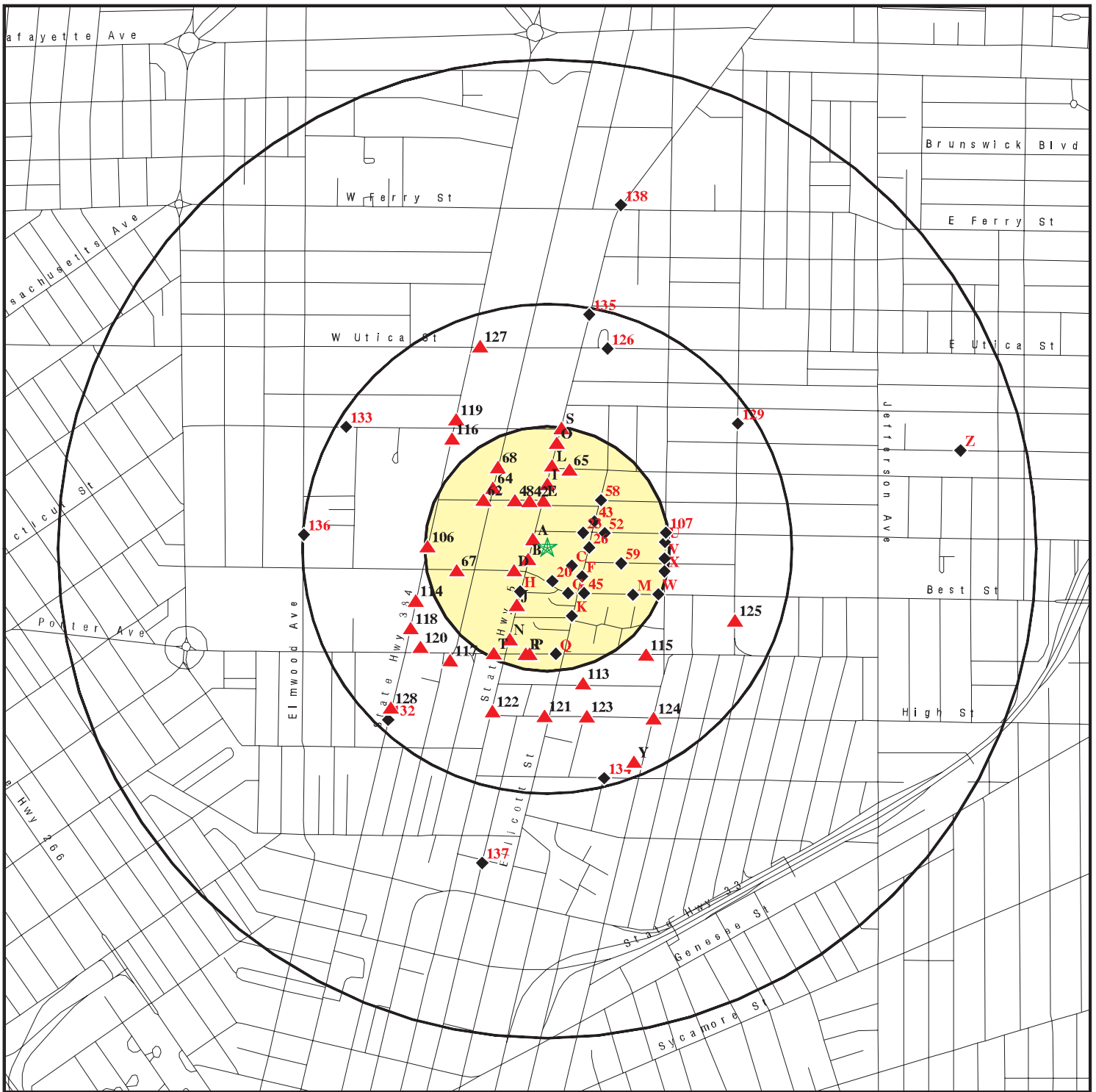
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
OSMOSE, INC	ELLCOTT ST	SE 0 - 1/8 (0.061 mi.)	C17	45
DIARSENOL COMPANY	84 KINGSLEY STREET	ENE 1/2 - 1 (0.869 mi.)	Z139	449
Not reported	84 KINGSLEY STREET	ENE 1/2 - 1 (0.869 mi.)	Z140	465

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 34 records.

<u>Site Name</u>	<u>Database(s)</u>
NYSDOT BIN 1022609	NY MANIFEST
NYSDOT BIN 1022890	NY MANIFEST
NYSDOT BIN 1022790	NY MANIFEST
NYSDOT BIN 1022590	NY MANIFEST
NYSDOT BIN #1063100	RCRA-LQG, NY MANIFEST
NYS DOT	RCRA-CESQG, NY MANIFEST
NYSDOT BIN 1039990	NY MANIFEST
NYSDOT BIN 1022880	NY MANIFEST
NYSDOT BIN 1042780	NY MANIFEST
BUFFALO POLICE RADIO TOWE	NY LTANKS
UNKNOWN TRUCK	NY LTANKS
NYS DOT BIN 1039899	RCRA-LQG
NYSDOT BIN 552015G	RCRA-LQG
CITY OF BFLO PARKS DEPT	NY Spills
TAR ON ROAD	NY Spills
BRENTON - BLUE LIQUID	NY Spills
OIL ON ROAD	NY Spills
OIL ON ROUTE 33 WESTBOUND	NY Spills
MOTOR OIL ON KENSINGTON	NY Spills
LOSURDO FOOD TRUCK	NY Spills
NSYDOT PUMPHOUSE RT. 33	NY Spills
KIELSA TANKER	NY Spills
TANKER KIISLA	NY Spills
OIL ON SKYWAY	NY Spills
TRUCK ON SKYWAY	NY Spills
FICEL TRUCKING	NY Spills
SKYWAY CONTRACTOR	NY Spills
COKE BREEZE	NY Spills
SCAJAQUADA EXPRY. OIL	NY Spills
INTEGRATED WASTE SYSTEM	NY Spills
WASTE OIL NEAR RR YARD	NY Spills
ABANDONED DRUM	NY Spills
MARK TWAIN MV NY9104GH	NY Spills
AT-6 AIRCRAFT	NY Spills

OVERVIEW MAP - 3834633.2s



★ Target Property

▲ Sites at elevations higher than or equal to the target property

◆ Sites at elevations lower than the target property

■ Manufactured Gas Plants

■ National Priority List Sites

■ Dept. Defense Sites

■ Indian Reservations BIA

■ Oil & Gas pipelines from USGS

■ 100-year flood zone

■ 500-year flood zone

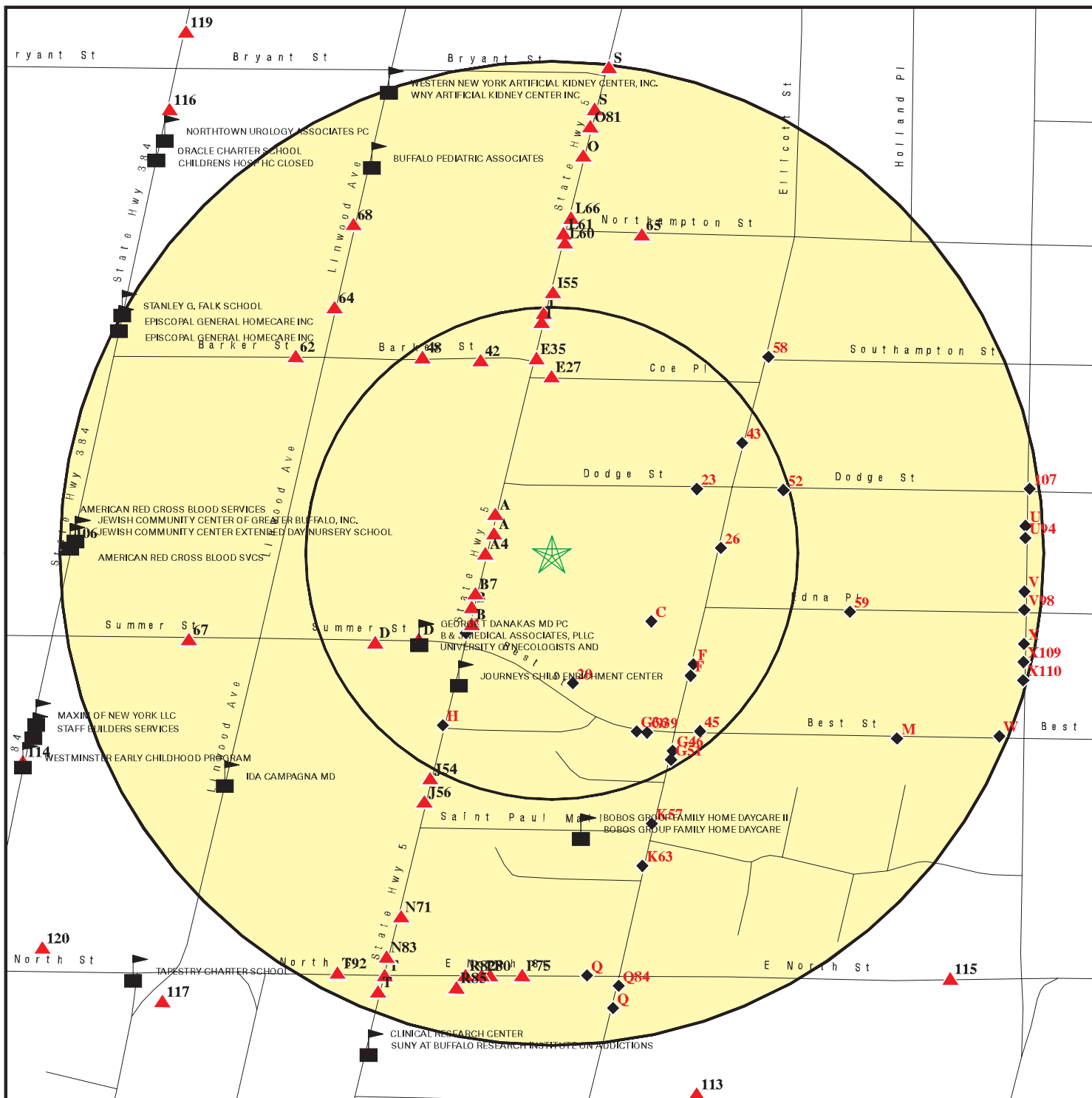


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Motel Site
 ADDRESS: 1159 Main Street
 Buffalo NY 14209
 LAT/LONG: 42.9053 / 78.8673

CLIENT: SJB Services Inc.
 CONTACT: Dave Steiner
 INQUIRY #: 3834633.2s
 DATE: January 21, 2014 1:11 pm

DETAIL MAP - 3834633.2s



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ⚡ Manufactured Gas Plants
- ⚠ Sensitive Receptors
- 🚚 National Priority List Sites
- 🏢 Dept. Defense Sites

- 🏞 Indian Reservations BIA
- 🛢 Oil & Gas pipelines from USGS
- 🌊 100-year flood zone
- 🌊 500-year flood zone

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: Motel Site
 ADDRESS: 1159 Main Street
 Buffalo NY 14209
 LAT/LONG: 42.9053 / 78.8673

CLIENT: SJB Services Inc.
 CONTACT: Dave Steiner
 INQUIRY #: 3834633.2s
 DATE: January 21, 2014 1:14 pm

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								
<i>Federal NPL site list</i>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
<i>Federal Delisted NPL site list</i>								
Delisted NPL	1.000		0	0	0	0	NR	0
<i>Federal CERCLIS list</i>								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
<i>Federal CERCLIS NFRAP site List</i>								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
<i>Federal RCRA CORRACTS facilities list</i>								
CORRACTS	1.000		0	0	0	1	NR	1
<i>Federal RCRA non-CORRACTS TSD facilities list</i>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<i>Federal RCRA generators list</i>								
RCRA-LQG	0.250		0	1	NR	NR	NR	1
RCRA-SQG	0.250		2	1	NR	NR	NR	3
RCRA-CESQG	0.250		0	1	NR	NR	NR	1
<i>Federal institutional controls / engineering controls registries</i>								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
<i>Federal ERNS list</i>								
ERNS	TP		NR	NR	NR	NR	NR	0
<i>State- and tribal - equivalent CERCLIS</i>								
NY SHWS	1.000		1	0	0	2	NR	3
NY VAPOR REOPENED	1.000		0	0	0	0	NR	0
<i>State and tribal landfill and/or solid waste disposal site lists</i>								
NY SWF/LF	0.500		0	1	0	NR	NR	1
<i>State and tribal leaking storage tank lists</i>								
NY LTANKS	0.500		3	5	23	NR	NR	31
NY HIST LTANKS	0.500		0	0	0	NR	NR	0
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
<i>State and tribal registered storage tank lists</i>								
NY TANKS	0.250		0	0	NR	NR	NR	0
NY UST	0.250		1	4	NR	NR	NR	5
NY CBS UST	0.250		1	0	NR	NR	NR	1
NY MOSF UST	0.500		0	0	0	NR	NR	0
NY AST	0.250		1	1	NR	NR	NR	2
NY CBS AST	0.250		1	0	NR	NR	NR	1
NY MOSF AST	0.500		0	0	0	NR	NR	0
NY CBS	0.250		1	0	NR	NR	NR	1
NY MOSF	0.500		0	0	0	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
<i>State and tribal institutional control / engineering control registries</i>								
NY ENG CONTROLS	0.500		1	0	0	NR	NR	1
NY INST CONTROL	0.500		1	0	0	NR	NR	1
NY RES DECL	0.125		0	NR	NR	NR	NR	0
<i>State and tribal voluntary cleanup sites</i>								
NY VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
<i>State and tribal Brownfields sites</i>								
NY ERP	0.500		0	0	0	NR	NR	0
NY BROWNFIELDS	0.500		0	0	2	NR	NR	2
<u>ADDITIONAL ENVIRONMENTAL RECORDS</u>								
<i>Local Brownfield lists</i>								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
<i>Local Lists of Landfill / Solid Waste Disposal Sites</i>								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
NY SWRCY	0.500		1	0	0	NR	NR	1
NY SWTIRE	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
<i>Local Lists of Hazardous waste / Contaminated Sites</i>								
US CDL	TP		NR	NR	NR	NR	NR	0
NY DEL SHWS	1.000		0	0	0	0	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
<i>Local Lists of Registered Storage Tanks</i>								
NY HIST UST	0.250		0	1	NR	NR	NR	1
NY HIST AST	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
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
NY LIENS	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
NY Spills	0.125		4	NR	NR	NR	NR	4
NY Hist Spills	0.125		0	NR	NR	NR	NR	0
NY SPILLS 90	0.125		0	NR	NR	NR	NR	0
NY SPILLS 80	0.125		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		7	7	NR	NR	NR	14
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
NY HSWDS	0.500		0	0	0	NR	NR	0
NY UIC	TP		NR	NR	NR	NR	NR	0
NY MANIFEST	0.250		8	9	NR	NR	NR	17
NJ MANIFEST	0.250		1	0	NR	NR	NR	1
NY DRYCLEANERS	0.250		0	0	NR	NR	NR	0
NY SPDES	TP		NR	NR	NR	NR	NR	0
NY AIRS	TP		NR	NR	NR	NR	NR	0
NY E DESIGNATION	0.125		0	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
NY Financial Assurance	TP		NR	NR	NR	NR	NR	0
NY COAL ASH	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
2020 COR ACTION	0.250		0	0	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
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		26	34	NR	NR	NR	60
EDR US Hist Cleaners	0.250		8	4	NR	NR	NR	12

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

NY RGA HWS	1.000		1	0	0	2	NR	3
------------	-------	--	---	---	---	---	----	---

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID			EDR ID Number
Direction			EPA ID Number
Distance			
Elevation	Site	Database(s)	

A1	KLINCK HAROLD FILLING STATION	EDR US Hist Auto Stat	1014538188
WNW	1169 MAIN ST		N/A
< 1/8	BUFFALO, NY		
0.031 mi.			
164 ft.	Site 1 of 6 in cluster A		
Relative:	EDR Historical Auto Stations:		
Higher	Name:	KLINCK HAROLD FILLING STATION	
	Year:	1940	
Actual:	Type:	GASOLINE AND OIL SERVICE STATIONS	
651 ft.			

A2	OLMSTEAD CENTER	NY SWRCY	S109695776
WNW	1170 MAIN STREET		N/A
< 1/8	BUFFALO, NY 14209		
0.033 mi.			
174 ft.	Site 2 of 6 in cluster A		
Relative:	SWRCY:		
Higher	Region:	9	
	Facility Address 2:	Not reported	
Actual:	Phone Number:	7168821025	
651 ft.	Owner Type:	Private	
	Owner Name:	Olmstead Center	
	Owner Address:	1170 Main Street	
	Owner Address 2:	Not reported	
	Owner City,St,Zip:	Buffalo, NY 14209	
	Owner Email:	Not reported	
	Owner Phone:	7168821025	
	Contact Name:	Daniel Genco	
	Contact Address:	Not reported	
	Contact Address 2:	Not reported	
	Contact City,St,Zip:	NY	
	Contact Email:	dgenco@olmstedcenter.org	
	Contact Phone:	7168821025	
	Activity Desc:	RHRF - registration	
	Activity Number:	[15M24]	
	Active:	Yes	
	East Coordinate:	184216	
	North Coordinate:	4757585	
	Accuracy Code:	4.2 - Utilization of GIS and existing spatial data	
	Regulatory Status:	Registration	
	Permit #:	15M24	
	Auth. Date:	07/24/2009	
	Expiration Date:	Not reported	
	Waste Types:	Not reported	

A3	J C CROSBY CO INC AUTO SALES	EDR US Hist Auto Stat	1014537958
WNW	1170 MAIN ST		N/A
< 1/8	BUFFALO, NY		
0.033 mi.			
174 ft.	Site 3 of 6 in cluster A		
Relative:	EDR Historical Auto Stations:		
Higher	Name:	1164 70 JUSTICE MOTOR CORN AUTOS	
	Year:	1930	
Actual:	Type:	AUTOMOBILE REPAIRING	
651 ft.			
	Name:	JUSTICE MOTOR CORP AUTOS	

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

J C CROSBY CO INC AUTO SALES (Continued)

1014537958

Year: 1940
Type: AUTOMOBILE REPAIRING

Name: J C CROSBY CO INC AUTO SALES
Year: 1946
Type: SERVICE STATIONS

**A4
West
< 1/8
0.034 mi.
178 ft.**

**JUSTICE MOTOR CORP AUTOS
1164 MAIN ST
BUFFALO, NY**

EDR US Hist Auto Stat

**1014537957
N/A**

Site 4 of 6 in cluster A

**Relative:
Higher**

EDR Historical Auto Stations:

Name: 1164 70 JUSTICE MOTOR CORN AUTOS
Year: 1930
Type: AUTOMOBILE REPAIRING

**Actual:
651 ft.**

Name: JUSTICE MOTOR CORP AUTOS
Year: 1940
Type: AUTOMOBILE REPAIRING

**A5
NW
< 1/8
0.035 mi.
185 ft.**

**AUTOPIA INC
1176 MAIN ST
BUFFALO, NY**

**RCRA NonGen / NLR
FINDS
NY MANIFEST**

**1000833430
NYD987012838**

Site 5 of 6 in cluster A

**Relative:
Higher**

RCRA NonGen / NLR:

Date form received by agency: 01/01/2007
Facility name: AUTOPIA INC
Facility address: 1176 MAIN ST
BUFFALO, NY 14203
EPA ID: NYD987012838
Mailing address: MAIN ST
BUFFALO, NY 14203
Contact: MICHAEL FARNSWORTH
Contact address: MAIN ST
BUFFALO, NY 14203
Contact country: US
Contact telephone: (716) 998-3052
Contact email: Not reported
EPA Region: 02
Land type: Private
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

**Actual:
651 ft.**

Owner/Operator Summary:

Owner/operator name: MRS SYLVIA WIESS
Owner/operator address: 360 CLAREMONT ST
KENMORE, NY 14036
Owner/operator country: US
Owner/operator telephone: (716) 836-4320
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AUTOPIA INC (Continued)

1000833430

Owner/Op end date: Not reported

Owner/operator name: MRS SYLVIA WIESS
Owner/operator address: 360 CLAREMONT ST
KENMORE, NY 14036

Owner/operator country: US
Owner/operator telephone: (716) 836-4320
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006
Facility name: AUTOPIA INC
Classification: Not a generator, verified

Date form received by agency: 06/01/2000
Facility name: AUTOPIA INC
Classification: Conditionally Exempt Small Quantity Generator

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 07/09/1997
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/20/1995
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

FINDS:

Registry ID: 110004494262

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AUTOPIA INC (Continued)

1000833430

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

NY MANIFEST:

EPA ID: NYD987012838
Country: USA
Mailing Name: N B S F
Mailing Contact: MERLE S EMMONS
Mailing Address: 1176 MAIN ST
Mailing Address 2: Not reported
Mailing City: BUFFALO
Mailing State: NY
Mailing Zip: 14209
Mailing Zip4: Not reported
Mailing Country: USA
Mailing Phone: 716-882-0375

Document ID: NJA2145673
Manifest Status: Completed copy
Trans1 State ID: 08690
Trans2 State ID: Not reported
Generator Ship Date: 951012
Trans1 Recv Date: 951012
Trans2 Recv Date: Not reported
TSD Site Recv Date: 951017
Part A Recv Date: 951023
Part B Recv Date: 951106
Generator EPA ID: NYD987012838
Trans1 EPA ID: ILD984908202
Trans2 EPA ID: Not reported
TSDF ID: NJD002182897
Waste Code: D018 - BENZENE 0.5 MG/L TCLP
Quantity: 00165
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 95

Document ID: NJA2255440
Manifest Status: Completed after the designated time period for a TSDF to get a copy to the DEC
Trans1 State ID: 08690
Trans2 State ID: Not reported
Generator Ship Date: 960105
Trans1 Recv Date: 960105
Trans2 Recv Date: Not reported
TSD Site Recv Date: 960111
Part A Recv Date: 960118

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AUTOPIA INC (Continued)

1000833430

Part B Recv Date: 960131
Generator EPA ID: NYD987012838
Trans1 EPA ID: ILD984908202
Trans2 EPA ID: Not reported
TSD ID: NJD002182897
Waste Code: D018 - BENZENE 0.5 MG/L TCLP
Quantity: 00200
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 96

Document ID: NJA2168815
Manifest Status: Completed copy
Trans1 State ID: 08690
Trans2 State ID: Not reported
Generator Ship Date: 960424
Trans1 Recv Date: 960424
Trans2 Recv Date: Not reported
TSD Site Recv Date: 960430
Part A Recv Date: 960502
Part B Recv Date: 960515
Generator EPA ID: NYD987012838
Trans1 EPA ID: ILD984908202
Trans2 EPA ID: Not reported
TSD ID: NJD002182897
Waste Code: D018 - BENZENE 0.5 MG/L TCLP
Quantity: 00175
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 96

Document ID: NJA2255456
Manifest Status: Completed copy
Trans1 State ID: 08690
Trans2 State ID: Not reported
Generator Ship Date: 960206
Trans1 Recv Date: 960206
Trans2 Recv Date: Not reported
TSD Site Recv Date: 960216
Part A Recv Date: 960222
Part B Recv Date: 960228
Generator EPA ID: NYD987012838
Trans1 EPA ID: ILD984908202
Trans2 EPA ID: Not reported
TSD ID: NJD002182897
Waste Code: D018 - BENZENE 0.5 MG/L TCLP
Quantity: 00300
Units: P - Pounds
Number of Containers: 001

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AUTOPIA INC (Continued)

1000833430

Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 96

Document ID: NJA2693712
Manifest Status: Completed after the designated time period for a TSDf to get a copy to the DEC
Trans1 State ID: 08690
Trans2 State ID: Not reported
Generator Ship Date: 960927
Trans1 Recv Date: 960927
Trans2 Recv Date: Not reported
TSD Site Recv Date: 961003
Part A Recv Date: 961016
Part B Recv Date: 961024
Generator EPA ID: NYD987012838
Trans1 EPA ID: ILD984908202
Trans2 EPA ID: Not reported
TSDf ID: NJD002182897
Waste Code: D018 - BENZENE 0.5 MG/L TCLP
Quantity: 00268
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 96

Document ID: NJA2540169
Manifest Status: Completed after the designated time period for a TSDf to get a copy to the DEC
Trans1 State ID: 08690
Trans2 State ID: 72351
Generator Ship Date: 960524
Trans1 Recv Date: 960524
Trans2 Recv Date: Not reported
TSD Site Recv Date: 960604
Part A Recv Date: 960607
Part B Recv Date: 960618
Generator EPA ID: NYD987012838
Trans1 EPA ID: ILD984908202
Trans2 EPA ID: Not reported
TSDf ID: NJD002182897
Waste Code: D018 - BENZENE 0.5 MG/L TCLP
Quantity: 00268
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 96

Document ID: NJA2693713
Manifest Status: Completed after the designated time period for a TSDf to get a copy to the DEC
Trans1 State ID: 08690

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AUTOPIA INC (Continued)

1000833430

Trans2 State ID: Not reported
Generator Ship Date: 961016
Trans1 Recv Date: 961016
Trans2 Recv Date: Not reported
TSD Site Recv Date: 961022
Part A Recv Date: 961106
Part B Recv Date: 961114
Generator EPA ID: NYD987012838
Trans1 EPA ID: ILD984908202
Trans2 EPA ID: Not reported
TSD ID: NJD002182897
Waste Code: D018 - BENZENE 0.5 MG/L TCLP
Quantity: 00223
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 96

Document ID: NJA2551714
Manifest Status: Completed copy
Trans1 State ID: 08690
Trans2 State ID: Not reported
Generator Ship Date: 960701
Trans1 Recv Date: 960701
Trans2 Recv Date: Not reported
TSD Site Recv Date: 960709
Part A Recv Date: 960715
Part B Recv Date: 960724
Generator EPA ID: NYD987012838
Trans1 EPA ID: ILD984908202
Trans2 EPA ID: Not reported
TSD ID: NJD002182897
Waste Code: D018 - BENZENE 0.5 MG/L TCLP
Quantity: 00110
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 96

Document ID: NJA2697946
Manifest Status: Completed after the designated time period for a TSD to get a copy to the DEC
Trans1 State ID: 08690
Trans2 State ID: Not reported
Generator Ship Date: 961223
Trans1 Recv Date: 961223
Trans2 Recv Date: Not reported
TSD Site Recv Date: 961231
Part A Recv Date: 970124
Part B Recv Date: 970124
Generator EPA ID: NYD987012838
Trans1 EPA ID: ILD984908202

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AUTOPIA INC (Continued)

1000833430

Trans2 EPA ID: Not reported
TSDF ID: NJD002182897
Waste Code: D018 - BENZENE 0.5 MG/L TCLP
Quantity: 00200
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 96

Document ID: NJA2552076
Manifest Status: Completed after the designated time period for a TSDF to get a copy to the DEC
Trans1 State ID: 08690
Trans2 State ID: Not reported
Generator Ship Date: 960828
Trans1 Recv Date: 960828
Trans2 Recv Date: Not reported
TSD Site Recv Date: 960904
Part A Recv Date: 960910
Part B Recv Date: 960924
Generator EPA ID: NYD987012838
Trans1 EPA ID: ILD984908202
Trans2 EPA ID: Not reported
TSDF ID: NJD002182897
Waste Code: D018 - BENZENE 0.5 MG/L TCLP
Quantity: 00268
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 96

Document ID: NJA2530245
Manifest Status: Completed copy
Trans1 State ID: 08690
Trans2 State ID: Not reported
Generator Ship Date: 960722
Trans1 Recv Date: 960722
Trans2 Recv Date: Not reported
TSD Site Recv Date: 960726
Part A Recv Date: 960802
Part B Recv Date: 960815
Generator EPA ID: NYD987012838
Trans1 EPA ID: ILD984908202
Trans2 EPA ID: Not reported
TSDF ID: NJD002182897
Waste Code: D018 - BENZENE 0.5 MG/L TCLP
Quantity: 00110
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AUTOPIA INC (Continued)

1000833430

Year: 96

Document ID: NJA2168801
Manifest Status: Completed copy
Trans1 State ID: 08690
Trans2 State ID: Not reported
Generator Ship Date: 960308
Trans1 Recv Date: 960308
Trans2 Recv Date: Not reported
TSD Site Recv Date: 960315
Part A Recv Date: Not reported
Part B Recv Date: 960328
Generator EPA ID: NYD987012838
Trans1 EPA ID: ILD984908202
Trans2 EPA ID: Not reported
TSD ID: NJD002182897
Waste Code: D018 - BENZENE 0.5 MG/L TCLP
Quantity: 00250
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 96

Document ID: NJA2697914
Manifest Status: Completed after the designated time period for a TSD to get a copy to the DEC
Trans1 State ID: 086900
Trans2 State ID: Not reported
Generator Ship Date: 961122
Trans1 Recv Date: 961122
Trans2 Recv Date: Not reported
TSD Site Recv Date: 961203
Part A Recv Date: 961218
Part B Recv Date: 961226
Generator EPA ID: NYD987012838
Trans1 EPA ID: ILD984908202
Trans2 EPA ID: Not reported
TSD ID: NJD002182897
Waste Code: D018 - BENZENE 0.5 MG/L TCLP
Quantity: 00268
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 100
Year: 96

Document ID: NYG2185614
Manifest Status: Not reported
Trans1 State ID: OH0000000539
Trans2 State ID: Not reported
Generator Ship Date: 07/26/2000
Trans1 Recv Date: 07/26/2000

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AUTOPIA INC (Continued)

1000833430

Trans2 Recv Date: Not reported
TSD Site Recv Date: 07/27/2000
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD987012838
Trans1 EPA ID: OHD066060609
Trans2 EPA ID: Not reported
TSD ID: TLR6664OH
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 01350
Units: P - Pounds
Number of Containers: 003
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Year: 2000

Document ID: NJA1965964
Manifest Status: Completed copy
Trans1 State ID: NYGR1992
Trans2 State ID: 08690
Generator Ship Date: 941129
Trans1 Recv Date: 941129
Trans2 Recv Date: 941201
TSD Site Recv Date: 941202
Part A Recv Date: 941228
Part B Recv Date: 941213
Generator EPA ID: NYD987012838
Trans1 EPA ID: ILD984908202
Trans2 EPA ID: ILD984908202
TSD ID: NJD002182897
Waste Code: D018 - BENZENE 0.5 MG/L TCLP
Quantity: 00178
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 94

Document ID: NYG0164403
Manifest Status: Completed copy
Trans1 State ID: P207004IL
Trans2 State ID: Not reported
Generator Ship Date: 971003
Trans1 Recv Date: 971003
Trans2 Recv Date: Not reported
TSD Site Recv Date: 971007
Part A Recv Date: 971023
Part B Recv Date: 971024
Generator EPA ID: NYD987012838
Trans1 EPA ID: NJD080631369
Trans2 EPA ID: Not reported
TSD ID: NYD049836679
Waste Code: F005 - UNKNOWN

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AUTOPIA INC (Continued)

1000833430

Quantity: 00180
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: TT - Cargo tank, tank trucks
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 97

A6
NW
< 1/8
0.035 mi.
185 ft.

1176 MAIN ST
BUFFALO, NY 14209

EDR US Hist Auto Stat 1014536877
N/A

Site 6 of 6 in cluster A

Relative:
Higher

EDR Historical Auto Stations:

Name: EUROTECH INTERNATIONAL AUTO
Year: 1998
Type: AUTOMOBILE REPAIRING & SERVICE

Actual:
651 ft.

Name: AUTOPIA LIMITED AUTO RPR & SERV
Year: 2008
Type: AUTOMOBILE REPAIRING & SERVICE

Name: AUTOPIA LTD
Year: 2001
Address: 1176 MAIN ST

Name: AUTOPIA LTD
Year: 2002
Address: 1176 MAIN ST

Name: AUTOPIA LIMITED
Year: 2012
Address: 1176 MAIN ST

B7
WSW
< 1/8
0.044 mi.
231 ft.

ROOT DELOSE AUTO REPR
1152 MAIN ST
BUFFALO, NY

EDR US Hist Auto Stat 1014539371
N/A

Site 1 of 7 in cluster B

Relative:
Higher

EDR Historical Auto Stations:

Name: ROOT DELOSE AUTO REPR
Year: 1940
Type: AUTOMOBILE REPAIRING

Actual:
650 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

B8 **G & L AUTO COLLISION** **EDR US Hist Auto Stat** **1014538829**
SW **1148 MAIN ST** **N/A**
< 1/8 **BUFFALO, NY**
0.049 mi.
258 ft. **Site 2 of 7 in cluster B**

Relative: EDR Historical Auto Stations:
Higher Name: H & H CRANKSHAFT GRINDING CO
Year: 1946
Actual: Type: AUTOMOBILE REPAIRING
649 ft.
Name: G & L AUTO COLLISION
Year: 1960
Type: AUTOMOBILE REPAIRING

B9 **GENL TIRE CO OF BUFFALO INC SERVICE STATION FILLING STA** **EDR US Hist Auto Stat** **1014537362**
SW **1146 MAIN ST** **N/A**
< 1/8 **BUFFALO, NY**
0.051 mi.
271 ft. **Site 3 of 7 in cluster B**

Relative: EDR Historical Auto Stations:
Higher Name: GENL TIRE CO OF BUFFALO INC SERVICE STATION FILLING STA
Year: 1940
Actual: Type: GASOLINE AND OIL SERVICE STATIONS
649 ft.

B10 **REAR ALLISON & SEIBOLD AUTO REPRS** **EDR US Hist Auto Stat** **1014538319**
SW **1137 MAIN ST** **N/A**
< 1/8 **BUFFALO, NY**
0.054 mi.
286 ft. **Site 4 of 7 in cluster B**

Relative: EDR Historical Auto Stations:
Higher Name: ALLISON & HAMMOND AUTO
Year: 1930
Actual: Type: AUTOMOBILE REPAIRING
649 ft.
Name: REAR ALLISON & SEIBOLD AUTO REPRS
Year: 1935
Type: AUTOMOBILE REPAIRING
Name: ALLISON & SEIBOLD AUTO REPRS
Year: 1940
Type: AUTOMOBILE REPAIRING

B11 **SIEGEL EDW J FILLING STA** **EDR US Hist Auto Stat** **1014537412**
SW **1142 MAIN ST** **N/A**
< 1/8 **BUFFALO, NY**
0.057 mi.
300 ft. **Site 5 of 7 in cluster B**

Relative: EDR Historical Auto Stations:
Higher Name: SIEGEL EDW J FILLING STA
Year: 1946
Actual: Type: GASOLINE AND OIL SERVICE STATIONS
649 ft.
Name: SIEGEL EDW J FILLING STA

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SIEGEL EDW J FILLING STA (Continued)

1014537412

Year: 1950
Type: GASOLINE STATIONS

Name: TRONOLONES SERVICE GAS STA
Year: 1955
Type: GASOLINE STATIONS

Name: LEOS FRIENDLY SERV GAS STA
Year: 1960
Type: GASOLINE STATIONS

**B12
SW
< 1/8
0.059 mi.
312 ft.**

**JUSTICE MOTOR CORP USED CAR DEPT
1133 MAIN ST
BUFFALO, NY**

EDR US Hist Auto Stat

**1014538907
N/A**

Site 6 of 7 in cluster B

**Relative:
Lower**

EDR Historical Auto Stations:

Name: JUSTICE MOTOR CORP USED CAR DEPT
Year: 1940
Type: AUTOMOBILE REPAIRING

**Actual:
648 ft.**

**B13
SW
< 1/8
0.059 mi.
314 ft.**

**BRUNN AUTO BODY SERVICE
1140 MAIN ST
BUFFALO, NY**

EDR US Hist Auto Stat

**1014538383
N/A**

Site 7 of 7 in cluster B

**Relative:
Lower**

EDR Historical Auto Stations:

Name: BRUNN AUTO BODY SERVICE
Year: 1940
Type: AUTOMOBILE REPAIRING

**Actual:
648 ft.**

**C14
SE
< 1/8
0.061 mi.
324 ft.**

**OSMOSE INC
980 ELLICOTT ST
BUFFALO, NY 14209**

NY UST

**U004063937
N/A**

Site 1 of 6 in cluster C

**Relative:
Lower**

UST:

Id/Status: 9-014583 / Active
Program Type: PBS
Region: STATE
DEC Region: 9
Expiration Date: 2016/09/02
UTM X: 184387.27523
UTM Y: 4757489.880239999
Site Type: Manufacturing (Other than Chemical)/Processing

**Actual:
639 ft.**

Affiliation Records:

Site Id: 52006
Affiliation Type: Facility Owner
Company Name: OSMOSE INC
Contact Type: PLANT MANAGER
Contact Name: EDWIN GOETZ

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE INC (Continued)

U004063937

Address1: 980 ELLICOTT ST
Address2: Not reported
City: BUFFALO
State: NY
Zip Code: 14209
Country Code: 001
Phone: (716) 882-5905
EMail: Not reported
Fax Number: Not reported
Modified By: SLZIEMBA
Date Last Modified: 6/23/2011

Site Id: 52006
Affiliation Type: Mail Contact
Company Name: OSMOSE INC
Contact Type: PLANT MANAGER
Contact Name: EDWIN GOETZ
Address1: 980 ELLICOTT ST
Address2: Not reported
City: BUFFALO
State: NY
Zip Code: 14209
Country Code: 001
Phone: (716) 882-5905
EMail: Not reported
Fax Number: Not reported
Modified By: SLZIEMBA
Date Last Modified: 6/23/2011

Site Id: 52006
Affiliation Type: On-Site Operator
Company Name: OSMOSE INC
Contact Type: Not reported
Contact Name: EDWIN GOETZ
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 999
Phone: (716) 882-5905
EMail: Not reported
Fax Number: Not reported
Modified By: SLZIEMBA
Date Last Modified: 6/23/2011

Site Id: 52006
Affiliation Type: Emergency Contact
Company Name: OSMOSE INC
Contact Type: Not reported
Contact Name: EDWIN GOETZ
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 999

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE INC (Continued)

U004063937

Phone: (716) 882-5905
EMail: Not reported
Fax Number: Not reported
Modified By: SLZIEMBA
Date Last Modified: 6/23/2011

Tank Info:

Tank Number: 1
Tank ID: 160439
Tank Status: Closed Prior to Micro Conversion, 03/91
Material Name: Closed Prior to Micro Conversion, 03/91
Capacity Gallons: 10000
Install Date: 04/01/1954
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 9999
Common Name of Substance: Other

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: LJJUDD
Last Modified: 07/19/2006

Equipment Records:

C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
J02 - Dispenser - Suction Dispenser
G00 - Tank Secondary Containment - None
B00 - Tank External Protection - None
H00 - Tank Leak Detection - None
I00 - Overfill - None

Tank Number: 2
Tank ID: 160440
Tank Status: Closed Prior to Micro Conversion, 03/91
Material Name: Closed Prior to Micro Conversion, 03/91
Capacity Gallons: 12000
Install Date: 04/01/1954
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 9999
Common Name of Substance: Other

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE INC (Continued)

U004063937

Modified By: LJJUDD
Last Modified: 07/19/2006

Equipment Records:

G00 - Tank Secondary Containment - None
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
J02 - Dispenser - Suction Dispenser
B00 - Tank External Protection - None
H00 - Tank Leak Detection - None
I00 - Overfill - None

Tank Number: 3
Tank ID: 160441
Tank Status: Closed Prior to Micro Conversion, 03/91
Material Name: Closed Prior to Micro Conversion, 03/91
Capacity Gallons: 12000
Install Date: 08/01/1962
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 9999
Common Name of Substance: Other

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: LJJUDD
Last Modified: 07/19/2006

Equipment Records:

B00 - Tank External Protection - None
A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
J02 - Dispenser - Suction Dispenser
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
G00 - Tank Secondary Containment - None
H00 - Tank Leak Detection - None
I00 - Overfill - None

Tank Number: 4
Tank ID: 174892
Tank Status: In Service
Material Name: In Service
Capacity Gallons: 12000
Install Date: 10/09/2003
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Fiberglass coated steel
Material Code: 0001

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE INC (Continued)

U004063937

Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: SLZIEMBA
Last Modified: 06/23/2011

Equipment Records:

- F04 - Pipe External Protection - Fiberglass
- A00 - Tank Internal Protection - None
- D02 - Pipe Type - Galvanized Steel
- J02 - Dispenser - Suction Dispenser
- K99 - Spill Prevention - Other
- L09 - Piping Leak Detection - Exempt Suction Piping
- E04 - Piping Secondary Containment - Double-Walled (Underground)
- H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
- I02 - Overfill - High Level Alarm
- G04 - Tank Secondary Containment - Double-Walled (Underground)
- C03 - Pipe Location - Aboveground/Underground Combination
- I01 - Overfill - Float Vent Valve
- B04 - Tank External Protection - Fiberglass
- H05 - Tank Leak Detection - In-Tank System (ATG)

C15 **BRUNN & CO INC AUTO BODY MFRS** **EDR US Hist Auto Stat** **1014539109**
SE **980 ELLICOTT ST** **N/A**
< 1/8 **BUFFALO, NY**
0.061 mi.
324 ft. **Site 2 of 6 in cluster C**

Relative: EDR Historical Auto Stations:
Lower Name: BRUNN & CO INC AUTO BODY MFRS
 Year: 1940
Actual: Type: AUTOMOBILE REPAIRING
639 ft.

C16 **OSMOSE WOOD PRESERVING INC** **NJ MANIFEST** **S108793908**
SE **980 ELLICOTT ST** **N/A**
< 1/8 **BUFFALO, NY 14209**
0.061 mi.
324 ft. **Site 3 of 6 in cluster C**

Relative: NJ MANIFEST:
Lower Manifest Code: 002988815FLE
 EPA ID: NYD002112944
Actual: Date Shipped: 04/23/2009
639 ft. TSDF EPA ID: NJD002454544
 Transporter EPA ID: OHD042311209
 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 10 EPA ID: Not reported
 Date Trans1 Transported Waste: 04/23/2009

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE WOOD PRESERVING INC (Continued)

S108793908

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: 07/27/2009
Tranporter 1 Decal: Not reported
Tranporter 2 Decal: Not reported
Generator EPA Facility Name: Not reported
Transporter-1 EPA Facility Name: Not reported
Transporter-2 EPA Facility Name: Not reported
Transporter-3 EPA Facility Name: Not reported
Transporter-4 EPA Facility Name: Not reported
Transporter-5 EPA Facility Name: 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
Reference Manifest Number: Not reported
Was Load Rejected (Y/N): No
Reason Load Was Rejected: Not reported
Waste Code: D001
Manifest Year: 2009 New Jersey Manifest Data
Quantity: 159
Unit: P
Hand Code: H061

Waste Code: D026
Manifest Year: 2009 New Jersey Manifest Data
Quantity: 2036
Unit: P
Hand Code: H141

Manifest Code: 005104162FLE
EPA ID: NYD002112944
Date Shipped: 10/17/2011
TSDf EPA ID: NJD002454544
Transporter EPA ID: OHR000162800
Transporter 2 EPA ID: NJD054126164
Transporter 3 EPA ID: Not reported
Transporter 4 EPA ID: Not reported
Transporter 5 EPA ID: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE WOOD PRESERVING INC (Continued)

S108793908

Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 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
Tranporter 1 Decal:	Not reported
Tranporter 2 Decal:	Not reported
Generator EPA Facility Name:	OSMOSE WOOD PRESERVING INC
Transporter-1 EPA Facility Name:	NEXEO SOLUTIONS
Transporter-2 EPA Facility Name:	FREEHOLD CARTAGE INC
Transporter-3 EPA Facility Name:	Not reported
Transporter-4 EPA Facility Name:	Not reported
Transporter-5 EPA Facility Name:	Not reported
TSDF EPA Facility Name:	VEOLIA ES TECHNICAL SOLUTIONS LLC
QTY Units:	Pounds
Transporter SEQ ID:	1.00
Transporter-1 Date:	10/17/2011
Waste SEQ ID:	1.00
Waste Type Code 2:	U051
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:	10/25/2011
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Reference Manifest Number:	Not reported
Was Load Rejected (Y/N):	Not reported
Reason Load Was Rejected:	Not reported
Waste Code:	D026
Manifest Year:	2011 New Jersey Manifest Data
Quantity:	2,280.00
Unit:	Pounds
Hand Code:	H141
Manifest Code:	005109563FLE
EPA ID:	NYD002112944
Date Shipped:	11/14/2011
TSDF EPA ID:	NJD002454544
Transporter EPA ID:	OHR000162800
Transporter 2 EPA ID:	NJD054126164
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE WOOD PRESERVING INC (Continued)

S108793908

Transporter 7 EPA ID: Not reported
Transporter 8 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
Tranporter 1 Decal: Not reported
Tranporter 2 Decal: Not reported
Generator EPA Facility Name: OSMOSE WOOD PRESERVING INC
Transporter-1 EPA Facility Name: NEXEO SOLUTIONS
Transporter-2 EPA Facility Name: FREEHOLD CARTAGE INC
Transporter-3 EPA Facility Name: Not reported
Transporter-4 EPA Facility Name: Not reported
Transporter-5 EPA Facility Name: Not reported
TSDf EPA Facility Name: VEOLIA ES TECHNICAL SOLUTIONS LLC
QTY Units: Pounds
Transporter SEQ ID: 1.00
Transporter-1 Date: 11/14/2011
Waste SEQ ID: 1.00
Waste Type Code 2: F003
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: 11/22/2011
Manifest Discrepancy Type: Not reported
Data Entry Number: Not reported
Reference Manifest Number: Not reported
Was Load Rejected (Y/N): Not reported
Reason Load Was Rejected: Not reported
Waste Code: D001
Manifest Year: 2011 New Jersey Manifest Data
Quantity: 66.00
Unit: Pounds
Hand Code: H061

Manifest Code: 001783443FLE
EPA ID: NYD002112944
Date Shipped: 01/22/2008
TSDf EPA ID: NJD002454544
Transporter EPA ID: OHD042311209
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

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE WOOD PRESERVING INC (Continued)

S108793908

Transporter 8 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	01/22/2008
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:	01/25/2008
Tranporter 1 Decal:	Not reported
Tranporter 2 Decal:	Not reported
Generator EPA Facility Name:	Not reported
Transporter-1 EPA Facility Name:	Not reported
Transporter-2 EPA Facility Name:	Not reported
Transporter-3 EPA Facility Name:	Not reported
Transporter-4 EPA Facility Name:	Not reported
Transporter-5 EPA Facility Name:	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
Reference Manifest Number:	Not reported
Was Load Rejectedd (Y/N):	No
Reason Load Was Rejected:	Not reported
Waste Code:	D001
Manifest Year:	2008 New Jersey Manifest Data
Quantity:	424
Unit:	P
Hand Code:	H061
Manifest Code:	003549625FLE
EPA ID:	NYD002112944
Date Shipped:	07/19/2010
TSDf EPA ID:	NJD002454544
Transporter EPA ID:	OHD042311209
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

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE WOOD PRESERVING INC (Continued)

S108793908

Transporter 10 EPA ID: Not reported
Date Trans1 Transported Waste: 07/19/2010
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: 07/23/2010
Tranporter 1 Decal: Not reported
Tranporter 2 Decal: Not reported
Generator EPA Facility Name: Not reported
Transporter-1 EPA Facility Name: Not reported
Transporter-2 EPA Facility Name: Not reported
Transporter-3 EPA Facility Name: Not reported
Transporter-4 EPA Facility Name: Not reported
Transporter-5 EPA Facility Name: 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
Reference Manifest Number: Not reported
Was Load Rejected (Y/N): No
Reason Load Was Rejected: Not reported
Waste Code: D026
Manifest Year: 2010 New Jersey Manifest Data
Quantity: 1988
Unit: P
Hand Code: H141

Manifest Code: 002989221FLE
EPA ID: NYD002112944
Date Shipped: 08/19/2009
TSDf EPA ID: NJD002454544
Transporter EPA ID: OHD042311209
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 10 EPA ID: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE WOOD PRESERVING INC (Continued)

S108793908

Date Trans1 Transported Waste: 08/19/2009
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: 08/24/2009
Tranporter 1 Decal: Not reported
Tranporter 2 Decal: Not reported
Generator EPA Facility Name: Not reported
Transporter-1 EPA Facility Name: Not reported
Transporter-2 EPA Facility Name: Not reported
Transporter-3 EPA Facility Name: Not reported
Transporter-4 EPA Facility Name: Not reported
Transporter-5 EPA Facility Name: 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
Reference Manifest Number: Not reported
Was Load Rejected (Y/N): No
Reason Load Was Rejected: Not reported
Waste Code: D002
Manifest Year: 2009 New Jersey Manifest Data
Quantity: 487
Unit: P
Hand Code: H061

Manifest Code: 000466168VES
EPA ID: NYD002112944
Date Shipped: 12/10/2010
TSDF EPA ID: NJD980536593
Transporter EPA ID: NJD080631369
Transporter 2 EPA ID: NJD054126164
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 10 EPA ID: Not reported
Date Trans1 Transported Waste: 12/10/2010

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE WOOD PRESERVING INC (Continued)

S108793908

Date Trans2 Transported Waste: 12/27/2010
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: 12/29/2010
Tranporter 1 Decal: Not reported
Tranporter 2 Decal: Not reported
Generator EPA Facility Name: Not reported
Transporter-1 EPA Facility Name: Not reported
Transporter-2 EPA Facility Name: Not reported
Transporter-3 EPA Facility Name: Not reported
Transporter-4 EPA Facility Name: Not reported
Transporter-5 EPA Facility Name: 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
Reference Manifest Number: Not reported
Was Load Rejected (Y/N): No
Reason Load Was Rejected: Not reported
Waste Code: D001
Manifest Year: 2010 New Jersey Manifest Data
Quantity: 77
Unit: P
Hand Code: H141

Waste Code: D009
Manifest Year: 2010 New Jersey Manifest Data
Quantity: 1
Unit: P
Hand Code: H141

Waste Code: P011
Manifest Year: 2010 New Jersey Manifest Data
Quantity: 3
Unit: P
Hand Code: H141

Waste Code: P010
Manifest Year: 2010 New Jersey Manifest Data
Quantity: 7
Unit: P
Hand Code: H141

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE WOOD PRESERVING INC (Continued)

S108793908

Waste Code: F027
Manifest Year: 2010 New Jersey Manifest Data
Quantity: 47
Unit: P
Hand Code: H141

Manifest Code: 003029052FLE
EPA ID: NYD002112944
Date Shipped: 04/19/2010
TSD EPA ID: NJD002454544
Transporter EPA ID: OHD042311209
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 10 EPA ID: Not reported
Date Trans1 Transported Waste: 04/19/2010
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 TSD Received Waste: 04/23/2010
Tranporter 1 Decal: Not reported
Tranporter 2 Decal: Not reported
Generator EPA Facility Name: Not reported
Transporter-1 EPA Facility Name: Not reported
Transporter-2 EPA Facility Name: Not reported
Transporter-3 EPA Facility Name: Not reported
Transporter-4 EPA Facility Name: Not reported
Transporter-5 EPA Facility Name: Not reported
TSD 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
Reference Manifest Number: Not reported
Was Load Rejected (Y/N): No
Reason Load Was Rejected: Not reported
Waste Code: D026

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE WOOD PRESERVING INC (Continued)

S108793908

Manifest Year: 2010 New Jersey Manifest Data
Quantity: 1816
Unit: P
Hand Code: H141

Manifest Code: 004983425FLE
EPA ID: NYD002112944
Date Shipped: 7/18/2011
TSDF EPA ID: NJD002454544
Transporter EPA ID: OHR000162800
Transporter 2 EPA ID: NJD054126164
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 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
Tranporter 1 Decal: Not reported
Tranporter 2 Decal: Not reported
Generator EPA Facility Name: OSMOSE WOOD PRESERVING INC
Transporter-1 EPA Facility Name: NEXEO SOLUTIONS
Transporter-2 EPA Facility Name: FREEHOLD CARTAGE INC
Transporter-3 EPA Facility Name: Not reported
Transporter-4 EPA Facility Name: Not reported
Transporter-5 EPA Facility Name: Not reported
TSDF EPA Facility Name: VEOLIA ES TECHNICAL SOLUTIONS LLC
QTY Units: Pounds
Transporter SEQ ID: 1.00
Transporter-1 Date: 7/18/2011
Waste SEQ ID: 1.00
Waste Type Code 2: U051
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: 7/25/2011
Manifest Discrepancy Type: Not reported
Data Entry Number: Not reported
Reference Manifest Number: Not reported
Was Load Rejected (Y/N): Not reported
Reason Load Was Rejected: Not reported
Waste Code: D026
Manifest Year: 2011 New Jersey Manifest Data

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE WOOD PRESERVING INC (Continued)

S108793908

Quantity: 1,988.00
Unit: Pounds
Hand Code: H061

Manifest Code: 000526073FLE
EPA ID: NYD002112944
Date Shipped: 09/17/2007
TSDf EPA ID: NJD002454544
Transporter EPA ID: OHD042311209
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 10 EPA ID: Not reported
Date Trans1 Transported Waste: 09/17/2007
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: 09/20/2007
Tranporter 1 Decal: Not reported
Tranporter 2 Decal: Not reported
Generator EPA Facility Name: Not reported
Transporter-1 EPA Facility Name: Not reported
Transporter-2 EPA Facility Name: Not reported
Transporter-3 EPA Facility Name: Not reported
Transporter-4 EPA Facility Name: Not reported
Transporter-5 EPA Facility Name: 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
Reference Manifest Number: Not reported
Was Load Rejected (Y/N): No
Reason Load Was Rejected: Not reported
Waste Code: D001
Manifest Year: 2007 New Jersey Manifest Data
Quantity: 903

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE WOOD PRESERVING INC (Continued)

S108793908

Unit: P
Hand Code: H06

Manifest Code: 003570516FLE
EPA ID: NYD002112944
Date Shipped: 10/19/2010
TSDF EPA ID: NJD002454544
Transporter EPA ID: OHD042311209
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 10 EPA ID: Not reported
Date Trans1 Transported Waste: 10/19/2010
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: 10/22/2010
Tranporter 1 Decal: Not reported
Tranporter 2 Decal: Not reported
Generator EPA Facility Name: Not reported
Transporter-1 EPA Facility Name: Not reported
Transporter-2 EPA Facility Name: Not reported
Transporter-3 EPA Facility Name: Not reported
Transporter-4 EPA Facility Name: Not reported
Transporter-5 EPA Facility Name: 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
Reference Manifest Number: Not reported
Was Load Rejected (Y/N): No
Reason Load Was Rejected: Not reported
Waste Code: D001
Manifest Year: 2010 New Jersey Manifest Data
Quantity: 53
Unit: P

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE WOOD PRESERVING INC (Continued)

S108793908

Hand Code: H061

Manifest Code: 002694493FLE
EPA ID: NYD002112944
Date Shipped: 03/20/2009
TSDf EPA ID: NJD002454544
Transporter EPA ID: OHD042311209
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 10 EPA ID: Not reported
Date Trans1 Transported Waste: 03/20/2009
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: 03/27/2009
Transporter 1 Decal: Not reported
Transporter 2 Decal: Not reported
Generator EPA Facility Name: Not reported
Transporter-1 EPA Facility Name: Not reported
Transporter-2 EPA Facility Name: Not reported
Transporter-3 EPA Facility Name: Not reported
Transporter-4 EPA Facility Name: Not reported
Transporter-5 EPA Facility Name: 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
Reference Manifest Number: Not reported
Was Load Rejected (Y/N): No
Reason Load Was Rejected: Not reported
Waste Code: D026
Manifest Year: 2009 New Jersey Manifest Data
Quantity: 1796
Unit: P
Hand Code: H141

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE WOOD PRESERVING INC (Continued)

S108793908

Manifest Code: 003163094FLE
EPA ID: NYD002112944
Date Shipped: 01/18/2010
TSDf EPA ID: NJD002454544
Transporter EPA ID: OHD042311209
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 10 EPA ID: Not reported
Date Trans1 Transported Waste: 01/18/2010
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: 01/26/2010
Tranporter 1 Decal: Not reported
Tranporter 2 Decal: Not reported
Generator EPA Facility Name: Not reported
Transporter-1 EPA Facility Name: Not reported
Transporter-2 EPA Facility Name: Not reported
Transporter-3 EPA Facility Name: Not reported
Transporter-4 EPA Facility Name: Not reported
Transporter-5 EPA Facility Name: 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
Reference Manifest Number: Not reported
Was Load Rejected (Y/N): No
Reason Load Was Rejected: Not reported
Waste Code: D001
Manifest Year: 2010 New Jersey Manifest Data
Quantity: 84
Unit: P
Hand Code: H061

Manifest Code: 002272188FLE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE WOOD PRESERVING INC (Continued)

S108793908

EPA ID: NYD002112944
Date Shipped: 10/14/2008
TSDF EPA ID: NJD002454544
Transporter EPA ID: OHD042311209
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 10 EPA ID: Not reported
Date Trans1 Transported Waste: 10/14/2008
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: 10/20/2008
Tranporter 1 Decal: Not reported
Tranporter 2 Decal: Not reported
Generator EPA Facility Name: Not reported
Transporter-1 EPA Facility Name: Not reported
Transporter-2 EPA Facility Name: Not reported
Transporter-3 EPA Facility Name: Not reported
Transporter-4 EPA Facility Name: Not reported
Transporter-5 EPA Facility Name: 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
Reference Manifest Number: Not reported
Was Load Rejected (Y/N): No
Reason Load Was Rejected: Not reported
Waste Code: D026
Manifest Year: 2008 New Jersey Manifest Data
Quantity: 2100
Unit: P
Hand Code: H141

Manifest Code: 002281803FLE
EPA ID: NYD002112944

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE WOOD PRESERVING INC (Continued)

S108793908

Date Shipped: 09/16/2008
TSDF EPA ID: NJD002454544
Transporter EPA ID: OHD042311209
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 10 EPA ID: Not reported
Date Trans1 Transported Waste: 09/16/2008
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: 09/23/2008
Tranporter 1 Decal: Not reported
Tranporter 2 Decal: Not reported
Generator EPA Facility Name: Not reported
Transporter-1 EPA Facility Name: Not reported
Transporter-2 EPA Facility Name: Not reported
Transporter-3 EPA Facility Name: Not reported
Transporter-4 EPA Facility Name: Not reported
Transporter-5 EPA Facility Name: 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
Reference Manifest Number: Not reported
Was Load Rejected (Y/N): No
Reason Load Was Rejected: Not reported
Waste Code: D002
Manifest Year: 2008 New Jersey Manifest Data
Quantity: 154
Unit: P
Hand Code: H141

Waste Code: D026
Manifest Year: 2008 New Jersey Manifest Data
Quantity: 1784
Unit: P
Hand Code: H141

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE WOOD PRESERVING INC (Continued)

S108793908

Manifest Code: 001808114FLE
EPA ID: NYD002112944
Date Shipped: 04/30/2008
TSDf EPA ID: NJD002454544
Transporter EPA ID: OHD042311209
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 10 EPA ID: Not reported
Date Trans1 Transported Waste: 04/30/2008
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: 05/01/2008
Tranporter 1 Decal: Not reported
Tranporter 2 Decal: Not reported
Generator EPA Facility Name: Not reported
Transporter-1 EPA Facility Name: Not reported
Transporter-2 EPA Facility Name: Not reported
Transporter-3 EPA Facility Name: Not reported
Transporter-4 EPA Facility Name: Not reported
Transporter-5 EPA Facility Name: 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
Reference Manifest Number: Not reported
Was Load Rejected (Y/N): No
Reason Load Was Rejected: Not reported
Waste Code: D026
Manifest Year: 2008 New Jersey Manifest Data
Quantity: 2072
Unit: P
Hand Code: H141

Manifest Code: 004516891FLE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE WOOD PRESERVING INC (Continued)

S108793908

EPA ID: NYD002112944
Date Shipped: 4/21/2011
TSDF EPA ID: NJD002454544
Transporter EPA ID: OHR000162800
Transporter 2 EPA ID: NJD054126164
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 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
Tranporter 1 Decal: Not reported
Tranporter 2 Decal: Not reported
Generator EPA Facility Name: OSMOSE WOOD PRESERVING INC
Transporter-1 EPA Facility Name: NEXEO SOLUTIONS
Transporter-2 EPA Facility Name: FREEHOLD CARTAGE INC
Transporter-3 EPA Facility Name: Not reported
Transporter-4 EPA Facility Name: Not reported
Transporter-5 EPA Facility Name: Not reported
TSDF EPA Facility Name: VEOLIA ES TECHNICAL SOLUTIONS LLC
QTY Units: Pounds
Transporter SEQ ID: 1.00
Transporter-1 Date: 4/21/2011
Waste SEQ ID: 1.00
Waste Type Code 2: U051
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: 5/2/2011
Manifest Discrepancy Type: Not reported
Data Entry Number: Not reported
Reference Manifest Number: Not reported
Was Load Rejected (Y/N): Not reported
Reason Load Was Rejected: Not reported
Waste Code: D026
Manifest Year: 2011 New Jersey Manifest Data
Quantity: 2,100.00
Unit: Pounds
Hand Code: H141

Manifest Code: 004518214FLE
EPA ID: NYD002112944

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE WOOD PRESERVING INC (Continued)

S108793908

Date Shipped: 6/13/2011
TSDF EPA ID: NJD002454544
Transporter EPA ID: OHR000162800
Transporter 2 EPA ID: NJD054126164
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 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
Tranporter 1 Decal: Not reported
Tranporter 2 Decal: Not reported
Generator EPA Facility Name: OSMOSE WOOD PRESERVING INC
Transporter-1 EPA Facility Name: NEXEO SOLUTIONS
Transporter-2 EPA Facility Name: FREEHOLD CARTAGE INC
Transporter-3 EPA Facility Name: Not reported
Transporter-4 EPA Facility Name: Not reported
Transporter-5 EPA Facility Name: Not reported
TSDF EPA Facility Name: VEOLIA ES TECHNICAL SOLUTIONS LLC
QTY Units: Pounds
Transporter SEQ ID: 1.00
Transporter-1 Date: 6/13/2011
Waste SEQ ID: 1.00
Waste Type Code 2: F003
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: 6/20/2011
Manifest Discrepancy Type: Not reported
Data Entry Number: Not reported
Reference Manifest Number: Not reported
Was Load Rejected (Y/N): Not reported
Reason Load Was Rejected: Not reported
Waste Code: D001
Manifest Year: 2011 New Jersey Manifest Data
Quantity: 810.00
Unit: Pounds
Hand Code: H061

Manifest Code: 004523225FLE
EPA ID: NYD002112944
Date Shipped: 5/17/2011

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE WOOD PRESERVING INC (Continued)

S108793908

TSDF EPA ID: NJD002454544
Transporter EPA ID: OHR000162800
Transporter 2 EPA ID: NJD054126164
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 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
Tranporter 1 Decal: Not reported
Tranporter 2 Decal: Not reported
Generator EPA Facility Name: OSMOSE WOOD PRESERVING INC
Transporter-1 EPA Facility Name: NEXEO SOLUTIONS
Transporter-2 EPA Facility Name: FREEHOLD CARTAGE INC
Transporter-3 EPA Facility Name: Not reported
Transporter-4 EPA Facility Name: Not reported
Transporter-5 EPA Facility Name: Not reported
TSDF EPA Facility Name: VEOLIA ES TECHNICAL SOLUTIONS LLC
QTY Units: Pounds
Transporter SEQ ID: 1.00
Transporter-1 Date: 5/17/2011
Waste SEQ ID: 1.00
Waste Type Code 2: F003
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: 5/24/2011
Manifest Discrepancy Type: Not reported
Data Entry Number: Not reported
Reference Manifest Number: Not reported
Was Load Rejected (Y/N): Not reported
Reason Load Was Rejected: Not reported
Waste Code: D001
Manifest Year: 2011 New Jersey Manifest Data
Quantity: 2,045.00
Unit: Pounds
Hand Code: H061

Manifest Code: 004138529FLE
EPA ID: NYD002112944
Date Shipped: 11/18/2010
TSDF EPA ID: NJD002454544

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE WOOD PRESERVING INC (Continued)

S108793908

Transporter EPA ID: OHD042311209
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 10 EPA ID: Not reported
Date Trans1 Transported Waste: 11/18/2010
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: 11/23/2010
Tranporter 1 Decal: Not reported
Tranporter 2 Decal: Not reported
Generator EPA Facility Name: Not reported
Transporter-1 EPA Facility Name: Not reported
Transporter-2 EPA Facility Name: Not reported
Transporter-3 EPA Facility Name: Not reported
Transporter-4 EPA Facility Name: Not reported
Transporter-5 EPA Facility Name: 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
Reference Manifest Number: Not reported
Was Load Rejected (Y/N): No
Reason Load Was Rejected: Not reported
Waste Code: D026
Manifest Year: 2010 New Jersey Manifest Data
Quantity: 2176
Unit: P
Hand Code: H141

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 01/18/2006
Facility name: OSMOSE, INC
Classification: Large Quantity Generator

Date form received by agency: 01/17/2006
Facility name: OSMOSE, INC
Classification: Large Quantity Generator

Date form received by agency: 02/19/2004
Facility name: OSMOSE, INC
Site name: OSMOSE INC
Classification: Large Quantity Generator

Date form received by agency: 02/20/2002
Facility name: OSMOSE, INC
Site name: OSMOSE INC
Classification: Large Quantity Generator

Date form received by agency: 01/01/2001
Facility name: OSMOSE, INC
Site name: OSMOSE INC
Classification: Large Quantity Generator

Date form received by agency: 02/25/1998
Facility name: OSMOSE, INC
Site name: OSMOSE WOOD PRESERVING, INC.
Classification: Large Quantity Generator

Date form received by agency: 03/22/1996
Facility name: OSMOSE, INC
Site name: OSMOSE WOOD PRESERVING INC
Classification: Large Quantity Generator

Date form received by agency: 03/29/1994
Facility name: OSMOSE, INC
Site name: OSMOSE WOOD PRESERVING, INC.
Classification: Large Quantity Generator

Date form received by agency: 02/27/1992
Facility name: OSMOSE, INC

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Site name: OSMOSE WOOD PRESERVING
Classification: Large Quantity Generator

Date form received by agency: 03/01/1990
Facility name: OSMOSE, INC
Site name: OSMOSE WD PG AA
Classification: Large Quantity Generator

Date form received by agency: 08/18/1980
Facility name: OSMOSE, INC
Site name: OSMOSE WOOD PRESERVING INC
Classification: Large Quantity Generator

Facility Has Received Notices of Violations:

Regulation violated: Not reported
Area of violation: Universal Waste - Small Quantity Handlers
Date violation determined: 01/13/2009
Date achieved compliance: 02/03/2009
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 01/13/2009
Enf. disposition status: Action Satisfied (Case Closed)
Enf. disp. status date: 02/12/2009
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 01/13/2009
Date achieved compliance: 02/03/2009
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 01/13/2009
Enf. disposition status: Action Satisfied (Case Closed)
Enf. disp. status date: 02/12/2009
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 02/10/1998
Date achieved compliance: 08/20/1998
Violation lead agency: State
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 03/25/1998
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 1600
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Area of violation: Generators - General
Date violation determined: 02/10/1998
Date achieved compliance: 08/20/1998
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 07/08/1998
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200
Paid penalty amount: 1200

Evaluation Action Summary:

Evaluation date: 01/11/2011
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/13/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 02/03/2009
Evaluation lead agency: State

Evaluation date: 01/13/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Universal Waste - Small Quantity Handlers
Date achieved compliance: 02/03/2009
Evaluation lead agency: State

Evaluation date: 08/31/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/28/2003
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/18/2002
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/22/2001
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA Contractor/Grantee

Evaluation date: 12/08/1999

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/20/1998
Evaluation: NOT A SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/10/1998
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 08/20/1998
Evaluation lead agency: State

Evaluation date: 02/10/1998
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/25/1996
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA

Evaluation date: 08/19/1991
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/10/1989
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

SSTS:

Product: OSMOPLASTIC "B" WOOD PRESERVER
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1990
Permit: Registered
Product Number: 00300800015
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Product: OSMOPLASTIC
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1990
Permit: Registered
Product Number: 00300800004
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: HOLLOW HEART WOOD PRESERVER
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1990
Permit: Registered
Product Number: 00300800008
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: Restricted use only
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: ADZ-LIFE WOOD PRESERVER
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1990
Permit: Registered
Product Number: 00300800013
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: OSMOPLASTIC-D
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1990
Permit: Registered
Product Number: 00300800056
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: WOODFUME
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1990
Permit: Registered
Product Number: 00300800033
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: OSMOS WOOD PRESERVING, STAIN
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1990
Permit: Registered
Product Number: 00300800022
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: OSMOSE COP-R-NAP
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1990
Permit: Registered
Product Number: 00963000015
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: OSMOSE WOOD PRESERVER CLEAR
Contact: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Status: Active
Registration Number: 003008NY 001
Report Year: 1990
Permit: Registered
Product Number: 00300800009
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: PATOX II POLE BANDAGE
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1990
Permit: Registered
Product Number: 00300800052
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: PATOX TYPE I POLE WRAP
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1990
Permit: Registered
Product Number: 01077100002
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: OSMOS SPECIAL K-33
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1990
Permit: Registered
Product Number: 00300800021
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: OSMOPLASTIC "B" WOOD PRESERVER
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1991
Permit: Registered
Product Number: 00300800015
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: OSMOPLASTIC
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1991
Permit: Registered
Product Number: 00300800004
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: HOLLOW HEART WOOD PRESERVER
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1991
Permit: Registered
Product Number: 00300800008
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: Restricted use only
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: ADZ-LIFE WOOD PRESERVER
Contact: Not reported
Status: Active
Registration Number: 003008NY 001

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Report Year: 1991
Permit: Registered
Product Number: 00300800013
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: OSMOPLASTIC-D
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1991
Permit: Registered
Product Number: 00300800056
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: WOODFUME
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1991
Permit: Registered
Product Number: 00300800033
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: PATOX II POLE BANDAGE
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1991
Permit: Registered
Product Number: 00300800052
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Zero product: Not reported
Pesticide RUP report: Not reported

Product: OSMOSE WOOD PRESERVEING STAINS
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1991
Permit: Registered
Product Number: 00300800022
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: OSMOSE WOOD PRESERVER CLEAR
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1991
Permit: Registered
Product Number: 00300800009
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: OSMOSE SPECIAL K-33
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1991
Permit: Registered
Product Number: 00300800021
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: OSMOSE COP-R-NAP
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1991
Permit: Registered

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Product Number: 00963000015
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: ADZ-LIFE WOOD PRESERVER
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1992
Permit: Registered
Product Number: 00300800013
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: COP-R-PLASTIC
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1992
Permit: Registered
Product Number: 00300800055
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: HOLLOW HEART WOOD PRESERVER
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1992
Permit: Registered
Product Number: 00300800008
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: Restricted use only
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Product: OSMOPLASTIC-D
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1992
Permit: Registered
Product Number: 00300800056
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: PATOX TYPE I POLE WRAP
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1992
Permit: Registered
Product Number: 01077100002003008
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: WOODFUME
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1992
Permit: Registered
Product Number: 00300800033
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: OSOMOSE WOOD PRESERVEING STAINS
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1992
Permit: Registered
Product Number: 00300800022
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: OSMOSE WOOD PRESERVER CLEAR
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1992
Permit: Registered
Product Number: 00300800009
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: OSMOSE SPECIAL K-33
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1992
Permit: Registered
Product Number: 00300800021
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: OSMOSE COP-R-NAP
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1992
Permit: Registered
Product Number: 00963000015003008
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: PATOX II POLE BANDAGE
Contact: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Status: Active
Registration Number: 003008NY 001
Report Year: 1992
Permit: Registered
Product Number: 00300800052
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

SHWS:

Program: HW
Site Code: 56635
Classification: SITE IS PROPERLY CLOSED - REQUIRES CONTINUED MANAGEMENT
Region: 9
Acres: .500
HW Code: 915143
Record Add: 11/18/1999
Record Upd: 10/09/2013
Updated By: MLDOSTER

Site Description: Location: The Osmose Wood Preserving site is located in a mixed commercial and residential area at 980 Ellicott Street in the City of Buffalo, Erie County. Site Features: The Site itself is an active facility composed of multiple structures and asphalt parking areas. Current Zoning/Use(s): This site is zoned for industrial-manufacturing. Historical Use(s): Underground storage tanks in the fenced parking lot of Osmose, Inc. were used to store creosote, #2 fuel oil, and other chemicals, which were found leaking in 1989. The tanks were removed from the site. Some soil surrounding the tanks also contained elevated levels of PAHs and were excavated and placed into a lined bio-cell in 1990 to undergo bio-remediation. The bio-remediation was not successful and was suspended in 1996. A site investigation by Osmose in 1993, confirmed the presence of severe environmental problems on-site due to PAHs in soil and groundwater outside the bio-cell area. Pilot studies to determine the effectiveness of in-situ Ozonation Technology was completed in 1994. A non-aqueous phase liquid (NAPL) extraction system was installed to recover the floating oily material in the groundwater in 1995 and has been in operation since then. At present no significant amount of NAPL is being recovered. The Feasibility Study was completed in 1995. The excavation of off-site contaminated soils was completed in 1995. The Record of Decision (ROD) was issued in 1997. Under the selected remedy, the non-aqueous phase liquid is pumped out followed by ozone treatment of contaminated subsurface soils. Construction of an ozone sparge/soil vapor extraction system was completed in 1999. The ozone treatment started in 2002 and was shutdown in 2005 as the soil cleanup levels were met. Groundwater extraction and treatment is on-going to address groundwater contamination. Currently, groundwater and street sanitary sewers are being monitored under the Operation and Monitoring Plan.

Env Problem: Nature and Extent of Contamination: Prior to Remediation: Contaminates of concern at this site included creosote, #2 fuel oil, Poly-aromatic Hydrocarbons, and other chemicals. These contaminants

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

had been stored in underground storage tanks which had leaked, subsequently contaminating groundwater and soil. Post-Remediation: The remediation of soils is complete and groundwater remediation is still going on. Remedial action is preventing off-site migration. Groundwater and street sewers are being monitored under the O&M Plan.

Health Problem: Exposures via drinking water are not expected because homes in the area are served by public water and no known private wells exist in the immediate area. Direct contact exposure to site-related contaminants by community members is not expected because the remaining contaminants are located below a paved parking lot and public access to the site is restricted by security guards. A deed restriction is in place to control future digging on the site.

Dump: False
Structure: False
Lagoon: False
Landfill: False
Pond: False
Disp Start: unknown
Disp Term: 1990
Lat/Long: 42:54:16:0 / 78:52:00:0
Dell: False
Record Add: 11/18/1999 12:00:00 PM
Record Upd: 11/18/1999 12:00:00 PM
Updated By: INITIAL
Own Op: Owner
Sub Type: E
Owner Name: Not reported
Owner Company: Osmose, Inc.
Owner Address: 980 Ellicott Street
Owner Addr2: Not reported
Owner City,St,Zip: Buffalo, NY 14209
Owner Country: United States of America
Own Op: On-Site Operator
Sub Type: E
Owner Name: Not reported
Owner Company: OSMOSE WOOD PRESERVING, INC.
Owner Address: 980 ELLICOTT ST.
Owner Addr2: Not reported
Owner City,St,Zip: BUFFALO, NY 14209
Owner Country: United States of America
Own Op: On-Site Operator
Sub Type: NNN
Owner Name: Not reported
Owner Company: Osmose Wood Preserving, Inc.
Owner Address: 980 Ellicott Street
Owner Addr2: Not reported
Owner City,St,Zip: Buffalo, NY 14209
Owner Country: United States of America
HW Code: 915143
Waste Type: CREOSOTE (U051)
Waste Quantity: > 1000 GALLONS
Waste Code: Not reported
Crossref ID: NYD002112944
Cross Ref Type Code: 05
Cross Ref Type: EPA Site ID
Record Added Date: 11/18/1999 12:00:00 PM

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Record Updated: 5/10/2001 4:31:00 PM
Updated By: REGTRANS
Crossref ID: B9-0314-90-01
Cross Ref Type Code: 23
Cross Ref Type: Agreement/Consent Order Number
Record Added Date: 1/30/2009 10:30:00 AM
Record Updated: 1/30/2009 10:30:00 AM
Updated By: DMMOLOUG

LTANKS:

Site ID: 114685
Spill Number/Closed Date: 8903194 / 9/12/1989
Spill Date: 6/26/1989
Spill Cause: Tank Overfill
Spill Source: Commercial/Industrial
Spill Class: Not reported
Cleanup Ceased: 9/12/1989
Cleanup Meets Standard: True
SWIS: 1502
Investigator: ROSS
Referred To: Not reported
Reported to Dept: 6/26/1989
CID: Not reported
Water Affected: Not reported
Spill Notifier: Responsible Party
Last Inspection: 8/22/1989
Recommended Penalty: False
UST Involvement: False
Remediation Phase: 0
Date Entered In Computer: 6/27/1989
Spill Record Last Update: 3/19/2002
Spiller Name: Not reported
Spiller Company: OSSOMOS
Spiller Address: 980 ELLICOTT STREET
Spiller City,St,Zip: BUFFALO, NY 14209
Spiller County: 001
Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported
DEC Region: 9
DER Facility ID: 100016
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "LQR"06/26/89: LQR TELCON W/ SPILLER TANKS EMPTIED,AND TO BE REMOVED.07/17/89: RLL TELCON W/ SPILLER MW'S INDICATED READINGS OF CONTAMINATION.08/14/89: LQR TELCON W/ SPILLER PRODUCT IN MW,S TANKS TO BE EMPTIED ASAP.08/16/89: LQR TELCON W/ SPILLER PRODUCT IN MW,S TANKS TO BE EMPTIED ASAP, TANKSTO BE PULLED 8/21-23/89.08/21/89: LQR TELCON W/ SPILLER TANKS TO BE PULLED 8/22/89.09/05/89: LQR TELCON W/ SPILLER CONTRACTOR TO BUG SOIL.09/11/89: LQR TELCON W/ SPILLER REFERED TO HW UNIT TO REVIEW RESULTS.09/12/89: REFERED TO HW UNIT.
Remarks: 1-10000,2-12000 TANKS TO BE REMOVED

Material:

Site ID: 114685
Operable Unit ID: 930695
Operable Unit: 01

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Material ID: 447306
Material Code: 0180A
Material Name: CREOSOTE
Case No.: 08001589
Material FA: Hazardous Material
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Site ID: 114688
Spill Number/Closed Date: 9975243 / 8/17/1999
Spill Date: 6/28/1999
Spill Cause: Tank Failure
Spill Source: Commercial/Industrial
Spill Class: Known release with minimal potential for fire or hazard. DEC Response.
Willing Responsible Party. Corrective action taken.
Cleanup Ceased: Not reported
Cleanup Meets Standard: True
SWIS: 1502
Investigator: JFOTTO
Referred To: Not reported
Reported to Dept: 6/28/1999
CID: Not reported
Water Affected: Not reported
Spill Notifier: Responsible Party
Last Inspection: 6/28/1999
Recommended Penalty: False
UST Involvement: False
Remediation Phase: 0
Date Entered In Computer: 6/28/1999
Spill Record Last Update: 3/19/2002
Spiller Name: Not reported
Spiller Company: OSMOSE WOOD PRESERVING
Spiller Address: 980 ELLICOTT STREET
Spiller City,St,Zip: BUFFALO, NY
Spiller County: 001
Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported
DEC Region: 9
DER Facility ID: 100016
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "JFO"06/28/99: JFO CALL FROM GREG WILLEY OF MAPLE TREE CONTACTORS. ONE ROLLOFF OF CONTAMINATED SOIL HAS BEEN EXCAVATED SO FAR. WILL VISIT SITE LATER TODAY.06/28/99: JFO ON SITE, MET WITH GREG WILLEY. TANK WAS AN ABOVEGROUND TANK, THE BOTTOM WAS ABOUT 3-4" BELOW GRADE. THE EXCAVATION (25'X6'X5') LOOKS CLEAN. I TOLD GREG TO SAMPLE SIDEWALLS AND BOTTOM AND ANALYZE FOR 8021 AND 8270 STARS. ANALYTICAL AND DISPOSAL RECEIPTS TO FOLLOW.08/02/99: JFO TELECON GREG WILLEY. HE WILL FORWARD ANALYTICAL AND DISPOSAL RECEIPTS.08/17/99: JFO RECEIVED DISPOSAL RECEIPTS AND ANALYTICAL. NO FURTHER ACTION REQUIRED. CLOSED WHILE REMOVING A 4,000 GALLON TANK, CONTAMINATED SOIL WAS DISCOVERED

Remarks:

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Material:

Site ID: 114688
Operable Unit ID: 1093750
Operable Unit: 01
Material ID: 291757
Material Code: 0003A
Material Name: #6 Fuel Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

CBS UST:

Id/Status: 9-000268 / ACTIVE FACILITY
Facility Type: MANUFACTURING
Facility Tel: (716) 882-5905
Total Tanks: 2
Region: STATE
ICS No: 9-178274
PBS No: 9-014583
MOSF No: Not reported
SPDES No: Not reported
Town: BUFFALO (C)
Operator: DAVID M. KASPROWICZ
Emergency Contact: DAVID KASPROWICZ
Emergency Contact Phone: (716) 882-5905
Certification Date: 07/05/2001
Expiration Date: 10/22/2003
Owner Name: OSMOSE INC.
Owner Address: 980 ELLICOTT STREET
Owner City,St,Zip: BUFFALO, NY 14209
Owner Tele: (716) 882-5905
Owner Type: Corporate/Commercial
Owner Subtype: Not reported
Mail To Name: OSMOSE INC.
Mail To Contact: DAVID M. KASPROWICZ
Mail To Address: 980 ELLICOTT STREET
Mail To Address 2: Not reported
Mail To City,St,Zip: BUFFALO, NY 14209
Mail To Telephone: (716) 882-5905

Tank Number: 4
Date Entered: 10/18/1999
Capacity: 12000
Chemical: Creosote
Tank Closed: Not reported
Tank Status: In Service
Tank Type: Concrete
Install Date: 10/98
CAS No: 8001589

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Substance: Single Hazardous Substance on DEC List
Tank Location: UNDERGROUND
Tank Internal: None
Tank External: Fiberglass
Pipe Location: Underground
Pipe Internal: None
Pipe External: Fiberglass
Leak Detection: 14
2nd Containmt: Double-Walled
Overfill Protection: Float Vent Valve, High Level Alarm
Haz Percent: 100
Pipe Containment: Double-Walled
Tank Error Status: No Missing Data
Tank Secret: False
Date Entered: 09:22:13
Last Test: Not reported
Due Date: Not reported
SWIS Code: 1402
Pipe Type: GALVANIZED STEEL
Cert Flag: False
Is it There: False
Is Updated: False
Owners Mark: First Owner
Lat/Long: 42|54|20 / 78|51|56
Renew Date: 05/03/93
Deliquent: False
Total Capacity: 24000
Date Expired: 08/30/95
Case No: Not reported
Federal Amt: True
Pipe Flag: False
Reserve Flag: True

Tank Number: 4
Date Entered: 08/30/1989
Capacity: 12000
Chemical: Creosote
Tank Closed: 10/98
Tank Status: In Service
Tank Type: Concrete
Install Date: 01/80
CAS No: 8001589
Substance: Single Hazardous Substance on DEC List
Tank Location: UNDERGROUND
Tank Internal: None
Tank External: Painted/Asphalt Coating
Pipe Location: Underground
Pipe Internal: None
Pipe External: 12
Leak Detection: None
2nd Containmt: None
Overfill Protection: Float Vent Valve, High Level Alarm
Haz Percent: 100
Pipe Containment: None
Tank Error Status: No Missing Data
Tank Secret: False

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Date Entered: 08:42:46
Last Test: Not reported
Due Date: Not reported
SWIS Code: 1402
Pipe Type: STEEL/IRON
Cert Flag: False
Is it There: False
Is Updated: False
Owners Mark: First Owner
Lat/Long: 42|54|20 / 78|51|56
Renew Date: 05/03/93
Deliquent: False
Total Capacity: 24000
Date Expired: 08/30/95
Case No: Not reported
Federal Amt: True
Pipe Flag: False
Reserve Flag: True

CBS AST:

CBS Number: 9-000268
ICS Number: 9-178274
PBS Number: 9-014583
MOSF Number: Not reported
SPDES Number: Not reported
Facility Status: ACTIVE FACILITY
Facility Type: MANUFACTURING
Telephone: (716) 882-5905
Facility Town: BUFFALO (C)
Region: STATE
Expiration Date: 10/22/2003
Total Capacity of All Active Tanks(gal): 24000
Operator: DAVID M. KASPROWICZ
Emergency Contact: DAVID KASPROWICZ
Emergency Phone: (716) 882-5905
Owner Name: OSMOSE INC.
Owner Address: 980 ELLICOTT STREET
Owner City,St,Zip: BUFFALO, NY 14209
Owner Telephone: (716) 882-5905
Owner Type: Corporate/Commercial
Owner Sub Type: Not reported
Mail Name: OSMOSE INC.
Mail Contact Addr: 980 ELLICOTT STREET
Mail Contact Addr2: Not reported
Mail Contact Contact: DAVID M. KASPROWICZ
Mail Contact City,St,Zip: BUFFALO, NY 14209
Mail Phone: (716) 882-5905

Tank Id: 6
CAS Number: 8001589
Federal ID: Not reported
Tank Status: In Service
Install Date: 08/89
Tank Closed: Not reported
Capacity (Gal): 12000
Chemical: Creosote
Tank Location: ABOVEGROUND ON SADDLES LEGS, STILTS, RACK, OR CRADLE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Tank Type: Steel/carbon steel
Total Tanks: 2
Tank Secret: False
Tank Containment: Diking
Tank Error Status: No Missing Data
Date Entered: 10/18/1999
Certified Date: 07/05/2001
Substance: Single Hazardous Substance on DEC List
Internal Protection: None
External Protection: Painted/Asphalt Coating
Pipe Location: Aboveground
Pipe Type: STEEL/IRON
Pipe Internal: None
Pipe External: 0
Pipe Containment: None
Pipe Flag: None
Leak Detection: Concrete Pad w/channels
Overfill Protection: 12
Haz Percent: 100
Last Test: Not reported
Due Date: Not reported
SWIS Code: 1402
Lat/Long: 42|54|20 / 78|51|56
Is Updated: False
Renew Date: 05/03/93
Is It There: False
Delinquent: False
Date Expired: 08/30/95
Owner Mark: 1
Certificate Needs to be Printed: 42|54|20 / 78|51|56
Fiscal Amt for Registration Fee Correct: 42|54|20 / 78|51|56
Renewal Has Been Printed for Facility: 42|54|20 / 78|51|56
Pre-Printed Renewal App Last Printed: 42|54|20 / 78|51|56

Tank Id: 6
CAS Number: 8001589
Federal ID: Not reported
Tank Status: In Service
Install Date: 08/89
Tank Closed: 10/98
Capacity (Gal): 12000
Chemical: Creosote
Tank Location: ABOVEGROUND ON SADDLES LEGS, STILTS, RACK, OR CRADLE
Tank Type: Steel/carbon steel
Total Tanks: 2
Tank Secret: False
Tank Containment: Diking
Tank Error Status: No Missing Data
Date Entered: 08/30/1989
Certified Date: 07/05/2001
Substance: Single Hazardous Substance on DEC List
Internal Protection: None
External Protection: Painted/Asphalt Coating
Pipe Location: Aboveground
Pipe Type: STEEL/IRON
Pipe Internal: None

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Pipe External: 0
Pipe Containment: None
Pipe Flag: None
Leak Detection: Concrete Pad w/channels
Overfill Protection: 12
Haz Percent: 100
Last Test: Not reported
Due Date: Not reported
SWIS Code: 1402
Lat/Long: 42|54|20 / 78|51|56
Is Updated: False
Renew Date: 05/03/93
Is It There: False
Delinquent: False
Date Expired: 08/30/95
Owner Mark: 1
Certificate Needs to be Printed: 42|54|20 / 78|51|56
Fiscal Amt for Registration Fee Correct: 42|54|20 / 78|51|56
Renewal Has Been Printed for Facility: 42|54|20 / 78|51|56
Pre-Printed Renewal App Last Printed: 42|54|20 / 78|51|56

NY MANIFEST:

EPA ID: NYD002112944
Country: USA
Mailing Name: OSMOSE WOOD PRESERVING INC
Mailing Contact: MICHAEL RIDER PLNT MGR
Mailing Address: 980 ELLICOTT ST
Mailing Address 2: Not reported
Mailing City: BUFFALO
Mailing State: NY
Mailing Zip: 14209
Mailing Zip4: Not reported
Mailing Country: USA
Mailing Phone: 716-882-5905

Document ID: NYO1352853
Manifest Status: Completed after the designated time period for a TSDF to get a copy to the DEC
Trans1 State ID: 9A 230
Trans2 State ID: MN001
Generator Ship Date: 830919
Trans1 Recv Date: 830919
Trans2 Recv Date: 830922
TSD Site Recv Date: 830927
Part A Recv Date: 031017
Part B Recv Date: 031017
Generator EPA ID: NYD002112944
Trans1 EPA ID: NYD000688630
Trans2 EPA ID: Not reported
TSDF ID: ALD000622464
Waste Code: U051 - CREOSOTE
Quantity: 09000
Units: P - Pounds
Number of Containers: 024
Container Type: DM - Metal drums, barrels
Handling Method: L Landfill.
Specific Gravity: 100

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Waste Code: Not reported
Quantity: 00450
Units: P - Pounds
Number of Containers: 004
Container Type: DM - Metal drums, barrels
Handling Method: L Landfill.
Specific Gravity: 100
Waste Code: Not reported
Quantity: 15340
Units: P - Pounds
Number of Containers: 026
Container Type: DM - Metal drums, barrels
Handling Method: L Landfill.
Specific Gravity: 100
Year: 83

Document ID: ALA0508402
Manifest Status: Completed after the designated time period for a TSDf to get a copy to the DEC
Trans1 State ID: NY75580B
Trans2 State ID: 75230BNY
Generator Ship Date: 890818
Trans1 Recv Date: 890818
Trans2 Recv Date: 890818
TSD Site Recv Date: 890822
Part A Recv Date: 891005
Part B Recv Date: 890919
Generator EPA ID: NYD002112944
Trans1 EPA ID: NYD000688630
Trans2 EPA ID: ILD099202681
TSDf ID: ALD000622464
Waste Code: D007 - CHROMIUM 5.0 MG/L TCLP
Quantity: 02700
Units: P - Pounds
Number of Containers: 006
Container Type: DM - Metal drums, barrels
Handling Method: L Landfill.
Specific Gravity: 100
Year: 89

Document ID: ARA5296360
Manifest Status: Completed copy
Trans1 State ID: PC936H245
Trans2 State ID: Not reported
Generator Ship Date: 920310
Trans1 Recv Date: 920310
Trans2 Recv Date: Not reported
TSD Site Recv Date: 920317
Part A Recv Date: Not reported
Part B Recv Date: 920330
Generator EPA ID: NYD002112944
Trans1 EPA ID: NYD980769947
Trans2 EPA ID: Not reported
TSDf ID: ARD069748192
Waste Code: P048 - 2,4-DINTROPHENOL
Quantity: 00185

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Units: L
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 92

Document ID: NYB1365246
Manifest Status: Completed copy
Trans1 State ID: 70868Z
Trans2 State ID: Not reported
Generator Ship Date: 920721
Trans1 Recv Date: 920721
Trans2 Recv Date: Not reported
TSD Site Recv Date: 920722
Part A Recv Date: Not reported
Part B Recv Date: 920803
Generator EPA ID: NYD002112944
Trans1 EPA ID: NYD049253719
Trans2 EPA ID: Not reported
TSDF ID: NYD049253719
Waste Code: D007 - CHROMIUM 5.0 MG/L TCLP
Quantity: 04500
Units: P - Pounds
Number of Containers: 015
Container Type: DM - Metal drums, barrels
Handling Method: L Landfill.
Specific Gravity: 100
Year: 92

Document ID: NYB5060448
Manifest Status: Completed copy
Trans1 State ID: Not reported
Trans2 State ID: Not reported
Generator Ship Date: 950907
Trans1 Recv Date: 950907
Trans2 Recv Date: 950913
TSD Site Recv Date: 950918
Part A Recv Date: 950915
Part B Recv Date: 950929
Generator EPA ID: NYD002112944
Trans1 EPA ID: MAD039322250
Trans2 EPA ID: MAD039322250
TSDF ID: OHD000816629
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00750
Units: P - Pounds
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 95

Document ID: NYB7961922

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Manifest Status: Completed copy
Trans1 State ID: X92414TN
Trans2 State ID: Not reported
Generator Ship Date: 950814
Trans1 Recv Date: 950814
Trans2 Recv Date: Not reported
TSD Site Recv Date: 950815
Part A Recv Date: 950821
Part B Recv Date: 950825
Generator EPA ID: NYD002112944
Trans1 EPA ID: NYD049253719
Trans2 EPA ID: Not reported
TSD ID: NYD049253719
Waste Code: F034 - UNKNOWN
Quantity: 01750
Units: P - Pounds
Number of Containers: 007
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Waste Code: Not reported
Quantity: 02040
Units: P - Pounds
Number of Containers: 006
Container Type: DM - Metal drums, barrels
Handling Method: L Landfill.
Specific Gravity: 100
Year: 95

Document ID: NYB7382862
Manifest Status: Completed copy
Trans1 State ID: 1306AONY
Trans2 State ID: Not reported
Generator Ship Date: 951113
Trans1 Recv Date: 951113
Trans2 Recv Date: Not reported
TSD Site Recv Date: 951114
Part A Recv Date: 951122
Part B Recv Date: 951205
Generator EPA ID: NYD002112944
Trans1 EPA ID: NYD049253719
Trans2 EPA ID: Not reported
TSD ID: NYD049253719
Waste Code: F034 - UNKNOWN
Quantity: 01600
Units: P - Pounds
Number of Containers: 006
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Waste Code: Not reported
Quantity: 00300
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: L Landfill.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Specific Gravity: 100
Year: 95

Document ID: NYG1451601
Manifest Status: Not reported
Trans1 State ID: NYD049253719
Trans2 State ID: Not reported
Generator Ship Date: 10/12/1998
Trans1 Recv Date: 10/12/1998
Trans2 Recv Date: Not reported
TSD Site Recv Date: 10/13/1998
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD002112944
Trans1 EPA ID: NYD049253719
Trans2 EPA ID: Not reported
TSD ID: 1306A0NY
Waste Code: D007 - CHROMIUM 5.0 MG/L TCLP
Quantity: 00686
Units: P - Pounds
Number of Containers: 001
Container Type: BA - Burlap, plastic, paper bags
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00586
Units: P - Pounds
Number of Containers: 002
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: F003 - UNKNOWN
Quantity: 00458
Units: P - Pounds
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Year: 98

Document ID: NYG0749169
Manifest Status: Not reported
Trans1 State ID: NYD049253719
Trans2 State ID: Not reported
Generator Ship Date: 04/06/1998
Trans1 Recv Date: 04/06/1998
Trans2 Recv Date: Not reported
TSD Site Recv Date: 04/07/1998
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD002112944
Trans1 EPA ID: NYD049253719
Trans2 EPA ID: Not reported
TSD ID: 22969NNY
Waste Code: F034 - UNKNOWN

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Quantity: 00590
Units: P - Pounds
Number of Containers: 001
Container Type: BA - Burlap, plastic, paper bags
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: D007 - CHROMIUM 5.0 MG/L TCLP
Quantity: 03567
Units: P - Pounds
Number of Containers: 004
Container Type: BA - Burlap, plastic, paper bags
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Year: 98

Document ID: NYG0573831
Manifest Status: Not reported
Trans1 State ID: NYD049253719
Trans2 State ID: Not reported
Generator Ship Date: 02/17/1998
Trans1 Recv Date: 02/17/1998
Trans2 Recv Date: Not reported
TSD Site Recv Date: 02/17/1998
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD002112944
Trans1 EPA ID: NYD049253719
Trans2 EPA ID: Not reported
TSDF ID: 1306AONY
Waste Code: F034 - UNKNOWN
Quantity: 00500
Units: P - Pounds
Number of Containers: 001
Container Type: CF - Fiber or plastic boxes, cartons
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: F034 - UNKNOWN
Quantity: 00500
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: D007 - CHROMIUM 5.0 MG/L TCLP
Quantity: 02400
Units: P - Pounds
Number of Containers: 003
Container Type: CF - Fiber or plastic boxes, cartons
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Year: 98

Document ID: NYG1079559
Manifest Status: Not reported
Trans1 State ID: NYD049253719

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Trans2 State ID: Not reported
Generator Ship Date: 09/28/1998
Trans1 Recv Date: 09/28/1998
Trans2 Recv Date: Not reported
TSD Site Recv Date: 09/29/1998
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD002112944
Trans1 EPA ID: NYD049253719
Trans2 EPA ID: Not reported
TSD ID: 22969NNY
Waste Code: F034 - UNKNOWN
Quantity: 01382
Units: P - Pounds
Number of Containers: 002
Container Type: CF - Fiber or plastic boxes, cartons
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: U051 - CREOSOTE
Quantity: 00537
Units: P - Pounds
Number of Containers: 003
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Year: 98

Document ID: NYG1079838
Manifest Status: Not reported
Trans1 State ID: NYD049253719
Trans2 State ID: Not reported
Generator Ship Date: 09/28/1998
Trans1 Recv Date: 09/28/1998
Trans2 Recv Date: Not reported
TSD Site Recv Date: 09/29/1998
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD002112944
Trans1 EPA ID: NYD049253719
Trans2 EPA ID: Not reported
TSD ID: 2296NNY
Waste Code: D007 - CHROMIUM 5.0 MG/L TCLP
Quantity: 00549
Units: P - Pounds
Number of Containers: 001
Container Type: CF - Fiber or plastic boxes, cartons
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Year: 98

Document ID: NYG1235025
Manifest Status: Not reported
Trans1 State ID: NYD049253719
Trans2 State ID: Not reported
Generator Ship Date: 12/15/1998

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Trans1 Recv Date: 12/15/1998
Trans2 Recv Date: Not reported
TSD Site Recv Date: 12/15/1998
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD002112944
Trans1 EPA ID: NYD049253719
Trans2 EPA ID: Not reported
TSD ID: 5038A1NY
Waste Code: U051 - CREOSOTE
Quantity: 02779
Units: P - Pounds
Number of Containers: 006
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: F034 - UNKNOWN
Quantity: 00448
Units: P - Pounds
Number of Containers: 001
Container Type: BA - Burlap, plastic, paper bags
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: D007 - CHROMIUM 5.0 MG/L TCLP
Quantity: 00644
Units: P - Pounds
Number of Containers: 001
Container Type: BA - Burlap, plastic, paper bags
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Year: 98

Document ID: NYG1235034
Manifest Status: Not reported
Trans1 State ID: NYD049253719
Trans2 State ID: Not reported
Generator Ship Date: 12/15/1998
Trans1 Recv Date: 12/15/1998
Trans2 Recv Date: Not reported
TSD Site Recv Date: 12/15/1998
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD002112944
Trans1 EPA ID: NYD049253719
Trans2 EPA ID: Not reported
TSD ID: 5038A1NY
Waste Code: D026 - CRESOL 200.0 MG/L TCLP
Quantity: 00498
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 01.00
Year: 98

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Document ID: NYG0721692
Manifest Status: Not reported
Trans1 State ID: NJD054126164
Trans2 State ID: Not reported
Generator Ship Date: 06/30/1998
Trans1 Recv Date: 06/30/1998
Trans2 Recv Date: Not reported
TSD Site Recv Date: 07/01/1998
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD002112944
Trans1 EPA ID: NYD049253719
Trans2 EPA ID: Not reported
TSD ID: T692VWNJ
Waste Code: F034 - UNKNOWN
Quantity: 01549
Units: P - Pounds
Number of Containers: 003
Container Type: CF - Fiber or plastic boxes, cartons
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: D007 - CHROMIUM 5.0 MG/L TCLP
Quantity: 00985
Units: P - Pounds
Number of Containers: 001
Container Type: CF - Fiber or plastic boxes, cartons
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Year: 98

Document ID: NYG1448559
Manifest Status: Not reported
Trans1 State ID: NYD049253719
Trans2 State ID: Not reported
Generator Ship Date: 11/09/1998
Trans1 Recv Date: 11/09/1998
Trans2 Recv Date: Not reported
TSD Site Recv Date: 11/10/1998
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD002112944
Trans1 EPA ID: NYD049253719
Trans2 EPA ID: Not reported
TSD ID: 1306A0NY
Waste Code: U051 - CREOSOTE
Quantity: 00958
Units: P - Pounds
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: U051 - CREOSOTE
Quantity: 01250
Units: P - Pounds
Number of Containers: 002
Container Type: DM - Metal drums, barrels

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: D026 - CRESOL 200.0 MG/L TCLP
Quantity: 01567
Units: P - Pounds
Number of Containers: 004
Container Type: DM - Metal drums, barrels
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 01.00
Year: 98

Document ID: NYG1924362
Manifest Status: Not reported
Trans1 State ID: NYD049253719
Trans2 State ID: Not reported
Generator Ship Date: 01/15/2001
Trans1 Recv Date: 01/15/2001
Trans2 Recv Date: Not reported
TSD Site Recv Date: 01/17/2001
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD002112944
Trans1 EPA ID: NYD049253719
Trans2 EPA ID: Not reported
TSD ID: 1306A0NY
Waste Code: F034 - UNKNOWN
Quantity: 00560
Units: P - Pounds
Number of Containers: 001
Container Type: CF - Fiber or plastic boxes, cartons
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: D007 - CHROMIUM 5.0 MG/L TCLP
Quantity: 00792
Units: P - Pounds
Number of Containers: 001
Container Type: CF - Fiber or plastic boxes, cartons
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: U051 - CREOSOTE
Quantity: 01004
Units: P - Pounds
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 01.00
Year: 2001

Document ID: NYG4434228
Manifest Status: Not reported
Trans1 State ID: NYD049253719
Trans2 State ID: Not reported
Generator Ship Date: 12/28/2005
Trans1 Recv Date: 12/28/2005
Trans2 Recv Date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

TSD Site Recv Date: 12/29/2005
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD002112944
Trans1 EPA ID: AE68622NY
Trans2 EPA ID: Not reported
TSD ID: NYD049253719
Waste Code: F034 - UNKNOWN
Quantity: 00771
Units: P - Pounds
Number of Containers: 003
Container Type: CF - Fiber or plastic boxes, cartons
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: D007 - CHROMIUM 5.0 MG/L TCLP
Quantity: 01039
Units: P - Pounds
Number of Containers: 001
Container Type: CF - Fiber or plastic boxes, cartons
Handling Method: Not reported
Specific Gravity: 01.00
Waste Code: Not reported
Quantity: Not reported
Units: Not reported
Number of Containers: Not reported
Container Type: Not reported
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: Not reported
Year: 2005

Document ID: NYG4675275
Manifest Status: Not reported
Trans1 State ID: NYD049253719
Trans2 State ID: Not reported
Generator Ship Date: 04/18/2005
Trans1 Recv Date: 04/18/2005
Trans2 Recv Date: Not reported
TSD Site Recv Date: 04/19/2005
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD002112944
Trans1 EPA ID: T183042TN
Trans2 EPA ID: Not reported
TSD ID: NYD049253719
Waste Code: U051 - CREOSOTE
Quantity: 00517
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: U051 - CREOSOTE
Quantity: 02177
Units: P - Pounds
Number of Containers: 004
Container Type: DM - Metal drums, barrels

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Handling Method: Not reported
Specific Gravity: 01.00
Waste Code: Not reported
Quantity: Not reported
Units: Not reported
Number of Containers: Not reported
Container Type: Not reported
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: Not reported
Year: 2005

Document ID: NYG3678588
Manifest Status: Not reported
Trans1 State ID: NYD049253719
Trans2 State ID: Not reported
Generator Ship Date: 01/24/2005
Trans1 Recv Date: 01/24/2005
Trans2 Recv Date: Not reported
TSD Site Recv Date: 01/25/2005
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD002112944
Trans1 EPA ID: AC12161NY
Trans2 EPA ID: Not reported
TSD ID: NYD049253719
Waste Code: U051 - CREOSOTE
Quantity: 02116
Units: P - Pounds
Number of Containers: 004
Container Type: DM - Metal drums, barrels
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 01.00
Waste Code: D007 - CHROMIUM 5.0 MG/L TCLP
Quantity: 00289
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: Not reported
Specific Gravity: 01.00
Waste Code: D007 - CHROMIUM 5.0 MG/L TCLP
Quantity: 01662
Units: P - Pounds
Number of Containers: 003
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00934
Units: P - Pounds
Number of Containers: 002
Container Type: CF - Fiber or plastic boxes, cartons
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: Not reported
Quantity: Not reported
Units: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Number of Containers: Not reported
Container Type: Not reported
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: Not reported
Year: 2005

[Click this hyperlink](#) while viewing on your computer to access 398 additional NY_MANIFEST: record(s) in the EDR Site Report.

SPILLS:

Facility ID: 9505668
DER Facility ID: 100016
Facility Type: ER
Site ID: 114686
DEC Region: 9
Spill Date: 8/7/1995
Spill Number/Closed Date: 9505668 / 8/11/1995
Spill Cause: Equipment Failure
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS: 1502
Investigator: RMCROSSE
Referred To: Not reported
Reported to Dept: 8/7/1995
CID: Not reported
Water Affected: Not reported
Spill Source: Tank Truck
Spill Notifier: Affected Persons
Cleanup Ceased: 8/11/1995
Cleanup Meets Std: True
Last Inspection: 8/11/1995
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 8/6/1995
Spill Record Last Update: 3/19/2002
Spiller Name: Not reported
Spiller Company: NOCO ENERGY
Spiller Address: 700 GRAND ISLAND BLVD
Spiller City,St,Zip: TONAWANDA, NY 001
Contact Name: Not reported
Contact Phone: Not reported
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was

"RMC"08/07/95: RMC/SITE CLEAN UP NEAR COMPLETE, SEVERAL DRUMS FOR DISPOSAL, SPILLED ON PARKING LOT AND INTO CONTAINMENT SUMP, DISPOSAL DUE 9/15/95.08/11/95: RMC/SITE ROESCH/PHONE CLEAN UP COMPLETE,4 DRUMS SPEEDY DRY ONBIO-CELL AT NOCO,AMOUNT SPILLED ADJUSTED DOWN FROM INITIAL EST AS DEBRIS GENERATED SUPPORT ONLY 100 GALLON SPILL, CLOSE OUT.

Remarks: HOSE FAILED ON TANKER TRUCK SPILL ON LAND

Material:

Site ID: 114686
Operable Unit ID: 1016553
Operable Unit: 01
Material ID: 363661

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Material Code: 0001A
Material Name: #2 Fuel Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 100
Units: Gallons
Recovered: 95
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Facility ID: 0750740
DER Facility ID: 51197
Facility Type: ER
Site ID: 386213
DEC Region: 9
Spill Date: 8/17/2007
Spill Number/Closed Date: 0750740 / 8/24/2007
Spill Cause: Unknown
Spill Class: Known release that creates a file or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS: 1502
Investigator: cgmckenz
Referred To: Not reported
Reported to Dept: 8/21/2007
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: True
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 8/22/2007
Spill Record Last Update: 8/24/2007
Spiller Name: ED GOETZ
Spiller Company: OSMOSE
Spiller Address: 980 ELLICOTT
Spiller City,St,Zip: BUFFALO, NY 14209
Spiller Company: 999
Contact Name: ED GOETZ
Contact Phone: (716) 882-5905
DEC Memo: 8/21/07: DKK/FILE...HAZ SUBSTANCE SPILL NOTIFICATION TO LOCAL MUNICIPALITY IS NOT NECESSARY IN THIS CASE. SPILL OCCURRED SOMETIME DURING THE WEEKEND OF 8/17-19/07. HOWEVER DEC DID NOT LEARN OF THE RELEASE UNTIL THE MORNING OF 8/21/07 VIA A NEWS PAPER ARTICLE. BY THAT TIME THE RELEASE WAS ALREADY PUBLIC INFORMATION. ALSO, RELEASE WAS TO A SECONDARY CONTAINMENT SYSTEM AND REMEDIAL EFFORTS TO REMOVE THE SPILLED PRODUCT WERE ALREADY UNDERWAY.8/24/07 FILE DUPLICATE OF SPILL #0750741. THIS SPILL CLOSED. ELECTRONIC FILE COPY ONLY.
Remarks: SAL STATES TO DKK THAT THE BUFFALO NEWS POSTED AN ARTICLE IN THE PAPER REGARDING THE UNREPORTED RELEASE.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Material:

Site ID: 386213
Operable Unit ID: 1143458
Operable Unit: 01
Material ID: 2133735
Material Code: 0161A
Material Name: COPPER
Case No.: 07440508
Material FA: Hazardous Material
Quantity: Not reported
Units: Gallons
Recovered: Not reported
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Facility ID: 0750741
DER Facility ID: 51197
Facility Type: ER
Site ID: 386215
DEC Region: 9
Spill Date: 8/17/2007
Spill Number/Closed Date: 0750741 / 1/15/2008
Spill Cause: Unknown
Spill Class: Known release that creates a file or hazard. DEC Response. Willing Responsible Party. Corrective action taken.

SWIS: 1502
Investigator: fxgalleg
Referred To: Not reported
Reported to Dept: 8/21/2007
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: 8/22/2007
Spill Record Last Update: 10/23/2008
Spiller Name: ED
Spiller Company: OS
Spiller Address: 980 ELLICOTT
Spiller City,St,Zip: BUFFALO, NY 14209
Spiller Company: 999
Contact Name: ED GOETZ
Contact Phone: (716) 851-5905
DEC Memo: 8/21/07 CGM ON SITE W/ ED GOETZ. ED STATES THE DISCOVERY WAS MADE BY EMPLOYEE, RICH RILEY, AT 6AM MONDAY MORNING UPON SMELLING ODORS OUTSIDE THE BUILDING. ODOR WAS TRACED BACK TO AREA OF TWO 12000 GAL STORAGE TANKS (#2 FUEL OIL AND OIL/ COPPER MIXTURE) INSIDE AN ENCLOSED ROOM. IT IS UNKNOWN WHEN THE RELEASE OCCURRED BETWEEN FRIDAY

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

AT 4:30PM (LAST KNOWN OBSERVATION OF TANK SYSTEM AREA) AND THE MONDAY 6AM DISCOVERY. FACILITY STATES CAUSE IS UNKNOWN, BUT PIPING IS SUSPECTED DUE TO STAIN SPRAY ALONG WALL ABOVE PUMP AREA. OPTECH WAS CALLED IN MONDAY AND TUESDAY FOR CLEANUP. PRODUCT WAS PUMPED OUT OF ROOM INTO A TANKER OUTSIDE THE BUILDING IN AN ALCOVE OF THE PARKING LOT, REMAINING WASHWATER/ SPEEDI-DRI WAS DRUMMED (~12 DRUMS GENERATED). CONCRETE BLOCK ROOM CONTAINING TWO TANKS IS A SUNKIN BASEMENT WITH 4' OF STAIRS INTO THE ROOM. THIS AREA SERVED AS A SECONDARY CONTAINMENT. REMAINING STAINING ALONG WALLS OF ROOM INDICATE LEVEL PRODUCT REACHED. CALCULATED ROOM SIZE AND PRODUCT DEPTH INDICATE A POSSIBLE RELEASE OF 7540 GALLONS. FACILITY STATES A 2% MIXTURE OF COPPER EQUATES TO 151 GALLONS OF COPPER AND 7389 GAL OF OIL RELEASED TO ROOM. A SUMP WAS OBSERVED IN THE FLOOR OF THE ROOM. THIS SUMP HAS PIPING CONNECTED TO THE ALCOVE PARKING LOT DRAIN. A VALVE IS STATED TO EXIST IN THE DRAIN WHICH WAS INACCESSIBLE DUE TO FLUID CONTENTS. LOT DRAIN/ SUMP AREA IS SUSPECT SINCE FACILITY HAS REPEATEDLY OBSERVED WATER INFILTRATION INTO THE SECONDARY CONTAINMENT. MINOR CRACKS OBSERVED IN THE FLOOR ALSO MAY INDICATE THE CONTAINMENT IS NOT TIGHT. DEPT REVIEWED MSDS SHEETS, SPILL RESPONSE, SPCC PLANS. PLAN LISTS EMERGENCY NUMBER NOTIFICATIONS TO FIRE, POLICE, MEDICAL, NRC, DEC, ERIE COUNTY EMERGENCY SERVS, DOT, BUFFALO SEWER AUTHORITY. THE REASON STATED FOR NO NOTIFICATIONS MADE IS THE COPPER NAPHTHENATE MSDS STATES THE MATERIAL DOES NOT CONTAIN SUBSTANCES WITH REPORTABLE QUANTITIES. DEPT REVIEWED REPORTING REQUIREMENTS FOR PBS AND CBS PROGRAMS THAT REGULATE THEIR FACILITY AND REQUIRED THEM TO REPORT THE RELEASE. OBSERVATIONS OF EQUIPMENT, PROCEDURES, DOCUMENTATION INDICATION DEFICIENCIES IN CBS COMPLIANCE; CBS INSPECTION MAY BE CONDUCTED. FACILITY WILL SUBMIT TO DEPARTMENT REQUIRED CBS DOCUMENTATION, IDENTIFY SOURCE OF LEAK, MAKE NECESSARY REPAIRS, REPLACEMENT, UPGRADE TANK SYSTEMS WHERE REGULATORILY DEFICIENT. IF CONTAINMENT IS TESTED AND FOUND TO LEAK, ADDITIONAL REMEDIAL ACTIVITY WILL PROCEED TO DETERMINE EXTENT OF IMPACT TO ENVIRONMENT. 8/21/07: DKK/FILE...HAZ SUBSTANCE SPILL NOTIFICATION TO LOCAL MUNICIPALITY IS NOT NECESSARY IN THIS CASE. SPILL OCCURRED SOMETIME DURING THE WEEKEND OF 8/17-19/07. HOWEVER DEC DID NOT LEARN OF THE RELEASE UNTIL THE MORNING OF 8/21/07 VIA A NEWS PAPER ARTICLE. BY THAT TIME THE RELEASE WAS ALREADY PUBLIC INFORMATION. ALSO, RELEASE WAS TO A SECONDARY CONTAINMENT SYSTEM AND REMEDIAL EFFORTS TO REMOVE THE SPILLED PRODUCT WERE ALREADY UNDERWAY. 8/22/07 FACILITY FAXED TANK#6 FIVE-YEAR INSPECTION REPORT. UPON REVIEW, CBS INSPECTION RECOMMENDED. 8/23/07 ED GOETZ T/C W/CGM. STATES FACILITY LOCATED TANK HOLE AS LEAK SOURCE. OPTECH CALLED BACK IN TO CLEAN UP SECONDARY CONTAINMENT AND CLEAN OUT TANK CONTENTS. HIRED ENGINEER TO ASSESS NEED FOR TANK FOR CURRENT PROCESS USE AND REQUIRED REPAIRS/ REPLACEMENT DEEMED NECESSARY. WILL SEND WRITTEN CONFIRMATION AND FOLLOWUP REPORT BY 9/5/07. CGM/JOSPOL REVIEW OF ONGOING REMEDIATION ACTIVITY. CLOSEST MWS TO SPILL AND SUMP-DRAIN AREA ARE MWS 24,26. LOCATION OF WELLS AND SOIL TYPES MAY NOT DISCLOSE ANY IMPACTS. 8/24/07 FACILITY EMAIL DOCUMENTING CURRENT STATUS NOTED ABOVE. 8/31/07 RECEIVED OSMOSE INVESTIGATION/ CAP REPORT CONFIRMING SPILL EVENTS. ROOM QUARANTINED TO ASSESS SITUATION, CLOSED PLANT, OPTECH HIRED FOR CLEANUP, AST #6 TANK/ EQUIPMENT INSPECTIONS PERFORMED, SPILL OCCURRED DUE TO A HOLE IN THE TANK BOTTOM. INVESTIGATION CONCLUDES WATER/ SLUDGE INTRODUCED DURING RE-CIRCULATION REACTED UNFAVORABLY W/STEEL TANK. CORRECTIVE ACTIONS STATED TO BE DECIDE ON FUTURE USE OF FAILED TANK (REPAIR, REPLACE), CONTACT RAW MATERIALS SUPPLIERS FOR ADDITIONAL INFO ON CHEM COMPOSITION OF PRODUCT, INSPECT/REPAIR

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

SECONDARY CONTAINMENT FOR INTEGRITY, AST#5 TO BE DRAINED, REVIEW EMERGENCY PLANS AND MAKE NECESSARY CHANGES.9/4/07 ED GEOTZ EM TO DEPT STATING INVESTIGATION REPORT SUBMITTED ON 8/31 WAS PRELIMINARY REPORT. UPDATE TO BE PROVIDED SOON.9/7/07 UPDATED INVESTIGATION REPORT SUBMITTED. CHANGES TO ABOVE REPORT INCLUDE: INSPECTION OF SECONDARY CONTAINMENT CONFIRMS NO ENV IMPACT OCCURRED, BUT WAS CONTAINED, ALL RELEASED MATERIAL RECOVERED, NO INJURIES OCCURRED. NO PIPING/ANCILLARY EQUIPMENT DEFICIENCIES FOUND BY QUALITY INSPECTION SERVICES INC, MINOR RPIPING REPAIRS NOTED AND REPAIRED. INTERNAL AST INSPECTION SHOWS TANK FAILED FOR EXCESSIVE RUST AND CORROSION AND PLACED OUT OF SERVICE. CAUSE OF CORROSION UNDER INVESTIGATION SINCE APRIL 2006 INSPECTION STATE VESSEL WAS IN GOOD CONDITION. INTRODUCTION OF SECOND PHASE WATER SUSPECTED THROUGH RAW MATERIALS OR ATMOSPHERIC CONDENSATION. AST #5 CONVERTED TO CUNAP-8 BLEND. BOTTOM DRAIN INCORPORATED TO INSURE AGITATION, SAMPLING FOR MOISTURE MONTHLY PART OF REVISED SPCC PLAN, UPGRADING SECONDARY CONTAINMENT PLANNED, AST #5 DRAINED.9/28/07 CGM ON SITE W/ED GOETZ FOR INSPECTION AFTER CLEANUP. WALLS AND PORTION OF FLOOR SEALANT ADDED. AST #6 TANK TAKEN OUT OF SERVICE PERMANENTLY, PRODUCT FROM TANKER AND RESIDUAL IN TANK SWITCHED TO TOTES, HEATING OIL REMAINS IN OTHER TANK INSIDE SECONDARY CONTAINMENT. DEPT REQUESTED FOLLOWUP EVIDENCE OF CHANGES ONCE MADE INFERENCED IN LAST REPORT (STATING IMPROVEMENTS INTENDED). DEPT REQUESTED TEST SHOWING SECONDARY CONTAINMENT TESTED TIGHT AS REPORT STATES. GEOTZ STATES HE WILL LOCATE WORK PERFORMED TO DATE. HE DOES NOT THINK SUMP WAS INCLUDED IN SECONDARY CONTAINMENT TESTING. GOETZ STATES HE REVISED CBS APPLICATION TO SHOW TANK CLOSED AND IS NO LONGER CBS REGULATED. DEPT REQUESTS DISPOSAL RCPTS SUBMITTED FOR CLEANUP MATERIAL.10/1/07 DEPT RECEIVED AST #6 INTERNAL EXPECTION REPORT DATED 9/7/07. REPORT STATES TANK IS NOT FIT FOR CONTINUED SERVICE DUE TO EXTENSIVE REPAIRS REQUIRED. SEVERAL HOLES LOCATED IN BOTTOM SECTION OF TANK BELOW DIP PIPE. SEVERELY CORRODED AREA IS APPROXIMATELY 5' WIDE AND COVERS ENTIRE LENGTH OF TANK. SEVERE PITTING ON TANK ENDS/HEADS BETWEEN 1/8"-3/16" DEEP. 10/2/07 OSMOSE FAXED DISPOSAL RECEIPTS SHOWING 10,990 POUNDS TAKEN TO ASHLAND BINGHAMTON FACILITY. 10/5/07 DEPT RECEIVES GOETZ EM DATED 10/4/07 WITH PICS SHOWING AST6 STENCILED W/PERMANENTLY CLOSED.10/09/07 HARD COPY OF STATUS OF CORRECTIVE ACTIONS REPORT RECEIVED BY CGM. REPORT STATES AST#5 CONVERTED TO STORE FUEL OIL BLEND W/BOTTOM DRAIN (NEED TO CONFIRM, CONFLICTS W 9/28 INSPECTION USE OF TOTES), RAW MATERIALS SUPPLIERS STATE ADDING WATER AND SULFER USE INCREASED CORROSION OF STEEL CAUSING TANK TO FAIL, SECONDARY CONTAINMENT EPOXY ADDED TO WALL/FLOOR JUNCTION FORMULATED FOR THESE CHEMICALS, SUMP HOLE HYDROSTATICALLY TESTED FOR 48 HOURS TO DETERMINE LEACHING-NONE FOUND, NO LONGER REGULATED UNDER CBS-SPR REMOVED FROM SPCC PLAN.1/15/08 SECONDARY CONTAINMENT SHOWN NOT TO HAVE BEEN BREACHED. DISPOSAL RECEIPTS PROVIDED AND TANK USED FOR PRODUCT NOT REGULATED BY CBS. NO FURTHER WORK IS REQUIRED. THE SITE IS CLOSED.

REMARKS: SAL STATES TO DKK THAT THE BUFFALO NEWS HAD AN ARTICLE IN THE PAPER THIS MORNING REGARDING THE UNREPORTED RELEASE OF 2000-3000 GALLONS OF PRODUCT (OIL/COPPER NAPHTHENATE MIXTURE) AT OSMOSE. THE ARTICLE STATES "MOST OF THE 180 WORKERS WERE SENT HOME ON MONDAY MORNING AFTER FINDING THE OIL LEAK AT ITS PLANT", "LEAK DIDN'T POSE AN EXPOSURE THREAT TO WORKS OR THE NEIGHBORHOOD AND WAS CONTAINED WITHIN THE PLANT", "WORKERS WERE SENT HOME BECAUSE OF THE POTENTIAL FIRE RISK AND OILY ODOR". THE MIXTURE CONTAINS FUEL OIL AND A FUNGICIDE CALLED COPPER NAPHTHENATE USED AS A WOOD PRESERVATIVE USED ON TELEPHONE POLES AND RAILROAD TIES.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Material:

Site ID: 386215
Operable Unit ID: 1143460
Operable Unit: 01
Material ID: 2133738
Material Code: 0001A
Material Name: #2 Fuel Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 7389
Units: Gallons
Recovered: Not reported
Resource Affected: Not reported
Oxygenate: False
Site ID: 386215
Operable Unit ID: 1143460
Operable Unit: 01
Material ID: 2133737
Material Code: 0161A
Material Name: COPPER
Case No.: 07440508
Material FA: Hazardous Material
Quantity: 151
Units: Gallons
Recovered: Not reported
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Facility ID: 9608362
DER Facility ID: 100016
Facility Type: ER
Site ID: 114687
DEC Region: 9
Spill Date: 10/4/1996
Spill Number/Closed Date: 9608362 / 10/11/1996
Spill Cause: Other
Spill Class: No spill occurred. No DEC Response. No corrective action required.
SWIS: 1502
Investigator: FXGALLEG
Referred To: Not reported
Reported to Dept: 10/4/1996
CID: 196
Water Affected: Not reported
Spill Source: Commercial/Industrial
Spill Notifier: Police Department
Cleanup Ceased: 10/11/1996
Cleanup Meets Std: True
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 10/4/1996
Spill Record Last Update: 10/8/1999

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Spiller Name: Not reported
Spiller Company: NONE
Spiller Address: Not reported
Spiller City,St,Zip: ZZ -
Spiller Company: 001
Contact Name: CARLOS GONZALEZ
Contact Phone: (716) 882-5905
DEC Memo:

Prior to Sept, 2004 data translation this spill Lead_DEC Field was "FG"10/4/96 CONTACTED OSMOSE. CYLINDER WAS A GAS GRILL TYPE. OSMOSE CLOSED THE VALVE. THE CYLINDER WAS DUMPED ON THEIR PROPERTY AND THEY JUST NOTICED IT.10/4/96 HENRY SANDONATO W/DAR SAID TO DRAIN TANK & PUT IN GARBAGE.10/4/96 CHERYL WEBSTER W/SOLID WASTE SAID IT IS OK TO DUMP IN GARBAGE IF EMPTY.10/4/96 CONTACTED OSMOSE & TOLD THEM IT IS OK TO DISCHARGE CONTENTS THEN THROW IN GARBAGE. NO FURTHER ACTION IS REQUIRED. SITE CAN BE CLOSED.
Remarks: LEAKING PROPANE CYLINDER.

Material:
Site ID: 114687
Operable Unit ID: 1039409
Operable Unit: 01
Material ID: 344098
Material Code: 2617A
Material Name: PROPANE GAS
Case No.: Not reported
Material FA: Other
Quantity: 0
Units: Pounds
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

ENG CONTROLS:
Site Code: 56635
HW Code: 915143
Control Code: 12
Control Type: ENG
Date Record Added: 06/18/2007
Date Rec Updated: 07/19/2013
Updated By: SRHEIGEL
Site Description: Location: The Osmose Wood Preserving site is located in a mixed commercial and residential area at 980 Ellicott Street in the City of Buffalo, Erie County.Site Features: The Site itself is an active facility composed of multiple structures and asphalt parking areas.Current Zoning/Use(s): This site is zoned for industrial-manufacturing.Historical Use(s): Underground storage tanks in the fenced parking lot of Osmose, Inc. were used to store creosote, #2 fuel oil, and other chemicals, which were found leaking in 1989. The tanks were removed from the site. Some soil surrounding the tanks also contained elevated levels of PAHs and were excavated and placed into a lined bio-cell in 1990 to undergo bio-remediation. The bio-remediation was not successful and was suspended in 1996. A site investigation by Osmose in 1993, confirmed the presence of severe environmental problems on-site due to PAHs in soil and

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

groundwater outside the bio-cell area. Pilot studies to determine the effectiveness of in-situ Ozonation Technology was completed in 1994. A non-aqueous phase liquid (NAPL) extraction system was installed to recover the floating oily material in the groundwater in 1995 and has been in operation since then. At present no significant amount of NAPL is being recovered. The Feasibility Study was completed in 1995. The excavation of off-site contaminated soils was completed in 1995. The Record of Decision (ROD) was issued in 1997. Under the selected remedy, the non-aqueous phase liquid is pumped out followed by ozone treatment of contaminated subsurface soils. Construction of an ozone sparge/soil vapor extraction system was completed in 1999. The ozone treatment started in 2002 and was shutdown in 2005 as the soil cleanup levels were met. Groundwater extraction and treatment is on-going to address groundwater contamination. Currently, groundwater and street sanitary sewers are being monitored under the Operation and Monitoring Plan.

Env Problem: Nature and Extent of Contamination: Prior to Remediation: Contaminates of concern at this site included creosote, #2 fuel oil, Poly-aromatic Hydrocarbons, and other chemicals. These contaminants had been stored in underground storage tanks which had leaked, subsequently contaminating groundwater and soil. Post-Remediation: The remediation of soils is complete and groundwater remediation is still going on. Remedial action is preventing off-site migration. Groundwater and street sewers are being monitored under the O&M Plan.

Health Problem: Exposures via drinking water are not expected because homes in the area are served by public water and no known private wells exist in the immediate area. Direct contact exposure to site-related contaminants by community members is not expected because the remaining contaminants are located below a paved parking lot and public access to the site is restricted by security guards. A deed restriction is in place to control future digging on the site.

INST CONTROL:

Site Code: 56635
Control Name: Deed Restriction
HW Code: 915143
Control Code: A
Control Type: INST
Dt record added: 06/18/2007
Dt rec updated: 07/19/2013
Updated By: SRHEIGEL
Site Code: 56635

Site Description: Location: The Osmose Wood Preserving site is located in a mixed commercial and residential area at 980 Ellicott Street in the City of Buffalo, Erie County. Site Features: The Site itself is an active facility composed of multiple structures and asphalt parking areas. Current Zoning/Use(s): This site is zoned for industrial-manufacturing. Historical Use(s): Underground storage tanks in the fenced parking lot of Osmose, Inc. were used to store creosote, #2 fuel oil, and other chemicals, which were found leaking in 1989. The tanks were removed from the site. Some soil surrounding the tanks also contained elevated levels of PAHs and were excavated and placed into a lined bio-cell in 1990 to undergo bio-remediation. The bio-remediation was not successful and was suspended in 1996. A site investigation by Osmose in 1993, confirmed the presence of severe environmental problems on-site due to PAHs in soil and

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

groundwater outside the bio-cell area. Pilot studies to determine the effectiveness of in-situ Ozonation Technology was completed in 1994. A non-aqueous phase liquid (NAPL) extraction system was installed to recover the floating oily material in the groundwater in 1995 and has been in operation since then. At present no significant amount of NAPL is being recovered. The Feasibility Study was completed in 1995. The excavation of off-site contaminated soils was completed in 1995. The Record of Decision (ROD) was issued in 1997. Under the selected remedy, the non-aqueous phase liquid is pumped out followed by ozone treatment of contaminated subsurface soils. Construction of an ozone sparge/soil vapor extraction system was completed in 1999. The ozone treatment started in 2002 and was shutdown in 2005 as the soil cleanup levels were met. Groundwater extraction and treatment is on-going to address groundwater contamination. Currently, groundwater and street sanitary sewers are being monitored under the Operation and Monitoring Plan.

Env Problem: Nature and Extent of Contamination: Prior to Remediation: Contaminates of concern at this site included creosote, #2 fuel oil, Poly-aromatic Hydrocarbons, and other chemicals. These contaminants had been stored in underground storage tanks which had leaked, subsequently contaminating groundwater and soil. Post-Remediation: The remediation of soils is complete and groundwater remediation is still going on. Remedial action is preventing off-site migration. Groundwater and street sewers are being monitored under the O&M Plan.

Health Problem: Exposures via drinking water are not expected because homes in the area are served by public water and no known private wells exist in the immediate area. Direct contact exposure to site-related contaminants by community members is not expected because the remaining contaminants are located below a paved parking lot and public access to the site is restricted by security guards. A deed restriction is in place to control future digging on the site.

Site Code: 56635
Control Name: O&M Plan
HW Code: 915143
Control Code: 33
Control Type: INST
Dt record added: 06/18/2007
Dt rec updated: 07/19/2013
Updated By: SRHEIGEL
Site Code: 56635

Site Description: Location: The Osmose Wood Preserving site is located in a mixed commercial and residential area at 980 Ellicott Street in the City of Buffalo, Erie County. Site Features: The Site itself is an active facility composed of multiple structures and asphalt parking areas. Current Zoning/Use(s): This site is zoned for industrial-manufacturing. Historical Use(s): Underground storage tanks in the fenced parking lot of Osmose, Inc. were used to store creosote, #2 fuel oil, and other chemicals, which were found leaking in 1989. The tanks were removed from the site. Some soil surrounding the tanks also contained elevated levels of PAHs and were excavated and placed into a lined bio-cell in 1990 to undergo bio-remediation. The bio-remediation was not successful and was suspended in 1996. A site investigation by Osmose in 1993, confirmed the presence of severe environmental problems on-site due to PAHs in soil and groundwater outside the bio-cell area. Pilot studies to determine the

OSMOSE, INC (Continued)

1000342225

effectiveness of in-situ Ozonation Technology was completed in 1994. A non-aqueous phase liquid (NAPL) extraction system was installed to recover the floating oily material in the groundwater in 1995 and has been in operation since then. At present no significant amount of NAPL is being recovered. The Feasibility Study was completed in 1995. The excavation of off-site contaminated soils was completed in 1995. The Record of Decision (ROD) was issued in 1997. Under the selected remedy, the non-aqueous phase liquid is pumped out followed by ozone treatment of contaminated subsurface soils. Construction of an ozone sparge/soil vapor extraction system was completed in 1999. The ozone treatment started in 2002 and was shutdown in 2005 as the soil cleanup levels were met. Groundwater extraction and treatment is on-going to address groundwater contamination. Currently, groundwater and street sanitary sewers are being monitored under the Operation and Monitoring Plan.

Env Problem: Nature and Extent of Contamination: Prior to Remediation: Contaminates of concern at this site included creosote, #2 fuel oil, Poly-aromatic Hydrocarbons, and other chemicals. These contaminants had been stored in underground storage tanks which had leaked, subsequently contaminating groundwater and soil. Post-Remediation: The remediation of soils is complete and groundwater remediation is still going on. Remedial action is preventing off-site migration. Groundwater and street sewers are being monitored under the O&M Plan.

Health Problem: Exposures via drinking water are not expected because homes in the area are served by public water and no known private wells exist in the immediate area. Direct contact exposure to site-related contaminants by community members is not expected because the remaining contaminants are located below a paved parking lot and public access to the site is restricted by security guards. A deed restriction is in place to control future digging on the site.

Site Code: 56635

Control Name: Monitoring Plan

HW Code: 915143

Control Code: 31

Control Type: INST

Dt record added: 06/18/2007

Dt rec updated: 07/19/2013

Updated By: SRHEIGEL

Site Code: 56635

Site Description: Location: The Osmose Wood Preserving site is located in a mixed commercial and residential area at 980 Ellicott Street in the City of Buffalo, Erie County. Site Features: The Site itself is an active facility composed of multiple structures and asphalt parking areas. Current Zoning/Use(s): This site is zoned for industrial-manufacturing. Historical Use(s): Underground storage tanks in the fenced parking lot of Osmose, Inc. were used to store creosote, #2 fuel oil, and other chemicals, which were found leaking in 1989. The tanks were removed from the site. Some soil surrounding the tanks also contained elevated levels of PAHs and were excavated and placed into a lined bio-cell in 1990 to undergo bio-remediation. The bio-remediation was not successful and was suspended in 1996. A site investigation by Osmose in 1993, confirmed the presence of severe environmental problems on-site due to PAHs in soil and groundwater outside the bio-cell area. Pilot studies to determine the effectiveness of in-situ Ozonation Technology was completed in 1994.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

A non-aqueous phase liquid (NAPL) extraction system was installed to recover the floating oily material in the groundwater in 1995 and has been in operation since then. At present no significant amount of NAPL is being recovered. The Feasibility Study was completed in 1995. The excavation of off-site contaminated soils was completed in 1995. The Record of Decision (ROD) was issued in 1997. Under the selected remedy, the non-aqueous phase liquid is pumped out followed by ozone treatment of contaminated subsurface soils. Construction of an ozone sparge/soil vapor extraction system was completed in 1999. The ozone treatment started in 2002 and was shutdown in 2005 as the soil cleanup levels were met. Groundwater extraction and treatment is on-going to address groundwater contamination. Currently, groundwater and street sanitary sewers are being monitored under the Operation and Monitoring Plan.

Env Problem: Nature and Extent of Contamination: Prior to Remediation: Contaminates of concern at this site included creosote, #2 fuel oil, Poly-aromatic Hydrocarbons, and other chemicals. These contaminants had been stored in underground storage tanks which had leaked, subsequently contaminating groundwater and soil. Post-Remediation: The remediation of soils is complete and groundwater remediation is still going on. Remedial action is preventing off-site migration. Groundwater and street sewers are being monitored under the O&M Plan.

Health Problem: Exposures via drinking water are not expected because homes in the area are served by public water and no known private wells exist in the immediate area. Direct contact exposure to site-related contaminants by community members is not expected because the remaining contaminants are located below a paved parking lot and public access to the site is restricted by security guards. A deed restriction is in place to control future digging on the site.

Site Code: 56635

Control Name: Landuse Restriction

HW Code: 915143

Control Code: 25

Control Type: INST

Dt record added: 06/18/2007

Dt rec updated: 07/19/2013

Updated By: SRHEIGEL

Site Code: 56635

Site Description: Location: The Osmose Wood Preserving site is located in a mixed commercial and residential area at 980 Ellicott Street in the City of Buffalo, Erie County. Site Features: The Site itself is an active facility composed of multiple structures and asphalt parking areas. Current Zoning/Use(s): This site is zoned for industrial-manufacturing. Historical Use(s): Underground storage tanks in the fenced parking lot of Osmose, Inc. were used to store creosote, #2 fuel oil, and other chemicals, which were found leaking in 1989. The tanks were removed from the site. Some soil surrounding the tanks also contained elevated levels of PAHs and were excavated and placed into a lined bio-cell in 1990 to undergo bio-remediation. The bio-remediation was not successful and was suspended in 1996. A site investigation by Osmose in 1993, confirmed the presence of severe environmental problems on-site due to PAHs in soil and groundwater outside the bio-cell area. Pilot studies to determine the effectiveness of in-situ Ozonation Technology was completed in 1994. A non-aqueous phase liquid (NAPL) extraction system was installed to

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

recover the floating oily material in the groundwater in 1995 and has been in operation since then. At present no significant amount of NAPL is being recovered. The Feasibility Study was completed in 1995. The excavation of off-site contaminated soils was completed in 1995. The Record of Decision (ROD) was issued in 1997. Under the selected remedy, the non-aqueous phase liquid is pumped out followed by ozone treatment of contaminated subsurface soils. Construction of an ozone sparge/soil vapor extraction system was completed in 1999. The ozone treatment started in 2002 and was shutdown in 2005 as the soil cleanup levels were met. Groundwater extraction and treatment is on-going to address groundwater contamination. Currently, groundwater and street sanitary sewers are being monitored under the Operation and Monitoring Plan.

Env Problem: Nature and Extent of Contamination: Prior to Remediation: Contaminates of concern at this site included creosote, #2 fuel oil, Poly-aromatic Hydrocarbons, and other chemicals. These contaminants had been stored in underground storage tanks which had leaked, subsequently contaminating groundwater and soil. Post-Remediation: The remediation of soils is complete and groundwater remediation is still going on. Remedial action is preventing off-site migration. Groundwater and street sewers are being monitored under the O&M Plan.

Health Problem: Exposures via drinking water are not expected because homes in the area are served by public water and no known private wells exist in the immediate area. Direct contact exposure to site-related contaminants by community members is not expected because the remaining contaminants are located below a paved parking lot and public access to the site is restricted by security guards. A deed restriction is in place to control future digging on the site.

Site Code: 56635
Control Name: Ground Water Use Restriction
HW Code: 915143
Control Code: 08
Control Type: INST
Dt record added: 06/18/2007
Dt rec updated: 07/19/2013
Updated By: SRHEIGEL
Site Code: 56635

Site Description: Location: The Osmose Wood Preserving site is located in a mixed commercial and residential area at 980 Ellicott Street in the City of Buffalo, Erie County. Site Features: The Site itself is an active facility composed of multiple structures and asphalt parking areas. Current Zoning/Use(s): This site is zoned for industrial-manufacturing. Historical Use(s): Underground storage tanks in the fenced parking lot of Osmose, Inc. were used to store creosote, #2 fuel oil, and other chemicals, which were found leaking in 1989. The tanks were removed from the site. Some soil surrounding the tanks also contained elevated levels of PAHs and were excavated and placed into a lined bio-cell in 1990 to undergo bio-remediation. The bio-remediation was not successful and was suspended in 1996. A site investigation by Osmose in 1993, confirmed the presence of severe environmental problems on-site due to PAHs in soil and groundwater outside the bio-cell area. Pilot studies to determine the effectiveness of in-situ Ozonation Technology was completed in 1994. A non-aqueous phase liquid (NAPL) extraction system was installed to recover the floating oily material in the groundwater in 1995 and has

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

been in operation since then. At present no significant amount of NAPL is being recovered. The Feasibility Study was completed in 1995. The excavation of off-site contaminated soils was completed in 1995. The Record of Decision (ROD) was issued in 1997. Under the selected remedy, the non-aqueous phase liquid is pumped out followed by ozone treatment of contaminated subsurface soils. Construction of an ozone sparge/soil vapor extraction system was completed in 1999. The ozone treatment started in 2002 and was shutdown in 2005 as the soil cleanup levels were met. Groundwater extraction and treatment is on-going to address groundwater contamination. Currently, groundwater and street sanitary sewers are being monitored under the Operation and Monitoring Plan.

Env Problem: Nature and Extent of Contamination: Prior to Remediation: Contaminates of concern at this site included creosote, #2 fuel oil, Poly-aromatic Hydrocarbons, and other chemicals. These contaminants had been stored in underground storage tanks which had leaked, subsequently contaminating groundwater and soil. Post-Remediation: The remediation of soils is complete and groundwater remediation is still going on. Remedial action is preventing off-site migration. Groundwater and street sewers are being monitored under the O&M Plan.

Health Problem: Exposures via drinking water are not expected because homes in the area are served by public water and no known private wells exist in the immediate area. Direct contact exposure to site-related contaminants by community members is not expected because the remaining contaminants are located below a paved parking lot and public access to the site is restricted by security guards. A deed restriction is in place to control future digging on the site.

CBS:

CBS Number: 9-000268
Program Type: CBS
Facility Status: Unregulated
Expiration Date: N/A
Dec Region: 9
UTMX: 184354.14073000
UTMY: 4757496.4950299

AIRS (AFS):

Compliance and Violation Data Major Sources:

EPA plant ID: 110000326932
Plant name: OSMOSE WOOD PRESERVING CO OF AMER
Plant address: 966 ELLICOTT ST
BUFFALO, NY 14209
County: ERIE
Region code: 02
Dunn & Bradst #: 002112944
Air quality cntrl region: 162
Sic code: 2879
Sic code desc: AGRICULTURAL CHEMICALS, NEC
North Am. industrial classf: 325320
NAIC code description: Pesticide and Other Agricultural Chemical Manufacturing
Default compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Default classification: POTENTIAL EMISSIONS ARE BELOW ALL APPLICABLE MAJOR SOURCE THRESHOLDS IF AND ONLY IF THE SOURCE COMPLIES WITH FEDERALLY ENFORCEABLE REGULATIONS OR LIMITATIONS.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

Govt facility: ALL OTHER FACILITIES NOT OWNED OR OPERATED BY A FEDERAL, STATE, OR LOCAL GOVERNMENT

Current HPV: Not reported

Compliance and Enforcement Major Issues:

Air program: SIP SOURCE
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 980312
Penalty amount: 000000000

Historical Compliance Minor Sources:

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1004
Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1101
Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1103
Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1104
Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1202
Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1203
Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1301
Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1302
Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1102
Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1201
Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1204
Air prog code hist file: SIP SOURCE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE, INC (Continued)

1000342225

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1303
Air prog code hist file: SIP SOURCE

RGA HWS:

2012	OSMOSE WOOD PRESERVING	980 ELLICOTT STREET
2011	OSMOSE WOOD PRESERVING	980 ELLICOTT STREET
2010	OSMOSE WOOD PRESERVING	980 ELLICOTT STREET
2009	OSMOSE WOOD PRESERVING	980 ELLICOTT STREET
2008	OSMOSE WOOD PRESERVING	980 ELLICOTT STREET
2007	OSMOSE WOOD PRESERVING	980 ELLICOTT STREET
2006	OSMOSE WOOD PRESERVING	980 ELLICOTT STREET
2005	OSMOSE WOOD PRESERVING	980 ELLICOTT STREET
2003	OSMOSE WOOD PRESERVING	980 ELLICOTT STREET
2000	OSMOSE WOOD PRESERVING	980 ELLICOTT STREET
1997	OSMOSE WOOD PRESERVING	980 ELLICOTT STREET

C18
SE
< 1/8
0.061 mi.
324 ft.

OSMOSE INC
980 ELLICOTT ST
BUFFALO, NY 14209
Site 5 of 6 in cluster C

TRIS 1005434451
SSTS 14209SMSWD980EL
NY AST

Relative:
Lower

TRIS:

[Click this hyperlink](#) while viewing on your computer to access 5 additional US_TRIS: record(s) in the EDR Site Report.

Actual:
639 ft.

SSTS:

Product: FLURODS
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: Not reported
Permit: Registered
Product Number: 00300800063
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: COP-R-NAP
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: Not reported
Permit: Registered
Product Number: 00963000015003008
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE INC (Continued)

1005434451

Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: WOODFUME
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: Not reported
Permit: Registered
Product Number: 00300800033
Product Type: Repackaged or relabeled
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: POLE WRAP
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: Not reported
Permit: Registered
Product Number: 00300800052
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: OSMOSE SPECIAL K-33
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: Not reported
Permit: Registered
Product Number: 00300800021
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: OSMOPLASTIC/TIMBERLIFE
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE INC (Continued)

1005434451

Permit: Registered
Product Number: 00300800056
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: OSMOPLASTIC W/ 2,4 DINITROPHENOL
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: Not reported
Permit: Unregistered
Product Number: 003008CF00001
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: HOLLOW HEART WOOD PRESERVER
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: Not reported
Permit: Registered
Product Number: 00300800008
Product Type: End-use blend, formulation, or concentrate
Product Class: Insecticide-Fungicide
Product Use: Restricted use only
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: COP-R- PLASTIC
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: Not reported
Permit: Registered
Product Number: 00300800055
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE INC (Continued)

1005434451

Pesticide RUP report: Not reported

Product: POLE WRAP
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1997
Permit: Registered
Product Number: 00300800052
Product Type: End-use blend, formulation, or concentrate
Product Class: Not reported
Product Use: All other products
UOM: U
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: OSMOSE SPECIAL K-33
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1997
Permit: Registered
Product Number: 00300800021
Product Type: End-use blend, formulation, or concentrate
Product Class: Not reported
Product Use: All other products
UOM: G
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: OSMOPLASTIC/TIMBERLIFE
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1997
Permit: Registered
Product Number: 00300800056
Product Type: End-use blend, formulation, or concentrate
Product Class: Not reported
Product Use: All other products
UOM: G
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: OSMOPLASTIC W/2,4 DINITROPHENOL
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1997
Permit: Unregistered
Product Number: 003008CF00001

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE INC (Continued)

1005434451

Product Type: End-use blend, formulation, or concentrate
Product Class: Not reported
Product Use: All other products
UOM: G
Market: Exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: HOLLOW HEART WOOD PRESERVER
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1997
Permit: Registered
Product Number: 00300800008
Product Type: Technical material or active ingredient
Product Class: Not reported
Product Use: Restricted use only
UOM: G
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: COP-R-NAP
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1997
Permit: Registered
Product Number: 00963000015003008
Product Type: End-use blend, formulation, or concentrate
Product Class: Not reported
Product Use: All other products
UOM: G
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: COP-R- PLASTIC
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1997
Permit: Registered
Product Number: 003008000055
Product Type: End-use blend, formulation, or concentrate
Product Class: Not reported
Product Use: All other products
UOM: G
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE INC (Continued)

1005434451

Product: WOODFUME
Contact: Not reported
Status: Active
Registration Number: 003008NY 001
Report Year: 1997
Permit: Registered
Product Number: 00300800033
Product Type: End-use blend, formulation, or concentrate
Product Class: Not reported
Product Use: All other products
UOM: G
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: FLURODS
Contact: Not reported
Status: Not reported
Registration Number: 003008NY 001
Report Year: 1999
Permit: Registered
Product Number: 00300800063
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: COP-R-NAP
Contact: Not reported
Status: Not reported
Registration Number: 003008NY 001
Report Year: 1999
Permit: Registered
Product Number: 00963000015003008
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: COP-R- PLASTIC
Contact: Not reported
Status: Not reported
Registration Number: 003008NY 001
Report Year: 1999
Permit: Registered
Product Number: 00300800055
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE INC (Continued)

1005434451

Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: HOLLOW HEART WOOD PRESERVER
Contact: Not reported
Status: Not reported
Registration Number: 003008NY 001
Report Year: 1999
Permit: Registered
Product Number: 00300800008
Product Type: End-use blend, formulation, or concentrate
Product Class: Insecticide-Fungicide
Product Use: Restricted use only
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: WOODFUME
Contact: Not reported
Status: Not reported
Registration Number: 003008NY 001
Report Year: 1999
Permit: Registered
Product Number: 00300800033
Product Type: Repackaged or relabeled
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: POLE WRAP
Contact: Not reported
Status: Not reported
Registration Number: 003008NY 001
Report Year: 1999
Permit: Registered
Product Number: 00300800052
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: OSMOSE SPECIAL K-33
Contact: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE INC (Continued)

1005434451

Status: Not reported
Registration Number: 003008NY 001
Report Year: 1999
Permit: Registered
Product Number: 00300800021
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: OSMOPLASTIC/TIMBERLIFE
Contact: Not reported
Status: Not reported
Registration Number: 003008NY 001
Report Year: 1999
Permit: Registered
Product Number: 00300800056
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: OSMOPLASTIC W/ DUP
Contact: Not reported
Status: Not reported
Registration Number: 003008NY 001
Report Year: 1999
Permit: Unregistered
Product Number: 003008CF00001
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: COP-R-NAP + ALTERNATE BRAND NAMES
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2001
Permit: Registered
Product Number: 00963000015003008
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE INC (Continued)

1005434451

Market: Marketed in the United States and exported out of the United States
Region: 02
Zero product: Not reported
Pesticide RUP report: Not reported

Product: COP-R-PLASTIC
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2001
Permit: Registered
Product Number: 00300800055
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: 02
Zero product: Not reported
Pesticide RUP report: Not reported

Product: WOODFUME
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2001
Permit: Registered
Product Number: 00300800033
Product Type: Repackaged or relabeled
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: 02
Zero product: Not reported
Pesticide RUP report: Not reported

Product: SPECIAL K-33
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2001
Permit: Registered
Product Number: 00300800021
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: 02
Zero product: Not reported
Pesticide RUP report: Not reported

Product: POLE WRAP
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE INC (Continued)

1005434451

Report Year: 2001
Permit: Registered
Product Number: 00300800052
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: 02
Zero product: Not reported
Pesticide RUP report: Not reported

Product: OSMOPLASTIC/TIMBERLIFE
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2001
Permit: Registered
Product Number: 00300800056
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: 02
Zero product: Not reported
Pesticide RUP report: Not reported

Product: HOLLOW HEART
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2001
Permit: Registered
Product Number: 00300800008
Product Type: End-use blend, formulation, or concentrate
Product Class: Insecticide-Fungicide
Product Use: Restricted use only
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: 02
Zero product: Not reported
Pesticide RUP report: Not reported

Product: FLURODS
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2001
Permit: Registered
Product Number: 00300800063
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: 02

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE INC (Continued)

1005434451

Zero product: Not reported
Pesticide RUP report: Not reported

Product: COP-R-NAP 1:3 CONCENTRATION
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2003
Permit: Registered
Product Number: 00300800073
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: 02
Zero product: Not reported
Pesticide RUP report: Not reported

Product: CU-89 COP-R-NAP RTU
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2003
Permit: Registered
Product Number: 00300800074
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: 02
Zero product: Not reported
Pesticide RUP report: Not reported

Product: FLURODS
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2003
Permit: Registered
Product Number: 00300800063
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: 02
Zero product: Not reported
Pesticide RUP report: Not reported

Product: HOLLOW HEART CONCENTRATE
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2003
Permit: Registered

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE INC (Continued)

1005434451

Product Number: 00300800008
Product Type: End-use blend, formulation, or concentrate
Product Class: Insecticide-Fungicide
Product Use: Restricted use only
UOM: Not reported
Market: Marketed in the United States
Region: 02
Zero product: Not reported
Pesticide RUP report: Not reported

Product: OSMOPLASTIC WOOD PRESERVING COMPOUND
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2003
Permit: Registered
Product Number: 00300800068
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: 02
Zero product: Not reported
Pesticide RUP report: Not reported

Product: PATOX LITE
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2003
Permit: Registered
Product Number: 00300800052
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: 02
Zero product: Not reported
Pesticide RUP report: Not reported

Product: COP-R-PLASTIC WOOD PRESERVING COMPOUND
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2003
Permit: Registered
Product Number: 00300800055
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: 02
Zero product: Not reported
Pesticide RUP report: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE INC (Continued)

1005434451

Product: WOODFUME
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2003
Permit: Registered
Product Number: 00300800033
Product Type: Repackaged or relabeled
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: 02
Zero product: Not reported
Pesticide RUP report: Not reported

Product: COP R PLASTIC WOOD PRESERVING COMPOUND
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2004
Permit: Not reported
Product Number: 107534100005
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: COP-R-NAP RTU SOLUTION
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2004
Permit: Not reported
Product Number: 107534000003
Product Type: End-use blend, formulation, or concentrate
Product Class: Insecticide-Fungicide
Product Use: Restricted use only
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: FLURODS
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2004
Permit: Not reported
Product Number: 107534100006
Product Type: End-use blend, formulation, or concentrate
Product Class: Insecticide-Fungicide

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE INC (Continued)

1005434451

Product Use: Restricted use only
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: MITC FUME
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2004
Permit: Not reported
Product Number: 106985000001075341
Product Type: Repackaged or relabeled
Product Class: Insecticide-Fungicide
Product Use: Restricted use only
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: OSMOSE COP R NAP
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2004
Permit: Not reported
Product Number: 107534100008
Product Type: End-use blend, formulation, or concentrate
Product Class: Insecticide-Fungicide
Product Use: Restricted use only
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: PATOX LITE
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2004
Permit: Not reported
Product Number: 107534100004
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: Restricted use only
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: WOODFUME
Contact: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE INC (Continued)

1005434451

Status: Not reported
Registration Number: 003008NY001
Report Year: 2004
Permit: Not reported
Product Number: 107534100002
Product Type: Repackaged or relabeled
Product Class: Insecticide-Fungicide
Product Use: Restricted use only
UOM: Not reported
Market: Marketed in the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: COP-R-NAP RTU SOLUTION
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2005
Permit: Not reported
Product Number: 07534000003
Product Type: End-use blend, formulation, or concentrate
Product Class: Insecticide-Fungicide
Product Use: Restricted use only
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: COP R PLASTIC WOOD PRESERVING COMPOUND
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2005
Permit: Not reported
Product Number: 07534100005
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: WOODFUME
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2005
Permit: Not reported
Product Number: 07534100002
Product Type: Repackaged or relabeled
Product Class: Insecticide-Fungicide
Product Use: Restricted use only
UOM: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE INC (Continued)

1005434451

Market: Marketed in the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: PATOX LITE
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2005
Permit: Not reported
Product Number: 07534100004
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: Restricted use only
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: OSMOSE COP R NAP
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2005
Permit: Not reported
Product Number: 07534100008
Product Type: End-use blend, formulation, or concentrate
Product Class: Insecticide-Fungicide
Product Use: Restricted use only
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: MITC FUME
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2005
Permit: Not reported
Product Number: 06985000001075341
Product Type: Repackaged or relabeled
Product Class: Fungicide
Product Use: Restricted use only
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: COPR NAP
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE INC (Continued)

1005434451

Report Year: 2005
Permit: Not reported
Product Number: 07534100011
Product Type: Repackaged or relabeled
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: COPRPLASTIC II WOOD PRESERVE CMPD
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2005
Permit: Not reported
Product Number: 07534100013
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: CU 89 RTU II
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2005
Permit: Not reported
Product Number: 07534000004
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: DURAFUME
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2005
Permit: Not reported
Product Number: 00144800104075341
Product Type: Repackaged or relabeled
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States
Region: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE INC (Continued)

1005434451

Zero product: Not reported
Pesticide RUP report: Not reported

Product: FLURODS
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2005
Permit: Not reported
Product Number: 07534100006
Product Type: End-use blend, formulation, or concentrate
Product Class: Insecticide-Fungicide
Product Use: Restricted use only
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: HOLLOW HEART CF
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2005
Permit: Not reported
Product Number: 07534100012
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: COP-R-NAP RTU SOLUTION
Contact: Not reported
Status: Not reported
Registration Number: 003008-NY-001
Report Year: 2006
Permit: Not reported
Product Number: 075340-00003
Product Type: Not reported
Product Class: Not reported
Product Use: Not reported
UOM: Not reported
Market: Not reported
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: COP R PLASTIC WOOD PRESERVING COMPOUND
Contact: Not reported
Status: Not reported
Registration Number: 003008-NY-001
Report Year: 2006
Permit: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE INC (Continued)

1005434451

Product Number: 075341-00005
Product Type: Not reported
Product Class: Not reported
Product Use: Not reported
UOM: Not reported
Market: Not reported
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: CU 89 RTU II
Contact: Not reported
Status: Not reported
Registration Number: 003008-NY-001
Report Year: 2006
Permit: Not reported
Product Number: 075340-00004
Product Type: Not reported
Product Class: Not reported
Product Use: Not reported
UOM: Not reported
Market: Not reported
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: COPRPLASTIC II WOOD PRESERVE CMPD
Contact: Not reported
Status: Not reported
Registration Number: 003008-NY-001
Report Year: 2006
Permit: Not reported
Product Number: 075341-00013
Product Type: Not reported
Product Class: Not reported
Product Use: Not reported
UOM: Not reported
Market: Not reported
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Product: OSMOSE COP R NAP
Contact: Not reported
Status: Not reported
Registration Number: 003008-NY-001
Report Year: 2006
Permit: Not reported
Product Number: 075341-00008
Product Type: Not reported
Product Class: Not reported
Product Use: Not reported
UOM: Not reported
Market: Not reported
Region: Not reported
Zero product: Not reported
Pesticide RUP report: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE INC (Continued)

1005434451

Product: COP-R-NAP
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2007
Permit: Registered
Product Number: 07534100011
Product Type: Repackaged or relabeled
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States
Region: 02
Zero product: Not reported
Pesticide RUP report: Not reported

Product: COP R PLASTIC WOOD PRESERVING COMPOUND
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2007
Permit: Registered
Product Number: 07534100005
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: 02
Zero product: Not reported
Pesticide RUP report: Not reported

Product: COPRPLASTIC II WOOD PRESERVE CMPD
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2007
Permit: Registered
Product Number: 07534100013
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: 02
Zero product: Not reported
Pesticide RUP report: Not reported

Product: WOODFUME
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2007
Permit: Registered
Product Number: 07534100002
Product Type: Repackaged or relabeled
Product Class: Fungicide

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE INC (Continued)

1005434451

Product Use: All other products
UOM: Not reported
Market: Marketed in the United States
Region: 02
Zero product: Not reported
Pesticide RUP report: Not reported

Product: PATOX-LIGHT
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2007
Permit: Registered
Product Number: 07534100004
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: 02
Zero product: Not reported
Pesticide RUP report: Not reported

Product: OSMOSE FLURODS
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2007
Permit: Registered
Product Number: 07534100006
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: 02
Zero product: Not reported
Pesticide RUP report: Not reported

Product: MITC - FUME
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2007
Permit: Registered
Product Number: 06985000001075341
Product Type: Repackaged or relabeled
Product Class: Fungicide
Product Use: Restricted use only
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: 02
Zero product: Not reported
Pesticide RUP report: Not reported

Product: HOLLOW HEART CF
Contact: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE INC (Continued)

1005434451

Status: Not reported
Registration Number: 003008NY001
Report Year: 2007
Permit: Registered
Product Number: 07534100012
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: 02
Zero product: Not reported
Pesticide RUP report: Not reported

Product: DURAFUME
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2007
Permit: Registered
Product Number: 00144800104075341
Product Type: Repackaged or relabeled
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: 02
Zero product: Not reported
Pesticide RUP report: Not reported

Product: CU 89 RTU II
Contact: Not reported
Status: Not reported
Registration Number: 003008NY001
Report Year: 2007
Permit: Registered
Product Number: 07534000004
Product Type: End-use blend, formulation, or concentrate
Product Class: Fungicide
Product Use: All other products
UOM: Not reported
Market: Marketed in the United States
Region: 02
Zero product: Not reported
Pesticide RUP report: Not reported

Product: COPRPLASTIC II WOOD PRESERVE CMPD
Contact: DAVID KASPROWICZ PLANT MANAGER P: 716-882-5905
Status: Not reported
Registration Number: 003008-NY-001
Report Year: 2008
Permit: Not reported
Product Number: 75341-13
Product Type: End-use blend, formulation, or concentrate
Product Class: Not reported
Product Use: Not reported
UOM: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE INC (Continued)

1005434451

Market: Marketed in the United States and exported out of the United States
Region: 2
Zero product: No
Pesticide RUP report: 2

Product: COP R PLASTIC WOOD PRESERVE
Contact: DAVID KASPROWICZ PLANT MANAGER P: 716-882-5905
Status: Not reported
Registration Number: 003008-NY-001
Report Year: 2009
Permit: Not reported
Product Number: 75431-13
Product Type: End-use blend, formulation, or concentrate
Product Class: Not reported
Product Use: Not reported
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: No
Pesticide RUP report: 2

Product: COP R PLASTIC WOOD PRESERVING COMPOUND
Contact: DAVID KASPROWICZ PLANT MANAGER P: 716-882-5905
Status: Not reported
Registration Number: 003008-NY-001
Report Year: 2009
Permit: Not reported
Product Number: 75341-5
Product Type: End-use blend, formulation, or concentrate
Product Class: Not reported
Product Use: Not reported
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: No
Pesticide RUP report: 2

Product: PATOX-LIGHT
Contact: DAVID KASPROWICZ PLANT MANAGER P: 716-882-5905
Status: Not reported
Registration Number: 003008-NY-001
Report Year: 2009
Permit: Not reported
Product Number: 75341-4
Product Type: End-use blend, formulation, or concentrate
Product Class: Not reported
Product Use: Not reported
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: No
Pesticide RUP report: 2

Product: WOODFUME
Contact: DAVID KASPROWICZ PLANT MANAGER P: 716-882-5905
Status: Not reported
Registration Number: 003008-NY-001

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE INC (Continued)

1005434451

Report Year: 2009
Permit: Not reported
Product Number: 75341-2
Product Type: Repackaged or relabeled
Product Class: Not reported
Product Use: Not reported
UOM: Not reported
Market: Marketed in the United States
Region: Not reported
Zero product: No
Pesticide RUP report: 2

Product: MP400
Contact: DAVID KASPROWICZ PLANT MANAGER P: 716-882-5905
Status: Not reported
Registration Number: 003008-NY-001
Report Year: 2009
Permit: Not reported
Product Number: 75341-14
Product Type: End-use blend, formulation, or concentrate
Product Class: Not reported
Product Use: Not reported
UOM: Not reported
Market: Marketed in the United States
Region: Not reported
Zero product: No
Pesticide RUP report: 2

Product: MITC - FUME
Contact: DAVID KASPROWICZ PLANT MANAGER P: 716-882-5905
Status: Not reported
Registration Number: 003008-NY-001
Report Year: 2009
Permit: Not reported
Product Number: 69850-1
Product Type: Repackaged or relabeled
Product Class: Not reported
Product Use: Not reported
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: No
Pesticide RUP report: 1

Product: HOLLOW HEART CF
Contact: DAVID KASPROWICZ PLANT MANAGER P: 716-882-5905
Status: Not reported
Registration Number: 003008-NY-001
Report Year: 2009
Permit: Not reported
Product Number: 75341-12
Product Type: End-use blend, formulation, or concentrate
Product Class: Not reported
Product Use: Not reported
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE INC (Continued)

1005434451

Zero product: No
Pesticide RUP report: 2

Product: DURAFUME
Contact: DAVID KASPROWICZ PLANT MANAGER P: 716-882-5905
Status: Not reported
Registration Number: 003008-NY-001
Report Year: 2009
Permit: Not reported
Product Number: 1448-104
Product Type: Repackaged or relabeled
Product Class: Not reported
Product Use: Not reported
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: No
Pesticide RUP report: 2

Product: CU 89 RTU II
Contact: DAVID KASPROWICZ PLANT MANAGER P: 716-882-5905
Status: Not reported
Registration Number: 003008-NY-001
Report Year: 2009
Permit: Not reported
Product Number: 75340-4
Product Type: End-use blend, formulation, or concentrate
Product Class: Not reported
Product Use: Not reported
UOM: Not reported
Market: Marketed in the United States
Region: Not reported
Zero product: No
Pesticide RUP report: 2

Product: COP R NAP
Contact: DAVID KASPROWICZ PLANT MANAGER P: 716-882-5905
Status: Not reported
Registration Number: 003008-NY-001
Report Year: 2009
Permit: Not reported
Product Number: 3008-11
Product Type: Repackaged or relabeled
Product Class: Not reported
Product Use: Not reported
UOM: Not reported
Market: Marketed in the United States
Region: Not reported
Zero product: No
Pesticide RUP report: 2

Product: OSMOSE FLURODS
Contact: DAVID KASPROWICZ PLANT MANAGER P: 716-882-5905
Status: Not reported
Registration Number: 003008-NY-001
Report Year: 2009
Permit: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE INC (Continued)

1005434451

Product Number: 75341-6
Product Type: End-use blend, formulation, or concentrate
Product Class: Not reported
Product Use: Not reported
UOM: Not reported
Market: Marketed in the United States and exported out of the United States
Region: Not reported
Zero product: No
Pesticide RUP report: 2

AST:

Region: STATE
DEC Region: 9
Site Status: Active
Facility Id: 9-014583
Program Type: PBS
UTM X: 184387.27523
UTM Y: 4757489.8802399999
Expiration Date: 2016/09/02
Site Type: Manufacturing (Other than Chemical)/Processing

Affiliation Records:

Site Id: 52006
Affiliation Type: Facility Owner
Company Name: OSMOSE INC
Contact Type: PLANT MANAGER
Contact Name: EDWIN GOETZ
Address1: 980 ELLICOTT ST
Address2: Not reported
City: BUFFALO
State: NY
Zip Code: 14209
Country Code: 001
Phone: (716) 882-5905
EMail: Not reported
Fax Number: Not reported
Modified By: SLZIEMBA
Date Last Modified: 6/23/2011

Site Id: 52006
Affiliation Type: Mail Contact
Company Name: OSMOSE INC
Contact Type: PLANT MANAGER
Contact Name: EDWIN GOETZ
Address1: 980 ELLICOTT ST
Address2: Not reported
City: BUFFALO
State: NY
Zip Code: 14209
Country Code: 001
Phone: (716) 882-5905
EMail: Not reported
Fax Number: Not reported
Modified By: SLZIEMBA
Date Last Modified: 6/23/2011

Site Id: 52006

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE INC (Continued)

1005434451

Affiliation Type: On-Site Operator
Company Name: OSMOSE INC
Contact Type: Not reported
Contact Name: EDWIN GOETZ
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 999
Phone: (716) 882-5905
EMail: Not reported
Fax Number: Not reported
Modified By: SLZIEMBA
Date Last Modified: 6/23/2011

Site Id: 52006
Affiliation Type: Emergency Contact
Company Name: OSMOSE INC
Contact Type: Not reported
Contact Name: EDWIN GOETZ
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 999
Phone: (716) 882-5905
EMail: Not reported
Fax Number: Not reported
Modified By: SLZIEMBA
Date Last Modified: 6/23/2011

Tank Info:

Tank Number: 5
Tank Id: 160442
Material Code: 0001
Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Equipment Records:

A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
G01 - Tank Secondary Containment - Diking (Aboveground)
J02 - Dispenser - Suction Dispenser
K99 - Spill Prevention - Other
L09 - Piping Leak Detection - Exempt Suction Piping
B01 - Tank External Protection - Painted/Asphalt Coating
F00 - Pipe External Protection - None
I04 - Overfill - Product Level Gauge (A/G)
E02 - Piping Secondary Containment - Vault (with Access)
H06 - Tank Leak Detection - Impervious Barrier/Concrete Pad (A/G)
C01 - Pipe Location - Aboveground
I01 - Overfill - Float Vent Valve

Tank Location: 3
Tank Type: Steel/Carbon Steel/Iron

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OSMOSE INC (Continued)

1005434451

Tank Status: In Service
Pipe Model: Not reported
Install Date: 08/01/1989
Capacity Gallons: 12000
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True
Modified By: SLZIEMBA
Last Modified: 06/23/2011
Material Name: #2 Fuel Oil (On-Site Consumption)

**C19
SE
< 1/8
0.061 mi.
324 ft.**

**DEGUSSA CORP
980 ELLICOTT ST - WAREHOUSE
BUFFALO, NY**

**RCRA NonGen / NLR
FINDS
NY MANIFEST**

**1004760440
NYR000045112**

Site 6 of 6 in cluster C

**Relative:
Lower**

RCRA NonGen / NLR:

**Actual:
639 ft.**

Date form received by agency: 01/01/2007
Facility name: DEGUSSA CORP
Facility address: 980 ELLICOTT ST - WAREHOUSE
BUFFALO, NY 14209
EPA ID: NYR000045112
Mailing address: PO BOX 606
THEODORE, NY 36590
Contact: CONNIE TWIFORD
Contact address: PO BOX 606
THEODORE, NY 36590
Contact country: US
Contact telephone: (334) 443-4427
Contact email: Not reported
EPA Region: 02
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: OSMOSE INC
Owner/operator address: 980 ELLICOTT ST
BUFFALO, NY 14209

Owner/operator country: US
Owner/operator telephone: (716) 882-5905
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: OSMOSE INC
Owner/operator address: 980 ELLICOTT ST
BUFFALO, NY 14209

Owner/operator country: US
Owner/operator telephone: (716) 882-5905
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DEGUSSA CORP (Continued)

1004760440

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006
Facility name: DEGUSSA CORP
Classification: Not a generator, verified

Date form received by agency: 09/23/1997
Facility name: DEGUSSA CORP
Classification: Conditionally Exempt Small Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110004537494

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

NY MANIFEST:

EPA ID: NYR000045112
Country: USA
Mailing Name: DEGUSSA CORP
Mailing Contact: DEGUSSA CORP
Mailing Address: 65 CHALLENGER RD
Mailing Address 2: Not reported
Mailing City: RIDGEFIELD PARK
Mailing State: NJ
Mailing Zip: 07660
Mailing Zip4: Not reported
Mailing Country: USA
Mailing Phone: 207-807-3634

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DEGUSSA CORP (Continued)

1004760440

Document ID: MAK4744730
Manifest Status: Completed after the designated time period for a TSDf to get a copy to the DEC
Trans1 State ID: MA13571
Trans2 State ID: HQ80960OR
Generator Ship Date: 971112
Trans1 Recv Date: 971112
Trans2 Recv Date: 971117
TSD Site Recv Date: 971117
Part A Recv Date: 971201
Part B Recv Date: 971212
Generator EPA ID: NYR000045112
Trans1 EPA ID: SCD987574647
Trans2 EPA ID: MOD095038998
TSDf ID: MAD000604447
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00010
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Waste Code: Not reported
Quantity: 00010
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Waste Code: Not reported
Quantity: 00010
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Waste Code: Not reported
Quantity: 00005
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 97

Document ID: MAK4744720
Manifest Status: Completed after the designated time period for a TSDf to get a copy to the DEC
Trans1 State ID: MA13571
Trans2 State ID: HQ80960OR
Generator Ship Date: 971112
Trans1 Recv Date: 971112
Trans2 Recv Date: 971117
TSD Site Recv Date: 971117
Part A Recv Date: 971201
Part B Recv Date: 971212
Generator EPA ID: NYR000045112
Trans1 EPA ID: SCD987574647

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

DEGUSSA CORP (Continued)

1004760440

Trans2 EPA ID: MOD095038998
 TSD ID: MAD000604447
 Waste Code: D001 - NON-LISTED IGNITABLE WASTES
 Quantity: 00010
 Units: P - Pounds
 Number of Containers: 001
 Container Type: DF - Fiberboard or plastic drums (glass)
 Handling Method: B Incineration, heat recovery, burning.
 Specific Gravity: 100
 Waste Code: Not reported
 Quantity: 00010
 Units: P - Pounds
 Number of Containers: 001
 Container Type: DF - Fiberboard or plastic drums (glass)
 Handling Method: B Incineration, heat recovery, burning.
 Specific Gravity: 100
 Waste Code: Not reported
 Quantity: 00010
 Units: P - Pounds
 Number of Containers: 001
 Container Type: DF - Fiberboard or plastic drums (glass)
 Handling Method: B Incineration, heat recovery, burning.
 Specific Gravity: 100
 Waste Code: Not reported
 Quantity: 00010
 Units: P - Pounds
 Number of Containers: 001
 Container Type: DF - Fiberboard or plastic drums (glass)
 Handling Method: B Incineration, heat recovery, burning.
 Specific Gravity: 100
 Waste Code: Not reported
 Quantity: 00010
 Units: P - Pounds
 Number of Containers: 001
 Container Type: DF - Fiberboard or plastic drums (glass)
 Handling Method: B Incineration, heat recovery, burning.
 Specific Gravity: 100
 Year: 97

20
South
< 1/8
0.067 mi.
352 ft.

MAIN - SUMMER CORPORATION
MAIN & SUMMER STREETS
BUFFALO, NY

NY LTANKS S100118156
N/A

Relative:
Lower

LTANKS:
 Site ID: 197277
 Spill Number/Closed Date: 8908322 / 4/2/1990
 Spill Date: 11/20/1989
 Spill Cause: Tank Failure
 Spill Source: Commercial/Industrial
 Spill Class: Not reported
 Cleanup Ceased: 2/12/1990
 Cleanup Meets Standard: True
 SWIS: 1502
 Investigator: LYONS
 Referred To: Not reported
 Reported to Dept: 11/20/1989
 CID: Not reported
 Water Affected: Not reported
 Spill Notifier: Responsible Party
 Last Inspection: 11/30/1989
 Recommended Penalty: False
 UST Involvement: False
 Remediation Phase: 0

Actual:
642 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MAIN - SUMMER CORPORATION (Continued)

S100118156

Date Entered In Computer: 11/22/1989
Spill Record Last Update: 4/10/1990
Spiller Name: Not reported
Spiller Company: MAIN-SUMMER CORPORATION
Spiller Address: 25 SUMMER STREET
Spiller City,St,Zip: BUFFALO, NY 14209
Spiller County: 001
Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported
DEC Region: 9
DER Facility ID: 164194
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "MEL"11/20/89: MEL INSPECTON. TANK REMOVED FROM GROUND, NO CONTAMINATED SOIL OBSERVED IN EXCAVATION. TANK FILLED WITH SAND. TOLD MR. CORDES THAT TANK HAD TO BE CLEANED, AND SAND IN TANK PROPERLY DISPOSED. 12/11/89: RNL TELCON WITH DICK DALEY FROM ELMWOOD TANK. MR. DALEY NOTIFIED DEC THAT ELMWOOD TANK WAS TO DO CLEAN UP WORK. 03/07/90: MEL RECIEVED PROPER RECIEPTS FROM DISPOSAL OF CONTAMINATED MATERIALS. NO FURTHER ACTION NECESSARY, RECOMMEND FILE BE CLOSED. 11/30/90: MEL INSPECTION. TANK, AND SOIL IN TANK, STILL ON SITE. SPOKE WITH OWNER, WHO SAID THAT ELMWOOD TANK WOULD BE REMOVING TANK AND CONTAMINATED SOIL. TO SEND IN RECIEPTS.
Remarks: TANK FOUND AT MAIN AND SUMMER SITE WHILE DIGGING FOR FOOTER

Material:
Site ID: 197277
Operable Unit ID: 933377
Operable Unit: 01
Material ID: 445070
Material Code: 0001A
Material Name: #2 Fuel Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 5
Units: Gallons
Recovered: 5
Resource Affected: Not reported
Oxygenate: False

Tank Test:

D21
WSW
< 1/8
0.080 mi.
424 ft.

SCHWARTZ SOL DRY CLNR
11 SUMMER ST
BUFFALO, NY
Site 1 of 7 in cluster D

EDR US Hist Cleaners 1014534996
N/A

Relative:
Higher

EDR Historical Cleaners:
Name: SCHWARTZ SOL DRY CLNR
Year: 1946
Type: CLEANERS AND DYERS

Actual:
649 ft.

Name: METROPOLITAN WARDROBE CLO CLNRS
Year: 1950
Type: CLEANERS AND DYERS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SCHWARTZ SOL DRY CLNR (Continued)

1014534996

Name: METROPOLITAN WARDROBE CLO CLNRS
Year: 1955
Type: CLEANERS AND DYERS

Name: METROPOLITAN CLNS & LNDRY
Year: 1960
Type: LAUNDRIES

Name: METROPOLITAN CLNS & LNDRY
Year: 1964
Type: CLEANERS AND DYERS

Name: METROPOLITAN WARDROBE SERVICE INC
Year: 1970
Type: CLEANERS AND DYERS

Name: METROPOLITAN WARDROBE SERVICE INC
Year: 1975
Type: CLEANERS AND DYERS

Name: METROPOLITAN WARDROBE SERVICE INC
Year: 1980
Type: CLEANERS AND DYERS

D22
WSW
< 1/8
0.080 mi.
424 ft.

PRECISION ABRASIVES CORP
11 SUMMER ST
BUFFALO, NY 14209

RCRA NonGen / NLR 1000457784
FINDS NYD986930584

Site 2 of 7 in cluster D

Relative:
Higher

RCRA NonGen / NLR:

Actual:
649 ft.

Date form received by agency: 01/01/2007
Facility name: PRECISION ABRASIVES CORP
Facility address: 11 SUMMER ST
BUFFALO, NY 14209
EPA ID: NYD986930584
Mailing address: UNKNOWN
BUFFALO, NY 14209
Contact: Not reported
Contact address: UNKNOWN
BUFFALO, NY 14209
Contact country: US
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 02
Land type: Facility is not located on Indian land. Additional information is not known.
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: Not reported
Owner/operator address: NOT REQUIRED
NOT REQUIRED, WY 99999
Owner/operator country: US
Owner/operator telephone: (212) 555-1212
Legal status: Private
Owner/Operator Type: Operator

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PRECISION ABRASIVES CORP (Continued)

1000457784

Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: Not reported
Owner/operator address: NOT REQUIRED
NOT REQUIRED, WY 99999
Owner/operator country: US
Owner/operator telephone: (212) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006
Facility name: PRECISION ABRASIVES CORP
Classification: Not a generator, verified

Date form received by agency: 12/31/1979
Facility name: PRECISION ABRASIVES CORP
Classification: Unverified

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 09/06/1990
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

FINDS:

Registry ID: 110004455973

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport,

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

PRECISION ABRASIVES CORP (Continued)

1000457784

and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

23
ENE
 < 1/8
 0.081 mi.
 426 ft.

BILLUPS BROTHERS CLEANERS
53 DODGE ST
BUFFALO, NY 14209

EDR US Hist Cleaners

1014534855
N/A

Relative:
Lower

EDR Historical Cleaners:

Name: BILLUPS BROTHERS CLEANERS
 Year: 1970
 Type: CLEANERS AND DYERS

Actual:
639 ft.

D24
WSW
 < 1/8
 0.082 mi.
 433 ft.

SCHUELE PAINT CO
12 SUMMER ST
BUFFALO, NY 14209

RCRA-SQG

1012186688
NYR000165506

Site 3 of 7 in cluster D

Relative:
Higher

RCRA-SQG:

Date form received by agency: 05/28/2009
 Facility name: SCHUELE PAINT CO
 Facility address: 12 SUMMER ST
 BUFFALO, NY 14209
 EPA ID: NYR000165506
 Mailing address: SUMMER ST
 BUFFALO, NY 14209
 Contact: PAUL R LEAHEY
 Contact address: SUMMER ST
 BUFFALO, NY 14209
 Contact country: US
 Contact telephone: (716) 884-3374
 Contact email: Not reported
 EPA Region: 02
 Classification: Small Small Quantity Generator
 Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Actual:
649 ft.

Owner/Operator Summary:

Owner/operator name: SCHUELE PAINT CO INC
 Owner/operator address: Not reported
 Not reported
 Owner/operator country: Not reported
 Owner/operator telephone: Not reported
 Legal status: Private
 Owner/Operator Type: Operator
 Owner/Op start date: 09/01/1994
 Owner/Op end date: Not reported

Owner/operator name: SUMMER ST ASSOCIATES

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SCHUELE PAINT CO (Continued)

1012186688

Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/2007
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
Used oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D007
Waste name: CHROMIUM

Waste code: D008
Waste name: LEAD

Waste code: D035
Waste name: METHYL ETHYL KETONE

Violation Status: No violations found

D25
WSW
< 1/8
0.082 mi.
433 ft.

SCHUELE PAINT CO
12 SUMMER ST
BUFFALO, NY 14209
Site 4 of 7 in cluster D

NY MANIFEST S110047290
N/A

Relative:
Higher

NY MANIFEST:
EPA ID: NYR000165506
Country: USA
Mailing Name: SCHUELE PAINT CO
Mailing Contact: SCHUELE PAINT CO

Actual:
649 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SCHUELE PAINT CO (Continued)

S110047290

Mailing Address: 12 SUMMER ST
Mailing Address 2: Not reported
Mailing City: BUFFALO
Mailing State: NY
Mailing Zip: 14209
Mailing Zip4: Not reported
Mailing Country: USA
Mailing Phone: 716-884-3374

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD986903904
Trans2 State ID: Not reported
Generator Ship Date: 2009-06-29
Trans1 Recv Date: 2009-06-29
Trans2 Recv Date: Not reported
TSD Site Recv Date: 2009-07-08
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000165506
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: OHD001926740
Waste Code: Not reported
Quantity: 6043.0
Units: P - Pounds
Number of Containers: 3.0
Container Type: CF - Fiber or plastic boxes, cartons
Handling Method: L Landfill.
Specific Gravity: 1.0
Year: 2009
Manifest Tracking Num: 000791275GBF
Import Ind: N
Export Ind: N
Discr Quantity Ind: Y
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H141

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD986903904
Trans2 State ID: Not reported
Generator Ship Date: 2010-10-13
Trans1 Recv Date: 2010-10-13
Trans2 Recv Date: Not reported
TSD Site Recv Date: 2010-10-21
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000165506

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SCHUELE PAINT CO (Continued)

S110047290

Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID: OHD001926740
Waste Code: Not reported
Quantity: 5130.0
Units: P - Pounds
Number of Containers: 3.0
Container Type: CF - Fiber or plastic boxes, cartons
Handling Method: L Landfill.
Specific Gravity: 1.0
Year: 2010
Manifest Tracking Num: 002875397FLE
Import Ind: N
Export Ind: N
Discr Quantity Ind: Y
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H141

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD986903904
Trans2 State ID: Not reported
Generator Ship Date: 2011-07-12
Trans1 Recv Date: 2011-07-12
Trans2 Recv Date: Not reported
TSD Site Recv Date: 2011-07-14
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000165506
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID: OHD001926740
Waste Code: Not reported
Quantity: 165.0
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 3.0
Container Type: DM - Metal drums, barrels
Handling Method: L Landfill.
Specific Gravity: 1.0
Year: 2011
Manifest Tracking Num: 002874309FLE
Import Ind: N
Export Ind: N
Discr Quantity Ind: Y
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SCHUELE PAINT CO (Continued)

S110047290

Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H141

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD986903904
Trans2 State ID: Not reported
Generator Ship Date: 2011-06-27
Trans1 Recv Date: 2011-06-27
Trans2 Recv Date: Not reported
TSD Site Recv Date: 2011-07-01
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000165506
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: OHD001926740
Waste Code: Not reported
Quantity: 12084.0
Units: P - Pounds
Number of Containers: 6.0
Container Type: CF - Fiber or plastic boxes, cartons
Handling Method: L Landfill.
Specific Gravity: 1.0
Year: 2011
Manifest Tracking Num: 002874285FLE
Import Ind: N
Export Ind: N
Discr Quantity Ind: Y
Discr Type Ind: Y
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H141

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD986903904
Trans2 State ID: Not reported
Generator Ship Date: 2011-07-12
Trans1 Recv Date: 2011-07-12
Trans2 Recv Date: Not reported
TSD Site Recv Date: 2011-07-14
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000165506
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: OHD001926740
Waste Code: Not reported
Quantity: 5538.0
Units: P - Pounds

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SCHUELE PAINT CO (Continued)

S110047290

Number of Containers: 3.0
Container Type: CF - Fiber or plastic boxes, cartons
Handling Method: L Landfill.
Specific Gravity: 1.0
Year: 2011
Manifest Tracking Num: 002874309FLE
Import Ind: N
Export Ind: N
Discr Quantity Ind: Y
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H141

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD986903904
Trans2 State ID: Not reported
Generator Ship Date: 2009-06-29
Trans1 Recv Date: 2009-06-29
Trans2 Recv Date: Not reported
TSD Site Recv Date: 2009-07-08
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000165506
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: OHD001926740
Waste Code: Not reported
Quantity: 6043.0
Units: P - Pounds
Number of Containers: 3.0
Container Type: CF - Fiber or plastic boxes, cartons
Handling Method: L Landfill.
Specific Gravity: 1.0
Year: 2009
Manifest Tracking Num: 000791275GBF
Import Ind: N
Export Ind: N
Discr Quantity Ind: Y
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H141

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

26
East
< 1/8
0.086 mi.
454 ft.

ABANDONED MEDICAL WASTE
1003 ELLICOTT STREET
BUFFALO, NY

NY Spills S104284124
N/A

Relative:
Lower

SPILLS:

Facility ID: 9910017
DER Facility ID: 135005
Facility Type: ER
Site ID: 159831
DEC Region: 9
Spill Date: 11/18/1999
Spill Number/Closed Date: 9910017 / 11/18/1999
Spill Cause: Deliberate
Spill Class: Known release that creates potential for fire or hazard. (Highly Improbable)

SWIS: 1502
Investigator: JFOTTO
Referred To: Not reported
Reported to Dept: 11/18/1999
CID: 204
Water Affected: Not reported
Spill Source: Unknown
Spill Notifier: Fire 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: 11/18/1999
Spill Record Last Update: 11/22/1999
Spiller Name: Not reported
Spiller Company: UNKNOWN
Spiller Address: Not reported
Spiller City,St,Zip: NY
Spiller Company: 999
Contact Name: FIRE DISPATCHER PITTS
Contact Phone: (716) 851-5510
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was

Remarks:

"JFO"11/18/99: JFO TELECON BUFFALO FIRE DISPATCHER PITTS. WASTE HAS BEEN CLEANED UP BY THE BUFFALO FIRE DEPARTMENT. A BLEACH COMPOUND IS BEING SPREAD ON THE AREA WHERE THE WASTE WAS DISCOVERED AND WILL BE BAGGED. BUFFALO GENERAL HOSPITAL WILL ACCEPT THE WASTE AND CLEANUP MATERIAL AND DISPOSE. NO ACTION NECESSARY. CLOSED
MEDICAL WASTE FOUND AT ABOVE LOCATION

Material:

Site ID: 159831
Operable Unit ID: 1088708
Operable Unit: 01
Material ID: 299079
Material Code: 0053A
Material Name: MEDICAL WASTE
Case No.: Not reported
Material FA: Other
Quantity: 0
Units: Gallons
Recovered: No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ABANDONED MEDICAL WASTE (Continued)

S104284124

Resource Affected: Not reported
Oxygenate: False

Tank Test:

E27
North
< 1/8
0.090 mi.
475 ft.

GIBSON BROS AUTO REPRS
10 COE PL
BUFFALO, NY
Site 1 of 2 in cluster E

EDR US Hist Auto Stat **1014538853**
N/A

Relative:
Higher

EDR Historical Auto Stations:

Name: GIBSON BROS AUTO REPRS
Year: 1930
Type: AUTOMOBILE REPAIRING

Actual:
650 ft.

Name: GIBSON JAS AUTO REPR
Year: 1935
Type: AUTOMOBILE REPAIRING

F28
SE
< 1/8
0.090 mi.
476 ft.

MCPMAHON WILFORD M CLO CLNR
970 ELLICOTT ST
BUFFALO, NY
Site 1 of 6 in cluster F

EDR US Hist Cleaners **1014535612**
N/A

Relative:
Lower

EDR Historical Cleaners:

Name: MCPMAHON WILFORD M CLO CLNR
Year: 1940
Type: CLOTHES PRESSERS AND CLEANERS

Actual:
638 ft.

Name: APFEL WALTER H CLO CLNR
Year: 1946
Type: CLEANERS AND DYERS

Name: APFEL WALTER H CLO CLNR
Year: 1950
Type: CLEANERS AND DYERS

Name: APFEL WALTER H CLO CLNR
Year: 1955
Type: CLEANERS AND DYERS

F29
SE
< 1/8
0.091 mi.
483 ft.

UNIVERSAL CARPET
967 ELLICOTT ST
BUFFALO, NY 14209
Site 2 of 6 in cluster F

EDR US Hist Cleaners **1014536315**
N/A

Relative:
Lower

EDR Historical Cleaners:

Name: UNIVERSAL CARPET
Year: 2008
Type: CARPET & RUG CLEANERS

Actual:
638 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

F30 **G & M GARAGE AUTO REPR** **EDR US Hist Auto Stat** **1014538823**
SE **967 ELLICOTT ST**
< 1/8 **BUFFALO, NY**
0.091 mi.
483 ft. **Site 3 of 6 in cluster F**

Relative: EDR Historical Auto Stations:
Lower Name: F & J AUTO SERVICE
 Year: 1940
 Type: AUTOMOBILE REPAIRING
Actual:
638 ft.
 Name: NEBRICH & CO AUTO ELECTNS
 Year: 1946
 Type: AUTOMOBILE REPAIRING
 Name: NEBRICH & CO AUTO REPRS
 Year: 1950
 Type: AUTOMOBILE REPAIRING
 Name: NEBRICH & CO AUTO REPRS
 Year: 1955
 Type: AUTOMOBILE REPAIRING
 Name: NEBRICH & CO AUTO REPRS
 Year: 1960
 Type: AUTOMOBILE REPAIRING
 Name: G & M GARAGE AUTO REPR
 Year: 1964
 Type: AUTOMOBILE REPAIRING

F31 **SCHWAB FRED O AUTO REPR** **EDR US Hist Auto Stat** **1014537927**
SE **966 ELLICOTT ST**
< 1/8 **BUFFALO, NY**
0.094 mi.
496 ft. **Site 4 of 6 in cluster F**

Relative: EDR Historical Auto Stations:
Lower Name: SCHWAB FRED O AUTO REPR
 Year: 1935
 Type: AUTOMOBILE REPAIRING
Actual:
638 ft.

F32 **WILL BEE DRY CLEANERS** **EDR US Hist Cleaners** **1014535585**
SE **963 ELLICOTT ST**
< 1/8 **BUFFALO, NY**
0.094 mi.
496 ft. **Site 5 of 6 in cluster F**

Relative: EDR Historical Cleaners:
Lower Name: WILL BEE DRY CLEANERS
 Year: 1935
 Type: CLOTHES PRESSERS AND CLEANERS
Actual:
638 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

F33 **MELCO AUTO SERV AUTO REPR** **EDR US Hist Auto Stat** **1014537438**
SE **961 ELLICOTT ST** **N/A**
< 1/8 **BUFFALO, NY**
0.095 mi.
504 ft. **Site 6 of 6 in cluster F**

Relative: EDR Historical Auto Stations:
Lower Name: MELCO AUTO SERV AUTO REPR
 Year: 1964
Actual: Type: AUTOMOBILE REPAIRING
638 ft.

D34 **RAYFIELD SIDNEY J AUTO REPR** **EDR US Hist Auto Stat** **1014538189**
WSW **20 SUMMER ST** **N/A**
< 1/8 **BUFFALO, NY**
0.097 mi.
511 ft. **Site 5 of 7 in cluster D**

Relative: EDR Historical Auto Stations:
Higher Name: RAYFIELD SIDNEY J AUTO REPR
 Year: 1935
Actual: Type: AUTOMOBILE REPAIRING
649 ft.

 Name: KAYS ELEC SERVICE AUTO REPRS
 Year: 1946
 Type: AUTOMOBILE REPAIRING

E35 **FORMER SARABETH BLDG** **NY Spills** **S106737055**
North **1219-1233 MAIN AND** **N/A**
< 1/8 **BUFFALO, NY**
0.099 mi.
525 ft. **Site 2 of 2 in cluster E**

Relative: **SPILLS:**
Higher Facility ID: 0600379
 DER Facility ID: 312616
Actual: Facility Type: ER
651 ft. Site ID: 362362
 DEC Region: 9
 Spill Date: 4/11/2006
 Spill Number/Closed Date: 0600379 / 10/26/2006
 Spill Cause: Other
 Spill Class: Known release with minimal potential for fire or hazard. DEC Response.
 Willing Responsible Party. Corrective action taken.

SWIS:
 Investigator: JFOTTO
 Referred To: Not reported
 Reported to Dept: 4/11/2006
 CID: 444
 Water Affected: Not reported
 Spill Source: Commercial/Industrial
 Spill Notifier: Other
 Cleanup Ceased: Not reported
 Cleanup Meets Std: False
 Last Inspection: 9/15/2006
 Recommended Penalty: False
 UST Trust: False
 Remediation Phase: 0
 Date Entered In Computer: 4/11/2006

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORMER SARABETH BLDG (Continued)

S106737055

Spill Record Last Update: 5/9/2007
Spiller Name: WILL LAW
Spiller Company: ARTSPACE PROJECT
Spiller Address: 250 THIRD ST NORTH
Spiller City,St,Zip: MINNEAPOLIS, MN 55401
Spiller Company: 001
Contact Name: PETE GORTON
Contact Phone: (716)308-8220
DEC Memo: 04/11/06 JFO TELCON WITH JEFF RAWLEY WITH LCS. THEY DID A PHASE II ON THE PROPERTY. THIS SITE HAS AN INACTIVE STATUS. JEFF WILL SUBMIT THE RESULTS WHEN HE GETS APPROVAL. THE RESULTS WILL DETERMINE IF THE SITE CAN REMAIN INACTIVE.04/21/06 JFO RECEIVED A COPY OF THE PHASE II AND DISCUSSED WITH SAC. WE AGREED THAT THERE ARE A COUPLE AREAS THAT NEED TO BE ADDRESSED. DOUG REID FROM LCS WANTS TO KNOW IF THEY CAN REMEDIATE WHEN THE CONSTRUCTION BEGINS. I CALLED DOUG AND GAVE A VERBAL APPROVAL.04/25/06 JFO CALL FROM DOUG REID, HE NEEDS A LTR INDICATING THE CONTAMINATION CAN BE ADDRESSED WHEN THEY BEGIN CONSTRUCTION THIS SUMMER. LETTER SENT05/16/06 JFO RECEIVED THE CORRECTIVE ACTION PLAN. REVIEWED AND APPROVED WHEN THEY ADD BH-7 INVESTIGATION. LTR SENT TO DOUG REID. CC'D CAMERON O'CONNOR DOH.05/ /06 JFO RECEIVED A CALL FROM PETER GORTON WITH PAN AMERICAN ENV. THEY WILL BE DOING THE WORK AND WILL FOLLOW THE PLAN SUBMITTED BY LCS.06/14/06 JFO ON SITE MET WITH PETER G. IN BH-1 THEY FOUND NO CONTAMINATION, A SAMPLE WAS COLLECTED. THEY HAVE DUG THE AREA NORTH OF BH-4 AND FOUND CONTAMINATED SOIL. THEY ARE STAGING IT ON THE SOUTH SIDE OF THE PROPERTY. 06/22/06 JFO ON SITE MET WITH JUSTIN AND PETER G. THEY DISCOVERED A TANK IN THE AREA OF BH-11 THEY WILL REMOVE IT AND DIG TO CLEAN. SO FAR THEY HAVE DISPOSED OF APPROX 1500 TONS.06/29/06 JFO ON SITE MET WITH JUSTIN. THE FIRST PIT IS BEING BACKFILLED. SAMPLES COLLECTED. THE SECOND PIT IS CLEAN AT SOUTH END AND BOTTOM. THEY WILL KEEP DIGGING TO THE NORTH.07/07/06 JFO ON SITE MET WITH PETE G. THEY HAVE DUG TO THE FENCE LINE ON THE EAST SIDE OF THE PROPERTY.07/24/06 JFO ON SITE WITH PETE GORTON. EXCAVATION COMPLETE. SIDEWALLS AND BOTTOM SAMPLES COLLECTED. 12,000 TONS DISPOSED.09/15/06 JFO AND FG ON SITE MET WITH PETE G AND ATTY: CRAIG SLATER. SAVARINO WAS INSTALLING A 48" SEWER LINE ON THE SOUTH SIDE OF THE PROPERTY AND DISCOVERED SOME DISCOLORED SOIL. A 3' AREA 12" THICK. THEY WILL SAMPLE. ALSO THEY DUG A TEST PIT (12" DEEP) IN THE AREA OF BH-7 AND BH-6. THEY FOUND NO CONTAMINATION OR ODORS. THEY SAMPLED BOTH PITS.09/21/06 JFO RECEIVED THE RESULTS OF THE SAMPLES. 1 THE STORM SEWER MATERIAL IS SLIGHTLY OVER TAGMS ON ONE COMPOUND ONLY. BENZO(A)ANTHRACENE 320 PPB TAGMS 224 PPB 2 THE TEST PIT IS <TAGMS FOR SVOC AND VOC. 3 THE SOIL PILE IS OVER TAGMS ON 5 COMPOUNDS AND WILL HAVE TO BE DISPOSED.JFO CALL TO PETE GORTON AND INFORMED HIM THAT THE SOIL PILE NEEDED TO BE DISPOSED.10/02/06 JFO RECEIVED E-MAIL FROM CRAIG SLATER. HE SPOKE WITH MARK HANS WITH SOLID WASTE. MARK HAS NO PROBLEM REUSING THE SOIL UNDER THE BUD EXEMPTION SINCE IT IS ONLY SLIGHTLY ABOVE TAGMS FOR 5 COMPOUNDS. I DISCUSSED WITH FG AND AGREE. I SENT CRAIG AN E-MAIL INFORMING HIM THE SOIL CAN BE REUSED ON SITE. 10/26/06 JFO RECEIVED THE CLOSURE REPORT. FOR THE 2 MAIN EXCAVATIONS, ALL SAMPLE RESULTS ARE <TAGMS. STORM SEWER EXCAVATION SAMPLE IS ABOVE TAGMS FOR 1 COMPOUNDBENZO(A)ANTHRACENE 320PPB LCS SOIL BORING BH-01 IS ABOVE TAGMS FOR 2 COMPOUNDSBENZO(A)PYRENE 220PPB AND DIBENZO(A)ANTHRACENE 50PPBTHIS SITE WILL BE INACTIVE. NO FURTHER ACTION REQUIRED AT THIS TIME.CLOSED05/09/07 JFO SENT INACTIVE LTR TO ATTY. CRAIG SLATER AT HIS REQUEST
Remarks: WHILE DOING SOIL BORINGS FOUND CONTAMINATION:

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORMER SARABETH BLDG (Continued)

S106737055

Material:

Site ID: 362362
Operable Unit ID: 1120463
Operable Unit: 01
Material ID: 2109959
Material Code: 0009
Material Name: Gasoline
Case No.: Not reported
Material FA: Petroleum
Quantity: Not reported
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False
Site ID: 362362
Operable Unit ID: 1120463
Operable Unit: 01
Material ID: 2109955
Material Code: 0066A
Material Name: UNKNOWN PETROLEUM
Case No.: Not reported
Material FA: Petroleum
Quantity: Not reported
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Facility ID: 0485354
DER Facility ID: 312616
Facility Type: ER
Site ID: 335483
DEC Region: 9
Spill Date: 12/22/2004
Spill Number/Closed Date: 0485354 / 1/27/2005
Spill Cause: Other
Spill Class: Not reported
SWIS: 1502
Investigator: FXGALLEG
Referred To: Not reported
Reported to Dept: 12/22/2004
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: 12/22/2004
Spill Record Last Update: 1/27/2005

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORMER SARABETH BLDG (Continued)

S106737055

Spiller Name: Not reported
Spiller Company: Not reported
Spiller Address: Not reported
Spiller City,St,Zip: Not reported
Spiller Company: Not reported
Contact Name: MARK PAGANO
Contact Phone: Not reported
DEC Memo: 1/27/05 CLOSED OUT UNDER SPILL 0485478. PLEASE REFER TO THAT SPILL FOR CLOSURE DOCUMENTATION.

Remarks: Contamination found while conducting subsurface investigation.
Suspect former USTs. Contamination also found on adjoining City of Buffalo property.

Material:

Site ID: 335483
Operable Unit ID: 1097544
Operable Unit: 01
Material ID: 577530
Material Code: 0009
Material Name: Gasoline
Case No.: Not reported
Material FA: Petroleum
Quantity: Not reported
Units: Gallons
Recovered: Not reported
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Facility ID: 0485478
DER Facility ID: 272092
Facility Type: ER
Site ID: 336757
DEC Region: 9
Spill Date: 1/26/2005
Spill Number/Closed Date: 0485478 / 1/27/2005
Spill Cause: Other
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS: 1502
Investigator: FXGALLEG
Referred To: Not reported
Reported to Dept: 1/26/2005
CID: Not reported
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: 1/27/2005
Spill Record Last Update: 1/27/2005

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORMER SARABETH BLDG (Continued)

S106737055

Spiller Name: DENNIS SUTTON
Spiller Company: CITY OF BUFFALO
Spiller Address: CITY HALL
Spiller City,St,Zip: BUFFALO, NY 14202
Spiller Company: 001
Contact Name: Not reported
Contact Phone: Not reported
DEC Memo: 1/27/05 ONLY ONE CONTAMINANT EXCEEDS TAGM'S FOR N PROPYL BENZENE. THERE MAY BE UST'S ON SITE. FG SPOKE TO THE DEVELOPER WHO IS PLANNING TO REMOVE UST'S IF FOUND AND CONTAMINATION IF THEIR DEVELOPMENT COMES ACROSS ANY. THE SITE IS INACTIVE.
Remarks: PHASE I SITE ASSESSMENT COMPLETED FOR THIS PROPERTY REPORTING THE PRESENCE OF PETROLEUM CONTAMINATION IN THE SUBSURFACE SLIGHTLY ABOVE TAGM'S (BH10 EXCEEDS FOR NPROPYLBENZENE)AND ABOVE STARS. ALSO NOTED POSSIBLE UST'S ON SITE.
Material:
Site ID: 336757
Operable Unit ID: 1098763
Operable Unit: 01
Material ID: 578946
Material Code: 0066A
Material Name: UNKNOWN PETROLEUM
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

G36
SSE
< 1/8
0.100 mi.
530 ft.

NIAGARA MOHAWK
45 BEST STREET
BUFFALO, NY
Site 1 of 4 in cluster G

NY Spills S102177905
N/A

Relative:
Lower

SPILLS:
Facility ID: 8603091
DER Facility ID: 248974
Facility Type: ER
Site ID: 308283
DEC Region: 9
Spill Date: 8/8/1986
Spill Number/Closed Date: 8603091 / 10/16/1986
Spill Cause: Equipment Failure
Spill Class: Not reported
SWIS: 1502
Investigator: LEARY
Referred To: Not reported
Reported to Dept: 8/8/1986
CID: Not reported
Water Affected: Not reported
Spill Source: Commercial/Industrial
Spill Notifier: Responsible Party

Actual:
639 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NIAGARA MOHAWK (Continued)

S102177905

Cleanup Ceased: 10/16/1986
Cleanup Meets Std: True
Last Inspection: 8/11/1986
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 8/8/1986
Spill Record Last Update: 10/28/1986
Spiller Name: Not reported
Spiller Company: NIAGARA MOHAWK
Spiller Address: Not reported
Spiller City,St,Zip: ZZ
Spiller Company: 001
Contact Name: Not reported
Contact Phone: Not reported
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "RNL" // : CONTAINED BY CONCRETE BERM, CLEANED UP BY NIGARA MOHAWK CREW. // : SITE INSPECTION 08/08/86, CLEANUP REQUIRED AND AGREED TO BY SPILLER; SITE INSPECTION 08/11/86, CLEANUP COMPLETE AND SATISFACTORY. // : TELECON 8/8/86. // : TELECONS 08/28/86 TO 09/17/86, SAMPLING RESULTS OF DRIVEWAY NEEDED. // : TELECONS 08/28/86 TO 09/17/86, SAMPLING RESULTS OF DRIVEWAY NEEDED; LETTER 10/16/86 RECEIVED, SAMPLING RESULTS OK, COMPLETE.
Remarks: TRANSFORMER FAILURE

Material:

Site ID: 308283
Operable Unit ID: 899986
Operable Unit: 01
Material ID: 475928
Material Code: 0017A
Material Name: PCB OIL
Case No.: Not reported
Material FA: Petroleum
Quantity: 15
Units: Gallons
Recovered: 15
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Facility ID: 9303440
DER Facility ID: 248974
Facility Type: ER
Site ID: 308284
DEC Region: 9
Spill Date: 6/15/1993
Spill Number/Closed Date: 9303440 / 10/12/1995
Spill Cause: Equipment Failure
Spill Class: Possible release with minimal potential for fire or hazard or Known release with no damage. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS: 1502
Investigator: SORGI
Referred To: Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

NIAGARA MOHAWK (Continued)

S102177905

Reported to Dept: 6/16/1993
 CID: Not reported
 Water Affected: Not reported
 Spill Source: Commercial/Industrial
 Spill Notifier: Responsible Party
 Cleanup Ceased: 10/12/1995
 Cleanup Meets Std: True
 Last Inspection: Not reported
 Recommended Penalty: False
 UST Trust: False
 Remediation Phase: 0
 Date Entered In Computer: 8/13/1993
 Spill Record Last Update: 10/16/1995
 Spiller Name: Not reported
 Spiller Company: NIAGARA MOHAWK
 Spiller Address: 535 WASHINGTON STREET
 Spiller City,St,Zip: BUFFALO, NY
 Spiller Company: 001
 Contact Name: Not reported
 Contact Phone: Not reported
 DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "MJS"10/12/95: MJS REVIEW FILE. NO INSPECTION DUE TO INCORRECT STREET NAME. MJS TELECON TO LENNY FIUME(NIMO) AND HE STATED STATION #49 IS ON BEST ST AND NOT BETH STREET. MJS CORRECTED FILE. NO INSPECTION REQUIRED AT THIS TIME. NO RECEIPTS REQUIRED - MINOR QUANTITY. MJS CLOSE FILE.

Remarks: TRANSFORMER BURNED UP CAUSING OIL TO BOIL OVER.

Material:

Site ID: 308284
 Operable Unit ID: 985320
 Operable Unit: 01
 Material ID: 397015
 Material Code: 0017A
 Material Name: PCB OIL
 Case No.: Not reported
 Material FA: Petroleum
 Quantity: 5
 Units: Gallons
 Recovered: No
 Resource Affected: Not reported
 Oxygenate: False

Tank Test:

D37
WSW
 < 1/8
 0.100 mi.
 530 ft.

MAYFLOWER CLEANERS CLO CLNRS
22 SUMMER ST
BUFFALO, NY
 Site 6 of 7 in cluster D

EDR US Hist Cleaners **1014535999**
 N/A

Relative:
Higher

EDR Historical Cleaners:
 Name: MAYFLOWER CLEANERS CLO CLNRS
 Year: 1940
 Type: CLOTHES PRESSERS AND CLEANERS

Actual:
 650 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

D38
WSW
< 1/8
0.100 mi.
530 ft.

SUMMER STREET GARAGE
22 SUMMER ST
BUFFALO, NY

EDR US Hist Auto Stat 1014538550
N/A

Site 7 of 7 in cluster D

Relative:
Higher

EDR Historical Auto Stations:

Name: SUMMER STREET GARAGE
Year: 1930
Type: AUTOMOBILE GARAGES

Actual:
650 ft.

Name: KAYS ELEC SERVICE AUTO REPR
Year: 1940
Type: AUTOMOBILE REPAIRING

G39
SSE
< 1/8
0.103 mi.
544 ft.

STATION 49
45 BEST ST
BUFFALO, NY

RCRA NonGen / NLR 1000413617
FINDS NYD980783229
NY MANIFEST

Site 2 of 4 in cluster G

Relative:
Lower

RCRA NonGen / NLR:

Date form received by agency: 01/01/2007
Facility name: STATION 49
Facility address: 45 BEST ST
BUFFALO, NY 142092301
EPA ID: NYD980783229
Mailing address: ERIE BLVD W
SYRACUSE, NY 13202
Contact: Not reported
Contact address: ERIE BLVD W
SYRACUSE, NY 13202
Contact country: US
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 02
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Actual:
639 ft.

Owner/Operator Summary:

Owner/operator name: Not reported
Owner/operator address: NOT REQUIRED
NOT REQUIRED, WY 99999

Owner/operator country: US
Owner/operator telephone: (212) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: Not reported
Owner/operator address: NOT REQUIRED
NOT REQUIRED, WY 99999

Owner/operator country: US
Owner/operator telephone: (212) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

STATION 49 (Continued)

1000413617

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006
Facility name: STATION 49
Classification: Not a generator, verified

Date form received by agency: 07/08/1999
Facility name: STATION 49
Classification: Not a generator, verified

Date form received by agency: 11/20/1984
Facility name: STATION 49
Classification: Large Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110004392602

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

NY MANIFEST:

EPA ID: NYD980783229
Country: USA
Mailing Name: NIAGARA MOHAWK
Mailing Contact: FRANK J GRABOWSKI
Mailing Address: 144 KENSINGTON AVE
Mailing Address 2: Not reported
Mailing City: BUFFALO
Mailing State: NY
Mailing Zip: 14214
Mailing Zip4: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

STATION 49 (Continued)

1000413617

Mailing Country: USA
Mailing Phone: 716-831-7426

Document ID: NYB4560849
Manifest Status: Completed after the designated time period for a TSDf to get a copy to the DEC
Trans1 State ID: 1278ABOK
Trans2 State ID: Not reported
Generator Ship Date: 930217
Trans1 Recv Date: 930217
Trans2 Recv Date: Not reported
TSD Site Recv Date: 930218
Part A Recv Date: 930225
Part B Recv Date: 930315
Generator EPA ID: NYD980783229
Trans1 EPA ID: TXD988052494
Trans2 EPA ID: Not reported
TSDf ID: PAD981113749
Waste Code: B002 - PETROLEUM OIL WITH 50 BUT < 500 PPM PCB
Quantity: 03196
Units: K - Kilograms (2.2 pounds)
Number of Containers: 001
Container Type: TT - Cargo tank, tank trucks
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 089
Year: 93

Document ID: NYB4560912
Manifest Status: Completed copy
Trans1 State ID: 1278ABOK
Trans2 State ID: Not reported
Generator Ship Date: 930114
Trans1 Recv Date: 930114
Trans2 Recv Date: Not reported
TSD Site Recv Date: 930115
Part A Recv Date: 930126
Part B Recv Date: 930201
Generator EPA ID: NYD980783229
Trans1 EPA ID: TXD988052494
Trans2 EPA ID: Not reported
TSDf ID: PAD981113749
Waste Code: B002 - PETROLEUM OIL WITH 50 BUT < 500 PPM PCB
Quantity: 04668
Units: K - Kilograms (2.2 pounds)
Number of Containers: 001
Container Type: TT - Cargo tank, tank trucks
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 100
Year: 93

Document ID: NYB4561452
Manifest Status: Completed copy
Trans1 State ID: 1285ABOK
Trans2 State ID: Not reported
Generator Ship Date: 930927

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

STATION 49 (Continued)

1000413617

Trans1 Recv Date: 930927
Trans2 Recv Date: Not reported
TSD Site Recv Date: 930928
Part A Recv Date: 931109
Part B Recv Date: 931013
Generator EPA ID: NYD980783229
Trans1 EPA ID: TXD988052494
Trans2 EPA ID: Not reported
TSD ID: PAD981113749
Waste Code: B002 - PETROLEUM OIL WITH 50 BUT < 500 PPM PCB
Quantity: 07738
Units: K - Kilograms (2.2 pounds)
Number of Containers: 001
Container Type: TT - Cargo tank, tank trucks
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 100
Year: 93

**H40
SSW
< 1/8
0.103 mi.
546 ft.**

**WORLD AUTO PAINT SHOPS OF BUFFALO INC
1114 MAIN ST
BUFFALO, NY 14209**

**RCRA NonGen / NLR 1000278151
NY MANIFEST NYD013780267**

Site 1 of 2 in cluster H

**Relative:
Lower**

RCRA NonGen / NLR:

**Actual:
648 ft.**

Date form received by agency: 01/01/2007
Facility name: WORLD AUTO PAINT SHOPS OF BUFFALO INC
Facility address: 1114 MAIN ST
BUFFALO, NY 14209
EPA ID: NYD013780267
Mailing address: MAIN ST
BUFFALO, NY 14209
Contact: Not reported
Contact address: MAIN ST
BUFFALO, NY 14209
Contact country: US
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 02
Land type: Facility is not located on Indian land. Additional information is not known.
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: ROBERT DUPREE
Owner/operator address: NOT REQUIRED
NOT REQUIRED, WY 99999
Owner/operator country: US
Owner/operator telephone: (212) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: ROBERT DUPREE
Owner/operator address: NOT REQUIRED
NOT REQUIRED, WY 99999

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

WORLD AUTO PAINT SHOPS OF BUFFALO INC (Continued)

1000278151

Owner/operator country: US
Owner/operator telephone: (212) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006
Facility name: WORLD AUTO PAINT SHOPS OF BUFFALO INC
Classification: Not a generator, verified

Date form received by agency: 07/14/1999
Facility name: WORLD AUTO PAINT SHOPS OF BUFFALO INC
Classification: Small Quantity Generator

Date form received by agency: 08/19/1988
Facility name: WORLD AUTO PAINT SHOPS OF BUFFALO INC
Classification: Large Quantity Generator

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 02/22/2010
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

NY MANIFEST:

EPA ID: NYD013780267
Country: USA
Mailing Name: WORLD AUTO PAINT
Mailing Contact: WORLD AUTO PAINT
Mailing Address: 1114 MAIN STREET
Mailing Address 2: Not reported
Mailing City: BUFFALO
Mailing State: NY
Mailing Zip: 14209

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

WORLD AUTO PAINT SHOPS OF BUFFALO INC (Continued)

1000278151

Mailing Zip4: Not reported
Mailing Country: USA
Mailing Phone: 714-884-6880

Document ID: NYA7420986
Manifest Status: Completed copy
Trans1 State ID: P93-069VA
Trans2 State ID: Not reported
Generator Ship Date: 890104
Trans1 Recv Date: 890104
Trans2 Recv Date: Not reported
TSD Site Recv Date: 890106
Part A Recv Date: 890111
Part B Recv Date: 890112
Generator EPA ID: NYD013780267
Trans1 EPA ID: VAD980831580
Trans2 EPA ID: Not reported
TSDF ID: NYD043815703
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00125
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: TT - Cargo tank, tank trucks
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 89

Document ID: NYC1630383
Manifest Status: Completed copy
Trans1 State ID: NYEM4533
Trans2 State ID: Not reported
Generator Ship Date: 920514
Trans1 Recv Date: 920514
Trans2 Recv Date: Not reported
TSD Site Recv Date: 920514
Part A Recv Date: Not reported
Part B Recv Date: 920602
Generator EPA ID: NYD013780267
Trans1 EPA ID: ILD051060408
Trans2 EPA ID: Not reported
TSDF ID: NYD981556541
Waste Code: F005 - UNKNOWN
Quantity: 00027
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 92

Document ID: NYC4065658
Manifest Status: Completed copy
Trans1 State ID: NYNA1635
Trans2 State ID: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

WORLD AUTO PAINT SHOPS OF BUFFALO INC (Continued)

1000278151

Generator Ship Date: 960520
Trans1 Recv Date: 960520
Trans2 Recv Date: Not reported
TSD Site Recv Date: 960520
Part A Recv Date: 960529
Part B Recv Date: 960604
Generator EPA ID: NYD013780267
Trans1 EPA ID: ILD984908202
Trans2 EPA ID: Not reported
TSDF ID: NYD981556541
Waste Code: F005 - UNKNOWN
Quantity: 00027
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 96

Document ID: NYC0067713
Manifest Status: Completed copy
Trans1 State ID: NYEM4533
Trans2 State ID: Not reported
Generator Ship Date: 900125
Trans1 Recv Date: 900125
Trans2 Recv Date: Not reported
TSD Site Recv Date: 900125
Part A Recv Date: 900205
Part B Recv Date: 900205
Generator EPA ID: NYD013780267
Trans1 EPA ID: ILD051060408
Trans2 EPA ID: Not reported
TSDF ID: NYD981556541
Waste Code: F003 - UNKNOWN
Quantity: 00027
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 90

Document ID: NYA9594369
Manifest Status: Completed after the designated time period for a TSDF to get a copy to the DEC
Trans1 State ID: NYEM4533
Trans2 State ID: Not reported
Generator Ship Date: 891109
Trans1 Recv Date: 891109
Trans2 Recv Date: Not reported
TSD Site Recv Date: 891109
Part A Recv Date: 900103
Part B Recv Date: 891117
Generator EPA ID: NYD013780267
Trans1 EPA ID: ILD051060408
Trans2 EPA ID: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

WORLD AUTO PAINT SHOPS OF BUFFALO INC (Continued)

1000278151

TSDF ID: NYD981556541
Waste Code: F003 - UNKNOWN
Quantity: 00027
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 89

Document ID: NYA9551575
Manifest Status: Completed after the designated time period for a TSDF to get a copy to the DEC
Trans1 State ID: 000000000
Trans2 State ID: 000000000
Generator Ship Date: 891205
Trans1 Recv Date: 891205
Trans2 Recv Date: Not reported
TSD Site Recv Date: 891205
Part A Recv Date: 900116
Part B Recv Date: 891212
Generator EPA ID: NYD013780267
Trans1 EPA ID: ILD051060408
Trans2 EPA ID: Not reported
TSDF ID: NYD981556541
Waste Code: F003 - UNKNOWN
Quantity: 00027
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 89

Document ID: NYC1739619
Manifest Status: Completed copy
Trans1 State ID: NYEM4533
Trans2 State ID: Not reported
Generator Ship Date: 920716
Trans1 Recv Date: 920716
Trans2 Recv Date: Not reported
TSD Site Recv Date: 920716
Part A Recv Date: Not reported
Part B Recv Date: 920724
Generator EPA ID: NYD013780267
Trans1 EPA ID: ILD051060408
Trans2 EPA ID: Not reported
TSDF ID: NYD981556541
Waste Code: F005 - UNKNOWN
Quantity: 00054
Units: P - Pounds
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 92

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

WORLD AUTO PAINT SHOPS OF BUFFALO INC (Continued)

1000278151

Document ID: NYB5764113
Manifest Status: Completed copy
Trans1 State ID: P22295IL
Trans2 State ID: Not reported
Generator Ship Date: 920916
Trans1 Recv Date: 920916
Trans2 Recv Date: Not reported
TSD Site Recv Date: 920925
Part A Recv Date: Not reported
Part B Recv Date: 921005
Generator EPA ID: NYD013780267
Trans1 EPA ID: ILD099202681
Trans2 EPA ID: Not reported
TSD ID: NYD049836679
Waste Code: F005 - UNKNOWN
Quantity: 00125
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: TT - Cargo tank, tank trucks
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 92

Document ID: NYC0177884
Manifest Status: Completed copy
Trans1 State ID: 000000000
Trans2 State ID: 000000000
Generator Ship Date: 900324
Trans1 Recv Date: 900324
Trans2 Recv Date: Not reported
TSD Site Recv Date: 900324
Part A Recv Date: 900416
Part B Recv Date: 900330
Generator EPA ID: NYD013780267
Trans1 EPA ID: ILD051060408
Trans2 EPA ID: Not reported
TSD ID: NYD981556541
Waste Code: F003 - UNKNOWN
Quantity: 00123
Units: P - Pounds
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 90

Document ID: NYC0263417
Manifest Status: Completed after the designated time period for a TSD ID to get a copy to the DEC
Trans1 State ID: 000000000
Trans2 State ID: 000000000
Generator Ship Date: 900522
Trans1 Recv Date: 900522
Trans2 Recv Date: Not reported
TSD Site Recv Date: 900522
Part A Recv Date: 900709

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

WORLD AUTO PAINT SHOPS OF BUFFALO INC (Continued)

1000278151

Part B Recv Date: 900530
Generator EPA ID: NYD013780267
Trans1 EPA ID: ILD051060408
Trans2 EPA ID: Not reported
TSD ID: NYD981556541
Waste Code: F005 - UNKNOWN
Quantity: 00027
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 90

Document ID: NYC0476875
Manifest Status: Completed copy
Trans1 State ID: NYEM4533
Trans2 State ID: Not reported
Generator Ship Date: 901001
Trans1 Recv Date: 901001
Trans2 Recv Date: Not reported
TSD Site Recv Date: 901001
Part A Recv Date: 901018
Part B Recv Date: 901023
Generator EPA ID: NYD013780267
Trans1 EPA ID: ILD051060408
Trans2 EPA ID: Not reported
TSD ID: NYD981556541
Waste Code: F005 - UNKNOWN
Quantity: 00027
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 90

Document ID: NYB6918894
Manifest Status: Completed copy
Trans1 State ID: P207083IL
Trans2 State ID: Not reported
Generator Ship Date: 960226
Trans1 Recv Date: 960226
Trans2 Recv Date: Not reported
TSD Site Recv Date: 960228
Part A Recv Date: Not reported
Part B Recv Date: 960308
Generator EPA ID: NYD013780267
Trans1 EPA ID: NJD080631369
Trans2 EPA ID: Not reported
TSD ID: NYD049836679
Waste Code: F005 - UNKNOWN
Quantity: 00110
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

WORLD AUTO PAINT SHOPS OF BUFFALO INC (Continued)

1000278151

Container Type: TT - Cargo tank, tank trucks
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 96

Document ID: MIA4483355
Manifest Status: Completed after the designated time period for a TSDf to get a copy to the DEC
Trans1 State ID: Not reported
Trans2 State ID: Not reported
Generator Ship Date: 970415
Trans1 Recv Date: 970415
Trans2 Recv Date: 970421
TSD Site Recv Date: 970421
Part A Recv Date: 970424
Part B Recv Date: 970515
Generator EPA ID: NYD013780267
Trans1 EPA ID: NYD097644801
Trans2 EPA ID: MID980684088
TSDf ID: MID980615298
Waste Code: F002 - HALO SOLV + STILL BOTTOMS FM REC OF SOLV
Quantity: 00165
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 003
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 97

Document ID: NYG1113858
Manifest Status: Not reported
Trans1 State ID: NYD097644801
Trans2 State ID: Not reported
Generator Ship Date: 03/29/1999
Trans1 Recv Date: 03/29/1999
Trans2 Recv Date: Not reported
TSD Site Recv Date: 04/06/1999
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD013780267
Trans1 EPA ID: OHD001926740
Trans2 EPA ID: Not reported
TSDf ID: 66502MNY
Waste Code: F003 - UNKNOWN
Quantity: 00110
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Year: 99

Document ID: NYG3217419
Manifest Status: Not reported
Trans1 State ID: NYD097644801

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

WORLD AUTO PAINT SHOPS OF BUFFALO INC (Continued)

1000278151

Trans2 State ID: Not reported
Generator Ship Date: 06/27/2002
Trans1 Recv Date: 06/27/2002
Trans2 Recv Date: Not reported
TSD Site Recv Date: 06/28/2002
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD013780267
Trans1 EPA ID: OHD001926740
Trans2 EPA ID: Not reported
TSD ID: 88982JENY
Waste Code: F003 - UNKNOWN
Quantity: 00055
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Year: 2002

Document ID: NYC0663423
Manifest Status: Completed copy
Trans1 State ID: NYEM4533
Trans2 State ID: Not reported
Generator Ship Date: 901226
Trans1 Recv Date: 901226
Trans2 Recv Date: Not reported
TSD Site Recv Date: 901226
Part A Recv Date: 910117
Part B Recv Date: 910118
Generator EPA ID: NYD013780267
Trans1 EPA ID: ILD051060408
Trans2 EPA ID: Not reported
TSD ID: NYD981556541
Waste Code: F005 - UNKNOWN
Quantity: 00027
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 90

Document ID: NYC0346329
Manifest Status: Completed after the designated time period for a TSD to get a copy to the DEC
Trans1 State ID: NYEM4533
Trans2 State ID: Not reported
Generator Ship Date: 900807
Trans1 Recv Date: 900807
Trans2 Recv Date: Not reported
TSD Site Recv Date: 900807
Part A Recv Date: 900828
Part B Recv Date: 900911
Generator EPA ID: NYD013780267
Trans1 EPA ID: ILD051060408

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

WORLD AUTO PAINT SHOPS OF BUFFALO INC (Continued)

1000278151

Trans2 EPA ID: Not reported
TSDF ID: NYD981556541
Waste Code: F005 - UNKNOWN
Quantity: 00096
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 90

Document ID: NYC2475775
Manifest Status: Completed copy
Trans1 State ID: Not reported
Trans2 State ID: Not reported
Generator Ship Date: 940922
Trans1 Recv Date: 940922
Trans2 Recv Date: Not reported
TSD Site Recv Date: 940922
Part A Recv Date: 940929
Part B Recv Date: 941003
Generator EPA ID: NYD013780267
Trans1 EPA ID: ILD984908202
Trans2 EPA ID: Not reported
TSDF ID: NYD981556541
Waste Code: F005 - UNKNOWN
Quantity: 00224
Units: P - Pounds
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 94

Document ID: NYC0777284
Manifest Status: Completed copy
Trans1 State ID: NYEM4533
Trans2 State ID: Not reported
Generator Ship Date: 910412
Trans1 Recv Date: 910412
Trans2 Recv Date: Not reported
TSD Site Recv Date: 910412
Part A Recv Date: 910418
Part B Recv Date: 910422
Generator EPA ID: NYD013780267
Trans1 EPA ID: ILD051060408
Trans2 EPA ID: Not reported
TSDF ID: NYD981556541
Waste Code: F005 - UNKNOWN
Quantity: 00027
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

WORLD AUTO PAINT SHOPS OF BUFFALO INC (Continued)

1000278151

Year: 91

Document ID: NYC1010261
Manifest Status: Completed copy
Trans1 State ID: NYEM4533
Trans2 State ID: Not reported
Generator Ship Date: 910613
Trans1 Recv Date: 910613
Trans2 Recv Date: Not reported
TSD Site Recv Date: 910613
Part A Recv Date: 910621
Part B Recv Date: 910620
Generator EPA ID: NYD013780267
Trans1 EPA ID: ILD051060408
Trans2 EPA ID: Not reported
TSD ID: NYD981556541
Waste Code: F005 - UNKNOWN
Quantity: 00027
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 91

[Click this hyperlink](#) while viewing on your computer to access 15 additional NY_MANIFEST: record(s) in the EDR Site Report.

H41
SSW
< 1/8
0.103 mi.
546 ft.

AUTO ROW GARAGE
1114 MAIN ST
BUFFALO, NY
Site 2 of 2 in cluster H

EDR US Hist Auto Stat 1014538723
N/A

Relative:
Lower

Actual:
648 ft.

EDR Historical Auto Stations:

Name: COUMOUNT LEOPOLD GARAGE
Year: 1930
Type: AUTOMOBILE GARAGES

Name: AUTO ROW GARAGE
Year: 1935
Type: AUTOMOBILE REPAIRING

Name: COTTRELL WHEEL & BRAKE SERVICE
Year: 1955
Type: AUTOMOBILE REPAIRING

Name: WORLD AUTO PAINTING & COLLISION
Year: 1999
Address: 1114 MAIN ST

Name: WORLD AUTO PAINTING & COLLISION
Year: 2000
Address: 1114 MAIN ST

Name: WORLD AUTO PAINTING
Year: 2001

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

AUTO ROW GARAGE (Continued)

1014538723

Address: 1114 MAIN ST
 Name: WORLD AUTO PAINTING & CLSN
 Year: 2003
 Address: 1114 MAIN ST
 Name: WORLD AUTO PAINT SHOPS OF BFL INC
 Year: 2004
 Address: 1114 MAIN ST
 Name: WORLD AUTO PAINT SP OF BFFL
 Year: 2005
 Address: 1114 MAIN ST
 Name: WORLD AUTO PAINTING
 Year: 2006
 Address: 1114 MAIN ST
 Name: WORLD AUTO PAINTING
 Year: 2010
 Address: 1114 MAIN ST
 Name: WORLD AUTO PAINTING
 Year: 2011
 Address: 1114 MAIN ST
 Name: WORLD AUTO PAINT SHOP OF BUFFALO INC
 Year: 2012
 Address: 1114 MAIN ST

**42
 NNW
 < 1/8
 0.105 mi.
 553 ft.**

**KAR AUTOMOTIVE TRANSMISSION & REPR SERVICE INC AUTO REPAIR
 16 BARKER ST
 BUFFALO, NY**

EDR US Hist Auto Stat

**1014539654
 N/A**

**Relative:
 Higher**

EDR Historical Auto Stations:

Name: KAR AUTOMOTIVE TRANSMISSION & REPR SERVICE INC AUTO REPAIR
 Year: 1964
 Type: AUTOMOBILE REPAIRING

**Actual:
 652 ft.**

**43
 ENE
 < 1/8
 0.112 mi.
 590 ft.**

**HETTRICH ELECTRIC SERV INC AUTO REPR
 1032 ELLICOTT ST
 BUFFALO, NY**

EDR US Hist Auto Stat

**1014538904
 N/A**

**Relative:
 Lower**

EDR Historical Auto Stations:

Name: HETTRIOH AUTO ELECTRIC SERVICE
 Year: 1930
 Type: AUTOMOBILE REPAIRING

**Actual:
 640 ft.**

Name: HETTRICH ELECTRIC SERVICE AUTO REPRS
 Year: 1950
 Type: AUTOMOBILE REPAIRING

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

HETTRICH ELECTRIC SERV INC AUTO REPR (Continued)

1014538904

Name: HETTRICH ELECTRIC SERVICE AUTO REPRS
 Year: 1955
 Type: AUTOMOBILE REPAIRING

Name: HETTRICH ELECTRIC SERVICE INC AUTO REPR
 Year: 1960
 Type: AUTOMOBILE REPAIRING

Name: HETTRICH ELECTRIC SERV INC AUTO REPR
 Year: 1964
 Type: AUTOMOBILE REPAIRING

I44
North
< 1/8
0.116 mi.
612 ft.

MINER S W INC AUTOS
1227 MAIN ST
BUFFALO, NY

EDR US Hist Auto Stat

1014537076
N/A

Site 1 of 6 in cluster I

Relative:
Higher

EDR Historical Auto Stations:

Name: MINER S W INC AUTOS
 Year: 1935
 Type: AUTOMOBILE REPAIRING

Actual:
650 ft.

Name: MINER S W INC AUTOS
 Year: 1935
 Type: AUTOMOBILE GARAGES

45
SE
< 1/8
0.118 mi.
621 ft.

WYNOT LOUIS W DCLO CLNR
68 BEST ST
BUFFALO, NY

EDR US Hist Cleaners

1014536820
N/A

Relative:
Lower

EDR Historical Cleaners:

Name: WYNOT LOUIS W DCLO CLNR
 Year: 1930
 Type: CLOTHES PRESSERS AND CLEANERS

Actual:
639 ft.

G46
SSE
< 1/8
0.118 mi.
622 ft.

NEBRICH & CO AUTO ELEC REPRS
935 ELLICOTT ST
BUFFALO, NY

EDR US Hist Auto Stat

1014539323
N/A

Site 3 of 4 in cluster G

Relative:
Lower

EDR Historical Auto Stations:

Name: STPAUL AUTO REPAIR SHOP
 Year: 1940
 Type: AUTOMOBILE REPAIRING

Actual:
639 ft.

Name: NEBRICH & CO AUTO ELEC REPRS
 Year: 1940
 Type: AUTOMOBILE REPAIRING

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

I47
North
< 1/8
0.118 mi.
622 ft.

ERHART MOTOR CAR CO
1218 MAIN ST
BUFFALO, NY

EDR US Hist Auto Stat

1014538806
N/A

Site 2 of 6 in cluster I

Relative:
Higher

EDR Historical Auto Stations:

Name: ERHART MOTOR CAR CO
Year: 1935
Type: AUTOMOBILE REPAIRING

Actual:
651 ft.

Name: ERHART MOTOR CAR CO
Year: 1935
Type: AUTOMOBILE GARAGES

48
NNW
< 1/8
0.120 mi.
631 ft.

GREAT ARROW TRUCK & AUTO REPAIR
31 BARKER ST
BUFFALO, NY 14209

EDR US Hist Auto Stat

1014538509
N/A

Relative:
Higher

EDR Historical Auto Stations:

Name: GREAT ARROW TRUCK & AUTO REPAIR
Year: 1985
Type: AUTOMOBILE REPAIRING

Actual:
654 ft.

I49
North
< 1/8
0.120 mi.
635 ft.

NIAGARA MOHAWK A NATIONAL GRID CO
1229 MAIN ST
BUFFALO, NY 14209

RCRA NonGen / NLR

1015746572
NYP000968909

Site 3 of 6 in cluster I

Relative:
Higher

RCRA NonGen / NLR:

Date form received by agency: 12/06/2012
Facility name: NIAGARA MOHAWK A NATIONAL GRID CO
Facility address: 1229 MAIN ST
BUFFALO, NY 14209
EPA ID: NYP000968909
Mailing address: ERIE BLVD
SYRACUSE, NY 13202
Contact: MARGARET M CARD
Contact address: ERIE BLVD
SYRACUSE, NY 13202
Contact country: US
Contact telephone: (315) 428-6670
Contact email: Not reported
EPA Region: 02
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Actual:
650 ft.

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NIAGARA MOHAWK A NATIONAL GRID CO (Continued)

1015746572

Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
Used oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 10/12/2012
Facility name: NIAGARA MOHAWK A NATIONAL GRID CO
Classification: Large Quantity Generator

Hazardous Waste Summary:

Waste code: D008
Waste name: LEAD

Waste code: D008
Waste name: LEAD

Violation Status: No violations found

150
North
< 1/8
0.120 mi.
635 ft.

NIAGARA MOHAWK A NATIONAL GRID CO
1229 MAIN ST
BUFFALO, NY 14209
Site 4 of 6 in cluster I

NY MANIFEST S112817531
N/A

Relative:
Higher

NY MANIFEST:
EPA ID: NYP000968909
Country: USA
Mailing Name: NIAGARA MOHAWK A NATIONAL GRID CO
Mailing Contact: M MORROW
Mailing Address: 144 KENSINGTON AVE
Mailing Address 2: Not reported
Mailing City: BUFFALO
Mailing State: NY
Mailing Zip: 14214
Mailing Zip4: Not reported
Mailing Country: USA
Mailing Phone: 716-831-7428

Actual:
650 ft.

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD986980753
Trans2 State ID: Not reported
Generator Ship Date: 2012-10-12
Trans1 Recv Date: 2012-10-12
Trans2 Recv Date: Not reported
TSD Site Recv Date: 2012-10-16
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYP000968909
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NYD049836679

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NIAGARA MOHAWK A NATIONAL GRID CO (Continued)

S112817531

Waste Code: Not reported
Quantity: 100.0
Units: P - Pounds
Number of Containers: 1.0
Container Type: DM - Metal drums, barrels
Handling Method: L Landfill.
Specific Gravity: 1.0
Year: 2012
Manifest Tracking Num: 001055805JJK
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H132

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD986980753
Trans2 State ID: Not reported
Generator Ship Date: 2012-10-12
Trans1 Recv Date: 2012-10-12
Trans2 Recv Date: Not reported
TSD Site Recv Date: 2012-10-16
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYP000968909
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NYD049836679
Waste Code: Not reported
Quantity: 165.0
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 3.0
Container Type: DM - Metal drums, barrels
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 1.0
Year: 2012
Manifest Tracking Num: 001055805JJK
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H132

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G51
SSE
< 1/8
0.121 mi.
639 ft.

STPAUL AUTO REPAIR SHOP
931 ELLICOTT ST
BUFFALO, NY

EDR US Hist Auto Stat 1014539414
N/A

Site 4 of 4 in cluster G

Relative:
Lower

EDR Historical Auto Stations:

Name: STPAUL AUTO REPAIR SHOP
Year: 1935
Type: AUTOMOBILE REPAIRING

Actual:
639 ft.

Name: STPAUL AUTO REPAIR SHOP
Year: 1940
Type: AUTOMOBILE REPAIRING

52
ENE
< 1/8
0.122 mi.
644 ft.

CRISSY EMERSON J LINOLEUM LAYER
73 DODGE ST
BUFFALO, NY

EDR US Hist Cleaners 1014534897
N/A

Relative:
Lower

EDR Historical Cleaners:

Name: CRISSY EMERSON J LINOLEUM LAYER
Year: 1940
Type: CARPET CLEANERS AND LAYERS

Actual:
639 ft.

I53
North
< 1/8
0.122 mi.
645 ft.

MIDCITY OFFICE EQUIPMENT INC
1220 MAIN ST
BUFFALO, NY

RCRA NonGen / NLR 1001215492
FINDS NYR000046102
NY LTANKS
NY MANIFEST

Site 5 of 6 in cluster I

Relative:
Higher

RCRA NonGen / NLR:

Date form received by agency: 01/01/2007
Facility name: MIDCITY OFFICE EQUIPMENT INC
Facility address: 1220 MAIN ST
BUFFALO, NY 14209
EPA ID: NYR000046102
Mailing address: MAIN ST
BUFFALO, NY 14209
Contact: BARRY COHEN
Contact address: MAIN ST
BUFFALO, NY 14209
Contact country: US
Contact telephone: (716) 882-0666
Contact email: Not reported
EPA Region: 02
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Actual:
651 ft.

Owner/Operator Summary:

Owner/operator name: BARRY COHEN
Owner/operator address: 1220 MAIN ST
BUFFALO, NY 14209
Owner/operator country: US
Owner/operator telephone: (716) 882-0666
Legal status: Private
Owner/Operator Type: Owner

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MIDCITY OFFICE EQUIPMENT INC (Continued)

1001215492

Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: BARRY COHEN
Owner/operator address: 1220 MAIN ST
BUFFALO, NY 14209

Owner/operator country: US
Owner/operator telephone: (716) 882-0666
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006
Facility name: MIDCITY OFFICE EQUIPMENT INC
Classification: Not a generator, verified

Date form received by agency: 08/07/1998
Facility name: MIDCITY OFFICE EQUIPMENT INC
Site name: MID CITY OFFICE EQUIPMENT, INC.
Classification: Large Quantity Generator

Date form received by agency: 10/21/1997
Facility name: MIDCITY OFFICE EQUIPMENT INC
Classification: Large Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110000883768

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MIDCITY OFFICE EQUIPMENT INC (Continued)

1001215492

LTANKS:

Site ID: 187292
Spill Number/Closed Date: 9707872 / 11/28/1997
Spill Date: 10/2/1997
Spill Cause: Tank Failure
Spill Source: Commercial/Industrial
Spill Class: Known release that creates potential for fire or hazard. DEC Response.
Willing Responsible Party. Corrective action taken.
Cleanup Ceased: Not reported
Cleanup Meets Standard: True
SWIS: 1502
Investigator: RMCROSSE
Referred To: Not reported
Reported to Dept: 10/3/1997
CID: 999
Water Affected: Not reported
Spill Notifier: Other
Last Inspection: 10/8/1997
Recommended Penalty: False
UST Involvement: True
Remediation Phase: 0
Date Entered In Computer: 10/3/1997
Spill Record Last Update: 12/12/1997
Spiller Name: BARRY COHEN
Spiller Company: MID CITY OFFICE EQUIPMENT
Spiller Address: 1220 MAIN STREET
Spiller City,St,Zip: BUFFALO, NY 14209-2194
Spiller County: 001
Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported
DEC Region: 9
DER Facility ID: 156482
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "RMC"10/08/97 RMC/SITE TWO EXCAVATIONS OPEN, APPEAR VISUAL CLEAN, ONE ROLL OFF AND 18 DRUMS STAGED ON SITE FOR DISPOSAL, SAMPLING AND DISPOSAL DUE 11/14/9710/10/97 RMC/FILE RECEIVED SAMPLE RESULTS FOR FOUR SEPARATE EXCAVATIONS, ONE HAD TWO GASOLINE TANKS, NO EXCEEDANCES, DISPOSAL AND MAP SHOWING FORMER LOCATIONS DUE 11/30/9711/28/97 RMC/FILE RECEIVED DISPOSAL RECEIPTS, OK, NO FURTHER ACTION REQUIRED, CLOSE OUT
Remarks: contamination discovered during tank removal

Material:

Site ID: 187292
Operable Unit ID: 1054381
Operable Unit: 01
Material ID: 558161
Material Code: 0022
Material Name: Waste Oil/Used Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MIDCITY OFFICE EQUIPMENT INC (Continued)

1001215492

Oxygenate: False
Site ID: 187292
Operable Unit ID: 1054381
Operable Unit: 01
Material ID: 558160
Material Code: 0009
Material Name: Gasoline
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

NY MANIFEST:

EPA ID: NYR000046102
Country: USA
Mailing Name: MID CITY OFFICE EQUIP
Mailing Contact: BARRY COHEN
Mailing Address: 2495 MAIN ST. STE 240
Mailing Address 2: Not reported
Mailing City: BUFFALO
Mailing State: NY
Mailing Zip: 14214
Mailing Zip4: 2156
Mailing Country: USA
Mailing Phone: 716-882-0666

Document ID: NYB8492994
Manifest Status: Completed after the designated time period for a TSDf to get a copy to the DEC
Trans1 State ID: 80361VNY
Trans2 State ID: Not reported
Generator Ship Date: 971107
Trans1 Recv Date: 971107
Trans2 Recv Date: Not reported
TSD Site Recv Date: 971111
Part A Recv Date: 971125
Part B Recv Date: 971218
Generator EPA ID: NYR000046102
Trans1 EPA ID: NYD982792814
Trans2 EPA ID: Not reported
TSDf ID: OHD980681571
Waste Code: D008 - LEAD 5.0 MG/L TCLP
Quantity: 01045
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 019
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 97

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

MIDCITY OFFICE EQUIPMENT INC (Continued)

1001215492

Document ID: NYB8829927
 Manifest Status: Completed copy
 Trans1 State ID: SL2643NY
 Trans2 State ID: Not reported
 Generator Ship Date: 971110
 Trans1 Recv Date: 971110
 Trans2 Recv Date: Not reported
 TSD Site Recv Date: 971111
 Part A Recv Date: Not reported
 Part B Recv Date: 971128
 Generator EPA ID: NYR000046102
 Trans1 EPA ID: NYD980646228
 Trans2 EPA ID: Not reported
 TSD ID: NYD049836679
 Waste Code: F001 - UNKNOWN
 Quantity: 34680
 Units: P - Pounds
 Number of Containers: 001
 Container Type: CM - Metal boxes, cases, roll-offs
 Handling Method: L Landfill.
 Specific Gravity: 100
 Year: 97

J54
SSW
1/8-1/4
0.130 mi.
685 ft.

DOWNTOWN MOTORS INC AUTOS
1100 MAIN ST
BUFFALO, NY
Site 1 of 2 in cluster J

EDR US Hist Auto Stat 1014537955
N/A

Relative:
Higher

Actual:
649 ft.

EDR Historical Auto Stations:
 Name: 1094 1100 BUICK MOTOR CO
 Year: 1930
 Type: SERVICE STATIONS

 Name: DOWNTOWN MOTORS INC AUTOS
 Year: 1950
 Type: AUTOMOBILE REPAIRING

I55
North
1/8-1/4
0.133 mi.
701 ft.

AGASSIZ HOLDINGS INC
1235 - 1245 MAIN STREET
BUFFALO, NY
Site 6 of 6 in cluster I

NY LTANKS S106868302
N/A

Relative:
Higher

Actual:
650 ft.

LTANKS:
 Site ID: 343953
 Spill Number/Closed Date: 0500859 / 3/21/2006
 Spill Date: 4/20/2005
 Spill Cause: Tank Failure
 Spill Source: Commercial/Industrial
 Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
 Cleanup Ceased: Not reported
 Cleanup Meets Standard: False
 SWIS: 1502
 Investigator: JFOTTO

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AGASSIZ HOLDINGS INC (Continued)

S106868302

Referred To: Not reported
Reported to Dept: 4/20/2005
CID: 408
Water Affected: Not reported
Spill Notifier: Other
Last Inspection: 1/25/2006
Recommended Penalty: False
UST Involvement: False
Remediation Phase: 0
Date Entered In Computer: 4/20/2005
Spill Record Last Update: 3/24/2006
Spiller Name: MARK PAGANO
Spiller Company: AGASSIZ HOLDINGS
Spiller Address: 40 AGASSIZ CIRCLE
Spiller City,St,Zip: BUFFALO, NY 14214
Spiller County: 001
Spiller Contact: JEFF ROWLEY
Spiller Phone: (716) 845-6145
Spiller Extension: Not reported
DEC Region: 9
DER Facility ID: 290562
DEC Memo: 04/22/05 JFO TELCON WITH DOUG REID OF LCS. HE WILL FORWARD PHASE II REPORT.10/17/06 JFO RECEIVED THE PHASE II. THERE ARE 2 AREAS THAT NEED TO BE ADDRESSED. BH-4 AND BH-10. SEND LTR10/18/05 JFO SENT TREATMENT LTR TO AGASSIZ HOLDINGS INC. RESPONSE BY 11/10/05.01/17/06 JFO MET IN OUR OFFICE WITH DOUG REID AND JEFF ROWLEY BOTH WITH LCS. THEY WILL BEGIN WORK ON JAN 23. THEY WILL DIG TO CLEAN. THEY WILL CALL FOR AN INSPECTION WHEN THE HOLES ARE CLEAN. ALSO DOUG R. GAVE ME A COPY OF THE MAGNETOMETER SURVEY AND SUPPLEMENTAL SUBSURFACE SOIL AND GROUNDWATER INVESTIGATION.01/23/06 JFO ON SITE MET WITH JEFF R WITH LCS. THEY REMOVED THE STORAGE TANK (APPROX 500 GALLON)AND PUMPED OUT OILY WATER TO DRUMS. THEY WILL BEGIN DIGGING TO CLEAN TOMORROW. I WILL VISIT SITE TOMORROW FOR INSPECTION. THEY WILL THEN DIG OUT THE OTHER AREA NEAR THE BUILDING.01/24/06 JFO ON SITE MET WITH JEFF. THE BOTTOM, NORTH, EAST AND SOUTH WALLS LOOK OK. THEY WILL FINISH THE WEST WALL TOMORROW.01/25/06 JFO ON SITE WITH JEFF. THE WEST WALL IS CLEAN. SAMPLES WERE COLLECTED. THEY STARTED THE OTHER HOT SPOT NEAR THE BUILDING AND DISCOVERED ANOTHER TANK (APPROX 500 GALLON). THE EXCAV IS BETWEEN THE BUILDING AND A BSA MANHOLE. THEY ARE CONCERNED ABOUT DAMAGING THE SEWER SO THEY WILL DIG ON THE OTHER SIDE OF THE MANHOLE AND COLLECT A SAMPLE. I WILL CHECK SITE 1/27/06.01/26/06 JFO TELCON WITH DOUG REID. THEY DUG OUT THE CONTAMINATION AND REMOVED THE SOIL AROUND THE MANHOLE. THEY BELIEVE THE GOT TO CLEAN. THEY SAMPLED BELOW THE MANHOLE ALONG WITH SIDEWALLS AND BOTTOM. RESULTS AND RECEIPTS TO FOLLOW.02/01/06 JFO RECEIVED THE ANALYTICAL RESULTS. IN THE 1ST EXCAVATION BENZENE AT 72 PPB WAS FOUND IN THE EAST SIDEWALL ALL OTHER 8260 COMPOUNDS <STARS. IN THE 2ND EXCAVATION TOTAL XYLENES AT 3300 PPB WAS FOUND IN THE BOTTOM SAMPLE ALL OTHER 8260 COMPOUNDS <TAGMS. DISCUSSED RESULTS WITH SAC AND AGREED SITE WILL BE "INACTIVE". NOTIFIED DOUG REID AND INFORMED HIM THAT WE NEED RECEIPTS TO CLOSE.03/21/06 JFO RECEIVED THE FINAL REPORT FROM DOUG REID. INCLUDED ARE THE DISPOSAL RECEIPTS FOR THE CONTAMINATED SOIL. "INACTIVE" NO FURTHER ACTION REQUIRED AT THIS TIME.CLOSED
Remarks: HAS NOT BEEN CLEANED UP. SOIL SAMPLES WERE TAKEN OF IMPACTED SOIL AND THE READINGS FAILED FOR TICKS.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AGASSIZ HOLDINGS INC (Continued)

S106868302

Material:
Site ID: 343953
Operable Unit ID: 1102612
Operable Unit: 01
Material ID: 582830
Material Code: 0066A
Material Name: UNKNOWN PETROLEUM
Case No.: Not reported
Material FA: Petroleum
Quantity: Not reported
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

J56
SSW
1/8-1/4
0.142 mi.
748 ft.

**1094 1100 BUICK MOTOR CO
1094 MAIN ST
BUFFALO, NY**

**EDR US Hist Auto Stat 1014536837
N/A**

Site 2 of 2 in cluster J

**Relative:
Higher**

EDR Historical Auto Stations:
Name: 1094 1100 BUICK MOTOR CO
Year: 1930

**Actual:
650 ft.**

Type: SERVICE STATIONS

K57
SSE
1/8-1/4
0.146 mi.
773 ft.

**KEVRA BROS AUTO REPRS
938 ELLICOTT ST
BUFFALO, NY**

**EDR US Hist Auto Stat 1014537796
N/A**

Site 1 of 2 in cluster K

**Relative:
Lower**

EDR Historical Auto Stations:
Name: KEVRA BTOS AUTO REPRS
Year: 1930
Type: AUTOMOBILE REPAIRING

**Actual:
642 ft.**

Name: KEVRA BROS AUTO REPRS
Year: 1935
Type: AUTOMOBILE REPAIRING

Name: KEVRA BROS AUTO REPRS
Year: 1940
Type: AUTOMOBILE REPAIRING

Name: KEVRA FRANK AUTO REPR
Year: 1946
Type: AUTOMOBILE REPAIRING

Name: KEVRA FRANK ATUO REPR
Year: 1950
Type: AUTOMOBILE REPAIRING

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

58
NE
1/8-1/4
0.148 mi.
784 ft.

BISHOP LESLIE
1059 ELLICOTT ST
BUFFALO, NY 14209

RCRA NonGen / NLR **1004760779**
FINDS **NYR000060442**

Relative:
Lower

RCRA NonGen / NLR:

Actual:
643 ft.

Date form received by agency: 01/01/2007
Facility name: BISHOP LESLIE
Facility address: 1059 ELLICOTT ST
BUFFALO, NY 14209
EPA ID: NYR000060442
Mailing address: ELLICOTT ST
BUFFALO, NY 14209
Contact: WILLIE ROBERSON
Contact address: ELLICOTT ST
BUFFALO, NY 14209
Contact country: US
Contact telephone: (212) 555-1212
Contact email: Not reported
EPA Region: 02
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: LESLIE BISHOP
Owner/operator address: 1059 ELLICOTT ST
BUFFALO, NY 14209
Owner/operator country: US
Owner/operator telephone: (716) 888-8007
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: LESLIE BISHOP
Owner/operator address: 1059 ELLICOTT ST
BUFFALO, NY 14209
Owner/operator country: US
Owner/operator telephone: (716) 888-8007
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
Used oil refiner: No
Used oil fuel marketer to burner: No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BISHOP LESLIE (Continued)

1004760779

Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006
Facility name: BISHOP LESLIE
Classification: Not a generator, verified

Date form received by agency: 09/18/1998
Facility name: BISHOP LESLIE
Classification: Conditionally Exempt Small Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110004546714

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

59
ESE
1/8-1/4
0.154 mi.
815 ft.

DEL-RICH PROPERTIES
35 EDNA PL
BUFFALO, NY 14209

RCRA NonGen / NLR 1004761454
FINDS NYR000087031
NY MANIFEST

Relative:
Lower

RCRA NonGen / NLR:

Date form received by agency: 01/01/2007
Facility name: DEL-RICH PROPERTIES
Facility address: 35 EDNA PL
BUFFALO, NY 14209
EPA ID: NYR000087031
Mailing address: SEYMORE AVE
TONAWANDA, NY 14151
Contact: DWIGHT HILL
Contact address: SEYMORE AVE
TONAWANDA, NY 14151
Contact country: US
Contact telephone: (716) 884-8859
Contact email: Not reported
EPA Region: 02
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Actual:
639 ft.

Owner/Operator Summary:

Owner/operator name: DEL-RICH PROPERTIES
Owner/operator address: 96 SEYMORE AVE
BUFFALO, NY 14151
Owner/operator country: US

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DEL-RICH PROPERTIES (Continued)

1004761454

Owner/operator telephone: (716) 835-5624
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: DEL-RICH PROPERTIES
Owner/operator address: 96 SEYMORE AVE
BUFFALO, NY 14151

Owner/operator country: US
Owner/operator telephone: (716) 835-5624
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006
Facility name: DEL-RICH PROPERTIES
Classification: Not a generator, verified

Date form received by agency: 06/14/2000
Facility name: DEL-RICH PROPERTIES
Classification: Conditionally Exempt Small Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110004562704

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DEL-RICH PROPERTIES (Continued)

1004761454

NY MANIFEST:

EPA ID: NYR000087031
Country: USA
Mailing Name: ARTHUR RAY-DEL RICH PROPERTIES
Mailing Contact: DWIGHT HILL
Mailing Address: 96 SEYMORE AVE
Mailing Address 2: Not reported
Mailing City: TONAWANDA
Mailing State: NY
Mailing Zip: 14151
Mailing Zip4: Not reported
Mailing Country: USA
Mailing Phone: 716-884-8859

Document ID: CTF0833100
Manifest Status: Not reported
Trans1 State ID: CTD983896341
Trans2 State ID: Not reported
Generator Ship Date: 07/19/2000
Trans1 Recv Date: 07/19/2000
Trans2 Recv Date: Not reported
TSD Site Recv Date: 07/20/2000
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000087031
Trans1 EPA ID: CTD983896341
Trans2 EPA ID: Not reported
TSD ID: Z665ZACT
Waste Code: D008 - LEAD 5.0 MG/L TCLP
Quantity: 00468
Units: P - Pounds
Number of Containers: 001
Container Type: CM - Metal boxes, cases, roll-offs
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 01.00
Year: 2000

L60
North
1/8-1/4
0.158 mi.
835 ft.

BUFFALO MOTORS INC AUTOS
1247 MAIN ST
BUFFALO, NY
Site 1 of 3 in cluster L

EDR US Hist Auto Stat 1014539503
N/A

Relative:
Higher

EDR Historical Auto Stations:
Name: BUFFALO MOTORS INC AUTOS
Year: 1935
Type: AUTOMOBILE REPAIRING

Actual:
651 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number

L61
North
1/8-1/4
0.163 mi.
859 ft.

DELTA SONIC - MAIN STREET
1264 MAIN ST
BUFFALO, NY
Site 2 of 3 in cluster L

RCRA-CESQG 1004757208
FINDS NYD986907954
NY MANIFEST

Relative:
Higher

RCRA-CESQG:

Date form received by agency: 01/01/2007
Facility name: DELTA SONIC - MAIN STREET
Facility address: 1264 MAIN ST
BUFFALO, NY 14209

Actual:
651 ft.

EPA ID: NYD986907954
Mailing address: DELAWARE AVE
BUFFALO, NY 14202
Contact: BRUCE NATALIZIA
Contact address: DELAWARE AVE
BUFFALO, NY 14202

Contact country: US
Contact telephone: (716) 886-0931
Contact email: Not reported
EPA Region: 02
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name: DELTA SONIC CAR WASH SYSTEMS INC
Owner/operator address: NOT REQUIRED
NOT REQUIRED, WY 99999
Owner/operator country: US
Owner/operator telephone: (212) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: DELTA SONIC CAR WASH SYSTEMS INC
Owner/operator address: NOT REQUIRED
NOT REQUIRED, WY 99999
Owner/operator country: US
Owner/operator telephone: (212) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DELTA SONIC - MAIN STREET (Continued)

1004757208

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006
Facility name: DELTA SONIC - MAIN STREET
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 03/02/1994
Facility name: DELTA SONIC - MAIN STREET
Site name: DELTA SONIC CAR WASH SYSTEMS INC
Classification: Large Quantity Generator

Date form received by agency: 07/23/1990
Facility name: DELTA SONIC - MAIN STREET
Classification: Conditionally Exempt Small Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110004450433

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and it Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DELTA SONIC - MAIN STREET (Continued)

1004757208

that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

NY MANIFEST:

EPA ID: NYD986907954
Country: USA
Mailing Name: DELTA SONIC CAR WASH
Mailing Contact: JEROME NOWORYTA
Mailing Address: 1238 MAIN ST
Mailing Address 2: Not reported
Mailing City: BUFFALO
Mailing State: NY
Mailing Zip: 14209
Mailing Zip4: Not reported
Mailing Country: USA
Mailing Phone: 716-881-2764

Document ID: PAH0138588
Manifest Status: Not reported
Trans1 State ID: NYD986983229
Trans2 State ID: VTR000500090
Generator Ship Date: 03/14/2005
Trans1 Recv Date: 03/15/2005
Trans2 Recv Date: 03/20/2005
TSD Site Recv Date: 03/21/2005
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD986907954
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: PAD067098822
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 01000
Units: P - Pounds
Number of Containers: 004
Container Type: DM - Metal drums, barrels
Handling Method: L Landfill.
Specific Gravity: 01.00
Year: Not reported

Document ID: PAH0138588
Manifest Status: Not reported
Trans1 State ID: NYD986983229
Trans2 State ID: VTR000500090
Generator Ship Date: 03/14/2005
Trans1 Recv Date: 03/15/2005
Trans2 Recv Date: 03/20/2005
TSD Site Recv Date: 03/21/2005
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD986907954
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: PAD067098822

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DELTA SONIC - MAIN STREET (Continued)

1004757208

Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 01000
Units: P - Pounds
Number of Containers: 004
Container Type: DM - Metal drums, barrels
Handling Method: L Landfill.
Specific Gravity: 01.00
Year: Not reported

Document ID: CTF0148853
Manifest Status: Completed copy
Trans1 State ID: 86036DNY
Trans2 State ID: Not reported
Generator Ship Date: 930305
Trans1 Recv Date: 930305
Trans2 Recv Date: Not reported
TSD Site Recv Date: 930308
Part A Recv Date: 930405
Part B Recv Date: 930319
Generator EPA ID: NYD986907954
Trans1 EPA ID: NYD982792814
Trans2 EPA ID: Not reported
TSDF ID: CTD072138969
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 01178
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: TT - Cargo tank, tank trucks
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 93

Document ID: CTF0148812
Manifest Status: Completed after the designated time period for a TSDF to get a copy to the DEC
Trans1 State ID: TAA4521NJ
Trans2 State ID: Not reported
Generator Ship Date: 930902
Trans1 Recv Date: 930902
Trans2 Recv Date: Not reported
TSD Site Recv Date: 930903
Part A Recv Date: 931028
Part B Recv Date: 931004
Generator EPA ID: NYD986907954
Trans1 EPA ID: NJD000692061
Trans2 EPA ID: Not reported
TSDF ID: CTD072138969
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 01345
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: TT - Cargo tank, tank trucks
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 93

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DELTA SONIC - MAIN STREET (Continued)

1004757208

Document ID: NYB1716453
Manifest Status: Completed copy
Trans1 State ID: MU1758NY
Trans2 State ID: Not reported
Generator Ship Date: 950406
Trans1 Recv Date: 950406
Trans2 Recv Date: Not reported
TSD Site Recv Date: 950406
Part A Recv Date: 960320
Part B Recv Date: 950414
Generator EPA ID: NYD986907954
Trans1 EPA ID: NYD986941607
Trans2 EPA ID: Not reported
TSD ID: NYD095577342
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00020
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 100
Year: 95

**62
NW
1/8-1/4
0.164 mi.
867 ft.**

**PROPERTY
75 BARKER ST.
BUFFALO, NY 14209**

**NY UST U004159958
N/A**

**Relative:
Higher**

UST:
Id/Status: 9-601225 / Unregulated
Program Type: PBS
Region: STATE
DEC Region: 9
Expiration Date: N/A
UTM X: Not reported
UTM Y: Not reported
Site Type: Private Residence

**Actual:
657 ft.**

Affiliation Records:
Site Id: 441675
Affiliation Type: On-Site Operator
Company Name: PROPERTY
Contact Type: Not reported
Contact Name: NONE
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 001
Phone: Not reported
EMail: Not reported
Fax Number: Not reported
Modified By: aeskalsk
Date Last Modified: 4/4/2012

Site Id: 441675

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PROPERTY (Continued)

U004159958

Affiliation Type: Facility Owner
Company Name: NORMAN VITI
Contact Type: Not reported
Contact Name: Not reported
Address1: 760 POTOMAC AVE
Address2: Not reported
City: BUFFALO
State: NY
Zip Code: 14209
Country Code: 001
Phone: Not reported
EMail: Not reported
Fax Number: Not reported
Modified By: aeskalsk
Date Last Modified: 11/4/2010

Tank Info:

Tank Number: 1
Tank ID: 236666
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 250
Install Date: Not reported
Date Tank Closed: 05/06/2010
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0009
Common Name of Substance: Gasoline

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: aeskalsk
Last Modified: 11/04/2010

K63
SSE
1/8-1/4
0.165 mi.
873 ft.

FIKE THEO AUTO REPR
908 ELLICOTT ST
BUFFALO, NY
Site 2 of 2 in cluster K

EDR US Hist Auto Stat 1014539450
N/A

Relative:
Lower

Actual:
644 ft.

EDR Historical Auto Stations:
Name: FIKE THEO AUTO REPR
Year: 1930
Type: AUTOMOBILE REPAIRING

Name: BOLT ALF J GARAGE
Year: 1930
Type: AUTOMOBILE GARAGES

Name: LILLEY FRANK AUTO IND!
Year: 1930
Type: AUTOMOBILE LAUNDRIES

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FIKE THEO AUTO REPR (Continued)

1014539450

Name: BOLT ALF J GARAGE
Year: 1935
Type: AUTOMOBILE REPAIRING

Name: MORRISON AUTO HOSPITAL
Year: 1935
Type: AUTOMOBILE REPAIRING

Name: WINTER & REISCH CO AUTO REPR
Year: 1935
Type: AUTOMOBILE REPAIRING

Name: BOLT ALF J AUTO REPR
Year: 1940
Type: AUTOMOBILE REPAIRING

Name: NORTH ELLICOTT SERVICE GARAGE
Year: 1946
Type: AUTOMOBILE REPAIRING

Name: NORTH ELLICOTT SERVICE GARAGE
Year: 1946
Type: AUTOMOBILE GARAGES

Name: NORTH ELLICOTT SERVICE GARAGE
Year: 1950
Type: AUTOMOBILE REPAIRING

Name: NORTH ELLICOTT SERVICE GARAGE
Year: 1955
Type: AUTOMOBILE GARAGES

Name: NORTH ELLICOTT GARAGE
Year: 1960
Type: AUTOMOBILE GARAGES

64
NW
1/8-1/4
0.167 mi.
881 ft.

172 LINWOOD AVE
BUFFALO, NY 14209

EDR US Hist Auto Stat 1015269231
N/A

Relative:
Higher
Actual:
656 ft.

EDR Historical Auto Stations:
Name: SOVEREIGN MOTORS
Year: 2008
Address: 172 LINWOOD AVE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

65
NNE
1/8-1/4
0.169 mi.
890 ft.

M J GRASS SCREW & MACHINE
19 NORTHAMPTON ST
BUFFALO, NY 14209

RCRA NonGen / NLR
FINDS
NY MANIFEST

1001968862
NYR000080382

Relative:
Higher

RCRA NonGen / NLR:

Actual:
649 ft.

Date form received by agency: 01/01/2007
Facility name: M J GRASS SCREW & MACHINE
Facility address: 19 NORTHAMPTON ST
BUFFALO, NY 14209
EPA ID: NYR000080382
Mailing address: MAIN ST SENECA BLDG
237 MAIN ST
BUFFALO, NY 14203
Contact: KEN KELLER
Contact address: MAIN ST SENECA BLDG 237 MAIN ST
BUFFALO, NY 14203
Contact country: US
Contact telephone: (716) 681-3535
Contact email: Not reported
EPA Region: 02
Land type: Facility is not located on Indian land. Additional information is not known.
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: WILLIAM LEISING
Owner/operator address: 237 MAIN ST - 1029 MAIN ST
BUFFALO, NY 14203
Owner/operator country: US
Owner/operator telephone: (716) 853-0246
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: WILLIAM LEISING
Owner/operator address: 237 MAIN ST - 1029 MAIN ST
BUFFALO, NY 14203
Owner/operator country: US
Owner/operator telephone: (716) 853-0246
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

M J GRASS SCREW & MACHINE (Continued)

1001968862

User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006
Facility name: M J GRASS SCREW & MACHINE
Classification: Not a generator, verified

Date form received by agency: 03/22/2000
Facility name: M J GRASS SCREW & MACHINE
Classification: Large Quantity Generator

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 10/22/2002
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA

FINDS:

Registry ID: 110004558292

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

NY MANIFEST:

EPA ID: NYR000080382
Country: USA
Mailing Name: MJ GRASS SCREW & MACHINE
Mailing Contact: N/S
Mailing Address: 5033 TRANSIT RD
Mailing Address 2: Not reported
Mailing City: DEPEW
Mailing State: NY
Mailing Zip: 14043
Mailing Zip4: Not reported
Mailing Country: USA
Mailing Phone: 716-681-3535

Document ID: MIA7680061
Manifest Status: Not reported
Trans1 State ID: NYD986903904
Trans2 State ID: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

M J GRASS SCREW & MACHINE (Continued)

1001968862

Generator Ship Date: 05/01/2000
Trans1 Recv Date: 05/01/2000
Trans2 Recv Date: Not reported
TSD Site Recv Date: 05/09/2000
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000080382
Trans1 EPA ID: MID096963194
Trans2 EPA ID: Not reported
TSDF ID: PP8404NY
Waste Code: D002 - NON-LISTED CORROSIVE WASTES
Quantity: 00165
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 003
Container Type: DM - Metal drums, barrels
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Year: 2000

Document ID: NYG1647099
Manifest Status: Not reported
Trans1 State ID: NYD986903904
Trans2 State ID: NYD986903904
Generator Ship Date: 05/01/2000
Trans1 Recv Date: 05/01/2000
Trans2 Recv Date: 05/08/2000
TSD Site Recv Date: 05/19/2000
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000080382
Trans1 EPA ID: OHD083377010
Trans2 EPA ID: Not reported
TSDF ID: PP8404NY
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00002
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: D002 - NON-LISTED CORROSIVE WASTES
Quantity: 00017
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Waste Code: D002 - NON-LISTED CORROSIVE WASTES
Quantity: 00007
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Year: 2000

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

M J GRASS SCREW & MACHINE (Continued)

1001968862

Document ID: NYG1647306
 Manifest Status: Not reported
 Trans1 State ID: NYD986903904
 Trans2 State ID: NYD986903904
 Generator Ship Date: 04/28/2000
 Trans1 Recv Date: 04/28/2000
 Trans2 Recv Date: 05/08/2000
 TSD Site Recv Date: 05/19/2000
 Part A Recv Date: Not reported
 Part B Recv Date: Not reported
 Generator EPA ID: NYR000080382
 Trans1 EPA ID: GAD093380814
 Trans2 EPA ID: Not reported
 TSD ID: PP8404NY
 Waste Code: F003 - UNKNOWN
 Quantity: 00085
 Units: G - Gallons (liquids only)* (8.3 pounds)
 Number of Containers: 002
 Container Type: DM - Metal drums, barrels
 Handling Method: B Incineration, heat recovery, burning.
 Specific Gravity: 01.00
 Year: 2000

Document ID: NYG1647459
 Manifest Status: Not reported
 Trans1 State ID: NYD986903904
 Trans2 State ID: NYD986903904
 Generator Ship Date: 05/01/2000
 Trans1 Recv Date: 05/01/2000
 Trans2 Recv Date: 05/08/2000
 TSD Site Recv Date: 05/19/2000
 Part A Recv Date: Not reported
 Part B Recv Date: Not reported
 Generator EPA ID: NYR000080382
 Trans1 EPA ID: OHD083377010
 Trans2 EPA ID: Not reported
 TSD ID: PP8404NY
 Waste Code: D002 - NON-LISTED CORROSIVE WASTES
 Quantity: 00055
 Units: G - Gallons (liquids only)* (8.3 pounds)
 Number of Containers: 001
 Container Type: DM - Metal drums, barrels
 Handling Method: T Chemical, physical, or biological treatment.
 Specific Gravity: 01.00
 Year: 2000

L66
North
1/8-1/4
0.171 mi.
902 ft.

MEEKS AUTO REPAIR
1253 MAIN ST
BUFFALO, NY
Site 3 of 3 in cluster L

EDR US Hist Auto Stat 1014539307
N/A

Relative:
Higher

EDR Historical Auto Stations:

Name: MEEKS AUTO REPAIR
 Year: 1964
 Type: AUTOMOBILE REPAIRING

Actual:
651 ft.

MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Site

Database(s)

EDR ID Number
 EPA ID Number

67
WSW
1/8-1/4
0.190 mi.
1001 ft.

MAYFLOWER APARTMENTS
66 SUMMER ST
BUFFALO, NY 14209

NY UST **U003317779**
NY HIST UST **N/A**

Relative:
Higher

UST:

Id/Status: 9-414913 / Unregulated
 Program Type: PBS
 Region: STATE
 DEC Region: 9
 Expiration Date: N/A
 UTM X: 183974.86986999999
 UTM Y: 4757494.6189700002
 Site Type: Apartment Building/Office Building

Actual:
658 ft.

Affiliation Records:

Site Id: 53899
 Affiliation Type: Facility Owner
 Company Name: EUGENIA PUENTE
 Contact Type: Not reported
 Contact Name: Not reported
 Address1: 25 NORTHUMBERLAND RD
 Address2: Not reported
 City: BRIGHTON
 State: NY
 Zip Code: 14618
 Country Code: 001
 Phone: (716) 271-0504
 EMail: Not reported
 Fax Number: Not reported
 Modified By: TRANSLAT
 Date Last Modified: 3/4/2004

Site Id: 53899
 Affiliation Type: Mail Contact
 Company Name: EUGENIA PUENTE
 Contact Type: Not reported
 Contact Name: Not reported
 Address1: 25 NORTHUMBERLAND RD
 Address2: Not reported
 City: BRIGHTON
 State: NY
 Zip Code: 14618
 Country Code: 001
 Phone: (716) 271-0504
 EMail: Not reported
 Fax Number: Not reported
 Modified By: TRANSLAT
 Date Last Modified: 3/4/2004

Site Id: 53899
 Affiliation Type: On-Site Operator
 Company Name: MAYFLOWER APARTMENTS
 Contact Type: Not reported
 Contact Name: RAYMOND KOEHNE
 Address1: Not reported
 Address2: Not reported
 City: Not reported
 State: NN

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MAYFLOWER APARTMENTS (Continued)

U003317779

Zip Code: Not reported
Country Code: 001
Phone: (716) 886-5301
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 3/4/2004

Site Id: 53899
Affiliation Type: Emergency Contact
Company Name: EUGENIA PUENTE
Contact Type: Not reported
Contact Name: RAYMOND KOEHNE
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 001
Phone: (716) 884-5948
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 3/4/2004

Tank Info:

Tank Number: 1
Tank ID: 166495
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 5000
Install Date: Not reported
Date Tank Closed: 06/01/1992
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0001
Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

G00 - Tank Secondary Containment - None
A00 - Tank Internal Protection - None
D02 - Pipe Type - Galvanized Steel
J02 - Dispenser - Suction Dispenser
F01 - Pipe External Protection - Painted/Asphalt Coating
H00 - Tank Leak Detection - None
B01 - Tank External Protection - Painted/Asphalt Coating
C02 - Pipe Location - Underground/On-ground
I00 - Overfill - None

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MAYFLOWER APARTMENTS (Continued)

U003317779

HIST UST:

PBS Number: 9-414913
SPDES Number: Not reported
Emergency Contact: RAYMOND KOEHNE
Emergency Telephone: (716) 884-5948
Operator: RAYMOND KOEHNE
Operator Telephone: (716) 886-5301
Owner Name: EUGENIA PUENTE
Owner Address: 25 NORTHUMBERLAND RD
Owner City,St,Zip: BRIGHTON, NY 14618
Owner Telephone: (716) 271-0504
Owner Type: Corporate/Commercial
Owner Subtype: Not reported
Mailing Name: EUGENIA PUENTE
Mailing Address: 25 NORTHUMBERLAND RD
Mailing Address 2: Not reported
Mailing City,St,Zip: BRIGHTON, NY 14618
Mailing Contact: Not reported
Mailing Telephone: (716) 271-0504
Owner Mark: First Owner
Facility Status: 2 - Unregulated by PBS (the total capacity is less than 1,101 gallons and Subpart 360-14.
Facility Addr2: Not reported
SWIS ID: 1402
Old PBS Number: Not reported
Facility Type: APARTMENT BUILDING
Inspected Date: Not reported
Inspector: Not reported
Inspection Result: Not reported
Federal ID: Not reported
Certification Flag: False
Certification Date: 01/18/1990
Expiration Date: 03/24/1992
Renew Flag: False
Renewal Date: 04/28/1992
Total Capacity: 0
FAMT: True
Facility Screen: No Missing Data
Owner Screen: Minor Data Missing
Tank Screen: 0
Dead Letter: False
CBS Number: Not reported
Town or City: BUFFALO (C)
County Code: 14
Town or City: 02
Region: 9

Tank Id: 1
Tank Location: UNDERGROUND
Tank Status: Closed-Removed
Install Date: Not reported
Capacity (gals): 5000
Product Stored: NOS 1,2, OR 4 FUEL OIL
Tank Type: Steel/carbon steel
Tank Internal: None
Tank External: 10
Pipe Location: Underground

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MAYFLOWER APARTMENTS (Continued)

U003317779

Pipe Type: GALVANIZED STEEL
Pipe Internal: None
Pipe External: 10
Second Containment: None
Leak Detection: None
Overfill Prot: None
Dispenser: Suction
Date Tested: Not reported
Next Test Date: Not reported
Missing Data for Tank: No Missing Data
Date Closed: 06/01/1992
Test Method: Not reported
Deleted: False
Updated: True
Lat/long: Not reported

68
NNW
1/8-1/4
0.195 mi.
1031 ft.

196 LINWOOD AVE
BUFFALO, NY 14209

EDR US Hist Auto Stat 1015296347
N/A

Relative:
Higher

EDR Historical Auto Stations:

Name: BP CARDAMONE LLC
Year: 2005
Address: 196 LINWOOD AVE

Actual:
656 ft.

M69
ESE
1/8-1/4
0.199 mi.
1051 ft.

NATIONAL GRID MANHOLE 119 BEST BUFFALO
119 BEST ST
BUFFALO, NY 14209

RCRA-LQG 1014472938
NYP000967299

Site 1 of 2 in cluster M

Relative:
Lower

RCRA-LQG:

Date form received by agency: 03/02/2012
Facility name: NATIONAL GRID MANHOLE 119 BEST BUFFALO
Facility address: 119 BEST ST
BUFFALO, NY 14209
EPA ID: NYP000967299
Mailing address: ERIE BLVD W
SYRACUSE, NY 13202
Contact: STEPHEN P HALLER
Contact address: ERIE BLVD W A-3
SYRACUSE, NY 13202
Contact country: US
Contact telephone: (315) 428-5206
Contact email: STEPHEN.HALLER@US.NGRID.COM
EPA Region: 02
Classification: Large Quantity Generator
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1

Actual:
643 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NATIONAL GRID MANHOLE 119 BEST BUFFALO (Continued)

1014472938

kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name: NATIONAL GRID
Owner/operator address: ERIE BLVD W
SYRACUSE, NY 13202
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 12/31/1979
Owner/Op end date: Not reported

Owner/operator name: NIAGARA MOHAWK POWER CORP
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 12/31/1979
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 06/02/2011
Facility name: NATIONAL GRID MANHOLE 119 BEST BUFFALO
Site name: NIAGARA MOHAWK A NATIONAL GRID CO
Classification: Not a generator, verified

Date form received by agency: 05/02/2011
Facility name: NATIONAL GRID MANHOLE 119 BEST BUFFALO
Site name: NIAGARA MOHAWK A NATIONAL GRID CO
Classification: Small Quantity Generator

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NATIONAL GRID MANHOLE 119 BEST BUFFALO (Continued)

1014472938

Hazardous Waste Summary:

Waste code: D008
Waste name: LEAD

Biennial Reports:

Last Biennial Reporting Year: 2013

Annual Waste Handled:

Waste code: D008
Waste name: LEAD
Amount (Lbs): 3039

Violation Status: No violations found

M70
ESE
1/8-1/4
0.199 mi.
1051 ft.

NIAGARA MOHAWK A NATIONAL GRID CO
119 BEST ST.
BUFFALO, NY 14209

NY MANIFEST **S112139500**
N/A

Site 2 of 2 in cluster M

Relative:
Lower

NY MANIFEST:
EPA ID: NYP000967299
Country: USA
Mailing Name: NIAGARA MOHAWK A NATIONAL GRID CO
Mailing Contact: MIKE MORROW
Mailing Address: 144 KENSINGTON AVE
Mailing Address 2: Not reported
Mailing City: BUFFALO
Mailing State: NY
Mailing Zip: 14214
Mailing Zip4: Not reported
Mailing Country: USA
Mailing Phone: 716-831-7428

NY MANIFEST:
No Manifest Records Available

N71
SSW
1/8-1/4
0.200 mi.
1054 ft.

MORRISON AUTO HOSPITAL
1059 MAIN ST
BUFFALO, NY

EDR US Hist Auto Stat **1014539232**
N/A

Site 1 of 2 in cluster N

Relative:
Higher

EDR Historical Auto Stations:
Name: MORRISON AUTO HOSPITAL
Year: 1940
Type: AUTOMOBILE REPAIRING

Actual:
654 ft.

Name: HAMILTON KENNETH BOATS
Year: 1946
Type: REPAIR SHOPS

MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Site

Database(s)

EDR ID Number
 EPA ID Number

O72
 North
 1/8-1/4
 0.203 mi.
 1071 ft.

1264 MAIN ST
BUFFALO, NY 14209
Site 1 of 4 in cluster O

EDR US Hist Auto Stat 1015195387
N/A

Relative:
Higher
Actual:
652 ft.

EDR Historical Auto Stations:
 Name: DELTA SONIC SONIC LUBE
 Year: 2000
 Address: 1264 MAIN ST

 Name: DELTA SONIC SONIC LUBE
 Year: 2001
 Address: 1264 MAIN ST

O73
 North
 1/8-1/4
 0.203 mi.
 1071 ft.

DELTA SONIC MAIN ST
1264 MAIN ST
BUFFALO, NY 14209
Site 2 of 4 in cluster O

NY UST U004062503
N/A

Relative:
Higher
Actual:
652 ft.

UST:
 Id/Status: 9-225223 / Active
 Program Type: PBS
 Region: STATE
 DEC Region: 9
 Expiration Date: 2017/08/17
 UTM X: 184299.43781999999
 UTM Y: 4757837.3947599996
 Site Type: Retail Gasoline Sales

 Affiliation Records:
 Site Id: 53311
 Affiliation Type: Emergency Contact
 Company Name: DELTA SONIC CARWASH SYSTEMS, INC.
 Contact Type: Not reported
 Contact Name: BRUCE A. NATALIZIA
 Address1: Not reported
 Address2: Not reported
 City: Not reported
 State: NN
 Zip Code: Not reported
 Country Code: 999
 Phone: (716) 998-9963
 EMail: Not reported
 Fax Number: Not reported
 Modified By: askalsk
 Date Last Modified: 11/28/2012

 Site Id: 53311
 Affiliation Type: Mail Contact
 Company Name: DELTA SONIC CARWASH SYSTEMS, INC.
 Contact Type: Not reported
 Contact Name: PATRICIA MAJCHRZAK
 Address1: 570 DELAWARE AVE
 Address2: Not reported
 City: BUFFALO
 State: NY
 Zip Code: 14202
 Country Code: 001

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DELTA SONIC MAIN ST (Continued)

U004062503

Phone: (716) 541-2340
EMail: Not reported
Fax Number: Not reported
Modified By: askalsk
Date Last Modified: 6/10/2013

Site Id: 53311
Affiliation Type: On-Site Operator
Company Name: DELTA SONIC MAIN ST
Contact Type: Not reported
Contact Name: JAMES GUMMO
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 001
Phone: (716) 882-2941
EMail: Not reported
Fax Number: Not reported
Modified By: SLZIEMBA
Date Last Modified: 8/15/2012

Site Id: 53311
Affiliation Type: Facility Owner
Company Name: DELTA SONIC CARWASH SYSTEMS, INC.
Contact Type: VP GASOLINE OPERATIONS
Contact Name: BRUCE A. NATALIZIA
Address1: 570 DELAWARE AVE
Address2: Not reported
City: BUFFALO
State: NY
Zip Code: 14202
Country Code: 001
Phone: (716) 998-0931
EMail: Not reported
Fax Number: Not reported
Modified By: SLZIEMBA
Date Last Modified: 8/15/2012

Tank Info:

Tank Number: 1
Tank ID: 164835
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 4000
Install Date: 09/01/1986
Date Tank Closed: 02/23/2005
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0009
Common Name of Substance: Gasoline

Tightness Test Method: NN
Date Test: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DELTA SONIC MAIN ST (Continued)

U004062503

Next Test Date: Not reported
Pipe Model: Not reported
Modified By: AESKALSK
Last Modified: 03/04/2005

Equipment Records:

B02 - Tank External Protection - Original Sacrificial Anode
A00 - Tank Internal Protection - None
J01 - Dispenser - Pressurized Dispenser
I03 - Overfill - Automatic Shut-Off
D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
G04 - Tank Secondary Containment - Double-Walled (Underground)
H99 - Tank Leak Detection - Other
C02 - Pipe Location - Underground/On-ground
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
F04 - Pipe External Protection - Fiberglass
K01 - Spill Prevention - Catch Basin

Tank Number: 1A
Tank ID: 180829
Tank Status: In Service
Material Name: In Service
Capacity Gallons: 20000
Install Date: 10/04/2004
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Equivalent technology
Material Code: 2712
Common Name of Substance: Gasoline/Ethanol

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: LDGOMEZ
Last Modified: 03/03/2011

Equipment Records:

I03 - Overfill - Automatic Shut-Off
C02 - Pipe Location - Underground/On-ground
G04 - Tank Secondary Containment - Double-Walled (Underground)
L07 - Piping Leak Detection - Pressurized Piping Leak Detector
D11 - Pipe Type - Flexible Piping
F06 - Pipe External Protection - Wrapped
A00 - Tank Internal Protection - None
J01 - Dispenser - Pressurized Dispenser
B04 - Tank External Protection - Fiberglass
H05 - Tank Leak Detection - In-Tank System (ATG)
L01 - Piping Leak Detection - Interstitial - Electronic Monitoring
E04 - Piping Secondary Containment - Double-Walled (Underground)
K01 - Spill Prevention - Catch Basin

Tank Number: 2
Tank ID: 164836
Tank Status: Closed - Removed

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DELTA SONIC MAIN ST (Continued)

U004062503

Material Name: Closed - Removed
Capacity Gallons: 8000
Install Date: 09/01/1986
Date Tank Closed: 02/23/2005
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0009
Common Name of Substance: Gasoline

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: AESKALSK
Last Modified: 03/04/2005

Equipment Records:

A00 - Tank Internal Protection - None
J01 - Dispenser - Pressurized Dispenser
I03 - Overfill - Automatic Shut-Off
H99 - Tank Leak Detection - Other
D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
G04 - Tank Secondary Containment - Double-Walled (Underground)
C02 - Pipe Location - Underground/On-ground
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
B02 - Tank External Protection - Original Sacrificial Anode
F04 - Pipe External Protection - Fiberglass
K01 - Spill Prevention - Catch Basin

Tank Number: 2A
Tank ID: 180830
Tank Status: In Service
Material Name: In Service
Capacity Gallons: 5000
Install Date: 10/04/2004
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Equivalent technology
Material Code: 2712
Common Name of Substance: Gasoline/Ethanol

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: LDGOMEZ
Last Modified: 03/03/2011

Equipment Records:

D11 - Pipe Type - Flexible Piping
F06 - Pipe External Protection - Wrapped
A00 - Tank Internal Protection - None
J01 - Dispenser - Pressurized Dispenser
E04 - Piping Secondary Containment - Double-Walled (Underground)
I03 - Overfill - Automatic Shut-Off

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DELTA SONIC MAIN ST (Continued)

U004062503

G04 - Tank Secondary Containment - Double-Walled (Underground)
L07 - Piping Leak Detection - Pressurized Piping Leak Detector
B04 - Tank External Protection - Fiberglass
H05 - Tank Leak Detection - In-Tank System (ATG)
L01 - Piping Leak Detection - Interstitial - Electronic Monitoring
K01 - Spill Prevention - Catch Basin
C02 - Pipe Location - Underground/On-ground

Tank Number: 2B
Tank ID: 180831
Tank Status: In Service
Material Name: In Service
Capacity Gallons: 8000
Install Date: 10/04/2004
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Equivalent technology
Material Code: 2712
Common Name of Substance: Gasoline/Ethanol

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: LDGOMEZ
Last Modified: 03/03/2011

Equipment Records:

C02 - Pipe Location - Underground/On-ground
I03 - Overfill - Automatic Shut-Off
G04 - Tank Secondary Containment - Double-Walled (Underground)
L07 - Piping Leak Detection - Pressurized Piping Leak Detector
B04 - Tank External Protection - Fiberglass
H05 - Tank Leak Detection - In-Tank System (ATG)
L01 - Piping Leak Detection - Interstitial - Electronic Monitoring
K01 - Spill Prevention - Catch Basin
E04 - Piping Secondary Containment - Double-Walled (Underground)
D11 - Pipe Type - Flexible Piping
F06 - Pipe External Protection - Wrapped
A00 - Tank Internal Protection - None
J01 - Dispenser - Pressurized Dispenser

Tank Number: 2C
Tank ID: 180832
Tank Status: In Service
Material Name: In Service
Capacity Gallons: 5000
Install Date: 10/04/2004
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Equivalent technology
Material Code: 0008
Common Name of Substance: Diesel

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DELTA SONIC MAIN ST (Continued)

U004062503

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: LDGOMEZ
Last Modified: 03/03/2011

Equipment Records:

C02 - Pipe Location - Underground/On-ground
K01 - Spill Prevention - Catch Basin
E04 - Piping Secondary Containment - Double-Walled (Underground)
B04 - Tank External Protection - Fiberglass
H05 - Tank Leak Detection - In-Tank System (ATG)
L01 - Piping Leak Detection - Interstitial - Electronic Monitoring
D11 - Pipe Type - Flexible Piping
F06 - Pipe External Protection - Wrapped
A00 - Tank Internal Protection - None
J01 - Dispenser - Pressurized Dispenser
I03 - Overfill - Automatic Shut-Off
G04 - Tank Secondary Containment - Double-Walled (Underground)
L07 - Piping Leak Detection - Pressurized Piping Leak Detector

Tank Number: 3
Tank ID: 164837
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 4000
Install Date: 09/01/1986
Date Tank Closed: 02/23/2005
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0009
Common Name of Substance: Gasoline

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: AESKALSK
Last Modified: 03/04/2005

Equipment Records:

H99 - Tank Leak Detection - Other
D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
G04 - Tank Secondary Containment - Double-Walled (Underground)
A00 - Tank Internal Protection - None
J01 - Dispenser - Pressurized Dispenser
I03 - Overfill - Automatic Shut-Off
F04 - Pipe External Protection - Fiberglass
K01 - Spill Prevention - Catch Basin
B02 - Tank External Protection - Original Sacrificial Anode
C02 - Pipe Location - Underground/On-ground
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring

Tank Number: 4

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DELTA SONIC MAIN ST (Continued)

U004062503

Tank ID: 164838
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 6000
Install Date: 09/01/1986
Date Tank Closed: 02/23/2005
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0009
Common Name of Substance: Gasoline

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: AESKALSK
Last Modified: 03/04/2005

Equipment Records:

C02 - Pipe Location - Underground/On-ground
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I03 - Overfill - Automatic Shut-Off
D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
G04 - Tank Secondary Containment - Double-Walled (Underground)
B02 - Tank External Protection - Original Sacrificial Anode
F04 - Pipe External Protection - Fiberglass
K01 - Spill Prevention - Catch Basin
H99 - Tank Leak Detection - Other
A00 - Tank Internal Protection - None
J01 - Dispenser - Pressurized Dispenser

Tank Number: 5
Tank ID: 164839
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 4000
Install Date: 09/01/1986
Date Tank Closed: 02/23/2005
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0009
Common Name of Substance: Gasoline

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: AESKALSK
Last Modified: 03/04/2005

Equipment Records:

D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
G04 - Tank Secondary Containment - Double-Walled (Underground)
H99 - Tank Leak Detection - Other
I03 - Overfill - Automatic Shut-Off

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DELTA SONIC MAIN ST (Continued)

U004062503

- A00 - Tank Internal Protection - None
- J01 - Dispenser - Pressurized Dispenser
- B02 - Tank External Protection - Original Sacrificial Anode
- C02 - Pipe Location - Underground/On-ground
- H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
- F04 - Pipe External Protection - Fiberglass
- K01 - Spill Prevention - Catch Basin

Tank Number: 6
Tank ID: 164840
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 4000
Install Date: 09/01/1986
Date Tank Closed: 02/23/2005
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0008
Common Name of Substance: Diesel

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: AESKALSK
Last Modified: 03/04/2005

Equipment Records:

- A00 - Tank Internal Protection - None
- J01 - Dispenser - Pressurized Dispenser
- I03 - Overfill - Automatic Shut-Off
- D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
- G04 - Tank Secondary Containment - Double-Walled (Underground)
- C02 - Pipe Location - Underground/On-ground
- H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
- H99 - Tank Leak Detection - Other
- B02 - Tank External Protection - Original Sacrificial Anode
- F04 - Pipe External Protection - Fiberglass
- K01 - Spill Prevention - Catch Basin

Tank Number: 7
Tank ID: 164841
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 4000
Install Date: 09/01/1986
Date Tank Closed: 02/23/2005
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 2722
Common Name of Substance: Kerosene [#1 Fuel Oil] (Resale/Redistribute)

Tightness Test Method: NN
Date Test: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DELTA SONIC MAIN ST (Continued)

U004062503

Next Test Date: Not reported
Pipe Model: Not reported
Modified By: AESKALSK
Last Modified: 03/04/2005

Equipment Records:

I03 - Overfill - Automatic Shut-Off
H99 - Tank Leak Detection - Other
D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
G04 - Tank Secondary Containment - Double-Walled (Underground)
B02 - Tank External Protection - Original Sacrificial Anode
F04 - Pipe External Protection - Fiberglass
K01 - Spill Prevention - Catch Basin
A00 - Tank Internal Protection - None
J01 - Dispenser - Pressurized Dispenser
C02 - Pipe Location - Underground/On-ground
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring

Tank Number: 8
Tank ID: 164842
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 4000
Install Date: 09/01/1986
Date Tank Closed: 02/23/2005
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0009
Common Name of Substance: Gasoline

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: AESKALSK
Last Modified: 03/04/2005

Equipment Records:

F04 - Pipe External Protection - Fiberglass
K01 - Spill Prevention - Catch Basin
A00 - Tank Internal Protection - None
J01 - Dispenser - Pressurized Dispenser
D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
G04 - Tank Secondary Containment - Double-Walled (Underground)
H99 - Tank Leak Detection - Other
I03 - Overfill - Automatic Shut-Off
B02 - Tank External Protection - Original Sacrificial Anode
C02 - Pipe Location - Underground/On-ground
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring

MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Site

Database(s)

EDR ID Number
 EPA ID Number

O74 **DELTASONIC**
North **1264 MAIN STREET**
1/8-1/4 **BUFFALO, NY**
0.203 mi.
1071 ft. **Site 3 of 4 in cluster O**

NY AST **U003317318**
NY Spills **N/A**

Relative:
Higher

AST:
 Region: STATE
 DEC Region: 9
 Site Status: Active
 Facility Id: 9-225223
 Program Type: PBS
 UTM X: 184299.43781999999
 UTM Y: 4757837.3947599996
 Expiration Date: 2017/08/17
 Site Type: Retail Gasoline Sales

Actual:
652 ft.

Affiliation Records:
 Site Id: 53311
 Affiliation Type: Emergency Contact
 Company Name: DELTA SONIC CARWASH SYSTEMS, INC.
 Contact Type: Not reported
 Contact Name: BRUCE A. NATALIZIA
 Address1: Not reported
 Address2: Not reported
 City: Not reported
 State: NN
 Zip Code: Not reported
 Country Code: 999
 Phone: (716) 998-9963
 EMail: Not reported
 Fax Number: Not reported
 Modified By: askalsk
 Date Last Modified: 11/28/2012

Site Id: 53311
 Affiliation Type: Mail Contact
 Company Name: DELTA SONIC CARWASH SYSTEMS, INC.
 Contact Type: Not reported
 Contact Name: PATRICIA MAJCHRZAK
 Address1: 570 DELAWARE AVE
 Address2: Not reported
 City: BUFFALO
 State: NY
 Zip Code: 14202
 Country Code: 001
 Phone: (716) 541-2340
 EMail: Not reported
 Fax Number: Not reported
 Modified By: askalsk
 Date Last Modified: 6/10/2013

Site Id: 53311
 Affiliation Type: On-Site Operator
 Company Name: DELTA SONIC MAIN ST
 Contact Type: Not reported
 Contact Name: JAMES GUMMO
 Address1: Not reported
 Address2: Not reported
 City: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DELTASONIC (Continued)

U003317318

State: NN
Zip Code: Not reported
Country Code: 001
Phone: (716) 882-2941
EMail: Not reported
Fax Number: Not reported
Modified By: SLZIEMBA
Date Last Modified: 8/15/2012

Site Id: 53311
Affiliation Type: Facility Owner
Company Name: DELTA SONIC CARWASH SYSTEMS, INC.
Contact Type: VP GASOLINE OPERATIONS
Contact Name: BRUCE A. NATALIZIA
Address1: 570 DELAWARE AVE
Address2: Not reported
City: BUFFALO
State: NY
Zip Code: 14202
Country Code: 001
Phone: (716) 998-0931
EMail: Not reported
Fax Number: Not reported
Modified By: SLZIEMBA
Date Last Modified: 8/15/2012

Tank Info:

Tank Number: 010
Tank Id: 208540
Material Code: 0013
Common Name of Substance: Lube Oil

Equipment Records:

D11 - Pipe Type - Flexible Piping
F99 - Pipe External Protection - Other
G09 - Tank Secondary Containment - Modified Double-Walled
(Aboveground)
E99 - Piping Secondary Containment - Other
I02 - Overfill - High Level Alarm
B02 - Tank External Protection - Original Sacrificial Anode
H05 - Tank Leak Detection - In-Tank System (ATG)
I04 - Overfill - Product Level Gauge (A/G)
K01 - Spill Prevention - Catch Basin
A00 - Tank Internal Protection - None
J02 - Dispenser - Suction Dispenser
L09 - Piping Leak Detection - Exempt Suction Piping
C01 - Pipe Location - Aboveground

Tank Location: 2
Tank Type: Steel/Carbon Steel/Iron
Tank Status: In Service
Pipe Model: Not reported
Install Date: 10/01/2005
Capacity Gallons: 325
Tightness Test Method: NN
Date Test: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DELTASONIC (Continued)

U003317318

Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True
Modified By: AESKALSK
Last Modified: 10/25/2005
Material Name: Lube Oil

Tank Number: 020
Tank Id: 208541
Material Code: 0013
Common Name of Substance: Lube Oil

Equipment Records:

C01 - Pipe Location - Aboveground
E99 - Piping Secondary Containment - Other
D11 - Pipe Type - Flexible Piping
A00 - Tank Internal Protection - None
B02 - Tank External Protection - Original Sacrificial Anode
H05 - Tank Leak Detection - In-Tank System (ATG)
F99 - Pipe External Protection - Other
G09 - Tank Secondary Containment - Modified Double-Walled (Aboveground)
J02 - Dispenser - Suction Dispenser
L09 - Piping Leak Detection - Exempt Suction Piping
I02 - Overfill - High Level Alarm
I04 - Overfill - Product Level Gauge (A/G)
K01 - Spill Prevention - Catch Basin

2
Tank Location:
Tank Type: Steel/Carbon Steel/Iron
Tank Status: In Service
Pipe Model: Not reported
Install Date: 10/01/2005
Capacity Gallons: 325
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True
Modified By: AESKALSK
Last Modified: 10/25/2005
Material Name: Lube Oil

Tank Number: 030
Tank Id: 208542
Material Code: 0013
Common Name of Substance: Lube Oil

Equipment Records:

D11 - Pipe Type - Flexible Piping
A00 - Tank Internal Protection - None
J02 - Dispenser - Suction Dispenser
L09 - Piping Leak Detection - Exempt Suction Piping
F99 - Pipe External Protection - Other
G09 - Tank Secondary Containment - Modified Double-Walled

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DELTASONIC (Continued)

U003317318

(Aboveground)
C01 - Pipe Location - Aboveground
B02 - Tank External Protection - Original Sacrificial Anode
H05 - Tank Leak Detection - In-Tank System (ATG)
I04 - Overfill - Product Level Gauge (A/G)
K01 - Spill Prevention - Catch Basin
E99 - Piping Secondary Containment - Other
I02 - Overfill - High Level Alarm

Tank Location: 2
Tank Type: Steel/Carbon Steel/Iron
Tank Status: In Service
Pipe Model: Not reported
Install Date: 10/01/2005
Capacity Gallons: 325
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True
Modified By: AESKALSK
Last Modified: 10/25/2005
Material Name: Lube Oil

Tank Number: 040
Tank Id: 208543
Material Code: 0013
Common Name of Substance: Lube Oil

Equipment Records:

C01 - Pipe Location - Aboveground
D11 - Pipe Type - Flexible Piping
F99 - Pipe External Protection - Other
G09 - Tank Secondary Containment - Modified Double-Walled (Aboveground)
B02 - Tank External Protection - Original Sacrificial Anode
H05 - Tank Leak Detection - In-Tank System (ATG)
I04 - Overfill - Product Level Gauge (A/G)
K01 - Spill Prevention - Catch Basin
A00 - Tank Internal Protection - None
J02 - Dispenser - Suction Dispenser
L09 - Piping Leak Detection - Exempt Suction Piping
E99 - Piping Secondary Containment - Other
I02 - Overfill - High Level Alarm

Tank Location: 2
Tank Type: Steel/Carbon Steel/Iron
Tank Status: In Service
Pipe Model: Not reported
Install Date: 10/01/2005
Capacity Gallons: 325
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True
Modified By: AESKALSK
Last Modified: 10/25/2005

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DELTASONIC (Continued)

U003317318

Material Name: Lube Oil

Tank Number: 050
Tank Id: 208544
Material Code: 0013
Common Name of Substance: Lube Oil

Equipment Records:

- I04 - Overfill - Product Level Gauge (A/G)
- K01 - Spill Prevention - Catch Basin
- A00 - Tank Internal Protection - None
- J02 - Dispenser - Suction Dispenser
- L09 - Piping Leak Detection - Exempt Suction Piping
- D11 - Pipe Type - Flexible Piping
- C01 - Pipe Location - Aboveground
- B02 - Tank External Protection - Original Sacrificial Anode
- H05 - Tank Leak Detection - In-Tank System (ATG)
- F99 - Pipe External Protection - Other
- G09 - Tank Secondary Containment - Modified Double-Walled (Aboveground)
- E99 - Piping Secondary Containment - Other
- I02 - Overfill - High Level Alarm

Tank Location: 2
Tank Type: Steel/Carbon Steel/Iron
Tank Status: In Service
Pipe Model: Not reported
Install Date: 10/01/2005
Capacity Gallons: 325
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True
Modified By: AESKALSK
Last Modified: 10/25/2005
Material Name: Lube Oil

Tank Number: 060
Tank Id: 208545
Material Code: 0013
Common Name of Substance: Lube Oil

Equipment Records:

- A00 - Tank Internal Protection - None
- J02 - Dispenser - Suction Dispenser
- L09 - Piping Leak Detection - Exempt Suction Piping
- C01 - Pipe Location - Aboveground
- E99 - Piping Secondary Containment - Other
- I02 - Overfill - High Level Alarm
- D11 - Pipe Type - Flexible Piping
- B02 - Tank External Protection - Original Sacrificial Anode
- H05 - Tank Leak Detection - In-Tank System (ATG)
- I04 - Overfill - Product Level Gauge (A/G)
- K01 - Spill Prevention - Catch Basin

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DELTASONIC (Continued)

U003317318

F99 - Pipe External Protection - Other
G09 - Tank Secondary Containment - Modified Double-Walled
(Aboveground)
Tank Location: 2
Tank Type: Steel/Carbon Steel/Iron
Tank Status: In Service
Pipe Model: Not reported
Install Date: 10/01/2005
Capacity Gallons: 325
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True
Modified By: AESKALSK
Last Modified: 10/25/2005
Material Name: Lube Oil

Tank Number: 070
Tank Id: 208546
Material Code: 0013
Common Name of Substance: Lube Oil

Equipment Records:

A00 - Tank Internal Protection - None
J02 - Dispenser - Suction Dispenser
L09 - Piping Leak Detection - Exempt Suction Piping
C01 - Pipe Location - Aboveground
E99 - Piping Secondary Containment - Other
I02 - Overfill - High Level Alarm
D11 - Pipe Type - Flexible Piping
B02 - Tank External Protection - Original Sacrificial Anode
H05 - Tank Leak Detection - In-Tank System (ATG)
I04 - Overfill - Product Level Gauge (A/G)
K01 - Spill Prevention - Catch Basin
F99 - Pipe External Protection - Other
G09 - Tank Secondary Containment - Modified Double-Walled
(Aboveground)

Tank Location: 2
Tank Type: Steel/Carbon Steel/Iron
Tank Status: In Service
Pipe Model: Not reported
Install Date: 10/01/2005
Capacity Gallons: 850
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True
Modified By: AESKALSK
Last Modified: 10/25/2005
Material Name: Lube Oil

Tank Number: 080
Tank Id: 208547

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DELTASONIC (Continued)

U003317318

Material Code: 0013
Common Name of Substance: Lube Oil

Equipment Records:

D11 - Pipe Type - Flexible Piping
F99 - Pipe External Protection - Other
G09 - Tank Secondary Containment - Modified Double-Walled (Aboveground)
E99 - Piping Secondary Containment - Other
I02 - Overfill - High Level Alarm
B02 - Tank External Protection - Original Sacrificial Anode
H05 - Tank Leak Detection - In-Tank System (ATG)
I04 - Overfill - Product Level Gauge (A/G)
K01 - Spill Prevention - Catch Basin
A00 - Tank Internal Protection - None
J02 - Dispenser - Suction Dispenser
L09 - Piping Leak Detection - Exempt Suction Piping
C01 - Pipe Location - Aboveground

Tank Location: 2
Tank Type: Steel/Carbon Steel/Iron
Tank Status: In Service
Pipe Model: Not reported
Install Date: 10/01/2005
Capacity Gallons: 720
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True
Modified By: AESKALSK
Last Modified: 10/25/2005
Material Name: Lube Oil

Tank Number: 090
Tank Id: 208548
Material Code: 0022
Common Name of Substance: Waste Oil/Used Oil

Equipment Records:

D11 - Pipe Type - Flexible Piping
A00 - Tank Internal Protection - None
J02 - Dispenser - Suction Dispenser
L09 - Piping Leak Detection - Exempt Suction Piping
C01 - Pipe Location - Aboveground
B02 - Tank External Protection - Original Sacrificial Anode
H05 - Tank Leak Detection - In-Tank System (ATG)
F99 - Pipe External Protection - Other
G09 - Tank Secondary Containment - Modified Double-Walled (Aboveground)
E99 - Piping Secondary Containment - Other
I02 - Overfill - High Level Alarm
I04 - Overfill - Product Level Gauge (A/G)
K01 - Spill Prevention - Catch Basin

Tank Location: 2
Tank Type: Steel/Carbon Steel/Iron

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DELTASONIC (Continued)

U003317318

Tank Status: In Service
Pipe Model: Not reported
Install Date: 10/01/2005
Capacity Gallons: 1100
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True
Modified By: AESKALSK
Last Modified: 10/25/2005
Material Name: Waste Oil/Used Oil

Tank Number: 10
Tank Id: 173144
Material Code: 0013
Common Name of Substance: Lube Oil

Equipment Records:

C01 - Pipe Location - Aboveground
H00 - Tank Leak Detection - None
B01 - Tank External Protection - Painted/Asphalt Coating
F00 - Pipe External Protection - None
I04 - Overfill - Product Level Gauge (A/G)
A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
G01 - Tank Secondary Containment - Diking (Aboveground)
J02 - Dispenser - Suction Dispenser
L09 - Piping Leak Detection - Exempt Suction Piping

Tank Location: 3
Tank Type: Steel/Carbon Steel/Iron
Tank Status: Closed - Removed
Pipe Model: Not reported
Install Date: 06/01/1998
Capacity Gallons: 280
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: 06/01/2004
Register: True
Modified By: AESKALSK
Last Modified: 10/25/2005
Material Name: Lube Oil

Tank Number: 100
Tank Id: 208549
Material Code: 0022
Common Name of Substance: Waste Oil/Used Oil

Equipment Records:

A00 - Tank Internal Protection - None
J02 - Dispenser - Suction Dispenser
L09 - Piping Leak Detection - Exempt Suction Piping
C01 - Pipe Location - Aboveground

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DELTASONIC (Continued)

U003317318

D11 - Pipe Type - Flexible Piping
E99 - Piping Secondary Containment - Other
I02 - Overfill - High Level Alarm
B02 - Tank External Protection - Original Sacrificial Anode
H05 - Tank Leak Detection - In-Tank System (ATG)
I04 - Overfill - Product Level Gauge (A/G)
K01 - Spill Prevention - Catch Basin
F99 - Pipe External Protection - Other
G09 - Tank Secondary Containment - Modified Double-Walled (Aboveground)

Tank Location: 2
Tank Type: Steel/Carbon Steel/Iron
Tank Status: In Service
Pipe Model: Not reported
Install Date: 10/01/2005
Capacity Gallons: 300
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True
Modified By: AESKALSK
Last Modified: 10/25/2005
Material Name: Waste Oil/Used Oil

Tank Number: 110
Tank Id: 208550
Material Code: 0022
Common Name of Substance: Waste Oil/Used Oil

Equipment Records:

E99 - Piping Secondary Containment - Other
I02 - Overfill - High Level Alarm
C01 - Pipe Location - Aboveground
B02 - Tank External Protection - Original Sacrificial Anode
H05 - Tank Leak Detection - In-Tank System (ATG)
I04 - Overfill - Product Level Gauge (A/G)
K01 - Spill Prevention - Catch Basin
F99 - Pipe External Protection - Other
G09 - Tank Secondary Containment - Modified Double-Walled (Aboveground)
D11 - Pipe Type - Flexible Piping
A00 - Tank Internal Protection - None
J02 - Dispenser - Suction Dispenser
L09 - Piping Leak Detection - Exempt Suction Piping

Tank Location: 2
Tank Type: Steel/Carbon Steel/Iron
Tank Status: In Service
Pipe Model: Not reported
Install Date: 10/01/2005
Capacity Gallons: 300
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DELTASONIC (Continued)

U003317318

Modified By: AESKALSK
Last Modified: 10/25/2005
Material Name: Waste Oil/Used Oil

Tank Number: 120
Tank Id: 208551
Material Code: 0022
Common Name of Substance: Waste Oil/Used Oil

Equipment Records:

D11 - Pipe Type - Flexible Piping
C01 - Pipe Location - Aboveground
F99 - Pipe External Protection - Other
G09 - Tank Secondary Containment - Modified Double-Walled (Aboveground)
E99 - Piping Secondary Containment - Other
B02 - Tank External Protection - Original Sacrificial Anode
H05 - Tank Leak Detection - In-Tank System (ATG)
I04 - Overfill - Product Level Gauge (A/G)
K01 - Spill Prevention - Catch Basin
A00 - Tank Internal Protection - None
J02 - Dispenser - Suction Dispenser
L09 - Piping Leak Detection - Exempt Suction Piping
I02 - Overfill - High Level Alarm

Tank Location: 2
Tank Type: Steel/Carbon Steel/Iron
Tank Status: In Service
Pipe Model: Not reported
Install Date: 10/01/2005
Capacity Gallons: 300
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True
Modified By: AESKALSK
Last Modified: 10/25/2005
Material Name: Waste Oil/Used Oil

Tank Number: 130
Tank Id: 208539
Material Code: 0022
Common Name of Substance: Waste Oil/Used Oil

Equipment Records:

E99 - Piping Secondary Containment - Other
I02 - Overfill - High Level Alarm
C01 - Pipe Location - Aboveground
B02 - Tank External Protection - Original Sacrificial Anode
H05 - Tank Leak Detection - In-Tank System (ATG)
I04 - Overfill - Product Level Gauge (A/G)
K01 - Spill Prevention - Catch Basin
F99 - Pipe External Protection - Other
G09 - Tank Secondary Containment - Modified Double-Walled

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DELTASONIC (Continued)

U003317318

(Aboveground)
D11 - Pipe Type - Flexible Piping
A00 - Tank Internal Protection - None
J02 - Dispenser - Suction Dispenser
L09 - Piping Leak Detection - Exempt Suction Piping
Tank Location: 2
Tank Type: Steel/Carbon Steel/Iron
Tank Status: In Service
Pipe Model: Not reported
Install Date: 10/01/2005
Capacity Gallons: 300
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True
Modified By: AESKALSK
Last Modified: 10/25/2005
Material Name: Waste Oil/Used Oil

Tank Number: 140
Tank Id: 238089
Material Code: 0015
Common Name of Substance: Motor Oil

Equipment Records:

L00 - Piping Leak Detection - None
A00 - Tank Internal Protection - None
B00 - Tank External Protection - None
K00 - Spill Prevention - None
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
I04 - Overfill - Product Level Gauge (A/G)
E00 - Piping Secondary Containment - None
H00 - Tank Leak Detection - None
D00 - Pipe Type - No Piping
G00 - Tank Secondary Containment - None
J03 - Dispenser - Gravity

Tank Location: 3
Tank Type: Plastic
Tank Status: Closed - Removed
Pipe Model: Not reported
Install Date: 01/01/2010
Capacity Gallons: 180
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: 11/15/2012
Register: True
Modified By: askalsk
Last Modified: 11/19/2012
Material Name: Motor Oil

Tank Number: 150
Tank Id: 238090

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DELTASONIC (Continued)

U003317318

Material Code: 0015
Common Name of Substance: Motor Oil

Equipment Records:

D00 - Pipe Type - No Piping
G00 - Tank Secondary Containment - None
J03 - Dispenser - Gravity
E00 - Piping Secondary Containment - None
H00 - Tank Leak Detection - None
L00 - Piping Leak Detection - None
B00 - Tank External Protection - None
K00 - Spill Prevention - None
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
I04 - Overfill - Product Level Gauge (A/G)
A00 - Tank Internal Protection - None

3
Tank Location:
Tank Type: Plastic
Tank Status: Closed - Removed
Pipe Model: Not reported
Install Date: 01/01/2010
Capacity Gallons: 180
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: 11/15/2012
Register: True
Modified By: askalsk
Last Modified: 11/19/2012
Material Name: Motor Oil

Tank Number: 20
Tank Id: 173145
Material Code: 0013
Common Name of Substance: Lube Oil

Equipment Records:

C01 - Pipe Location - Aboveground
H00 - Tank Leak Detection - None
B01 - Tank External Protection - Painted/Asphalt Coating
F00 - Pipe External Protection - None
I04 - Overfill - Product Level Gauge (A/G)
A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
G01 - Tank Secondary Containment - Diking (Aboveground)
J02 - Dispenser - Suction Dispenser
L09 - Piping Leak Detection - Exempt Suction Piping

3
Tank Location:
Tank Type: Steel/Carbon Steel/Iron
Tank Status: Closed - Removed
Pipe Model: Not reported
Install Date: 06/01/1998
Capacity Gallons: 280
Tightness Test Method: NN
Date Test: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DELTASONIC (Continued)

U003317318

Next Test Date: Not reported
Date Tank Closed: 06/01/2004
Register: True
Modified By: AESKALSK
Last Modified: 10/25/2005
Material Name: Lube Oil

Tank Number: 30
Tank Id: 173146
Material Code: 0013
Common Name of Substance: Lube Oil

Equipment Records:

B01 - Tank External Protection - Painted/Asphalt Coating
F00 - Pipe External Protection - None
I04 - Overfill - Product Level Gauge (A/G)
C01 - Pipe Location - Aboveground
H00 - Tank Leak Detection - None
A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
G01 - Tank Secondary Containment - Diking (Aboveground)
J02 - Dispenser - Suction Dispenser
L09 - Piping Leak Detection - Exempt Suction Piping

Tank Location: 3
Tank Type: Steel/Carbon Steel/Iron
Tank Status: Closed - Removed
Pipe Model: Not reported
Install Date: 06/01/1998
Capacity Gallons: 280
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: 06/01/2004
Register: True
Modified By: AESKALSK
Last Modified: 10/25/2005
Material Name: Lube Oil

Tank Number: 40
Tank Id: 173147
Material Code: 0013
Common Name of Substance: Lube Oil

Equipment Records:

A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
G01 - Tank Secondary Containment - Diking (Aboveground)
J02 - Dispenser - Suction Dispenser
L09 - Piping Leak Detection - Exempt Suction Piping
C01 - Pipe Location - Aboveground
H00 - Tank Leak Detection - None
B01 - Tank External Protection - Painted/Asphalt Coating
F00 - Pipe External Protection - None
I04 - Overfill - Product Level Gauge (A/G)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DELTASONIC (Continued)

U003317318

Tank Location: 3
Tank Type: Steel/Carbon Steel/Iron
Tank Status: Closed - Removed
Pipe Model: Not reported
Install Date: 06/01/1998
Capacity Gallons: 280
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: 06/01/2004
Register: True
Modified By: AESKALSK
Last Modified: 10/25/2005
Material Name: Lube Oil

Tank Number: 50
Tank Id: 173148
Material Code: 0013
Common Name of Substance: Lube Oil

Equipment Records:

C01 - Pipe Location - Aboveground
H00 - Tank Leak Detection - None
B01 - Tank External Protection - Painted/Asphalt Coating
F00 - Pipe External Protection - None
I04 - Overfill - Product Level Gauge (A/G)
A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
G01 - Tank Secondary Containment - Diking (Aboveground)
J02 - Dispenser - Suction Dispenser
L09 - Piping Leak Detection - Exempt Suction Piping

Tank Location: 3
Tank Type: Steel/Carbon Steel/Iron
Tank Status: Closed - Removed
Pipe Model: Not reported
Install Date: 06/01/1998
Capacity Gallons: 900
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: 06/01/2004
Register: True
Modified By: AESKALSK
Last Modified: 10/25/2005
Material Name: Lube Oil

Tank Number: 60
Tank Id: 173149
Material Code: 0022
Common Name of Substance: Waste Oil/Used Oil

Equipment Records:

B01 - Tank External Protection - Painted/Asphalt Coating
F00 - Pipe External Protection - None

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DELTASONIC (Continued)

U003317318

I04 - Overfill - Product Level Gauge (A/G)
C01 - Pipe Location - Aboveground
H00 - Tank Leak Detection - None
A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
G01 - Tank Secondary Containment - Diking (Aboveground)
J02 - Dispenser - Suction Dispenser
L09 - Piping Leak Detection - Exempt Suction Piping
3
Tank Location:
Tank Type: Steel/Carbon Steel/Iron
Tank Status: Closed - Removed
Pipe Model: Not reported
Install Date: 06/01/1998
Capacity Gallons: 1170
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: 06/01/2004
Register: True
Modified By: AESKALSK
Last Modified: 10/25/2005
Material Name: Waste Oil/Used Oil

Tank Number: 70
Tank Id: 173741
Material Code: 0013
Common Name of Substance: Lube Oil

Equipment Records:

A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
G01 - Tank Secondary Containment - Diking (Aboveground)
J02 - Dispenser - Suction Dispenser
L09 - Piping Leak Detection - Exempt Suction Piping
C01 - Pipe Location - Aboveground
H00 - Tank Leak Detection - None
B01 - Tank External Protection - Painted/Asphalt Coating
F00 - Pipe External Protection - None
I04 - Overfill - Product Level Gauge (A/G)
3
Tank Location:
Tank Type: Steel/Carbon Steel/Iron
Tank Status: Closed - Removed
Pipe Model: Not reported
Install Date: 06/01/1998
Capacity Gallons: 560
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: 06/01/2004
Register: True
Modified By: AESKALSK
Last Modified: 10/25/2005
Material Name: Lube Oil

Tank Number: 80

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DELTASONIC (Continued)

U003317318

Tank Id: 173742
Material Code: 0013
Common Name of Substance: Lube Oil

Equipment Records:

A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
G01 - Tank Secondary Containment - Diking (Aboveground)
J02 - Dispenser - Suction Dispenser
L09 - Piping Leak Detection - Exempt Suction Piping
C01 - Pipe Location - Aboveground
H00 - Tank Leak Detection - None
B01 - Tank External Protection - Painted/Asphalt Coating
F00 - Pipe External Protection - None
I04 - Overfill - Product Level Gauge (A/G)

Tank Location: 3
Tank Type: Steel/Carbon Steel/Iron
Tank Status: Closed - Removed
Pipe Model: Not reported
Install Date: 06/01/1998
Capacity Gallons: 280
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: 06/01/2004
Register: True
Modified By: AESKALSK
Last Modified: 10/25/2005
Material Name: Lube Oil

Tank Number: 90
Tank Id: 173743
Material Code: 0013
Common Name of Substance: Lube Oil

Equipment Records:

A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
G01 - Tank Secondary Containment - Diking (Aboveground)
J02 - Dispenser - Suction Dispenser
L09 - Piping Leak Detection - Exempt Suction Piping
C01 - Pipe Location - Aboveground
H00 - Tank Leak Detection - None
B01 - Tank External Protection - Painted/Asphalt Coating
F00 - Pipe External Protection - None
I04 - Overfill - Product Level Gauge (A/G)

Tank Location: 3
Tank Type: Steel/Carbon Steel/Iron
Tank Status: Closed - Removed
Pipe Model: Not reported
Install Date: 06/01/1998
Capacity Gallons: 280
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DELTASONIC (Continued)

U003317318

Date Tank Closed: 06/01/2004
Register: True
Modified By: AESKALSK
Last Modified: 10/25/2005
Material Name: Lube Oil

SPILLS:

Facility ID: 9906970
DER Facility ID: 60699
Facility Type: ER
Site ID: 62627
DEC Region: 9
Spill Date: 9/11/1999
Spill Number/Closed Date: 9906970 / 9/14/1999
Spill Cause: Equipment Failure
Spill Class: Known release with minimal potential for fire or hazard. DEC Response.
Willing Responsible Party. Corrective action taken.

SWIS: 1502
Investigator: SACALAND
Referred To: Not reported
Reported to Dept: 9/11/1999
CID: 351
Water Affected: Not reported
Spill Source: Passenger Vehicle
Spill Notifier: Other
Cleanup Ceased: Not reported
Cleanup Meets Std: True
Last Inspection: 9/14/1999
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 9/11/1999
Spill Record Last Update: 3/15/2002
Spiller Name: Not reported
Spiller Company: UNKNOWN MOTORIST
Spiller Address: Not reported
Spiller City,St,Zip: NY
Spiller Company: 999
Contact Name: FRANK SCHIABARRASI
Contact Phone: (716) 882-2941
DEC Memo:

Prior to Sept, 2004 data translation this spill Lead_DEC Field was "SAC"09/11/99: GERRY PALUMBO, DUTY OFFICER, SPOKE WITH FRANK SCHIABARRASI OF DELTA SONIC, ALTHOUGH ORIGINALLY REPORTED AS 15 GALLONS, 7.9 GALS OF PRODUCT SPILLED DUE TO BROKEN FUEL LINE, SPILL WAS CONTAINED WITH KITTY LITTER, NO SEWERS WERE IN THE AREA AND HIS STAFF COMPLETED THE CLEANUP.09/14/99: SAC SITE INSPECTION, MET STORE MANAGER, DONNA, WHO SHOWED SAC LOCATION OF THE SPILL, SPILL WAS CLEANED UP, DONNA SAID THAT BRUCE NATALIZIA WAS ON-SCENE DURING THE INCIDENT SAC SPOKE TO DELTA SONIC EMPLOYEE JOHNNY MOORE WHO HELPED WITH THE CLEANUP, PER MR. NATALIZIA'S DIRECTION, ABSORBENTS WERE PLACED DOWN TO CLEAN UP THE SPILL, AND ALLOWED TO AERATE AND THEN PLACED IN PLASTIC BAG FOR DUMPSTER PICKUP.
Remarks: DRIVER OF A VEHICLE WAS FILLING TANK AT GAS STATION & THE GAS TANK ON THE VEHICLE WAS LEAKING - FD ON SCENE WHO HAS CONTAINED THE SPILL

Material:
Site ID: 62627

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DELTASONIC (Continued)

U003317318

Operable Unit ID: 1085403
Operable Unit: 01
Material ID: 299682
Material Code: 0009
Material Name: Gasoline
Case No.: Not reported
Material FA: Petroleum
Quantity: 8
Units: Gallons
Recovered: 8
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Facility ID: 9204557
DER Facility ID: 60699
Facility Type: ER
Site ID: 62626
DEC Region: 9
Spill Date: 7/8/1992
Spill Number/Closed Date: 9204557 / 7/22/1992
Spill Cause: Other
Spill Class: No spill occurred. No DEC Response. No corrective action required.
SWIS: 1502
Investigator: SORGI
Referred To: Not reported
Reported to Dept: 7/20/1992
CID: Not reported
Water Affected: Not reported
Spill Source: Gasoline Station
Spill Notifier: Affected Persons
Cleanup Ceased: 7/22/1992
Cleanup Meets Std: True
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 7/22/1992
Spill Record Last Update: 3/15/2002
Spiller Name: Not reported
Spiller Company: NONE
Spiller Address: Not reported
Spiller City,St,Zip: NY
Spiller Company: 999
Contact Name: Not reported
Contact Phone: Not reported
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "MJS"07/20/92: MDB TO INSPECT. HOLD FOR HIS REPORT. 07/22/92: MJS SPOKE WITH MDB. HE INSPECTED SITE AND FOUND NO VIOLATIONS. FILL CAP WAS LEFT OFF FILL PIPE AND RAINWATER ENTERED TANK. NO FURTHER ACTION BY SPILL UNIT. MJS TO CLOSE FILE.
Remarks: CONSUMER SAID HE RECEIVED APPROX 25 GAL OF GAS, HALF OF WHICH WAS WATER

Material:

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DELTASONIC (Continued)

U003317318

Site ID: 62626
Operable Unit ID: 968225
Operable Unit: 01
Material ID: 412266
Material Code: 0009
Material Name: Gasoline
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Pounds
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Facility ID: 0809396
DER Facility ID: 356111
Facility Type: ER
Site ID: 406855
DEC Region: 9
Spill Date: 11/19/2008
Spill Number/Closed Date: 0809396 / 11/28/2008
Spill Cause: Equipment Failure
Spill Class: Not reported
SWIS: 1502
Investigator: TDJOHNSO
Referred To: Not reported
Reported to Dept: 11/19/2008
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: 11/19/2008
Spill Record Last Update: 11/28/2008
Spiller Name: JOHN RUSCH
Spiller Company: DELPASONIC
Spiller Address: 1264 MAIN ST
Spiller City,St,Zip: BUFFALO, NY 999
Contact Name: JOHN RUSCH
Contact Phone: (716) 289-2895
DEC Memo: 11/19/08 TDJ VALVE ON WASTE OIL LINE LEAKED OIL ONTO CONCRETE VAULT IN BASEMENT OF DELTASONIC OIL CHANGE AREA. MANAGER WAS CLEANING UP WIYH SPEEDY DRY AND WILL HAVE SAFETY KLEEN DISPOSE OF MATERIAL. NO DRAINS IN FLOOR OF VAULT AND AREA WILL BE REINSPECTED WHEN WORK ISS COMPLETE. 11/28/08 TDJ RECEIVED DISPOSAL RECEIPT FOR SPEEDY DRY/WASTE OIL CLEANUP MATERIAL TAKEN AWAY FOR DISPOSAL BY SAFETY KLEEN SYSTEMS. ONE DRUM OF NON REGULATED WASTE WAS DISPOSED OF. NO FURTHER ACTIONFILE CLOSED

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DELTASONIC (Continued)

U003317318

Remarks: A waste oil heater valve was loose and leaked oil onto the concrete floor. Clean up is ongoing.

Material:

Site ID: 406855
Operable Unit ID: 1163424
Operable Unit: 01
Material ID: 2154738
Material Code: 0022
Material Name: Waste Oil/Used Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 30
Units: Gallons
Recovered: Not reported
Resource Affected: Not reported
Oxygenate: False

Tank Test:

P75
South
1/8-1/4
0.215 mi.
1134 ft.

MEICHT RALPH L AUTO REPR
36 NORTH ST E
BUFFALO, NY
Site 1 of 4 in cluster P

EDR US Hist Auto Stat 1014537831
N/A

Relative:
Higher
Actual:
649 ft.

EDR Historical Auto Stations:
Name: MEICHT RALPH L AUTO REPR
Year: 1930
Type: AUTOMOBILE REPAIRING

Q76
South
1/8-1/4
0.215 mi.
1136 ft.

NORTH ELLICOTT GARAGE INC
52 NORTH ST E
BUFFALO, NY 14203
Site 1 of 5 in cluster Q

EDR US Hist Auto Stat 1014537863
N/A

Relative:
Lower
Actual:
648 ft.

EDR Historical Auto Stations:
Name: NORTH ELLICOTT GARAGE INC
Year: 1964
Type: AUTOMOBILE REPAIRING

Name: NORTH ELLICOTT GARAGE INC
Year: 1970
Type: AUTOMOBILE GARAGES

MAP FINDINGS

Map ID			EDR ID Number
Direction			EPA ID Number
Distance			
Elevation	Site	Database(s)	

Q77 **NORTH ELLICOTT GARAGE INC** **EDR US Hist Auto Stat** **1014538969**
South **54 NORTH ST E** **N/A**
1/8-1/4 **BUFFALO, NY**
0.216 mi.
1138 ft. **Site 2 of 5 in cluster Q**

Relative: EDR Historical Auto Stations:
Lower Name: NORTH ELLICOTT GARAGE INC
 Year: 1964
Actual: Type: AUTOMOBILE REPAIRING
648 ft.

P78 **BENZLER WM AUTO REPR** **EDR US Hist Auto Stat** **1014539469**
South **30 NORTH ST E** **N/A**
1/8-1/4 **BUFFALO, NY**
0.216 mi.
1140 ft. **Site 2 of 4 in cluster P**

Relative: EDR Historical Auto Stations:
Higher Name: BUFFALO CYLINDER GRINDING INC
 Year: 1930
Actual: Type: AUTOMOBILE REPAIRING
651 ft.

Name: ROBERTS WM H AUTO REPR
Year: 1940
Type: AUTOMOBILE REPAIRING

Name: BENZLER WM AUTO REPR
Year: 1946
Type: AUTOMOBILE GARAGES

P79 **ROBERTS NASH SERVICE** **EDR US Hist Auto Stat** **1014539355**
South **28 NORTH ST E** **N/A**
1/8-1/4 **BUFFALO, NY**
0.216 mi.
1143 ft. **Site 3 of 4 in cluster P**

Relative: EDR Historical Auto Stations:
Higher Name: ROBERTS NASH SERVICE
 Year: 1935
Actual: Type: AUTOMOBILE REPAIRING
651 ft.

P80 **MORRISONS AUTO HOSPITAL** **EDR US Hist Auto Stat** **1014539705**
South **26 NORTH ST E** **N/A**
1/8-1/4 **BUFFALO, NY**
0.217 mi.
1147 ft. **Site 4 of 4 in cluster P**

Relative: EDR Historical Auto Stations:
Higher Name: MORRISONS AUTO HOSPITAL
 Year: 1930
Actual: Type: AUTOMOBILE REPAIRING
652 ft.

MAP FINDINGS

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
O81 North 1/8-1/4 0.218 mi. 1151 ft.	BAKER SHELDON MOTOR CORP 1274 MAIN ST BUFFALO, NY Site 4 of 4 in cluster O	EDR US Hist Auto Stat	1014538000 N/A
Relative: Higher	EDR Historical Auto Stations: Name: BAKER SHELDON MOTOR CORP Year: 1935 Type: AUTOMOBILE REPAIRING		
Actual: 653 ft.			
R82 SSW 1/8-1/4 0.219 mi. 1155 ft.	MARKS V DUB INC FOREIGN CAR REPR 22 NORTH ST E BUFFALO, NY 14203 Site 1 of 2 in cluster R	EDR US Hist Auto Stat	1014538192 N/A
Relative: Higher	EDR Historical Auto Stations: Name: MARKS V DUB INC FOREIGN CAR REPR Year: 1975 Type: AUTOMOBILE REPAIRING		
Actual: 653 ft.			
N83 SSW 1/8-1/4 0.221 mi. 1169 ft.	CLEVE HILL TIRE & AUTO GAS 1050 MAIN ST BUFFALO, NY 14209 Site 2 of 2 in cluster N	EDR US Hist Auto Stat	1014537656 N/A
Relative: Higher	EDR Historical Auto Stations: Name: CLEVE HILL TIRE & AUTO GAS Year: 1998 Type: GASOLINE STATIONS Name: TEN FIFTY MAIN STREET GENL AUTO REPR SHOP Year: 2001 Type: AUTOMOBILE REPAIRING & SERVICE Name: CLEVE HILL TIRE & AUTO Year: 2009 Address: 1050 MAIN ST		
Actual: 656 ft.			
Q84 South 1/8-1/4 0.222 mi. 1174 ft.	BLAIR CLARENCE J AUTO LNDRY 883 ELLICOTT ST BUFFALO, NY Site 3 of 5 in cluster Q	EDR US Hist Auto Stat	1014537579 N/A
Relative: Lower	EDR Historical Auto Stations: Name: BLAIR CLARENCE J AUTO LNDRY Year: 1935 Type: AUTOMOBILE LAUNDRIES		
Actual: 648 ft.			

MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Site

Database(s)

EDR ID Number
 EPA ID Number

R85
SSW
1/8-1/4
0.226 mi.
1192 ft.

NIRELLI'S GULF STATION
1038 MAIN & NORTH
BUFFALO, NY

NY LTANKS **S100117551**
 N/A

Site 2 of 2 in cluster R

Relative:
Higher

LTANKS:

Site ID: 168845
 Spill Number/Closed Date: 8808014 / 10/2/1989
 Spill Date: 1/3/1989
 Spill Cause: Tank Failure
 Spill Source: Gasoline Station
 Spill Class: Not reported
 Cleanup Ceased: 10/2/1989
 Cleanup Meets Standard: True
 SWIS: 1502
 Investigator: PRINGLE
 Referred To: Not reported
 Reported to Dept: 1/5/1989
 CID: Not reported
 Water Affected: Not reported
 Spill Notifier: Affected Persons
 Last Inspection: 6/8/1989
 Recommended Penalty: False
 UST Involvement: True
 Remediation Phase: 0
 Date Entered In Computer: 1/10/1989
 Spill Record Last Update: 10/5/1989
 Spiller Name: Not reported
 Spiller Company: CUMBERLAND FARMS
 Spiller Address: 777 DEDHAM
 Spiller City,St,Zip: CANTON, OH 02021
 Spiller County: 001
 Spiller Contact: Not reported
 Spiller Phone: Not reported
 Spiller Extention: Not reported
 DEC Region: 9
 DER Facility ID: 142195
 DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "MNP"01/05/89: 1/5/89 MNP INSP. GASOLINE FUMES FOUND IN BASEMENT, GULF STATION TO TEST TANKS & EXCAVATE INTERCEPTION TRENCH TO STOP FUMES FROM ENTERING BUILDING.10/02/89: 10/2/89 MNP REVIEW OF FILE, CLEANUP & DISPOSAL SATISFACTORY, COMPLETE.

Remarks: LEAK AT GAS STATION CAUSED FUMES TO ENTER BASEMENT OF BRYANT & STRATTON SCHOOL

Material:

Site ID: 168845
 Operable Unit ID: 923499
 Operable Unit: 01
 Material ID: 559496
 Material Code: 0009
 Material Name: Gasoline
 Case No.: Not reported
 Material FA: Petroleum
 Quantity: 0
 Units: Gallons
 Recovered: No
 Resource Affected: Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

NIRELLI'S GULF STATION (Continued)

S100117551

Oxygenate: False

Tank Test:

Site ID: 168845

Spill Tank Test: 1535058

Tank Number: Not reported

Tank Size: 0

Test Method: 00

Leak Rate: 0

Gross Fail: Not reported

Modified By: Spills

Last Modified: 10/1/2004

Test Method: Unknown

S86
North
1/8-1/4
0.227 mi.
1198 ft.

ERNST STEEL SLF
1280 MAIN ST
BUFFALO, NY

Site 1 of 4 in cluster S

FINDS **1006834029**
NY SWF/LF **N/A**

Relative:
Higher

FINDS:

Registry ID: 110013947168

Actual:
653 ft.

Environmental Interest/Information System

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

CRITERIA AND HAZARDOUS AIR POLLUTANT INVENTORY

SWF/LF:

Flag: INACTIVE

Region Code: 9

Phone Number: Not reported

Owner Name: ERNST STEEL CORP

Owner Type: Private

Owner Address: 1280 MAIN ST

Owner Addr2: Not reported

Owner City,St,Zip: BUFFALO, NY 14209

Owner Email: Not reported

Owner Phone: Not reported

Contact Name: Not reported

Contact Address: Not reported

Contact Addr2: Not reported

Contact City,St,Zip: Not reported

Contact Email: Not reported

Contact Phone: Not reported

Activity Desc: Landfill - municipal solid waste

Activity Number: [15S35]

Active: No

East Coordinate: 192201

North Coordinate: 4758053

Accuracy Code: Not reported

Regulatory Status: None

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ERNST STEEL SLF (Continued)

1006834029

Waste Type: Not reported
Authorization #: Not reported
Authorization Date: Not reported
Expiration Date: Not reported

S87
North
1/8-1/4
0.227 mi.
1198 ft.

YERACARIS BERNICE
1280 MAIN ST
BUFFALO, NY 14209
Site 2 of 4 in cluster S

RCRA NonGen / NLR
FINDS
NY MANIFEST

1000144019
NYD986896892

Relative:
Higher

RCRA NonGen / NLR:

Date form received by agency: 01/01/2007

Facility name: YERACARIS BERNICE

Facility address: 1280 MAIN ST
BUFFALO, NY 142091912

EPA ID: NYD986896892
Mailing address: NORWOOD AVE
BUFFALO, NY 14222

Contact: Not reported
Contact address: NORWOOD AVE
BUFFALO, NY 14222

Contact country: US
Contact telephone: Not reported
Contact email: Not reported

EPA Region: 02

Classification: Non-Generator

Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: BERNICE YERACARIS
Owner/operator address: NOT REQUIRED
NOT REQUIRED, WY 99999

Owner/operator country: US
Owner/operator telephone: (212) 555-1212

Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: BERNICE YERACARIS
Owner/operator address: NOT REQUIRED
NOT REQUIRED, WY 99999

Owner/operator country: US
Owner/operator telephone: (212) 555-1212

Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

YERACARIS BERNICE (Continued)

1000144019

On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
Used oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006
Facility name: YERACARIS BERNICE
Classification: Not a generator, verified

Date form received by agency: 07/08/1999
Facility name: YERACARIS BERNICE
Classification: Not a generator, verified

Date form received by agency: 04/02/1990
Facility name: YERACARIS BERNICE
Classification: Large Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110004444897

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

NY MANIFEST:

EPA ID: NYD986896892
Country: USA
Mailing Name: DOCTOR YERACARIS
Mailing Contact: DOCTOR YERACARIS
Mailing Address: 485 NORWOOD AVENUE
Mailing Address 2: Not reported
Mailing City: BUFFALO
Mailing State: NY
Mailing Zip: 14222
Mailing Zip4: Not reported
Mailing Country: USA
Mailing Phone: 716-633-6736

Document ID: NYB1040778
Manifest Status: Completed after the designated time period for a TSDf to get a copy to the DEC
Trans1 State ID: PTA8394
Trans2 State ID: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

YERACARIS BERNICE (Continued)

1000144019

Generator Ship Date: 900606
Trans1 Recv Date: 900606
Trans2 Recv Date: Not reported
TSD Site Recv Date: 900619
Part A Recv Date: 900726
Part B Recv Date: 900803
Generator EPA ID: NYD986896892
Trans1 EPA ID: MND980791321
Trans2 EPA ID: Not reported
TSDF ID: KSD980964993
Waste Code: B006 - PCB TRANSFORMERS WITH 500 PPM OR > PCB
Quantity: 03175
Units: K - Kilograms (2.2 pounds)
Number of Containers: 007
Container Type: CM - Metal boxes, cases, roll-offs
Handling Method: L Landfill.
Specific Gravity: 100
Year: 90

T88
SSW
1/8-1/4
0.230 mi.
1217 ft.

A.R.G. TRUCKING CO.
MAIN AND NORTH ST.
BUFFALO, NY

NY LTANKS **S103038059**
N/A

Site 1 of 7 in cluster T

Relative:
Higher

LTANKS:

Actual:
656 ft.

Site ID: 193501
Spill Number/Closed Date: 8607168 / 2/24/1987
Spill Date: 2/24/1987
Spill Cause: Tank Overfill
Spill Source: Tank Truck
Spill Class: Not reported
Cleanup Ceased: 2/24/1987
Cleanup Meets Standard: True
SWIS: 1502
Investigator: ROSS
Referred To: Not reported
Reported to Dept: 2/24/1987
CID: Not reported
Water Affected: Not reported
Spill Notifier: Responsible Party
Last Inspection: Not reported
Recommended Penalty: False
UST Involvement: False
Remediation Phase: 0
Date Entered In Computer: 12/2/2003
Spill Record Last Update: 12/2/2003
Spiller Name: Not reported
Spiller Company: A.R.G. TRUCKING CO.
Spiller Address: Not reported
Spiller City,St,Zip: TONAWANDA, ZZ
Spiller County: 001
Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported
DEC Region: 9
DER Facility ID: 161329
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A.R.G. TRUCKING CO. (Continued)

S103038059

Remarks: "LQR" // : F.D. FLSHED TO SEWER.
SPILL OCCURED AND NSI GAS STATION

Material:
Site ID: 193501
Operable Unit ID: 903852
Operable Unit: 01
Material ID: 472690
Material Code: 0009
Material Name: Gasoline
Case No.: Not reported
Material FA: Petroleum
Quantity: 30
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

T89
SSW
1/8-1/4
0.232 mi.
1227 ft.

LEE LIM 1 LNDRY
1037 MAIN ST
BUFFALO, NY
Site 2 of 7 in cluster T

EDR US Hist Cleaners **1014535718**
N/A

Relative:
Higher

EDR Historical Cleaners:
Name: LEVENSON JULIUS DCLO CINR
Year: 1930
Type: CLOTHES PRESSERS AND CLEANERS

Actual:
656 ft.

Name: LEE LIM 1 LNDRY
Year: 1940
Type: LAUNDRIES - CHINESE

Name: LEE LIM LNDRY
Year: 1950
Type: LAUNDRIES

Name: LEE JIM LNDRY
Year: 1955
Type: LAUNDRIES

Name: LEES LNDRY
Year: 1960
Type: LAUNDRIES

Name: LEES LNDRY
Year: 1964
Type: LAUNDRIES

MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Site

Database(s)

EDR ID Number
 EPA ID Number

Q90 **UNIVERSITY AT BUFFALO - CTRC**
South **875 ELLICOTT ST**
1/8-1/4 **BUFFALO, NY 14203**
0.233 mi.
1231 ft. **Site 4 of 5 in cluster Q**

NY MANIFEST **S113496484**
 N/A

Relative:
Lower

NY MANIFEST:
 EPA ID: NYR000195461
 Country: USA
 Mailing Name: UNIVERSITY AT BUFFALO - CTRC
 Mailing Contact: TONY OSWALD
 Mailing Address: 220 WINSPEAR AVE
 Mailing Address 2: Not reported
 Mailing City: BUFFALO
 Mailing State: NY
 Mailing Zip: 14215
 Mailing Zip4: Not reported
 Mailing Country: USA
 Mailing Phone: 716-829-3301

Actual:
648 ft.

Document ID: Not reported
 Manifest Status: Not reported
 Trans1 State ID: INR000123497
 Trans2 State ID: Not reported
 Generator Ship Date: 30-Jan-2013 00:00:00
 Trans1 Recv Date: 30-Jan-2013 00:00:00
 Trans2 Recv Date: Not reported
 TSD Site Recv Date: 02-Feb-2013 00:00:00
 Part A Recv Date: Not reported
 Part B Recv Date: Not reported
 Generator EPA ID: NYR000195461
 Trans1 EPA ID: Not reported
 Trans2 EPA ID: Not reported
 TSDF ID: IND000646943
 Waste Code: Not reported
 Quantity: 117
 Units: P - Pounds
 Number of Containers: 1
 Container Type: CF - Fiber or plastic boxes, cartons
 Handling Method: B Incineration, heat recovery, burning.
 Specific Gravity: 1
 Year: 2013
 Manifest Tracking Num: 010353583JJK
 Import Ind: N
 Export Ind: N
 Discr Quantity Ind: N
 Discr Type Ind: N
 Discr Residue Ind: N
 Discr Partial Reject Ind: N
 Discr Full Reject Ind: N
 Manifest Ref Num: Not reported
 Alt Fac RCRA Id: Not reported
 Alt Fac Sign Date: Not reported
 Mgmt Method Type Code: H141

Document ID: Not reported
 Manifest Status: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

UNIVERSITY AT BUFFALO - CTRC (Continued)

S113496484

Trans1 State ID: INR000123497
Trans2 State ID: Not reported
Generator Ship Date: 22-Aug-2013 00:00:00
Trans1 Recv Date: 22-Aug-2013 00:00:00
Trans2 Recv Date: Not reported
TSD Site Recv Date: 24-Aug-2013 00:00:00
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000195461
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: IND000646943
Waste Code: Not reported
Quantity: 23
Units: P - Pounds
Number of Containers: 1
Container Type: CF - Fiber or plastic boxes, cartons
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 1
Year: 2013
Manifest Tracking Num: 010353608JJK
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H061

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: INR000123497
Trans2 State ID: Not reported
Generator Ship Date: 22-Aug-2013 00:00:00
Trans1 Recv Date: 22-Aug-2013 00:00:00
Trans2 Recv Date: Not reported
TSD Site Recv Date: 24-Aug-2013 00:00:00
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000195461
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: IND000646943
Waste Code: Not reported
Quantity: 99
Units: P - Pounds
Number of Containers: 1
Container Type: CF - Fiber or plastic boxes, cartons
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 1
Year: 2013
Manifest Tracking Num: 010353608JJK

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

UNIVERSITY AT BUFFALO - CTRC (Continued)

S113496484

Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H141

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: INR000123497
Trans2 State ID: INR000123497
Generator Ship Date: 05-Apr-2013 00:00:00
Trans1 Recv Date: 05-Apr-2013 00:00:00
Trans2 Recv Date: 15-Apr-2013 00:00:00
TSD Site Recv Date: 16-Apr-2013 00:00:00
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000195461
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: IND000646943
Waste Code: Not reported
Quantity: 20
Units: P - Pounds
Number of Containers: 1
Container Type: CF - Fiber or plastic boxes, cartons
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 1
Year: 2013
Manifest Tracking Num: 010353678JJK
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H061

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: INR000123497
Trans2 State ID: INR000123497
Generator Ship Date: 05-Apr-2013 00:00:00
Trans1 Recv Date: 05-Apr-2013 00:00:00
Trans2 Recv Date: 15-Apr-2013 00:00:00
TSD Site Recv Date: 16-Apr-2013 00:00:00

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

UNIVERSITY AT BUFFALO - CTRC (Continued)

S113496484

Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000195461
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDf ID: IND000646943
Waste Code: Not reported
Quantity: 79
Units: P - Pounds
Number of Containers: 1
Container Type: CF - Fiber or plastic boxes, cartons
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 1
Year: 2013
Manifest Tracking Num: 010353678JJK
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H141

Q91
South
1/8-1/4
0.233 mi.
1231 ft.

UNIVERSITY AT BUFFALO - CTRC
875 ELLICOTT ST
BUFFALO, NY 14203
Site 5 of 5 in cluster Q

RCRA-SQG 1014958299
NYR000195461

Relative:
Lower

RCRA-SQG:

Actual:
648 ft.

Date form received by agency: 07/11/2012
Facility name: UNIVERSITY AT BUFFALO - CTRC
Facility address: 875 ELLICOTT ST
BUFFALO, NY 14203
EPA ID: NYR000195461
Mailing address: WINSPEAR AVE
BUFFALO, NY 14215
Contact: ANTHONY OSWALD
Contact address: WINSPEAR AVE
BUFFALO, NY 14215
Contact country: US
Contact telephone: (716) 829-3301
Contact email: ACOSWALD@BUFFALO.EDU
EPA Region: 02
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: ANTHONY OSWALD

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

UNIVERSITY AT BUFFALO - CTRC (Continued)

1014958299

Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: State
Owner/Operator Type: Operator
Owner/Op start date: 07/01/2012
Owner/Op end date: Not reported

Owner/operator name: UNIVERSITY AT BUFFALO
Owner/operator address: CAPER HALL
AMHERST, NY 14260

Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: State
Owner/Operator Type: Owner
Owner/Op start date: 07/01/2012
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKEY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: D018

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

UNIVERSITY AT BUFFALO - CTRC (Continued)

1014958299

Waste name: BENZENE
Waste code: D022
Waste name: CHLOROFORM
Waste code: D028
Waste name: 1,2-DICHLOROETHANE
Waste code: D029
Waste name: 1,1-DICHLOROETHYLENE
Waste code: D039
Waste name: TETRACHLOROETHYLENE
Waste code: D040
Waste name: TRICHLOROETHYLENE
Waste code: U003
Waste name: ACETONITRILE (I,T)
Waste code: U044
Waste name: CHLOROFORM
Waste code: U188
Waste name: PHENOL
Violation Status: No violations found

T92
SSW
1/8-1/4
0.239 mi.
1263 ft.

RADIO GARAGE AUTO REPR
11 NORTH ST
BUFFALO, NY

EDR US Hist Auto Stat **1014537615**
N/A

Site 3 of 7 in cluster T

Relative:
Higher

EDR Historical Auto Stations:

Actual:
657 ft.

Name: UDTOWN GARAGE
Year: 1930
Type: AUTOMOBILE GARAGES
Name: NORTH STREET GARAGE
Year: 1935
Type: AUTOMOBILE GARAGES
Name: RADIO GARAGE AUTO REPR
Year: 1940
Type: AUTOMOBILE REPAIRING
Name: RAINS WILFRED E RADIO REPR AND GARAGE
Year: 1946
Type: AUTOMOBILE GARAGES
Name: NORTH STREET MOTORAMP STGE GARAGE
Year: 1955
Type: AUTOMOBILE GARAGES
Name: BISON JOE COLLISION SERV
Year: 1960
Type: AUTOMOBILE REPAIRING

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

RADIO GARAGE AUTO REPR (Continued)

1014537615

Name: BISON COLLISION SERV
Year: 1964
Type: AUTOMOBILE REPAIRING

T93
SSW
1/8-1/4
0.239 mi.
1264 ft.

FISHER MOYNIHAN COLLISION SERVICE
1040 MAIN ST
BUFFALO, NY

EDR US Hist Auto Stat

1014539591
N/A

Site 4 of 7 in cluster T

Relative:
Higher

EDR Historical Auto Stations:

Name: FISHER MOYNIHAN COLLISION SERVICE
Year: 1940
Type: AUTOMOBILE REPAIRING

Actual:
657 ft.

U94
East
1/8-1/4
0.241 mi.
1271 ft.

FEUERSTEIN JOHN H AUTO RE DR
1184 MICHIGAN AVE
BUFFALO, NY

EDR US Hist Auto Stat

1014538128
N/A

Site 1 of 3 in cluster U

Relative:
Lower

EDR Historical Auto Stations:

Name: FEUERSTEIN JOHN H AUTO RE DR
Year: 1930
Type: AUTOMOBILE REPAIRING

Actual:
638 ft.

Name: FIRESTONE JOHN H AUTO REPR
Year: 1940
Type: AUTOMOBILE REPAIRING

V95
East
1/8-1/4
0.241 mi.
1273 ft.

HOLZER JOHN F FILL STA
1166 MICHIGAN AVE
BUFFALO, NY

EDR US Hist Auto Stat

1014537374
N/A

Site 1 of 3 in cluster V

Relative:
Lower

EDR Historical Auto Stations:

Name: HOLZER JOHN F FILL STA
Year: 1930
Type: GASOLINE AND OIL SERVICE STATIONS

Actual:
638 ft.

U96
East
1/8-1/4
0.241 mi.
1273 ft.

FIRESTONE JOHN H AUTO REPR
1188 MICHIGAN AVE
BUFFALO, NY

EDR US Hist Auto Stat

1014539590
N/A

Site 2 of 3 in cluster U

Relative:
Lower

EDR Historical Auto Stations:

Name: FIRESTONE JOHN H AUTO REPR
Year: 1946
Type: AUTOMOBILE REPAIRING

Actual:
638 ft.

MAP FINDINGS

Map ID			EDR ID Number
Direction			EPA ID Number
Distance			
Elevation	Site	Database(s)	

U97	RAU LOUIS CLO CLNR	EDR US Hist Cleaners	1014536770
East	1188 MICHIGAN AVE		N/A
1/8-1/4	BUFFALO, NY		
0.241 mi.			
1273 ft.	Site 3 of 3 in cluster U		

Relative:	EDR Historical Cleaners:		
Lower	Name:	RAU LOUIS CLO CLNR	
	Year:	1940	
Actual:	Type:	CLOTHES PRESSERS AND CLEANERS	
638 ft.			

V98	FRONTIER OIL SERVICE FILLING STA	EDR US Hist Auto Stat	1014539614
East	1160 MICHIGAN AVE		N/A
1/8-1/4	BUFFALO, NY		
0.242 mi.			
1277 ft.	Site 2 of 3 in cluster V		

Relative:	EDR Historical Auto Stations:		
Lower	Name:	FRONTIER OIL SERVICE FILLING STA	
	Year:	1950	
Actual:	Type:	GASOLINE STATIONS	
639 ft.			

V99	M & S AUTO SERV	EDR US Hist Auto Stat	1014537061
East	1164 MICHIGAN AVE		N/A
1/8-1/4	BUFFALO, NY 14203		
0.242 mi.			
1279 ft.	Site 3 of 3 in cluster V		

Relative:	EDR Historical Auto Stations:		
Lower	Name:	M & S AUTO SERV	
	Year:	1980	
Actual:	Type:	AUTOMOBILE REPAIRING	
638 ft.			

W100	BLATNER NORMAN FILLING STA	EDR US Hist Auto Stat	1014538394
ESE	145 BEST ST		N/A
1/8-1/4	BUFFALO, NY		
0.243 mi.			
1282 ft.	Site 1 of 2 in cluster W		

Relative:	EDR Historical Auto Stations:		
Lower	Name:	OSTROM GERALD E FILLING STA	
	Year:	1940	
Actual:	Type:	GASOLINE AND OIL SERVICE STATIONS	
645 ft.			
	Name:	BLATNER NORMAN FILLING STA	
	Year:	1946	
	Type:	GASOLINE AND OIL SERVICE STATIONS	
	Name:	BLATNER NORMAN GAS STA	
	Year:	1950	
	Type:	GASOLINE STATIONS	
	Name:	BLATNER NORMAN GAS STA	
	Year:	1955	
	Type:	GASOLINE STATIONS	
	Name:	EMSER RAY TEXACO SERVICE	

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BLATNER NORMAN FILLING STA (Continued)

1014538394

Year: 1960
Type: GASOLINE STATIONS

Name: EMSER RAY TEXACO SERVICE GAS STA
Year: 1964
Type: GASOLINE STATIONS

T101
SSW
1/8-1/4
0.243 mi.
1283 ft.

NIRELLIS N S I SERVICE CENTER
1038 MAIN ST
BUFFALO, NY 14203

EDR US Hist Auto Stat

1014538606
N/A

Site 5 of 7 in cluster T

Relative:
Higher

EDR Historical Auto Stations:

Actual:
657 ft.

Name: SEELEY GEO FILLING STA
Year: 1946
Type: GASOLINE AND OIL SERVICE STATIONS

Name: SEELEY GEO J FILLING STA
Year: 1950
Type: GASOLINE STATIONS

Name: SEELEY GEO J GAS STA
Year: 1955
Type: GASOLINE STATIONS

Name: SEELEY GEO J GAS STA
Year: 1960
Type: GASOLINE STATIONS

Name: NIRELLI GULF SERVICE GAS STA
Year: 1964
Type: GASOLINE STATIONS

Name: NIRELLIS GULF SERVICE
Year: 1970
Type: GASOLINE STATIONS

Name: NIRE UIS GULF SERVICE
Year: 1975
Type: GASOLINE STATIONS

Name: NIRELLIS N S I SERVICE CENTER
Year: 1980
Type: GASOLINE STATIONS

Name: NIRELLIS N S I SERVICE CENTER
Year: 1985
Type: GASOLINE STATIONS

Name: NIRELLIS GULF SERVICE CENTER GAS STA
Year: 1992
Type: GASOLINE STATIONS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

T102
SSW
1/8-1/4
0.243 mi.
1283 ft.

GULF SERVICE STATION #176476
1038 MAIN ST
BUFFALO, NY
Site 6 of 7 in cluster T

RCRA NonGen / NLR
FINDS
NY LTANKS
NY MANIFEST
NY Spills
1004760126
NYR000033134

Relative:
Higher

RCRA NonGen / NLR:

Actual:
657 ft.

Date form received by agency: 01/01/2007
Facility name: GULF SERVICE STATION #176476
Facility address: 1038 MAIN ST
BUFFALO, NY 14202
EPA ID: NYR000033134
Mailing address: DEDHAM ST
CANTON, NY 020219118
Contact: WILLIAM LOVELY
Contact address: DEDHAM ST
CANTON, NY 020219118
Contact country: US
Contact telephone: (617) 828-4900
Contact email: Not reported
EPA Region: 02
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: CUMBERLAND FARMS INC
Owner/operator address: 777 DEDHAM ST
CANTON, MA 02021
Owner/operator country: US
Owner/operator telephone: (617) 828-4900
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: CUMBERLAND FARMS INC
Owner/operator address: 777 DEDHAM ST
CANTON, MA 02021
Owner/operator country: US
Owner/operator telephone: (617) 828-4900
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
Used oil refiner: No
Used oil fuel marketer to burner: No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

GULF SERVICE STATION #176476 (Continued)

1004760126

Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006

Facility name: GULF SERVICE STATION #176476

Classification: Not a generator, verified

Date form received by agency: 03/04/1998

Facility name: GULF SERVICE STATION #176476

Classification: Large Quantity Generator

Date form received by agency: 12/12/1996

Facility name: GULF SERVICE STATION #176476

Classification: Conditionally Exempt Small Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110000893034

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

LTANKS:

Site ID: 71678
Spill Number/Closed Date: 8803956 / 8/8/1988
Spill Date: 8/4/1988
Spill Cause: Tank Overfill
Spill Source: Gasoline Station
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
Cleanup Ceased: 8/8/1988
Cleanup Meets Standard: True
SWIS: 1502
Investigator: LEARY
Referred To: Not reported
Reported to Dept: 8/4/1988
CID: Not reported
Water Affected: Not reported
Spill Notifier: Citizen
Last Inspection: 8/4/1988
Recommended Penalty: False
UST Involvement: True
Remediation Phase: 0
Date Entered In Computer: 8/30/1988
Spill Record Last Update: 7/26/2000
Spiller Name: Not reported
Spiller Company: ARG TRUCKING

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

GULF SERVICE STATION #176476 (Continued)

1004760126

Spiller Address: 122 COOPER AVENUE
Spiller City,St,Zip: TONAWANDA, NY 14150
Spiller County: 001
Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported
DEC Region: 9
DER Facility ID: 67798
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "RNL"08/04/88: RNL SITE INSP., GASOLINE SPILLED AND FLUSHED BY BUFFALO FD, FURTHER CLEANUP NOT POSSIBLE, SPILLER MADE NO ATTEMPT TO CLEANUP.08/08/88: RNL LETTER 08/08/88 TO SPILLER, REQUIRES CLEANUP FOR FUTURE SPILLS.
Remarks: OVERFILLED TANK

Material:
Site ID: 71678
Operable Unit ID: 921125
Operable Unit: 01
Material ID: 459476
Material Code: 0009
Material Name: Gasoline
Case No.: Not reported
Material FA: Petroleum
Quantity: 50
Units: Gallons
Recovered: 25
Resource Affected: Not reported
Oxygenate: False

Tank Test:

NY MANIFEST:
EPA ID: NYR000033134
Country: USA
Mailing Name: CUMBERLAND FARMS
Mailing Contact: MICHAEL DONNELLY
Mailing Address: 777 DHEM
Mailing Address 2: Not reported
Mailing City: CANTON
Mailing State: MA
Mailing Zip: 02021
Mailing Zip4: Not reported
Mailing Country: USA
Mailing Phone: 800-225-9702

Document ID: NYB7147908
Manifest Status: Completed copy
Trans1 State ID: OH100
Trans2 State ID: Not reported
Generator Ship Date: 970226
Trans1 Recv Date: 970226
Trans2 Recv Date: Not reported
TSD Site Recv Date: 970227

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

GULF SERVICE STATION #176476 (Continued)

1004760126

Part A Recv Date: 970320
Part B Recv Date: 970312
Generator EPA ID: NYR000033134
Trans1 EPA ID: OHD004178612
Trans2 EPA ID: Not reported
TSD ID: OHD004178612
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00110
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Waste Code: Not reported
Quantity: 00110
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Waste Code: Not reported
Quantity: 00110
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Waste Code: Not reported
Quantity: 00055
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 97

SPILLS:

Facility ID: 9613078
DER Facility ID: 67798
Facility Type: ER
Site ID: 71680
DEC Region: 9
Spill Date: 2/4/1997
Spill Number/Closed Date: 9613078 / 3/17/1997
Spill Cause: Equipment Failure
Spill Class: Known release with minimal potential for fire or hazard. DEC Response.
Willing Responsible Party. Corrective action taken.
SWIS: 1502
Investigator: COOKE
Referred To: Not reported
Reported to Dept: 2/4/1997
CID: 351
Water Affected: Not reported
Spill Source: Gasoline Station
Spill Notifier: Tank Tester
Cleanup Ceased: 3/14/1997
Cleanup Meets Std: True

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

GULF SERVICE STATION #176476 (Continued)

1004760126

Last Inspection: 2/7/1997
Recommended Penalty: False
UST Trust: True
Remediation Phase: 0
Date Entered In Computer: 2/4/1997
Spill Record Last Update: 4/24/1997
Spiller Name: BILL LOVELY
Spiller Company: CUMBERLAND FARMS
Spiller Address: 727 DEDHAM STREET
Spiller City,St,Zip: CANTON, MA 02021-9118
Spiller Company: 001
Contact Name: Not reported
Contact Phone: Not reported
DEC Memo:

Prior to Sept, 2004 data translation this spill Lead_DEC Field was "JDC"2/4/97: JDC ON SITE AND MET W/ BOB DRABOT, GES MINOR CONTAMINATION TO SERVICE ISLAND AREA ALONG MAIN STREET. NO FREE PRODUCT WAS OBSERVED IN ISLAND EXCAVATION. SOILS REMOVED AND STAGED ALONG BUILDING FOR DISPOSAL.2/7/97: JDC ON SITE AND OBSERVED EXCAVATION ON WEST SIDE OF BUILDING WHERE WASTE OIL TANK WAS DISCOVERD FULL OF WASTE OILS. SAFETY CLEAN HIRED TO REMOVE WASTE OILS. CONTAMINATED SOILS WILL BE DISPOSED OF SEPARATELY.3/17/97: REVIEWED CLOSURE REPORT AND FOUND POST TEST AND DISPOSAL INFORMATION SATISFACTORY. POST TEST INDICATED NO VIOLATIONS OF STARS, SITE WILL BE CLOSED, SENT LETTER STATING SAME.
Remarks: 2 - 8K TANKS BEING REMOVED BY NATURE'S WAY BY CUMBERLAND THROUGH GESERVICES SOIL CONTAMINATION FOUND UNDER SERVICE ISLAND ALONG MAIN STREET SIDE. NO FREE PRODUCT FOUND. SPILL FAXED FROM REGION 9 ON 02/04/97

Material:
Site ID: 71680
Operable Unit ID: 1040734
Operable Unit: 01
Material ID: 566737
Material Code: 0009
Material Name: Gasoline
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Facility ID: 9311640
DER Facility ID: 67798
Facility Type: ER
Site ID: 71679
DEC Region: 9
Spill Date: 12/30/1993
Spill Number/Closed Date: 9311640 / 7/1/1994
Spill Cause: Unknown
Spill Class: Possible release with minimal potential for fire or hazard or Known release with no damage. No DEC Response. No corrective action

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

GULF SERVICE STATION #176476 (Continued)

1004760126

required.
SWIS: 1502
Investigator: SORGI
Referred To: Not reported
Reported to Dept: 12/30/1993
CID: Not reported
Water Affected: Not reported
Spill Source: Gasoline Station
Spill Notifier: Other
Cleanup Ceased: 7/1/1994
Cleanup Meets Std: True
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 12/30/1993
Spill Record Last Update: 9/28/2000
Spiller Name: Not reported
Spiller Company: CUMBERLAND FARMS/GULF
Spiller Address: 777 DEDHAM STREET
Spiller City,St,Zip: CANTON, MA 02021
Spiller Company: 001
Contact Name: Not reported
Contact Phone: Not reported
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "MJS"02/14/94: LETTER TO RP REQUESTING SUBSURFACE INVESTIGATION REPORT. 02/23/94: MJS/KEVIN MCCABE, CUMBERLAND FARMS/TELECON - HE STATES THAT NO FREE PRODUCT WAS FOUND IN BORINGS. HE WILL FORWARD A LETTER TO THAT EFFECT AND ANY FIELD DATA HE CAN OBTAIN. 04/06/94: MJS RECEIVED BORING LOGS AND SITE MAP FROM CONSULTANT. GW AT APPROX. 25' BELOW GRADE. LOW P.I.D. READINGS IN BORINGS #2, #3 JUST ABOVE WATER TABLE. 04/07/94: MJS SENT LETTER TO RP ADVISING THAT DEC REQUIRES GROUNDWATER SAMPLING. 06/01/94: RECEIVED REPORT FROM GES INC. NO BTEX FOUND IN WELLS. LEAD FOUND ABOVE GW STANDARDS. NO FURTHER ACTION BY SPILL UNIT REQUIRED. COPY OF REPORT TO BE PASSED ON TO DOW FOR FOLLOWUP ON LEAD PROBLEM. 07/01/94: RECEIVED REPORT FROM GES INC. NO BTEX FOUND IN WELLS. LEAD FOUND ABOVE GW STANDARDS. NO FURTHER ACTION BY SPILL UNIT REQUIRED. COPY OF REPORT TO BE PASSED ON TO DOW FOR FOLLOWUP ON LEAD PROBLEM.
Remarks: SOIL SAMPLING FOUND LEAD, NO BTEX
Material:
Site ID: 71679
Operable Unit ID: 993656
Operable Unit: 01
Material ID: 390666
Material Code: 0009
Material Name: Gasoline
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Pounds
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Site

Database(s)

EDR ID Number
 EPA ID Number

T103 **CUMBERLAND FARMS #176476**
SSW **1038 MAIN ST**
1/8-1/4 **BUFFALO, NY 14202**
0.243 mi.
1283 ft. **Site 7 of 7 in cluster T**

NY UST **U001327825**
 N/A

Relative:
Higher

UST:
 Id/Status: 9-222690 / Unregulated
 Program Type: PBS
 Region: STATE
 DEC Region: 9
 Expiration Date: N/A
 UTM X: 184110.51061999999
 UTM Y: 4757199.2130199997
 Site Type: Retail Gasoline Sales

Actual:
657 ft.

Affiliation Records:
 Site Id: 53097
 Affiliation Type: Emergency Contact
 Company Name: CUMBERLAND FARMS, INC.
 Contact Type: Not reported
 Contact Name: CUMBERLAND FARMS, INC.
 Address1: Not reported
 Address2: Not reported
 City: Not reported
 State: NN
 Zip Code: Not reported
 Country Code: 999
 Phone: (781) 828-4900
 EMail: Not reported
 Fax Number: Not reported
 Modified By: NRLOMBAR
 Date Last Modified: 3/4/2009

Site Id: 53097
 Affiliation Type: Mail Contact
 Company Name: CUMBERLAND FARMS INC
 Contact Type: Not reported
 Contact Name: LORAIN HIGGINS
 Address1: 777 DEDHAM ST
 Address2: Not reported
 City: CANTON
 State: MA
 Zip Code: 02021
 Country Code: 001
 Phone: (617) 828-4900
 EMail: Not reported
 Fax Number: Not reported
 Modified By: TRANSLAT
 Date Last Modified: 3/4/2004

Site Id: 53097
 Affiliation Type: On-Site Operator
 Company Name: CUMBERLAND FARMS #176476
 Contact Type: Not reported
 Contact Name: MANAGER
 Address1: Not reported
 Address2: Not reported
 City: Not reported
 State: NN

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CUMBERLAND FARMS #176476 (Continued)

U001327825

Zip Code: Not reported
Country Code: 001
Phone: (716) 886-9043
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 3/4/2004

Site Id: 53097
Affiliation Type: Facility Owner
Company Name: CUMBERLAND FARMS, INC.
Contact Type: Not reported
Contact Name: Not reported
Address1: 777 DEDHAM STREET
Address2: Not reported
City: CANTON
State: MA
Zip Code: 02021
Country Code: 001
Phone: (617) 828-4912
EMail: Not reported
Fax Number: Not reported
Modified By: wlseven
Date Last Modified: 2/11/2008

Tank Info:

Tank Number: 1
Tank ID: 164355
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 8000
Install Date: 04/01/1977
Date Tank Closed: 01/01/1997
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0009
Common Name of Substance: Gasoline

Tightness Test Method: 14
Date Test: 10/01/1994
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

B00 - Tank External Protection - None
A00 - Tank Internal Protection - None
D02 - Pipe Type - Galvanized Steel
J01 - Dispenser - Pressurized Dispenser
G00 - Tank Secondary Containment - None
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
H03 - Tank Leak Detection - Vapor Well
I00 - Overfill - None

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CUMBERLAND FARMS #176476 (Continued)

U001327825

Tank Number: 2
Tank ID: 164356
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 8000
Install Date: 04/01/1977
Date Tank Closed: 02/01/1997
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0009
Common Name of Substance: Gasoline

Tightness Test Method: 14
Date Test: 10/01/1994
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

G00 - Tank Secondary Containment - None
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
A00 - Tank Internal Protection - None
D02 - Pipe Type - Galvanized Steel
J01 - Dispenser - Pressurized Dispenser
B00 - Tank External Protection - None
H03 - Tank Leak Detection - Vapor Well
I00 - Overfill - None

Tank Number: 3
Tank ID: 164357
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 550
Install Date: 04/01/1954
Date Tank Closed: 02/01/1997
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 9999
Common Name of Substance: Other

Tightness Test Method: 14
Date Test: 10/01/1994
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

G00 - Tank Secondary Containment - None
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
A00 - Tank Internal Protection - None
D02 - Pipe Type - Galvanized Steel

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CUMBERLAND FARMS #176476 (Continued)

U001327825

J02 - Dispenser - Suction Dispenser
H00 - Tank Leak Detection - None
B00 - Tank External Protection - None
I00 - Overfill - None

X104
East
1/8-1/4
0.244 mi.
1290 ft.

DIXON & ADAMS AUTO REPRS
1152 MICHIGAN AVE
BUFFALO, NY

EDR US Hist Auto Stat **1014536901**
N/A

Site 1 of 4 in cluster X

Relative:
Lower

EDR Historical Auto Stations:

Name: DIXON & ADAMS AUTO REPRS
Year: 1935
Type: AUTOMOBILE REPAIRING

Actual:
640 ft.

Name: CARLSON DANNY FILLING STA
Year: 1946
Type: GASOLINE AND OIL SERVICE STATIONS

Name: FRONTIER OIL SERVICE GAS STA
Year: 1955
Type: GASOLINE STATIONS

Name: BROWN GARAGE AUTO REPR
Year: 1964
Type: AUTOMOBILE REPAIRING

X105
East
1/8-1/4
0.244 mi.
1290 ft.

FIDELITY FOUR HOUR CLEANERS
1152 MICHIGAN AVE
BUFFALO, NY

EDR US Hist Cleaners **1014534917**
N/A

Site 2 of 4 in cluster X

Relative:
Lower

EDR Historical Cleaners:

Name: FIDELITY FOUR HOUR CLEANERS
Year: 1964
Type: CLEANERS AND DYERS

Actual:
640 ft.

106
West
1/8-1/4
0.245 mi.
1292 ft.

AMERICAN RED CROSS BLOOD SERVICES
786 DELAWARE AVE
BUFFALO, NY

RCRA NonGen / NLR **1000358783**
FINDS **NYD091903096**
NY LTANKS
NY MANIFEST

Relative:
Higher

RCRA NonGen / NLR:

Date form received by agency: 01/01/2007
Facility name: AMERICAN RED CROSS BLOOD SERVICES
Facility address: 786 DELAWARE AVE
BUFFALO, NY 142092006
EPA ID: NYD091903096
Mailing address: DELAWARE AVE
BUFFALO, NY 14209
Contact: Not reported
Contact address: DELAWARE AVE

Actual:
661 ft.

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

AMERICAN RED CROSS BLOOD SERVICES (Continued)

1000358783

BUFFALO, NY 14209
 Contact country: US
 Contact telephone: Not reported
 Contact email: Not reported
 EPA Region: 02
 Land type: Facility is not located on Indian land. Additional information is not known.
 Classification: Non-Generator
 Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: AMERICAN RED CROSS NY PENN REGION
 Owner/operator address: 786 DELAWARE AVE
 BUFFALO, NY 14209
 Owner/operator country: US
 Owner/operator telephone: (716) 886-7500
 Legal status: Private
 Owner/Operator Type: Operator
 Owner/Op start date: Not reported
 Owner/Op end date: Not reported

Owner/operator name: AMERICAN RED CROSS NY PENN REGION
 Owner/operator address: 786 DELAWARE AVE
 BUFFALO, NY 14209
 Owner/operator country: US
 Owner/operator telephone: (716) 886-7500
 Legal status: Private
 Owner/Operator Type: Owner
 Owner/Op start date: Not reported
 Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
 Mixed waste (haz. and radioactive): No
 Recycler of hazardous waste: No
 Transporter of hazardous waste: No
 Treater, storer or disposer of HW: No
 Underground injection activity: No
 On-site burner exemption: No
 Furnace exemption: No
 Used oil fuel burner: No
 Used oil processor: No
 User oil refiner: No
 Used oil fuel marketer to burner: No
 Used oil Specification marketer: No
 Used oil transfer facility: No
 Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006
 Facility name: AMERICAN RED CROSS BLOOD SERVICES
 Classification: Not a generator, verified

Date form received by agency: 07/08/1999
 Facility name: AMERICAN RED CROSS BLOOD SERVICES
 Classification: Not a generator, verified

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AMERICAN RED CROSS BLOOD SERVICES (Continued)

1000358783

Date form received by agency: 09/06/1994
Facility name: AMERICAN RED CROSS BLOOD SERVICES
Classification: Small Quantity Generator

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 07/18/1996
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

FINDS:

Registry ID: 110004374329

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

LTANKS:

Site ID: 141275
Spill Number/Closed Date: 9404334 / 12/12/1995
Spill Date: 6/28/1994
Spill Cause: Tank Test Failure
Spill Source: Institutional, Educational, Gov., Other
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
Cleanup Ceased: Not reported
Cleanup Meets Standard: True
SWIS: 1502
Investigator: SORGI
Referred To: Not reported
Reported to Dept: 6/28/1994
CID: Not reported
Water Affected: Not reported
Spill Notifier: Tank Tester
Last Inspection: 6/28/1994
Recommended Penalty: False
UST Involvement: False
Remediation Phase: 0
Date Entered In Computer: 6/28/1994
Spill Record Last Update: 1/5/1996
Spiller Name: MIKE DAGGETT
Spiller Company: AMERICAN RED CROSS
Spiller Address: 786 DELAWARE AVENUE
Spiller City, St, Zip: BUFFALO, NY 14209-
Spiller County: 001
Spiller Contact: MIKE DAGGETT
Spiller Phone: (716) 886-7500
Spiller Extention: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AMERICAN RED CROSS BLOOD SERVICES (Continued)

1000358783

DEC Region: 9
DER Facility ID: 120650
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "MJS"06/28/94: MJS TELECON W/ DENNIS CANNON. HE IS HIRING CONTRACTOR TO PLACE ALTERNATE TANK AND PUMP OUT LEAKING TANK. CONCRETE VAULT IS CONTAINING RELEASED PRODUCT. 06/28/94: MJS SITE INSPECT. MET W/ MR CANNON. TANKNOLOGY INC ON SITE. TANK IS APPROX 400 GALLONS AND ON SADDLES. SMALL AMOUNT OF PRODUCT ON BOTTOM OF VAULT. TANK MUST BE REMOVED. NO SAMPLE RESULTS REQUIRED.05/25/95: MJS REVIEW FILE. NO INFO ON REMOVAL. LETTER TO RP REQUESTING UPDATE. 09/22/95: MJS TELECON FROM MIKE DAGGETT(RED CROSS). HE REPLACED MR CANNON AND IS RESPONDING TO 5/25/95 LETTER REGARDING UPDATE ON CLEANUP. TANK WAS REPLACED. HE WILL SEARCH FOR DOCUMENTATION AND DISPOSAL RECEIPT.11/10/95: MJS TELECON TO MR DAGGETT AND LEFT MESSAGE FOR HIM TO CALL. 11/14/95: MJS TELECON FROM MR DAGGETT. HE HAS SPOKEN WITH ELMWOOD TANK AND PIPING AND FOUND THAT ONLY SMALL QUANTITY OF CONTAMINATED DEBRIS GENERATED AND DISPOSED IN REGULAR WASTE STREAM. 11/16/95: MJS TELECON WITH JOE KLOC FROM ELMWOOD. HE CONFIRMED ONLY MINOR QUANTITY GENERATED. 12/12/95: MJS REVIEW FILE. NO RECEIPTS REQUIRED. NO FURTHER ACTION NECESSARY. MJS CLOSE FILE.
Remarks: TANK TEST FAILURE. TANK IN GARAGE IN CONCRETE VAULT.

Material:
Site ID: 141275
Operable Unit ID: 1001406
Operable Unit: 01
Material ID: 380946
Material Code: 0001A
Material Name: #2 Fuel Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:
Site ID: 141275
Spill Tank Test: 1542909
Tank Number: Not reported
Tank Size: 400
Test Method: 14
Leak Rate: 0
Gross Fail: F
Modified By: Spills
Last Modified: 10/1/2004
Test Method: VacuTest

NY MANIFEST:
EPA ID: NYD091903096
Country: USA
Mailing Name: AMERICAN RED CROSS
Mailing Contact: AMERICAN RED CROSS
Mailing Address: 786 DELAWARE AVE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AMERICAN RED CROSS BLOOD SERVICES (Continued)

1000358783

Mailing Address 2: Not reported
Mailing City: BUFFALO
Mailing State: NY
Mailing Zip: 14209
Mailing Zip4: 2088
Mailing Country: USA
Mailing Phone: 716-886-7500

Document ID: NYA5396157
Manifest Status: Completed after the designated time period for a TSDf to get a copy to the DEC
Trans1 State ID: AK6980NY
Trans2 State ID: Not reported
Generator Ship Date: 870710
Trans1 Recv Date: 870710
Trans2 Recv Date: Not reported
TSD Site Recv Date: 870710
Part A Recv Date: 870910
Part B Recv Date: 870721
Generator EPA ID: NYD091903096
Trans1 EPA ID: ILD099202681
Trans2 EPA ID: Not reported
TSDf ID: NYD049836679
Waste Code: B006 - PCB TRANSFORMERS WITH 500 PPM OR > PCB
Quantity: 00300
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 87

Document ID: NYB4821534
Manifest Status: Completed copy
Trans1 State ID: 10733PNY
Trans2 State ID: Not reported
Generator Ship Date: 941104
Trans1 Recv Date: 941104
Trans2 Recv Date: Not reported
TSD Site Recv Date: 941104
Part A Recv Date: 941117
Part B Recv Date: 941118
Generator EPA ID: NYD091903096
Trans1 EPA ID: NYD980769947
Trans2 EPA ID: Not reported
TSDf ID: NYD000632372
Waste Code: U246 - CYANOGEN BROMIDE
Quantity: 00005
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 100
Year: 94

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AMERICAN RED CROSS BLOOD SERVICES (Continued)

1000358783

Document ID: NYB1511163
Manifest Status: Completed copy
Trans1 State ID: NY5555
Trans2 State ID: Not reported
Generator Ship Date: 920207
Trans1 Recv Date: 920207
Trans2 Recv Date: Not reported
TSD Site Recv Date: 920207
Part A Recv Date: 920225
Part B Recv Date: 920220
Generator EPA ID: NYD091903096
Trans1 EPA ID: NYD982792814
Trans2 EPA ID: Not reported
TSD ID: NYD043815703
Waste Code: D002 - NON-LISTED CORROSIVE WASTES
Quantity: 00900
Units: P - Pounds
Number of Containers: 002
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 100
Year: 92

Document ID: SCA1107940
Manifest Status: Completed copy
Trans1 State ID: 11591RNY
Trans2 State ID: Not reported
Generator Ship Date: 941107
Trans1 Recv Date: 941107
Trans2 Recv Date: Not reported
TSD Site Recv Date: 941110
Part A Recv Date: 941122
Part B Recv Date: 941130
Generator EPA ID: NYD091903096
Trans1 EPA ID: NYD980769947
Trans2 EPA ID: Not reported
TSD ID: SCD044442333
Waste Code: P105 - SODIUM AZIDE
Quantity: 00080
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Waste Code: Not reported
Quantity: 00149
Units: P - Pounds
Number of Containers: 002
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Waste Code: Not reported
Quantity: 00089
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AMERICAN RED CROSS BLOOD SERVICES (Continued)

1000358783

Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Waste Code: Not reported
Quantity: 00083
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Waste Code: Not reported
Quantity: 00064
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Waste Code: Not reported
Quantity: 00010
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 94

Document ID: SCA1107940
Manifest Status: Completed copy
Trans1 State ID: 11591RNY
Trans2 State ID: Not reported
Generator Ship Date: 941107
Trans1 Recv Date: 941107
Trans2 Recv Date: Not reported
TSD Site Recv Date: 941110
Part A Recv Date: 941122
Part B Recv Date: 941130
Generator EPA ID: NYD091903096
Trans1 EPA ID: NYD980769947
Trans2 EPA ID: Not reported
TSDF ID: SCD044442333
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00015
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Waste Code: Not reported
Quantity: 00013
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 100
Year: 94

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

107
East
1/8-1/4
0.245 mi.
1294 ft.

TOWN & COUNTRY CLEANERS
1199 MICHIGAN AVE
BUFFALO, NY

EDR US Hist Cleaners

1014535645
N/A

Relative:
Lower

Actual:
638 ft.

EDR Historical Cleaners:

Name: TOWN & COUNTRY CLEANERS
Year: 1950
Type: CLEANERS AND DYERS

Name: TOWN & COUNTRY CLEANERS
Year: 1955
Type: CLEANERS AND DYERS

Name: TOWN & COUNTRY CLEANERS
Year: 1960
Type: CLEANERS AND DYERS

Name: TOWN & COUNTRY CLEANERS
Year: 1964
Type: CLEANERS AND DYERS

Name: TOWN & COUNTRY DRY CLEANERS
Year: 1970
Type: CLEANERS AND DYERS

Name: COMMUNITY CLEANERS
Year: 1975
Type: CLEANERS AND DYERS

W108
ESE
1/8-1/4
0.246 mi.
1297 ft.

WILCOX FRANK C FILLING STA
150 BEST ST
BUFFALO, NY

EDR US Hist Auto Stat

1014536865
N/A

Site 2 of 2 in cluster W

Relative:
Lower

Actual:
645 ft.

EDR Historical Auto Stations:

Name: REICHLIN BROS FILL STA
Year: 1930
Type: GASOLINE AND OIL SERVICE STATIONS

Name: WILCOX FRANK C FILLING STA
Year: 1940
Type: GASOLINE AND OIL SERVICE STATIONS

Name: SCHUESLEE JAS S FILLING STA
Year: 1946
Type: GASOLINE AND OIL SERVICE STATIONS

Name: SCHUESLER JAS S FILLING STA
Year: 1950
Type: GASOLINE STATIONS

Name: BERTI LOUIS E GAS STA
Year: 1955
Type: GASOLINE STATIONS

Name: BERTI LOUIS P GAS STA
Year: 1960

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

WILCOX FRANK C FILLING STA (Continued)

1014536865

Type: GASOLINE STATIONS
Name: TAYLOR MOBILE SERVICE
Year: 1970
Type: GASOLINE STATIONS

**X109
ESE
1/8-1/4
0.246 mi.
1299 ft.**

**TUTTON ELECTRIC CO INC AUTO REPR
1148 MICHIGAN AVE
BUFFALO, NY 14209**

EDR US Hist Auto Stat

**1014539777
N/A**

Site 3 of 4 in cluster X

**Relative:
Lower**

EDR Historical Auto Stations:

Name: TUTTON CHAS H AUTO REPR
Year: 1950
Type: AUTOMOBILE REPAIRING

Name: TUTTON CHAS H AUTO REPR
Year: 1955
Type: AUTOMOBILE REPAIRING

Name: TUTTON ELEC CO AUTO REPR
Year: 1960
Type: AUTOMOBILE REPAIRING

Name: TUTTON ELECTRIC CO AUTO REPR
Year: 1964
Type: AUTOMOBILE REPAIRING

Name: TUTTON ELECTRIC CO AUTO REPR
Year: 1970
Type: AUTOMOBILE REPAIRING

Name: TUTTON ELECTRIC CO INC AUTO REPR
Year: 1975
Type: AUTOMOBILE REPAIRING

Name: TUTTON ELECTRIC CO INC AUTO REPR
Year: 1980
Type: AUTOMOBILE REPAIRING

Name: TUTTON ELECTRIC CO INC AUTO REPR
Year: 1985
Type: AUTOMOBILE REPAIRING

**X110
ESE
1/8-1/4
0.248 mi.
1310 ft.**

**ROBERTS & RICE CO AUTO REPR
1144 MICHIGAN AVE
BUFFALO, NY**

EDR US Hist Auto Stat

**1014537580
N/A**

Site 4 of 4 in cluster X

**Relative:
Lower**

EDR Historical Auto Stations:

Name: ROBERTSON & RICE CO AUTO REPRS
Year: 1946
Type: AUTOMOBILE REPAIRING

**Actual:
642 ft.**

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ROBERTS & RICE CO AUTO REPR (Continued)

1014537580

Name: ROBERTS & RICE CO AUTO REPRS
Year: 1950
Type: AUTOMOBILE REPAIRING

Name: ROBERTS & RICE CO AUTO REPRS
Year: 1955
Type: AUTOMOBILE REPAIRING

Name: ROBERTS & RICE CO AUTO REPRS
Year: 1960
Type: AUTOMOBILE REPAIRING

Name: ROBERTS & RICE CO AUTO REPR
Year: 1964
Type: AUTOMOBILE REPAIRING

Name: MOYNIHANS COLLISION AUTO REPR
Year: 1970
Type: AUTOMOBILE REPAIRING

Name: MOYNIHANS COLLISION AUTO REPR
Year: 1975
Type: AUTOMOBILE REPAIRING

Name: MOYNIHANS COLLISION AUTO REPR
Year: 1980
Type: AUTOMOBILE REPAIRING

Name: MOYNIHANS COLLISION AUTO REPR
Year: 1985
Type: AUTOMOBILE REPAIRING

Name: BEST AUTO SERVICE INC AUTO REPR
Year: 1992
Type: AUTOMOBILE REPAIRING & SERVICE

S111
North
1/8-1/4
0.249 mi.
1314 ft.

1291 MAIN ST
BUFFALO, NY 14209

Site 3 of 4 in cluster S

EDR US Hist Auto Stat 1015199279
N/A

Relative:
Higher

EDR Historical Auto Stations:

Name: AUTOPIA LTD
Year: 2005
Address: 1291 MAIN ST

Actual:
654 ft.

Name: AUTOPIA LTD
Year: 2006
Address: 1291 MAIN ST

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

S112
North
1/8-1/4
0.249 mi.
1314 ft.

SAVAGE PRINTING CO
1291 MAIN ST
BUFFALO, NY

RCRA NonGen / NLR
FINDS
NY MANIFEST

1000145990
NYD982723322

Site 4 of 4 in cluster S

Relative:
Higher

RCRA NonGen / NLR:

Actual:
654 ft.

Date form received by agency: 01/01/2007
Facility name: SAVAGE PRINTING CO
Facility address: 1291 MAIN ST
BUFFALO, NY 142091947
EPA ID: NYD982723322
Mailing address: MAIN ST
BUFFALO, NY 14209
Contact: Not reported
Contact address: MAIN ST
BUFFALO, NY 14209
Contact country: US
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 02
Land type: Facility is not located on Indian land. Additional information is not known.
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: EDWARD C CRANGLE SR
Owner/operator address: NOT REQUIRED
NOT REQUIRED, WY 99999
Owner/operator country: US
Owner/operator telephone: (212) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: EDWARD C CRANGLE SR
Owner/operator address: NOT REQUIRED
NOT REQUIRED, WY 99999
Owner/operator country: US
Owner/operator telephone: (212) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SAVAGE PRINTING CO (Continued)

1000145990

Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006
Facility name: SAVAGE PRINTING CO
Classification: Not a generator, verified

Date form received by agency: 07/08/1999
Facility name: SAVAGE PRINTING CO
Classification: Not a generator, verified

Date form received by agency: 02/10/1989
Facility name: SAVAGE PRINTING CO
Classification: Small Quantity Generator

Facility Has Received Notices of Violations:

Regulation violated: SR - 373-3.9
Area of violation: Generators - General
Date violation determined: 11/12/1998
Date achieved compliance: 06/18/2001
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 01/21/1999
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 373-3.9
Area of violation: Generators - General
Date violation determined: 11/12/1998
Date achieved compliance: 06/18/2001
Violation lead agency: State
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 11/17/1999
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: LDR - General
Date violation determined: 02/16/1995
Date achieved compliance: 04/06/1995
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/16/1995
Enf. disposition status: Not reported
Enf. disp. status date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SAVAGE PRINTING CO (Continued)

1000145990

Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 02/16/1995
Date achieved compliance: 04/06/1995
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/16/1995
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:

Evaluation date: 07/05/2001
Evaluation: NOT A SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/18/2001
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 11/13/1998
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 11/12/1998
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 06/18/2001
Evaluation lead agency: State

Evaluation date: 02/07/1995
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: LDR - General
Date achieved compliance: 04/06/1995
Evaluation lead agency: State

Evaluation date: 02/07/1995
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 04/06/1995
Evaluation lead agency: State

Evaluation date: 01/16/1992

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SAVAGE PRINTING CO (Continued)

1000145990

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

FINDS:

Registry ID: 110004427585

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

NY MANIFEST:

EPA ID: NYP000020325
Country: USA
Mailing Name: SAVAGE LITHO COMPANY
Mailing Contact: SAVAGE LITHO COMPANY
Mailing Address: 1291 MAIN STREET
Mailing Address 2: Not reported
Mailing City: BUFFALO
Mailing State: NY
Mailing Zip: 14209
Mailing Zip4: Not reported
Mailing Country: USA
Mailing Phone: 716-884-1515

Document ID: MIA1296243
Manifest Status: Completed copy
Trans1 State ID: 55113D
Trans2 State ID: Not reported
Generator Ship Date: 890118
Trans1 Recv Date: 890118
Trans2 Recv Date: Not reported
TSD Site Recv Date: 890119
Part A Recv Date: 890201
Part B Recv Date: 890131
Generator EPA ID: NYP000020325
Trans1 EPA ID: NYD097644801
Trans2 EPA ID: Not reported
TSD ID: MID980615298
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00055
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 100
Year: 89

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SAVAGE PRINTING CO (Continued)

1000145990

Document ID: MIA1296229
Manifest Status: Completed copy
Trans1 State ID: 55113D/NY
Trans2 State ID: Not reported
Generator Ship Date: 890118
Trans1 Recv Date: 890118
Trans2 Recv Date: Not reported
TSD Site Recv Date: 890119
Part A Recv Date: 890201
Part B Recv Date: 890202
Generator EPA ID: NYP000020325
Trans1 EPA ID: NYD097644801
Trans2 EPA ID: Not reported
TSD ID: MID096963194
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00500
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: L Landfill.
Specific Gravity: 100
Year: 89

Document ID: NYG1990116
Manifest Status: Not reported
Trans1 State ID: NYD097644801
Trans2 State ID: Not reported
Generator Ship Date: 05/14/2001
Trans1 Recv Date: 05/14/2001
Trans2 Recv Date: Not reported
TSD Site Recv Date: 05/15/2001
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD982723322
Trans1 EPA ID: NYD049836679
Trans2 EPA ID: Not reported
TSD ID: 41060RNY
Waste Code: D002 - NON-LISTED CORROSIVE WASTES
Quantity: 00005
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Year: 2001

Document ID: NYG1990368
Manifest Status: Not reported
Trans1 State ID: NYD097644801
Trans2 State ID: Not reported
Generator Ship Date: 05/14/2001
Trans1 Recv Date: 05/14/2001
Trans2 Recv Date: Not reported
TSD Site Recv Date: 05/15/2001
Part A Recv Date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SAVAGE PRINTING CO (Continued)

1000145990

Part B Recv Date: Not reported
Generator EPA ID: NYD982723322
Trans1 EPA ID: NYD049836679
Trans2 EPA ID: Not reported
TSD ID: 41060R
Waste Code: D002 - NON-LISTED CORROSIVE WASTES
Quantity: 00008
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Waste Code: D002 - NON-LISTED CORROSIVE WASTES
Quantity: 00006
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00007
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00002
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Year: 2001

Document ID: MIA1779371
Manifest Status: Completed copy
Trans1 State ID: 37436ME
Trans2 State ID: Not reported
Generator Ship Date: 890725
Trans1 Recv Date: 890725
Trans2 Recv Date: 890727
TSD Site Recv Date: 890727
Part A Recv Date: 890801
Part B Recv Date: 890810
Generator EPA ID: NYD982723322
Trans1 EPA ID: NYD097644801
Trans2 EPA ID: MID980684088
TSD ID: MID980615298
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00055
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 100

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SAVAGE PRINTING CO (Continued)

1000145990

Year: 89

Document ID: MIA1779368
Manifest Status: Completed copy
Trans1 State ID: 000000000
Trans2 State ID: 000000000
Generator Ship Date: 890725
Trans1 Recv Date: 890725
Trans2 Recv Date: Not reported
TSD Site Recv Date: 890727
Part A Recv Date: 890801
Part B Recv Date: 890801
Generator EPA ID: NYD982723322
Trans1 EPA ID: NYD097644801
Trans2 EPA ID: Not reported
TSD ID: MID096963194
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00055
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: L Landfill.
Specific Gravity: 100
Year: 89

Document ID: MIA1779216
Manifest Status: Completed copy
Trans1 State ID: 55113DNY
Trans2 State ID: Not reported
Generator Ship Date: 891017
Trans1 Recv Date: 891017
Trans2 Recv Date: Not reported
TSD Site Recv Date: 891023
Part A Recv Date: 891020
Part B Recv Date: 891101
Generator EPA ID: NYD982723322
Trans1 EPA ID: NYD097644801
Trans2 EPA ID: Not reported
TSD ID: MID096963194
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00550
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: L Landfill.
Specific Gravity: 100
Year: 89

Document ID: NYB7832961
Manifest Status: Completed copy
Trans1 State ID: 1306AONY
Trans2 State ID: Not reported
Generator Ship Date: 960722
Trans1 Recv Date: 960722

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SAVAGE PRINTING CO (Continued)

1000145990

Trans2 Recv Date: Not reported
TSD Site Recv Date: 960723
Part A Recv Date: 960731
Part B Recv Date: 960805
Generator EPA ID: NYD982723322
Trans1 EPA ID: NYD049253719
Trans2 EPA ID: Not reported
TSD ID: NYD049253719
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00055
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Waste Code: Not reported
Quantity: 00110
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 96

Document ID: MIA1745243
Manifest Status: Completed after the designated time period for a TSD to get a copy to the DEC
Trans1 State ID: 37436ME
Trans2 State ID: Not reported
Generator Ship Date: 900228
Trans1 Recv Date: 900228
Trans2 Recv Date: Not reported
TSD Site Recv Date: 900302
Part A Recv Date: 900315
Part B Recv Date: 900328
Generator EPA ID: NYD982723322
Trans1 EPA ID: NYD097644801
Trans2 EPA ID: Not reported
TSD ID: MID096963194
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00600
Units: P - Pounds
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: L Landfill.
Specific Gravity: 100
Year: 90

Document ID: MIA2167587
Manifest Status: Completed after the designated time period for a TSD to get a copy to the DEC
Trans1 State ID: Not reported
Trans2 State ID: Not reported
Generator Ship Date: 901228
Trans1 Recv Date: 901228
Trans2 Recv Date: 910102
TSD Site Recv Date: 910102

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SAVAGE PRINTING CO (Continued)

1000145990

Part A Recv Date: 910122
Part B Recv Date: 910507
Generator EPA ID: NYD982723322
Trans1 EPA ID: NYD097644801
Trans2 EPA ID: MID980684088
TSDF ID: MID980615298
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00055
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: L Landfill.
Specific Gravity: 100
Year: 90

Document ID: MIA2167630
Manifest Status: Completed after the designated time period for a TSDF to get a copy to the DEC
Trans1 State ID: 55113DNY
Trans2 State ID: Not reported
Generator Ship Date: 901228
Trans1 Recv Date: 901228
Trans2 Recv Date: Not reported
TSD Site Recv Date: 910102
Part A Recv Date: 910122
Part B Recv Date: 910129
Generator EPA ID: NYD982723322
Trans1 EPA ID: NYD097644801
Trans2 EPA ID: Not reported
TSDF ID: MID096963194
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00110
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: L Landfill.
Specific Gravity: 100
Year: 90

Document ID: MIA2443961
Manifest Status: Completed copy
Trans1 State ID: E37435ME
Trans2 State ID: Not reported
Generator Ship Date: 910802
Trans1 Recv Date: 910802
Trans2 Recv Date: 910806
TSD Site Recv Date: 910806
Part A Recv Date: 910814
Part B Recv Date: 910820
Generator EPA ID: NYD982723322
Trans1 EPA ID: NYD097644801
Trans2 EPA ID: MID980684088
TSDF ID: MID980615298
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00055
Units: G - Gallons (liquids only)* (8.3 pounds)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SAVAGE PRINTING CO (Continued)

1000145990

Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Waste Code: Not reported
Quantity: 00110
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 91

Document ID: NYB6797403
Manifest Status: Completed copy
Trans1 State ID: W83020TN
Trans2 State ID: Not reported
Generator Ship Date: 950313
Trans1 Recv Date: 950313
Trans2 Recv Date: Not reported
TSD Site Recv Date: 950314
Part A Recv Date: Not reported
Part B Recv Date: 950322
Generator EPA ID: NYD982723322
Trans1 EPA ID: NYD049253719
Trans2 EPA ID: Not reported
TSDF ID: NYD049253719
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00165
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 003
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Waste Code: Not reported
Quantity: 00110
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 95

Document ID: MIA1041946
Manifest Status: Completed after the designated time period for a TSDF to get a copy to the DEC
Trans1 State ID: E37441ME
Trans2 State ID: Not reported
Generator Ship Date: 881025
Trans1 Recv Date: 881025
Trans2 Recv Date: Not reported
TSD Site Recv Date: 881027
Part A Recv Date: 881125
Part B Recv Date: 881130
Generator EPA ID: NYP000020325
Trans1 EPA ID: NYD097644801

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SAVAGE PRINTING CO (Continued)

1000145990

Trans2 EPA ID: Not reported
TSDF ID: MID096963194
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 01500
Units: P - Pounds
Number of Containers: 003
Container Type: DM - Metal drums, barrels
Handling Method: L Landfill.
Specific Gravity: 100
Year: 88

Document ID: MIA8114213
Manifest Status: Not reported
Trans1 State ID: NYD097644801
Trans2 State ID: Not reported
Generator Ship Date: 05/14/2001
Trans1 Recv Date: 05/14/2001
Trans2 Recv Date: Not reported
TSD Site Recv Date: 05/16/2001
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD982723322
Trans1 EPA ID: MID060975844
Trans2 EPA ID: Not reported
TSDF ID: 41000R
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00550
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 010
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00030
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Year: 2001

EPA ID: NYD982723322
Country: USA
Mailing Name: SAVAGE LITHO COMPANY
Mailing Contact: SAVAGE LITHO COMPANY
Mailing Address: 1291 MAIN STREET
Mailing Address 2: Not reported
Mailing City: BUFFALO
Mailing State: NY
Mailing Zip: 14209
Mailing Zip4: Not reported
Mailing Country: USA
Mailing Phone: 716-884-1515

Document ID: MIA1296243

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SAVAGE PRINTING CO (Continued)

1000145990

Manifest Status: Completed copy
Trans1 State ID: 55113D
Trans2 State ID: Not reported
Generator Ship Date: 890118
Trans1 Recv Date: 890118
Trans2 Recv Date: Not reported
TSD Site Recv Date: 890119
Part A Recv Date: 890201
Part B Recv Date: 890131
Generator EPA ID: NYP000020325
Trans1 EPA ID: NYD097644801
Trans2 EPA ID: Not reported
TSD ID: MID980615298
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00055
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 100
Year: 89

Document ID: MIA1296229
Manifest Status: Completed copy
Trans1 State ID: 55113D/NY
Trans2 State ID: Not reported
Generator Ship Date: 890118
Trans1 Recv Date: 890118
Trans2 Recv Date: Not reported
TSD Site Recv Date: 890119
Part A Recv Date: 890201
Part B Recv Date: 890202
Generator EPA ID: NYP000020325
Trans1 EPA ID: NYD097644801
Trans2 EPA ID: Not reported
TSD ID: MID096963194
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00500
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: L Landfill.
Specific Gravity: 100
Year: 89

Document ID: NYG1990116
Manifest Status: Not reported
Trans1 State ID: NYD097644801
Trans2 State ID: Not reported
Generator Ship Date: 05/14/2001
Trans1 Recv Date: 05/14/2001
Trans2 Recv Date: Not reported
TSD Site Recv Date: 05/15/2001
Part A Recv Date: Not reported
Part B Recv Date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SAVAGE PRINTING CO (Continued)

1000145990

Generator EPA ID: NYD982723322
Trans1 EPA ID: NYD049836679
Trans2 EPA ID: Not reported
TSD ID: 41060RNY
Waste Code: D002 - NON-LISTED CORROSIVE WASTES
Quantity: 00005
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Year: 2001

Document ID: NYG1990368
Manifest Status: Not reported
Trans1 State ID: NYD097644801
Trans2 State ID: Not reported
Generator Ship Date: 05/14/2001
Trans1 Recv Date: 05/14/2001
Trans2 Recv Date: Not reported
TSD Site Recv Date: 05/15/2001
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD982723322
Trans1 EPA ID: NYD049836679
Trans2 EPA ID: Not reported
TSD ID: 41060R
Waste Code: D002 - NON-LISTED CORROSIVE WASTES
Quantity: 00008
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Waste Code: D002 - NON-LISTED CORROSIVE WASTES
Quantity: 00006
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00007
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00002
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Year: 2001

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SAVAGE PRINTING CO (Continued)

1000145990

Document ID: MIA1779371
Manifest Status: Completed copy
Trans1 State ID: 37436ME
Trans2 State ID: Not reported
Generator Ship Date: 890725
Trans1 Recv Date: 890725
Trans2 Recv Date: 890727
TSD Site Recv Date: 890727
Part A Recv Date: 890801
Part B Recv Date: 890810
Generator EPA ID: NYD982723322
Trans1 EPA ID: NYD097644801
Trans2 EPA ID: MID980684088
TSD ID: MID980615298
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00055
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 100
Year: 89

Document ID: MIA1779368
Manifest Status: Completed copy
Trans1 State ID: 000000000
Trans2 State ID: 000000000
Generator Ship Date: 890725
Trans1 Recv Date: 890725
Trans2 Recv Date: Not reported
TSD Site Recv Date: 890727
Part A Recv Date: 890801
Part B Recv Date: 890801
Generator EPA ID: NYD982723322
Trans1 EPA ID: NYD097644801
Trans2 EPA ID: Not reported
TSD ID: MID096963194
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00055
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: L Landfill.
Specific Gravity: 100
Year: 89

Document ID: MIA1779216
Manifest Status: Completed copy
Trans1 State ID: 55113DNY
Trans2 State ID: Not reported
Generator Ship Date: 891017
Trans1 Recv Date: 891017
Trans2 Recv Date: Not reported
TSD Site Recv Date: 891023
Part A Recv Date: 891020

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SAVAGE PRINTING CO (Continued)

1000145990

Part B Recv Date: 891101
Generator EPA ID: NYD982723322
Trans1 EPA ID: NYD097644801
Trans2 EPA ID: Not reported
TSD ID: MID096963194
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00550
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: L Landfill.
Specific Gravity: 100
Year: 89

Document ID: NYB7832961
Manifest Status: Completed copy
Trans1 State ID: 1306AONY
Trans2 State ID: Not reported
Generator Ship Date: 960722
Trans1 Recv Date: 960722
Trans2 Recv Date: Not reported
TSD Site Recv Date: 960723
Part A Recv Date: 960731
Part B Recv Date: 960805
Generator EPA ID: NYD982723322
Trans1 EPA ID: NYD049253719
Trans2 EPA ID: Not reported
TSD ID: NYD049253719
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00055
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Waste Code: Not reported
Quantity: 00110
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 96

Document ID: MIA1745243
Manifest Status: Completed after the designated time period for a TSD to get a copy to the DEC
Trans1 State ID: 37436ME
Trans2 State ID: Not reported
Generator Ship Date: 900228
Trans1 Recv Date: 900228
Trans2 Recv Date: Not reported
TSD Site Recv Date: 900302
Part A Recv Date: 900315
Part B Recv Date: 900328
Generator EPA ID: NYD982723322

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SAVAGE PRINTING CO (Continued)

1000145990

Trans1 EPA ID: NYD097644801
Trans2 EPA ID: Not reported
TSD ID: MID096963194
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00600
Units: P - Pounds
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: L Landfill.
Specific Gravity: 100
Year: 90

Document ID: MIA2167587
Manifest Status: Completed after the designated time period for a TSD to get a copy to the DEC
Trans1 State ID: Not reported
Trans2 State ID: Not reported
Generator Ship Date: 901228
Trans1 Recv Date: 901228
Trans2 Recv Date: 910102
TSD Site Recv Date: 910102
Part A Recv Date: 910122
Part B Recv Date: 910507
Generator EPA ID: NYD982723322
Trans1 EPA ID: NYD097644801
Trans2 EPA ID: MID980684088
TSD ID: MID980615298
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00055
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: L Landfill.
Specific Gravity: 100
Year: 90

Document ID: MIA2167630
Manifest Status: Completed after the designated time period for a TSD to get a copy to the DEC
Trans1 State ID: 55113DNY
Trans2 State ID: Not reported
Generator Ship Date: 901228
Trans1 Recv Date: 901228
Trans2 Recv Date: Not reported
TSD Site Recv Date: 910102
Part A Recv Date: 910122
Part B Recv Date: 910129
Generator EPA ID: NYD982723322
Trans1 EPA ID: NYD097644801
Trans2 EPA ID: Not reported
TSD ID: MID096963194
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00110
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: L Landfill.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SAVAGE PRINTING CO (Continued)

1000145990

Specific Gravity: 100
Year: 90

Document ID: MIA2443961
Manifest Status: Completed copy
Trans1 State ID: E37435ME
Trans2 State ID: Not reported
Generator Ship Date: 910802
Trans1 Recv Date: 910802
Trans2 Recv Date: 910806
TSD Site Recv Date: 910806
Part A Recv Date: 910814
Part B Recv Date: 910820
Generator EPA ID: NYD982723322
Trans1 EPA ID: NYD097644801
Trans2 EPA ID: MID980684088
TSDF ID: MID980615298
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00055
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Waste Code: Not reported
Quantity: 00110
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 91

Document ID: NYB6797403
Manifest Status: Completed copy
Trans1 State ID: W83020TN
Trans2 State ID: Not reported
Generator Ship Date: 950313
Trans1 Recv Date: 950313
Trans2 Recv Date: Not reported
TSD Site Recv Date: 950314
Part A Recv Date: Not reported
Part B Recv Date: 950322
Generator EPA ID: NYD982723322
Trans1 EPA ID: NYD049253719
Trans2 EPA ID: Not reported
TSDF ID: NYD049253719
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00165
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 003
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Waste Code: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SAVAGE PRINTING CO (Continued)

1000145990

Quantity: 00110
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 95

Document ID: MIA1041946
Manifest Status: Completed after the designated time period for a TSDF to get a copy to the DEC
Trans1 State ID: E37441ME
Trans2 State ID: Not reported
Generator Ship Date: 881025
Trans1 Recv Date: 881025
Trans2 Recv Date: Not reported
TSD Site Recv Date: 881027
Part A Recv Date: 881125
Part B Recv Date: 881130
Generator EPA ID: NYP000020325
Trans1 EPA ID: NYD097644801
Trans2 EPA ID: Not reported
TSDF ID: MID096963194
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 01500
Units: P - Pounds
Number of Containers: 003
Container Type: DM - Metal drums, barrels
Handling Method: L Landfill.
Specific Gravity: 100
Year: 88

Document ID: MIA8114213
Manifest Status: Not reported
Trans1 State ID: NYD097644801
Trans2 State ID: Not reported
Generator Ship Date: 05/14/2001
Trans1 Recv Date: 05/14/2001
Trans2 Recv Date: Not reported
TSD Site Recv Date: 05/16/2001
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD982723322
Trans1 EPA ID: MID060975844
Trans2 EPA ID: Not reported
TSDF ID: 41000R
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00550
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 010
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00030
Units: G - Gallons (liquids only)* (8.3 pounds)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SAVAGE PRINTING CO (Continued)

1000145990

Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Year: 2001

113
SSE
1/4-1/2
0.284 mi.
1501 ft.

**BUFFALO GENERAL HOSPITAL
NORTH STREET
BUFFALO, NY**

**NY LTANKS S103038227
N/A**

**Relative:
Higher**

LTANKS:

**Actual:
658 ft.**

Site ID: 116252
Spill Number/Closed Date: 9310029 / 12/16/1994
Spill Date: 11/17/1993
Spill Cause: Tank Overfill
Spill Source: Institutional, Educational, Gov., Other
Spill Class: Known release with minimal potential for fire or hazard. DEC Response.
Willing Responsible Party. Corrective action taken.
Cleanup Ceased: 12/16/1994
Cleanup Meets Standard: True
SWIS: 1502
Investigator: SORGI
Referred To: Not reported
Reported to Dept: 11/17/1993
CID: Not reported
Water Affected: Not reported
Spill Notifier: Citizen
Last Inspection: 11/17/1993
Recommended Penalty: False
UST Involvement: False
Remediation Phase: 0
Date Entered In Computer: 11/19/1993
Spill Record Last Update: 12/22/1994
Spiller Name: Not reported
Spiller Company: BUFFALO GENERAL HOSPITAL
Spiller Address: 100 HIGH STREET
Spiller City,St,Zip: BUFFALO, NY 14203
Spiller County: 001
Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported
DEC Region: 9
DER Facility ID: 101186
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "MJS"11/17/93: MJS SITE INSPECT. WEATHER RAINING. HEAVY SHEEN ON WATER RUNNING DOWN STREET. PRODUCT CAME OUT VENT PIPE DURING FILLING OF TANK. MET W/ MR KERLING - DEBRIS MUST BE DISPOSED. 09/08/94: MJS REVIEW FILE. NO RECEIPTS OR ANALYTICAL FOR CONT DEBRIS. LETTER TO RP REQUESTING DOCUMENTATION. RESPONSE DUE 10/1/94. 10/12/94: MJS TELECON FROM RP. HE WILL FORWARD DOCUMENTATION ASAP FOR CLOSURE OF FILE. 12/16/94: RECEICED DISPOSAL DOCUMENTATION FROM RP. NO FURTHER ACTION REQUIRED. MJS CLOSE FILE.
Remarks: CITIZEN OBSERVED OIL RUNNING DOWN SIDEWALK INTO STREET.

Material:

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

S103038227

Site ID: 116252
Operable Unit ID: 991734
Operable Unit: 01
Material ID: 392667
Material Code: 0001A
Material Name: #2 Fuel Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Not reported
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

114
WSW
1/4-1/2
0.289 mi.
1524 ft.

**WESTMINSTER PRESBYTERIAN
724 DELAWARE AVENUE
BUFFALO, NY**

**NY LTANKS S100117414
N/A**

**Relative:
Higher**

LTANKS:
Site ID: 70639
Spill Number/Closed Date: 8805542 / 11/10/1988
Spill Date: 9/28/1988
Spill Cause: Tank Test Failure
Spill Source: Institutional, Educational, Gov., Other
Spill Class: Not reported
Cleanup Ceased: 11/10/1988
Cleanup Meets Standard: True
SWIS: 1502
Investigator: FIX
Referred To: Not reported
Reported to Dept: 9/28/1988
CID: Not reported
Water Affected: Not reported
Spill Notifier: Tank Tester
Last Inspection: 11/10/1988
Recommended Penalty: False
UST Involvement: False
Remediation Phase: 0
Date Entered In Computer: 10/14/1988
Spill Record Last Update: 11/21/1988
Spiller Name: Not reported
Spiller Company: WESTMINSTER PREBYTERIAN
Spiller Address: 724 DELAWARE AVENUE
Spiller City,St,Zip: BUFFALO, NY
Spiller County: 001
Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported
DEC Region: 9
DER Facility ID: 67001
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "CAF" // : CAF SITE VISIT BACK FILLING COMPLETE,TANK CUT

**Actual:
666 ft.**

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

WESTMINSTER PRESBYTERIAN (Continued)

S100117414

Remarks: OPEN,CLEANED AND REMOVED NO FURTHER WORK ANTICIPATED.
6000 FALLON TANK FAILURE RATE 0.084 GPH

Material:

Site ID: 70639
Operable Unit ID: 922523
Operable Unit: 01
Material ID: 457446
Material Code: 0001A
Material Name: #2 Fuel Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Site ID: 70639
Spill Tank Test: 1534698
Tank Number: Not reported
Tank Size: 0
Test Method: 00
Leak Rate: 0
Gross Fail: Not reported
Modified By: Spills
Last Modified: 10/1/2004
Test Method: Unknown

115
SE
1/4-1/2
0.296 mi.
1563 ft.

BUFFALO CITY MISSION (E. NORTH ST & MICHIGAN AVE)
150 EAST NORTH STREET
BUFFALO, NY 14203

NY BROWNFIELDS S113916444
N/A

Relative:
Higher

BROWNFIELDS:

Program: BCP
Site Code: 337121

Actual:
656 ft.

Site Description: A BCP application was received in early 2005 for the investigation of vacant land in support of the construction of a new housing facility. The application included an assessment conducted in 2004 which revealed no evidence of recognized environmental conditions in connection with the subject property. According to the 1951-1952 Polk Directory, the portion of the subject property historically addressed at 1082 Michigan Avenue was identified as a vehicle service facility. This facility was apparently not present in 1948 or in 1957, suggesting this operation was short-lived. No other records were discovered identifying this potential historic on-site operation of environmental concern. A building permit, dated 1954, relative to the installation of one 220-gallon fuel oil tank within a former on-site residence basement, historically addressed at 142 East North Street, is on file for the subject property. As this tank was located within the basement of this structure, it was likely an aboveground storage tank (AST) that was removed from the subject property at the time of building demolition. This project was denied

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO CITY MISSION (E. NORTH ST & MICHIGAN AVE) (Continued)

S113916444

entry into the BCP.
Env Problem: No environmental problems have been defined for this site.
Health Problem: Not reported

**116
NW
1/4-1/2
0.298 mi.
1572 ft.**

**TANKS AT APARTMENT COMPLE
905 DELAWARE AVENUE
BUFFALO, NY**

**NY LTANKS S104781823
N/A**

**Relative:
Higher**

LTANKS:

**Actual:
658 ft.**

Site ID: 121438
Spill Number/Closed Date: 0075007 / 6/22/2000
Spill Date: 4/5/2000
Spill Cause: Tank Failure
Spill Source: Institutional, Educational, Gov., Other
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
Cleanup Ceased: Not reported
Cleanup Meets Standard: True
SWIS: 1502
Investigator: RJJONAK
Referred To: Not reported
Reported to Dept: 4/6/2000
CID: Not reported
Water Affected: Not reported
Spill Notifier: Citizen
Last Inspection: 4/6/2000
Recommended Penalty: False
UST Involvement: True
Remediation Phase: 0
Date Entered In Computer: 4/6/2000
Spill Record Last Update: 7/10/2000
Spiller Name: TONY PICCIONE
Spiller Company: TONY PICCIONE
Spiller Address: 159 BYRANT STREET
Spiller City,St,Zip: BUFFALO, NY
Spiller County: 001
Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported
DEC Region: 9
DER Facility ID: 105411
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "RJJ"04/06/2000...RJJ SITE INSPECTION AT 1300...MEET WITH STEVE CROSS OF OKAR EQUIPMENT CO., THEY ARE PULLING 1-4000 AND 1-2000 GAL. FUEL OIL TANKS AT 905 DELAWARE AVE...THE EXCAVATION IS ABOUT 20X10X8",AND THE SOIL IS STAGED ON PLASTIC...PIT AREA LOOKS AND SMELLS CLEAN, NO VISIBLE STAINED SOIL...THEY WILL SEND ME THE ANALYTICAL RESULTS FROM THE 4 SIDES AND THE FLOOR AND THE SOIL DISPOSAL RECEIPTS...TANKS WERE CUT AND CLEANED PROPERLY...THEY PLAN TO BACKFILL THE PIT AREA TODAY ,WHEN THEY ARE DONE.04/17/2000: RJJ RECEIVED ANALYTICAL DATA FOR THE TANK EXCAVATION AT 905 DELAWARE AVE...ALL SAMPLES SHOW NO CONTAMINATED LEVELS OF PRODUCT...WHEN THEY SEND THE SOIL DISPOSAL RECEIPTS, I WILL BE ABLE TO CLOSE OUT THIS SPILL.06/22/2000: RJJ RECEIVED THE SOIL DISPOSAL RECEIPTS FRON OKAR EQUIPMENT,THEY REMOVED 5.03 TONS OF SOIL...ALL RECEIPTS ARE IN ORDER, I CAN NOW CLOSE OUT THIS SPILL...I WILL DRAFT AND SEND A CLOSURE LETTER...NO FURTHER

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TANKS AT APARTMENT COMPLE (Continued)

S104781823

Remarks: ACTION NEEDED.
CALLER OBSERVED UST REMOVAL IN PROCESS IN FRONT OF UNKNOWN APARTMENT
BLDG. AND FELT THAT THERE WAS LIQUID LEAKING FROM TANKS AND WAS
COVERED UP WITH DIRT.

Material:
Site ID: 121438
Operable Unit ID: 836373
Operable Unit: 01
Material ID: 568873
Material Code: 0066A
Material Name: UNKNOWN PETROLEUM
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

117
SW
1/4-1/2
0.302 mi.
1592 ft.

**KULBACK CONSTRUCTION
DELAWARE AT NORTH
BUFFALO, NY**

**NY LTANKS S101174723
N/A**

**Relative:
Higher**

LTANKS:
Site ID: 221515
Spill Number/Closed Date: 9403219 / 10/4/1994
Spill Date: 6/1/1994
Spill Cause: Tank Failure
Spill Source: Commercial/Industrial
Spill Class: No spill occurred. No DEC Response. No corrective action required.
Cleanup Ceased: 10/4/1994
Cleanup Meets Standard: True
SWIS: 1502
Investigator: RMCROSSE
Referred To: Not reported
Reported to Dept: 6/2/1994
CID: Not reported
Water Affected: Not reported
Spill Notifier: Responsible Party
Last Inspection: 6/13/1994
Recommended Penalty: False
UST Involvement: False
Remediation Phase: 0
Date Entered In Computer: 6/6/1994
Spill Record Last Update: 10/7/1994
Spiller Name: Not reported
Spiller Company: KULBACK CONSTRUCTION
Spiller Address: 6363 TRANSIT ROAD
Spiller City,St,Zip: DEPEW, NY 14043
Spiller County: 001
Spiller Contact: Not reported

**Actual:
667 ft.**

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KULBACK CONSTRUCTION (Continued)

S101174723

Spiller Phone: Not reported
Spiller Extension: Not reported
DEC Region: 9
DER Facility ID: 183195
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "RMC"06/13/94: RMC/BRAD MEYERS/SITE TANK ,8K, REMOVED, NO VISUAL CONTAMINATION FOUND, BUFFALO DRILLING TOOK SAMPLES, RESULTS DUE 7/15/94.07/22/94: RMC/RESULTS LETTER, RESPONSE DUE 8/1/94.10/04/94: RMC/RECEIVED TEST RESULTS, NO EXCEEDANCE, NO INDICATION OF SPILL ASSOCIATED W/ THIS TANK, CLOSE OUT.

Remarks: FOUND 1000 GALLON TANK WHILE EXCAVATING FOR BUILDING

Material:

Site ID: 221515
Operable Unit ID: 997012
Operable Unit: 01
Material ID: 570081
Material Code: 0001A
Material Name: #2 Fuel Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

118
WSW
1/4-1/2
0.322 mi.
1701 ft.

SINCLAIR RADIO OF BUFFALO
695 DELAWARE AVENUE
BUFFALO, NY

NY LTANKS **S102960426**
NY MANIFEST **N/A**

Relative:
Higher

LTANKS:

Actual:
669 ft.

Site ID: 190349
Spill Number/Closed Date: 9709172 / 12/2/1998
Spill Date: 10/29/1997
Spill Cause: Tank Failure
Spill Source: Commercial/Industrial
Spill Class: Possible release with minimal potential for fire or hazard or Known release with no damage. No DEC Response. No corrective action required.
Cleanup Ceased: Not reported
Cleanup Meets Standard: True
SWIS: 1502
Investigator: COOKE
Referred To: Not reported
Reported to Dept: 11/4/1997
CID: 999
Water Affected: Not reported
Spill Notifier: Responsible Party
Last Inspection: Not reported
Recommended Penalty: False
UST Involvement: True

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SINCLAIR RADIO OF BUFFALO (Continued)

S102960426

Remediation Phase: 0
Date Entered In Computer: 11/6/1997
Spill Record Last Update: 12/5/2001
Spiller Name: THOMAS ATKINS
Spiller Company: SINCLAIR RADIO OF BUFFALO
Spiller Address: 695 DELAWARE AVENUE
Spiller City,St,Zip: BUFFALO, NY 14209-001
Spiller County: 001
Spiller Contact: TOM ATKINS
Spiller Phone: (716) 843-0269
Spiller Extention: Not reported
DEC Region: 9
DER Facility ID: 158781
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "JDC"11/4/97: JDC TELCON W/ TOM ATKINS, FACILTY MGR FOR RADIO STATION. ADVISED HE FORWARD POST TEST RESULTS FOR OUR REVIEW. RECEIVED RESULTS AND FOUND LEVELS SATISFACTORY FOR 8021 DIRECT, HOWEVER 8270 RESULTS EXCEEDED. JDC CONTACTED MR ATKINS AND REQUESTED HE RESAMPLE UNDER TCLP CONDITIONS. HE AGREED, WILL DETERMINE STATUS BASED ON NEXT ROUND OF SAMPLING.5/4/98: JDC TELCON W/ ANDY KASARICK, BFLO DRILLING AND ADVISED ON RESAMPLING REQUIREMENTS.12/2/98:JDC LEFT MESSAGE FOR MR ATKINS TO RETURN MY CALL ON RESAMPLING STATUS. TELCON W/ ANDY KASARICK WHO SAID HE FAX OVER RESULTS. JDC RECEIVED TEST RESULTS FOR TCLP AND FOUND SATISFACTORY. NO FURTHER ACTION REQUIRED SITE CLOSED. WILL SEND CLOSURE LETTER.
Remarks: MR ATKINS ADVISED HIS POST TEST RESULTS HAD LEVELS OF CONTAMINATION. AFTER REVIEW OF FAXED RESULTS FOUND MINOR VIOLATIONS, WILL CLOSE FILE AS INACTIVE. ADVISED MR MTKINS THAT HE COULD RESAMPLE FOR CLOSURE.

Material:
Site ID: 190349
Operable Unit ID: 1055557
Operable Unit: 01
Material ID: 331087
Material Code: 0008
Material Name: Diesel
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

NY MANIFEST:
EPA ID: NYD131683641
Country: USA
Mailing Name: WWKB RADIO
Mailing Contact: WWKB RADIO
Mailing Address: 695 DELAWARE AVENUE
Mailing Address 2: Not reported
Mailing City: BUFFALO
Mailing State: NY

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SINCLAIR RADIO OF BUFFALO (Continued)

S102960426

Mailing Zip: 14209
Mailing Zip4: Not reported
Mailing Country: USA
Mailing Phone: 716-884-5101

NY MANIFEST:

No Manifest Records Available

119
NW
1/4-1/2
0.324 mi.
1710 ft.

925 DELAWARE AVE INC
925 DELAWARE AVE
BUFFALO, NY 14209

NY LTANKS **U003318787**
NY UST **N/A**
NY MANIFEST

Relative:
Higher

LTANKS:

Actual:
659 ft.

Site ID: 418711
Spill Number/Closed Date: 0906378 / 1/6/2010
Spill Date: 9/2/2009
Spill Cause: Tank Test Failure
Spill Source: Commercial/Industrial
Spill Class: Known release that creates potential for fire or hazard. DEC Response.
Willing Responsible Party. Corrective action taken.
Cleanup Ceased: Not reported
Cleanup Meets Standard: False
SWIS: 1502
Investigator: FXGALLEG
Referred To: Not reported
Reported to Dept: 9/2/2009
CID: Not reported
Water Affected: Not reported
Spill Notifier: Other
Last Inspection: 12/8/2009
Recommended Penalty: False
UST Involvement: False
Remediation Phase: 0
Date Entered In Computer: 9/2/2009
Spill Record Last Update: 1/6/2010
Spiller Name: Not reported
Spiller Company: 925 DELAWARE AVENUE INC
Spiller Address: Not reported
Spiller City,St,Zip: NY
Spiller County: 999
Spiller Contact: THOMAS G. PRITCHARD
Spiller Phone: (716) 885-9250
Spiller Extention: Not reported
DEC Region: 9
DER Facility ID: 367810
DEC Memo: will pull tank, will empty this week9/15/09 FG SPOKE TO RP. SAID
ELMWOOD REMOVED ALL FUEL. IS GETTING PROPOSAL FROM ELMWOOD TANK FOR A
SUBSURFACE INVESTIGATION. FG SPOKE TO TOM PRITCHARD WITH 925 DELAWARE
AVENUE INC. 885-9250.12/08/09: MF S/V/ELMOOD TANK/GARY TOWNER/TOM
PRITCHER. 8K #2FO UST REMOVED. NO HOLES NOTICED, NO CONTAMINATION
NOTICED. SAMPLES TAKED, 8260 & 8270.1/6/09 FG CONFIRMED WITH MIKE
CLANCY WITH ELMWOOD TANK THAT NO SOIL WAS REMOVED DURING THE TANK
REMOVAL. EXCAVATION ANALYTICAL PROVIDED FOR 8260 & 8270 STARS LIST
AND ALL ARE BELOW DER 10 GUIDELINES. NO FURTHER WORK IS REQUIRED. THE
SITE IS CLOSED.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

925 DELAWARE AVE INC (Continued)

U003318787

Remarks: tank test failure. 8k fuel oil

Material:

Site ID: 418711
Operable Unit ID: 1174877
Operable Unit: 01
Material ID: 2167264
Material Code: 0001A
Material Name: #2 Fuel Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: Not reported
Units: Gallons
Recovered: Not reported
Resource Affected: Not reported
Oxygenate: False

Tank Test:

UST:

Id/Status: 9-600180 / Unregulated
Program Type: PBS
Region: STATE
DEC Region: 9
Expiration Date: N/A
UTM X: 184002.55312
UTM Y: 4757997.8706400003
Site Type: Apartment Building/Office Building

Affiliation Records:

Site Id: 55044
Affiliation Type: Facility Owner
Company Name: 925 DELAWARE AVE INC
Contact Type: RESIDENT MANAGER & RECORDIN SEC.
Contact Name: THOMAS G. PRITCHARD
Address1: 925 DELAWARE AVE
Address2: Not reported
City: BUFFALO
State: NY
Zip Code: 14209
Country Code: 001
Phone: (716) 885-9250
EMail: Not reported
Fax Number: Not reported
Modified By: LJJUDD
Date Last Modified: 10/25/2004

Site Id: 55044
Affiliation Type: Mail Contact
Company Name: 925 DELAWARE AVE INC
Contact Type: Not reported
Contact Name: MRS. PEARL SPOERL
Address1: 925 DELAWARE AVE
Address2: Not reported
City: BUFFALO

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

925 DELAWARE AVE INC (Continued)

U003318787

State: NY
Zip Code: 14209
Country Code: 001
Phone: (716) 885-9250
EMail: Not reported
Fax Number: Not reported
Modified By: LJJUDD
Date Last Modified: 10/25/2004

Site Id: 55044
Affiliation Type: On-Site Operator
Company Name: 925 DELAWARE AVE INC
Contact Type: Not reported
Contact Name: TOM PRITCHARD
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 001
Phone: (716) 885-9250
EMail: Not reported
Fax Number: Not reported
Modified By: LJJUDD
Date Last Modified: 10/25/2004

Site Id: 55044
Affiliation Type: Emergency Contact
Company Name: 925 DELAWARE AVE INC
Contact Type: Not reported
Contact Name: PEARL SPOERL
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 999
Phone: (716) 881-0866
EMail: Not reported
Fax Number: Not reported
Modified By: LJJUDD
Date Last Modified: 10/25/2004

Tank Info:

Tank Number: 1
Tank ID: 171270
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 8000
Install Date: 07/01/1966
Date Tank Closed: 12/08/2009
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0001
Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

925 DELAWARE AVE INC (Continued)

U003318787

Tightness Test Method: 21
Date Test: 09/22/2004
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: MXFRANKS
Last Modified: 12/11/2009

Equipment Records:

I00 - Overfill - None
A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
B00 - Tank External Protection - None
J02 - Dispenser - Suction Dispenser
L09 - Piping Leak Detection - Exempt Suction Piping
C03 - Pipe Location - Aboveground/Underground Combination
H00 - Tank Leak Detection - None
F00 - Pipe External Protection - None
G00 - Tank Secondary Containment - None

NY MANIFEST:

EPA ID: NYR000174136
Country: USA
Mailing Name: CAMPANILE
Mailing Contact: CAMPANILE
Mailing Address: 925 DELAWARE AVE
Mailing Address 2: Not reported
Mailing City: BUFFALO
Mailing State: NY
Mailing Zip: 14209
Mailing Zip4: Not reported
Mailing Country: USA
Mailing Phone: 716-885-9250

NY MANIFEST:

No Manifest Records Available

120
SW
1/4-1/2
0.327 mi.
1727 ft.

**WESTBROOK 675 DELAWARE
675 DELAWARE AVENUE
BUFFALO, NY**

**NY LTANKS S100781976
N/A**

**Relative:
Higher**

LTANKS:

Site ID: 213036
Spill Number/Closed Date: 9308986 / 4/20/1994
Spill Date: 10/21/1993
Spill Cause: Tank Failure
Spill Source: Private Dwelling
Spill Class: Known release that creates potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
Cleanup Ceased: 2/8/1994
Cleanup Meets Standard: True
SWIS: 1502
Investigator: RMCROSSE
Referred To: Not reported
Reported to Dept: 10/21/1993
CID: Not reported

**Actual:
670 ft.**

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

WESTBROOK 675 DELAWARE (Continued)

S100781976

Water Affected: Not reported
Spill Notifier: Other
Last Inspection: 12/1/1993
Recommended Penalty: False
UST Involvement: False
Remediation Phase: 0
Date Entered In Computer: 10/26/1993
Spill Record Last Update: 4/21/1994
Spiller Name: Not reported
Spiller Company: NIAGARA ASSET CORP.
Spiller Address: 60 LAKEFRONT BLVD.
Spiller City,St,Zip: BUFFALO, NY 14202-4392
Spiller County: 001
Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported
DEC Region: 9
DER Facility ID: 176488
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "RMC"10/22/93: RMC/JOE KLOC/SITE - 6K #6 OIL TANK; PLANNED TO CLOSE IN PLACE. ONCE CLEANED, OIL RAN INTO BOTTOM FROM OUTSIDE. REMOVAL PROBLEMATIC DUE TO BUILDING. REQUESTED WORK PLAN AND SCHEDULE BY 11/15/93. 11/01/93: RMC/RECEIVED WRITTEN WOK PLAN, OK. HOWEVER PLAN ALTERED TO COMPLETE REMOVAL, DUE TO AMOUNT OF CONTAMINATION FOUND, REMOVAL DUE 12/1/93.12/01/93: RMC/FILE/SITE MET HITCHCOCK ON SITE, DATE UNKNOWN, TANK REMOVED, VERY MINOR CONTAMINATION NOTED AT NORTH END, 1 YARD TO REMOVE, DISPOSAL AND TESTING DUE 1/30/94.03/07/94: RMC/NFC/PHONE TO FAX DISPOSAL AND ANALYTICAL. DUE 3/21/94.03/10/94: RMC/RECEIVED SAMPLING RESULTS, NO EXCEEDANCES, DISPOSAL DUE 4/1/94.04/20/94: RMC/RECEIVED DISPOSAL RECEIPT, OK SPILL COMPLETE, CLOSE OUT.
Remarks: CONTAMINATED SOIL DISCOVERED DURING REMOVAL OF 6K UST

Material:
Site ID: 213036
Operable Unit ID: 990522
Operable Unit: 01
Material ID: 391662
Material Code: 0003A
Material Name: #6 Fuel Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Not reported
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Site

Database(s)

EDR ID Number
 EPA ID Number

121
 South
 1/4-1/2
 0.341 mi.
 1801 ft.

CMX LABORATORIES
50 HIGH STREET
BUFFALO, NY 14203

NY LTANKS
NY MANIFEST
NY Spills

S108765520
N/A

Relative:
Higher

LTANKS:

Actual:
662 ft.

Site ID: 385683
 Spill Number/Closed Date: 0705382 / 9/13/2007
 Spill Date: 8/10/2007
 Spill Cause: Tank Failure
 Spill Source: Commercial/Industrial
 Spill Class: Possible release with minimal potential for fire or hazard or Known release with no damage. DEC Response. Willing Responsible Party. Corrective action taken.
 Cleanup Ceased: Not reported
 Cleanup Meets Standard: True
 SWIS: 1502
 Investigator: rmcrosse
 Referred To: DUPLICATE OF 0705383
 Reported to Dept: 8/10/2007
 CID: 76
 Water Affected: Not reported
 Spill Notifier: Other
 Last Inspection: 8/10/2007
 Recommended Penalty: False
 UST Involvement: True
 Remediation Phase: 0
 Date Entered In Computer: 8/10/2007
 Spill Record Last Update: 9/13/2007
 Spiller Name: DAVE HANNAHAK
 Spiller Company: US FOOD SERVICE
 Spiller Address: 125 GARDENVILLE PKWY
 Spiller City,St,Zip: BUFFALO, NY 14224
 Spiller County: 001
 Spiller Contact: LARRY SNYDER
 Spiller Phone: (716) 824-2245
 Spiller Extention: Not reported
 DEC Region: 9
 DER Facility ID: 335065
 DEC Memo: DUPLICATE OF 0705383
 Remarks: 25-30 GALLONS SPILL. IN PROCESS OF CONTAINMENT. FIRE DEPT O/S.

Material:

Site ID: 385683
 Operable Unit ID: 1142946
 Operable Unit: 01
 Material ID: 2133193
 Material Code: 0008
 Material Name: Diesel
 Case No.: Not reported
 Material FA: Petroleum
 Quantity: 30
 Units: Gallons
 Recovered: No
 Resource Affected: Not reported
 Oxygenate: False

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CMX LABORATORIES (Continued)

S108765520

Tank Test:

NY MANIFEST:

EPA ID: NYD982179434
Country: USA
Mailing Name: CMX LABORATORIES
Mailing Contact: CMX LABORATORIES
Mailing Address: 50 HIGH STREET
Mailing Address 2: Not reported
Mailing City: BUFFALO
Mailing State: NY
Mailing Zip: 14203
Mailing Zip4: Not reported
Mailing Country: USA
Mailing Phone: 716-689-7555

NY MANIFEST:

No Manifest Records Available

SPILLS:

Facility ID: 1201711
DER Facility ID: 335065
Facility Type: ER
Site ID: 464436
DEC Region: 9
Spill Date: 5/1/2012
Spill Number/Closed Date: 1201711 / 8/24/2012
Spill Cause: Other
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS: 1502
Investigator: jswalia
Referred To: Not reported
Reported to Dept: 5/15/2012
CID: Not reported
Water Affected: Not reported
Spill Source: Commercial/Industrial
Spill Notifier: DEC
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: 5/22/2012
Spill Record Last Update: 8/24/2012
Spiller Name: Not reported
Spiller Company: Kaleida health
Spiller Address: Not reported
Spiller City,St,Zip: buffalo, NY
Spiller Company: 999
Contact Name: A. KRUGER
Contact Phone: Not reported
DEC Memo: 05/22/12 JSW/File. As per request from C&S Companies (letter dated

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CMX LABORATORIES (Continued)

S108765520

5/15/2012), the spill # 9500234 was split into two spills. The spill #9500234 will pertain to the western portion of the block and would be addressed under the BCP site # C915260. The eastern portion of the block (830 Ellicott Street and 40 High Street) is the intended location of Kaleida's new WCHOB. The eastern portion of the block also known as 50 High Street would be the property of spill # 1201711.08/24/12 JSW/File: This following reports and sampling data were reviewed:Phase I Report, dated March 2011 and Phase II Investigation Report, dated August 2011, for 50 High Street property, both prepared by American Consulting ProfessionalsSite Monitoring Report for Spill # 9500234, dated March, 2012, prepared by Groundwater and Environmental ServicesSoil Borings Results - April 2012, submitted by C&S Engineers.The results show exceedances of New York State groundwater standards for VOCs and phthalates in on-site monitoring wells. However, based upon site conditions represented in the above referenced documents, the Department will not require any further work at this time. The site will have a status of "inactive".
Remarks: another Spill for the eastern portion of the property covered under Spill #9500234 is being created to separate the two spill sites.

Material:

Site ID: 464436
Operable Unit ID: 1214488
Operable Unit: 01
Material ID: 2212534
Material Code: 0066A
Material Name: UNKNOWN PETROLEUM
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

122
SSW
1/4-1/2
0.350 mi.
1846 ft.

**FORMER MOBIL SERVICE STATION 99-MST
979 MAIN STREET
BUFFALO, NY 14203**

**NY LTANKS S100117475
NY BROWNFIELDS N/A**

Relative:
Higher

LTANKS:

Site ID: 146808
Spill Number/Closed Date: 8806781 / 1/25/1989
Spill Date: 11/1/1988
Spill Cause: Tank Failure
Spill Source: Gasoline Station
Spill Class: Not reported
Cleanup Ceased: 1/25/1989
Cleanup Meets Standard: True
SWIS: 1502
Investigator: MXFRANKS
Referred To: Not reported
Reported to Dept: 11/14/1988
CID: Not reported

Actual:
662 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORMER MOBIL SERVICE STATION 99-MST (Continued)

S100117475

Water Affected: Not reported
Spill Notifier: Other
Last Inspection: 1/23/1989
Recommended Penalty: False
UST Involvement: True
Remediation Phase: 0
Date Entered In Computer: 11/17/1988
Spill Record Last Update: 7/2/2001
Spiller Name: Not reported
Spiller Company: PHYSICIANS IMAGING CENTER
Spiller Address: ONE CAMBRIDGE SQUARE
Spiller City,St,Zip: MERRIVILLE, IN 46410
Spiller County: 001
Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported
DEC Region: 9
DER Facility ID: 124995
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was

"MF"11/14/88: MF TELECON VARIOUS PARTIES TO GET OWNERS NAME.
11/18/88: MF TELECON JIM KELLY TO GET ENVIRONMENTAL REPORT. NOT IN TO RETURN CALL. 11/28/88: MF TELECON JIM KELLEY FOR COPY OF EMPIRE SOIL'S REPORT. HE CLAIMED HE WILL SEND IT RIGHT OUT. 12/12/88: MF TELECON RAVI CHOPRA,I ASKED FOR A COPY OF THE REPORT FROM EMPIRE SOILS HE CLAIMED HE DIDN'T GET A COPY AS YET, & AS SONN AS HE DOES HE WILL SEND ME A COPY. 12/30/88: MF JIM KELLY TELECON, HE WANTED TO KNOW IF I HAD A COPY OF REPORT AS HE DIDN'T. HE WILL SET UP SITE MEETING WITH ESI ASAP. 01/23/89: MF RECEIVED COPY OF SITE SURVEY. SITE VISIT/EMPIRE SOILS & JIM KELLY (LAWYER) WELLS BAILED & CHECKED FOR SHEEN. NO SHEEN NOTICED, 1 WELL NO LIQUID. NO FUTHER ACTION NECESSARY.
Remarks: CONTRACTOR CALLED IN SHEEN IN MW, SITE IS AN OLD MOBIL STATION.

Material:

Site ID: 146808
Operable Unit ID: 923617
Operable Unit: 01
Material ID: 455124
Material Code: 0064A
Material Name: UNKNOWN MATERIAL
Case No.: Not reported
Material FA: Other
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

BROWNFIELDS:

Program: BCP
Site Code: 458395
Site Description: Location: This site is located at 979 Main Street in the City of Buffalo. The site borders with Goodrich Street on north, High Street

MAP FINDINGS

FORMER MOBIL SERVICE STATION 99-MST (Continued)

S100117475

on south, and a parking lot for the Buffalo General Hospital on the east. The underground subway system is along the Main Street on the west. The land use in the project area is characterized as urban mixed use, primarily commercial and community services. The community services include public and private medical and hospital facilities. Site Features: The site consists of four vacant parcels and is approximately 1.72 acres in size. Current Zoning/Use(s): The site is located within the commercial zoning district. Historical Use(s): The Mobil Gas station and its predecessors operated a gas station from approximately 1940s to 1982. The gas station building was demolished in 1982. Four underground storage tanks (USTs) were removed in 1981 (4000 gal, 3000 gal), 1982 (6000 gal), and 2007 (1000gal). Other previous businesses at the site included an auto repair shop, UB medical and dental departments, restaurant, and a motel. Site Investigations: Several investigations were conducted under the Spills Program from 1988 to 2010. The investigations have shown the presence of lighter non-aqueous phase liquid (LNAPL) or product (gasoline) and elevated levels of petroleum hydrocarbons in soil and groundwater at the site. An interim treatment system consisting of a high vacuum extraction (HVE) and Air Sparge (AS) system to remove petroleum products was operated between 1998 and 2008. A Remedial Action Plan to remove LNAPL by a Vacuum Enhanced Groundwater Extraction system was submitted by GES in July 2010 but it was not implemented. Site Geology and Hydrogeology: Overburden soils in the area consist primarily of fill material at the ground surface. Geotechnical boring logs collected from the site in 2010 indicate that fill material such as sand, gravel and bricks varies in thickness from 2 to 10 feet across the site. Soil underlying the fill is comprised of interbedded sands and silts that are brown to olive-brown in color. Overburden soils are underlain by the Onondaga Limestone (bedrock), which is at approximately 100 feet below ground surface. The groundwater is approx. 24 feet bgs and flows towards northeast. 3/1/12-The Department signed the Brownfield Cleanup Program Acceptance Letter for this site. 6/15/12-The Department signed the Brownfield Cleanup Agreement for this site.

Env Problem:

The site is contaminated with petroleum hydrocarbons as a result of leaking USTs from the former Mobil Service Station. Four USTs were removed from the site between 1981 and 2007. The investigations conducted since 1988 under the Spills Program (Spill #: 80-0831, 88-06781, 95-00234) have reported the presence of LNAPL/ product and elevated levels of VOCs related to petroleum hydrocarbons in soil and groundwater at the site. LNAPL (gasoline and related compounds) is present in a portion of the site. During 2008 investigation by GES, elevated concentrations of petroleum hydrocarbons (1,2,4-trimethylbenzene = 150,000 ppb; benzene = 4,250 ppb; toluene = 77,600 ppb; ethylbenzene = 79,200 ppb; xylenes = 175,000 ppb; total VOCs = 1,197,515 ppb) were found in soil samples at an approx. depth of 35 feet bgs. Some off-site migration of the site related petroleum hydrocarbons has occurred. The concentrations of VOC constituents exceeded GW standards in 18 out of 31 monitoring wells sampled during December 2010 by GES. The BTEX levels varied from 4.8 ug/l to 88,270 ug/l. One monitoring well (MW-26) containing NAPL showed 93,155 ug/l of total petroleum hydrocarbons; 35,400 ug/l of benzene; 38,000 ug/l of toluene; 2,270 ug/l of ethylbenzene; 12,580 ug/l of xylenes; and 4.2 ug/l of MTBE. The extent of off-site groundwater plume has been delineated. One of the off-site monitoring wells (MW-02) showed BTEX levels up to 3,553 ug/l.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORMER MOBIL SERVICE STATION 99-MST (Continued)

S100117475

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.

123
SSE
1/4-1/2
0.352 mi.
1856 ft.

**BUFFALO GENERAL HOSPITAL
100 HIGH STREET
BUFFALO, NY**

**RCRA-SQG 1000105471
FINDS NYD074042292
NY LTANKS
NY HIST UST
NY AST
NY HIST AST
NY MANIFEST
NY Spills
NY AIRS
US AIRS**

Relative:
Higher

Actual:
663 ft.

RCRA-SQG:

Date form received by agency: 01/01/2007
Facility name: BUFFALO GENERAL HOSPITAL THE
Facility address: 100 HIGH ST
BUFFALO, NY 14203
EPA ID: NYD074042292
Mailing address: HIGH ST
BUFFALO, NY 14203
Contact: Not reported
Contact address: HIGH ST
BUFFALO, NY 14203
Contact country: US
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 02
Land type: Facility is not located on Indian land. Additional information is not known.
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: THE BUFFALO GENERAL HOSPITAL
Owner/operator address: NOT REQUIRED
NOT REQUIRED, WY 99999
Owner/operator country: US
Owner/operator telephone: (212) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported
Owner/operator name: THE BUFFALO GENERAL HOSPITAL
Owner/operator address: NOT REQUIRED
NOT REQUIRED, WY 99999
Owner/operator country: US
Owner/operator telephone: (212) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006
Facility name: BUFFALO GENERAL HOSPITAL THE
Classification: Small Quantity Generator

Date form received by agency: 01/01/2001
Facility name: BUFFALO GENERAL HOSPITAL THE
Site name: BUFFALO GENERAL HOSPITAL
Classification: Large Quantity Generator

Date form received by agency: 07/14/1999
Facility name: BUFFALO GENERAL HOSPITAL THE
Classification: Small Quantity Generator

Date form received by agency: 01/31/1996
Facility name: BUFFALO GENERAL HOSPITAL THE
Site name: THE BUFFALO GENERAL HOSPITAL
Classification: Large Quantity Generator

Date form received by agency: 12/11/1984
Facility name: BUFFALO GENERAL HOSPITAL THE
Classification: Large Quantity Generator

Facility Has Received Notices of Violations:

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 06/19/1995
Date achieved compliance: 06/23/1995
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/19/1995
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Evaluation Action Summary:

Evaluation date: 11/03/2011
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/01/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/27/2003
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA

Evaluation date: 07/02/2003
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/15/2002
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/08/1995
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 06/23/1995
Evaluation lead agency: State

Evaluation date: 11/01/1986
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

FINDS:

Registry ID: 110000879808

Environmental Interest/Information System

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

redesign to support facility operating permits required under Title V of the Clean Air Act.

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

FIS (New York - Facility Information System) is New York's Department of Environmental Conservation (DEC) information system for tracking environmental facility information found across the State.

CRITERIA AND HAZARDOUS AIR POLLUTANT INVENTORY

LTANKS:

Site ID: 138918
Spill Number/Closed Date: 0075587 / 2/27/2001
Spill Date: 1/30/2001
Spill Cause: Tank Overfill
Spill Source: Institutional, Educational, Gov., Other
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
Cleanup Ceased: Not reported
Cleanup Meets Standard: True
SWIS: 1502
Investigator: FXGALLEG
Referred To: Not reported
Reported to Dept: 1/30/2001
CID: Not reported
Water Affected: Not reported
Spill Notifier: Responsible Party
Last Inspection: 1/30/2001
Recommended Penalty: False
UST Involvement: False
Remediation Phase: 0
Date Entered In Computer: 1/30/2001
Spill Record Last Update: 3/12/2002
Spiller Name: LARRY HEANEY
Spiller Company: BUFFALO GENERAL HOSPITAL
Spiller Address: 100 HIGH STREET
Spiller City,St,Zip: BUFFALO, NY 14203-
Spiller County: 001
Spiller Contact: LARRY HEANEY
Spiller Phone: (716) 859-2613
Spiller Extention: Not reported
DEC Region: 9
DER Facility ID: 118777
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "FG"01/30/01: FG SITE INSPECTION. BUFFALO GENERAL WAS CLEANING UP SPILL WHEN I ARRIVED. IT WAS RAINING AND THEY HAD BUILT A DAM TO

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Remarks: PREVENT THE SHEEN OFF THE PARKING LOT FROM ENTERING THE STORM DRAIN. THE CAUSE OF THE SPILL IS AN OVERFILL INTO CONTAINMENT. APPROXIMATELY 1 GALLON SPILLED OUT OF THE SECONDARY CONTAINMENT ONTO THE PARKING LOT. BUFFALO GENERAL HIRED THE ENVIRONMENTAL SERVICE GROUP TO COMPLETE THE CLEANUP AND DISPOSAL OF THE SPILLED MATERIAL. THEY WILL PUMP THE PRODUCT OUT OF THE SECONDARY CONTAINMENT. ESG IS EXPECTED TO BE ON SITE SHORTLY.02/02/01: FG SPOKE TO DAVE MENDEL WITH THE ENVIRONMENTAL SERVICE GROUP. HE SAID BUFFALO GENERAL GENERATED 15 DRUMS OF DEBRIS, TWO OF THOSE ARE FUEL OIL RECOVERED, THE REST ARE PADS, BOOMS, SPEEDI DRY. ESG WILL BE HANDLING THE DISPOSAL OF THE MATERIAL AND WILL SEND ME A DISPOSAL RECEIPT.02/27/01: FG RECEIVED DISPOSAL RECPT. NO FURTHER WORK IS REQUIRED. SITE CAN BE CLOSED. CALLER SAID THAT THY HAD A #6 FUEL OIL SPILL(50 GAL),ALL IN THEIR SECONDARY CONTANIMENT AREA,BUT A SMALL AMOUNT GOT INTO THE SEWER,DUE TO THE RAIN...THEY HAVE PUT ABSORBANT BOOMS/PADS ALL OVER AND HAVE CONTAINED ABOUT 49 GALS.

Material:

Site ID: 138918
Operable Unit ID: 838457
Operable Unit: 01
Material ID: 539165
Material Code: 0003A
Material Name: #6 Fuel Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 50
Units: Gallons
Recovered: 49
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Site ID: 138920
Spill Number/Closed Date: 8909904 / 7/10/1990
Spill Date: 1/15/1990
Spill Cause: Tank Test Failure
Spill Source: Institutional, Educational, Gov., Other
Spill Class: Not reported
Cleanup Ceased: 7/10/1990
Cleanup Meets Standard: True
SWIS: 1502
Investigator: PRINGLE
Referred To: Not reported
Reported to Dept: 1/16/1990
CID: Not reported
Water Affected: Not reported
Spill Notifier: Responsible Party
Last Inspection: Not reported
Recommended Penalty: False
UST Involvement: True
Remediation Phase: 0
Date Entered In Computer: 1/29/1990
Spill Record Last Update: 7/11/1990

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Spiller Name: Not reported
Spiller Company: BUFFALO GENERAL HOSPITAL
Spiller Address: 100 HIGH STREET
Spiller City,St,Zip: BUFFALO, NY 14203
Spiller County: 001
Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported
DEC Region: 9
DER Facility ID: 118777
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was
"MNP"01/24/90: 1/24/90 LETTER TO FLANIGAN, OPTION TO RETEST OR REMOVE
TANK.07/10/90: 7/10/90 MNP REVIEW OF FILE TANK RETEST RECEIVED
1/31/90. TANK TEST RESULTS SATISFACTORY, TANK & PIPING TESTED TIGHT,
COMPLETE.
Remarks: 5,000 GAL. UST FAILED SYSTEM TEST

Material:

Site ID: 138920
Operable Unit ID: 935004
Operable Unit: 01
Material ID: 443045
Material Code: 0008
Material Name: Diesel
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Not reported
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Site ID: 138920
Spill Tank Test: 1536684
Tank Number: Not reported
Tank Size: 0
Test Method: 00
Leak Rate: 0
Gross Fail: Not reported
Modified By: Spills
Last Modified: 10/1/2004
Test Method: Unknown

HIST UST:

PBS Number: 9-451320
SPDES Number: Not reported
Emergency Contact: RICHARD L KERLING
Emergency Telephone: (716) 873-3148
Operator: BUFFALO GENERAL HOSPITAL
Operator Telephone: (716) 845-5600
Owner Name: BUFFALO GENERAL HOSPITAL
Owner Address: 100 HIGH ST
Owner City,St,Zip: BUFFALO, NY 14203
Owner Telephone: (716) 859-5600

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Owner Type: Corporate/Commercial
Owner Subtype: Not reported
Mailing Name: BUFFALO GENERAL HOSPITAL
Mailing Address: 100 HIGH ST
Mailing Address 2: Not reported
Mailing City, St, Zip: BUFFALO, NY 14203
Mailing Contact: RICHARD L. KERLING
Mailing Telephone: (716) 859-5600
Owner Mark: First Owner
Facility Status: 1 - Active PBS facility, i.e. total capacity of the PBS tanks is greater than 1,100 gallons, regardless if Subpart 360-14 tanks exist or not at the facility.

Facility Addr2: Not reported
SWIS ID: 1402
Old PBS Number: Not reported
Facility Type: OTHER
Inspected Date: 04/26/1995
Inspector: BAJ
Inspection Result: Not reported
Federal ID: Not reported
Certification Flag: False
Certification Date: 12/08/1998
Expiration Date: 07/28/2003
Renew Flag: False
Renewal Date: 04/01/1993
Total Capacity: 72750
FAMT: True
Facility Screen: No Missing Data
Owner Screen: No Missing Data
Tank Screen: Minor Data Missing
Dead Letter: False
CBS Number: Not reported
Town or City: BUFFALO (C)
County Code: 14
Town or City: 02
Region: 9

Tank Id: 3
Tank Location: UNDERGROUND
Tank Status: Closed-Removed
Install Date: Not reported
Capacity (gals): 5000
Product Stored: NOS 1,2, OR 4 FUEL OIL
Tank Type: Fiberglass reinforced plastic [FRP]
Tank Internal: Fiberglass Liner (FRP)
Tank External: 40
Pipe Location: Underground
Pipe Type: STEEL/IRON
Pipe Internal: None
Pipe External: 10
Second Containment: 30
Leak Detection: None
Overfill Prot: Product Level Gauge
Dispenser: Suction
Date Tested: 03/01/1995
Next Test Date: Not reported
Missing Data for Tank: No Missing Data

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Date Closed: 10/01/1998
Test Method: Horner EZ Check
Deleted: False
Updated: True
Lat/long: Not reported

Tank Id: 5
Tank Location: UNDERGROUND
Tank Status: Closed-Removed
Install Date: Not reported
Capacity (gals): 500
Product Stored: UNLEADED GASOLINE
Tank Type: Steel/carbon steel
Tank Internal: None
Tank External: 20
Pipe Location: Underground
Pipe Type: STEEL/IRON
Pipe Internal: None
Pipe External: Not reported
Second Containment: Vault (w/o access)
Leak Detection: None
Overfill Prot: Product Level Gauge
Dispenser: Suction
Date Tested: Not reported
Next Test Date: Not reported
Missing Data for Tank: Minor Data Missing
Date Closed: 10/01/1998
Test Method: Not reported
Deleted: False
Updated: True
Lat/long: Not reported

AST:

Region: STATE
DEC Region: 9
Site Status: Active
Facility Id: 9-451320
Program Type: PBS
UTM X: 184437.31797
UTM Y: 4756999.9726499999
Expiration Date: 2018/07/28
Site Type: Hospital/Nursing Home/Health Care

Affiliation Records:

Site Id: 54488
Affiliation Type: Mail Contact
Company Name: BUFFALO GENERAL HOSPITAL
Contact Type: Not reported
Contact Name: DENNIS DEVORE
Address1: 100 HIGH ST
Address2: Not reported
City: BUFFALO
State: NY
Zip Code: 14203
Country Code: 001
Phone: (716) 859-3930

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

EMail: DRDEVORE@KALEIDAHEALTH.ORG
Fax Number: Not reported
Modified By: SLZIEMBA
Date Last Modified: 6/11/2013

Site Id: 54488
Affiliation Type: Facility Owner
Company Name: BUFFALO GENERAL HOSPITAL
Contact Type: PLANT OPERATIONS SUPERVISOR
Contact Name: DENNIS DEVORE
Address1: 100 HIGH ST
Address2: Not reported
City: BUFFALO
State: NY
Zip Code: 14203
Country Code: 001
Phone: (716) 859-2613
EMail: Not reported
Fax Number: Not reported
Modified By: SLZIEMBA
Date Last Modified: 6/11/2013

Site Id: 54488
Affiliation Type: Emergency Contact
Company Name: BUFFALO GENERAL HOSPITAL
Contact Type: Not reported
Contact Name: DENNIS DEVORE
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 999
Phone: (716) 859-2613
EMail: Not reported
Fax Number: Not reported
Modified By: SLZIEMBA
Date Last Modified: 6/11/2013

Site Id: 54488
Affiliation Type: On-Site Operator
Company Name: BUFFALO GENERAL HOSPITAL
Contact Type: Not reported
Contact Name: DENNIS DEVORE
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 999
Phone: (716) 859-2613
EMail: Not reported
Fax Number: Not reported
Modified By: SLZIEMBA
Date Last Modified: 6/11/2013

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Tank Info:

Tank Number: 3A
Tank Id: 248682

Equipment Records:

B09 - Tank External Protection - Urethane
C03 - Pipe Location - Aboveground/Underground Combination
G12 - Tank Secondary Containment - Double-Wall (Aboveground)
D01 - Pipe Type - Steel/Carbon Steel/Iron
A03 - Tank Internal Protection - Fiberglass Liner (FRP)
I04 - Overfill - Product Level Gauge (A/G)
J05 - Dispenser - On Site Heating System (Supply/Return)
K01 - Spill Prevention - Catch Basin
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
E12 - Piping Secondary Containment - Double-Wall (Aboveground)
L01 - Piping Leak Detection - Interstitial - Electronic Monitoring

Tank Location: 3
Tank Type: Steel/Carbon Steel/Iron
Tank Status: In Service
Pipe Model: Not reported
Install Date: 05/09/2011
Capacity Gallons: 26000
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True
Modified By: SLZIE MBA
Last Modified: 06/11/2013
Material Name: Diesel

Tank Number: 6
Tank Id: 178126
Material Code: 0022
Common Name of Substance: Waste Oil/Used Oil

Equipment Records:

H00 - Tank Leak Detection - None
D00 - Pipe Type - No Piping
J03 - Dispenser - Gravity
A00 - Tank Internal Protection - None
G01 - Tank Secondary Containment - Diking (Aboveground)
B01 - Tank External Protection - Painted/Asphalt Coating
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
K01 - Spill Prevention - Catch Basin
I00 - Overfill - None

Tank Location: 1
Tank Type: Steel/Carbon Steel/Iron
Tank Status: In Service
Pipe Model: Not reported
Install Date: 11/01/1997
Capacity Gallons: 250
Tightness Test Method: NN
Date Test: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True
Modified By: SLZIEMBA
Last Modified: 06/11/2013
Material Name: Waste Oil/Used Oil

Tank Number: 6-A
Tank Id: 178127
Material Code: 0001
Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Equipment Records:

A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
J02 - Dispenser - Suction Dispenser
B00 - Tank External Protection - None
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
I04 - Overfill - Product Level Gauge (A/G)
H00 - Tank Leak Detection - None
G03 - Tank Secondary Containment - Vault (w/o access)

Tank Location: 6
Tank Type: Steel/Carbon Steel/Iron
Tank Status: Closed Prior to Micro Conversion, 03/91
Pipe Model: Not reported
Install Date: Not reported
Capacity Gallons: 3000
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True
Modified By: TRANSLAT
Last Modified: 03/04/2004
Material Name: #2 Fuel Oil (On-Site Consumption)

Tank Number: 7-A
Tank Id: 178129
Material Code: 0001
Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Equipment Records:

C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
I04 - Overfill - Product Level Gauge (A/G)
G03 - Tank Secondary Containment - Vault (w/o access)
A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
J02 - Dispenser - Suction Dispenser
H00 - Tank Leak Detection - None
B00 - Tank External Protection - None

Tank Location: 6
Tank Type: Steel/Carbon Steel/Iron

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Tank Status: Closed Prior to Micro Conversion, 03/91
Pipe Model: Not reported
Install Date: Not reported
Capacity Gallons: 3000
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True
Modified By: TRANSLAT
Last Modified: 03/04/2004
Material Name: #2 Fuel Oil (On-Site Consumption)

Tank Number: 9
Tank Id: 174947
Material Code: 0008
Common Name of Substance: Diesel

Equipment Records:

B05 - Tank External Protection - Jacketed
A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
K01 - Spill Prevention - Catch Basin
C01 - Pipe Location - Aboveground
I01 - Overfill - Float Vent Valve
F06 - Pipe External Protection - Wrapped
J03 - Dispenser - Gravity
G03 - Tank Secondary Containment - Vault (w/o access)
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm

Tank Location: 1
Tank Type: Steel/Carbon Steel/Iron
Tank Status: Closed - Removed
Pipe Model: Not reported
Install Date: 12/20/1999
Capacity Gallons: 1500
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: 10/01/2009
Register: True
Modified By: TJWALKER
Last Modified: 08/31/2010
Material Name: Diesel

HIST AST:

PBS Number: 9-451320
SWIS Code: 1402
Operator: BUFFALO GENERAL HOSPITAL
Facility Phone: (716) 845-5600
Facility Addr2: Not reported
Facility Type: OTHER
Emergency: RICHARD L KERLING
Emergency Tel: (716) 873-3148
Old PBSNO: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Date Inspected: 04/26/1995
Inspector: BAJ
Result of Inspection: Not reported
Owner Name: BUFFALO GENERAL HOSPITAL
Owner Address: 100 HIGH ST
Owner City,St,Zip: BUFFALO, NY 14203
Federal ID: Not reported
Owner Tel: (716) 859-5600
Owner Type: Corporate/Commercial
Owner Subtype: Not reported
Mailing Contact: RICHARD L. KERLING
Mailing Name: BUFFALO GENERAL HOSPITAL
Mailing Address: 100 HIGH ST
Mailing Address 2: Not reported
Mailing City,St,Zip: BUFFALO, NY 14203
Mailing Telephone: (716) 859-5600
Owner Mark: First Owner
Facility Status: 1 - Active PBS facility, i.e. total capacity of the PBS tanks is greater than 1,100 gallons, regardless if Subpart 360-14 tanks exist or not at the facility.

Certification Flag: False
Certification Date: 12/08/1998
Expiration: 07/28/2003
Renew Flag: False
Renew Date: 04/01/1993
Total Capacity: 72750
FAMT: True
Facility Screen: No Missing Data
Owner Screen: No Missing Data
Tank Screen: Minor Data Missing
Dead Letter: False
CBS Number: Not reported
Town or City: BUFFALO (C)
County Code: 14
Town or City Code: 02
Region: 9

Tank ID: 6
Tank Location: UNDERGROUND, VAULTED, WITH ACCESS
Tank Status: Closed Before April 1, 1991
Install Date: Not reported
Capacity (Gal): 3000
Product Stored: NOS 1,2, OR 4 FUEL OIL
Tank Type: Steel/carbon steel
Tank Internal: Not reported
Tank External: Not reported
Pipe Location: Not reported
Pipe Type: STEEL/IRON
Pipe Internal: Not reported
Pipe External: Not reported
Tank Containment: Diking
Leak Detection: 0
Overfill Protection: 4
Dispenser Method: Suction
Date Tested: Not reported
Next Test Date: Not reported
Missing Data for Tank: Minor Data Missing

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Date Closed: Not reported
Test Method: Not reported
Deleted: False
Updated: False
SPDES Number: Not reported
Lat/Long: Not reported

Tank ID: 7
Tank Location: UNDERGROUND, VAULTED, WITH ACCESS
Tank Status: Closed Before April 1, 1991
Install Date: Not reported
Capacity (Gal): 3000
Product Stored: NOS 1,2, OR 4 FUEL OIL
Tank Type: Steel/carbon steel
Tank Internal: Not reported
Tank External: Not reported
Pipe Location: Not reported
Pipe Type: STEEL/IRON
Pipe Internal: Not reported
Pipe External: Not reported
Tank Containment: Diking
Leak Detection: 0
Overfill Protection: 4
Dispenser Method: Suction
Date Tested: Not reported
Next Test Date: Not reported
Missing Data for Tank: Minor Data Missing
Date Closed: Not reported
Test Method: Not reported
Deleted: False
Updated: False
SPDES Number: Not reported
Lat/Long: Not reported

NY MANIFEST:

EPA ID: NYD074042292
Country: USA
Mailing Name: BUFFALO GENERAL HOSPITAL
Mailing Contact: WILLIAM E BAMBERG
Mailing Address: 100 HIGH STREET
Mailing Address 2: Not reported
Mailing City: BUFFALO
Mailing State: NY
Mailing Zip: 14203
Mailing Zip4: Not reported
Mailing Country: USA
Mailing Phone: 716-845-1602

Document ID: NYB5739705
Manifest Status: Completed copy
Trans1 State ID: Not reported
Trans2 State ID: Not reported
Generator Ship Date: 920604
Trans1 Recv Date: 920604
Trans2 Recv Date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

TSD Site Recv Date: 920604
Part A Recv Date: Not reported
Part B Recv Date: 920619
Generator EPA ID: NYD074042292
Trans1 EPA ID: OHD053576294
Trans2 EPA ID: Not reported
TSD ID: OHD053576294
Waste Code: B006 - PCB TRANSFORMERS WITH 500 PPM OR > PCB
Quantity: 02039
Units: K - Kilograms (2.2 pounds)
Number of Containers: 001
Container Type: TP - Tanks, portable
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 92

Document ID: INA1029450
Manifest Status: Completed copy
Trans1 State ID: T694VWNJ
Trans2 State ID: Not reported
Generator Ship Date: 950926
Trans1 Recv Date: 950926
Trans2 Recv Date: Not reported
TSD Site Recv Date: 950929
Part A Recv Date: 951005
Part B Recv Date: 951019
Generator EPA ID: NYD074042292
Trans1 EPA ID: NJD054126164
Trans2 EPA ID: Not reported
TSD ID: IND000646943
Waste Code: F003 - UNKNOWN
Quantity: 01600
Units: P - Pounds
Number of Containers: 004
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Waste Code: Not reported
Quantity: 00500
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 95

Document ID: NYG1989315
Manifest Status: Not reported
Trans1 State ID: NYD097644801
Trans2 State ID: Not reported
Generator Ship Date: 09/05/2001
Trans1 Recv Date: 09/05/2001
Trans2 Recv Date: Not reported
TSD Site Recv Date: 09/05/2001
Part A Recv Date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Part B Recv Date: Not reported
Generator EPA ID: NYD074042292
Trans1 EPA ID: NYD000632372
Trans2 EPA ID: Not reported
TSD ID: 88982JBNY
Waste Code: D002 - NON-LISTED CORROSIVE WASTES
Quantity: 00009
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Waste Code: U133 - HYDRAZINE (R,T)
Quantity: 00005
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00002
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Year: 2001

Document ID: NYG1989468
Manifest Status: Not reported
Trans1 State ID: NYD097644801
Trans2 State ID: Not reported
Generator Ship Date: 09/05/2001
Trans1 Recv Date: 09/05/2001
Trans2 Recv Date: Not reported
TSD Site Recv Date: 09/11/2001
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074042292
Trans1 EPA ID: NYD049836679
Trans2 EPA ID: Not reported
TSD ID: 88982JBNY
Waste Code: U058 - CYCLOPHOSPHAMIDE
Quantity: 00015
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: U044 - CHLOROFORM
Quantity: 00004
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Waste Code: D002 - NON-LISTED CORROSIVE WASTES
Quantity: 00055
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Waste Code: U196 - PYRIDINE
Quantity: 00002
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Year: 2001

Document ID: NYG1989468
Manifest Status: Not reported
Trans1 State ID: NYD097644801
Trans2 State ID: Not reported
Generator Ship Date: 09/05/2001
Trans1 Recv Date: 09/05/2001
Trans2 Recv Date: Not reported
TSD Site Recv Date: 09/11/2001
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074042292
Trans1 EPA ID: NYD049836679
Trans2 EPA ID: Not reported
TSD ID: 88982JBNY
Waste Code: D002 - NON-LISTED CORROSIVE WASTES
Quantity: 00001
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Waste Code: D002 - NON-LISTED CORROSIVE WASTES
Quantity: 00007
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00010
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Waste Code: P105 - SODIUM AZIDE
Quantity: 00011
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Year: 2001

Document ID: NYG1989468
Manifest Status: Not reported
Trans1 State ID: NYD097644801
Trans2 State ID: Not reported
Generator Ship Date: 09/05/2001
Trans1 Recv Date: 09/05/2001
Trans2 Recv Date: Not reported
TSD Site Recv Date: 09/11/2001
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074042292
Trans1 EPA ID: NYD049836679
Trans2 EPA ID: Not reported
TSD ID: 88982JBNY
Waste Code: U006 - ACETYL CHLORIDE
Quantity: 00001
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: D003 - NON-LISTED REACTIVE WASTES
Quantity: 00002
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: P048 - 2,4-DINTROPHENOL
Quantity: 00001
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: D009 - MERCURY 0.2 MG/L TCLP
Quantity: 00001
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 01.00
Year: 2001

Document ID: NYG2836854
Manifest Status: Not reported
Trans1 State ID: NYD097644801
Trans2 State ID: Not reported
Generator Ship Date: 01/03/2005
Trans1 Recv Date: 01/03/2005
Trans2 Recv Date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

TSD Site Recv Date: 01/04/2005
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074042292
Trans1 EPA ID: 88982JBNY
Trans2 EPA ID: Not reported
TSDF ID: OHD066060609
Waste Code: D002 - NON-LISTED CORROSIVE WASTES
Quantity: 00001
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00001
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: Not reported
Specific Gravity: 01.00
Waste Code: U031 - N-BUTYL ALCOHOL(L)
Quantity: 00001
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: Not reported
Quantity: Not reported
Units: Not reported
Number of Containers: Not reported
Container Type: Not reported
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: Not reported
Year: 2005

Document ID: NYG2836944
Manifest Status: Not reported
Trans1 State ID: NYD097644801
Trans2 State ID: Not reported
Generator Ship Date: 01/24/2005
Trans1 Recv Date: 01/24/2005
Trans2 Recv Date: Not reported
TSD Site Recv Date: 02/01/2005
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074042292
Trans1 EPA ID: NY88982JB
Trans2 EPA ID: Not reported
TSDF ID: OHD066060609
Waste Code: D002 - NON-LISTED CORROSIVE WASTES
Quantity: 00008
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DM - Metal drums, barrels

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Waste Code: D002 - NON-LISTED CORROSIVE WASTES
Quantity: 00001
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: Not reported
Specific Gravity: 01.00
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00001
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Waste Code: Not reported
Quantity: Not reported
Units: Not reported
Number of Containers: Not reported
Container Type: Not reported
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: Not reported
Year: 2005

Document ID: NYG2837016
Manifest Status: Not reported
Trans1 State ID: NYD097644801
Trans2 State ID: Not reported
Generator Ship Date: 03/18/2005
Trans1 Recv Date: 03/18/2005
Trans2 Recv Date: Not reported
TSD Site Recv Date: 03/23/2005
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074042292
Trans1 EPA ID: 88982JBNY
Trans2 EPA ID: Not reported
TSDF ID: OHD066060609
Waste Code: D002 - NON-LISTED CORROSIVE WASTES
Quantity: 00003
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Waste Code: D002 - NON-LISTED CORROSIVE WASTES
Quantity: 00005
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: Not reported
Specific Gravity: 01.00
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00002
Units: G - Gallons (liquids only)* (8.3 pounds)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: P087 - OSMIUM TETROXIDE
Quantity: 00001
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: Not reported
Quantity: Not reported
Units: Not reported
Number of Containers: Not reported
Container Type: Not reported
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: Not reported
Year: 2005

Document ID: MIA0017861
Manifest Status: Not reported
Trans1 State ID: NYD097644801
Trans2 State ID: Not reported
Generator Ship Date: 01/06/2006
Trans1 Recv Date: 01/06/2006
Trans2 Recv Date: Not reported
TSD Site Recv Date: 01/12/2006
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074042292
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: MID980991566
Waste Code: F005 - UNKNOWN
Quantity: 00165
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 003
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Year: 2006

Document ID: MIA0017955
Manifest Status: Not reported
Trans1 State ID: NYD097644801
Trans2 State ID: Not reported
Generator Ship Date: 02/17/2006
Trans1 Recv Date: 02/17/2006
Trans2 Recv Date: Not reported
TSD Site Recv Date: 02/22/2006
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074042292
Trans1 EPA ID: 8892JSNY

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Trans2 EPA ID: Not reported
TSDF ID: MID980991566
Waste Code: F003 - UNKNOWN
Quantity: 00110
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Year: 2006

Document ID: MIA0339179
Manifest Status: Not reported
Trans1 State ID: NYD097644801
Trans2 State ID: Not reported
Generator Ship Date: 06/19/2006
Trans1 Recv Date: 06/19/2006
Trans2 Recv Date: Not reported
TSD Site Recv Date: 06/22/2006
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074042292
Trans1 EPA ID: 88982JBNY
Trans2 EPA ID: Not reported
TSDF ID: MID980991566
Waste Code: F003 - UNKNOWN
Quantity: 00110
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Year: 2006

Document ID: MIA0339331
Manifest Status: Not reported
Trans1 State ID: NYD087644801
Trans2 State ID: Not reported
Generator Ship Date: 08/11/2006
Trans1 Recv Date: 08/11/2006
Trans2 Recv Date: Not reported
TSD Site Recv Date: 08/15/2006
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074042292
Trans1 EPA ID: 88982JBNY
Trans2 EPA ID: Not reported
TSDF ID: MID980991566
Waste Code: F003 - UNKNOWN
Quantity: 00165
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 003
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Year: 2006

Document ID: MIA0339005
Manifest Status: Not reported
Trans1 State ID: NYD097644801
Trans2 State ID: Not reported
Generator Ship Date: 03/17/2006
Trans1 Recv Date: 03/17/2006
Trans2 Recv Date: Not reported
TSD Site Recv Date: 03/23/2006
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074042292
Trans1 EPA ID: 88982JBNY
Trans2 EPA ID: Not reported
TSD ID: MID980991566
Waste Code: F003 - UNKNOWN
Quantity: 00110
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Year: 2006

Document ID: MIA0339081
Manifest Status: Not reported
Trans1 State ID: NYD097644801
Trans2 State ID: Not reported
Generator Ship Date: 04/27/2006
Trans1 Recv Date: 04/27/2006
Trans2 Recv Date: Not reported
TSD Site Recv Date: 05/02/2006
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074042292
Trans1 EPA ID: 88982JRNY
Trans2 EPA ID: Not reported
TSD ID: MID980991566
Waste Code: F003 - UNKNOWN
Quantity: 00110
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 002
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Year: 2006

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD097644801
Trans2 State ID: Not reported
Generator Ship Date: 2012-01-11
Trans1 Recv Date: 2012-01-11

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Trans2 Recv Date: Not reported
TSD Site Recv Date: 2012-01-17
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074042292
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: MID980615298
Waste Code: Not reported
Quantity: 430.0
Units: P - Pounds
Number of Containers: 1.0
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 1.0
Year: 2012
Manifest Tracking Num: 008531689JJK
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H061

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD097644801
Trans2 State ID: Not reported
Generator Ship Date: 2012-02-08
Trans1 Recv Date: 2012-02-08
Trans2 Recv Date: Not reported
TSD Site Recv Date: 2012-02-14
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074042292
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: MID980615298
Waste Code: Not reported
Quantity: 1200.0
Units: P - Pounds
Number of Containers: 3.0
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 1.0
Year: 2012
Manifest Tracking Num: 008531765JJK
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H061

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD097644801
Trans2 State ID: Not reported
Generator Ship Date: 2012-03-14
Trans1 Recv Date: 2012-03-14
Trans2 Recv Date: Not reported
TSD Site Recv Date: 2012-03-23
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074042292
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: MID980615298
Waste Code: Not reported
Quantity: 1600.0
Units: P - Pounds
Number of Containers: 4.0
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 1.0
Year: 2012
Manifest Tracking Num: 008531794JJK
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H061

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD097644801
Trans2 State ID: Not reported
Generator Ship Date: 2012-04-11
Trans1 Recv Date: 2012-04-11
Trans2 Recv Date: Not reported
TSD Site Recv Date: 2012-04-17
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074042292
Trans1 EPA ID: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Trans2 EPA ID: Not reported
TSDF ID: MID980615298
Waste Code: Not reported
Quantity: 800.0
Units: P - Pounds
Number of Containers: 2.0
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 1.0
Year: 2012
Manifest Tracking Num: 009700325JJK
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H061

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD097644801
Trans2 State ID: Not reported
Generator Ship Date: 2012-05-09
Trans1 Recv Date: 2012-05-09
Trans2 Recv Date: Not reported
TSD Site Recv Date: 2012-05-15
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074042292
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID: MID980615298
Waste Code: Not reported
Quantity: 850.0
Units: P - Pounds
Number of Containers: 2.0
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 1.0
Year: 2012
Manifest Tracking Num: 009700389JJK
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Mgmt Method Type Code: H061

[Click this hyperlink](#) while viewing on your computer to access 399 additional NY_MANIFEST: record(s) in the EDR Site Report.

SPILLS:

Facility ID: 9408004
DER Facility ID: 118777
Facility Type: ER
Site ID: 138921
DEC Region: 9
Spill Date: 9/14/1994
Spill Number/Closed Date: 9408004 / 9/14/1994
Spill Cause: Equipment Failure
Spill Class: Possible release with minimal potential for fire or hazard or Known release with no damage. DEC Response. Willing Responsible Party. Corrective action taken.

SWIS: 1502
Investigator: RMCROSSE
Referred To: Not reported
Reported to Dept: 9/14/1994
CID: Not reported
Water Affected: Not reported
Spill Source: Commercial Vehicle
Spill Notifier: Responsible Party
Cleanup Ceased: 9/14/1994
Cleanup Meets Std: True
Last Inspection: 9/14/1994
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 9/15/1994
Spill Record Last Update: 10/7/1994
Spiller Name: Not reported
Spiller Company: BUFFALO GENERAL
Spiller Address: 100 HIGH STREET
Spiller City,St,Zip: BUFFALO, NY
Spiller Company: 001
Contact Name: Not reported
Contact Phone: Not reported
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "RMC"09/14/94: RMC/KERLING/PHONE RMC/SITE MATERIAL CLEANED UP W/ SPEEDY DRY AND PUT IN DUMPSTER, NO FURTHER ACTION REQUIRED, CLOSEOUT.
Remarks: HYDRAULIC LINE FAILURE ON TRUCK

Material:

Site ID: 138921
Operable Unit ID: 1005715
Operable Unit: 01
Material ID: 377457
Material Code: 0022
Material Name: Waste Oil/Used Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 5
Units: Gallons
Recovered: 5

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Resource Affected: Not reported
Oxygenate: False

Tank Test:

Facility ID: 0109330
DER Facility ID: 118777
Facility Type: ER
Site ID: 138919
DEC Region: 9
Spill Date: 12/20/2001
Spill Number/Closed Date: 0109330 / 12/21/2001
Spill Cause: Human Error
Spill Class: Possible release with minimal potential for fire or hazard or Known release with no damage. DEC Response. Willing Responsible Party. Corrective action taken.

SWIS: 1502
Investigator: BRENNAN
Referred To: Not reported
Reported to Dept: 12/20/2001
CID: 196
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: 12/20/2001
Spill Record Last Update: 1/4/2002
Spiller Name: Not reported
Spiller Company: BUFFALO GENERAL HOSPITAL
Spiller Address: 100 HIGH STREET
Spiller City,St,Zip: BUFFALO, NY
Spiller Company: 001
Contact Name: SGT COLLEGE
Contact Phone: (716) 859-4520
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "KAB"12/21/01: KAB RECEIVED AFTER-HOURS REPORT OF SPILLAGE AT BUFFALO GENERAL HOSPITAL. NO RESPONDER CALLED OUT AT TIME OF INCIDENT. MINOR SPILLAGE CLEANED UP BY RP AND DISPOSED WITH HOSPITAL'S REGULAR HAZMAT DISPOSAL. NO FURTHER ACTION NECESSARY. CLOSE OUT. *****NO PAPER FILE EXISTS FOR THIS SPILL*****

Remarks: CALLER STATES THAT A MATERIAL NAMED NATURALYTE THAT IS USED FOR A DIALYSIS MACHINE SPILLED 1 QUART IN A ELEVATOR MATERIAL HAS BEEN CLEANED UP. UNKNOWN WHO SPILLED THE PRODUCT. CHEMICAL HAS BEEN CLEANED UP BY THE HOSPITAL CHEMICAL TEAM. PUT IN BIOHAZMAT BAGS AND WILL BE DISPOSED.

Material:
Site ID: 138919
Operable Unit ID: 846677
Operable Unit: 01
Material ID: 530537

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Material Code: 0064A
Material Name: UNKNOWN MATERIAL
Case No.: Not reported
Material FA: Other
Quantity: 1
Units: Gallons
Recovered: Yes
Resource Affected: Not reported
Oxygenate: False

Tank Test:

AIRS:

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B01FP
Contaminant Name/cas: 71432
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.10999999
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B01FP
Contaminant Name/cas: 56553
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.0001
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B01FP
Contaminant Name/cas: 50328
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.0001
Unit: LB

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B01FP
Contaminant Name/cas: 50000
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 3.97000002
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B01FP
Contaminant Name/cas: 218019
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.0001
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B01FP
Contaminant Name/cas: 207089
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.0001
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B01FP
Contaminant Name/cas: 206440
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.0002
Unit: LB

Permit Type: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B01FP
Contaminant Name/cas: 205992
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.0001
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B01FP
Contaminant Name/cas: 191242
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.0001
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B01FP
Contaminant Name/cas: 129000
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.0004
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B01FP
Contaminant Name/cas: 120127
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.0002
Unit: LB

Permit Type: Not reported
Permit Status: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B01FP
Contaminant Name/cas: 110543
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 95.3399963
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B01FP
Contaminant Name/cas: 108883
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.18
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B02FP
Contaminant Name/cas: 50000
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 15.8199996
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B01FP
Contaminant Name/cas: SO2
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.02363999
Unit: TON

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B01FP
Contaminant Name/cas: PM10-PRI
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.29771499
Unit: TON

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B01FP
Contaminant Name/cas: NOX
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 3.94
Unit: TON

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B01FP
Contaminant Name/cas: NH3
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 38.6100006
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B01FP
Contaminant Name/cas: CO
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 3.30960009
Unit: TON

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B01FP
Contaminant Name/cas: 91203
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.02999999
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B01FP
Contaminant Name/cas: 86737
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.0002
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B01FP
Contaminant Name/cas: 85018
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.0009
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B01FP
Contaminant Name/cas: 83329
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.0001
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B01FP
Contaminant Name/cas: 7782492
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.0019
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B01FP
Contaminant Name/cas: 7440484
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.0066
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B01FP
Contaminant Name/cas: 7440473
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.10999999
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B01FP
Contaminant Name/cas: 7440439
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.07999999
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Emission Unit Id: B00001
Process Id: B01FP
Contaminant Name/cas: 7440417
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.0009
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B01FP
Contaminant Name/cas: 7440382
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.01
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: I00003
Process Id: I2BFP
Contaminant Name/cas: SO2
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0
Unit: TON

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: I00003
Process Id: I2BFP
Contaminant Name/cas: NOX
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0
Unit: TON

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: I00003

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Process Id: I2BFP
Contaminant Name/cas: CO
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0
Unit: TON

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: I00003
Process Id: I2BFP
Contaminant Name/cas: 7439921
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: I00003
Process Id: I2AFP
Contaminant Name/cas: SO2
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.405
Unit: TON

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: I00003
Process Id: I2AFP
Contaminant Name/cas: PM-PRI
Epa Control Code: 099
Contol Eff: 90
Emissions: 0.041
Unit: TON

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: I00003
Process Id: I2AFP

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Contaminant Name/cas: NOX
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 2.0205
Unit: TON

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: I00003
Process Id: I2AFP
Contaminant Name/cas: CO
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 1.674
Unit: TON

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: I00003
Process Id: I2AFP
Contaminant Name/cas: 7647010
Epa Control Code: 099
Contol Eff: 97
Emissions: 1023
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: I00003
Process Id: I2AFP
Contaminant Name/cas: 7440473
Epa Control Code: 099
Contol Eff: 90
Emissions: 0.20999999
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: I00003
Process Id: I2AFP
Contaminant Name/cas: 7440439

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Epa Control Code: 099
Contol Eff: 90
Emissions: 0.10999999
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: I00003
Process Id: I2AFP
Contaminant Name/cas: 7440382
Epa Control Code: 099
Contol Eff: 90
Emissions: 0.01
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: I00003
Process Id: I2AFP
Contaminant Name/cas: 7439976
Epa Control Code: 099
Contol Eff: 90
Emissions: 11.1000003
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: I00003
Process Id: I2AFP
Contaminant Name/cas: 7439965
Epa Control Code: 099
Contol Eff: 90
Emissions: 0.10999999
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: I00003
Process Id: I2AFP
Contaminant Name/cas: 7439921
Epa Control Code: 099

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Contol Eff: 90
Emissions: 0.1
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: I00003
Process Id: I2AFP
Contaminant Name/cas: 50000
Epa Control Code: 099
Contol Eff: 98
Emissions: 0.58999997
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: I00003
Process Id: I2AFP
Contaminant Name/cas: 16065831
Epa Control Code: 099
Contol Eff: 90
Emissions: 0.20999999
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: I00003
Process Id: I2AFP
Contaminant Name/cas: 132649
Epa Control Code: 099
Contol Eff: 98
Emissions: 0
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: I00003
Process Id: I01FP
Contaminant Name/cas: SO2
Epa Control Code: Not reported
Contol Eff: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Emissions: 0
Unit: TON

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: I00003
Process Id: I01FP
Contaminant Name/cas: NOX
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0
Unit: TON

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: I00003
Process Id: I01FP
Contaminant Name/cas: CO
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0
Unit: TON

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: I00003
Process Id: I01FP
Contaminant Name/cas: 7439921
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: EI0001
Process Id: X02EI
Contaminant Name/cas: VOC
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.144925

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Unit: TON

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: EI0001
Process Id: X02EI
Contaminant Name/cas: SO2
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.01581
Unit: TON

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: EI0001
Process Id: X02EI
Contaminant Name/cas: PM10-PR1
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.20024499
Unit: TON

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: EI0001
Process Id: X02EI
Contaminant Name/cas: NOX
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 2.635
Unit: TON

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: EI0001
Process Id: X02EI
Contaminant Name/cas: CO
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 2.2133999
Unit: TON

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: EI0001
Process Id: X02EI
Contaminant Name/cas: 7439921
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.02
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: EI0001
Process Id: X01EI
Contaminant Name/cas: VOC
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.00769999
Unit: TON

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: EI0001
Process Id: X01EI
Contaminant Name/cas: SO2
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.00083999
Unit: TON

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: EI0001
Process Id: X01EI
Contaminant Name/cas: PM10-PRI
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.010635
Unit: TON

Permit Type: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: EI0001
Process Id: X01EI
Contaminant Name/cas: NOX
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.14
Unit: TON

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: EI0001
Process Id: X01EI
Contaminant Name/cas: CO
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.11759999
Unit: TON

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: EI0001
Process Id: X01EI
Contaminant Name/cas: 7439921
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.0014
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: E00004
Process Id: E02FP
Contaminant Name/cas: 75218
Epa Control Code: 019
Contol Eff: 99.9
Emissions: 0.01
Unit: LB

Permit Type: Not reported
Permit Status: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: E00004
Process Id: E01FP
Contaminant Name/cas: 75218
Epa Control Code: 019
Contol Eff: 99.9
Emissions: 0.33000001
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B02FP
Contaminant Name/cas: VOC
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.20249
Unit: TON

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B02FP
Contaminant Name/cas: SO2
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 43.8501015
Unit: TON

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B02FP
Contaminant Name/cas: PM10-PR1
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 1.97343005
Unit: TON

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B02FP
Contaminant Name/cas: NOX
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 8.75140035
Unit: TON

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B02FP
Contaminant Name/cas: NH3
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 297.920013
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B02FP
Contaminant Name/cas: CO
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.931
Unit: TON

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B02FP
Contaminant Name/cas: 7782492
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.01
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B02FP
Contaminant Name/cas: 7440417
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.0016
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: EI0001
Process Id: X01EI
Contaminant Name/cas: PM25-PRI
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.0106393
Unit: TON

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B01FP
Contaminant Name/cas: PM25-PRI
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.29771711
Unit: TON

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: EI0001
Process Id: X02EI
Contaminant Name/cas: PM25-PRI
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.20024682
Unit: TON

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B02FP
Contaminant Name/cas: PM25-PRI
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.73283471
Unit: TON

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B01FP
Contaminant Name/cas: 7440020
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.15999999
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B01FP
Contaminant Name/cas: 7439976
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.02
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089
Emission Unit Id: B00001
Process Id: B01FP
Contaminant Name/cas: 7439965
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.02
Unit: LB

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36029
DEC Id: 9140200089

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Emission Unit Id: B00001
Process Id: B01FP
Contaminant Name/cas: 7439921
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.02999999
Unit: LB

AIRS (AFS):

Compliance and Violation Data Major Sources:

EPA plant ID: 110000879808
Plant name: BUFFALO GENERAL HOSPITAL
Plant address: 100 HIGH ST
BUFFALO, NY 14203
County: ERIE
Region code: 02
Dunn & Bradst #: 074042292
Air quality cntrl region: 162
Sic code: 8062
Sic code desc: Not reported
North Am. industrial classf: 622110
NAIC code description: General Medical and Surgical Hospitals
Default compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Default classification: POTENTIAL EMISSIONS ARE BELOW ALL APPLICABLE MAJOR SOURCE THRESHOLDS
IF AND ONLY IF THE SOURCE COMPLIES WITH FEDERALLY ENFORCEABLE
REGULATIONS OR LIMITATIONS.
Govt facility: ALL OTHER FACILITIES NOT OWNED OR OPERATED BY A FEDERAL, STATE, OR
LOCAL GOVERNMENT
Current HPV: Not reported

Compliance and Enforcement Major Issues:

Air program: TITLE V PERMITS
National action type: COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved: 000314
Penalty amount: 000000000
Air program: NSPS
National action type: COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved: 000314
Penalty amount: 000000000
Air program: PSD
National action type: COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved: 000314
Penalty amount: 000000000
Air program: SIP SOURCE
National action type: COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved: 000314
Penalty amount: 000000000
Air program: SIP SOURCE
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 000517
Penalty amount: 000000000

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Air program: NSPS
National action type: OWNER/OPERATOR CONDUCTED SOURCE TEST
Date achieved: 010131
Penalty amount: Not reported

Air program: NSPS
National action type: OWNER/OPERATOR CONDUCTED SOURCE TEST
Date achieved: 010131
Penalty amount: 000000000

Air program: SIP SOURCE
National action type: PCE/OFF-SITE
Date achieved: 010309
Penalty amount: Not reported

Air program: NSPS
National action type: CLOSEOUT MEMO ISSUED
Date achieved: 010309
Penalty amount: Not reported

Air program: NSPS
National action type: PCE/OFF-SITE
Date achieved: 010309
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: CLOSEOUT MEMO ISSUED
Date achieved: 010309
Penalty amount: Not reported

Air program: NSPS
National action type: OWNER/OPERATOR CONDUCTED SOURCE TEST
Date achieved: 010417
Penalty amount: Not reported

Air program: NSPS
National action type: OWNER/OPERATOR CONDUCTED SOURCE TEST
Date achieved: 010417
Penalty amount: 000000000

Air program: TITLE V PERMITS
National action type: COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved: 010507
Penalty amount: 000000000

Air program: SIP SOURCE
National action type: COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved: 010507
Penalty amount: 000000000

Air program: NSPS
National action type: COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved: 010507
Penalty amount: 000000000

Air program: PSD
National action type: COMPLIANCE CERTIFICATION STATE REVIEW

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Date achieved:	010507
Penalty amount:	000000000
Air program:	PSD
National action type:	PCE/OFF-SITE
Date achieved:	020319
Penalty amount:	000000000
Air program:	PSD
National action type:	STATE CONDUCTED FCE / ON-SITE
Date achieved:	020319
Penalty amount:	000000000
Air program:	SIP SOURCE
National action type:	PCE/OFF-SITE
Date achieved:	020319
Penalty amount:	000000000
Air program:	SIP SOURCE
National action type:	STATE CONDUCTED FCE / ON-SITE
Date achieved:	020319
Penalty amount:	000000000
Air program:	TITLE V PERMITS
National action type:	PCE/OFF-SITE
Date achieved:	020319
Penalty amount:	000000000
Air program:	TITLE V PERMITS
National action type:	STATE CONDUCTED FCE / ON-SITE
Date achieved:	020319
Penalty amount:	000000000
Air program:	NSPS
National action type:	PCE/OFF-SITE
Date achieved:	020319
Penalty amount:	000000000
Air program:	NSPS
National action type:	STATE CONDUCTED FCE / ON-SITE
Date achieved:	020319
Penalty amount:	000000000
Air program:	TITLE V PERMITS
National action type:	COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved:	020425
Penalty amount:	Not reported
Air program:	SIP SOURCE
National action type:	COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved:	020425
Penalty amount:	Not reported
Air program:	NSPS
National action type:	COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved:	020425
Penalty amount:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Air program:	PSD
National action type:	COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved:	020425
Penalty amount:	Not reported
Air program:	SIP SOURCE
National action type:	S/L REQ (O/O COND) STACK TEST/NOT OBSV BUT REVWD
Date achieved:	021004
Penalty amount:	Not reported
Air program:	NSPS
National action type:	S/L REQ (O/O COND) STACK TEST/NOT OBSV BUT REVWD
Date achieved:	021004
Penalty amount:	Not reported
Air program:	SIP SOURCE
National action type:	PCE/OFF-SITE
Date achieved:	030307
Penalty amount:	Not reported
Air program:	TITLE V PERMITS
National action type:	PCE/OFF-SITE
Date achieved:	030307
Penalty amount:	Not reported
Air program:	PSD
National action type:	PCE/OFF-SITE
Date achieved:	030307
Penalty amount:	Not reported
Air program:	NSPS
National action type:	PCE/OFF-SITE
Date achieved:	030307
Penalty amount:	Not reported
Air program:	NSPS
National action type:	STATE CONDUCTED FCE / ON-SITE
Date achieved:	030414
Penalty amount:	Not reported
Air program:	SIP SOURCE
National action type:	STATE CONDUCTED FCE / ON-SITE
Date achieved:	030414
Penalty amount:	Not reported
Air program:	PSD
National action type:	STATE CONDUCTED FCE / ON-SITE
Date achieved:	030414
Penalty amount:	Not reported
Air program:	TITLE V PERMITS
National action type:	STATE CONDUCTED FCE / ON-SITE
Date achieved:	030414
Penalty amount:	Not reported
Air program:	SIP SOURCE
National action type:	COMPLIANCE CERTIFICATION STATE REVIEW

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Date achieved:	030513
Penalty amount:	Not reported
Air program:	TITLE V PERMITS
National action type:	COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved:	030513
Penalty amount:	Not reported
Air program:	NSPS
National action type:	COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved:	030513
Penalty amount:	Not reported
Air program:	PSD
National action type:	COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved:	030513
Penalty amount:	Not reported
Air program:	NSPS
National action type:	COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved:	040428
Penalty amount:	Not reported
Air program:	TITLE V PERMITS
National action type:	COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved:	040428
Penalty amount:	Not reported
Air program:	SIP SOURCE
National action type:	COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved:	040428
Penalty amount:	Not reported
Air program:	PSD
National action type:	COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved:	040428
Penalty amount:	Not reported
Air program:	TITLE V PERMITS
National action type:	TITLE V COMPLIANCE CERT DUE/RECEIVED BY
Date achieved:	040504
Penalty amount:	Not reported
Air program:	SIP SOURCE
National action type:	STATE CONDUCTED FCE / ON-SITE
Date achieved:	040930
Penalty amount:	Not reported
Air program:	PSD
National action type:	STATE CONDUCTED FCE / ON-SITE
Date achieved:	040930
Penalty amount:	Not reported
Air program:	NSPS
National action type:	STATE CONDUCTED FCE / ON-SITE
Date achieved:	040930
Penalty amount:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Air program: TITLE V PERMITS
National action type: STATE CONDUCTED FCE / ON-SITE
Date achieved: 040930
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: PCE/OFF-SITE
Date achieved: 050222
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: PCE/OFF-SITE
Date achieved: 060202
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: PCE/OFF-SITE
Date achieved: 070606
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: PCE/OFF-SITE
Date achieved: 080402
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: NXXXXX
Date achieved: 080429
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: PCE/OFF-SITE
Date achieved: 080515
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: PCE/OFF-SITE
Date achieved: 090330
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 090922
Penalty amount: Not reported

Air program: PSD
National action type: STATE CONDUCTED FCE / ON-SITE
Date achieved: 090924
Penalty amount: Not reported

Air program: NSPS
National action type: STATE CONDUCTED FCE / ON-SITE
Date achieved: 090924
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE CONDUCTED FCE / ON-SITE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Date achieved:	090924
Penalty amount:	Not reported
Air program:	TITLE V PERMITS
National action type:	STATE CONDUCTED FCE / ON-SITE
Date achieved:	090924
Penalty amount:	Not reported
Air program:	SIP SOURCE
National action type:	PCE/OFF-SITE
Date achieved:	100331
Penalty amount:	Not reported
Air program:	SIP SOURCE
National action type:	PCE/OFF-SITE
Date achieved:	110331
Penalty amount:	Not reported
Air program:	SIP SOURCE
National action type:	PCE/OFF-SITE
Date achieved:	120323
Penalty amount:	Not reported
Air program:	SIP SOURCE
National action type:	PCE/OFF-SITE
Date achieved:	130306
Penalty amount:	Not reported
Air program:	SIP SOURCE
National action type:	STATE CONDUCTED PCE/ ON-SITE
Date achieved:	970224
Penalty amount:	000000000
Air program:	SIP SOURCE
National action type:	NXXXXX
Date achieved:	970731
Penalty amount:	000105000
Air program:	SIP SOURCE
National action type:	SV RESOLVED
Date achieved:	970731
Penalty amount:	000000000
Air program:	SIP SOURCE
National action type:	SV RESOLVED
Date achieved:	970801
Penalty amount:	000000000
Air program:	SIP SOURCE
National action type:	STATE CONDUCTED PCE/ ON-SITE
Date achieved:	970821
Penalty amount:	000000000
Air program:	SIP SOURCE
National action type:	STATE CONDUCTED PCE/ ON-SITE
Date achieved:	971112
Penalty amount:	000000000

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Air program: SIP SOURCE
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 971229
Penalty amount: 000000000

Air program: TITLE V PERMITS
National action type: EPA CONDUCTED PCE/ ON-SITE
Date achieved: 980831
Penalty amount: 000000000

Air program: SIP SOURCE
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 980901
Penalty amount: 000000000

Air program: SIP SOURCE
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 981112
Penalty amount: 000000000

Air program: SIP SOURCE
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 981123
Penalty amount: 000000000

Air program: SIP SOURCE
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 990512
Penalty amount: 000000000

Historical Compliance Minor Sources:

State compliance status: IN VIOLATION WITH REGARD TO BOTH EMISSIONS AND PROCEDURAL COMPLIANCE
Hist compliance date: 1004
Air prog code hist file: NSPS

State compliance status: IN VIOLATION WITH REGARD TO BOTH EMISSIONS AND PROCEDURAL COMPLIANCE
Hist compliance date: 1101
Air prog code hist file: SIP SOURCE

State compliance status: IN VIOLATION WITH REGARD TO BOTH EMISSIONS AND PROCEDURAL COMPLIANCE
Hist compliance date: 1101
Air prog code hist file: NSPS

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1004
Air prog code hist file: NSR

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1004
Air prog code hist file: TITLE V PERMITS

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1101
Air prog code hist file: NSR

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1101

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Air prog code hist file:	TITLE V PERMITS
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1102
Air prog code hist file:	PSD
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1102
Air prog code hist file:	NSR
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1102
Air prog code hist file:	NSPS
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1103
Air prog code hist file:	SIP SOURCE
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1103
Air prog code hist file:	PSD
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1103
Air prog code hist file:	NSPS
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1103
Air prog code hist file:	TITLE V PERMITS
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1104
Air prog code hist file:	SIP SOURCE
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1104
Air prog code hist file:	NSR
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1104
Air prog code hist file:	NSPS
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1201
Air prog code hist file:	SIP SOURCE
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1201
Air prog code hist file:	PSD
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1201
Air prog code hist file:	NSPS
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1201
Air prog code hist file:	TITLE V PERMITS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1202
Air prog code hist file:	SIP SOURCE
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1202
Air prog code hist file:	NSR
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1202
Air prog code hist file:	NSPS
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1203
Air prog code hist file:	SIP SOURCE
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1203
Air prog code hist file:	PSD
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1203
Air prog code hist file:	NSPS
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1203
Air prog code hist file:	TITLE V PERMITS
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1204
Air prog code hist file:	SIP SOURCE
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1204
Air prog code hist file:	NSR
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1204
Air prog code hist file:	NSPS
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1301
Air prog code hist file:	SIP SOURCE
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1301
Air prog code hist file:	PSD
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1301
Air prog code hist file:	NSR
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1301
Air prog code hist file:	TITLE V PERMITS
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Hist compliance date:	1302
Air prog code hist file:	SIP SOURCE
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1302
Air prog code hist file:	NSR
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1302
Air prog code hist file:	NSPS
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1303
Air prog code hist file:	SIP SOURCE
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1303
Air prog code hist file:	PSD
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1303
Air prog code hist file:	NSR
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1303
Air prog code hist file:	TITLE V PERMITS
State compliance status:	IN VIOLATION WITH REGARD TO BOTH EMISSIONS AND PROCEDURAL COMPLIANCE
Hist compliance date:	1004
Air prog code hist file:	SIP SOURCE
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1004
Air prog code hist file:	PSD
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1101
Air prog code hist file:	PSD
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1102
Air prog code hist file:	SIP SOURCE
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1102
Air prog code hist file:	TITLE V PERMITS
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1103
Air prog code hist file:	NSR
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1104
Air prog code hist file:	PSD
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1104

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Air prog code hist file: TITLE V PERMITS

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1201
Air prog code hist file: NSR

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1202
Air prog code hist file: PSD

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1202
Air prog code hist file: TITLE V PERMITS

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1203
Air prog code hist file: NSR

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1204
Air prog code hist file: PSD

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1204
Air prog code hist file: TITLE V PERMITS

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1301
Air prog code hist file: NSPS

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1302
Air prog code hist file: PSD

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1302
Air prog code hist file: TITLE V PERMITS

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1303
Air prog code hist file: NSPS

Permit Information:
Compliance plant ID: 00033
Permit number: 914020008900009
Permit category: V
Permit category desc: TITLE V PERMIT - PLANT SP

Permit Source:
Compliance plant ID: 00033
Plant name: BUFFALO GENERAL HOSPITAL
Plant address: 100 HIGH ST
BUFFALO, NY 14203

Event Information:
Compliance permit ID: 00033

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUFFALO GENERAL HOSPITAL (Continued)

1000105471

Permit number: 914020008900009
Event action type: IF
Event description: *PERMIT AUTHORITY ISSUES FINAL PERMIT
Event action #: 005
Event date: 19990413

Compliance permit ID: 00033
Permit number: 914020008900009
Event action type: IX
Event description: PERMIT EXPIRES
Event action #: 006
Event date: 20040413

124
SSE
1/4-1/2
0.409 mi.
2157 ft.

**ROSWELL PARK #6 OIL
HIGH & MICHIGAN AVENUES
BUFFALO, NY**

**NY LTANKS S105054097
N/A**

**Relative:
Higher**

LTANKS:

**Actual:
663 ft.**

Site ID: 286130
Spill Number/Closed Date: 8907884 / 12/12/1989
Spill Date: 11/8/1989
Spill Cause: Tank Overfill
Spill Source: Institutional, Educational, Gov., Other
Spill Class: Not reported
Cleanup Ceased: 12/12/1989
Cleanup Meets Standard: True
SWIS: 1502
Investigator: MXFRANKS
Referred To: Not reported
Reported to Dept: 11/9/1989
CID: Not reported
Water Affected: Not reported
Spill Notifier: Affected Persons
Last Inspection: 12/4/1989
Recommended Penalty: False
UST Involvement: False
Remediation Phase: 0
Date Entered In Computer: 11/9/1989
Spill Record Last Update: 1/3/1996
Spiller Name: Not reported
Spiller Company: NOCO ENERGY
Spiller Address: 700 GRAND ISLAND BLVD
Spiller City,St,Zip: TONAWANDA, NY
Spiller County: 001
Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported
DEC Region: 9
DER Facility ID: 231904
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "MF"11/09/89: MF 1300 SITE VISIT, SPILLAGE ALL CONTAINED. SPILL AREA COVERED WITH PLASTIC. 0800 SITE VISIT, ELMWOOD TANK HIRED BY HOSPITAL TO REMEDIATE SPILL. 0930 ELMWOOD ON SITE. 11/17/89: MF 11/16/890 ELMWOOD TANK ON SITE REMEDIATING AREA. 11/17/89 ELMWOOD TANK ON SITE REMEDIATING AREA, WILL NOT BE COMPLETED TODAY. ROSWELL WILL MONITOR

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ROSWELL PARK #6 OIL (Continued)

S105054097

MONDAY. (VACATION). 12/04/89: MF SITE VISIT WITH FRANK VALLONE. THE SPILL AREA HAS BEEN BACKFILLED. ROSWELL PARK IS SATISFIED WITH THE CLEAN UP. TOLD FRANK OF THE NEED FOR DISPOSAL RECEIPTS. 12/12/89: MF RECEIVED COPY OF THE DISPOSAL RECEIPT. NO FUTHER ACTION NECESSARY BY SPILLS.
Remarks: DRIVER UNLOADED FUEL TO WRONG TANK; PRODUCT SPILLED ON STONE PARKING LOT, ALL CONTAINED.

Material:

Site ID: 286130
Operable Unit ID: 935474
Operable Unit: 01
Material ID: 444659
Material Code: 0003A
Material Name: #6 Fuel Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 1000
Units: Gallons
Recovered: 990
Resource Affected: Not reported
Oxygenate: False

Tank Test:

125
ESE
1/4-1/2
0.411 mi.
2170 ft.

**NATIONAL GUARD BUILDING
27 MASTEN AVE
BUFFALO, NY**

**NY LTANKS S103053506
NY Spills N/A**

**Relative:
Higher**

LTANKS:

**Actual:
676 ft.**

Site ID: 106039
Spill Number/Closed Date: 9709636 / 3/30/1998
Spill Date: 11/19/1997
Spill Cause: Tank Failure
Spill Source: Commercial/Industrial
Spill Class: Known release that creates potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
Cleanup Ceased: Not reported
Cleanup Meets Standard: False
SWIS: 1502
Investigator: RMCROSSE
Referred To: Not reported
Reported to Dept: 11/19/1997
CID: 999
Water Affected: Not reported
Spill Notifier: Other
Last Inspection: 11/20/1997
Recommended Penalty: False
UST Involvement: True
Remediation Phase: 0
Date Entered In Computer: 11/19/1997
Spill Record Last Update: 5/11/1998
Spiller Name: HEIDI GABEL
Spiller Company: NYS DIV MILITARY NAVAL AF

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NATIONAL GUARD BUILDING (Continued)

S103053506

Spiller Address: 330 OLD NISKAYUNA ROAD
Spiller City,St,Zip: LATHAM, NY 12210-2224
Spiller County: 001
Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported
DEC Region: 9
DER Facility ID: 93469
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "RMC"11/19/97 AND 11/20/97: RMC/SITE, MET WITH MARSHALL KIMMONS, CONTAMINATION NOTED IN TANK PIT UPON REMOVAL, KIMMONS REMOVED APPROXIMATELY 200 TONS SOIL AND TOOK POST EXCAVATION SAMPLES, LETTER TO RP, SAMPLE RESULTS AND DISPOSAL RECEIPTS DUE 1/30/9812/02/97: RMC/FILE, TANK WAS MIS-REPORTED AS A 5000 GALLON TANK, ACTUAL TANK IS A 3000 GALLON FUEL OIL TANK12/04/97: RMC/FILE, RECEIVED EXCAVATION SAMPLE REPORT, MINOR EXCEEDANCES, DISPOSAL DUE 1/30/9801/15/98: RMC/HEIDI GABEL/PHONE, GABEL HAS BEEN UNABLE TO CONTACT KIMMONS, FAXED CONTRACTORS LIST, RESPONSE DUE 2/28/9803/30/98: RMC/FILE, RECEIVED DISPOSAL DOCUMENTS, OK, SITE TO BE MADE INACTIVE PER RNL, LETTER, INACTIVE
Remarks: REMOVED 5000 GALLON TANK AND FOUND CONTAMINATION

Material:

Site ID: 106039
Operable Unit ID: 1052680
Operable Unit: 01
Material ID: 327972
Material Code: 0008
Material Name: Diesel
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Site ID: 219353
Spill Number/Closed Date: 9305872 / 8/27/1993
Spill Date: 8/11/1993
Spill Cause: Tank Overfill
Spill Source: Institutional, Educational, Gov., Other
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
Cleanup Ceased: 8/27/1993
Cleanup Meets Standard: True
SWIS: 1502
Investigator: RMCROSSE
Referred To: Not reported
Reported to Dept: 8/12/1993
CID: Not reported
Water Affected: Not reported
Spill Notifier: DEC

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NATIONAL GUARD BUILDING (Continued)

S103053506

Last Inspection: 8/27/1993
Recommended Penalty: False
UST Involvement: False
Remediation Phase: 0
Date Entered In Computer: 8/13/1993
Spill Record Last Update: 8/31/1993
Spiller Name: Not reported
Spiller Company: MASTEN AVENUE ARMORY
Spiller Address: 27 MASTEN AVENUE
Spiller City,St,Zip: BUFFALO, NY 14203
Spiller County: 001
Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported
DEC Region: 9
DER Facility ID: 181393
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "RMC"08/20/93: RMC/LESLIE FISHER SUPT OF MAINTENANCE/PHONE RP TO REMOVE CONTAMINATED SOIL, RMC TO INSPECT NEXT WEEK.08/27/93: RMC/LESLIE FISHER SUPT OF MAINTENANCE/SITE CONTAMINATION REMOVED TO NORMAL DUMPSTER PICKUP, NO FURTHER ACTION REQUIRED, CLOSE OUT.
Remarks: TANK #7 WAS OVERFILLED, NOTED DURING PBS INSPECTION.

Material:

Site ID: 219353
Operable Unit ID: 987352
Operable Unit: 01
Material ID: 395775
Material Code: 0022
Material Name: Waste Oil/Used Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Not reported
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Site ID: 219353
Spill Tank Test: 1541872
Tank Number: 007
Tank Size: 0
Test Method: 00
Leak Rate: 0
Gross Fail: Not reported
Modified By: Spills
Last Modified: 10/1/2004
Test Method: Unknown

Site ID: 219352
Spill Number/Closed Date: 8904853 / 11/14/1990
Spill Date: 8/15/1989
Spill Cause: Tank Test Failure
Spill Source: Institutional, Educational, Gov., Other

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NATIONAL GUARD BUILDING (Continued)

S103053506

Spill Class: Not reported
Cleanup Ceased: 11/14/1990
Cleanup Meets Standard: True
SWIS: 1502
Investigator: LYONS
Referred To: Not reported
Reported to Dept: 8/15/1989
CID: Not reported
Water Affected: Not reported
Spill Notifier: Tank Tester
Last Inspection: 11/14/1990
Recommended Penalty: False
UST Involvement: True
Remediation Phase: 0
Date Entered In Computer: 8/16/1989
Spill Record Last Update: 12/18/1990
Spiller Name: Not reported
Spiller Company: MASTEN AVENUE ARMORY
Spiller Address: 27 MASTEN AVENUE
Spiller City,St,Zip: BUFFALO, NY
Spiller County: 001
Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported
DEC Region: 9
DER Facility ID: 181393
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "MEL"08/16/89: LQR TELCON W/ SPILLER RETEST BEING PREFORMED.09/25/89: LQR TELCON W/ SPILLER TANK TO BE REMOVED LETTER TO SPILLER SENT.11/17/89: LQR TELCON W/ SPILLER BIDS OUT TO REMOVE 2 TANKS.01/30/90: LQR TELCON W/ SPILLER REMOVE 2 TANKS AFTER 04/01/90.11/14/90: MEL INSP. TANKS REMOVED FROM GROUND, NO CONTAMINATION OBSERVED. NO FURTHER ACTION NECESSARY, RECOMMEND FILE BE CLOSED. 09/29/95: This is additional information about material spilled from the translation of the old spill file: UNKNOWN AMOUNT.
Remarks: 4000 GAL LEAK RATE -O.37047 GPH

Material:

Site ID: 219352
Operable Unit ID: 932603
Operable Unit: 01
Material ID: 448884
Material Code: 0009
Material Name: Gasoline
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Site ID: 219352
Spill Tank Test: 1535858
Tank Number: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NATIONAL GUARD BUILDING (Continued)

S103053506

Tank Size: 0
Test Method: 00
Leak Rate: 0
Gross Fail: Not reported
Modified By: Spills
Last Modified: 10/1/2004
Test Method: Unknown

SPILLS:

Facility ID: 9907527
DER Facility ID: 181393
Facility Type: ER
Site ID: 219354
DEC Region: 9
Spill Date: 9/22/1999
Spill Number/Closed Date: 9907527 / 9/24/1999
Spill Cause: Equipment Failure
Spill Class: Possible release with minimal potential for fire or hazard or Known release with no damage. DEC Response. Willing Responsible Party. Corrective action taken.

SWIS:

Investigator: 1502
Referred To: RMCROSSE
Reported to Dept: Not reported
CID: 9/22/1999
Water Affected: 211
Spill Source: Not reported
Spill Notifier: Commercial Vehicle
Cleanup Ceased: Responsible Party
Cleanup Meets Std: Not reported
Last Inspection: True
Recommended Penalty: 9/23/1999
UST Trust: False
Remediation Phase: False
Date Entered In Computer: 0
Spill Record Last Update: 9/22/1999
Spiller Name: 9/30/1999
Spiller Company: ANTHONY IMAGNA
Spiller Address: NYS NATIONAL GUARD
Spiller City,St,Zip: 27 MASTEN AVENUE ARMORY
Spiller Company: BUFFALO, NY
Contact Name: 001
Contact Phone: Not reported
DEC Memo: Not reported
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "RMC"09/23/99: RMC SITE INSPECTION, MET SGT IMAGNA AND HEIDE GABEL, 518-786-4347, SPILLAGE FROM VEHICLE, WHICH MUST HAVE MINOR HISTORICAL LEAKING PROBLEM, TO INSIDE OF STORAGE SHED ON GRAVEL WHERE PARKED, NOTED TRIANGULAR AREA 6 BY 10 BY 8 FEET IMPACTED WITH STAINED GRAVEL, RMC ADVISED TO BAG UP MINOR AMOUNT OF GRAVEL IMPACTED AND DISPOSE OF IN NORMAL WASTESTREAM, PROVIDED 6MILL GARBAGE BAGS, ALSO TO CHECK MACHINE FOR LEAKS AND REPAIR IF NECESSARY, CLOSE OUT
Remarks: historical spill - waste products from vehicles - soil affected no clean up

Material:

Site ID: 219354

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NATIONAL GUARD BUILDING (Continued)

S103053506

Operable Unit ID: 1081806
Operable Unit: 01
Material ID: 300230
Material Code: 0043A
Material Name: ANTIFREEZE
Case No.: Not reported
Material FA: Other
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False
Site ID: 219354
Operable Unit ID: 1081806
Operable Unit: 01
Material ID: 300229
Material Code: 0022
Material Name: Waste Oil/Used Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Facility ID: 9708830
DER Facility ID: 215366
Facility Type: ER
Site ID: 264237
DEC Region: 9
Spill Date: 10/28/1997
Spill Number/Closed Date: 9708830 / 10/31/1997
Spill Cause: Equipment Failure
Spill Class: Possible release with minimal potential for fire or hazard or Known release with no damage. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS: 1502
Investigator: RMCROSSE
Referred To: Not reported
Reported to Dept: 10/28/1997
CID: 267
Water Affected: Not reported
Spill Source: Commercial Vehicle
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: 10/28/1997
Spill Record Last Update: 11/12/1997
Spiller Name: JAMES FREEHART

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NATIONAL GUARD BUILDING (Continued)

S103053506

Spiller Company: NYS NATIONAL GUARD
Spiller Address: 27 MASTEN AVENUE
Spiller City,St,Zip: BUFFALO, NY 14204-
Spiller Company: 001
Contact Name: Not reported
Contact Phone: Not reported
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was
"RMC"10/28/97 RMC/FILE LEFT MESSAGE FOR RP TO CALL10/31/97 RMC/FILE
KAH TOOK CALL FROM JAMES FREEHART, NATIONAL GUARD, WHO STATED THAT
MINOR SPILL HAPPENED TOTALLY WITHIN BUILDING SOMETIME IN 1995, THEY
JUST REALIZED THAT REPORTING WAS REQUIRED, SPILL WAS CLEANED UP WITH
SPEEDY DRY, RMC VIEWED THIS AS A MINOR SPILL TO BEGIN WITH AND BEING
CLEANED UP YEARS AGO, NO ACTION REQUIRED, CLOSE OUT
Remarks: FUEL LAEKING FROM AN M1 TANK INSIDE THE BUILDING ONTO THE
BLACKTOPFLOOR CALLER WAS JUST ADVISED OF THIS AND WILL BE FOLLOWING
UPTOMORROW AM UNKNOWN IF THIS IS A SPILL OR CAUSED BY THE HEAT OF THE
TANK CALLER WILL UPDATE DEC TOMORROW

Material:
Site ID: 264237
Operable Unit ID: 1055265
Operable Unit: 01
Material ID: 330773
Material Code: 0008
Material Name: Diesel
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

126
NNE
1/4-1/2
0.427 mi.
2257 ft.

**ABANDONED AUTO REPAIR
63 E. UTICA
BUFFALO, NY**

**NY LTANKS S105995030
N/A**

**Relative:
Lower**

LTANKS:
Site ID: 308975
Spill Number/Closed Date: 0175489 / 10/3/2002
Spill Date: 1/1/2002
Spill Cause: Tank Failure
Spill Source: Commercial/Industrial
Spill Class: Possible release with minimal potential for fire or hazard or Known
release with no damage. DEC Response. Willing Responsible Party.
Corrective action taken.

**Actual:
640 ft.**

Cleanup Ceased: Not reported
Cleanup Meets Standard: True
SWIS: 1502
Investigator: JFOTTO
Referred To: Not reported
Reported to Dept: 1/29/2002
CID: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ABANDONED AUTO REPAIR (Continued)

S105995030

Water Affected: Not reported
Spill Notifier: Local Agency
Last Inspection: 10/2/2002
Recommended Penalty: False
UST Involvement: False
Remediation Phase: 0
Date Entered In Computer: 1/29/2002
Spill Record Last Update: 10/3/2002
Spiller Name: LARRY OWENS
Spiller Company: LARRY OWENS
Spiller Address: 47 E. UTICA
Spiller City,St,Zip: BUFFALO, NY 14209-
Spiller County: 001
Spiller Contact: LARRY OWENS
Spiller Phone: (716) 885-2547
Spiller Extention: Not reported
DEC Region: 9
DER Facility ID: 249523
DEC Memo:

Prior to Sept, 2004 data translation this spill Lead_DEC Field was "JFO"01/29/02 JFO ON SITE MET WITH MR LARRY OWENS. THERE ARE 2-275 GALLON ABOVE GROUND HEATING OIL TANKS IN HIS YARD. OVER THE YEARS A SLIGHT LEAK HAS ACCUMULATED AND STAINED THE CONCRETE. ONE TANK IS EMPTY, THE OTHER HAS A FEW GALLONS IN IT. I EXPLAINED TO MR OWENS THAT HE SHOULD EMPTY THE TANK TO PREVENT ANY MORE SPILLAGE. A SERVICE GARAGE THAT CHANGES OIL WILL ACCEPT 5 GALLONS A DAY. MR OWENS WILL CLEAN UP AROUND THE TANKS AND DISPOSE IN REGULAR WASTE STREAM. I WILL CHECK SITE IN 2 WEEKS. 02/14/02 JFO ON SITE MET WITH LARRY OWENS. HE HAS NOT BEEN ABLE TO CLEANUP THE AREA AROUND THE TANKS BECAUSE OF THE WEATHER (FROZEN GROUND) HE WILL CLEANUP AS SOON AS THE GROUND THAWS. I WILL CHECK BACK AGAIN WHEN I AM IN THE AREA.10/02/02 JFO ON SITE, THE AREA HAS BEEN CLEANED UP. THERE APPEARS TO BE NO OIL IN THE TANKS. NO FURTHER ACTION REQUIRED.CLOSED

Remarks: WHILE DOING BUILDING INSPECTION, CITY OF BUFFALO INSPECTOR CAME ACROSS TWO OLD ABOVE-GROUND STORAGE TANKS (APPROX. 100 GAL.). ONE TANK APPEARED TO BE EMPTY AND THE OTHER APPEARED TO HAVE A SMALL QUANTITY OF LIQUID IN THE BOTTOM. MR. BANYI INDICATED THAT THERE WAS A PETROLEUM ODOR PRESENT. TO ACCESS PROPERTY AT 63 E. UTICA, TAKE DRIVEWAY FOR 47 E. UTICA (WHICH IS REPORTEDLY MR. OWENS, PROPERTY OWNER OF RECORD'S RESIDENCE) STRAIGHT BACK TO ABANDONED AUTO REPAIR AND TIRE SHOP. OUTSIDE OF THAT SHOP IS WHERE THE TANKS ARE LOCATED.

Material:
Site ID: 308975
Operable Unit ID: 853262
Operable Unit: 01
Material ID: 524820
Material Code: 0066A
Material Name: UNKNOWN PETROLEUM
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ABANDONED AUTO REPAIR (Continued)

S105995030

Tank Test:

127
NNW
1/4-1/2
0.436 mi.
2304 ft.

**TIMON TOWERS APTS.
1015 DELAWARE AVENUE
BUFFALO, NY**

**NY LTANKS S107410472
N/A**

**Relative:
Higher**

LTANKS:

**Actual:
662 ft.**

Site ID: 352127
Spill Number/Closed Date: 0550932 / 5/8/2006
Spill Date: 9/6/2005
Spill Cause: Tank Test Failure
Spill Source: Commercial/Industrial
Spill Class: Known release that creates potential for fire or hazard. DEC Response.
Willing Responsible Party. Corrective action taken.
Cleanup Ceased: Not reported
Cleanup Meets Standard: False
SWIS: 1502
Investigator: JFOTTO
Referred To: Not reported
Reported to Dept: 9/6/2005
CID: Not reported
Water Affected: Not reported
Spill Notifier: Other
Last Inspection: 12/14/2005
Recommended Penalty: False
UST Involvement: True
Remediation Phase: 0
Date Entered In Computer: 9/6/2005
Spill Record Last Update: 5/8/2006
Spiller Name: Not reported
Spiller Company: Not reported
Spiller Address: Not reported
Spiller City,St,Zip: Not reported
Spiller County: Not reported
Spiller Contact: PATTY GRACZYK
Spiller Phone: (716) 882-2123
Spiller Extention: Not reported
DEC Region: 9
DER Facility ID: 299420
DEC Memo: 9/16/05 FG CONTACTED JOHN GRAMZ WITH PRIME TIME. HE SAID HE RETESTED AND THE TANK PASSED. HE WILL SEND THE REPORT.12/13/05 FG RECEIVED THE ANALYTICAL FROM THE EXCAVATION. 8260 NON DETECT, 8270 IS SLIGHTLY ABOVE TAGMS FOR 5 COMPOUNDS. THIS SITE WILL BE INACTIVE.12/14/05 JFO CALL TO MIKE CLANCY, HE WILL DISPOSE OF APPROX 2 TONS OF SOIL AND SUBMIT RECEIPTS.JFO VISITED SITE NOA. THE HOLE IS OPEN BUT FULL OF SNOW. CONTAMINATED SOIL ON SITE.05/05/06 JFO CALL TO MIKE C. HE WILL SEND RECEIPTS ON MONDAY.05/08/06 JFO RECEIVED THE DISPOSAL RECEIPT. THIS SITE WILL BE INACTIVE. NO FURTHER ACTION REQUIRED AT THIS TIME. INACTIVE LTR SENT.CLOSED
Remarks: 275 GALLON BACK UP GENERATOR TANK FAILURE. THINKS PROBLEM IS A VENT. PLAN ON REPAIRING AND RETESTING.

Material:
Site ID:

352127

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TIMON TOWERS APTS. (Continued)

S107410472

Operable Unit ID: 1109638
Operable Unit: 01
Material ID: 2099648
Material Code: 0008
Material Name: Diesel
Case No.: Not reported
Material FA: Petroleum
Quantity: Not reported
Units: Gallons
Recovered: Not reported
Resource Affected: Not reported
Oxygenate: False

Tank Test:

128
SW
1/4-1/2
0.455 mi.
2405 ft.

NYSDEC
600 DELAWARE AVE
BUFFALO, NY 14202

RCRA NonGen / NLR **1000185749**
FINDS **NYD981178650**
NY LTANKS
NY MANIFEST
NY Spills

Relative:
Higher

RCRA NonGen / NLR:

Date form received by agency: 01/01/2007
Facility name: NYSDEC
Facility address: 600 DELAWARE AVE
BUFFALO, NY 142021002
EPA ID: NYD981178650
Mailing address: DELAWARE AVE
BUFFALO, NY 14202
Contact: Not reported
Contact address: DELAWARE AVE
BUFFALO, NY 14202
Contact country: US
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 02
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Actual:
651 ft.

Owner/Operator Summary:

Owner/operator name: NYSDEC
Owner/operator address: NOT REQUIRED
NOT REQUIRED, WY 99999
Owner/operator country: US
Owner/operator telephone: (212) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NYSDEC
Owner/operator address: NOT REQUIRED
NOT REQUIRED, WY 99999
Owner/operator country: US
Owner/operator telephone: (212) 555-1212
Legal status: Private

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYSDEC (Continued)

1000185749

Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006
Facility name: NYSDEC
Classification: Not a generator, verified

Date form received by agency: 07/08/1999
Facility name: NYSDEC
Classification: Not a generator, verified

Date form received by agency: 12/23/1985
Facility name: NYSDEC
Classification: Small Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110004401861

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

LTANKS:

Site ID: 169894
Spill Number/Closed Date: 9503691 / 5/7/1998
Spill Date: 6/1/1995
Spill Cause: Tank Failure
Spill Source: Commercial/Industrial
Spill Class: Known release that creates potential for fire or hazard. DEC Response.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYSDEC (Continued)

1000185749

Willing Responsible Party. Corrective action taken.

Cleanup Ceased: Not reported
Cleanup Meets Standard: True
SWIS: 1502
Investigator: RMCROSSE
Referred To: Not reported
Reported to Dept: 6/23/1995
CID: Not reported
Water Affected: Not reported
Spill Notifier: Other
Last Inspection: 3/4/1998
Recommended Penalty: False
UST Involvement: True
Remediation Phase: 0
Date Entered In Computer: 6/30/1995
Spill Record Last Update: 3/20/2002
Spiller Name: JOHN GOULD
Spiller Company: BENDERSON DEVELOPMENT
Spiller Address: 570 DELAWARE AVENUE
Spiller City,St,Zip: BUFFALO, NY 14202
Spiller County: 001
Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported
DEC Region: 9
DER Facility ID: 142956
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "RMC"07/05/95: RMC/FILE, SENT LETTER REQUESTING SITE ASSESMENT , DUE 8/30/95.09/20/95: RMC/FILE, SENT LETTER REQUESTING SITE ASSESMENT , DUE 8/30/95, REVISED TO 9/30/95.11/2/95 RMC/FILE, NO RESPONSE LETTER, RESPONSE DUE 11/15/951/4/96 RMC/LAURIE CIRCELLI/PHONE, SITE CONTACT SHOULD BE JOHN GOULD, BENDERSON HAS HIRED BUFFALO DRILLING TO PREPARE A SITE ASSESMENT, DUE 2/28/9602/22/96 RMC/RECEIVED REPORT, RICK CROUCH/PHONE RNL/MEETING, REPORT SHOWS NO CONTAMINATION OUTSIDE TANK PIT, LEVELS IN HIGH PPM IN TANK PIT ITSELF BASED ON B AND D SAMPLING, TANK PIT REQUIRES FURTHER SITE ASSESMENT AND MAYBE REMEDIATION, CROUCH TO TALK WITH BENDERSON AND WORK OUT NEXT STEP, CALL BACK DUE 3/15/965/1/96 RMC/FILE, CONTRACTOR ADVISED THAT REPORT WILL BE SUBMITTED BY 6/1/9607/05/96 RMC/LORI CIRCELLI/PHONE, RMC AGAIN ADVISED THAT FURTHER WORK IS REQUIRED, TO CALL BACK,CALL DUE 7/7/9608/26/96 RMC/FILE, LETTER, RESPONSE DUE 9/6/9609/09/96 RMC/RICK CROUCH, BUFFALO DRILLING/PHONE, TO PROPOSE VAC. EXTRACTION POINTS TO CLIENT AND GET BACK TO DEC, CALL DUE 9/15/9610/21/96 RMC/RICK CROUCH/PHONE, WENT OVER PROPOSAL TO INSTALL SVE, RMC ADVISED THAT NEED TO HAVE SAMPLING IN PLAN ADEQUATE FOR CLOSURE DETERMINATION, TO DO BASELINE BORINGS IN TANK PIT AND RESUBMIT PLAN WITH MINOR CHANGES, DUE 11/30/9612/31/96 RMC/RICK CROUCH/PHONE, SENT REWORKED PLAN TO BENDERSON, NOTHING HAS YET TO BE DECIDED BECAUSE GOULD LEFT COMPANY, CROUCH TO GET PLAN TO ME BY 1/30/9702/25/97 RMC/FILE, LEFT MESSAGE FOR CROUCH TO CALL, CALL DUE 3/1/9702/28/97 RMC/FILE, LEFT MESSAGE FOR TOM WUERCH TO CALL, CALL DUE 3/3/9703/20/97 RMC/FILE, LEFT MESSAGE FOR RP TO CALL. CALL DUE 4/1/9703/20/96 RMC/IVAN LOZINA, 878-9319/PHONE, RMC TO HAVE MEETING TO DISCUSS SITE APPROACH AFTER 4/8/96 06/03/97 RMC/FILE, LEFT MESSAGE FOR LOZINA TO CALL, CALL DUE 6/10/9706/26/97 RMC/FILE, LEFT ANOTHER MESSAGE CALL DUE 6/2707/21/97 RMC/FILE, LEFT ANOTHER MESSAGE CALL BACK 7/28 12/22/97 RMC/FILE, RETURNED LOZINAS CALL12/24/97 RMC/LOZINA/PHONE, TO MEET

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYSDEC (Continued)

1000185749

1/8/9803/04/98 RMC/IVAN LOZINA/SITE, WENT OVER PREVIOUS WORK, SITE ASSESSMENT SHOWED CONTAMINATION CONFINED TO TANK PIT AREA, RMC REQUESTED THE TANK PIT BE RESAMPLED, FOR TCLP STARS TABLE 2, DUE 5/1/9805/07/98 RMC/FILE, RECEIVED SUPPLEMENTAL REPORT FROM NWI, WORK REQUESTED AS ORIGINAL POST EXCAVATION SAMPLE BY B AND D IN 1995 PRIOR TO INSTALLING A NEW UST SHOWED EXCEEDANCES IN STARS, RMC REVIEWED FILE, NO PROBLEMS NOTED IN BUFFALO DRILLINGS INVESTIGATION OUTSIDE THE UST TANK PIT, NO EXCEEDANCES IN LATEST WORK BY NWI, NO ACTION REQUIRED, CLOSE OUT

Remarks: CONTAMINATION FOUND IN CHEMICAL ANALYSIS

Material:

Site ID: 169894
Operable Unit ID: 1018150
Operable Unit: 01
Material ID: 365199
Material Code: 0009
Material Name: Gasoline
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Site ID: 169893
Spill Number/Closed Date: 9404468 / 8/15/1994
Spill Date: 6/29/1994
Spill Cause: Tank Test Failure
Spill Source: Commercial/Industrial
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
Cleanup Ceased: 8/15/1994
Cleanup Meets Standard: True
SWIS: 1502
Investigator: RMCROSSE
Referred To: Not reported
Reported to Dept: 6/29/1994
CID: Not reported
Water Affected: Not reported
Spill Notifier: Tank Tester
Last Inspection: Not reported
Recommended Penalty: False
UST Involvement: True
Remediation Phase: 0
Date Entered In Computer: 6/30/1994
Spill Record Last Update: 3/20/2002
Spiller Name: Not reported
Spiller Company: BENDERSON DEVELOPMENT
Spiller Address: 570 DELAWARE AVENUE
Spiller City,St,Zip: BUFFALO, NY 14202
Spiller County: 001

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYSDEC (Continued)

1000185749

Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported
DEC Region: 9
DER Facility ID: 142956
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "RMC"06/30/94: RMC/LETTER RESPONSE DUE 7/30/94.07/12/94: SAC BRUCE NATALIZIA BENDERSON/PHONE BENDERSON IS GOING TO RETEST, RESULTS DUE 8/18/94.08/15/94: RMC/RECEIVED RETEST, PASSED, CLOSE OUT.
Remarks: LINES PASSED, TANK FAILED

Material:

Site ID: 169893
Operable Unit ID: 1001539
Operable Unit: 01
Material ID: 553940
Material Code: 0008
Material Name: Diesel
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Site ID: 169893
Spill Tank Test: 1542915
Tank Number: Not reported
Tank Size: 0
Test Method: 00
Leak Rate: 0
Gross Fail: Not reported
Modified By: Spills
Last Modified: 10/1/2004
Test Method: Unknown

NY MANIFEST:

EPA ID: NYP003601416
Country: USA
Mailing Name: NYSDEC
Mailing Contact: KEVIN N. GLASER
Mailing Address: 600 DELAWARE AVENUE
Mailing Address 2: Not reported
Mailing City: BUFFALO
Mailing State: NY
Mailing Zip: 14202
Mailing Zip4: Not reported
Mailing Country: USA
Mailing Phone: 716-847-4585

Document ID: NYO1414818
Manifest Status: Completed copy

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYSDEC (Continued)

1000185749

Trans1 State ID: 9A-214
Trans2 State ID: Not reported
Generator Ship Date: 840709
Trans1 Recv Date: 840709
Trans2 Recv Date: Not reported
TSD Site Recv Date: 840709
Part A Recv Date: 840716
Part B Recv Date: 840716
Generator EPA ID: NYP000785113
Trans1 EPA ID: NYD980592653
Trans2 EPA ID: Not reported
TSDF ID: NYD980592653
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00250
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 005
Container Type: DM - Metal drums, barrels
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 100
Year: 84

Document ID: NYA4108432
Manifest Status: Completed copy
Trans1 State ID: Not reported
Trans2 State ID: 36972GV
Generator Ship Date: 860904
Trans1 Recv Date: 860904
Trans2 Recv Date: Not reported
TSD Site Recv Date: 860908
Part A Recv Date: 860910
Part B Recv Date: 860916
Generator EPA ID: NYD981178650
Trans1 EPA ID: NYD049836679
Trans2 EPA ID: Not reported
TSDF ID: NYD049836679
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00450
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 86

Document ID: NYA3992196
Manifest Status: Completed copy
Trans1 State ID: 67859GKNY
Trans2 State ID: Not reported
Generator Ship Date: 860603
Trans1 Recv Date: 860603
Trans2 Recv Date: Not reported
TSD Site Recv Date: 860604
Part A Recv Date: 860606
Part B Recv Date: 860606
Generator EPA ID: NYD981178650

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYSDEC (Continued)

1000185749

Trans1 EPA ID: NYD049836679
Trans2 EPA ID: Not reported
TSDF ID: NYD049836679
Waste Code: D002 - NON-LISTED CORROSIVE WASTES
Quantity: 00008
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: L Landfill.
Specific Gravity: 100
Year: 86

Document ID: NYA3992152
Manifest Status: Completed copy
Trans1 State ID: 67859GKNY
Trans2 State ID: Not reported
Generator Ship Date: 860603
Trans1 Recv Date: 860603
Trans2 Recv Date: Not reported
TSD Site Recv Date: 860604
Part A Recv Date: 860606
Part B Recv Date: 860606
Generator EPA ID: NYD981178650
Trans1 EPA ID: NYD049836679
Trans2 EPA ID: Not reported
TSDF ID: NYD049836679
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00020
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 100
Waste Code: Not reported
Quantity: 00002
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Waste Code: Not reported
Quantity: 00020
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 004
Container Type: DM - Metal drums, barrels
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 100
Waste Code: Not reported
Quantity: 00125
Units: P - Pounds
Number of Containers: 002
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 86

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYSDEC (Continued)

1000185749

EPA ID: NYD981178650
Country: USA
Mailing Name: NYSDEC
Mailing Contact: NYSDEC
Mailing Address: 600 DELAWARE AVE
Mailing Address 2: Not reported
Mailing City: BUFFALO
Mailing State: NY
Mailing Zip: 14202
Mailing Zip4: Not reported
Mailing Country: USA
Mailing Phone: 716-847-4676

Document ID: NYO1414818
Manifest Status: Completed copy
Trans1 State ID: 9A-214
Trans2 State ID: Not reported
Generator Ship Date: 840709
Trans1 Recv Date: 840709
Trans2 Recv Date: Not reported
TSD Site Recv Date: 840709
Part A Recv Date: 840716
Part B Recv Date: 840716
Generator EPA ID: NYP000785113
Trans1 EPA ID: NYD980592653
Trans2 EPA ID: Not reported
TSDF ID: NYD980592653
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00250
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 005
Container Type: DM - Metal drums, barrels
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 100
Year: 84

Document ID: NYA4108432
Manifest Status: Completed copy
Trans1 State ID: Not reported
Trans2 State ID: 36972GV
Generator Ship Date: 860904
Trans1 Recv Date: 860904
Trans2 Recv Date: Not reported
TSD Site Recv Date: 860908
Part A Recv Date: 860910
Part B Recv Date: 860916
Generator EPA ID: NYD981178650
Trans1 EPA ID: NYD049836679
Trans2 EPA ID: Not reported
TSDF ID: NYD049836679
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00450
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYSDEC (Continued)

1000185749

Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 86

Document ID: NYA3992196
Manifest Status: Completed copy
Trans1 State ID: 67859GKNY
Trans2 State ID: Not reported
Generator Ship Date: 860603
Trans1 Recv Date: 860603
Trans2 Recv Date: Not reported
TSD Site Recv Date: 860604
Part A Recv Date: 860606
Part B Recv Date: 860606
Generator EPA ID: NYD981178650
Trans1 EPA ID: NYD049836679
Trans2 EPA ID: Not reported
TSDF ID: NYD049836679
Waste Code: D002 - NON-LISTED CORROSIVE WASTES
Quantity: 00008
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: L Landfill.
Specific Gravity: 100
Year: 86

Document ID: NYA3992152
Manifest Status: Completed copy
Trans1 State ID: 67859GKNY
Trans2 State ID: Not reported
Generator Ship Date: 860603
Trans1 Recv Date: 860603
Trans2 Recv Date: Not reported
TSD Site Recv Date: 860604
Part A Recv Date: 860606
Part B Recv Date: 860606
Generator EPA ID: NYD981178650
Trans1 EPA ID: NYD049836679
Trans2 EPA ID: Not reported
TSDF ID: NYD049836679
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00020
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 100
Waste Code: Not reported
Quantity: 00002
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYSDEC (Continued)

1000185749

Waste Code: Not reported
Quantity: 00020
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 004
Container Type: DM - Metal drums, barrels
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 100
Waste Code: Not reported
Quantity: 00125
Units: P - Pounds
Number of Containers: 002
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 86

EPA ID: NYP000785113
Country: USA
Mailing Name: NYSDEC
Mailing Contact: ROBERT C WOZNIAK
Mailing Address: 600 DELAWARE AVENUE
Mailing Address 2: Not reported
Mailing City: BUFFALO
Mailing State: NY
Mailing Zip: 14202
Mailing Zip4: Not reported
Mailing Country: USA
Mailing Phone: 716-847-4585

Document ID: NYO1414818
Manifest Status: Completed copy
Trans1 State ID: 9A-214
Trans2 State ID: Not reported
Generator Ship Date: 840709
Trans1 Recv Date: 840709
Trans2 Recv Date: Not reported
TSD Site Recv Date: 840709
Part A Recv Date: 840716
Part B Recv Date: 840716
Generator EPA ID: NYP000785113
Trans1 EPA ID: NYD980592653
Trans2 EPA ID: Not reported
TSD ID: NYD980592653
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00250
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 005
Container Type: DM - Metal drums, barrels
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 100
Year: 84

Document ID: NYA4108432
Manifest Status: Completed copy
Trans1 State ID: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYSDEC (Continued)

1000185749

Trans2 State ID: 36972GV
Generator Ship Date: 860904
Trans1 Recv Date: 860904
Trans2 Recv Date: Not reported
TSD Site Recv Date: 860908
Part A Recv Date: 860910
Part B Recv Date: 860916
Generator EPA ID: NYD981178650
Trans1 EPA ID: NYD049836679
Trans2 EPA ID: Not reported
TSD ID: NYD049836679
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00450
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 86

Document ID: NYA3992196
Manifest Status: Completed copy
Trans1 State ID: 67859GKNY
Trans2 State ID: Not reported
Generator Ship Date: 860603
Trans1 Recv Date: 860603
Trans2 Recv Date: Not reported
TSD Site Recv Date: 860604
Part A Recv Date: 860606
Part B Recv Date: 860606
Generator EPA ID: NYD981178650
Trans1 EPA ID: NYD049836679
Trans2 EPA ID: Not reported
TSD ID: NYD049836679
Waste Code: D002 - NON-LISTED CORROSIVE WASTES
Quantity: 00008
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: L Landfill.
Specific Gravity: 100
Year: 86

Document ID: NYA3992152
Manifest Status: Completed copy
Trans1 State ID: 67859GKNY
Trans2 State ID: Not reported
Generator Ship Date: 860603
Trans1 Recv Date: 860603
Trans2 Recv Date: Not reported
TSD Site Recv Date: 860604
Part A Recv Date: 860606
Part B Recv Date: 860606
Generator EPA ID: NYD981178650
Trans1 EPA ID: NYD049836679

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYSDEC (Continued)

1000185749

Trans2 EPA ID: Not reported
TSD ID: NYD049836679
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00020
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 100
Waste Code: Not reported
Quantity: 00002
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Waste Code: Not reported
Quantity: 00020
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 004
Container Type: DM - Metal drums, barrels
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 100
Waste Code: Not reported
Quantity: 00125
Units: P - Pounds
Number of Containers: 002
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 86

SPILLS:

Facility ID: 9004957
DER Facility ID: 142956
Facility Type: ER
Site ID: 169892
DEC Region: 9
Spill Date: 8/3/1990
Spill Number/Closed Date: 9004957 / 8/6/1990
Spill Cause: Human Error
Spill Class: Not reported
SWIS: 1502
Investigator: PRINGLE
Referred To: Not reported
Reported to Dept: 8/3/1990
CID: Not reported
Water Affected: Not reported
Spill Source: Institutional, Educational, Gov., Other
Spill Notifier: Citizen
Cleanup Ceased: 8/6/1990
Cleanup Meets Std: True
Last Inspection: 8/6/1990
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 8/7/1990

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYSDEC (Continued)

1000185749

Spill Record Last Update: 12/4/1990
Spiller Name: Not reported
Spiller Company: NYSDEC
Spiller Address: 600 DELAWARE AVENUE
Spiller City,St,Zip: BUFFALO, NY 14202
Spiller Company: 001
Contact Name: Not reported
Contact Phone: Not reported
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "MNP"08/06/90: 8/6/90 MNP INSP. SPEEDY DRY PICKED UP & DISPOSED, I PUT GASOLINE SOAKED SORBENT PADS IN DUMPSTER. NO FURTHER ACTION NEEDED, COMPLETE.
Remarks: NOZZLE DID NOT SHUT OFF WHILE NYSDEC EMPLOYEE WAS FUELING STATE VEHICLE

Material:
Site ID: 169892
Operable Unit ID: 942608
Operable Unit: 01
Material ID: 436030
Material Code: 0009
Material Name: Gasoline
Case No.: Not reported
Material FA: Petroleum
Quantity: 15
Units: Gallons
Recovered: 15
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Facility ID: 9002580
DER Facility ID: 142956
Facility Type: ER
Site ID: 169891
DEC Region: 9
Spill Date: 6/5/1990
Spill Number/Closed Date: 9002580 / 6/6/1990
Spill Cause: Equipment Failure
Spill Class: Not reported
SWIS: 1502
Investigator: FIX
Referred To: Not reported
Reported to Dept: 6/5/1990
CID: Not reported
Water Affected: Not reported
Spill Source: Institutional, Educational, Gov., Other
Spill Notifier: Responsible Party
Cleanup Ceased: 6/6/1990
Cleanup Meets Std: True
Last Inspection: 6/6/1990
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 6/6/1990

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYSDEC (Continued)

1000185749

Spill Record Last Update: 6/8/1990
Spiller Name: Not reported
Spiller Company: MODERN DISPOSAL
Spiller Address: Not reported
Spiller City,St,Zip: NY
Spiller Company: 999
Contact Name: Not reported
Contact Phone: Not reported
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "CAF" // : CAF SITE INSPECTION-REASONABLE CLEANUP,SOME SPEEDY DRY STILL ON SITENO FURTHER ACTION PLANNED.,
Remarks: MODERN DISPOSAL WILL SEND CREW TO CLEAN UO,BENDERSON CREWS STARTED CLEANUP BY APPLYING FLOOR DRY.

Material:

Site ID: 169891
Operable Unit ID: 940597
Operable Unit: 01
Material ID: 437321
Material Code: 0016A
Material Name: NON PCB OIL
Case No.: Not reported
Material FA: Petroleum
Quantity: 2
Units: Gallons
Recovered: 2
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Facility ID: 8900461
DER Facility ID: 142956
Facility Type: ER
Site ID: 169888
DEC Region: 9
Spill Date: 4/14/1989
Spill Number/Closed Date: 8900461 / 7/3/1991
Spill Cause: Human Error
Spill Class: Not reported
SWIS: 1502
Investigator: LEARY
Referred To: Not reported
Reported to Dept: 4/17/1989
CID: Not reported
Water Affected: Not reported
Spill Source: Institutional, Educational, Gov., Other
Spill Notifier: Affected Persons
Cleanup Ceased: 7/3/1991
Cleanup Meets Std: True
Last Inspection: 4/17/1989
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 4/17/1989
Spill Record Last Update: 7/3/1991

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYSDEC (Continued)

1000185749

Spiller Name: Not reported
Spiller Company: NYSDEC
Spiller Address: DELAWARE AVENUE
Spiller City,St,Zip: BUFFALO, NY 14202
Spiller Company: 001
Contact Name: Not reported
Contact Phone: Not reported
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "RNL"04/17/89: RNL SITE INSP. 04/17/89 WITH R. MCCABE AND K. KISH, CLEANUP REQUIRED, RNL TO CONTACT BENDERSON FOR CLEANUP, J. MCMAHON AND P. BUECHI ALSON NOTIFIED.04/17/89: 04/17/89, P. BUECHI STATED BENDERSON REFUSED TO CLEANUP AS THEY STATED THEY WERE NOT THE SPILLER, RNL CONTACTED E&E TO CLEANUP ROOM, THEY WILL DO SO 04/17/89, PM.04/17/89: RNL SITE INSP. 04/17/89, E&E CLEANED UP ROOM OF FREE MERCURY, AIR MONITORING TO BE DONE 04/18/89.04/18/89: E&E SAMPLED AIR IN ROOM, LEVELS OF MUNCURY WERE FOUND, VENTILATION DONE.04/24/89: E&E AGAIN SAMPLED AIR IN ROOM, VIRTUALLY ALL READINGS WERE ZERO, CONTINUE TO VENTILATE.06/01/89: RNL DISCUSSION WITH LESTER ABOUT POP DISPOSAL AND METHOD OF PAYMENT FOR HIS DAMAGES, TALKED TO E&E, S&HW, AND ADMINSTRATION, NO ANSWER TO DATE.08/13/90: RNL DISCUSSION 08/13/90 WITH LESTER ABOUT POP DISPOSAL AND METHOD OF PAYMENT FOR HIS DAMAGES, STILL NO ANSWER TO DATE.01/29/91: RNL DISCUSSION 01/29/91 WITH LESTER ABOUT POP DISPOSAL AND METHOD OF PAYMENT FOR HIS DAMAGES, HE WILL CHECK WITH ALBANY, NO PAYMENT TO DATE.05/16/91: RNL REVIEW OF FILE, NO FURTHER SPILL UNIT INVOLVEMENT, LESTER NOT PURSUEING HIS COST RECOVERY, CLOSEOUT.

Remarks: MERCURY SPILL FROM MANOMETER FOUND IN AIR ROOM

Material:

Site ID: 169888
Operable Unit ID: 926868
Operable Unit: 01
Material ID: 451795
Material Code: 0031A
Material Name: MERCURY
Case No.: 07439976
Material FA: Hazardous Material
Quantity: 1
Units: Pounds
Recovered: Yes
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Facility ID: 8608020
DER Facility ID: 142956
Facility Type: ER
Site ID: 169887
DEC Region: 9
Spill Date: 3/26/1987
Spill Number/Closed Date: 8608020 / 3/26/1987
Spill Cause: Equipment Failure
Spill Class: Not reported
SWIS: 1502
Investigator: COOKE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYSDEC (Continued)

1000185749

Referred To: Not reported
Reported to Dept: 3/3/1987
CID: Not reported
Water Affected: Not reported
Spill Source: Passenger Vehicle
Spill Notifier: Affected Persons
Cleanup Ceased: 3/26/1987
Cleanup Meets Std: True
Last Inspection: 3/26/1987
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 3/31/1987
Spill Record Last Update: 4/6/1987
Spiller Name: Not reported
Spiller Company: NYS DEPT. OF ENV. CONS.
Spiller Address: 600 DELAWARE AVENUE
Spiller City,St,Zip: BUFFALO, NY 14202
Spiller Company: 001
Contact Name: Not reported
Contact Phone: Not reported
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "JDC" // : JDC SITE INSP. 03/26/87, CLEANED UP BY DEC SPILL UNIT.
Remarks: Not reported

Material:

Site ID: 169887
Operable Unit ID: 904596
Operable Unit: 01
Material ID: 473508
Material Code: 0009
Material Name: Gasoline
Case No.: Not reported
Material FA: Petroleum
Quantity: 5
Units: Gallons
Recovered: 5
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Facility ID: 8912037
DER Facility ID: 142956
Facility Type: ER
Site ID: 169890
DEC Region: 9
Spill Date: 3/20/1990
Spill Number/Closed Date: 8912037 / 3/20/1990
Spill Cause: Human Error
Spill Class: Not reported
SWIS: 1502
Investigator: ROSS
Referred To: Not reported
Reported to Dept: 3/20/1990
CID: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NYSDEC (Continued)

1000185749

Water Affected: Not reported
Spill Source: Institutional, Educational, Gov., Other
Spill Notifier: Responsible Party
Cleanup Ceased: 3/20/1990
Cleanup Meets Std: True
Last Inspection: 3/20/1990
Recommended Penalty: False
UST Trust: True
Remediation Phase: 0
Date Entered In Computer: 3/20/1990
Spill Record Last Update: 3/26/1990
Spiller Name: Not reported
Spiller Company: NYSDEC
Spiller Address: 600 DELAWARE AVENUE
Spiller City,St,Zip: BUFFALO, NY 14202
Spiller Company: 001
Contact Name: Not reported
Contact Phone: Not reported
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "LQR"03/20/90: LQR AND CAF SPILL UNIT SPREAD SPEEDY DRY AND PADS,MECHANIC CLEANED UP.
Remarks: OVER FILL TANK ON VEHICLE

Material:
Site ID: 169890
Operable Unit ID: 937794
Operable Unit: 01
Material ID: 441518
Material Code: 0009
Material Name: Gasoline
Case No.: Not reported
Material FA: Petroleum
Quantity: 4
Units: Gallons
Recovered: 4
Resource Affected: Not reported
Oxygenate: False

Tank Test:

[Click this hyperlink](#) while viewing on your computer to access additional NY_SPILL: detail in the EDR Site Report.

129
ENE
1/4-1/2
0.466 mi.
2462 ft.

MASTEN SERVICE INC
247 MASTEN AVE
BUFFALO, NY 14209

NY LTANKS **U003318536**
NY UST **N/A**
NY HIST UST
NY Spills

Relative:
Lower

LTANKS:
Site ID: 205526
Spill Number/Closed Date: 9601741 / 5/3/1996
Spill Date: 5/3/1996
Spill Cause: Tank Overfill
Spill Source: Gasoline Station
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.

Actual:
639 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MASTEN SERVICE INC (Continued)

U003318536

Cleanup Ceased: Not reported
Cleanup Meets Standard: True
SWIS: 1502
Investigator: PRINGLE
Referred To: Not reported
Reported to Dept: 5/3/1996
CID: Not reported
Water Affected: Not reported
Spill Notifier: Responsible Party
Last Inspection: 5/3/1996
Recommended Penalty: False
UST Involvement: True
Remediation Phase: 0
Date Entered In Computer: 5/3/1996
Spill Record Last Update: 3/19/2002
Spiller Name: BILL ANDERSON
Spiller Company: FRANCIS W KING PETROLEUM
Spiller Address: 370 ESSEX AVENUE
Spiller City,St,Zip: BUFFALO, NY 14207-
Spiller County: 001
Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported
DEC Region: 9
DER Facility ID: 170654
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "MNP"05/03/96: MNP INSP. SPOKE W/ STATION OWNER. SPILL CAUSED BY AIR LOCK IN VENT. KING PETROLEUM FINISHED DELIVERY WITHOUT ANY MORE PROBLEMS. AFTER INITIAL SPILL. ONLY STAINED BLACKTOP, NO DRAINS AFFECTED. CLEANUP USING SORBENT PADS SATISFACTORY.. NO FURTHER ACTION NEEDED, COMPLETE.
Remarks: tank was being filled and petrolium gushed out at the end maybe a vent problem - stain on pavement - spill cleaned up usingpads

Material:
Site ID: 205526
Operable Unit ID: 1033309
Operable Unit: 01
Material ID: 351546
Material Code: 0009
Material Name: Gasoline
Case No.: Not reported
Material FA: Petroleum
Quantity: 15
Units: Gallons
Recovered: 10
Resource Affected: Not reported
Oxygenate: False

Tank Test:

UST:
Id/Status: 9-495913 / Active
Program Type: PBS
Region: STATE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MASTEN SERVICE INC (Continued)

U003318536

DEC Region: 9
Expiration Date: 2014/05/25
UTM X: 184929.22638000001
UTM Y: 4757938.2141399998
Site Type: Retail Gasoline Sales

Affiliation Records:

Site Id: 54693
Affiliation Type: Mail Contact
Company Name: MASTEN SERVICE, INC
Contact Type: Not reported
Contact Name: DAVID PLISZKA
Address1: 247 MASTEN AVE
Address2: Not reported
City: BUFFALO
State: NY
Zip Code: 14209
Country Code: 001
Phone: (716) 881-6441
EMail: MASTENSALES@VERIZON.NET
Fax Number: Not reported
Modified By: LDGOMEZ
Date Last Modified: 5/8/2009

Site Id: 54693
Affiliation Type: On-Site Operator
Company Name: MASTEN SERVICE INC
Contact Type: Not reported
Contact Name: DAVID PLISZKA
Address1: Not reported
Address2: Not reported
City: Not reported
State: NY
Zip Code: Not reported
Country Code: 001
Phone: (716) 881-6441
EMail: Not reported
Fax Number: Not reported
Modified By: bfgraber
Date Last Modified: 2/4/2008

Site Id: 54693
Affiliation Type: Emergency Contact
Company Name: DAVID PLISZKA
Contact Type: Not reported
Contact Name: DAVID PLISZKA
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 999
Phone: (716) 913-3012
EMail: Not reported
Fax Number: Not reported
Modified By: bfgraber
Date Last Modified: 2/4/2008

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MASTEN SERVICE INC (Continued)

U003318536

Site Id: 54693
Affiliation Type: Facility Owner
Company Name: DAVID PLISZKA
Contact Type: OWNER
Contact Name: DAVID PLISZKA
Address1: 201 LEYDECKER RD.
Address2: Not reported
City: WEST SENECA
State: NY
Zip Code: 14224
Country Code: 001
Phone: (716) 913-3012
EMail: Not reported
Fax Number: Not reported
Modified By: LDGOMEZ
Date Last Modified: 5/8/2009

Tank Info:

Tank Number: 1
Tank ID: 168643
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 4000
Install Date: Not reported
Date Tank Closed: 04/01/1990
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0009
Common Name of Substance: Gasoline

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

H00 - Tank Leak Detection - None
B00 - Tank External Protection - None
G00 - Tank Secondary Containment - None
F00 - Pipe External Protection - None
A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
J02 - Dispenser - Suction Dispenser
C02 - Pipe Location - Underground/On-ground
I00 - Overfill - None

Tank Number: 2
Tank ID: 168644
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 2000
Install Date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MASTEN SERVICE INC (Continued)

U003318536

Date Tank Closed: 04/01/1990
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0009
Common Name of Substance: Gasoline

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

I00 - Overfill - None
A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
J02 - Dispenser - Suction Dispenser
F00 - Pipe External Protection - None
G00 - Tank Secondary Containment - None
B00 - Tank External Protection - None
H00 - Tank Leak Detection - None
C02 - Pipe Location - Underground/On-ground

Tank Number: 3
Tank ID: 170668
Tank Status: Temporarily Out of Service
Material Name: Temporarily Out of Service
Capacity Gallons: 3000
Install Date: 04/01/1990
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0009
Common Name of Substance: Gasoline

Tightness Test Method: NN
Date Test: 05/13/2004
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: LDGOMEZ
Last Modified: 05/08/2009

Equipment Records:

A00 - Tank Internal Protection - None
J02 - Dispenser - Suction Dispenser
F04 - Pipe External Protection - Fiberglass
K01 - Spill Prevention - Catch Basin
E00 - Piping Secondary Containment - None
H02 - Tank Leak Detection - Interstitial - Manual Monitoring
H04 - Tank Leak Detection - Groundwater Well
L02 - Piping Leak Detection - Interstitial - Manual Monitoring
C02 - Pipe Location - Underground/On-ground
L04 - Piping Leak Detection - Groundwater Well
D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MASTEN SERVICE INC (Continued)

U003318536

G04 - Tank Secondary Containment - Double-Walled (Underground)
B02 - Tank External Protection - Original Sacrificial Anode
I00 - Overfill - None

Tank Number: 4
Tank ID: 170669
Tank Status: Temporarily Out of Service
Material Name: Temporarily Out of Service
Capacity Gallons: 3000
Install Date: 04/01/1990
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0009
Common Name of Substance: Gasoline

Tightness Test Method: NN
Date Test: 05/13/2004
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: LDGOMEZ
Last Modified: 05/08/2009

Equipment Records:

B02 - Tank External Protection - Original Sacrificial Anode
I00 - Overfill - None
E00 - Piping Secondary Containment - None
A00 - Tank Internal Protection - None
J02 - Dispenser - Suction Dispenser
F04 - Pipe External Protection - Fiberglass
K01 - Spill Prevention - Catch Basin
D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
G04 - Tank Secondary Containment - Double-Walled (Underground)
H02 - Tank Leak Detection - Interstitial - Manual Monitoring
H04 - Tank Leak Detection - Groundwater Well
L02 - Piping Leak Detection - Interstitial - Manual Monitoring
C02 - Pipe Location - Underground/On-ground
L04 - Piping Leak Detection - Groundwater Well

HIST UST:

PBS Number: 9-495913
SPDES Number: Not reported
Emergency Contact: KEVIN DANIELL
Emergency Telephone: (716) 553-4084
Operator: KEVIN DANIELL
Operator Telephone: (716) 881-6441
Owner Name: KEVIN DANIELL
Owner Address: 119 LEONARD
Owner City,St,Zip: LACKAWANNA, NY 14219
Owner Telephone: (716) 553-4084
Owner Type: Corporate/Commercial
Owner Subtype: Not reported
Mailing Name: MASTEN SERVICE, INC
Mailing Address: 247 MASTEN AVE
Mailing Address 2: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MASTEN SERVICE INC (Continued)

U003318536

Mailing City,St,Zip: BUFFALO, NY 14209
Mailing Contact: KEVIN DANIELL
Mailing Telephone: (716) 881-6441
Owner Mark: First Owner
Facility Status: 1 - Active PBS facility, i.e. total capacity of the PBS tanks is greater than 1,100 gallons, regardless if Subpart 360-14 tanks exist or not at the facility.

Facility Addr2: Not reported
SWIS ID: 1402
Old PBS Number: Not reported
Facility Type: RETAIL GASOLINE SALES
Inspected Date: 02/16/1995
Inspector: JES
Inspection Result: Not reported
Federal ID: Not reported
Certification Flag: False
Certification Date: 02/25/2000
Expiration Date: 10/27/2004
Renew Flag: False
Renewal Date: Not reported
Total Capacity: 6000
FAMT: True
Facility Screen: No Missing Data
Owner Screen: No Missing Data
Tank Screen: No Missing Data
Dead Letter: False
CBS Number: Not reported
Town or City: BUFFALO (C)
County Code: 14
Town or City: 02
Region: 9

Tank Id: 1
Tank Location: UNDERGROUND
Tank Status: Closed-Removed
Install Date: Not reported
Capacity (gals): 4000
Product Stored: LEADED GASOLINE
Tank Type: Steel/carbon steel
Tank Internal: None
Tank External: None
Pipe Location: Underground
Pipe Type: STEEL/IRON
Pipe Internal: None
Pipe External: None
Second Containment: None
Leak Detection: None
Overfill Prot: None
Dispenser: Suction
Date Tested: Not reported
Next Test Date: Not reported
Missing Data for Tank: No Missing Data
Date Closed: 04/01/1990
Test Method: Not reported
Deleted: False
Updated: True
Lat/long: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MASTEN SERVICE INC (Continued)

U003318536

Tank Id: 2
Tank Location: UNDERGROUND
Tank Status: Closed-Removed
Install Date: Not reported
Capacity (gals): 2000
Product Stored: LEADED GASOLINE
Tank Type: Steel/carbon steel
Tank Internal: None
Tank External: None
Pipe Location: Underground
Pipe Type: STEEL/IRON
Pipe Internal: None
Pipe External: None
Second Containment: None
Leak Detection: None
Overfill Prot: None
Dispenser: Suction
Date Tested: Not reported
Next Test Date: Not reported
Missing Data for Tank: No Missing Data
Date Closed: 04/01/1990
Test Method: Not reported
Deleted: False
Updated: True
Lat/long: Not reported

SPILLS:

Facility ID: 0813761
DER Facility ID: 360677
Facility Type: ER
Site ID: 411459
DEC Region: 9
Spill Date: 3/20/2009
Spill Number/Closed Date: 0813761 / 3/23/2009
Spill Cause: Deliberate
Spill Class: Possible release with minimal potential for fire or hazard or Known release with no damage. DEC Response. Willing Responsible Party. Corrective action taken.

SWIS: 1502
Investigator: FXGALLEG
Referred To: LAW ENFORCEMENT
Reported to Dept: 3/20/2009
CID: Not reported
Water Affected: Not reported
Spill Source: Gasoline Station
Spill Notifier: Citizen
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: 3/20/2009
Spill Record Last Update: 3/23/2009
Spiller Name: Not reported
Spiller Company: MASTEN SALES & SERVICES
Spiller Address: 247 MASTEN AVE.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MASTEN SERVICE INC (Continued)

U003318536

Spiller City,St,Zip: BUFFALO, NY
Spiller Company: 999
Contact Name: Not reported
Contact Phone: Not reported
DEC Memo: 3/21/09 REFERRED SPILL REPORT TO THE DIVISION OF LAW ENFORCEMENT FOR FOLLOW UP. SPILL IS CLOSED.ELECTRONIC FILE ONLY.
Remarks: CALLER STATES THAT HE HAS SEEN EMPLOYEES DUMP ANT-FREZZE & TRANSMISSION FLUID IN A HOLE IN THE FLOOR,NEAR THE WASH BASINS.

Material:

Site ID: 411459
Operable Unit ID: 1167935
Operable Unit: 01
Material ID: 2159558
Material Code: 0021
Material Name: Transmission Fluid
Case No.: Not reported
Material FA: Petroleum
Quantity: Not reported
Units: Gallons
Recovered: Not reported
Resource Affected: Not reported
Oxygenate: False
Site ID: 411459
Operable Unit ID: 1167935
Operable Unit: 01
Material ID: 2159557
Material Code: 0043A
Material Name: ANTIFREEZE
Case No.: Not reported
Material FA: Other
Quantity: Not reported
Units: Gallons
Recovered: Not reported
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Y130
SSE
1/4-1/2
0.470 mi.
2481 ft.

**ROSWELL PARK CANCER INST.
MICHIGAN AND HIGH STREETS
BUFFALO, NY**
Site 1 of 2 in cluster Y

**NY LTANKS S103038260
N/A**

Relative:
Higher

LTANKS:

Actual:
650 ft.

Site ID: 116024
Spill Number/Closed Date: 9504008 / 7/1/1996
Spill Date: 7/3/1995
Spill Cause: Tank Overfill
Spill Source: Institutional, Educational, Gov., Other
Spill Class: Known release that creates potential for fire or hazard. DEC Response. Unknown Responsible Party. Corrective action taken. (ISR)
Cleanup Ceased: Not reported
Cleanup Meets Standard: False
SWIS: 1502
Investigator: RMCROSSE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ROSWELL PARK CANCER INST. (Continued)

S103038260

Referred To: Not reported
Reported to Dept: 7/3/1995
CID: Not reported
Water Affected: Not reported
Spill Notifier: Responsible Party
Last Inspection: 4/29/1996
Recommended Penalty: False
UST Involvement: False
Remediation Phase: 0
Date Entered In Computer: 7/6/1995
Spill Record Last Update: 3/19/1999
Spiller Name: Not reported
Spiller Company: ROSWELL PARK CANCER INST.
Spiller Address: ELM AND CARLTON STREETS
Spiller City,St,Zip: BUFFALO, NY 14263
Spiller County: 001
Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported
DEC Region: 9
DER Facility ID: 100997
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "RMC"07/03/95: RMC/RAY JONES/AL GUSTAFSON/EPS/SITE EPS GAVE ROSWELL ESTIMATE OF 10 K TO CLEAN UP ESTIMATED 50 GALLON SPILL AROUND CONTAINMENT MH,RMC ADVISED AUTHORIZATION TO CONTRACTOR BY ROSWELL COULD TAKE 6 WEEKS.07/03/95: RMC/RAY JONES/AL GUSTAFSON/EPS/SITE AFTER TALKING WITH RNL.. DEC+ROSWELL AGREED DEC TO DO CLEANUP AND BILL ROSWELL FOR COST LATER, ROE SIGNED, EPS AUTHORIZED TO BEGIN.07/03/95: RMC/EPS/SITE TWO LOADS MATERIAL EXCAVATED,APPEARS SIGNIFICANTLY MORE PRODUCTS SPILLED THAN ORIGINALLY THOUGHT,NO ROOM TO STAGE ON SITE, SUMP DUG TO GIVE PRODUCT PLACE TO ACCUMULATE TILL WED AM.07/03/95: RMC/FILE CONTACTED HENRY SANDONATO AND ADVISED OF SPILL AND SPACE PROBLEMS, HS AGREED THAT STAGING AT BIG K SITE NOT DESIRABLE BUT HAVE NO OTHER OPTION READILY AVAILABLE,RMC WROTE TRANSPORTER PERMIT.07/05/95: RMC/SITE WORK UNDER WAY, EPS FOUND LIMITS OF SPILL, AND RECOVERED 300 + GALLONS PURE PRODUCT, FIVE LOADS CONTAMINATED SOIL EXCAVATED, EXCAVATION COMPLETE,.07/06/95: RMC/SITE RESTORATION WORK BEGUN, CLAY REPLACEMENT COMPLETE, REPLACING STONE NOW, TO DRUM CONTENTS OF VAC TRUCK PENDING DISPOSAL,.07/06/95: RMC/FILE AUTHORIZATION TO PROCEED AND RP LETTER SENT.07/14/95: RMC/FILE DISPOSAL AND TESTING DUE 8/30/95.08/02/95: RNL/EPS/ROSWELL/SITE FOUND ADDITIONAL MINOR SPILLAGE UNDER CONCRETE CURB, EPS TO REMEDIATE, DISPOSAL AND TESTING DUE 8/30/95.08/10/95: RMC/ROSWELL/JERRY MILNE ENG 3157351960/PEG LAWRENCE ERM 6335920/SITE WENT OVER REQUIRMENT FOR UTILITY EXCAVATIONS,NO ACTION UNLESS FIND VISUAL CONTAMINATION,DISPOSAL DUE FOR SOIL SEGRATED DUE 9/15/95\08/11/95: RMC/SITE NO VISUAL CONTAMINATION NOTED IN NFG EXCAVATIONS OR WATER LINEEXCAVATIONS TO THE EAST OF 6 OIL TANKS WHERE RECENT OVERFILL HAPPENED, DISPOSAL BY RP FOR SOIL DUE 9/15/95 DISP+BILL DUE EPS 9/1.02/09/96 RMC/GUSTAFSON/PHONE 6 OIL TANK REMOVALS ARE A YEAR A HEAD OF SCHEDUL, CONTRACT TO BE RELEASED TO OGS BY 3/1, THE DISPOSAL OF THE REMAINING LOAD OF SOIL WILL BE IN THE TANK REMOVAL PROJECT, CALL FROM OGS DUE 3/30/9603/16/96 RMC/RECEIVED TANK CLOSURE NOTICE, REMOVALS TO PROCEED, 3/19/9603/19/96 RMC/SITE NO WORK YET03/20/96 RMC/BURN/PHONE REMOVALS PUT BACK TO NEXT WEEK , SITE CONTACT FOR OGS IS BOB MAYER 852-743704/17/96 RMC/FILE SAC INSPECTED SITE ON 4/10 AND 4/12/96 TWO TANKS REMOVED, CAN NOT IMMEDIATELY FIND

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ROSWELL PARK CANCER INST. (Continued)

S103038260

550 GALLON DIESEL TANK DUE TO SITE LIMITATIONS ON EXCAVATION 04/17/96
RMC/BOB MAYER/OWEN BURN/PHONE WATER IN EXCAVATION WILL BE PUMPED OUT
THEN EXCAVATION OF CONTAMINATION WILL RESUME, FUTURE CONTRACT WILL
COVER DIESEL AND OTHER TWO TANKS, TO REINSPECT 04/27/96
RMC/BURN/DENNIS MAHN PRINCIPAL UTILITIES ENG 845 5866/SITE TWO TANKS
REMOVED AND SIGNIFICANT AMOUNTS OF CONTAMINATED SOIL AND WATER TO
REMOVE REMAINING VISUAL CONTAMINATION AND TEST, THREE REMAINING TANKS
TO BE REMOVED LATER THIS YEAR, TESTING AND DISPOSAL DUE
5/30/96 07/01/96 RMC/BOB MAYER/DENNIS MAHN/PHONE RMC WAS ADVISED THAT
REMAINING TANKS WOULD BE TAKEN OUT OF SERVICE AND REMOVED LATE THIS
YEAR OR EARLY NEXT YEAR, FILE NOTE THESE REMOVALS MAY RESULT IN
ADDITIONAL SPILLAGE BEING FOUND, 07/01/96 RMC/FILE, MINOR EXCEEDANCES
IN TANK PIT, SITE TO BE MADE INACTIVE
OVER FILLED 6 OIL TANK

Remarks:

Material:

Site ID: 116024
Operable Unit ID: 1018472
Operable Unit: 01
Material ID: 365518
Material Code: 0001A
Material Name: #2 Fuel Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 600
Units: Gallons
Recovered: 600
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Site ID: 309722
Spill Number/Closed Date: 9875428 / 3/1/1999
Spill Date: 2/1/1999
Spill Cause: Tank Overfill
Spill Source: Institutional, Educational, Gov., Other
Spill Class: Possible release with minimal potential for fire or hazard or Known
release with no damage. DEC Response. Willing Responsible Party.
Corrective action taken.
Cleanup Ceased: Not reported
Cleanup Meets Standard: False
SWIS: 1502
Investigator: RMCROSSE
Referred To: Not reported
Reported to Dept: 3/1/1999
CID: Not reported
Water Affected: Not reported
Spill Notifier: Other
Last Inspection: Not reported
Recommended Penalty: False
UST Involvement: True
Remediation Phase: 0
Date Entered In Computer: 3/1/1999
Spill Record Last Update: 3/31/1999

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ROSWELL PARK CANCER INST. (Continued)

S103038260

Spiller Name: Not reported
Spiller Company: ROSWELL PARK
Spiller Address: 666 ELM STREET
Spiller City,St,Zip: BUFFALO, NY 14263
Spiller County: 001
Spiller Contact: OWEN BYRNE OGS
Spiller Phone: (716) 674-0437
Spiller Extention: Not reported
DEC Region: 9
DER Facility ID: 250034
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "RMC"03/01/99: RMC TELECON WITH CRONIN, TANK CLOSURE REPORT SHOWS ONE MINOR EXCEEDANCE, NO FURTHER ACTION REQUIRED, INACTIVE
Remarks: SAMPLE RESULTS FROM 2500 GALLON TANK EXCAVATION SHOW MINOR EXCEEDANCE, NO VISUAL CONTAMINATION WAS NOTED AT THE TIME OF EXCAVATION BY THE CONTRACTOR

Material:
Site ID: 309722
Operable Unit ID: 1074849
Operable Unit: 01
Material ID: 307068
Material Code: 0008
Material Name: Diesel
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Y131
SSE
1/4-1/2
0.470 mi.
2481 ft.

**ROSWELL PARK CANCER INSTITUTE
ELM & CARLTON STREETS
BUFFALO, NY 14263**

**RCRA-LQG 1000436071
NY LTANKS NYD083534115
NY Spills**

Site 2 of 2 in cluster Y

**Relative:
Higher**

RCRA-LQG:
Date form received by agency: 03/05/2012
Facility name: ROSWELL PARK CANCER INSTITUTE
Facility address: ELM & CARLTON STREETS
BUFFALO, NY 14263
EPA ID: NYD083534115
Contact: JOSEPH W MOSLOW
Contact address: ELM & CARLTON STREETS
BUFFALO, NY 14263
Contact country: US
Contact telephone: (716) 845-3872
Contact email: JOE.MOSLOW@ROSWELLPARK.ORG
EPA Region: 02
Land type: Other land type
Classification: Large Quantity Generator
Description: Handler: generates 1,000 kg or more of hazardous waste during any

**Actual:
650 ft.**

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ROSWELL PARK CANCER INSTITUTE (Continued)

1000436071

calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name: NYS DEPT. OF HEALTH
Owner/operator address: ELM & CARLTON STS.
BUFFALO, NY 14263
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Other
Owner/Operator Type: Owner
Owner/Op start date: 12/31/1979
Owner/Op end date: Not reported

Owner/operator name: PUBLIC BENEFIT CORPORATION
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Other
Owner/Operator Type: Operator
Owner/Op start date: 01/01/1900
Owner/Op end date: Not reported

Owner/operator name: ROSWELL PARK CANCER INSTITUTE
Owner/operator address: ELM & CARLTON STREETS
BUFFALO, NY 14263
Owner/operator country: US
Owner/operator telephone: (716) 845-2300
Legal status: Other
Owner/Operator Type: Owner
Owner/Op start date: 01/01/1900
Owner/Op end date: Not reported

Owner/operator name: Not reported
Owner/operator address: NOT REQUIRED
NOT REQUIRED, WY 99999
Owner/operator country: US
Owner/operator telephone: (212) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ROSWELL PARK CANCER INSTITUTE (Continued)

1000436071

Recycler of hazardous waste: Yes
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 02/26/2010
Facility name: ROSWELL PARK CANCER INSTITUTE
Classification: Large Quantity Generator

Date form received by agency: 02/26/2008
Facility name: ROSWELL PARK CANCER INSTITUTE
Classification: Large Quantity Generator

Date form received by agency: 01/01/2007
Facility name: ROSWELL PARK CANCER INSTITUTE
Classification: Large Quantity Generator

Date form received by agency: 02/28/2006
Facility name: ROSWELL PARK CANCER INSTITUTE
Classification: Large Quantity Generator

Date form received by agency: 02/27/2006
Facility name: ROSWELL PARK CANCER INSTITUTE
Classification: Large Quantity Generator

Date form received by agency: 02/25/2004
Facility name: ROSWELL PARK CANCER INSTITUTE
Classification: Large Quantity Generator

Date form received by agency: 02/05/2002
Facility name: ROSWELL PARK CANCER INSTITUTE
Site name: ROSWELL PARK CANCER INSTITUTE CORP
Classification: Large Quantity Generator

Date form received by agency: 01/01/2001
Facility name: ROSWELL PARK CANCER INSTITUTE
Site name: ROSWELL PARK CANCER INSTITUTE CORP.
Classification: Large Quantity Generator

Date form received by agency: 02/24/1998
Facility name: ROSWELL PARK CANCER INSTITUTE
Classification: Large Quantity Generator

Date form received by agency: 05/15/1996
Facility name: ROSWELL PARK CANCER INSTITUTE
Classification: Large Quantity Generator

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ROSWELL PARK CANCER INSTITUTE (Continued)

1000436071

Date form received by agency: 06/10/1994
Facility name: ROSWELL PARK CANCER INSTITUTE
Site name: ROSWELL PARK CANCER INSTITUTE NYSDH
Classification: Large Quantity Generator

Date form received by agency: 04/30/1992
Facility name: ROSWELL PARK CANCER INSTITUTE
Site name: NYSDOH ROSWELL PARK MEMORIAL INSTITUTE
Classification: Large Quantity Generator

Date form received by agency: 12/11/1981
Facility name: ROSWELL PARK CANCER INSTITUTE
Site name: ROSWELL PARK MEMORIAL INSTITUTE
Classification: Large Quantity Generator

Hazardous Waste Summary:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKEY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: D003
Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Waste code: D005
Waste name: BARIUM

Waste code: D007
Waste name: CHROMIUM

Waste code: D011
Waste name: SILVER

Waste code: D018
Waste name: BENZENE

Waste code: D019
Waste name: CARBON TETRACHLORIDE

Waste code: D022

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ROSWELL PARK CANCER INSTITUTE (Continued)

1000436071

Waste name: CHLOROFORM

Waste code: D038
Waste name: PYRIDINE

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED 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 NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED 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 name: THE FOLLOWING SPENT NON-HALOGENATED 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 NON-HALOGENATED 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: LABP
Waste name: LAB PACK

Waste code: P001
Waste name: 2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%

Waste code: P012
Waste name: ARSENIC OXIDE AS2O3

Waste code: P042
Waste name: 1,2-BENZENEDIOL, 4-[1-HYDROXY-2-(METHYLAMINO)ETHYL]-, (R)-

Waste code: P046
Waste name: BENZENEETHANAMINE, ALPHA,ALPHA-DIMETHYL-

Waste code: P075
Waste name: NICOTINE, & SALTS

Waste code: B007
Waste name: B007

Biennial Reports:

Last Biennial Reporting Year: 2013

Annual Waste Handled:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKEY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET,

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ROSWELL PARK CANCER INSTITUTE (Continued)

1000436071

Amount (Lbs): 31933.5
Waste code: D002
Waste name: WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Amount (Lbs): 5285.6
Waste code: D003
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Amount (Lbs): 4531
Waste code: D005
Waste name: BARIUM
Amount (Lbs): 4531

Waste code: D007
Waste name: CHROMIUM
Amount (Lbs): 4531

Waste code: D011
Waste name: SILVER
Amount (Lbs): 4751

Waste code: D018
Waste name: BENZENE
Amount (Lbs): 31178.9

Waste code: D019
Waste name: CARBON TETRACHLORIDE
Amount (Lbs): 2779.1

Waste code: D022
Waste name: CHLOROFORM
Amount (Lbs): 7310.1

Waste code: D038
Waste name: PYRIDINE
Amount (Lbs): 7310.1

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED 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 NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ROSWELL PARK CANCER INSTITUTE (Continued)

1000436071

CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED 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.

Amount (Lbs): 24623.4

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED 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 NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Amount (Lbs): 23868.8

Waste code: LABP
Waste name: LAB PACK
Amount (Lbs): 4531

Waste code: P001
Waste name: 2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%

Amount (Lbs): 6075

Waste code: P012
Waste name: ARSENIC OXIDE AS2O3
Amount (Lbs): 6075

Waste code: P042
Waste name: 1,2-BENZENEDIOL, 4-[1-HYDROXY-2-(METHYLAMINO)ETHYL]-, (R)-
Amount (Lbs): 6075

Waste code: P046
Waste name: BENZENEETHANAMINE, ALPHA,ALPHA-DIMETHYL-
Amount (Lbs): 6075

Waste code: P075
Waste name: NICOTINE, & SALTS
Amount (Lbs): 6075

Facility Has Received Notices of Violations:

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 12/21/1999
Date achieved compliance: 06/06/2000
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 05/26/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 11500
Paid penalty amount: 11500

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ROSWELL PARK CANCER INSTITUTE (Continued)

1000436071

Regulation violated: Not reported
Area of violation: Generators - Manifest
Date violation determined: 02/24/1997
Date achieved compliance: 07/08/1997
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/24/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 02/24/1997
Date achieved compliance: 07/08/1997
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/24/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 04/30/1993
Date achieved compliance: 10/19/1993
Violation lead agency: State
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 08/04/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 1200
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 04/30/1993
Date achieved compliance: 10/19/1993
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 10/19/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200
Paid penalty amount: 1200

Regulation violated: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ROSWELL PARK CANCER INSTITUTE (Continued)

1000436071

Area of violation: Generators - General
Date violation determined: 01/13/1986
Date achieved compliance: 05/29/1986
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/14/1986
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:

Evaluation date: 10/24/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/22/2010
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/01/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/16/2004
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/15/2002
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/21/1999
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 06/06/2000
Evaluation lead agency: State

Evaluation date: 02/04/1997
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Manifest
Date achieved compliance: 07/08/1997
Evaluation lead agency: State

Evaluation date: 02/04/1997

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ROSWELL PARK CANCER INSTITUTE (Continued)

1000436071

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 07/08/1997
Evaluation lead agency: State

Evaluation date: 04/30/1993
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Generators - Records/Reporting
Date achieved compliance: 10/19/1993
Evaluation lead agency: State

Evaluation date: 01/13/1986
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 05/29/1986
Evaluation lead agency: State

LTANKS:

Site ID: 195812
Spill Number/Closed Date: 8905775 / 11/22/1989
Spill Date: 9/7/1989
Spill Cause: Tank Failure
Spill Source: Institutional, Educational, Gov., Other
Spill Class: Not reported
Cleanup Ceased: 11/22/1989
Cleanup Meets Standard: True
SWIS: 1502
Investigator: LYONS
Referred To: Not reported
Reported to Dept: 9/8/1989
CID: Not reported
Water Affected: Not reported
Spill Notifier: Responsible Party
Last Inspection: 10/26/1989
Recommended Penalty: False
UST Involvement: True
Remediation Phase: 0
Date Entered In Computer: 9/15/1989
Spill Record Last Update: 12/8/1989
Spiller Name: Not reported
Spiller Company: ROSWELL PARK
Spiller Address: 666 ELM STREET
Spiller City,St,Zip: BUFFALO, NY 14263
Spiller County: 001
Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported
DEC Region: 9
DER Facility ID: 163129
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "MEL"09/14/89: MEL TELCON WITH DENNIS MAHN. TANK HAS BEEN EMPTIED, AND ARRANGEMENTS ARE BEING MADE TO REMOVE TANK FROM GROUND. 10/23/89: MEL TELCON WITH DON FRASER, OGS. TANKS ARE TO BE REMOVED ON 10/24/89. SENT LETTER OUTLINING REQUIREMENTS. 10/24/89: CAF INSPECTION. MET DON FRASER ON SITE. TWO 1000 GALLON TANKS REMOVED. NO PETROLEUM CONTAMINATED SOIL OBSERVED, PERMISSION TO BACKFILL GIVEN. ELMWOOD TANK TO CLEAN TANKS. 10/26/89: MEL INSPECTION. EXCAVATION BACKFILLED.ELMWOOD TANK ON SITE TO CLEAN TANKS. 11/20/89: MEL. NO

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ROSWELL PARK CANCER INSTITUTE (Continued)

1000436071

Remarks: CONTAMINATION OBSERVED, TANKS CLEANED BY ELMWOOD TANK. NO FURTHER ACTION NECESSARY, RECOMMEND FILE BE CLOSED AS PER RNL.
1000 GALLON TANK WAS TAKING ON WATER AND FAILED AN AIR PRESSURE TEST.

Material:

Site ID: 195812
Operable Unit ID: 930967
Operable Unit: 01
Material ID: 446178
Material Code: 0009
Material Name: Gasoline
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

SPILLS:

Facility ID: 8902159
DER Facility ID: 163129
Facility Type: ER
Site ID: 195811
DEC Region: 9
Spill Date: 6/2/1989
Spill Number/Closed Date: 8902159 / 6/13/1989
Spill Cause: Other
Spill Class: Not reported
SWIS: 1502
Investigator: ROSS
Referred To: Not reported
Reported to Dept: 6/2/1989
CID: Not reported
Water Affected: Not reported
Spill Source: Commercial/Industrial
Spill Notifier: Fire Department
Cleanup Ceased: 6/13/1989
Cleanup Meets Std: True
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 6/2/1989
Spill Record Last Update: 6/26/1989
Spiller Name: Not reported
Spiller Company: J & I TRUCKING CO
Spiller Address: 11372 MAIN STREET
Spiller City,St,Zip: CLARENCE, NY
Spiller Company: 001
Contact Name: Not reported
Contact Phone: Not reported
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ROSWELL PARK CANCER INSTITUTE (Continued)

1000436071

Remarks: "LQR"06/02/89: MF FOR LQR CHEMICALS BURNED UP IN THE FIRE. FD TO CONTACT HOSPITAL TO FIND OUT WHY CHEMICALS WERE THROWN OUT & CONTAINERS NOT CLEANED. 06/13/89: NO RESPONSE FROM FD FOR FURTHER ASSISTANTS,NO FURTHER ACTION REQUIRED.09/29/95: This is additional information about material spilled from the translation of the old spill file: HEXANE & THIOPHENE.
EXPLOSION IN A DUMP TRUCK

Material:

Tank Test:

Facility ID: 8706549
DER Facility ID: 163129
Facility Type: ER
Site ID: 195810
DEC Region: 9
Spill Date: 10/26/1987
Spill Number/Closed Date: 8706549 / 11/18/1987
Spill Cause: Other
Spill Class: Not reported
SWIS: 1502
Investigator: MXFRANKS
Referred To: Not reported
Reported to Dept: 11/2/1987
CID: Not reported
Water Affected: Not reported
Spill Source: Institutional, Educational, Gov., Other
Spill Notifier: Citizen
Cleanup Ceased: 11/18/1987
Cleanup Meets Std: True
Last Inspection: 11/4/1987
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 11/4/1987
Spill Record Last Update: 12/10/1987
Spiller Name: Not reported
Spiller Company: ROSWELL PARK
Spiller Address: 666 ELM STREET
Spiller City,St,Zip: BUFFALO, NY
Spiller Company: 001
Contact Name: Not reported
Contact Phone: Not reported
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "MF" // : MF 11/04/87 DEC TO INVESTIGATE. // : 11/04/87 MF MET WITH AL GUSTAFSON (ROSWELL). LAST TIME DIGGING 2 WEEKS AGO, MICHIGAN & HIGH DID NOT NOTICE CONTAMINATION IN EXCAVATION. // : MF 11/18/87 PAUL RODRIGEZE HAS NOT CONTACTED OFFICE APPEARANTLY COMPLAINT IS UNFOUNDED, HE WAS SCHEDULED TO CALL 11/4/87.

Remarks: NATIONAL FUEL GAS ON SCENE, TURNED OFF WATER HEATER & FURNACE. SUSPECT CO FUMES FROM FURNACE & HOT WATER HEATER.

Material:
Site ID: 195810
Operable Unit ID: 910270
Operable Unit: 01

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ROSWELL PARK CANCER INSTITUTE (Continued)

1000436071

Material ID: 465558
Material Code: 0009
Material Name: Gasoline
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

132
SW
1/4-1/2
0.477 mi.
2517 ft.

**BENDERSON DEVELOPMENT
584 DELAWARE AVENUE
BUFFALO, NY**

**NY LTANKS S100119790
N/A**

**Relative:
Lower**

LTANKS:

**Actual:
648 ft.**

Site ID: 272336
Spill Number/Closed Date: 8808966 / 11/10/1989
Spill Date: 2/16/1989
Spill Cause: Tank Failure
Spill Source: Commercial/Industrial
Spill Class: Not reported
Cleanup Ceased: 11/10/1989
Cleanup Meets Standard: True
SWIS: 1502
Investigator: LEARY
Referred To: Not reported
Reported to Dept: 2/16/1989
CID: Not reported
Water Affected: Not reported
Spill Notifier: Fire Department
Last Inspection: 11/10/1989
Recommended Penalty: False
UST Involvement: True
Remediation Phase: 0
Date Entered In Computer: 2/23/1989
Spill Record Last Update: 12/7/1989
Spiller Name: Not reported
Spiller Company: BENDERSON DEVELOP. CORP.
Spiller Address: 570 DELAWARE AVENUE
Spiller City,St,Zip: BUFFALO, NY 14202
Spiller County: 001
Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported
DEC Region: 9
DER Facility ID: 221660
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "RNL"02/23/89: TANK TO BE TESTED BY OWNER, TANK OPERATED BY DEC R-9.03/01/89: RNL SITE INSP. 03/01/89, FUMES NOTED ONLY IN SUMP PIT, FAN REMOVED, NO MONITORING WELLS.03/09/89: RNL LETTER 03/03/89, REQUEST MW'S BY 03/07/89; RNL TELECON 03/08/89, NO ANSWER; RNL

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BENDERSON DEVELOPMENT (Continued)

S100119790

TELECON 03/09/89, NO ANSWER.05/17/89: RNL CHECKED MW 04/05/89 AND 05/17/89, BOTH TIMES WELL WAS DRY, NO GASOLINE FUMES NOTED.11/10/89: RNL CHECKED MW 08/15/89 AND 11/10/89, BOTH TIMES WELL WAS DRY, NO GASOLINE FUMES NOTED, CLOSEOUT SITE, NOTHING IN MW SINCE INSTALLATION.
Not reported

Remarks: FUMES DETECTED IN ELEVATOR SHAFT FROM LEAKING BENDERSON TANK

Material:

Site ID: 272336
Operable Unit ID: 925281
Operable Unit: 01
Material ID: 453722
Material Code: 0009
Material Name: Gasoline
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

133
WNW
1/4-1/2
0.480 mi.
2537 ft.

CHILDRENS HOSPITAL
219 BRYANT ST
BUFFALO, NY 14222

RCRA-CESQG 1000278846
NY LTANKS NYD074015744
NY UST
NY MANIFEST
NY Spills
US AIRS

Relative:
Lower

RCRA-CESQG:

Date form received by agency:01/01/2007
Facility name: CHILDRENS HOSPITAL
Facility address: 219 BRYANT ST
BUFFALO, NY 14222
EPA ID: NYD074015744
Mailing address: BRYANT ST
BUFFALO, NY 14222
Contact: Not reported
Contact address: BRYANT ST
BUFFALO, NY 14222
Contact country: US
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 02
Land type: Facility is not located on Indian land. Additional information is not known.
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting

Actual:
648 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHILDRENS HOSPITAL (Continued)

1000278846

from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name: CHILDREN'S HOSPITAL OF BUFFALO
Owner/operator address: NOT REQUIRED
NOT REQUIRED, WY 99999
Owner/operator country: US
Owner/operator telephone: (212) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: CHILDREN'S HOSPITAL OF BUFFALO
Owner/operator address: NOT REQUIRED
NOT REQUIRED, WY 99999
Owner/operator country: US
Owner/operator telephone: (212) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006
Facility name: CHILDRENS HOSPITAL
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 03/25/1996
Facility name: CHILDRENS HOSPITAL
Classification: Large Quantity Generator

Date form received by agency: 10/29/1993
Facility name: CHILDRENS HOSPITAL

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHILDRENS HOSPITAL (Continued)

1000278846

Classification: Not a generator, verified

Date form received by agency: 09/23/1992

Facility name: CHILDRENS HOSPITAL

Classification: Large Quantity Generator

Date form received by agency: 08/27/1986

Facility name: CHILDRENS HOSPITAL

Classification: Conditionally Exempt Small Quantity Generator

Facility Has Received Notices of Violations:

Regulation violated: SR - 373-3.9(d)(3)
Area of violation: Generators - General
Date violation determined: 12/15/2004
Date achieved compliance: 01/03/2005
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/23/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 374-3.2(e)(5)
Area of violation: Generators - General
Date violation determined: 12/15/2004
Date achieved compliance: 01/03/2005
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/23/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:

Evaluation date: 03/01/2011
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/23/2006
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/15/2004
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 01/03/2005

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHILDRENS HOSPITAL (Continued)

1000278846

Evaluation lead agency: State

Evaluation date: 09/22/1992
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA Contractor/Grantee

LTANKS:

Site ID: 119782
Spill Number/Closed Date: 8707780 / 4/12/1988
Spill Date: 12/9/1987
Spill Cause: Tank Test Failure
Spill Source: Institutional, Educational, Gov., Other
Spill Class: Not reported
Cleanup Ceased: 4/12/1988
Cleanup Meets Standard: True
SWIS: 1502
Investigator: MXFRANKS
Referred To: Not reported
Reported to Dept: 12/9/1987
CID: Not reported
Water Affected: Not reported
Spill Notifier: Responsible Party
Last Inspection: 4/8/1988
Recommended Penalty: False
UST Involvement: True
Remediation Phase: 0
Date Entered In Computer: 12/10/1987
Spill Record Last Update: 4/12/1988
Spiller Name: Not reported
Spiller Company: CHILDRENS HOSPITAL
Spiller Address: 219 BRYANT STREET
Spiller City,St,Zip: BUFFALO, NY
Spiller County: 001
Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported
DEC Region: 9
DER Facility ID: 104039
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "MF" // : MNP INFORMATION 12/09/87, TANK TO BE RETESTED. // : MJH 12/11/87 FOUND LEAKING UNION;MF 12/16/87 TELECON/DICK KERLING, TANK SCHEDULED FOR RETEST TODAY (FLEISCHMANN'S) NO SHOW. // : MF 12/21/87 TELECON/DICK KERLING TANK ABOUT TO FAIL RETEST, TOLD HIM TANK WILL HAVE TO BE REMOVED. TANK IS FOR EMERGENCY GENERATOR. // : MF 1/7/88 TELECON DICK KERLING, BIDS OUT FOR REMOVAL HE WILL KEEP ME INFORMED. // : MF 1/21/88 TELECON DICK KERLING-D.J. PRESTON WILL REMOVE TANK, & INSTALL NEW TANK ASAP. WILL KNOW DATE NEXT WEEK. // : MF 2/2/88 SITE VISIT/DICK KERLING, HE DOESN'T WANT TO PUT SKID TANK IN, LACK OF SPACE. TOLD HE TO GET IN TOUCH WITH F.D. 04/07/88: MF SITE VISIT TANK UNCOVERED, CONTRACTOR NOT ON SITE, NO ODOR NOTICED. TANK WAS REMOVED AT 1600. 04/08/88: MF SITE VISIT, WENT INTO TANK EXCAVATION DOWN TO PAD, NO SIGNS OF CONTAMINATION OR ODOR, HOLE CLEAN. TANK WAS CLEANED YESTERDAY AND REMOVED BY PRESTON.
Remarks: 2000 GALLON TANK, FAILURE RATE -0.623 GPH

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHILDRENS HOSPITAL (Continued)

1000278846

Material:

Site ID: 119782
Operable Unit ID: 912104
Operable Unit: 01
Material ID: 463182
Material Code: 0008
Material Name: Diesel
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Site ID: 119782
Spill Tank Test: 1532595
Tank Number: Not reported
Tank Size: 0
Test Method: 00
Leak Rate: 0
Gross Fail: Not reported
Modified By: Spills
Last Modified: 10/1/2004
Test Method: Unknown

UST:

Id/Status: 9-386855 / Active
Program Type: PBS
Region: STATE
DEC Region: 9
Expiration Date: 2017/07/20
UTM X: 183630.73061
UTM Y: 4757993.19496
Site Type: Hospital/Nursing Home/Health Care

Affiliation Records:

Site Id: 53772
Affiliation Type: Mail Contact
Company Name: CHILDRENS HOSPITAL OF BUFFALO
Contact Type: Not reported
Contact Name: GEORGE ARMELE
Address1: 219 BRYANT ST
Address2: Not reported
City: BUFFALO
State: NY
Zip Code: 14222
Country Code: 001
Phone: (716) 878-7691
EMail: GARMELE@KALEIDAHEALTH.ORG
Fax Number: Not reported
Modified By: SLZIEMBA
Date Last Modified: 10/16/2012

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHILDRENS HOSPITAL (Continued)

1000278846

Site Id: 53772
Affiliation Type: On-Site Operator
Company Name: CHILDRENS HOSPITAL OF BUFFALO
Contact Type: Not reported
Contact Name: GEORGE ARMELE
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 999
Phone: (716) 878-7691
EMail: Not reported
Fax Number: Not reported
Modified By: SLZIEMBA
Date Last Modified: 10/16/2012

Site Id: 53772
Affiliation Type: Emergency Contact
Company Name: CHILDRENS HOSPITAL OF BUFFALO
Contact Type: Not reported
Contact Name: GEORGE ARMELE
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 999
Phone: (716) 878-7691
EMail: Not reported
Fax Number: Not reported
Modified By: SLZIEMBA
Date Last Modified: 10/16/2012

Site Id: 53772
Affiliation Type: Facility Owner
Company Name: CHILDRENS HOSPITAL OF BUFFALO
Contact Type: PLANT OPERATIONS MANAGER
Contact Name: GEORGE R. ARMELE
Address1: 219 BRYANT ST
Address2: Not reported
City: BUFFALO
State: NY
Zip Code: 14222
Country Code: 001
Phone: (716) 878-7691
EMail: Not reported
Fax Number: Not reported
Modified By: SLZIEMBA
Date Last Modified: 10/16/2012

Tank Info:

Tank Number: 3
Tank ID: 164097
Tank Status: Closed Prior to Micro Conversion, 03/91
Material Name: Closed Prior to Micro Conversion, 03/91

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHILDRENS HOSPITAL (Continued)

1000278846

Capacity Gallons: 2000
Install Date: 12/01/1971
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0008
Common Name of Substance: Diesel

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

B00 - Tank External Protection - None
C00 - Pipe Location - No Piping
I04 - Overfill - Product Level Gauge (A/G)
A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
J02 - Dispenser - Suction Dispenser
F06 - Pipe External Protection - Wrapped
G00 - Tank Secondary Containment - None
H05 - Tank Leak Detection - In-Tank System (ATG)

Tank Number: 4
Tank ID: 164098
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 20000
Install Date: 08/01/1973
Date Tank Closed: 06/01/1995
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0003
Common Name of Substance: #6 Fuel Oil (On-Site Consumption)

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

H05 - Tank Leak Detection - In-Tank System (ATG)
G03 - Tank Secondary Containment - Vault (w/o access)
B00 - Tank External Protection - None
A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
J02 - Dispenser - Suction Dispenser
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
I04 - Overfill - Product Level Gauge (A/G)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHILDRENS HOSPITAL (Continued)

1000278846

Tank Number: 5
Tank ID: 164099
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 20000
Install Date: 08/01/1973
Date Tank Closed: 06/01/1995
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0003
Common Name of Substance: #6 Fuel Oil (On-Site Consumption)

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

H05 - Tank Leak Detection - In-Tank System (ATG)
A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
J02 - Dispenser - Suction Dispenser
G03 - Tank Secondary Containment - Vault (w/o access)
B00 - Tank External Protection - None
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
I04 - Overfill - Product Level Gauge (A/G)

Tank Number: 6
Tank ID: 164100
Tank Status: In Service
Material Name: In Service
Capacity Gallons: 3000
Install Date: 12/01/1986
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0008
Common Name of Substance: Diesel

Tightness Test Method: 03
Date Test: 12/01/1998
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: askalsk
Last Modified: 09/27/2011

Equipment Records:

C02 - Pipe Location - Underground/On-ground
F02 - Pipe External Protection - Original Sacrificial Anode
A00 - Tank Internal Protection - None
D02 - Pipe Type - Galvanized Steel
J02 - Dispenser - Suction Dispenser

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHILDRENS HOSPITAL (Continued)

1000278846

L09 - Piping Leak Detection - Exempt Suction Piping
G00 - Tank Secondary Containment - None
I04 - Overfill - Product Level Gauge (A/G)
K01 - Spill Prevention - Catch Basin
B02 - Tank External Protection - Original Sacrificial Anode
H05 - Tank Leak Detection - In-Tank System (ATG)
E00 - Piping Secondary Containment - None

Tank Number: 7
Tank ID: 172438
Tank Status: In Service
Material Name: In Service
Capacity Gallons: 4010
Install Date: 07/01/1989
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0008
Common Name of Substance: Diesel

Tightness Test Method: 03
Date Test: 12/01/1998
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: aeskalsk
Last Modified: 09/27/2011

Equipment Records:

C02 - Pipe Location - Underground/On-ground
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm
G04 - Tank Secondary Containment - Double-Walled (Underground)
K01 - Spill Prevention - Catch Basin
A00 - Tank Internal Protection - None
D10 - Pipe Type - Copper
J02 - Dispenser - Suction Dispenser
L09 - Piping Leak Detection - Exempt Suction Piping
F05 - Pipe External Protection - Jacketed
E00 - Piping Secondary Containment - None
B02 - Tank External Protection - Original Sacrificial Anode

Tank Number: 8
Tank ID: 172439
Tank Status: In Service
Material Name: In Service
Capacity Gallons: 15000
Install Date: 08/01/1995
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Equivalent technology
Material Code: 0003
Common Name of Substance: #6 Fuel Oil (On-Site Consumption)

Tightness Test Method: NN

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHILDRENS HOSPITAL (Continued)

1000278846

Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: asksk
Last Modified: 09/27/2011

Equipment Records:

C02 - Pipe Location - Underground/On-ground
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm
B00 - Tank External Protection - None
D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
G04 - Tank Secondary Containment - Double-Walled (Underground)
J02 - Dispenser - Suction Dispenser
L09 - Piping Leak Detection - Exempt Suction Piping
E00 - Piping Secondary Containment - None
A03 - Tank Internal Protection - Fiberglass Liner (FRP)
K01 - Spill Prevention - Catch Basin
F06 - Pipe External Protection - Wrapped

NY MANIFEST:

EPA ID: NYD074015744
Country: USA
Mailing Name: CHILDRENS HOSPITAL OF BUFFALO
Mailing Contact: CHILDRENS HOSPITAL OF BUFFALO
Mailing Address: 219 BRYANT AVE
Mailing Address 2: Not reported
Mailing City: BUFFALO
Mailing State: NY
Mailing Zip: 14222
Mailing Zip4: 2099
Mailing Country: USA
Mailing Phone: 716-878-7800

Document ID: NYC7499621
Manifest Status: Not reported
Trans1 State ID: TXR000050930
Trans2 State ID: Not reported
Generator Ship Date: 11/16/2005
Trans1 Recv Date: 11/16/2005
Trans2 Recv Date: Not reported
TSD Site Recv Date: 11/16/2005
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074015744
Trans1 EPA ID: NY10826JF
Trans2 EPA ID: Not reported
TSDF ID: NYD981556541
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00010
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 01.00
Year: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHILDRENS HOSPITAL (Continued)

1000278846

Document ID: NYB6769836
Manifest Status: Completed copy
Trans1 State ID: 96092FNY
Trans2 State ID: Not reported
Generator Ship Date: 951129
Trans1 Recv Date: 951129
Trans2 Recv Date: 951130
TSD Site Recv Date: 951206
Part A Recv Date: 951212
Part B Recv Date: 951221
Generator EPA ID: NYD074015744
Trans1 EPA ID: NYD097644801
Trans2 EPA ID: OH0000000539
TSD ID: OHD083377010
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00005
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 95

Document ID: NYG1989306
Manifest Status: Not reported
Trans1 State ID: NYD097644801
Trans2 State ID: Not reported
Generator Ship Date: 08/29/2001
Trans1 Recv Date: 08/29/2001
Trans2 Recv Date: Not reported
TSD Site Recv Date: 08/30/2001
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074015744
Trans1 EPA ID: NYD049836679
Trans2 EPA ID: Not reported
TSD ID: 88982JBNY
Waste Code: F003 - UNKNOWN
Quantity: 00018
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: U122 - FORMALDEHYDE
Quantity: 00006
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: D002 - NON-LISTED CORROSIVE WASTES
Quantity: 00030
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHILDRENS HOSPITAL (Continued)

1000278846

Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Waste Code: U188 - PHENOL
Quantity: 00003
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Year: 2001

Document ID: NYG1989306
Manifest Status: Not reported
Trans1 State ID: NYD097644801
Trans2 State ID: Not reported
Generator Ship Date: 08/29/2001
Trans1 Recv Date: 08/29/2001
Trans2 Recv Date: Not reported
TSD Site Recv Date: 08/30/2001
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074015744
Trans1 EPA ID: NYD049836679
Trans2 EPA ID: Not reported
TSD ID: 88982JBNY
Waste Code: D002 - NON-LISTED CORROSIVE WASTES
Quantity: 00002
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: D005 - BARIUM 100.0 MG/L TCLP
Quantity: 00003
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: L Landfill.
Specific Gravity: 01.00
Waste Code: P048 - 2,4-DINTROPHENOL
Quantity: 00002
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: U019 - BENZENE
Quantity: 00014
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Year: 2001

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHILDRENS HOSPITAL (Continued)

1000278846

Document ID: NYG1989306
Manifest Status: Not reported
Trans1 State ID: NYD097644801
Trans2 State ID: Not reported
Generator Ship Date: 08/29/2001
Trans1 Recv Date: 08/29/2001
Trans2 Recv Date: Not reported
TSD Site Recv Date: 08/30/2001
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074015744
Trans1 EPA ID: NYD049836679
Trans2 EPA ID: Not reported
TSD ID: 88982JB NY
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00001
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: D009 - MERCURY 0.2 MG/L TCLP
Quantity: 00002
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 01.00
Year: 2001

Document ID: NYG1989324
Manifest Status: Not reported
Trans1 State ID: NYD097644801
Trans2 State ID: Not reported
Generator Ship Date: 08/29/2001
Trans1 Recv Date: 08/29/2001
Trans2 Recv Date: Not reported
TSD Site Recv Date: 08/30/2001
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074015744
Trans1 EPA ID: NYD000632372
Trans2 EPA ID: Not reported
TSD ID: 88982JB NY
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00006
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00001
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHILDRENS HOSPITAL (Continued)

1000278846

Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Waste Code: D002 - NON-LISTED CORROSIVE WASTES
Quantity: 00001
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00004
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Year: 2001

Document ID: NYG2836872
Manifest Status: Not reported
Trans1 State ID: NYD097644801
Trans2 State ID: Not reported
Generator Ship Date: 07/29/2005
Trans1 Recv Date: 07/29/2005
Trans2 Recv Date: Not reported
TSD Site Recv Date: 08/03/2005
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074015744
Trans1 EPA ID: 88952JBNY
Trans2 EPA ID: Not reported
TSD ID: OHD066060609
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00004
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: U044 - CHLOROFORM
Quantity: 00012
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: Not reported
Specific Gravity: 01.00
Waste Code: D002 - NON-LISTED CORROSIVE WASTES
Quantity: 00008
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Waste Code: D002 - NON-LISTED CORROSIVE WASTES
Quantity: 00008
Units: P - Pounds

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHILDRENS HOSPITAL (Continued)

1000278846

Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Waste Code: Not reported
Quantity: Not reported
Units: Not reported
Number of Containers: Not reported
Container Type: Not reported
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: Not reported
Year: 2005

Document ID: NYG2836872
Manifest Status: Not reported
Trans1 State ID: NYD097644801
Trans2 State ID: Not reported
Generator Ship Date: 07/29/2005
Trans1 Recv Date: 07/29/2005
Trans2 Recv Date: Not reported
TSD Site Recv Date: 08/03/2005
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074015744
Trans1 EPA ID: 88952JBNY
Trans2 EPA ID: Not reported
TSDF ID: OHD066060609
Waste Code: P106 - SODIUM CYANIDE
Quantity: 00001
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: F003 - UNKNOWN
Quantity: 00125
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: Not reported
Specific Gravity: 01.00
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00012
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: U151 - MERCURY
Quantity: 00009
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHILDRENS HOSPITAL (Continued)

1000278846

Quantity: Not reported
Units: Not reported
Number of Containers: Not reported
Container Type: Not reported
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: Not reported
Year: 2005

Document ID: NYG2836872
Manifest Status: Not reported
Trans1 State ID: NYD097644801
Trans2 State ID: Not reported
Generator Ship Date: 07/29/2005
Trans1 Recv Date: 07/29/2005
Trans2 Recv Date: Not reported
TSD Site Recv Date: 08/03/2005
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074015744
Trans1 EPA ID: 88952JBNY
Trans2 EPA ID: Not reported
TSD ID: OHD066060609
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00005
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 01.00
Waste Code: D008 - LEAD 5.0 MG/L TCLP
Quantity: 00055
Units: P - Pounds
Number of Containers: 001
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: Not reported
Specific Gravity: 01.00
Waste Code: F003 - UNKNOWN
Quantity: 00020
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Waste Code: Not reported
Quantity: Not reported
Units: Not reported
Number of Containers: Not reported
Container Type: Not reported
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: Not reported
Year: 2005

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD097644801

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHILDRENS HOSPITAL (Continued)

1000278846

Trans2 State ID: NYD097644801
Generator Ship Date: 2012-08-21
Trans1 Recv Date: 2012-08-21
Trans2 Recv Date: 2012-08-23
TSD Site Recv Date: 2012-08-23
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074015744
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: OHD066060609
Waste Code: Not reported
Quantity: 8.0
Units: P - Pounds
Number of Containers: 1.0
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 1.0
Year: 2012
Manifest Tracking Num: 009700714JJK
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H141

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD097644801
Trans2 State ID: NYD097644801
Generator Ship Date: 2012-08-21
Trans1 Recv Date: 2012-08-21
Trans2 Recv Date: 2012-08-23
TSD Site Recv Date: 2012-08-23
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074015744
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: OHD066060609
Waste Code: Not reported
Quantity: 1.0
Units: P - Pounds
Number of Containers: 1.0
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 1.0
Year: 2012
Manifest Tracking Num: 009700714JJK
Import Ind: N

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHILDRENS HOSPITAL (Continued)

1000278846

Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H141

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NJD080631369
Trans2 State ID: NJD054126164
Generator Ship Date: 2012-02-23
Trans1 Recv Date: 2012-02-23
Trans2 Recv Date: 2012-02-27
TSD Site Recv Date: 2012-03-07
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074015744
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NJD980536593
Waste Code: Not reported
Quantity: 164.0
Units: P - Pounds
Number of Containers: 1.0
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 1.0
Year: 2012
Manifest Tracking Num: 000571279VES
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H141

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NJD080631369
Trans2 State ID: NJD054126164
Generator Ship Date: 2012-02-23
Trans1 Recv Date: 2012-02-23
Trans2 Recv Date: 2012-02-27
TSD Site Recv Date: 2012-03-07
Part A Recv Date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHILDRENS HOSPITAL (Continued)

1000278846

Part B Recv Date: Not reported
Generator EPA ID: NYD074015744
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NJD980536593
Waste Code: Not reported
Quantity: 476.0
Units: P - Pounds
Number of Containers: 3.0
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 1.0
Year: 2012
Manifest Tracking Num: 000571279VES
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H141

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NJD080631369
Trans2 State ID: NJD054126164
Generator Ship Date: 2012-04-13
Trans1 Recv Date: 2012-04-13
Trans2 Recv Date: 2012-04-16
TSD Site Recv Date: 2012-04-25
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074015744
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NJD980536593
Waste Code: Not reported
Quantity: 760.0
Units: P - Pounds
Number of Containers: 5.0
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 1.0
Year: 2012
Manifest Tracking Num: 000571467VES
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHILDRENS HOSPITAL (Continued)

1000278846

Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H141

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NJD080631369
Trans2 State ID: NJD054126164
Generator Ship Date: 2012-05-18
Trans1 Recv Date: 2012-05-18
Trans2 Recv Date: 2012-05-21
TSD Site Recv Date: 2012-05-23
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074015744
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NJD980536593
Waste Code: Not reported
Quantity: 11.0
Units: P - Pounds
Number of Containers: 1.0
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 1.0
Year: 2012
Manifest Tracking Num: 000623547VES
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H141

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NJD080631369
Trans2 State ID: NJD054126164
Generator Ship Date: 2012-05-18
Trans1 Recv Date: 2012-05-18
Trans2 Recv Date: 2012-05-21
TSD Site Recv Date: 2012-05-23
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074015744
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NJD980536593
Waste Code: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHILDRENS HOSPITAL (Continued)

1000278846

Quantity: 67.0
Units: P - Pounds
Number of Containers: 1.0
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 1.0
Year: 2012
Manifest Tracking Num: 000623547VES
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H141

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NJD080631369
Trans2 State ID: NJD054126164
Generator Ship Date: 2012-05-18
Trans1 Recv Date: 2012-05-18
Trans2 Recv Date: 2012-05-21
TSD Site Recv Date: 2012-05-23
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074015744
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NJD980536593
Waste Code: Not reported
Quantity: 663.0
Units: P - Pounds
Number of Containers: 4.0
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 1.0
Year: 2012
Manifest Tracking Num: 000623547VES
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H141

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHILDRENS HOSPITAL (Continued)

1000278846

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NJD080631369
Trans2 State ID: NJD054126164
Generator Ship Date: 2012-08-16
Trans1 Recv Date: 2012-08-16
Trans2 Recv Date: 2012-08-20
TSD Site Recv Date: 2012-08-22
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074015744
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NJD980536593
Waste Code: Not reported
Quantity: 13.0
Units: P - Pounds
Number of Containers: 1.0
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 1.0
Year: 2012
Manifest Tracking Num: 000623654VES
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H141

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NJD080631369
Trans2 State ID: NJD054126164
Generator Ship Date: 2012-08-16
Trans1 Recv Date: 2012-08-16
Trans2 Recv Date: 2012-08-20
TSD Site Recv Date: 2012-08-22
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074015744
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NJD980536593
Waste Code: Not reported
Quantity: 499.0
Units: P - Pounds
Number of Containers: 4.0
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 1.0

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHILDRENS HOSPITAL (Continued)

1000278846

Year: 2012
Manifest Tracking Num: 000623654VES
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H141

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NJD080631369
Trans2 State ID: NJD054126164
Generator Ship Date: 2012-08-16
Trans1 Recv Date: 2012-08-16
Trans2 Recv Date: 2012-08-20
TSD Site Recv Date: 2012-08-22
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD074015744
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSD ID: NJD980536593
Waste Code: Not reported
Quantity: 191.0
Units: P - Pounds
Number of Containers: 1.0
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 1.0
Year: 2012
Manifest Tracking Num: 000623654VES
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N
Discr Partial Reject Ind: N
Discr Full Reject Ind: N
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H141

[Click this hyperlink](#) while viewing on your computer to access
317 additional NY_MANIFEST: record(s) in the EDR Site Report.

SPILLS:

Facility ID: 9708031
DER Facility ID: 104039
Facility Type: ER

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHILDRENS HOSPITAL (Continued)

1000278846

Site ID: 119784
DEC Region: 9
Spill Date: 9/30/1997
Spill Number/Closed Date: 9708031 / 10/9/1997
Spill Cause: Equipment Failure
Spill Class: Known release with minimal potential for fire or hazard. DEC Response.
Willing Responsible Party. Corrective action taken.
SWIS: 1502
Investigator: SORGI
Referred To: Not reported
Reported to Dept: 9/30/1997
CID: 999
Water Affected: Not reported
Spill Source: Institutional, Educational, Gov., Other
Spill Notifier: Responsible Party
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: 10/8/1997
Spill Record Last Update: 3/15/2002
Spiller Name: GARY ROESCH
Spiller Company: NOCO ENERGY
Spiller Address: 700 GRAND ISLAND BLVD
Spiller City,St,Zip: TONAWANDA, NY 14150-0086
Spiller Company: 001
Contact Name: Not reported
Contact Phone: Not reported
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was
"MJS"10/09/97: SPILL CLEANED BY NOCO. MINOR QUANTITY. NOCO WILL BE
REPAIRING VENT. NO FURTHER ACTION REQUIRED. MJS CLOSE FILE.

Remarks: MALFUNCTIONING VENT ON TANK SYSTEM.

Material:

Site ID: 119784
Operable Unit ID: 1054528
Operable Unit: 01
Material ID: 330019
Material Code: 0003A
Material Name: #6 Fuel Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 5
Units: Gallons
Recovered: 5
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Facility ID: 1114130
DER Facility ID: 416615
Facility Type: ER
Site ID: 462171

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHILDRENS HOSPITAL (Continued)

1000278846

DEC Region: 9
Spill Date: 3/20/2012
Spill Number/Closed Date: 1114130 / 5/14/2012
Spill Cause: Equipment Failure
Spill Class: Known release with minimal potential for fire or hazard. DEC Response.
Willing Responsible Party. Corrective action taken.

SWIS: 1502
Investigator: FXGALLEG
Referred To: Not reported
Reported to Dept: 3/21/2012
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: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 3/21/2012
Spill Record Last Update: 5/14/2012
Spiller Name: GEORGE ARMELE
Spiller Company: WOMEN AND CHILDRENS HOSPITAL OF BUFFALO
Spiller Address: 219 BRYANT ST
Spiller City,St,Zip: BUFFALO, NY
Spiller Company: 999
Contact Name: GEORGE ARMELE
Contact Phone: (716) 878-7487
DEC Memo: 3/21/12 FG SPOKE TO GEORGE AMERLE, MAINTENANCE SUPERVISOR FOR KALEIDA HEALTH. HE SAID THE SPILL CAME FROM A FAILED PIPE IN A HEAT EXCHANGER. THE #6 FUEL OIL REACHED A SUMP IN THE BASEMENT AND ESG HAS BEEN HIRED AND WILL BE ON SITE FOR CLEANUP.FG MET GEORGE AMERLE ON SITE. ESG ON SITE COMPLETING CLEANUP. ALL THE IMPACTED LINES WILL BE REPLACED. PRODUCT FROM THE SUMP HAS BEEN REMOVED AND CLEANUP IS ONGOING. THE CLEANUP MATERIAL AND PRODUCT WILL BE DISPOSED AND RECEIPTS PROVIDED. MOST OF THE CLEANUP IS COMPLETE. NO PRODUCT WAS RELEASED TO THE ENVIRONMENT. IT WAS ALL CONTAINED. A REPORT WILL BE PROVIDED.5/14/12 ESG PROVIDED A CLOSURE REPORT INCLUDING PHOTOS OF THE REMEDIATED AREA AND DISPOSAL RECEIPTS FOR 15 DRUMS OF FUEL OIL AND 3 DRUMS OF CLEANUP DEBRIS. THE MATERIAL WAS DISPOSED AT AMERICAN RECYCLERS CORP 177 WALES AVE, TONAWANDA. NO FURTHER WORK IS REQUIRED. THE SPILL IS CLOSED.

Remarks: Line failure spilled 50-200 gallons into a flash tank and an internal sump. Clean up is pending crew arrival.

Material:
Site ID: 462171
Operable Unit ID: 1212238
Operable Unit: 01
Material ID: 2210103
Material Code: 0003A
Material Name: #6 Fuel Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 200
Units: Gallons
Recovered: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHILDRENS HOSPITAL (Continued)

1000278846

Resource Affected: Not reported
Oxygenate: False

Tank Test:

Facility ID: 9009999
DER Facility ID: 104039
Facility Type: ER
Site ID: 119783
DEC Region: 9
Spill Date: 12/13/1990
Spill Number/Closed Date: 9009999 / 12/13/1990
Spill Cause: Equipment Failure
Spill Class: Not reported
SWIS: 1502
Investigator: PRINGLE
Referred To: Not reported
Reported to Dept: 12/13/1990
CID: Not reported
Water Affected: Not reported
Spill Source: Commercial/Industrial
Spill Notifier: Responsible Party
Cleanup Ceased: 12/13/1990
Cleanup Meets Std: True
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 12/19/1990
Spill Record Last Update: 12/28/1990
Spiller Name: Not reported
Spiller Company: CHILDREN'S HOSPITAL
Spiller Address: 219 BRYANT STREET
Spiller City,St,Zip: BUFFALO, NY 14222
Spiller Company: 001
Contact Name: Not reported
Contact Phone: Not reported
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "MNP"12/13/90: 12/13/90 MNP RECEIVED REPORT, NO ACTION POSSIBLE. BEING REFERRED TO AIR FOR FOLLOWUP, COMPLETE.

Remarks: "EMPTY" CYLINDER RELEASED GAS INTO AIR, CAUSED BY FAULTY VALVE STEM

Material:

Site ID: 119783
Operable Unit ID: 947035
Operable Unit: 01
Material ID: 557348
Material Code: 0075A
Material Name: ETHYLENE OXIDE
Case No.: 00075218
Material FA: Hazardous Material
Quantity: 1
Units: Pounds
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHILDRENS HOSPITAL (Continued)

1000278846

Tank Test:

Facility ID: 9708075
DER Facility ID: 104039
Facility Type: ER
Site ID: 119785
DEC Region: 9
Spill Date: 10/9/1997
Spill Number/Closed Date: 9708075 / 10/14/1997
Spill Cause: Equipment Failure
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.

SWIS: 1502
Investigator: SORGI
Referred To: Not reported
Reported to Dept: 10/9/1997
CID: 322
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: 10/9/1997
Spill Record Last Update: 3/15/2002
Spiller Name: GARY ROESCH
Spiller Company: NOCO ENERGY
Spiller Address: 700 GRAND ISLAND BLVD
Spiller City,St,Zip: TONAWANDA, NY 14150-0086
Spiller Company: 001
Contact Name: Not reported
Contact Phone: Not reported
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "MJS"10/10/97: MJS TELECON WITH GARY ROESCH(NOCO). DEFECTIVE VENT IS CAUSING SPILLS TO OCCUR DURING FILLING. SPILL CLEANED BY NOCO. RP WILL REPAIR VENT. MJS CLOSE FILE.10/14/97: MJS UPDATE COMPUTER AND CLOSE FILE.

Remarks: DEFECTIVE VENT CAUSED SPILL - SPILL IS CLEANED UP

Material:

Site ID: 119785
Operable Unit ID: 1051306
Operable Unit: 01
Material ID: 569476
Material Code: 0003A
Material Name: #6 Fuel Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 10
Units: Gallons
Recovered: 10
Resource Affected: Not reported
Oxygenate: False

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHILDRENS HOSPITAL (Continued)

1000278846

Tank Test:

Facility ID: 9708843
DER Facility ID: 104039
Facility Type: ER
Site ID: 119786
DEC Region: 9
Spill Date: 10/28/1997
Spill Number/Closed Date: 9708843 / 10/31/1997
Spill Cause: Human Error
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.

SWIS: 1502
Investigator: RMCROSSE
Referred To: Not reported
Reported to Dept: 10/28/1997
CID: 999
Water Affected: Not reported
Spill Source: Commercial/Industrial
Spill Notifier: Citizen
Cleanup Ceased: Not reported
Cleanup Meets Std: True
Last Inspection: 10/28/1997
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 10/29/1997
Spill Record Last Update: 3/15/2002
Spiller Name: BRUCE JOHNSON
Spiller Company: CHILDRENS HOSPITAL
Spiller Address: 219 BRYANT STREET
Spiller City,St,Zip: BUFFALO, NY
Spiller Company: 001
Contact Name: Not reported
Contact Phone: Not reported
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "RMC"10/28/97 RMC/JOHNSON,CHILDRENS/JORDON, BUFFALO SEWER/SITE SPILL HAPPENS SOMETIMES WHEN FILLING #6 OIL TANK, TANK IS FILLED BY REMOTE FILL, OIL SOMETIMES PUSHES UP OTHER FILL AND RUNS OUT OVER SIDEWALK, NEVER HAS OIL WENT MORE THAN EIGHT FEET FROM SOURCE, NEAREST RECEIVER IS FOURTY FEET AWAY, RMC NOTED TEMPERATURE OF #6 OIL WAS KEPT AT 140 DEGREES, UPON LOOKING AT OPERATIONS MANUAL 160 DEGREES WAS CALLED FOR, RMC ADVISED THAT THE OIL BEING TOO COLD MAY CAUSE IT TO NOT FLOW FREELY, RP AGREED TO RAISE OPERATIONAL TEMPERATURE TO SPECS AND TO MONITOR CLOSELY, RMC ADVISED THAT IF THE OIL CONTINUED TO FLOW OUT, A PROFESSIONAL CONTRACTOR MUST BE BROUGHT IN, 10/31/97 RMC/JOHNSON/PHONE NO FUTHER PROBLEMS NOTED AFTER RAISING TEMP, NO FURTHER ACTION REQUIRED, CLOSEOUT

Remarks: CALLER CLAIMES FUEL OIL IS BEING DUMPED INTO SEWERS

Material:
Site ID: 119786
Operable Unit ID: 1051920
Operable Unit: 01
Material ID: 330784
Material Code: 0003A

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CHILDRENS HOSPITAL (Continued)

1000278846

Material Name: #6 Fuel Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 5
Units: Gallons
Recovered: 5
Resource Affected: Not reported
Oxygenate: False

Tank Test:

[Click this hyperlink](#) while viewing on your computer to access additional NY_SPILL: detail in the EDR Site Report.

AIRS (AFS):

Compliance and Violation Data Major Sources:

EPA plant ID: 110000848815
Plant name: BUFFALO CHILDRENS HOSPITAL
Plant address: 219 BRYANT ST
BUFFALO, NY 14222
County: ERIE
Region code: 02
Dunn & Bradst #: 074015744
Air quality cntrl region: 162
Sic code: 8062
Sic code desc: Not reported
North Am. industrial classf: 622110
NAIC code description: General Medical and Surgical Hospitals
Default compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Default classification: POTENTIAL EMISSIONS ARE BELOW ALL APPLICABLE MAJOR SOURCE THRESHOLDS
IF AND ONLY IF THE SOURCE COMPLIES WITH FEDERALLY ENFORCEABLE
REGULATIONS OR LIMITATIONS.
Govt facility: ALL OTHER FACILITIES NOT OWNED OR OPERATED BY A FEDERAL, STATE, OR
LOCAL GOVERNMENT
Current HPV: Not reported

Historical Compliance Minor Sources:

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1004
Air prog code hist file: SIP SOURCE
State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1101
Air prog code hist file: SIP SOURCE
State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1102
Air prog code hist file: SIP SOURCE
State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1103
Air prog code hist file: SIP SOURCE

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

CHILDRENS HOSPITAL (Continued)

1000278846

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
 Hist compliance date: 1104
 Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
 Hist compliance date: 1201
 Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
 Hist compliance date: 1202
 Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
 Hist compliance date: 1203
 Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
 Hist compliance date: 1204
 Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
 Hist compliance date: 1301
 Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
 Hist compliance date: 1302
 Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
 Hist compliance date: 1303
 Air prog code hist file: SIP SOURCE

134
 SSE
 1/4-1/2
 0.483 mi.
 2549 ft.

**ROSWELL PARK
 ELM AT CARLTON
 BUFFALO, NY**

**NY LTANKS S108765897
 N/A**

**Relative:
 Lower**

LTANKS:
 Site ID: 386342
 Spill Number/Closed Date: 0750760 / 11/15/2007
 Spill Date: 8/24/2007
 Spill Cause: Tank Test Failure
 Spill Source: Institutional, Educational, Gov., Other
 Spill Class: Known release that creates potential for fire or hazard. DEC Response.
 Willing Responsible Party. Corrective action taken.

Cleanup Ceased: Not reported
 Cleanup Meets Standard: False
 SWIS: 1502
 Investigator: fxgalleg
 Referred To: Not reported
 Reported to Dept: 8/24/2007
 CID: Not reported
 Water Affected: Not reported
 Spill Notifier: Other
 Last Inspection: Not reported
 Recommended Penalty: False

**Actual:
 645 ft.**

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ROSWELL PARK (Continued)

S108765897

UST Involvement: True
Remediation Phase: 0
Date Entered In Computer: 8/24/2007
Spill Record Last Update: 11/15/2007
Spiller Name: Not reported
Spiller Company: Not reported
Spiller Address: Not reported
Spiller City,St,Zip: Not reported
Spiller County: Not reported
Spiller Contact: ANTHONY PUTRELO
Spiller Phone: (716) 845-8171
Spiller Extention: Not reported
DEC Region: 9
DER Facility ID: 335727
DEC Memo:

8/27/07 FG SPOKE TO TERRY WATERS WITH ROSWELL. HE SAID THAT ROSWELL IS GETTING A PRICE QUOTE TO RETEST THE UST'S ASAP. HE WILL PROVIDE THE RESULTS AS SOON AS HE GETS THEM.10/10/07 FG SPOKE TO TERRI WATERS WITH ROSWELL AND HE SAID ELMWOOD CAME BACK OUT BECAUSE THEY RAN THE ORIGINAL TEST IMPROPERLY. THEY CAPPED THE WRONG VENT LINE. ROSWELL WILL SUBMIT THE PASSED TEST WITHIN THE NEXT TWO WEEKS. THEY DO NOT HAVE A FAILED TEST BECAUSE OF THE ERROR IN RUNNING THE ORIGINAL TEST.11/15/07 FG SPOKE TO TERRY WATERS WITH ROSWELL. HE SAID THAT THE UST'S PASSED THE RETEST. PBS IS SCHEDULED TO COMPLETE AN INSPECTION NEXT WEEK AND HE WILL GIVE THE FAILED AND PASSED TESTS TO THE DEC REPRESENTATIVE AT THAT TIME. PBS WILL KEEP THE TESTS IN THEIR FILE.NO FURTHER WORK IS REQUIRED. THE SITE IS CLOSED.ELECTRONIC FILE ONLY.
Remarks: 3 TEN K USTS FAILED TANK TEST. BELIEVE PROBLEM IS WITH THE VENT. TANKS FOR EMERGENCY GENERATORS. TANKS 126,123,122.

Material:
Site ID: 386342
Operable Unit ID: 1143582
Operable Unit: 01
Material ID: 2133853
Material Code: 0008
Material Name: Diesel
Case No.: Not reported
Material FA: Petroleum
Quantity: Not reported
Units: Gallons
Recovered: Not reported
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

135
 North
 1/4-1/2
 0.486 mi.
 2568 ft.

ENGINE #16 1416 MAIN
1416 MAIN ST. AT UTICA
BUFFALO, NY

NY LTANKS S100494870
N/A

Relative:
Lower

LTANKS:

Actual:
644 ft.

Site ID: 320684
 Spill Number/Closed Date: 9213701 / 10/15/1993
 Spill Date: 3/11/1993
 Spill Cause: Tank Failure
 Spill Source: Institutional, Educational, Gov., Other
 Spill Class: Known release with minimal potential for fire or hazard. DEC Response.
 Willing Responsible Party. Corrective action taken.
 Cleanup Ceased: 8/23/1993
 Cleanup Meets Standard: True
 SWIS: 1502
 Investigator: RMCROSSE
 Referred To: Not reported
 Reported to Dept: 3/12/1993
 CID: Not reported
 Water Affected: Not reported
 Spill Notifier: Other
 Last Inspection: 3/12/1993
 Recommended Penalty: False
 UST Involvement: False
 Remediation Phase: 0
 Date Entered In Computer: 3/12/1993
 Spill Record Last Update: 11/1/1993
 Spiller Name: Not reported
 Spiller Company: WESTERN NY VETERANS HOUSI
 Spiller Address: 1125 MAIN STREET
 Spiller City,St,Zip: BUFFALO, NY 14209
 Spiller County: 001
 Spiller Contact: Not reported
 Spiller Phone: Not reported
 Spiller Extention: Not reported
 DEC Region: 9
 DER Facility ID: 258358
 DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "RMC"03/12/93: RMC/NORM KEHL/PHONE - FOUND CONTAMINATION AND PRODUCT WHILE REMOVINGTANK. TO DIG TO CLEAN & SAMPLE. 8021 & 8270 REQUIRED ON EXCAVATION. 03/12/93: RMC/NORM KEHL/ALBERT O'BRIEN/SITE - REMOVED 550-GAL. KEROSENE TANK & APPROX. 10 YDS. CONTAMINATED MATERIAL. EST. 10 MORE TO BE REMOVED FROM NE SIDE. ADVISED OF SAMPLING & DISPOSAL RQMTS. DUE 5/1/92. 04/06/93: RMC/SITE PIT BACKFILLED, EST. 50 YARDS OF SOIL STOCKPILED SAMPLING AND DISPOSAL PLAN DUE 05/01/93. 04/13/93: RMC/ALBERT OBRIEN/PHONE ADVISED OF DISPOSAL REQUIREMENTS, LETTER, RESPONSE DUE 05/01/93. 05/04/93: RMC/ALBERT OBRIEN/PHONE HIRED AL GILLOWICZ TO TEST AND DISPOSE OF SAMPLING AND DISPOSAL RECEIPTS ALL DUE BY 6/15/93.07/08/93: RMC/RECEIVED LETTER OF INTENT TO DISPOSE FROM ISI, SAMPLING AND DISPOSAL RECEIPTS ALL DUE BY 8/15/93.08/23/93: RMC/RECEIVED DISPOSAL RECEIPTS, OK. NEED CLEAN HOLE TEST TO CLOSE DUE 10/1/93.10/15/93: RMC/RECEIVED CLEAN HOLE TESTS, NO EXCEEDANCES, CLOSE OUT.
 Remarks: 550-GAL. TANK REMOVED W/HOLES AND PRODUCT IN EXCAVATION.

Material:
 Site ID: 320684

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ENGINE #16 1416 MAIN (Continued)

S100494870

Operable Unit ID: 977798
Operable Unit: 01
Material ID: 403465
Material Code: 0012A
Material Name: Kerosene
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Not reported
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

136
West
1/4-1/2
0.498 mi.
2631 ft.

HEYMAN LABORATORIES INC
325 ELMWOOD AVE
BUFFALO, NY 14222

RCRA NonGen / NLR
FINDS
NY LTANKS
NY MANIFEST
1000295159
NYD986886356

Relative:
Lower

RCRA NonGen / NLR:

Actual:
643 ft.

Date form received by agency: 01/01/2007
Facility name: HEYMAN LABORATORIES INC
Facility address: 325 ELMWOOD AVE
BUFFALO, NY 14222203
EPA ID: NYD986886356
Mailing address: ELMWOOD AVE
BUFFALO, NY 14222
Contact: Not reported
Contact address: ELMWOOD AVE
BUFFALO, NY 14222
Contact country: US
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 02
Land type: Facility is not located on Indian land. Additional information is not known.
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: BRACOR INC/TODD BRASON
Owner/operator address: NOT REQUIRED
NOT REQUIRED, WY 99999
Owner/operator country: US
Owner/operator telephone: (212) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: BRACOR INC/TODD BRASON
Owner/operator address: NOT REQUIRED
NOT REQUIRED, WY 99999
Owner/operator country: US
Owner/operator telephone: (212) 555-1212

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

HEYMAN LABORATORIES INC (Continued)

1000295159

Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006
Facility name: HEYMAN LABORATORIES INC
Classification: Not a generator, verified

Date form received by agency: 07/08/1999
Facility name: HEYMAN LABORATORIES INC
Classification: Not a generator, verified

Date form received by agency: 12/12/1989
Facility name: HEYMAN LABORATORIES INC
Classification: Large Quantity Generator

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 11/23/1992
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

FINDS:

Registry ID: 110009477663

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

HEYMAN LABORATORIES INC (Continued)

1000295159

LTANKS:

Site ID: 141703
Spill Number/Closed Date: 9311171 / 1/30/1996
Spill Date: 12/15/1993
Spill Cause: Tank Failure
Spill Source: Commercial/Industrial
Spill Class: Known release that creates potential for fire or hazard. DEC Response.
Willing Responsible Party. Corrective action taken.
Cleanup Ceased: 1/30/1996
Cleanup Meets Standard: False
SWIS: 1502
Investigator: COOKE
Referred To: Not reported
Reported to Dept: 12/15/1993
CID: Not reported
Water Affected: Not reported
Spill Notifier: Other
Last Inspection: 1/20/1995
Recommended Penalty: False
UST Involvement: True
Remediation Phase: 0
Date Entered In Computer: 12/15/1993
Spill Record Last Update: 12/17/1998
Spiller Name: DAVID MUSKOPF
Spiller Company: JOSEPH DAVIS, INC.
Spiller Address: 120 WEST TUPPER STREET
Spiller City,St,Zip: BUFFALO, NY 14201-2192
Spiller County: 001
Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported
DEC Region: 9
DER Facility ID: 120970
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "JDC"12/15/93: JDC/GARY TULNER, K & T PUMP/SITE - STRONG GASOLINE ODOR EMANATING FROM SAND-LOAM BACKFILL. NO FREE GASOLINE OBSERVED. CONTAMINATED SOILS BEING REMOVED AND STAGED ON PLASTIC. 12/16/93: JDC/DAVE MUSKOPF/TELECON - ADVISED HIM OF REMEDIATION REQUIREMENTS. INSPECTED SITE AND FOUND MORE SOIL CONTAMINATION EXPOSED IN EXCAVATION. 12/17/93: JDC DRAFTED LETTER TO MR. MUSKOPF OUTLINING CLEANUP OPTIONS. 12/21/93: SAC/KATHY MCCARTHY, K & T PUMP/TELECON - THEY WILL BE REMOVING TANK TOMORROW AT JOSEPH DAVIS. 12/27/93: JDC/KATHY MCCARTHY, K & T/TELECON - THEY HAVE BEEN DIRECTED BY R.P. TO DO REMEDIAL WORK. REMEDIAL PLAN SHOULD BE COMPLETED SOMETIME NEXT WEEK. 1/18/94: RECEIVED ANALYSIS FOR GW DATED 11/2/94 AND FOUND SATISFACTORY. NO FURTHER ACTION REQUIRED. SENT CLOSURE LETTER. 4/25/94: JDC/MR. MOSKUPF, RP/TELECON - WILL BE SENDING UPDATE ON CLEANUP STATUS; EXPECTS SOIL WILL BE DISPOSED OF. 5/6/94: SOIL ANALYSIS 4/18/94 INDICATES NON-HAZ, NO UPDATE FROM RP ON CLEANUP. 5/28/94: SENT LETTER REQUESTING DISPOSAL RECEIPTS FOR REMOVED SOILS. CK BK 7/14/94.7/6/94: JDC INSPECTED SITE AND FOUND SOILS REMOVED. SOIL DISPOSAL RECEIPTS RECEIVED. NEED SOIL ANALYSIS TO CLOSE FILE. CK BK 7/14/94.7/13/94: JDC SENT LETTER REQUESTING GW REMEDIATION PLAN AND/ OR RESAMPLING. RECEIVED SOIL DISPOSAL AND GW ANALYSIS FROM 4K TANK PIT. CK BK 7/29/94.8/22/94: JDC TELCON W/ MR MUSKOFF, WILL RESAMPLE GW IN EXCAVATION OF 4K TANK WHEN MW IS INSTALLED.12/9/94: RECIEVED GW ANALYSIS AT 4K TANK BOTTOM SHOWING MINOR LEVELS OF MTBE.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

HEYMAN LABORATORIES INC (Continued)

1000295159

WILL REQUEST ONE ADDITIONAL SAMPLE TO CONFIRM.01/20/95: JDC INSPECTED PROPERTY AND CONFIRMED WELL IN PLACE. WILL CONTACTED RP AND REQUEST ANALYSIS OF GW TO CONFIRM 11/94 ANALYSIS. 01/23/95: JDC CONTACTED MR MUSKOPF AND REQUESTED ADDITIONAL ANALYSIS BE COMPLETED. RP AGREED AND WILL BE USING K&T PUMP TO COLLECT SAMPLE. 03/09/95: SENT STATUS LETTER TO RP REQUESTING LAB TEST RESULTS FOR GW ANALYSIS. CK BK 3/30/95. 12/15/95: JDC LEFT MESSAGE FOR MR MUSKOFF TO RETURN MY CALL REGARDING SAMPLING STATUS.1/30/96: RECIEVED GW ANALYSIS AND FOUND LOW LEVELS OF BTEX. WILL PROCESS FILE AS INACTIVE. NO FURTHER ACTION AT THIS TIME.

Remarks: CONTAMINATED SOIL DISCOVERED DURING TANK REMOVAL.

Material:

Site ID: 141703
Operable Unit ID: 989810
Operable Unit: 01
Material ID: 554033
Material Code: 0009
Material Name: Gasoline
Case No.: Not reported
Material FA: Petroleum
Quantity: 0
Units: Gallons
Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

Site ID: 141703
Spill Tank Test: 1542302
Tank Number: Not reported
Tank Size: 0
Test Method: 00
Leak Rate: 0
Gross Fail: Not reported
Modified By: Spills
Last Modified: 10/1/2004
Test Method: Unknown

NY MANIFEST:

EPA ID: NYD986886356
Country: USA
Mailing Name: HEYMAN LABORTAORIES INC
Mailing Contact: HEYMAN LABORTAORIES INC
Mailing Address: 5817 SOUTH PARK AVE
Mailing Address 2: Not reported
Mailing City: HAMBURG
Mailing State: NY
Mailing Zip: 14075
Mailing Zip4: Not reported
Mailing Country: USA
Mailing Phone: 716-648-6990

Document ID: NYB1891512

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

HEYMAN LABORATORIES INC (Continued)

1000295159

Manifest Status: Completed copy
Trans1 State ID: 80347VNY
Trans2 State ID: Not reported
Generator Ship Date: 900125
Trans1 Recv Date: 900125
Trans2 Recv Date: Not reported
TSD Site Recv Date: 900125
Part A Recv Date: 900214
Part B Recv Date: 900208
Generator EPA ID: NYD986886356
Trans1 EPA ID: NYD982792814
Trans2 EPA ID: Not reported
TSDF ID: NYD043815703
Waste Code: F003 - UNKNOWN
Quantity: 00115
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 023
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 90

Document ID: NYB2099547
Manifest Status: Completed copy
Trans1 State ID: NY5555
Trans2 State ID: Not reported
Generator Ship Date: 901025
Trans1 Recv Date: 901025
Trans2 Recv Date: Not reported
TSD Site Recv Date: 901025
Part A Recv Date: 901106
Part B Recv Date: 901107
Generator EPA ID: NYD986886356
Trans1 EPA ID: NYD982792814
Trans2 EPA ID: Not reported
TSDF ID: NYD043815703
Waste Code: F003 - UNKNOWN
Quantity: 00023
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 007
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 90

Document ID: NJA1484742
Manifest Status: Completed copy
Trans1 State ID: NJDEPE632
Trans2 State ID: Not reported
Generator Ship Date: 941115
Trans1 Recv Date: 941115
Trans2 Recv Date: Not reported
TSD Site Recv Date: 941117
Part A Recv Date: 941123
Part B Recv Date: 941207

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

HEYMAN LABORATORIES INC (Continued)

1000295159

Generator EPA ID: NYD986886356
Trans1 EPA ID: NJD991291584
Trans2 EPA ID: Not reported
TSD ID: NJD980536593
Waste Code: F003 - UNKNOWN
Quantity: 00400
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 94

Document ID: NJA1484750
Manifest Status: Completed copy
Trans1 State ID: NJDEPE632
Trans2 State ID: Not reported
Generator Ship Date: 940823
Trans1 Recv Date: 940823
Trans2 Recv Date: Not reported
TSD Site Recv Date: 940826
Part A Recv Date: 940902
Part B Recv Date: 940913
Generator EPA ID: NYD986886356
Trans1 EPA ID: NJD991291584
Trans2 EPA ID: Not reported
TSD ID: NJD980536593
Waste Code: F003 - UNKNOWN
Quantity: 00400
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 94

Document ID: NJA1484746
Manifest Status: Completed copy
Trans1 State ID: NJDEPE632
Trans2 State ID: Not reported
Generator Ship Date: 950207
Trans1 Recv Date: 950207
Trans2 Recv Date: Not reported
TSD Site Recv Date: 950209
Part A Recv Date: 950223
Part B Recv Date: 950301
Generator EPA ID: NYD986886356
Trans1 EPA ID: NJD991291584
Trans2 EPA ID: Not reported
TSD ID: NJD980536593
Waste Code: F003 - UNKNOWN
Quantity: 00400
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

HEYMAN LABORATORIES INC (Continued)

1000295159

Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 95

EPA ID: NYD982793838
Country: USA
Mailing Name: JOSEPH DAVIS INC
Mailing Contact: JOSEPH DAVIS INC
Mailing Address: 325 SOUTH ELMWOOD
Mailing Address 2: Not reported
Mailing City: BUFFALO
Mailing State: NY
Mailing Zip: 14201
Mailing Zip4: Not reported
Mailing Country: USA
Mailing Phone: 716-842-1500

Document ID: NYB1891512
Manifest Status: Completed copy
Trans1 State ID: 80347VNY
Trans2 State ID: Not reported
Generator Ship Date: 900125
Trans1 Recv Date: 900125
Trans2 Recv Date: Not reported
TSD Site Recv Date: 900125
Part A Recv Date: 900214
Part B Recv Date: 900208
Generator EPA ID: NYD986886356
Trans1 EPA ID: NYD982792814
Trans2 EPA ID: Not reported
TSD ID: NYD043815703
Waste Code: F003 - UNKNOWN
Quantity: 00115
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 023
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 90

Document ID: NYB2099547
Manifest Status: Completed copy
Trans1 State ID: NY5555
Trans2 State ID: Not reported
Generator Ship Date: 901025
Trans1 Recv Date: 901025
Trans2 Recv Date: Not reported
TSD Site Recv Date: 901025
Part A Recv Date: 901106
Part B Recv Date: 901107
Generator EPA ID: NYD986886356
Trans1 EPA ID: NYD982792814
Trans2 EPA ID: Not reported
TSD ID: NYD043815703
Waste Code: F003 - UNKNOWN

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

HEYMAN LABORATORIES INC (Continued)

1000295159

Quantity: 00023
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 007
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 90

Document ID: NJA1484742
Manifest Status: Completed copy
Trans1 State ID: NJDEPE632
Trans2 State ID: Not reported
Generator Ship Date: 941115
Trans1 Recv Date: 941115
Trans2 Recv Date: Not reported
TSD Site Recv Date: 941117
Part A Recv Date: 941123
Part B Recv Date: 941207
Generator EPA ID: NYD986886356
Trans1 EPA ID: NJD991291584
Trans2 EPA ID: Not reported
TSD ID: NJD980536593
Waste Code: F003 - UNKNOWN
Quantity: 00400
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 94

Document ID: NJA1484750
Manifest Status: Completed copy
Trans1 State ID: NJDEPE632
Trans2 State ID: Not reported
Generator Ship Date: 940823
Trans1 Recv Date: 940823
Trans2 Recv Date: Not reported
TSD Site Recv Date: 940826
Part A Recv Date: 940902
Part B Recv Date: 940913
Generator EPA ID: NYD986886356
Trans1 EPA ID: NJD991291584
Trans2 EPA ID: Not reported
TSD ID: NJD980536593
Waste Code: F003 - UNKNOWN
Quantity: 00400
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 94

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

HEYMAN LABORATORIES INC (Continued)

1000295159

Document ID: NJA1484746
Manifest Status: Completed copy
Trans1 State ID: NJDEPE632
Trans2 State ID: Not reported
Generator Ship Date: 950207
Trans1 Recv Date: 950207
Trans2 Recv Date: Not reported
TSD Site Recv Date: 950209
Part A Recv Date: 950223
Part B Recv Date: 950301
Generator EPA ID: NYD986886356
Trans1 EPA ID: NJD991291584
Trans2 EPA ID: Not reported
TSD ID: NJD980536593
Waste Code: F003 - UNKNOWN
Quantity: 00400
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 95

137
SSW
1/2-1
0.655 mi.
3461 ft.

**CENTURY CENTRE I
817 WASHINGTON ST
BUFFALO, NY 14203**

**CORRACTS 1000177343
RCRA-CESQG NYD002107399
PADS
US AIRS**

Relative:
Lower

CORRACTS:

Actual:
636 ft.

EPA ID: NYD002107399
EPA Region: 02
Area Name: SITEWIDE
Actual Date: 19940112
Action: CA075LO - CA Prioritization, Facility or area was assigned a low corrective action priority
NAICS Code(s): Not reported
Original schedule date: 19940331
Schedule end date: Not reported

EPA ID: NYD002107399
EPA Region: 02
Area Name: SITEWIDE
Actual Date: 19881216
Action: CA070NO - RFA Determination Of Need For An RFI, RFI is Not Necessary
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: NYD002107399
EPA Region: 02
Area Name: SITEWIDE
Actual Date: 19881216
Action: CA999NF - Corrective Action Process Terminated, No Further Action
NAICS Code(s): Not reported
Original schedule date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CENTURY CENTRE I (Continued)

1000177343

Schedule end date: Not reported

EPA ID: NYD002107399
EPA Region: 02
Area Name: SITEWIDE
Actual Date: 19940719
Action: CA070YE - RFA Determination Of Need For An RFI, RFI is Necessary
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: NYD002107399
EPA Region: 02
Area Name: SITEWIDE
Actual Date: 19920922
Action: CA050 - RFA Completed
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: NYD002107399
EPA Region: 02
Area Name: SITEWIDE
Actual Date: 19881028
Action: CA050PA - RFA Completed, Assessment was a PA-Plus
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

RCRA-CESQG:

Date form received by agency: 02/21/2007
Facility name: CENTURY CENTRE I
Facility address: 817 WASHINGTON ST
BUFFALO, NY 14203
EPA ID: NYD002107399
Mailing address: LOVELL PLACE
ERIE, PA 16503
Contact: RON FARA VAUGH
Contact address: LOVELL PLACE
ERIE, PA 16503
Contact country: US
Contact telephone: (814) 392-4085
Contact email: Not reported
EPA Region: 02
Land type: Private
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CENTURY CENTRE I (Continued)

1000177343

any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: Yes
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 02/20/2007
Facility name: CENTURY CENTRE I
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 02/20/2007
Facility name: CENTURY CENTRE I
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 03/20/2002
Facility name: CENTURY CENTRE I
Classification: Large Quantity Generator

Date form received by agency: 07/14/1999
Facility name: CENTURY CENTRE I
Classification: Small Quantity Generator

Date form received by agency: 03/29/1996
Facility name: CENTURY CENTRE I
Site name: TRICO PRODUCTS CORPORATION
Classification: Large Quantity Generator

Date form received by agency: 05/17/1994
Facility name: CENTURY CENTRE I
Site name: TRICO PRODUCTS CORPORATION
Classification: Large Quantity Generator

Date form received by agency: 02/27/1992
Facility name: CENTURY CENTRE I
Site name: TRICO PRODUCTS CORP
Classification: Large Quantity Generator

Date form received by agency: 03/01/1990
Facility name: CENTURY CENTRE I
Site name: TRICO PRODUCTS CORPORATION

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CENTURY CENTRE I (Continued)

1000177343

Classification: Large Quantity Generator

Date form received by agency: 11/19/1980

Facility name: CENTURY CENTRE I

Classification: Not a generator, verified

Date form received by agency: 08/18/1980

Facility name: CENTURY CENTRE I

Classification: Large Quantity Generator

Hazardous Waste Summary:

Waste code: D001

Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKEY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D007

Waste name: CHROMIUM

Waste code: F003

Waste name: THE FOLLOWING SPENT NON-HALOGENATED 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 NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED 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.

Corrective Action Summary:

Event date: 10/28/1988

Event: RFA Completed, Assessment was a PA-Plus.

Event date: 12/16/1988

Event: RFA Determination Of Need For An RFI, RFI is Not Necessary;

Event date: 12/16/1988

Event: Corrective Action Process Terminated, No Further Action

Event date: 09/22/1992

Event: RFA Completed

Event date: 01/12/1994

Event: CA Prioritization, Facility or area was assigned a low corrective action priority.

Event date: 07/19/1994

Event: RFA Determination Of Need For An RFI, RFI is Necessary;

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CENTURY CENTRE I (Continued)

1000177343

Facility Has Received Notices of Violations:

Regulation violated: Not reported
Area of violation: LDR - General
Date violation determined: 01/27/1997
Date achieved compliance: 02/11/1997
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 01/27/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:

Evaluation date: 03/05/2003
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA

Evaluation date: 10/11/2001
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/13/2001
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/31/2001
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/13/1999
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA

Evaluation date: 09/18/1998
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA

Evaluation date: 01/10/1997
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: LDR - General
Date achieved compliance: 02/11/1997

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CENTURY CENTRE I (Continued)

1000177343

Evaluation lead agency: State

Evaluation date: 11/06/1995
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/02/1986
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/12/1986
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 11/14/1985
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/21/1985
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

PADS:

EPAID: NYD002107399
Facility name: TRICO PRODUCTS CORP.
Facility Address: 817 WASHINGTON STREET
BUFFALO, NY 14203

Facility country: US
Generator: Yes
Storer: No
Transporter: No
Disposer: No
Research facility: No
Smelter: No

Facility owner name: TRICO PRODUCTS CORP.
Contact title: Not reported
Contact name: TOMPKINS, TIM
Contact tel: (716)857-3052
Contact extension: Not reported
Mailing address: 817 WASHINGTON STREET
BUFFALO, NY 14203

Mailing country: US
Cert. title: Not reported
Cert. name: Not reported
Cert. date: 01/11/1994
Date received: 02/02/1994

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CENTURY CENTRE I (Continued)

1000177343

AIRS (AFS):

Airs Minor Details:

EPA plant ID: 110000326816
Plant name: TRICO PRODUCTS CORP
Plant address: 817 WASHINGTON ST
BUFFALO, NY 14203
County: ERIE
Region code: 02
Dunn & Bradst #: 002107399
Air quality cntrl region: 162
Sic code: 3714
Sic code desc: MOTOR VEHICLE PARTS AND ACCESSORIES
North Am. industrial classf: 336399
NAIC code description: All Other Motor Vehicle Parts Manufacturing
Default compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Default classification: POTENTIAL UNCONTROLLED EMISSIONS < 100 TONS/YEAR
Govt facility: ALL OTHER FACILITIES NOT OWNED OR OPERATED BY A FEDERAL, STATE, OR LOCAL GOVERNMENT
Current HPV: Not reported

Historical Compliance Minor Sources:

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1004
Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1102
Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1201
Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1203
Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1302
Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1101
Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1103
Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1104
Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CENTURY CENTRE I (Continued)

1000177343

Hist compliance date: 1202
Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1204
Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1301
Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1303
Air prog code hist file: SIP SOURCE

Compliance & Violation Data by Minor Sources:

Air program code: SIP SOURCE
Plant air program pollutant: Not reported
Default pollutant classification: POTENTIAL UNCONTROLLED EMISSIONS < 100 TONS/YEAR
Def. poll. compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Def. attainment/non atnmnt: ATTAINMENT AREA FOR GIVEN POLLUTANT
Repeat violator date: Not reported
Turnover compliance: Not reported

Air program code: SIP SOURCE
Plant air program pollutant: SULFUR DIOXIDE
Default pollutant classification: POTENTIAL UNCONTROLLED EMISSIONS < 100 TONS/YEAR
Def. poll. compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Def. attainment/non atnmnt: ATTAINMENT AREA FOR GIVEN POLLUTANT
Repeat violator date: Not reported
Turnover compliance: Not reported

Air program code: SIP SOURCE
Plant air program pollutant: CARBON MONOXIDE
Default pollutant classification: POTENTIAL UNCONTROLLED EMISSIONS < 100 TONS/YEAR
Def. poll. compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Def. attainment/non atnmnt: ATTAINMENT AREA FOR GIVEN POLLUTANT
Repeat violator date: Not reported
Turnover compliance: Not reported

Air program code: SIP SOURCE
Plant air program pollutant: TOTAL PARTICULATE MATTER
Default pollutant classification: POTENTIAL UNCONTROLLED EMISSIONS < 100 TONS/YEAR
Def. poll. compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Def. attainment/non atnmnt: ALL OTHER NON-ATTAINMENT FOR PRIMARY AND SECONDARY STANDARDS
Repeat violator date: Not reported
Turnover compliance: Not reported

Air program code: SIP SOURCE
Plant air program pollutant: VOLATILE ORGANIC COMPOUNDS
Default pollutant classification: POTENTIAL UNCONTROLLED EMISSIONS < 100 TONS/YEAR
Def. poll. compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Def. attainment/non atnmnt: Not reported
Repeat violator date: Not reported
Turnover compliance: Not reported

MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Site

Database(s)

EDR ID Number
 EPA ID Number

138
 NNE
 1/2-1
 0.719 mi.
 3794 ft.

1542 MAIN STREET
 1542 MAIN STREET
 BUFFALO, NY 14209

NY SHWS S113916812
 N/A

Relative:
 Lower

SHWS:
 Program: HW
 Site Code: 482356
 Classification: P
 Region: 9
 Acres: .270
 HW Code: 915278
 Record Add: 05/24/2013
 Record Upd: 07/02/2013
 Updated By: BXANDERS

Actual:
 631 ft.

Site Description: Location: The Site is an approximate 0.27-acre parcel located at the corner of Main St. and West Ferry St. in the City of Buffalo. Site Features: There are two adjoined buildings on the Site, which are 2- and 3- story brick, wood and concrete structures that were historically mixed use commercial and residential. The building was re-developed into a commercial building in 2012. Current Zoning and Land Use: The surrounding properties are predominately commercial to the north, east, and south with private residences to the west. Past Use of the Site: A portion of the building, historically addressed as 958-960 West Ferry Street, was used as a dry-cleaner in the past. As part of a property transaction a series of Environmental Assessments were conducted on the property from 2007 - 2012. These reports document groundwater contamination that resulted in remedial action. Included in the remedial action:- in-situ enhanced bioremediation of VOC impacted groundwater;- implementation of a soil/fill management plan to address potentially impacted soil that may be encountered during Site redevelopment; and,- design and installation of an active subsurface depressurization (ASD) system to protect the building from potential vapor intrusion of VOCs. Site Geology and Hydrogeology: The geology at the Site is generally described as fill materials overlying sandy lean clay and sandy silt. The fill materials consist of miscellaneous sand, intermixed with brick, concrete and cinders. Groundwater was encountered at approximately 6 fbg during exterior installations and approximately 2 feet below grade surface during installation of the basement borings (i.e., approximately 7 feet below street grade). Groundwater elevations surveyed in 2009 indicate groundwater flows in a general northeast direction across the Site.

Env Problem: Nature and Extent of Contamination: Chlorinated Volatile Organic Compounds (cVOCs) were detected at very low concentrations in soil samples, with the majority of analytes detected at estimated concentrations below laboratory detection limits. No cVOCs were detected above Part 375 Unrestricted Use SCOs. In groundwater the highest concentrations of cVOCs were noted in MW-12 with a concentration of 7,845 ug/L total cVOCs. Additionally; On-Site groundwater has been impacted by cVOCs, specifically perchloroethylene (PCE) and its chemical breakdown products. PCE is a common dry-cleaning solvent and the groundwater impacts are reasonably attributable to past use of a portion of the Site as a dry-cleaning facility. The groundwater impacts are located west of the buildings (MW-12 area), north of the buildings (MW-16 area) and beneath the buildings (MW-13 area). The highest concentration of cVOCs in groundwater was detected in MW-12 (7,845ug/L total VOCs), which is located on the southern Site boundary west of the buildings.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

1542 MAIN STREET (Continued)

S113916812

Groundwater samples from MW-13 through MW-16 are most representative of the area where the new building was recently completed. The potential for migration of cVOCs has not yet been evaluated.

Health Problem: As information for this site becomes available, it will be reviewed by the NYSDOH to determine if site contamination presents public health exposure concerns.

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: Owner
Sub Type: 06
Owner Name: Scott W. Gehl
Owner Company: HOUSING OPPORTUNITIES MADE EQUAL INC.
Owner Address: 1542 Main Street (at Ferry)
Owner Addr2: Not reported
Owner City,St,Zip: Buffalo, NY 14209
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
Updated By: Not reported

Z139 DIARSENOL COMPANY
ENE 84 KINGSLEY STREET
1/2-1 BUFFALO, NY 14208
0.869 mi.
4586 ft. Site 1 of 2 in cluster Z

CERC-NFRAP 1000369446
RCRA NonGen / NLR NYD981187040
NY SHWS
NY MANIFEST
NY ENG CONTROLS
NY INST CONTROL
NY RGA HWS

Relative:
Lower

CERC-NFRAP:
Site ID: 0202327
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Site Alias Name(s):
Alias Name: KINGSLEY PARK
Alias Address: Not reported
NY

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DIARSENOL COMPANY (Continued)

1000369446

CERCLIS-NFRAP Assessment History:

Action: SITE INSPECTION
Date Started: 10/01/90
Date Completed: 02/13/91
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

Action: SITE INSPECTION
Date Started: 02/19/87
Date Completed: 02/23/87
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

Action: DISCOVERY
Date Started: / /
Date Completed: 03/26/86
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT
Date Started: / /
Date Completed: 03/26/86
Priority Level: Low priority for further assessment

Action: ARCHIVE SITE
Date Started: / /
Date Completed: 01/31/97
Priority Level: Not reported

RCRA NonGen / NLR:

Date form received by agency: 01/01/2007
Facility name: BUFFALO CITY OF - DIARSENOL KINGSLEY PK
Facility address: 60-86 KINGSLEY ST
BUFFALO, NY 142082142
EPA ID: NYD981187040
Mailing address: WOLF RD - RM 423
ALBANY, NY 12233
Contact: Not reported
Contact address: WOLF RD - RM 423
ALBANY, NY 12233
Contact country: US
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 02
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: CITY OF BUFFALO
Owner/operator address: NOT REQUIRED
NOT REQUIRED, WY 99999
Owner/operator country: US
Owner/operator telephone: (212) 555-1212
Legal status: Municipal
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: CITY OF BUFFALO

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DIARSENOL COMPANY (Continued)

1000369446

Owner/operator address: NOT REQUIRED
NOT REQUIRED, WY 99999
Owner/operator country: US
Owner/operator telephone: (212) 555-1212
Legal status: Municipal
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006
Facility name: BUFFALO CITY OF - DIARSENOL KINGSLEY PK
Classification: Not a generator, verified

Date form received by agency: 07/08/1999
Facility name: BUFFALO CITY OF - DIARSENOL KINGSLEY PK
Classification: Not a generator, verified

Date form received by agency: 02/11/1992
Facility name: BUFFALO CITY OF - DIARSENOL KINGSLEY PK
Site name: NEW YORK STATE DEPT ENV C DIARSENOL
Classification: Large Quantity Generator

Date form received by agency: 04/22/1991
Facility name: BUFFALO CITY OF - DIARSENOL KINGSLEY PK
Classification: Large Quantity Generator

Violation Status: No violations found

SHWS:

Program: HW
Site Code: 56621
Classification: SITE IS PROPERLY CLOSED - REQUIRES CONTINUED MANAGEMENT
Region: 9
Acres: 2.000
HW Code: 915124
Record Add: 11/18/1999
Record Upd: 09/13/2013
Updated By: MLDOSTER
Site Description: Location: The Diarsenol Co., Kingsley Park Site is located in a

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DIARSENOL COMPANY (Continued)

1000369446

residential neighborhood on Kingsley Street in the City of Buffalo, Erie County. Site Features: The Site is currently a flat, grass covered lot with no buildings. Fencing surrounds much of the Site. Current Zoning: The Site is still a City-owned park. Historic Uses: The Diarsenol Company reportedly disposed waste materials on this site, which was located adjacent to their former plant site on Kingsley Street. Diarsenol produced medications containing arsenic. The firm began operation in the early 1900's and ceased production in the 1940's. The plant was demolished, the site was graded and covered with topsoil. By 1951 the city had developed a park on the reported disposal area. A Phase II Investigation was conducted in 1989 and found arsenic present on the site. In 1991 NYSDEC excavated and provided off-site disposal of contaminated soils. The removal included the excavation and disposal of 9,569 tons of contaminated non-hazardous materials and 1,980 tons of hazardous materials. A post-remedial Operation, Maintenance and Monitoring Plan (OM&M Plan) is currently in place. A small groundwater collection system was installed which collects shallow groundwater and discharges it to the sanitary sewer. The discharge is monitored by the Buffalo Sewer Authority (BSA). Site Geology and Hydrology: The Site is currently covered with topsoil overlying clean fill and native clay. Minimal shallow-groundwater contamination is still present in an area proximal to the groundwater collection system. Groundwater monitoring has been conducted by the City of Buffalo to verify groundwater flow to the collection system and that it does not pose a problem to the community.

Env Problem: Nature and Extent of Contamination: Remediation at the Site is complete. Prior to remediation, the primary contaminant of concern was arsenic in soil and groundwater. Removal of waste and impacted soils has removed the threat of arsenic contamination to the community. Shallow groundwater is directed towards a collection system for discharge to the City sewer. Groundwater and Discharge water from the collection system is assessed annually and is not considered a threat to the environment.

Health Problem: Kingsley Park is located in a residential neighborhood of the City of Buffalo. The site is currently fenced and overgrown. Arsenic contaminated soils were removed, eliminating the potential for public exposures to contaminated soils. Exposures to contaminated groundwater are not expected because area residents use public water. NYSDOH performed a cancer incidence study at the request of the community. This study reported an increased incidence of some cancers which have strong associations with life-style factors and may also be associated with occupational exposures. It was not possible to determine whether site exposures were a contributing factor. An update study, which will evaluate additional data for these cancers and cancer data from five more years, is planned.

Dump: True
Structure: False
Lagoon: False
Landfill: False
Pond: False
Disp Start: unknown
Disp Term: 1951
Lat/Long: 42:54:32:0 / 78:51:04:0
Dell: False
Record Add: 11/18/1999 12:00:00 PM
Record Upd: 11/18/1999 12:00:00 PM

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DIARSENOL COMPANY (Continued)

1000369446

Updated By: INITIAL
Own Op: Owner
Sub Type: C01
Owner Name: Francisco Guzman
Owner Company: City of Buffalo
Owner Address: ROOM 201, CITY HALL
Owner Addr2: Not reported
Owner City,St,Zip: BUFFALO, NY 14202
Owner Country: United States of America
Own Op: Disp. Owner
Sub Type: NNN
Owner Name: Not reported
Owner Company: DIARSENOL COMPANY
Owner Address: Not reported
Owner Addr2: Not reported
Owner City,St,Zip: ZZ
Owner Country: United States of America
Own Op: On-Site Operator
Sub Type: NNN
Owner Name: Not reported
Owner Company: Diarsenol Company
Owner Address: 84 Kingsley Street
Owner Addr2: Not reported
Owner City,St,Zip: Buffalo, NY 14208
Owner Country: United States of America
Own Op: On-Site Operator
Sub Type: C01
Owner Name: Not reported
Owner Company: DIARSENOL COMPANY
Owner Address: 84 KINGSLEY STREET
Owner Addr2: Not reported
Owner City,St,Zip: BUFFALO, NY
Owner Country: United States of America
HW Code: 915124
Waste Type: ARSENIC
Waste Quantity: UNKNOWN
Waste Code: Not reported
Crossref ID: NYD981187040
Cross Ref Type Code: 05
Cross Ref Type: EPA Site ID
Record Added Date: 11/18/1999 12:00:00 PM
Record Updated: 5/10/2001 4:31:00 PM
Updated By: REGTRANS

NY MANIFEST:

EPA ID: NYD981187040
Country: USA
Mailing Name: NYSDEC
Mailing Contact: NYSDEC
Mailing Address: 50 WOLF RD RM 208
Mailing Address 2: Not reported
Mailing City: ALBANY
Mailing State: NY
Mailing Zip: 12233
Mailing Zip4: Not reported
Mailing Country: USA
Mailing Phone: 518-457-9280

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DIARSENOL COMPANY (Continued)

1000369446

Document ID: MIA2549440
Manifest Status: Completed copy
Trans1 State ID: Not reported
Trans2 State ID: Not reported
Generator Ship Date: 911216
Trans1 Recv Date: 911216
Trans2 Recv Date: Not reported
TSD Site Recv Date: 911217
Part A Recv Date: Not reported
Part B Recv Date: 920109
Generator EPA ID: NYD981187040
Trans1 EPA ID: OHD986974780
Trans2 EPA ID: Not reported
TSD ID: MID000724831
Waste Code: D004 - ARSENIC 5.0 MG/L TCLP
Quantity: 00023
Units: T - Tons
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: L Landfill.
Specific Gravity: 100
Year: 91

Document ID: MIA2530224
Manifest Status: Completed after the designated time period for a TSD to get a copy to the DEC
Trans1 State ID: Not reported
Trans2 State ID: Not reported
Generator Ship Date: 911023
Trans1 Recv Date: 911023
Trans2 Recv Date: Not reported
TSD Site Recv Date: 911025
Part A Recv Date: 920219
Part B Recv Date: 920319
Generator EPA ID: NYD981187040
Trans1 EPA ID: OHD986974780
Trans2 EPA ID: Not reported
TSD ID: MID000724831
Waste Code: D004 - ARSENIC 5.0 MG/L TCLP
Quantity: 00022
Units: T - Tons
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: L Landfill.
Specific Gravity: 100
Year: 91

Document ID: MIA2530248
Manifest Status: Completed after the designated time period for a TSD to get a copy to the DEC
Trans1 State ID: Not reported
Trans2 State ID: Not reported
Generator Ship Date: 911203
Trans1 Recv Date: 911203
Trans2 Recv Date: Not reported
TSD Site Recv Date: 911204
Part A Recv Date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DIARSENOL COMPANY (Continued)

1000369446

Part B Recv Date: 911230
Generator EPA ID: NYD981187040
Trans1 EPA ID: OHD986974780
Trans2 EPA ID: Not reported
TSD ID: MID000724831
Waste Code: D004 - ARSENIC 5.0 MG/L TCLP
Quantity: 00025
Units: T - Tons
Number of Containers: 001
Container Type: TT - Cargo tank, tank trucks
Handling Method: L Landfill.
Specific Gravity: 100
Year: 91

Document ID: MIA2530236
Manifest Status: Completed copy
Trans1 State ID: Not reported
Trans2 State ID: Not reported
Generator Ship Date: 911024
Trans1 Recv Date: 911024
Trans2 Recv Date: Not reported
TSD Site Recv Date: 911025
Part A Recv Date: Not reported
Part B Recv Date: 911112
Generator EPA ID: NYD981187040
Trans1 EPA ID: OHD009865825
Trans2 EPA ID: Not reported
TSD ID: MID000724831
Waste Code: D004 - ARSENIC 5.0 MG/L TCLP
Quantity: 00021
Units: T - Tons
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: L Landfill.
Specific Gravity: 100
Year: 91

Document ID: MIA2530246
Manifest Status: Completed after the designated time period for a TSD to get a copy to the DEC
Trans1 State ID: Not reported
Trans2 State ID: Not reported
Generator Ship Date: 911129
Trans1 Recv Date: 911129
Trans2 Recv Date: Not reported
TSD Site Recv Date: 911202
Part A Recv Date: Not reported
Part B Recv Date: 911230
Generator EPA ID: NYD981187040
Trans1 EPA ID: OHD986974780
Trans2 EPA ID: Not reported
TSD ID: MID000724831
Waste Code: D004 - ARSENIC 5.0 MG/L TCLP
Quantity: 00022
Units: T - Tons
Number of Containers: 001

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DIARSENOL COMPANY (Continued)

1000369446

Container Type: DT - Dump trucks
Handling Method: L Landfill.
Specific Gravity: 100
Year: 91

Document ID: MIA2530249
Manifest Status: Completed after the designated time period for a TSDf to get a copy to the DEC
Trans1 State ID: Not reported
Trans2 State ID: Not reported
Generator Ship Date: 911203
Trans1 Recv Date: 911203
Trans2 Recv Date: Not reported
TSD Site Recv Date: 911204
Part A Recv Date: Not reported
Part B Recv Date: 911230
Generator EPA ID: NYD981187040
Trans1 EPA ID: OHD986974780
Trans2 EPA ID: Not reported
TSDf ID: MID000724831
Waste Code: D004 - ARSENIC 5.0 MG/L TCLP
Quantity: 00021
Units: T - Tons
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: L Landfill.
Specific Gravity: 100
Year: 91

Document ID: MIA2548408
Manifest Status: Completed copy
Trans1 State ID: Not reported
Trans2 State ID: Not reported
Generator Ship Date: 911206
Trans1 Recv Date: 911206
Trans2 Recv Date: Not reported
TSD Site Recv Date: 911209
Part A Recv Date: Not reported
Part B Recv Date: 911230
Generator EPA ID: NYD981187040
Trans1 EPA ID: OHD986974780
Trans2 EPA ID: Not reported
TSDf ID: MID000724831
Waste Code: D004 - ARSENIC 5.0 MG/L TCLP
Quantity: 00021
Units: T - Tons
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: L Landfill.
Specific Gravity: 100
Year: 91

Document ID: MIA2549404
Manifest Status: Completed copy
Trans1 State ID: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DIARSENOL COMPANY (Continued)

1000369446

Trans2 State ID: Not reported
Generator Ship Date: 911205
Trans1 Recv Date: 911205
Trans2 Recv Date: Not reported
TSD Site Recv Date: 911206
Part A Recv Date: Not reported
Part B Recv Date: 911230
Generator EPA ID: NYD981187040
Trans1 EPA ID: PAD041255175
Trans2 EPA ID: Not reported
TSD ID: MID000724831
Waste Code: D004 - ARSENIC 5.0 MG/L TCLP
Quantity: 00023
Units: T - Tons
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: L Landfill.
Specific Gravity: 100
Year: 91

Document ID: MIA2549405
Manifest Status: Completed copy
Trans1 State ID: Not reported
Trans2 State ID: Not reported
Generator Ship Date: 911205
Trans1 Recv Date: 911205
Trans2 Recv Date: Not reported
TSD Site Recv Date: 911206
Part A Recv Date: Not reported
Part B Recv Date: 911230
Generator EPA ID: NYD981187040
Trans1 EPA ID: PAD041255175
Trans2 EPA ID: Not reported
TSD ID: MID000724831
Waste Code: D004 - ARSENIC 5.0 MG/L TCLP
Quantity: 00022
Units: T - Tons
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: L Landfill.
Specific Gravity: 100
Year: 91

Document ID: MIA2549406
Manifest Status: Completed copy
Trans1 State ID: Not reported
Trans2 State ID: Not reported
Generator Ship Date: 911205
Trans1 Recv Date: 911205
Trans2 Recv Date: Not reported
TSD Site Recv Date: 911206
Part A Recv Date: Not reported
Part B Recv Date: 911230
Generator EPA ID: NYD981187040
Trans1 EPA ID: OHD986974780

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DIARSENOL COMPANY (Continued)

1000369446

Trans2 EPA ID: Not reported
TSDF ID: MID000724831
Waste Code: D008 - LEAD 5.0 MG/L TCLP
Quantity: 00020
Units: T - Tons
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: L Landfill.
Specific Gravity: 100
Year: 91

Document ID: MIA2549411
Manifest Status: Completed copy
Trans1 State ID: Not reported
Trans2 State ID: Not reported
Generator Ship Date: 911206
Trans1 Recv Date: 911206
Trans2 Recv Date: Not reported
TSD Site Recv Date: 911209
Part A Recv Date: Not reported
Part B Recv Date: 911230
Generator EPA ID: NYD981187040
Trans1 EPA ID: OHD986974780
Trans2 EPA ID: Not reported
TSDF ID: MID000724831
Waste Code: D004 - ARSENIC 5.0 MG/L TCLP
Quantity: 00022
Units: T - Tons
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: L Landfill.
Specific Gravity: 100
Year: 91

Document ID: MIA2549362
Manifest Status: Completed copy
Trans1 State ID: Not reported
Trans2 State ID: Not reported
Generator Ship Date: 911223
Trans1 Recv Date: 911223
Trans2 Recv Date: Not reported
TSD Site Recv Date: 911224
Part A Recv Date: Not reported
Part B Recv Date: 920109
Generator EPA ID: NYD981187040
Trans1 EPA ID: OHD986974780
Trans2 EPA ID: Not reported
TSDF ID: MID000724831
Waste Code: D004 - ARSENIC 5.0 MG/L TCLP
Quantity: 00028
Units: T - Tons
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: L Landfill.
Specific Gravity: 100

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DIARSENOL COMPANY (Continued)

1000369446

Year: 91

Document ID: MIA2530231
Manifest Status: Completed copy
Trans1 State ID: Not reported
Trans2 State ID: Not reported
Generator Ship Date: 911023
Trans1 Recv Date: 911023
Trans2 Recv Date: Not reported
TSD Site Recv Date: 911025
Part A Recv Date: Not reported
Part B Recv Date: 911112
Generator EPA ID: NYD981187040
Trans1 EPA ID: OHD986974780
Trans2 EPA ID: Not reported
TSD ID: MID000724831
Waste Code: D004 - ARSENIC 5.0 MG/L TCLP
Quantity: 00023
Units: T - Tons
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: L Landfill.
Specific Gravity: 100
Year: 91

Document ID: MIA2530239
Manifest Status: Completed copy
Trans1 State ID: Not reported
Trans2 State ID: Not reported
Generator Ship Date: 911024
Trans1 Recv Date: 911024
Trans2 Recv Date: Not reported
TSD Site Recv Date: 911025
Part A Recv Date: Not reported
Part B Recv Date: 911112
Generator EPA ID: NYD981187040
Trans1 EPA ID: OHD009865825
Trans2 EPA ID: Not reported
TSD ID: MID000724831
Waste Code: D004 - ARSENIC 5.0 MG/L TCLP
Quantity: 00024
Units: T - Tons
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: L Landfill.
Specific Gravity: 100
Year: 91

Document ID: MIA2549366
Manifest Status: Completed copy
Trans1 State ID: Not reported
Trans2 State ID: Not reported
Generator Ship Date: 911223
Trans1 Recv Date: 911223

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DIARSENOL COMPANY (Continued)

1000369446

Trans2 Recv Date: Not reported
TSD Site Recv Date: 911224
Part A Recv Date: Not reported
Part B Recv Date: 920109
Generator EPA ID: NYD981187040
Trans1 EPA ID: OHD986974780
Trans2 EPA ID: Not reported
TSD ID: MID000724831
Waste Code: D004 - ARSENIC 5.0 MG/L TCLP
Quantity: 00021
Units: T - Tons
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: L Landfill.
Specific Gravity: 100
Year: 91

Document ID: MIA2549367
Manifest Status: Completed copy
Trans1 State ID: Not reported
Trans2 State ID: Not reported
Generator Ship Date: 911223
Trans1 Recv Date: 911223
Trans2 Recv Date: Not reported
TSD Site Recv Date: 911224
Part A Recv Date: Not reported
Part B Recv Date: 920109
Generator EPA ID: NYD981187040
Trans1 EPA ID: OHD986974780
Trans2 EPA ID: Not reported
TSD ID: MID000724831
Waste Code: D004 - ARSENIC 5.0 MG/L TCLP
Quantity: 00020
Units: T - Tons
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: L Landfill.
Specific Gravity: 100
Year: 91

Document ID: MIA2530226
Manifest Status: Completed copy
Trans1 State ID: Not reported
Trans2 State ID: Not reported
Generator Ship Date: 911022
Trans1 Recv Date: 911023
Trans2 Recv Date: Not reported
TSD Site Recv Date: 911024
Part A Recv Date: Not reported
Part B Recv Date: 911108
Generator EPA ID: NYD981187040
Trans1 EPA ID: OHD986974780
Trans2 EPA ID: Not reported
TSD ID: MID000724831
Waste Code: D004 - ARSENIC 5.0 MG/L TCLP

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DIARSENOL COMPANY (Continued)

1000369446

Quantity: 00020
Units: T - Tons
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: L Landfill.
Specific Gravity: 100
Year: 91

Document ID: MIA2549433
Manifest Status: Completed after the designated time period for a TSDf to get a copy to the DEC
Trans1 State ID: Not reported
Trans2 State ID: Not reported
Generator Ship Date: 911213
Trans1 Recv Date: 911213
Trans2 Recv Date: Not reported
TSD Site Recv Date: 911216
Part A Recv Date: Not reported
Part B Recv Date: 920109
Generator EPA ID: NYD981187040
Trans1 EPA ID: OHD986974780
Trans2 EPA ID: Not reported
TSDf ID: MID000724831
Waste Code: D004 - ARSENIC 5.0 MG/L TCLP
Quantity: 00023
Units: T - Tons
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: L Landfill.
Specific Gravity: 100
Year: 91

Document ID: MIA2549434
Manifest Status: Completed after the designated time period for a TSDf to get a copy to the DEC
Trans1 State ID: Not reported
Trans2 State ID: Not reported
Generator Ship Date: 911213
Trans1 Recv Date: 911213
Trans2 Recv Date: Not reported
TSD Site Recv Date: 911217
Part A Recv Date: Not reported
Part B Recv Date: 920109
Generator EPA ID: NYD981187040
Trans1 EPA ID: OHD986974780
Trans2 EPA ID: Not reported
TSDf ID: MID000724831
Waste Code: D004 - ARSENIC 5.0 MG/L TCLP
Quantity: 00024
Units: T - Tons
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: L Landfill.
Specific Gravity: 100
Year: 91

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DIARSENOL COMPANY (Continued)

1000369446

Document ID: MIA2549441
Manifest Status: Completed copy
Trans1 State ID: Not reported
Trans2 State ID: Not reported
Generator Ship Date: 911216
Trans1 Recv Date: 911216
Trans2 Recv Date: Not reported
TSD Site Recv Date: 911217
Part A Recv Date: Not reported
Part B Recv Date: 920109
Generator EPA ID: NYD981187040
Trans1 EPA ID: OHD986974780
Trans2 EPA ID: Not reported
TSD ID: MID000724831
Waste Code: D004 - ARSENIC 5.0 MG/L TCLP
Quantity: 00023
Units: T - Tons
Number of Containers: 001
Container Type: DT - Dump trucks
Handling Method: L Landfill.
Specific Gravity: 100
Year: 91

[Click this hyperlink](#) while viewing on your computer to access
49 additional NY_MANIFEST: record(s) in the EDR Site Report.

ENG CONTROLS:

Site Code: 56621
HW Code: 915124
Control Code: 17
Control Type: ENG
Date Record Added: 07/14/2004
Date Rec Updated: 10/28/2011
Updated By: DSSZYMAN
Site Description: Location: The Diarsenol Co., Kingsley Park Site is located in a residential neighborhood on Kingsley Street in the City of Buffalo, Erie County. Site Features: The Site is currently a flat, grass covered lot with no buildings. Fencing surrounds much of the Site. Current Zoning: The Site is still a City-owned park. Historic Uses: The Diarsenol Company reportedly disposed waste materials on this site, which was located adjacent to their former plant site on Kingsley Street. Diarsenol produced medications containing arsenic. The firm began operation in the early 1900's and ceased production in the 1940's. The plant was demolished, the site was graded and covered with topsoil. By 1951 the city had developed a park on the reported disposal area. A Phase II Investigation was conducted in 1989 and found arsenic present on the site. In 1991 NYSDEC excavated and provided off-site disposal of contaminated soils. The removal included the excavation and disposal of 9,569 tons of contaminated non-hazardous materials and 1,980 tons of hazardous materials. A post-remedial Operation, Maintenance and Monitoring Plan (OM&M Plan) is currently in place. A small groundwater collection system was installed which collects shallow groundwater and discharges it to the sanitary sewer. The discharge is monitored by the Buffalo Sewer Authority (BSA). Site Geology and Hydrology: The Site is currently covered with topsoil overlying clean fill and native clay. Minimal shallow-groundwater contamination is still present in an area proximal

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DIARSENOL COMPANY (Continued)

1000369446

to the groundwater collection system. Groundwater monitoring has been conducted by the City of Buffalo to verify groundwater flow to the collection system and that it does not pose a problem to the community.

Env Problem: Nature and Extent of Contamination: Remediation at the Site is complete. Prior to remediation, the primary contaminant of concern was arsenic in soil and groundwater. Removal of waste and impacted soils has removed the threat of arsenic contamination to the community. Shallow groundwater is directed towards a collection system for discharge to the City sewer. Groundwater and Discharge water from the collection system is assessed annually and is not considered a threat to the environment.

Health Problem: Kingsley Park is located in a residential neighborhood of the City of Buffalo. The site is currently fenced and overgrown. Arsenic contaminated soils were removed, eliminating the potential for public exposures to contaminated soils. Exposures to contaminated groundwater are not expected because area residents use public water. NYSDOH performed a cancer incidence study at the request of the community. This study reported an increased incidence of some cancers which have strong associations with life-style factors and may also be associated with occupational exposures. It was not possible to determine whether site exposures were a contributing factor. An update study, which will evaluate additional data for these cancers and cancer data from five more years, is planned.

INST CONTROL:

Site Code: 56621
Control Name: O&M Plan
HW Code: 915124
Control Code: 33
Control Type: INST
Dt record added: 07/14/2004
Dt rec updated: 10/28/2011
Updated By: DSSZYMAN
Site Code: 56621
Site Description:

Location: The Diarsenol Co., Kingsley Park Site is located in a residential neighborhood on Kingsley Street in the City of Buffalo, Erie County. Site Features: The Site is currently a flat, grass covered lot with no buildings. Fencing surrounds much of the Site. Current Zoning: The Site is still a City-owned park. Historic Uses: The Diarsenol Company reportedly disposed waste materials on this site, which was located adjacent to their former plant site on Kingsley Street. Diarsenol produced medications containing arsenic. The firm began operation in the early 1900's and ceased production in the 1940's. The plant was demolished, the site was graded and covered with topsoil. By 1951 the city had developed a park on the reported disposal area. A Phase II Investigation was conducted in 1989 and found arsenic present on the site. In 1991 NYSDEC excavated and provided off-site disposal of contaminated soils. The removal included the excavation and disposal of 9,569 tons of contaminated non-hazardous materials and 1,980 tons of hazardous materials. A post-remedial Operation, Maintenance and Monitoring Plan (OM&M Plan) is currently in place. A small groundwater collection system was installed which collects shallow groundwater and discharges it to the sanitary sewer. The discharge is monitored by the Buffalo Sewer Authority (BSA). Site Geology and Hydrology: The Site is currently covered with topsoil overlying clean fill and native clay. Minimal

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DIARSENOL COMPANY (Continued)

1000369446

shallow-groundwater contamination is still present in an area proximal to the groundwater collection system. Groundwater monitoring has been conducted by the City of Buffalo to verify groundwater flow to the collection system and that it does not pose a problem to the community.

Env Problem: Nature and Extent of Contamination: Remediation at the Site is complete. Prior to remediation, the primary contaminant of concern was arsenic in soil and groundwater. Removal of waste and impacted soils has removed the threat of arsenic contamination to the community. Shallow groundwater is directed towards a collection system for discharge to the City sewer. Groundwater and Discharge water from the collection system is assessed annually and is not considered a threat to the environment.

Health Problem: Kingsley Park is located in a residential neighborhood of the City of Buffalo. The site is currently fenced and overgrown. Arsenic contaminated soils were removed, eliminating the potential for public exposures to contaminated soils. Exposures to contaminated groundwater are not expected because area residents use public water. NYSDOH performed a cancer incidence study at the request of the community. This study reported an increased incidence of some cancers which have strong associations with life-style factors and may also be associated with occupational exposures. It was not possible to determine whether site exposures were a contributing factor. An update study, which will evaluate additional data for these cancers and cancer data from five more years, is planned.

Site Code: 56621
Control Name: Deed Restriction
HW Code: 915124
Control Code: A
Control Type: INST
Dt record added: 07/14/2004
Dt rec updated: 10/28/2011
Updated By: DSSZYMAN
Site Code: 56621

Site Description: Location: The Diarsenol Co., Kingsley Park Site is located in a residential neighborhood on Kingsley Street in the City of Buffalo, Erie County. Site Features: The Site is currently a flat, grass covered lot with no buildings. Fencing surrounds much of the Site. Current Zoning: The Site is still a City-owned park. Historic Uses: The Diarsenol Company reportedly disposed waste materials on this site, which was located adjacent to their former plant site on Kingsley Street. Diarsenol produced medications containing arsenic. The firm began operation in the early 1900's and ceased production in the 1940's. The plant was demolished, the site was graded and covered with topsoil. By 1951 the city had developed a park on the reported disposal area. A Phase II Investigation was conducted in 1989 and found arsenic present on the site. In 1991 NYSDEC excavated and provided off-site disposal of contaminated soils. The removal included the excavation and disposal of 9,569 tons of contaminated non-hazardous materials and 1,980 tons of hazardous materials. A post-remedial Operation, Maintenance and Monitoring Plan (OM&M Plan) is currently in place. A small groundwater collection system was installed which collects shallow groundwater and discharges it to the sanitary sewer. The discharge is monitored by the Buffalo Sewer Authority (BSA). Site Geology and Hydrology: The Site is currently covered with topsoil overlying clean fill and native clay. Minimal

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

DIARSENOL COMPANY (Continued)

1000369446

shallow-groundwater contamination is still present in an area proximal to the groundwater collection system. Groundwater monitoring has been conducted by the City of Buffalo to verify groundwater flow to the collection system and that it does not pose a problem to the community.

Env Problem: Nature and Extent of Contamination: Remediation at the Site is complete. Prior to remediation, the primary contaminant of concern was arsenic in soil and groundwater. Removal of waste and impacted soils has removed the threat of arsenic contamination to the community. Shallow groundwater is directed towards a collection system for discharge to the City sewer. Groundwater and Discharge water from the collection system is assessed annually and is not considered a threat to the environment.

Health Problem: Kingsley Park is located in a residential neighborhood of the City of Buffalo. The site is currently fenced and overgrown. Arsenic contaminated soils were removed, eliminating the potential for public exposures to contaminated soils. Exposures to contaminated groundwater are not expected because area residents use public water. NYSDOH performed a cancer incidence study at the request of the community. This study reported an increased incidence of some cancers which have strong associations with life-style factors and may also be associated with occupational exposures. It was not possible to determine whether site exposures were a contributing factor. An update study, which will evaluate additional data for these cancers and cancer data from five more years, is planned.

RGA HWS:

2012	DIARSENOL CO., KINGSLEY PARK	KINGSLEY STREET
2011	DIARSENOL CO., KINGSLEY PARK	KINGSLEY STREET
2010	DIARSENOL CO., KINGSLEY PARK	KINGSLEY STREET
2009	DIARSENOL CO., KINGSLEY PARK	KINGSLEY STREET
2008	DIARSENOL CO., KINGSLEY PARK	KINGSLEY STREET
2007	DIARSENOL CO., KINGSLEY PARK	KINGSLEY STREET
2006	DIARSENOL CO., KINGSLEY PARK	KINGSLEY STREET
2005	DIARSENOL CO., KINGSLEY PARK	KINGSLEY STREET
2000	DIARSENOL CO., KINGSLEY PARK	KINGSLEY STREET
1997	DIARSENOL CO., KINGSLEY PARK	KINGSLEY STREET

Z140
 ENE
 1/2-1
 0.869 mi.
 4586 ft.

**84 KINGSLEY STREET
 BUFFALO, NY**
 Site 2 of 2 in cluster Z

**NY RGA HWS S114184081
 N/A**

Relative:
 Lower

RGA HWS:

2003 DIARSENOL COMPANY - KINGSLEY PARK 84 KINGSLEY STREET

Actual:
 640 ft.

Count: 34 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
BUFFALO	S104953303	CITY OF BFLO PARKS DEPT	ROUTE 198 SCAJAQUADA EXPR		NY Spills
BUFFALO	S104278929	BUFFALO POLICE RADIO TOWE	ROUTE 198 WB		NY LTANKS
BUFFALO	S102178515	TAR ON ROAD	ROUTE 198		NY Spills
BUFFALO	S102175597	BRENTON - BLUE LIQUID	ROUTE 198		NY Spills
BUFFALO	S100493920	UNKNOWN TRUCK	ROUTE 198 EAST		NY LTANKS
BUFFALO	1007571201	NYS DOT BIN 1039899	RTE 198 W AVE	14203	RCRA-LQG
BUFFALO	S109581915	OIL ON ROAD	ROUTE 33 AT HUMBOLDT		NY Spills
BUFFALO	S102178777	OIL ON ROUTE 33 WESTBOUND	ROUTE 33 WEST		NY Spills
BUFFALO	S102177197	MOTOR OIL ON KENSINGTON	ROUTE 33		NY Spills
BUFFALO	S102176980	LOSURDO FOOD TRUCK	ROUTE 33 - KENSINGTON EXP		NY Spills
BUFFALO	S102175440	NSYDOT PUMPHOUSE RT. 33	ROUTE 33		NY Spills
BUFFALO	S103562349	KIELSA TANKER	ROUTE 5 - BUFFALO HARBOR		NY Spills
BUFFALO	S103562348	TANKER KIISLA	ROUTE 5 - LAKE ERIE		NY Spills
BUFFALO	S102447806	OIL ON SKYWAY	ROUTE 5 - SKYWAY NB		NY Spills
BUFFALO	S102447738	TRUCK ON SKYWAY	ROUTE 5 - SKYWAY		NY Spills
BUFFALO	S102178402	FICEL TRUCKING	ROUTE 5		NY Spills
BUFFALO	S102174029	SKYWAY CONTRACTOR	ROUTE 5 SKYWAY		NY Spills
BUFFALO	S102176984	COKE BREEZE	ROUTE 5, FURHMAN		NY Spills
BUFFALO	1011863421	NYS DOT BIN 552015G	RTE 950E OVER I-190 AT EXIT N7	14202	RCRA-LQG
BUFFALO	S102175659	SCAJAQUADA EXPRY. OIL	ROUTE 98		NY Spills
BUFFALO	S109375225	NYS DOT BIN 1022609	BEST ST OVER RTE 33 BIN 102260	14203	NY MANIFEST
BUFFALO	S109375121	NYS DOT BIN 1022890	CAYUGA RD RTE 33 BIN #1022890	14203	NY MANIFEST
BUFFALO	S109375106	NYS DOT BIN 1022790	EGGERT/RTE 33 BIN 1022790	14203	NY MANIFEST
BUFFALO	S107407885	INTEGRATED WASTE SYSTEM	FUHRMANN BLVD. - ROUTE 5		NY Spills
BUFFALO	S103273838	WASTE OIL NEAR RR YARD	FUHRMANN BLVD - ROUTE 5		NY Spills
BUFFALO	S102176781	ABANDONED DRUM	FURHMAN BLVD - ROUTE 5		NY Spills
BUFFALO	S103562576	MARK TWAIN MV NY9104GH	FURHMAN BLVD - ROUTE 5		NY Spills
BUFFALO	S109375227	NYS DOT BIN 1022590	HIGH ST OVER RTE 33 BIN 102259	14203	NY MANIFEST
BUFFALO	1004762393	NYS DOT BIN #1063100	RTE I-190 OVER I-190 RAMP H	14203	RCRA-LQG, NY MANIFEST
BUFFALO	1007264873	NYS DOT	LASALLLE ARTERIAL HIGHWAY	14203	RCRA-CESQG, NY MANIFEST
BUFFALO	S102177361	AT-6 AIRCRAFT	NIAGARA RIVER - ROUTE 5		NY Spills
BUFFALO	S110611121	NYS DOT BIN 1039990	PED BRIDGE OVER RTE 198	14222	NY MANIFEST
BUFFALO	S109375114	NYS DOT BIN 1022880	UNION RD ROUTE 33 BIN #1022880	14203	NY MANIFEST
ELLCOTTVILLE	S109375128	NYS DOT BIN 1042780	ROUTE 242 OVER GREAT VALLEY CR	14203	NY MANIFEST

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

Federal NPL site list

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: 04/26/2013	Source: EPA
Date Data Arrived at EDR: 05/09/2013	Telephone: N/A
Date Made Active in Reports: 07/10/2013	Last EDR Contact: 01/21/2014
Number of Days to Update: 62	Next Scheduled EDR Contact: 04/21/2014
	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 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

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: 04/26/2013	Source: EPA
Date Data Arrived at EDR: 05/09/2013	Telephone: N/A
Date Made Active in Reports: 07/10/2013	Last EDR Contact: 01/09/2014
Number of Days to Update: 62	Next Scheduled EDR Contact: 04/21/2014
	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	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 08/15/2011
Number of Days to Update: 56	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

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: 04/26/2013	Source: EPA
Date Data Arrived at EDR: 05/09/2013	Telephone: N/A
Date Made Active in Reports: 07/10/2013	Last EDR Contact: 01/09/2014
Number of Days to Update: 62	Next Scheduled EDR Contact: 04/21/2014
	Data Release Frequency: Quarterly

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS 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). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/26/2013	Source: EPA
Date Data Arrived at EDR: 05/29/2013	Telephone: 703-412-9810
Date Made Active in Reports: 08/09/2013	Last EDR Contact: 11/11/2013
Number of Days to Update: 72	Next Scheduled EDR Contact: 03/10/2014
	Data Release Frequency: Quarterly

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: 05/31/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/08/2013	Telephone: 703-603-8704
Date Made Active in Reports: 12/06/2013	Last EDR Contact: 01/10/2014
Number of Days to Update: 151	Next Scheduled EDR Contact: 04/21/2014
	Data Release Frequency: Varies

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS 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 this 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. This 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 a potential NPL site.

Date of Government Version: 04/26/2013	Source: EPA
Date Data Arrived at EDR: 05/29/2013	Telephone: 703-412-9810
Date Made Active in Reports: 08/09/2013	Last EDR Contact: 11/11/2013
Number of Days to Update: 72	Next Scheduled EDR Contact: 03/10/2014
	Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 75

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 01/02/2014
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

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: 09/10/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 75

Source: Environmental Protection Agency
Telephone: (212) 637-3660
Last EDR Contact: 01/02/2014
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Quarterly

Federal RCRA generators list

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: 09/10/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 75

Source: Environmental Protection Agency
Telephone: (212) 637-3660
Last EDR Contact: 01/02/2014
Next Scheduled EDR Contact: 04/14/2014
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: 09/10/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 75

Source: Environmental Protection Agency
Telephone: (212) 637-3660
Last EDR Contact: 01/02/2014
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - 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). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 75

Source: Environmental Protection Agency
Telephone: (212) 637-3660
Last EDR Contact: 01/02/2014
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal institutional controls / engineering controls registries

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: 06/17/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/21/2013	Telephone: 703-603-0695
Date Made Active in Reports: 10/03/2013	Last EDR Contact: 12/09/2013
Number of Days to Update: 104	Next Scheduled EDR Contact: 03/24/2014
	Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional 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.

Date of Government Version: 06/17/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/21/2013	Telephone: 703-603-0695
Date Made Active in Reports: 10/03/2013	Last EDR Contact: 12/09/2013
Number of Days to Update: 104	Next Scheduled EDR Contact: 03/24/2014
	Data Release Frequency: Varies

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: 08/20/2013	Source: Department of the Navy
Date Data Arrived at EDR: 08/23/2013	Telephone: 843-820-7326
Date Made Active in Reports: 11/01/2013	Last EDR Contact: 11/18/2013
Number of Days to Update: 70	Next Scheduled EDR Contact: 03/03/2014
	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: 09/30/2013	Source: National Response Center, United States Coast Guard
Date Data Arrived at EDR: 10/01/2013	Telephone: 202-267-2180
Date Made Active in Reports: 12/06/2013	Last EDR Contact: 01/10/2014
Number of Days to Update: 66	Next Scheduled EDR Contact: 04/14/2014
	Data Release Frequency: Annually

State- and tribal - equivalent CERCLIS

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: 11/13/2013	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 11/13/2013	Telephone: 518-402-9622
Date Made Active in Reports: 11/18/2013	Last EDR Contact: 11/13/2013
Number of Days to Update: 5	Next Scheduled EDR Contact: 03/03/2014
	Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 01/01/2013	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 02/20/2013	Telephone: 518-402-9814
Date Made Active in Reports: 03/15/2013	Last EDR Contact: 11/22/2013
Number of Days to Update: 23	Next Scheduled EDR Contact: 03/03/2014
	Data Release Frequency: Varies

State and tribal landfill and/or solid waste disposal site lists

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: 10/08/2013	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 10/09/2013	Telephone: 518-457-2051
Date Made Active in Reports: 11/14/2013	Last EDR Contact: 01/06/2014
Number of Days to Update: 36	Next Scheduled EDR Contact: 04/21/2014
	Data Release Frequency: Semi-Annually

State and tribal leaking storage tank lists

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: 09/25/2013	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 09/26/2013	Telephone: 518-402-9549
Date Made Active in Reports: 11/15/2013	Last EDR Contact: 11/22/2013
Number of Days to Update: 50	Next Scheduled EDR Contact: 03/03/2014
	Data Release Frequency: Varies

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	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 07/08/2005	Telephone: 518-402-9549
Date Made Active in Reports: 07/14/2005	Last EDR Contact: 07/07/2005
Number of Days to Update: 6	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 11/06/2013	Source: EPA Region 10
Date Data Arrived at EDR: 11/07/2013	Telephone: 206-553-2857
Date Made Active in Reports: 12/06/2013	Last EDR Contact: 10/28/2013
Number of Days to Update: 29	Next Scheduled EDR Contact: 02/11/2014
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 03/01/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2013	Telephone: 415-972-3372
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 10/28/2013
Number of Days to Update: 42	Next Scheduled EDR Contact: 02/11/2014
	Data Release Frequency: Quarterly

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: 08/27/2012	Source: EPA Region 8
Date Data Arrived at EDR: 08/28/2012	Telephone: 303-312-6271
Date Made Active in Reports: 10/16/2012	Last EDR Contact: 10/28/2013
Number of Days to Update: 49	Next Scheduled EDR Contact: 02/11/2014
	Data Release Frequency: Quarterly

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 08/01/2013	Source: EPA Region 4
Date Data Arrived at EDR: 08/02/2013	Telephone: 404-562-8677
Date Made Active in Reports: 11/01/2013	Last EDR Contact: 10/28/2013
Number of Days to Update: 91	Next Scheduled EDR Contact: 02/11/2014
	Data Release Frequency: Semi-Annually

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 09/12/2011	Source: EPA Region 6
Date Data Arrived at EDR: 09/13/2011	Telephone: 214-665-6597
Date Made Active in Reports: 11/11/2011	Last EDR Contact: 10/28/2013
Number of Days to Update: 59	Next Scheduled EDR Contact: 02/11/2014
	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: 08/27/2013	Source: EPA Region 7
Date Data Arrived at EDR: 08/27/2013	Telephone: 913-551-7003
Date Made Active in Reports: 11/01/2013	Last EDR Contact: 10/28/2013
Number of Days to Update: 66	Next Scheduled EDR Contact: 02/11/2014
	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: 08/20/2013	Source: EPA, Region 5
Date Data Arrived at EDR: 08/23/2013	Telephone: 312-886-7439
Date Made Active in Reports: 11/01/2013	Last EDR Contact: 10/28/2013
Number of Days to Update: 70	Next Scheduled EDR Contact: 02/11/2014
	Data Release Frequency: Varies

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: 02/01/2013	Source: EPA Region 1
Date Data Arrived at EDR: 05/01/2013	Telephone: 617-918-1313
Date Made Active in Reports: 11/01/2013	Last EDR Contact: 11/01/2013
Number of Days to Update: 184	Next Scheduled EDR Contact: 02/11/2014
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

State and tribal registered storage tank lists

TANKS: Storage Tank Facility 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: 11/13/2013	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 11/13/2013	Telephone: 518-402-9543
Date Made Active in Reports: 11/18/2013	Last EDR Contact: 01/02/2014
Number of Days to Update: 5	Next Scheduled EDR Contact: 04/14/2014
	Data Release Frequency: Quarterly

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: 11/13/2013	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 11/13/2013	Telephone: 518-402-9549
Date Made Active in Reports: 11/18/2013	Last EDR Contact: 01/02/2014
Number of Days to Update: 5	Next Scheduled EDR Contact: 04/14/2014
	Data Release Frequency: No Update Planned

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	Source: NYSDEC
Date Data Arrived at EDR: 02/20/2002	Telephone: 518-402-9549
Date Made Active in Reports: 03/22/2002	Last EDR Contact: 10/24/2005
Number of Days to Update: 30	Next Scheduled EDR Contact: 01/23/2006
	Data Release Frequency: No Update Planned

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	Source: NYSDEC
Date Data Arrived at EDR: 02/20/2002	Telephone: 518-402-9549
Date Made Active in Reports: 03/22/2002	Last EDR Contact: 07/25/2005
Number of Days to Update: 30	Next Scheduled EDR Contact: 10/24/2005
	Data Release Frequency: Varies

AST: Petroleum Bulk Storage

Registered Aboveground Storage Tanks.

Date of Government Version: 11/13/2013	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 11/13/2013	Telephone: 518-402-9549
Date Made Active in Reports: 11/18/2013	Last EDR Contact: 01/02/2014
Number of Days to Update: 5	Next Scheduled EDR Contact: 04/14/2014
	Data Release Frequency: No Update Planned

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	Source: NYSDEC
Date Data Arrived at EDR: 02/20/2002	Telephone: 518-402-9549
Date Made Active in Reports: 03/22/2002	Last EDR Contact: 07/25/2005
Number of Days to Update: 30	Next Scheduled EDR Contact: 10/24/2005
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

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: 11/13/2013
Date Data Arrived at EDR: 11/13/2013
Date Made Active in Reports: 11/18/2013
Number of Days to Update: 5

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 01/02/2014
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Quarterly

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: 11/13/2013
Date Data Arrived at EDR: 11/13/2013
Date Made Active in Reports: 11/18/2013
Number of Days to Update: 5

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 01/02/2014
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Quarterly

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: 08/20/2013
Date Data Arrived at EDR: 08/23/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 70

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

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: 08/01/2013
Date Data Arrived at EDR: 08/02/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 91

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Semi-Annually

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: 09/28/2012
Date Data Arrived at EDR: 11/07/2012
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 156

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 11/01/2014
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 12/31/2012	Source: EPA Region 7
Date Data Arrived at EDR: 02/28/2013	Telephone: 913-551-7003
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 10/28/2013
Number of Days to Update: 43	Next Scheduled EDR Contact: 02/11/2014
	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: 02/05/2013	Source: EPA Region 10
Date Data Arrived at EDR: 02/06/2013	Telephone: 206-553-2857
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 10/28/2013
Number of Days to Update: 65	Next Scheduled EDR Contact: 02/11/2014
	Data Release Frequency: Quarterly

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: 07/29/2013	Source: EPA Region 9
Date Data Arrived at EDR: 07/30/2013	Telephone: 415-972-3368
Date Made Active in Reports: 12/06/2013	Last EDR Contact: 10/28/2013
Number of Days to Update: 129	Next Scheduled EDR Contact: 02/11/2014
	Data Release Frequency: Quarterly

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: 07/29/2013	Source: EPA Region 8
Date Data Arrived at EDR: 08/01/2013	Telephone: 303-312-6137
Date Made Active in Reports: 11/01/2013	Last EDR Contact: 10/28/2013
Number of Days to Update: 92	Next Scheduled EDR Contact: 02/11/2014
	Data Release Frequency: Quarterly

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: 05/10/2011	Source: EPA Region 6
Date Data Arrived at EDR: 05/11/2011	Telephone: 214-665-7591
Date Made Active in Reports: 06/14/2011	Last EDR Contact: 10/28/2013
Number of Days to Update: 34	Next Scheduled EDR Contact: 02/11/2014
	Data Release Frequency: Semi-Annually

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010	Source: FEMA
Date Data Arrived at EDR: 02/16/2010	Telephone: 202-646-5797
Date Made Active in Reports: 04/12/2010	Last EDR Contact: 01/13/2014
Number of Days to Update: 55	Next Scheduled EDR Contact: 04/28/2014
	Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ENG CONTROLS: Registry of Engineering Controls

Environmental Remediation sites that have engineering controls in place.

Date of Government Version: 11/13/2013	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 11/13/2013	Telephone: 518-402-9553
Date Made Active in Reports: 11/18/2013	Last EDR Contact: 11/13/2013
Number of Days to Update: 5	Next Scheduled EDR Contact: 03/03/2014
	Data Release Frequency: Quarterly

INST CONTROL: Registry of Institutional Controls

Environmental Remediation sites that have institutional controls in place.

Date of Government Version: 11/13/2013	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 11/13/2013	Telephone: 518-402-9553
Date Made Active in Reports: 11/18/2013	Last EDR Contact: 11/13/2013
Number of Days to Update: 5	Next Scheduled EDR Contact: 03/03/2014
	Data Release Frequency: Quarterly

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: 11/18/2010	Source: NYC Department of City Planning
Date Data Arrived at EDR: 12/23/2010	Telephone: 212-720-3401
Date Made Active in Reports: 02/11/2011	Last EDR Contact: 12/26/2013
Number of Days to Update: 50	Next Scheduled EDR Contact: 04/07/2014
	Data Release Frequency: No Update Planned

State and tribal voluntary cleanup sites

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: 09/17/2013	Source: EPA, Region 1
Date Data Arrived at EDR: 10/01/2013	Telephone: 617-918-1102
Date Made Active in Reports: 12/06/2013	Last EDR Contact: 01/03/2014
Number of Days to Update: 66	Next Scheduled EDR Contact: 04/14/2014
	Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 04/20/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	Data Release Frequency: Varies

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: 11/13/2013	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 11/13/2013	Telephone: 518-402-9711
Date Made Active in Reports: 11/20/2013	Last EDR Contact: 11/13/2013
Number of Days to Update: 7	Next Scheduled EDR Contact: 03/03/2014
	Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

State and tribal Brownfields sites

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: 11/13/2013	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 11/13/2013	Telephone: 518-402-9622
Date Made Active in Reports: 11/18/2013	Last EDR Contact: 11/13/2013
Number of Days to Update: 5	Next Scheduled EDR Contact: 03/03/2014
	Data Release Frequency: Quarterly

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: 11/13/2013	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 11/13/2013	Telephone: 518-402-9764
Date Made Active in Reports: 11/18/2013	Last EDR Contact: 11/13/2013
Number of Days to Update: 5	Next Scheduled EDR Contact: 03/03/2014
	Data Release Frequency: Semi-Annually

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: 09/24/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/24/2013	Telephone: 202-566-2777
Date Made Active in Reports: 12/06/2013	Last EDR Contact: 12/24/2013
Number of Days to Update: 73	Next Scheduled EDR Contact: 04/07/2014
	Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/09/2004	Telephone: 800-424-9346
Date Made Active in Reports: 09/17/2004	Last EDR Contact: 06/09/2004
Number of Days to Update: 39	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: No Update Planned

SWRCY: Registered Recycling Facility List

A listing of recycling facilities.

Date of Government Version: 10/08/2013
Date Data Arrived at EDR: 10/09/2013
Date Made Active in Reports: 11/14/2013
Number of Days to Update: 36

Source: Department of Environmental Conservation
Telephone: 518-402-8705
Last EDR Contact: 01/06/2014
Next Scheduled EDR Contact: 04/21/2014
Data Release Frequency: Semi-Annually

SWTIRE: Registered Waste Tire Storage & Facility List

A listing of facilities registered to accept waste tires.

Date of Government Version: 08/01/2006
Date Data Arrived at EDR: 11/15/2006
Date Made Active in Reports: 11/30/2006
Number of Days to Update: 15

Source: Department of Environmental Conservation
Telephone: 518-402-8694
Last EDR Contact: 10/22/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Annually

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: 11/04/2013
Next Scheduled EDR Contact: 02/17/2014
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

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: 08/06/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 22

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 12/05/2013
Next Scheduled EDR Contact: 03/17/2014
Data Release Frequency: Quarterly

DEL SHWS: Delisted Registry Sites

A database listing of sites delisted from the Registry of Inactive Hazardous Waste Disposal Sites.

Date of Government Version: 11/13/2013
Date Data Arrived at EDR: 11/13/2013
Date Made Active in Reports: 11/18/2013
Number of Days to Update: 5

Source: Department of Environmental Conservation
Telephone: 518-402-9622
Last EDR Contact: 11/13/2013
Next Scheduled EDR Contact: 03/03/2014
Data Release Frequency: Annually

US HIST CDL: National Clandestine Laboratory Register

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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/01/2007
Date Data Arrived at EDR: 11/19/2008
Date Made Active in Reports: 03/30/2009
Number of Days to Update: 131

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

Local Lists of Registered Storage Tanks

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

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

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: 02/06/2013
Date Data Arrived at EDR: 04/25/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 11/13/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

LIENS: Spill Liens Information

Lien information from the Oil Spill Fund.

Date of Government Version: 08/19/2013
Date Data Arrived at EDR: 08/20/2013
Date Made Active in Reports: 09/11/2013
Number of Days to Update: 22

Source: Office of the State Comptroller
Telephone: 518-474-9034
Last EDR Contact: 11/08/2013
Next Scheduled EDR Contact: 02/24/2014
Data Release Frequency: Varies

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: 09/30/2013
Date Data Arrived at EDR: 10/01/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 76

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 01/03/2014
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 09/25/2013	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 09/26/2013	Telephone: 518-402-9549
Date Made Active in Reports: 11/15/2013	Last EDR Contact: 11/22/2013
Number of Days to Update: 50	Next Scheduled EDR Contact: 03/03/2014
	Data Release Frequency: Varies

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	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 07/08/2005	Telephone: 518-402-9549
Date Made Active in Reports: 07/14/2005	Last EDR Contact: 07/07/2005
Number of Days to Update: 6	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

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	Source: FirstSearch
Date Data Arrived at EDR: 01/03/2013	Telephone: N/A
Date Made Active in Reports: 02/12/2013	Last EDR Contact: 01/03/2013
Number of Days to Update: 40	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

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	Source: FirstSearch
Date Data Arrived at EDR: 01/03/2013	Telephone: N/A
Date Made Active in Reports: 03/07/2013	Last EDR Contact: 01/03/2013
Number of Days to Update: 63	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non 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). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 09/10/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/02/2013	Telephone: (212) 637-3660
Date Made Active in Reports: 12/16/2013	Last EDR Contact: 01/02/2014
Number of Days to Update: 75	Next Scheduled EDR Contact: 04/14/2014
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transportation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 11/06/2013
Next Scheduled EDR Contact: 02/17/2014
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: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 01/15/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Semi-Annually

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: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 03/13/2013
Number of Days to Update: 15

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 12/13/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Varies

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: 06/30/2013
Date Data Arrived at EDR: 08/07/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 57

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 12/26/2013
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Varies

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: 04/26/2013
Date Data Arrived at EDR: 06/11/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 143

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 12/12/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Annually

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: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 11/26/2013
Next Scheduled EDR Contact: 03/10/2014
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 08/01/2013
Date Data Arrived at EDR: 09/05/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 28

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 12/06/2013
Next Scheduled EDR Contact: 03/17/2014
Data Release Frequency: Semi-Annually

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: 12/31/2011
Date Data Arrived at EDR: 07/31/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 44

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 11/27/2013
Next Scheduled EDR Contact: 03/10/2014
Data Release Frequency: Annually

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: 12/31/2006
Date Data Arrived at EDR: 09/29/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 64

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 12/26/2013
Next Scheduled EDR Contact: 04/07/2014
Data Release Frequency: Every 4 Years

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: 11/21/2013
Next Scheduled EDR Contact: 03/10/2014
Data Release Frequency: Quarterly

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: 11/21/2014
Next Scheduled EDR Contact: 03/10/2014
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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

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: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
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: 07/20/2011
Date Data Arrived at EDR: 11/10/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 10/09/2014
Next Scheduled EDR Contact: 04/28/2014
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: 06/01/2013
Date Data Arrived at EDR: 07/17/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 107

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 01/28/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Annually

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: 07/22/2013
Date Data Arrived at EDR: 08/02/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 91

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 12/09/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 09/30/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/09/2013	Telephone: 202-343-9775
Date Made Active in Reports: 11/01/2013	Last EDR Contact: 01/10/2014
Number of Days to Update: 23	Next Scheduled EDR Contact: 04/21/2014
	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: 03/08/2013	Source: EPA
Date Data Arrived at EDR: 03/21/2013	Telephone: (212) 637-3000
Date Made Active in Reports: 07/10/2013	Last EDR Contact: 12/10/2013
Number of Days to Update: 111	Next Scheduled EDR Contact: 03/24/2014
	Data Release Frequency: Quarterly

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	Source: EPA
Date Data Arrived at EDR: 07/03/1995	Telephone: 202-564-4104
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 06/02/2008
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/01/2008
	Data Release Frequency: No Update Planned

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: 05/08/2012	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/25/2012	Telephone: 202-564-8600
Date Made Active in Reports: 07/10/2012	Last EDR Contact: 10/28/2013
Number of Days to Update: 46	Next Scheduled EDR Contact: 02/11/2014
	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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/19/2013
Number of Days to Update: 52

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 11/25/2013
Next Scheduled EDR Contact: 03/10/2014
Data Release Frequency: Biennially

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

UIC: Underground Injection Control Wells

A listing of enhanced oil recovery underground injection wells.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 09/12/2013
Date Made Active in Reports: 11/18/2013
Number of Days to Update: 67

Source: Department of Environmental Conservation
Telephone: 518-402-8056
Last EDR Contact: 12/12/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Quarterly

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: 11/01/2013
Date Data Arrived at EDR: 11/07/2013
Date Made Active in Reports: 11/18/2013
Number of Days to Update: 11

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 11/07/2013
Next Scheduled EDR Contact: 02/17/2014
Data Release Frequency: Annually

DRYCLEANERS: Registered Drycleaners

A listing of all registered drycleaning facilities.

Date of Government Version: 10/17/2013
Date Data Arrived at EDR: 10/17/2013
Date Made Active in Reports: 11/14/2013
Number of Days to Update: 28

Source: Department of Environmental Conservation
Telephone: 518-402-8403
Last EDR Contact: 12/16/2013
Next Scheduled EDR Contact: 03/31/2014
Data Release Frequency: Varies

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: 07/15/2013
Date Data Arrived at EDR: 07/17/2013
Date Made Active in Reports: 09/09/2013
Number of Days to Update: 54

Source: Department of Environmental Conservation
Telephone: 518-402-8233
Last EDR Contact: 01/13/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

AIRS: Air Emissions Data

Point source emissions inventory data.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 11/01/2013
Date Made Active in Reports: 01/09/2014
Number of Days to Update: 69

Source: Department of Environmental Conservation
Telephone: 518-402-8452
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Annually

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: 09/17/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 11/14/2013
Number of Days to Update: 43

Source: New York City Department of City Planning
Telephone: 718-595-6658
Last EDR Contact: 12/19/2013
Next Scheduled EDR Contact: 04/07/2014
Data Release Frequency: Varies

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: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 01/15/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Semi-Annually

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: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 01/20/2014
Next Scheduled EDR Contact: 05/05/2014
Data Release Frequency: Varies

COAL ASH DOE: Sleam-Electric Plan Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 01/13/2014
Next Scheduled EDR Contact: 04/28/2014
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: 10/28/2013
Date Data Arrived at EDR: 10/29/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 38

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 11/18/2013
Next Scheduled EDR Contact: 03/03/2014
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Financial 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: 10/31/2008	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 11/25/2008	Telephone: 518-402-8712
Date Made Active in Reports: 12/11/2008	Last EDR Contact: 01/06/2014
Number of Days to Update: 16	Next Scheduled EDR Contact: 04/21/2014
	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: 08/17/2010	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/03/2011	Telephone: N/A
Date Made Active in Reports: 03/21/2011	Last EDR Contact: 12/13/2013
Number of Days to Update: 77	Next Scheduled EDR Contact: 03/24/2014
	Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial assurance information.

Date of Government Version: 10/15/2013	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 10/16/2013	Telephone: 518-402-8660
Date Made Active in Reports: 11/14/2013	Last EDR Contact: 01/06/2014
Number of Days to Update: 29	Next Scheduled EDR Contact: 04/21/2014
	Data Release Frequency: Quarterly

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/19/2011	Telephone: 202-566-0517
Date Made Active in Reports: 01/10/2012	Last EDR Contact: 11/01/2013
Number of Days to Update: 83	Next Scheduled EDR Contact: 02/11/2014
	Data Release Frequency: Varies

COAL ASH: Coal Ash Disposal Site Listing

A listing of coal ash disposal site locations.

Date of Government Version: 10/08/2013	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 10/09/2013	Telephone: 518-402-8660
Date Made Active in Reports: 11/14/2013	Last EDR Contact: 01/06/2014
Number of Days to Update: 36	Next Scheduled EDR Contact: 04/21/2014
	Data Release Frequency: Varies

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: 06/30/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/13/2013	Telephone: 617-520-3000
Date Made Active in Reports: 09/13/2013	Last EDR Contact: 11/15/2013
Number of Days to Update: 31	Next Scheduled EDR Contact: 02/24/2014
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/23/2013
Date Data Arrived at EDR: 11/06/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 30

Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 12/26/2013
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Annually

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: 10/23/2013
Date Data Arrived at EDR: 11/06/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 30

Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 12/26/2013
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Annually

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: 11/11/2011
Date Data Arrived at EDR: 05/18/2012
Date Made Active in Reports: 05/25/2012
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 11/15/2013
Next Scheduled EDR Contact: 02/24/2014
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 1931 and 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

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: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 01/15/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: N/A

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/15/2013
Date Data Arrived at EDR: 07/03/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 72

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 01/02/2014
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Quarterly

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 01/29/2013
Date Data Arrived at EDR: 02/14/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 01/03/2014
Next Scheduled EDR Contact: 04/21/2014
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 US Hist Auto Stat: EDR Exclusive Historic Gas 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 US Hist Cleaners: EDR Exclusive Historic Dry 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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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 US Hist Cleaners: EDR Proprietary Historic Dry Cleaners - Cole

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: N/A
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Auto Stat: EDR Proprietary Historic Gas Stations - Cole

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: N/A
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

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.

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: EDR
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

CORTLAND COUNTY:

Cortland County Storage Tank Listing

A listing of aboveground storage tank sites located in Cortland County.

Date of Government Version: 08/23/2013
Date Data Arrived at EDR: 08/28/2013
Date Made Active in Reports: 09/12/2013
Number of Days to Update: 15

Source: Cortland County Health Department
Telephone: 607-753-5035
Last EDR Contact: 11/04/2013
Next Scheduled EDR Contact: 02/17/2014
Data Release Frequency: Quarterly

Cortland County Storage Tank Listing

A listing of underground storage tank sites located in Cortland County.

Date of Government Version: 08/23/2013
Date Data Arrived at EDR: 08/28/2013
Date Made Active in Reports: 09/12/2013
Number of Days to Update: 15

Source: Cortland County Health Department
Telephone: 607-753-5035
Last EDR Contact: 11/04/2013
Next Scheduled EDR Contact: 02/17/2014
Data Release Frequency: Quarterly

NASSAU COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Registered Tank Database

A listing of aboveground storage tank sites located in Nassau County.

Date of Government Version: 05/21/2003
Date Data Arrived at EDR: 05/27/2003
Date Made Active in Reports: 06/09/2003
Number of Days to Update: 13

Source: Nassau County Health Department
Telephone: 516-571-3314
Last EDR Contact: 01/21/2014
Next Scheduled EDR Contact: 04/21/2014
Data Release Frequency: No Update Planned

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: 11/04/2013
Next Scheduled EDR Contact: 02/17/2014
Data Release Frequency: Varies

Registered Tank Database

A listing of underground storage tank sites located in Nassau County.

Date of Government Version: 05/21/2003
Date Data Arrived at EDR: 05/27/2003
Date Made Active in Reports: 06/09/2003
Number of Days to Update: 13

Source: Nassau County Health Department
Telephone: 516-571-3314
Last EDR Contact: 01/21/2014
Next Scheduled EDR Contact: 04/21/2014
Data Release Frequency: No Update Planned

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: 11/04/2013
Next Scheduled EDR Contact: 02/17/2014
Data Release Frequency: Varies

ROCKLAND COUNTY:

Petroleum Bulk Storage Database

A listing of aboveground storage tank sites located in Rockland County.

Date of Government Version: 09/19/2013
Date Data Arrived at EDR: 09/20/2013
Date Made Active in Reports: 11/13/2013
Number of Days to Update: 54

Source: Rockland County Health Department
Telephone: 914-364-2605
Last EDR Contact: 12/09/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Quarterly

Petroleum Bulk Storage Database

A listing of underground storage tank sites located in Rockland County.

Date of Government Version: 09/19/2013
Date Data Arrived at EDR: 09/20/2013
Date Made Active in Reports: 11/13/2013
Number of Days to Update: 54

Source: Rockland County Health Department
Telephone: 914-364-2605
Last EDR Contact: 12/09/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Quarterly

SUFFOLK COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Storage Tank Database

A listing of aboveground storage tank sites located in Suffolk County.

Date of Government Version: 07/08/2013
Date Data Arrived at EDR: 09/10/2013
Date Made Active in Reports: 11/25/2013
Number of Days to Update: 76

Source: Suffolk County Department of Health Services
Telephone: 631-854-2521
Last EDR Contact: 12/30/2013
Next Scheduled EDR Contact: 02/17/2014
Data Release Frequency: No Update Planned

Storage Tank Database

A listing of underground storage tank sites located in Suffolk County.

Date of Government Version: 07/08/2013
Date Data Arrived at EDR: 09/10/2013
Date Made Active in Reports: 11/25/2013
Number of Days to Update: 76

Source: Suffolk County Department of Health Services
Telephone: 631-854-2521
Last EDR Contact: 12/30/2013
Next Scheduled EDR Contact: 02/17/2014
Data Release Frequency: No Update Planned

WESTCHESTER COUNTY:

Listing of Storage Tanks

A listing of aboveground storage tank sites located in Westchester County.

Date of Government Version: 09/11/2013
Date Data Arrived at EDR: 09/12/2013
Date Made Active in Reports: 11/13/2013
Number of Days to Update: 62

Source: Westchester County Department of Health
Telephone: 914-813-5161
Last EDR Contact: 11/04/2013
Next Scheduled EDR Contact: 02/17/2014
Data Release Frequency: Varies

Listing of Storage Tanks

A listing of underground storage tank sites located in Westchester County.

Date of Government Version: 09/11/2013
Date Data Arrived at EDR: 09/12/2013
Date Made Active in Reports: 11/13/2013
Number of Days to Update: 62

Source: Westchester County Department of Health
Telephone: 914-813-5161
Last EDR Contact: 11/04/2013
Next Scheduled EDR Contact: 02/17/2014
Data Release Frequency: Varies

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: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 11/22/2013
Next Scheduled EDR Contact: 03/03/2014
Data Release Frequency: Annually

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/19/2012
Date Made Active in Reports: 08/28/2012
Number of Days to Update: 40

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 01/17/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Annually

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 07/24/2013
Date Made Active in Reports: 08/19/2013
Number of Days to Update: 26

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 01/20/2014
Next Scheduled EDR Contact: 05/05/2014
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 06/21/2013
Date Made Active in Reports: 08/05/2013
Number of Days to Update: 45

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 11/25/2013
Next Scheduled EDR Contact: 03/10/2014
Data Release Frequency: Annually

VT MANIFEST: Hazardous Waste Manifest Data

Hazardous waste manifest information.

Date of Government Version: 11/12/2013
Date Data Arrived at EDR: 11/20/2013
Date Made Active in Reports: 12/11/2013
Number of Days to Update: 21

Source: Department of Environmental Conservation
Telephone: 802-241-3443
Last EDR Contact: 01/20/2014
Next Scheduled EDR Contact: 05/05/2014
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 08/09/2013
Date Made Active in Reports: 09/27/2013
Number of Days to Update: 49

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 12/11/2013
Next Scheduled EDR Contact: 03/31/2014
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data

Source: Rextag Strategies Corp.
Telephone: (281) 769-2247

U.S. Electric Transmission and Power Plants Systems Digital GIS Data

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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Freshwater Wetlands

Source: Department of Environmental Conservation

Telephone: 518-402-8961

Scanned Digital USGS 7.5' Topographic Map (DRG)

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

STREET AND ADDRESS INFORMATION

© 2010 Tele Atlas North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

APPENDIX D

Environmental Questionnaire

ASTM E1527-13 USER/OWNER QUESTIONNAIRE

INTRODUCTION

In order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "Brownfields Amendments"), the user must conduct the following inquiries required by 40 CFR 312.25, 312.28, 312.29, 312.30 and 312.31. These inquiries must also be conducted by EPA Brownfield Assessment and Characterization grantees. The user should provide the following information to the environmental professional. Failure to conduct these inquiries could result in a determination that "all appropriate inquiries" is not complete.

**PROPERTY: 1159 MAIN STREET
BUFFALO, NEW YORK**

(1.) Environmental liens that are filed or recorded against the site (40 CFR 312.25).

Are you aware of any environmental cleanup liens against the property that are filed or recorded under Federal, tribal, state or local law?

YES _____ NO

If yes, explain _____

(2.) Activity and use limitations (AULs) that are in place on the property or that have been filed or recorded against the property (40 CFR 312.26).

Are you aware of any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under Federal, tribal, state or local law?

YES _____ NO (See page 2)

If yes, explain _____

(3.) Specialized knowledge or experience of the person seeking to qualify for the LLP (40 CFR 312.28).

As the user of this ESA do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the 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

If Yes, explain _____

**PROPERTY: 1159 MAIN STREET
BUFFALO, NEW YORK**

(4.) Relationship of the purchase price to the fair market value of the property if it were not contaminated (40 CFR 312.29).

Does the purchase price being paid for this property reasonably reflect the fair market value of the property?

YES _____ NO

If no, explain _____

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 property?

YES _____ NO

Explain _____

(5.) Commonly known or reasonably ascertainable information about the property (40 CFR 312.30).

Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example, as user,

(a) Do you know the past uses of the property?

YES _____ NO

(b) Do you know of specific chemicals that are present or once were present at the property?

YES _____ NO

(c) Do you know of spills or other chemical releases that have taken place at the property?

YES _____ NO

(d) Do you know of any environmental cleanups that have taken place at the property?

YES _____ NO

(e) Do you know of any environmentally related items reported in local media which pertain to the property?

YES _____ NO (See page 3)

If the answer to any of the inquiries of Question (5) was yes, explain _____

PROPERTY: 1159 MAIN STREET
BUFFALO, NEW YORK

(6.) The degree of obviousness of the presence or likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31).

As the user of this ESA, based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of contamination at the property?

YES _____ NO X

If Yes, explain _____

(7.) Is a chain of title or similar record of title for the property available?

YES X NO _____

If Yes, please provide that document to the environmental professional.

(8.) Reason for conducting this ESA.

Indicate the reason that this ESA of the property is being conducted (for example, purchase, sale, exchange, refinancing, foreclosure, assessment of potential environmental conditions that could materially impact the operation of the business associated with the property, etc.).

New Construction

(9.) Do you have any other knowledge or experience with the 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)?

YES _____ NO X

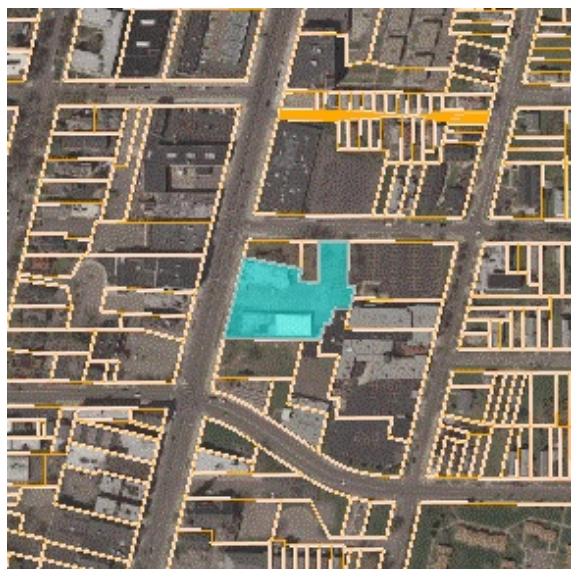
Signature Frank P. Jarode Date 1/28/14

Representing (Firm) _____

Title President Telephone Number 716-704-5007

APPENDIX E

Municipal Property Information



Parcel Overview Map



Parcel Detail Map

PIN: 1402001006300003033000

SBL: 100.63-3-33

Address: 1159 MAIN

Owner 1: SLEEP & SAVE INC

Owner 2:

Mailing Address: 1159 MAIN ST

City/Zip: BUFFALO NY 14209

Municipality: City of Buffalo

Property Class: 415

Class Description: C - Motel

Front: 213.83

Depth: 245

Deed Roll: 1

Deed Book: 09686

Deed Page: 00165

Deed Date:

Acreage: 1.248

Total Assessment: \$515,000

Land Assessment: \$141,600

County Taxes: \$515,000

Town Taxes: \$0

School Taxes: \$0

Village Taxes: \$0

School District: CITY OF BUFFALO

Year Built: 0

Sqft Living Area: 0

Condition: 0

Heating: 0

Basement: 0

Fireplace: 0

Beds: 0

Baths: 0



City of Buffalo

Mayor Byron W. Brown

[Home](#) > [City Services](#) > Property Information

SEARCH:

GO

Property Information

Commercial Inventory Information

Site No:	Bldg.Section:	Bldg.No:	No.Identical Bldg:	Actual Yr. Built:
1	1	1	1	1971
Eff.Yr.Built:	Constr. Quality:	Condition:	Bldg Perimeter:	Gross Floor Area:
1971	2.0- Average	3- Normal	728	11420
No.of Stories:	Story Height:	Air Cond. Pc:	No. Elevators:	Bsmt.Perimeter:
2.0	8	100	0	0
Site No:	Bldg.Section:	Bldg.No:	No.Identical Bldg:	Actual Yr. Built:
1	1	2	1	1965
Eff.Yr.Built:	Constr. Quality:	Condition:	Bldg Perimeter:	Gross Floor Area:
1965	2.0- Average	3- Normal	1060	18540
No.of Stories:	Story Height:	Air Cond. Pc:	No. Elevators:	Bsmt.Perimeter:
2.0	8	100	0	0
View Owner Information	View Improvements/Uses	View Sales	View Billed Property Taxes	

[Return to Main Search](#)

[Return to Listing](#)

© 2001-2011 City of Buffalo

Photos by Angel Art LTP, compliments of the [Greater Buffalo Convention and Visitors Bureau](#). Additional photos by [Adrian Roselli](#), compliments of [Algonquin Studios](#)

[Feedback](#) | [Accessibility Statement](#) | [Disclaimer and Privacy Policy](#) | [Site Map](#)





City of Buffalo

Mayor Byron W. Brown

[Home](#) > [City Services](#) > Property Information

SEARCH:

Property Information

Owner Information

Owner Name	Assess Address	Zipcode	SWIS	SBL	Prop.Description
SLEEP & SAVE INC ;	1159 MAIN	14209	147006	1006300003033000	47. S DODGE
Prop.Class	Front	Depth	Census #	Land Value	Councilmatic Dist.
415	213.83	245.00	0168002	\$141,600.00	EL

Gross Property Tax

Gross Sewer Tax

Total Assessed Value	Taxrate	Gross Property Tax	Total Assessed Value	Taxrate	Gross Sewer Tax
\$515,000.00	\$28.02	\$0.00	\$515,000.00	\$1.71	\$0.00

Tax Type

N - Non-Homestead

[View Improvements/Uses](#) |

[View](#) |

[View Sales](#) |

[View Billed Property](#) |

[Residential/Commerical](#)

[Taxes](#)

[Inventory](#)

[Return to Main Search](#)

[Return to Listing](#)

© 2001-2011 City of Buffalo

Photos by Angel Art LTP, compliments of the [Greater Buffalo Convention and Visitors Bureau](#). Additional photos by [Adrian Roselli](#), compliments of [Algonquin Studios](#)

[Feedback](#) | [Accessibility Statement](#) | [Disclaimer and Privacy Policy](#) | [Site Map](#)





CITY OF BUFFALO



FREEDOM OF INFORMATION LAW RECORDS REQUEST FORM

MAYOR
BYRON W. BROWN

Under the provisions of Article 6, Sections 84 -90, of the New York State Public Officers Law entitled, the FREEDOM OF INFORMATION LAW (FOIL), I hereby request the records or portions thereof that I have reasonably described in Part "B" of this form.

PART A - APPLICANT INFORMATION

1. Name of Applicant: Jacob Metzger

2. Company Name: SJB Services Inc.

3. Type of Business:

- Government Entity
- Law Firm
- Media
- Other Environmental Consultant

4. Address: 5167 South Park Ave State: Hamburg, NY Zip Code: 14075

5. Telephone Number: 716-649-8110 Fax Number: 716-649-8051

6. E-Mail: jmetzger@sjbempire.net

PART B - INFORMATION REQUESTED

Describe the records that you are requesting in the space provided below. Please include as much detail as possible such as the respective department having possession of the records, dates, titles, or any other information that may assist us in locating the record(s) you are seeking.

Parcel: 1159 Main St.
Buffalo, NY
SBL #: 100.63-3-33

Records:

- USTs or ASTs present on site
- Existing or historical spills/releases of hazardous substances or petroleum
- Inspections, citations, or emergency responses related to the property
- Records of building inspections or demolitions

PART C – METHODS OF REVIEW

- I would like to schedule a time to review the records that I am requesting. I understand that access to the requested records will be provided in accordance with Section 87 of New York State Public Officers Law. I understand that copies may not be immediately available.
- I would like the requested documents mailed to me. I understand that access to the requested records will be provided in accordance with Public Officers Law §87. I understand that any fees associated with my obtaining copies of the requested records must be received by the City before the records are disclosed.
- I would like the requested records sent to the following e-mail address: jmetzger@sjbempire.net

PART D – FEES

Should you desire copies of records, fees shall apply in accordance with Section 87(1) of the Public Officers Law. Advanced payment is required before records will be released. Please make check or money orders payable to the **City of Buffalo**.

FEES FOR PHOTOCOPIES: *Pages up to 9" x 14" are \$.25 ea. or the actual cost of reproducing any other record.*

The fee for reproducing a record may include the actual cost of the storage device or media; actual cost for engaging outside professional service to reproduce record; hourly salary for employee time used in reproducing the record.

PART E – SUBMISSION OF REQUEST

After you have reasonably described the records you wish to inspect or obtain, please sign this form and return it to the appropriate City department that maintains the records you seek. Requests may be sent via electronic mail, regular US mail, or hand delivery.

I hereby affirm that the information I have provided on this request form is correct.

Signature: J. Metzger Print Name: Jacob Metzger Date: 1-27-14

APPENDIX F

Sanborn Maps

1951 Sanborn Map

12181 BUFFALO, N.Y. VOL. 1A

83
(277)

11 028



BARKER ST

SOUTHAMPTON ST

81

74

DODGE

84

MAIN

ELLCOTT

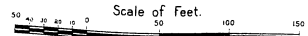
EDNA PL.

SUMMER ST

73

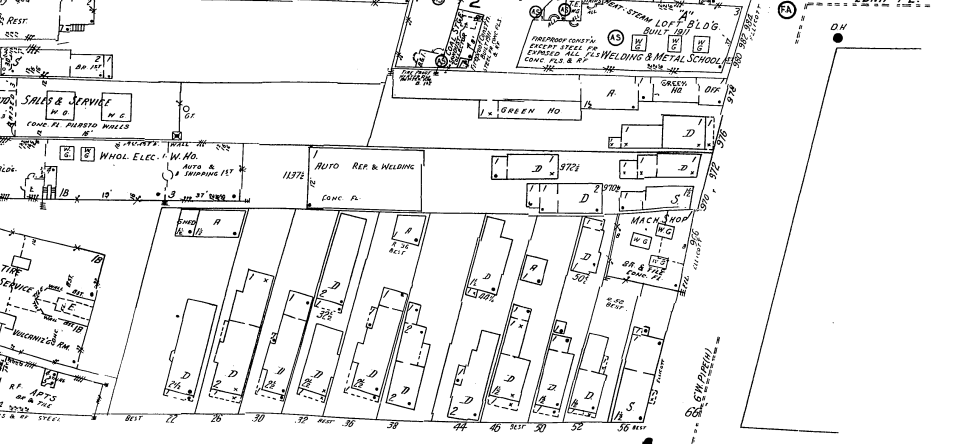
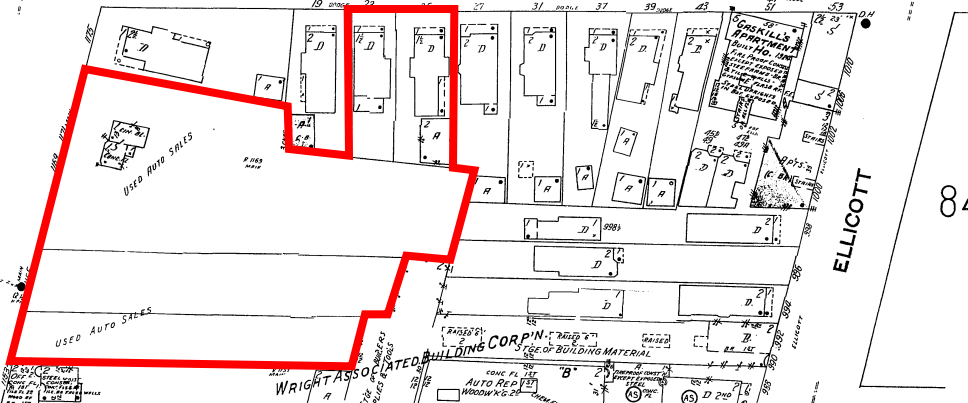
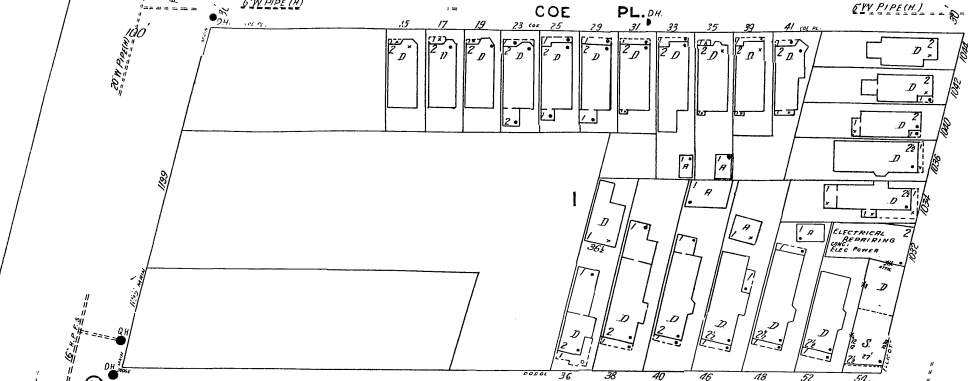
BEST

85



Copyright 1951 by the Sanborn Map Co

88



83
(277)



BARKER ST

SOUTHAMPTON ST

81

COE PL.

Greasing Pit

DODGE

74

G.T. = Gas Tanks

Filling Station

MAIN

Auto Repairing

ELLICOTT

84

CHARLES BERRICK'S SONS - BUILDERS

STORAGE OF BUILDING MATERIAL

WOOD WORKING

BRUN

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

GREEN HO.

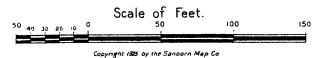
SUMMER ST

EDNA PL.

73

BEST

85



Copyright 1925 by the Sanborn Map Co

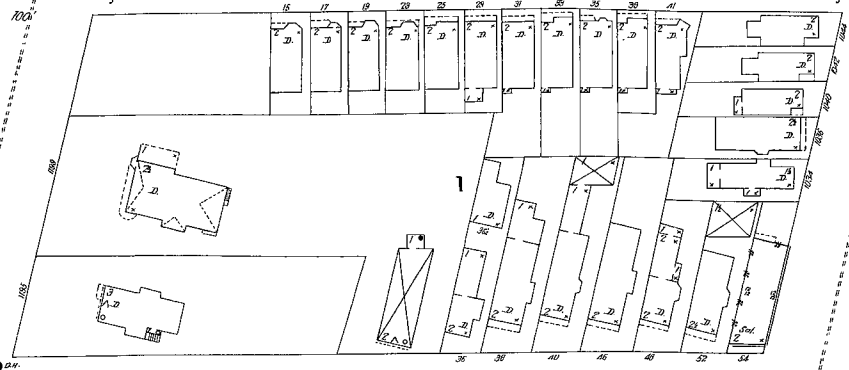
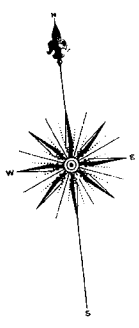
277

BARKER ST.

279

SOUTHAMPTON

COE PL.



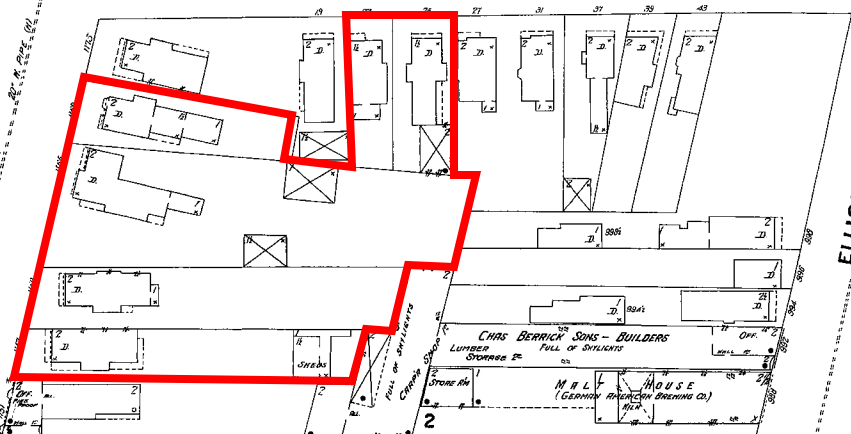
DODGE

S B B
VOLUME ONE

MAIN

ELLICOTT

278



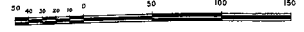
EDNA PL.

SUMMER ST.

BEST

275

Scale of Feet.



CORPORATE/

BUFFALO OFFICE

5167 South Park Avenue
Hamburg, NY 14075
Phone: (716)-649-8110
Fax: (716) 649-8051

ALBANY OFFICE

P.O. Box 2199
Ballston Spa, NY 12020

5 Knabner Road
Mechanicville, NY 12118
Phone: (518) 899-7491
Fax: (518) 899-7496

CORTLAND OFFICE

60 Miller Street
Cortland, NY 13045
Phone: (607) 758-7182
Fax: (607) 758-7188

ROCHESTER OFFICE

535 Summit Point Drive
Henrietta, NY 14467
Phone: (585) 359-2730
Fax: (585) 359-9668

Project No. BEV-14-003
March 3, 2014

Sleep Inn
1159 Main Street
Buffalo, New York 14202

Attention: *Mr. Fadi Dagher*
Mr. Fred Bou Jaoude

Phone: 716-725-2731
Fax: 716-884-6541
Email: fdager1@yahoo.com
Fbj007@gmail.com

Reference: Phase II Environmental Site Assessment
Summary Report for Subsurface Investigation
1159 Main Street
Buffalo, New York 14202

Dear Mr. Dagher and Mr. Bou Jaoude,

As authorized by Sleep Inn, Empire Geo-Services Inc. (Empire) completed a Phase II Environmental Site Assessment (ESA) subsurface soil investigation at the referenced site (subject site) on February 17, 2014. The purpose of the investigation was to determine if the presence of petroleum impacts associated with the historical gasoline filling station were on site. The findings of our work are presented in this summary report.

BACKGROUND

Empire recently completed a Phase I ESA of the referenced subject site. The findings of the ESA concluded an ASTM recognized environmental condition (REC) due to the historical operation of the subject property as a gasoline filling station prior to modern state and federal regulations for storage containers of hazardous materials. In addition, a controlled recognized environmental condition (CREC) was identified on the adjacent property to the east, which is owned and operated by Osmose, Inc. The adjacent property has had numerous spills. However, remediation of these spills is complete with ongoing treatment and monitoring of the groundwater occurring.

Therefore the purpose of this Phase II subsurface soil investigation was to explore for evidence of subsurface petroleum impacts, if any, associated with the former gasoline filling station in addition to any environmental impacts associated with the adjacent property.

DIRECT PUSH BORINGS

The subsurface soil investigation was completed on February 17, 2014 and included the advancement of nine (9) direct push soil probes, designated as DP-1 through DP-9. The soil probes were generally located throughout the site with a greater concentration near the location of the former USTs from the historical filling station and along the eastern limits of the subject property. Refer to the Subsurface Investigation Plan (Figure 2) included in Appendix A for exact locations of the direct push borings.

A track mounted Geoprobe® 6620DT direct push rig was used to complete the borings in general accordance with ASTM D6282, *Standard Guide for Direct Push Soil Sampling for Environmental Site Characterizations*. At each boring location, continuous soil samples were collected from the ground surface to the termination depth using the Geoprobe® Macro-Core (MC) soil sampler. The MC soil sampler recovers a 1.5-inch diameter soil sample with a maximum length of 48 inches. The sampler is fitted with a clear PVC liner and a removable cutting shoe. The liners are replaced after each sample collection. The MC soil sampler and cutting shoe were decontaminated between boring locations and sampling intervals to minimize the potential for cross-contamination.

The recovered soil samples were visually classified by an Empire geologist who prepared a subsurface log for each probe location. The geologist examined the soil samples for visual and olfactory indications of petroleum and screened the samples with a MiniRAE 3000 photoionization detector (PID). The PID is capable of detecting volatile organic vapor concentrations at a practical threshold of 1.0 part per million. PID readings recorded along with soil classifications are found on the subsurface logs in Appendix B.

SUBSURFACE CONDITIONS

A total of 37 soil samples were recovered from the nine direct push probes. Each probe was terminated at a depth of 16 feet with the exception of probe location DP-3, which was terminated at a depth of 20 feet.

Subsurface conditions encountered at the nine probe locations generally consisted of approximately 3 to 8 feet of silt, sand and gravel fill materials overlying native soils. In general, the fill soils got deeper across the site from west to east. The native soils typically consisted of sand and gravel with layers of silts and clays throughout.

Apparent perched groundwater was encountered at direct push borings DP-7 and DP-8 at a depth of approximately 10 to 11 feet below the ground surface.

PID measurements were at background levels on all recovered soil samples from all nine soil probe locations.

SAMPLING AND ANALYSIS

The soil sampling model was to collect soil samples for laboratory analysis that displayed the highest PID readings and/or had visual or olfactory evidence of petroleum impacts. Since no evidence of petroleum impacts was obtained on any of the recovered soil samples, one soil sample was collected in the vicinity of the former USTs associated with the historical filling station and one sample along the eastern property limit closest to the adjacent property to the

east with known spills. Each soil sample was collected at a depth of 8-12 feet, since this is the depth interval just below the bottom of a typical underground petroleum fuel storage tank. The soil samples for lab analysis were placed into pre-cleaned 4 and 8 ounce glass containers, labeled with the date, time, location of project, and placed in an iced cooler at approximately 4 degrees Celsius for transport to Alpha Analytical, Inc. (Alpha) located in Westborough, Massachusetts. Alpha is a New York State Department of Health (NYSDOH) certified analytical testing laboratory. Chain-of-custody documentation accompanied the samples.

The two soil samples were analyzed by Alpha for volatile organic compounds (VOCs) utilizing Analytical Method 8260C for New York State Department of Environmental Conservation (NYSDEC) Spill Technology and Remediation Series (STARS) listed compounds. The soil samples were also analyzed for STARS listed semi-volatile organic compounds (SVOCs) utilizing Analytical Method 8270D for NYSDEC STARS listed compounds.

No STARS listed VOCs were detected in either of the two soil samples.

Three individual SVOCs were detected at concentrations above the laboratory detection limits at sample DP-3. However, all three concentrations were estimated by the laboratory and well below the guidelines determined by the Unrestricted Use Soil Cleanup Objectives for the NYSDEC Policy CP-51. Therefore, all STARS listed SVOCs were below the required regulatory limits.

Summary tables of the analytical laboratory results are attached with this report and the analytical report prepared by Alpha Analytical is included in Appendix C.

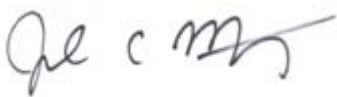
CONCLUSIONS

The Phase II subsurface soil investigation completed by Empire on February 17, 201 at 1159 Main Street in Buffalo, New York indicated no evidence of petroleum impacts on any soil samples recovered at the nine soil probe locations. Laboratory analysis of two soil samples indicated no detections above the regulatory limits for STARS VOCs or SVOCs. ***In Empire's opinion, the subject site does not appear to have been impacted by the historical presence of a filling station on site or spills occurring on the adjacent property based on the information obtained for this Phase II subsurface investigation.***

CLOSING

This project and report have been completed for the exclusive use of Sleep Inn and it's assigns in accordance with generally accepted environmental practices. Empire appreciates the opportunity to provide these services. If you have any questions or if we can provide further assistance, please contact our office at 716-649-8110.

Respectfully submitted,
EMPIRE GEOSERVICES, INC.



Jacob C Metzger, PE
Environmental Engineer

Attachments

Analytical Summary Tables

Appendices

A - Site Drawings

B - Subsurface Direct Push Logs

C - Alpha Analytical Laboratory Report

TABLE I
SUMMARY OF STARS VOLATILE ORGANIC COMPOUNDS
Sleep Inn
1159 Main Street - Buffalo, New York 14202

Sample Identification	DP-3	DP-7	Unrestricted Use Cleanup Objectives - NYSDEC Policy CP-51
Depth	8-12'	8-12'	
Date	02/17/14	02/17/14	
Analyte			
Benzene	ND	ND	60
n-Butylbenzene	ND	ND	12,000
sec-Butylbenzene	ND	ND	11,000
tert-Butylbenzene	ND	ND	5,900
Ethylbenzene	ND	ND	1,000
n-Propylbenzene	ND	ND	3,900
Isopropylbenzene	ND	ND	NA
p-Isopropyltoluene	ND	ND	10,000
Naphthalene	ND	ND	12,000
Toluene	ND	ND	700
1,2,4-Trimethylbenzene	ND	ND	3,600
1,3,5-Trimethylbenzene	ND	ND	8,400
Total Xylenes	ND	ND	260
Methyl tert butyl ether (MTBE)	ND	ND	930

NOTES:

- 1) All concentrations are presented in ug/kg or parts per billion (ppb).
- 2) ND denotes Not Detected above the laboratory detection limit.
- 3) All samples were analyzed for VOC's by EPA Method 8260
- 4) Guidance values were obtained from the Unrestricted Use Soil Cleanup Objective Table in the NYSDEC Policy CP-51

TABLE 2
SUMMARY OF STARS SEMI-VOLATILE ORGANIC COMPOUNDS
Sleep Inn
1159 Main Street - Buffalo, New York 14202

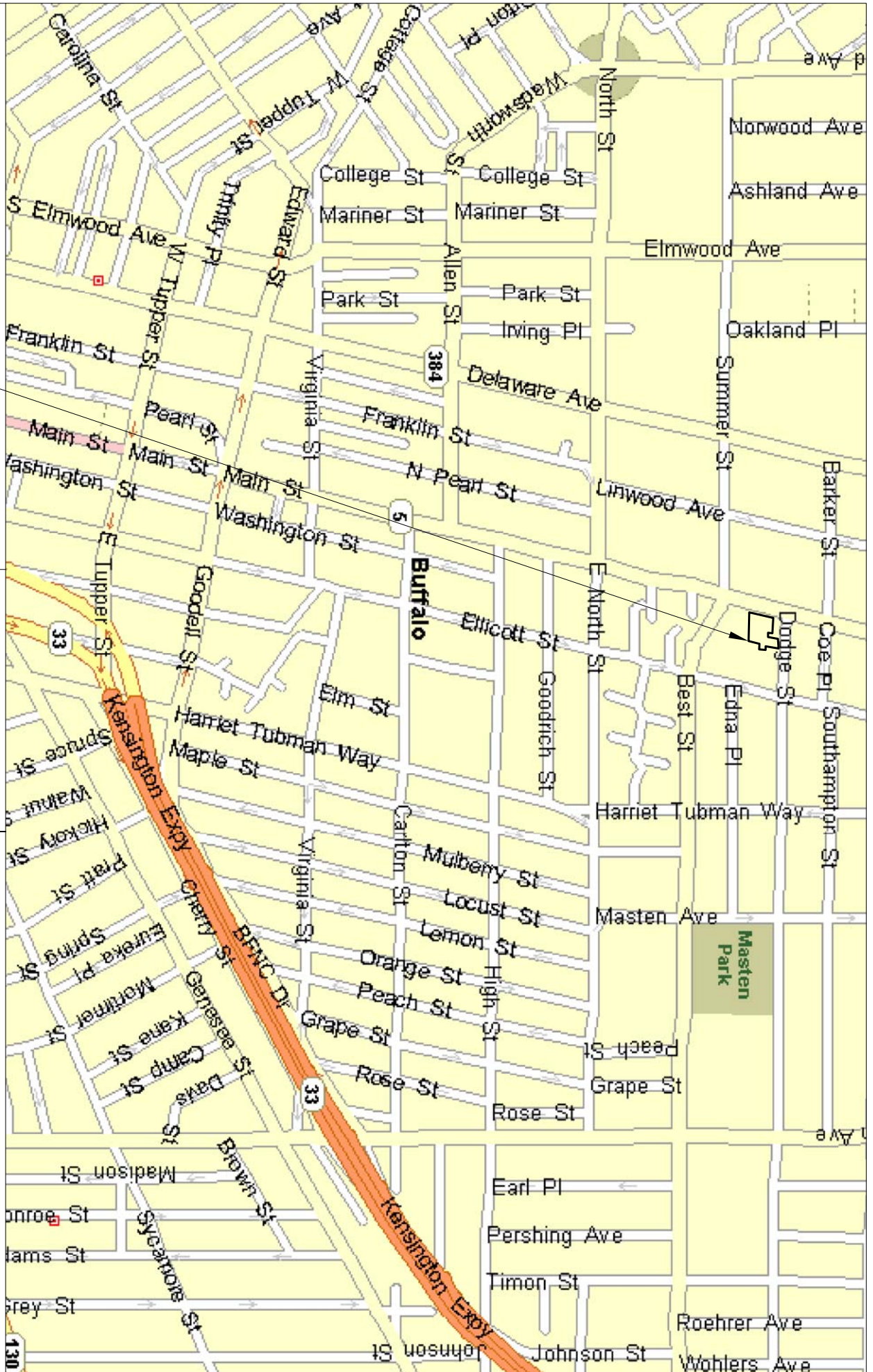
Sample Identification	DP-3	DP-7	Unrestricted Use Soil Cleanup Objectives - NYSDEC Policy CP-51
Depth	8-12'	8-12'	
Date	02/17/14	02/17/14	
Analyte			
Anthracene	ND	ND	100,000
Acenaphthene	ND	ND	20,000
Benzo(a)anthracene	ND	ND	1,000
Benzo(a)pyrene	ND	ND	1,000
Benzo(b)fluoranthene	ND	ND	1,000
Benzo(g,h,i)perylene	ND	ND	100,000
Benzo(k)fluoranthene	ND	ND	800
Chrysene	ND	ND	1,000
Dibenzo(a,h)anthracene	ND	ND	330
Fluoranthene	62	ND	100,000
Fluorene	ND	ND	30,000
Indeno(1,2,3-cd)pyrene	ND	ND	500
Naphthalene	ND	ND	12,000
Phenanthrene	60	ND	100,000
Pyrene	42	ND	100,000

NOTES:

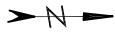
- 1) All concentrations are presented in ug/kg or parts per billion (ppb).
- 2) ND denotes Not Detected above the laboratory detection limit.
- 3) All samples were analyzed for semi-VOCs by EPA Method 8270
- 4) Guidance values were obtained from the Unrestricted Use Soil Cleanup Objective Table in the NYSDEC Policy CP-51
- 5) The SCOs for unrestricted use of individual chemicals not listed in Policy CP-51 were capped at a maximum value of 100,000 ppb as per the Technical Support Document (Section 9.3 in Table 9.3.1)
- 5) Concentrations observed in **BOLD** were estimated by the laboratory

APPENDIX A

Site Drawings



APPROXIMATE SITE LOCATION



NOTE:
SITE LOCATION PLAN DEVELOPED
FROM MICROSOFT STREETS & TRIPS 2006

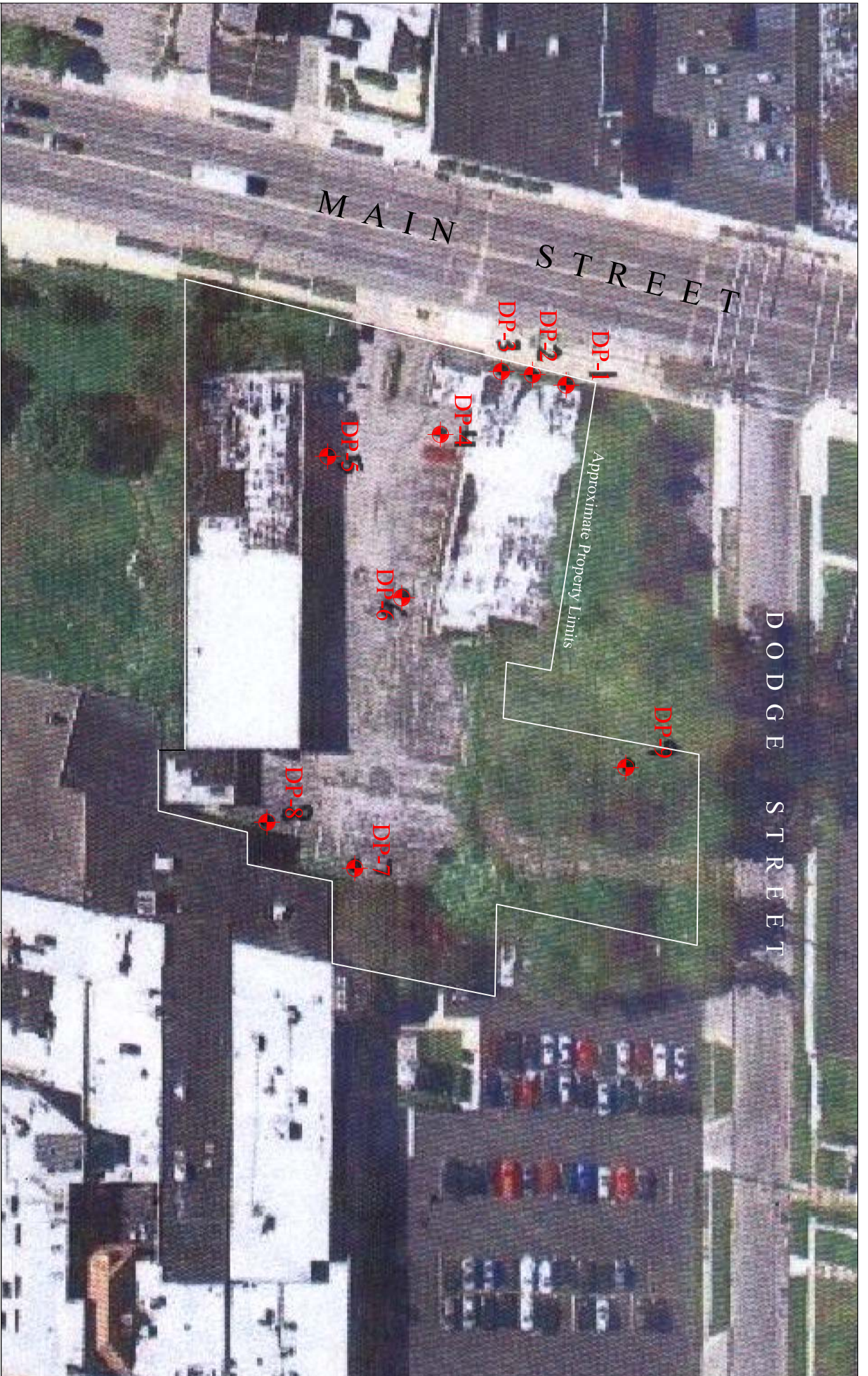


SITE LOCATION MAP

PHASE II ENVIRONMENTAL SITE ASSESSMENT
SUBSURFACE INVESTIGATION
SLEEP INN

1159 MAIN STREET
BUFFALO, NEW YORK

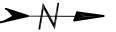
DR BY: JCM	SCALE: NTS	PROJ NO.: BEV-14-003
CHKD BY: DRS	DATE: 02-28-14	FIGURE NO.: 1



NOTE:
SITE PLAN DEVELOPED FROM GOOGLE MAPS

LEGEND:

 APPROXIMATE LOCATION AND DESIGNATION OF THE DIRECT
PUSH SOIL BORING LOCATIONS PERFORMED BY EMPIRE GEO
SERVICES ON FEBRUARY 17, 2014



EMPIRE GEO
SERVICES INC
a subsidiary of S&B Services, Inc.

SUBSURFACE INVESTIGATION
PLAN

PHASE II ENVIRONMENTAL SITE ASSESSMENT
SUBSURFACE INVESTIGATION
SLEEP INN
1159 MAIN STREET
BUFFALO, NEW YORK 14202

DR BY: JCM

CHKD BY: DRS

APPROX. SCALE: NTS

PROJ NO.: BEV-14-003

DATE: 02-28-14

FIGURE NO.: 2

APPENDIX B

Subsurface Direct Push Logs

DATE:
 START 2/17/2014
 FINISH 2/17/2014
 SHEET 1 OF 1

SJB SERVICES, INC.
DIRECT PUSH LOG



HOLE NO. DP-1
 SURF. ELEV. NA
 G.W. DEPTH _____

PROJECT: Sleep Inn LOCATION: See Subsurface Investigation Plan
1159 Main Street - Buffalo, NY 14202 (Figure 2)

DEPTH FT.	SAMPL NO.	REC (inches)	PID (ppm)	SOIL OR ROCK CLASSIFICATION	NOTES
			BG	Topsoil	
	1	30		Brown sandy SILT, some gravel (moist, FILL)	
4				Brown f-c SAND, little silt (moist, SM-SP)	
	2	30		same	
8				same	
	3	24		same	
12					
	4	26		Brown f-c SAND and f-c GRAVEL (moist, SP-GP)	
16			↓	End of Boring at 16.0'	
20					
24					

PID=Photo Ionization
 Detector
 BG=Background Levels

DRILLER: Art Koske DRILL RIG TYPE: Geoprobe 6620DT Track Rig CLASSIFICATION: Visual by
 METHOD OF INVESTIGATION ASTM 6282 - Direct Push Sampling Environmental Scientist

DATE:
 START 2/17/2014
 FINISH 2/17/2014
 SHEET 1 OF 1

SJB SERVICES, INC.
DIRECT PUSH LOG



HOLE NO. DP-2
 SURF. ELEV NA
 G.W. DEPTH _____

PROJECT: Sleep Inn LOCATION: See Subsurface Investigation Plan
1159 Main Street - Buffalo, NY 14202 (Figure 2)

DEPTH FT.	SAMPL NO.	REC (inches)	PID (ppm)	SOIL OR ROCK CLASSIFICATION	NOTES
			BG	Topsoil	
	1	30		Black-brown sand SILT, tr organics, tr gravel (moist, FILL)	
4				Brown fine SAND, little silt (moist, SW)	
	2	30		same	
8				same	
	3	36		Brown f-c SAND and f-c GRAVEL (moist, SP-GP)	
12				same	
	4	30		same	
16			↓	End of Boring at 16.0'	
20					
24					

PID=Photo Ionization
 Detector
 BG=Background Levels

DRILLER: Art Koske DRILL RIG TYPE: Geoprobe 6620DT Track Rig CLASSIFICATION: Visual by
 METHOD OF INVESTIGATION ASTM 6282 - Direct Push Sampling Environmental Scientist

DATE:
 START 2/17/2014
 FINISH 2/17/2014
 SHEET 1 OF 1

SJB SERVICES, INC.
DIRECT PUSH LOG



HOLE NO. DP-3
 SURF. ELEV NA
 G.W. DEPTH _____

PROJECT: Sleep Inn LOCATION: See Subsurface Investigation Plan
1159 Main Street - Buffalo, NY 14202 (Figure 2)

DEPTH FT.	SMPL NO.	REC (inches)	PID (ppm)	SOIL OR ROCK CLASSIFICATION	NOTES
			BG	Topsoil	
	1	24		Brown-black sandy SILT, some gravel (moist, FILL)	
4				Brown silty CLAY, tr organics (moist, FILL)	
	2	24		Brown fine SAND, little silt (moist, SW)	
8				same	
	3	30		Brown f-c SAND and f-c GRAVEL (moist, SP-GP)	Composite Analytical Sample Obtained from 8-12'
12				Brown f-c SAND (moist, SP)	
	4	42			
16				same	
	5	48			
20			↓		
				End of Boring at 20.0'	
24					
					PID=Photo Ionization Detector BG=Background Levels

DRILLER: Art Koske DRILL RIG TYPE: Geoprobe 6620DT Track Rig CLASSIFICATION: Visual by Environmental Scientist
 METHOD OF INVESTIGATION ASTM 6282 - Direct Push Sampling

DATE:
 START 2/17/2014
 FINISH 2/17/2014
 SHEET 1 OF 1

SJB SERVICES, INC.
DIRECT PUSH LOG



HOLE NO. DP-4
 SURF. ELEV. NA
 G.W. DEPTH _____

PROJECT: Sleep Inn LOCATION: See Subsurface Investigation Plan
1159 Main Street - Buffalo, NY 14202 (Figure 2)

DEPTH FT.	SMPLE NO.	REC (inches)	PID (ppm)	SOIL OR ROCK CLASSIFICATION	NOTES
			BG	Asphalt	
	1	36		Brown-black f-c SAND, some gravel, little silt, tr clay (moist, FILL)	
4				Brown f-c SAND, little gravel (moist, FILL)	
	2	42		Red brick fragments (FILL)	
				Brown CLAY, some f-c gravel, tr silt (moist, CL)	
8					
	3	30		Brown f-c SAND, tr silt (moist, SP)	
12					
	4	36		same	
			↓	Brown f-c SAND and f-c GRAVEL (moist, SP-GP)	
16				End of Boring at 16.0'	
20					
24					

PID=Photo Ionization
 Detector
 BG=Background Levels

DRILLER: Art Koske DRILL RIG TYPE: Geoprobe 6620DT Track Rig CLASSIFICATION: Visual by
 METHOD OF INVESTIGATION ASTM 6282 - Direct Push Sampling Environmental Scientist

DATE:
 START 2/17/2014
 FINISH 2/17/2014
 SHEET 1 OF 1

SJB SERVICES, INC.
DIRECT PUSH LOG



HOLE NO. DP-5
 SURF. ELEV. NA
 G.W. DEPTH _____

PROJECT: Sleep Inn LOCATION: See Subsurface Investigation Plan
1159 Main Street - Buffalo, NY 14202 (Figure 2)

DEPTH FT.	SAMPL NO.	REC (inches)	PID (ppm)	SOIL OR ROCK CLASSIFICATION	NOTES
			BG	Asphalt	
	1	36		Brown-black f-c SAND, some gravel, tr slag, tr brick fragments (moist, FILL)	
4				Brown fine SAND, little silt (moist, SW)	
	2	36		same	
8				same	
	3	42		Brown-red sandy SILT, little clay, tr gravel (moist, ML)	
12				Brown f-c SAND (moist, SP)	
	4	48		contains "little gravel"	
16			↓	End of Boring at 16.0'	
20					
24					

PID=Photo Ionization
 Detector
 BG=Background Levels

DRILLER: Art Koske DRILL RIG TYPE: Geoprobe 6620DT Track Rig CLASSIFICATION: Visual by
 METHOD OF INVESTIGATION ASTM 6282 - Direct Push Sampling Environmental Scientist

DATE:
 START 2/17/2014
 FINISH 2/17/2014
 SHEET 1 OF 1

SJB SERVICES, INC.
DIRECT PUSH LOG



HOLE NO. DP-6
 SURF. ELEV NA
 G.W. DEPTH _____

PROJECT: Sleep Inn LOCATION: See Subsurface Investigation Plan
1159 Main Street - Buffalo, NY 14202 (Figure 2)

DEPTH FT.	SMPL NO.	REC (inches)	PID (ppm)	SOIL OR ROCK		NOTES
				CLASSIFICATION		
— — —	1	36	BG	Asphalt		No Recovery S-4
				Black f-c SAND, little gravel, tr silt (moist, FILL)		
				Red brick fragments, some gravel (moist, FILL)		
4	2	36		Black sandy SILT, little gravel (moist, FILL)		
				Brown fine SAND, little silt (moist, SW)		
8	3	42		same		
				Red-brown silty CLAY, tr gravel (moist, CL-ML)		
12	4	0		same		
				↓		
16				End of Boring at 16.0'		
20						
24						

PID=Photo Ionization
 Detector
 BG=Background Levels

DRILLER: Art Koske DRILL RIG TYPE : Geoprobe 6620DT Track Rig CLASSIFICATION: Visual by
 METHOD OF INVESTIGATION ASTM 6282 - Direct Push Sampling Environmental Scientist

DATE:
 START 2/17/2014
 FINISH 2/17/2014
 SHEET 1 OF 1

SJB SERVICES, INC.
DIRECT PUSH LOG



HOLE NO. DP-7
 SURF. ELEV. NA
 G.W. DEPTH _____

PROJECT: Sleep Inn LOCATION: See Subsurface Investigation Plan
1159 Main Street - Buffalo, NY 14202 (Figure 2)

DEPTH FT.	SMPLE NO.	REC (inches)	PID (ppm)	SOIL OR ROCK CLASSIFICATION	NOTES
			BG	Asphalt	
	1	24		Black sandy SILT, little gravel, tr brick frags (moist, FILL)	
				Brown fine SAND, little silt, tr clay (moist, FILL)	
4					
	2	30		Dark brown-tan silty CLAY, tr ash, tr sand, tr organics (moist, FILL)	
8					
	3	30		Olive-brown fine SAND, some silt (moist, SM)	
				(wet)	Composite Analytical Sample Obtained from 8-12'
12					
	4	42		Red-brown silty CLAY, tr gravel (moist, CL-ML)	
				same	
16			↓	End of Boring at 16.0'	
20					
24					

PID=Photo Ionization
 Detector
 BG=Background Levels

DRILLER: Art Koske DRILL RIG TYPE: Geoprobe 6620DT Track Rig CLASSIFICATION: Visual by
 METHOD OF INVESTIGATION ASTM 6282 - Direct Push Sampling Environmental Scientist

DATE:
 START 2/17/2014
 FINISH 2/17/2014
 SHEET 1 OF 1

SJB SERVICES, INC.
DIRECT PUSH LOG



HOLE NO. DP-8
 SURF. ELEV. NA
 G.W. DEPTH _____

PROJECT: Sleep Inn LOCATION: See Subsurface Investigation Plan
1159 Main Street - Buffalo, NY 14202 (Figure 2)

DEPTH FT.	SAMPL NO.	REC (inches)	PID (ppm)	SOIL OR ROCK CLASSIFICATION	NOTES
			BG	Asphalt	
	1	20		Gray f-c GRAVEL, some sand, tr silt (moist, FILL)	
				Red brick fragments (moist, FILL)	
4				Brown f-c SAND, some gravel, tr silt (moist, FILL)	
	2	24		Red-brown sandy SILT, little gravel (moist, FILL)	
8				Black-brown f-c SAND, some gravel, tr red brick fragments, tr ash (moist, FILL)	
	3	24		Olive-brown fine SAND, little silt (moist, SM)	
				(wet)	
12			↓	Red-brown silty CLAY (moist, CL-ML)	
	4	36			
			↓		
16				End of Boring at 16.0'	
20					
24					

PID=Photo Ionization
 Detector
 BG=Background Levels

DRILLER: Art Koske DRILL RIG TYPE: Geoprobe 6620DT Track Rig CLASSIFICATION: Visual by
 METHOD OF INVESTIGATION ASTM 6282 - Direct Push Sampling Environmental Scientist

DATE:
 START 2/17/2014
 FINISH 2/17/2014
 SHEET 1 OF 1

SJB SERVICES, INC.
DIRECT PUSH LOG



HOLE NO. DP-9
 SURF. ELEV. NA
 G.W. DEPTH _____

PROJECT: Sleep Inn LOCATION: See Subsurface Investigation Plan
1159 Main Street - Buffalo, NY 14202 (Figure 2)

DEPTH FT.	SAMPL NO.	REC (inches)	PID (ppm)	SOIL OR ROCK CLASSIFICATION	NOTES
			BG	Topsoil	
	1	30		Black sandy SILT, tr clay, tr red brick fragments (moist, FILL)	
4				Black-brown f-c SAND, little gravel, some silt, tr organics, tr red brick fragments (moist, FILL)	
	2	30			
8				Red-brown silty CLAY, little sand, occasional seams of silt (moist, CL-ML)	
	3	36			
12					
	4	30		Brown f-c SAND, little silt (moist, SM)	
16			↓	End of Boring at 16.0'	
20					
24					

PID=Photo Ionization
 Detector
 BG=Background Levels

DRILLER: Art Koske DRILL RIG TYPE: Geoprobe 6620DT Track Rig CLASSIFICATION: Visual by
 METHOD OF INVESTIGATION ASTM 6282 - Direct Push Sampling Environmental Scientist

APPENDIX C

Alpha Analytical Laboratory Report



ANALYTICAL REPORT

Lab Number:	L1403650
Client:	SJB Services, Inc 5167 South Park Ave. Hamburg, NY 14705
ATTN:	Dave Steiner
Phone:	(716) 649-8110
Project Name:	SLEEP INN
Project Number:	BEV-14-003
Report Date:	02/24/14

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: SLEEP INN
Project Number: BEV-14-003

Lab Number: L1403650
Report Date: 02/24/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1403650-01	DP-3 @ 8-12'	BUFFALO, NY (1159 MAIN ST)	02/17/14 10:15
L1403650-02	DP-7 @ 8-12'	BUFFALO, NY (1159 MAIN ST)	02/17/14 13:15

Project Name: SLEEP INN
Project Number: BEV-14-003

Lab Number: L1403650
Report Date: 02/24/14

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: SLEEP INN
Project Number: BEV-14-003

Lab Number: L1403650
Report Date: 02/24/14

Case Narrative (continued)

Report Submission

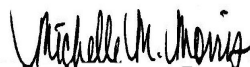
All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Volatile Organics

Any reported concentrations that are below 200 ug/kg may be biased low due to the sample not being collected according to 5035-L/5035A-L low-level specifications.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Michelle M. Morris

Title: Technical Director/Representative

Date: 02/24/14

ORGANICS

VOLATILES

Project Name: SLEEP INN
Project Number: BEV-14-003

Lab Number: L1403650
Report Date: 02/24/14

SAMPLE RESULTS

Lab ID: L1403650-01
 Client ID: DP-3 @ 8-12'
 Sample Location: BUFFALO, NY (1159 MAIN ST)
 Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 02/20/14 10:05
 Analyst: BN
 Percent Solids: 95%

Date Collected: 02/17/14 10:15
 Date Received: 02/17/14
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/kg	1.0	0.12	1
Toluene	ND		ug/kg	1.6	0.12	1
Ethylbenzene	ND		ug/kg	1.0	0.15	1
Methyl tert butyl ether	ND		ug/kg	2.1	0.11	1
p/m-Xylene	ND		ug/kg	2.1	0.34	1
o-Xylene	ND		ug/kg	2.1	0.28	1
n-Butylbenzene	ND		ug/kg	1.0	0.21	1
sec-Butylbenzene	ND		ug/kg	1.0	0.22	1
tert-Butylbenzene	ND		ug/kg	5.2	0.59	1
Isopropylbenzene	ND		ug/kg	1.0	0.18	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.20	1
Naphthalene	ND		ug/kg	5.2	0.81	1
n-Propylbenzene	ND		ug/kg	1.0	0.13	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.2	0.15	1
1,2,4-Trimethylbenzene	ND		ug/kg	5.2	0.60	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	97		70-130

Project Name: SLEEP INN
Project Number: BEV-14-003

Lab Number: L1403650
Report Date: 02/24/14

SAMPLE RESULTS

Lab ID: L1403650-02
 Client ID: DP-7 @ 8-12'
 Sample Location: BUFFALO, NY (1159 MAIN ST)
 Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 02/20/14 10:33
 Analyst: BN
 Percent Solids: 85%

Date Collected: 02/17/14 13:15
 Date Received: 02/17/14
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/kg	1.2	0.14	1
Toluene	ND		ug/kg	1.8	0.13	1
Ethylbenzene	ND		ug/kg	1.2	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.12	1
p/m-Xylene	ND		ug/kg	2.4	0.38	1
o-Xylene	ND		ug/kg	2.4	0.32	1
n-Butylbenzene	ND		ug/kg	1.2	0.23	1
sec-Butylbenzene	ND		ug/kg	1.2	0.24	1
tert-Butylbenzene	ND		ug/kg	5.9	0.66	1
Isopropylbenzene	ND		ug/kg	1.2	0.20	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.23	1
Naphthalene	ND		ug/kg	5.9	0.91	1
n-Propylbenzene	ND		ug/kg	1.2	0.15	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.9	0.17	1
1,2,4-Trimethylbenzene	ND		ug/kg	5.9	0.68	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	98		70-130

Project Name: SLEEP INN
Project Number: BEV-14-003

Lab Number: L1403650
Report Date: 02/24/14

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 02/20/14 09:09
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG671580-3					
Benzene	ND		ug/kg	1.0	0.12
Toluene	ND		ug/kg	1.5	0.11
Ethylbenzene	ND		ug/kg	1.0	0.15
Methyl tert butyl ether	ND		ug/kg	2.0	0.10
p/m-Xylene	ND		ug/kg	2.0	0.32
o-Xylene	ND		ug/kg	2.0	0.27
n-Butylbenzene	ND		ug/kg	1.0	0.20
sec-Butylbenzene	ND		ug/kg	1.0	0.20
tert-Butylbenzene	ND		ug/kg	5.0	0.56
Isopropylbenzene	ND		ug/kg	1.0	0.17
p-Isopropyltoluene	ND		ug/kg	1.0	0.19
Naphthalene	ND		ug/kg	5.0	0.77
n-Propylbenzene	ND		ug/kg	1.0	0.12
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.14
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.57

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	95		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: SLEEP INN
Project Number: BEV-14-003

Lab Number: L1403650
Report Date: 02/24/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG671580-1 WG671580-2								
Methylene chloride	104		101		70-130	3		30
1,1-Dichloroethane	101		100		70-130	1		30
Chloroform	102		99		70-130	3		30
Carbon tetrachloride	101		98		70-130	3		30
1,2-Dichloropropane	105		101		70-130	4		30
Dibromochloromethane	96		94		70-130	2		30
2-Chloroethylvinyl ether	105		101		70-130	4		30
1,1,2-Trichloroethane	102		100		70-130	2		30
Tetrachloroethene	97		92		70-130	5		30
Chlorobenzene	100		97		70-130	3		30
Trichlorofluoromethane	101		99		70-139	2		30
1,2-Dichloroethane	103		102		70-130	1		30
1,1,1-Trichloroethane	99		96		70-130	3		30
Bromodichloromethane	102		100		70-130	2		30
trans-1,3-Dichloropropene	99		98		70-130	1		30
cis-1,3-Dichloropropene	102		99		70-130	3		30
1,1-Dichloropropene	102		100		70-130	2		30
Bromoform	90		92		70-130	2		30
1,1,2,2-Tetrachloroethane	100		102		70-130	2		30
Benzene	100		97		70-130	3		30
Toluene	97		94		70-130	3		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: SLEEP INN
Project Number: BEV-14-003

Lab Number: L1403650
Report Date: 02/24/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG671580-1 WG671580-2								
Ethylbenzene	100		97		70-130	3		30
Chloromethane	82		80		52-130	2		30
Bromomethane	119		114		57-147	4		30
Vinyl chloride	87		86		67-130	1		30
Chloroethane	97		94		50-151	3		30
1,1-Dichloroethene	97		94		65-135	3		30
trans-1,2-Dichloroethene	97		96		70-130	1		30
Trichloroethene	102		99		70-130	3		30
1,2-Dichlorobenzene	102		101		70-130	1		30
1,3-Dichlorobenzene	104		103		70-130	1		30
1,4-Dichlorobenzene	105		104		70-130	1		30
Methyl tert butyl ether	93		93		66-130	0		30
p/m-Xylene	100		96		70-130	4		30
o-Xylene	98		96		70-130	2		30
cis-1,2-Dichloroethene	100		96		70-130	4		30
Dibromomethane	101		100		70-130	1		30
Styrene	100		97		70-130	3		30
Dichlorodifluoromethane	66		67		30-146	2		30
Acetone	112		108		54-140	4		30
Carbon disulfide	93		90		59-130	3		30
2-Butanone	102		104		70-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: SLEEP INN
Project Number: BEV-14-003

Lab Number: L1403650
Report Date: 02/24/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG671580-1 WG671580-2								
Vinyl acetate	91		91		70-130	0		30
4-Methyl-2-pentanone	92		96		70-130	4		30
1,2,3-Trichloropropane	101		98		68-130	3		30
2-Hexanone	82		83		70-130	1		30
Bromochloromethane	98		97		70-130	1		30
2,2-Dichloropropane	100		95		70-130	5		30
1,2-Dibromoethane	95		94		70-130	1		30
1,3-Dichloropropane	98		97		69-130	1		30
1,1,1,2-Tetrachloroethane	98		96		70-130	2		30
Bromobenzene	97		96		70-130	1		30
n-Butylbenzene	114		113		70-130	1		30
sec-Butylbenzene	106		103		70-130	3		30
tert-Butylbenzene	101		100		70-130	1		30
o-Chlorotoluene	113		111		70-130	2		30
p-Chlorotoluene	107		105		70-130	2		30
1,2-Dibromo-3-chloropropane	94		99		68-130	5		30
Hexachlorobutadiene	99		98		67-130	1		30
Isopropylbenzene	100		99		70-130	1		30
p-Isopropyltoluene	105		104		70-130	1		30
Naphthalene	95		99		70-130	4		30
Acrylonitrile	93		98		70-130	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: SLEEP INN
Project Number: BEV-14-003

Lab Number: L1403650
Report Date: 02/24/14

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG671580-1 WG671580-2								
Isopropyl Ether	98		96		66-130	2		30
tert-Butyl Alcohol	91		96		70-130	5		30
n-Propylbenzene	104		103		70-130	1		30
1,2,3-Trichlorobenzene	100		102		70-130	2		30
1,2,4-Trichlorobenzene	107		108		70-130	1		30
1,3,5-Trimethylbenzene	103		102		70-130	1		30
1,2,4-Trimethylbenzene	105		103		70-130	2		30
Methyl Acetate	90		91		51-146	1		30
Ethyl Acetate	84		79		70-130	6		30
Acrolein	85		90		70-130	6		30
Cyclohexane	103		99		59-142	4		30
1,4-Dioxane	107		105		65-136	2		30
1,1,2-Trichloro-1,2,2-Trifluoroethane	103		100		50-139	3		30
1,4-Diethylbenzene	110		108		70-130	2		30
4-Ethyltoluene	106		104		70-130	2		30
1,2,4,5-Tetramethylbenzene	106		104		70-130	2		30
Tetrahydrofuran	84		88		66-130	5		30
Ethyl ether	93		94		67-130	1		30
trans-1,4-Dichloro-2-butene	106		109		70-130	3		30
Methyl cyclohexane	103		99		70-130	4		30
Ethyl-Tert-Butyl-Ether	97		95		70-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: SLEEP INN
Project Number: BEV-14-003

Lab Number: L1403650
Report Date: 02/24/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG671580-1 WG671580-2								
Tertiary-Amyl Methyl Ether	94		93		70-130	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	103		102		70-130
Toluene-d8	99		98		70-130
4-Bromofluorobenzene	100		103		70-130
Dibromofluoromethane	100		101		70-130

SEMIVOLATILES

Project Name: SLEEP INN
Project Number: BEV-14-003

Lab Number: L1403650
Report Date: 02/24/14

SAMPLE RESULTS

Lab ID: L1403650-01
 Client ID: DP-3 @ 8-12'
 Sample Location: BUFFALO, NY (1159 MAIN ST)
 Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 02/21/14 15:30
 Analyst: JB
 Percent Solids: 95%

Date Collected: 02/17/14 10:15
 Date Received: 02/17/14
 Field Prep: Not Specified
 Extraction Method: EPA 3546
 Extraction Date: 02/19/14 11:48

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	35.	1
Fluoranthene	62	J	ug/kg	100	31.	1
Naphthalene	ND		ug/kg	170	56.	1
Benzo(a)anthracene	ND		ug/kg	100	33.	1
Benzo(a)pyrene	ND		ug/kg	140	41.	1
Benzo(b)fluoranthene	ND		ug/kg	100	34.	1
Benzo(k)fluoranthene	ND		ug/kg	100	32.	1
Chrysene	ND		ug/kg	100	33.	1
Anthracene	ND		ug/kg	100	28.	1
Benzo(ghi)perylene	ND		ug/kg	140	35.	1
Fluorene	ND		ug/kg	170	48.	1
Phenanthrene	60	J	ug/kg	100	33.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	33.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	38.	1
Pyrene	42	J	ug/kg	100	33.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	83		30-120
4-Terphenyl-d14	96		18-120

Project Name: SLEEP INN
Project Number: BEV-14-003

Lab Number: L1403650
Report Date: 02/24/14

SAMPLE RESULTS

Lab ID: L1403650-02
 Client ID: DP-7 @ 8-12'
 Sample Location: BUFFALO, NY (1159 MAIN ST)
 Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 02/21/14 15:58
 Analyst: JB
 Percent Solids: 85%

Date Collected: 02/17/14 13:15
 Date Received: 02/17/14
 Field Prep: Not Specified
 Extraction Method: EPA 3546
 Extraction Date: 02/19/14 11:48

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	160	40.	1
Fluoranthene	ND		ug/kg	120	36.	1
Naphthalene	ND		ug/kg	190	64.	1
Benzo(a)anthracene	ND		ug/kg	120	38.	1
Benzo(a)pyrene	ND		ug/kg	160	47.	1
Benzo(b)fluoranthene	ND		ug/kg	120	39.	1
Benzo(k)fluoranthene	ND		ug/kg	120	37.	1
Chrysene	ND		ug/kg	120	38.	1
Anthracene	ND		ug/kg	120	32.	1
Benzo(ghi)perylene	ND		ug/kg	160	40.	1
Fluorene	ND		ug/kg	190	56.	1
Phenanthrene	ND		ug/kg	120	38.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	38.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	160	43.	1
Pyrene	ND		ug/kg	120	38.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	77		30-120
4-Terphenyl-d14	55		18-120

Project Name: SLEEP INN
Project Number: BEV-14-003

Lab Number: L1403650
Report Date: 02/24/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 02/21/14 08:36
Analyst: JB

Extraction Method: EPA 3546
Extraction Date: 02/19/14 11:48

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG671186-1					
Acenaphthene	ND		ug/kg	130	34.
Fluoranthene	ND		ug/kg	98	30.
Naphthalene	ND		ug/kg	160	54.
Benzo(a)anthracene	ND		ug/kg	98	32.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	33.
Benzo(k)fluoranthene	ND		ug/kg	98	31.
Chrysene	ND		ug/kg	98	32.
Anthracene	ND		ug/kg	98	27.
Benzo(ghi)perylene	ND		ug/kg	130	34.
Fluorene	ND		ug/kg	160	47.
Phenanthrene	ND		ug/kg	98	32.
Dibenzo(a,h)anthracene	ND		ug/kg	98	32.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	36.
Pyrene	ND		ug/kg	98	32.

Tentatively Identified Compounds

No Tentatively Identified Compounds ND ug/kg

Project Name: SLEEP INN
Project Number: BEV-14-003

Lab Number: L1403650
Report Date: 02/24/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 02/21/14 08:36
Analyst: JB

Extraction Method: EPA 3546
Extraction Date: 02/19/14 11:48

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG671186-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	77		25-120
Phenol-d6	74		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	77		30-120
2,4,6-Tribromophenol	82		0-136
4-Terphenyl-d14	81		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: SLEEP INN
Project Number: BEV-14-003

Lab Number: L1403650
Report Date: 02/24/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG671186-2 WG671186-3								
Acenaphthene	82		86		31-137	5		50
Benzidine	21		24			13		50
n-Nitrosodimethylamine	70		71			1		50
1,2,4-Trichlorobenzene	82		87		38-107	6		50
Hexachlorobenzene	86		91		40-140	6		50
Bis(2-chloroethyl)ether	75		81		40-140	8		50
2-Chloronaphthalene	82		87		40-140	6		50
1,2-Dichlorobenzene	80		83		40-140	4		50
1,3-Dichlorobenzene	80		83		40-140	4		50
1,4-Dichlorobenzene	80		83		28-104	4		50
3,3'-Dichlorobenzidine	71		76		40-140	7		50
2,4-Dinitrotoluene	84		89		28-89	6		50
2,6-Dinitrotoluene	77		83		40-140	8		50
Fluoranthene	88		91		40-140	3		50
4-Chlorophenyl phenyl ether	84		89		40-140	6		50
4-Bromophenyl phenyl ether	84		89		40-140	6		50
Azobenzene	80		88		40-140	10		50
Bis(2-chloroisopropyl)ether	66		70		40-140	6		50
Bis(2-chloroethoxy)methane	74		80		40-117	8		50
Hexachlorobutadiene	82		87		40-140	6		50
Hexachlorocyclopentadiene	61		67		40-140	9		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: SLEEP INN
Project Number: BEV-14-003

Lab Number: L1403650
Report Date: 02/24/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG671186-2 WG671186-3								
Hexachloroethane	74		77		40-140	4		50
Isophorone	72		78		40-140	8		50
Naphthalene	79		84		40-140	6		50
Nitrobenzene	80		83		40-140	4		50
NitrosoDiPhenylAmine(NDPA)/DPA	84		89			6		50
n-Nitrosodi-n-propylamine	73		77		32-121	5		50
Bis(2-Ethylhexyl)phthalate	89		96		40-140	8		50
Butyl benzyl phthalate	85		87		40-140	2		50
Di-n-butylphthalate	89		92		40-140	3		50
Di-n-octylphthalate	91		96		40-140	5		50
Diethyl phthalate	83		89		40-140	7		50
Dimethyl phthalate	82		88		40-140	7		50
Benzo(a)anthracene	90		96		40-140	6		50
Benzo(a)pyrene	84		96		40-140	13		50
Benzo(b)fluoranthene	86		90		40-140	5		50
Benzo(k)fluoranthene	88		92		40-140	4		50
Chrysene	88		95		40-140	8		50
Acenaphthylene	77		82		40-140	6		50
Anthracene	88		91		40-140	3		50
Benzo(ghi)perylene	92		97		40-140	5		50
Fluorene	82		89		40-140	8		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: SLEEP INN
Project Number: BEV-14-003

Lab Number: L1403650
Report Date: 02/24/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG671186-2 WG671186-3								
Phenanthrene	87		90		40-140	3		50
Dibenzo(a,h)anthracene	91		95		40-140	4		50
Indeno(1,2,3-cd)Pyrene	91		95		40-140	4		50
Pyrene	87		90		35-142	3		50
Biphenyl	105		111			6		50
Aniline	47		55		40-140	16		50
4-Chloroaniline	69		69		40-140	0		50
2-Nitroaniline	80		86		47-134	7		50
3-Nitroaniline	36		41		26-129	13		50
4-Nitroaniline	85		90		41-125	6		50
Dibenzofuran	85		91		40-140	7		50
2-Methylnaphthalene	82		87		40-140	6		50
1,2,4,5-Tetrachlorobenzene	104		108		40-117	4		50
Acetophenone	94		98		14-144	4		50
2,4,6-Trichlorophenol	82		89		30-130	8		50
P-Chloro-M-Cresol	81		88		26-103	8		50
2-Chlorophenol	81		86		25-102	6		50
2,4-Dichlorophenol	84		89		30-130	6		50
2,4-Dimethylphenol	74		80		30-130	8		50
2-Nitrophenol	76		83		30-130	9		50
4-Nitrophenol	87		95		11-114	9		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: SLEEP INN
Project Number: BEV-14-003

Lab Number: L1403650
Report Date: 02/24/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG671186-2 WG671186-3								
2,4-Dinitrophenol	80		85		4-130	6		50
4,6-Dinitro-o-cresol	85		93		10-130	9		50
Pentachlorophenol	91		92		17-109	1		50
Phenol	80		84		26-90	5		50
2-Methylphenol	77		83		30-130.	8		50
3-Methylphenol/4-Methylphenol	79		86		30-130	8		50
2,4,5-Trichlorophenol	83		88		30-130	6		50
Benzoic Acid	63		65			3		50
Benzyl Alcohol	77		81		40-140	5		50
Carbazole	93		94		54-128	1		50
Benzaldehyde	90		95			5		50
Caprolactam	94		98			4		50
Atrazine	105		106			1		50
2,3,4,6-Tetrachlorophenol	85		89			5		50
Pyridine	61		60		10-93	2		50
Parathion, ethyl	86		94		40-140	9		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: SLEEP INN
Project Number: BEV-14-003

Lab Number: L1403650
Report Date: 02/24/14

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
-----------	-------------------------	-------------	--------------------------	-------------	----------------------------	------------	-------------	----------------------

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG671186-2 WG671186-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	93		98		25-120
Phenol-d6	89		92		10-120
Nitrobenzene-d5	85		88		23-120
2-Fluorobiphenyl	89		93		30-120
2,4,6-Tribromophenol	104		108		0-136
4-Terphenyl-d14	97		97		18-120

INORGANICS & MISCELLANEOUS

Project Name: SLEEP INN
Project Number: BEV-14-003

Lab Number: L1403650
Report Date: 02/24/14

SAMPLE RESULTS

Lab ID: L1403650-01
Client ID: DP-3 @ 8-12'
Sample Location: BUFFALO, NY (1159 MAIN ST)
Matrix: Soil

Date Collected: 02/17/14 10:15
Date Received: 02/17/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	95.2		%	0.100	NA	1	-	02/18/14 15:52	30,2540G	SB



Project Name: SLEEP INN
Project Number: BEV-14-003

Lab Number: L1403650
Report Date: 02/24/14

SAMPLE RESULTS

Lab ID: L1403650-02
Client ID: DP-7 @ 8-12'
Sample Location: BUFFALO, NY (1159 MAIN ST)
Matrix: Soil

Date Collected: 02/17/14 13:15
Date Received: 02/17/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84.6		%	0.100	NA	1	-	02/18/14 15:52	30,2540G	SB



Lab Duplicate Analysis
Batch Quality Control

Project Name: SLEEP INN

Project Number: BEV-14-003

Lab Number: L1403650

Report Date: 02/24/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG671230-1 QC Sample: L1403611-01 Client ID: DUP Sample						
Solids, Total	94.5	80.3	%	16		20

Project Name: SLEEP INN
Project Number: BEV-14-003

Lab Number: L1403650
Report Date: 02/24/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1403650-01A	Glass 120ml unpreserved	A	N/A	2.4	Y	Absent	NYTCL-8260(14)
L1403650-01B	Amber 250ml unpreserved	A	N/A	2.4	Y	Absent	NYTCL-8270(14),TS(7)
L1403650-02A	Glass 120ml unpreserved	A	N/A	2.4	Y	Absent	NYTCL-8260(14)
L1403650-02B	Amber 250ml unpreserved	A	N/A	2.4	Y	Absent	NYTCL-8270(14),TS(7)

*Values in parentheses indicate holding time in days

Project Name: SLEEP INN
Project Number: BEV-14-003

Lab Number: L1403650
Report Date: 02/24/14

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.

Report Format: DU Report with 'J' Qualifiers



Project Name: SLEEP INN
Project Number: BEV-14-003

Lab Number: L1403650
Report Date: 02/24/14

Data Qualifiers

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Project Name: SLEEP INN
Project Number: BEV-14-003

Lab Number: L1403650
Report Date: 02/24/14

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

Last revised December 11, 2013

The following analytes are not included in our NELAP Scope of Accreditation:

Westborough Facility

EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.

EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.

EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.

EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 625: 4-Chloroaniline, 4-Methylphenol.

SM4500: Soil: Total Phosphorus, TKN, NO₂, NO₃.

EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility

EPA 8270D: Biphenyl.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water

EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7:** Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;

EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B**

EPA 332: Perchlorate.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water

EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;

EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;

EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, EPA 350.1: Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**

EPA 624: Volatile Halocarbons & Aromatics,

EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF.**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



WESTBORO, MA
TEL: 508-898-9220
FAX: 508-898-9193

MANSFIELD, MA
TEL: 508-822-9300
FAX: 508-822-3288

CHAIN OF CUSTODY

PAGE 1 OF 1

Serial No. 02241414.46

ALPHA Job #: L1403650

Client Information

Client: **Empire Geo Services**
Address: **5167 South Park Ave
Hamburg, NY 14075**
Phone: **716-649-8110**
Fax: **716-649-8051**
Email: **jmetzger@sjbempire.net**

These samples have been previously analyzed by Alpha

Project Information

Project Name: **Sleep Inn**
Project Location: **Buffalo, NY (1159 Main St)**
Project #: **REV-14-003**
Project Manager: **Dave Steiner**
ALPHA Quote #:

Turn-Around Time

Standard RUSH (only confirmed if pre-approved)

Date Due: **5-day TA** Time:
2/25/14

Other Project Specific Requirements/Comments/Detection Limits:

Report Information - Data Deliverables

FAX EMAIL
 ADEX Add'l Deliverables

Billing Information

Same as Client info PO #: **16194**

Regulatory Requirements/Report Limits

State /Fed Program Criteria

ANALYSIS STARTS VOCs STARTS SVOCs

SAMPLE HANDLING

Filtration _____

Done

Not needed

Lab to do

Preservation

Lab to do

(Please specify below)

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials					Sample Specific Comments
		Date	Time							
03650-01	DP-3 @ 8-12'	2-17-14	10:15	Soil	JCM	X	X			
-02	DP-7 @ 8-12'	2-17-14	13:15	Soil	JCM	X	X			

Container Type	
Preservative	

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By:	Date/Time	Received By:	Date/Time
<i>Jacob Metzger - J.C.M.</i>	2-17-14/16:55	<i>[Signature]</i>	2/19/14 16:57
<i>[Signature]</i>	2/18/14 16:45	<i>[Signature]</i>	2/19/14 18:45
<i>[Signature]</i>	2/18/14 22:40	<i>[Signature]</i>	2/19/14 22:10
<i>[Signature]</i>	2/19/14 00:38	<i>[Signature]</i>	2/19/14 00:38



Strong Advocates, Effective Solutions, Integrated Implementation

October 2, 2018

Dr. Fadi Dagher
D&S Capital Real Estate II, LLC
50 Lakefront Boulevard, Suite 103
Buffalo, New York 14202

**Re: Phase II Environmental Investigation
1155 Main Street (Site)
Buffalo, New York**

Dear Dr. Dagher:

TurnKey Environmental Restoration, LLC (TurnKey) has prepared this letter to summarize the results of the Phase II Environmental Investigation (Phase II) activities at the above referenced Site owned by D&S Capital Real Estate II, LLC (D&S) located at the corner of Main Street and Dodge Street, Buffalo, New York (Site; see Figures 1 and 2). The primary purpose of the Phase II was to evaluate potential environmental impacts at the Site associated with historic uses. A previous Phase I Environmental Site Assessment¹ completed at the 1159 Main Street portion of the Site (further discussed below) identified historic site usage as a gasoline filling station with underground tanks and auto repair.

The secondary purpose was to evaluate whether the Site may be eligible for admission to the New York Brownfield Cleanup Program (BCP) if environmental impacts were identified. We understand that the planned redevelopment includes a 5-story mixed use building with student housing and minor commercial space on the first floor.

D&S Capital Real Estate II, LLC applied to combine the three (3) parcels addressed 1159 Main Street, 11 Dodge Street, and 19 Dodge Street parcels into a single separate legal tax parcel that is addressed 1155 Main Street. The City of Buffalo Department of Assessment & Taxation issued a Pre-Approval for Combination of Parcel on September 25, 2018 which has also received Planning Board approval. The combined parcel will appear on the City of Buffalo's preliminary tax roll on December 1, 2018.

¹ "Phase I Environmental Site Assessment, Sleep Inn, 1159 Main Street, Buffalo, New York". Prepared for Sleep Inn by Empire Geo-Services Inc. January 2014.

Soil/Fill Sampling

The Phase II investigation activities consisted of 14 direct-push soil borings (SBs), 18 test pits (TPs) and three (3) surface soil (SS) samples. The locations are shown on attached Figure 2.

The direct-push SBs were advanced using a track mounted drill rig (Geoprobe® 6600DT) equipped with a 1.5-inch diameter macrocore sampler 4-feet in length. The 4-foot sample cores were retrieved from the boring locations to allow for field characterization of the subsurface soil/fill and to collect of soil/fill samples by TurnKey's geologist. The SBs were advanced to depths ranging from 12 to 16 to feet below ground surface (fbgs). Borings were advanced into native soils. Macrocore sample recovery was poor during the soil borings as less than 50% recovery was noted at most of the sample intervals.

The TPs were completed using a track-mounted mini-excavator (Kubota KX040). The TPs were approximately 2 to 4 feet wide, 6 to 12 feet long and ranged in depth from 4 to 8.5 feet below ground surface (fbgs). Excavated soil/fill was brought to the ground surface for field characterization of the subsurface soil/fill and to collect of soil/fill samples by TurnKey's geologist. Soil/fill generated during the test pits were placed on the ground adjacent to the test pit location and used to backfill the excavations back to ground surface.

Three (3) SS samples were collected by TurnKey with a 3-inch diameter stainless steel barrel auger. The hand auger was advance to 2 to 3 inches below the vegetative cover at the sampling locations.

TurnKey personnel made visual and olfactory observations and scanned soil/fill samples retrieved from the investigation locations for total volatile organic vapors with a photoionization detector (PID) that is capable of detecting the presence of contaminants that emit volatile organic compounds (VOCs) such as petroleum products and solvents.

PID measurements were not detected above background (i.e., 0 ppm) at the SBs or TPs except for SB-5, 8 to 12 fbgs which exhibited a field screening result of 3 parts per million (ppm).

Sample Analysis

Table 1 is a summary of the soil/fill samples submitted along with the analysis completed. The soil/fill samples were placed in pre-cleaned laboratory provided sample jars, cooled to 4°C in the field, and transported under chain-of-custody to the laboratory for analysis by Alpha Analytical, Inc. in Westbrough, Massachusetts. Analysis included VOCs via EPA Method 8260, semi-volatile organic compounds (SVOCs) via EPA Method 8270 and metals via EPA Method 6010C/7471B.

TurnKey collected one (1) groundwater sample from a 1-inch diameter temporary microwell (TMW-1) that was installed within SB-9 to a depth of about 12 fbgs. The sample was

analyzed for VOCs via EPA Method 8260. The temporary microwell was removed after the groundwater sample was collected with a polyethylene bailer.

Subsurface Conditions

The subsurface conditions encountered at the Site below the various surface covers (i.e., vegetation, topsoil, asphalt, crushed concrete) consisted of fill material overlying native soil. Table 2 is a summary of the subsurface conditions encountered at the investigation locations. The fill materials encountered varied from brown to dark brown to black sands containing man-made constituents (brick, cinders, glass, concrete, plaster, metal, wire, plastic, etc.) to brown reworked native soil (sand) containing man-made constituents. In general, fill material is present across most of the Site and varies in thickness from 1.5 fbs to 8 fbs, with the exception of one (1) location, TP-5, in the northwest portion of the Site. No fill material was encountered at this location.

Groundwater was not encountered during the Phase II, with the exception of SB-9. Saturated conditions were encountered from 8 to 11 fbs below the fill material present and above the underlying clay and may represent a perched condition.

Soil/Fill Analytical Results

The results of the analytical samples collected and analyzed as part of the Phase II investigation are summarized on Table 3. The laboratory analytical reports are attached.

Based on your planned redevelopment, the applicable soil cleanup objectives (SCOs) would be 6NYCRR Part 375 Restricted-Residential Use Soil Cleanup Objectives (RRSCOs); exceedances of RRSCOs, as well as Commercial SCOs (CSCOs) and Industrial SCOs (ISCOs), were noted during this investigation.

Volatile Organic Compounds

VOCs were detected in three (3) of the four (4) samples analyzed for VOCs during the Phase II. Acetone was detected below its Unrestricted Use Soil Cleanup Objective (USCO) and methylcyclohexane does not have a SCO.

Semi-Volatile Organic Compounds

SVOCs were detected at or above their respective Part 375 RRSCOs (i.e., the applicable SCOs for the intended Site reuse) at six (6) investigation locations, SB-4, SB-10, TP-4, TP-14, and TP-18. The exceedances were identified in the soil/fill material at these locations. These sample locations are shown in red on Figure 2.

- Benzo(a)anthracene exceeded its RRSCO at three (3) locations (SB-4, TP-4, SS-3) and ISCO at one (1) location, TP-18.
- Benzo(a)pyrene exceeded its CSCO at three (3) locations (SB-4, TP-4, SS-3) and ISCO at one (1) location, TP-18.

- Benzo(b)fluoranthene exceeded its RRSCO at five (5) locations (SB-4, SB-10, TP-4, TP-14, and SS-3) and ISCO at one (1) location, TP-18.
- Benzo(k)fluoranthene exceeded its RRSCO at one (1) location, TP-18.
- Chrysene exceeded its RRSCO at one (1) location, TP-18.
- Dibenzo(a,h)anthracene exceeded its ISCO at one (1) location, TP-18.
- Indeno(1,2,3-cd)pyrene exceeded its RRSCO at three (3) locations (TP-4, TP-14, and SS-3) and its ISCO at one (1) location, TP-18.

Metal Analytes

Metal analytes were detected above their respective RRSCOs at four (4) investigation locations, TP-4, TP-15, TP-16, and TP-18.

- Barium exceeded its CSCO at one (1) location, TP-15.
- Chromium exceeded its RRSCO at one (1) location, TP-15.
- Lead exceeded its CSCO at three (3) locations (TP-15, TP-16, and TP-18).
- Nickel exceeded its CSCO at one (1) location, TP-4.

Polychlorinated Biphenyls (PCBs)

PCBs were not detected above method detection limits in the two (2) samples analyzed for PCBs during the Phase II.

Groundwater Analytical Results

One groundwater sample was collected for VOC analysis from TMW-1 installed at SB-9. The results of the sample indicate benzene and acetone were detected above method detection limits but below their respective groundwater standards. Groundwater was not identified at other investigation location and may represent a perched groundwater condition at that location.

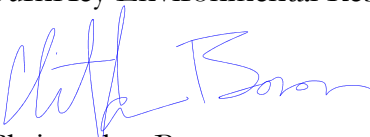
Conclusions

Environmental impacts have been identified at the Site and may be attributed historic Site usage. SVOCs and metals were detected at concentrations above their respective RRSCOs, which are applicable for the intended reuse of the Site. The detected concentrations exceeding the applicable SCOs were detected in the fill material present at the Site. Fill material is present across most of the Site and varies in depth up to 8 fbs. The fill material and any other contaminated material generated during the redevelopment project will require management as contaminated soil.


Based on the existing data, which includes SVOC- and metals-contaminated soil/fill at numerous sample locations Site-wide above applicable RRSCOs, as well as CSCOs/ISCOs, the Site is a candidate for the BCP. The Site meets the definition of a BCP site per the current BCP law which states a “brownfield site or site shall mean any real property where a contaminant is present at levels exceeding the soil cleanup objectives or other health-based or environmental standards, criteria, or guidance adopted by the department that are applicable based on the reasonably anticipated use of the property, in accordance with applicable regulations.”

Please contact us if you have any questions or require additional information.

Sincerely,
TurnKey Environmental Restoration, LLC



Christopher Boron
Sr. Project Manager



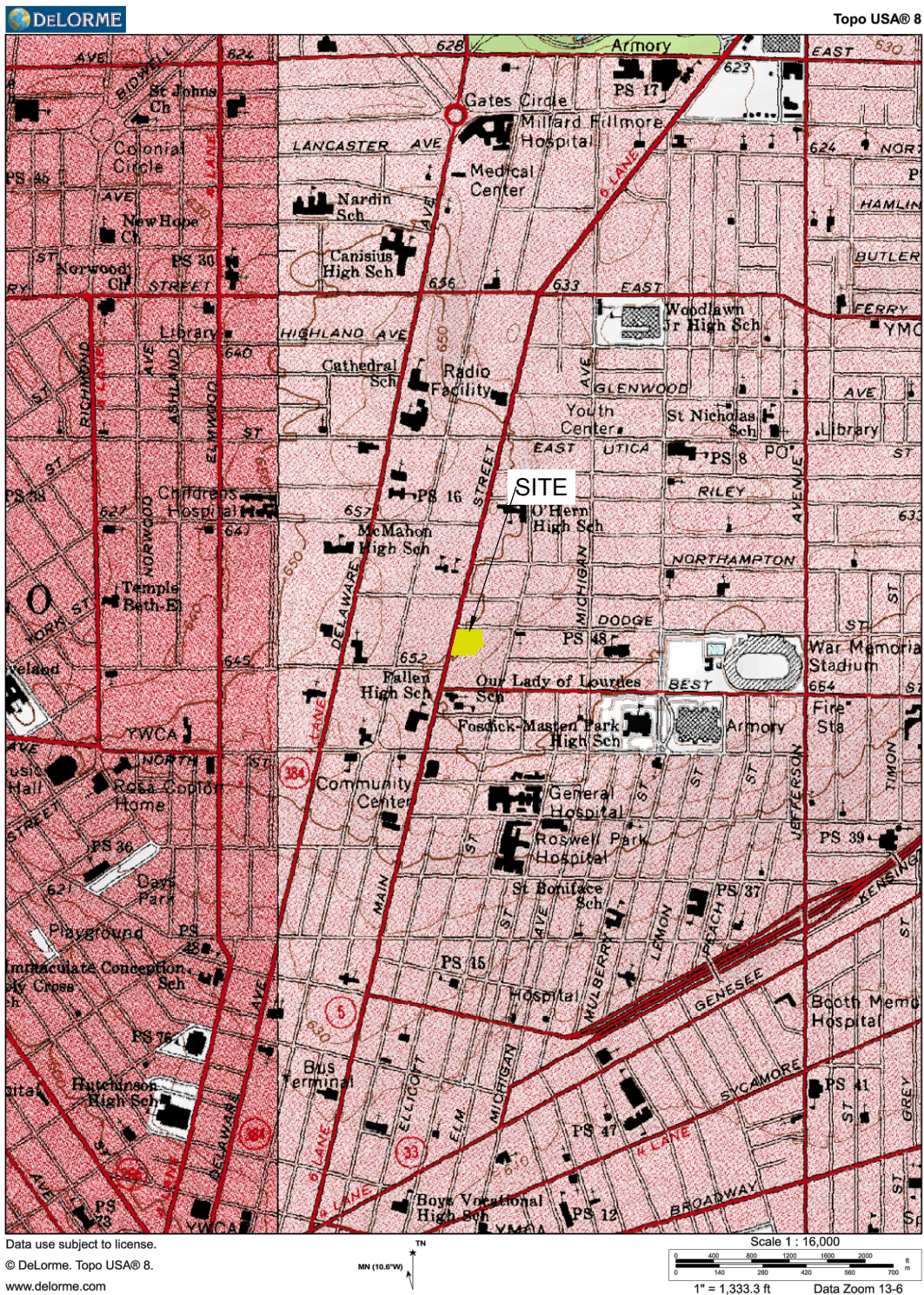
Michael Lesakowski
Principal

Attachments: Figure 1 – Site Location & Vicinity Map
 Figure 2 – Site Plan
 Table 1 – Summary of Phase II Sampling and Analysis Program
 Table 2 – Summary of Subsurface Field Observations
 Table 3 – Summary of Soil/Fill Sample Analytical Results
 Analytical Data Packages

File: 0371-018-001

FIGURES

FIGURE 1



Data use subject to license.
 © DeLorme. Topo USA® 8.
 www.delorme.com

Scale 1 : 16,000
 0 400 800 1200 1600 2000 2400 2800 3200 3600 4000 4400 4800 5200 5600 6000 6400 6800 7200 7600 8000 8400 8800 9200 9600 10000
 1" = 1,333.3 ft Data Zoom 13-6



2558 HAMBURG TURNPIKE
 SUITE 300
 BUFFALO, NY 14218
 (716) 856-0635

SITE LOCATION AND VICINITY MAP

ENVIRONMENTAL SITE INVESTIGATION
 11 & 19 DODGE STREET AND 1159 MAIN STREET SITE

BUFFALO, NEW YORK

PREPARED FOR

CEDARLAND DEVELOPMENT GROUP

PROJECT NO.: 0371-018-001

DATE: AUGUST 2018

DRAFTED BY: CMC

DISCLAIMER:

PROPERTY OF TURNKEY ENVIRONMENTAL RESTORATION, LLC. IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF TURNKEY ENVIRONMENTAL RESTORATION, LLC.

LEGEND:

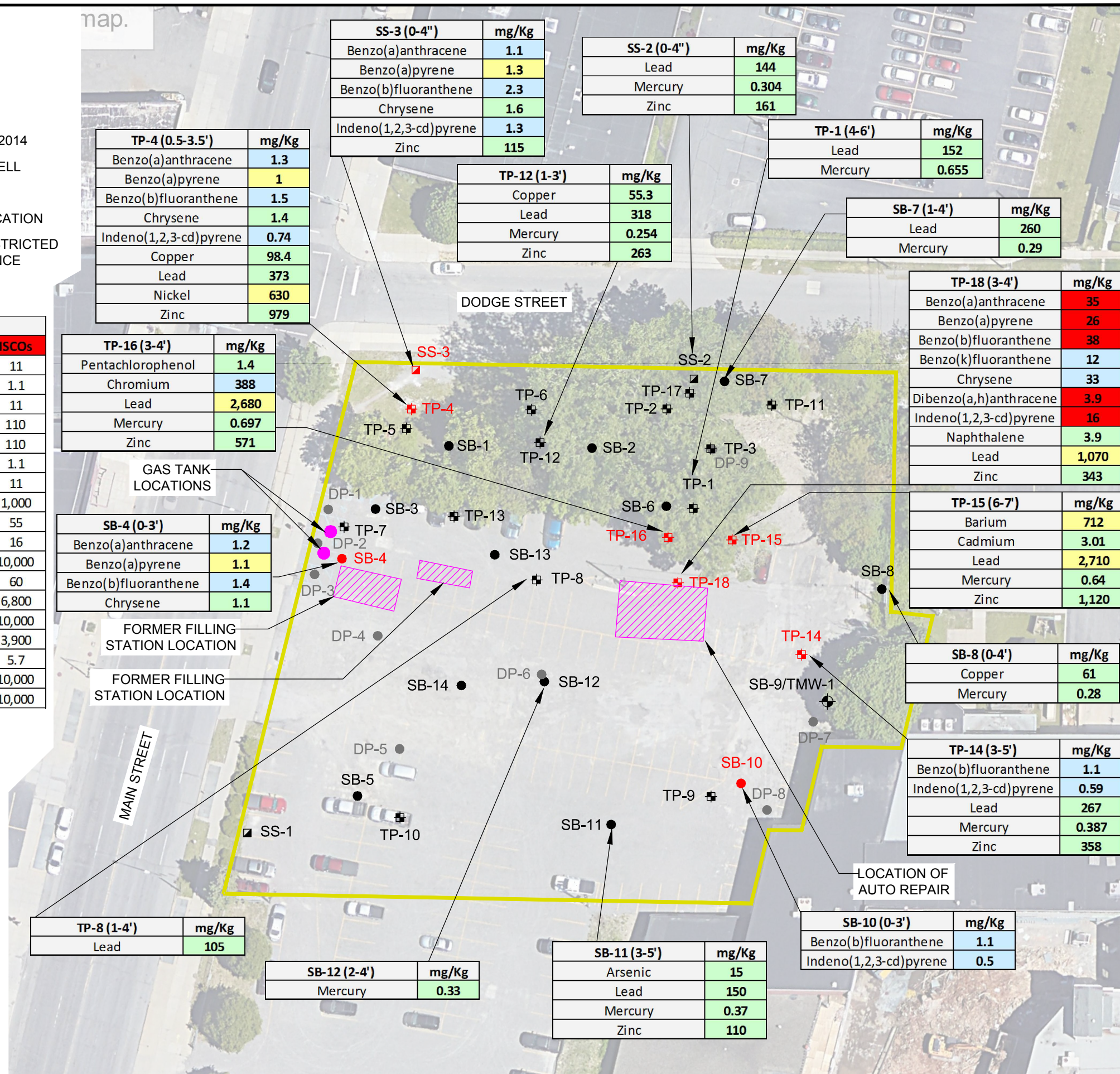
- BCP SITE BOUNDARY
- SB-1 ● SOIL BORING
- DP-6 ● SOIL BORING - PHASE II FEB. 2014
- SB-9/TMW-1 ⊕ TEMPORARY MONITORING WELL
- SS-2 ▣ SURFACE SOIL SAMPLE
- TP-2 ⊕ TEST PIT INVESTIGATION LOCATION
- TP-8 ⊕ SAMPLE LOCATION WITH RESTRICTED RESIDENTIAL SCO EXCEEDANCE

Part 375 Soil Cleanup Objectives				
	USCOs	RRSCOs	CSCOs	ISCOs
Benzo(a)anthracene	1	1	5.6	11
Benzo(a)pyrene	1	1	1	1.1
Benzo(b)fluoranthene	1	1	5.6	11
Benzo(k)fluoranthene	0.8	3.9	56	110
Chrysene	1	3.9	56	110
Dibenzo(a,h)anthracene	0.33	0.33	0.56	1.1
Indeno(1,2,3-cd)pyrene	0.5	0.5	5.6	11
Naphthalene	12	100	500	1,000
Pentachlorophenol	0.8	6.7	6.7	55
Arsenic	13	16	16	16
Barium	350	400	400	10,000
Cadmium	2.5	4.3	9.3	60
Chromium	30	180	1,500	6,800
Copper	50	270	270	10,000
Lead	63	400	1,000	3,900
Mercury	0.18	0.81	2.8	5.7
Nickel	30	310	310	10,000
Zinc	109	10,000	10,000	10,000

Note:
 USCO = Unrestricted Soil Cleanup Objective
 RRSCO = Restricted - Residential Soil Cleanup Objective
 CSCO = Commercial Soil Cleanup Objective
 ISCO = Industrial Soil Cleanup Objective



SCALE: 1 INCH = 50 FEET
 SCALE IN FEET
 (approximate)



INVESTIGATION LOCATIONS & AREAS OF CONCERN

BROWNFIELD CLEANUP PROGRAM APPLICATION
 1155 MAIN STREET SITE
 BUFFALO, NEW YORK
 PREPARED FOR
 D&S CAPITAL REAL ESTATE II, LLC

BENCHMARK
 ENVIRONMENTAL
 ENGINEERING &
 SCIENCE, PLLC
 2558 HAMBURG TURNPIKE
 SUITE 300
 BUFFALO, NY 14218
 (716) 856-0599

JOB NO.: 0371-018-002

FIGURE 7

DISCLAIMER: PROPERTY OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC. IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC.

TABLES



TABLE 1

**SUMMARY OF SAMPLING AND ANALYSIS PROGRAM
PHASE II ENVIRONMENTAL INVESTGATION REPORT
11 & 19 DODGE STREET and 1159 MAIN STREET SITE
BUFFALO, NY**

Sample Identifier	Depth Sampled (fbgs)	Analysis				Date Sampled
		TCL VOCs Method 8260C	TCL SVOCs Method 8270D	Part 375 Metals List Methods 6010C/7471 B 9010C/9012 B	PCBs Method 8082A	
Surface Soil/Fill						
SS-1	0 to 0.3		X	X		08/08/2018
SS-2	0 to 0.3		X	X		08/08/2018
SS-3	0 to 0.3		X	X		08/08/2018
Subsurface Soil/Fill						
SB-1	1 to 4		X			02/18/2016
SB-4	0 to 3		X			02/18/2016
SB-5	8 to 12	X				02/18/2016
SB-7	1 to 4		X	X		02/18/2016
SB-8	0 to 4		X	X		02/18/2016
SB-9	5 to 8	X				02/18/2016
SB-10	0 to 3		X	X		02/18/2016
SB-11	3 to 5		X	X		02/18/2016
SB-12	2 to 4	X	X	X	X	02/18/2016
SB-14	0 to 2	X			X	02/18/2016
TP-1	4 to 6		X	X		08/08/2018
TP-4	0.5 to 3.5		X	X		08/08/2018
TP-8	1 to 4		X	X		08/08/2018
TP-12	1 to 3		X	X		08/08/2018
TP-14	3 to 5		X	X		08/08/2018
TP-15	6 to 7		X	X		08/23/2018
TP-16	3 to 4		X	X		08/23/2018
TP-18	3 to 4		X	X		08/23/2018
Groundwater						
TMW-1 (SB-9)	--	X				02/18/2016

Notes:
fbgs = feet below ground surface.
TCL = Target Compound List
VOCs =volatile organic compounds
SVOCs = semi-volatile organic compounds
PCBs = polychlorinated biphenyls



TABLE 2
SUMMARY OF SUBSURFACE FIELD OBSERVATIONS
PHASE II ENVIRONMENTAL INVESTGATION
11 & 19 DODGE STREET and 1159 MAIN STREET SITE
BUFFALO, NY

Location	Investigation Dimensions			Fill Depth (fbgs)	Peak PID Scan (ppm)	Approximate DTW (fbgs)	Sample Interval (fbgs)	Depth (fbgs) and Soil Description (ASTM D2488: Visual-Manual Procedure)
	Length (feet)	Width (feet)	Depth (fbgs)					
SB-1	NA	0.25	16	0.5 - 4	0	none	(1.0 - 4.0)	0.0 - 0.5: TOPSOIL - Dark brown, moist, fine sand, and non-plastic fines. 0.5 - 4.0: FILL - Dark brown, moist, fine to coarse sand with non-plastic fines, red brick and cinders. 4.0 - 8.0: FINE SAND - Brown, moist, fine sand with some non-plastic fines. 8.0 - 16.0: FINE SAND - Brown, moist, fine sand with some non-plastic fins and gravel.
SB-2	NA	0.25	12	0.1 - 4	0	none	na	0 - 0.1: TOPSOIL - Dark brown, moist, fine sand, and non-plastic fines. 0.1 - 4.0: FILL - Dark brown, moist, fine to coarse sand with non-plastic fines, red brick and cinders. 4.0 - 8.0: FINE SAND - Brown, moist, fine sand with some non-plastic fines. 8.0 - 12.0: LEAN CLAY WITH FINE SAND - Brown, moist, lean clay with fine sand.
SB-3	NA	0.25	12	0 - 8	0	none	na	0.0 - 6.0: FILL - Dark brown, moist, fine sand, and non-plastic fines, brick, cinders. 6.0 - 8.0: FILL - Dark brown, moist, clayey fill with cinders and brick. 8.0 - 12.0: FINE SAND - Brown, moist, fine sand with some non-plastic fines.
SB-4	NA	0.25	12	0 - 3	0	none	(0.0 - 3.0)	0.0 - 3.0: FILL - Black stained, moist, fine to coarse sand, little cinders, no odor 3.0 - 4.0: FILL - Gray, moist, limestone fragement. 4.0 - 9.0: FILL - Brown, moist, lean clay with gray limestone fragments. 9.0 - 12.0: FINE SAND - Brown, moist, fine sand with some non-plastic fines.
SB-5	NA	0.25	12	2 - 4	3.8	none	(8.0 - 12.0)	0.0 - 0.5: FILL - Gray, moist, Gravel with brick and cinders. 0.5 - 2.0: FILL - Dark brown, moist, black stained sand, gray limestone fragments, cinders, no odor. 2.0 - 4.0: FILL - Dark brown, moist, fine to coarse sand with non-plastic fines, red brick and cinders. 4.0 - 12: FINE SAND - Brown, moist, fine sand with some non-plastic fines, slight odor at 8 to 12 ft.
SB-6	NA	0.25	12	0.2 - 6	0	none	na	0.0 - 0.2: TOPSOIL - Dark brown, moist, fine sand, and non-plastic fines. 0.2 - 4.0: FILL - Dark brown, moist, fine to coarse sand with trace cinders. 4.0 - 6.0: FILL - Dark brown, moist, clay, some fine sand, brick and cinders 6.0 - 8.0: FINE SAND - Brown, moist, fine sand with some non-plastic fines. 8.0 - 12.0: LEAN CLAY - Brown, moist, lean clay with fine sand.
SB-7	NA	0.25	12	1 - 8	0	none	(1.0 - 4.0)	0.0 - 1.0: TOPSOIL - Dark brown, moist, fine sand, and non-plastic fines. 1.0 - 8.0: FILL - Dark brown, moist, fine to coarse sand with cinders and brick. 8.0 - 12.0: LEAN CLAY - Brown, moist, lean clay, with coarse sand.
SB-8	NA	0.25	12	0 - 6	0	none	(0.0 - 4.0)	0.0 - 4.0: FILL - Dark brown, moist, black stained, sand, trace cinders and brick. 4.0 - 6.0: FILL - Dark brown, moist, fine to coarse sand with trace cinders. 6.0 - 8.0: FINE SAND - Brown, moist, fine sand with some non-plastic fines. 8.0 - 12.0: LEAN CLAY - Brown, moist, lean clay with fine sand.
SB-9	NA	0.25	12	0 - 8	0	none	(5.0 - 8.0)	0.0 - 6.0: FILL - Dark brown, moist, clay with non-plastic fines with cinders and brick. 6.0 - 8.0: FILL - Dark brown, moist, sand with non-plastic fines and cinders. 8.0 - 11.0: FINE SAND - Brown, wet, fine sand, little coarse sand. (perched water condition) 11.0 - 12.0: LEAN CLAY - Brown, moist, lean clay with fine sand.
SB-10	NA	0.25	12	0 - 8	0	none	(0.0 - 3.0)	0.0 - 1.0: FILL - Dark brown, moist, sand with non-plastic fines, with brick and cinders. 1.0 - 3.0: FILL - Black stained, moist, sand with non-plastic fines, with cinders, no odor. 3.0 - 7.0: FILL - Dark brown, moist, sand. 7.0 - 8.0: FILL - Black, clayey fill with sand, trace brick and cinders, no odor 8.0 - 10.0: LEAN CLAY - Brown, moist, lean clay, with coarse sand. 10.0 - 11.0: FINE SAND - Brown, moist, fine sand with some non-plastic fines. 11.0 - 12.0: LEAN CLAY - Brown, moist, lean clay with fine sand.
SB-11	NA	0.25	12	1.5 - 6.5	0	none	(3.0 - 5.0)	0.0 - 1.5: FILL - Gray, moist, gravel and coarse sand. 1.5 - 3.0: FILL - Dark brown, moist, sand with non-plastic fines, with brick. 3.0 - 5.0: FILL - Black, moist, fine to coarse sand, with brick and cinders. 5.0 - 6.5: FILL - Dark brown, moist, silty clay with trace cinders. 6.5 - 10.5: LEAN CLAY - Brown, moist, lean clay with trace fine sand. 10.5 - 12.0: FINE SAND - Brown, moist, fine sand with some non-plastic fines.



TABLE 2
SUMMARY OF SUBSURFACE FIELD OBSERVATIONS
PHASE II ENVIRONMENTAL INVESTGATION
11 & 19 DODGE STREET and 1159 MAIN STREET SITE
BUFFALO, NY

Location	Investigation Dimensions			Fill Depth (fbgs)	Peak PID Scan (ppm)	Approximate DTW (fbgs)	Sample Interval (fbgs)	Depth (fbgs) and Soil Description (ASTM D2488: Visual-Manual Procedure)
	Length (feet)	Width (feet)	Depth (fbgs)					
SB-12	NA	0.25	12	0.5 - 4	0	none	(2.0 - 4.0)	<p>0.0 - 0.5: ASPHALT and Subbase. 0.5 - 2.5: FILL - Dark brown, moist, sand with non-plastic fines, little clay, with brick and cinders. 2.5 - 4.0: FILL - Black stained, moist, sand with cinders, no odor. 4.0 - 10.5: LEAN CLAY - Brown, moist, lean clay with trace fine sand, wet at 10.5 ft (perched water condition) 10.5 - 12.0: LEAN CLAY - Brown, moist, lean clay with fine sand.</p>
SB-13	NA	0.25	12	0.33 - 1.5	0	none	na	<p>0.0 - 0.33: TOPSOIL - Dark brown, moist, fine sand, and non-plastic fines. 0.33 - 2.5: FILL - Dark brown, moist, clay with non-plastic fines with cinders and brick. 2.5 - 9.0: FINE SAND - Brown, moist, fine sand with some non-plastic fines. 9.0 - 11.0: LEAN CLAY - Brown, moist, lean clay with fine sand. 11.0 - 12.0: FINE SAND - Brown, moist, fine sand with some non-plastic fines.</p>
SB-14	NA	0.25	12	0.33 - 4	0	none	(0.0 - 2.0)	<p>0.0 - 0.33: ASPHALT and subbase. 0.33 - 2.0: FILL - Black, moist, clay with non-plastic fines with cinders and brick. 2.0 - 4.0: FILL - Dark brown, moist, clay with non-plastic fines with brick and cinders. 4.0 - 8.5: LEAN CLAY - Brown, moist, lean clay with fine sand. 8.5 - 12.0: FINE SAND - Brown, moist, fine sand with some non-plastic fines.</p>
TP-1	8.0	2.0	7.0	0 - 6	0	none	(4.0 - 6.0)	<p>0.0 - 6.0: FILL - Brown, moist, mostly non-plastic fines, some fine sand, orange brick, cinders, concrete, roots, 4-inch PVC pipe running east west on south end of test pit. 6.0 - 7.0: POORLY GRADED FINE SAND - Brown moist, mostly fine sand, few non-plastic fines, medium dense, loose when disturbed.</p>
TP-2	7.0	2.0	5.0	0 - 5	0	none	na	<p>0.0 - 5.0: FILL - Brown, moist, mostly non-plastic fines, some fine sand, orange brick, cinders, concrete, roots, 6-inch PVC pipe (4.5 fbgs) running east west on bottom of test pit.</p>
TP-3	12.0	2.5	5.5	0 - 5.5	0	none	(3.5 - 5.5)	<p>0.0 - 5.5: FILL - Brown, moist, mostly non-plastic fines, some fine sand, orange brick, cinders, concrete, roots, one and half inch steel piping, running east west in test pit, concrete floor at 5.5 fbgs.</p>
TP-4	9.0	3.5	3.5	0 - 3.5	0	none	(0.5 - 3.5)	<p>0.0 - 0.5: TOPSOIL - Dark brown, moist, mostly fine sand, little non-plastic fines, mixed with crushed stone, medium dense. 0.5 - 3.5: FILL - Orange brick debris, concrete floor at 3.5 fbgs.</p>
TP-5	6.0	2.5	6.0	none	0	none	na	<p>0.0 - 0.5: TOPSOIL - Dark brown, moist, mostly fine sand, little non-plastic fines, mixed with crushed stone, medium dense. 0.5 - 6.0: POORLY GRADED FINE SAND - Brown moist, mostly fine sand, few non-plastic fines, medium dense, loose when disturbed.</p>
TP-6	8.0	4.0	6.5	0.0 - 1.5	0	none	(0.0 - 1.5)	<p>0.0 - 0.5: TOPSOIL - Dark brown, moist, mostly fine sand, little non-plastic fines, mixed with crushed stone, medium dense. 0.5 - 1.5: FILL - Orange brick debris, mixed with black non-plastic fines and fine sand. 1.5 - 6.5: POORLY GRADED FINE SAND - Brown moist, mostly fine sand, few non-plastic fines, medium dense, loose when disturbed.</p>
TP-7	6.0	2.0	5.0	1 - 2	0	none	na	<p>0.0 - 1.0: CRUSHED STONE - Grey, moist, mostly one inch crushed limestone over black fabric. 1.0 - 2.0: FILL - Brown, moist, mostly fine sand, trace brick and concrete. 2.0 - 5.0: POORLY GRADED FINE SAND - Brown moist, mostly fine sand, few non-plastic fines, medium dense, loose when disturbed.</p>



TABLE 2
SUMMARY OF SUBSURFACE FIELD OBSERVATIONS
PHASE II ENVIRONMENTAL INVESTIGATION
11 & 19 DODGE STREET and 1159 MAIN STREET SITE
BUFFALO, NY

Location	Investigation Dimensions			Fill Depth (fbgs)	Peak PID Scan (ppm)	Approximate DTW (fbgs)	Sample Interval (fbgs)	Depth (fbgs) and Soil Description (ASTM D2488: Visual-Manual Procedure)
	Length (feet)	Width (feet)	Depth (fbgs)					
TP-8	8.0	2.0	6.0	1 - 4	0	none	(1.0 - 4.0)	0.0 - 1.0: CRUSHED STONE - Grey, moist, mostly one inch crushed limestone over black fabric. 1.0 - 4.0: FILL - Brown, moist, mostly fine sand, brick, concrete, cinders, 4 inch cast iron pipe (4.0 fbgs) running east west on north side of test pit. 4.0 - 6.0: POORLY GRADED FINE SAND - Brown moist, mostly fine sand, few non-plastic fines, medium dense, loose when disturbed.
TP-9	8.0	2.0	8.5	0.5 - 4	0	none	(0.5 - 2.5)	0.0 - 0.5: CRUSHED STONE - Grey, moist, mostly one inch crushed limestone over black fabric. 0.5 - 4.0: FILL - Brown, moist, mostly fine sand, brick, concrete, cinders, roots. 4.0 - 8.5: REWORKED POORLY GRADED FINE SAND - Brown moist, mostly fine sand, few non-plastic fines, medium dense, loose when disturbed.
TP-10	10.0	2.0	7.5	1 - 4.5	0	none	na	0.0 - 1.0: CRUSHED STONE - Grey, moist, mostly one inch crushed limestone over black fabric. 1.0 - 2.0: FILL - Brown, moist, mostly fine sand mixed with reddish brown clay, trace brick and concrete, red sandstone. 2.0 - 5.0: POORLY GRADED FINE SAND - Brown moist, mostly fine sand, few non-plastic fines, medium dense, loose when disturbed.
TP-11	11.0	2.5	6.0	0 - 5	0	none	na	0.0 - 5.0: FILL - Brown, moist, mostly non-plastic fines, some fine sand, crushed limestone, orange brick, cinders, concrete, roots, three quarter inch copper water line (4.5 fbgs) running east west center of test pit. 5.0 - 5.0: POORLY GRADED FINE SAND - Brown moist, mostly fine sand, few non-plastic fines, medium dense, loose when disturbed.
TP-12	9.0	3.0	6.0	0 - 3	0	none	(1.0 - 3.0)	0.0 - 1.0: TOPSOIL/FILL - Dark brown, moist, mostly fine sand, little non-plastic fines, mixed with brick, medium dense. 1.0 - 3.0: FILL - Orange brick debris, mixed with black non-plastic fines and fine sand. 3.0 - 6.0: POORLY GRADED FINE SAND - Brown moist, mostly fine sand, few non-plastic fines, medium dense, loose when disturbed.
TP-13	9.0	2.5	7.5	0.5 - 2	0	none	na	0.0 - 0.5: CRUSHED STONE - Grey, moist, mostly one inch crushed limestone over black fabric. 0.5 - 4.0: FILL - Brown, moist, mostly fine sand, trace brick, concrete, cinders, roots. 4.0 - 8.5: REWORKED - Brown moist, mostly fine sand, few non-plastic fines, roots, medium dense, loose when disturbed.
TP-14	7.0	2.0	8.0	0 - 7	0	none	(3.0 - 5.0)	0.0 - 0.5: ASPHALT and SUBASE - Black, moist, mostly asphalt and stone. 0.5 - 7.0: FILL - Brown, moist, mostly fine sand, brick, concrete, cinders, roots, from 3.0 to 5.0 fbgs dark grey to black clay soils. 7.0 - 8.0: POORLY GRADED FINE SAND - Brown, moist mostly fine sand few non-plastic fines, medium dense loose when disturbed.
TP-15	6.0	3.0	7.0	0 - 7	0	none	none	0.0 - 0.5: TOPSOIL - Dark brown, moist, mostly non-plastic fines, some fine sand, loose, with roots and leaf debris. 0.5 - 7.0: FILL - Dark brown, moist, fine to coarse sand, little non-plastic fines and gravel, brick, concrete, plaster, glass, wire, asphalt. 7.0 CONCRETE SLAB - Excavator Refusal, concrete slab.
TP-16	6.0	3.0	8.0	0 - 7	0	none	none	0.0 - 0.5: TOPSOIL - Dark brown, moist, mostly non-plastic fines, some fine sand, loose, with roots and leaf debris. 0.5 - 7.0: FILL - Dark brown, moist, fine to coarse sand, little non-plastic fines and gravel, brick, concrete, plaster, glass, plastic. 7.0 - 8.0: FINE SAND - Light brown, moist, fine sand, some non-plastic fines, trace root structures.
TP-17	6.0	3.0	5.0	0 - 4	0	none	none	0.0 - 0.5: TOPSOIL - Dark brown, moist, mostly non-plastic fines, some fine sand, loose, with roots and leaf debris. 0.5 - 2.0: FILL - Dark brown, moist, fine to medium sand, some non-plastic fines, little gravel and brick. 2.0 - 4.0: FILL - Gray, moist, crushed stone. 2, 1-inch metal lines (water, no contents within lines). 4.0 - 5.0: SILT & SAND - Light brown, moist, non-plastic fine and fine sand, trace gravel.
TP-18	6.0	3.0	4.0	0 - 4	0	none	none	0.0 - 1.0: FILL - Gray, moist, crushed stone with underlying geotextile fabric. 1.0 - 3.0: Reworked - Light brown, moist, fine to medium sand and non-plastic fines, little gravel (reworked native). 3.0 - 4.0: FILL - Dark brown, moist, fine to medium sand and non-plastic fines, some black residue on fill material, steel tie back rod. 4.0 :CONCRETE SLAB - Excavator Refusal, concrete slab.

- Notes:
1. fbgs = feet below ground surface
 2. DTW = depth to water
 3. PID = MiniRae photoionization detector equipped with a 10.6 eV lamp
 4. ppm = parts per million
 5. cpm = counts per minute



TABLE 3
SUMMARY OF SOIL/FILL SAMPLE ANALYTICAL RESULTS
PHASE II ENVIRONMENTAL INVESTIGATION
11 & 19 DODGE STREET and 1159 MAIN STREET SITE
BUFFALO, NY

PARAMETER ¹	Unrestricted Use SCOs ²	Restricted Residential Use SCOs ²	Commercial Use SCOs ²	Industrial Use SCOs ²	SB-1	SB-4	SB-5	SB-7	SB-8	SB-9	SB-10	SB-11	SB-12	SB-14	TP-1	TP-4	TP-8	TP-12	TP-14	TP-15	TP-16	TP-18	SS-1	SS-2	SS-3	
					1-4 ft	0-3 ft	8-12 ft	1-4 ft	0-4 ft	5-8 ft	0-3 ft	1-4 ft	0-2 ft	0-2 ft	4-6 ft	0.5-3.5 ft	1-4 ft	1-3 ft	3-5 ft	6-7 ft	3-4 ft	3-4 ft	0-4 in	0-4 in	0-4 in	
Volatile Organic Compounds (VOCs) - mg/Kg³																										
Acetone	0.05	100	500	1000	NT	NT	ND	NT	NT	1.7 J	NT	NT	ND	0.002 J	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
Methylcyclohexane	--	--	--	--	NT	NT	ND	NT	NT	ND	NT	NT	0.00025 J	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg³																										
2-Methylnaphthalene	--	--	--	--	ND	0.072 J	NT	ND	ND	NT	0.06 J	ND	ND	NT	ND	ND	0.063 J	0.052 J	0.043 J	ND	ND	ND	ND	ND	ND	
2-Nitrodiphenylamine (NDPA/DPA)	--	--	--	--	ND	ND	NT	ND	ND	NT	0.039 J	ND	ND	NT	NT	NT	NT	NT	ND	ND	ND	ND	NT	NT	NT	
Acenaphthene	20	100	500	1000	ND	0.092 J	NT	ND	ND	NT	0.12 J	ND	ND	NT	ND	0.065 J	0.022 J	0.036 J	0.027 J	ND	6	ND	0.4 J	0.067 J		
Acenaphthylene	100	100	500	1000	ND	0.051 J	NT	ND	0.061 J	NT	0.07 J	0.12 J	ND	NT	ND	0.12 J	0.16	0.04 J	0.066 J	ND	4.2	ND	0.053 J	0.06 J		
Anthracene	100	100	500	1000	ND	0.32	NT	0.094 J	0.11	NT	0.35	0.14	0.076 J	NT	ND	0.19 J	0.27	0.19	0.14	0.13	ND	18	ND	0.14 J	0.19	
Benzo(a)anthracene	1	1	5.6	11	0.36	1.2	NT	0.18	0.36	NT	0.93	0.47	0.19	0.062 J	1.3	0.89	0.44	0.63	0.36	0.1 J	35	0.16	0.46	1.1		
Benzo(a)pyrene	1	1	1	1.1	0.31	1.1	NT	0.18	0.33	NT	0.84	0.52	0.18	0.082 J	1	0.75	0.42	0.63	0.38	0.11 J	26	0.18	0.44	1.3		
Benzo(b)fluoranthene	1	1	5.6	11	0.46	1.4	NT	0.23	0.45	NT	1.1	0.62	2.2	0.088 J	1.5	1.1	0.61	1.1	0.54	0.18	38	0.29	0.64	2.3		
Benzo(ghi)perylene	100	100	500	1000	0.18	0.56	NT	0.12 J	0.18	NT	0.44	0.44	0.11 J	0.064 J	0.63 J	0.43	0.6	0.54	0.3	0.14 J	13	0.14 J	0.31	1.2		
Benzo(k)fluoranthene	0.8	3.9	56	110	0.18	0.54	NT	0.071 J	0.14	NT	0.47	0.21	0.088 J	NT	ND	0.52	0.34	0.21	0.34	0.15	0.075 J	12	0.089 J	0.2	0.65	
Bis(2-ethylhexyl) phthalate	--	--	--	--	0.084 J	0.11 J	NT	0.41	0.24	NT	ND	ND	ND	NT	ND	ND	ND	0.25	ND	ND	ND	ND	ND	0.34	0.57	
Butyl benzyl phthalate	--	--	--	--	ND	ND	NT	0.057 J	ND	NT	ND	ND	ND	NT	ND	ND	ND	1.3	ND	ND	ND	ND	ND	0.079 J	0.1 J	
Carbazole	--	--	--	--	0.056 J	0.18 J	NT	0.047 J	0.032 J	NT	0.17 J	0.063 J	0.045 J	NT	ND	0.25 J	0.16 J	0.074 J	0.16 J	ND	ND	ND	ND	0.077 J	0.2 J	
Chrysene	1	3.9	56	110	0.34	1.1	NT	0.17	0.35	NT	0.89	0.47	0.18	0.057 J	1.4	0.94	0.47	0.83	0.4	0.12 J	33	0.2	0.51	1.6		
Dibenzo(a,h)anthracene	0.33	0.33	0.56	1.1	0.045 J	0.14	NT	ND	0.046 J	NT	0.11	0.084 J	0.026 J	NT	ND	0.21 J	0.13	0.083 J	0.13	0.089 J	ND	3.9	0.034 J	0.088 J	0.26	
Di-n-butyl phthalate	--	--	--	--	ND	ND	NT	0.064 J	ND	NT	ND	ND	ND	NT	ND	ND	ND	0.13 J	ND	ND	ND	ND	ND	ND	ND	
Dibenzofuran	7	59	350	1000	ND	0.075 J	NT	ND	ND	NT	0.079 J	ND	ND	NT	ND	ND	0.072 J	0.029 J	0.044 J	0.023 J	ND	6	ND	0.024 J	0.035 J	
Fluoranthene	100	100	500	1000	0.5	2	NT	0.38	0.79	NT	2	0.88	0.36	0.1 J	2.1	1.9	ND	1.7	0.7	0.18	72	0.37	1	3		
Fluorene	30	100	500	1000	ND	0.11 J	NT	0.039 J	ND	NT	0.14 J	0.04 J	0.027 J	NT	ND	ND	0.1 J	0.034 J	0.045 J	0.032 J	ND	8.5	ND	0.053 J	0.067 J	
Indeno(1,2,3-cd)pyrene	0.5	0.5	5.6	11	0.2	0.65	NT	0.1 J	0.2	NT	0.5	0.33	0.11 J	0.057 J	0.74	0.49	0.44	0.59	0.29	0.1 J	16	0.15 J	0.33	1.3		
Naphthalene	12	100	500	1000	ND	0.076 J	NT	ND	ND	NT	0.059 J	ND	ND	NT	ND	0.13 J	0.076 J	0.67 J	0.095 J	0.032 J	0.026 J	3.9	ND	0.031 J	0.047 J	
Pentachlorophenol	0.8	6.7	6.7	--	ND	ND	NT	ND	ND	NT	ND	ND	ND	NT	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	
Phenanthrene	100	100	500	1000	0.088 J	1.2	NT	ND	0.35	NT	1.5	0.43	0.28	0.080 J	0.25 J	1.3	0.39	0.78	0.39	0.1 J	68	0.12 J	0.57	1.1		
Pyrene	100	100	500	1000	0.41	1.6	NT	0.3	0.67	NT	1.6	0.78	0.29	0.092 J	1.8	1.6	0.66	1.4	0.59	0.15	59	0.29	0.81	2.4		
Total Metals - mg/Kg																										
Arsenic	13	16	16	16	NT	NT	NT	3.1	2	NT	4.2	15	9.7	NT	3.77	9.15	3.94	10.9	8.09	5.61	5.32	6.8	3.75	5.28	2.36	
Barium	350	400	400	10000	NT	NT	NT	75	46	NT	36	67	77	NT	82	66.4	85	62.6	115	712	69.7	192	44	79.2	67.4	
Beryllium	7.2	72	590	2700	NT	NT	NT	0.22 J	0.26	NT	0.24	0.35	0.17 J	NT	0.397	0.167 J	0.383	0.332	0.376	0.18 J	0.176 J	0.421	0.352	1.1	1.7	
Cadmium	2.5	4.3	9.3	60	NT	NT	NT	ND	ND	NT	0.07 J	ND	ND	NT	0.344 J	1.03	0.413 J	2.11	0.838	3.01	1.26	1	0.546	0.845	0.932	
Chromium	30	180	1500	6800	NT	NT	NT	6.5	5.7	NT	5.2	10	4.4	NT	11.1	31.6	9.77	13.5	12.5	12.7	388	9.9	12.5	10.2	17.7	
Copper	50	270	270	10000	NT	NT	NT	12	61	NT	9.3	38	21	NT	17.5	98.4	18.1	55.3	49.2	35.1	21.9	27.1	21.5	27.1	23.2	
Lead	63	400	1000	3900	NT	NT	NT	260	55	NT	17	150	58	NT	152	373	105	318	267	2710	2680	1070	39.5	144	100	
Manganese	1600	2000	10000	10000	NT	NT	NT	200	180	NT	230	220	250	NT	335	236	241	332	572	202	171	398	314	423	496	
Mercury	0.18	0.81	2.8	5.7	NT	NT	NT	0.29	0.28	NT	0.06 J	0.37	0.33	NT	0.655	0.127	0.134	0.254	0.387	0.64	0.697	0.676	0.103	0.304	0.074 J	
Nickel	30	310	310	10000	NT	NT	NT	6.1	4.8	NT	5.1	11	5.3	NT	11.9	630	10.3	16.5	16.4	6.68	6.7	11.5	9.82	10.9	9.31	
Selenium	3.9	180	1500	6800	NT	NT	NT	0.5 J	0.49 J	NT	0.54 J	0.92 J	0.57 J	NT	0.408 J	0.771 J	0.557 J	1.62	1.1	0.554 J	0.704 J	0.530 J	0.578 J	1.13 J	1.3	
Silver	2	180	1500	6800	NT	NT	NT	ND	ND	NT	ND	ND	ND	NT	ND	ND	ND	0.146 J	ND	0.237 J	0.479 J	0.549	ND	ND	0.418	
Zinc	109	10000	10000	10000	NT	NT	NT	100	49	NT	24	110	99	NT	61.2	979	78.2	263	358	1120	571	343	81.5	161	115	
Polychlorinated biphenyls (PCBs) - mg/Kg³																										
Total PCBs	0.1	1	1	25	NT	NT	NT	NT	NT	NT	NT	NT	ND	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; other compounds were reported as non-detect.
2. Values per NYSDEC Part 375 Soil Cleanup Objectives (SCOs).
3. Sample results were reported by the laboratory in ug/kg and converted to mg/kg for comparisons to SCOs.

Definitions:

ND = Parameter not detected above laboratory detection limit.
 NT = Parameter not analysed for.
 "--" = No value available for the parameter.
 J = Estimated value; result is less than the reporting limit but greater than method detection limit.

Bold	= Result exceeds Unrestricted Use SCOs.
Bold	= Result exceeds Restricted Residential Use SCOs.
Bold	= Result exceeds Commercial Use SCOs.
Bold	= Result exceeds Industrial use SCOs.

ANALYTICAL DATA PACKAGES



ANALYTICAL REPORT

Lab Number:	L1831086
Client:	Turnkey Environmental Restoration, LLC 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Chris Boron
Phone:	(716) 856-0599
Project Name:	MAIN & DODGE
Project Number:	0371-018-001
Report Date:	08/16/18

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1831086
Report Date: 08/16/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1831086-01	TP-1 (4-6)	SOIL	BUFFALO, NY	08/08/18 08:20	08/09/18
L1831086-02	TP-3 (3.5-5.5)	SOIL	BUFFALO, NY	08/08/18 09:55	08/09/18
L1831086-03	TP-4 (0.5-3.5)	SOIL	BUFFALO, NY	08/08/18 10:38	08/09/18
L1831086-04	TP-6 (0-1.5)	SOIL	BUFFALO, NY	08/08/18 10:53	08/09/18
L1831086-05	TP-8 (1-4)	SOIL	BUFFALO, NY	08/08/18 11:46	08/09/18
L1831086-06	TP-9 (0.5-2.5)	SOIL	BUFFALO, NY	08/08/18 12:30	08/09/18
L1831086-07	TP-12 (1-3)	SOIL	BUFFALO, NY	08/08/18 14:15	08/09/18
L1831086-08	TP-14 (3-5)	SOIL	BUFFALO, NY	08/08/18 15:40	08/09/18
L1831086-09	SS-1	SOIL	BUFFALO, NY	08/08/18 15:30	08/09/18
L1831086-10	SS-2	SOIL	BUFFALO, NY	08/08/18 15:55	08/09/18
L1831086-11	SS-3	SOIL	BUFFALO, NY	08/08/18 16:00	08/09/18

Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1831086
Report Date: 08/16/18

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1831086
Report Date: 08/16/18

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Semivolatile Organics

L1831086-03: The sample has elevated detection limits due to the dilution required by the sample matrix.

Cyanide, Total

The WG1145485-3 LCSD recovery (60%), associated with L1831086-01, -03, -05, -07, -08 and -09, is outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

The WG1145485-2/-3 LCS/LCSD RPD (43%), associated with L1831086-01, -03, -05, -07, -08 and -09, is above the acceptance criteria.


The WG1145685-2/-3 LCS/LCSD recoveries (58%/79%), associated with L1831086-10 and -11, are outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

The WG1145485-4 MS recovery (47%), performed on L1831086-01, is outside the acceptance criteria; however, the associated LCS recovery is within criteria. No further action was taken.

The WG1145485-4/-5 MS/MSD RPD (67%), performed on L1831086-01, is above the acceptance criteria.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Michelle M. Morris

Title: Technical Director/Representative

Date: 08/16/18

ORGANICS

SEMIVOLATILES

Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1831086
Report Date: 08/16/18

SAMPLE RESULTS

Lab ID: L1831086-01
 Client ID: TP-1 (4-6)
 Sample Location: BUFFALO, NY

Date Collected: 08/08/18 08:20
 Date Received: 08/09/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 08/15/18 02:37
 Analyst: RC
 Percent Solids: 74%

Extraction Method: EPA 3546
 Extraction Date: 08/14/18 08:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	180	23.	1
1,2,4-Trichlorobenzene	ND		ug/kg	220	26.	1
Hexachlorobenzene	ND		ug/kg	130	25.	1
Bis(2-chloroethyl)ether	ND		ug/kg	200	30.	1
2-Chloronaphthalene	ND		ug/kg	220	22.	1
1,2-Dichlorobenzene	ND		ug/kg	220	40.	1
1,3-Dichlorobenzene	ND		ug/kg	220	38.	1
1,4-Dichlorobenzene	ND		ug/kg	220	39.	1
3,3'-Dichlorobenzidine	ND		ug/kg	220	60.	1
2,4-Dinitrotoluene	ND		ug/kg	220	45.	1
2,6-Dinitrotoluene	ND		ug/kg	220	38.	1
Fluoranthene	100	J	ug/kg	130	26.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	220	24.	1
4-Bromophenyl phenyl ether	ND		ug/kg	220	34.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	270	38.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	240	22.	1
Hexachlorobutadiene	ND		ug/kg	220	33.	1
Hexachlorocyclopentadiene	ND		ug/kg	640	200	1
Hexachloroethane	ND		ug/kg	180	36.	1
Isophorone	ND		ug/kg	200	29.	1
Naphthalene	ND		ug/kg	220	27.	1
Nitrobenzene	ND		ug/kg	200	33.	1
NDPA/DPA	ND		ug/kg	180	25.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	220	34.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	220	77.	1
Butyl benzyl phthalate	ND		ug/kg	220	56.	1
Di-n-butylphthalate	ND		ug/kg	220	42.	1
Di-n-octylphthalate	ND		ug/kg	220	76.	1

Project Name: MAIN & DODGE

Lab Number: L1831086

Project Number: 0371-018-001

Report Date: 08/16/18

SAMPLE RESULTS

Lab ID: L1831086-01

Date Collected: 08/08/18 08:20

Client ID: TP-1 (4-6)

Date Received: 08/09/18

Sample Location: BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	220	21.	1
Dimethyl phthalate	ND		ug/kg	220	47.	1
Benzo(a)anthracene	62	J	ug/kg	130	25.	1
Benzo(a)pyrene	82	J	ug/kg	180	54.	1
Benzo(b)fluoranthene	88	J	ug/kg	130	38.	1
Benzo(k)fluoranthene	ND		ug/kg	130	36.	1
Chrysene	57	J	ug/kg	130	23.	1
Acenaphthylene	ND		ug/kg	180	34.	1
Anthracene	ND		ug/kg	130	44.	1
Benzo(ghi)perylene	64	J	ug/kg	180	26.	1
Fluorene	ND		ug/kg	220	22.	1
Phenanthrene	80	J	ug/kg	130	27.	1
Dibenzo(a,h)anthracene	ND		ug/kg	130	26.	1
Indeno(1,2,3-cd)pyrene	57	J	ug/kg	180	31.	1
Pyrene	92	J	ug/kg	130	22.	1
Biphenyl	ND		ug/kg	510	52.	1
4-Chloroaniline	ND		ug/kg	220	41.	1
2-Nitroaniline	ND		ug/kg	220	43.	1
3-Nitroaniline	ND		ug/kg	220	42.	1
4-Nitroaniline	ND		ug/kg	220	93.	1
Dibenzofuran	ND		ug/kg	220	21.	1
2-Methylnaphthalene	ND		ug/kg	270	27.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	220	23.	1
Acetophenone	ND		ug/kg	220	28.	1
Benzyl Alcohol	ND		ug/kg	220	68.	1
Carbazole	ND		ug/kg	220	22.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	73		25-120
Phenol-d6	75		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	80		30-120
2,4,6-Tribromophenol	78		10-136
4-Terphenyl-d14	63		18-120

Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1831086
Report Date: 08/16/18

SAMPLE RESULTS

Lab ID: L1831086-03 D
 Client ID: TP-4 (0.5-3.5)
 Sample Location: BUFFALO, NY

Date Collected: 08/08/18 10:38
 Date Received: 08/09/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 08/15/18 06:12
 Analyst: RC
 Percent Solids: 75%

Extraction Method: EPA 3546
 Extraction Date: 08/14/18 08:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	700	91.	4
1,2,4-Trichlorobenzene	ND		ug/kg	880	100	4
Hexachlorobenzene	ND		ug/kg	520	98.	4
Bis(2-chloroethyl)ether	ND		ug/kg	790	120	4
2-Chloronaphthalene	ND		ug/kg	880	87.	4
1,2-Dichlorobenzene	ND		ug/kg	880	160	4
1,3-Dichlorobenzene	ND		ug/kg	880	150	4
1,4-Dichlorobenzene	ND		ug/kg	880	150	4
3,3'-Dichlorobenzidine	ND		ug/kg	880	230	4
2,4-Dinitrotoluene	ND		ug/kg	880	180	4
2,6-Dinitrotoluene	ND		ug/kg	880	150	4
Fluoranthene	2100		ug/kg	520	100	4
4-Chlorophenyl phenyl ether	ND		ug/kg	880	94.	4
4-Bromophenyl phenyl ether	ND		ug/kg	880	130	4
Bis(2-chloroisopropyl)ether	ND		ug/kg	1000	150	4
Bis(2-chloroethoxy)methane	ND		ug/kg	950	88.	4
Hexachlorobutadiene	ND		ug/kg	880	130	4
Hexachlorocyclopentadiene	ND		ug/kg	2500	790	4
Hexachloroethane	ND		ug/kg	700	140	4
Isophorone	ND		ug/kg	790	110	4
Naphthalene	130	J	ug/kg	880	110	4
Nitrobenzene	ND		ug/kg	790	130	4
NDPA/DPA	ND		ug/kg	700	100	4
n-Nitrosodi-n-propylamine	ND		ug/kg	880	140	4
Bis(2-ethylhexyl)phthalate	ND		ug/kg	880	300	4
Butyl benzyl phthalate	ND		ug/kg	880	220	4
Di-n-butylphthalate	ND		ug/kg	880	170	4
Di-n-octylphthalate	ND		ug/kg	880	300	4

Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1831086
Report Date: 08/16/18

SAMPLE RESULTS

Lab ID: L1831086-03 D
 Client ID: TP-4 (0.5-3.5)
 Sample Location: BUFFALO, NY

Date Collected: 08/08/18 10:38
 Date Received: 08/09/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	880	81.	4
Dimethyl phthalate	ND		ug/kg	880	180	4
Benzo(a)anthracene	1300		ug/kg	520	99.	4
Benzo(a)pyrene	1000		ug/kg	700	210	4
Benzo(b)fluoranthene	1500		ug/kg	520	150	4
Benzo(k)fluoranthene	520		ug/kg	520	140	4
Chrysene	1400		ug/kg	520	91.	4
Acenaphthylene	ND		ug/kg	700	140	4
Anthracene	190	J	ug/kg	520	170	4
Benzo(ghi)perylene	630	J	ug/kg	700	100	4
Fluorene	ND		ug/kg	880	85.	4
Phenanthrene	250	J	ug/kg	520	110	4
Dibenzo(a,h)anthracene	210	J	ug/kg	520	100	4
Indeno(1,2,3-cd)pyrene	740		ug/kg	700	120	4
Pyrene	1800		ug/kg	520	87.	4
Biphenyl	ND		ug/kg	2000	200	4
4-Chloroaniline	ND		ug/kg	880	160	4
2-Nitroaniline	ND		ug/kg	880	170	4
3-Nitroaniline	ND		ug/kg	880	160	4
4-Nitroaniline	ND		ug/kg	880	360	4
Dibenzofuran	ND		ug/kg	880	83.	4
2-Methylnaphthalene	ND		ug/kg	1000	100	4
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	880	91.	4
Acetophenone	ND		ug/kg	880	110	4
Benzyl Alcohol	ND		ug/kg	880	270	4
Carbazole	250	J	ug/kg	880	85.	4

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	75		25-120
Phenol-d6	78		10-120
Nitrobenzene-d5	85		23-120
2-Fluorobiphenyl	72		30-120
2,4,6-Tribromophenol	85		10-136
4-Terphenyl-d14	54		18-120

Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1831086
Report Date: 08/16/18

SAMPLE RESULTS

Lab ID: L1831086-05
 Client ID: TP-8 (1-4)
 Sample Location: BUFFALO, NY

Date Collected: 08/08/18 11:46
 Date Received: 08/09/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 08/15/18 06:36
 Analyst: RC
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 08/14/18 08:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	65	J	ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	21.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	190	18.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	32.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	37.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	1900		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	76	J	ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	65.	1
Butyl benzyl phthalate	ND		ug/kg	190	47.	1
Di-n-butylphthalate	ND		ug/kg	190	35.	1
Di-n-octylphthalate	ND		ug/kg	190	64.	1

Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1831086
Report Date: 08/16/18

SAMPLE RESULTS

Lab ID: L1831086-05
Client ID: TP-8 (1-4)
Sample Location: BUFFALO, NY

Date Collected: 08/08/18 11:46
Date Received: 08/09/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	39.	1
Benzo(a)anthracene	890		ug/kg	110	21.	1
Benzo(a)pyrene	750		ug/kg	150	46.	1
Benzo(b)fluoranthene	1100		ug/kg	110	31.	1
Benzo(k)fluoranthene	340		ug/kg	110	30.	1
Chrysene	940		ug/kg	110	19.	1
Acenaphthylene	120	J	ug/kg	150	29.	1
Anthracene	270		ug/kg	110	36.	1
Benzo(ghi)perylene	430		ug/kg	150	22.	1
Fluorene	100	J	ug/kg	190	18.	1
Phenanthrene	1300		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	130		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	490		ug/kg	150	26.	1
Pyrene	1600		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	43.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	35.	1
4-Nitroaniline	ND		ug/kg	190	77.	1
Dibenzofuran	72	J	ug/kg	190	18.	1
2-Methylnaphthalene	63	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
Benzyl Alcohol	ND		ug/kg	190	57.	1
Carbazole	160	J	ug/kg	190	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	73		25-120
Phenol-d6	77		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	85		30-120
2,4,6-Tribromophenol	90		10-136
4-Terphenyl-d14	86		18-120

Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1831086
Report Date: 08/16/18

SAMPLE RESULTS

Lab ID: L1831086-07
 Client ID: TP-12 (1-3)
 Sample Location: BUFFALO, NY

Date Collected: 08/08/18 14:15
 Date Received: 08/09/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 08/15/18 07:00
 Analyst: RC
 Percent Solids: 92%

Extraction Method: EPA 3546
 Extraction Date: 08/14/18 09:11

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	22	J	ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	20.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1
1,3-Dichlorobenzene	ND		ug/kg	180	30.	1
1,4-Dichlorobenzene	ND		ug/kg	180	31.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	47.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	30.	1
Fluoranthene	820		ug/kg	110	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	27.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	510	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	67	J	ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	27.	1
Bis(2-ethylhexyl)phthalate	250		ug/kg	180	62.	1
Butyl benzyl phthalate	1300		ug/kg	180	45.	1
Di-n-butylphthalate	130	J	ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	60.	1

Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1831086
Report Date: 08/16/18

SAMPLE RESULTS

Lab ID: L1831086-07
 Client ID: TP-12 (1-3)
 Sample Location: BUFFALO, NY

Date Collected: 08/08/18 14:15
 Date Received: 08/09/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	16.	1
Dimethyl phthalate	ND		ug/kg	180	37.	1
Benzo(a)anthracene	440		ug/kg	110	20.	1
Benzo(a)pyrene	420		ug/kg	140	43.	1
Benzo(b)fluoranthene	610		ug/kg	110	30.	1
Benzo(k)fluoranthene	210		ug/kg	110	28.	1
Chrysene	470		ug/kg	110	18.	1
Acenaphthylene	160		ug/kg	140	27.	1
Anthracene	190		ug/kg	110	35.	1
Benzo(ghi)perylene	600		ug/kg	140	21.	1
Fluorene	34	J	ug/kg	180	17.	1
Phenanthrene	390		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	83	J	ug/kg	110	20.	1
Indeno(1,2,3-cd)pyrene	440		ug/kg	140	25.	1
Pyrene	660		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	400	41.	1
4-Chloroaniline	ND		ug/kg	180	32.	1
2-Nitroaniline	ND		ug/kg	180	34.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	74.	1
Dibenzofuran	29	J	ug/kg	180	17.	1
2-Methylnaphthalene	52	J	ug/kg	210	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	18.	1
Acetophenone	ND		ug/kg	180	22.	1
Benzyl Alcohol	ND		ug/kg	180	54.	1
Carbazole	74	J	ug/kg	180	17.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		25-120
Phenol-d6	65		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	71		30-120
2,4,6-Tribromophenol	63		10-136
4-Terphenyl-d14	63		18-120

Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1831086
Report Date: 08/16/18

SAMPLE RESULTS

Lab ID: L1831086-08
 Client ID: TP-14 (3-5)
 Sample Location: BUFFALO, NY

Date Collected: 08/08/18 15:40
 Date Received: 08/09/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 08/15/18 07:24
 Analyst: RC
 Percent Solids: 76%

Extraction Method: EPA 3546
 Extraction Date: 08/14/18 09:11

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	36	J	ug/kg	170	22.	1
1,2,4-Trichlorobenzene	ND		ug/kg	220	25.	1
Hexachlorobenzene	ND		ug/kg	130	24.	1
Bis(2-chloroethyl)ether	ND		ug/kg	200	30.	1
2-Chloronaphthalene	ND		ug/kg	220	22.	1
1,2-Dichlorobenzene	ND		ug/kg	220	39.	1
1,3-Dichlorobenzene	ND		ug/kg	220	37.	1
1,4-Dichlorobenzene	ND		ug/kg	220	38.	1
3,3'-Dichlorobenzidine	ND		ug/kg	220	58.	1
2,4-Dinitrotoluene	ND		ug/kg	220	44.	1
2,6-Dinitrotoluene	ND		ug/kg	220	37.	1
Fluoranthene	1700		ug/kg	130	25.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	220	23.	1
4-Bromophenyl phenyl ether	ND		ug/kg	220	33.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	260	37.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	240	22.	1
Hexachlorobutadiene	ND		ug/kg	220	32.	1
Hexachlorocyclopentadiene	ND		ug/kg	620	200	1
Hexachloroethane	ND		ug/kg	170	35.	1
Isophorone	ND		ug/kg	200	28.	1
Naphthalene	95	J	ug/kg	220	26.	1
Nitrobenzene	ND		ug/kg	200	32.	1
NDPA/DPA	ND		ug/kg	170	25.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	220	34.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	220	75.	1
Butyl benzyl phthalate	ND		ug/kg	220	55.	1
Di-n-butylphthalate	ND		ug/kg	220	41.	1
Di-n-octylphthalate	ND		ug/kg	220	74.	1

Project Name: MAIN & DODGE

Lab Number: L1831086

Project Number: 0371-018-001

Report Date: 08/16/18

SAMPLE RESULTS

Lab ID: L1831086-08

Date Collected: 08/08/18 15:40

Client ID: TP-14 (3-5)

Date Received: 08/09/18

Sample Location: BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	220	20.	1
Dimethyl phthalate	ND		ug/kg	220	46.	1
Benzo(a)anthracene	630		ug/kg	130	24.	1
Benzo(a)pyrene	630		ug/kg	170	53.	1
Benzo(b)fluoranthene	1100		ug/kg	130	37.	1
Benzo(k)fluoranthene	340		ug/kg	130	35.	1
Chrysene	830		ug/kg	130	23.	1
Acenaphthylene	40	J	ug/kg	170	34.	1
Anthracene	140		ug/kg	130	42.	1
Benzo(ghi)perylene	540		ug/kg	170	26.	1
Fluorene	45	J	ug/kg	220	21.	1
Phenanthrene	780		ug/kg	130	26.	1
Dibenzo(a,h)anthracene	130		ug/kg	130	25.	1
Indeno(1,2,3-cd)pyrene	590		ug/kg	170	30.	1
Pyrene	1400		ug/kg	130	22.	1
Biphenyl	ND		ug/kg	500	50.	1
4-Chloroaniline	ND		ug/kg	220	40.	1
2-Nitroaniline	ND		ug/kg	220	42.	1
3-Nitroaniline	ND		ug/kg	220	41.	1
4-Nitroaniline	ND		ug/kg	220	90.	1
Dibenzofuran	44	J	ug/kg	220	21.	1
2-Methylnaphthalene	43	J	ug/kg	260	26.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	220	23.	1
Acetophenone	ND		ug/kg	220	27.	1
Benzyl Alcohol	ND		ug/kg	220	67.	1
Carbazole	160	J	ug/kg	220	21.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	79		25-120
Phenol-d6	80		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	80		30-120
2,4,6-Tribromophenol	88		10-136
4-Terphenyl-d14	83		18-120

Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1831086
Report Date: 08/16/18

SAMPLE RESULTS

Lab ID: L1831086-09
 Client ID: SS-1
 Sample Location: BUFFALO, NY

Date Collected: 08/08/18 15:30
 Date Received: 08/09/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 08/15/18 03:01
 Analyst: RC
 Percent Solids: 73%

Extraction Method: EPA 3546
 Extraction Date: 08/14/18 09:11

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	180	23.	1
1,2,4-Trichlorobenzene	ND		ug/kg	220	26.	1
Hexachlorobenzene	ND		ug/kg	140	25.	1
Bis(2-chloroethyl)ether	ND		ug/kg	200	30.	1
2-Chloronaphthalene	ND		ug/kg	220	22.	1
1,2-Dichlorobenzene	ND		ug/kg	220	40.	1
1,3-Dichlorobenzene	ND		ug/kg	220	39.	1
1,4-Dichlorobenzene	ND		ug/kg	220	39.	1
3,3'-Dichlorobenzidine	ND		ug/kg	220	60.	1
2,4-Dinitrotoluene	ND		ug/kg	220	45.	1
2,6-Dinitrotoluene	ND		ug/kg	220	39.	1
Fluoranthene	370		ug/kg	140	26.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	220	24.	1
4-Bromophenyl phenyl ether	ND		ug/kg	220	34.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	270	38.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	240	22.	1
Hexachlorobutadiene	ND		ug/kg	220	33.	1
Hexachlorocyclopentadiene	ND		ug/kg	640	200	1
Hexachloroethane	ND		ug/kg	180	36.	1
Isophorone	ND		ug/kg	200	29.	1
Naphthalene	ND		ug/kg	220	27.	1
Nitrobenzene	ND		ug/kg	200	33.	1
NDPA/DPA	ND		ug/kg	180	26.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	220	35.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	220	78.	1
Butyl benzyl phthalate	ND		ug/kg	220	57.	1
Di-n-butylphthalate	ND		ug/kg	220	43.	1
Di-n-octylphthalate	ND		ug/kg	220	77.	1

Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1831086
Report Date: 08/16/18

SAMPLE RESULTS

Lab ID: L1831086-09
 Client ID: SS-1
 Sample Location: BUFFALO, NY

Date Collected: 08/08/18 15:30
 Date Received: 08/09/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	220	21.	1
Dimethyl phthalate	ND		ug/kg	220	47.	1
Benzo(a)anthracene	160		ug/kg	140	25.	1
Benzo(a)pyrene	180		ug/kg	180	55.	1
Benzo(b)fluoranthene	290		ug/kg	140	38.	1
Benzo(k)fluoranthene	89	J	ug/kg	140	36.	1
Chrysene	200		ug/kg	140	23.	1
Acenaphthylene	ND		ug/kg	180	35.	1
Anthracene	ND		ug/kg	140	44.	1
Benzo(ghi)perylene	140	J	ug/kg	180	26.	1
Fluorene	ND		ug/kg	220	22.	1
Phenanthrene	120	J	ug/kg	140	27.	1
Dibenzo(a,h)anthracene	34	J	ug/kg	140	26.	1
Indeno(1,2,3-cd)pyrene	150	J	ug/kg	180	31.	1
Pyrene	290		ug/kg	140	22.	1
Biphenyl	ND		ug/kg	510	52.	1
4-Chloroaniline	ND		ug/kg	220	41.	1
2-Nitroaniline	ND		ug/kg	220	43.	1
3-Nitroaniline	ND		ug/kg	220	42.	1
4-Nitroaniline	ND		ug/kg	220	93.	1
Dibenzofuran	ND		ug/kg	220	21.	1
2-Methylnaphthalene	ND		ug/kg	270	27.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	220	24.	1
Acetophenone	ND		ug/kg	220	28.	1
Benzyl Alcohol	ND		ug/kg	220	69.	1
Carbazole	ND		ug/kg	220	22.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	86		25-120
Phenol-d6	82		10-120
Nitrobenzene-d5	85		23-120
2-Fluorobiphenyl	72		30-120
2,4,6-Tribromophenol	83		10-136
4-Terphenyl-d14	54		18-120

Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1831086
Report Date: 08/16/18

SAMPLE RESULTS

Lab ID: L1831086-10
 Client ID: SS-2
 Sample Location: BUFFALO, NY

Date Collected: 08/08/18 15:55
 Date Received: 08/09/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 08/15/18 08:36
 Analyst: RC
 Percent Solids: 63%

Extraction Method: EPA 3546
 Extraction Date: 08/14/18 09:11

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	40	J	ug/kg	200	27.	1
1,2,4-Trichlorobenzene	ND		ug/kg	260	29.	1
Hexachlorobenzene	ND		ug/kg	150	29.	1
Bis(2-chloroethyl)ether	ND		ug/kg	230	35.	1
2-Chloronaphthalene	ND		ug/kg	260	25.	1
1,2-Dichlorobenzene	ND		ug/kg	260	46.	1
1,3-Dichlorobenzene	ND		ug/kg	260	44.	1
1,4-Dichlorobenzene	ND		ug/kg	260	45.	1
3,3'-Dichlorobenzidine	ND		ug/kg	260	68.	1
2,4-Dinitrotoluene	ND		ug/kg	260	51.	1
2,6-Dinitrotoluene	ND		ug/kg	260	44.	1
Fluoranthene	1000		ug/kg	150	30.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	260	27.	1
4-Bromophenyl phenyl ether	ND		ug/kg	260	39.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	310	44.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	280	26.	1
Hexachlorobutadiene	ND		ug/kg	260	38.	1
Hexachlorocyclopentadiene	ND		ug/kg	740	230	1
Hexachloroethane	ND		ug/kg	200	42.	1
Isophorone	ND		ug/kg	230	33.	1
Naphthalene	31	J	ug/kg	260	31.	1
Nitrobenzene	ND		ug/kg	230	38.	1
NDPA/DPA	ND		ug/kg	200	29.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	260	40.	1
Bis(2-ethylhexyl)phthalate	340		ug/kg	260	89.	1
Butyl benzyl phthalate	79	J	ug/kg	260	65.	1
Di-n-butylphthalate	ND		ug/kg	260	49.	1
Di-n-octylphthalate	ND		ug/kg	260	87.	1

Project Name: MAIN & DODGE

Lab Number: L1831086

Project Number: 0371-018-001

Report Date: 08/16/18

SAMPLE RESULTS

Lab ID: L1831086-10

Date Collected: 08/08/18 15:55

Client ID: SS-2

Date Received: 08/09/18

Sample Location: BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	260	24.	1
Dimethyl phthalate	ND		ug/kg	260	54.	1
Benzo(a)anthracene	460		ug/kg	150	29.	1
Benzo(a)pyrene	440		ug/kg	200	63.	1
Benzo(b)fluoranthene	640		ug/kg	150	43.	1
Benzo(k)fluoranthene	200		ug/kg	150	41.	1
Chrysene	510		ug/kg	150	27.	1
Acenaphthylene	53	J	ug/kg	200	40.	1
Anthracene	140	J	ug/kg	150	50.	1
Benzo(ghi)perylene	310		ug/kg	200	30.	1
Fluorene	53	J	ug/kg	260	25.	1
Phenanthrene	570		ug/kg	150	31.	1
Dibenzo(a,h)anthracene	88	J	ug/kg	150	30.	1
Indeno(1,2,3-cd)pyrene	330		ug/kg	200	36.	1
Pyrene	810		ug/kg	150	26.	1
Biphenyl	ND		ug/kg	580	60.	1
4-Chloroaniline	ND		ug/kg	260	47.	1
2-Nitroaniline	ND		ug/kg	260	50.	1
3-Nitroaniline	ND		ug/kg	260	48.	1
4-Nitroaniline	ND		ug/kg	260	110	1
Dibenzofuran	24	J	ug/kg	260	24.	1
2-Methylnaphthalene	ND		ug/kg	310	31.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	260	27.	1
Acetophenone	ND		ug/kg	260	32.	1
Benzyl Alcohol	ND		ug/kg	260	79.	1
Carbazole	77	J	ug/kg	260	25.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	73		25-120
Phenol-d6	76		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	67		30-120
2,4,6-Tribromophenol	89		10-136
4-Terphenyl-d14	53		18-120

Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1831086
Report Date: 08/16/18

SAMPLE RESULTS

Lab ID: L1831086-11
 Client ID: SS-3
 Sample Location: BUFFALO, NY

Date Collected: 08/08/18 16:00
 Date Received: 08/09/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 08/15/18 08:12
 Analyst: RC
 Percent Solids: 61%

Extraction Method: EPA 3546
 Extraction Date: 08/14/18 09:11

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	67	J	ug/kg	220	28.	1
1,2,4-Trichlorobenzene	ND		ug/kg	270	31.	1
Hexachlorobenzene	ND		ug/kg	160	30.	1
Bis(2-chloroethyl)ether	ND		ug/kg	240	36.	1
2-Chloronaphthalene	ND		ug/kg	270	27.	1
1,2-Dichlorobenzene	ND		ug/kg	270	48.	1
1,3-Dichlorobenzene	ND		ug/kg	270	46.	1
1,4-Dichlorobenzene	ND		ug/kg	270	47.	1
3,3'-Dichlorobenzidine	ND		ug/kg	270	72.	1
2,4-Dinitrotoluene	ND		ug/kg	270	54.	1
2,6-Dinitrotoluene	ND		ug/kg	270	46.	1
Fluoranthene	3000		ug/kg	160	31.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	270	29.	1
4-Bromophenyl phenyl ether	ND		ug/kg	270	41.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	320	46.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	290	27.	1
Hexachlorobutadiene	ND		ug/kg	270	39.	1
Hexachlorocyclopentadiene	ND		ug/kg	770	240	1
Hexachloroethane	ND		ug/kg	220	44.	1
Isophorone	ND		ug/kg	240	35.	1
Naphthalene	47	J	ug/kg	270	33.	1
Nitrobenzene	ND		ug/kg	240	40.	1
NDPA/DPA	ND		ug/kg	220	31.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	270	42.	1
Bis(2-ethylhexyl)phthalate	570		ug/kg	270	93.	1
Butyl benzyl phthalate	100	J	ug/kg	270	68.	1
Di-n-butylphthalate	ND		ug/kg	270	51.	1
Di-n-octylphthalate	ND		ug/kg	270	92.	1

Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1831086
Report Date: 08/16/18

SAMPLE RESULTS

Lab ID: L1831086-11
 Client ID: SS-3
 Sample Location: BUFFALO, NY

Date Collected: 08/08/18 16:00
 Date Received: 08/09/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	270	25.	1
Dimethyl phthalate	ND		ug/kg	270	56.	1
Benzo(a)anthracene	1100		ug/kg	160	30.	1
Benzo(a)pyrene	1300		ug/kg	220	66.	1
Benzo(b)fluoranthene	2300		ug/kg	160	45.	1
Benzo(k)fluoranthene	650		ug/kg	160	43.	1
Chrysene	1600		ug/kg	160	28.	1
Acenaphthylene	60	J	ug/kg	220	42.	1
Anthracene	190		ug/kg	160	52.	1
Benzo(ghi)perylene	1200		ug/kg	220	32.	1
Fluorene	67	J	ug/kg	270	26.	1
Phenanthrene	1100		ug/kg	160	33.	1
Dibenzo(a,h)anthracene	260		ug/kg	160	31.	1
Indeno(1,2,3-cd)pyrene	1300		ug/kg	220	38.	1
Pyrene	2400		ug/kg	160	27.	1
Biphenyl	ND		ug/kg	610	62.	1
4-Chloroaniline	ND		ug/kg	270	49.	1
2-Nitroaniline	ND		ug/kg	270	52.	1
3-Nitroaniline	ND		ug/kg	270	51.	1
4-Nitroaniline	ND		ug/kg	270	110	1
Dibenzofuran	35	J	ug/kg	270	25.	1
2-Methylnaphthalene	ND		ug/kg	320	32.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	270	28.	1
Acetophenone	ND		ug/kg	270	33.	1
Benzyl Alcohol	ND		ug/kg	270	82.	1
Carbazole	200	J	ug/kg	270	26.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	75		25-120
Phenol-d6	75		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	68		30-120
2,4,6-Tribromophenol	83		10-136
4-Terphenyl-d14	52		18-120

Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1831086
Report Date: 08/16/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 08/14/18 10:30
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 08/14/18 00:38

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01,03,05,07-11 Batch: WG1146078-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.
Hexachlorobenzene	ND		ug/kg	99	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	30.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	29.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	99	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	27.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	42.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1831086
Report Date: 08/16/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 08/14/18 10:30
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 08/14/18 00:38

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01,03,05,07-11 Batch: WG1146078-1					
Dimethyl phthalate	ND		ug/kg	160	35.
Benzo(a)anthracene	ND		ug/kg	99	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	99	28.
Benzo(k)fluoranthene	ND		ug/kg	99	26.
Chrysene	ND		ug/kg	99	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	99	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	99	20.
Dibenzo(a,h)anthracene	ND		ug/kg	99	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	99	16.
Biphenyl	ND		ug/kg	380	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.

Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1831086
Report Date: 08/16/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 08/14/18 10:30
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 08/14/18 00:38

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01,03,05,07-11 Batch: WG1146078-1					

Tentatively Identified Compounds

No Tentatively Identified Compounds ND ug/kg

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	68		25-120
Phenol-d6	73		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	70		30-120
2,4,6-Tribromophenol	81		10-136
4-Terphenyl-d14	86		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & DODGE

Lab Number: L1831086

Project Number: 0371-018-001

Report Date: 08/16/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03,05,07-11 Batch: WG1146078-2 WG1146078-3								
Acenaphthene	76		87		31-137	13		50
1,2,4-Trichlorobenzene	76		82		38-107	8		50
Hexachlorobenzene	83		87		40-140	5		50
Bis(2-chloroethyl)ether	76		78		40-140	3		50
2-Chloronaphthalene	80		91		40-140	13		50
1,2-Dichlorobenzene	72		74		40-140	3		50
1,3-Dichlorobenzene	74		75		40-140	1		50
1,4-Dichlorobenzene	74		75		28-104	1		50
3,3'-Dichlorobenzidine	57		58		40-140	2		50
2,4-Dinitrotoluene	81		89		40-132	9		50
2,6-Dinitrotoluene	84		92		40-140	9		50
Fluoranthene	86		94		40-140	9		50
4-Chlorophenyl phenyl ether	80		87		40-140	8		50
4-Bromophenyl phenyl ether	83		84		40-140	1		50
Bis(2-chloroisopropyl)ether	75		78		40-140	4		50
Bis(2-chloroethoxy)methane	80		86		40-117	7		50
Hexachlorobutadiene	75		80		40-140	6		50
Hexachlorocyclopentadiene	80		88		40-140	10		50
Hexachloroethane	68		74		40-140	8		50
Isophorone	82		84		40-140	2		50
Naphthalene	79		84		40-140	6		50
Nitrobenzene	77		79		40-140	3		50
NDPA/DPA	82		91		36-157	10		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & DODGE

Lab Number: L1831086

Project Number: 0371-018-001

Report Date: 08/16/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03,05,07-11 Batch: WG1146078-2 WG1146078-3								
n-Nitrosodi-n-propylamine	80		85		32-121	6		50
Bis(2-ethylhexyl)phthalate	84		90		40-140	7		50
Butyl benzyl phthalate	85		92		40-140	8		50
Di-n-butylphthalate	86		94		40-140	9		50
Di-n-octylphthalate	85		92		40-140	8		50
Diethyl phthalate	81		90		40-140	11		50
Dimethyl phthalate	85		96		40-140	12		50
Benzo(a)anthracene	80		86		40-140	7		50
Benzo(a)pyrene	84		89		40-140	6		50
Benzo(b)fluoranthene	83		92		40-140	10		50
Benzo(k)fluoranthene	86		87		40-140	1		50
Chrysene	84		89		40-140	6		50
Acenaphthylene	82		93		40-140	13		50
Anthracene	83		92		40-140	10		50
Benzo(ghi)perylene	85		92		40-140	8		50
Fluorene	80		90		40-140	12		50
Phenanthrene	82		90		40-140	9		50
Dibenzo(a,h)anthracene	84		91		40-140	8		50
Indeno(1,2,3-cd)pyrene	85		93		40-140	9		50
Pyrene	85		93		35-142	9		50
Biphenyl	83		93		54-104	11		50
4-Chloroaniline	46		49		40-140	6		50
2-Nitroaniline	80		86		47-134	7		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & DODGE

Project Number: 0371-018-001

Lab Number: L1831086

Report Date: 08/16/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03,05,07-11 Batch: WG1146078-2 WG1146078-3								
3-Nitroaniline	61		65		26-129	6		50
4-Nitroaniline	81		82		41-125	1		50
Dibenzofuran	79		88		40-140	11		50
2-Methylnaphthalene	78		88		40-140	12		50
1,2,4,5-Tetrachlorobenzene	78		88		40-117	12		50
Acetophenone	81		84		14-144	4		50
Benzyl Alcohol	82		87		40-140	6		50
Carbazole	83		93		54-128	11		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	77		85		25-120
Phenol-d6	82		84		10-120
Nitrobenzene-d5	75		78		23-120
2-Fluorobiphenyl	75		83		30-120
2,4,6-Tribromophenol	82		88		10-136
4-Terphenyl-d14	80		87		18-120

METALS

Project Name: MAIN & DODGE

Lab Number: L1831086

Project Number: 0371-018-001

Report Date: 08/16/18

SAMPLE RESULTS

Lab ID: L1831086-01
 Client ID: TP-1 (4-6)
 Sample Location: BUFFALO, NY

Date Collected: 08/08/18 08:20
 Date Received: 08/09/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Percent Solids: 74%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	3.77		mg/kg	0.530	0.110	1	08/15/18 13:40	08/15/18 17:06	EPA 3050B	1,6010D	AB
Barium, Total	82.0		mg/kg	0.530	0.092	1	08/15/18 13:40	08/15/18 17:06	EPA 3050B	1,6010D	AB
Beryllium, Total	0.397		mg/kg	0.265	0.018	1	08/15/18 13:40	08/15/18 17:06	EPA 3050B	1,6010D	AB
Cadmium, Total	0.344	J	mg/kg	0.530	0.052	1	08/15/18 13:40	08/15/18 17:06	EPA 3050B	1,6010D	AB
Chromium, Total	11.1		mg/kg	0.530	0.051	1	08/15/18 13:40	08/15/18 17:06	EPA 3050B	1,6010D	AB
Copper, Total	17.5		mg/kg	0.530	0.137	1	08/15/18 13:40	08/15/18 17:06	EPA 3050B	1,6010D	AB
Lead, Total	152		mg/kg	2.65	0.142	1	08/15/18 13:40	08/15/18 17:06	EPA 3050B	1,6010D	AB
Manganese, Total	335		mg/kg	0.530	0.084	1	08/15/18 13:40	08/15/18 17:06	EPA 3050B	1,6010D	AB
Mercury, Total	0.655		mg/kg	0.086	0.018	1	08/15/18 05:00	08/15/18 20:35	EPA 7471B	1,7471B	EA
Nickel, Total	11.9		mg/kg	1.32	0.128	1	08/15/18 13:40	08/15/18 17:06	EPA 3050B	1,6010D	AB
Selenium, Total	0.408	J	mg/kg	1.06	0.137	1	08/15/18 13:40	08/15/18 17:06	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.530	0.150	1	08/15/18 13:40	08/15/18 17:06	EPA 3050B	1,6010D	AB
Zinc, Total	61.2		mg/kg	2.65	0.155	1	08/15/18 13:40	08/15/18 17:06	EPA 3050B	1,6010D	AB



Project Name: MAIN & DODGE**Lab Number:** L1831086**Project Number:** 0371-018-001**Report Date:** 08/16/18**SAMPLE RESULTS**

Lab ID: L1831086-03

Date Collected: 08/08/18 10:38

Client ID: TP-4 (0.5-3.5)

Date Received: 08/09/18

Sample Location: BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 75%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	9.15		mg/kg	0.507	0.105	1	08/15/18 13:40	08/15/18 17:11	EPA 3050B	1,6010D	AB
Barium, Total	66.4		mg/kg	0.507	0.088	1	08/15/18 13:40	08/15/18 17:11	EPA 3050B	1,6010D	AB
Beryllium, Total	0.167	J	mg/kg	0.254	0.017	1	08/15/18 13:40	08/15/18 17:11	EPA 3050B	1,6010D	AB
Cadmium, Total	1.03		mg/kg	0.507	0.050	1	08/15/18 13:40	08/15/18 17:11	EPA 3050B	1,6010D	AB
Chromium, Total	31.6		mg/kg	0.507	0.049	1	08/15/18 13:40	08/15/18 17:11	EPA 3050B	1,6010D	AB
Copper, Total	98.4		mg/kg	0.507	0.131	1	08/15/18 13:40	08/15/18 17:11	EPA 3050B	1,6010D	AB
Lead, Total	373		mg/kg	2.54	0.136	1	08/15/18 13:40	08/15/18 17:11	EPA 3050B	1,6010D	AB
Manganese, Total	236		mg/kg	0.507	0.081	1	08/15/18 13:40	08/15/18 17:11	EPA 3050B	1,6010D	AB
Mercury, Total	0.127		mg/kg	0.085	0.018	1	08/15/18 05:00	08/15/18 20:37	EPA 7471B	1,7471B	EA
Nickel, Total	630		mg/kg	1.27	0.123	1	08/15/18 13:40	08/15/18 17:11	EPA 3050B	1,6010D	AB
Selenium, Total	0.771	J	mg/kg	1.01	0.131	1	08/15/18 13:40	08/15/18 17:11	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.507	0.143	1	08/15/18 13:40	08/15/18 17:11	EPA 3050B	1,6010D	AB
Zinc, Total	979		mg/kg	2.54	0.148	1	08/15/18 13:40	08/15/18 17:11	EPA 3050B	1,6010D	AB



Project Name: MAIN & DODGE

Lab Number: L1831086

Project Number: 0371-018-001

Report Date: 08/16/18

SAMPLE RESULTS

Lab ID: L1831086-05

Date Collected: 08/08/18 11:46

Client ID: TP-8 (1-4)

Date Received: 08/09/18

Sample Location: BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	3.94		mg/kg	0.425	0.089	1	08/15/18 13:40	08/15/18 18:31	EPA 3050B	1,6010D	AB
Barium, Total	85.0		mg/kg	0.425	0.074	1	08/15/18 13:40	08/15/18 18:31	EPA 3050B	1,6010D	AB
Beryllium, Total	0.383		mg/kg	0.213	0.014	1	08/15/18 13:40	08/15/18 18:31	EPA 3050B	1,6010D	AB
Cadmium, Total	0.413	J	mg/kg	0.425	0.042	1	08/15/18 13:40	08/15/18 18:31	EPA 3050B	1,6010D	AB
Chromium, Total	9.77		mg/kg	0.425	0.041	1	08/15/18 13:40	08/15/18 18:31	EPA 3050B	1,6010D	AB
Copper, Total	18.1		mg/kg	0.425	0.110	1	08/15/18 13:40	08/15/18 18:31	EPA 3050B	1,6010D	AB
Lead, Total	105		mg/kg	2.13	0.114	1	08/15/18 13:40	08/15/18 18:31	EPA 3050B	1,6010D	AB
Manganese, Total	241		mg/kg	0.425	0.068	1	08/15/18 13:40	08/15/18 18:31	EPA 3050B	1,6010D	AB
Mercury, Total	0.134		mg/kg	0.071	0.015	1	08/15/18 05:00	08/15/18 20:38	EPA 7471B	1,7471B	EA
Nickel, Total	10.3		mg/kg	1.06	0.103	1	08/15/18 13:40	08/15/18 18:31	EPA 3050B	1,6010D	AB
Selenium, Total	0.557	J	mg/kg	0.851	0.110	1	08/15/18 13:40	08/15/18 18:31	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.425	0.120	1	08/15/18 13:40	08/15/18 18:31	EPA 3050B	1,6010D	AB
Zinc, Total	78.2		mg/kg	2.13	0.125	1	08/15/18 13:40	08/15/18 18:31	EPA 3050B	1,6010D	AB



Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1831086
Report Date: 08/16/18

SAMPLE RESULTS

Lab ID: L1831086-07
 Client ID: TP-12 (1-3)
 Sample Location: BUFFALO, NY

Date Collected: 08/08/18 14:15
 Date Received: 08/09/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	10.9		mg/kg	0.429	0.089	1	08/15/18 13:40	08/15/18 19:37	EPA 3050B	1,6010D	AB
Barium, Total	62.6		mg/kg	0.429	0.075	1	08/15/18 13:40	08/15/18 19:37	EPA 3050B	1,6010D	AB
Beryllium, Total	0.322		mg/kg	0.214	0.014	1	08/15/18 13:40	08/15/18 19:37	EPA 3050B	1,6010D	AB
Cadmium, Total	2.11		mg/kg	0.429	0.042	1	08/15/18 13:40	08/15/18 19:37	EPA 3050B	1,6010D	AB
Chromium, Total	13.5		mg/kg	0.429	0.041	1	08/15/18 13:40	08/15/18 19:37	EPA 3050B	1,6010D	AB
Copper, Total	55.3		mg/kg	0.429	0.111	1	08/15/18 13:40	08/15/18 19:37	EPA 3050B	1,6010D	AB
Lead, Total	318		mg/kg	2.14	0.115	1	08/15/18 13:40	08/15/18 19:37	EPA 3050B	1,6010D	AB
Manganese, Total	332		mg/kg	0.429	0.068	1	08/15/18 13:40	08/15/18 19:37	EPA 3050B	1,6010D	AB
Mercury, Total	0.254		mg/kg	0.069	0.015	1	08/15/18 05:00	08/15/18 20:40	EPA 7471B	1,7471B	EA
Nickel, Total	16.5		mg/kg	1.07	0.104	1	08/15/18 13:40	08/15/18 19:37	EPA 3050B	1,6010D	AB
Selenium, Total	1.62		mg/kg	0.858	0.111	1	08/15/18 13:40	08/15/18 19:37	EPA 3050B	1,6010D	AB
Silver, Total	0.146	J	mg/kg	0.429	0.121	1	08/15/18 13:40	08/15/18 19:37	EPA 3050B	1,6010D	AB
Zinc, Total	263		mg/kg	2.14	0.126	1	08/15/18 13:40	08/15/18 19:37	EPA 3050B	1,6010D	AB



Project Name: MAIN & DODGE

Lab Number: L1831086

Project Number: 0371-018-001

Report Date: 08/16/18

SAMPLE RESULTS

Lab ID: L1831086-08

Date Collected: 08/08/18 15:40

Client ID: TP-14 (3-5)

Date Received: 08/09/18

Sample Location: BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 76%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	8.09		mg/kg	0.502	0.104	1	08/15/18 13:40	08/15/18 19:42	EPA 3050B	1,6010D	AB
Barium, Total	115		mg/kg	0.502	0.087	1	08/15/18 13:40	08/15/18 19:42	EPA 3050B	1,6010D	AB
Beryllium, Total	0.376		mg/kg	0.251	0.017	1	08/15/18 13:40	08/15/18 19:42	EPA 3050B	1,6010D	AB
Cadmium, Total	0.838		mg/kg	0.502	0.049	1	08/15/18 13:40	08/15/18 19:42	EPA 3050B	1,6010D	AB
Chromium, Total	12.5		mg/kg	0.502	0.048	1	08/15/18 13:40	08/15/18 19:42	EPA 3050B	1,6010D	AB
Copper, Total	49.2		mg/kg	0.502	0.129	1	08/15/18 13:40	08/15/18 19:42	EPA 3050B	1,6010D	AB
Lead, Total	267		mg/kg	2.51	0.134	1	08/15/18 13:40	08/15/18 19:42	EPA 3050B	1,6010D	AB
Manganese, Total	572		mg/kg	0.502	0.080	1	08/15/18 13:40	08/15/18 19:42	EPA 3050B	1,6010D	AB
Mercury, Total	0.387		mg/kg	0.082	0.017	1	08/15/18 05:00	08/15/18 20:42	EPA 7471B	1,7471B	EA
Nickel, Total	16.4		mg/kg	1.25	0.121	1	08/15/18 13:40	08/15/18 19:42	EPA 3050B	1,6010D	AB
Selenium, Total	1.10		mg/kg	1.00	0.129	1	08/15/18 13:40	08/15/18 19:42	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.502	0.142	1	08/15/18 13:40	08/15/18 19:42	EPA 3050B	1,6010D	AB
Zinc, Total	358		mg/kg	2.51	0.147	1	08/15/18 13:40	08/15/18 19:42	EPA 3050B	1,6010D	AB

Project Name: MAIN & DODGE

Lab Number: L1831086

Project Number: 0371-018-001

Report Date: 08/16/18

SAMPLE RESULTS

Lab ID: L1831086-09

Date Collected: 08/08/18 15:30

Client ID: SS-1

Date Received: 08/09/18

Sample Location: BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 73%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	3.75		mg/kg	0.525	0.109	1	08/15/18 13:40	08/15/18 19:47	EPA 3050B	1,6010D	AB
Barium, Total	44.0		mg/kg	0.525	0.091	1	08/15/18 13:40	08/15/18 19:47	EPA 3050B	1,6010D	AB
Beryllium, Total	0.352		mg/kg	0.263	0.017	1	08/15/18 13:40	08/15/18 19:47	EPA 3050B	1,6010D	AB
Cadmium, Total	0.546		mg/kg	0.525	0.052	1	08/15/18 13:40	08/15/18 19:47	EPA 3050B	1,6010D	AB
Chromium, Total	12.5		mg/kg	0.525	0.050	1	08/15/18 13:40	08/15/18 19:47	EPA 3050B	1,6010D	AB
Copper, Total	21.5		mg/kg	0.525	0.136	1	08/15/18 13:40	08/15/18 19:47	EPA 3050B	1,6010D	AB
Lead, Total	39.5		mg/kg	2.63	0.141	1	08/15/18 13:40	08/15/18 19:47	EPA 3050B	1,6010D	AB
Manganese, Total	314		mg/kg	0.525	0.084	1	08/15/18 13:40	08/15/18 19:47	EPA 3050B	1,6010D	AB
Mercury, Total	0.103		mg/kg	0.086	0.018	1	08/15/18 05:00	08/15/18 20:44	EPA 7471B	1,7471B	EA
Nickel, Total	9.82		mg/kg	1.31	0.127	1	08/15/18 13:40	08/15/18 19:47	EPA 3050B	1,6010D	AB
Selenium, Total	0.578	J	mg/kg	1.05	0.136	1	08/15/18 13:40	08/15/18 19:47	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.525	0.149	1	08/15/18 13:40	08/15/18 19:47	EPA 3050B	1,6010D	AB
Zinc, Total	81.5		mg/kg	2.63	0.154	1	08/15/18 13:40	08/15/18 19:47	EPA 3050B	1,6010D	AB



Project Name: MAIN & DODGE

Lab Number: L1831086

Project Number: 0371-018-001

Report Date: 08/16/18

SAMPLE RESULTS

Lab ID: L1831086-10

Date Collected: 08/08/18 15:55

Client ID: SS-2

Date Received: 08/09/18

Sample Location: BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 63%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	5.28		mg/kg	0.626	0.130	1	08/15/18 13:40	08/15/18 19:52	EPA 3050B	1,6010D	AB
Barium, Total	79.6		mg/kg	0.626	0.109	1	08/15/18 13:40	08/15/18 19:52	EPA 3050B	1,6010D	AB
Beryllium, Total	1.10		mg/kg	0.313	0.021	1	08/15/18 13:40	08/15/18 19:52	EPA 3050B	1,6010D	AB
Cadmium, Total	0.845		mg/kg	0.626	0.061	1	08/15/18 13:40	08/15/18 19:52	EPA 3050B	1,6010D	AB
Chromium, Total	10.2		mg/kg	0.626	0.060	1	08/15/18 13:40	08/15/18 19:52	EPA 3050B	1,6010D	AB
Copper, Total	27.1		mg/kg	0.626	0.161	1	08/15/18 13:40	08/15/18 19:52	EPA 3050B	1,6010D	AB
Lead, Total	144		mg/kg	3.13	0.168	1	08/15/18 13:40	08/15/18 19:52	EPA 3050B	1,6010D	AB
Manganese, Total	423		mg/kg	0.626	0.100	1	08/15/18 13:40	08/15/18 19:52	EPA 3050B	1,6010D	AB
Mercury, Total	0.304		mg/kg	0.10	0.021	1	08/15/18 05:00	08/15/18 20:46	EPA 7471B	1,7471B	EA
Nickel, Total	10.9		mg/kg	1.56	0.151	1	08/15/18 13:40	08/15/18 19:52	EPA 3050B	1,6010D	AB
Selenium, Total	1.13	J	mg/kg	1.25	0.161	1	08/15/18 13:40	08/15/18 19:52	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.626	0.177	1	08/15/18 13:40	08/15/18 19:52	EPA 3050B	1,6010D	AB
Zinc, Total	161		mg/kg	3.13	0.183	1	08/15/18 13:40	08/15/18 19:52	EPA 3050B	1,6010D	AB



Project Name: MAIN & DODGE

Lab Number: L1831086

Project Number: 0371-018-001

Report Date: 08/16/18

SAMPLE RESULTS

Lab ID: L1831086-11
 Client ID: SS-3
 Sample Location: BUFFALO, NY

Date Collected: 08/08/18 16:00
 Date Received: 08/09/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Percent Solids: 61%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	2.36		mg/kg	0.634	0.132	1	08/15/18 13:40	08/15/18 19:57	EPA 3050B	1,6010D	AB
Barium, Total	67.4		mg/kg	0.634	0.110	1	08/15/18 13:40	08/15/18 19:57	EPA 3050B	1,6010D	AB
Beryllium, Total	1.70		mg/kg	0.317	0.021	1	08/15/18 13:40	08/15/18 19:57	EPA 3050B	1,6010D	AB
Cadmium, Total	0.932		mg/kg	0.634	0.062	1	08/15/18 13:40	08/15/18 19:57	EPA 3050B	1,6010D	AB
Chromium, Total	17.7		mg/kg	0.634	0.061	1	08/15/18 13:40	08/15/18 19:57	EPA 3050B	1,6010D	AB
Copper, Total	23.2		mg/kg	0.634	0.163	1	08/15/18 13:40	08/15/18 19:57	EPA 3050B	1,6010D	AB
Lead, Total	100		mg/kg	3.17	0.170	1	08/15/18 13:40	08/15/18 19:57	EPA 3050B	1,6010D	AB
Manganese, Total	496		mg/kg	0.634	0.101	1	08/15/18 13:40	08/15/18 19:57	EPA 3050B	1,6010D	AB
Mercury, Total	0.074	J	mg/kg	0.103	0.022	1	08/15/18 05:00	08/15/18 20:51	EPA 7471B	1,7471B	EA
Nickel, Total	9.31		mg/kg	1.58	0.153	1	08/15/18 13:40	08/15/18 19:57	EPA 3050B	1,6010D	AB
Selenium, Total	1.30		mg/kg	1.27	0.163	1	08/15/18 13:40	08/15/18 19:57	EPA 3050B	1,6010D	AB
Silver, Total	0.418	J	mg/kg	0.634	0.179	1	08/15/18 13:40	08/15/18 19:57	EPA 3050B	1,6010D	AB
Zinc, Total	115		mg/kg	3.17	0.186	1	08/15/18 13:40	08/15/18 19:57	EPA 3050B	1,6010D	AB



Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1831086
Report Date: 08/16/18

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01,03,05,07-11 Batch: WG1146557-1									
Mercury, Total	ND	mg/kg	0.083	0.018	1	08/15/18 05:00	08/15/18 16:28	1,7471B	MG

Prep Information

Digestion Method: EPA 7471B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01,03,05,07-11 Batch: WG1146818-1									
Arsenic, Total	ND	mg/kg	0.400	0.083	1	08/15/18 13:40	08/15/18 16:36	1,6010D	AB
Barium, Total	ND	mg/kg	0.400	0.070	1	08/15/18 13:40	08/15/18 16:36	1,6010D	AB
Beryllium, Total	ND	mg/kg	0.200	0.013	1	08/15/18 13:40	08/15/18 16:36	1,6010D	AB
Cadmium, Total	ND	mg/kg	0.400	0.039	1	08/15/18 13:40	08/15/18 16:36	1,6010D	AB
Chromium, Total	ND	mg/kg	0.400	0.038	1	08/15/18 13:40	08/15/18 16:36	1,6010D	AB
Copper, Total	ND	mg/kg	0.400	0.103	1	08/15/18 13:40	08/15/18 16:36	1,6010D	AB
Lead, Total	ND	mg/kg	2.00	0.107	1	08/15/18 13:40	08/15/18 16:36	1,6010D	AB
Manganese, Total	ND	mg/kg	0.400	0.064	1	08/15/18 13:40	08/15/18 16:36	1,6010D	AB
Nickel, Total	ND	mg/kg	1.00	0.097	1	08/15/18 13:40	08/15/18 16:36	1,6010D	AB
Selenium, Total	ND	mg/kg	0.800	0.103	1	08/15/18 13:40	08/15/18 16:36	1,6010D	AB
Silver, Total	ND	mg/kg	0.400	0.113	1	08/15/18 13:40	08/15/18 16:36	1,6010D	AB
Zinc, Total	ND	mg/kg	2.00	0.117	1	08/15/18 13:40	08/15/18 16:36	1,6010D	AB

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & DODGE

Project Number: 0371-018-001

Lab Number: L1831086

Report Date: 08/16/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01,03,05,07-11 Batch: WG1146557-2 SRM Lot Number: D098-540								
Mercury, Total	90		-		50-149	-		
Total Metals - Mansfield Lab Associated sample(s): 01,03,05,07-11 Batch: WG1146818-2 SRM Lot Number: D098-540								
Arsenic, Total	99		-		83-117	-		
Barium, Total	97		-		82-118	-		
Beryllium, Total	94		-		83-117	-		
Cadmium, Total	94		-		82-117	-		
Chromium, Total	101		-		83-119	-		
Copper, Total	99		-		84-116	-		
Lead, Total	96		-		82-117	-		
Manganese, Total	93		-		82-118	-		
Nickel, Total	94		-		82-117	-		
Selenium, Total	99		-		78-121	-		
Silver, Total	103		-		80-120	-		
Zinc, Total	97		-		81-119	-		

Matrix Spike Analysis Batch Quality Control

Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1831086
Report Date: 08/16/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01,03,05,07-11 QC Batch ID: WG1146557-3 QC Sample: L1830435-03 Client ID: MS Sample												
Mercury, Total	0.067J	0.145	0.236	163	Q	-	-		80-120	-		20
Total Metals - Mansfield Lab Associated sample(s): 01,03,05,07-11 QC Batch ID: WG1146818-3 WG1146818-4 QC Sample: L1831151-01 Client ID: MS Sample												
Arsenic, Total	5.66	11.2	14.5	79		14.8	83		75-125	2		20
Barium, Total	124.	186	240	62	Q	255	72	Q	75-125	6		20
Beryllium, Total	0.325J	4.66	4.38	94		4.27	93		75-125	3		20
Cadmium, Total	1.09	4.76	5.40	90		5.53	95		75-125	2		20
Chromium, Total	12.9	18.6	28.8	85		40.6	151	Q	75-125	34	Q	20
Copper, Total	85.7	23.3	81.7	0	Q	96.7	48	Q	75-125	17		20
Lead, Total	341.	47.6	300	0	Q	363	47	Q	75-125	19		20
Manganese, Total	199.	46.6	233	73	Q	195	0	Q	75-125	18		20
Nickel, Total	17.5	46.6	56.0	82		59.7	92		75-125	6		20
Selenium, Total	1.19J	11.2	12.1	108		11.7	106		75-125	3		20
Silver, Total	ND	28	27.2	97		26.6	97		75-125	2		20
Zinc, Total	164.	46.6	177	28	Q	212	105		75-125	18		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: MAIN & DODGE

Project Number: 0371-018-001

Lab Number: L1831086

Report Date: 08/16/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01,03,05,07-11 QC Batch ID: WG1146557-4 QC Sample: L1830435-03 Client ID: DUP Sample						
Mercury, Total	0.067J	0.069J	mg/kg	NC		20

INORGANICS & MISCELLANEOUS

Project Name: MAIN & DODGE

Lab Number: L1831086

Project Number: 0371-018-001

Report Date: 08/16/18

SAMPLE RESULTS

Lab ID: L1831086-01

Date Collected: 08/08/18 08:20

Client ID: TP-1 (4-6)

Date Received: 08/09/18

Sample Location: BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	73.6		%	0.100	NA	1	-	08/13/18 12:41	121,2540G	JK
Cyanide, Total	ND		mg/kg	1.3	0.27	1	08/11/18 15:00	08/13/18 10:59	1,9010C/9012B	LH



Project Name: MAIN & DODGE

Lab Number: L1831086

Project Number: 0371-018-001

Report Date: 08/16/18

SAMPLE RESULTS

Lab ID: L1831086-03

Date Collected: 08/08/18 10:38

Client ID: TP-4 (0.5-3.5)

Date Received: 08/09/18

Sample Location: BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	75.1		%	0.100	NA	1	-	08/13/18 12:41	121,2540G	JK
Cyanide, Total	ND		mg/kg	1.3	0.27	1	08/11/18 15:00	08/13/18 11:04	1,9010C/9012B	LH



Project Name: MAIN & DODGE

Lab Number: L1831086

Project Number: 0371-018-001

Report Date: 08/16/18

SAMPLE RESULTS

Lab ID: L1831086-05

Date Collected: 08/08/18 11:46

Client ID: TP-8 (1-4)

Date Received: 08/09/18

Sample Location: BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.9		%	0.100	NA	1	-	08/13/18 12:41	121,2540G	JK
Cyanide, Total	ND		mg/kg	1.1	0.23	1	08/11/18 15:00	08/13/18 11:05	1,9010C/9012B	LH



Project Name: MAIN & DODGE

Lab Number: L1831086

Project Number: 0371-018-001

Report Date: 08/16/18

SAMPLE RESULTS

Lab ID: L1831086-07

Date Collected: 08/08/18 14:15

Client ID: TP-12 (1-3)

Date Received: 08/09/18

Sample Location: BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	91.7		%	0.100	NA	1	-	08/13/18 12:41	121,2540G	JK
Cyanide, Total	0.84	J	mg/kg	1.1	0.23	1	08/11/18 15:00	08/13/18 11:06	1,9010C/9012B	LH



Project Name: MAIN & DODGE

Project Number: 0371-018-001

Lab Number: L1831086

Report Date: 08/16/18

SAMPLE RESULTS

Lab ID: L1831086-08

Client ID: TP-14 (3-5)

Sample Location: BUFFALO, NY

Date Collected: 08/08/18 15:40

Date Received: 08/09/18

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	76.0		%	0.100	NA	1	-	08/13/18 12:41	121,2540G	JK
Cyanide, Total	ND		mg/kg	1.3	0.28	1	08/11/18 15:00	08/13/18 11:07	1,9010C/9012B	LH



Project Name: MAIN & DODGE

Lab Number: L1831086

Project Number: 0371-018-001

Report Date: 08/16/18

SAMPLE RESULTS

Lab ID: L1831086-09

Date Collected: 08/08/18 15:30

Client ID: SS-1

Date Received: 08/09/18

Sample Location: BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	73.0		%	0.100	NA	1	-	08/13/18 12:41	121,2540G	JK
Cyanide, Total	ND		mg/kg	1.3	0.28	1	08/11/18 15:00	08/13/18 11:08	1,9010C/9012B	LH



Project Name: MAIN & DODGE

Project Number: 0371-018-001

Lab Number: L1831086

Report Date: 08/16/18

SAMPLE RESULTS

Lab ID: L1831086-10

Client ID: SS-2

Sample Location: BUFFALO, NY

Date Collected: 08/08/18 15:55

Date Received: 08/09/18

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	62.9		%	0.100	NA	1	-	08/13/18 12:41	121,2540G	JK
Cyanide, Total	ND		mg/kg	1.5	0.32	1	08/13/18 11:15	08/13/18 15:51	1,9010C/9012B	LH



Project Name: MAIN & DODGE

Lab Number: L1831086

Project Number: 0371-018-001

Report Date: 08/16/18

SAMPLE RESULTS

Lab ID: L1831086-11

Date Collected: 08/08/18 16:00

Client ID: SS-3

Date Received: 08/09/18

Sample Location: BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	60.6		%	0.100	NA	1	-	08/13/18 12:41	121,2540G	JK
Cyanide, Total	0.73	J	mg/kg	1.6	0.34	1	08/13/18 11:15	08/13/18 15:52	1,9010C/9012B	LH



Project Name: MAIN & DODGE

Lab Number: L1831086

Project Number: 0371-018-001

Report Date: 08/16/18

Method Blank Analysis
Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01,03,05,07-09 Batch: WG1145485-1									
Cyanide, Total	ND	mg/kg	0.97	0.20	1	08/11/18 15:00	08/13/18 10:55	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 10-11 Batch: WG1145685-1									
Cyanide, Total	ND	mg/kg	0.98	0.21	1	08/13/18 11:15	08/13/18 15:38	1,9010C/9012B	LH

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & DODGE

Project Number: 0371-018-001

Lab Number: L1831086

Report Date: 08/16/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01,03,05,07-09 Batch: WG1145485-2 WG1145485-3								
Cyanide, Total	93		60	Q	80-120	43	Q	35
General Chemistry - Westborough Lab Associated sample(s): 10-11 Batch: WG1145685-2 WG1145685-3								
Cyanide, Total	58	Q	79	Q	80-120	35		35

Matrix Spike Analysis Batch Quality Control

Project Name: MAIN & DODGE

Lab Number: L1831086

Project Number: 0371-018-001

Report Date: 08/16/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01,03,05,07-09 QC Batch ID: WG1145485-4 WG1145485-5 QC Sample: L1831086-01 Client ID: TP-1 (4-6)												
Cyanide, Total	ND	13	6.0	47	Q	12	90		75-125	67	Q	35
General Chemistry - Westborough Lab Associated sample(s): 10-11 QC Batch ID: WG1145685-4 WG1145685-5 QC Sample: L1830864-53 Client ID: MS Sample												
Cyanide, Total	ND	11	7.9	69	Q	11	100		75-125	33		35

Lab Duplicate Analysis
Batch Quality Control

Project Name: MAIN & DODGE

Project Number: 0371-018-001

Lab Number: L1831086

Report Date: 08/16/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01,03,05,07-11 QC Batch ID: WG1145903-1 QC Sample: L1831041-03 Client ID: DUP Sample						
Solids, Total	90.6	90.3	%	0		20



Project Name: MAIN & DODGE**Lab Number:** L1831086**Project Number:** 0371-018-001**Report Date:** 08/16/18**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1831086-01A	Glass 250ml/8oz unpreserved	A	NA		4.0	Y	Absent		NYTCL-8270(14),TCN-9010(14),TS(7)
L1831086-01X	Glass 60ml unpreserved split	A	NA		4.0	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-TI(180),CD-TI(180)
L1831086-02A	Glass 250ml/8oz unpreserved	A	NA		4.0	Y	Absent		HOLD-8270(14),HOLD-METAL(180)
L1831086-03A	Glass 250ml/8oz unpreserved	A	NA		4.0	Y	Absent		NYTCL-8270(14),TCN-9010(14),TS(7)
L1831086-03X	Glass 60ml unpreserved split	A	NA		4.0	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-TI(180),CD-TI(180)
L1831086-04A	Glass 250ml/8oz unpreserved	A	NA		4.0	Y	Absent		HOLD-8270(14),HOLD-METAL(180)
L1831086-05A	Glass 250ml/8oz unpreserved	A	NA		4.0	Y	Absent		NYTCL-8270(14),TCN-9010(14),TS(7)
L1831086-05X	Glass 60ml unpreserved split	A	NA		4.0	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-TI(180),CD-TI(180)
L1831086-06A	Glass 250ml/8oz unpreserved	A	NA		4.0	Y	Absent		HOLD-8270(14),HOLD-METAL(180)
L1831086-07A	Glass 250ml/8oz unpreserved	A	NA		4.0	Y	Absent		NYTCL-8270(14),TCN-9010(14),TS(7)
L1831086-07X	Glass 60ml unpreserved split	A	NA		4.0	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-TI(180),CD-TI(180)
L1831086-08A	Glass 250ml/8oz unpreserved	A	NA		4.0	Y	Absent		NYTCL-8270(14),TCN-9010(14),TS(7)
L1831086-08X	Glass 60ml unpreserved split	A	NA		4.0	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-TI(180),CD-TI(180)
L1831086-09A	Glass 250ml/8oz unpreserved	A	NA		4.0	Y	Absent		NYTCL-8270(14),TCN-9010(14),TS(7)
L1831086-09X	Glass 60ml unpreserved split	A	NA		4.0	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-TI(180),CD-TI(180)

Project Name: MAIN & DODGE
Project Number: 0371-018-001

Serial_No:08161815:20
Lab Number: L1831086
Report Date: 08/16/18

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1831086-10A	Glass 250ml/8oz unpreserved	A	NA		4.0	Y	Absent		NYTCL-8270(14),TCN-9010(14),TS(7)
L1831086-10X	Glass 60ml unpreserved split	A	NA		4.0	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-TI(180),CD-TI(180)
L1831086-11A	Glass 250ml/8oz unpreserved	A	NA		4.0	Y	Absent		NYTCL-8270(14),TCN-9010(14),TS(7)
L1831086-11X	Glass 60ml unpreserved split	A	NA		4.0	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-TI(180),CD-TI(180)

*Values in parentheses indicate holding time in days



Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1831086
Report Date: 08/16/18

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: DU Report with 'J' Qualifiers



Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1831086
Report Date: 08/16/18

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers



Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1831086
Report Date: 08/16/18

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 300: DW: Bromide

EPA 6860: SCM: Perchlorate

EPA 9010: NPW and SCM: Amenable Cyanide Distillation

SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **EPA 351.1, SM4500P-E, SM4500P-B, E,**

SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.

EPA 624: Volatile Halocarbons & Aromatics,

EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, SM9222D.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Be, Cd, Cr, Cu, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.


EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

NEW YORK CHAIN OF CUSTODY		Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105		Page 1 of 2		Date Rec'd in Lab 8/10/18		ALPHA Job # L1831086																																																																																																																																																																					
		Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193		Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288		Project Information Project Name: Main + Dodge Project Location: Buffalo NY Project # 0371-018-001		Deliverables <input type="checkbox"/> ASP-A <input type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other		Billing Information <input type="checkbox"/> Same as Client Info PO #																																																																																																																																																																			
Client Information Client: Twinkey Environmental Address: 2558 Anthony Turnpike Lackawanna NY 14218 Phone: (716) 818 8558 Fax: (716) 856-0583 Email: T.Belmont@twinkeyllc.com		(Use Project name as Project #) <input checked="" type="checkbox"/> Project Manager: Chris Barton ALPHAQuote #:		Regulatory Requirement <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:																																																																																																																																																																							
Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		These samples have been previously analyzed by Alpha <input type="checkbox"/>		ANALYSIS		Sample Filtration <input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below)		Total Bottles																																																																																																																																																																					
Other project specific requirements/comments:		Please specify Metals or TAL.		8270 SVOC BN ONLY Part 375 METALS		Sample Specific Comments																																																																																																																																																																							
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">ALPHA Lab ID (Lab Use Only)</th> <th rowspan="2">Sample ID</th> <th colspan="2">Collection</th> <th rowspan="2">Sample Matrix</th> <th rowspan="2">Sampler's Initials</th> <th colspan="2"></th> <th colspan="2"></th> <th colspan="2"></th> <th colspan="2"></th> </tr> <tr> <th>Date</th> <th>Time</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>31086-01</td> <td>TP-1 (4-6)</td> <td>8/8/18</td> <td>820</td> <td>Soil</td> <td>TAB</td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> </tr> <tr> <td>02</td> <td>TP-3 (3.5-5.5)</td> <td></td> <td>955</td> <td></td> <td></td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Hold</td> </tr> <tr> <td>03</td> <td>TP-4 (0.5-3.5)</td> <td></td> <td>1038</td> <td></td> <td></td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> </tr> <tr> <td>04</td> <td>TP-6 (0-1.5)</td> <td></td> <td>1053</td> <td></td> <td></td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Hold</td> </tr> <tr> <td>05</td> <td>TP-8 (1-4)</td> <td></td> <td>1146</td> <td></td> <td></td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> </tr> <tr> <td>06</td> <td>TP-9 (0.5-2.5)</td> <td></td> <td>1230</td> <td></td> <td></td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Hold</td> </tr> <tr> <td>07</td> <td>TP-12 (1-3)</td> <td></td> <td>1415</td> <td></td> <td></td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> </tr> <tr> <td>08</td> <td>TP-14 (3-5)</td> <td></td> <td>1540</td> <td></td> <td></td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> </tr> <tr> <td>09</td> <td>SS-1</td> <td></td> <td>1530</td> <td></td> <td></td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> </tr> <tr> <td>10</td> <td>SS-2</td> <td></td> <td>1555</td> <td></td> <td></td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> </tr> </tbody> </table>		ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials									Date	Time									31086-01	TP-1 (4-6)	8/8/18	820	Soil	TAB	X	X						1	02	TP-3 (3.5-5.5)		955			X	X						Hold	03	TP-4 (0.5-3.5)		1038			X	X						1	04	TP-6 (0-1.5)		1053			X	X						Hold	05	TP-8 (1-4)		1146			X	X						1	06	TP-9 (0.5-2.5)		1230			X	X						Hold	07	TP-12 (1-3)		1415			X	X						1	08	TP-14 (3-5)		1540			X	X						1	09	SS-1		1530			X	X						1	10	SS-2		1555			X	X						1	Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type A A		Preservative A A		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)	
ALPHA Lab ID (Lab Use Only)	Sample ID			Collection				Sample Matrix	Sampler's Initials																																																																																																																																																																				
		Date	Time																																																																																																																																																																										
31086-01	TP-1 (4-6)	8/8/18	820	Soil	TAB	X	X						1																																																																																																																																																																
02	TP-3 (3.5-5.5)		955			X	X						Hold																																																																																																																																																																
03	TP-4 (0.5-3.5)		1038			X	X						1																																																																																																																																																																
04	TP-6 (0-1.5)		1053			X	X						Hold																																																																																																																																																																
05	TP-8 (1-4)		1146			X	X						1																																																																																																																																																																
06	TP-9 (0.5-2.5)		1230			X	X						Hold																																																																																																																																																																
07	TP-12 (1-3)		1415			X	X						1																																																																																																																																																																
08	TP-14 (3-5)		1540			X	X						1																																																																																																																																																																
09	SS-1		1530			X	X						1																																																																																																																																																																
10	SS-2		1555			X	X						1																																																																																																																																																																
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Relinquished By: [Signature]		Date/Time 8/9/18 02:30		Received By: [Signature]		Date/Time 8/9/18 9:15																																																																																																																																																																			

 NEW YORK CHAIN OF CUSTODY	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page 2 of 2	Date Rec'd in Lab 8/10/18	ALPHA Job # L183 086		
	Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288				
Project Information Project Name: Main + Dodge Project Location: Buffalo NY Project # 0371-018-001 (Use Project name as Project #) <input checked="" type="checkbox"/>		Deliverables <input type="checkbox"/> ASP-A <input type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other		Billing Information <input type="checkbox"/> Same as Client Info PO #		
Client Information Client: Junkley Environmental Address: 2555 Hamburg Turnpike Lackawanna NY 14215 Phone: (716) 818-8355 Fax: (716) 856-0583 Email: JB@junkley.com		Regulatory Requirement <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:		
Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:						
These samples have been previously analyzed by Alpha <input type="checkbox"/> Other project specific requirements/comments:		ANALYSIS		Sample Filtration <input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below)		
Please specify Metals or TAL.		8220 1320 ONLY Part 375 Metals				
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date Time	Sample Matrix	Sampler's Initials	Sample Specific Comments	Total Bottles 1
31086 - 11	SS-3	8/8/18 1600	Soil	TA13	X X	
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other	Container Code P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle	Westboro: Certification No: MA935 Mansfield: Certification No: MA015	Container Type Preservative	Relinquished By: Date/Time	Received By: Date/Time	Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)
				Jack Stony all 8/9/18 0730	Jack Stony all 8/9/18 15:05	



ANALYTICAL REPORT

Lab Number:	L1833279
Client:	Turnkey Environmental Restoration, LLC 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Chris Boron
Phone:	(716) 856-0599
Project Name:	MAIN & DODGE
Project Number:	0371-018-001
Report Date:	08/30/18

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1833279
Report Date: 08/30/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1833279-01	TP-15 5-6'	SOIL	BUFFALO, NY	08/23/18 08:00	08/23/18
L1833279-02	TP-15 6-7'	SOIL	BUFFALO, NY	08/23/18 08:10	08/23/18
L1833279-03	TP-16 3-4'	SOIL	BUFFALO, NY	08/23/18 09:00	08/23/18
L1833279-04	TP-18 3-4'	SOIL	BUFFALO, NY	08/23/18 10:00	08/23/18

Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1833279
Report Date: 08/30/18

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1833279
Report Date: 08/30/18

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

The client IDs were specified by the client.

Cyanide, Total

The WG1150181-2 LCS recovery (74%), associated with L1833279-02, -03 and -04, is outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

WG1150181: A Matrix Spike and Matrix Spike Duplicate were prepared with the sample batch, however, the native sample was not available for reporting; therefore, the Matrix Spike and Matrix Spike Duplicate results could not be reported.

Hexavalent Chromium

The WG1150485-4 Insoluble MS recovery (67%), performed on L1833279-02, is below the acceptance criteria. The Soluble MS recovery (0%) was also below criteria. This has been attributed to matrix interference. A post-spike was performed with an acceptable recovery of 87%.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Melissa Cripps

Title: Technical Director/Representative

Date: 08/30/18

ORGANICS

SEMIVOLATILES

Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1833279
Report Date: 08/30/18

SAMPLE RESULTS

Lab ID: L1833279-02
 Client ID: TP-15 6-7'
 Sample Location: BUFFALO, NY

Date Collected: 08/23/18 08:10
 Date Received: 08/23/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 08/28/18 08:21
 Analyst: EK
 Percent Solids: 86%

Extraction Method: EPA 3546
 Extraction Date: 08/26/18 04:57

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	27	J	ug/kg	150	20.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Fluoranthene	700		ug/kg	110	22.	1
Naphthalene	32	J	ug/kg	190	23.	1
Benzo(a)anthracene	360		ug/kg	110	21.	1
Benzo(a)pyrene	380		ug/kg	150	46.	1
Benzo(b)fluoranthene	540		ug/kg	110	32.	1
Benzo(k)fluoranthene	150		ug/kg	110	30.	1
Chrysene	400		ug/kg	110	20.	1
Acenaphthylene	66	J	ug/kg	150	29.	1
Anthracene	130		ug/kg	110	37.	1
Benzo(ghi)perylene	300		ug/kg	150	22.	1
Fluorene	32	J	ug/kg	190	18.	1
Phenanthrene	390		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	89	J	ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	290		ug/kg	150	26.	1
Pyrene	590		ug/kg	110	19.	1
Dibenzofuran	23	J	ug/kg	190	18.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	30.	1

Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1833279
Report Date: 08/30/18

SAMPLE RESULTS

Lab ID: L1833279-02
 Client ID: TP-15 6-7'
 Sample Location: BUFFALO, NY

Date Collected: 08/23/18 08:10
 Date Received: 08/23/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	56		25-120
Phenol-d6	59		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	60		30-120
2,4,6-Tribromophenol	54		10-136
4-Terphenyl-d14	55		18-120

Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1833279
Report Date: 08/30/18

SAMPLE RESULTS

Lab ID: L1833279-03
 Client ID: TP-16 3-4'
 Sample Location: BUFFALO, NY

Date Collected: 08/23/18 09:00
 Date Received: 08/23/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 08/28/18 08:46
 Analyst: EK
 Percent Solids: 78%

Extraction Method: EPA 3546
 Extraction Date: 08/26/18 04:57

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	170	22.	1
Hexachlorobenzene	ND		ug/kg	130	24.	1
Fluoranthene	180		ug/kg	130	24.	1
Naphthalene	26	J	ug/kg	210	26.	1
Benzo(a)anthracene	100	J	ug/kg	130	24.	1
Benzo(a)pyrene	110	J	ug/kg	170	52.	1
Benzo(b)fluoranthene	180		ug/kg	130	36.	1
Benzo(k)fluoranthene	75	J	ug/kg	130	34.	1
Chrysene	120	J	ug/kg	130	22.	1
Acenaphthylene	ND		ug/kg	170	33.	1
Anthracene	ND		ug/kg	130	41.	1
Benzo(ghi)perylene	140	J	ug/kg	170	25.	1
Fluorene	ND		ug/kg	210	20.	1
Phenanthrene	100	J	ug/kg	130	26.	1
Dibenzo(a,h)anthracene	ND		ug/kg	130	24.	1
Indeno(1,2,3-cd)pyrene	100	J	ug/kg	170	30.	1
Pyrene	150		ug/kg	130	21.	1
Dibenzofuran	ND		ug/kg	210	20.	1
Pentachlorophenol	1400		ug/kg	170	47.	1
Phenol	ND		ug/kg	210	32.	1
2-Methylphenol	ND		ug/kg	210	33.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	300	33.	1

Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1833279
Report Date: 08/30/18

SAMPLE RESULTS

Lab ID: L1833279-03
 Client ID: TP-16 3-4'
 Sample Location: BUFFALO, NY

Date Collected: 08/23/18 09:00
 Date Received: 08/23/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		25-120
Phenol-d6	49		10-120
Nitrobenzene-d5	59		23-120
2-Fluorobiphenyl	49		30-120
2,4,6-Tribromophenol	47		10-136
4-Terphenyl-d14	46		18-120

Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1833279
Report Date: 08/30/18

SAMPLE RESULTS

Lab ID: L1833279-04 D
 Client ID: TP-18 3-4'
 Sample Location: BUFFALO, NY

Date Collected: 08/23/18 10:00
 Date Received: 08/23/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 08/29/18 18:06
 Analyst: JG
 Percent Solids: 82%

Extraction Method: EPA 3546
 Extraction Date: 08/26/18 04:57

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	6000		ug/kg	1600	210	10
Hexachlorobenzene	ND		ug/kg	1200	230	10
Fluoranthene	72000		ug/kg	1200	230	10
Naphthalene	3900		ug/kg	2000	250	10
Benzo(a)anthracene	35000		ug/kg	1200	230	10
Benzo(a)pyrene	26000		ug/kg	1600	500	10
Benzo(b)fluoranthene	38000		ug/kg	1200	340	10
Benzo(k)fluoranthene	12000		ug/kg	1200	320	10
Chrysene	33000		ug/kg	1200	210	10
Acenaphthylene	4200		ug/kg	1600	310	10
Anthracene	18000		ug/kg	1200	400	10
Benzo(ghi)perylene	13000		ug/kg	1600	240	10
Fluorene	8500		ug/kg	2000	200	10
Phenanthrene	68000		ug/kg	1200	250	10
Dibenzo(a,h)anthracene	3900		ug/kg	1200	230	10
Indeno(1,2,3-cd)pyrene	16000		ug/kg	1600	280	10
Pyrene	59000		ug/kg	1200	200	10
Dibenzofuran	6000		ug/kg	2000	190	10
Pentachlorophenol	ND		ug/kg	1600	450	10
Phenol	ND		ug/kg	2000	310	10
2-Methylphenol	ND		ug/kg	2000	310	10
3-Methylphenol/4-Methylphenol	ND		ug/kg	2900	320	10

Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1833279
Report Date: 08/30/18

SAMPLE RESULTS

Lab ID: L1833279-04 D
 Client ID: TP-18 3-4'
 Sample Location: BUFFALO, NY

Date Collected: 08/23/18 10:00
 Date Received: 08/23/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
-----------	--------	-----------	-------	----	-----	-----------------

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	58		25-120
Phenol-d6	60		10-120
Nitrobenzene-d5	60		23-120
2-Fluorobiphenyl	63		30-120
2,4,6-Tribromophenol	53		10-136
4-Terphenyl-d14	65		18-120

Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1833279
Report Date: 08/30/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 08/27/18 23:27
Analyst: EK

Extraction Method: EPA 3546
Extraction Date: 08/26/18 04:57

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02-04 Batch: WG1150710-1					
Acenaphthene	ND		ug/kg	130	17.
Hexachlorobenzene	ND		ug/kg	99	18.
Fluoranthene	ND		ug/kg	99	19.
Naphthalene	ND		ug/kg	160	20.
Benzo(a)anthracene	ND		ug/kg	99	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	99	28.
Benzo(k)fluoranthene	ND		ug/kg	99	26.
Chrysene	ND		ug/kg	99	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	99	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	99	20.
Dibenzo(a,h)anthracene	ND		ug/kg	99	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	99	16.
Dibenzofuran	ND		ug/kg	160	16.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	26.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.

Tentatively Identified Compounds

No Tentatively Identified Compounds ND ug/kg

Project Name: MAIN & DODGE

Lab Number: L1833279

Project Number: 0371-018-001

Report Date: 08/30/18

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D
 Analytical Date: 08/27/18 23:27
 Analyst: EK

Extraction Method: EPA 3546
 Extraction Date: 08/26/18 04:57

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02-04 Batch: WG1150710-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	70		25-120
Phenol-d6	77		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	74		30-120
2,4,6-Tribromophenol	84		10-136
4-Terphenyl-d14	86		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & DODGE

Lab Number: L1833279

Project Number: 0371-018-001

Report Date: 08/30/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 Batch: WG1150710-2 WG1150710-3								
Acenaphthene	78		84		31-137	7		50
Hexachlorobenzene	77		85		40-140	10		50
Fluoranthene	79		89		40-140	12		50
Naphthalene	77		79		40-140	3		50
Benzo(a)anthracene	78		84		40-140	7		50
Benzo(a)pyrene	83		91		40-140	9		50
Benzo(b)fluoranthene	80		90		40-140	12		50
Benzo(k)fluoranthene	79		87		40-140	10		50
Chrysene	80		89		40-140	11		50
Acenaphthylene	78		84		40-140	7		50
Anthracene	82		89		40-140	8		50
Benzo(ghi)perylene	79		87		40-140	10		50
Fluorene	77		88		40-140	13		50
Phenanthrene	80		89		40-140	11		50
Dibenzo(a,h)anthracene	77		88		40-140	13		50
Indeno(1,2,3-cd)pyrene	80		89		40-140	11		50
Pyrene	79		88		35-142	11		50
Dibenzofuran	76		84		40-140	10		50
Pentachlorophenol	72		84		17-109	15		50
Phenol	83		84		26-90	1		50
2-Methylphenol	84		87		30-130	4		50
3-Methylphenol/4-Methylphenol	88		91		30-130	3		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1833279
Report Date: 08/30/18

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 Batch: WG1150710-2 WG1150710-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	83		83		25-120
Phenol-d6	88		88		10-120
Nitrobenzene-d5	89		87		23-120
2-Fluorobiphenyl	76		80		30-120
2,4,6-Tribromophenol	76		87		10-136
4-Terphenyl-d14	73		81		18-120

METALS

Project Name: MAIN & DODGE

Lab Number: L1833279

Project Number: 0371-018-001

Report Date: 08/30/18

SAMPLE RESULTS

Lab ID: L1833279-02

Date Collected: 08/23/18 08:10

Client ID: TP-15 6-7'

Date Received: 08/23/18

Sample Location: BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	5.61		mg/kg	0.440	0.092	1	08/29/18 08:00	08/29/18 16:46	EPA 3050B	1,6010D	AB
Barium, Total	712		mg/kg	0.440	0.077	1	08/29/18 08:00	08/29/18 16:46	EPA 3050B	1,6010D	AB
Beryllium, Total	0.180	J	mg/kg	0.220	0.015	1	08/29/18 08:00	08/29/18 16:46	EPA 3050B	1,6010D	AB
Cadmium, Total	3.01		mg/kg	0.440	0.043	1	08/29/18 08:00	08/29/18 16:46	EPA 3050B	1,6010D	AB
Chromium, Total	12.7		mg/kg	0.440	0.042	1	08/29/18 08:00	08/29/18 16:46	EPA 3050B	1,6010D	AB
Copper, Total	35.1		mg/kg	0.440	0.113	1	08/29/18 08:00	08/29/18 16:46	EPA 3050B	1,6010D	AB
Lead, Total	2710		mg/kg	2.20	0.118	1	08/29/18 08:00	08/29/18 16:46	EPA 3050B	1,6010D	AB
Manganese, Total	202		mg/kg	0.440	0.070	1	08/29/18 08:00	08/29/18 16:46	EPA 3050B	1,6010D	AB
Mercury, Total	0.640		mg/kg	0.073	0.016	1	08/25/18 07:30	08/29/18 16:49	EPA 7471B	1,7471B	MG
Nickel, Total	6.68		mg/kg	1.10	0.106	1	08/29/18 08:00	08/29/18 16:46	EPA 3050B	1,6010D	AB
Selenium, Total	0.554	J	mg/kg	0.880	0.113	1	08/29/18 08:00	08/29/18 16:46	EPA 3050B	1,6010D	AB
Silver, Total	0.237	J	mg/kg	0.440	0.124	1	08/29/18 08:00	08/29/18 16:46	EPA 3050B	1,6010D	AB
Zinc, Total	1120		mg/kg	2.20	0.129	1	08/29/18 08:00	08/29/18 16:46	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	13		mg/kg	0.93	0.93	1		08/29/18 16:46	NA	107,-	



Project Name: MAIN & DODGE

Lab Number: L1833279

Project Number: 0371-018-001

Report Date: 08/30/18

SAMPLE RESULTS

Lab ID: L1833279-03

Date Collected: 08/23/18 09:00

Client ID: TP-16 3-4'

Date Received: 08/23/18

Sample Location: BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 78%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	5.32		mg/kg	0.489	0.102	1	08/29/18 08:00	08/29/18 16:51	EPA 3050B	1,6010D	AB
Barium, Total	69.7		mg/kg	0.489	0.085	1	08/29/18 08:00	08/29/18 16:51	EPA 3050B	1,6010D	AB
Beryllium, Total	0.176	J	mg/kg	0.244	0.016	1	08/29/18 08:00	08/29/18 16:51	EPA 3050B	1,6010D	AB
Cadmium, Total	1.26		mg/kg	0.489	0.048	1	08/29/18 08:00	08/29/18 16:51	EPA 3050B	1,6010D	AB
Chromium, Total	388		mg/kg	0.489	0.047	1	08/29/18 08:00	08/29/18 16:51	EPA 3050B	1,6010D	AB
Copper, Total	21.9		mg/kg	0.489	0.126	1	08/29/18 08:00	08/29/18 16:51	EPA 3050B	1,6010D	AB
Lead, Total	2680		mg/kg	2.44	0.131	1	08/29/18 08:00	08/29/18 16:51	EPA 3050B	1,6010D	AB
Manganese, Total	171		mg/kg	0.489	0.078	1	08/29/18 08:00	08/29/18 16:51	EPA 3050B	1,6010D	AB
Mercury, Total	0.697		mg/kg	0.082	0.017	1	08/25/18 07:30	08/29/18 16:54	EPA 7471B	1,7471B	MG
Nickel, Total	6.70		mg/kg	1.22	0.118	1	08/29/18 08:00	08/29/18 16:51	EPA 3050B	1,6010D	AB
Selenium, Total	0.704	J	mg/kg	0.978	0.126	1	08/29/18 08:00	08/29/18 16:51	EPA 3050B	1,6010D	AB
Silver, Total	0.479	J	mg/kg	0.489	0.138	1	08/29/18 08:00	08/29/18 16:51	EPA 3050B	1,6010D	AB
Zinc, Total	571		mg/kg	2.44	0.143	1	08/29/18 08:00	08/29/18 16:51	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	390		mg/kg	1.0	1.0	1		08/29/18 16:51	NA	107,-	

Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1833279
Report Date: 08/30/18

SAMPLE RESULTS

Lab ID: L1833279-04
 Client ID: TP-18 3-4'
 Sample Location: BUFFALO, NY

Date Collected: 08/23/18 10:00
 Date Received: 08/23/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Percent Solids: 82%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	6.80		mg/kg	0.473	0.098	1	08/29/18 08:00	08/29/18 16:56	EPA 3050B	1,6010D	AB
Barium, Total	192		mg/kg	0.473	0.082	1	08/29/18 08:00	08/29/18 16:56	EPA 3050B	1,6010D	AB
Beryllium, Total	0.421		mg/kg	0.236	0.016	1	08/29/18 08:00	08/29/18 16:56	EPA 3050B	1,6010D	AB
Cadmium, Total	1.00		mg/kg	0.473	0.046	1	08/29/18 08:00	08/29/18 16:56	EPA 3050B	1,6010D	AB
Chromium, Total	9.90		mg/kg	0.473	0.045	1	08/29/18 08:00	08/29/18 16:56	EPA 3050B	1,6010D	AB
Copper, Total	27.1		mg/kg	0.473	0.122	1	08/29/18 08:00	08/29/18 16:56	EPA 3050B	1,6010D	AB
Lead, Total	1070		mg/kg	2.36	0.127	1	08/29/18 08:00	08/29/18 16:56	EPA 3050B	1,6010D	AB
Manganese, Total	398		mg/kg	0.473	0.075	1	08/29/18 08:00	08/29/18 16:56	EPA 3050B	1,6010D	AB
Mercury, Total	0.676		mg/kg	0.077	0.016	1	08/25/18 07:30	08/29/18 16:56	EPA 7471B	1,7471B	MG
Nickel, Total	11.5		mg/kg	1.18	0.114	1	08/29/18 08:00	08/29/18 16:56	EPA 3050B	1,6010D	AB
Selenium, Total	0.530	J	mg/kg	0.946	0.122	1	08/29/18 08:00	08/29/18 16:56	EPA 3050B	1,6010D	AB
Silver, Total	0.549		mg/kg	0.473	0.134	1	08/29/18 08:00	08/29/18 16:56	EPA 3050B	1,6010D	AB
Zinc, Total	343		mg/kg	2.36	0.138	1	08/29/18 08:00	08/29/18 16:56	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	9.9		mg/kg	0.98	0.98	1		08/29/18 16:56	NA	107,-	



Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1833279
Report Date: 08/30/18

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 02-04 Batch: WG1150517-1									
Mercury, Total	ND	mg/kg	0.083	0.018	1	08/25/18 07:30	08/29/18 16:32	1,7471B	MG

Prep Information

Digestion Method: EPA 7471B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 02-04 Batch: WG1151625-1									
Arsenic, Total	ND	mg/kg	0.400	0.083	1	08/29/18 08:00	08/29/18 10:26	1,6010D	PE
Barium, Total	ND	mg/kg	0.400	0.070	1	08/29/18 08:00	08/29/18 10:26	1,6010D	PE
Beryllium, Total	ND	mg/kg	0.200	0.013	1	08/29/18 08:00	08/29/18 10:26	1,6010D	PE
Cadmium, Total	ND	mg/kg	0.400	0.039	1	08/29/18 08:00	08/29/18 10:26	1,6010D	PE
Chromium, Total	ND	mg/kg	0.400	0.038	1	08/29/18 08:00	08/29/18 10:26	1,6010D	PE
Copper, Total	ND	mg/kg	0.400	0.103	1	08/29/18 08:00	08/29/18 10:26	1,6010D	PE
Lead, Total	ND	mg/kg	2.00	0.107	1	08/29/18 08:00	08/29/18 10:26	1,6010D	PE
Manganese, Total	ND	mg/kg	0.400	0.064	1	08/29/18 08:00	08/29/18 10:26	1,6010D	PE
Nickel, Total	ND	mg/kg	1.00	0.097	1	08/29/18 08:00	08/29/18 10:26	1,6010D	PE
Selenium, Total	ND	mg/kg	0.800	0.103	1	08/29/18 08:00	08/29/18 10:26	1,6010D	PE
Silver, Total	ND	mg/kg	0.400	0.113	1	08/29/18 08:00	08/29/18 10:26	1,6010D	PE
Zinc, Total	ND	mg/kg	2.00	0.117	1	08/29/18 08:00	08/29/18 10:26	1,6010D	PE

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & DODGE

Project Number: 0371-018-001

Lab Number: L1833279

Report Date: 08/30/18

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Total Metals - Mansfield Lab Associated sample(s): 02-04 Batch: WG1150517-2 SRM Lot Number: D102-540								
Mercury, Total	134		-		65-134	-		
Total Metals - Mansfield Lab Associated sample(s): 02-04 Batch: WG1151625-2 SRM Lot Number: D102-540								
Arsenic, Total	94		-		83-117	-		
Barium, Total	99		-		83-118	-		
Beryllium, Total	102		-		83-116	-		
Cadmium, Total	103		-		83-118	-		
Chromium, Total	93		-		83-117	-		
Copper, Total	98		-		84-116	-		
Lead, Total	91		-		82-118	-		
Manganese, Total	116		-		82-118	-		
Nickel, Total	95		-		83-117	-		
Selenium, Total	100		-		79-121	-		
Silver, Total	97		-		80-120	-		
Zinc, Total	92		-		81-118	-		

Matrix Spike Analysis Batch Quality Control

Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1833279
Report Date: 08/30/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02-04 QC Batch ID: WG1150517-3 WG1150517-4 QC Sample: L1833320-01 Client ID: MS Sample												
Mercury, Total	ND	0.132	0.198	149	Q	0.190	143	Q	80-120	4		20
Total Metals - Mansfield Lab Associated sample(s): 02-04 QC Batch ID: WG1151625-3 QC Sample: L1833997-01 Client ID: MS Sample												
Arsenic, Total	4.96	10.8	13.0	74	Q	-	-		75-125	-		20
Barium, Total	98.8	180	232	74	Q	-	-		75-125	-		20
Beryllium, Total	0.401J	4.49	3.78	84		-	-		75-125	-		20
Cadmium, Total	0.345J	4.58	3.61	79		-	-		75-125	-		20
Chromium, Total	11.8	18	25.3	75		-	-		75-125	-		20
Copper, Total	11.4	22.4	27.8	73	Q	-	-		75-125	-		20
Lead, Total	9.18	45.8	36.2	59	Q	-	-		75-125	-		20
Manganese, Total	206.	44.9	382	392	Q	-	-		75-125	-		20
Nickel, Total	10.5	44.9	40.6	67	Q	-	-		75-125	-		20
Selenium, Total	ND	10.8	7.16	66	Q	-	-		75-125	-		20
Silver, Total	ND	26.9	20.1	74	Q	-	-		75-125	-		20
Zinc, Total	26.1	44.9	56.6	68	Q	-	-		75-125	-		20



Lab Duplicate Analysis

Batch Quality Control

Project Name: MAIN & DODGE

Project Number: 0371-018-001

Lab Number: L1833279

Report Date: 08/30/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02-04 QC Batch ID: WG1151625-4 QC Sample: L1833997-01 Client ID: DUP Sample						
Arsenic, Total	4.96	3.12	mg/kg	46	Q	20

INORGANICS & MISCELLANEOUS

Project Name: MAIN & DODGE

Lab Number: L1833279

Project Number: 0371-018-001

Report Date: 08/30/18

SAMPLE RESULTS

Lab ID: L1833279-02

Date Collected: 08/23/18 08:10

Client ID: TP-15 6-7'

Date Received: 08/23/18

Sample Location: BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.0		%	0.100	NA	1	-	08/24/18 08:53	121,2540G	RI
Cyanide, Total	0.75	J	mg/kg	1.1	0.23	1	08/24/18 11:40	08/27/18 13:15	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.930	0.186	1	08/24/18 21:20	08/27/18 09:41	1,7196A	NH



Project Name: MAIN & DODGE

Lab Number: L1833279

Project Number: 0371-018-001

Report Date: 08/30/18

SAMPLE RESULTS

Lab ID: L1833279-03

Date Collected: 08/23/18 09:00

Client ID: TP-16 3-4'

Date Received: 08/23/18

Sample Location: BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	77.5		%	0.100	NA	1	-	08/24/18 08:53	121,2540G	RI
Cyanide, Total	0.90	J	mg/kg	1.2	0.26	1	08/24/18 11:40	08/27/18 13:16	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	1.03	0.206	1	08/24/18 21:20	08/27/18 09:41	1,7196A	NH



Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1833279
Report Date: 08/30/18

SAMPLE RESULTS

Lab ID: L1833279-04
Client ID: TP-18 3-4'
Sample Location: BUFFALO, NY

Date Collected: 08/23/18 10:00
Date Received: 08/23/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	81.7		%	0.100	NA	1	-	08/24/18 08:53	121,2540G	RI
Cyanide, Total	0.28	J	mg/kg	1.2	0.24	1	08/24/18 11:40	08/27/18 13:30	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.979	0.196	1	08/24/18 21:20	08/27/18 09:41	1,7196A	NH



Project Name: MAIN & DODGE

Lab Number: L1833279

Project Number: 0371-018-001

Report Date: 08/30/18

Method Blank Analysis
Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 02-04 Batch: WG1150181-1									
Cyanide, Total	ND	mg/kg	0.91	0.19	1	08/24/18 11:40	08/27/18 13:06	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 02-04 Batch: WG1150485-1									
Chromium, Hexavalent	ND	mg/kg	0.800	0.160	1	08/24/18 21:20	08/27/18 09:41	1,7196A	NH

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & DODGE

Project Number: 0371-018-001

Lab Number: L1833279

Report Date: 08/30/18

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
General Chemistry - Westborough Lab Associated sample(s): 02-04 Batch: WG1150181-2 WG1150181-3								
Cyanide, Total	74	Q	80		80-120	5		35
General Chemistry - Westborough Lab Associated sample(s): 02-04 Batch: WG1150485-2								
Chromium, Hexavalent	82		-		80-120	-		20

Matrix Spike Analysis Batch Quality Control

Project Name: MAIN & DODGE

Lab Number: L1833279

Project Number: 0371-018-001

Report Date: 08/30/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02-04 QC Batch ID: WG1150485-4 QC Sample: L1833279-02 Client ID: TP-15 6-7'												
Chromium, Hexavalent	ND	1150	772	67	Q	-	-		75-125	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: MAIN & DODGE

Project Number: 0371-018-001

Lab Number: L1833279

Report Date: 08/30/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02-04 QC Batch ID: WG1150189-1 QC Sample: L1833423-01 Client ID: DUP Sample						
Solids, Total	88.2	89.7	%	2		20
General Chemistry - Westborough Lab Associated sample(s): 02-04 QC Batch ID: WG1150485-6 QC Sample: L1833279-02 Client ID: TP-15 6-7'						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20

Project Name: MAIN & DODGE**Lab Number:** L1833279**Project Number:** 0371-018-001**Report Date:** 08/30/18**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1833279-01A	Glass 250ml/8oz unpreserved	A	NA		2.5	Y	Absent		HOLD-METAL(180)
L1833279-01B	Glass 250ml/8oz unpreserved	A	NA		2.5	Y	Absent		HOLD-WETCHEM(),HOLD-8270(14)
L1833279-02A	Glass 250ml/8oz unpreserved	A	NA		2.5	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-TI(180),CD-TI(180)
L1833279-02B	Glass 250ml/8oz unpreserved	A	NA		2.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),TRICR-CALC(30),TS(7),HEXCR-7196(30)
L1833279-03A	Glass 250ml/8oz unpreserved	A	NA		2.5	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-TI(180),CD-TI(180)
L1833279-03B	Glass 250ml/8oz unpreserved	A	NA		2.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),TRICR-CALC(30),TS(7),HEXCR-7196(30)
L1833279-04A	Glass 250ml/8oz unpreserved	A	NA		2.5	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-TI(180),CD-TI(180)
L1833279-04B	Glass 250ml/8oz unpreserved	A	NA		2.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),TRICR-CALC(30),TS(7),HEXCR-7196(30)

Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1833279
Report Date: 08/30/18

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: DU Report with 'J' Qualifiers



Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1833279
Report Date: 08/30/18

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers



Project Name: MAIN & DODGE
Project Number: 0371-018-001

Lab Number: L1833279
Report Date: 08/30/18

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 107 Alpha Analytical - In-house calculation method.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 300: DW: Bromide

EPA 6860: SCM: Perchlorate

EPA 9010: NPW and SCM: Amenable Cyanide Distillation

SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **EPA 351.1, SM4500P-E, SM4500P-B, E,**

SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.

EPA 624: Volatile Halocarbons & Aromatics,

EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, SM9222D.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Be, Cd, Cr, Cu, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

NEW YORK CHAIN OF CUSTODY Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105		Page 1 of 1		Date Rec'd In Lab 8/24/18		41833279 ALPHA Job #			
		Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193		Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288		Project Information Project Name: Main + Dodge Project Location: Ts. ffalo NY Project # 0321-018-001 (Use Project name as Project #) <input type="checkbox"/>		Deliverables <input type="checkbox"/> ASP-A <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQulS (1 File) <input type="checkbox"/> EQulS (4 File) <input type="checkbox"/> Other	
Client Information Client: Turnkey Environmental Kit Address: 2550 Hamburg Tpke Suite 300 Phone: Lakewood NY 1421 Fax: 716-856-0635 Email: cbaron@turnkeyllc.com		Project Manager: Chris Baron ALPHAQuote #:		Regulatory Requirement <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:			
Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		These samples have been previously analyzed by Alpha <input type="checkbox"/>		ANALYSIS		Sample Filtration <input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below)			
Other project specific requirements/comments:		Please specify Metals or TAL.		Part 375 Solids Part 375 Metals		Total Bottles			
ALPHA Lab ID (Lab Use Only)		Sample ID		Collection Date Time		Sample Matrix Sampler's Initials		Sample Specific Comments	
33279-01		TP-14 5-6'		8/23/18 800		S CZB		X X HOLD	
-02		TP-14 6-7'		8/23/18 810		S CZB		X X 2	
-03		TP-15 3-4		8/23/18 900		S CZB		X X 2	
-04		TP-17 3-4		8/23/18 1000		S CZB		X X 2	
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type A A Preservative A A		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)	
Relinquished By: Chris Baron Date/Time: 8/23/18 15:30		Received By: Paul Murray Date/Time: 8/24/18 15:30		Relinquished By: Jack Murray Date/Time: 8/23/18 14:20		Received By: Joe Date/Time: 8/24/18 0140			



ANALYTICAL REPORT

Lab Number:	L1604591
Client:	Turnkey Environmental Restoration, LLC 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Chris Boron
Phone:	(716) 856-0599
Project Name:	MAIN & DODGE
Project Number:	T0371-016-002
Report Date:	02/29/16

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), VA (460195), MD (348), IL (200077), NC (666), TX (T104704476), DOD (L2217), USDA (Permit #P-330-11-00240).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1604591-01	SB-1 (1-4')	SOIL	MAIN & DODGE	02/18/16 09:00	02/19/16
L1604591-02	SB-4 (0-3')	SOIL	MAIN & DODGE	02/18/16 10:30	02/19/16
L1604591-03	SB-5 (8-12')	SOIL	MAIN & DODGE	02/18/16 11:00	02/19/16
L1604591-04	SB-7 (1-4')	SOIL	MAIN & DODGE	02/18/16 12:00	02/19/16
L1604591-05	SB-8 (0-4')	SOIL	MAIN & DODGE	02/18/16 12:30	02/19/16
L1604591-06	SB-10 (0-3')	SOIL	MAIN & DODGE	02/18/16 14:00	02/19/16
L1604591-07	SB-11 (3-5')	SOIL	MAIN & DODGE	02/18/16 14:30	02/19/16
L1604591-08	SB-12 (2-4')	SOIL	MAIN & DODGE	02/18/16 15:00	02/19/16
L1604591-09	SB-14 (0-2')	SOIL	MAIN & DODGE	02/18/16 16:00	02/19/16
L1604591-10	TMW-1	WATER	MAIN & DODGE	02/18/16 15:15	02/19/16
L1604591-11	SB-9 (5-8')	SOIL	MAIN & DODGE	02/18/16 13:30	02/19/16

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Case Narrative (continued)

Report Submission

The sample collection date for L1604591-10 and -11, as well as the project number, were provided by the client.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Volatile Organics

Any reported concentrations that are below 200 ug/kg may be biased low due to the sample not being collected according to 5035-L/5035A-L low-level specifications.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Cristin Walker

Title: Technical Director/Representative

Date: 02/29/16

ORGANICS

VOLATILES

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-03
 Client ID: SB-5 (8-12')
 Sample Location: MAIN & DODGE
 Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 02/24/16 21:03
 Analyst: BN
 Percent Solids: 96%

Date Collected: 02/18/16 11:00
 Date Received: 02/19/16
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	10	1.2	1
1,1-Dichloroethane	ND		ug/kg	1.6	0.09	1
Chloroform	ND		ug/kg	1.6	0.39	1
Carbon tetrachloride	ND		ug/kg	1.0	0.22	1
1,2-Dichloropropane	ND		ug/kg	3.7	0.24	1
Dibromochloromethane	ND		ug/kg	1.0	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.6	0.32	1
Tetrachloroethene	ND		ug/kg	1.0	0.15	1
Chlorobenzene	ND		ug/kg	1.0	0.36	1
Trichlorofluoromethane	ND		ug/kg	5.2	0.40	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.12	1
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.12	1
Bromodichloromethane	ND		ug/kg	1.0	0.18	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.13	1
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.12	1
1,3-Dichloropropene, Total	ND		ug/kg	1.0	0.12	1
Bromoform	ND		ug/kg	4.2	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.10	1
Benzene	ND		ug/kg	1.0	0.12	1
Toluene	ND		ug/kg	1.6	0.20	1
Ethylbenzene	ND		ug/kg	1.0	0.13	1
Chloromethane	ND		ug/kg	5.2	0.31	1
Bromomethane	ND		ug/kg	2.1	0.35	1
Vinyl chloride	ND		ug/kg	2.1	0.12	1
Chloroethane	ND		ug/kg	2.1	0.33	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.27	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.22	1
Trichloroethene	ND		ug/kg	1.0	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	5.2	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	5.2	0.14	1

Project Name: MAIN & DODGE

Lab Number: L1604591

Project Number: T0371-016-002

Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-03
 Client ID: SB-5 (8-12')
 Sample Location: MAIN & DODGE

Date Collected: 02/18/16 11:00
 Date Received: 02/19/16
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/kg	5.2	0.14	1
Methyl tert butyl ether	ND		ug/kg	2.1	0.09	1
p/m-Xylene	ND		ug/kg	2.1	0.21	1
o-Xylene	ND		ug/kg	2.1	0.18	1
Xylenes, Total	ND		ug/kg	2.1	0.18	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.15	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.15	1
Styrene	ND		ug/kg	2.1	0.42	1
Dichlorodifluoromethane	ND		ug/kg	10	0.20	1
Acetone	ND		ug/kg	10	1.1	1
Carbon disulfide	ND		ug/kg	10	1.2	1
2-Butanone	ND		ug/kg	10	0.28	1
4-Methyl-2-pentanone	ND		ug/kg	10	0.26	1
2-Hexanone	ND		ug/kg	10	0.70	1
Bromochloromethane	ND		ug/kg	5.2	0.29	1
1,2-Dibromoethane	ND		ug/kg	4.2	0.18	1
n-Butylbenzene	ND		ug/kg	1.0	0.12	1
sec-Butylbenzene	ND		ug/kg	1.0	0.13	1
tert-Butylbenzene	ND		ug/kg	5.2	0.14	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.2	0.41	1
Isopropylbenzene	ND		ug/kg	1.0	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.13	1
Naphthalene	ND		ug/kg	5.2	0.14	1
n-Propylbenzene	ND		ug/kg	1.0	0.11	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.2	0.15	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.2	0.19	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.2	0.15	1
1,2,4-Trimethylbenzene	ND		ug/kg	5.2	0.15	1
Methyl Acetate	ND		ug/kg	21	0.28	1
Cyclohexane	ND		ug/kg	21	0.15	1
1,4-Dioxane	ND		ug/kg	100	15.	1
Freon-113	ND		ug/kg	21	0.29	1
Methyl cyclohexane	ND		ug/kg	4.2	0.16	1

Project Name: MAIN & DODGE**Lab Number:** L1604591**Project Number:** T0371-016-002**Report Date:** 02/29/16**SAMPLE RESULTS**

Lab ID: L1604591-03

Date Collected: 02/18/16 11:00

Client ID: SB-5 (8-12')

Date Received: 02/19/16

Sample Location: MAIN & DODGE

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
-----------	--------	-----------	-------	----	-----	-----------------

Volatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	99		70-130

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-08
 Client ID: SB-12 (2-4')
 Sample Location: MAIN & DODGE
 Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 02/24/16 21:30
 Analyst: BN
 Percent Solids: 88%

Date Collected: 02/18/16 15:00
 Date Received: 02/19/16
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	11	1.2	1
1,1-Dichloroethane	ND		ug/kg	1.7	0.10	1
Chloroform	ND		ug/kg	1.7	0.42	1
Carbon tetrachloride	ND		ug/kg	1.1	0.24	1
1,2-Dichloropropane	ND		ug/kg	4.0	0.26	1
Dibromochloromethane	ND		ug/kg	1.1	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.7	0.34	1
Tetrachloroethene	ND		ug/kg	1.1	0.16	1
Chlorobenzene	ND		ug/kg	1.1	0.40	1
Trichlorofluoromethane	ND		ug/kg	5.7	0.44	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.13	1
1,1,1-Trichloroethane	ND		ug/kg	1.1	0.12	1
Bromodichloromethane	ND		ug/kg	1.1	0.20	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.14	1
cis-1,3-Dichloropropene	ND		ug/kg	1.1	0.13	1
1,3-Dichloropropene, Total	ND		ug/kg	1.1	0.13	1
Bromoform	ND		ug/kg	4.5	0.27	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.1	0.11	1
Benzene	ND		ug/kg	1.1	0.13	1
Toluene	ND		ug/kg	1.7	0.22	1
Ethylbenzene	ND		ug/kg	1.1	0.14	1
Chloromethane	ND		ug/kg	5.7	0.33	1
Bromomethane	ND		ug/kg	2.3	0.38	1
Vinyl chloride	ND		ug/kg	2.3	0.13	1
Chloroethane	ND		ug/kg	2.3	0.36	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.30	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.24	1
Trichloroethene	ND		ug/kg	1.1	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	5.7	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	5.7	0.15	1

Project Name: MAIN & DODGE

Lab Number: L1604591

Project Number: T0371-016-002

Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-08
 Client ID: SB-12 (2-4')
 Sample Location: MAIN & DODGE

Date Collected: 02/18/16 15:00
 Date Received: 02/19/16
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/kg	5.7	0.16	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.10	1
p/m-Xylene	ND		ug/kg	2.3	0.22	1
o-Xylene	ND		ug/kg	2.3	0.20	1
Xylenes, Total	ND		ug/kg	2.3	0.20	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.16	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.16	1
Styrene	ND		ug/kg	2.3	0.46	1
Dichlorodifluoromethane	ND		ug/kg	11	0.22	1
Acetone	ND		ug/kg	11	1.2	1
Carbon disulfide	ND		ug/kg	11	1.2	1
2-Butanone	ND		ug/kg	11	0.31	1
4-Methyl-2-pentanone	ND		ug/kg	11	0.28	1
2-Hexanone	ND		ug/kg	11	0.76	1
Bromochloromethane	ND		ug/kg	5.7	0.31	1
1,2-Dibromoethane	ND		ug/kg	4.5	0.20	1
n-Butylbenzene	ND		ug/kg	1.1	0.13	1
sec-Butylbenzene	ND		ug/kg	1.1	0.14	1
tert-Butylbenzene	ND		ug/kg	5.7	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.7	0.45	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.14	1
Naphthalene	ND		ug/kg	5.7	0.16	1
n-Propylbenzene	ND		ug/kg	1.1	0.12	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.7	0.17	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.7	0.21	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.7	0.16	1
1,2,4-Trimethylbenzene	ND		ug/kg	5.7	0.16	1
Methyl Acetate	ND		ug/kg	23	0.31	1
Cyclohexane	ND		ug/kg	23	0.16	1
1,4-Dioxane	ND		ug/kg	110	16.	1
Freon-113	ND		ug/kg	23	0.31	1
Methyl cyclohexane	0.25	J	ug/kg	4.5	0.18	1

Project Name: MAIN & DODGE**Lab Number:** L1604591**Project Number:** T0371-016-002**Report Date:** 02/29/16**SAMPLE RESULTS**

Lab ID: L1604591-08

Date Collected: 02/18/16 15:00

Client ID: SB-12 (2-4')

Date Received: 02/19/16

Sample Location: MAIN & DODGE

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
-----------	--------	-----------	-------	----	-----	-----------------

Volatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	99		70-130

Project Name: MAIN & DODGE

Lab Number: L1604591

Project Number: T0371-016-002

Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-09
 Client ID: SB-14 (0-2')
 Sample Location: MAIN & DODGE
 Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 02/24/16 21:56
 Analyst: BN
 Percent Solids: 92%

Date Collected: 02/18/16 16:00
 Date Received: 02/19/16
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	11	1.2	1
1,1-Dichloroethane	ND		ug/kg	1.6	0.09	1
Chloroform	ND		ug/kg	1.6	0.40	1
Carbon tetrachloride	ND		ug/kg	1.1	0.23	1
1,2-Dichloropropane	ND		ug/kg	3.8	0.25	1
Dibromochloromethane	ND		ug/kg	1.1	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.6	0.33	1
Tetrachloroethene	ND		ug/kg	1.1	0.15	1
Chlorobenzene	ND		ug/kg	1.1	0.38	1
Trichlorofluoromethane	ND		ug/kg	5.5	0.42	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.12	1
1,1,1-Trichloroethane	ND		ug/kg	1.1	0.12	1
Bromodichloromethane	ND		ug/kg	1.1	0.19	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.13	1
cis-1,3-Dichloropropene	ND		ug/kg	1.1	0.13	1
1,3-Dichloropropene, Total	ND		ug/kg	1.1	0.13	1
Bromoform	ND		ug/kg	4.4	0.26	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.1	0.11	1
Benzene	ND		ug/kg	1.1	0.13	1
Toluene	ND		ug/kg	1.6	0.21	1
Ethylbenzene	ND		ug/kg	1.1	0.14	1
Chloromethane	ND		ug/kg	5.5	0.32	1
Bromomethane	ND		ug/kg	2.2	0.37	1
Vinyl chloride	ND		ug/kg	2.2	0.13	1
Chloroethane	ND		ug/kg	2.2	0.34	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.29	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.23	1
Trichloroethene	ND		ug/kg	1.1	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	5.5	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	5.5	0.15	1

Project Name: MAIN & DODGE

Lab Number: L1604591

Project Number: T0371-016-002

Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-09
 Client ID: SB-14 (0-2')
 Sample Location: MAIN & DODGE

Date Collected: 02/18/16 16:00
 Date Received: 02/19/16
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/kg	5.5	0.15	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.09	1
p/m-Xylene	ND		ug/kg	2.2	0.22	1
o-Xylene	ND		ug/kg	2.2	0.19	1
Xylenes, Total	ND		ug/kg	2.2	0.19	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.16	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.16	1
Styrene	ND		ug/kg	2.2	0.44	1
Dichlorodifluoromethane	ND		ug/kg	11	0.21	1
Acetone	2.0	J	ug/kg	11	1.1	1
Carbon disulfide	ND		ug/kg	11	1.2	1
2-Butanone	ND		ug/kg	11	0.30	1
4-Methyl-2-pentanone	ND		ug/kg	11	0.27	1
2-Hexanone	ND		ug/kg	11	0.73	1
Bromochloromethane	ND		ug/kg	5.5	0.30	1
1,2-Dibromoethane	ND		ug/kg	4.4	0.19	1
n-Butylbenzene	ND		ug/kg	1.1	0.12	1
sec-Butylbenzene	ND		ug/kg	1.1	0.13	1
tert-Butylbenzene	ND		ug/kg	5.5	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.5	0.43	1
Isopropylbenzene	ND		ug/kg	1.1	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.14	1
Naphthalene	ND		ug/kg	5.5	0.15	1
n-Propylbenzene	ND		ug/kg	1.1	0.12	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.5	0.16	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.5	0.20	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.5	0.16	1
1,2,4-Trimethylbenzene	ND		ug/kg	5.5	0.15	1
Methyl Acetate	ND		ug/kg	22	0.30	1
Cyclohexane	ND		ug/kg	22	0.16	1
1,4-Dioxane	ND		ug/kg	110	16.	1
Freon-113	ND		ug/kg	22	0.30	1
Methyl cyclohexane	ND		ug/kg	4.4	0.17	1

Project Name: MAIN & DODGE**Lab Number:** L1604591**Project Number:** T0371-016-002**Report Date:** 02/29/16**SAMPLE RESULTS**

Lab ID: L1604591-09

Date Collected: 02/18/16 16:00

Client ID: SB-14 (0-2')

Date Received: 02/19/16

Sample Location: MAIN & DODGE

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
-----------	--------	-----------	-------	----	-----	-----------------

Volatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	97		70-130

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-10
Client ID: TMW-1
Sample Location: MAIN & DODGE
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 02/26/16 12:30
Analyst: PD

Date Collected: 02/18/16 15:15
Date Received: 02/19/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.13	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.14	1
Benzene	0.17	J	ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.14	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: MAIN & DODGE

Lab Number: L1604591

Project Number: T0371-016-002

Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-10
 Client ID: TMW-1
 Sample Location: MAIN & DODGE

Date Collected: 02/18/16 15:15
 Date Received: 02/19/16
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	6.9		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	41.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Project Name: MAIN & DODGE**Lab Number:** L1604591**Project Number:** T0371-016-002**Report Date:** 02/29/16**SAMPLE RESULTS**

Lab ID: L1604591-10

Date Collected: 02/18/16 15:15

Client ID: TMW-1

Date Received: 02/19/16

Sample Location: MAIN & DODGE

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	98		70-130

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-11
 Client ID: SB-9 (5-8')
 Sample Location: MAIN & DODGE
 Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 02/25/16 03:39
 Analyst: PK
 Percent Solids: 86%

Date Collected: 02/18/16 13:30
 Date Received: 02/19/16
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	12	1.3	1
1,1-Dichloroethane	ND		ug/kg	1.7	0.10	1
Chloroform	ND		ug/kg	1.7	0.43	1
Carbon tetrachloride	ND		ug/kg	1.2	0.24	1
1,2-Dichloropropane	ND		ug/kg	4.0	0.26	1
Dibromochloromethane	ND		ug/kg	1.2	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.7	0.35	1
Tetrachloroethene	ND		ug/kg	1.2	0.16	1
Chlorobenzene	ND		ug/kg	1.2	0.40	1
Trichlorofluoromethane	ND		ug/kg	5.8	0.45	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.13	1
1,1,1-Trichloroethane	ND		ug/kg	1.2	0.13	1
Bromodichloromethane	ND		ug/kg	1.2	0.20	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.14	1
cis-1,3-Dichloropropene	ND		ug/kg	1.2	0.14	1
1,3-Dichloropropene, Total	ND		ug/kg	1.2	0.14	1
Bromoform	ND		ug/kg	4.6	0.27	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.2	0.12	1
Benzene	ND		ug/kg	1.2	0.14	1
Toluene	ND		ug/kg	1.7	0.22	1
Ethylbenzene	ND		ug/kg	1.2	0.15	1
Chloromethane	ND		ug/kg	5.8	0.34	1
Bromomethane	ND		ug/kg	2.3	0.39	1
Vinyl chloride	ND		ug/kg	2.3	0.14	1
Chloroethane	ND		ug/kg	2.3	0.36	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.30	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.24	1
Trichloroethene	ND		ug/kg	1.2	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	5.8	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	5.8	0.16	1

Project Name: MAIN & DODGE

Lab Number: L1604591

Project Number: T0371-016-002

Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-11

Date Collected: 02/18/16 13:30

Client ID: SB-9 (5-8')

Date Received: 02/19/16

Sample Location: MAIN & DODGE

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/kg	5.8	0.16	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.10	1
p/m-Xylene	ND		ug/kg	2.3	0.23	1
o-Xylene	ND		ug/kg	2.3	0.20	1
Xylenes, Total	ND		ug/kg	2.3	0.20	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.16	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.16	1
Styrene	ND		ug/kg	2.3	0.46	1
Dichlorodifluoromethane	ND		ug/kg	12	0.22	1
Acetone	1.7	J	ug/kg	12	1.2	1
Carbon disulfide	ND		ug/kg	12	1.3	1
2-Butanone	ND		ug/kg	12	0.31	1
4-Methyl-2-pentanone	ND		ug/kg	12	0.28	1
2-Hexanone	ND		ug/kg	12	0.77	1
Bromochloromethane	ND		ug/kg	5.8	0.32	1
1,2-Dibromoethane	ND		ug/kg	4.6	0.20	1
n-Butylbenzene	ND		ug/kg	1.2	0.13	1
sec-Butylbenzene	ND		ug/kg	1.2	0.14	1
tert-Butylbenzene	ND		ug/kg	5.8	0.16	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.8	0.46	1
Isopropylbenzene	ND		ug/kg	1.2	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.14	1
Naphthalene	ND		ug/kg	5.8	0.16	1
n-Propylbenzene	ND		ug/kg	1.2	0.13	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.8	0.17	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.8	0.21	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.8	0.16	1
1,2,4-Trimethylbenzene	ND		ug/kg	5.8	0.16	1
Methyl Acetate	ND		ug/kg	23	0.31	1
Cyclohexane	ND		ug/kg	23	0.17	1
1,4-Dioxane	ND		ug/kg	120	17.	1
Freon-113	ND		ug/kg	23	0.32	1
Methyl cyclohexane	ND		ug/kg	4.6	0.18	1

Project Name: MAIN & DODGE**Lab Number:** L1604591**Project Number:** T0371-016-002**Report Date:** 02/29/16**SAMPLE RESULTS**

Lab ID: L1604591-11

Date Collected: 02/18/16 13:30

Client ID: SB-9 (5-8')

Date Received: 02/19/16

Sample Location: MAIN & DODGE

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
-----------	--------	-----------	-------	----	-----	-----------------

Volatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	101		70-130

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 02/24/16 13:08
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03,08-09 Batch: WG868262-3					
Methylene chloride	ND		ug/kg	10	1.1
1,1-Dichloroethane	ND		ug/kg	1.5	0.09
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.21
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.15
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.30
Tetrachloroethene	ND		ug/kg	1.0	0.14
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.39
1,2-Dichloroethane	ND		ug/kg	1.0	0.11
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.11
Bromodichloromethane	ND		ug/kg	1.0	0.17
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
1,3-Dichloropropene, Total	ND		ug/kg	1.0	0.12
Bromoform	ND		ug/kg	4.0	0.24
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.10
Benzene	ND		ug/kg	1.0	0.12
Toluene	ND		ug/kg	1.5	0.19
Ethylbenzene	ND		ug/kg	1.0	0.13
Chloromethane	0.57	J	ug/kg	5.0	0.29
Bromomethane	ND		ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.12
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.26
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.21
Trichloroethene	ND		ug/kg	1.0	0.12
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.15

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 02/24/16 13:08
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03,08-09 Batch: WG868262-3					
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.14
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.14
Methyl tert butyl ether	ND		ug/kg	2.0	0.08
p/m-Xylene	ND		ug/kg	2.0	0.20
o-Xylene	ND		ug/kg	2.0	0.17
Xylenes, Total	ND		ug/kg	2.0	0.17
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.14
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Styrene	ND		ug/kg	2.0	0.40
Dichlorodifluoromethane	ND		ug/kg	10	0.19
Acetone	ND		ug/kg	10	1.0
Carbon disulfide	ND		ug/kg	10	1.1
2-Butanone	ND		ug/kg	10	0.27
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
2-Hexanone	ND		ug/kg	10	0.67
Bromochloromethane	ND		ug/kg	5.0	0.28
1,2-Dibromoethane	ND		ug/kg	4.0	0.17
n-Butylbenzene	ND		ug/kg	1.0	0.11
sec-Butylbenzene	ND		ug/kg	1.0	0.12
tert-Butylbenzene	ND		ug/kg	5.0	0.14
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40
Isopropylbenzene	ND		ug/kg	1.0	0.10
p-Isopropyltoluene	ND		ug/kg	1.0	0.12
Naphthalene	ND		ug/kg	5.0	0.14
n-Propylbenzene	ND		ug/kg	1.0	0.11
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.15
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.18
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.14
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.14

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 02/24/16 13:08
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03,08-09 Batch: WG868262-3					
Methyl Acetate	ND		ug/kg	20	0.27
Cyclohexane	ND		ug/kg	20	0.15
1,4-Dioxane	ND		ug/kg	100	14.
Freon-113	ND		ug/kg	20	0.27
Methyl cyclohexane	ND		ug/kg	4.0	0.15

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	99		70-130

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 02/24/16 21:15
Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG868376-3					
Methylene chloride	ND		ug/kg	10	1.1
1,1-Dichloroethane	ND		ug/kg	1.5	0.09
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.21
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.15
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.30
Tetrachloroethene	ND		ug/kg	1.0	0.14
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.39
1,2-Dichloroethane	ND		ug/kg	1.0	0.11
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.11
Bromodichloromethane	ND		ug/kg	1.0	0.17
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
1,3-Dichloropropene, Total	ND		ug/kg	1.0	0.12
Bromoform	ND		ug/kg	4.0	0.24
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.10
Benzene	ND		ug/kg	1.0	0.12
Toluene	ND		ug/kg	1.5	0.19
Ethylbenzene	ND		ug/kg	1.0	0.13
Chloromethane	0.83	J	ug/kg	5.0	0.29
Bromomethane	ND		ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.12
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.26
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.21
Trichloroethene	ND		ug/kg	1.0	0.12
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.15

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 02/24/16 21:15
Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG868376-3					
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.14
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.14
Methyl tert butyl ether	ND		ug/kg	2.0	0.08
p/m-Xylene	ND		ug/kg	2.0	0.20
o-Xylene	ND		ug/kg	2.0	0.17
Xylenes, Total	ND		ug/kg	2.0	0.17
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.14
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Styrene	ND		ug/kg	2.0	0.40
Dichlorodifluoromethane	ND		ug/kg	10	0.19
Acetone	1.6	J	ug/kg	10	1.0
Carbon disulfide	1.2	J	ug/kg	10	1.1
2-Butanone	ND		ug/kg	10	0.27
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
2-Hexanone	ND		ug/kg	10	0.67
Bromochloromethane	ND		ug/kg	5.0	0.28
1,2-Dibromoethane	ND		ug/kg	4.0	0.17
n-Butylbenzene	ND		ug/kg	1.0	0.11
sec-Butylbenzene	ND		ug/kg	1.0	0.12
tert-Butylbenzene	ND		ug/kg	5.0	0.14
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40
Isopropylbenzene	ND		ug/kg	1.0	0.10
p-Isopropyltoluene	ND		ug/kg	1.0	0.12
Naphthalene	ND		ug/kg	5.0	0.14
n-Propylbenzene	ND		ug/kg	1.0	0.11
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.15
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.18
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.14
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.14

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 02/24/16 21:15
Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG868376-3					
Methyl Acetate	ND		ug/kg	20	0.27
Cyclohexane	ND		ug/kg	20	0.15
1,4-Dioxane	ND		ug/kg	100	14.
Freon-113	ND		ug/kg	20	0.27
Methyl cyclohexane	ND		ug/kg	4.0	0.15

Tentatively Identified Compounds

Total TIC Compounds	6.5		ug/kg
Unknown	2.2	J	ug/kg
Unknown	4.3	J	ug/kg

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	97		70-130

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 02/26/16 11:05
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 10 Batch: WG868717-3					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.13
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.14
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.14
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 02/26/16 11:05
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 10 Batch: WG868717-3					
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 02/26/16 11:05
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 10 Batch: WG868717-3					
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	41.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	98		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & DODGE

Lab Number: L1604591

Project Number: T0371-016-002

Report Date: 02/29/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03,08-09 Batch: WG868262-1 WG868262-2								
Methylene chloride	98		98		70-130	0		30
1,1-Dichloroethane	98		98		70-130	0		30
Chloroform	98		100		70-130	2		30
Carbon tetrachloride	105		104		70-130	1		30
1,2-Dichloropropane	96		96		70-130	0		30
Dibromochloromethane	107		109		70-130	2		30
2-Chloroethylvinyl ether	91		95		70-130	4		30
1,1,2-Trichloroethane	108		110		70-130	2		30
Tetrachloroethene	122		121		70-130	1		30
Chlorobenzene	111		113		70-130	2		30
Trichlorofluoromethane	122		119		70-139	2		30
1,2-Dichloroethane	94		94		70-130	0		30
1,1,1-Trichloroethane	103		102		70-130	1		30
Bromodichloromethane	96		98		70-130	2		30
trans-1,3-Dichloropropene	108		110		70-130	2		30
cis-1,3-Dichloropropene	97		98		70-130	1		30
1,1-Dichloropropene	102		101		70-130	1		30
Bromoform	103		108		70-130	5		30
1,1,2,2-Tetrachloroethane	109		110		70-130	1		30
Benzene	101		100		70-130	1		30
Toluene	112		112		70-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03,08-09 Batch: WG868262-1 WG868262-2								
Ethylbenzene	112		112		70-130	0		30
Chloromethane	103		99		52-130	4		30
Bromomethane	99		96		57-147	3		30
Vinyl chloride	99		95		67-130	4		30
Chloroethane	101		105		50-151	4		30
1,1-Dichloroethene	106		104		65-135	2		30
trans-1,2-Dichloroethene	103		102		70-130	1		30
Trichloroethene	102		101		70-130	1		30
1,2-Dichlorobenzene	115		114		70-130	1		30
1,3-Dichlorobenzene	118		117		70-130	1		30
1,4-Dichlorobenzene	117		115		70-130	2		30
Methyl tert butyl ether	94		94		66-130	0		30
p/m-Xylene	112		112		70-130	0		30
o-Xylene	111		112		70-130	1		30
cis-1,2-Dichloroethene	100		101		70-130	1		30
Dibromomethane	98		99		70-130	1		30
Styrene	112		113		70-130	1		30
Dichlorodifluoromethane	106		102		30-146	4		30
Acetone	96		92		54-140	4		30
Carbon disulfide	106		104		59-130	2		30
2-Butanone	86		89		70-130	3		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03,08-09 Batch: WG868262-1 WG868262-2								
Vinyl acetate	93		94		70-130	1		30
4-Methyl-2-pentanone	84		87		70-130	4		30
1,2,3-Trichloropropane	106		107		68-130	1		30
2-Hexanone	96		99		70-130	3		30
Bromochloromethane	104		103		70-130	1		30
2,2-Dichloropropane	100		100		70-130	0		30
1,2-Dibromoethane	108		112		70-130	4		30
1,3-Dichloropropane	106		108		69-130	2		30
1,1,1,2-Tetrachloroethane	109		110		70-130	1		30
Bromobenzene	115		114		70-130	1		30
n-Butylbenzene	121		118		70-130	3		30
sec-Butylbenzene	120		117		70-130	3		30
tert-Butylbenzene	118		115		70-130	3		30
o-Chlorotoluene	116		113		70-130	3		30
p-Chlorotoluene	116		113		70-130	3		30
1,2-Dibromo-3-chloropropane	97		102		68-130	5		30
Hexachlorobutadiene	123		122		67-130	1		30
Isopropylbenzene	117		114		70-130	3		30
p-Isopropyltoluene	120		118		70-130	2		30
Naphthalene	107		111		70-130	4		30
Acrylonitrile	94		95		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03,08-09 Batch: WG868262-1 WG868262-2								
Isopropyl Ether	94		94		66-130	0		30
tert-Butyl Alcohol	85		89		70-130	5		30
n-Propylbenzene	117		114		70-130	3		30
1,2,3-Trichlorobenzene	117		118		70-130	1		30
1,2,4-Trichlorobenzene	119		120		70-130	1		30
1,3,5-Trimethylbenzene	117		114		70-130	3		30
1,2,4-Trimethylbenzene	117		114		70-130	3		30
Methyl Acetate	86		92		51-146	7		30
Ethyl Acetate	126		130		70-130	3		30
Acrolein	91		93		70-130	2		30
Cyclohexane	106		105		59-142	1		30
1,4-Dioxane	79		83		65-136	5		30
Freon-113	111		110		50-139	1		30
1,4-Diethylbenzene	121		119		70-130	2		30
4-Ethyltoluene	118		115		70-130	3		30
1,2,4,5-Tetramethylbenzene	118		116		70-130	2		30
Tetrahydrofuran	90		93		66-130	3		30
Ethyl ether	103		80		67-130	25		30
trans-1,4-Dichloro-2-butene	107		109		70-130	2		30
Methyl cyclohexane	108		105		70-130	3		30
Ethyl-Tert-Butyl-Ether	94		95		70-130	1		30

Lab Control Sample Analysis Batch Quality Control

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03,08-09 Batch: WG868262-1 WG868262-2								
Tertiary-Amyl Methyl Ether	93		95		70-130	2		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	94		92		70-130
Toluene-d8	104		105		70-130
4-Bromofluorobenzene	96		94		70-130
Dibromofluoromethane	101		100		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG868376-1 WG868376-2								
Methylene chloride	84		85		70-130	1		30
1,1-Dichloroethane	91		94		70-130	3		30
Chloroform	91		93		70-130	2		30
Carbon tetrachloride	78		84		70-130	7		30
1,2-Dichloropropane	94		97		70-130	3		30
Dibromochloromethane	90		92		70-130	2		30
2-Chloroethylvinyl ether	93		94		70-130	1		30
1,1,2-Trichloroethane	98		100		70-130	2		30
Tetrachloroethene	79		84		70-130	6		30
Chlorobenzene	86		90		70-130	5		30
Trichlorofluoromethane	69	Q	74		70-139	7		30
1,2-Dichloroethane	98		99		70-130	1		30
1,1,1-Trichloroethane	83		88		70-130	6		30
Bromodichloromethane	90		93		70-130	3		30
trans-1,3-Dichloropropene	88		92		70-130	4		30
cis-1,3-Dichloropropene	88		90		70-130	2		30
1,1-Dichloropropene	82		88		70-130	7		30
Bromoform	88		89		70-130	1		30
1,1,2,2-Tetrachloroethane	99		100		70-130	1		30
Benzene	88		92		70-130	4		30
Toluene	86		90		70-130	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & DODGE

Project Number: T0371-016-002

Lab Number: L1604591

Report Date: 02/29/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG868376-1 WG868376-2								
Ethylbenzene	84		89		70-130	6		30
Chloromethane	86		90		52-130	5		30
Bromomethane	86		84		57-147	2		30
Vinyl chloride	80		85		67-130	6		30
Chloroethane	91		96		50-151	5		30
1,1-Dichloroethene	77		84		65-135	9		30
trans-1,2-Dichloroethene	83		86		70-130	4		30
Trichloroethene	85		88		70-130	3		30
1,2-Dichlorobenzene	89		89		70-130	0		30
1,3-Dichlorobenzene	87		88		70-130	1		30
1,4-Dichlorobenzene	88		88		70-130	0		30
Methyl tert butyl ether	94		94		66-130	0		30
p/m-Xylene	85		89		70-130	5		30
o-Xylene	86		89		70-130	3		30
cis-1,2-Dichloroethene	87		90		70-130	3		30
Dibromomethane	95		94		70-130	1		30
Styrene	88		91		70-130	3		30
Dichlorodifluoromethane	59		63		30-146	7		30
Acetone	96		90		54-140	6		30
Carbon disulfide	85		98		59-130	14		30
2-Butanone	92		92		70-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & DODGE

Lab Number: L1604591

Project Number: T0371-016-002

Report Date: 02/29/16

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG868376-1 WG868376-2								
Vinyl acetate	96		96		70-130	0		30
4-Methyl-2-pentanone	92		95		70-130	3		30
1,2,3-Trichloropropane	99		100		68-130	1		30
2-Hexanone	84		82		70-130	2		30
Bromochloromethane	96		97		70-130	1		30
2,2-Dichloropropane	81		84		70-130	4		30
1,2-Dibromoethane	91		93		70-130	2		30
1,3-Dichloropropane	96		99		69-130	3		30
1,1,1,2-Tetrachloroethane	87		91		70-130	4		30
Bromobenzene	85		87		70-130	2		30
n-Butylbenzene	88		90		70-130	2		30
sec-Butylbenzene	83		87		70-130	5		30
tert-Butylbenzene	81		85		70-130	5		30
o-Chlorotoluene	88		90		70-130	2		30
p-Chlorotoluene	88		89		70-130	1		30
1,2-Dibromo-3-chloropropane	80		78		68-130	3		30
Hexachlorobutadiene	76		79		67-130	4		30
Isopropylbenzene	83		88		70-130	6		30
p-Isopropyltoluene	82		84		70-130	2		30
Naphthalene	86		85		70-130	1		30
Acrylonitrile	105		111		70-130	6		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG868376-1 WG868376-2								
Isopropyl Ether	95		97		66-130	2		30
tert-Butyl Alcohol	91		92		70-130	1		30
n-Propylbenzene	85		88		70-130	3		30
1,2,3-Trichlorobenzene	86		85		70-130	1		30
1,2,4-Trichlorobenzene	85		83		70-130	2		30
1,3,5-Trimethylbenzene	84		87		70-130	4		30
1,2,4-Trimethylbenzene	85		87		70-130	2		30
Methyl Acetate	98		98		51-146	0		30
Ethyl Acetate	158	Q	149	Q	70-130	6		30
Acrolein	98		97		70-130	1		30
Cyclohexane	74		79		59-142	7		30
1,4-Dioxane	103		105		65-136	2		30
Freon-113	67		73		50-139	9		30
1,4-Diethylbenzene	82		86		70-130	5		30
4-Ethyltoluene	86		89		70-130	3		30
1,2,4,5-Tetramethylbenzene	82		83		70-130	1		30
Tetrahydrofuran	118		111		66-130	6		30
Ethyl ether	95		93		67-130	2		30
trans-1,4-Dichloro-2-butene	98		97		70-130	1		30
Methyl cyclohexane	68	Q	73		70-130	7		30
Ethyl-Tert-Butyl-Ether	96		97		70-130	1		30

Lab Control Sample Analysis Batch Quality Control

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG868376-1 WG868376-2								
Tertiary-Amyl Methyl Ether	92		94		70-130	2		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	106		105		70-130
Toluene-d8	104		104		70-130
4-Bromofluorobenzene	101		99		70-130
Dibromofluoromethane	104		102		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10 Batch: WG868717-1 WG868717-2								
Methylene chloride	104		103		70-130	1		20
1,1-Dichloroethane	102		101		70-130	1		20
Chloroform	99		101		70-130	2		20
2-Chloroethylvinyl ether	100		103		70-130	3		20
Carbon tetrachloride	103		99		63-132	4		20
1,2-Dichloropropane	100		100		70-130	0		20
Dibromochloromethane	97		97		63-130	0		20
1,1,2-Trichloroethane	100		102		70-130	2		20
Tetrachloroethene	105		104		70-130	1		20
Chlorobenzene	100		98		75-130	2		20
Trichlorofluoromethane	102		102		62-150	0		20
1,2-Dichloroethane	97		101		70-130	4		20
1,1,1-Trichloroethane	99		103		67-130	4		20
Bromodichloromethane	100		99		67-130	1		20
trans-1,3-Dichloropropene	99		98		70-130	1		20
cis-1,3-Dichloropropene	99		99		70-130	0		20
1,1-Dichloropropene	103		101		70-130	2		20
Bromoform	95		95		54-136	0		20
1,1,2,2-Tetrachloroethane	93		100		67-130	7		20
Benzene	98		99		70-130	1		20
Toluene	99		99		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10 Batch: WG868717-1 WG868717-2								
Ethylbenzene	98		98		70-130	0		20
Chloromethane	104		104		64-130	0		20
Bromomethane	87		82		39-139	6		20
Vinyl chloride	106		105		55-140	1		20
Chloroethane	95		97		55-138	2		20
1,1-Dichloroethene	96		97		61-145	1		20
trans-1,2-Dichloroethene	103		101		70-130	2		20
Trichloroethene	100		99		70-130	1		20
1,2-Dichlorobenzene	97		96		70-130	1		20
1,3-Dichlorobenzene	94		97		70-130	3		20
1,4-Dichlorobenzene	96		96		70-130	0		20
Methyl tert butyl ether	94		99		63-130	5		20
p/m-Xylene	96		94		70-130	2		20
o-Xylene	94		93		70-130	1		20
cis-1,2-Dichloroethene	101		100		70-130	1		20
Dibromomethane	94		96		70-130	2		20
1,2,3-Trichloropropane	100		99		64-130	1		20
Acrylonitrile	97		94		70-130	3		20
Isopropyl Ether	100		101		70-130	1		20
tert-Butyl Alcohol	85		90		70-130	6		20
Styrene	93		92		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10 Batch: WG868717-1 WG868717-2								
Dichlorodifluoromethane	99		101		36-147	2		20
Acetone	90		89		58-148	1		20
Carbon disulfide	90		91		51-130	1		20
2-Butanone	98		102		63-138	4		20
Vinyl acetate	92		93		70-130	1		20
4-Methyl-2-pentanone	77		81		59-130	5		20
2-Hexanone	85		86		57-130	1		20
Acrolein	97		93		40-160	4		20
Bromochloromethane	100		96		70-130	4		20
2,2-Dichloropropane	104		106		63-133	2		20
1,2-Dibromoethane	96		99		70-130	3		20
1,3-Dichloropropane	100		103		70-130	3		20
1,1,1,2-Tetrachloroethane	99		102		64-130	3		20
Bromobenzene	96		98		70-130	2		20
n-Butylbenzene	81		79		53-136	3		20
sec-Butylbenzene	98		96		70-130	2		20
tert-Butylbenzene	99		98		70-130	1		20
o-Chlorotoluene	100		101		70-130	1		20
p-Chlorotoluene	100		102		70-130	2		20
1,2-Dibromo-3-chloropropane	96		92		41-144	4		20
Hexachlorobutadiene	97		92		63-130	5		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10 Batch: WG868717-1 WG868717-2								
Isopropylbenzene	99		100		70-130	1		20
p-Isopropyltoluene	84		82		70-130	2		20
Naphthalene	95		96		70-130	1		20
n-Propylbenzene	99		99		69-130	0		20
1,2,3-Trichlorobenzene	98		94		70-130	4		20
1,2,4-Trichlorobenzene	93		97		70-130	4		20
1,3,5-Trimethylbenzene	100		99		64-130	1		20
1,2,4-Trimethylbenzene	98		98		70-130	0		20
Methyl Acetate	103		103		70-130	0		20
Ethyl Acetate	85		86		70-130	1		20
Cyclohexane	106		105		70-130	1		20
Ethyl-Tert-Butyl-Ether	98		100		70-130	2		20
Tertiary-Amyl Methyl Ether	95		97		66-130	2		20
1,4-Dioxane	99		96		56-162	3		20
Freon-113	100		104		70-130	4		20
1,4-Diethylbenzene	81		80		70-130	1		20
4-Ethyltoluene	97		99		70-130	2		20
1,2,4,5-Tetramethylbenzene	105		103		70-130	2		20
Ethyl ether	91		97		59-134	6		20
trans-1,4-Dichloro-2-butene	94		98		70-130	4		20
Iodomethane	72		82		70-130	13		20

Lab Control Sample Analysis Batch Quality Control

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10 Batch: WG868717-1 WG868717-2								
Methyl cyclohexane	104		102		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	97		97		70-130
Toluene-d8	103		103		70-130
4-Bromofluorobenzene	104		103		70-130
Dibromofluoromethane	100		97		70-130

SEMIVOLATILES

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-01
 Client ID: SB-1 (1-4)
 Sample Location: MAIN & DODGE
 Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 02/27/16 18:43
 Analyst: PS
 Percent Solids: 86%

Date Collected: 02/18/16 09:00
 Date Received: 02/19/16
 Field Prep: Not Specified
 Extraction Method: EPA 3546
 Extraction Date: 02/25/16 15:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	35.	1
1,3-Dichlorobenzene	ND		ug/kg	190	33.	1
1,4-Dichlorobenzene	ND		ug/kg	190	34.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	51.	1
2,4-Dinitrotoluene	ND		ug/kg	190	39.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	500		ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	550	180	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	ND		ug/kg	190	24.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	84	J	ug/kg	190	67.	1
Butyl benzyl phthalate	ND		ug/kg	190	49.	1
Di-n-butylphthalate	ND		ug/kg	190	37.	1
Di-n-octylphthalate	ND		ug/kg	190	66.	1
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1

Project Name: MAIN & DODGE

Lab Number: L1604591

Project Number: T0371-016-002

Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-01
 Client ID: SB-1 (1-4')
 Sample Location: MAIN & DODGE

Date Collected: 02/18/16 09:00
 Date Received: 02/19/16
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)anthracene	360		ug/kg	120	22.	1
Benzo(a)pyrene	310		ug/kg	150	47.	1
Benzo(b)fluoranthene	460		ug/kg	120	32.	1
Benzo(k)fluoranthene	180		ug/kg	120	31.	1
Chrysene	340		ug/kg	120	20.	1
Acenaphthylene	ND		ug/kg	150	30.	1
Anthracene	ND		ug/kg	120	38.	1
Benzo(ghi)perylene	180		ug/kg	150	23.	1
Fluorene	ND		ug/kg	190	19.	1
Phenanthrene	88	J	ug/kg	120	23.	1
Dibenzo(a,h)anthracene	45	J	ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	200		ug/kg	150	27.	1
Pyrene	410		ug/kg	120	19.	1
Biphenyl	ND		ug/kg	440	45.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	80.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
Benzyl Alcohol	ND		ug/kg	190	59.	1
Carbazole	56	J	ug/kg	190	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	90		23-120
2-Fluorobiphenyl	79		30-120
4-Terphenyl-d14	72		18-120

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-02
 Client ID: SB-4 (0-3')
 Sample Location: MAIN & DODGE
 Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 02/27/16 19:09
 Analyst: PS
 Percent Solids: 88%

Date Collected: 02/18/16 10:30
 Date Received: 02/19/16
 Field Prep: Not Specified
 Extraction Method: EPA 3546
 Extraction Date: 02/25/16 15:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	92	J	ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	21.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	32.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	2000		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	76	J	ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	110	J	ug/kg	190	65.	1
Butyl benzyl phthalate	ND		ug/kg	190	47.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	64.	1
Diethyl phthalate	ND		ug/kg	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	39.	1

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-02
Client ID: SB-4 (0-3')
Sample Location: MAIN & DODGE

Date Collected: 02/18/16 10:30
Date Received: 02/19/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)anthracene	1200		ug/kg	110	21.	1
Benzo(a)pyrene	1100		ug/kg	150	46.	1
Benzo(b)fluoranthene	1400		ug/kg	110	32.	1
Benzo(k)fluoranthene	540		ug/kg	110	30.	1
Chrysene	1100		ug/kg	110	20.	1
Acenaphthylene	51	J	ug/kg	150	29.	1
Anthracene	320		ug/kg	110	36.	1
Benzo(ghi)perylene	560		ug/kg	150	22.	1
Fluorene	110	J	ug/kg	190	18.	1
Phenanthrene	1200		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	140		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	650		ug/kg	150	26.	1
Pyrene	1600		ug/kg	110	19.	1
Biphenyl	ND		ug/kg	430	44.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	35.	1
4-Nitroaniline	ND		ug/kg	190	78.	1
Dibenzofuran	75	J	ug/kg	190	18.	1
2-Methylnaphthalene	72	J	ug/kg	220	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
Benzyl Alcohol	ND		ug/kg	190	57.	1
Carbazole	180	J	ug/kg	190	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	102		23-120
2-Fluorobiphenyl	90		30-120
4-Terphenyl-d14	77		18-120

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-04
 Client ID: SB-7 (1-4)
 Sample Location: MAIN & DODGE
 Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 02/27/16 19:34
 Analyst: PS
 Percent Solids: 84%

Date Collected: 02/18/16 12:00
 Date Received: 02/19/16
 Field Prep: Not Specified
 Extraction Method: EPA 3546
 Extraction Date: 02/25/16 15:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	160	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	35.	1
1,3-Dichlorobenzene	ND		ug/kg	190	33.	1
1,4-Dichlorobenzene	ND		ug/kg	190	34.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	52.	1
2,4-Dinitrotoluene	ND		ug/kg	190	39.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	380		ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	550	180	1
Hexachloroethane	ND		ug/kg	160	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	ND		ug/kg	190	24.	1
Nitrobenzene	ND		ug/kg	170	29.	1
NDPA/DPA	ND		ug/kg	160	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	410		ug/kg	190	67.	1
Butyl benzyl phthalate	57	J	ug/kg	190	49.	1
Di-n-butylphthalate	64	J	ug/kg	190	37.	1
Di-n-octylphthalate	ND		ug/kg	190	66.	1
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	41.	1

Project Name: MAIN & DODGE

Lab Number: L1604591

Project Number: T0371-016-002

Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-04
 Client ID: SB-7 (1-4')
 Sample Location: MAIN & DODGE

Date Collected: 02/18/16 12:00
 Date Received: 02/19/16
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)anthracene	180		ug/kg	120	22.	1
Benzo(a)pyrene	180		ug/kg	160	47.	1
Benzo(b)fluoranthene	230		ug/kg	120	33.	1
Benzo(k)fluoranthene	71	J	ug/kg	120	31.	1
Chrysene	170		ug/kg	120	20.	1
Acenaphthylene	ND		ug/kg	160	30.	1
Anthracene	94	J	ug/kg	120	38.	1
Benzo(ghi)perylene	120	J	ug/kg	160	23.	1
Fluorene	38	J	ug/kg	190	19.	1
Phenanthrene	310		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	39	J	ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	100	J	ug/kg	160	27.	1
Pyrene	300		ug/kg	120	19.	1
Biphenyl	ND		ug/kg	440	45.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	80.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
Benzyl Alcohol	ND		ug/kg	190	59.	1
Carbazole	47	J	ug/kg	190	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	68		30-120
4-Terphenyl-d14	58		18-120

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-05
 Client ID: SB-8 (0-4')
 Sample Location: MAIN & DODGE
 Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 02/27/16 19:59
 Analyst: PS
 Percent Solids: 89%

Date Collected: 02/18/16 12:30
 Date Received: 02/19/16
 Field Prep: Not Specified
 Extraction Method: EPA 3546
 Extraction Date: 02/25/16 15:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	32.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	37.	1
2,6-Dinitrotoluene	ND		ug/kg	180	32.	1
Fluoranthene	790		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	ND		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	170	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	240		ug/kg	180	64.	1
Butyl benzyl phthalate	ND		ug/kg	180	47.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	63.	1
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	39.	1

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-05
Client ID: SB-8 (0-4')
Sample Location: MAIN & DODGE

Date Collected: 02/18/16 12:30
Date Received: 02/19/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)anthracene	360		ug/kg	110	21.	1
Benzo(a)pyrene	330		ug/kg	150	45.	1
Benzo(b)fluoranthene	450		ug/kg	110	31.	1
Benzo(k)fluoranthene	140		ug/kg	110	30.	1
Chrysene	350		ug/kg	110	19.	1
Acenaphthylene	61	J	ug/kg	150	28.	1
Anthracene	110		ug/kg	110	36.	1
Benzo(ghi)perylene	180		ug/kg	150	22.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	350		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	46	J	ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	200		ug/kg	150	26.	1
Pyrene	670		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	43.	1
4-Chloroaniline	ND		ug/kg	180	34.	1
2-Nitroaniline	ND		ug/kg	180	36.	1
3-Nitroaniline	ND		ug/kg	180	35.	1
4-Nitroaniline	ND		ug/kg	180	77.	1
Dibenzofuran	ND		ug/kg	180	18.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
Benzyl Alcohol	ND		ug/kg	180	57.	1
Carbazole	32	J	ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	92		23-120
2-Fluorobiphenyl	81		30-120
4-Terphenyl-d14	70		18-120

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-06
 Client ID: SB-10 (0-3')
 Sample Location: MAIN & DODGE
 Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 02/27/16 20:25
 Analyst: PS
 Percent Solids: 87%

Date Collected: 02/18/16 14:00
 Date Received: 02/19/16
 Field Prep: Not Specified
 Extraction Method: EPA 3546
 Extraction Date: 02/25/16 15:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	120	J	ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	32.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	2000		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	59	J	ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	39	J	ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	65.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	64.	1
Diethyl phthalate	ND		ug/kg	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1

Project Name: MAIN & DODGE

Lab Number: L1604591

Project Number: T0371-016-002

Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-06
 Client ID: SB-10 (0-3')
 Sample Location: MAIN & DODGE

Date Collected: 02/18/16 14:00
 Date Received: 02/19/16
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)anthracene	930		ug/kg	110	21.	1
Benzo(a)pyrene	840		ug/kg	150	46.	1
Benzo(b)fluoranthene	1100		ug/kg	110	32.	1
Benzo(k)fluoranthene	470		ug/kg	110	30.	1
Chrysene	890		ug/kg	110	20.	1
Acenaphthylene	70	J	ug/kg	150	29.	1
Anthracene	350		ug/kg	110	37.	1
Benzo(ghi)perylene	440		ug/kg	150	22.	1
Fluorene	140	J	ug/kg	190	18.	1
Phenanthrene	1500		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	110		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	500		ug/kg	150	26.	1
Pyrene	1600		ug/kg	110	19.	1
Biphenyl	ND		ug/kg	430	44.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	78.	1
Dibenzofuran	79	J	ug/kg	190	18.	1
2-Methylnaphthalene	60	J	ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
Benzyl Alcohol	ND		ug/kg	190	58.	1
Carbazole	170	J	ug/kg	190	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	100		23-120
2-Fluorobiphenyl	89		30-120
4-Terphenyl-d14	76		18-120

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-07
 Client ID: SB-11 (3-5')
 Sample Location: MAIN & DODGE
 Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 02/27/16 20:50
 Analyst: PS
 Percent Solids: 81%

Date Collected: 02/18/16 14:30
 Date Received: 02/19/16
 Field Prep: Not Specified
 Extraction Method: EPA 3546
 Extraction Date: 02/25/16 15:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	160	21.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	23.	1
Hexachlorobenzene	ND		ug/kg	120	23.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	28.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
1,2-Dichlorobenzene	ND		ug/kg	200	36.	1
1,3-Dichlorobenzene	ND		ug/kg	200	35.	1
1,4-Dichlorobenzene	ND		ug/kg	200	36.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	54.	1
2,4-Dinitrotoluene	ND		ug/kg	200	41.	1
2,6-Dinitrotoluene	ND		ug/kg	200	35.	1
Fluoranthene	880		ug/kg	120	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	22.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	31.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	35.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	220	20.	1
Hexachlorobutadiene	ND		ug/kg	200	30.	1
Hexachlorocyclopentadiene	ND		ug/kg	580	180	1
Hexachloroethane	ND		ug/kg	160	33.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	ND		ug/kg	200	25.	1
Nitrobenzene	ND		ug/kg	180	30.	1
NDPA/DPA	ND		ug/kg	160	23.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	31.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	70.	1
Butyl benzyl phthalate	ND		ug/kg	200	51.	1
Di-n-butylphthalate	ND		ug/kg	200	38.	1
Di-n-octylphthalate	ND		ug/kg	200	69.	1
Diethyl phthalate	ND		ug/kg	200	19.	1
Dimethyl phthalate	ND		ug/kg	200	43.	1

Project Name: MAIN & DODGE

Lab Number: L1604591

Project Number: T0371-016-002

Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-07
 Client ID: SB-11 (3-5')
 Sample Location: MAIN & DODGE

Date Collected: 02/18/16 14:30
 Date Received: 02/19/16
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)anthracene	470		ug/kg	120	23.	1
Benzo(a)pyrene	520		ug/kg	160	50.	1
Benzo(b)fluoranthene	620		ug/kg	120	34.	1
Benzo(k)fluoranthene	210		ug/kg	120	32.	1
Chrysene	470		ug/kg	120	21.	1
Acenaphthylene	120	J	ug/kg	160	31.	1
Anthracene	140		ug/kg	120	40.	1
Benzo(ghi)perylene	400		ug/kg	160	24.	1
Fluorene	40	J	ug/kg	200	20.	1
Phenanthrene	430		ug/kg	120	25.	1
Dibenzo(a,h)anthracene	84	J	ug/kg	120	24.	1
Indeno(1,2,3-cd)pyrene	330		ug/kg	160	28.	1
Pyrene	780		ug/kg	120	20.	1
Biphenyl	ND		ug/kg	460	47.	1
4-Chloroaniline	ND		ug/kg	200	37.	1
2-Nitroaniline	ND		ug/kg	200	39.	1
3-Nitroaniline	ND		ug/kg	200	38.	1
4-Nitroaniline	ND		ug/kg	200	84.	1
Dibenzofuran	ND		ug/kg	200	19.	1
2-Methylnaphthalene	ND		ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	21.	1
Acetophenone	ND		ug/kg	200	25.	1
Benzyl Alcohol	ND		ug/kg	200	62.	1
Carbazole	63	J	ug/kg	200	20.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	88		23-120
2-Fluorobiphenyl	78		30-120
4-Terphenyl-d14	64		18-120

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-08
 Client ID: SB-12 (2-4')
 Sample Location: MAIN & DODGE
 Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 02/27/16 21:16
 Analyst: PS
 Percent Solids: 88%

Date Collected: 02/18/16 15:00
 Date Received: 02/19/16
 Field Prep: Not Specified
 Extraction Method: EPA 3546
 Extraction Date: 02/25/16 15:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	21.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	190	18.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	32.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	37.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	360		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	ND		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	65.	1
Butyl benzyl phthalate	ND		ug/kg	190	47.	1
Di-n-butylphthalate	ND		ug/kg	190	35.	1
Di-n-octylphthalate	ND		ug/kg	190	64.	1
Diethyl phthalate	ND		ug/kg	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	39.	1

Project Name: MAIN & DODGE

Lab Number: L1604591

Project Number: T0371-016-002

Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-08
 Client ID: SB-12 (2-4')
 Sample Location: MAIN & DODGE

Date Collected: 02/18/16 15:00
 Date Received: 02/19/16
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)anthracene	190		ug/kg	110	21.	1
Benzo(a)pyrene	180		ug/kg	150	46.	1
Benzo(b)fluoranthene	220		ug/kg	110	32.	1
Benzo(k)fluoranthene	88	J	ug/kg	110	30.	1
Chrysene	180		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	76	J	ug/kg	110	36.	1
Benzo(ghi)perylene	110	J	ug/kg	150	22.	1
Fluorene	27	J	ug/kg	190	18.	1
Phenanthrene	280		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	26	J	ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	110	J	ug/kg	150	26.	1
Pyrene	290		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	430	43.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	35.	1
4-Nitroaniline	ND		ug/kg	190	77.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
Benzyl Alcohol	ND		ug/kg	190	57.	1
Carbazole	45	J	ug/kg	190	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	41		23-120
2-Fluorobiphenyl	38		30-120
4-Terphenyl-d14	33		18-120

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 02/26/16 09:42
Analyst: PS

Extraction Method: EPA 3546
Extraction Date: 02/25/16 15:19

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02,04-08 Batch: WG868367-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	18.
Hexachlorobenzene	ND		ug/kg	97	18.
Bis(2-chloroethyl)ether	ND		ug/kg	140	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	29.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	28.
3,3'-Dichlorobenzidine	ND		ug/kg	160	43.
2,4-Dinitrotoluene	ND		ug/kg	160	32.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	97	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	17.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	190	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	460	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	140	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	140	24.
NDPA/DPA	ND		ug/kg	130	18.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	56.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	55.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 02/26/16 09:42
Analyst: PS

Extraction Method: EPA 3546
Extraction Date: 02/25/16 15:19

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02,04-08 Batch: WG868367-1					
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	97	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	97	27.
Benzo(k)fluoranthene	ND		ug/kg	97	26.
Chrysene	ND		ug/kg	97	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	97	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	97	20.
Dibenzo(a,h)anthracene	ND		ug/kg	97	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	97	16.
Biphenyl	ND		ug/kg	370	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	31.
3-Nitroaniline	ND		ug/kg	160	30.
4-Nitroaniline	ND		ug/kg	160	67.
Dibenzofuran	ND		ug/kg	160	15.
2-Methylnaphthalene	ND		ug/kg	190	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 02/26/16 09:42
Analyst: PS

Extraction Method: EPA 3546
Extraction Date: 02/25/16 15:19

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02,04-08 Batch: WG868367-1					

Tentatively Identified Compounds

No Tentatively Identified Compounds ND ug/kg

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	86		25-120
Phenol-d6	93		10-120
Nitrobenzene-d5	99		23-120
2-Fluorobiphenyl	100		30-120
2,4,6-Tribromophenol	95		10-136
4-Terphenyl-d14	114		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,04-08 Batch: WG868367-2 WG868367-3								
Acenaphthene	109		85		31-137	25		50
Benzidine	77	Q	68	Q	10-66	12		50
n-Nitrosodimethylamine	78		64		22-100	20		50
1,2,4-Trichlorobenzene	103		85		38-107	19		50
Hexachlorobenzene	129		93		40-140	32		50
Bis(2-chloroethyl)ether	96		79		40-140	19		50
2-Chloronaphthalene	106		86		40-140	21		50
1,2-Dichlorobenzene	97		80		40-140	19		50
1,3-Dichlorobenzene	91		76		40-140	18		50
1,4-Dichlorobenzene	92		78		28-104	16		50
3,3'-Dichlorobenzidine	94		84		40-140	11		50
2,4-Dinitrotoluene	128	Q	95	Q	28-89	30		50
2,6-Dinitrotoluene	127		97		40-140	27		50
Fluoranthene	124		92		40-140	30		50
4-Chlorophenyl phenyl ether	115		87		40-140	28		50
4-Bromophenyl phenyl ether	123		90		40-140	31		50
Azobenzene	123		92		40-140	29		50
Bis(2-chloroisopropyl)ether	94		80		40-140	16		50
Bis(2-chloroethoxy)methane	109		92		40-117	17		50
Hexachlorobutadiene	105		89		40-140	16		50
Hexachlorocyclopentadiene	38	Q	30	Q	40-140	24		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,04-08 Batch: WG868367-2 WG868367-3								
Hexachloroethane	100		85		40-140	16		50
Isophorone	117		97		40-140	19		50
Naphthalene	102		83		40-140	21		50
Nitrobenzene	107		86		40-140	22		50
NitrosoDiPhenylAmine(NDPA)/DPA	120		89		36-157	30		50
n-Nitrosodi-n-propylamine	116		95		32-121	20		50
Bis(2-Ethylhexyl)phthalate	111		83		40-140	29		50
Butyl benzyl phthalate	130		96		40-140	30		50
Di-n-butylphthalate	121		90		40-140	29		50
Di-n-octylphthalate	116		86		40-140	30		50
Diethyl phthalate	120		91		40-140	27		50
Dimethyl phthalate	118		90		40-140	27		50
Benzo(a)anthracene	123		90		40-140	31		50
Benzo(a)pyrene	125		92		40-140	30		50
Benzo(b)fluoranthene	120		87		40-140	32		50
Benzo(k)fluoranthene	112		90		40-140	22		50
Chrysene	116		88		40-140	27		50
Acenaphthylene	113		89		40-140	24		50
Anthracene	122		92		40-140	28		50
Benzo(ghi)perylene	114		88		40-140	26		50
Fluorene	116		88		40-140	27		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,04-08 Batch: WG868367-2 WG868367-3								
Phenanthrene	114		86		40-140	28		50
Dibenzo(a,h)anthracene	117		89		40-140	27		50
Indeno(1,2,3-cd)Pyrene	114		90		40-140	24		50
Pyrene	122		91		35-142	29		50
Biphenyl	111	Q	90		54-104	21		50
Aniline	77		59		40-140	26		50
4-Chloroaniline	113		95		40-140	17		50
2-Nitroaniline	122		91		47-134	29		50
3-Nitroaniline	87		66		26-129	27		50
4-Nitroaniline	112		80		41-125	33		50
Dibenzofuran	112		87		40-140	25		50
2-Methylnaphthalene	104		84		40-140	21		50
1,2,4,5-Tetrachlorobenzene	116		94		40-117	21		50
Acetophenone	114		94		14-144	19		50
2,4,6-Trichlorophenol	127		98		30-130	26		50
P-Chloro-M-Cresol	125	Q	95		26-103	27		50
2-Chlorophenol	104	Q	85		25-102	20		50
2,4-Dichlorophenol	119		93		30-130	25		50
2,4-Dimethylphenol	125		102		30-130	20		50
2-Nitrophenol	111		92		30-130	19		50
4-Nitrophenol	103		80		11-114	25		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & DODGE

Lab Number: L1604591

Project Number: T0371-016-002

Report Date: 02/29/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,04-08 Batch: WG868367-2 WG868367-3								
2,4-Dinitrophenol	75		62		4-130	19		50
4,6-Dinitro-o-cresol	106		76		10-130	33		50
Pentachlorophenol	89		67		17-109	28		50
Phenol	102	Q	82		26-90	22		50
2-Methylphenol	113		92		30-130.	20		50
3-Methylphenol/4-Methylphenol	123		99		30-130	22		50
2,4,5-Trichlorophenol	118		89		30-130	28		50
Benzoic Acid	32		26		10-66	21		50
Benzyl Alcohol	112		90		40-140	22		50
Carbazole	119		89		54-128	29		50
Benzaldehyde	126		88		40-140	36		50
Caprolactam	136	Q	101		15-130	30		50
Atrazine	162	Q	146	Q	40-140	10		50
2,3,4,6-Tetrachlorophenol	124		90		40-140	32		50
Pyridine	59		48		10-93	21		50
Parathion, ethyl	164	Q	148	Q	40-140	10		50
1-Methylnaphthalene	107		88		26-130	19		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
-----------	-------------------------	-------------	--------------------------	-------------	----------------------------	------------	-------------	----------------------

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,04-08 Batch: WG868367-2 WG868367-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	84		80		25-120
Phenol-d6	93		87		10-120
Nitrobenzene-d5	96		94		23-120
2-Fluorobiphenyl	98		92		30-120
2,4,6-Tribromophenol	101		92		10-136
4-Terphenyl-d14	107		98		18-120

PCBS

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-08
 Client ID: SB-12 (2-4')
 Sample Location: MAIN & DODGE
 Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 02/26/16 06:09
 Analyst: JW
 Percent Solids: 88%

Date Collected: 02/18/16 15:00
 Date Received: 02/19/16
 Field Prep: Not Specified
 Extraction Method: EPA 3546
 Extraction Date: 02/24/16 22:09
 Cleanup Method: EPA 3665A
 Cleanup Date: 02/26/16
 Cleanup Method: EPA 3660B
 Cleanup Date: 02/26/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.2	2.86	1	A
Aroclor 1221	ND		ug/kg	36.2	3.34	1	A
Aroclor 1232	ND		ug/kg	36.2	4.24	1	A
Aroclor 1242	ND		ug/kg	36.2	4.43	1	A
Aroclor 1248	ND		ug/kg	36.2	3.06	1	A
Aroclor 1254	ND		ug/kg	36.2	2.98	1	A
Aroclor 1260	ND		ug/kg	36.2	2.76	1	A
Aroclor 1262	ND		ug/kg	36.2	1.80	1	A
Aroclor 1268	ND		ug/kg	36.2	5.25	1	A
PCBs, Total	ND		ug/kg	36.2	1.80	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		30-150	A
Decachlorobiphenyl	82		30-150	A
2,4,5,6-Tetrachloro-m-xylene	69		30-150	B
Decachlorobiphenyl	77		30-150	B

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-09
 Client ID: SB-14 (0-2')
 Sample Location: MAIN & DODGE
 Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 02/25/16 16:51
 Analyst: KE
 Percent Solids: 92%

Date Collected: 02/18/16 16:00
 Date Received: 02/19/16
 Field Prep: Not Specified
 Extraction Method: EPA 3546
 Extraction Date: 02/24/16 22:09
 Cleanup Method: EPA 3665A
 Cleanup Date: 02/25/16
 Cleanup Method: EPA 3660B
 Cleanup Date: 02/25/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.8	2.82	1	A
Aroclor 1221	ND		ug/kg	35.8	3.30	1	A
Aroclor 1232	ND		ug/kg	35.8	4.19	1	A
Aroclor 1242	ND		ug/kg	35.8	4.38	1	A
Aroclor 1248	ND		ug/kg	35.8	3.02	1	A
Aroclor 1254	ND		ug/kg	35.8	2.94	1	A
Aroclor 1260	ND		ug/kg	35.8	2.72	1	A
Aroclor 1262	ND		ug/kg	35.8	1.77	1	A
Aroclor 1268	ND		ug/kg	35.8	5.18	1	A
PCBs, Total	ND		ug/kg	35.8	1.77	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	A
Decachlorobiphenyl	67		30-150	A
2,4,5,6-Tetrachloro-m-xylene	65		30-150	B
Decachlorobiphenyl	63		30-150	B

Project Name: MAIN & DODGE

Lab Number: L1604591

Project Number: T0371-016-002

Report Date: 02/29/16

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A
 Analytical Date: 02/25/16 17:04
 Analyst: KE

Extraction Method: EPA 3546
 Extraction Date: 02/24/16 22:09
 Cleanup Method: EPA 3665A
 Cleanup Date: 02/25/16
 Cleanup Method: EPA 3660B
 Cleanup Date: 02/25/16

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 08-09 Batch: WG868104-1						
Aroclor 1016	ND		ug/kg	31.5	2.48	A
Aroclor 1221	ND		ug/kg	31.5	2.90	A
Aroclor 1232	ND		ug/kg	31.5	3.69	A
Aroclor 1242	ND		ug/kg	31.5	3.85	A
Aroclor 1248	ND		ug/kg	31.5	2.66	A
Aroclor 1254	11.3	J	ug/kg	31.5	2.59	A
Aroclor 1260	ND		ug/kg	31.5	2.40	A
Aroclor 1262	ND		ug/kg	31.5	1.56	A
Aroclor 1268	ND		ug/kg	31.5	4.56	A
PCBs, Total	11.3	J	ug/kg	31.5	1.56	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	93		30-150	A
Decachlorobiphenyl	94		30-150	A
2,4,5,6-Tetrachloro-m-xylene	82		30-150	B
Decachlorobiphenyl	79		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & DODGE

Project Number: T0371-016-002

Lab Number: L1604591

Report Date: 02/29/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 08-09 Batch: WG868104-2 WG868104-3									
Aroclor 1016	76		70		40-140	8		50	A
Aroclor 1260	52		52		40-140	0		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	96		92		30-150	A
Decachlorobiphenyl	80		81		30-150	A
2,4,5,6-Tetrachloro-m-xylene	84		87		30-150	B
Decachlorobiphenyl	72		78		30-150	B

METALS

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-04
 Client ID: SB-7 (1-4')
 Sample Location: MAIN & DODGE
 Matrix: Soil
 Percent Solids: 84%

Date Collected: 02/18/16 12:00
 Date Received: 02/19/16
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	3.1		mg/kg	0.48	0.10	1	02/23/16 13:32	02/24/16 00:36	EPA 3050B	1,6010C	PS
Barium, Total	75		mg/kg	0.48	0.14	1	02/23/16 13:32	02/24/16 00:36	EPA 3050B	1,6010C	PS
Beryllium, Total	0.22	J	mg/kg	0.24	0.05	1	02/23/16 13:32	02/24/16 00:36	EPA 3050B	1,6010C	PS
Cadmium, Total	ND		mg/kg	0.48	0.03	1	02/23/16 13:32	02/24/16 00:36	EPA 3050B	1,6010C	PS
Chromium, Total	6.5		mg/kg	0.48	0.10	1	02/23/16 13:32	02/24/16 00:36	EPA 3050B	1,6010C	PS
Copper, Total	12		mg/kg	0.48	0.10	1	02/23/16 13:32	02/24/16 00:36	EPA 3050B	1,6010C	PS
Lead, Total	260		mg/kg	2.4	0.10	1	02/23/16 13:32	02/24/16 00:36	EPA 3050B	1,6010C	PS
Manganese, Total	200		mg/kg	0.48	0.10	1	02/23/16 13:32	02/24/16 00:36	EPA 3050B	1,6010C	PS
Mercury, Total	0.29		mg/kg	0.08	0.02	1	02/23/16 09:20	02/23/16 23:21	EPA 7471B	1,7471B	EA
Nickel, Total	6.1		mg/kg	1.2	0.19	1	02/23/16 13:32	02/24/16 00:36	EPA 3050B	1,6010C	PS
Selenium, Total	0.50	J	mg/kg	0.95	0.14	1	02/23/16 13:32	02/24/16 00:36	EPA 3050B	1,6010C	PS
Silver, Total	ND		mg/kg	0.48	0.10	1	02/23/16 13:32	02/24/16 00:36	EPA 3050B	1,6010C	PS
Zinc, Total	100		mg/kg	2.4	0.33	1	02/23/16 13:32	02/24/16 00:36	EPA 3050B	1,6010C	PS



Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-05
Client ID: SB-8 (0-4')
Sample Location: MAIN & DODGE
Matrix: Soil
Percent Solids: 89%

Date Collected: 02/18/16 12:30
Date Received: 02/19/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	2.0		mg/kg	0.45	0.09	1	02/23/16 13:32	02/24/16 00:40	EPA 3050B	1,6010C	PS
Barium, Total	46		mg/kg	0.45	0.13	1	02/23/16 13:32	02/24/16 00:40	EPA 3050B	1,6010C	PS
Beryllium, Total	0.26		mg/kg	0.22	0.05	1	02/23/16 13:32	02/24/16 00:40	EPA 3050B	1,6010C	PS
Cadmium, Total	ND		mg/kg	0.45	0.03	1	02/23/16 13:32	02/24/16 00:40	EPA 3050B	1,6010C	PS
Chromium, Total	5.7		mg/kg	0.45	0.09	1	02/23/16 13:32	02/24/16 00:40	EPA 3050B	1,6010C	PS
Copper, Total	61		mg/kg	0.45	0.09	1	02/23/16 13:32	02/24/16 00:40	EPA 3050B	1,6010C	PS
Lead, Total	55		mg/kg	2.2	0.09	1	02/23/16 13:32	02/24/16 00:40	EPA 3050B	1,6010C	PS
Manganese, Total	180		mg/kg	0.45	0.09	1	02/23/16 13:32	02/24/16 00:40	EPA 3050B	1,6010C	PS
Mercury, Total	0.28		mg/kg	0.07	0.02	1	02/23/16 09:20	02/23/16 23:23	EPA 7471B	1,7471B	EA
Nickel, Total	4.8		mg/kg	1.1	0.18	1	02/23/16 13:32	02/24/16 00:40	EPA 3050B	1,6010C	PS
Selenium, Total	0.49	J	mg/kg	0.89	0.13	1	02/23/16 13:32	02/24/16 00:40	EPA 3050B	1,6010C	PS
Silver, Total	ND		mg/kg	0.45	0.09	1	02/23/16 13:32	02/24/16 00:40	EPA 3050B	1,6010C	PS
Zinc, Total	49		mg/kg	2.2	0.31	1	02/23/16 13:32	02/24/16 00:40	EPA 3050B	1,6010C	PS



Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-06
 Client ID: SB-10 (0-3')
 Sample Location: MAIN & DODGE
 Matrix: Soil
 Percent Solids: 87%

Date Collected: 02/18/16 14:00
 Date Received: 02/19/16
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	4.2		mg/kg	0.45	0.09	1	02/23/16 13:32	02/24/16 01:32	EPA 3050B	1,6010C	PS
Barium, Total	36		mg/kg	0.45	0.14	1	02/23/16 13:32	02/24/16 01:32	EPA 3050B	1,6010C	PS
Beryllium, Total	0.24		mg/kg	0.23	0.05	1	02/23/16 13:32	02/24/16 01:32	EPA 3050B	1,6010C	PS
Cadmium, Total	0.07	J	mg/kg	0.45	0.03	1	02/23/16 13:32	02/24/16 01:32	EPA 3050B	1,6010C	PS
Chromium, Total	5.2		mg/kg	0.45	0.09	1	02/23/16 13:32	02/24/16 01:32	EPA 3050B	1,6010C	PS
Copper, Total	9.3		mg/kg	0.45	0.09	1	02/23/16 13:32	02/24/16 01:32	EPA 3050B	1,6010C	PS
Lead, Total	17		mg/kg	2.3	0.09	1	02/23/16 13:32	02/24/16 01:32	EPA 3050B	1,6010C	PS
Manganese, Total	230		mg/kg	0.45	0.09	1	02/23/16 13:32	02/24/16 01:32	EPA 3050B	1,6010C	PS
Mercury, Total	0.06	J	mg/kg	0.07	0.02	1	02/23/16 09:20	02/23/16 23:25	EPA 7471B	1,7471B	EA
Nickel, Total	5.1		mg/kg	1.1	0.18	1	02/23/16 13:32	02/24/16 01:32	EPA 3050B	1,6010C	PS
Selenium, Total	0.54	J	mg/kg	0.91	0.14	1	02/23/16 13:32	02/24/16 01:32	EPA 3050B	1,6010C	PS
Silver, Total	ND		mg/kg	0.45	0.09	1	02/23/16 13:32	02/24/16 01:32	EPA 3050B	1,6010C	PS
Zinc, Total	24		mg/kg	2.3	0.32	1	02/23/16 13:32	02/24/16 01:32	EPA 3050B	1,6010C	PS



Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-07
 Client ID: SB-11 (3-5')
 Sample Location: MAIN & DODGE
 Matrix: Soil
 Percent Solids: 81%

Date Collected: 02/18/16 14:30
 Date Received: 02/19/16
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	15		mg/kg	0.48	0.10	1	02/23/16 13:32	02/24/16 01:37	EPA 3050B	1,6010C	PS
Barium, Total	67		mg/kg	0.48	0.14	1	02/23/16 13:32	02/24/16 01:37	EPA 3050B	1,6010C	PS
Beryllium, Total	0.35		mg/kg	0.24	0.05	1	02/23/16 13:32	02/24/16 01:37	EPA 3050B	1,6010C	PS
Cadmium, Total	ND		mg/kg	0.48	0.03	1	02/23/16 13:32	02/24/16 01:37	EPA 3050B	1,6010C	PS
Chromium, Total	10		mg/kg	0.48	0.10	1	02/23/16 13:32	02/24/16 01:37	EPA 3050B	1,6010C	PS
Copper, Total	38		mg/kg	0.48	0.10	1	02/23/16 13:32	02/24/16 01:37	EPA 3050B	1,6010C	PS
Lead, Total	150		mg/kg	2.4	0.10	1	02/23/16 13:32	02/24/16 01:37	EPA 3050B	1,6010C	PS
Manganese, Total	220		mg/kg	0.48	0.10	1	02/23/16 13:32	02/24/16 01:37	EPA 3050B	1,6010C	PS
Mercury, Total	0.37		mg/kg	0.08	0.02	1	02/23/16 09:20	02/23/16 23:26	EPA 7471B	1,7471B	EA
Nickel, Total	11		mg/kg	1.2	0.19	1	02/23/16 13:32	02/24/16 01:37	EPA 3050B	1,6010C	PS
Selenium, Total	0.92	J	mg/kg	0.96	0.14	1	02/23/16 13:32	02/24/16 01:37	EPA 3050B	1,6010C	PS
Silver, Total	ND		mg/kg	0.48	0.10	1	02/23/16 13:32	02/24/16 01:37	EPA 3050B	1,6010C	PS
Zinc, Total	110		mg/kg	2.4	0.34	1	02/23/16 13:32	02/24/16 01:37	EPA 3050B	1,6010C	PS



Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-08
 Client ID: SB-12 (2-4')
 Sample Location: MAIN & DODGE
 Matrix: Soil
 Percent Solids: 88%

Date Collected: 02/18/16 15:00
 Date Received: 02/19/16
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	9.7		mg/kg	0.44	0.09	1	02/23/16 13:32	02/24/16 01:41	EPA 3050B	1,6010C	PS
Barium, Total	77		mg/kg	0.44	0.13	1	02/23/16 13:32	02/24/16 01:41	EPA 3050B	1,6010C	PS
Beryllium, Total	0.17	J	mg/kg	0.22	0.04	1	02/23/16 13:32	02/24/16 01:41	EPA 3050B	1,6010C	PS
Cadmium, Total	ND		mg/kg	0.44	0.03	1	02/23/16 13:32	02/24/16 01:41	EPA 3050B	1,6010C	PS
Chromium, Total	4.4		mg/kg	0.44	0.09	1	02/23/16 13:32	02/24/16 01:41	EPA 3050B	1,6010C	PS
Copper, Total	21		mg/kg	0.44	0.09	1	02/23/16 13:32	02/24/16 01:41	EPA 3050B	1,6010C	PS
Lead, Total	58		mg/kg	2.2	0.09	1	02/23/16 13:32	02/24/16 01:41	EPA 3050B	1,6010C	PS
Manganese, Total	250		mg/kg	0.44	0.09	1	02/23/16 13:32	02/24/16 01:41	EPA 3050B	1,6010C	PS
Mercury, Total	0.33		mg/kg	0.07	0.02	1	02/23/16 09:20	02/23/16 23:28	EPA 7471B	1,7471B	EA
Nickel, Total	5.3		mg/kg	1.1	0.18	1	02/23/16 13:32	02/24/16 01:41	EPA 3050B	1,6010C	PS
Selenium, Total	0.57	J	mg/kg	0.88	0.13	1	02/23/16 13:32	02/24/16 01:41	EPA 3050B	1,6010C	PS
Silver, Total	ND		mg/kg	0.44	0.09	1	02/23/16 13:32	02/24/16 01:41	EPA 3050B	1,6010C	PS
Zinc, Total	99		mg/kg	2.2	0.31	1	02/23/16 13:32	02/24/16 01:41	EPA 3050B	1,6010C	PS



Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 04-08 Batch: WG867429-1									
Mercury, Total	ND	mg/kg	0.08	0.02	1	02/23/16 09:20	02/23/16 22:46	1,7471B	EA

Prep Information

Digestion Method: EPA 7471B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst	
Total Metals - Westborough Lab for sample(s): 04-08 Batch: WG867602-1										
Arsenic, Total	ND	mg/kg	0.40	0.08	1	02/23/16 13:32	02/23/16 22:30	1,6010C	PS	
Barium, Total	ND	mg/kg	0.40	0.12	1	02/23/16 13:32	02/23/16 22:30	1,6010C	PS	
Beryllium, Total	ND	mg/kg	0.20	0.04	1	02/23/16 13:32	02/23/16 22:30	1,6010C	PS	
Cadmium, Total	ND	mg/kg	0.40	0.03	1	02/23/16 13:32	02/23/16 22:30	1,6010C	PS	
Chromium, Total	ND	mg/kg	0.40	0.08	1	02/23/16 13:32	02/23/16 22:30	1,6010C	PS	
Copper, Total	ND	mg/kg	0.40	0.08	1	02/23/16 13:32	02/23/16 22:30	1,6010C	PS	
Lead, Total	ND	mg/kg	2.0	0.08	1	02/23/16 13:32	02/23/16 22:30	1,6010C	PS	
Manganese, Total	ND	mg/kg	0.40	0.08	1	02/23/16 13:32	02/23/16 22:30	1,6010C	PS	
Nickel, Total	ND	mg/kg	1.0	0.16	1	02/23/16 13:32	02/23/16 22:30	1,6010C	PS	
Selenium, Total	ND	mg/kg	0.80	0.12	1	02/23/16 13:32	02/23/16 22:30	1,6010C	PS	
Silver, Total	ND	mg/kg	0.40	0.08	1	02/23/16 13:32	02/23/16 22:30	1,6010C	PS	
Zinc, Total	0.32	J	mg/kg	2.0	0.28	1	02/23/16 13:32	02/23/16 22:30	1,6010C	PS

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & DODGE

Project Number: T0371-016-002

Lab Number: L1604591

Report Date: 02/29/16

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Total Metals - Westborough Lab Associated sample(s): 04-08 Batch: WG867429-2 SRM Lot Number: D088-540								
Mercury, Total	107		-		72-128	-		
Total Metals - Westborough Lab Associated sample(s): 04-08 Batch: WG867602-2 SRM Lot Number: D088-540								
Arsenic, Total	86		-		79-121	-		
Barium, Total	83		-		83-117	-		
Beryllium, Total	87		-		83-117	-		
Cadmium, Total	86		-		83-117	-		
Chromium, Total	87		-		80-120	-		
Copper, Total	90		-		81-118	-		
Lead, Total	85		-		81-117	-		
Manganese, Total	86		-		81-118	-		
Nickel, Total	86		-		83-117	-		
Selenium, Total	91		-		78-122	-		
Silver, Total	86		-		75-124	-		
Zinc, Total	84		-		82-118	-		

Matrix Spike Analysis Batch Quality Control

Project Name: MAIN & DODGE

Lab Number: L1604591

Project Number: T0371-016-002

Report Date: 02/29/16

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 04-08 QC Batch ID: WG867429-4 QC Sample: L1604529-02 Client ID: MS Sample												
Mercury, Total	1.6	0.14	0.90	0	Q	-	-		80-120	-		20
Total Metals - Westborough Lab Associated sample(s): 04-08 QC Batch ID: WG867602-4 QC Sample: L1604758-01 Client ID: MS Sample												
Arsenic, Total	1.9	10.7	11	85		-	-		75-125	-		20
Barium, Total	27.	178	180	86		-	-		75-125	-		20
Beryllium, Total	0.16J	4.45	4.0	90		-	-		75-125	-		20
Cadmium, Total	ND	4.54	3.6	79		-	-		75-125	-		20
Chromium, Total	9.0	17.8	24	84		-	-		75-125	-		20
Copper, Total	12.	22.2	30	81		-	-		75-125	-		20
Lead, Total	10.	45.4	48	84		-	-		75-125	-		20
Manganese, Total	150	44.5	180	67	Q	-	-		75-125	-		20
Nickel, Total	6.4	44.5	43	82		-	-		75-125	-		20
Selenium, Total	0.39J	10.7	9.8	92		-	-		75-125	-		20
Silver, Total	ND	26.7	24	90		-	-		75-125	-		20
Zinc, Total	20.	44.5	60	90		-	-		75-125	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 04-08 QC Batch ID: WG867429-3 QC Sample: L1604529-02 Client ID: DUP Sample						
Mercury, Total	1.6	0.74	mg/kg	74	Q	20
Total Metals - Westborough Lab Associated sample(s): 04-08 QC Batch ID: WG867602-3 QC Sample: L1604758-01 Client ID: DUP Sample						
Arsenic, Total	1.9	1.8	mg/kg	5		20
Barium, Total	27.	26	mg/kg	4		20
Beryllium, Total	0.16J	0.17J	mg/kg	NC		20
Cadmium, Total	ND	ND	mg/kg	NC		20
Chromium, Total	9.0	8.3	mg/kg	8		20
Copper, Total	12.	11	mg/kg	9		20
Lead, Total	10.	9.3	mg/kg	7		20
Manganese, Total	150	140	mg/kg	7		20
Nickel, Total	6.4	6.4	mg/kg	0		20
Selenium, Total	0.39J	0.31J	mg/kg	NC		20
Silver, Total	ND	ND	mg/kg	NC		20
Zinc, Total	20.	20	mg/kg	0		20

INORGANICS & MISCELLANEOUS

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-01
Client ID: SB-1 (1-4)
Sample Location: MAIN & DODGE
Matrix: Soil

Date Collected: 02/18/16 09:00
Date Received: 02/19/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.0		%	0.100	NA	1	-	02/22/16 10:25	30,2540G	RI



Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-02
Client ID: SB-4 (0-3')
Sample Location: MAIN & DODGE
Matrix: Soil

Date Collected: 02/18/16 10:30
Date Received: 02/19/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.8		%	0.100	NA	1	-	02/22/16 10:25	30,2540G	RI



Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-03
Client ID: SB-5 (8-12')
Sample Location: MAIN & DODGE
Matrix: Soil

Date Collected: 02/18/16 11:00
Date Received: 02/19/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	95.6		%	0.100	NA	1	-	02/23/16 01:35	30,2540G	RT



Project Name: MAIN & DODGE

Lab Number: L1604591

Project Number: T0371-016-002

Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-04

Date Collected: 02/18/16 12:00

Client ID: SB-7 (1-4)

Date Received: 02/19/16

Sample Location: MAIN & DODGE

Field Prep: Not Specified

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	83.8		%	0.100	NA	1	-	02/22/16 16:06	30,2540G	RI
Cyanide, Total	0.29	J	mg/kg	1.1	0.19	1	02/23/16 10:11	02/23/16 14:04	1,9010C/9012B	ML



Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-05
Client ID: SB-8 (0-4')
Sample Location: MAIN & DODGE
Matrix: Soil

Date Collected: 02/18/16 12:30
Date Received: 02/19/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.0		%	0.100	NA	1	-	02/22/16 16:06	30,2540G	RI
Cyanide, Total	0.44	J	mg/kg	1.1	0.18	1	02/23/16 10:11	02/23/16 14:08	1,9010C/9012B	ML



Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-06
Client ID: SB-10 (0-3')
Sample Location: MAIN & DODGE
Matrix: Soil

Date Collected: 02/18/16 14:00
Date Received: 02/19/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.4		%	0.100	NA	1	-	02/22/16 16:06	30,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.18	1	02/23/16 10:11	02/23/16 14:09	1,9010C/9012B	ML



Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-07
Client ID: SB-11 (3-5')
Sample Location: MAIN & DODGE
Matrix: Soil

Date Collected: 02/18/16 14:30
Date Received: 02/19/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	81.4		%	0.100	NA	1	-	02/22/16 16:06	30,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.19	1	02/23/16 10:11	02/23/16 14:10	1,9010C/9012B	ML



Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-08
Client ID: SB-12 (2-4')
Sample Location: MAIN & DODGE
Matrix: Soil

Date Collected: 02/18/16 15:00
Date Received: 02/19/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.1		%	0.100	NA	1	-	02/22/16 16:06	30,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.18	1	02/23/16 10:11	02/23/16 14:11	1,9010C/9012B	ML



Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-09
Client ID: SB-14 (0-2')
Sample Location: MAIN & DODGE
Matrix: Soil

Date Collected: 02/18/16 16:00
Date Received: 02/19/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	91.5		%	0.100	NA	1	-	02/23/16 01:35	30,2540G	RT



Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

SAMPLE RESULTS

Lab ID: L1604591-11
Client ID: SB-9 (5-8')
Sample Location: MAIN & DODGE
Matrix: Soil

Date Collected: 02/18/16 13:30
Date Received: 02/19/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.4		%	0.100	NA	1	-	02/23/16 01:35	30,2540G	RT



Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Method Blank Analysis
Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 04-08 Batch: WG867572-1									
Cyanide, Total	ND	mg/kg	0.85	0.14	1	02/23/16 10:11	02/23/16 13:59	1,9010C/9012B	ML

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & DODGE

Lab Number: L1604591

Project Number: T0371-016-002

Report Date: 02/29/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 04-08 Batch: WG867572-2 WG867572-3								
Cyanide, Total	94		97		80-120	3		35

Matrix Spike Analysis
Batch Quality Control

Project Name: MAIN & DODGE

Lab Number: L1604591

Project Number: T0371-016-002

Report Date: 02/29/16

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 04-08 QC Batch ID: WG867572-4 WG867572-5 QC Sample: L1604591-04 Client ID: SB-7 (1-4')												
Cyanide, Total	0.29J	11	8.8	75		9.4	78		65-135	7		35

Lab Duplicate Analysis

Batch Quality Control

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG867242-1 QC Sample: L1604549-01 Client ID: DUP Sample						
Solids, Total	88.0	89.2	%	1		20
General Chemistry - Westborough Lab Associated sample(s): 04-08 QC Batch ID: WG867343-1 QC Sample: L1604608-01 Client ID: DUP Sample						
Solids, Total	92.7	92.6	%	0		20
General Chemistry - Westborough Lab Associated sample(s): 03,09,11 QC Batch ID: WG867415-1 QC Sample: L1604666-01 Client ID: DUP Sample						
Solids, Total	91.7	94.5	%	3		20

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information Custody Seal

Cooler

A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1604591-01A	Glass 250ml/8oz unpreserved	A	N/A	4.2	Y	Absent	NYTCL-8270(14),TS(7)
L1604591-02A	Glass 250ml/8oz unpreserved	A	N/A	4.2	Y	Absent	NYTCL-8270(14),TS(7)
L1604591-03A	Vial Large Septa unpreserved (4o	A	N/A	4.2	Y	Absent	NYTCL-8260-R2(14),TS(7)
L1604591-04A	Glass 120ml/4oz unpreserved	A	N/A	4.2	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),TS(7),CU-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-TI(180),CD-TI(180)
L1604591-05A	Glass 120ml/4oz unpreserved	A	N/A	4.2	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),TS(7),CU-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-TI(180),CD-TI(180)
L1604591-06A	Glass 250ml/8oz unpreserved	A	N/A	4.2	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),TS(7),CU-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-TI(180),CD-TI(180)
L1604591-07A	Glass 250ml/8oz unpreserved	A	N/A	4.2	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),TS(7),CU-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-TI(180),CD-TI(180)
L1604591-08A	Vial Large Septa unpreserved (4o	A	N/A	4.2	Y	Absent	NYTCL-8260-R2(14)
L1604591-08B	Glass 250ml/8oz unpreserved	A	N/A	4.2	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),TS(7),CU-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-TI(180),NYTCL-8082(14),CD-TI(180)

*Values in parentheses indicate holding time in days

Project Name: MAIN & DODGE

Project Number: T0371-016-002

Lab Number: L1604591

Report Date: 02/29/16

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1604591-09A	Vial Large Septa unpreserved (4o	A	N/A	4.2	Y	Absent	NYTCL-8260-R2(14),TS(7),NYTCL-8082(14)
L1604591-10A	Vial HCl preserved	A	N/A	4.2	Y	Absent	NYTCL-8260-R2(14)
L1604591-10B	Vial HCl preserved	A	N/A	4.2	Y	Absent	NYTCL-8260-R2(14)
L1604591-10C	Vial HCl preserved	A	N/A	4.2	Y	Absent	NYTCL-8260-R2(14)
L1604591-11A	Vial Large Septa unpreserved (4o	A	N/A	4.2	Y	Absent	NYTCL-8260-R2(14),TS(7)

Container Comments

L1604591-01A

L1604591-02A

L1604591-08B

*Values in parentheses indicate holding time in days

Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCS D	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MS D	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

Report Format: DU Report with 'J' Qualifiers



Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

Data Qualifiers

- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers



Project Name: MAIN & DODGE
Project Number: T0371-016-002

Lab Number: L1604591
Report Date: 02/29/16

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 524.2: 1,2-Dibromo-3-chloropropane, 1,2-Dibromoethane, m/p-xylene, o-xylene
EPA 624: 2-Butanone (MEK), 1,4-Dioxane, tert-Amylmethyl Ether, tert-Butyl Alcohol, m/p-xylene, o-xylene
EPA 625: Aniline, Benzoic Acid, Benzyl Alcohol, 4-Chloroaniline, 3-Methylphenol, 4-Methylphenol.
EPA 1010A: NPW: Ignitability
EPA 6010C: NPW: Strontium; SCM: Strontium
EPA 8151A: NPW: 2,4-DB, Dicamba, Dichloroprop, MCPA, MCPP; SCM: 2,4-DB, Dichloroprop, MCPA, MCPP
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene, Isopropanol; SCM: Iodomethane (methyl iodide), Methyl methacrylate (soil); 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Pentachloronitrobenzene, 1-Methylnaphthalene, Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Pentachloronitrobenzene, 1-Methylnaphthalene, Dimethylnaphthalene, 1,4-Diphenylhydrazine.
EPA 9010: NPW: Amenable Cyanide Distillation, Total Cyanide Distillation
EPA 9038: NPW: Sulfate
EPA 9050A: NPW: Specific Conductance
EPA 9056: NPW: Chloride, Nitrate, Sulfate
EPA 9065: NPW: Phenols
EPA 9251: NPW: Chloride
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO₂, NO₃.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility

EPA 8270D: NPW: Biphenyl; SCM: Biphenyl, Caprolactam
EPA 8270D-SIM Isotope Dilution: SCM: 1,4-Dioxane
SM 2540D: TSS
SM2540G: SCM: Percent Solids
EPA 1631E: SCM: Mercury
EPA 7474: SCM: Mercury
EPA 8081B: NPW and SCM: Mirex, Hexachlorobenzene.
EPA 8082A: NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.
EPA 8270-SIM: NPW and SCM: Alkylated PAHs.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene, n-Butylbenzene, n-Propylbenzene, sec-Butylbenzene, tert-Butylbenzene.
Biological Tissue Matrix: **8270D-SIM; 3050B; 3051A; 7471B; 8081B; 8082A; 6020A:** Lead; **8270D:** bis(2-ethylhexyl)phthalate, Butylbenzylphthalate, Diethyl phthalate, Dimethyl phthalate, Di-n-butyl phthalate, Di-n-octyl phthalate, Fluoranthene, Pentachlorophenol.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water

EPA 200.8: Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, Ti; **EPA 200.7:** Ba, Be, Ca, Cd, Cr, Cu, Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, Ti, Zn;
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, Ti, Tl, V, Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, EPA 350.1: Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **SM4500NO3-F,**
EPA 353.2: Nitrate-N, **SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF.**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



**NEW YORK
CHAIN OF
CUSTODY**

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page

1 of 2

Date Rec'd
in Lab

2/19/16

ALPHA Job #

C1604591

Project Information

Project Name: *Mun & Dodge*

Project Location: *Mun & Dodge*

Project #

(Use Project name as Project #)

Project Manager: *Chris Beron*

ALPHAQuote #:

Turn-Around Time

Standard

Due Date:

Rush (only if pre approved)

of Days:

Deliverables

ASP-A

ASP-B

EQUIS (1 File)

EQUIS (4 File)

Other

Billing Information

Same as Client Info

PO #

Client Information

Client: *TURKEY ENVIRONMENTAL*

Address: *2558 Hamburg Tpk
Waltham MA 02451 Suite 300*

Phone: *(716) 818 8358*

Fax: *(716) 836-0583*

Email: *NSuraci@TURKEYINC.COM*

Regulatory Requirement

NY TOGS

NY Part 375

AWQ Standards

NY CP-51

NY Restricted Use

Other

NY Unrestricted Use

NYC Sewer Discharge

Disposal Site Information

Please identify below location of applicable disposal facilities.

Disposal Facility:

NJ

NY

Other:

These samples have been previously analyzed by Alpha

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

TCL+CP-51 VOCs
6270 Best Available 822
Part 375 2.1st Metals
PCBS 8082
EPA 8260 VOCs

Sample Filtration

Done

Lab to do

Preservation

Lab to do

(Please Specify below)

Sample Specific Comments

T
o
t
a
l

B
o
t
t
l
e

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	ANALYSIS					Sample Specific Comments	
		Date	Time			TCL+CP-51 VOCs	6270 Best Available 822	Part 375 2.1st Metals	PCBS 8082	EPA 8260 VOCs		
04591-01	SB-1 (1-4')	2/18/16	0400	Soil	JJR	X						
02	SB-4 (6-7')	2/18/16	1030	Soil	JJR	X						
03	SB-5 (8-12')	2/18/16	1100	Soil	JJR	X						
04	SB-7 (1-4')	2/18/16	1200	Soil	JJR	X	X					
05	SB-8 (6-4')	2/18/16	1230	Soil	JJR	X	X					
06	SB-16 (9-3')	2/18/16	1400	Soil	JJR	X	X					
07	SB-11 (3-5')	2/18/16	1430	Soil	JJR	X	X					
08	SB-12 (2-4')	2/18/16	1500	Soil	JJR	X	X	X	X			
09	SB-14 (6-2')	2/18/16	1600	Soil	JJR	X			X			
10	TMW-1	2/8/16	1515	GW	JJR				X			Groundwater

Preservative Code:

- A = None
- B = HCl
- C = HNO₃
- D = H₂SO₄
- E = NaOH
- F = MeOH
- G = NaHSO₄
- H = Na₂S₂O₃
- K/E = Zn Ac/NaOH
- O = Other

Container Code

- P = Plastic
- A = Amber Glass
- V = Vial
- G = Glass
- B = Bacteria Cup
- C = Cube
- O = Other
- E = Encore
- D = BOD Bottle

Westboro: Certification No: MA935

Mansfield: Certification No: MA015

Container Type


A A A A A

Preservative

A A A A B

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Relinquished By:	Date/Time	Received By:	Date/Time
<i>Joshua Robinson</i>	<i>02/08/2016 1730</i>	<i>Joshua J. Patis AAL</i>	<i>2/19/16 1200</i>
<i>Joshua J. Patis AAL</i>	<i>2/19/16</i>	<i>Matthew Phillips</i>	<i>2/19/16 2340</i>

 NEW YORK CHAIN OF CUSTODY Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page	Date Rec'd in Lab 2/19/16	ALPHA Job # U604591
			2 of 2		
			Project Information Project Name: <u>Main rd Dodge</u> Project Location: <u>Main rd Dodge</u> Project # _____ (Use Project name as Project #) <input type="checkbox"/>		
Client Information Client: <u>Tunkes Environmental</u> Address: <u>2558 Hamburg Turnpike</u> <u>Lactanema, NY 14188</u> Phone: <u>716-856-0583</u> Fax: _____ Email: <u>jrobins@tunkesllc.com</u>	Regulatory Requirement <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge	Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other: _____			
Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: _____ Rush (only if pre approved) <input type="checkbox"/> # of Days: _____		ANALYSIS	Sample Filtration <input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below)	Total Bottle	
These samples have been previously analyzed by Alpha <input type="checkbox"/> Other project specific requirements/comments: _____ Please specify Metals or TAL.		ANALYSIS Table with columns for various parameters and handwritten notes: <u>TCL+CP-51 VOC</u>	Sample Specific Comments		
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date Time	Sample Matrix	Sampler's Initials	Container Type Preservative
04591 -11	SB-9 (5-8')	2/8/16 1330	Soil	JTR	A A
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other	Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle	Westboro: Certification No: MA935 Mansfield: Certification No: MA015	Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)		
Relinquished By: _____		Date/Time: _____	Received By: _____		Date/Time: _____
_____		02/08/16 1730	_____		2/19/16 1200
_____		2/19/16	_____		2/19/16 2340

APPENDIX C

PROJECT DOCUMENTATION FORMS

INSPECTOR'S DAILY REPORT

(CONTINUED)

Page of

CONTRACTOR:	JOB NO.:
CLIENT:	DATE:

MEETINGS HELD & RESULTS:

CONTRACTOR'S WORK FORCE AND EQUIPMENT								
DESCRIPTION	H	#	DESCRIPTION	H	#	DESCRIPTION	H	#
Field Engineer						Front Loader Ton		
Superintendent						Bulldozer		
Laborer-Foreman						DJ Dump Truck		
Laborer						Water Truck		
Operating Engineer			Equipment			Backhoe		
Carpenter			Generators			Excavator		
Ironworker			Welding Equipment			Pad foot roller		
Concrete Finisher			Roller					
			Paving Equipment					
			Air Compressor					

REMARKS:

REFERENCES TO OTHER FORMS:

SAMPLES COLLECTED:

Sample Number: _____

Approx. Location of Stockpile: _____

No. of Stockpile _____

Date of Collection: _____

Weather: _____

Field Observations: _____

APPENDIX D

SITE-SPECIFIC HEALTH AND SAFETY PLAN

(PROVIDED ELECTRONICALLY)

SITE HEALTH AND SAFETY PLAN
for
BROWNFIELD CLEANUP PROGRAM
RI/IRM ACTIVITIES

1155 MAIN STREET SITE
BUFFALO, NEW YORK

October 2018

0371-018-002

Prepared for:

MAIN & DODGE LLC

**1155 MAIN STREET SITE
HEALTH AND SAFETY PLAN FOR RI/IRM ACTIVITIES**

ACKNOWLEDGEMENT

Plan Reviewed by (initial):

Corporate Health and Safety Director: _____ Thomas H. Forbes, P.E.

Project Manager: _____ Christopher Boron

Designated Site Safety and Health Officer: _____ Christopher Boron

Acknowledgement:

I acknowledge that I have reviewed the information contained in this site-specific Health and Safety Plan, and understand the hazards associated with performance of the field activities described herein. I agree to comply with the requirements of this plan.

NAME (PRINT)	SIGNATURE	DATE
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

**1155 MAIN STREET SITE
HEALTH AND SAFETY PLAN FOR RI/IRM ACTIVITIES**

TABLE OF CONTENTS

1.0 INTRODUCTION.....	1
1.1 General.....	1
1.2 Background.....	1
1.3 Known and Suspected Environmental Conditions.....	2
1.4 Parameters of Interest.....	3
1.5 Overview of RI/IRM Activities	3
2.0 ORGANIZATIONAL STRUCTURE.....	5
2.1 Roles and Responsibilities	5
2.1.1 Corporate Health and Safety Director.....	5
2.1.2 Project Manager	5
2.1.3 Site Safety and Health Officer.....	6
2.1.4 Site Workers.....	7
2.1.5 Other Site Personnel.....	7
3.0 HAZARD EVALUATION	8
3.1 Chemical Hazards.....	8
3.2 Physical Hazards	9
4.0 TRAINING.....	11
4.1 Site Workers	11
4.1.1 Initial and Refresher Training	11
4.1.2 Site Training.....	12
4.2 Supervisor Training	13
4.3 Emergency Response Training.....	14
4.4 Site Visitors.....	14
5.0 MEDICAL MONITORING	15
6.0 SAFE WORK PRACTICES.....	17
7.0 PERSONAL PROTECTIVE EQUIPMENT	19
7.1 Equipment Selection	19
7.2 Protection Ensembles	20
7.2.1 Level A/B Protection Ensemble	20
7.2.2 Level C Protection Ensemble	21
7.2.3 Level D Protection Ensemble.....	21
7.2.4 Recommended Level of Protection for Site Tasks	22

**1155 MAIN STREET SITE
HEALTH AND SAFETY PLAN FOR RI/IRM ACTIVITIES**

TABLE OF CONTENTS

8.0 EXPOSURE MONITORING	23
8.1 General.....	23
8.1.1 On-Site Work Zone Monitoring.....	23
8.1.2 Off-Site Community Air Monitoring.....	23
8.2 Monitoring Action Levels	24
8.2.1 On-Site Work Zone Action Levels	24
8.2.2 Community Air Monitoring Action Levels	25
9.0 SPILL RELEASE/RESPONSE	29
9.1 Potential Spills and Available Controls	29
9.2 Initial Spill Notification and Evaluation.....	30
9.3 Spill Response	31
9.4 Post-Spill Evaluation.....	32
10.0 HEAT/COLD STRESS MONITORING	33
10.1 Heat Stress Monitoring.....	33
10.2 Cold Stress Monitoring.....	35
11.0 WORK ZONES AND SITE CONTROL	38
12.0 DECONTAMINATION.....	40
12.1 Decontamination for Benchmark-TurnKey Employees	40
12.2 Decontamination for Medical Emergencies	41
12.3 Decontamination of Field Equipment	41
13.0 CONFINED SPACE ENTRY	42
14.0 FIRE PREVENTION AND PROTECTION	43
14.1 General Approach	43
14.2 Equipment and Requirements	43
14.3 Flammable and Combustible Substances.....	43
14.4 Hot Work.....	43
15.0 EMERGENCY INFORMATION	44
16.0 REFERENCES	45

**1155 MAIN STREET SITE
HEALTH AND SAFETY PLAN FOR RI/IRM ACTIVITIES**

TABLE OF CONTENTS

LIST OF TABLES

Table 1	Toxicity Data for Constituents of Potential Concern
Table 2	Potential Routes of Exposure to Constituents of Potential Concern
Table 3	Required Levels of Protection for RI/IRM Tasks

LIST OF FIGURES

Figure 1	Site Location and Vicinity Map
Figure 2	Site Plan (Aerial)

ATTACHMENTS

Attachment A	Emergency Response Plan
Attachment B	Hot Work Permit Form
Attachment C	Community Air Monitoring Plan

1.0 INTRODUCTION

1.1 General

In accordance with OSHA requirements contained in 29 CFR 1910.120, this Health and Safety Plan (HASP) describes the specific health and safety practices and procedures to be employed by and Benchmark Environmental Engineering & Science, PLLC and TurnKey Environmental Restoration, LLC employees (referred to jointly hereafter as “Benchmark-TurnKey”) during Remedial Investigation (RI) and Interim Remedial Measures (IRM) activities at the 1155 Main Street Site (Site) located in the City of Buffalo, Erie County, New York. This HASP presents procedures for Benchmark-TurnKey employees who will be involved with RI/IRM field activities; it does not cover the activities of other contractors, subcontractors or other individuals on the Site. These firms will be required to develop and enforce their own HASPs as discussed in Section 2.0. Benchmark-TurnKey accepts no responsibility for the health and safety of contractor, subcontractor or other personnel.

This HASP presents information on known Site health and safety hazards using available historical information, and identifies the equipment, materials and procedures that will be used to eliminate or control these hazards. Environmental monitoring will be performed during the course of field activities to provide real-time data for on-going assessment of potential hazards.

1.2 Background

The Site totals ± 1.55 acres, at the southeast corner of Main Street and Dodge Street, in the City of Buffalo, Erie County, New York and formerly consisted of three (3) parcels. A request was made to the City of Buffalo to combine the three (3) parcels addressed 1159 Main Street (± 1.25 acres), 11 Dodge Street (± 0.19 -acres), and 19 Dodge Street (± 0.11 -acres) parcels into a single separate legal tax parcel that is addressed 1155 Main Street. The City of Buffalo Department of Assessment & Taxation issued a Pre-Approval for Combination of Parcel on September 25, 2018, which has also received Planning Board approval. The combined parcel will appear on the City of Buffalo’s preliminary tax roll on December 1, 2018.

The Site consists of asphalt, crushed stone and vegetative surface cover. The northern portion of the Site vegetated and vacant, and the central and southern portion is crushed stone and asphalt and used for parking.

The Site has a long history of being utilized for various residential and commercial uses since the late 1800s including a gasoline station, an auto service station, used auto sales and a motel.

Previous environmental investigations completed at the Site have identified elevated levels of semi-volatile organic compounds (SVOCs) and metals at concentrations exceeding applicable regulatory guidelines, specifically Part 375 Restricted-Residential Soil Cleanup Objectives (RRSCOs). Details of the previous investigations are presented in Section 2.8 below.

1.3 Known and Suspected Environmental Conditions

TurnKey completed a Phase II Environmental Investigation on the Site in October 2018. Findings of the Phase II investigation are detailed below:

- The Site, located at the southeast corner of Main and Dodge Streets, is in a mixed-use area in the Masten Park section of the City of Buffalo.
- SVOCs were detected at or above their respective Part 375 RRSCOs (i.e., the applicable SCOs for the intended Site reuse) at six (6) investigation locations, SB-4, SB-10, SS-3, TP-4, TP-14, and TP-18. Benzo(a)anthracene, benzo(a) pyrene, benzo(a) fluoranthene, dibenzo(a,h)anthracene, and Ideno(1,2,3-cd)pyrene were also detected at one (1) location (TP-18) in exceedance of their Industrial SCOs (ISCOs).
- Metal analytes were detected above their respective RRSCOs at four (4) investigation locations, TP-4, TP-15, TP-16, and TP-18.
 - Barium exceeded its CSCO at one (1) location (TP-15).
 - Lead exceeded its CSCO at three (3) locations (TP-15, TP-16, and TP-18).
 - Nickel exceeded its CSCO at one (1) location (TP-4).

The RI will be performed in support of the BCP to determine the nature and extent of impacts from these known environmental conditions and determine if others exist on this parcel. As part of the RI, an IRM will be completed to immediately address known environmental impacts related to past uses of the Site. An IRM will quickly mitigate risks to public health and the environment attributable to petroleum contamination at the Site.

Impacted soil will be removed and impacted groundwater (if encountered) will be extracted and treated during the IRM.

1.4 Parameters of Interest

Based on the previous investigations, constituents of potential concern (COPCs) in soil and, potentially groundwater, at the Site include:

- **Inorganic Compounds** – The inorganic COPCs potentially present at elevated concentrations are barium, nickel, and lead.
- **Semi-Volatile Organic Compounds (SVOCs)** – SVOCs present at elevated concentrations may include polycyclic aromatic hydrocarbons (PAHs), which are byproducts of incomplete combustion and impurities in petroleum products.

1.5 Overview of RI/IRM Activities

Benchmark-TurnKey personnel will be on-site to observe and perform RI and IRM activities. The field activities to be completed as part of the RI and IRM are described below.

Remedial Investigation Activities

1. **Subsurface Soil Sampling:** Benchmark-TurnKey will observe test pits and collect subsurface soil samples for the purpose of determining the nature and extent of potential COPC impacts in the subsurface soil/fill.
2. **Monitoring Well Installation/Development and Sampling:** Benchmark-TurnKey will observe the installation of four (4) groundwater monitoring wells, develop the wells, and collect groundwater samples for the purpose of determining the nature and extent of potential COPC impacts.

Potential IRM Activities

1. **Soil Excavation:** The remediation contractor would perform soil excavation activities.
2. **Verification Sampling:** The remediation contractor, in association with Benchmark-TurnKey, will collect soil samples from the sidewalls and bottom of the excavations using a backhoe to verify that cleanup objectives have been met.

3. **Backfilling:** The remediation contractor would coordinate and perform backfilling activities.
4. **Groundwater and Surface Management:** The remediation contractor will direct groundwater/surface water collection during soil excavation activities and coordinate disposal/treatment of the collected water, in association with Benchmark-TurnKey.

2.0 ORGANIZATIONAL STRUCTURE

This section of the HASP describes the lines of authority, responsibility and communication as they pertain to health and safety functions at the Site. The purpose of this chapter is to identify the personnel who impact the development and implementation of the HASP and to describe their roles and responsibilities. This chapter also identifies other contractors and subcontractors involved in work operations and establish the lines of communications among them for health and safety matters. The organizational structure described in this chapter is consistent with the requirements of 29 CFR 1910.120(b)(2). This section will be reviewed by the Project Manager and updated as necessary to reflect the current organizational structure at this Site.

2.1 Roles and Responsibilities

All Benchmark-TurnKey personnel on the Site must comply with the minimum requirements of this HASP. The specific responsibilities and authority of management, safety and health, and other personnel on this Site are detailed in the following paragraphs.

2.1.1 Corporate Health and Safety Director

The Benchmark-TurnKey Corporate Health and Safety Director is *Mr. Thomas H. Forbes, P.E.* The Corporate Health and Safety Director responsible for developing and implementing the Health and Safety program and policies for Benchmark Environmental Engineering & Science, PLLC and TurnKey Environmental Restoration, LLC, and consulting with corporate management to ensure adequate resources are available to properly implement these programs and policies. The Corporate Health and Safety Director coordinates Benchmark-TurnKey's Health and Safety training and medical monitoring programs and assists project management and field staff in developing site-specific health and safety plans.

2.1.2 Project Manager

The Project Manager for this Site is *Mr. Christopher Boron.* The Project Manager has the responsibility and authority to direct all Benchmark-TurnKey work operations at the Site. The Project Manager coordinates safety and health functions with the Site Safety and Health Officer and bears ultimate responsibility for proper implementation of this HASP.

He may delegate authority to expedite and facilitate any application of the program, including modifications to the overall project approach as necessary to circumvent unsafe work conditions. Specific duties of the Project Manager include:

- Preparing and coordinating the Site work plan.
- Providing Benchmark-TurnKey workers with work assignments and overseeing their performance.
- Coordinating health and safety efforts with the Site Safety and Health Officer (SSHO).
- Reviewing the emergency response coordination plan to assure its effectiveness.
- Serving as the primary liaison with Site contractors and the property owner.

2.1.3 Site Safety and Health Officer

The SSHO for this Site is **Mr. Christopher Boron**. The qualified alternate SSHO is **Mr. Nathan Munley**. The SSHO reports to the Project Manager. The SSHO is on-site or readily accessible to the Site during all work operations and has the authority to halt Site work if unsafe conditions are detected. The specific responsibilities of the SSHO are:

- Managing the safety and health functions for Benchmark-TurnKey personnel on the Site.
- Serving as the point of contact for safety and health matters.
- Ensuring that Benchmark-TurnKey field personnel working on the Site have received proper training (per 29 CFR Part 1910.120(e)), that they have obtained medical clearance to wear respiratory protection (per 29 CFR Part 1910.134), and that they are properly trained in the selection, use and maintenance of personal protective equipment, including qualitative respirator fit testing.
- Performing or overseeing Site monitoring as required by the HASP.
- Assisting in the preparation and review of the HASP.
- Maintaining site-specific safety and health records as described in this HASP.
- Coordinating with the Project Manager, Site Workers, and Contractor's SSHO as necessary for safety and health efforts.

2.1.4 Site Workers

Site workers are responsible for: complying with this HASP or a more stringent HASP, if appropriate (i.e., Contractor and Subcontractor's HASP); using proper PPE; reporting unsafe acts and conditions to the SSHO; and following the safety and health instructions of the Project Manager and SSHO.

2.1.5 Other Site Personnel

Other Site personnel who will have health and safety responsibilities will include the Drilling Contractor, who will be responsible for developing, implementing and enforcing a Health and Safety Plan equally stringent or more stringent than Benchmark-TurnKey's HASP. Benchmark-TurnKey assumes no responsibility for the health and safety of anyone outside its direct employ. Each Contractor's HASP shall cover all non-Benchmark/TurnKey Site personnel. Each Contractor shall assign a SSHO who will coordinate with Benchmark-TurnKey's SSHO as necessary to ensure effective lines of communication and consistency between contingency plans.

In addition to Benchmark-TurnKey and Contractor personnel, other individuals who may have responsibilities in the work zone include subcontractors and governmental agencies performing Site inspection work (i.e., the New York State Department of Environmental Conservation). The Contractor shall be responsible for ensuring that these individuals have received OSHA-required training (29 CFR 1910.120(e)), including initial, refresher and site-specific training, and shall be responsible for the safety and health of these individuals while they are on-site.

3.0 HAZARD EVALUATION

Due to the presence of certain contaminants at the Site, the possibility exists that workers will be exposed to hazardous substances during field activities. The principal points of exposure would be through direct contact with and incidental ingestion of soil, and through the inhalation of contaminated particles or vapors. Other points of exposure may include direct contact with groundwater. In addition, the use of drilling and/or medium to large-sized construction equipment (e.g., excavator) will also present conditions for potential physical injury to workers. Further, since work will be performed outdoors, the potential exists for heat/cold stress to impact workers, especially those wearing protective equipment and clothing. Adherence to the medical evaluations, worker training relative to chemical hazards, safe work practices, proper personal protection, environmental monitoring, establishment work zones and Site control, appropriate decontamination procedures and contingency planning outlined herein will reduce the potential for chemical exposures and physical injuries.

3.1 Chemical Hazards

As discussed in Section 1.3, SVOC and inorganic impacts have been identified in the fill material present at the Site. Table 1 lists exposure limits for airborne concentrations of the COPCs identified in Section 1.4 of this HASP. Brief descriptions of the toxicology of the prevalent COPCs and related health and safety guidance and criteria are provided below.

- **Polycyclic Aromatic Hydrocarbons (PAHs)** are formed as a result of the pyrolysis and incomplete combustion of organic matter such as fossil fuel. PAH aerosols formed during the combustion process disperse throughout the atmosphere, resulting in the deposition of PAH condensate in soil, water and on vegetation. In addition, several products formed from petroleum processing operations (e.g., roofing materials and asphalt) also contain elevated levels of PAHs. Hence, these compounds are widely dispersed in the environment. PAHs are characterized by a molecular structure containing three or more fused, unsaturated carbon rings. Seven of the PAHs are classified by USEPA as probable human carcinogens (USEPA Class B2). These are: benzo(a)pyrene; benzo(a)anthracene; benzo(b)fluoranthene; benzo(k)fluoranthene; chrysene; dibenzo(a,h)anthracene; and indeno(1,2,3-cd)pyrene. The primary route of exposure to PAHs is through incidental ingestion and inhalation of contaminated particulates. PAHs are characterized by an organic odor and exist as oily liquids in pure form. Acute exposure symptoms may include acne-type blemishes in areas of the skin exposed to sunlight.

- **Barium (CAS # 7440-39-3)** is a silver white metal, produced by the reduction of barium oxide. Local effects and symptoms of exposure to barium compounds, such as the hydroxide or carbonate, may include irritation of the eyes, throat, nose and skin. Systemic effects from ingestion include increased muscle contractility, reduction of heart rate/potential arrest, intestinal peristalsis, vascular constriction, and bladder contraction.
- **Nickel (CAS # 7440-02-0)** is a metal, commonly used to make coins, magnets, jewelry, stainless steel, electronics, and components of industrial machines. It is widely used in industry, primarily refining, electroplating, and welding. Nickel is a carcinogenic metal, that with chronic exposure has been connected with increased risk of lung cancer, cardiovascular disease, neurological deficits, developmental deficits in childhood, and high blood pressure.
- **Lead (CAS #7439-92-1)** can affect almost every organ and system in our bodies. The most sensitive is the central nervous system, particularly in children. Lead also damages kidneys and the immune system. The effects are the same whether it is breathed or swallowed. Lead may decrease reaction time, cause weakness in fingers, wrists, or ankles, and possibly affect memory. Lead may cause anemia.

With respect to the anticipated RI/IRM activities discussed in Section 1.5, possible routes of exposure to the above-mentioned contaminants are presented in Table 2. The use of proper respiratory equipment, as outlined in Section 7.0 of this HASP, will minimize the potential for exposure to airborne contamination, if deemed necessary. Exposure to contaminants through dermal and other routes will also be minimized through the use of protective clothing (Section 7.0), safe work practices (Section 6.0), and proper decontamination procedures (Section 12.0).

3.2 Physical Hazards

RI/IRM field activities at the 1155 Main Street Site may present the following physical hazards:

- The potential for physical injury during heavy construction equipment use, such as backhoes, excavators and drilling equipment.
- The potential for heat/cold stress to employees during the summer/winter months (see Section 10.0).

- The potential for slip and fall injuries due to rough, uneven terrain and/or open excavations.

These hazards represent only some of the possible means of injury that may be present during RI/IRM operations and sampling activities at the Site. Since it is impossible to list all potential sources of injury, it shall be the responsibility of each individual to exercise proper care and caution during all phases of the work.

4.0 TRAINING

4.1 Site Workers

All personnel performing RI/IRM activities at the Site (such as, but not limited to, equipment operators, general laborers, and drillers) and who may be exposed to hazardous substances, health hazards, or safety hazards and their supervisors/managers responsible for the Site shall receive training in accordance with 29 CFR 1910.120(e) before they are permitted to engage in operations in the exclusion zone or contaminant reduction zone. This training includes an initial 40-hour Hazardous Waste Site Worker Protection Course, an 8-hour Annual Refresher Course subsequent to the initial 40-hour training, and 3 days of actual field experience under the direct supervision of a trained, experienced supervisor. Additional site-specific training shall also be provided by the SSHO prior to the start of field activities. A description of topics to be covered by this training is provided below.

4.1.1 Initial and Refresher Training

Initial and refresher training is conducted by a qualified instructor as specified under OSHA 29 CFR 1910.120(e)(5) and is specifically designed to meet the requirements of OSHA 29 CFR 1910.120(e)(3) and 1910.120(e)(8). The training covers, as a minimum, the following topics:

- OSHA HAZWOPER regulations.
- Site safety and hazard recognition, including chemical and physical hazards.
- Medical monitoring requirements.
- Air monitoring, permissible exposure limits, and respiratory protection level classifications.
- Appropriate use of personal protective equipment (PPE), including chemical compatibility and respiratory equipment selection and use.
- Work practices to minimize risk.
- Work zones and Site control.

- Safe use of engineering controls and equipment.
- Decontamination procedures.
- Emergency response and escape.
- Confined space entry procedures.
- Heat and cold stress monitoring.
- Elements of a Health and Safety Plan.
- Spill containment.

Initial training also incorporates workshops for PPE and respiratory equipment use (Levels A, B and C), and respirator fit testing. Records and certification received from the course instructor documenting each employee's successful completion of the training identified above are maintained on file at Benchmark-TurnKey's Buffalo, NY office. Contractors and Subcontractors are required to provide similar documentation of training for all their personnel who will be involved in on-site work activities.

Any employee who has not been certified as having received health and safety training in conformance with 29 CFR 1910.120(e) is prohibited from working in the exclusion and contamination reduction zones, or to engage in any on-site work activities that may involve exposure to hazardous substances or wastes.

4.1.2 Site Training

Site workers are given a copy of the HASP and provided a site-specific briefing prior to the commencement of work to ensure that employees are familiar with the HASP and the information and requirements it contains. The Site briefing shall be provided by the SSHO prior to initiating field activities and shall include:

- Names of personnel and alternates responsible for Site safety and health.
- Safety, health and other hazards present on the Site.
- The site lay-out including work zones and places of refuge.

- The emergency communications system and emergency evacuation procedures.
- Use of PPE.
- Work practices by which the employee can minimize risks from hazards.
- Safe use of engineering controls and equipment on the site.
- Medical surveillance, including recognition of symptoms and signs of over-exposure as described in Chapter 5 of this HASP.
- Decontamination procedures as detailed in Chapter 12 of this HASP.
- The emergency response plan as detailed in Chapter 15 of this HASP.
- Confined space entry procedures, if required, as detailed in Chapter 13 of this HASP.
- The spill containment program as detailed in Chapter 9 of this HASP.
- Site control as detailed in Chapter 11 of this HASP.

Supplemental health and safety briefings will also be conducted by the SSHO on an as-needed basis during the course of the work. Supplemental briefings are provided as necessary to notify employees of any changes to this HASP as a result of information gathered during ongoing Site characterization and analysis. Conditions for which the SSHO may schedule additional briefings include but are not limited to: a change in Site conditions (e.g., based on monitoring results); changes in the work schedule/plan; newly discovered hazards; and safety incidents occurring during Site work.

4.2 Supervisor Training

On-site safety and health personnel who are directly responsible for or who supervise the safety and health of workers engaged in hazardous waste operations (i.e., SSHO) shall receive, in addition to the appropriate level of worker training described in Section 4.1, above, 8 additional hours of specialized supervisory training, in compliance with 29 CFR 1910.120(e)(4).

4.3 Emergency Response Training

Emergency response training is addressed in Appendix A of this HASP, Emergency Response Plan.

4.4 Site Visitors

Each Contractor's SSHO will provide a site-specific briefing to all Site visitors and other non- Benchmark/TurnKey personnel who enter the Site beyond the Site entry point. The site-specific briefing will provide information about Site hazards, the Site layout including work zones and places of refuge, the emergency communications system and emergency evacuation procedures, and other pertinent safety and health requirements as appropriate.

Site visitors will not be permitted to enter the exclusion zone or contaminant reduction zones unless they have received the level of training required for Site workers as described in Section 4.1.

5.0 MEDICAL MONITORING

Medical monitoring examinations are provided to Benchmark-TurnKey employees as stipulated under 29 CFR Part 1910.120(f). These exams include initial employment, annual and employment termination physicals for all Benchmark-TurnKey employees involved in hazardous waste site field operations. Post-exposure examinations are also provided for employees who may have been injured, received a health impairment, or developed signs or symptoms of over-exposure to hazardous substances or were accidentally exposed to substances at concentrations above the permissible exposure limits without necessary personal protective equipment. Such exams are performed as soon as possible following development of symptoms or the known exposure event.

Medical evaluations are performed by Health Works, an occupational health care provider under contract with Benchmark-TurnKey. Health Works is located in Seneca Square Plaza, 1900 Ridge Road, West Seneca, New York 14224. The facility can be reached at (716) 823-5050 to schedule routine appointments or post-exposure examinations.

Medical evaluations are conducted according to the Benchmark-TurnKey Medical Monitoring Program and include an evaluation of the workers' ability to use respiratory protective equipment. The examinations include:

- Occupational/medical history review.
- Physical exam, including vital sign measurement.
- Spirometry testing.
- Eyesight testing.
- Audio testing (minimum baseline and exit, annual for employees routinely exposed to greater than 85db).
- EKG (for employees >40 yrs age or as medical conditions dictate).
- Chest X-ray (baseline and exit, and every 5 years).
- Blood biochemistry (including blood count, white cell differential count, serum multiplastic screening).
- Medical certification of physical requirements (i.e., sight, musculoskeletal,

cardiovascular) for safe job performance and to wear respiratory protection equipment.

The purpose of the medical evaluation is to determine an employee's fitness for duty on hazardous waste sites; and to establish baseline medical data. In conformance with OSHA regulations, Benchmark-TurnKey will maintain and preserve medical records for a period of 30 years following termination of employment. Employees are provided a copy of the physician's post-exam report and have access to their medical records and analyses.

6.0 SAFE WORK PRACTICES

All Benchmark-TurnKey employees shall conform to the following safe work practices during all on-site work activities conducted within the exclusion and contamination reduction zones:

- Eating, drinking, chewing gum or tobacco, smoking, or any practice that increases the probability of hand-to-mouth contact is strictly prohibited.
- The hands and face must be thoroughly washed upon leaving the work area and prior to engaging in any activity indicated above.
- Respiratory protective equipment and clothing must be worn by all personnel entering the Site as required by the HASP or as modified by the Site safety officer. Excessive facial hair (i.e., beards, long mustaches or sideburns) that interferes with the satisfactory respirator-to-face seal is prohibited.
- Contact with surfaces/materials either suspected or known to be contaminated will be avoided to minimize the potential for transfer to personnel, cross contamination and need for decontamination.
- Medicine and alcohol can synergize the effects of exposure to toxic chemicals. Due to possible contraindications, use of prescribed drugs should be reviewed with the Benchmark-TurnKey occupational physician. Alcoholic beverage and illegal drug intake are strictly forbidden during the workday.
- All personnel shall be familiar with standard operating safety procedures and additional instructions contained in this Health and Safety Plan.
- On-site personnel shall use the “buddy” system. No one may work alone (i.e., out of earshot or visual contact with other workers) in the exclusion zone.
- Personnel and equipment in the contaminated area shall be minimized, consistent with effective Site operations.
- All employees have the obligation to immediately report and if possible, correct unsafe work conditions.
- Use of contact lenses on-site will not be permitted. Spectacle kits for insertion into full-face respirators will be provided for Benchmark-TurnKey employees, as requested and required.

The recommended specific safety practices for working around the contractor's equipment (e.g., backhoes, bulldozers, excavators, drill rigs etc.) are as follows:

- Although the Contractor and subcontractors are responsible for their equipment and safe operation of the Site, Benchmark-TurnKey personnel are also responsible for their own safety.
- Subsurface work will not be initiated without first clearing underground utility services.
- Heavy equipment should not be operated within 20 feet of overhead wires. This distance may be increased if windy conditions are anticipated or if lines carry high voltage. The Site should also be sufficiently clear to ensure the project staff can move around the heavy machinery safely.
- Care should be taken to avoid overhead wires when moving heavy-equipment from location to location.
- Hard hats, safety boots and safety glasses should be worn at all times in the vicinity of heavy equipment. Hearing protection is also recommended.
- The work Site should be kept neat. This will prevent personnel from tripping and will allow for fast emergency exit from the Site.
- Proper lighting must be provided when working at night.
- Construction activities should be discontinued during an electrical storm or severe weather conditions.
- The presence of combustible gases should be checked before igniting any open flame.
- Personnel shall stand upwind of any construction operation when not immediately involved in sampling/logging/observing activities.
- Personnel will not approach the edge of an unsecured trench/excavation closer than 2 feet.

7.0 PERSONAL PROTECTIVE EQUIPMENT

7.1 Equipment Selection

PPE will be donned when work activities may result in exposure to physical or chemical hazards beyond acceptable limits, and when such exposure can be mitigated through appropriate PPE. The selection of PPE will be based on an evaluation of the performance characteristics of the PPE relative to the requirements and limitations of the Site, the task-specific conditions and duration, and the hazards and potential hazards identified at the Site.

Equipment designed to protect the body against contact with known or suspect chemical hazards are grouped into four categories according to the degree of protection afforded. These categories designated A through D consistent with United States Environmental Protection Agency (USEPA) Level of Protection designation, are:

- **Level A:** Should be selected when the highest level of respiratory, skin and eye protection is needed.
- **Level B:** Should be selected when the highest level of respiratory protection is needed, but a lesser level of skin protection is required. Level B protection is the minimum level recommended on initial Site entries until the hazards have been further defined by on-site studies. Level B (or Level A) is also necessary for oxygen-deficient atmospheres.
- **Level C:** Should be selected when the types of airborne substances are known, the concentrations have been measured and the criteria for using air-purifying respirators are met. In atmospheres where no airborne contaminants are present, Level C provides dermal protection only.
- **Level D:** Should not be worn on any Site with elevated respiratory or skin hazards. This is generally a work uniform providing minimal protection.

OSHA requires the use of certain PPE under conditions where an immediate danger to life and health (IDLH) may be present. Specifically, OSHA 29 CFR 1910.120(g)(3)(iii) requires use of a positive pressure self-contained breathing apparatus, or positive pressure air-line respirator equipped with an escape air supply when chemical exposure levels present a substantial possibility of immediate serious injury, illness or death, or impair the ability to

escape. Similarly, OSHA 29 CFR 1910.120(g)(3)(iv) requires donning totally-encapsulating chemical protective suits (with a protection level equivalent to Level A protection) in conditions where skin absorption of a hazardous substance may result in a substantial possibility of immediate serious illness, injury or death, or impair the ability to escape.

In situations where the types of chemicals, concentrations, and possibilities of contact are unknown, the appropriate level of protection must be selected based on professional experience and judgment until the hazards can be further characterized. The individual components of clothing and equipment must be assembled into a full protective ensemble to protect the worker from site-specific hazards, while at the same time minimizing hazards and drawbacks of the personal protective gear itself. Ensemble components are detailed below for levels A/B, C, and D protection.

7.2 Protection Ensembles

7.2.1 Level A/B Protection Ensemble

Level A/B ensembles include similar respiratory protection, however Level A provides a higher degree of dermal protection than Level B. Use of Level A over Level B is determined by: comparing the concentrations of identified substances in the air with skin toxicity data, and assessing the effect of the substance (by its measured air concentrations or splash potential) on the small area of the head and neck unprotected by Level B clothing.

The recommended PPE for level A/B is:

- Pressure-demand, full-face piece self-contained breathing apparatus (MSHA/-NIOSH approved) or pressure-demand supplied-air respirator with escape self-contained breathing apparatus (SCBA).
- Chemical-resistant clothing. For Level A, clothing consists of totally-encapsulating chemical resistant suit. Level B incorporates hooded one-or two-piece chemical splash suit.
- Inner and outer chemical resistant gloves.
- Chemical-resistant safety boots/shoes.
- Hardhat.

7.2.2 Level C Protection Ensemble

Level C protection is distinguished from Level B by the equipment used to protect the respiratory system, assuming the same type of chemical-resistant clothing is used. The main selection criterion for Level C is that conditions permit wearing an air-purifying device. The device (when required) must be an air-purifying respirator (MSHA/NIOSH approved) equipped with filter cartridges. Cartridges must be able to remove the substances encountered. Respiratory protection will be used only with proper fitting, training and the approval of a qualified individual. In addition, an air-purifying respirator can be used only if: oxygen content of the atmosphere is at least 19.5% in volume; substances are identified and concentrations measured; substances have adequate warning properties; the individual passes a qualitative fit-test for the mask; and an appropriate cartridge/canister is used, and its service limit concentration is not exceeded.

Recommended PPE for Level C conditions includes:

- Full-face piece, air-purifying respirator equipped with MSHA and NIOSH approved organic vapor/acid gas/dust/mist combination cartridges or as designated by the SSHO.
- Chemical-resistant clothing (hooded, one or two-piece chemical splash suit or disposable chemical-resistant one-piece suit).
- Inner and outer chemical-resistant gloves.
- Chemical-resistant safety boots/shoes.
- Hardhat.

An air-monitoring program is part of all response operations when atmospheric contamination is known or suspected. It is particularly important that the air be monitored thoroughly when personnel are wearing air-purifying respirators. Continual surveillance using direct-reading instruments is needed to detect any changes in air quality necessitating a higher level of respiratory protection.

7.2.3 Level D Protection Ensemble

As indicated above, Level D protection is primarily a work uniform. It can be worn in areas where only boots can be contaminated, where there are no inhalable toxic substances

and where the atmospheric contains at least 19.5% oxygen.

Recommended PPE for Level D includes:

- Coveralls.
- Safety boots/shoes.
- Safety glasses or chemical splash goggles.
- Hardhat.
- Optional gloves; escape mask; face shield.

7.2.4 Recommended Level of Protection for Site Tasks

Based upon current information regarding both the contaminants suspected to be present at the Site and the various tasks that are included in the remedial activities, the minimum required levels of protection for these tasks shall be as identified in Table 3.

8.0 EXPOSURE MONITORING

8.1 General

Based on the results of historic sample analysis and the nature of the proposed work activities at the Site, the possibility exist that organic vapors and/or particulates may be released to the air during intrusive construction activities. Ambient breathing zone concentrations may at times, exceed the permissible exposure limits (PELs) established by OSHA for the individual compounds (see Table 1), in which case respiratory protection will be required. Respiratory and dermal protection may be modified (upgraded or downgraded) by the SSHO based upon real-time field monitoring data.

8.1.1 On-Site Work Zone Monitoring

Benchmark-TurnKey personnel will conduct routine, real-time air monitoring during all intrusive construction phases such as excavation, backfilling, drilling, etc. The work area will be monitored at regular intervals using a PID, combustible gas meter and a particulate meter. Observed values will be recorded and maintained as part of the permanent field record.

Additional air monitoring measurements may be made by Benchmark-TurnKey personnel to verify field conditions during subcontractor oversight activities. Monitoring instruments will be protected from surface contamination during use. Additional monitoring instruments may be added if the situations or conditions change. Monitoring instruments will be calibrated in accordance with manufacturer's instructions before use.

8.1.2 Off-Site Community Air Monitoring

In addition to on-site monitoring within the work zone(s), monitoring at the downwind portion of the Site perimeter will be conducted. This will provide a real-time method for determination of vapor and/or particulate releases to the surrounding community as a result of ground intrusive investigation work.

Ground intrusive activities are defined in the Generic Community Air Monitoring Plan and attached as Appendix C. Ground intrusive activities include soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells. Non-intrusive activities include the collection of soil and sediment samples or the

collection of groundwater samples from existing wells. Continuous monitoring is required for ground intrusive activities and periodic monitoring is required for non-intrusive activities. Periodic monitoring consists of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring while bailing a well, and taking a reading prior to leaving a sampling location. This may be upgraded to continuous if the sampling location is in close proximity to individuals not involved in the Site activity (i.e., on a curb of a busy street). The action levels below will be used during periodic monitoring.

8.2 Monitoring Action Levels

8.2.1 On-Site Work Zone Action Levels

The PID, or other appropriate instrument(s), will be used by Benchmark-TurnKey personnel to monitor organic vapor concentrations as specified in this HASP. Combustible gas will be monitored with the “combustible gas” option on the combustible gas meter or other appropriate instrument(s). In addition, fugitive dust/particulate concentrations will be monitored during major soil intrusion (viz., well/boring installation) using a real-time particulate monitor as specified in this plan. In the absence of such monitoring, appropriate respiratory protection for particulates shall be donned. Sustained readings obtained in the breathing zone may be interpreted (with regard to other Site conditions) as follows for Benchmark-TurnKey personnel:

- Total atmospheric concentrations of unidentified vapors or gases ranging from 0 to 1 ppm above background on the PID) - Continue operations under Level D (see Appendix A).
- Total atmospheric concentrations of unidentified vapors or gases yielding sustained readings from >1 ppm to 5 ppm above background on the PID (vapors not suspected of containing high levels of chemicals toxic to the skin) - Continue operations under Level C (see Appendix A).
- Total atmospheric concentrations of unidentified vapors or gases yielding sustained readings of >5 ppm to 50 ppm above background on the PID - Continue operations under Level B (see Attachment 1), re-evaluate and alter (if possible) construction methods to achieve lower vapor concentrations.

- Total atmospheric concentrations of unidentified vapors or gases above 50 ppm on the PID - Discontinue operations and exit the work zone immediately.

The particulate monitor will be used to monitor respirable dust concentrations during all intrusive activities and during handling of Site soil/fill. Action levels based on the instrument readings shall be as follows:

- Less than 50 mg/m³ - Continue field operations.
- 50-150 mg/m³ - Don dust/particulate mask or equivalent
- Greater than 150 mg/m³ - Don dust/particulate mask or equivalent. Initiate engineering controls to reduce respirable dust concentration (viz., wetting of excavated soils or tools at discretion of Site Health and Safety Officer).

Readings from the field equipment will be recorded and documented on the appropriate Project Field Forms. All instruments will be calibrated before use on a daily basis and the procedure will be documented on the appropriate Project Field Forms.

8.2.2 Community Air Monitoring Action Levels

In addition to the action levels prescribed in Section 8.2.1 for Benchmark-TurnKey personnel on-site, the following criteria shall also be adhered to for the protection of downwind receptors consistent with NYSDOH requirements (Appendix C):

- o **ORGANIC VAPOR PERIMETER MONITORING:**
 - If the sustained ambient air concentration of organic vapors at the downwind perimeter of the exclusion zone exceeds 5 ppm above background for the 15-minute average, work activities will be temporarily halted and monitoring continued. If the sustained organic vapor decreases below 5 ppm over background, work activities can resume with continued monitoring.
 - If the sustained ambient air concentration of organic vapors at the downwind perimeter of the exclusion zone are greater than 5 ppm over background but less than 25 ppm for the 15-minute average, activities can resume provided that: the organic vapor level 200 feet downwind of the working site or half the distance to the nearest off-site residential or commercial structure, whichever

is less, but in no case less than 20 feet, is below 5 ppm over background; and more frequent intervals of monitoring, as directed by the Site Health and Safety Officer, are conducted.

- If the sustained organic vapor level is above 25 ppm at the perimeter of the exclusion zone for the 15-minute average, the Site Health and Safety Officer must be notified and work activities shut down. The Site Health and Safety Officer will determine when re-entry of the exclusion zone is possible and will implement downwind air monitoring to ensure vapor emissions do not impact the nearest off-site residential or commercial structure at levels exceeding those specified in the ***Organic Vapor Contingency Monitoring Plan*** below. All readings will be recorded and will be available for New York State Department of Environmental Conservation (DEC) and Department of Health (DOH) personnel to review.

o **ORGANIC VAPOR CONTINGENCY MONITORING PLAN:**

- If the sustained organic vapor level is greater than 5 ppm over background 200 feet downwind from the work area or half the distance to the nearest off-site residential or commercial property, whichever is less, all work activities must be halted.
- If, following the cessation of the work activities or as the result of an emergency, sustained organic levels persist above 5 ppm above background 200 feet downwind or half the distance to the nearest off-site residential or commercial property from the work area, then the air quality must be monitored within 20 feet of the perimeter of the nearest off-site residential or commercial structure (20-foot zone).
- If efforts to abate the emission source are unsuccessful and if sustained organic vapor levels approach or exceed 5 ppm above background within the 20-foot zone for more than 30 minutes, or are sustained at levels greater than 10 ppm above background for longer than one minute, then the ***Major Vapor Emission Response Plan*** (see below) will automatically be placed into effect.

o **MAJOR VAPOR EMISSION RESPONSE PLAN:**

Upon activation, the following activities will be undertaken:

1. All Emergency Response Contacts as listed in this Health and Safety Plan and the Emergency Response Plan (Appendix A) will be advised.

2. The local police authorities will immediately be contacted by the Site Health and Safety Officer and advised of the situation.
3. Frequent air monitoring will be conducted at 30-minute intervals within the 20-foot zone. If two sustained successive readings below action levels are measured, air monitoring may be halted or modified by the Site Health and Safety Officer.

The following personnel are to be notified in the listed sequence in the event that a Major Vapor Emission Plan is activated:

Responsible Person	Contact	Phone Number
SSHO	Police	911
SSHO	State Emergency Response Hotline	(800) 457-7362

Additional emergency numbers are listed in the Emergency Response Plan included as Appendix A.

o **EXPLOSIVE VAPORS:**

- Sustained atmospheric concentrations of greater than 10% LEL in the work area - Initiate combustible gas monitoring at the downwind portion of the Site perimeter.
- Sustained atmospheric concentrations of greater than 10% LEL at the downwind Site perimeter – Halt work and contact local Fire Department.

o **AIRBORNE PARTICULATE COMMUNITY AIR MONITORING**

Respirable (PM-10) particulate monitoring will be performed on a continuous basis at the upwind and downwind perimeter of the exclusion zone. The monitoring will be performed using real-time monitoring equipment capable of measuring PM-10 and integrating over a period of 15-minutes for comparison to the airborne particulate action levels. The equipment will be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration will be visually assessed during all work activities. All readings will be recorded and will be available for NYSDEC and NYSDOH review. Readings will be interpreted as follows:

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (ug/m^3) greater than the background (upwind perimeter) reading 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 provided that the downwind PM-10 particulate levels do not exceed $150 \text{ ug}/\text{m}^3$ above the upwind level and that visible dust is not migrating from the work area.
- If, after implementation of dust suppression techniques downwind PM-10 levels are greater than $150 \text{ ug}/\text{m}^3$ above the upwind level, work activities must be stopped, and dust suppression controls re-evaluated. Work can resume provided that supplemental dust suppression measures and/or other controls are successful in reducing the downwind PM-10 particulate concentration to within $150 \text{ ug}/\text{m}^3$ of the upwind level and in preventing visible dust migration.

Pertinent emergency response information including the telephone number of the Fire Department is included in the Emergency Response Plan (Appendix A).

9.0 SPILL RELEASE/RESPONSE

This chapter of the HASP describes the potential for and procedures related to spills or releases of known or suspected petroleum and/or hazardous substances on the Site. The purpose of this Section of the HASP is to plan appropriate response, control, countermeasures and reporting, consistent with OSHA requirements in 29 CFR 1910.120(b)(4)(ii)(J) and (j)(1)(viii). The spill containment program addresses the following elements:

- Potential hazardous material spills and available controls.
- Initial notification and evaluation.
- Spill response.
- Post-spill evaluation.

9.1 Potential Spills and Available Controls

An evaluation was conducted to determine the potential for hazardous material and oil/petroleum spills at this Site. For the purpose of this evaluation, hazardous materials posing a significant spill potential are considered to be:

- CERCLA Hazardous Substances as identified in 40 CFR Part 302, where such materials pose the potential for release in excess of their corresponding Reportable Quantity (RQ).
- Extremely Hazardous Substances as identified in 40 CFR Part 355, Appendix A, where such materials pose the potential for release in excess of their corresponding Reportable Quantity (RQ).
- Hazardous Chemicals as defined under Section 311(e) of the Emergency Planning and Community Right-To-Know Act of 1986, where such chemicals are present or will be stored in excess of 10,000 lbs.
- Toxic Chemicals as defined in 40 CFR Part 372, where such chemicals are present or will be stored in excess of 10,000 lbs.
- Chemicals regulated under 6NYCRR Part 597, where such materials pose the potential for release in excess of their corresponding Reportable Quantity (RQ).

Oil/petroleum products are considered to pose a significant spill potential whenever the following situations occur:

- The potential for a “harmful quantity” of oil (including petroleum and non-petroleum-based fuels and lubricants) to reach navigable waters of the U.S. exists (40 CFR Part 112.4). Harmful quantities are considered by USEPA to be volumes that could form a visible sheen on the water or violate applicable water quality standards.
- The potential for any amount of petroleum to reach any waters of NY State, including groundwater, exists. Petroleum, as defined by NY State in 6NYCRR Part 612, is a petroleum-based heat source, energy source, or engine lubricant/maintenance fluid.
- The potential for any release, to soil or water, of petroleum from a bulk storage facility regulated under 6NYCRR Part 612. A regulated petroleum storage facility is defined by NY State as a site having stationary tank(s) and intra-facility piping, fixtures and related equipment with an aggregate storage volume of 1,100 gallons or greater.

The evaluation indicates that, based on Site history and decommissioning records, a hazardous material spill and/or a petroleum product spill is not likely to occur during RI/IRM efforts.

9.2 Initial Spill Notification and Evaluation

Any worker who discovers a hazardous substance or oil/petroleum spill will immediately notify the Project Manager and SSHO. The worker will, to the best of his/her ability, report the material involved, the location of the spill, the estimated quantity of material spilled, the direction/flow of the spill material, related fire/explosion incidents, if any, and any associated injuries. The Emergency Response Plan presented in Attachment H2 of this HASP will immediately be implemented if an emergency release has occurred.

Following initial report of a spill, the Project Manager will make an evaluation as to whether the release exceeds RQ levels. If an RQ level is exceeded, the Project Manager will notify the Site owner and NYSDEC at 1-800-457-7362 within 2 hours of spill discovery. The Project Manager will also determine what additional agencies (e.g., USEPA) are to be contacted regarding the release, and will follow-up with written reports as required by the applicable regulations.

9.3 Spill Response

For all spill situations, the following general response guidelines will apply:

- Only those personnel involved in overseeing or performing containment operations will be allowed within the spill area. If necessary, the area will be roped, ribboned, or otherwise blocked off to prevent unauthorized access.
- Appropriate PPE, as specified by the SSHO, will be donned before entering the spill area.
- Ignition points will be extinguished/removed if fire or explosion hazards exist.
- Surrounding reactive materials will be removed.
- Drains or drainage in the spill area will be blocked to prevent inflow of spilled materials or applied materials.

For minor spills, the Contractor will maintain a Spill Control and Containment Kit in the Field Office or other readily accessible storage location. The kit will consist of, at a minimum, a 50 lb. bag of “speedy dry” granular absorbent material, absorbent pads, shovels, empty 5-gallon pails and an empty open-top 55-gallon drum. Spilled materials will be absorbed, and shoveled into a 55-gallon drum for proper disposal (NYSDEC approval will be secured for on-site treatment of the impacted soils/absorbent materials, if applicable). Impacted soils will be hand-excavated to the point that no visible signs of contamination remains, and will be drummed with the absorbent.

In the event of a major release or a release that threatens surface water, a spill response contractor will be called to the Site. The response contractor may use heavy equipment (e.g., excavator, backhoe, etc.) to berm the soils surrounding the spill Site or create diversion trenching to mitigate overland migration or release to navigable waters. Where feasible, pumps will be used to transfer free liquid to storage containers. Spill control/cleanup contractors in the Western New York area that may be contacted for assistance include:

- The Environmental Service Group of NY, Inc.: (716) 695-6720
- Environmental Products and Services, Inc.: (716) 447-4700
- Op-Tech: (716) 873-7680

9.4 Post-Spill Evaluation

If a reportable quantity of hazardous material or oil/petroleum is spilled as determined by the Project Manager, a written report will be prepared as indicated in Section 9.2. The report will identify the root cause of the spill, type and amount of material released, date/time of release, response actions, agencies notified and/or involved in cleanup, and procedures to be implemented to avoid repeat incidents. In addition, all re-useable spill cleanup and containment materials will be decontaminated, and spill kit supplies/disposable items will be replenished.

10.0 HEAT/COLD STRESS MONITORING

Since some of the work activities at the Site will be scheduled for both the summer and winter months, measures will be taken to minimize heat/cold stress to Benchmark-TurnKey employees. The Site Safety and Health Officer and/or his or her designee will be responsible for monitoring Benchmark-TurnKey field personnel for symptoms of heat/cold stress.

10.1 Heat Stress Monitoring

Personal protective equipment may place an employee at risk of developing heat stress, a common and potentially serious illness often encountered at construction, landfill, waste disposal, industrial or other unsheltered sites. The potential for heat stress is dependent on a number of factors, including environmental conditions, clothing, workload, physical conditioning and age. Personal protective equipment may severely reduce the body's normal ability to maintain temperature equilibrium (via evaporation and convection), and require increased energy expenditure due to its bulk and weight.

Proper training and preventive measures will mitigate the potential for 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 illness. To avoid heat stress, the following steps should be taken:

- Adjust work schedules.
- Modify work/rest schedules according to monitoring requirements.
- 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 approximately equal the amount of water lost in sweat (i.e., eight fluid ounces must be ingested for approximately every 1 lb of weight lost). The normal thirst

mechanism is not sensitive enough to ensure that enough water will be consumed to replace lost perspiration. When heavy sweating occurs, workers should be encouraged to drink more.

- Train workers to recognize the symptoms of heat related illness.

Heat-Related Illness - Symptoms:

- Heat rash may result from continuous exposure to heat or humid air.
- Heat cramps are caused by heavy sweating with inadequate electrolyte replacement. Signs and symptoms include: muscle spasms; pain in the hands, feet and abdomen.
- Heat exhaustion occurs from increased stress on various body organs including inadequate blood circulation due to cardiovascular insufficiency or dehydration. Signs and symptoms include: pale, cool, moist skin; heavy sweating; dizziness; nausea; fainting.
- Heat stroke is the most serious form of heat stress. Temperature regulation fails and the body temperature rises to critical levels. Immediate action must be taken to cool the body before serious injury and death occur. Competent medical help must be obtained. Signs and symptoms are: red, hot, usually dry skin; lack of or reduced perspiration; nausea; dizziness and confusion; strong, rapid pulse; coma.

The monitoring of personnel wearing protective clothing should commence when the ambient temperature is 70 degrees Fahrenheit or above. For monitoring the body's recuperative ability to excess heat, one or more of the following techniques should be used as a screening mechanism.

- Heart rate may be measured by the radial pulse for 30 seconds as early as possible in the resting period. The rate at the beginning of the rest period should not exceed 100 beats per minute. If the rate is higher, the next work period should be shortened by 10 minutes (or 33%), while the length of the rest periods stay the same, If the pulse rate is 100 beats per minute at the beginning of the nest rest period, the following work cycle should be further shortened by 33%.
- Body temperature may be measured orally with a clinical thermometer as early as possible in the resting period. Oral temperature at the beginning of the rest period

should not exceed 99.6 degrees Fahrenheit. If it does, the next work period should be shortened by 10 minutes (or 33%), while the length of the rest period remains the same. However, if the oral temperature exceeds 99.6 degrees Fahrenheit at the beginning of the next period, the work cycle may be further shortened by 33%. Oral temperature should be measured at the end of the rest period to make sure that it has dropped below 99.6 degrees Fahrenheit. No Benchmark-TurnKey employee will be permitted to continue wearing semi-permeable or impermeable garments when his/her oral temperature exceeds 100.6 degrees Fahrenheit.

10.2 Cold Stress Monitoring

Exposure to cold conditions may result in frostbite or hypothermia, each of which progresses in stages as shown below.

- **Frostbite** occurs when body tissue (usually on the extremities) begins to freeze. The three states of frostbite are:
 - 1) **Frost nip** - This is the first stage of the freezing process. It is characterized by a whitened area of skin, along with a slight burning or painful sensation. Treatment consists of removing the victim from the cold conditions, removal of boots and gloves, soaking the injured part in warm water (102 to 108 degrees Fahrenheit) and drinking a warm beverage. Do not rub skin to generate friction/ heat.
 - 2) **Superficial Frostbite** - This is the second stage of the freezing process. It is characterized by a whitish gray area of tissue, which will be firm to the touch but will yield little pain. The treatment is identical for Frost nip.
 - 3) **Deep Frostbite** - In this final stage of the freezing process the affected tissue will be cold, numb and hard and will yield little to no pain. Treatment is identical to that for Frost nip.

- **Hypothermia** is a serious cold stress condition occurring when the body loses heat at a rate faster than it is produced. If untreated, hypothermia may be fatal. The stages of hypothermia may not be clearly defined or visible at first, but generally include:
 - 1) Shivering
 - 2) Apathy (i.e., a change to an indifferent or uncaring mood)

- 3) Unconsciousness
- 4) Bodily freezing

Employees exhibiting signs of hypothermia should be treated by medical professionals. Steps that can be taken while awaiting help include:

- 1) Remove the victim from the cold environment and remove wet or frozen clothing. (Do this carefully as frostbite may have started.)
- 2) Perform active re-warming with hot liquids for drinking (Note: do not give the victim any liquid containing alcohol or caffeine) and a warm water bath (102 to 108 degrees Fahrenheit).
- 3) Perform passive re-warming with a blanket or jacket wrapped around the victim.

In any potential cold stress situation, it is the responsibility of the Site Health and Safety Officer to encourage the following:

- Education of workers to recognize the symptoms of frostbite and hypothermia.
- Workers should dress warmly, with more layers of thin clothing as opposed to one thick layer.
- Personnel should remain active and keep moving.
- Personnel should be allowed to take shelter in a heated area, as necessary.
- Personnel should drink warm liquids (no caffeine or alcohol if hypothermia has set in).
- For monitoring the body's recuperation from excess cold, oral temperature recordings should occur:
 - At the Site Safety Technicians discretion when suspicion is based on changes in a worker's performance or mental status.
 - At a workers request.
 - As a screening measure, two times per shift, under unusually hazardous conditions (e.g., wind chill less than 20 degrees Fahrenheit or wind chill

less than 30 degrees Fahrenheit with precipitation).

- As a screening measure, whenever anyone worker on-site develops hypothermia.

Any person developing moderate hypothermia (a core body temperature of 92 degrees Fahrenheit) will not be allowed to return to work for 48 hours without the recommendation of a qualified medical doctor.

11.0 WORK ZONES AND SITE CONTROL

Work zones around the areas designated for construction activities will be established on a daily basis and communicated to all employees and other Site users by the SSHO. It shall be each Contractor's Site Safety and Health Officer's responsibility to ensure that all Site workers are aware of the work zone boundaries and to enforce proper procedures in each area. The zones will include:

- Exclusion Zone ("Hot Zone") - The area where contaminated materials may be exposed, excavated or handled and all areas where contaminated equipment or personnel may travel. Flagging tape will delineate the zone. All personnel entering the Exclusion Zone must wear the prescribed level of personal protective equipment identified in Section 7.
- Contamination Reduction Zone - The zone where decontamination of personnel and equipment takes place. Any potentially contaminated clothing, equipment and samples must remain in the Contamination Reduction Zone until decontaminated.
- Support Zone - The part of the site that is considered non-contaminated or "clean." Support equipment will be located in this zone, and personnel may wear normal work clothes within this zone.

In the absence of other task-specific work zone boundaries established by the SSHO, the following boundaries will apply to all investigation and construction activities involving disruption or handling of Site soils or groundwater:

- Exclusion Zone: 50 foot radius from the outer limit of the sampling/construction activity.
- Contaminant Reduction Zone: 100 foot radius from the outer limit of the sampling/construction activity.
- Support Zone: Areas outside the Contaminant Reduction Zone.

Access of non-essential personnel to the Exclusion and Contamination Reduction Zones will be strictly controlled by the SSHO. Only personnel who are essential to the

completion of the task will be allowed access to these areas and only if they are wearing the prescribed level of protection. Entrance of all personnel must be approved by the SSHO.

The SSHO will maintain a Health and Safety Logbook containing the names of Benchmark-TurnKey workers and their level of protection. The zone boundaries may be changed by the SSHO as environmental conditions warrant, and to respond to the necessary changes in work locations on-site.

12.0 DECONTAMINATION

12.1 Decontamination for Benchmark-TurnKey Employees

The degree of decontamination required is a function of a particular task and the environment within which it occurs. The following decontamination procedure will remain flexible, thereby allowing the decontamination crew to respond appropriately to the changing environmental conditions that may arise at the Site. All Benchmark-TurnKey personnel on-site shall follow the procedure below, or the Contractor's procedure (if applicable), whichever is more stringent.

Station 1 - Equipment Drop: Deposit visibly contaminated (if any) re-useable equipment used in the contamination reduction and exclusion zones (tools, containers, monitoring instruments, radios, clipboards, etc.) on plastic sheeting.

Station 2 - Boots and Gloves Wash and Rinse: Scrub outer boots and outer gloves. Deposit tape and gloves in waste disposal container.

Station 3 - Tape, Outer Boot and Glove Removal: Remove tape, outer boots and gloves. Deposit tape and gloves in waste disposal container.

Station 4 - Canister or Mask Change: If worker leaves exclusive 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 cover donned, and worker returns to duty.

Station 5 - Outer Garment/Face Piece Removal: Protective suit removed and deposited in separate container provided by Contractor. Face piece or goggles are removed if used. Avoid touching face with fingers. Face piece and/or goggles deposited on plastic sheet. Hard hat removed and placed on plastic sheet.

Station 6 - Inner Glove Removal: Inner gloves are the last personal protective equipment to be removed. Avoid touching the outside of the gloves with bare fingers. Dispose of these gloves in waste disposal container.

Following PPE removal, personnel shall wash hands, face and forearms with absorbent wipes. If field activities proceed for duration of 6 consecutive months or longer, shower facilities will be provided for worker use in accordance with OSHA 29 CFR 1910.120(n).

12.2 Decontamination for Medical Emergencies

In the event of a minor, non-life-threatening injury, personnel should follow the decontamination procedures as defined, and then administer first-aid.

In the event of a major injury or other serious medical concern (e.g., heat stroke), immediate first-aid is to be administered and the victim transported to the hospital in lieu of further decontamination efforts unless exposure to a Site contaminant would be considered “Immediately Dangerous to Life or Health.”

12.3 Decontamination of Field Equipment

The Contractor in accordance with his approved Health and Safety Plan in the Contamination Reduction Zone will conduct decontamination of heavy equipment. As a minimum, this will include manually removing heavy soil contamination, followed by steam cleaning on an impermeable pad.

Benchmark-TurnKey personnel will conduct decontamination of all tools used for sample collection purposes. It is expected that all tools will be constructed of nonporous, nonabsorbent materials (i.e., metal), which will aid in the decontamination effort. Any tool or part of a tool made of porous, absorbent material (i.e., wood) will be placed into suitable containers and prepared for disposal.

Decontamination of bailers, split-spoons, spatula knives, and other tools used for environmental sampling and examination shall be as follows:

- Disassemble the equipment
- Water wash to remove all visible foreign matter.
- Wash with detergent.
- Rinse all parts with distilled-deionized water.
- Allow to air dry.
- Wrap all parts in aluminum foil or polyethylene.

13.0 CONFINED SPACE ENTRY

OSHA 29 CFR 1910.146 identifies a confined space as a space that is large enough and so configured that an employee can physically enter and do assigned work, has limited or restricted means for entry and exit, and is not intended for continuous employee occupancy. Confined spaces include, but are not limited to, trenches, storage tanks, process vessels, pits, sewers, tunnels, underground utility vaults, pipelines, sumps, wells, and excavations.

Confined space entry by Benchmark-TurnKey employees is not anticipated to be necessary to complete the RI/IRM activities identified in Section 2.0. In the event that the scope of work changes or confined space entry appears necessary, the Project Manager will be consulted to determine if feasible engineering alternatives to confined space entry can be implemented. If confined space entry by Benchmark-TurnKey employees cannot be avoided through reasonable engineering measures, task-specific confined space entry procedures will be developed, and a confined-space entry permit will be issued through Benchmark-TurnKey's corporate Health and Safety Director. Benchmark-TurnKey employees shall not enter a confined space without these procedures and permits in place.

14.0 FIRE PREVENTION AND PROTECTION

14.1 General Approach

Recommended practices and standards of the National Fire Protection Association (NFPA) and other applicable regulations will be followed in the development and application of Project Fire Protection Programs. When required by regulatory authorities, the project management will prepare and submit a Fire Protection Plan for the approval of the contracting officers, authorized representative or other designated official. Essential considerations for the Fire Protection Plan will include:

- Proper Site preparation and safe storage of combustible and flammable materials.
- Availability of coordination with private and public fire authorities.
- Adequate job-site fire protection and inspections for fire prevention.
- Adequate indoctrination and training of employees.

14.2 Equipment and Requirements

Fire extinguishers will be provided by each Contractor and are required on all heavy equipment and in each field trailer. Fire extinguishers will be inspected, serviced, and maintained in accordance with the manufacturer's instructions. As a minimum, all extinguishers shall be checked monthly and weighed semi-annually, and recharged if necessary. Recharge or replacement shall be mandatory immediately after each use.

14.3 Flammable and Combustible Substances

All storage, handling or use of flammable and combustible substances will be under the supervision of qualified persons. All tanks, containers and pumping equipment, whether portable or stationary, used for the storage and handling of flammable and combustible liquids, will meet the recommendations of the National Fire Protection Association.

14.4 Hot Work

If the scope of work necessitates welding or blowtorch operation, the hot work permit presented in Appendix B will be completed by the SSHO and reviewed/issued by the Project Manager.

15.0 EMERGENCY INFORMATION

In accordance with OSHA 29 CFR Part 1910, an Emergency Response Plan is attached to this HASP as Appendix A. The hospital route map is presented within Appendix A as Figure 1.

16.0 REFERENCES

1. New York State Department of Environmental Conservation. *DER-10; Technical Guidance for Site Investigation and Remediation*. May 2010.

TABLES



TABLE 1
TOXICITY DATA FOR CONSTITUENTS OF POTENTIAL CONCERN
1155 MAIN STREET SITE
Buffalo, New York

Parameter	Synonyms	CAS No.	Code	Concentration Limits ¹		
				PEL	TLV	IDLH
Semi-volatile Organic Compounds (SVOCs) ² : ppm						
Benzo(a)anthracene	<i>none</i>	56-55-3	<i>none</i>	--	--	--
Benzo(a)pyrene	<i>none</i>	50-32-8	<i>none</i>	--	--	--
Benzo(b)fluoranthene	<i>none</i>	205-99-2	<i>none</i>	--	--	--
Benzo(k)fluoranthene	<i>none</i>	207-08-9	<i>none</i>	--	--	--
Chrysene	<i>none</i>	218 01 9	<i>none</i>	--	--	--
Dibenzo(a,h)anthracene	<i>none</i>	53-70-3	<i>none</i>	--	--	--
Indeno(1,2,3-cd)pyrene	<i>none</i>	193-39-5	<i>none</i>	--	--	--
Naphthalene	Naphthalin, Tar camphor, White tar	91-20-3	<i>none</i>	10	10	250
Inorganic Compounds: mg/m ²						
Barium	<i>none</i>	7440-39-3	<i>none</i>	0.5	0.5	50
Lead	<i>none</i>	7439-92-1	<i>none</i>	0.05	0.15	100
Nickel	<i>none</i>	7440-02-0	<i>none</i>	1	1.5	10

Notes:

1. Concentration limits as reported by NIOSH Pocket Guide to Chemical Hazards, February 2004 (NIOSH Publication No. 97-140, fourth printing with changes and updates).
2. "--" = concentration limit not available; exposure should be minimized to the extent feasible through appropriate engineering controls & PPE.

Explanation:

- Ca = NIOSH considers constituent to be a potential occupational carcinogen.
- C-## = Ceiling Level equals the maximum exposure concentration allowable during the work day.
- IDLH = Immediately Dangerous to Life or Health.
- ND indicates that an IDLH has not as yet been determined.
- TLV = Threshold Limit Value, established by American Conference of Industrial Hygienists (ACGIH), equals the maximum exposure concentration allowable for 8 hours/day @ 40 hours per week.
- TLVs are the amounts of chemicals in the air that almost all healthy adult workers are predicted to be able to tolerate without adverse effects. There are three types.
 - TLV-TWA (TLV-Time-Weighted Average) which is averaged over the normal eight-hour day/forty-hour work week. (Most TLVs.)
 - TLV-C or Ceiling limits are the concentration that should not be exceeded during any part of the working exposure.
 - Unless the initials "STEL" or "C" appear in the Code column, the TLV value should be considered to be the eight-hour TLV-TWA.
- PEL = Permissible Exposure Limit, established by OSHA, equals the maximum exposure concentration allowable for 8 hours per day @ 40 hours per week



TABLE 2

**POTENTIAL ROUTES OF EXPOSURE TO THE
CONSTITUENTS OF POTENTIAL CONCERN**

**1155 Main Street Site
Buffalo, New York**

Activity ¹	Direct Contact with Soil/Fill	Inhalation of Vapors or Dust	Direct Contact with Groundwater
Remedial Investigation Tasks			
1. Subsurface Soil Sampling	x	x	
2. Monitoring Well Installation/Development and Sampling	x	x	x
Interim Remedial Measures Tasks			
1. Soil Excavation	x	x	
2. Backfilling	x	x	
3. Verification Sampling	x	x	
4. Groundwater and Surface Water Management	x		x

Notes:

1. Activity as described in Section 1.5 of the Health and Safety Plan.



TABLE 3

**REQUIRED LEVELS OF PROTECTION
FOR RI/IRM TASKS**

**1155 Main Street Site
Buffalo, New York**

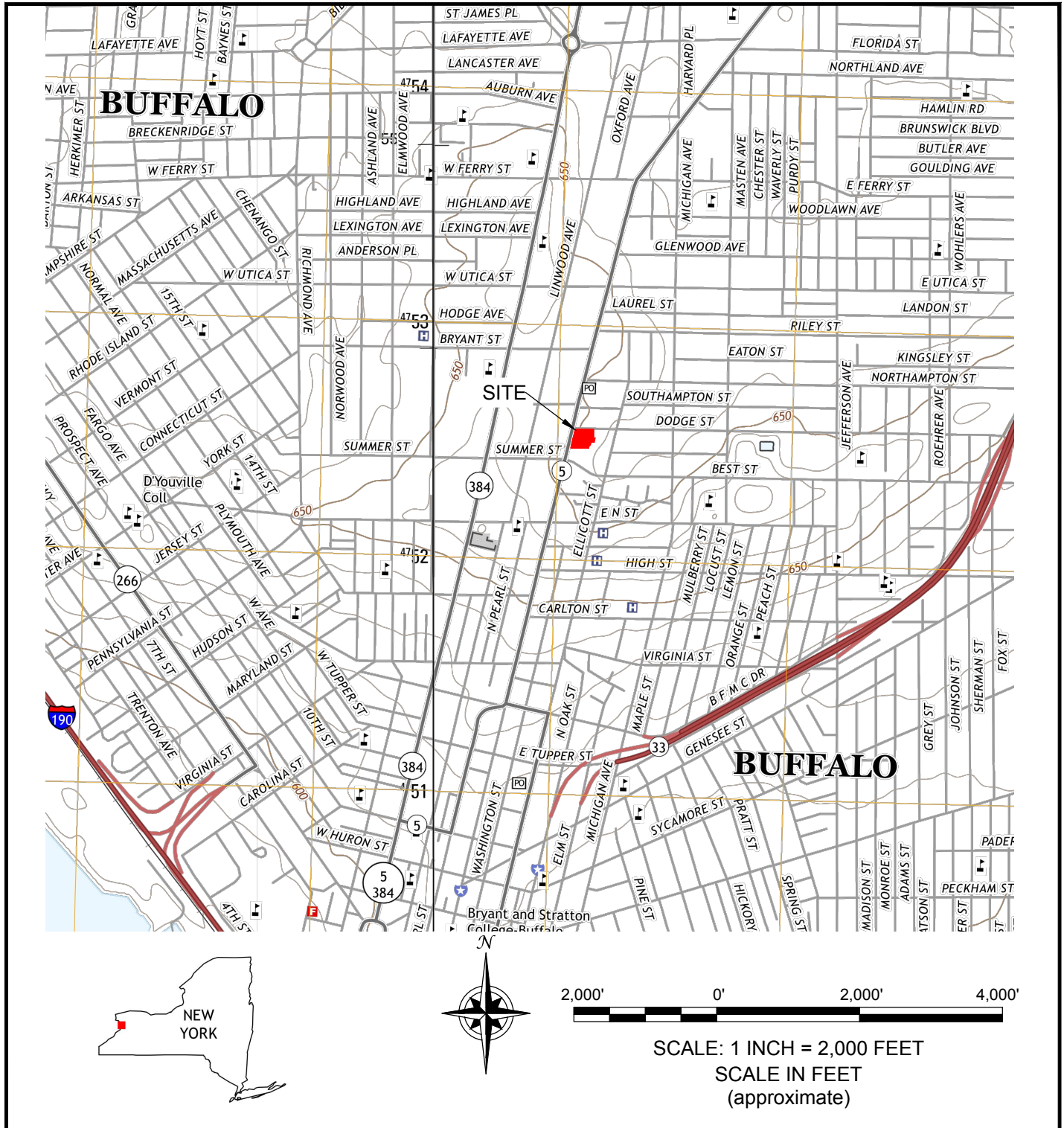
Activity	Respiratory Protection¹	Clothing	Gloves²	Boots^{2,3}	Other Required PPE/Modifications^{2,4}
Remedial Investigation Tasks					
1. Subsurface Soil Sampling	Level D (upgrade to Level C if necessary)	Work Uniform or Tyvek	L/N	outer: L inner: STSS	HH SGSS
2. Monitoring Well Installation/Development and Sampling	Level D (upgrade to Level C if necessary)	Work Uniform or Tyvek	L/N	outer: L inner: STSS	SGSS
Interim Remedial Measures Tasks					
1. Soil Excavation	Level D (upgrade to Level C if necessary)	Work Uniform or Tyvek	L/N	outer: L inner: STSS	HH SGSS
2. Backfilling	Level D (upgrade to Level C if necessary)	Work Uniform or Tyvek	L/N	outer: L inner: STSS	HH SGSS
3. Verification Sampling	Level D (upgrade to Level C if necessary)	Work Uniform or Tyvek	L/N	outer: L inner: STSS	HH SGSS
4. Groundwater and Surface Water Management	Level D (upgrade to Level C if necessary)	Work Uniform or Tyvek	L/N	outer: L inner: STSS	HH SGSS

Notes:

1. Respiratory equipment shall conform to guidelines presented in Section 7.0 of this HASP. The Level C requirement is an air-purifying respirator equipped with organic compound/acid gas/dust cartridge.
2. HH = hardhat; L= Latex; L/N = latex inner glove, nitrile outer glove; N = Nitrile; S = Saranex; SG = safety glasses; SGSS = safety glasses with sideshields; STSS = steel toe safety shoes.
3. Latex outer boot (or approved overboot) required whenever contact with contaminated materials may occur. SSHO may downgrade to STSS (steel-toed safety shoes) if contact will be limited to cover/replacement soils.
4. Dust masks shall be donned as directed by the SSHO (site safety and health officer) or site safety technician whenever potentially contaminated airborne particulates (i.e., dust) are present in significant amounts in the breathing zone. Goggles may be substituted with safety glasses w/side-shields whenever contact with contaminated liquids is not anticipated.

FIGURES

FIGURE 1



F:\CAD\TurnKey Development Group\Main & Dodge\HASP\Figure 1: Site Location and Vicinity Map.dwg, 10/19/2018 9:36:50 AM, DWG To PDF.pc3



2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0599

SITE LOCATION AND VICINITY MAP

HEALTH AND SAFETY PLAN

1155 MAIN STREET SITE

BUFFALO, NEW YORK

PREPARED FOR

MAIN & DODGE LLC

PROJECT NO.: 0371-018-002

DATE: OCTOBER 2018

DRAFTED BY: CMC

DISCLAIMER: PROPERTY OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC. IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC.

LEGEND:

— BCP SITE BOUNDARY



SITE PLAN (AERIAL)

HEALTH AND SAFETY PLAN

1155 MAIN STREET SITE

BUFFALO, NEW YORK

PREPARED FOR

MAIN & DODGE LLC

FIGURE 2



2556 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0599

PROJECT NO.: 0371-018-002

DATE: OCTOBER 2018

DRAFTED BY: CMC

DISCLAIMER:

PROPERTY OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC. IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC.

ATTACHMENT A

EMERGENCY RESPONSE PLAN

EMERGENCY RESPONSE PLAN
for
BROWNFIELD CLEANUP PROGRAM
RI/IRM ACTIVITIES

1155 MAIN STREET SITE
BUFFALO, NEW YORK

October 2018

0371-018-002

Prepared for:

MAIN & DODGE LLC

1155 MAIN STREET SITE
HEALTH AND SAFETY PLAN FOR RI/IRM ACTIVITIES
APPENDIX A: EMERGENCY RESPONSE PLAN

TABLE OF CONTENTS

1.0	GENERAL.....	1
2.0	PRE-EMERGENCY PLANNING.....	2
3.0	ON-SITE EMERGENCY RESPONSE EQUIPMENT.....	3
4.0	EMERGENCY PLANNING MAPS.....	4
5.0	EMERGENCY CONTACTS.....	5
6.0	EMERGENCY ALERTING & EVACUATION.....	6
7.0	EXTREME WEATHER CONDITIONS.....	8
8.0	EMERGENCY MEDICAL TREATMENT & FIRST AID.....	9
9.0	EMERGENCY RESPONSE CRITIQUE & RECORD KEEPING.....	10
10.0	EMERGENCY RESPONSE TRAINING.....	11

LIST OF FIGURES

Figure 1	Hospital Route Map
----------	--------------------

1.0 GENERAL

This report presents the site-specific Emergency Response Plan (ERP) referenced in the Site Health and Safety Plan (HASP) prepared for Remedial Investigation (RI) and Interim Remedial Measures (IRM) activities at the 1155 Main Street Site in Buffalo, New York. This appendix of the HASP describes potential emergencies that may occur at the Site; procedures for responding to those emergencies; roles and responsibilities during emergency response; and training all workers must receive in order to follow emergency procedures. This ERP also describes the provisions this Site has made to coordinate its emergency response planning with other contractors on-site and with off-site emergency response organizations.

This ERP is consistent with the requirements of 29 CFR 1910.120(l) and provides the following site-specific information:

- Pre-emergency planning.
- Personnel roles, lines of authority, and communication.
- Emergency recognition and prevention.
- Safe distances and places of refuge.
- Evacuation routes and procedures.
- Decontamination procedures.
- Emergency medical treatment and first aid.
- Emergency alerting and response procedures.
- Critique of response and follow-up.
- Emergency personal protective equipment (PPE) and equipment.

2.0 PRE-EMERGENCY PLANNING

This Site has been evaluated for potential emergency occurrences, based on site hazards, the required work tasks, the site topography, and prevailing weather conditions. The results of that evaluation indicate the potential for the following site emergencies to occur at the locations indicated.

Type of Emergency:

1. Medical, due to physical injury

Source of Emergency:

1. Slip/trip/fall

Location of Source:

1. Non-specific

3.0 ON-SITE EMERGENCY RESPONSE EQUIPMENT

Emergency procedures may require specialized equipment to facilitate worker rescue, contamination control and reduction, or post-emergency clean up. Emergency response equipment available on the Site is listed below. The equipment inventory and storage locations are based on the potential emergencies described above. This equipment inventory is designed to meet on-site emergency response needs and any specialized equipment needs that off-site responders might require because of the hazards at this Site but not ordinarily stocked.

Any additional personal protective equipment (PPE) required and stocked for emergency response is also listed in below. During an emergency, the Emergency Response Coordinator (ERC) is responsible for specifying the level of PPE required for emergency response. At a minimum, PPE used by emergency responders will comply with Section 7.0, Personal Protective Equipment, of this HASP. Emergency response equipment is inspected at regular intervals and maintained in good working order. The equipment inventory is replenished as necessary to maintain response capabilities.

Emergency Equipment	Quantity	Location
First Aid Kit	1	Site Vehicle
Chemical Fire Extinguisher	2 (minimum)	All heavy equipment and Site Vehicle

Emergency PPE	Quantity	Location
Full-face respirator	1 for each worker	Site Vehicle
Chemical-resistant suits	4 (minimum)	Site Vehicle

4.0 EMERGENCY PLANNING MAPS

An area-specific map of the Site will be developed on a daily basis during performance of field activities. The map will be marked to identify critical on-site emergency planning information, including: emergency evacuation routes, a place of refuge, an assembly point, and the locations of key site emergency equipment. Site zone boundaries will be shown to alert responders to known areas of contamination. There are no major topographical features, however the direction of prevailing winds/weather conditions that could affect emergency response planning are also marked on the map. The map will be posted at site-designated place of refuge and inside the Benchmark-TurnKey personnel field vehicle.

5.0 EMERGENCY CONTACTS

The following identifies the emergency contacts for this ERP.

Emergency Telephone Numbers:

Project Manager: *Christopher Boron*

Work: (716) 856-0635

Mobile: (716) 864-2726

Corporate Health and Safety Director: *Thomas H. Forbes*

Work: (716) 856-0599

Mobile: (716) 864-1730

Site Safety and Health Officer (SSHO): *Christopher Boron*

Work: (716) 856-0635

Mobile: (716) 864-2726

Alternate SSHO: *Nathan Munley*

Work: (716) 856-0635

Mobile: (716) 289-1072

BUFFALO GENERAL HOSPITAL (ER):	(716) 748-2100
FIRE:	911
AMBULANCE:	911
BUFFALO POLICE:	911
STATE EMERGENCY RESPONSE HOTLINE:	(800) 457-7362
NATIONAL RESPONSE HOTLINE:	(800) 424-8802
NYSDOH:	(716) 847-4385
NYSDEC:	(716) 851-7220
NYSDEC 24-HOUR SPILL HOTLINE:	(800) 457-7252

The Site location is:

1155 Main Street

Buffalo, New York 14209

Site Phone Number: TurnKey Staff Cell Phones to be used.

6.0 EMERGENCY ALERTING & EVACUATION

Internal emergency communication systems are used to alert workers to danger, convey safety information, and maintain site control. Any effective system can be employed. Two-way radio headsets or field telephones are often used when work teams are far from the command post. Hand signals and air-horn blasts are also commonly used. Every system must have a backup. It shall be the responsibility of each contractor's Site Health and Safety Officer to ensure all personnel entering the site understand an adequate method of internal communication. Unless all personnel are otherwise informed, the following signals shall be used.

- 1) Emergency signals by portable air horn, siren, or whistle: two short blasts, personal injury; continuous blast, emergency requiring site excavation.
- 2) Visual signals: hand gripping throat, out of air/cannot breathe; hands on top of head, need assistance; thumbs up, affirmative/ everything is OK; thumbs down, no/negative; grip partner's wrist or waist, leave area immediately.

If evacuation notice is given, site workers leave the worksite with their respective buddies, if possible, by way of the nearest exit. Emergency decontamination procedures detailed in Section 12.0 of the HASP are followed to the extent practical without compromising the safety and health of site personnel. The evacuation routes and assembly area will be determined by conditions at the time of the evacuation based on wind direction, the location of the hazard source, and other factors as determined by rehearsals and inputs from emergency response organizations. Wind direction indicators are located so that workers can determine a safe up wind or cross wind evacuation route and assembly area if not informed by the emergency response coordinator at the time the evacuation alarm sounds. Since work conditions and work zones within the site may be changing on daily basis, it shall be the responsibility of the construction Site Health and Safety Officer to review evacuation routes and procedures as necessary and to inform all Benchmark-TurnKey workers of any changes.

Personnel exiting the site will gather at a designated assembly point. To determine that everyone has successfully exited the site, personnel will be accounted for at the assembly

HEALTH & SAFETY PLAN
APPENDIX A: EMERGENCY RESPONSE PLAN

site. If any worker cannot be accounted for, notification is given to the SSHO (*Christopher Boron* or *Nathan Munley*) so that appropriate action can be initiated. Contractors and subcontractors on this site have coordinated their emergency response plans to ensure that these plans are compatible and that source(s) of potential emergencies are recognized, alarm systems are clearly understood, and evacuation routes are accessible to all personnel relying upon them.

7.0 EXTREME WEATHER CONDITIONS

In the event of adverse weather conditions, the Site Safety and Health Officer in conjunction with the Contractor's SSHO will determine if engineering operations can continue without sacrificing the health and safety of site personnel. Items to be considered prior to determining if work should continue include but are not limited to:

- Potential for heat/cold stress.
- Weather-related construction hazards (e.g., flooding or wet conditions producing undermining of structures or sheeting, high wind threats, etc).
- Limited visibility.
- Potential for electrical storms.
- Limited site access/egress (e.g., due to heavy snow)

8.0 EMERGENCY MEDICAL TREATMENT & FIRST AID

Personnel Exposure:

The following general guidelines will be employed in instances where health impacts threaten to occur acute exposure is realized:

- **Skin Contact:** Use copious amounts of soap and water. Wash/rinse affected area for at least 15 minutes. Decontaminate and provide medical attention. Eyewash stations will be provided on site. If necessary, transport to Buffalo General Hospital.
- **Inhalation:** Move to fresh air and, if necessary, transport to Hospital.
- **Ingestion:** Decontaminate and transport to Hospital.

Personal Injury:

Minor first-aid will be applied on-site as deemed necessary. In the event of a life threatening injury, the individual should be transported to Hospital via ambulance. The Site Health and Safety Officer will supply available chemical specific information to appropriate medical personnel as requested.

First aid kits will conform to Red Cross and other applicable good health standards, and shall consist of a weatherproof container with individually sealed packages for each type of item. First aid kits will be fully equipped before being sent out on each job and will be checked weekly by the SSHO to ensure that the expended items are replaced.

Directions to Buffalo General Hospital (see Figure 1):

The following directions describe the best route from the Site to Buffalo General Hospital:

- Turn left (south) onto Main Street
- Turn left (east) onto High Street
- Hospital on the left (100 High Street)
(0.5 miles)

9.0 EMERGENCY RESPONSE CRITIQUE & RECORD KEEPING

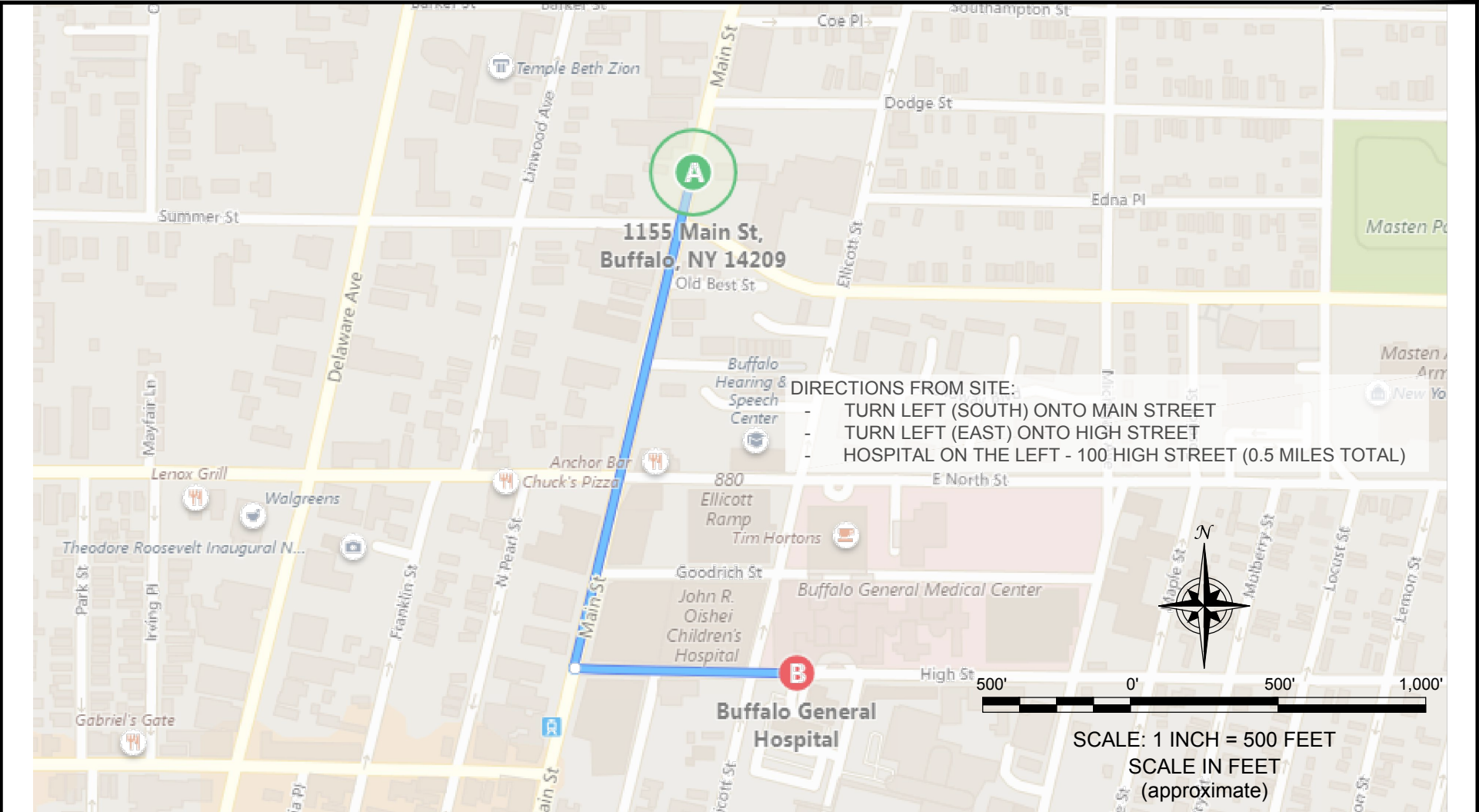
Following an emergency, the SSHO and Project Manager shall review the effectiveness of this Emergency Response Plan (ERP) in addressing notification, control and evacuation requirements. Updates and modifications to this ERP shall be made accordingly. It shall be the responsibility of each contractor to establish and assure adequate records of the following:

- Occupational injuries and illnesses.
- Accident investigations.
- Reports to insurance carrier or State compensation agencies.
- Reports required by the client.
- Records and reports required by local, state, federal and/or international agencies.
- Property or equipment damage.
- Third party injury or damage claims.
- Environmental testing logs.
- Explosive and hazardous substances inventories and records.
- Records of inspections and citations.
- Safety training.

10.0 EMERGENCY RESPONSE TRAINING

All persons who enter the worksite, including visitors, shall receive a site-specific briefing about anticipated emergency situations and the emergency procedures by the SSHO. Where this site relies on off-site organizations for emergency response, the training of personnel in those off-site organizations has been evaluated and is deemed adequate for response to this site.

FIGURES



BENCHMARK
ENVIRONMENTAL
ENGINEERING &
SCIENCE, PLLC

2556 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0599

PROJECT NO.: 0371-018-002

DATE: OCTOBER 2018

DRAFTED BY: CCB

SITE PLAN (AERIAL)

EMERGENCY RESPONSE PLAN

1155 MAIN STREET SITE

BUFFALO, NEW YORK

PREPARED FOR
MAIN & DODGE LLC

FIGURE 1

DISCLAIMER:
PROPERTY OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC. IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC.

ATTACHMENT B

HOT WORK PERMIT FORM



HOT WORK PERMIT

PART 1 - INFORMATION

Issue Date:

Date Work to be Performed: Start:

Finish (permit terminated):

Performed By:

Work Area:

Object to be Worked On:

PART 2 - APPROVAL

(for 1, 2 or 3: mark Yes, No or NA)*

Will working be on or in:

Finish (permit terminated):

- | | | |
|--|-----|----|
| 1. Metal partition, wall, ceiling covered by combustible material? | yes | no |
| 2. Pipes, in contact with combustible material? | yes | no |
| 3. Explosive area? | yes | no |

* = If any of these conditions exist (marked "yes"), a permit will not be issued without being reviewed and approved by Thomas H. Forbes (Corporate Health and Safety Director). Required Signature below.

PART 3 - REQUIRED CONDITIONS**

(Check all conditions that must be met)

PROTECTIVE ACTION		PROTECTIVE EQUIPMENT	
<input type="checkbox"/>	Specific Risk Assessment Required	<input type="checkbox"/>	Goggles/visor/welding screen
<input type="checkbox"/>	Fire or spark barrier	<input type="checkbox"/>	Apron/fireproof clothing
<input type="checkbox"/>	Cover hot surfaces	<input type="checkbox"/>	Welding gloves/gauntlets/other:
<input type="checkbox"/>	Move movable fire hazards, specifically	<input type="checkbox"/>	Wellintons/Knee pads
<input type="checkbox"/>	Erect screen on barrier	<input type="checkbox"/>	Ear protection: Ear muffs/Ear plugs
<input type="checkbox"/>	Restrict Access	<input type="checkbox"/>	B.A.: SCBA/Long Breather
<input type="checkbox"/>	Wet the ground	<input type="checkbox"/>	Respirator: Type:
<input type="checkbox"/>	Ensure adequate ventilation	<input type="checkbox"/>	Cartridge:
<input type="checkbox"/>	Provide adequate supports	<input type="checkbox"/>	Local Exhaust Ventilation
<input type="checkbox"/>	Cover exposed drain/floor or wall cracks	<input type="checkbox"/>	Extinguisher/Fire blanket
<input type="checkbox"/>	Fire watch (must remain on duty during duration of permit)	<input type="checkbox"/>	Personal flammable gas monitor
<input type="checkbox"/>	Issue additional permit(s):	<input type="checkbox"/>	

Other precautions:

** Permit will not be issued until these conditions are met.

SIGNATURES

Originating Employee:

Date:

Project Manager:

Date:

Part 2 Approval:

Date:

ATTACHMENT C

NYSDOH GENERIC COMMUNITY AIR MONITORING PLAN

Appendix C1
New York State Department of Health
Generic Community Air Monitoring Plan

Overview

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 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 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 DEC/NYSDOH staff.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. 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 perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. 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.

1. 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.

2. 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.

3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) 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.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) 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 $150 \text{ mcg}/\text{m}^3$ above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than $150 \text{ mcg}/\text{m}^3$ 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 $150 \text{ mcg}/\text{m}^3$ of the upwind level and in preventing visible dust migration.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

December 2009

Appendix C2 Fugitive Dust and Particulate Monitoring

A program for suppressing fugitive dust and particulate matter monitoring at hazardous waste sites is a responsibility on the remedial party performing the work. These procedures must be incorporated into appropriate intrusive work plans. The following fugitive dust suppression and particulate monitoring program should be employed at sites during construction and other intrusive activities which warrant its use:

1. Reasonable fugitive dust suppression techniques must be employed during all site activities which may generate fugitive dust.
2. Particulate monitoring must be employed during the handling of waste or contaminated soil or when activities on site may generate fugitive dust from exposed waste or contaminated soil. Remedial activities may also include the excavation, grading, or placement of clean fill. These control measures should not be considered necessary for these activities.
3. Particulate monitoring must be performed using real-time particulate monitors and shall monitor particulate matter less than ten microns (PM10) with the following minimum performance standards:
 - (a) Objects to be measured: Dust, mists or aerosols;
 - (b) Measurement Ranges: 0.001 to 400 mg/m³ (1 to 400,000 :ug/m³);
 - (c) Precision (2-sigma) at constant temperature: +/- 10 :g/m³ for one second averaging; and +/- 1.5 g/m³ for sixty second averaging;
 - (d) Accuracy: +/- 5% of reading +/- precision (Referred to gravimetric calibration with SAE fine test dust (mmd= 2 to 3 :m, g= 2.5, as aerosolized);
 - (e) Resolution: 0.1% of reading or 1g/m³, whichever is larger;
 - (f) Particle Size Range of Maximum Response: 0.1-10;
 - (g) Total Number of Data Points in Memory: 10,000;
 - (h) Logged Data: Each data point with average concentration, time/date and data point number
 - (i) Run Summary: overall average, maximum concentrations, time/date of maximum, total number of logged points, start time/date, total elapsed time (run duration), STEL concentration and time/date occurrence, averaging (logging) period, calibration factor, and tag number;
 - (j) Alarm Averaging Time (user selectable): real-time (1-60 seconds) or STEL (15 minutes), alarms required;
 - (k) Operating Time: 48 hours (fully charged NiCd battery); continuously with charger;
 - (l) Operating Temperature: -10 to 50° C (14 to 122° F);
 - (m) Particulate levels will be monitored upwind and immediately downwind at the working site and integrated over a period not to exceed 15 minutes.
4. In order to ensure the validity of the fugitive dust measurements performed, there must be appropriate Quality Assurance/Quality Control (QA/QC). It is the responsibility of the remedial party to adequately supplement QA/QC Plans to include the following critical features: periodic instrument calibration, operator training, daily instrument performance (span) checks, and a record keeping plan.
5. The action level will be established at 150 ug/m³ (15 minutes average). While conservative,

this short-term interval will provide a real-time assessment of on-site air quality to assure both health and safety. If particulate levels are detected in excess of 150 ug/m³, the upwind background level must be confirmed immediately. If the working site particulate measurement is greater than 100 ug/m³ above the background level, additional dust suppression techniques must be implemented to reduce the generation of fugitive dust and corrective action taken to protect site personnel and reduce the potential for contaminant migration. Corrective measures may include increasing the level of personal protection for on-site personnel and implementing additional dust suppression techniques (see paragraph 7). Should the action level of 150 ug/m³ continue to be exceeded work must stop and DER must be notified as provided in the site design or remedial work plan. The notification shall include a description of the control measures implemented to prevent further exceedances.

6. It must be recognized that the generation of dust from waste or contaminated soil that migrates off-site, has the potential for transporting contaminants off-site. There may be situations when dust is being generated and leaving the site and the monitoring equipment does not measure PM₁₀ at or above the action level. Since this situation has the potential to allow for the migration of contaminants off-site, it is unacceptable. While it is not practical to quantify total suspended particulates on a real-time basis, it is appropriate to rely on visual observation. If dust is observed leaving the working site, additional dust suppression techniques must be employed. Activities that have a high dusting potential--such as solidification and treatment involving materials like kiln dust and lime--will require the need for special measures to be considered.

7. The following techniques have been shown to be effective for the controlling of the generation and migration of dust during construction activities:

- (a) Applying water on haul roads;
- (b) Wetting equipment and excavation faces;
- (c) Spraying water on buckets during excavation and dumping;
- (d) Hauling materials in properly tarped or watertight containers;
- (e) Restricting vehicle speeds to 10 mph;
- (f) Covering excavated areas and material after excavation activity ceases; and
- (g) Reducing the excavation size and/or number of excavations.

Experience has shown that the chance of exceeding the 150ug/m³ action level is remote when the above-mentioned techniques are used. When techniques involving water application are used, care must be taken not to use excess water, which can result in unacceptably wet conditions. Using atomizing sprays will prevent overly wet conditions, conserve water, and provide an effective means of suppressing the fugitive dust.

8. The evaluation of weather conditions is necessary for proper fugitive dust control. When extreme wind conditions make dust control ineffective, as a last resort remedial actions may need to be suspended. There may be situations that require fugitive dust suppression and particulate monitoring requirements with action levels more stringent than those provided above. Under some circumstances, the contaminant concentration and/or toxicity may require additional monitoring to protect site personnel and the public. Additional integrated sampling and chemical analysis of the dust may also be in order. This must be evaluated when a health and safety plan is developed and when appropriate suppression and monitoring requirements are established for protection of health and the environment.

APPENDIX E

FIELD OPERATING PROCEDURES (PROVIDED ELECTRONICALLY)

FIELD OPERATING PROCEDURES

Abandonment of Borehole Procedures

FOP 001.1

ABANDONMENT OF BOREHOLE PROCEDURE

PURPOSE

Soil borings that are not completed as monitoring wells will be plugged by filling the holes with a cement/bentonite grout. Field staff will calculate the borehole volume and compare it to the final installed volume of grout to evaluate whether bridging or loss to the formation has occurred. These calculations and the actual volume placed will be noted on the Boring Log.

PROCEDURE

1. Determine most suitable seal materials. Grout specifications generally have mixture ratios as follows:

Grout Slurry Composition (% Weight)

1.5 to 3.0%	-	Bentonite (Quick Gel)
40 to 60 %	-	Cement (Portland Type I)
40 to 60 %	-	Potable Water

2. Calculate the volume of the borehole base on the bit or auger head diameter plus 10% and determine the volume of grout to be emplaced. Generally, the total mixed volume is the borehole volume plus 20%.
3. Identify the equipment to be used for the preparation and mixing of the grout. Ensure the volume of the tanks to be used for mixing has been measured adequately. Document these volumes on the Well Abandonment/Decommissioning Log (sample attached).
4. Identify the source of the water to be used for the grout and determine its suitability for use. In particular, water with high sulfate, or chloride levels or heated water should not be used. These types of waters can cause operational difficulties or modify the set-up for the grout.

FOP 001.1

ABANDONMENT OF BOREHOLE PROCEDURE

5. Identify the equipment to be used for emplacing the grout. Ensure that the pump to be used has adequate pressure to enable complete return to surface.
6. Identify the volumes to be pumped at each stage or in total if only one stage is to be used.
7. Prepare the borehole abandonment plan and discuss the plan and activities with the drilling contractor prior to beginning any mixing activities.
8. Begin mixing the grout to be emplaced.
9. Record the type and amount of materials used during the mixing operation. Ensure the ratios are within specifications tolerance.
10. Begin pumping the grout through the return line bypass system to confirm all pump and surface fittings are secure.
11. Initiate downhole pumping from the bottom of the borehole. Record the times and volumes emplaced on the Well Abandonment/Decommissioning Log (sample attached).
12. Document the return circulation of grout. This may be facilitated by using a colored dye or other tagging method if a mudded borehole condition exists prior to grout injection.
13. Identify what procedures will be used for grouting in the upper 3 feet. When casing exists in the borehole, decisions are required as to the timing for removal and final disposition of the casing. Generally, it will not be removed prior to grouting because of the potential for difficult access and loss of circulation in the upper soil or rock layers. Accordingly, when cement return is achieved at surface, the casing is commonly removed and the borehole is topped off with grout or soils. If casing removal is not possible or not desired, the casing left in place should be cut off at a depth of 5 feet or greater below ground surface. If casing is not present during grouting, the grout level in the borehole is topped off after the rods or tremie pipe is removed.

FOP 001.1

ABANDONMENT OF BOREHOLE PROCEDURE

14. Clear and clean the surface near the borehole.
15. The uppermost five feet of the borehole at the land surface should be filled with material physically similar to the natural soils. The surface of the borehole should be restored to the condition of the area surrounding the borehole. For example, concrete or asphalt will be patched with concrete or asphalt of the same type and thickness, grassed areas will be seeded, and topsoil will be used in other areas. All solid waste materials generated during the decommissioning process must be disposed of properly.
16. A follow-up check at each site should be made within one week to 10 days of completion. It should be noted that on occasion, the grout and/or surface material may settle over several days. If settling occurs, additional material physically similar to surrounding materials (i.e., asphalt, concrete, or soil) must be used to match the existing grade.
17. Document borehole and/or well/piezometer decommissioning activities on a Well Abandonment/Decommissioning Log (sample attached).

ATTACHMENTS

Well Abandonment/Decommissioning Log (sample)

REFERENCES

ASTM D 5299: *Guide for Decommissioning of Ground Water Wells, Vadose Zone Monitoring Devices, Boreholes, and Other Devices for Environmental Activities.*

NYSDEC, July 1988, *Drilling and Monitoring Well Installation Guidance Manual.*

NYSDEC, November 2009, *CP-43: Groundwater Monitoring Well Decommissioning Policy.*

Driscoll, F.G., 1987, *Groundwater and Wells*, Johnson Division, St. Paul, Minnesota, 1089 p.

FIELD OPERATING PROCEDURES

Abandonment of
Monitoring Wells
Procedure

ABANDONMENT OF MONITORING WELLS PROCEDURE

PURPOSE

This guideline presents a method for the abandonment and decommissioning of wells that are no longer reliable as competent monitors of formation groundwater. Well abandonment and decommissioning is required in order to remove a potential pathway for the vertical migration of impacted groundwater and/or surface water.

PROCEDURE

1. Examine the existing well to be abandoned/decommissioned and review well construction detail information (if applicable) to determine well depth,, screened interval, diameter, material of composition and other construction details. Establish appropriate equipment requirements for removal of the well.
2. Determine the most suitable seal materials as discussed in the next section.
3. Attempt to remove the well using a drilling rig, by using the following procedures:
 - Attaching the winch line to the well to see if it can be removed by pulling;
 - Using the rig's hydraulics to advance casing incrementally;
 - If a cable tool rig is available, bump back the casing using the cathead and drive block.
3. Upon removal of the well, ream the borehole by advancing the augers approximately one foot beyond the total depth of the well. Rotate the augers at a speed sufficient to remove the construction materials (i.e., filter pack, bentonite seal, etc.) from the borehole annulus (if possible). Backfill the resulting borehole with cement/bentonite grout, by tremie method, to approximately one foot below ground surface. Fill the remaining borehole to match the existing grade elevation and material of construction (i.e., clean native soil, concrete or asphalt, as necessary). Go to Step 10.

ABANDONMENT OF MONITORING WELLS PROCEDURE

4. If the well cannot be removed from the borehole over-drill the borehole and well to approximately two (2) feet below the well depth. Upon reaching the desired depth, remove the well from within the augers and go back to Step 3.
5. If the borehole cannot be reamed out using conventional drilling techniques (i.e., over-drilled), remove or puncture the base plate of the well screen using the drill rig and associated equipment by pounding with the drill rods. Upon filling the well with grout by tremie method, slowly pull the well from the ground surface to allow the grout to evacuate through the bottom of the well to fill the void space created by removal of the well casing. Continue adding grout mix to the well casing, as necessary, to fill the void space to approximately one foot below ground surface. Fill the remaining borehole to match the existing grade elevation and material of construction (i.e., clean native soil, concrete or asphalt, as necessary). Go to Step 10.

If the driller is unsuccessful at removing or puncturing the base plate of the well due, in part, to well construction materials (i.e., stainless steel or black iron), go to Step 6.

6. Insert a tremie pipe down the well to the bottom and pump a cement/bentonite grout mixture to a depth one to two feet above the top of the screen.
7. Perform a hydraulic pressure test on the portion of the well casing above the grouted screen section. Allow the grout to set up for a period not less than 72 hours before pressure testing of the grouted interval. Place a pneumatic packer a maximum of 4.5 feet above the top of the slotted screen section of the well. The infiltration pressure applied to the packer shall not exceed the pressure rating of the well casing material. If the interval between the top of the grout and the bottom of the packer is not saturated, potable water will be used to fill the interval. A gauge pressure of 5 psig at the well head shall be applied to the interval for a period of 5 minutes to allow for temperature stabilization. After 5 minutes, the pressure will be maintained at 5 psig for 30 minutes. The grout seal shall be considered acceptable if the total loss of water to the seal does not exceed 0.5 gallons over a 30-minute period.

FOP 002.0

ABANDONMENT OF MONITORING WELLS PROCEDURE

8. If the grout seal is determined to be unacceptable, tremie grout an additional 5 feet of well riser above the failing interval and retest as specified above (see Step 7).
9. If the grout seal is determined to be acceptable, tremie grout the remainder of the well until grout displaces all formation water and a grout return is visible in the well at the surface. Cut off well casing at a depth of five feet or greater below ground surface and backfill the remaining borehole to match the existing grade elevation and material of construction (i.e., clean native soil, concrete or asphalt, as necessary).
10. Record all well construction details and abandonment procedures on the **Well Abandonment/Decommissioning Log** (sample attached).

CEMENT/BENTONITE GROUT MIXTURE

The cement/bentonite grout mixture identified below is generally considered the most suitable seal material for monitoring well advancement and abandonment. Grout specifications generally have mixture ratios as follows:

Grout Slurry Composition (% Weight)

1.5 to 3.0%	-	Bentonite (Quick Gel)
40 to 60%	-	Cement (Portland Type I)
40 to 60%	-	Potable Water

MISCELLANEOUS

All removed well materials (PVC, stainless steel, steel pipe) should be decontaminated (if necessary) as per the project specific **Drilling and Excavation Equipment Decontamination FOP** and removed from the site. The project manager will determine the destination of final disposal for all well materials. All drill cuttings (depending on site protocol) should be placed in DOT-approved 55-gallon drums, labeled and sampled in

FOP 002.0

ABANDONMENT OF MONITORING WELLS PROCEDURE

accordance with Benchmark's field operating procedure **Management of Investigation-Derived Waste** in order to determine proper removal and disposal procedures. The drilling subcontractor will provide any potable water utilized during this field activity from a known and reliable source (see Notes section).

ATTACHMENTS

Well Abandonment/Decommissioning Log (sample)

REFERENCES

New York State Department of Environmental Conservation, July 1988, *Drilling and Monitoring Well Installation Guidance Manual*.

Driscoll, F.G., 1987, *Groundwater and Wells*, Johnson Division, St. Paul, Minnesota, p. 1089.

Benchmark FOPs:

018 *Drilling/Excavation Equipment Decontamination Protocols*

032 *Management of Investigation-Derived Waste*

NOTES

Tap water may be used from any municipal water treatment system. The use of an untreated potable water supply is not an acceptable substitute.

FIELD OPERATING PROCEDURES

Calibration and
Maintenance of
Portable Dissolved
Oxygen Meter

FOP 007.0

CALIBRATION AND MAINTENANCE OF PORTABLE DISSOLVED OXYGEN METER

PURPOSE

This guideline describes a method for calibration of a portable dissolved oxygen meter. This meter measures the concentration of dissolved oxygen within a water sample. This parameter is of interest both as a general indicator of water quality, and because of its pertinence to fate and transport of organics and inorganics. This guideline presents a method for calibration of this meter, which is performed to verify instrument accuracy and function. All field instruments will be calibrated, verified and recalibrated at frequencies required by their respective operating manuals or manufacturer's specifications, but not less than once each day that the instrument is in use. Field personnel should have access to all operating manuals for the instruments used for the field measurements. This procedure also documents critical maintenance activities for this meter.

ACCURACY

The calibrated accuracy of the dissolved oxygen meter will be within $\pm 1\%$ of full-scale over the temperature range of 23° to 113° F (-5° to +45° C).

PROCEDURE

1. Calibrate the dissolved oxygen meter to ambient air based on probe temperature and true local atmospheric pressure conditions (or feet above sea level). Because procedures vary with different brands and models of meters, refer to the manufacturer's recommended calibration procedures.
2. In the event of a failure to adequately calibrate, follow the corrective action directed by the manufacturer.
3. If calibration cannot be achieved or maintained, obtain a replacement instrument (rental instruments) and/or order necessary repairs/adjustment.

FOP 007.0

CALIBRATION AND MAINTENANCE OF PORTABLE DISSOLVED OXYGEN METER

4. Document the calibration results and related information in the Project Field Book and on an **Equipment Calibration Log** (see attached sample). Information will include, at a minimum:
 - Time, date, and initials of the field team member performing the calibration
 - The unique identifier for the meter, including manufacturer, model, and serial number
 - The brand and expiration dates of calibration solutions
 - The calibration readings
 - The instrument settings (if applicable)
 - The approximate response time
 - The overall adequacy of calibration including the Pass or fail designation in accordance with the accuracy specifications presented above
 - Corrective action taken (see Step 5 above) in the event of failure to adequately calibrate

MAINTENANCE

- When not in use or between measurements, the dissolved oxygen probe will be kept immersed in or moist with deionized water.
- The meter batteries will be checked prior to each meter's use and will be replaced when the meter cannot be redline adjusted.
- The meter response time and stability will be tracked to determine the need for instrument maintenance. When response time becomes greater than two minutes, probe service is indicated.

ATTACHMENTS

Equipment Calibration Log (sample)

FOP 007.0

**CALIBRATION AND MAINTENANCE OF PORTABLE
DISSOLVED OXYGEN METER**



EQUIPMENT CALIBRATION

PROJECT INFORMATION:

Project Name: _____ Date: _____
 Project No.: _____
 Client: _____ Instrument Source: BM Rental

METER TYPE	UNITS	TIME	MAKE/MODEL	SERIAL NUMBER	CAL. BY	STANDARD	READING	SETTL
<input type="checkbox"/> pH meter	units		Myron L. Company Ultra Meter 6P	606987		4.00 7.00 10.01		
<input type="checkbox"/> Turbidity meter	NTU		Hach 2100P Turbidimeter	970600014560		< 0.4 20 100 800		
<input type="checkbox"/> Sp. conductance meter	uS/mS		Myron L. Company Ultra Meter 6P	606987		uS @ 25 °C		
<input type="checkbox"/> PID	ppm		Photovac 2020 PID			open air zero ppm Iso. Gas		MIBK re factor :
<input type="checkbox"/> Particulate meter	mg/m ³					zero air		
<input type="checkbox"/> Oxygen	%					open air		
<input type="checkbox"/> Hydrogen sulfide	ppm					open air		
<input type="checkbox"/> Carbon monoxide	ppm					open air		
<input type="checkbox"/> LEL	%					open air		
<input type="checkbox"/> Radiation Meter	uR/h					background area		
<input type="checkbox"/>								

ADDITIONAL REMARKS:

PREPARED BY: _____ DATE: _____



FIELD OPERATING PROCEDURES

Calibration and
Maintenance of
Portable Field pH/Eh
Meter

FOP 008.0

CALIBRATION AND MAINTENANCE OF PORTABLE FIELD pH/Eh METER

PURPOSE

This guideline describes a method for calibration of a portable pH/Eh meter. The pH/Eh meter measures the hydrogen ion concentration or acidity of a water sample (pH function), and the oxidation/reduction potential of a water sample (Eh function). Calibration is performed to verify instrument accuracy and function. All field instruments will be calibrated, verified and recalibrated at frequencies required by their respective operating manuals or manufacturer's specifications, but not less than once each day that the instrument is in use. Field personnel should have access to all operating manuals for the instruments used for the field measurements. This procedure also documents critical maintenance activities for this meter.

ACCURACY

The calibrated accuracy of the pH/Eh meter will be:

pH ± 0.2 pH unit, over the temperature range of ± 0.2 C.

Eh ± 0.2 millivolts (mV) over the range of ± 399.9 mV, otherwise ± 2 mV.

PROCEDURE

Note: Meters produced by different manufacturers may have different calibration procedures. These instructions will take precedence over the procedure provided herein. This procedure is intended to be used as a general guideline, or in the absence of available manufacturer's instructions.

1. Obtain and active the meter to be used. As stated above, initial calibrations will be performed at the beginning of each sampling day.

FOP 008.0

CALIBRATION AND MAINTENANCE OF PORTABLE FIELD pH/Eh METER

2. Immerse the sensing probe in a container of certified pH 7.0 buffer solution traceable to the National Bureau of Standards.
3. Measure the temperature of the buffer solution, and adjust the temperature setting accordingly.
4. Compare the meter reading to the known value of the buffer solution while stirring. If the reading obtained by the meter does not agree with the known value of the buffer solution, recalibrate the meter according to the manufacturer's instructions until the desired reading is obtained. This typically involves accessing and turning a dial or adjustment screw while measuring the pH of the buffer solution. The meter is adjusted until the output agrees with the known solution pH.
5. Repeat Steps 2 through 5 with a pH 4.0 and 10.0 buffer solution to provide a three-point calibration. Standards used to calibrate the pH meter will be of concentrations that bracket the expected values of the samples to be analyzed, especially for two-point calibrations (see note below).

Note: Some pH meters only allow two-point calibrations. Two-point calibrations should be within the suspected range of the groundwater to be analyzed. For example, if the groundwater pH is expected to be approximately 8, the two-point calibration should bracket that value. Buffer solutions of 7 and 10 should then be used for the two-point calibration.

6. Document the calibration results and related information in the Project Field Book and on an **Equipment Calibration Log** (see attached sample). Information will include, at a minimum:
 - Time, date, and initials of the field team member performing the calibration
 - The unique identifier for the meter, including manufacturer, model, and serial number
 - The brand and expiration dates of buffer solutions
 - The instrument readings
 - The instrument settings (if applicable)

FOP 008.0

CALIBRATION AND MAINTENANCE OF PORTABLE FIELD pH/Eh METER

- Pass or fail designation in accordance with the accuracy specifications presented above
- Corrective action taken (see Maintenance below) in the event of failure to adequately calibrate

MAINTENANCE

- When not in use, or between measurements, keep the pH/Eh probe immersed in or moist with buffer solutions.
- Check the meter batteries at the end of each day and recharge or replace as needed.
- Replace the pH/Eh probe any time that the meter response time becomes greater than two minutes or the meter consistently fails to retain its calibrated accuracy for a minimum of ten sample measurements.
- If a replacement of the pH/Eh probe fails to resolve instrument response time and stability problems, obtain a replacement instrument (rental instruments) and/or order necessary repairs/adjustment.

ATTACHMENTS

Equipment Calibration Log (sample)

FOP 008.0

**CALIBRATION AND MAINTENANCE OF PORTABLE
FIELD pH/Eh METER**



EQUIPMENT CALIBRATION

PROJECT INFORMATION:

Project Name: _____ Date: _____
 Project No.: _____
 Client: _____ Instrument Source: BM Rental

METER TYPE	UNITS	TIME	MAKE/MODEL	SERIAL NUMBER	CAL. BY	STANDARD	READING	SETTING
<input type="checkbox"/> pH meter	units		Myron L. Company Ultra Meter 6P	606987		4.00 7.00 10.01		
<input type="checkbox"/> Turbidity meter	NTU		Hach 2100P Turbidimeter	970600014560		< 0.4 20 100 800		
<input type="checkbox"/> Sp. conductance meter	uS/mS		Myron L. Company Ultra Meter 6P	606987		uS @ 25 °C		
<input type="checkbox"/> PID	ppm		Photovac 2020 PID			open air zero ppm Iso. Gas		MIBK re factor :
<input type="checkbox"/> Particulate meter	mg/m ³					zero air		
<input type="checkbox"/> Oxygen	%					open air		
<input type="checkbox"/> Hydrogen sulfide	ppm					open air		
<input type="checkbox"/> Carbon monoxide	ppm					open air		
<input type="checkbox"/> LEL	%					open air		
<input type="checkbox"/> Radiation Meter	uR/h					background area		
<input type="checkbox"/>								

ADDITIONAL REMARKS: _____

PREPARED BY: _____ **DATE:** _____



FIELD OPERATING PROCEDURES

Calibration and
Maintenance of
Portable Field
Turbidity Meter

FOP 009.0

CALIBRATION AND MAINTENANCE OF PORTABLE FIELD TURBIDITY METER

PURPOSE

This guideline describes the method for calibration of the HACH 2100P portable field turbidity meter. Turbidity is one water quality parameter measured during purging and development of wells. Turbidity is measured as a function of the samples ability to transmit light, expressed as Nephelometric Turbidity Units (NTUs). The turbidity meter is factory calibrated and must be checked daily prior to using the meter in the field. Calibration is performed to verify instrument accuracy and function. This procedure also documents critical maintenance activities for this meter.

ACCURACY

Accuracy shall be $\pm 2\%$ of reading below 499 NTU or $\pm 3\%$ of reading above 500 NTU with resolution to 0.01 NTU in the lowest range. The range key provides for automatic or manual range selection for ranges of 0.00 to 9.99, 0.0 to 99.9 and 0 to 1000 NTU. Another key provides for selecting automatic signal averaging. Pressing the key shall toggle signal averaging on or off.

PROCEDURE

Calibration of the 2100P Turbidimeter is based on formazin, the primary standard for turbidity. The instrument's electronic and optical design provides long-term stability and minimizes the need for frequent calibration. The two-detector ratioing system compensates for most fluctuations in lamp output. **A formazin recalibration should be performed at least once every three months**, more often if experience indicates the need. During calibration, use a primary standard such as StablCal™ Stabilized Standards or formazin standards.

FOP 009.0

CALIBRATION AND MAINTENANCE OF PORTABLE FIELD TURBIDITY METER

Note: Meters produced by different manufacturers may have different calibration check procedures. These manufacturers' instructions will take precedence over the procedure provided here. This procedure is intended to be used as a general guideline, or in the absence of available manufacturer's instructions.

Note: Because the turbidity meter measures light transmission, it is critical that the meter and standards be cared for as precision optical instruments. Scratches, dirt, dust, etc. can all temporarily or permanently affect the accuracy of meter readings.

Preparing StablCal Stabilized Standards in Sealed Vials

Sealed vials that have been sitting undisturbed for longer than a month must be shaken to break the condensed suspension into its original particle size. Start at *step 1* for these standards. If the standards are used on at least a weekly interval, start at *step 3*.

Note: These instructions do not apply to < 0.1 NTU StablCal Standards; < 0.1 NTU StablCal Standards should not be shaken or inverted.

1. Shake the standard vigorously for 2-3 minutes to re-suspend any particles.
2. Allow the standard to stand undisturbed for 5 minutes.
3. Gently invert the vial of StablCal 5 to 7 times.
4. Prepare the vial for measurement using traditional preparation techniques. This usually consists of oiling the vial (see *Section 2.3.2 on page 11 of the manual*)

FOP 009.0

CALIBRATION AND MAINTENANCE OF PORTABLE FIELD TURBIDITY METER

and marking the vial to maintain the same orientation in the sample cell compartment (see *Section 2.3.3 on page 12 of the manual*). This step will eliminate any optical variations in the sample vial.

5. Let the vial stand for one minute. The standard is now ready for use in the calibration procedure.

Calibration Procedure

1. Turn the meter on.
2. Shake pre-mixed formazin primary standards in accordance with the above procedure.
3. Wipe the outside of the < 0.1 NTU standard and insert the sample cell in the cell compartment by aligning the orientation mark on the cell with the mark on the front of the cell compartment.
4. Close the lid and press **I/O**.
5. Press the **CAL** button. The **CAL** and **S0** icons will be displayed and the 0 will flash. The four-digit display will show the value of the **S0** standard for the previous calibration. If the blank value was forced to 0.0, the display will be blank. Press the right arrow key (\rightarrow) to get a numerical display.
6. Press **READ**. The instrument will count from 60 to 0, read the blank and use it to calculate a correction factor for the 20 NTU standard measurement. If the dilution water is ≥ 0.5 NTU, E 1 will appear when the calibration is calculated (see *Section 3.6.2.3 on page 31 of the manual*). The display will automatically increment to the next standard. Remove the sample cell from the cell compartment

FOP 009.0

CALIBRATION AND MAINTENANCE OF PORTABLE FIELD TURBIDITY METER

Note: The turbidity of the dilution water can be “forced” to zero by pressing → rather than reading the dilution water. The display will show “S0 NTU” and the ↑ key must be pressed to continue with the next standard.

7. Repeat steps 1 through 7 for the 20, 100 and 800 standards.
8. Following the 800 NTU standard calibration, the display will increment back to the **S0** display. Remove the sample cell from the cell compartment.
9. Press **CAL** to accept the calibration. The instrument will return to measurement mode automatically.
10. Document the calibration results and related information in the Project Field Book and on an **Equipment Calibration Log** (see attached sample). Information will include, at a minimum:
 - Time, date, and initials of the field team member performing the calibration
 - The unique identifier for the meter, including manufacturer, model, and serial number
 - The brand of calibration standards
 - The instrument readings
 - The instrument settings (if applicable)
 - Pass or fail designation in accordance with the accuracy specifications presented above
 - Corrective action taken (see Maintenance below) in the event of failure to adequately calibrate.

Note: Pressing **CAL** completes the calculation of the calibration coefficients. If calibration errors occurred during calibration, error messages will appear after **CAL** is pressed. If **E 1** or **E 2** appear, check the standard preparation and review the calibration; repeat the calibration if necessary. If “**CAL?**” appears, an error may have

**CALIBRATION AND MAINTENANCE OF PORTABLE
FIELD TURBIDITY METER**

occurred during calibration. If “CAL?” is flashing, the instrument is using the default calibration.

NOTES

- If the **I/O** key is pressed during calibration, the new calibration data is lost and the old calibration will be used for measurements. Once in calibration mode, only the **READ**, **I/O**, **↑**, and **→** keys function. Signal averaging and range mode must be selected before entering the calibration mode.
- If **E 1** or **E 2** are displayed, an error occurred during calibration. Check the standard preparation and review the calibration; repeat the calibration if necessary. Press **DIAG** to cancel the error message (**E 1** or **E 2**). To continue without repeating the calibration, press **I/O** twice to restore the previous calibration. If “CAL?” is displayed, an error may have occurred during calibration. The previous calibration may not be restored. Either recalibrate or use the calibration as is.
- To review a calibration, press **CAL** and then **↑** to view the calibration standard values. As long as **READ** is never pressed and **CAL** is not flashing, the calibration will not be updated. Press **CAL** again to return to the measurement mode.

MAINTENANCE

- **Cleaning:** Keep the turbidimeter and accessories as clean as possible and store the instrument in the carrying case when not in use. Avoid prolonged exposure to sunlight and ultraviolet light. Wipe spills up promptly. Wash sample cells with non-abrasive laboratory detergent, rinse with distilled or demineralized water, and air dry. Avoid scratching the cells and wipe all moisture and fingerprints off the cells before inserting them into the instrument. Failure to do so can give inaccurate readings. See *Section 2.3.1 on page 11 of the manual* for more information about sample cell care.
- **Battery Replacement:** AA alkaline cells typically last for about 300 tests with the signal-averaging mode off, about 180 tests if signal averaging is used. The “battery” icon flashes when battery replacement is needed. Refer to *Section 1.4.2 on page 5 of the manual* for battery installation instructions. If the batteries are changed within 30

FOP 009.0

CALIBRATION AND MAINTENANCE OF PORTABLE FIELD TURBIDITY METER

seconds, the instrument retains the latest range and signal average selections. If it takes more than 30 seconds, the instrument uses the default settings. If, after changing batteries, the instrument will not turn off or on and the batteries are good, remove the batteries and reinstall them. If the instrument still won't function, contact Hach Service or the nearest authorized dealer.

- **Lamp Replacement:** The procedure in *Section 4.0 on page 49 of the manual* explains lamp installation and electrical connections. Use a small screwdriver to remove and install the lamp leads in the terminal block. The instrument requires calibration after lamp replacement.

ATTACHMENTS

Equipment Calibration Log (sample)

FOP 009.0

**CALIBRATION AND MAINTENANCE OF PORTABLE
FIELD TURBIDITY METER**



EQUIPMENT CALIBRATION

PROJECT INFORMATION:

Project Name: _____ Date: _____
 Project No.: _____
 Client: _____ Instrument Source: BM Rental

METER TYPE	UNITS	TIME	MAKE/MODEL	SERIAL NUMBER	CAL. BY	STANDARD	READING	SETTL
<input type="checkbox"/> pH meter	units		Myron L. Company Ultra Meter 6P	606987		4.00 7.00 10.01		
<input type="checkbox"/> Turbidity meter	NTU		Hach 2100P Turbidimeter	970600014560		< 0.4 20 100 800		
<input type="checkbox"/> Sp. conductance meter	uS/mS		Myron L. Company Ultra Meter 6P	606987		uS @ 25 °C		
<input type="checkbox"/> PID	ppm		Photovac 2020 PID			open air zero ppm Iso. Gas		MIBK re factor :
<input type="checkbox"/> Particulate meter	mg/m ³					zero air		
<input type="checkbox"/> Oxygen	%					open air		
<input type="checkbox"/> Hydrogen sulfide	ppm					open air		
<input type="checkbox"/> Carbon monoxide	ppm					open air		
<input type="checkbox"/> LEL	%					open air		
<input type="checkbox"/> Radiation Meter	uR/h					background area		
<input type="checkbox"/>								

ADDITIONAL REMARKS:

PREPARED BY: _____ DATE: _____



FIELD OPERATING PROCEDURES

Calibration and
Maintenance of
Portable
Photoionization
Detector (PID)

FOP 011.1

CALIBRATION AND MAINTENANCE OF PORTABLE PHOTOIONIZATION DETECTOR

PURPOSE

This procedure describes a general method for the calibration and maintenance of a portable photoionization detector (PID). The PID detects and initially quantifies a reading of the volatile organic compound (VOC) concentration in air. The PID is used as a field-screening tool for initial evaluation of soil samples and for ambient air monitoring of compounds with ionization potentials (IP) less than the PID lamp electron voltage (eV) rating. The IP is the amount of energy required to move an electron to an infinite distance from the nucleus thus creating a positive ion plus an electron. It should be noted that all of the major components of air (i.e., carbon dioxide, methane, nitrogen, oxygen etc.) have IP's above 12 eV. As a result, they will not be ionized by the 9.8, 10.6, or 11.7 eV lamps typically utilized in field PIDs. The response of the PID will then be the sum of the organic and inorganic compounds in air that are ionized by the appropriate lamp (i.e., 9.8, 10.6 or 11.7 eV). Attached to this FOP is a table summarizing common organic compounds and their respective IPs.

Calibration is performed to verify instrument accuracy and function. All field instruments will be calibrated, verified and recalibrated at frequencies required by their respective operating manuals or manufacturer's specifications, but not less than once each day that the instrument is in use. Compound-specific calibration methods should be selected on a project-by-project basis to increase the accuracy of the instrument. The best way to calibrate a PID to different compounds is to use a standard of the gas of interest. However, correction factors have been determined that enable the user to quantify a large number of chemicals using only a single calibration gas, typically isobutylene. Field personnel should have access to all operating manuals for the instruments used for the field measurements. This procedure also documents critical maintenance activities for this meter.

FOP 011.1

CALIBRATION AND MAINTENANCE OF PORTABLE PHOTOIONIZATION DETECTOR

Note: The information included below is equipment manufacturer- and model-specific, however, accuracy, calibration, and maintenance procedures for this type of portable equipment are typically similar. The information below pertains to the MiniRAE 2000 Portable VOC Monitor equipped with a 10.6 eV lamp. The actual equipment to be used in the field will be equivalent or similar. The following information is provided for general reference; the equipment-specific manufacturer's manual should be followed with precedence over this FOP.

Note: The PID indicates total VOC concentration readings that are normalized to a calibration standard, so actual quantification of individual compounds is not provided. In addition, the PID response to compounds is highly variable, dependent on ionization potential of the compound, and the presence or absence of other compounds.

ACCURACY

The MiniRAE 2000 is accurate to ± 2 ppm or 10% of the reading for concentrations ranging from 0-2,000 ppm and $\pm 20\%$ of the reading at concentrations greater than 2,000 ppm. Response time is less than two seconds to 90 percent of full-scale. The operating temperature range is 0 to 45° C and the operating humidity range is 0 to 95 % relative humidity (non-condensing).

CALIBRATION PROCEDURE

The calibration method and correction factor, if applicable, will be selected on a project-by-project basis and confirmed with the Project Manager prior to the start of field work.

1. Calibrate all field test equipment at the beginning of each sampling day. Check and recalibrate the PID according to the manufacture's specifications.

FOP 011.1

CALIBRATION AND MAINTENANCE OF PORTABLE PHOTOIONIZATION DETECTOR

2. Calibrate the PID using a compressed gas cylinder or equivalent containing the calibration standard, a flow regulator, and a tubing assembly. In addition, a compressed gas cylinder containing zero air (“clean” air) may be required if ambient air conditions do not permit calibration to “clean air”.
3. Fill two Tedlar® bags equipped with a one-way valve with zero-air (if applicable) and the calibration standard gas.
4. Assemble the calibration equipment and actuate the PID in its calibration mode.
5. Select the appropriate calibration method. Calibration may be completed with two methods: 1) where the calibration standard gas is the same as the measurement gas (no correction factor is applied) or 2) where the calibration standard gas is not the same as the measurement gas and a correction factor will be applied. An isobutylene standard gas must be used as the calibration standard gas for the use of correction factors with the MiniRAE 2000. See below for additional instructions for calibration specific to use with or without correction factors.

Calibrating Without a Correction Factor

Navigate within the menu to select the “cal memory” for the specific calibration standard gas prior to calibration. The default gas selections for the MiniRAE 2000 are as follows:

Cal Memory #0	Isobutylene
Cal Memory #1	Hexane
Cal Memory #2	Xylene
Cal Memory #3	Benzene
Cal Memory #4	Styrene
Cal Memory #5	Toluene
Cal Memory #6	Vinyl Chloride
Cal Memory #7	Custom

FOP 011.1

CALIBRATION AND MAINTENANCE OF PORTABLE PHOTOIONIZATION DETECTOR

The calibration standard gas for Cal Memory #1-7 may be toggled for selection of any of the approximately 100 preprogrammed calibration standard gases for use without an applied correction factor (i.e., the calibration gas must be the same as the measurement gas).

Calibrating With a Correction Factor

Navigate within the menu to select the “Cal Memory”.

Select “Cal Memory #0” and toggle for selection of any of the approximately 100 preprogrammed chemicals. During calibration, the unit requests isobutylene gas and displays the isobutylene concentration immediately following calibration, but when the unit is returned to the normal reading mode, it displays the selected chemical and applies the correction factor.

If the pre-programmed list does not include the desired chemical or a user-defined measurement gas and correction factor is desired, toggle Cal Memory #0 to “user defined custom gas”. A list of approximately 300 correction factors is attached in Technical Note 106 generated by MiniRAE.

6. Once the PID settings have been verified, connect the PID probe to the zero air calibration bag (or calibrate to ambient air if conditions permit) and wait for a stable indication.
7. Connect the PID probe to the calibration standard bag. Measure an initial reading of the standard and wait for a stable indication.
8. Keep the PID probe connected to the calibration standard bag, calibrate to applicable concentration (typically 100 ppm with isobutylene) with the standard and wait for a stable indication.
9. Document the calibration results and related information in the Project Field Book and on an **Equipment Calibration Log** (see attached sample), indicating the meter readings before and after the instrument has been adjusted. This is important, not only for data validation, but also to establish

FOP 011.1

CALIBRATION AND MAINTENANCE OF PORTABLE PHOTOIONIZATION DETECTOR

maintenance schedules and component replacement. Information will include, at a minimum:

- Time, date and initials of the field team member performing the calibration
- The unique identifier for the meter, including manufacturer, model, and serial number
- The calibration standard and concentration
- Correction factors used, if any
- The brand and expiration date of the calibration standard gas
- The instrument readings: before and after calibration
- The instrument settings (if applicable)
- Pass or fail designation in accordance with the accuracy specifications presented above
- Corrective action taken (see Maintenance below) in the event of failure to adequately calibrate.

MAINTENANCE

- The probe and dust filter of the PID should be checked before and after every use for cleanliness. Should instrument response become unstable, recalibration should be performed. If this does not resolve the problem, access the photoionization bulb and clean with the manufacturer-supplied abrasive compound, then recalibrate.
- The PID battery must be recharged after each use. Store the PID in its carrying case when not in use. Additional maintenance details related to individual components of the PID are provided in the equipment manufacturer's instruction manual. If calibration or instrument performance is not in accordance with specifications, send the instrument to the equipment manufacturer for repair.
- Maintain a log for each monitoring instrument. Record all maintenance performed on the instrument on this log with date and name of the organization performing the maintenance.

FOP 011.1

**CALIBRATION AND MAINTENANCE OF PORTABLE
PHOTOIONIZATION DETECTOR**

ATTACHMENTS

Table 1; Summary of Ionization Potentials
Equipment Calibration Log (sample)
Technical Note TN-106

**CALIBRATION AND MAINTENANCE OF PORTABLE
PHOTOIONIZATION DETECTOR**

TABLE 1

SUMMARY OF IONIZATION POTENTIALS

Chemical Name	Ionization Potential (eV)	Cannot be Read by 10.6 eV PID
A		
2-Amino pyridine	8	
Acetaldehyde	10.21	
Acetamide	9.77	
Acetic acid	10.69	X
Acetic anhydride	10	
Acetone	9.69	
Acetonitrile	12.2	X
Acetophenone	9.27	
Acetyl bromide	10.55	
Acetyl chloride	11.02	X
Acetylene	11.41	X
Acrolein	10.1	
Acrylamide	9.5	
Acrylonitrile	10.91	X
Allyl alcohol	9.67	
Allyl chloride	9.9	
Ammonia	10.2	
Aniline	7.7	
Anisidine	7.44	
Anisole	8.22	
Arsine	9.89	
B		
1,3-Butadiene (butadiene)	9.07	
1-Bromo-2-chloroethane	10.63	X
1-Bromo-2-methylpropane	10.09	
1-Bromo-4-fluorobenzene	8.99	
1-Bromobutane	10.13	
1-Bromopentane	10.1	
1-Bromopropane	10.18	
1-Bromopropene	9.3	
1-Butanethiol	9.14	
1-Butene	9.58	
1-Butyne	10.18	
2,3-Butadione	9.23	
2-Bromo-2-methylpropane	9.89	
2-Bromobutane	9.98	
2-Bromopropane	10.08	

FOP 011.1

CALIBRATION AND MAINTENANCE OF PORTABLE
PHOTOIONIZATION DETECTOR

TABLE 1

SUMMARY OF IONIZATION POTENTIALS

Chemical Name	Ionization Potential (eV)	Cannot be Read by 10.6 eV PID
2-Bromothiophene	8.63	
2-Butanone (MEK)	9.54	
3-Bromopropene	9.7	
3-Butene nitrile	10.39	
Benzaldehyde	9.53	
Benzene	9.25	
Benzenethiol	8.33	
Benzonitrile	9.71	
Benzotrifluoride	9.68	
Biphenyl	8.27	
Boron oxide	13.5	X
Boron trifluoride	15.56	X
Bromine	10.54	
Bromobenzene	8.98	
Bromochloromethane	10.77	X
Bromoform	10.48	
Butane	10.63	X
Butyl mercaptan	9.15	
cis-2-Butene	9.13	
m-Bromotoluene	8.81	
n-Butyl acetate	10.01	
n-Butyl alcohol	10.04	
n-Butyl amine	8.71	
n-Butyl benzene	8.69	
n-Butyl formate	10.5	
n-Butyraldehyde	9.86	
n-Butyric acid	10.16	
n-Butyronitrile	11.67	X
o-Bromotoluene	8.79	
p-Bromotoluene	8.67	
p-tert-Butyltoluene	8.28	
s-Butyl amine	8.7	
s-Butyl benzene	8.68	
sec-Butyl acetate	9.91	
t-Butyl amine	8.64	
t-Butyl benzene	8.68	
trans-2-Butene	9.13	
C		

**CALIBRATION AND MAINTENANCE OF PORTABLE
PHOTOIONIZATION DETECTOR**

TABLE 1

SUMMARY OF IONIZATION POTENTIALS

Chemical Name	Ionization Potential (eV)	Cannot be Read by 10.6 eV PID
1-Chloro-2-methylpropane	10.66	X
1-Chloro-3-fluorobenzene	9.21	
1-Chlorobutane	10.67	X
1-Chloropropane	10.82	X
2-Chloro-2-methylpropane	10.61	X
2-Chlorobutane	10.65	X
2-Chloropropane	10.78	X
2-Chlorothiophene	8.68	
3-Chloropropene	10.04	
Camphor	8.76	
Carbon dioxide	13.79	X
Carbon disulfide	10.07	
Carbon monoxide	14.01	X
Carbon tetrachloride	11.47	X
Chlorine	11.48	X
Chlorine dioxide	10.36	
Chlorine trifluoride	12.65	X
Chloroacetaldehyde	10.61	X
α -Chloroacetophenone	9.44	
Chlorobenzene	9.07	
Chlorobromomethane	10.77	X
Chlorofluoromethane (Freon 22)	12.45	X
Chloroform	11.37	X
Chlorotrifluoromethane (Freon 13)	12.91	X
Chrysene	7.59	
Cresol	8.14	
Crotonaldehyde	9.73	
Cumene (isopropyl benzene)	8.75	
Cyanogen	13.8	X
Cyclohexane	9.8	
Cyclohexanol	9.75	
Cyclohexanone	9.14	
Cyclohexene	8.95	
Cyclo-octatetraene	7.99	
Cyclopentadiene	8.56	
Cyclopentane	10.53	
Cyclopentanone	9.26	
Cyclopentene	9.01	

FOP 011.1

CALIBRATION AND MAINTENANCE OF PORTABLE
PHOTOIONIZATION DETECTOR

TABLE 1

SUMMARY OF IONIZATION POTENTIALS

Chemical Name	Ionization Potential (eV)	Cannot be Read by 10.6 eV PID
Cyclopropane	10.06	
m-Chlorotoluene	8.83	
o-Chlorotoluene	8.83	
p-Chlorotoluene	8.7	
D		
1,1-Dibromoethane	10.19	
1,1-Dichloroethane	11.12	X
1,1-Dimethoxyethane	9.65	
1,1-Dimethylhydrazine	7.28	
1,2-Dibromoethane	9.45	
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	12.2	X
1,2-Dichloroethane	11.12	X
1,2-Dichloropropane	10.87	X
1,3-Dibromopropane	10.07	
1,3-Dichloropropane	10.85	X
2,2-Dimethyl butane	10.06	
2,2-Dimethyl propane	10.35	
2,3-Dichloropropene	9.82	
2,3-Dimethyl butane	10.02	
3,3-Dimethyl butanone	9.17	
cis-Dichloroethene	9.65	
Decaborane	9.88	
Diazomethane	9	
Diborane	12	X
Dibromochloromethane	10.59	
Dibromodifluoromethane	11.07	X
Dibromomethane	10.49	
Dibutylamine	7.69	
Dichlorodifluoromethane (Freon 12)	12.31	X
Dichlorofluoromethane	12.39	X
Dichloromethane	11.35	X
Diethoxymethane	9.7	
Diethyl amine	8.01	
Diethyl ether	9.53	
Diethyl ketone	9.32	
Diethyl sulfide	8.43	
Diethyl sulfite	9.68	
Difluorodibromomethane	11.07	X

**CALIBRATION AND MAINTENANCE OF PORTABLE
PHOTOIONIZATION DETECTOR**

TABLE 1

SUMMARY OF IONIZATION POTENTIALS

Chemical Name	Ionization Potential (eV)	Cannot be Read by 10.6 eV PID
Dihydropyran	8.34	
Diiodomethane	9.34	
Diisopropylamine	7.73	
Dimethoxymethane (methylal)	10	
Dimethyl amine	8.24	
Dimethyl ether	10	
Dimethyl sulfide	8.69	
Dimethylaniline	7.13	
Dimethylformamide	9.18	
Dimethylphthalate	9.64	
Dinitrobenzene	10.71	X
Dioxane	9.19	
Diphenyl	7.95	
Dipropyl amine	7.84	
Dipropyl sulfide	8.3	
Durene	8.03	
m-Dichlorobenzene	9.12	
N,N-Diethyl acetamide	8.6	
N,N-Diethyl formamide	8.89	
N,N-Dimethyl acetamide	8.81	
N,N-Dimethyl formamide	9.12	
o-Dichlorobenzene	9.06	
p-Dichlorobenzene	8.95	
p-Dioxane	9.13	
trans-Dichloroethene	9.66	
E		
Epichlorohydrin	10.2	
Ethane	11.65	X
Ethanethiol (ethyl mercaptan)	9.29	
Ethanolamine	8.96	
Ethene	10.52	
Ethyl acetate	10.11	
Ethyl alcohol	10.48	
Ethyl amine	8.86	
Ethyl benzene	8.76	
Ethyl bromide	10.29	
Ethyl chloride (chloroethane)	10.98	X
Ethyl disulfide	8.27	

FOP 011.1

CALIBRATION AND MAINTENANCE OF PORTABLE
PHOTOIONIZATION DETECTOR

TABLE 1

SUMMARY OF IONIZATION POTENTIALS

Chemical Name	Ionization Potential (eV)	Cannot be Read by 10.6 eV PID
Ethyl ether	9.51	
Ethyl formate	10.61	X
Ethyl iodide	9.33	
Ethyl isothiocyanate	9.14	
Ethyl mercaptan	9.29	
Ethyl methyl sulfide	8.55	
Ethyl nitrate	11.22	X
Ethyl propionate	10	
Ethyl thiocyanate	9.89	
Ethylene chlorohydrin	10.52	
Ethylene diamine	8.6	
Ethylene dibromide	10.37	
Ethylene dichloride	11.05	X
Ethylene oxide	10.57	
Ethylenimine	9.2	
Ethynylbenzene	8.82	
F		
2-Furaldehyde	9.21	
Fluorine	15.7	X
Fluorobenzene	9.2	
Formaldehyde	10.87	X
Formamide	10.25	
Formic acid	11.05	X
Freon 11 (trichlorofluoromethane)	11.77	X
Freon 112 (1,1,2,2-tetrachloro-1,2-difluoroethane)	11.3	X
Freon 113 (1,1,2-trichloro-1,2,2-trifluoroethane)	11.78	X
Freon 114 (1,2-dichloro-1,1,2,2-tetrafluoroethane)	12.2	X
Freon 12 (dichlorodifluoromethane)	12.31	X
Freon 13 (chlorotrifluoromethane)	12.91	X
Freon 22 (chlorofluoromethane)	12.45	X
Furan	8.89	
Furfural	9.21	
m-Fluorotoluene	8.92	
o-Fluorophenol	8.66	
o-Fluorotoluene	8.92	
p-Fluorotoluene	8.79	
H		
1-Hexene	9.46	

FOP 011.1

CALIBRATION AND MAINTENANCE OF PORTABLE
PHOTOIONIZATION DETECTOR

TABLE 1

SUMMARY OF IONIZATION POTENTIALS

Chemical Name	Ionization Potential (eV)	Cannot be Read by 10.6 eV PID
2-Heptanone	9.33	
2-Hexanone	9.35	
Heptane	10.08	
Hexachloroethane	11.1	X
Hexane	10.18	
Hydrazine	8.1	
Hydrogen	15.43	X
Hydrogen bromide	11.62	X
Hydrogen chloride	12.74	X
Hydrogen cyanide	13.91	X
Hydrogen fluoride	15.77	X
Hydrogen iodide	10.38	
Hydrogen selenide	9.88	
Hydrogen sulfide	10.46	
Hydrogen telluride	9.14	
Hydroquinone	7.95	
I		
1-Iodo-2-methylpropane	9.18	
1-Iodobutane	9.21	
1-Iodopentane	9.19	
1-Iodopropane	9.26	
2-Iodobutane	9.09	
2-Iodopropane	9.17	
Iodine	9.28	
Iodobenzene	8.73	
Isobutane	10.57	
Isobutyl acetate	9.97	
Isobutyl alcohol	10.12	
Isobutyl amine	8.7	
Isobutyl formate	10.46	
Isobutyraldehyde	9.74	
Isobutyric acid	10.02	
Isopentane	10.32	
Isophorone	9.07	
Isoprene	8.85	
Isopropyl acetate	9.99	
Isopropyl alcohol	10.16	
Isopropyl amine	8.72	

**CALIBRATION AND MAINTENANCE OF PORTABLE
PHOTOIONIZATION DETECTOR**

TABLE 1

SUMMARY OF IONIZATION POTENTIALS

Chemical Name	Ionization Potential (eV)	Cannot be Read by 10.6 eV PID
Isopropyl benzene	8.69	
Isopropyl ether	9.2	
Isovaleraldehyde	9.71	
m-Iodotoluene	8.61	
o-Iodotoluene	8.62	
p-Iodotoluene	8.5	
K		
Ketene	9.61	
L		
2,3-Lutidine	8.85	
2,4-Lutidine	8.85	
2,6-Lutidine	8.85	
M		
2-Methyl furan	8.39	
2-Methyl naphthalene	7.96	
1-Methyl naphthalene	7.96	
2-Methyl propene	9.23	
2-Methyl-1-butene	9.12	
2-Methylpentane	10.12	
3-Methyl-1-butene	9.51	
3-Methyl-2-butene	8.67	
3-Methylpentane	10.08	
4-Methylcyclohexene	8.91	
Maleic anhydride	10.8	X
Mesityl oxide	9.08	
Mesitylene	8.4	
Methane	12.98	X
Methanethiol (methyl mercaptan)	9.44	
Methyl acetate	10.27	
Methyl acetylene	10.37	
Methyl acrylate	9.9	
Methyl alcohol	10.85	X
Methyl amine	8.97	
Methyl bromide	10.54	
Methyl butyl ketone	9.34	
Methyl butyrate	10.07	
Methyl cellosolve	9.6	
Methyl chloride	11.28	X

FOP 011.1

CALIBRATION AND MAINTENANCE OF PORTABLE
PHOTOIONIZATION DETECTOR

TABLE 1

SUMMARY OF IONIZATION POTENTIALS

Chemical Name	Ionization Potential (eV)	Cannot be Read by 10.6 eV PID
Methyl chloroform (1,1,1-trichloroethane)	11	X
Methyl disulfide	8.46	
Methyl ethyl ketone	9.53	
Methyl formate	10.82	X
Methyl iodide	9.54	
Methyl isobutyl ketone	9.3	
Methyl isobutyrate	9.98	
Methyl isocyanate	10.67	X
Methyl isopropyl ketone	9.32	
Methyl isothiocyanate	9.25	
Methyl mercaptan	9.44	
Methyl methacrylate	9.7	
Methyl propionate	10.15	
Methyl propyl ketone	9.39	
α -Methyl styrene	8.35	
Methyl thiocyanate	10.07	
Methylal (dimethoxymethane)	10	
Methylcyclohexane	9.85	
Methylene chloride	11.32	X
Methyl-n-amyl ketone	9.3	
Monomethyl aniline	7.32	
Monomethyl hydrazine	7.67	
Morpholine	8.2	
n-Methyl acetamide	8.9	
N		
1-Nitropropane	10.88	X
2-Nitropropane	10.71	X
Naphthalene	8.12	
Nickel carbonyl	8.27	
Nitric oxide, (NO)	9.25	
Nitrobenzene	9.92	
Nitroethane	10.88	X
Nitrogen	15.58	X
Nitrogen dioxide	9.78	
Nitrogen trifluoride	12.97	X
Nitromethane	11.08	X
Nitrotoluene	9.45	
p-Nitrochloro benzene	9.96	

**CALIBRATION AND MAINTENANCE OF PORTABLE
PHOTOIONIZATION DETECTOR**

TABLE 1

SUMMARY OF IONIZATION POTENTIALS

Chemical Name	Ionization Potential (eV)	Cannot be Read by 10.6 eV PID
O		
Octane	9.82	
Oxygen	12.08	X
Ozone	12.08	X
P		
1-Pentene	9.5	
1-Propanethiol	9.2	
2,4-Pentanedione	8.87	
2-Pentanone	9.38	
2-Picoline	9.02	
3-Picoline	9.02	
4-Picoline	9.04	
n-Propyl nitrate	11.07	X
Pentaborane	10.4	
Pentane	10.35	
Perchloroethylene	9.32	
Pheneloic	8.18	
Phenol	8.5	
Phenyl ether (diphenyl oxide)	8.82	
Phenyl hydrazine	7.64	
Phenyl isocyanate	8.77	
Phenyl isothiocyanate	8.52	
Phenylene diamine	6.89	
Phosgene	11.77	X
Phosphine	9.87	
Phosphorus trichloride	9.91	
Phthalic anhydride	10	
Propane	11.07	X
Propargyl alcohol	10.51	
Propiolactone	9.7	
Propionaldehyde	9.98	
Propionic acid	10.24	
Propionitrile	11.84	X
Propyl acetate	10.04	
Propyl alcohol	10.2	
Propyl amine	8.78	
Propyl benzene	8.72	
Propyl ether	9.27	

FOP 011.1

CALIBRATION AND MAINTENANCE OF PORTABLE
PHOTOIONIZATION DETECTOR

TABLE 1

SUMMARY OF IONIZATION POTENTIALS

Chemical Name	Ionization Potential (eV)	Cannot be Read by 10.6 eV PID
Propyl formate	10.54	
Propylene	9.73	
Propylene dichloride	10.87	X
Propylene imine	9	
Propylene oxide	10.22	
Propyne	10.36	
Pyridine	9.32	
Pyrrole	8.2	
Q		
Quinone	10.04	
S		
Stibine	9.51	
Styrene	8.47	
Sulfur dioxide	12.3	X
Sulfur hexafluoride	15.33	X
Sulfur monochloride	9.66	
Sulfuryl fluoride	13	X
T		
o-Terphenyls	7.78	
1,1,2,2-Tetrachloro-1,2-difluoroethane (Freon 112)	11.3	X
1,1,1-Trichloroethane	11	X
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.78	X
2,2,4-Trimethyl pentane	9.86	
o-Toluidine	7.44	
Tetrachloroethane	11.62	X
Tetrachloroethene	9.32	
Tetrachloromethane	11.47	X
Tetrahydrofuran	9.54	
Tetrahydropyran	9.25	
Thiolacetic acid	10	
Thiophene	8.86	
Toluene	8.82	
Tribromoethene	9.27	
Tribromofluoromethane	10.67	X
Tribromomethane	10.51	
Trichloroethene	9.45	
Trichloroethylene	9.47	
Trichlorofluoromethane (Freon 11)	11.77	X

FOP 011.1

CALIBRATION AND MAINTENANCE OF PORTABLE
PHOTOIONIZATION DETECTOR

TABLE 1

SUMMARY OF IONIZATION POTENTIALS

Chemical Name	Ionization Potential (eV)	Cannot be Read by 10.6 eV PID
Trichloromethane	11.42	X
Triethylamine	7.5	
Trifluoromonobromo-methane	11.4	X
Trimethyl amine	7.82	
Tripropyl amine	7.23	
V		
o-Vinyl toluene	8.2	
Valeraldehyde	9.82	
Valeric acid	10.12	
Vinyl acetate	9.19	
Vinyl bromide	9.8	
Vinyl chloride	10	
Vinyl methyl ether	8.93	
W		
Water	12.59	X
X		
2,4-Xylidine	7.65	
m-Xylene	8.56	
o-Xylene	8.56	
p-Xylene	8.45	

FOP 011.0

CALIBRATION AND MAINTENANCE OF PORTABLE PHOTOIONIZATION DETECTOR



EQUIPMENT CALIBRATION LOG

PROJECT INFORMATION:

Project Name: _____
 Project No.: _____
 Client: _____

Date: _____

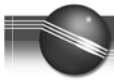
Instrument Source: BM Rental

METER TYPE	UNITS	TIME	MAKE/MODEL	SERIAL NUMBER	CAL. BY	STANDARD	POST CAL. READING	SETTINGS
<input type="checkbox"/> pH meter	units		Myron L Company Ultra Meter 6P	606987		4.00 7.00 10.01		
<input type="checkbox"/> Turbidity meter	NTU		Hach 2100P Turbidimeter	9706000145		0.4 100 800		
<input type="checkbox"/> Sp. Cond. meter	uS mS		Myron L Company Ultra Meter 6P			mS @ 25 °C		
<input type="checkbox"/> PID	ppm		MinRAE 20			open air zero ppm Iso. Gas		MIBK response factor = 1.0
<input type="checkbox"/> Dissolved Oxygen	ppm		YSI Model 5					
<input type="checkbox"/> Particulate meter	mg/m ³					zero air		
<input type="checkbox"/> Oxygen	%					open air		
<input type="checkbox"/> Hydrogen sulfide	ppm					open air		
<input type="checkbox"/> Carbon monoxide	ppm					open air		
<input type="checkbox"/> LEL	%					open air		
<input type="checkbox"/> Radiation Meter	uR/H					background area		
<input type="checkbox"/>								

ADDITIONAL REMARKS:

PREPARED BY: _____ DATE: _____





Correction Factors, Ionization Energies*, And Calibration Characteristics

Correction Factors and Ionization Energies

RAE Systems PIDs can be used for the detection of a wide variety of gases that exhibit different responses. In general, any compound with ionization energy (IE) lower than that of the lamp photons can be measured.* The best way to calibrate a PID to different compounds is to use a standard of the gas of interest. However, correction factors have been determined that enable the user to quantify a large number of chemicals using only a single calibration gas, typically isobutylene. In our PIDs, correction factors can be used in one of three ways:

- 1) Calibrate the monitor with isobutylene in the usual fashion to read in isobutylene equivalents. Manually multiply the reading by the correction factor (CF) to obtain the concentration of the gas being measured.
- 2) Calibrate the unit with isobutylene in the usual fashion to read in isobutylene equivalents. Call up the correction factor from the instrument memory or download it from a personal computer and then call it up. The monitor will then read directly in units of the gas of interest.
- 3) Calibrate the unit with isobutylene, but input an equivalent, "corrected" span gas concentration when prompted for this value. The unit will then read directly in units of the gas of interest.

* The term "ionization energy" is more scientifically correct and replaces the old term "ionization potential." High-boiling ("heavy") compounds may not vaporize enough to give a response even when their ionization energies are below the lamp photon energy. Some inorganic compounds like H_2O_2 and NO_2 give weak response even when their ionization energies are well below the lamp photon energy.

Example 1:

With the unit calibrated to read isobutylene equivalents, the reading is 10 ppm with a 10.6 eV lamp. The gas being measured is butyl acetate, which has a correction factor of 2.6. Multiplying 10 by 2.6 gives an adjusted butyl acetate value of 26 ppm. Similarly, if the gas being measured were trichloroethylene (CF = 0.54), the adjusted value with a 10 ppm reading would be 5.4 ppm.

Example 2:

With the unit calibrated to read isobutylene equivalents, the reading is 100 ppm with a 10.6 eV lamp. The gas measured is m-xylene (CF = 0.43). After downloading this factor, the unit should read about 43 ppm when exposed to the same gas, and thus read directly in m-xylene values.

Example 3:

The desired gas to measure is ethylene dichloride (EDC). The CF is 0.6 with an 11.7 eV lamp. During calibration with 100 ppm isobutylene, insert 0.6 times 100, or 60 at the prompt for the calibration gas concentration. The unit then reads directly in EDC values.

Conversion to mg/m^3

To convert from ppm to mg/m^3 , use the following formula:

$$\text{Conc. (mg/m}^3\text{)} = \frac{[\text{Conc. (ppmv)} \times \text{mol. wt. (g/mole)}]}{\text{molar gas volume (L)}}$$

For air at 25 °C (77 °F), the molar gas volume is 24.4 L/mole and the formula reduces to:

$$\text{Conc. (mg/m}^3\text{)} = \text{Conc. (ppmv)} \times \text{mol. wt. (g/mole)} \times 0.041$$

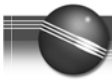
For example, if the instrument is calibrated with a gas standard in ppmv, such as 100 ppm isobutylene, and the user wants the display to read in mg/m^3 of hexane, whose m.w. is 86 and CF is 4.3, the overall correction factor would be $4.3 \times 86 \times 0.041$ equals 15.2.

Correction Factors for Mixtures

The correction factor for a mixture is calculated from the sum of the mole fractions X_i of each component divided by their respective correction factors CF_i :

$$CF_{\text{mix}} = 1 / (X_1/CF_1 + X_2/CF_2 + X_3/CF_3 + \dots X_i/CF_i)$$

Thus, for example, a vapor phase mixture of 5% benzene and 95% n-hexane would have a CF_{mix} of $CF_{\text{mix}} = 1 / (0.05/0.53 + 0.95/4.3) = 3.2$. A reading of 100 would then correspond to 320 ppm of the total mixture, comprised of 16 ppm benzene and 304 ppm hexane.



For a spreadsheet to compute the correction factor and TLV of a mixture see the appendix at the end of the CF table.

TLVs and Alarm Limits for Mixtures

The correction factor for mixtures can be used to set alarm limits for mixtures. To do this one first needs to calculate the exposure limit for the mixture. The Threshold Limit Value (TLV) often defines exposure limits. The TLV for the mixture is calculated in a manner similar to the CF calculation:

$$TLV_{mix} = 1 / (X_1/TLV_1 + X_2/TLV_2 + X_3/TLV_3 + \dots X_i/TLV_i)$$

In the above example, the 8-h TLV for benzene is 0.5 ppm and for n-hexane 50 ppm. Therefore the TLV of the mixture is $TLV_{mix} = 1 / (0.05/0.5 + 0.95/50) = 8.4$ ppm, corresponding to 8.0 ppm hexane and 0.4 ppm benzene. For an instrument calibrated on isobutylene, the reading corresponding to the TLV is:

$$Alarm\ Reading = TLV_{mix} / CF_{mix} = 8.4 / 3.2 = 2.6\ ppm$$

A common practice is to set the lower alarm limit to half the TLV, and the higher limit to the TLV. Thus, one would set the alarms to 1.3 and 2.6 ppm, respectively.

Calibration Characteristics

a) Flow Configuration. PID response is essentially independent of gas flow rate as long as it is sufficient to satisfy the pump demand. Four main flow configurations are used for calibrating a PID:

- 1) Pressurized gas cylinder (Fixed-flow regulator):** The flow rate of the regulator should match the flow demand of the instrument pump or be slightly higher.
- 2) Pressurized gas cylinder (Demand-flow regulator):** A demand-flow regulator better matches pump speed differences, but results in a slight vacuum during calibration and thus slightly high readings.
- 3) Collapsible gas bag:** The instrument will draw the calibration gas from the bag at its normal flow rate, as long as the bag valve is large enough. The bag should be filled with enough gas to allow at least one minute of flow (~ 0.6 L for a MiniRAE, ~0.3 L for MultiRAE).

4) T (or open tube) method: The T method uses a T-junction with gas flow higher than the pump draw. The gas supply is connected to one end of the T, the instrument inlet is connected to a second end of the T, and excess gas flow escapes through the third, open end of the T. To prevent ambient air mixing, a long tube should be connected to the open end, or a high excess rate should be used. Alternatively, the instrument probe can be inserted into an open tube slightly wider than the probe. Excess gas flows out around the probe.

The first two cylinder methods are the most efficient in terms of gas usage, while the bag and T methods give slightly more accurate results because they match the pump flow better.

- b) Pressure.** Pressures deviating from atmospheric pressure affect the readings by altering gas concentration and pump characteristics. It is best to calibrate with the instrument and calibration gas at the same pressure as each other and the sample gas. (Note that the cylinder pressure is not relevant because the regulator reduces the pressure to ambient.) If the instrument is calibrated at atmospheric pressure in one of the flow configurations described above, then 1) pressures slightly above ambient are acceptable but high pressures can damage the pump and 2) samples under vacuum may give low readings if air leaks into the sample train.
- c) Temperature.** Because temperature affects gas density and concentration, the temperature of the calibration gas and instrument should be as close as possible to the ambient temperature where the unit will be used. We recommend that the temperature of the calibration gas be within the instrument's temperature specification (typically 14° to 113° F or -10° to 45° C). Also, during actual measurements, the instrument should be kept at the same or higher temperature than the sample temperature to avoid condensation in the unit.
- d) Matrix.** The matrix gas of the calibration compound and VOC sample is significant. Some common matrix components, such as methane and water vapor can affect the VOC signal. PIDs are

most commonly used for monitoring VOCs in air, in which case the preferred calibration gas matrix is air. For a MiniRAE, methane, methanol, and water vapor reduce the response by about 20% when their concentration is 15,000 ppm and by about 40% at 30,000 ppm. Despite earlier reports of oxygen effects, RAE PID responses with 10.6 eV lamps are independent of oxygen concentration, and calibration gases in a pure nitrogen matrix can be used. H₂ and CO₂ up to 5 volume % also have no effect.

- e) Concentration.** Although RAE Systems PIDs have electronically linearized output, it is best to calibrate in a concentration range close to the actual measurement range. For example, 100 ppm standard gas for anticipated vapors of 0 to 250 ppm, and 500 ppm standard for expected concentrations of 250 to 1000 ppm. The correction factors in this table were typically measured at 50 to 100 ppm and apply from the ppb range up to about 1000 ppm. Above 1000 ppm the CF may vary and it is best to calibrate with the gas of interest near the concentration of interest.
- f) Filters.** Filters affect flow and pressure conditions and therefore all filters to be used during sampling should also be in place during calibration. Using a water trap (hydrophobic filter) greatly reduces the chances of drawing water aerosols or dirt particles into the instrument. Regular filter replacements are recommended because dirty filters can adsorb VOCs and cause slower response time and shifts in calibration.
- g) Instrument Design.** High-boiling (“heavy”) or very reactive compounds can be lost by reaction or adsorption onto materials in the gas sample train, such as filters, pumps and other sensors. Multi-gas meters, including EntryRAE, MultiRAE and AreaRAE have the pump and other sensors upstream of the PID and are prone to these losses. Compounds possibly affected by such losses are shown in green in the table, and may give slow response, or in extreme cases, no response at all. In many cases the multi-gas meters can still give a rough indication of the relative concentration, without giving an accurate,

quantitative reading. The ppbRAE and MiniRAE series instruments have inert sample trains and therefore do not exhibit significant loss; nevertheless, response may be slow for the very heavy compounds and additional sampling time up to a minute or more should be allowed to get a stable reading.

Table Abbreviations:

- CF** = Correction Factor (multiply by reading to get corrected value for the compound when calibrated to isobutylene)
- NR** = No Response
- IE** = Ionization Energy (values in parentheses are not well established)
- C** = Confirmed Value indicated by “+” in this column; all others are preliminary or estimated values and are subject to change
- ne** = Not Established ACGIH 8-hr. TWA
- C##** = Ceiling value, given where 8-hr.TWA is not available

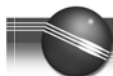
Disclaimer:

Actual readings may vary with age and cleanliness of lamp, relative humidity, and other factors. For accurate work, the instrument should be calibrated regularly under the operating conditions used. The factors in this table were measured in dry air at room temperature, typically at 50-100 ppm. CF values may vary above about 1000 ppm.

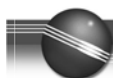
Updates:

The values in this table are subject to change as more or better data become available. Watch for updates of this table on the Internet at <http://www.raesystems.com>

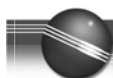
IE data are taken from the CRC Handbook of Chemistry and Physics, 73rd Edition, D.R. Lide (Ed.), CRC Press (1993) and NIST Standard Ref. Database 19A, NIST Positive Ion Energetics, Vers. 2.0, Lias, et.al., U.S. Dept. Commerce (1993). Exposure limits (8-h TWA and Ceiling Values) are from the 2005 ACGIH Guide to Occupational Exposure Values, ACGIH, Cincinnati, OH 2005. Equations for exposure limits for mixtures of chemicals were taken from the 1997 TLVs and BEIs handbook published by the ACGIH (1997).



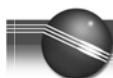
Compound Name	Synonym/Abbreviation	CAS No.	Formula	9.8	C	10.6	C	11.7	C	IE (eV)	TWA
Acetaldehyde		75-07-0	C ₂ H ₄ O	NR	+	6	+	3.3	+	10.23	C25
Acetic acid	Ethanoic Acid	64-19-7	C ₂ H ₄ O ₂	NR	+	22	+	2.6	+	10.66	10
Acetic anhydride	Ethanoic Acid Anhydride	108-24-7	C ₄ H ₆ O ₃	NR	+	6.1	+	2.0	+	10.14	5
Acetone	2-Propanone	67-64-1	C ₃ H ₆ O	1.2	+	1.1	+	1.4	+	9.71	500
Acetone cyanohydrin	2-Hydroxyisobutyronitrile	75-86-5	C ₄ H ₇ NO					4	+	11.1	C5
Acetonitrile	Methyl cyanide, Cyanomethane	75-05-8	C ₂ H ₃ N					100		12.19	40
Acetylene	Ethyne	74-86-2	C ₂ H ₂					2.1	+	11.40	ne
Acrolein	Propenal	107-02-8	C ₃ H ₄ O	42	+	3.9	+	1.4	+	10.10	0.1
Acrylic acid	Propenoic Acid	79-10-7	C ₃ H ₄ O ₂			12	+	2.0	+	10.60	2
Acrylonitrile	Propenenitrile	107-13-1	C ₃ H ₃ N			NR	+	1.2	+	10.91	2
Allyl alcohol		107-18-6	C ₃ H ₆ O	4.5	+	2.4	+	1.6	+	9.67	2
Allyl chloride	3-Chloropropene	107-05-1	C ₃ H ₅ Cl			4.3		0.7		9.9	1
Ammonia		7664-41-7	H ₃ N	NR	+	9.7	+	5.7	+	10.16	25
Amyl acetate	mix of n-Pentyl acetate & 2-Methylbutyl acetate	628-63-7	C ₇ H ₁₄ O ₂	11	+	2.3	+	0.95	+	<9.9	100
Amyl alcohol	1-Pentanol	75-85-4	C ₅ H ₁₂ O			5		1.6		10.00	ne
Aniline	Aminobenzene	62-53-3	C ₇ H ₇ N	0.50	+	0.48	+	0.47	+	7.72	2
Anisole	Methoxybenzene	100-66-3	C ₇ H ₈ O	0.89	+	0.58	+	0.56	+	8.21	ne
Arsine	Arsenic trihydride	7784-42-1	AsH ₃			1.9	+			9.89	0.05
Benzaldehyde		100-52-7	C ₇ H ₆ O					1		9.49	ne
Benzenamine, N-methyl-	N-Methylphenylamine	100-61-8	C ₇ H ₉ N			0.7				7.53	
Benzene		71-43-2	C ₆ H ₆	0.55	+	0.53	+	0.6	+	9.25	0.5
Benzonitrile	Cyanobenzene	100-47-0	C ₇ H ₅ N			1.6				9.62	ne
Benzyl alcohol	α-Hydroxytoluene, Hydroxymethylbenzene, Benzenemethanol	100-51-6	C ₇ H ₈ O	1.4	+	1.1	+	0.9	+	8.26	ne
Benzyl chloride	α-Chlorotoluene, Chloromethylbenzene	100-44-7	C ₇ H ₇ Cl	0.7	+	0.6	+	0.5	+	9.14	1
Benzyl formate	Formic acid benzyl ester	104-57-4	C ₈ H ₈ O ₂	0.9	+	0.73	+	0.66	+		ne
Boron trifluoride		7637-07-2	BF ₃	NR		NR		NR		15.5	C1
Bromine		7726-95-6	Br ₂	NR	+	1.30	+	0.74	+	10.51	0.1
Bromobenzene		108-86-1	C ₆ H ₅ Br			0.6		0.5		8.98	ne
2-Bromoethyl methyl ether		6482-24-2	C ₃ H ₇ OBr			0.84	+			~10	ne
Bromoform	Tribromomethane	75-25-2	CHBr ₃	NR	+	2.5	+	0.5	+	10.48	0.5
Bromopropane, 1-	n-Propyl bromide	106-94-5	C ₃ H ₇ Br	150	+	1.5	+	0.6	+	10.18	ne
Butadiene	1,3-Butadiene, Vinyl ethylene	106-99-0	C ₄ H ₆	0.8		0.85	+	1.1		9.07	2
Butadiene diepoxide, 1,3-	1,2,3,4-Diepoxybutane	298-18-0	C ₄ H ₆ O ₂	25	+	3.5	+	1.2		~10	ne
Butanal	1-Butanal	123-72-8	C ₄ H ₈ O			1.8				9.84	
Butane		106-97-8	C ₄ H ₁₀			67	+	1.2		10.53	800
Butanol, 1-	Butyl alcohol, n-Butanol	71-36-3	C ₄ H ₁₀ O	70	+	4.7	+	1.4	+	9.99	20
Butanol, t-	tert-Butanol, t-Butyl alcohol	75-65-0	C ₄ H ₁₀ O	6.9	+	2.9	+			9.90	100
Butene, 1-	1-Butylene	106-98-9	C ₄ H ₈			0.9				9.58	ne
Butoxyethanol, 2-	Butyl Cellosolve, Ethylene glycol monobutyl ether	111-76-2	C ₆ H ₁₄ O ₂	1.8	+	1.2	+	0.6	+	<10	25
Butoxyethanol acetate	Ethanol, 2-(2-butoxyethoxy)-, acetate	124-17-4	C ₁₀ H ₂₀ O ₄			5.6				≤10.6	
Butoxyethoxyethanol	2-(2-Butoxyethoxy)ethanol	112-34-5	C ₈ H ₁₈ O ₃			4.6				≤10.6	
Butyl acetate, n-		123-86-4	C ₆ H ₁₂ O ₂			2.6	+			10	150
Butyl acrylate, n-	Butyl 2-propenoate, Acrylic acid butyl ester	141-32-2	C ₇ H ₁₂ O ₂			1.6	+	0.6	+		10
Butylamine, n-		109-73-9	C ₄ H ₁₁ N	1.1	+	1.1	+	0.7	+	8.71	C5
Butyl cellosolve	see 2-Butoxyethanol	111-76-2									
Butyl hydroperoxide, t-		75-91-2	C ₄ H ₁₀ O ₂	2.0	+	1.6	+			<10	1
Butyl mercaptan	1-Butanethiol	109-79-5	C ₄ H ₁₀ S	0.55	+	0.52	+			9.14	0.5
Carbon disulfide		75-15-0	CS ₂	4	+	1.2	+	0.44		10.07	10
Carbon tetrachloride	Tetrachloromethane	56-23-5	CCl ₄	NR	+	NR	+	1.7	+	11.47	5
Carbonyl sulfide	Carbon oxysulfide	463-58-1	COS							11.18	
Cellosolve	see 2-Ethoxyethanol										
CFC-14	see Tetrafluoromethane										
CFC-113	see 1,1,2-Trichloro-1,2,2-trifluoroethane										



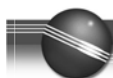
Compound Name	Synonym/Abbreviation	CAS No.	Formula	9.8	C	10.6	C	11.7	C	IE (eV)	TWA	
Chlorine		7782-50-5	Cl ₂					1.0	+	11.48	0.5	
Chlorine dioxide		10049-04-4	ClO ₂	NR	+	NR	+	NR	+	10.57	0.1	
Chlorobenzene	Monochlorobenzene	108-90-7	C ₆ H ₅ Cl	0.44	+	0.40	+	0.39	+	9.06	10	
Chlorobenzotrifluoride, 4-	PCBTf, OXSOL 100 p-Chlorobenzotrifluoride	98-56-6	C ₇ H ₄ ClF ₃	0.74	+	0.63	+	0.55	+	<9.6	25	
Chloro-1,3-butadiene, 2-	Chloroprene	126-99-8	C ₄ H ₅ Cl					3			10	
Chloro-1,1-difluoroethane, 1-	HCFC-142B, R-142B	75-68-3	C ₂ H ₃ ClF ₂	NR		NR		NR		12.0	ne	
Chlorodifluoromethane	HCFC-22, R-22	75-45-6	CHClF ₂	NR		NR		NR		12.2	1000	
Chloroethane	Ethyl chloride	75-00-3	C ₂ H ₅ Cl	NR	+	NR	+	1.1	+	10.97	100	
Chloroethanol	Ethylene chlorhydrin	107-07-3	C ₂ H ₅ ClO					2.9		10.52	C1	
Chloroethyl ether, 2-	bis(2-chloroethyl) ether	111-44-4	C ₄ H ₈ Cl ₂ O	8.6	+	3.0	+				5	
Chloroethyl methyl ether, 2-	Methyl 2-chloroethyl ether	627-42-9	C ₃ H ₇ ClO					3			ne	
Chloroform	Trichloromethane	67-66-3	CHCl ₃	NR	+	NR	+	3.5	+	11.37	10	
Chloro-2-methylpropene, 3-	Methallyl chloride, Isobutenyl chloride	563-47-3	C ₄ H ₇ Cl	1.4	+	1.2	+	0.63	+	9.76	ne	
Chloropicrin		76-06-2	CCl ₃ NO ₂	NR	+	~400	+	7	+	?	0.1	
Chlorotoluene, o-	o-Chloromethylbenzene	95-49-8	C ₇ H ₇ Cl					0.5		0.6	8.83	50
Chlorotoluene, p-	p-Chloromethylbenzene	106-43-4	C ₇ H ₇ Cl							0.6	8.69	ne
Chlorotrifluoroethene	CTFE, Chlorotrifluoroethylene Genetron 1113	79-38-9	C ₂ ClF ₃	6.7	+	3.9	+	1.2	+	9.76	5	
Chlorotrimethylsilane		75-77-4	C ₃ H ₉ ClSi	NR		NR		0.82	+	10.83	ne	
Cresol, m-	m-Hydroxytoluene	108-39-4	C ₇ H ₈ O	0.57	+	0.50	+	0.57	+	8.29	5	
Cresol, o-	o-Hydroxytoluene	95-48-7	C ₇ H ₈ O					1.0		8.50		
Cresol, p-	p-Hydroxytoluene	106-44-5	C ₇ H ₈ O					1.4		8.35		
Crotonaldehyde	<i>trans</i> -2-Butenal	123-73-9	C ₄ H ₆ O	1.5	+	1.1	+	1.0	+	9.73	2	
		4170-30-3										
Cumene	Isopropylbenzene	98-82-8	C ₉ H ₁₂	0.58	+	0.54	+	0.4	+	8.73	50	
Cyanogen bromide		506-68-3	CNBr	NR		NR		NR		11.84	ne	
Cyanogen chloride		506-77-4	CNCl	NR		NR		NR		12.34	C0.3	
Cyclohexane		110-82-7	C ₆ H ₁₂	3.3	+	1.4	+	0.64	+	9.86	300	
Cyclohexanol	Cyclohexyl alcohol	108-93-0	C ₆ H ₁₂ O	1.5	+	0.9	+	1.1	+	9.75	50	
Cyclohexanone		108-94-1	C ₆ H ₁₀ O	1.0	+	0.9	+	0.7	+	9.14	25	
Cyclohexene		110-83-8	C ₆ H ₁₀					0.8	+	8.95	300	
Cyclohexylamine		108-91-8	C ₆ H ₁₃ N					1.2		8.62	10	
Cyclopentane 85%		287-92-3	C ₅ H ₁₀	NR	+	15	+	1.1		10.33	600	
2,2-dimethylbutane 15%												
Cyclopropylamine	Aminocyclopropane	765-30-0	C ₃ H ₇ N	1.1	+	0.9	+	0.9	+		ne	
Decamethylcyclopentasiloxane		541-02-6	C ₁₀ H ₃₀ O ₅ Si ₅	0.16	+	0.13	+	0.12	+		ne	
Decamethyltetrasiloxane		141-62-8	C ₁₀ H ₃₀ O ₃ Si ₄	0.17	+	0.13	+	0.12	+	<10.2	ne	
Decane		124-18-5	C ₁₀ H ₂₂	4.0	+	1.4	+	0.35	+	9.65	ne	
Diacetone alcohol	4-Methyl-4-hydroxy-2-pentanone	123-42-2	C ₆ H ₁₂ O ₂					0.7			50	
Dibromochloromethane	Chlorodibromomethane	124-48-1	CHBr ₂ Cl	NR	+	5.3	+	0.7	+	10.59	ne	
Dibromo-3-chloropropane, 1,2-	DBCP	96-12-8	C ₃ H ₅ Br ₂ Cl	NR	+	1.7	+	0.43	+		0.001	
Dibromoethane, 1,2-	EDB, Ethylene dibromide, Ethylene bromide	106-93-4	C ₂ H ₄ Br ₂	NR	+	1.7	+	0.6	+	10.37	ne	
Dichlorobenzene, o-	1,2-Dichlorobenzene	95-50-1	C ₆ H ₄ Cl ₂	0.54	+	0.47	+	0.38	+	9.08	25	
Dichlorodifluoromethane	CFC-12	75-71-8	CCl ₂ F ₂					NR	+	11.75	1000	
Dichlorodimethylsilane		75-78-5	C ₂ H ₆ Cl ₂ Si	NR		NR		1.1	+	>10.7	ne	
Dichloroethane, 1,2-	EDC, 1,2-DCA, Ethylene dichloride	107-06-2	C ₂ H ₄ Cl ₂					NR	+	0.6	11.04	10
Dichloroethene, 1,1-	1,1-DCE, Vinylidene chloride	75-35-4	C ₂ H ₂ Cl ₂					0.82	+	0.8	9.79	5
Dichloroethene, c-1,2-	c-1,2-DCE, <i>cis</i> -Dichloroethylene	156-59-2	C ₂ H ₂ Cl ₂					0.8			9.66	200
Dichloroethene, t-1,2-	t-1,2-DCE, <i>trans</i> -Dichloroethylene	156-60-5	C ₂ H ₂ Cl ₂					0.45	+	0.34	9.65	200
Dichloro-1-fluoroethane, 1,1-	R-141B	1717-00-6	C ₂ H ₃ Cl ₂ F	NR	+	NR	+	2.0	+		ne	
Dichloromethane	see Methylene chloride											



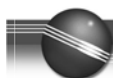
Compound Name	Synonym/Abbreviation	CAS No.	Formula	9.8	C	10.6	C	11.7	C IE (eV)	TWA	
Dichloropentafluoropropane	AK-225, mix of ~45% 3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca) & ~55% 1,3-Dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb)	442-56-0 507-55-1	C ₃ HCl ₂ F ₅	NR	+	NR	+	25	+	ne	
Dichloropropane, 1,2-		78-87-5	C ₃ H ₆ Cl ₂					0.7		10.87	75
Dichloro-1-propene, 1,3-		542-75-6	C ₃ H ₄ Cl ₂	1.3	+	0.96	+			<10	1
Dichloro-1-propene, 2,3-		78-88-6	C ₃ H ₄ Cl ₂	1.9	+	1.3	+	0.7	+	<10	ne
Dichloro-1,1,1-trifluoroethane, 2,2-	R-123	306-83-2	C ₂ HCl ₂ F ₃	NR	+	NR	+	10.1	+	11.5	ne
Dichloro-2,4,6-trifluoropyridine, 3,5-	DCTFP	1737-93-5	C ₅ Cl ₂ F ₃ N	1.1	+	0.9	+	0.8	+		ne
Dichlorvos *	Vapona; O,O-dimethyl O-dichlorovinyl phosphate	62-73-7	C ₄ H ₇ Cl ₂ O ₄ P			0.9	+			<9.4	0.1
Dicyclopentadiene	DCPD, Cyclopentadiene dimer	77-73-6	C ₁₀ H ₁₂	0.57	+	0.48	+	0.43	+	8.8	5
Diesel Fuel		68334-30-5	m.w. 226			0.9	+				11
Diesel Fuel #2 (Automotive)		68334-30-5	m.w. 216	1.3		0.7	+	0.4	+		11
Diethylamine		109-89-7	C ₄ H ₁₁ N			1	+			8.01	5
Diethylaminopropylamine, 3-		104-78-9	C ₇ H ₁₈ N ₂			1.3					ne
Diethylbenzene	See Dowtherm J										
Diethylmaleate		141-05-9	C ₈ H ₁₂ O ₄			4					ne
Diethyl sulfide	see Ethyl sulfide										
Diglyme	See Methoxyethyl ether	111-96-6	C ₆ H ₁₄ O ₃								
Diisobutyl ketone	DIBK, 2,2-dimethyl-4-heptanone	108-83-8	C ₉ H ₁₈ O	0.71	+	0.61	+	0.35	+	9.04	25
Diisopropylamine		108-18-9	C ₆ H ₁₅ N	0.84	+	0.74	+	0.5	+	7.73	5
Diketene	Ketene dimer	674-82-8	C ₄ H ₄ O ₂	2.6	+	2.0	+	1.4	+	9.6	0.5
Dimethylacetamide, N,N-	DMA	127-19-5	C ₄ H ₉ NO	0.87	+	0.8	+	0.8	+	8.81	10
Dimethylamine		124-40-3	C ₂ H ₇ N			1.5				8.23	5
Dimethyl carbonate	Carbonic acid dimethyl ester	616-38-6	C ₃ H ₆ O ₃	NR	+	~70	+	1.7	+	~10.5	ne
Dimethyl disulfide	DMDS	624-92-0	C ₂ H ₆ S ₂	0.2	+	0.20	+	0.21	+	7.4	ne
Dimethyl ether	see Methyl ether										
Dimethylethylamine	DMEA	598-56-1	C ₄ H ₁₁ N	1.1	+	1.0	+	0.9	+	7.74	~3
Dimethylformamide, N,N-	DMF	68-12-2	C ₃ H ₇ NO	0.7	+	0.7	+	0.8	+	9.13	10
Dimethylhydrazine, 1,1-	UDMH	57-14-7	C ₂ H ₈ N ₂			0.8	+	0.8	+	7.28	0.01
Dimethyl methylphosphonate	DMMP, methyl phosphonic acid dimethyl ester	756-79-6	C ₃ H ₉ O ₃ P	NR	+	4.3	+	0.74	+	10.0	ne
Dimethyl sulfate		77-78-1	C ₂ H ₆ O ₄ S	~23		~20	+	2.3	+		0.1
Dimethyl sulfide	see Methyl sulfide										
Dimethyl sulfoxide	DMSO, Methyl sulfoxide	67-68-5	C ₂ H ₆ OS			1.4	+			9.10	ne
Dioxane, 1,4-		123-91-1	C ₄ H ₈ O ₂			1.3				9.19	25
Dioxolane, 1,3-	Ethylene glycol formal	646-06-0	C ₃ H ₆ O ₂	4.0	+	2.3	+	1.6	+	9.9	20
Dowtherm A	see Therminol® *										
Dowtherm J (97% Diethylbenzene) *		25340-17-4	C ₁₀ H ₁₄			0.5					
DS-108F Wipe Solvent	Ethyl lactate/Isopar H/Propoxypropanol ~7:2:1	97-64-3 64742-48-9 1569-01-3	m.w. 118	3.3	+	1.6	+	0.7	+		ne
Epichlorohydrin	ECH Chloromethyloxirane, 1-chloro2,3-epoxypropane	106-89-8	C ₂ H ₅ ClO	~200	+	8.5	+	1.4	+	10.2	0.5
Ethane		74-84-0	C ₂ H ₆			NR	+	15	+	11.52	ne
Ethanol	Ethyl alcohol	64-17-5	C ₂ H ₆ O			10	+	3.1	+	10.47	1000
Ethanolamine *	MEA, Monoethanolamine	141-43-5	C ₂ H ₇ NO	5.6	+	1.6	+			8.96	3
Ethene	Ethylene	74-85-1	C ₂ H ₄			9	+	4.5	+	10.51	ne
Ethoxyethanol, 2-	Ethyl cellosolve	110-80-5	C ₄ H ₁₀ O ₂			1.3				9.6	5
Ethyl acetate		141-78-6	C ₄ H ₈ O ₂			4.6	+	3.5		10.01	400
Ethyl acetoacetate		141-97-9	C ₆ H ₁₀ O ₃	1.4	+	1.2	+	1.0	+	<10	ne
Ethyl acrylate		140-88-5	C ₅ H ₈ O ₂			2.4	+	1.0	+	<10.3	5
Ethylamine		75-04-7	C ₂ H ₇ N			0.8				8.86	5



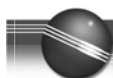
Compound Name	Synonym/Abbreviation	CAS No.	Formula	9.8	C	10.6	C	11.7	C	IE (Ev)	TWA
Ethylbenzene		100-41-4	C ₈ H ₁₀	0.52	+	0.52	+	0.51	+	8.77	100
Ethyl caprylate	Ethyl octanoate	106-32-1	C ₁₀ H ₂₀ O ₂			+	0.52	+	0.51	+	
Ethylenediamine	1,2-Ethanediamine; 1,2-Diaminoethane	107-15-3	C ₂ H ₈ N ₂	0.9	+	0.8	+	1.0	+	8.6	10
Ethylene glycol *	1,2-Ethanediol	107-21-1	C ₂ H ₆ O ₂				16	+	6	+	10.16 C100
Ethylene glycol, Acrylate	2-hydroxyethyl Acrylate	818-61-1	C ₅ H ₈ O ₃				8.2				≤10.6
Ethylene glycol dimethyl ether	1,2-Dimethoxyethane, Monoglyme	110-71-4	C ₄ H ₁₀ O ₂	1.1		0.86		0.7		9.2	ne
Ethylene glycol monobutyl ether acetate	2-Butoxyethyl acetate	112-07-2	C ₈ H ₁₆ O ₃			1.3				≤10.6	
Ethylene glycol, monothio	mercapto-2-ethanol	60-24-2	C ₂ H ₆ OS			1.5				9.65	
Ethylene oxide	Oxirane, Epoxyethane	75-21-8	C ₂ H ₄ O			13	+	3.5	+	10.57	1
Ethyl ether	Diethyl ether	60-29-7	C ₄ H ₁₀ O			1.1	+	1.7		9.51	400
Ethyl 3-ethoxypropionate	EEP	763-69-9	C ₇ H ₁₄ O ₃	1.2	+	0.75	+				ne
Ethyl formate		109-94-4	C ₃ H ₆ O ₂					1.9		10.61	100
Ethylhexyl acrylate, 2-	Acrylic acid 2-ethylhexyl ester	103-11-7	C ₁₁ H ₂₀ O ₂			1.1	+	0.5	+		ne
Ethylhexanol	2-Ethyl-1-hexanol	104-76-7	C ₈ H ₁₈ O			1.9				≤10.6	
Ethylidenenorbornene	5-Ethylidene bicyclo(2,2,1)hept-2-ene	16219-75-3	C ₉ H ₁₂	0.4	+	0.39	+	0.34	+	≤8.8	ne
Ethyl (S)-(-)-lactate see also DS-108F	Ethyl lactate, Ethyl (S)-(-)-hydroxypropionate	687-47-8 97-64-3	C ₅ H ₁₀ O ₃	13	+	3.2	+	1.6	+	~10	ne
Ethyl mercaptan	Ethanethiol	75-08-1	C ₂ H ₆ S	0.60	+	0.56	+			9.29	0.5
Ethyl sulfide	Diethyl sulfide	352-93-2	C ₄ H ₁₀ S			0.5	+			8.43	ne
Formaldehyde	Formalin	50-00-0	CH ₂ O	NR	+	NR	+	1.6	+	10.87	C0.3
Formamide		75-12-7	CH ₃ NO			6.9	+	4		10.16	10
Formic acid		64-18-6	CH ₂ O ₂	NR	+	NR	+	9	+	11.33	5
Furfural	2-Furaldehyde	98-01-1	C ₅ H ₄ O ₂			0.92	+	0.8	+	9.21	2
Furfuryl alcohol		98-00-0	C ₅ H ₆ O ₂			0.80	+			<9.5	10
Gasoline #1		8006-61-9	m.w. 72			0.9	+				300
Gasoline #2, 92 octane		8006-61-9	m.w. 93	1.3	+	1.0	+	0.5	+		300
Glutaraldehyde	1,5-Pentanedial, Glutaric dialdehyde	111-30-8	C ₅ H ₈ O ₂	1.1	+	0.8	+	0.6	+		C0.05
Glycidyl methacrylate	2,3-Epoxypropyl methacrylate	106-91-2	C ₇ H ₁₀ O ₃	2.6	+	1.2	+	0.9	+		0.5
Halothane	2-Bromo-2-chloro-1,1,1-trifluoroethane	151-67-7	C ₂ HBrClF ₃					0.6		11.0	50
HCFC-22	see Chlorodifluoromethane										
HCFC-123	see 2,2-Dichloro-1,1,1-trifluoroethane										
HCFC-141B	see 1,1-Dichloro-1-fluoroethane										
HCFC-142B	see 1-Chloro-1,1-difluoroethane										
HCFC-134A	see 1,1,1,2-Tetrafluoroethane										
HCFC-225	see Dichloropentafluoropropane										
Heptane, n-		142-82-5	C ₇ H ₁₆	45	+	2.8	+	0.60	+	9.92	400
Heptanol, 4-	Dipropylcarbinol	589-55-9	C ₇ H ₁₆ O	1.8	+	1.3	+	0.5	+	9.61	ne
Hexamethyldisilazane, 1,1,1,3,3,3- *	HMDS	999-97-3	C ₆ H ₁₉ NSi ₂			0.2	+	0.2	+	~8.6	ne
Hexamethyldisiloxane	HMDSx	107-46-0	C ₆ H ₁₈ OSi ₂	0.33	+	0.27	+	0.25	+	9.64	ne
Hexane, n-		110-54-3	C ₆ H ₁₄	350	+	4.3	+	0.54	+	10.13	50
Hexanol, 1-	Hexyl alcohol	111-27-3	C ₆ H ₁₄ O	9	+	2.5	+	0.55	+	9.89	ne
Hexene, 1-		592-41-6	C ₆ H ₁₂			0.8				9.44	30
HFE-7100	see Methyl nonafluorobutyl ether										
Histoclear (Histo-Clear)	Limonene/corn oil reagent		m.w. ~136	0.5	+	0.4	+	0.3	+		ne
Hydrazine *		302-01-2	H ₄ N ₂	>8	+	2.6	+	2.1	+	8.1	0.01
Hydrazoic acid	Hydrogen azide		HN ₃							10.7	
Hydrogen	Synthesis gas	1333-74-0	H ₂	NR	+	NR	+	NR	+	15.43	ne
Hydrogen cyanide	Hydrocyanic acid	74-90-8	HCN	NR	+	NR	+	NR	+	13.6	C4.7
Hydrogen iodide *	Hydriodic acid	10034-85-2	HI			~0.6*				10.39	
Hydrogen peroxide		7722-84-1	H ₂ O ₂	NR	+	NR	+	NR	+	10.54	1
Hydrogen sulfide		7783-06-4	H ₂ S	NR	+	3.3	+	1.5	+	10.45	10
Hydroxypropyl methacrylate		27813-02-1 923-26-2	C ₇ H ₁₂ O ₃	9.9	+	2.3	+	1.1	+		ne
Iodine *		7553-56-2	I ₂	0.1	+	0.1	+	0.1	+	9.40	C0.1



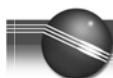
Compound Name	Synonym/Abbreviation	CAS No.	Formula	9.8	C	10.6	C	11.7	C	IE (eV)	TWA
Iodomethane	Methyl iodide	74-88-4	CH ₃ I	0.21	+	0.22	+	0.26	+	9.54	2
Isoamyl acetate	Isopentyl acetate	123-92-2	C ₇ H ₁₄ O ₂	10.1		2.1		1.0		<10	100
Isobutane	2-Methylpropane	75-28-5	C ₄ H ₁₀			100	+	1.2	+	10.57	ne
Isobutanol	2-Methyl-1-propanol	78-83-1	C ₄ H ₁₀ O	19	+	3.8	+	1.5		10.02	50
Isobutene	Isobutylene, Methyl butene	115-11-7	C ₄ H ₈	1.00	+	1.00	+	1.00	+	9.24	Ne
Isobutyl acrylate	Isobutyl 2-propenoate	106-63-8	C ₇ H ₁₂ O ₂			1.5	+	0.60	+		Ne
Isoflurane	1-Chloro-2,2,2-trifluoroethyl difluoromethyl ether, forane	26675-46-7	C ₃ H ₂ ClF ₅ O	NR	+	NR	+	48	+	~11.7	Ne
Isooctane	2,2,4-Trimethylpentane	540-84-1	C ₈ H ₁₈			1.2				9.86	ne
Isopar E Solvent	Isoparaffinic hydrocarbons	64741-66-8	m.w. 121	1.7	+	0.8	+				Ne
Isopar G Solvent	Photocopier diluent	64742-48-9	m.w. 148			0.8	+				Ne
Isopar K Solvent	Isoparaffinic hydrocarbons	64742-48-9	m.w. 156	0.9	+	0.5	+	0.27	+		Ne
Isopar L Solvent	Isoparaffinic hydrocarbons	64742-48-9	m.w. 163	0.9	+	0.5	+	0.28	+		Ne
Isopar M Solvent	Isoparaffinic hydrocarbons	64742-47-8	m.w. 191			0.7	+	0.4	+		Ne
Isopentane	2-Methylbutane	78-78-4	C ₅ H ₁₂			8.2					Ne
Isophorone		78-59-1	C ₉ H ₁₄ O					3		9.07	C5
Isoprene	2-Methyl-1,3-butadiene	78-79-5	C ₅ H ₈	0.69	+	0.63	+	0.60	+	8.85	Ne
Isopropanol	Isopropyl alcohol, 2-propanol, IPA	67-63-0	C ₃ H ₈ O	500	+	6.0	+	2.7		10.12	200
Isopropyl acetate		108-21-4	C ₅ H ₁₀ O ₂			2.6				9.99	100
Isopropyl ether	Diisopropyl ether	108-20-3	C ₆ H ₁₄ O			0.8				9.20	250
Jet fuel JP-4	Jet B, Turbo B, F-40 Wide cut type aviation fuel	8008-20-6 + 64741-42-0	m.w. 115			1.0	+	0.4	+		Ne
Jet fuel JP-5	Jet 5, F-44, Kerosene type aviation fuel	8008-20-6 + 64747-77-1	m.w. 167			0.6	+	0.5	+		29
Jet fuel JP-8	Jet A-1, F-34, Kerosene type aviation fuel	8008-20-6 + 64741-77-1	m.w. 165			0.6	+	0.3	+		30
Jet fuel A-1 (JP-8)	F-34, Kerosene type aviation fuel	8008-20-6 + 64741-77-1	m.w. 145			0.67					34
Jet Fuel TS	Thermally Stable Jet Fuel, Hydrotreated kerosene fuel (R)-(+)-Limonene	8008-20-6 + 64742-47-8 5989-27-5	m.w. 165 C ₁₀ H ₁₆	0.9	+	0.6	+	0.3	+		30
Limonene, D- Kerosene C10-C16 petro.distillate – see Jet Fuels		8008-20-6				0.33	+			~8.2	Ne
MDI – see 4,4'-Methylenebis(phenylisocyanate)											
Maleic anhydride	2,5-Furandione	108-31-6	C ₄ H ₂ O ₃							~10.8	0.1
Mesitylene	1,3,5-Trimethylbenzene	108-67-8	C ₉ H ₁₂	0.36	+	0.35	+	0.3	+	8.41	25
Methallyl chloride	– see 3-Chloro-2-methylpropene										
Methane	Natural gas	74-82-8	CH ₄	NR	+	NR	+	NR	+	12.61	Ne
Methanol	Methyl alcohol, carbinol	67-56-1	CH ₄ O	NR	+	NR	+	2.5	+	10.85	200
Methoxyethanol, 2-	Methyl cellosolve, Ethylene glycol monomethyl ether	109-86-4	C ₃ H ₈ O ₂	4.8	+	2.4	+	1.4	+	10.1	5
Methoxyethoxyethanol, 2-	2-(2-Methoxyethoxy)ethanol Diethylene glycol monomethyl ether	111-77-3	C ₇ H ₁₆ O	2.3	+	1.2	+	0.9	+	<10	Ne
Methoxyethyl ether, 2-	bis(2-Methoxyethyl) ether, Diethylene glycol dimethyl ether, Diglyme	111-96-6	C ₆ H ₁₄ O ₃	0.64	+	0.54	+	0.44	+	<9.8	Ne
Methyl acetate		79-20-9	C ₃ H ₆ O ₂	NR	+	6.6	+	1.4	+	10.27	200
Methyl acrylate	Methyl 2-propenoate, Acrylic acid methyl ester	96-33-3	C ₄ H ₆ O ₂			3.7	+	1.2	+	(9.9)	2
Methylamine	Aminomethane	74-89-5	CH ₅ N			1.2				8.97	5
Methyl amyl ketone	MAK, 2-Heptanone, Methyl pentyl ketone	110-43-0	C ₇ H ₁₄ O	0.9	+	0.85	+	0.5	+	9.30	50
Methyl bromide	Bromomethane	74-83-9	CH ₃ Br	110	+	1.7	+	1.3	+	10.54	1
Methyl t-butyl ether	MTBE, <i>tert</i> -Butyl methyl ether	1634-04-4	C ₅ H ₁₂ O			0.9	+			9.24	40
Methyl cellosolve	see 2-Methoxyethanol										
Methyl chloride	Chloromethane	74-87-3	CH ₃ Cl	NR	+	NR	+	0.74	+	11.22	50
Methylcyclohexane		107-87-2	C ₇ H ₁₄	1.6	+	0.97	+	0.53	+	9.64	400
Methylene bis(phenylisocyanate), 4,4'- *	MDI, Mondur M		C ₁₅ H ₁₀ N ₂ O ₂							Very slow ppb level response	0.005



Compound Name	Synonym/Abbreviation	CAS No.	Formula	9.8	C	10.6	C	11.7	C	IE (eV)	TWA
Methylene chloride	Dichloromethane	75-09-2	CH ₂ Cl ₂	NR	+	NR	+	0.89	+	11.32	25
Methyl ether	Dimethyl ether	115-10-6	C ₂ H ₆ O	4.8	+	3.1	+	2.5	+	10.03	Ne
Methyl ethyl ketone	MEK, 2-Butanone	78-93-3	C ₄ H ₈ O	0.86	+	0.9	+	1.1	+	9.51	200
Methylhydrazine	Monomethylhydrazine, Hydrazomethane	60-34-4	C ₂ H ₆ N ₂	1.4	+	1.2	+	1.3	+	7.7	0.01
Methyl isoamyl ketone	MIAK, 5-Methyl-2-hexanone	110-12-3	C ₇ H ₁₄ O	0.8	+	0.76	+	0.5	+	9.28	50
Methyl isobutyl ketone	MIBK, 4-Methyl-2-pentanone	108-10-1	C ₆ H ₁₂ O	0.9	+	0.8	+	0.6	+	9.30	50
Methyl isocyanate	CH ₃ NCO	624-83-9	C ₂ H ₃ NO	NR	+	4.6	+	1.5	+	10.67	0.02
Methyl isothiocyanate	CH ₃ NCS	551-61-6	C ₂ H ₃ NS	0.5	+	0.45	+	0.4	+	9.25	ne
Methyl mercaptan	Methanethiol	74-93-1	CH ₄ S	0.65		0.54		0.66		9.44	0.5
Methyl methacrylate		80-62-6	C ₅ H ₈ O ₂	2.7	+	1.5	+	1.2	+	9.7	100
Methyl nonafluorobutyl ether	HFE-7100DL	163702-08-7, 163702-07-6	C ₅ H ₃ F ₉ O			NR	+	~35	+		ne
Methyl-1,5-pentanediamine, 2-(coats lamp) *	Dytek-A amine, 2-Methyl pentamethylenediamine	15520-10-2	C ₆ H ₁₆ N ₂			~0.6	+			<9.0	ne
Methyl propyl ketone	MPK, 2-Pentanone	107-87-9	C ₅ H ₁₂ O			0.93	+	0.79	+	9.38	200
Methyl-2-pyrrolidinone, N-	NMP, N-Methylpyrrolidone, 1-Methyl-2-pyrrolidinone, 1-Methyl-2-pyrrolidone	872-50-4	C ₅ H ₉ NO	1.0	+	0.8	+	0.9	+	9.17	ne
Methyl salicylate	Methyl 2-hydroxybenzoate	119-36-8	C ₈ H ₈ O ₃	1.3	+	0.9	+	0.9	+	~9	ne
Methylstyrene, α-	2-Propenylbenzene	98-83-9	C ₉ H ₁₀			0.5				8.18	50
Methyl sulfide	DMS, Dimethyl sulfide	75-18-3	C ₂ H ₆ S	0.49	+	0.44	+	0.46	+	8.69	ne
Mineral spirits	Stoddard Solvent, Varsol 1, White Spirits	8020-83-5 8052-41-3 68551-17-7	m.w. 144	1.0		0.69	+	0.38	+		100
Mineral Spirits - Viscor 120B Calibration Fluid, b.p. 156-207°C		8052-41-3	m.w. 142	1.0	+	0.7	+	0.3	+		100
Monoethanolamine - see Ethanolamine											
Mustard *	HD, Bis(2-chloroethyl) sulfide	505-60-2 39472-40-7 68157-62-0	C ₄ H ₈ Cl ₂ S			0.6					0.0005
Naphtha - see VM & P Naptha											
Naphthalene	Mothballs	91-20-3	C ₁₀ H ₈	0.45	+	0.42	+	0.40	+	8.13	10
Nickel carbonyl (in CO)	Nickel tetracarbonyl	13463-39-3	C ₄ NiO ₄			0.18				<8.8	0.001
Nicotine		54-11-5	C ₁₀ H ₁₄ N ₂			2.0				≤10.6	
Nitric oxide		10102-43-9	NO	~6		5.2	+	2.8	+	9.26	25
Nitrobenzene		98-95-3	C ₆ H ₅ NO ₂	2.6	+	1.9	+	1.6	+	9.81	1
Nitroethane		79-24-3	C ₂ H ₅ NO ₂					3		10.88	100
Nitrogen dioxide		10102-44-0	NO ₂	23	+	16	+	6	+	9.75	3
Nitrogen trifluoride		7783-54-2	NF ₃	NR		NR		NR		13.0	10
Nitromethane		75-52-5	CH ₃ NO ₂					4		11.02	20
Nitropropane, 2-		79-46-9	C ₃ H ₇ NO ₂					2.6		10.71	10
Nonane		111-84-2	C ₉ H ₂₀			1.4				9.72	200
Norpar 12	n-Paraffins, mostly C ₁₀ -C ₁₃	64771-72-8	m.w. 161	3.2	+	1.1	+	0.28	+		ne
Norpar 13	n-Paraffins, mostly C ₁₃ -C ₁₄	64771-72-8	m.w. 189	2.7	+	1.0	+	0.3	+		ne
Octamethylcyclotetrasiloxane		556-67-2	C ₈ H ₂₄ O ₄ Si ₄	0.21	+	0.17	+	0.14	+		ne
Octamethyltrisiloxane		107-51-7	C ₈ H ₂₄ O ₂ Si ₃	0.23	+	0.18	+	0.17	+	<10.0	ne
Octane, n-		111-65-9	C ₈ H ₁₈	13	+	1.8	+			9.82	300
Octene, 1-		111-66-0	C ₈ H ₁₆	0.9	+	0.75	+	0.4	+	9.43	75
Pentane		109-66-0	C ₅ H ₁₂	80	+	8.4	+	0.7	+	10.35	600
Peracetic acid *	Peroxyacetic acid, Acetyl hydroperoxide	79-21-0	C ₂ H ₄ O ₃	NR	+	NR	+	2.3	+		ne
Peracetic/Acetic acid mix *	Peroxyacetic acid, Acetyl hydroperoxide	79-21-0	C ₂ H ₄ O ₃			50	+	2.5	+		ne
Perchloroethene	PCE, Perchloroethylene, Tetrachloroethylene	127-18-4	C ₂ Cl ₄	0.69	+	0.57	+	0.31	+	9.32	25
PGME	Propylene glycol methyl ether, 1-Methoxy-2-propanol	107-98-2	C ₆ H ₁₂ O ₃	2.4	+	1.5	+	1.1	+		100



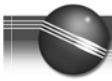
Compound Name	Synonym/Abbreviation	CAS No.	Formula	9.8	C	10.6	C	11.7	C	IE (eV)	TWA
PGMEA	Propylene glycol methyl ether acetate, 1-Methoxy-2-acetoxypropane, 1-Methoxy-2-propanol acetate	108-65-6	C ₆ H ₁₂ O ₃	1.65	+	1.0	+	0.8	+		ne
Phenol	Hydroxybenzene	108-95-2	C ₆ H ₆ O	1.0	+	1.0	+	0.9	+	8.51	5
Phosgene	Dichlorocarbonyl	75-44-5	CCl ₂ O	NR	+	NR	+	8.5	+	11.2	0.1
Phosgene in Nitrogen	Dichlorocarbonyl	75-44-5	CCl ₂ O	NR	+	NR	+	6.8	+	11.2	0.1
Phosphine (coats lamp)		7803-51-2	PH ₃	28		3.9	+	1.1	+	9.87	0.3
Photocopier Toner	Isoparaffin mix					0.5	+	0.3	+		ne
Picoline, 3-	3-Methylpyridine	108-99-6	C ₆ H ₇ N			0.9				9.04	ne
Pinene, α-		2437-95-8	C ₁₀ H ₁₆			0.31	+	0.47		8.07	ne
Pinene, β-		18172-67-3	C ₁₀ H ₁₆	0.38	+	0.37	+	0.37	+	~8	100
Piperylene, isomer mix	1,3-Pentadiene	504-60-9	C ₅ H ₈	0.76	+	0.69	+	0.64	+	8.6	100
Propane		74-98-6	C ₃ H ₈			NR	+	1.8	+	10.95	2500
Propanol, n-	Propyl alcohol	71-23-8	C ₃ H ₈ O			5		1.7		10.22	200
Propene	Propylene	115-07-1	C ₃ H ₆	1.5	+	1.4	+	1.6	+	9.73	ne
Propionaldehyde	Propanal	123-38-6	C ₃ H ₆ O			1.9				9.95	ne
Propyl acetate, n-		109-60-4	C ₅ H ₁₀ O ₂			3.5		2.3		10.04	200
Propylamine, n-	1-Propylamine, 1-Aminopropane	107-10-8	C ₃ H ₉ N	1.1	+	1.1	+	0.9	+	8.78	ne
Propylene carbonate *		108-32-7	C ₄ H ₆ O ₃			62	+	1	+	10.5	ne
Propylene glycol	1,2-Propanediol	57-55-6	C ₃ H ₈ O ₂	18		5.5	+	1.6	+	<10.2	ne
Propylene glycol propyl ether	1-Propoxy-2-propanol	1569-01-3	C ₆ H ₁₄ O ₂	1.3	+	1.0	+	1.6	+		ne
Propylene oxide	Methyloxirane	75-56-9	C ₃ H ₆ O	~240		6.6	+	2.9	+	10.22	20
		16088-62-3									
		15448-47-2									
Propyleneimine	2-Methylaziridine	75-55-8	C ₃ H ₇ N	1.5	+	1.3	+	1.0	+	9.0	2
Propyl mercaptan, 2-	2-Propanethiol, Isopropyl mercaptan	75-33-2	C ₃ H ₈ S	0.64	+	0.66	+			9.15	ne
Pyridine		110-86-1	C ₅ H ₅ N	0.78	+	0.7	+	0.7	+	9.25	5
Pyrrolidine (coats lamp)	Azacyclohexane	123-75-1	C ₄ H ₉ N	2.1	+	1.3	+	1.6	+	~8.0	ne
RR7300 (PGME/PGMEA)	70:30 PGME:PGMEA (1-Methoxy-2-propanol:1-Methoxy-2-acetoxypropane)	107-98-2	C ₄ H ₁₀ O ₂ / C ₆ H ₁₂ O ₃			1.4	+	1.0	+		ne
Sarin	GB, Isopropyl methylphosphonofluoridate	107-44-8	C ₄ H ₁₀ FO ₂ P			~3					
		50642-23-4									
Stoddard Solvent - see Mineral Spirits		8020-83-5									
Styrene		100-42-5	C ₈ H ₈	0.45	+	0.40	+	0.4	+	8.43	20
Sulfur dioxide		7446-09-5	SO ₂	NR		NR	+	NR	+	12.32	2
Sulfur hexafluoride		2551-62-4	SF ₆	NR		NR		NR		15.3	1000
Sulfuryl fluoride	Vikane	2699-79-8	SO ₂ F ₂	NR		NR		NR		13.0	5
Tabun *	Ethyl N, N-dimethylphosphoramidocyanidate	77-81-6	C ₅ H ₁₁ N ₂ O ₂ P			0.8					15ppt
Tetrachloroethane, 1,1,1,2-		630-20-6	C ₂ H ₂ Cl ₄					1.3		~11.1	ne
Tetrachloroethane, 1,1,1,2,2-		79-34-5	C ₂ H ₂ Cl ₄	NR	+	NR	+	0.60	+	~11.1	1
Tetrachlorosilane		10023-04-7	SiCl ₄	NR		NR		15	+	11.79	ne
Tetraethyl lead	TEL	78-00-2	C ₈ H ₂₀ Pb	0.4		0.3		0.2		~11.1	0.008
Tetraethyl orthosilicate	Ethyl silicate, TEOS	78-10-4	C ₈ H ₂₀ O ₄ Si			0.7	+	0.2	+	~9.8	10
Tetrafluoroethane, 1,1,1,2-	HFC-134A	811-97-2	C ₂ H ₂ F ₄			NR		NR			ne
Tetrafluoroethene	TFE, Tetrafluoroethylene, Perfluoroethylene	116-14-3	C ₂ F ₄			~15				10.12	ne
Tetrafluoromethane	CFC-14, Carbon tetrafluoride	75-73-0	CF ₄			NR	+	NR	+	>15.3	ne
Tetrahydrofuran	THF	109-99-9	C ₄ H ₈ O	1.9	+	1.7	+	1.0	+	9.41	200
Tetramethyl orthosilicate	Methyl silicate, TMOS	681-84-5	C ₄ H ₁₂ O ₄ Si	10	+	1.9	+			~10	1
Therminol® D-12 *	Hydrotreated heavy naphtha	64742-48-9	m.w. 160	0.8	+	0.51	+	0.33	+		ne
Therminol® VP-1 *	Dowtherm A, 3:1 Diphenyl oxide:	101-84-8	C ₁₂ H ₁₀ O			0.4	+				1
	Biphenyl	92-52-4	C ₁₂ H ₁₀								
Toluene	Methylbenzene	108-88-3	C ₇ H ₈	0.54	+	0.50	+	0.51	+	8.82	50



Compound Name	Synonym/Abbreviation	CAS No.	Formula	9.8	C	10.6	C	11.7	C	IE (eV)	TWA
Tolylene-2,4-diisocyanate	TDI, 4-Methyl-1,3-phenylene-2,4-diisocyanate	584-84-9	C ₉ H ₆ N ₂ O ₂	1.4	+	1.4	+	2.0	+		0.002
Trichlorobenzene, 1,2,4-	1,2,4-TCB	120-82-1	C ₆ H ₃ Cl ₃	0.7	+	0.46	+			9.04	C5
Trichloroethane, 1,1,1-	1,1,1-TCA, Methyl chloroform	71-55-6	C ₂ H ₃ Cl ₃			NR	+	1	+	11	350
Trichloroethane, 1,1,2-	1,1,2-TCA	79-00-5	C ₂ H ₃ Cl ₃	NR	+	NR	+	0.9	+	11.0	10
Trichloroethene	TCE, Trichloroethylene	79-01-6	C ₂ HCl ₃	0.62	+	0.54	+	0.43	+	9.47	50
Trichloromethylsilane	Methyltrichlorosilane	75-79-6	CH ₃ Cl ₃ Si	NR		NR		1.8	+	11.36	ne
Trichlorotrifluoroethane, 1,1,2-	CFC-113	76-13-1	C ₂ Cl ₃ F ₃			NR		NR		11.99	1000
Triethylamine	TEA	121-44-8	C ₆ H ₁₅ N	0.95	+	0.9	+	0.65	+	7.3	1
Triethyl borate	TEB; Boric acid triethyl ester	150-46-9	C ₆ H ₁₅ O ₃ B			2.2	+	1.1	+	~10	ne
Triethyl phosphate	Ethyl phosphate	78-40-0	C ₆ H ₁₅ O ₄ P	~50	+	3.1	+	0.60	+	9.79	ne
Trifluoroethane, 1,1,2-		430-66-0	C ₂ H ₃ F ₃					34		12.9	ne
Trimethylamine		75-50-3	C ₃ H ₉ N			0.9				7.82	5
Trimethylbenzene, 1,3,5- - see Mesitylene		108-67-8									25
Trimethyl borate	TMB; Boric acid trimethyl ester, Boron methoxide	121-43-7	C ₃ H ₉ O ₃ B			5.1	+	1.2	+	10.1	ne
Trimethyl phosphate	Methyl phosphate	512-56-1	C ₃ H ₉ O ₄ P			8.0	+	1.3	+	9.99	ne
Trimethyl phosphite	Methyl phosphite	121-45-9	C ₃ H ₉ O ₃ P			1.1	+		+	8.5	2
Turpentine	Pinenes (85%) + other diisoprenes	8006-64-2	C ₁₀ H ₁₆	0.37	+	0.30	+	0.29	+	~8	20
Undecane		1120-21-4	C ₁₁ H ₂₄			2				9.56	ne
Varsol – see Mineral Spirits											
Vinyl acetate		108-05-4	C ₄ H ₆ O ₂	1.5	+	1.2	+	1.0	+	9.19	10
Vinyl bromide	Bromoethylene	593-60-2	C ₂ H ₃ Br			0.4				9.80	5
Vinyl chloride	Chloroethylene, VCM	75-01-4	C ₂ H ₃ Cl			2.0	+	0.6	+	9.99	5
Vinyl-1-cyclohexene, 4-	Butadiene dimer, 4-Ethenylcyclohexene	100-40-3	C ₈ H ₁₂	0.6	+	0.56	+			9.83	0.1
Vinylidene chloride - see 1,1-Dichloroethene											
Vinyl-2-pyrrolidinone, 1-	NVP, N-vinylpyrrolidone, 1-ethenyl-2-pyrrolidinone	88-12-0	C ₆ H ₉ NO	1.0	+	0.8	+	0.9	+		ne
Viscor 120B - see Mineral Spirits - Viscor 120B Calibration Fluid											
V. M. & P. Naphtha	Ligroin; Solvent naphtha; Varnish maker's & painter's naphtha	64742-89-8	m.w. 111 (C ₈ -C ₉)	1.7	+	0.97	+				300
Xylene, m-	1,3-Dimethylbenzene	108-38-3	C ₈ H ₁₀	0.50	+	0.44	+	0.40	+	8.56	100
Xylene, o-	1,2-Dimethylbenzene	95-47-6	C ₈ H ₁₀	0.56	+	0.46	+	0.43		8.56	100
Xylene, p-	1,4-Dimethylbenzene	106-42-3	C ₈ H ₁₀	0.48	+	0.39	+	0.38	+	8.44	100
None				1		1		1			
Undetectable				1E+6		1E+6		1E+6			

* Compounds indicated in green can be detected using a MiniRAE 2000 or ppbRAE/+ with slow response, but may be lost by adsorption on a MultiRAE or EntryRAE. Response on multi-gas meters can give an indication of relative concentrations, but may not be quantitative and for some chemicals no response is observed.

Therminol® is a registered Trademark of Solutia, Inc.



Appendix I:

Example of Automatic Calculation of Correction Factors, TLVs and Alarm Limits for Mixtures (Calculations performed using Excel version of this database, available on request)

Compound	CF 9.8 eV	CF 10.6 eV	CF 11.7eV	Mol. Frac	Conc ppm	TLV ppm	STEL Ppm
Benzene	0.55	0.53	0.6	0.01	1	0.5	2.5
Toluene	0.54	0.5	0.51	0.06	10	50	150
Hexane, n-	300	4.3	0.54	0.06	10	50	150
Heptane, n-	45	2.8	0.6	0.28	50	400	500
Styrene	0.45	0.4	0.42	0.06	10	20	40
Acetone	1.2	1.1	1.4	0.28	50	750	1000
Isopropanol	500	6	2.7	0.28	50	400	500
None	1	1	1	0.00	0	1	
Mixture Value:	2.1	1.5	0.89	1.00	181	56	172
TLV Alarm Setpoint when Calibrated to Isobutylene:	26 ppm	37 ppm	62 ppm		ppm	ppm	ppm
STEL Alarm Setpoint, same Calibration	86 ppm	115 ppm	193 ppm				

FIELD OPERATING PROCEDURES

Calibration and
Maintenance of
Portable Specific
Conductance Meter

FOP 012.0

CALIBRATION AND MAINTENANCE OF PORTABLE SPECIFIC CONDUCTANCE METER

PURPOSE

This guideline describes a method for calibration of a portable specific conductance meter. This meter measures the ability of a water sample to conduct electricity, which is largely a function of the dissolved solids within the water. The instrument has been calibrated by the manufacturer according to factory specifications. This guideline presents a method for checking the factory calibration of a portable specific conductance meter. A calibration check is performed to verify instrument accuracy and function. All field test equipment will be checked at the beginning of each sampling day. This procedure also documents critical maintenance activities for this meter.

ACCURACY

The calibrated accuracy of the specific conductance meter will be within ± 1 percent of full-scale, with repeatability of ± 1 percent. The built-in cell will be automatically temperature compensated from at least 32° to 160° F (0° to 71°C).

PROCEDURE

Note: The information included below is equipment manufacturer- and model-specific, however, accuracy, calibration, and maintenance procedures for this type of portable equipment are typically similar. The information below pertains to the Myron L Company Ultrameter Model 6P. The actual equipment to be used in the field will be equivalent or similar.

FOP 012.0

CALIBRATION AND MAINTENANCE OF PORTABLE SPECIFIC CONDUCTANCE METER

1. Calibrate all field test equipment at the beginning of each sampling day. Check and recalibrate the specific conductance meter according to the manufacture's specifications.
2. Use a calibration solution of known specific conductivity and salinity. For maximum accuracy, use a Standard Solution Value closest to the samples to be tested.
3. Rinse conductivity cell three times with proper standard.
4. Re-fill conductivity cell with same standard.
5. Press **COND** or **TDS**, then press **CAL/MCLR**. The "CAL" icon will appear on the display.
6. Press the **↑/MS** or **MR/↓** key to step the displayed value toward the standard's value or hold a key down to cause rapid scrolling of the reading.
7. Press **CAL/MCLR** once to confirm new value and end the calibration sequence for this particular solution type.
8. Repeat steps 1 through 7 with additional new solutions, as necessary.
9. Document the calibration results and related information in the Project Field Book and on an **Equipment Calibration Log** (see attached sample), indicating the meter readings before and after the instrument has been adjusted. This is important, not only for data validation, but also to establish maintenance schedules and component replacement. Information will include, at a minimum:
 - Time, date and initials of the field team member performing the calibration
 - The unique identifier for the meter, including manufacturer, model, and serial number
 - The brand and expiration date of the calibration standards
 - The instrument readings: before and after calibration

FOP 012.0

CALIBRATION AND MAINTENANCE OF PORTABLE SPECIFIC CONDUCTANCE METER

- The instrument settings (if applicable)
- The overall adequacy of calibration including the Pass or fail designation in accordance with the accuracy specifications presented above.
- Corrective action taken (see Maintenance below) in the event of failure to adequately calibrate.

MAINTENANCE

NOTE: Ultrameters should be rinsed with clean water after use. Solvents should be avoided. Shock damage from a fall may cause instrument failure.

Temperature Extremes

Solutions in excess of 160°F/71°C should not be placed in the cell cup area; this may cause damage. Care should be exercised not to exceed rated operating temperature. Leaving the Ultrameter in a vehicle or storage shed on a hot day can easily subject the instrument to over 150°F voiding the warranty.

Battery Replacement

Dry Instrument THOROUGHLY. Remove the four bottom screws. Open instrument carefully; it may be necessary to rock the bottom slightly side to side to release it from the RS-232 connector. Carefully detach battery from circuit board. Replace with 9-volt alkaline battery. Replace bottom, ensuring the sealing gasket is installed in the groove of the top half of case. Re-install screws, tighten evenly and securely.

FOP 012.0

CALIBRATION AND MAINTENANCE OF PORTABLE SPECIFIC CONDUCTANCE METER

NOTE: Because of nonvolatile EEPROM circuitry, all data stored in memory and all calibration settings are protected even during power loss or battery replacement.

Cleaning Sensors

The conductivity cell cup should be kept as clean as possible. Flushing with clean water following use will prevent buildup on electrodes. However, if very dirty samples — particularly scaling types — are allowed to dry in the cell cup, a film will form. This film reduces accuracy. When there are visible films of oil, dirt, or scale in the cell cup or on the electrodes, use a foaming non-abrasive household cleaner. Rinse out the cleaner and your Ultrameter is ready for accurate measurements.

NOTE: Maintain a log for each monitoring instrument. Record all maintenance performed on the instrument on this log with date and name of the organization performing the maintenance.

ATTACHMENTS

Equipment Calibration Log (sample)

FOP 012.0

**CALIBRATION AND MAINTENANCE OF PORTABLE
SPECIFIC CONDUCTANCE METER**



EQUIPMENT CALIBRATION

PROJECT INFORMATION:

Project Name: _____ Date: _____
 Project No.: _____
 Client: _____ Instrument Source: BM Rental

METER TYPE	UNITS	TIME	MAKE/MODEL	SERIAL NUMBER	CAL. BY	STANDARD	READING	SETTL
<input type="checkbox"/> pH meter	units		Myron L. Company Ultra Meter 6P	606987		4.00 7.00 10.01		
<input type="checkbox"/> Turbidity meter	NTU		Hach 2100P Turbidimeter	970600014560		< 0.4 20 100 800		
<input type="checkbox"/> Sp. conductance meter	uS/mS		Myron L. Company Ultra Meter 6P	606987		uS @ 25 °C		
<input type="checkbox"/> PID	ppm		Photovac 2020 PID			open air zero ppm Iso. Gas		MIBK re factor :
<input type="checkbox"/> Particulate meter	mg/m ³					zero air		
<input type="checkbox"/> Oxygen	%					open air		
<input type="checkbox"/> Hydrogen sulfide	ppm					open air		
<input type="checkbox"/> Carbon monoxide	ppm					open air		
<input type="checkbox"/> LEL	%					open air		
<input type="checkbox"/> Radiation Meter	uR/h					background area		
<input type="checkbox"/>								

ADDITIONAL REMARKS:

PREPARED BY: _____ DATE: _____



FIELD OPERATING PROCEDURES

Composite Sample
Collection Procedure
for Non-VOC Analysis

FOP 013.0

COMPOSITE SAMPLE COLLECTION PROCEDURE FOR NON-VOLATILE ORGANIC ANALYSIS

PURPOSE

This guideline addresses the procedure to be used when soil samples are to be composited in the field.

PROCEDURE

1. Transfer equal weighted aliquots of soil from individual split-spoon samples, excavator bucket, hand auger or surface soil sample location to a large precleaned stainless steel (or Pyrex glass) mixing bowl.
2. Thoroughly mix (homogenize) and break up the soil using a stainless steel scoop or trowel.
3. Spread the composite sample evenly on a stainless steel tray and quarter the sample.
4. Discard alternate (i.e., diagonal) quarters and, using a small stainless steel scoop or spatula, collect equal portions of subsample from the remaining two quarters until the amount required for the composite sample is acquired. Transfer these subsamples to a precleaned stainless steel (or Pyrex glass) mixing bowl and re-mix.
5. Transfer the composite sample to the laboratory provided, precleaned sample jars. Store any excess sample from the stainless steel tray in a separate, precleaned, wide-mouth sample jar and refrigerate for future use, if applicable.
6. Decontaminate all stainless steel (or Pyrex glass) equipment in accordance with Benchmark's Non-disposable and Non-dedicated Sampling Equipment Decontamination procedures.
7. Prepare samples in accordance with Benchmark's Sample Labeling, Storage and Shipment FOP.

FOP 013.0

COMPOSITE SAMPLE COLLECTION PROCEDURE FOR NON-VOLATILE ORGANIC ANALYSIS

8. Record all sampling details in the Project Field Book and on the Soil/Sediment Sample Collection Summary Log (sample attached).

ATTACHMENTS

Soil/Sediment Sample Collection Summary Log (sample)

REFERENCES

Benchmark FOPs:

040 *Non-disposable and Non-dedicated Sampling Equipment Decontamination*

046 *Sample Labeling, Storage and Shipment*

FIELD OPERATING PROCEDURES

Documentation
Requirements for
Drilling and Well
Installation

FOP 015.0

DOCUMENTATION REQUIREMENTS FOR DRILLING AND WELL INSTALLATION

PURPOSE

The purpose of these documentation requirements is to document the procedures used for drilling and installing wells in order to ensure the quality of the data obtained from these operations. Benchmark field technical personnel will be responsible for developing and maintaining documentation for quality control of field operations. At least one field professional will monitor each major operation (e.g. one person per drilling rig) to document and record field procedures for quality control. These procedures provide a description of the format and information for this documentation.

PROCEDURE

Project Field Book

Personnel assigned by the Benchmark Field Team Leader or Project Manager will maintain a Project Field Book for all site activities. These Field Books will be started upon initiation of any site activities to document the field investigation process. The Field Books will meet the following criteria:

- Permanently bound, with nominal 8.5-inch by 11-inch gridded pages.
- Water resistant paper.
- Pages must be pre-numbered or numbered in the field, front and back.

Notations in the field book will be in black or blue ink that will not smudge when wet. Information that may be recorded in the Field Book includes:

- Time and date of all entries.

FOP 015.0

DOCUMENTATION REQUIREMENTS FOR DRILLING AND WELL INSTALLATION

- Name and location of project site and project job number.
- Listing of key project, client and agency personnel and telephone numbers.
- Date and time of daily arrivals and departures, name of person keeping the log, names and affiliation of persons on site, purpose of visit (if applicable), weather conditions, outline of project activities to be completed.
- Details of any variations to the procedures/protocols (i.e., as presented in the Work Plan or Field Operating Procedures) and the basis for the change.
- Field-generated data relating to implementation of the field program, including sample locations, sample descriptions, field measurements, instrument calibration, etc.
- Record of all photographs taken in the field, including date, time, photographer, site location and orientation, sequential number of photograph, and roll number.

Upon completion of the site activities, all Field Books will be photocopied and both the original and photocopied versions placed in the project files. In addition, all field notes except those presented on specific field forms will be neatly transcribed into Field Activity Daily Log (FADL) forms (sample attached).

Field Borehole/Monitoring Well Installation Log Form

Examples of the Field Borehole Log and Field Borehole/Monitoring Well Installation Log forms are attached to this Field Operating Procedure. One form will be completed for every boring by the Benchmark field person overseeing the drilling. At a minimum, these forms will include:

- Project name, location, and number.
- Boring number.

FOP 015.0

DOCUMENTATION REQUIREMENTS FOR DRILLING AND WELL INSTALLATION

- Rig type and drilling method.
- Drilling dates.
- Sampling method.
- Sample descriptions, to meet the requirements of the Unified Soil Classification System (USCS) for soils and the Unified Rock Classification System (URCS) for rock.
- Results of photoionization evaluations (scan and/or headspace determinations).
- Blow counts for sampler penetration (Standard Penetration Test, N-Value).
- Drilling rate, rig chatter, and other drilling-related information, as necessary.

All depths recorded on Boring/Monitoring Well Installation Log forms will be expressed in increments tenths of feet, and not in inches.

Well Completion Detail Form

An example of this form is attached to this Field Operating Procedure. One form will be completed for every boring by the Benchmark field person overseeing the well installation.

At a minimum, these forms will include:

- Project name, location, and number.
- Well number.
- Installation dates.
- Dimensions and depths of the various well components illustrated in the Well Completion Detail (attached). These include the screened interval, bottom caps or plugs, centralizers, and the tops and bottoms of the various annular materials.

FOP 015.0

DOCUMENTATION REQUIREMENTS FOR DRILLING AND WELL INSTALLATION

- Drilling rate, rig chatter, and other drilling related information.

All depths recorded on Field Borehole/Monitoring Well Installation Logs will be expressed in tenths of feet, and not in inches.

Daily Drilling Report Form

An example of this form is attached to this Field Operating Procedure. This form should be used to summarize all drilling activities. One form should be completed for each rig for each day. These forms will include summaries of:

- Footage drilled, broken down by diameter (e.g. 200 feet of 6-inch diameter hole, 50 feet of 10-inch diameter hole).
- Footage of well and screen installed, broken down by diameter.
- Quantities of materials used, including sand, cement, bentonite, centralizers, protective casings, traffic covers, etc. recorded by well or boring location.
- Active time (hours), and activity (drilling, decontamination, development, well installation, surface completions, etc.)
- Down-time (hours) and reason.
- Mobilizations and other events.
- Other quantities that will be the basis for drilling invoices.

The form should be signed daily by both the Benchmark field supervisor and the driller's representative, and provided to the Benchmark Field Team Leader.

FOP 015.0

DOCUMENTATION REQUIREMENTS FOR DRILLING AND WELL INSTALLATION

Other Project Field Forms

Well purging/well development forms, test pit logs, environmental sampling field data sheets, water level monitoring forms, and well testing (slug test or pumping test) forms. Refer to specific guidelines for form descriptions.

ATTACHMENTS

- Field Activity Daily Log (FADL) (sample)
- Field Borehole Log (sample)
- Field Borehole/Monitoring Well Installation Log (sample)
- Stick-up Well/Piezometer Completion Detail (sample)
- Flush-mount Well/Piezometer Completion Detail (sample)
- Daily Drilling Report (sample)

FOP 015.0

DOCUMENTATION REQUIREMENTS FOR DRILLING AND WELL INSTALLATION



DAILY LOG	DATE			
	NO.			
	SHEET	OF		

FIELD ACTIVITY DAILY LOG

PROJECT NAME:		PROJECT NO.:
PROJECT LOCATION:		CLIENT:
FIELD ACTIVITY SUBJECT:		
DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:		
TIME	DESCRIPTION	
VISITORS ON SITE:		CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS:
WEATHER CONDITIONS:		IMPORTANT TELEPHONE CALLS:
A.M.:		
P.M.:		
BM/TK PERSONNEL ON SITE:		
SIGNATURE		DATE:

(CONTINUED)

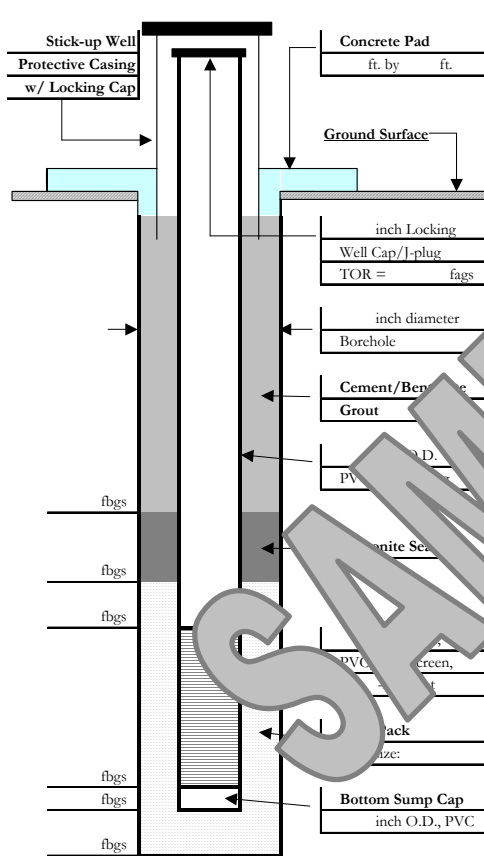
FOP 015.0

DOCUMENTATION REQUIREMENTS FOR DRILLING AND WELL INSTALLATION



STICK-UP WELL/PIEZOMETER COMPLETION DETAIL

Project Name: _____ WELL NUMBER: _____
 Client: _____ Date Installed: _____
 Boring Location: _____ Project Number: _____



Driller Information

Company: _____
 Driller: _____
 Helper: _____
 Permit Number: _____
 Drill Rig Type: _____

Well Information

Land Surface Elevation: _____ fmsl (approximate)
 Drilling Method: _____
 Soil Sample Collection Method: _____
 Drilling Fluid: _____
 Fluid Used During Drilling: _____ gallons (approximate)

Well Construction

Casing Material: _____
 Casing Size: _____
 Pack: _____
 Seal: _____

Development

Purpose: _____
 Technique(s): _____
 Date Completed: _____
 BM/TK Personnel: _____
 Total Volume Purge: _____ gallons
 Static Water Level: _____ fbTOR
 Pump Depth: _____
 Purge Duration: _____ minutes
 Yield: _____ gpm
 Specific Capacity: _____ gpm/ft

Comments: _____

PREPARED BY: _____ DATE: _____



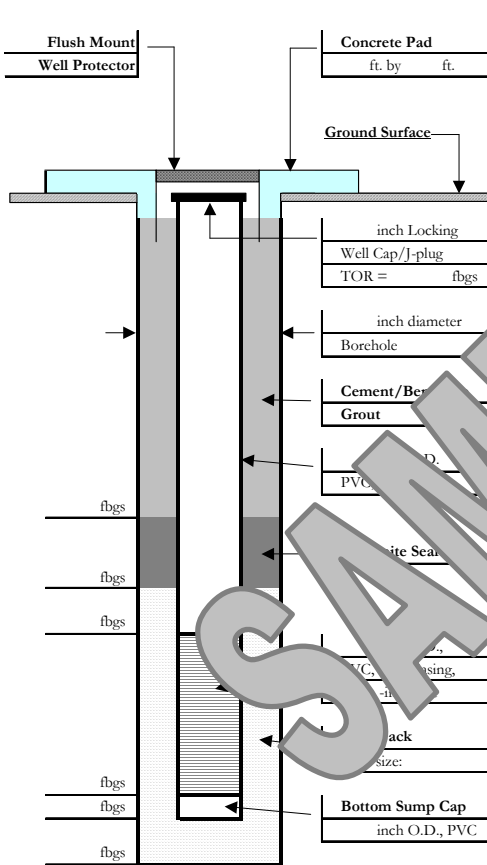
FOP 015.0

DOCUMENTATION REQUIREMENTS FOR DRILLING AND WELL INSTALLATION



FLUSHMOUNT WELL/PIEZOMETER
COMPLETION DETAIL

Project Name: _____ WELL NUMBER: _____
 Client: _____ Date Installed: _____
 Boring Location: _____ Project Number: _____



Driller Information	
Company:	
Driller:	
Helper:	
Permit Number:	
Drill Rig Type:	

Well Information	
Land Surface Elevation:	fmsl (approximate)
Drilling Method:	
Soil Sample Collection Method:	
Fluid:	
Fluid Used During Drilling:	gallons (approximate)

Well Completion	
Cement/Ber Grout:	
Pack:	
Seal:	

Well Development	
Well Purpose:	
Technique(s):	
Date Completed:	
BM/TK Personnel:	
Total Volume Purge:	gallons
Static Water Level:	fbTOR
Pump Depth:	
Purge Duration:	minutes
Yield:	gpm
Specific Capacity:	gpm/ft

Comments: _____

PREPARED BY: _____ DATE: _____

FOP 015.0

DOCUMENTATION REQUIREMENTS FOR DRILLING AND WELL INSTALLATION



DAILY DRILLING REPORT

CONTRACTOR:	DATE:
DRILLING EQUIPMENT:	PROJECT:
CREW MEMBERS:	JOB NUMBER:
SITE NAME:	BM PERSONNEL:

CATEGORY	Total Hours	a.m.												p.m.												a.m.											
		6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6											
MOB / DEMOB																																					
DRILLING																																					
WELL INSTALLATION																																					
DEVELOPMENT / TESTING																																					
GROUTING																																					
STEAM / DECON																																					
DOWN TIME: (explain below)																																					
STANDBY: (explain below)																																					
CLEANUP																																					
PREP FOR DRILLING																																					
LUNCH																																					
OTHER:																																					

REMARKS:

DRILLING & WELL MATERIALS: Describe nature, quantities, location

ITEM OR SERVICE	LOCATION	TOTALS
Starting depth (fbgs)		--
Ending depth (fbgs)		--
Total footage drilled (feet)		
Drilling Method (HSA, air, cable etc.)		--
Auger/Bit size		--
CSSS starting depth (fbgs)		--
CSSS ending depth (fbgs)		--
Total CSSS footage		
-inch Schedule 40 PVC screen, slot size =		
-inch Schedule 40 PVC riser		
-inch Schedule 40 PVC screen, slot size =		
-inch Schedule 40 PVC riser		
-inch Schedule 40 PVC screen, slot size =		
-inch Schedule 40 PVC riser		
Sand pack, size =		
Bentonite pellets/chips, size =		
Cement/beontonite grout		
<input type="checkbox"/> Protective casing <input type="checkbox"/> Flushmount road box		
Lockable J-plug		
Lock		

PERSONNEL TIME LOG:

POSITION	NAME	HOURS
Observer		
Drillers		

DRILLER (optional): _____ BM REP. _____



FIELD OPERATING PROCEDURES

Drill Site Selection Procedure

FOP 017.0

DRILL SITE SELECTION PROCEDURE

PURPOSE

This procedure presents a method for selecting a site location for drilling. Drill site selection should be based on the project objectives, ease of site access, freedom from obstructions and buried metallic objects (drums) and site safety (appropriate set backs from overhead and buried services).

PROCEDURE

The following procedure outlines procedures prior to drilling activities:

1. Review project objectives and tentatively select drilling locations that provide necessary information for achieving objectives (i.e., Work Plan).
2. Clear locations with property owner/operator to ensure that drilling activities will not interfere with site operations and select appropriate access routes.
3. Stake locations in the field, measure distance from locations to recognizable landmarks, such as building or fence lines and plot locations on site plan. Ensure location is relatively flat, free of overhead wires and readily accessible. Survey location if property ownership is in doubt.
4. Obtain clearances from appropriate utilities and if buried waste/metallic objects are suspected, screen location with appropriate geophysical method.
5. Establish a secure central staging area for storage of drilling supplies and for equipment decontamination. Locate a secure storage area for drilling samples, as necessary.

ATTACHMENTS

none

FIELD OPERATING PROCEDURES

Drilling and Excavation
Equipment
Decontamination
Procedures

FOP 018.0

DRILLING AND EXCAVATION EQUIPMENT DECONTAMINATION PROCEDURES

PURPOSE

This procedure is to be used for the decontamination of drilling and excavation equipment (i.e., drill rigs, backhoes, augers, drill bits, drill rods, buckets, and associated equipment) used during a subsurface investigation. The purpose of this procedure is to remove chemical constituents associated with a particular drilling or excavation location from this equipment. This prevents these constituents from being transferred between drilling or excavation locations, or being transported out of controlled areas.

PROCEDURE

The following procedure will be utilized prior to the use of drilling or excavation equipment at each location, and prior to the demobilization of such equipment from the site:

1. Remove all loose soil and other particulate materials from the equipment at the survey site.
2. Wrap augers, tools, plywood, and other reusable items with a plastic cover prior to transport from the site of use to the decontamination facility.
3. Transport equipment to the decontamination facility. All equipment must be decontaminated at an established decontamination facility. This facility will be placed within a controlled area, and will be equipped with necessary features to contain and collect wash water and entrained materials.
4. Wash equipment thoroughly with pressurized low-volume water or steam, supplied by a pressure washer or steam cleaner.
5. If necessary, use a brush or scraper to remove visible soils adhering to the equipment, and a non-phosphate detergent to remove any oils, grease, and/or hydraulic fluids adhering to the equipment. Continue pressure washing until all visible contaminants are removed.

FOP 018.0

**DRILLING AND EXCAVATION EQUIPMENT
DECONTAMINATION PROCEDURES**

6. Allow equipment to air dry.
7. Store equipment in a clean area or wrap the equipment in new plastic sheeting as necessary to ensure cleanliness until ready for use.
8. Manage all wash waters and entrained solids as described in the Benchmark Field Operating Procedure for Management of Investigation-Derived Waste.

ATTACHMENTS

none

FIELD OPERATING PROCEDURES

Establishing
Horizontal and Vertical
Control

FOP 021.0

ESTABLISHING HORIZONTAL AND VERTICAL CONTROL

PURPOSE

This guideline presents a method for establishing horizontal and vertical controls at a project site. It is imperative that this procedure be performed accurately, as all topographic and site maps, monitoring well locations and test pit locations will be based on these controls.

PROCEDURE

A. Establishing Horizontal Primary and Project Control

1. Research the State Plan Coordinate, USGS or project site applicable horizontal control monuments.
2. At the project site, recover the above-mentioned monuments, two markers minimum being recovered.
3. Establish control points on the project site by bringing in the primary control points recovered in the field.
4. All control points will be tied into a closed traverse to assure the error of closure.
5. Compute closures for obtaining degree of accuracy to adjust traverse points.

B. Establishing Vertical Primary and Project Control

1. Research project or USGS datum for recovering monument(s) for vertical control if different than those previously found.
2. Recover the monuments in the field, two markers minimum being found.
3. Set the projects benchmarks.
4. Run a level line from the monuments to the set project benchmarks and back, setting turning points on all benchmarks set on site.

FOP 021.0

ESTABLISHING HORIZONTAL AND VERTICAL CONTROL

5. Reduce field notes and compute error of closure to adjust benchmarks set on site.
6. Prepare the recovery sketches and tabulate a list for horizontal and vertical control throughout project site.

FIELD OPERATING PROCEDURES

Groundwater Level Measurement

GROUNDWATER LEVEL MEASUREMENT

PURPOSE

This procedure describes the methods used to obtain accurate and consistent water level measurements in monitoring wells, piezometers and well points. Water levels will be measured at monitoring wells and, if practicable, in supply wells to estimate purge volumes associated with sampling, and to develop a potentiometric surface of the groundwater in order to estimate the direction and velocity of flow in the aquifer. Water levels in monitoring wells will be measured using an electronic water level indicator (e-line) that has been checked for operation prior to mobilization.

PROCEDURE

1. Decontaminate the e-line probe and a lower portion of cable following the procedures referenced in the Benchmark Field Operating Procedure for Non-Disposable and Non-Dedicated Sampling Equipment Decontamination. Store the e-line in a protected area until use. This may include wrapping the e-line in clean plastic until the time of use.
2. Unlock and remove the well protective cap or cover and place on clean plastic.
3. Lower the probe slowly into the monitoring well until the audible alarm sounds. This indicates the depth to water has been reached.
4. Move the cable up and down slowly to identify the depth at which the alarm just begins to sound. Measure this depth against the mark on the lip of the well riser used as a surveyed reference point (typically the north side of the riser).
5. Read depth from the graduated cable to the nearest 0.01 foot. Do not use inches. If the e-line is not graduated, use a rule or tape measure graduated in 0.01-foot increments to measure from the nearest reference mark on the e-line cable.

FOP 022.0

GROUNDWATER LEVEL MEASUREMENT

6. Record the water level on a Water Level Monitoring Record (sample attached).
7. Remove the probe from the well slowly, drying the cable and probe with a clean paper wipe. Be sure to repeat decontamination before use in another well.
8. Replace well plug and protective cap or cover. Lock in place as appropriate.

ATTACHMENTS

Water Level Monitoring Record (sample)

REFERENCES

Benchmark FOPs:

040 *Non-Disposable and Non-Dedicated Sampling Equipment Decontamination*

FIELD OPERATING PROCEDURES

Groundwater Purging
Procedures Prior to
Sample Collection

FOP 023.1

GROUNDWATER PURGING PROCEDURES PRIOR TO SAMPLE COLLECTION

PURPOSE

This procedure describes the methods for monitoring well/piezometer purging prior to groundwater sample collection in order to collect representative groundwater samples. The goal of purging is to remove stagnant, non-representative groundwater from the well and/or prevent stagnant water from entering collected samples. Purging involves the removal of at least three to five volumes of water in wells with moderate yields and at least one well volume from wells with low yields (slow water level recovery).

Purge and sample wells in order of least-to-most contaminated (this is not necessary if dedicated or disposable equipment is used). If you do not know this order, sample the upgradient wells first, then the furthest down-gradient or side-gradient wells, and finally the wells closest to, but down-gradient of the most contaminated area. Sampling should commence immediately following purging or as soon as the well has adequately recharged and not more than 24-hours following end time of evacuation.

PROCEDURE

1. Prepare the electronic water level indicator (e-line) in accordance with the procedures referenced in the Benchmark Field Operating Procedure for Groundwater Level Measurement and decontaminate the e-line probe and a lower portion of cable following the procedures referenced in the Benchmark Field Operating Procedure for Non-disposable and Non-dedicated Sampling Equipment Decontamination. Store the e-line in a protected area until use. This may include wrapping the e-line in clean plastic until the time of use.
2. Inspect the interior and exterior of the well/piezometer for signs of vandalism or damage and record condition on the Groundwater Field Form and/or Groundwater Well Inspection Form (samples attached). Specifically, inspect

FOP 023.1

GROUNDWATER PURGING PROCEDURES PRIOR TO SAMPLE COLLECTION

the integrity of the following: concrete surface seal, lock, protective casing and well cover, well riser and J-plug/cap. Report any irregular findings to the Project Manager.

3. Unlock and remove the well protective cap or cover and place on clean plastic to avoid introducing foreign material into the well.
4. Calibrate the photoionization detector (PID) in accordance with the Benchmark Field Operating Procedure for Calibration and Maintenance of Portable Photoionization Detector.
5. Monitor the well for organic vapors using a PID, as per the Work Plan. If a reading of greater than 5 ppm is recorded, the well should be allowed to vent until levels drop below 5 ppm before proceeding with purging.
6. Lower the e-line probe slowly into the monitoring well and record the initial water level in accordance with the procedures referenced in the Benchmark Field Operating Procedure for Groundwater Level Measurement.
7. Following static water level determinations, slowly lower the e-line to the bottom of the well/piezometer. Record the total depth to the nearest 0.01-foot and compare to the previous total depth measurement. If a significant discrepancy exists, re-measure the total depth. Continue with purging activities observing purge water to determine whether the well/piezometer had become silted due to inactivity or damaged (i.e., well sand within purge water). Upon confirmation of the new total depth and determination of the cause (i.e., siltation or damage), notify the Project Manager following field activities.
8. Calculate the volume of water in the well based on the water level below the top of riser and the total depth of the well using the following equation:

$$V = 0.0408[(B)^2 \times \{(A) - (C)\}]$$

Where,

FOP 023.1

GROUNDWATER PURGING PROCEDURES PRIOR TO SAMPLE COLLECTION

A = Total Depth of Well (feet below measuring point)

B = Casing diameter (inches)

C = Static Water Level (feet below measuring point)

9. **For wells where the water level is 20 feet or less below the top of riser**, a peristaltic pump may be used to purge the well. Measure the purged volume using a calibrated container (i.e., graduated 5-gallon bucket) and record measurements on the attached Groundwater Well Development and Purge Log. Use new and dedicated tubing for each well. During the evacuation of shallow wells, the intake opening of the pump tubing should be positioned just below the surface of the water. As the water level drops, lower the tubing as needed to maintain flow. For higher yielding wells, the intake level should not be lowered past the top of the screen. Pumping from the top of the water column will ensure proper flushing of the well. Continue pumping until the required volumes are removed (typically three well volumes). For higher yielding wells, adjust the purging rate to maintain the water level above the screen. For lower yielding wells or wells where the screen straddles the water table, maintain purging at a rate that matches the rate of recovery of the well (well yield). If the well purges to dryness and is slow to recharge (greater than 15 minutes), terminate evacuation. **A peristaltic pump and dedicated tubing cannot be used to collect VOC or SVOC project-required samples; only non-organic compounds may be collected using this type of pump.**
10. **For wells where the water level is initially below 20 feet**, or drawn down to this level because of slow recharge rate, conduct purging using one of three devices listed below:
- **Bailer** – A bottom filling dedicated polyethylene bailer attached to a length of dedicated hollow-braid polypropylene rope. Purging a well utilizing a bailer should be conducted smoothly and slowly as not to agitate the groundwater or damage the well.
 - **Well Wizard Purge Pump (or similar)** – This pneumatic bladder pump uses compressed air to push water to the surface. Groundwater is not in contact

FOP 023.1

GROUNDWATER PURGING PROCEDURES PRIOR TO SAMPLE COLLECTION

with the drive air during the pumping process, therefore the pump may be used for sample collection.

- Submersible Pump (12 or 24 volt, or similar) – These submersible pumps are constructed of PVC or stainless steel and are capable of pumping up to 70 feet from ground surface using a 12 volt battery (standard pump) and standard low flow controller. For depths up to 200 feet from ground surface, a high performance power booster controller is used with a 12 volt battery. Unless these pumps are dedicated to the monitoring well location, decontamination between locations is necessary and an equipment blank may be required.
- Waterra™ Pump – This manually operated pump uses dedicated polyethylene tubing and a check valve that can be used as an optional method for purging deeper wells. The pump utilizes positive pressure to evacuate the well, therefore the pump may be used for sample collection, and however over-agitation groundwater should be avoided.

Prior to use in a well, non-dedicated bailers, exterior pump bodies and pump tubing should be cleaned in accordance with the Benchmark Field Operating Procedure for Non-Disposable and Non-Dedicated Sampling Equipment Decontamination. Dedicated and/or disposable equipment should be contained within the sealed original manufacturers packaging and certified pre-cleaned by the manufacturer with a non-phosphate laboratory detergent and rinsed using de-ionized water.

8. Purging will continue until a predetermined volume of water has been removed (typically three well volumes) or to dryness. Measurements for pH, temperature, specific conductance, dissolved oxygen (optional), Eh (optional), and turbidity will be recorded following removal of each well volume. Purge the well to dryness or until the readings for indicator parameters listed above (or well-specific indicator parameters) stabilize within the following limits for each parameter measured:

FOP 023.1

GROUNDWATER PURGING PROCEDURES PRIOR TO SAMPLE COLLECTION

Field Parameter	Stabilization Criteria
Dissolved Oxygen	± 0.3 mg/L
Turbidity	± 10 %
Specific Conductance	± 3 %
Eh	± 10 mV
PH	± 0.1 unit

Stabilization criteria presented within the project Work Plan will take precedence.

DOCUMENTATION AND SAMPLE COLLECTION

This section pertains to the documentation of collected field data during and following purging activities and sample collection.

1. Record all data including the final three stable readings for each indicator parameter on the attached Groundwater Well Purge & Sample Log.
2. Record, at a minimum, the “volume purged,” “purging stop-time,” “purged dry (Y/N),” “purged below sand pack (Y/N),” and any problems purging on the attached Groundwater Well Purge & Sample Log.
3. Collect groundwater samples in accordance with the Benchmark Field Operating Procedure for Groundwater Sample Collection. Record “sample flow rate” as an average, “time sample collected,” and any other pertinent information related to the sampling event on the attached Groundwater Well Purge & Sample Log.
4. Restore the well to its capped/covered and locked condition.

FOP 023.1

GROUNDWATER PURGING PROCEDURES PRIOR TO SAMPLE COLLECTION

ALTERNATIVE METHODS

Alternative purging and sampling methods and equipment, other than those described herein are acceptable if they provide representative groundwater samples. The purging and sampling method and equipment must not adversely affect sample integrity, chemistry, temperature, and turbidity. In addition, alternative equipment must have minimal or no effect on groundwater geochemistry, aquifer permeability and well materials. Equipment materials must also minimize sorption and leaching. The field team is responsible for documenting and describing any alternative equipment and procedures used to purge a well and collect samples.

ATTACHMENTS

Groundwater Field Form
Groundwater Well Inspection Form

REFERENCES

Benchmark FOPs:

- 011 *Calibration and Maintenance of Portable Photoionization Detector*
- 022 *Groundwater Level Measurement*
- 024 *Groundwater Sample Collection Procedures*
- 040 *Non-disposable and Non-dedicated Sampling Equipment Decontamination*

FOP 023.1

GROUNDWATER PURGING PROCEDURES PRIOR TO SAMPLE COLLECTION



GROUNDWATER FIELD FORM

Project Name: _____ Date: _____
 Location: _____ Project No.: _____ Field Team: _____

Well No.			Diameter (inches):			Sample Time:			
Product Depth (fbTOR):			Water Column (ft):			DTW when sampled:			
DTW (static) (fbTOR):			Casing Volume:			Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample			
Total Depth (fbTOR):			Purge Volume (gal):			Purge Method:			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
0	Initial								
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
Sample Information:			Date: (if different from above)						
S1									
S2									

Well No.			Diameter (inches):			Sample Time:			
Product Depth (fbTOR):			Water Column (ft):			DTW when sampled:			
DTW (static) (fbTOR):			Casing Volume:			Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample			
Total Depth (fbTOR):			Purge Volume (gal):			Purge Method:			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
0	Initial								
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
Sample Information:			Date: (if different from above)						
S1									
S2									

REMARKS: _____

Note: All water level measurements are in feet, distance from top of riser.

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

PREPARED BY: _____



FOP 023.1

GROUNDWATER PURGING PROCEDURES PRIOR
TO SAMPLE COLLECTION



GROUNDWATER WELL INSPECTION FORM

Project:	WELL I.D.:
Client:	
Job No.:	
Date:	
Time:	
EXTERIOR INSPECTION	
Protective Casing:	
Lock:	
Hinge/Lid:	
Concrete Surface Seal:	
Bollards:	
Label/I.D.:	
Other:	
INTERIOR INSPECTION	
Well Riser:	
Annular Space:	
Well Cap:	
Water Level (fbTOR):	
Total Depth (fbTOR):	
Other:	
Comments/Corrective Actions:	

PREPARED BY: _____

DATE: _____



FIELD OPERATING PROCEDURES

Groundwater Sample Collection Procedures

FOP 024.1

GROUNDWATER SAMPLE COLLECTION PROCEDURES

PURPOSE

This procedure describes the methods for collecting groundwater samples from monitoring wells and domestic supply wells following purging and sufficient recovery. This procedure also includes the preferred collection order in which water samples are collected based on the volatilization sensitivity or suite of analytical parameters required.

PROCEDURE

Allow approximately 3 to 10 days following well development before performing purge and sample activities at any well location. Conversely, perform sampling as soon as practical after sample purging at any time after the well has recovered sufficiently to sample, or within 24 hours after evacuation, if the well recharges slowly. If the well does not yield sufficient volume for all required laboratory analytical testing (including quality control), a decision should be made to prioritize analyses based on contaminants of concern at the site. If the well takes longer than 24 hours to recharge, the Project Manager should be consulted. The following two procedures outline sample collection activities for monitoring and domestic type wells.

Monitoring Wells

1. Purge the monitoring well in accordance with the Benchmark FOPs for Groundwater Purging Procedures Prior to Sample Collection or Low Flow (Minimal Drawdown) Groundwater Purging & Sampling Procedures. Perform sampling as soon as practical after purging at any time after the well has recovered sufficiently to sample, or within 24 hours after evacuation, if the well recharges slowly. If the well does not yield sufficient volume for all required laboratory analytical testing (including quality control), a decision should be made to prioritize analyses based on contaminants of concern at the site. Analyses will be prioritized in the order of the parameters volatilization sensitivity. After volatile organics have been collected, field parameters

FOP 024.1

GROUNDWATER SAMPLE COLLECTION PROCEDURES

must be measured from the next sample collected. If a well takes longer than 24 hours to recharge, the Project Manager should be consulted.

2. Sampling equipment that is not disposable or dedicated to the well will be decontaminated in accordance with the Benchmark Field Operating Procedure for Non-Disposable and Non-Dedicated Sampling Equipment Decontamination.
3. Calibrate all field meters (i.e., pH/Eh, turbidity, specific conductance, dissolved oxygen, PID etc.) in accordance with the Benchmark Field Operating Procedure for Calibration and Maintenance of the specific field meter.
4. Prepare the electronic water level indicator (e-line) in accordance with the procedures referenced in the Benchmark Field Operating Procedure for Groundwater Level Measurement and decontaminate the e-line probe and a lower portion of cable following the procedures referenced in the Benchmark Field Operating Procedure for Non-disposable and Non-dedicated Sampling Equipment Decontamination. Store the e-line in a protected area until use. This may include wrapping the e-line in clean plastic until the time of use.
5. Inspect the well/piezometer for signs of vandalism or damage and record condition on the Groundwater Field Form (sample attached). Specifically, inspect the integrity of the following: concrete surface seal, lock, protective casing and well cover, well casing and J-plug/cap. Report any irregular findings to the Project Manager.
6. Unlock and remove the well protective cap or cover and place on clean plastic to avoid introducing foreign material into the well.
7. Calibrate the photoionization detector (PID) in accordance with the Benchmark Field Operating Procedure for Calibration and Maintenance of Portable Photoionization Detector.
8. Monitor the well for organic vapors using a PID, as per the Work Plan. If a reading of greater than 5 ppm is recorded, the well should be allowed to vent until levels drop below 5 ppm before proceeding with purging. Record PID measurements on a well-specific Groundwater Field Form (sample attached).

FOP 024.1

GROUNDWATER SAMPLE COLLECTION PROCEDURES

9. Lower the e-line probe slowly into the monitoring well and record the measurement on a well-specific Groundwater Field Form (sample attached).
10. Groundwater samples will be collected directly from the sampling valve on the flow through cell (low-flow), discharge port of a standard pump assembly (peristaltic, pneumatic, submersible, or Waterra™ pump) or bailer (stainless steel, PVC or polyethylene) into appropriate laboratory provided containers. In low-yielding wells at which the flow through cell is not used, the samples may be collected using a disposable bailer.
11. If disposable polyethylene bailers are used, the bailer should be lowered *slowly* below the surface of the water to minimize agitation and volatilization. For wells that are known to produce turbid samples (values greater than 50 NTU), the bailer should be lowered and retrieved at a rate that limits surging of the well.
12. Sampling data will be recorded on a Groundwater Field Form (sample attached).
13. Pre-label all sample bottles in the field using a waterproof permanent marker in accordance with the Benchmark Sample Labeling, Storage, and Shipment FOP. The following information, at a minimum, should be included on the label:
 - Project Number;
 - Sample identification code (as per project specifications);
 - Date of sample collection (mm, dd, yy);
 - Time of sample collection (military time only) (hh:mm);
 - Specify “grab” or “composite” sample type;
 - Sampler initials;
 - Preservative(s) (if applicable); and
 - Analytes for analysis (if practicable).
14. Collect a separate sample of approximately 200 ml into an appropriate container prior to collecting the first and following the last groundwater sample collected to measure the following field parameters:

Parameter	Units
Dissolved Oxygen	parts per million (ppm)

FOP 024.1

GROUNDWATER SAMPLE COLLECTION PROCEDURES

Specific Conductance	$\mu\text{mhos/cm}$ or μS or mS
pH	pH units
Temperature	$^{\circ}\text{C}$ or $^{\circ}\text{F}$
Turbidity	NTU
Eh (<i>optional</i>)	mV
PID VOCs (<i>optional</i>)	ppm

Record all field measurements on a Groundwater Field Form (sample attached).

15. Collect samples into pre-cleaned bottles provided by the analytical laboratory with the appropriate preservative(s) added based on the volatilization sensitivity or suite of analytical parameters required, as designated in the **Sample Collection Order** section below.
16. Lower the e-line probe slowly into the monitoring well and record the measurement on a well-specific Groundwater Field Form (sample attached).
17. The samples will be labeled, stored, and shipped in accordance with the Benchmark Field Operating Procedure for Sample Labeling, Storage, and Shipment Procedures.

Domestic Supply Wells

1. Calculate or estimate the volume of water in the well. It is desirable to purge at least one casing volume before sampling. This is controlled, to some extent, by the depth of the well, well yield and the rate of the existing pump. If the volume of water in the well cannot be calculated, the well should be purged continuously for no less than 15 minutes.
2. Connect a sampling tap to an accessible fitting between the well and the pressure tank where practicable. A hose will be connected to the device and the hose discharge located 25 to 50 feet away. The well will be allowed to pump until the lines and one well volume is removed. Flow rate will be measured with a container of known volume and a stopwatch.

FOP 024.1

GROUNDWATER SAMPLE COLLECTION PROCEDURES

3. Place a clean piece of polyethylene or Teflon™ tubing on the sampling port and collect the samples in the order designated below and in the sample containers supplied by the laboratory for the specified analytes. **DO NOT** use standard garden hose to collect samples.
4. Sampling results and measurements will be recorded on a Groundwater Field Form (sample attached) as described in the previous section.
5. Collect samples into pre-cleaned bottles provided by the analytical laboratory with the appropriate preservative(s) added based on the volatilization sensitivity or suite of analytical parameters required, as designated in the **Sample Collection Order** section below.
6. The samples will be labeled, stored, and shipped in accordance with the Benchmark Field Operating Procedure for Sample Labeling, Storage, and Shipment Procedures.

SAMPLE COLLECTION ORDER

All groundwater samples, from monitoring wells and domestic supply wells, will be collected in accordance with the following.

1. Samples will be collected preferentially in recognition of volatilization sensitivity. The preferred order of sampling if no free product is present is:
 - Field parameters
 - Volatile Organic Compounds (VOCs)
 - Purgeable organic carbons (POC)
 - Purgeable organic halogens (POH)
 - Total Organic Halogens (TOX)
 - Total Organic Carbon (TOC)
 - Extractable Organic Compounds (i.e., BNAs, SVOCs, etc.)
 - Total petroleum hydrocarbons (TPH) and oil and grease
 - PCBs and pesticides
 - Total metals (Dissolved Metals)
 - Total Phenolic Compounds

FOP 024.1

GROUNDWATER SAMPLE COLLECTION PROCEDURES

- Cyanide
 - Sulfate and Chloride
 - Turbidity
 - Nitrate (as Nitrogen) and Ammonia
 - Preserved inorganics
 - Radionuclides
 - Unpreserved inorganics
 - Bacteria
 - Field parameters
2. Document the sampling procedures and related information in the Project Field Book and on a Groundwater Field Form (sample attached).

DOCUMENTATION

The three words used to ensure adequate documentation for groundwater sampling are accountability, controllability, and traceability. Accountability is undertaken in the sampling plan and answers the questions who, what, where, when, and why to assure that the sampling effort meets its goals. Controllability refers to checks (including QA/QC) used to ensure that the procedures used are those specified in the sampling plan. Traceability is documentation of what was done, when it was done, how it was done, and by whom it was done, and is found in the field forms, Project Field Book, and chain-of-custody forms. At a minimum, adequate documentation of the sampling conducted in the field consists of an entry in the Project Field Book (with sewn binding), field data sheets for each well, and a chain-of-custody form.

As a general rule, if one is not sure whether the information is necessary, it should nevertheless be recorded, as it is impossible to over-document one's fieldwork. Years may go by before the documentation comes under close scrutiny, so the documentation must be

FOP 024.1

GROUNDWATER SAMPLE COLLECTION PROCEDURES

capable of defending the sampling effort without the assistance or translation of the sampling crew.

The minimum information to be recorded daily with an indelible pen in the Project Field Book and/or field data sheets includes date and time(s), name of the facility, name(s) of the sampling crew, site conditions, the wells sampled, a description of how the sample shipment was handled, and a QA/QC summary. After the last entry for the day in the Project Field Book, the Field Team Leader should sign the bottom of the page under the last entry and then draw a line across the page directly under the signature.

PRECAUTIONS/RECOMMENDATIONS

The following precautions should be adhered to prior to and during sample collection activities:

- Field vehicles should be parked downwind (to avoid potential sample contamination concerns) at a minimum of 15 feet from the well and the engine turned off prior to PID vapor analysis and VOC sample collection.
- Ambient odors, vehicle exhaust, precipitation, or windy/dusty conditions can potentially interfere with obtaining representative samples. These conditions should be minimized and should be recorded in the field notes. Shield sample bottles from strong winds, rain, and dust when being filled.
- The outlet from the sampling device should discharge below the top of the sample's air/water interface, when possible. The sampling plan should specify how the samples will be transferred from the sample collection device to the sample container to minimize sample alterations.

FOP 024.1

GROUNDWATER SAMPLE COLLECTION PROCEDURES

- The order of sampling should be from the least contaminated to the most contaminated well to reduce the potential for cross contamination of sampling equipment (see the Sampling Plan or Work Plan).
- Samples should not be transferred from one sampling container to another.
- Sampling equipment must not be placed on the ground, because the ground may be contaminated and soil contains trace metals. Equipment and supplies should be removed from the field vehicle only when needed.
- Smoking and eating should not be allowed until the well is sampled and hands are washed with soap and water, due to safety and possibly sample contamination concerns. These activities should be conducted beyond a 15-foot radius of the well.
- No heat-producing or electrical instruments should be within 15 feet of the well, unless they are intrinsically safe, prior to PID vapor analysis.
- Minimize the amount of time that the sample containers remain open.
- Do not touch the inside of sample bottles or the groundwater sample as it enters the bottle. Disposable gloves may be a source of phthalates, which could be introduced into groundwater samples if the gloves contact the sample.
- Sampling personnel should use a new pair of disposable gloves for each well sampled to reduce the potential for exposure of the sampling personnel to contaminants and to reduce sample cross contamination. In addition, sampling personnel should change disposable gloves between purging and sampling operations at the same well.
- Sampling personnel should not use perfume, insect repellent, hand lotion, etc., when taking groundwater samples. If insect repellent must be used, then sampling personnel should not allow samples or sampling equipment to contact the repellent, and it should be noted in the documentation that insect repellent was used.

FOP 024.1

GROUNDWATER SAMPLE COLLECTION PROCEDURES

- Complete the documentation of the well. A completed assemblage of paperwork for a sampling event includes the completed field forms, entries in the Project Field Book (with a sewn binding), transportation documentation (if required), and possibly chain-of-custody forms.

ATTACHMENTS

Groundwater Field Form (sample)

REFERENCES

1. Wilson, Neal. *Soil Water and Ground Water Sampling*, 1995

Benchmark FOPs:

- 007 *Calibration and Maintenance of Portable Dissolved Oxygen Meter*
- 008 *Calibration and Maintenance of Portable Field pH/Eh Meter*
- 009 *Calibration and Maintenance of Portable Field Turbidity Meter*
- 011 *Calibration and Maintenance of Portable Photoionization Detector*
- 012 *Calibration and Maintenance of Portable Specific Conductance Meter*
- 022 *Groundwater Level Measurement*
- 023 *Groundwater Purging Procedures Prior to Sample Collection (optional)*
- 031 *Low Flow (Minimal Drawdown) Groundwater Purging & Sampling Procedures (optional)*
- 040 *Non-Disposable and Non-Dedicated Sampling Equipment Decontamination*
- 046 *Sample Labeling, Storage and Shipment Procedures*

FOP 024.1

GROUNDWATER SAMPLE COLLECTION PROCEDURES



GROUNDWATER FIELD FORM

Project Name: _____ Date: _____
 Location: _____ Project No.: _____ Field Team: _____

Well No.			Diameter (inches):			Sample Time:			
Product Depth (fbTOR):			Water Column (ft):			DTW when sampled:			
DTW (static) (fbTOR):			Casing Volume:			Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample			
Total Depth (fbTOR):			Purge Volume (gal):			Purge Method:			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
0	Initial								
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
Sample Information:			Date: (if different from above)						
S1									
S2									

Well No.			Diameter (inches):			Sample Time:			
Product Depth (fbTOR):			Water Column (ft):			DTW when sampled:			
DTW (static) (fbTOR):			Casing Volume:			Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample			
Total Depth (fbTOR):			Purge Volume (gal):			Purge Method:			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
0	Initial								
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
Sample Information:			Date: (if different from above)						
S1									
S2									

REMARKS: _____

Note: All water level measurements are in feet, distance from top of riser.

Volume Calculation		Stabilization Criteria	
Diam.	Vol. (g/ft)	Parameter	Criteria
1"	0.041	pH	± 0.1 unit
2"	0.163	SC	± 3%
4"	0.653	Turbidity	± 10%
6"	1.469	DO	± 0.3 mg/L
		ORP	± 10 mV

PREPARED BY: _____



FIELD OPERATING PROCEDURES

Hollow Stem Auger
Drilling Procedures

FOP 026.1

HOLLOW STEM AUGER (HSA) DRILLING PROCEDURES

PURPOSE

This guideline presents a method for drilling a borehole through unconsolidated materials, including soils or overburden, and consolidated materials, including bedrock.

PROCEDURE

The following procedure will be used to drill a borehole for sampling and/or well installation, using hollow-stem auger methods and equipment.

1. Follow Benchmark's Field Operating Procedure for Drill Site Selection Procedure prior to implementing any drilling activity.
2. Perform drill rig safety checks with the driller by completing the Drilling Safety Checklist form (sample attached).
3. Conduct tailgate health and safety meeting with project team and drillers by completing the Tailgate Safety Meeting Form.
4. Calibrate air-monitoring equipment in accordance with the appropriate Benchmark's Field Operating Procedures (i.e., PID, FID, combustible gas meter) or manufacturer's recommendations for calibration of field meters (i.e., DataRAM 4 Particulate Meter).
5. Ensure all drilling equipment (i.e., augers, rods, split-spoons) appear clean and free of soil prior to initiating any subsurface intrusion. Decontamination of drilling equipment should be in accordance with Benchmark's FOP: Drilling and Excavation Equipment Decontamination Procedures.
6. Mobilize the auger rig to the site and position over the borehole.
7. Level and stabilize the rig using the rig jacks, and recheck the rig location against the planned drilling location. If necessary, raise the jacks and adjust the rig position.

FOP 026.1

HOLLOW STEM AUGER (HSA) DRILLING PROCEDURES

8. Place a metal or plywood auger pan over the borehole location to collect the auger cuttings. This auger pan will be equipped with a 12-inch nominal diameter hole for auger passage. As an alternative, a piece of polyethylene tarp may be used as a substitute.
9. Advance augers into the subsurface. For sampling or pilot-hole drilling, nominal 8-inch outside diameter (OD) augers should be used. The boring diameter will be approved by the Benchmark field supervisor.
10. Collect soil samples via split spoon sampler in accordance with Benchmark's Field Operating Procedure for Split Spoon Sampling.
11. Check augers periodically during drilling to ensure the boring is plumb. Adjust rig position as necessary to maintain plumb.
12. Continue drilling until reaching the assigned total depth, or until auger refusal occurs. Auger refusal is when the drilling penetration drops below 0.1 feet per 10 minutes, with the full weight of the rig on the auger bit, and a center bit (not center plug) in place.
13. Plug and abandon boreholes not used for well installation in accordance with Benchmark's Field Operating Procedure for Abandonment of Borehole.

OTHER PROCEDURAL ISSUES

- Slip rings may be used for lifting a sampling or bit string. The string will not be permitted to extend more than 15 feet above the mast crown.
- Borings will not be over drilled (rat holed) without the express permission of the Benchmark field supervisor. All depth measurements should be accurate to the nearest 0.1 foot, to the extent practicable.
- Potable water may be placed in the auger stem if critically necessary for borehole control or to accomplish sampling objectives and must be approved by the Benchmark Project Manager and/or NYSDEC Project Manager. Upon approval,

FOP 026.1

HOLLOW STEM AUGER (HSA) DRILLING PROCEDURES

the potable water source and quantity used will be documented in the Project Field Book and subsequent report submittal.

ATTACHMENTS

Drilling Safety Checklist (sample)
Tailgate Safety Meeting Form (sample)

REFERENCES

Benchmark FOPs:

- 001 *Abandonment of Borehole Procedures*
- 010 *Calibration and Maintenance of Portable Flame Ionization Detector*
- 011 *Calibration and Maintenance of Portable Photoionization Detector*
- 017 *Drill Site Selection Procedure*
- 018 *Drilling and Excavation Equipment Decontamination Procedures*
- 058 *Split Spoon Sampling Procedures*

FOP 026.1

HOLLOW STEM AUGER (HSA) DRILLING PROCEDURES



DRILLING SAFETY CHECKLIST

Project: Supplemental Phase II RFI/ICMs	Date:
Project No.: 0041-009-500	Drilling Company:
Client: RealCo., Inc.	Drill Rig Type:

ITEMS TO CHECK	OK	ACTION NEEDED
"Kill switches" installed by the manufacturer are in operable condition and all workers at the drill site are familiar with their location and how to activate them?		
"Kill switches" are accessible to workers on both sides of the rotating stem? NOTE: Optional based on location and number of switches provided by the manufacturer.		
Cables on drill rig are free of kinks, frayed wires, "bird cages" and worn or missing sections?		
Cables are terminated at the working end with a proper eye splice, either swaged Coupling or using cable clamps?		
Cable clamps are installed with the saddle on the live or load side? Clamps should not be alternated and should be of the correct size and number for the cable size to which it is installed. Clamps are complete with no missing parts?		
Hooks installed on hoist cables are the safety type with a functional latch to prevent accidental separation?		
Safety latches are functional and completely span the entire throat of the hook and have positive action to close the throat except when manually displaced for connecting or disconnecting a load?		
Drive shafts, belts, chain drives and universal joints shall be guarded to prevent accidental insertion of hands and fingers or tools.		
Outriggers shall be extended prior to and whenever the boom is raised off its cradle. Hydraulic outriggers must maintain pressure to continuously support and stabilize the drill rig even while unattended.		
Outriggers shall be properly supported on the ground surface to prevent settling into the soil.		
Controls are properly labeled and have freedom of movement. Controls should not be blocked or locked in an action position.		
Safeties on any device shall not be bypassed or neutralized.		
Controls shall be operated smoothly and cables and lifting devices shall not be jerked or operated erratically to overcome resistance.		
Slings, chokers and lifting devices are inspected before using and are in proper working order? Damaged units are removed from service and are properly tagged?		
Shackles and clevises are in proper working order and pins and screws are fully inserted before placing under a load?		
High-pressure hoses have a safety (chain, cable or strap) at each end of the hose section to prevent whipping in the event of a failure?		
Rotating parts of the drill string shall be free of sharp projections or hooks, which could entrap clothing or foreign objects?		
Wire ropes should not be allowed to bend around sharp edges without cushion material.		
The exclusion zone is centered over the borehole and the radius is equal or greater than the boom height?		

ITEMS TO CHECK	OK	ACTION NEEDED
----------------	----	---------------



FOP 026.1

HOLLOW STEM AUGER (HSA) DRILLING PROCEDURES



DRILLING SAFETY CHECKLIST

Project: **Supplemental Phase II RFI/ICMs** Date: _____
 Project No.: **0041-009-500** Drilling Company: _____
 Client: **RealCo., Inc.** Drill Rig Type: _____

ITEMS TO CHECK	OK	ACTION NEEDED
The work area around the borehole shall be kept clear of trip hazards and walking surfaces should be free of slippery material.		
Workers shall not proceed higher than the drilling deck without a fall restraining device and must attach the device in a manner to restrict fall to less than 6 feet.		
A fire extinguisher of appropriate size shall be immediately available to the drill crew. The drill crew shall have received annual training on proper use of the fire extinguisher.		
29 CFR 1910.333 © (3) Except where electrical distribution and transmission lines have been de-energized and visibly grounded, drill rigs will be operated proximate to, under, by, or near power lines only in accordance with the following: .333 © (3) (ii) 50 kV or less - minimum clearance is 10 ft. For 50 kV or over - 10ft. Plus ½ in. For each additional kV Benchmark Policy: Maintain 20 feet clearance		
29 CFR 1910.333 © (3) (iii) While the rig is in transit with the boom in the down position, clearance from energized power lines will be maintained as follows: Less than 50 kV - 4 feet 50 to 365 kV - 10 feet 365 to 720 kV - 16 feet		

Name: _____ (printed)
 Signed: _____ Date: _____

FOP 026.1

HOLLOW STEM AUGER (HSA) DRILLING PROCEDURES



TAILGATE SAFETY MEETING FORM

Project Name: _____ Date: _____ Time: _____
Project Number: _____ Client: _____
Work Activities: _____

HOSPITAL INFORMATION:

Name: _____
Address: _____ City: _____ State: _____ Zip: _____
Phone No.: _____ Ambulance Phone No. _____

SAFETY TOPICS PRESENTED:

Chemical Hazards: _____
Physical Hazards: Slips, Trips, Falls

PERSONAL PROTECTIVE EQUIPMENT:

Table with 5 columns: Activity, PPE Level, A, B, C, D. Contains 5 rows of activity and PPE level information.

New Equipment: _____

Other Safety Topic (s): Environmental Hazards (aggressive fauna)
Eating, drinking, use of tobacco products is prohibited in the Exclusion Zone (EZ)

ATTENDEES

Table with 2 columns: Name Printed, Signatures. Contains 8 rows for attendee information.

Meeting conducted by: _____



FIELD OPERATING PROCEDURES

Low-Flow (Minimal
Drawdown)
Groundwater Purging
& Sampling Procedure

FOP 031.2

LOW FLOW (MINIMAL DRAWDOWN) GROUNDWATER PURGING & SAMPLING PROCEDURES

PURPOSE

This procedure describes the methods used for performing low flow (minimal drawdown) purging, also referred to as micro-purging, at a well prior to groundwater sampling to obtain a representative sample from the water-bearing zone. This method of purging is used to minimize the turbidity of the produced water. This may increase the representativeness of the groundwater samples by avoiding the necessity of filtering suspended solids in the field prior to preservation of the sample.

Well purging is typically performed immediately preceding groundwater sampling. The sample should be collected as soon as the parameters measured in the field (i.e., pH, specific conductance, dissolved oxygen, Eh, temperature, and turbidity) have stabilized.

PROCEDURE

Allow approximately 3 to 10 days following well development for groundwater to return to static conditions before performing low-flow purge and sample activities at any well location. Conversely, perform low-flow sampling as soon as purged groundwater has stabilized. If the well does not yield sufficient volume (i.e., cannot maintain a constant water level during purging) for low-flow purge and sampling, then an alternative method must be performed in accordance with Benchmark's Groundwater Purging Procedures Prior to Sample Collection FOP.

1. Water samples should not be taken immediately following well development. Sufficient time should be allowed to stabilize the groundwater flow regime in

FOP 031.2

LOW FLOW (MINIMAL DRAWDOWN) GROUNDWATER PURGING & SAMPLING PROCEDURES

the vicinity of the monitoring well. This lag time will depend on site conditions and methods of installation but may exceed one week.

2. Prepare the electronic water level indicator (e-line) in accordance with the procedures referenced in the Benchmark's Groundwater Level Measurement FOP and decontaminate the e-line probe and a lower portion of cable following the procedures referenced in the Benchmark's Non-disposable and Non-dedicated Sampling Equipment Decontamination FOP. Store the e-line in a protected area until use. This may include wrapping the e-line in clean plastic until the time of use.
3. Calibrate all sampling devices and monitoring equipment in accordance with manufacturer's recommendations, the site Quality Assurance Project Plan (QAPP) and/or Field Sampling Plan (FSP). Calibration of field instrumentation should be followed as specified in Benchmark's Calibration and Maintenance FOP for each individual meter.
4. Inspect the well/piezometer for signs of vandalism or damage and record condition on the Groundwater Field Form (sample attached). Specifically, inspect the integrity of the following: concrete surface seal, lock, protective casing and well cover, well casing and J-plug/cap. Report any irregular findings to the Project Manager.
5. Unlock and remove the well protective cap or cover and place on clean plastic to avoid introducing foreign material into the well.
6. Monitor the well for organic vapors using a PID, as per the Work Plan. If a reading of greater than 5 ppm is recorded, the well should be allowed to vent until levels drop below 5 ppm before proceeding with purging.
7. Lower the e-line probe slowly into the monitoring well and record the initial water level in accordance with the procedures referenced in Benchmark's Groundwater Level Measurement FOP. Refer to the construction diagram for the well to identify the screened depth.

FOP 031.2

LOW FLOW (MINIMAL DRAWDOWN) GROUNDWATER PURGING & SAMPLING PROCEDURES

8. Decontaminate all non-dedicated pump and tubing equipment following the procedures referenced in the Benchmark's Non-disposable and Non-dedicated Sampling Equipment Decontamination FOP.
9. Lower the purge pump or tubing (i.e., low-flow electrical submersible, peristaltic, etc.) slowly into the well until the pump/tubing intake is approximately in the middle of the screened interval. Rapid insertion of the pump will increase the turbidity of well water, and can increase the required purge time. This step can be eliminated if dedicated tubing is already within the well.

Placement of the pump close to the bottom of the well will cause increased entrainment of solids, which may have settled in the well over time. Low-flow purging has the advantage of minimizing mixing between the overlying stagnant casing water and water within the screened interval. The objective of low-flow purging is to maintain a purging rate, which minimizes stress (drawdown) of the water level in the well. Low-flow refers to the velocity with which water enters the pump intake and that is imparted to the formation pore water in the immediate vicinity of the well screen.

10. Lower the e-line back down the well as water levels will be frequently monitored during purge and sample activities.
11. Begin pumping to purge the well. The pumping rate should be between 100 and 500 milliliters (ml) per minute (0.03 to 0.13 gallons per minute) depending on site hydrogeology. Periodically check the well water level with the e-line adjusting the flow rate as necessary to stabilize drawdown within the well. If possible, a steady flow rate should be maintained that results in a stabilized water level (drawdown of 0.3 feet or less). If the water level exceeds 2 feet below static and declining, slow the purge rate until the water level generally stabilizes. Record each pumping rate and water level during the event. If the water level continues to drop and will not stabilize, the monitoring location is not conducive to low-flow sampling and conventional purge and sample methods should be performed.

**LOW FLOW (MINIMAL DRAWDOWN) GROUNDWATER
PURGING & SAMPLING PROCEDURES**

The low flow rate determined during purging will be maintained during the collection of analytical samples. At some sites where geologic heterogeneities are sufficiently different within the screened interval, high conductivity zones may be preferentially sampled.

12. Measure and record field parameters (pH, specific conductance, Eh, dissolved oxygen (DO), temperature, and turbidity) during purging activities. In lieu of measuring all of the parameters, a minimum subset could be limited to pH, specific conductance, and turbidity or DO. A reduction in the field parameter list must be approved by the Project Manager and/or the NYSDEC Project Manager.

Water quality indicator parameters should be used to determine purging needs prior to sample collection in each well. Stabilization of indicator parameters should be used to determine when formation water is first encountered during purging. In general, the order of stabilization is pH, temperature, and specific conductance, followed by Eh, DO and turbidity. Performance criteria for determination of stabilization should be based on water-level drawdown, pumping rate and equipment specifications for measuring indicator parameters. An in-line flow through cell to continuously measure the above parameters may be used. The in-line device should be disconnected or bypassed during sample collection.

13. Purging will continue until parameters of water quality have stabilized. Record measurements for field indicator parameters (including water levels) at regular intervals during purging. The stability of these parameters with time can be used to guide the decision to discontinue purging. Proper adjustments must be made to stabilize the flow rate as soon as possible.
14. Record well purging and sampling data in the Project Field Book or on the Groundwater Field Form (sample attached). Measurements should be taken approximately every three to five minutes, or as merited given the rapidity of change.

FOP 031.2

LOW FLOW (MINIMAL DRAWDOWN) GROUNDWATER PURGING & SAMPLING PROCEDURES

15. Purging is complete when field indicator parameters stabilize. Stabilization is achieved after all field parameters have stabilized for three successive readings. Three successive readings should be within ± 0.1 units for pH, $\pm 3\%$ for specific conductance, ± 10 mV for Eh, and $\pm 10\%$ for turbidity and dissolved oxygen. These stabilization guidelines are provided for rough estimates only, actual site-specific knowledge may be used to adjust these requirements higher or lower.

An in-line water quality measurement device (e.g., flow-through cell) should be used to establish the stabilization time for several field parameters on a well-specific basis. Data on pumping rate, drawdown, and volume required for parameter stabilization can be used as a guide for conducting subsequent sampling activities.

16. Collect all project-required samples from the discharge tubing at the flow rate established during purging in accordance with Benchmark's Groundwater Sample Collection Procedures FOP. **A peristaltic pump and dedicated tubing cannot be used to collect VOC or SVOC project-required samples; only non-organic compounds may be collected using this type of pump.** Continue to maintain a constant flow rate such that the water level is not drawn down as described above. Fill sample containers with minimal turbulence by allowing the ground water to flow from the tubing along the inside walls of the container.
17. If field filtration is recommended as a result of increased turbidity greater than 50 NTU, an in-line filter equipped with a 0.45-micron filter should be utilized. Collection of a filtered sample must be accompanied by an unfiltered sample.
18. Replace the dedicated tubing down the well taking care to avoid contact with the ground surface.
19. Restore the well to its capped/covered and locked condition.
20. Upon purge and sample collection completion, slowly lower the e-line to the bottom of the well/piezometer. Record the total depth to the nearest 0.01-

FOP 031.2

LOW FLOW (MINIMAL DRAWDOWN) GROUNDWATER PURGING & SAMPLING PROCEDURES

foot and compare to the previous total depth measurement. If a significant discrepancy exists, re-measure the total depth. Record observations of purge water to determine whether the well/piezometer had become silted due to inactivity or damaged (i.e., well sand within purge water). Upon confirmation of the new total depth and determination of the cause (i.e., siltation or damage), notify the Project Manager following project field activities.

ATTACHMENTS

Groundwater Field Form (sample)

REFERENCES

United States Environmental Protection Agency, 540/S-95/504, 1995. *Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures*.

Benchmark FOPs:

- 007 *Calibration and Maintenance of Portable Dissolved Oxygen Meter*
- 008 *Calibration and Maintenance of Portable Field pH/Eh Meter*
- 009 *Calibration and Maintenance of Portable Field Turbidity Meter*
- 011 *Calibration and Maintenance of Portable Photoionization Detector*
- 012 *Calibration and Maintenance of Portable Specific Conductance Meter*
- 022 *Groundwater Level Measurement*
- 024 *Groundwater Sample Collection Procedures*
- 040 *Non-Disposable and Non-Dedicated Sampling Equipment Decontamination*
- 046 *Sample Labeling, Storage and Shipment Procedures*

FOP 031.2

LOW FLOW (MINIMAL DRAWDOWN) GROUNDWATER PURGING & SAMPLING PROCEDURES



GROUNDWATER FIELD FORM

Project Name: _____ Date: _____
 Location: _____ Project No.: _____ Field Team: _____

Well No.			Diameter (inches):			Sample Time:			
Product Depth (fbTOR):			Water Column (ft):			DTW when sampled:			
DTW (static) (fbTOR):			Casing Volume:			Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample			
Total Depth (fbTOR):			Purge Volume (gal):			Purge Method:			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
0	Initial								
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
Sample Information:			Date: (if different from above)						
S1									
S2									

Well No.			Diameter (inches):			Sample Time:			
Product Depth (fbTOR):			Water Column (ft):			DTW when sampled:			
DTW (static) (fbTOR):			Casing Volume:			Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample			
Total Depth (fbTOR):			Purge Volume (gal):			Purge Method:			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
0	Initial								
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
Sample Information:			Date: (if different from above)						
S1									
S2									

REMARKS: _____

Note: All water level measurements are in feet, distance from top of riser.

Volume Calculation		Stabilization Criteria	
Diam.	Vol. (g/ft)	Parameter	Criteria
1"	0.041	pH	± 0.1 unit
2"	0.163	SC	± 3%
4"	0.653	Turbidity	± 10%
6"	1.469	DO	± 0.3 mg/L
		ORP	± 10 mV

PREPARED BY: _____



FIELD OPERATING PROCEDURES

Management of
Investigative-Derived
Waste (IDW)

FOP 032.1

MANAGEMENT OF INVESTIGATION-DERIVED WASTE (IDW)

PURPOSE

The purpose of these guidelines is to ensure the proper holding, storage, transportation, and disposal of materials generated from field investigation activities that may contain hazardous wastes. Investigation-derived waste (IDW) includes the following:

- Drill cuttings, discarded soil samples, drilling mud solids, and used sample containers.
- Well development and purge waters and discarded groundwater samples.
- Decontamination waters and associated solids.
- Soiled disposable personal protective equipment (PPE).
- Used disposable sampling equipment.
- Used plastic sheeting and aluminum foil.
- Other equipment or materials that either contain or have been in contact with potentially impacted environmental media.

Because these materials may contain regulated chemical constituents, they must be managed as a solid waste. This management may be terminated if characterization analytical results indicate the absence of these constituents.

PROCEDURE

1. Contain all investigation-derived wastes in Department of Transportation (DOT)-approved 55-gallon drums, roll-off boxes, or other containers suitable for the wastes.

FOP 032.1

MANAGEMENT OF INVESTIGATION-DERIVED WASTE (IDW)

2. Contain wastes from separate borings or wells in separate containers (i.e. do not combine wastes from several borings/wells in a single container, unless it is a container used specifically for transfer purposes, or unless specific permission to do so has been provided by the Benchmark Field Team Leader. Unused samples from surface sample locations within a given area may be combined.
3. To the extent practicable, separate solids from drilling muds, decontamination waters, and similar liquids. Place solids within separate containers.
4. Transfer all waste containers to a staging area. Access to this area will be controlled. Waste containers must be transferred to the staging area as soon as practicable after the generating activity is complete.
5. Pending transfer, all containers will be covered and secured when not immediately attended.
6. Label all containers with regard to contents, origin, date of generation, using Benchmark's IDW container label (sample attached). Use indelible ink for all labeling.
7. Complete the Investigative Derived Waste Container Log (sample attached) as waste containers are labeled in order to track and inventory project waste. Leave a copy of the log with the site manager or fax copy to the owner/operator as necessary.
8. Collect samples for waste characterization purposes, or use boring/well sample analytical data for characterization.
9. For wastes determined to be hazardous in character, **be aware of accumulation time limitations**. Coordinate the disposal of these wastes with the plant manager/owner/operator, if applicable.
10. Upon Property Owner, Project Manager, and/or NYSDEC Project Manager approval, dispose of investigation-derived wastes as follows:

FOP 032.1

MANAGEMENT OF INVESTIGATION-DERIVED WASTE (IDW)

- Soil, water, and other environmental media for which analysis does not detect organic constituents, and for which inorganic constituents are at levels that meet the Site's cleanup objectives, may be spread on the Property or otherwise treated as a non-waste material. Disposal quantity and on-site location will be documented on Project Field Books and in the project report submittal.
- Soil, water, and other environmental media in which organic compounds are detected or metals are present above the Site's cleanup objectives will be disposed off-site in accordance with applicable state and federal regulations. Disposal quantity and off-site location will be documented on Project Field Books and in the project report submittal.
- Personal protective equipment, disposable bailers, and similar equipment may be disposed as municipal waste, unless waste characterization results mandate otherwise.

WASTE STORAGE MANAGEMENT

Hazardous materials generated on site should be temporarily stored in a secure location that is under the control of the owner/operator or does not allow for vandalism (i.e., within a locked building structure or within a locked fenced in area). A waste-staging area should be designated on-site by the Project Manager in conjunction with the owner/operator.

ATTACHMENTS

Investigation Derived Waste Container Log (sample)
Investigation Derived Waste Container Label (sample)


REFERENCES

None

FOP 032.1

MANAGEMENT OF INVESTIGATION-DERIVED WASTE (IDW)

IDW Container Label (sample):

 <p>BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC</p>
Project Name: _____
Project Number: _____
Container I.D.: _____
Contents/Matrix: _____
Estimated Quantity: _____
Date of Generation: _____
Date of Sample Collection: _____
Contact Name: _____
Contact Phone Number: _____

FIELD OPERATING PROCEDURES

Monitoring Well
Construction for
Hollow Stem Auger
Boreholes

FOP 033.0

MONITORING WELL CONSTRUCTION FOR HOLLOW STEM AUGER BOREHOLES

PURPOSE

Wells will be installed within selected boreholes for the purpose of evaluating groundwater characteristics. Well installation procedures depend upon the drilling method. This procedure describes well construction and installation for boreholes drilled using the hollow stem auger method. Refer to the Benchmark's Hollow Stem Auger Drilling Procedures FOP. Nominal dimensions and materials for the well are shown in the attached well construction diagram.

PROCEDURE

1. Advance borehole in accordance with the Benchmark's Hollow Stem Auger Drilling Procedure FOP to the required depth. The nominal inside diameter (ID) of the auger stem used should be at least 2 inches larger than the outside diameter (OD) of the riser and screen selected for the well installation. Record the monitoring well construction on the Field Borehole/Monitoring Well Installation Log (sample attached) (see Documentation Requirements for Drilling and Well Installation FOP).
2. Remove the drill rods and center bit/plug from the auger stem and verify borehole depth using weighted measuring tape.
3. In the event of an over drill (i.e. borehole depth is more than one foot greater than desired base of screen depth), use bentonite chips poured through the auger stem to seal the over drilled portion of the borehole. Be sure to note bentonite chip thickness on Field Borehole/Monitoring Well Installation Log.
4. Add a maximum of 6 inches of filter pack material through the auger stem to the base of the borehole. (Note: This step may be avoided if dense non-aqueous phase liquids are suspected to be present and it is desirable to have the screen and/or sump at the base of the borehole.)

FOP 033.0

MONITORING WELL CONSTRUCTION FOR HOLLOW STEM AUGER BOREHOLES

5. Measure the length of the well string (i.e. riser and screen), and lower the well string into the well assembly to the desired depth. All measurements during the well installation process will be accurate to 0.1 foot.
6. Surface pour filter pack material into the annulus between the well and the auger stem as the augers are gradually withdrawn from the borehole. Use a weighted tape to confirm that the level of sand is maintained within the augers at all times. Record material volumes used.
7. After filter pack materials are brought to the required level, surface pour bentonite chips or pellets into the annulus between the well and the auger stem to form the filter pack seal. If necessary to avoid bridging, delayed hydration (coated) pellets may be used. Record the volume of material used.
8. Allow the bentonite chips/pellets to adequately hydrate for approximately 30 to 45-minutes. Cap or cover the well top of riser.
9. Mix cement/bentonite grout to a smooth consistency using a centrifugal or reciprocating pump. Do not hand mix. All water used must be potable quality. Record the volume of water used.
10. Fill the remaining annulus between the well and the auger stem with grout by surface pouring or pumping, and begin withdrawal of the auger string. Periodically top the auger string off with additional grout. If groundwater is present within the annulus above the bentonite chip/pellet seal, cement/bentonite grout will be pressure tremie grouted from bottom to top in order to displace groundwater from the borehole.
11. When the auger string is withdrawn, center the upper portion of the well riser within the borehole, and place drums or barricades around the well for protection while the grout cures. Place and lock a security cap (i.e., J-plug) in the opening of the well riser.
12. Leave the well undisturbed for at least 24 hours to allow the grout to cure. If excessive grout fallback occurs, top off as necessary with bentonite chips or additional grout.

FOP 033.0

MONITORING WELL CONSTRUCTION FOR HOLLOW STEM AUGER BOREHOLES

13. Construct the surface completion as shown in the attached Typical Monitoring Well Detail (Figure 1). Select flush completions for all locations in active operational or high traffic areas, or in other areas where an above grade completion would be undesirable. Use aboveground completions in all other areas.
14. Place a dedicated lock on the well or protective casing, and keep well locked when not actively attended.
15. Permanently label the well with the appropriate well identifier as determined by the Project Manager or specified in the Work Plan.
16. Permanently mark a survey location on the north side at the top of the casing with a saw cut. Survey all wells for horizontal location and elevation, using a surveyor licensed by the State of New York. Coordinates and elevations will be provided in a coordinate system consistent with previous well surveys at the Site. Information obtained will include location (x and y) of the well, and elevation (z) of the ground surface, the pad, and the top of riser.
17. Develop the well as described in the Benchmark Field Operating Procedure for Monitoring Well Development.
18. Manage all waste materials generated during well installation and development as described in the Benchmark Field Operating Procedure for Management of Investigation Derived Waste.

ATTACHMENTS

Field Borehole/Monitoring Well Installation Log (sample)
Typical Monitoring Well Detail (Figure 1)

FOP 033.0

MONITORING WELL CONSTRUCTION FOR
HOLLOW STEM AUGER BOREHOLES

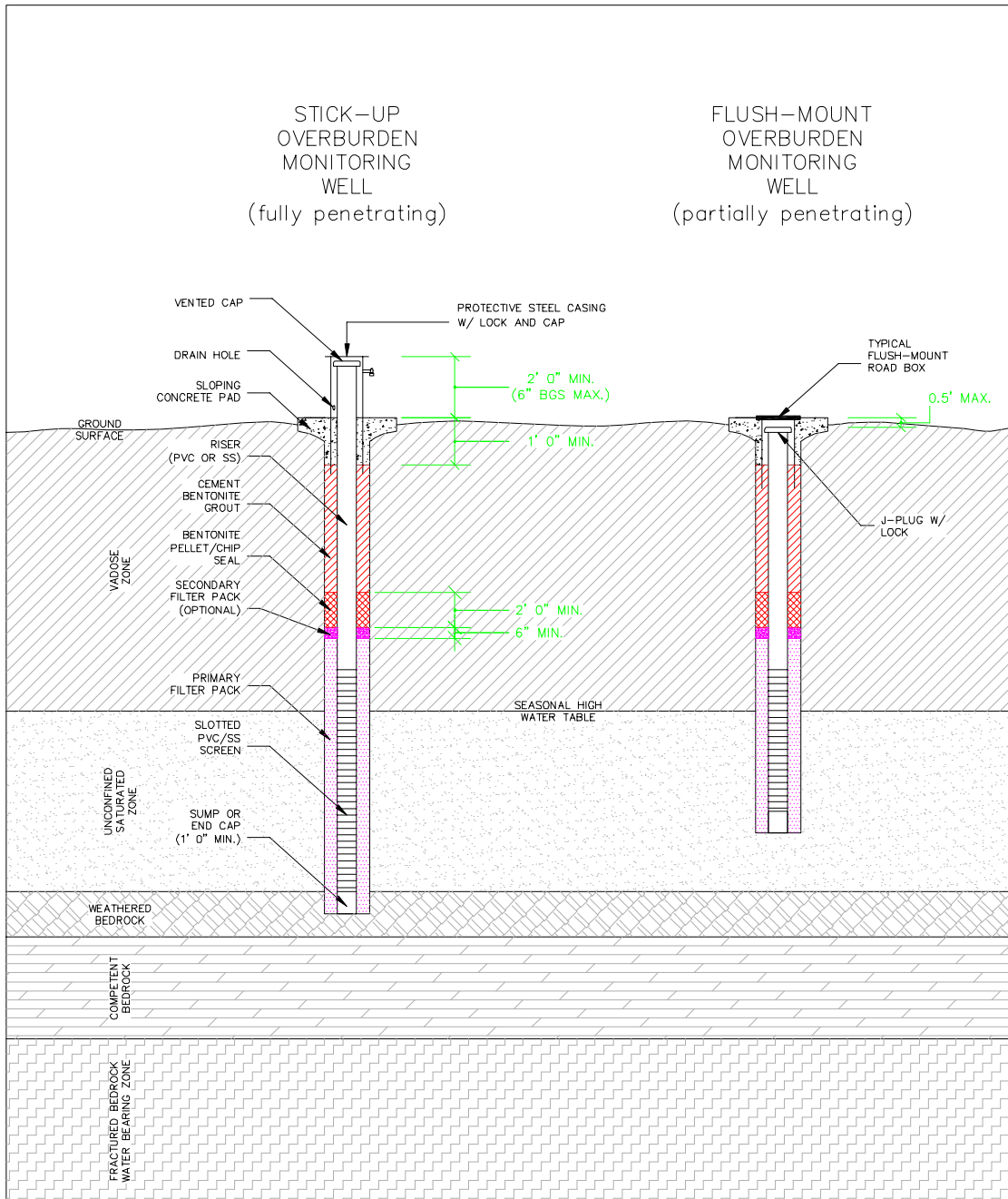
REFERENCES

Benchmark FOPs:

- 015 *Documentation Requirements for Drilling and Well Installation*
- 026 *Hollow Stem Auger Drilling Procedures*
- 032 *Management of Investigation Derived Waste*
- 036 *Monitoring Well Development Procedures*

MONITORING WELL CONSTRUCTION FOR
HOLLOW STEM AUGER BOREHOLES

FIGURE 1



FIELD OPERATING PROCEDURES

Monitoring Well
Development
Procedures

MONITORING WELL DEVELOPMENT PROCEDURES

PURPOSE

This procedure describes the methods for the development of newly installed monitoring wells and re-development of existing monitoring wells that have been inactive for an extended period of time (i.e., one year or more). Monitoring wells are developed after installation in order to remove introduced water and drilling fluids, reduce the turbidity of the water, and improve the hydraulic communication between the well and the water-bearing formation. Well development will not commence until the annular grout seal has cured, but will be performed within ten calendar days of well installation.

PROCEDURE

1. All well development will include surge blocking or false bailing with one or more of the following fluid removal methods. Well development activities may include:
 - Bailing
 - Air Lifting
 - Submersible Pumping
 - Other methods as approved by the Benchmark Field Team Leader.
 - The appropriate water removal method will be selected based on water level depth and anticipated well productivity.
2. Assemble and decontaminate equipment (if necessary), and place in the well. Reference the Benchmark Field Operating Procedure for Non-Disposable and Non-Dedicated Sampling Equipment Decontamination.
3. Alternate the use of agitation methods with water removal methods, using the former to suspend solids in the well water, and the latter to remove the turbid water. For example, use a vented surge block to agitate the well, moving up and down within the screened interval and then use a pump to clear the well. A bailer may be used for both purposes, by surging with the bailer (false

FOP 036.0

MONITORING WELL DEVELOPMENT PROCEDURES

- bailing) for a period within the screened interval, then bailing a volume of water from the well.
4. When using surging methods, initiate this activity gradually, with short (2 to 3 feet) strokes. After several passes across the screened interval, increase the speed and length of the surge strokes.
 5. Continue development until the following objectives are achieved:
 - Field parameters stabilize to the following criteria:
 - o Dissolved Oxygen: ± 0.3 mg/L
 - o Turbidity: $\pm 10\%$
 - o Specific Conductance: $\pm 3\%$
 - o ORP: ± 10 mV
 - o pH: ± 0.1 units
 - The well will generate non-turbid water during continued pumping typically less than 50 NTU.
 - A minimum of 10 well volumes has been evacuated from the well.
 - In the case of lost water during drilling activities, the volume of water removed exceeds twice the volume of water lost to the formation during the drilling process, as indicated by the water balance.
 6. Document the development methods, volumes, field parameter measurements, and other observations on the attached Benchmark Groundwater Well Development Log (sample attached).

ATTACHMENTS

Groundwater Well Development Log (sample)

REFERENCES

Benchmark FOPs:

040 *Non-Disposable and Non-Dedicated Sampling Equipment Decontamination*

FOP 036.0

MONITORING WELL DEVELOPMENT PROCEDURES



GROUNDWATER WELL DEVELOPMENT LOG

Project Name: _____ WELL NUMBER: _____
 Project Number: _____ Sample Matrix: _____
 Client: _____ Weather: _____

WELL DATA:

DATE:	TIME:
Casing Diameter (inches):	Casing Material:
Screened interval (fbTOR):	Screen Material:
Static Water Level (fbTOR):	Bottom Depth (fbTOR):
Elevation Top of Well Riser (fmsl):	Datum Ground Surface: Mean Sea Level
Elevation Top of Screen (fmsl):	Stick-up (feet):

PURGING DATA:

DATE:	START TIME:	END TIME:
-------	-------------	-----------

VOLUME CALCULATION:

(A) Total Depth of Well (fbTOR):		Volume Calculation	Stabilization Criteria
(B) Casing Diameter (inches):			
(C) Static Water Level (fbTOR):		Well Diameter	Criteria
One Well Volume (V, gallons):		0.941	DO +/- 0.3 mg/L
$V = 0.0408 [(B)^2 \times (A) - (C)]$		3" 0.041	Turbidity +/- 10%
		6" 0.653	SC +/- 3%
		1.020	ORP +/- 10 mV
		1.469	pH +/- 0.1 unit
		2.611	

*Use the table to the right to calculate one well volume.

Field Personnel: _____

EVACUATION STABILIZATION DATA:

Time	Water Level (fbTOR)	Accumulated Volume (gallons)	Temperature (degrees C)	Conductance (S/cm)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor

REMARKS: _____

PREPARED BY: _____



FIELD OPERATING PROCEDURES

Non-Aqueous Phase
Liquid (NAPL)
Detection and Sample
Collection Procedure

FOP 039.1

NON-AQUEOUS PHASE LIQUID DETECTION AND SAMPLE COLLECTION PROCEDURE

PURPOSE

This procedure describes the methods to detect the presence and sample collection of Non-Aqueous Phase Liquid (NAPL) in groundwater monitoring wells prior to purging activities. If NAPL is suspected, all activities should be performed with proper personnel protective equipment (PPE).

DETECTION PROCEDURE

Groundwater monitoring wells suspected of containing NAPL will be sounded with an interface probe, or similar device, in accordance with the following.

1. Inspect the well/piezometer for signs of vandalism or damage and record condition on the Groundwater Field Form (sample attached). Specifically, inspect the integrity of the following: concrete surface seal, lock, protective casing and well cover, well casing and J-plug/cap. Report any irregular findings to the Project Manager.
2. Unlock and remove the well protective cap or cover and place on clean plastic to avoid introducing foreign material into the well.
3. Calibrate the photoionization detector (PID) in accordance with the Benchmark Field Operating Procedure for Calibration and Maintenance of Portable Photoionization Detector.
4. Monitor the well for organic vapors using a PID, as per the Work Plan. If a reading of greater than 5 ppm is recorded, the well should be allowed to vent until levels drop below 5 ppm before proceeding with purging. Record PID measurements on the Groundwater Field Form (sample attached).
5. Slowly lower the interface probe down the well, avoiding contact with the well casing. Upon contact with the static liquid level in the well, the interface

FOP 039.1

NON-AQUEOUS PHASE LIQUID DETECTION AND SAMPLE COLLECTION PROCEDURE

probe will signal contact with an audible tone and/or a visible light mounted inside the reel.

Note:

- If the signal is constant, the probe is in contact with groundwater; and
 - If the signal oscillates, the probe is in contact with NAPL.
6. Record the depth, type of liquid encountered (if applicable) and any other related information in the Project Field Book and on a Groundwater Field Form (sample attached).
 7. Slowly lower the interface probe to the well bottom. Record the depth(s) and type(s) of any additional phases encountered.
 8. Slowly raise the interface probe to the surface, avoiding contact with the well casing.
 9. Place the interface probe and storage reel in a plastic bag for subsequent decontamination in accordance with the Benchmark's Field Operating Procedure for Non-Disposable and Non-Dedicated Sampling Equipment Decontamination.

SAMPLE COLLECTION PROCEDURE

All NAPL samples collected from groundwater monitoring wells will be collected in accordance with the following.

1. Place plastic sheeting on the ground around the well to prevent equipment from coming in contact with soil and also to prevent the surface transmission of NAPL.

FOP 039.1

NON-AQUEOUS PHASE LIQUID DETECTION AND SAMPLE COLLECTION PROCEDURE

2. All sampling personnel will don the appropriate PPE in accordance with the site health and safety plan.
3. Measure the static water level and NAPL level(s) using an interface probe as described in the previous section.
4. Determine depth to NAPL layer and thickness. Record appropriate data in the Project Field Book and on a Groundwater Sample Collection Log form (sample attached).

DNAPL SAMPLE COLLECTION

The following procedure should be used in sampling dense, heavier than water NAPL (i.e., with a high specific gravity) (DNAPL).

1. Collect samples using a translucent double check valve bailer (i.e., a bailer with a ball valve on both the top and bottom) constructed of Teflon, polyethylene or PVC which is connected to polypropylene rope for lowering into the well. All non-dedicated equipment shall be decontaminated in accordance with the Benchmark Field Operating Procedure for Non-Disposable and Non-Dedicated Sampling Equipment Decontamination.
2. Remove wrapping (i.e., aluminum foil, manufacturers packaging etc.), attach bailer to new polypropylene rope and slowly lower the bailer until it contacts the well bottom.
3. Slowly raise and lower the bailer to create a gentle surging action thereby inducing DNAPL into the bailer past the bottom ball valve.
4. Slowly raise the bailer to the surface. Avoid contact of the bailer line with the well casing and/or ground surface.

FOP 039.1

NON-AQUEOUS PHASE LIQUID DETECTION AND SAMPLE COLLECTION PROCEDURE

5. Observe the DNAPL through the translucent wall of the bailer and check if the immiscible phases have separated. If not, allow the bailer to stand upright until the phases have separated.
6. Carefully attach a bottom-emptying device with stopcock to the bottom of the bailer and discharge the DNAPL gently down the side of the sample bottle to minimize turbulence.
7. Repeat steps 2 through 6 until a sufficient sample volume is obtained.
8. Cap the sample bottle and label, preserve and ship samples in accordance with the Benchmark Field Operating Procedure for Sample Labeling, Storage and Shipment Procedures.
9. Place the used plastic sheeting, bailer and polyethylene rope in a plastic bag for subsequent decontamination or disposal.
10. Document the sampling procedures and related information in the Project Field Book and on a Groundwater Sample Collection Log form (sample attached).

LNAPL SAMPLE COLLECTION

The following procedure should be used in sampling lighter than water NAPL (i.e., with a low specific gravity) (LNAPL).

1. Collect samples using a translucent double check valve bailer (i.e., a bailer with a ball valve on both the top and bottom) constructed of Teflon, polyethylene or PVC which is connected to polypropylene rope for lowering into the well. All non-dedicated equipment shall be decontaminated in accordance with the Benchmark Field Operating Procedure for Non-Disposable and Non-Dedicated Sampling Equipment Decontamination.

FOP 039.1

NON-AQUEOUS PHASE LIQUID DETECTION AND SAMPLE COLLECTION PROCEDURE

2. Remove wrapping (i.e., aluminum foil, manufacturers packaging etc.), attach bailer to new polypropylene rope and slowly lower the bailer down the well into the immiscible phase of LNAPL. Care should be taken to lower the bailer just through the LNAPL layer, but not significantly down into the underlying groundwater.
3. Slowly raise the bailer to the surface. Avoid contact of the bailer line with the well casing and/or ground surface.
4. Observe the LNAPL through the translucent wall of the bailer and check if the immiscible phases have separated. If not, allow the bailer to stand upright until the phases have separated.
5. Carefully attach a bottom-emptying device with stopcock to the bottom of the bailer and decant the denser groundwater portion of the bailer contents into a DOT-approved 55-gallon drum for proper disposal.
6. Discharge the LNAPL gently down the side of the sample bottle to minimize turbulence.
7. Repeat steps 2 through 6 until a sufficient sample volume is obtained.
8. Cap the sample bottle and label, preserve and ship samples in accordance with the Benchmark Field Operating Procedure for Sample Labeling, Storage and Shipment Procedures.
9. Place the used plastic sheeting, bailer and polyethylene rope in a plastic bag for subsequent decontamination or disposal.
10. Document the sampling procedures and related information in the Project Field Book and on a Groundwater Sample Collection Log form (sample attached).

ATTACHMENTS

FOP 039.1

NON-AQUEOUS PHASE LIQUID DETECTION
AND SAMPLE COLLECTION PROCEDURE

Groundwater Well Purge & Sample Collection Log (sample)

REFERENCES

Benchmark FOPs:

- 010 *Calibration and Maintenance of Portable Flame Ionization Detector*
- 011 *Calibration and Maintenance of Portable Photoionization Detector*
- 040 *Non-Disposable and Non-Dedicated Sampling Equipment Decontamination*
- 046 *Sample Labeling, Storage and Shipment Procedures*

FOP 039.1

NON-AQUEOUS PHASE LIQUID DETECTION
AND SAMPLE COLLECTION PROCEDURE



GROUNDWATER WELL
PURGE & SAMPLE COLLECTION LOG

Project Name: _____ WELL NUMBER: _____
 Project Number: _____ Sample Matrix: _____
 Client: _____ Weather: _____

WELL DATA: DATE: _____ TIME: _____
 Casing Diameter (inches): _____ Casing Material: _____
 Screened interval (ftTOR): _____ Screen Material: _____
 Static Water Level (ftTOR): _____ Bottom Depth (ftTOR): _____
 Elevation Top of Well Riser (fmsl): _____ Ground Surface Elevation (fmsl): _____
 Elevation Top of Screen (fmsl): _____ Stick-up (feet): _____

PURGING DATA: DATE: _____ START TIME: _____ END TIME: _____
 Method: _____ Is purge equipment dedicated to sample location? yes
 No. of Well Volumes Purged: _____ Was well purged to dryness? yes
 Standing Volume (gallons): _____ Was well purged below top of sand pack? yes
 Volume Purged (gallons): _____ Condition of Well: _____
 Purge Rate (gal/min): _____ Field Personnel: _____

VOLUME CALCULATION:

Volume Calculation		Stabilization Criteria	
Well Diameter	Volume gal/ft	Parameter	Criteria
1"	0.041	pH	+/- 0.1 ur
2"	0.163	SC	+/- 3%
3"	0.367	Turbidity	+/- 10%
4"	0.655	DO	+/- 0.3 mV
5"	1.020	ORP	+/- 10 mV
6"	1.462		

(A) Total Depth of Well (ftTOR): _____
 (B) Casing Diameter (inches): _____
 (C) Static Water Level (ftTOR): _____
 One Well Volume (V, gallons): _____
 $V = 0.0408 \{ (B)^2 \times \{ (A) - (C) \} \}$

* Use the table to the right to calculate one well volume by subtracting C from A, then multiplying by the volume calculation in the table per well diameter.

EVACUATION STABILIZATION TEST DATA:

Time	Water Level (ftTOR)	Accumulated Volume (gallons)	pH (units)	Temperature (degrees C)	Specific Conductance (uS/cm)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance Odor
		initial							

SAMPLING DATA: DATE: _____ START TIME: _____ END TIME: _____
 Method: _____ Is sampling equipment dedicated to sample location? yes
 Initial Water Level (ftTOR): _____ Was well sampled to dryness? yes
 Final Water Level (ftTOR): _____ Was well sampled below top of sand pack? yes
 Air Temperature (°F): _____ Field Personnel: _____
 Source and type of water used in the field for QC purposes: _____

PHYSICAL & CHEMICAL DATA:

DESCRIPTION OF WATER SAMPLE			WATER QUALITY MEASUREMENTS							
Odor	Color	NAPL	Sample	Time	pH (units)	TEMP. (°C)	SC (uS)	TURB. (NTU)	DO (ppm)	ORP (mV)
			initial							
			final							

Contains Sediment? yes no

REMARKS: _____

PREPARED BY: _____

FIELD OPERATING PROCEDURES

Non-Disposable and
Non-Dedicated
Sampling Equipment
Decontamination

FOP 040.1

NON-DISPOSABLE AND NON-DEDICATED SAMPLING EQUIPMENT DECONTAMINATION

PURPOSE

This procedure is to be used for the decontamination of non-disposable and non-dedicated equipment used in the collection of environmental samples. The purpose of this procedure is to remove chemical constituents from previous samples from the sampling equipment. This prevents these constituents from being transferred to later samples, or being transported out of controlled areas.

HEALTH AND SAFETY

Nitric acid is a strong oxidizing agent as well as being extremely corrosive to the skin and eyes. Solvents such as acetone, methanol, hexane and isopropanol are flammable liquids. Limited contact with skin can cause irritation, while prolonged contact may result in dermatitis. Eye contact with the solvents may cause irritation or temporary corneal damage. Safety glasses with protective side shields, neoprene or nitrile gloves and long-sleeve protective clothing must be worn whenever acids and solvents are being used.

PROCEDURE – GENERAL EQUIPMENT

Bailers, split-spoons, steel or brass split-spoon liners, Shelby tubes, submersible pumps, soil sampling knives, and similar equipment will be decontaminated as described below.

1. Wash equipment thoroughly with non-phosphate detergent and potable-quality water, using a brush where possible to remove any particulate matter or surface film. If the sampler is visibly coated with tars or other phase-separated hydrocarbons, pre-wash with acetone or isopropanol, or by steam cleaning. Decontamination will adhere to the following procedure:

FOP 040.1

NON-DISPOSABLE AND NON-DEDICATED SAMPLING EQUIPMENT DECONTAMINATION

- a. Rinse with potable-quality water; if the sampling equipment is very oily and use of a solvent is necessary, rinse with pesticide-grade isopropanol.
 - b. Rinse with potable-quality water;
 - c. Rinse with deionized water demonstrated analyte-free, such as distilled water;
 - d. Air dry; and
 - e. Store in a clean area or wrap in aluminum foil (shiny side out) or new plastic sheeting as necessary to ensure cleanliness.
2. All non-dedicated well evacuation equipment, such as submersible pumps and bailers, which are put into the well, must be decontaminated following the procedures listed above. All evacuation tubing must be dedicated to individual wells (i.e., tubing cannot be reused). However, if submersible pump discharge tubing must be reused, the tubing and associated sample valves or flow-through cells used in well purging or pumping tests will be decontaminated as described below:
- a. Pump a mixture of potable water and a non-phosphate detergent through the tubing, sample valves and flow cells, using the submersible pump.
 - b. Steam clean or detergent wash the exterior of the tubing, sample valves, flow cells and pump.
 - c. Pump potable water through the tubing, sample valve, and flow cell until no indications of detergent (e.g. foaming) are observed.
 - d. Double rinse the exterior of the tubing with potable water.
 - e. Rinse the exterior of the tubing with distilled water.

FOP 040.1

NON-DISPOSABLE AND NON-DEDICATED SAMPLING EQUIPMENT DECONTAMINATION

- f. Store in a clean area or wrap the pump and tubing assembly in new plastic sheeting as necessary to ensure cleanliness until ready for use.
3. All unused sample bottles and sampling equipment must be maintained in such a manner that there is no possibility of casual contamination.
4. Manage all waste materials generated during decontamination procedures as described in the Benchmark Field Operating Procedure for Management of Investigation Derived Waste.

PROCEDURE – SUBMERSIBLE PUMPS

Submersible pumps used in well purging or purging tests will be decontaminated thoroughly each day before use as well as between well locations as described below:

Daily Decontamination Procedure:

1. Pre-rinse: Operate the pump in a basin containing 8 to 10 gallons of potable water for 5 minutes and flush other equipment with potable water for 5 minutes.
2. Wash: Operate the pump in 8 to 10 gallons of non-phosphate detergent solution (i.e., Alconox) for 5 minutes and flush other equipment with fresh detergent solution for 5 minutes.
3. Rinse: Operate the pump in a basin of potable water for 5 minutes and flush other equipment with potable water for 5 minutes.
4. Disassemble pump.
5. Wash pump parts with a non-phosphate detergent solution (i.e., Alconox). Scrub all pump parts with a test tube brush or similar device.

FOP 040.1

NON-DISPOSABLE AND NON-DEDICATED SAMPLING EQUIPMENT DECONTAMINATION

6. Rinse pump with potable water.
7. Rinse the inlet screen, the shaft, the suction interconnection, the motor lead assembly, and the stator housing with distilled/deionized water.
8. Rinse the impeller assembly with 1% nitric acid (HNO₃).
9. Rinse the impeller assembly with isopropanol.
10. Rinse the impeller assembly with distilled/deionized water.

Between Wells Decontamination Procedure:

1. Pre-rinse: Operate the pump in a basin containing 8 to 10 gallons of potable water for 5 minutes.
2. Wash: Operate the pump in 8 to 10 gallons of non-phosphate detergent solution (i.e., Alconox) for 5 minutes.
3. Rinse: Operate the pump in a basin of potable water for 5 minutes.
4. Final rinse the pump in distilled/deionized water.

ATTACHMENTS

None

REFERENCES

Benchmark FOPs:
032 Management of Investigation-Derived Waste

FIELD OPERATING PROCEDURES

Overburden Casing Installation Procedure

FOP 041.0

OVERBURDEN CASING INSTALLATION PROCEDURES

PURPOSE

This guideline presents a method for the installation of casing to prevent downhole contamination of hazardous compounds from shallow overburden material. This method is particularly applicable where contaminated strata overlie uncontaminated strata of lower permeability. The method can be used with hollow stem auger drilling or rotary wash drilling (where temporary casing is used). This guideline also presents a method for the evaluation of the integrity of the grout seal around an overburden casing, which has been positioned into a confining layer.

CASING INSTALLATION PROCEDURE

1. Advance boring by appropriate drilling methods, through the contaminated strata a short distance (1 to 2 feet) into an underlying lower permeable unit.
2. Calculate the volume of the borehole based on the bit/auger head or steel casing diameter plus 10% and determine the volume of grout to be emplaced. Generally, the total mixed volume is the borehole volume plus 20%.
3. Identify the equipment to be used for the preparation and mixing of the grout. Ensure the volume of the tanks to be used for mixing has been measured adequately. Document these volumes on the Field Borehole/Monitoring Well Installation Log (sample attached).
4. Identify the source of the water to be used for the grout and determine its suitability for use. In particular, water with high sulfate, or chloride levels or heated water should not be used. These types of waters can cause operational difficulties or modify the set-up for the grout.
5. Identify the equipment to be used for emplacing the grout. Ensure that the pump to be used has adequate pressure to enable complete return to surface.

FOP 041.0

OVERBURDEN CASING INSTALLATION PROCEDURES

6. Identify the volumes to be pumped at each stage or in total if only one stage is to be used.
7. Begin mixing the grout to be emplaced. Grout specifications generally have mixture ratios as follows:

Grout Slurry Composition (% Weight)

1.5 to 3.0%	-	Bentonite (Quick Gel)
40 to 60 %	-	Cement (Portland Type I)
40 to 60 %	-	Potable Water

8. Record the type and amount of materials used during the mixing operation. Ensure the ratios are within specifications tolerance.
9. Begin pumping the grout through the return line bypass system to confirm all pump and surface fittings are secure.
10. Remove drill rods and center plug (or clean out temporary casing) and insert a tremie pipe to the bottom of the boring. Pump the cement/bentonite grout slurry through the tremie pipe until grout return is observed at grade and no bridging of the slurry is evident. Slowly withdraw the augers (or casing) from the boring while maintaining the grout level at grade. Record the times and volumes emplaced on the Field Borehole/Monitoring Well Installation Log (sample attached).
11. Document the return circulation of grout. This may be facilitated by using a colored dye or other tagging method if a mudded borehole condition exists prior to grout injection.
12. Place a drillable plug (preferably untreated wood) at the downhole end of black steel or other appropriate casing, insert the casing through the slurry, and seat it into the underlying formation.
13. Allow grout to set for 24 to 48 hours.

FOP 041.0

OVERBURDEN CASING INSTALLATION PROCEDURES

HYDROSTATIC TESTING OF CASING PROCEDURE

1. Following adequate setting time for the grout, drill through the grout inside the casing until the top of the confining layer has been reached (refer to Field Borehole/Monitoring Well Installation Log during casing installation).
2. Fill the casing with potable water and measure the water level within the casing with a water level indicator to the nearest 0.01-foot and record the measurement on the Pipe Leakage Testing Log (sample attached).
3. Monitor the water level for 30 minutes and record the final water level within the casing with a water level indicator to the nearest 0.01-foot and record the measurement on the Pipe Leakage Testing Log (sample attached).
4. Should the water level drop more than the allowable volume calculated using the following equation, the seal shall be regouted at the Subcontractor's expense.

$$Q_{(\text{allowable})} = 2.75 DKH$$

Where:

$Q_{(\text{allowable})}$ = Flow rate during a 30 minute test

D = Inside diameter of overburden casing

K = Confining layer hydraulic conductivity (see Table 1)

H = Head of water applied

Note: Be sure to use consistent units of measure.

ATTACHMENTS

Field Borehole/Monitoring Well Installation Log (sample)

Pipe Leakage Testing Log (sample)

Table 1 – Range of Values of Hydraulic Conductivity and Permeability

FOP 041.0

OVERBURDEN CASING INSTALLATION PROCEDURES

REFERENCES

Freeze, R.A. and J.A. Cherry. 1979. *Groundwater*. Prentice-Hall, Inc., Englewood, New Jersey, 604 p.

Benchmark FOPs:

018 *Drilling and Excavation Equipment Decontamination Protocols*

FOP 041.0

OVERBURDEN CASING INSTALLATION PROCEDURES



PIPE LEAKAGE TESTING LOG

Project: _____ Location: _____
 Client: _____ Date: _____
 Job No: _____ BM Personnel: _____

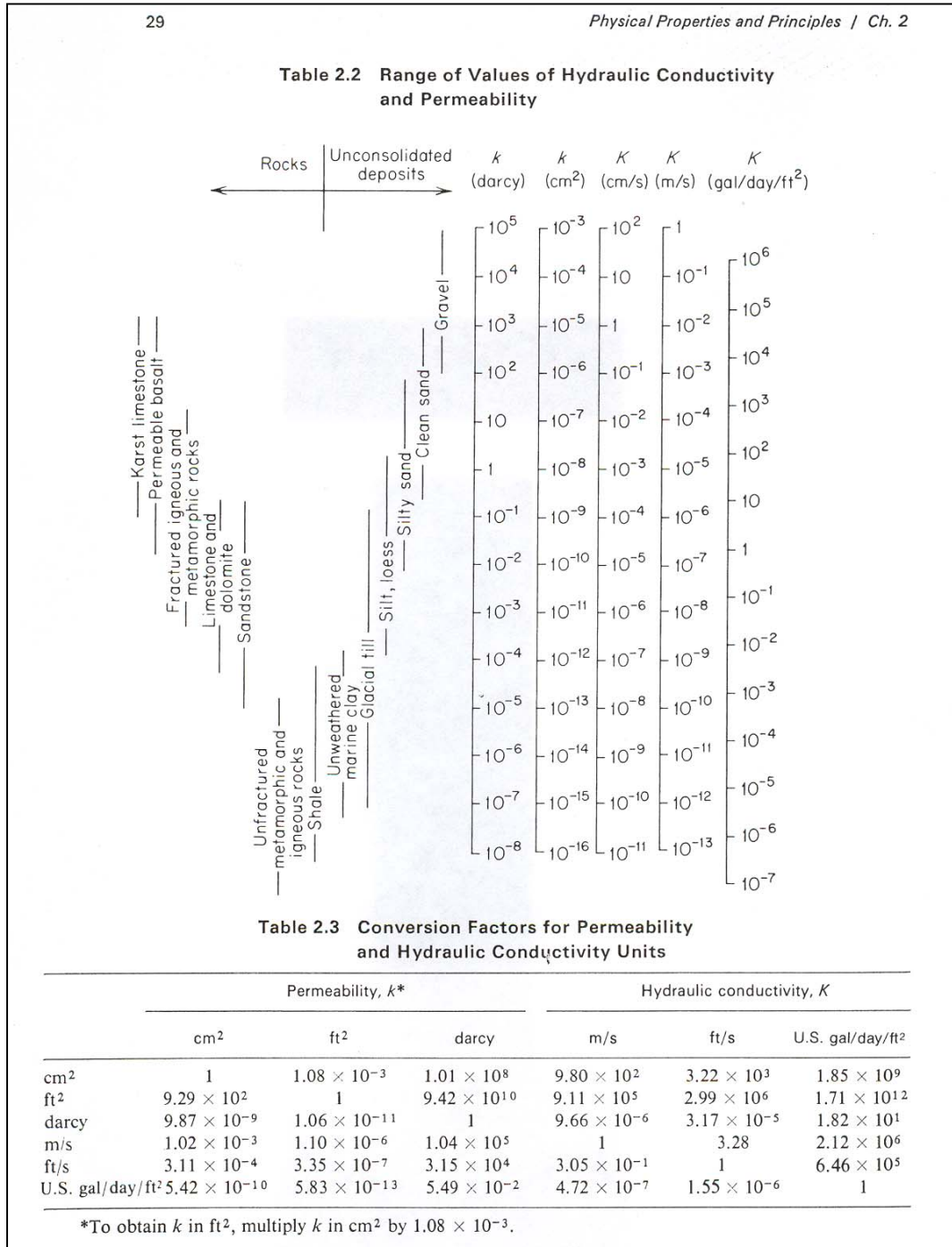
Location Description	Test Procedure (Air or Hydrostatic)	QC Initials	Readings				Elapsed Time (minutes)	Change in Pressure/ Water Level (psi/fbMP)	Pass/Fail	Passing Retest Date	Comments/Notes
			Start		End						
			Pressure or Water Level	Time	Pressure or Water Level	Time					

SAMPLE

Prepared By: _____ Date: _____

OVERBURDEN CASING INSTALLATION PROCEDURES

TABLE 1: (From Freeze and Cherry, page 29.)



FIELD OPERATING PROCEDURES

Sample Labeling,
Storage, and Shipment
Procedures

SAMPLE LABELING, STORAGE & SHIPMENT PROCEDURES

PURPOSE

The collection and analysis of samples of environmental media, including soils, groundwater, surface water, and sediment, are the central activities of the field investigation. These samples must be properly labeled to preserve its identity, and properly stored and shipped in a manner that preserves its integrity and chain of custody. This procedure presents methods for these activities.

SAMPLE LABELING PROCEDURE

1. Assign each sample retained for analysis a unique 9-digit alphanumeric identification code or as indicated in the Project Work Plan. Typically, this code will be formatted as follows:

Sample I.D. Example: GW051402047	
GW	Sample matrix GW = groundwater; SW = surface water; SUB = subsurface soil; SS = surface soil; SED = sediment; L = leachate; A = air
05	Month of sample collection
14	Day of sample collection
02	Year of sample collection
047	Consecutive sample number

2. Consecutive sample numbers will indicate the individual sample's sequence in the total set of samples collected during the investigation/sampling event. The sample number above, for example, would indicate the 47th sample retained for analysis during the field investigation, collected on May 14, 2002.

FOP 046.0

SAMPLE LABELING, STORAGE & SHIPMENT PROCEDURES

3. Affix a non-removable (when wet) label to each sample container. The following information will be written on the label with black or blue ink that will not smudge when wet:
 - Project number
 - Sample ID (see Step 1 above)
 - Date of sample collection
 - Time of sample collection (military time only)
 - Specify “grab” or “composite” sample with an “X”
 - Sampler initials
 - Preservative(s) (if applicable)
 - Analytes for analysis (if practicable)
4. Record all sample label information in the Project Field Book and on a Sample Summary Collection Log (see attached samples), keyed to the sample identification number. In addition, add information regarding the matrix, sample location, depth, etc. to provide a complete description of the sample.

SAMPLE STORAGE PROCEDURE

1. Immediately after collection, placement in the proper container, and labeling, place samples to be retained for chemical analysis into resealable plastic bags.
2. Place bagged samples into an ice chest filled approximately half-full of double bagged ice. Blue ice is not an acceptable substitute for ice.
3. Maintain samples in an ice chest or in an alternative location (e.g. sample refrigerator) as approved by the Benchmark Field Team Leader until time of shipment. Periodically drain melt-water off coolers and replenish ice as necessary.

FOP 046.0

SAMPLE LABELING, STORAGE & SHIPMENT PROCEDURES

4. Ship samples on a daily basis, unless otherwise directed by the Benchmark Field Team Leader.
5. Maintain appropriate custody procedures on coolers and other sample storage containers at all times. These procedures are discussed in detail in the Project Quality Assurance Project Plan, Monitoring Plan or Work Plan.
6. Samples shall be kept in a secure location locked and controlled (i.e., locked building or fenced area) so that only the Project Field Team Leader has access to the location or under the constant visual surveillance of the same.

SAMPLE SHIPPING PROCEDURE

1. Fill out the chain-of-custody form completely (see attached sample) with all relevant information. The white original goes with the samples and should be placed in a resealable plastic bag and taped inside the sample cooler lid; the sampler should retain the copy.
2. Place a layer of inert cushioning material such as bubble pack in the bottom of cooler.
3. Place each bottle in a bubble wrap sleeve or other protective wrap. To the extent practicable, then place each bottle in a resealable plastic bag.
4. Open a garbage bag (or similar) into a cooler and place sample bottles into the garbage bag (or similar) with volatile organic analysis (VOA) vials near the center of the cooler.
5. Pack bottles with ice in plastic bags. At packing completion, cooler should be at least 50 percent ice, by volume. Coolers should be completely filled, so that samples do not move excessively during shipping.
6. Duct tape (or similar) cooler drain closed and wrap cooler completely in two or more locations to secure lid, specifically covering the hinges of the cooler.

FOP 046.0

SAMPLE LABELING, STORAGE & SHIPMENT PROCEDURES

7. Place laboratory label address identifying cooler number (i.e., 1 of 4, 2 of 4 etc.) and overnight delivery waybill sleeves on cooler lid or handle sleeve (Federal Express).
8. Sign the custody seal tape with an indelible soft-tip marker and place over the duct tape across the front and back seam between the lid and cooler body.
9. Cover the signed custody seal tape with an additional wrap of transparent strapping tape.
10. Place “Fragile” and “This Side Up” labels on all four sides of the cooler. “This Side Up” labels are yellow labels with a black arrow with the arrowhead pointing toward the cooler lid.
11. For coolers shipped by overnight delivery, retain a copy of the shipping waybill, and attach to the chain-of-custody documentation.

ATTACHMENTS

Soil/Sediment Sample Summary Collection Log (sample)
Groundwater/Surface Water Sample Summary Collection Log (sample)
Wipe Sample Summary Collection Log (sample)
Air Sample Summary Collection Log (sample)
Chain-Of-Custody Form (sample)

REFERENCES

None

FOP 046.0

SAMPLE LABELING, STORAGE & SHIPMENT PROCEDURES



CHAIN OF CUSTODY RECORD

Project No.		Project Name				Number of Containers							REMARKS
Samplers (Signature)													
No.	Date	Time	comp	grab	Sample Identification								
Possible Hazard Identification:						Sample Disposal:							
<input type="checkbox"/> Non-hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison <input type="checkbox"/> Unknown						Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive _____(mos.)							
Turnaround Time Required:						OC Level:							
Normal <input type="checkbox"/> Rush <input type="checkbox"/>						<input type="checkbox"/> I. <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> Project Specific (specify): _____							
Relinquished by: (Signature)		Date	Time	Relinquished by: (Signature)		Date	Time	REMARKS:					
Relinquished by: (Signature)		Date	Time	Relinquished by: (Signature)		Date	Time						

SAMPLE

FOP 046.0

SAMPLE LABELING, STORAGE & SHIPMENT PROCEDURES



WIPE SAMPLE COLLECTION SUMMARY LOG

Field ID	Location	QC Type	Analytical Parameters	Containers	Date	Time	Sampler Initials	Comments (e.g. problems encountered, ref. to variance, location changes, important observations or descriptions, etc.)

- Notes:*
- 1. See QAPP for sampling frequency and actual number of QC samples.
 - 2. CWM - clear, wide-mouth glass jar with Teflon-lined cap.
 - 3. FD - Field Duplicate.
 - 4. FB - Field Blank.
 - 5. RS - Rinsate.
 - 6. No Matrix Spike, Matrix Spike Duplicate or Matrix Spike Blanks for wipe samples.
 - 7. Rinsates should be taken at a rate of 1 per day during wipe sampling. Only take when reusable equipment is used.
 - 8. Wipe sample FB collected by wiping unused glove and any other sampling equipment coming into contact with sampled surface) with prepared gauze pad and place in sample jar. Take at a rate of 1 FB per 20 samples.
 - 9. Wipe sample FDs taken adjacent to original sample at a rate of 1 FD per 20 samples.
 - 10. **EH**: Extract and Hold

FOP 046.0

SAMPLE LABELING, STORAGE & SHIPMENT PROCEDURES



AIR SAMPLE COLLECTION SUMMARY LOG

Field ID	Location	QC Type	Analytical Parameters	Containers	Date	Time	Sampler Initials	Comments (e.g. problems encountered, ref. to variance, location changes, important observations or descriptions, etc.)
<p>Notes:</p> <ol style="list-style-type: none"> 1. See QAPP for sampling frequency and actual number of QC samples. 2. SC - Summa Canister. 3. TB - Tedlar Bag (quantity). 4. No Matrix Spike, Matrix Spike Duplicate, Matrix Spike Blanks, Field Duplicate, Field Blanks or Rinsates collected for air samples. 								



FOP 046.0

SAMPLE LABELING, STORAGE & SHIPMENT PROCEDURES



CHAIN OF CUSTODY RECORD

Project No.		Project Name				Number of Containers	REMARKS					
Samplers (Signature)												
No.	Date	Time	comp	grab	Sample Identification	VOCs	SVOCs	Metals				
Possible Hazard Identification: <input type="checkbox"/> Non-hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown						Sample Disposal: <input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive _____(mos.)						
Turnaround Time Required: Normal <input type="checkbox"/> Rush <input type="checkbox"/>						VOC Level: I. <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> Project Specific (specify): _____						
Relinquished by: (Signature)		Date	Time	Relinquished by: (Signature)		Date	Time	REMARKS:				
Relinquished by: (Signature)		Date	Time	Relinquished by: (Signature)		Date	Time					

SAMPLE

FIELD OPERATING PROCEDURES

Screening of Soil
Samples for Organic
Vapors During Drilling
Activities

FOP 047.0

SCREENING OF SOIL SAMPLES FOR ORGANIC VAPORS DURING DRILLING ACTIVITIES

PURPOSE

This procedure is used to screen soil samples for the presence of volatile organic constituents (VOCs) using a field organic vapor meter. These meters will be either photoionization detector (PID) or flame-ionization detector (FID) type. This screening is performed at the drilling and sampling location as a procedure for ensuring the health and safety of personnel at the site and to identify potentially contaminated soil samples for laboratory analysis. All soil samples will be field screened to provide a vertical profile of soil contamination by volatile organic substances.

PROCEDURE

1. Calibrate air-monitoring equipment in accordance with the appropriate Benchmark's Field Operating Procedures or manufacturers recommendations for calibration of field meters.
2. Collect split-spoon (or other sampler) samples in accordance with Benchmark's Split Spoon Sampling Procedure FOP.
3. When the split-spoon or other sampler is opened or accessed, shave a thin layer of material from the entire length of the core.
4. Scan the core visually and with the PID or FID noting stratification, visible staining, or other evidence of contamination.
5. Based on this initial scan of the sample, collect approximately 100 milliliters (ml) of soil using a decontaminated or dedicated stainless steel spatula, scoop, or equivalent. Place this soil into a labeled wide-mouth glass jar approximately $\frac{1}{2}$ to $\frac{3}{4}$ full and seal with aluminum foil and a screw top cap. Alternatively, the soil may be placed into a clean, re-sealable plastic bag and sealed. Be sure to leave some headspace above the soil sample within the sealed container.

FOP 047.0

SCREENING OF SOIL SAMPLES FOR ORGANIC VAPORS DURING DRILLING ACTIVITIES

6. Place field screening sample (i.e., jar or bag) in a location where the ambient temperature is at least 70° Fahrenheit.
7. Leave the field screening sample bag for at least 30 minutes, but no more than 60 minutes.
8. Carefully remove the screw top cap from the jar and slowly insert the tip of the organic vapor meter (PID or FID) through the aluminum foil seal making the smallest hole possible. Alternatively, unseal a portion of the plastic bag just big enough to insert the probe of a calibrated PID.
9. Record the maximum reading in parts per million by volume (ppmv) on the Field Borehole Log or Field Borehole/Monitoring Well Installation Log form (see attached samples) (see Documentation Requirements for Drilling and Well Installation FOP), at the depth interval corresponding to the depth of sample collection.

ATTACHMENTS

Field Borehole Log (sample)
Field Borehole/Monitoring Well Installation Log (sample)

REFERENCES

Benchmark FOPs:

- 010 *Calibration and Maintenance of Portable Flame Ionization Detector*
- 011 *Calibration and Maintenance of Portable Photoionization Detector*
- 015 *Documentation Requirements for Drilling and Well Installation*
- 058 *Split Spoon Sampling Procedures*



FIELD OPERATING PROCEDURES

Screening of Soil
Samples for Organic
Vapors During
Impacted Soil Removal
Activities

FOP 048.0

SCREENING OF SOIL SAMPLES FOR ORGANIC VAPORS DURING IMPACTED SOIL REMOVAL ACTIVITIES

PURPOSE

This procedure is used to screen soil samples for the presence of volatile organic constituents (VOCs) using a field organic vapor meter. The field meter should either be a photoionization detector (PID) or flame-ionization detector (FID) type. This type of screening is generally performed during underground storage tank (UST) and/or impacted soil removal activities as a procedure for ensuring the health and safety of the community and personnel at the site as well as to identify potential VOC-impacted soil samples for laboratory analysis (i.e., confirmatory or verification samples). Soil samples are also screened in the field to provide assessment criteria to determine horizontal and vertical extents of VOC-impacts in order to ensure soils that may have been impacted by volatile organic substances are removed.

PROCEDURE

1. Calibrate air-monitoring equipment in accordance with the appropriate TurnKey's Field Operating Procedures or manufacturers recommendations for calibration of field meters.
2. Perform community air monitoring in accordance with the Project Work Plan and/or TurnKey's FOP: Real-Time Air Monitoring During Intrusive Activities.
3. Upon proper removal of any identified UST in accordance with NYSDEC Division of Environmental Remediation, Spill Response Unit or Bulk Storage Unit guidelines and/or TurnKey's FOP: Underground Storage Tank Removal Procedures; examine the four sidewalls and bottom of the excavation for visually impacted (i.e., stained) soils.



**SCREENING OF SOIL SAMPLES FOR ORGANIC
VAPORS DURING IMPACTED SOIL REMOVAL ACTIVITIES**

4. If visually impacted soils are identified, direct the excavating equipment operator to scrape the impacted area (i.e., sidewall or bottom of the excavation) and present the scraped soil for evaluation. NOTE: Under no circumstances should anyone enter an excavation greater than 4 feet in depth, unless absolutely necessary. Excavation entry may only occur under strict confined space entry procedures following implementation of specific engineering controls (i.e., continuous air monitoring, excavation shoring, trench box installation, benching).
5. Visually inspect and perform an open air PID/FID scan of the scraped soil sample noting stratification, visible staining, or other evidence of impact (i.e., presence of non-aqueous phase liquid, NAPL).
6. Collect a representative sample (approximately 100 milligrams (mg)) of soil using a decontaminated or dedicated stainless steel sampling tool (i.e., spoon, spatula, scoop, or approved equivalent), for field headspace determination of VOC-impact. Place the representative soil sample into a labeled wide-mouth glass jar approximately $\frac{1}{2}$ to $\frac{3}{4}$ full and seal with aluminum foil and a screw top cap. Alternatively, the soil sample may be placed into a clean, re-sealable plastic bag and sealed. Be sure to leave adequate headspace above the soil sample within either sealed container.
7. Place the field screening sample (i.e., jar or bag) in a location where the ambient temperature is at least 70° Fahrenheit for at least 15 minutes, but no more than 60 minutes.
8. Carefully remove the screw top cap from the jar and slowly insert the tip of the organic vapor meter (PID or FID) through the aluminum foil seal making the smallest hole possible. Alternatively, unseal a portion of the plastic bag just big enough to insert the probe of a calibrated PID.
9. Record the depth, sample location (i.e., sidewall, bottom) and maximum reading in parts per million by volume (ppmv) in the Project Field Book and Impacted Soil Excavation Log (sample attached), at the depth interval corresponding to the depth of sample collection.

FOP 048.0

SCREENING OF SOIL SAMPLES FOR ORGANIC VAPORS DURING IMPACTED SOIL REMOVAL ACTIVITIES

10. The representative soil samples collected from the excavation will be used to assess the vertical and horizontal limits of VOC-impact and guide the impacted soil removal activities in accordance with project requirements (i.e., PID scans less than 20 ppm will not require removal unless laboratory analytical results exceed regulatory limits).
11. Collect verification/confirmation samples in accordance with NYSDEC Division of Environmental Remediation, Spill Response Unit or Bulk Storage Unit guidelines and/or TurnKey's FOP: Surface and Subsurface Soil Sampling Procedures.

ATTACHMENTS

Impacted Soil Excavation Log (sample)

REFERENCES

TurnKey FOPs:

- 010 *Calibration and Maintenance of Portable Flame Ionization Detector*
- 011 *Calibration and Maintenance of Portable Photoionization Detector*
- 063 *Surface and Subsurface Soil Sampling Procedures*
- 073 *Real-Time Air Monitoring During Intrusive Activities*
- 074 *Underground Storage Tank Removal Procedures*



FOP 048.0

SCREENING OF SOIL SAMPLES FOR ORGANIC VAPORS DURING IMPACTED SOIL REMOVAL ACTIVITIES



IMPACTED SOIL EXCAVATION LOG

Project:	EXCAVATION I.D.:
Project No.:	Excavation Date:
Client:	Excavation Method:
Location:	CQA Observer:

Excavation Location: <i>NOT TO SCALE</i> (approximate)	Excavation Cross Section: Grade - 0' 2' 4' 6' 8' 10' 12' 14' 16' 18' 20'
---	---

TIME	Length:	Width:	Depth:	PID Scan (ppm)	PID Headspace (ppm)	Photos Y / N
Start:						
End:						
Verification Sample I.D.	Depth (ft)	Location (site)				

COMMENTS:

UST ENCOUNTERED: yes no If yes, Describe (type, material, size, capacity etc.):

GROUNDWATER ENCOUNTERED: yes no If yes, depth to GW:

VISUAL IMPACTS: yes no Describe:

OLFACTORY OBSERVATIONS: yes no Describe:

NON-NATIVE FILL ENCOUNTERED: yes no

OTHER OBSERVATIONS: yes no Describe:

QUANTITY OF IMPACTED SOIL REMOVED:

FINAL DESTINATION OF IMPACTED SOIL:

TYPE OF BACKFILL:

SURFACE COMPLETION:



FIELD OPERATING PROCEDURES

Soil Description
Procedures Using The
Visual-Manual Method

FOP 054.2

SOIL DESCRIPTION PROCEDURES USING THE VISUAL-MANUAL METHOD

PURPOSE

This guideline presents a means for insuring consistent and proper field identification and description of collected soils during a project (via, split-spoon (barrel) sampler, hand auger, test pit etc.). The lithology and moisture content of each soil sample will be physically characterized by visual-manual observation in accordance with ASTM Method D2488, Standard Practice for Description and Identification of Soils (Visual-Manual Procedure). When precise classification of soils for engineering purposes is required, the procedures prescribed in ASTM Method D2487 (Standard Practice for Classification of Soils for Engineering Purposes [Unified Soil Classification System, USCS]) will be used. The method of soil characterization presented herein describes soil types based on grain size, liquid and plastic limits, and moisture content based on visual examination and manual tests. When using this FOP to classify soil, the detail of description provided for a particular material should be dictated by the complexity and objectives of the project. However, more often than not, “after the fact” field information is required later in the project, therefore, every attempt to describe the soil as completely as possibly should be made.

Intensely weathered or decomposed rock that is friable and can be reduced to gravel size or smaller by normal hand pressure should be classified as a soil. The soil classification would be followed by the parent rock name in parenthesis. Projects requiring depth to bedrock determinations should always classify weathered or decomposed bedrock as bedrock (i.e., landfill siting). The project manager should always be consulted prior to making this determination.

FOP 054.2

SOIL DESCRIPTION PROCEDURES USING THE VISUAL-MANUAL METHOD

PROCEDURE

Assemble necessary equipment and discuss program requirements with drilling contractor.

1. Calibrate air-monitoring equipment in accordance with the appropriate Benchmark's Field Operating Procedures or manufacturers recommendations for calibration of field meters.
2. Collect desired soil sample in accordance with appropriate Benchmark FOP (i.e., split-spoon sampling, hand augering, test pitting etc.).
3. Shave a thin layer off the entire length of the sample to expose fresh sample.
4. Photograph and scan the sample with a photoionization detector (PID) at this time, if applicable, in accordance with Benchmark's Screening of Soil Samples for Organic Vapors During Drilling Activities FOP.
5. Describe the sample using terminology presented in the Descriptive Terms section below.
6. Record all pertinent information in the Project Field Book and Field Borehole Log (sample attached) or Field Borehole/Monitoring Well Installation Log (sample attached).
7. After the sample has been described, place a representative portion of the sample in new, precleaned jars or self-sealing plastic bags for archival purposes (if required). Label the jar or bag with the sample identification number, sample interval, date, project number and store in a secure location.
8. If the soil is to be submitted to a laboratory for analysis, collect the soil sample with a dedicated stainless steel sampling tool, place the sample into the appropriate laboratory-supplied containers, and store in an ice-chilled cooler staged in a secure location in accordance with Benchmark's Sample Labeling, Storage and Shipment Procedures FOP.

**SOIL DESCRIPTION PROCEDURES
USING THE VISUAL-MANUAL METHOD**

9. All remaining soil from soil sample collection activities shall be containerized in accordance with Benchmark's Management of Investigative-Derived Waste (IDW) FOP and/or the Project Work Plan.

DESCRIPTIVE TERMS

All field soil samples will be described using the Unified Soil Classification System (USCS) presented in Figures 1 and 2 (attached). In addition to ASTM Method D2488, Method D1586, Standard Test Method for Penetration Test and Split-Barrel Sampling of Soils (a.k.a., Standard Penetration Test, STP), when implemented, can also be used to classify the resistance of soils. In certain instances, it is desirable to supplement the USCS classification with a geologic interpretation of the soil sample that is supported by the soil descriptive terms presented in this section. The project manager should be consulted when making any geologic interpretation. Field test methods are provided to assist field personnel in classifying soil and are identified by a bold blue **FTM** and shaded. Classification of sampled soils will use the following ASTM descriptive terms and criteria:

- **Group Name** (USCS, see Figure 2)
- **Group Symbol** (USCS, see Figure 2) – only use if physical laboratory testing has been performed to substantiate. The USCS can be applied to most unconsolidated materials, and is represented by a two-letter symbol, except Peat (Pt).
 - The first letter includes: G (gravel), S (sand), M (silt), C (clay), and O (organic).
 - The second letter includes: P (poorly graded or uniform particle sizes), W (well graded or diversified particle sizes), H (high plasticity), and L (low plasticity).
 - Examples:
 - GW = well graded gravels and gravel-sand mixtures, little or no fines
 - GP = poorly graded gravels and gravel-sand mixtures, little or no fines
 - GM = silty gravels, gravel-sand-silt mixtures

FOP 054.2

SOIL DESCRIPTION PROCEDURES USING THE VISUAL-MANUAL METHOD

- GC = clayey gravels, gravel-sand-clay mixtures
 - SW = well graded sands and gravelly sands, little or no fines
 - SP = poorly graded sands and gravelly sands, little or no fines
 - SM = silty sand, sand-silt mixtures
 - SC = clayey sand sand-clay mixtures
 - ML = inorganic silts, very fine sands, rock flour, silty or clayey fine sands
 - CL = inorganic clays of low to medium plasticity, gravelly/sandy/silty/lean clays
 - OL = organic silts and organic silty clays of low plasticity
 - MH = inorganic silts, micaceous or diatomaceous fine sands or silts, elastic silts (very rare)
 - CH = inorganic clays of high plasticity, fat clays
 - OH = organic clays of medium to high plasticity
 - Pt = peat, muck, and other highly organic soils
- **Angularity** (ASTM D2488; Table 1)
 - Angular – particles have sharp edges and relatively planar sides with unpolished surfaces
 - Subangular – particles are similar to angular description but have rounded edges
 - Subrounded – particles have nearly planar sides but have well-rounded corners and edges
 - Rounded – particles have smoothly curved sides and no edges
 - **Particle Shape** (ASTM D2488; Table 2)
 - Flat – particles with width/thickness > 3
 - Elongated – particles with length/width > 3
 - Flat and Elongated – particles meet criteria for both flat and elongated
 - **Moisture Condition** (ASTM D2488; Table 3)
 - Dry – absence of moisture, dusty, dry to the touch
 - Moist – damp, but no visible water
 - Wet – visible free water, usually soil is below water table
 - **Reaction with Hydrochloric Acid (HCL)** (ASTM D2488; Table 4)
 - None – no visible reaction

**SOIL DESCRIPTION PROCEDURES
USING THE VISUAL-MANUAL METHOD**

- Weak – some reaction, with bubbles forming slowly
- Strong – violent reaction, with bubbles forming immediately
- **Consistency of Cohesive Soils** (ASTM D2488; Table 5)
 - Very soft – squeezes between fingers when fist is closed; easily penetrated several inches by fist (SPT = 2 or less)
 - Soft – easily molded by fingers; easily penetrated several inches by thumb (SPT = 2 to 4)
 - Firm – molded by strong pressure of fingers; can be penetrated several inches by thumb with moderate effort (SPT = 4 to 8)
 - Stiff – dented by strong pressure of fingers; readily indented by thumb but can be penetrated only with great effort (SPT = 8 to 15)
 - Very stiff – readily indented by thumbnail (SPT = 15 to 30)
 - Hard – indented with difficulty by thumbnail (SPT >30)
- **Cementation** (ASTM D2488; Table 6)
 - Weak – crumbles or breaks with handling or slight finger pressure
 - Moderate – crumbles or breaks with considerable finger pressure
 - Strong – will not crumble or break with finger pressure
- **Structure (Fabric)** (ASTM D2488; Table 7)
 - Varved – alternating 1 mm to 12 mm (0.04 – 0.5 inch) layers of sand, silt and clay
 - Stratified – alternating layers of varying material or color with the layers less than 6 mm (0.23 inches) thick; note thickness
 - Laminated – alternating layers of varying material or color with the layers less than 6 mm (0.23 inches) thick; note thickness
 - Fissured – contains shears or separations along planes of weakness
 - Slickensided – shear planes appear polished or glossy, sometimes striated

**SOIL DESCRIPTION PROCEDURES
USING THE VISUAL-MANUAL METHOD**

- Blocky – cohesive soil that can be broken down into small angular lumps which resist further breakdown
- Lensed – inclusion of small pockets of different soils, such as small lenses of sand scattered through a mass of clay; note thickness
- Homogeneous or Massive – same color and appearance throughout
- **Inorganic Fine-Grained Soil Characteristics** (ASTM D2488; Table 12)

Several field tests can be performed to determine the characteristics of fine-grained soils (material passing the No. 40 sieve), such as dry strength, dilatency, and toughness. These field testing methods are described below.

- **Dry Strength** (ASTM D2488; Table 8)

FTM (Dry Strength): Select enough material and moisten with water until it can be molded or shaped without sticking to your fingers (slightly below the sticky limit) into a ball about 1 inch in diameter. From this ball, form three balls about ½ inch in diameter and allow to dry in air, or sun, or by artificial means (temperature not to exceed 60° C (140° F). Soil containing natural dry lumps about ½ inch in diameter may be used in place of molded balls, however the dry strengths are usually lower. Test the strength by crushing the dry balls or lumps between your fingers using the descriptions below.

- None – the dry specimen crumbles with the slightest pressure of handling
 - Low – the dry specimen crumbles with some finger pressure
 - Medium – the dry specimen breaks into pieces or crumbles with considerable finger pressure
 - High – the dry specimen cannot be broken with finger pressure. The specimen will break into pieces between the thumb and a hard surface.
 - Very High – the dry specimen cannot be broken between the thumb and a hard surface
- **Dilatency** (ASTM D2488; Table 9)

FTM (Dilatency): Place enough material in your hand to form a ball approximately ½ inch in diameter and moisten with water until it can be

**SOIL DESCRIPTION PROCEDURES
USING THE VISUAL-MANUAL METHOD**

molded or shaped without sticking to your fingers (slightly below the sticky limit). Smooth the ball in the palm of one hand with the blade of a knife or small spatula. Shake horizontally, striking the side of the hand vigorously against the other several times. Note the reaction of water appearing on the surface of the soil. The soil is said to have given a reaction to this test if, when it is shaken, water comes to the surface of the sample producing a smooth, shiny appearance. Squeeze the sample between the thumb and forefinger and note the reaction as follows:

- None – no visible change in the specimen
 - Slow – water slowly appears on the surface of the specimen during shaking and does not disappear or disappears slowly upon squeezing
 - Rapid – water quickly appears on the surface of the specimen during shaking and disappears upon squeezing
- **Toughness** (ASTM D2488; Table 10)

FTM (Toughness): Following the dilatency test above, shape the test specimen into an elongated pat and roll by hand on a smooth surface or between palms into a thread about 1/8 inch in diameter. Fold the sample threads and re-roll repeatedly until the thread crumbles at a diameter of about 1/8 inch (e.g., near the plastic limit). Note the pressure required to roll the thread near the plastic limit as well as the strength of the thread. After the thread crumbles, lump the pieces together and knead the lump until it crumbles. Describe the toughness as follows:

- Low – only slight pressure is required to roll the thread near the plastic limit. The thread and the lump are weak and very soft.
- Medium – medium pressure is required to roll the thread to near the plastic limit. The thread and the lump are soft.
- High – considerable pressure is required to roll the thread to near the plastic limit. The thread and the lump are firm.

Using the results of the dry strength, dilatency, and toughness test described above, classify the soil according to the following:

**SOIL DESCRIPTION PROCEDURES
USING THE VISUAL-MANUAL METHOD**

Soil Symbol	Dry Strength	Dilatency	Toughness
Silt (ML)	None to low	Slow to rapid	Low or thread cannot be formed
Lean clay (CL)	Medium to high	None to slow	Medium
Elastic Silt (MH)	Low to medium	None to slow	Low to medium
Fat Clay (CH)	High to very high	None	Low to medium high

- **Plasticity** (ASTM D2488; Table 11)

Two field test methods can be used to determine plasticity of fine-grained soils (material passing the No. 40 sieve): the roll or thread test and the ribbon test. Each test is described below.

FTM (Roll or Thread Test): As with the toughness test above, mix a representative portion of the soil sample with water until it can be molded or shaped without sticking to your fingers (slightly below the sticky limit). Place an elongated cylindrical sample on a nonabsorbent rolling surface (e.g., glass or was paper on a flat surface) and attempt to roll it into a thread approximately 1/8 inch in diameter. The results of this test are defined below (non-plastic to high plasticity).

FTM (Ribbon Test): Form a roll from a handful of moist soil (slightly below the sticky limit) about 1/2 to 3/4 inches in diameter and about 3 to 5 inches long. Place the material in the palm of your hand and, starting at one end, flatten the roll between your thumb and forefinger to form the longest and thinnest ribbon possible that can be supported by the cohesive properties of the material before breaking. If the soil sample holds together for a length of 6 to 10 inches without breaking, the material is considered to be both highly plastic and highly compressive (Fat Clay, CH). If the soil cannot be ribboned, it is non-plastic (Silt, ML or MH). If it can be ribboned only with difficulty into short lengths, it has low plasticity (Lean Clay, CL). Use the following terms to describe the plasticity of soil:

FOP 054.2

SOIL DESCRIPTION PROCEDURES USING THE VISUAL-MANUAL METHOD

- Nonplastic (ML or MH) – a 3 mm (0.12 inches) thread cannot be rolled at any water content
- Low Plasticity (CL, ML, or MH) – the thread can barely be rolled, and crumbles easily
- Medium Plasticity (CL) – the thread is easy to roll and not much time is required to reach the plastic limit before crumbling
- High Plasticity (CH) – it takes considerable time rolling and kneading to reach the plastic limit; the thread can be rolled several times before crumbling

Note: A soil with as little as 20% clay will behave as a clayey soil. A soil needs 45% to over 60% medium to coarse sand to behave as a sandy soil. In a soil with 20% clay and 80% sand, the soil will behave as a clayey soil.

- **Relative Density of Cohesionless (Granular) Soils**

- Very loose – easily penetrated 30 cm (1.2 inches) with 13 mm (0.5 inch) rebar pushed by hand (SPT = 0 to 4)
- Loose – easily penetrated several cm with 13 mm (0.5 inch) rebar pushed by hand (SPT = 4 to 10)
- Medium dense – easily to moderately penetrated with 13 mm (0.5 inch) rebar driven by 2.3 kg (6 pound) hammer (SPT = 10 to 30)
- Dense – penetrated 0.3 m (1 foot) with difficulty using 13 mm (0.5 inch) rebar driven by 2.3 kg (6 pound) hammer (SPT = 30 to 50)
- Very dense – penetrated only a few cm with 13 mm (0.5 inch) rebar driven by 2.3 kg (6 pound) hammer (SPT = >50)

- **Color** (use Munsel® Color System, as necessary)

- **Particle Size** (see Figure 3)

- Boulder – larger than a basketball
- Cobble – grapefruit, orange, volleyball
- Coarse Gravel – tennis ball, grape

**SOIL DESCRIPTION PROCEDURES
USING THE VISUAL-MANUAL METHOD**

- Fine Gravel – pea
- Coarse Sand – rock salt
- Medium Sand – opening in window screen
- Fine Sand – sugar, table salt
- Fines (silt and clay) – cannot visually determine size (unaided)
- **Gradation**
 - Well Graded (GW, SW) – full range and even distribution of grain sizes present
 - Poorly-graded (GP, SP) – narrow range of grain sizes present
 - Uniformly-graded (GP, SP) – consists predominantly of one grain size
 - Gap-graded (GP-SP) – within the range of grain sizes present, one or more sizes are missing
- **Organic Material** – Organic soils usually have a dark brown to black color and may have an organic odor. Often, organic soils will change color, for example, black to brown, when exposed to the air. Some organic soils will lighten in color significantly when air-dried. Organic soils normally will not have a high toughness or plasticity. The thread of the toughness test will be spongy.
 - PEAT – 50 to 100 percent organics by volume, primary constituent
 - Organic (soil name) – 15 to 50 percent organics by volume, secondary organic constituent
 - (Soil name) with some organics – 5 to 15 percent organics by volume, additional organic constituents
- **Fill Materials** – All soils should be examined to see if they contain materials indicative of man-made fills. Man-made fill items should be listed in each of the soil descriptions. Common fill indicators include glass, brick, dimensioned lumber, concrete, pavement sections, asphalt, metal, plastics, plaster etc. Other items that could suggest fill include buried vegetation mats, tree limbs, stumps etc. The soil description for a fill material should be followed by the term “FILL”, i.e., for a sandy silt with some brick fragments the description would be “SANDY

**SOIL DESCRIPTION PROCEDURES
USING THE VISUAL-MANUAL METHOD**

SILT (ML), with brick fragments (Fill)”. The size and distribution of fill indicators should be noted. The limits (depth range) of fill material should be determined and identified at each exploration location.

- **Other Constituents/Characteristics**

- Additional constituents and/or pertinent soil characteristics not included in the previous categories should be described depending on the scope and objectives of the project. Observations that may be discussed include:
 - Oxide staining
 - Odor
 - Origin
 - Presence of root cast
 - Presence of mica
 - Presence of gypsum
 - Presence of calcium carbonate
 - Percent by volume of cobbles & boulders with size description and appropriate rock classification
- Other pertinent information from the exploratory program should be recorded, if it would be useful from a biddability/constructability perspective. The conditions that should be listed include caving or sloughing, difficulty in drilling and groundwater infiltration.

SOIL DESCRIPTIONS

Generally, soil descriptions collected during most investigations are not intended for civil engineering (construction) purposes, but rather for hydrogeologic and contaminant transport purposes. As such, the ASTM visual-manual assessments are somewhat limited in that they are only performed in order to indicate important information about potential hydraulic properties of a soil. Soil descriptions should be concise, stressing major constituents and

**SOIL DESCRIPTION PROCEDURES
USING THE VISUAL-MANUAL METHOD**

characteristics, and should be given in a consistent order and format. The following order is recommended:

- Soil name. The basic name of the predominant grain size and a single-word modifier indicating the major subordinate grain size (i.e., mostly clay with some silt). The feel test can be used to determine the texture of the soil by rubbing some moist soil between your fingers; sand feels gritty, silt feels smooth, and clays feel sticky. The terms representing percentages of grain size to be used include:
 - Trace – particles are present, but estimated to be less than 5%
 - Few – 5 to 10%
 - Little – 15 to 25%
 - Some – 30 to 45%
 - Mostly – 50 to 100%
- Color (using Munsell® charts, as necessary). Color is an important property in identifying organic soils, and within a given locality it may also be useful in identifying materials of similar geologic origin. If the sample contains layers or patches of varying colors (e.g., mottled), this shall be noted and all representative colors shall be described. The color shall be described for moist samples, however if the color represents a dry condition, it must be stated as such in the log. Generally, colors become darker as the moisture content increases and lighter as the soil dries. Examples include:
 - Some fine-grained soils (OL, OH) with dark drab shades of brown or gray, including almost black, contain organic colloidal matter.
 - In contrast, clean, bright looking shades of gray, olive green, brown, red, yellow, and white are associated with inorganic soils.
 - Gray-blue or gray- and yellow-mottled colors frequently result from poor drainage.
 - Red, yellow, and yellowish brown result from the presence of iron oxides.

FOP 054.2

SOIL DESCRIPTION PROCEDURES USING THE VISUAL-MANUAL METHOD

- White to pink may indicate considerable silica, calcium carbonate, or aluminum compounds.
- Field moisture condition as dry, moist, or wet;
- Gradation or Plasticity. Granular soils (i.e., sands or gravels) should be described as well-graded, poorly graded, uniform, or gap-graded, depending on the gradation of the minus 3-inch fraction. Cohesive soils (i.e., silts and clays) should be described as non-plastic, low, medium, or high, depending on the results of the manual evaluation for dry strength, dilatency, toughness, and plasticity discussed previously.
- Consistency/Density. An estimate of consistency of a cohesive soil or density of a granular soil, usually based on the SPT results (see Descriptive Terms section of this FOP);
- Soil Structure or Mineralogy. Description of discontinuities, inclusions, and structures, including joints, fissures, and slickensides.
- Odor. Describe the odor if organic or unusual. Soils containing a significant amount of organic material usually have a distinctive odor of decaying vegetation. This is especially apparent in fresh samples, but if the samples are dried, the odor may often be revived by heating a moistened sample. If the odor is unusual (petroleum, chemical, etc.), it should be noted in the log.
- Other important geologic information such as consolidation, gravel size and shape, visible internal structure, root holes, mica, odors, etc.

The first step when describing soil is to determine if the sample is predominantly fine-grained or coarse-grained (see Figures 3 and 4). Coarse-grained soils are relatively easy to identify, however descriptions of fine-grained soils can be more difficult, requiring additional field tests to assist the field geologist arrive at the proper soils classification (see [FTMs](#) under Descriptive Terms above). These tests are explained in detail in the ASTM Standard D2488 and briefly herein. Generally, the differentiation between silt and clay is based on plasticity and “texture”. However, tests for dry strength and dilatency, along with plasticity,

FOP 054.2

SOIL DESCRIPTION PROCEDURES USING THE VISUAL-MANUAL METHOD

can be very helpful and are recommended in the ASTM Standard. If additional tests are performed, in addition to plasticity, to classify the fines, record them with the soil description on the logs. Doing this will assist the reader (i.e., Project Manager) to follow the logic used to describe a soil (e.g., medium plasticity, low dry strength = elastic silt [MH]; not a lean clay [CL]).

Fines described in the classification should be modified by their plasticity (e.g., non-plastic fines, low plasticity fines, etc.) reserving the words “silt” and “clay” for the soil name.

In summary, adhering to the ASTM Standard and the guidelines outlined in this FOP will provide uniformity in soil descriptions provided by all field personnel. Prior to mobilization to the field, field staff should make sure to have laminated copies of the ASTM Standard flow charts and tables as well as this FOP (as necessary). Some examples of complete soil descriptions are as follows:

Coarse-grained Soil

POORLY GRADED FINE SAND w/ SILT: Dark grey, wet, mostly fine sand with some non-plastic fines, some iron-stained mottling, laminated, medium dense

Fine-grained Soil

LEAN CLAY: Dark reddish/brown, moist, mostly fines, medium plasticity, firm, no dilatency, medium dry strength, root holes.

Soil/Fill (option 1) – visual evidence of fill

FILL: Black, moist, mostly fines with some fine sand, slag, cinders, metal, brick, non-plastic, loose when disturbed, strong odor

FOP 054.2

SOIL DESCRIPTION PROCEDURES USING THE VISUAL-MANUAL METHOD

Soil/Fill (option 2) – no visual evidence of fill, suspected reworked material

FILL (reworked): Black, moist, mostly fines with some fine sand and few coarse angular gravel, non-plastic, hard, loose when disturbed, mild odor

BORING AND MONITORING WELL INSTALLATION LOGS

Currently, Benchmark utilizes WinLoG software to construct subsurface logs and a template of the log is included in this FOP as an example. One of the most important functions of a boring/monitoring well installation log, besides transmitting the soil description, is to indicate where the “data” (soil samples) were collected, giving the reader an idea of how reliable or representative the description is. On each sample log, depths of attempted and recovered or non-recovered interval are shown. Odor, if noted, should be considered subjective and not necessarily indicative of specific compounds or concentrations.

Remember: all field logs should be NEAT, ACCURATE, and LEGIBLE. Don’t forget that the well completion diagram completed for each well requires details of the surface completion (i.e., flush-mount, stick-up etc.). It is the responsibility of the field staff to double-check each log (i.e., soil names, classifications, well construction details etc.) prior to implementing into a final report. A registered professional (i.e., professional engineer, PE or professional geologist, PG) must review each log and will be ultimately responsible for its content and accuracy.

REQUIRED EQUIPMENT

- Knife
- Engineer’s rule/measuring tape

FOP 054.2

SOIL DESCRIPTION PROCEDURES USING THE VISUAL-MANUAL METHOD

- Permanent marker
- Pre-cleaned wide-mouth sample jars (typically provided by the driller)
- Pre-cleaned wide-mouth laboratory sample jars (provided by the laboratory)
- Stainless steel sampling equipment (i.e., spoons, spatulas, bowls etc.)
- 10x hand lens
- Hydrochloric acid
- ASTM D2488 flow charts (preferably laminated)
- ASTM D2488 test procedures (Tables 1 through 12) (preferably laminated)
- Camera (disposable, 35 mm or digital)
- Munsell soil color chart (as necessary)
- Project Field Book/field forms

ATTACHMENTS

Figure 1; Field Guide for Soil and Stratigraphic Analysis

Figure 2; USCS Soil Classification Flow Chart (modified from ASTM D2488)

Figure 3; Illustration of Particle Sizes

Figure 4; Grain-Size Scale (Modified Wentworth Scale)

Field Borehole Log (sample)

REFERENCES

American Society for Testing and Materials, 2008a. *ASTM D1586: Standard Test Method for Standard Penetration Test (SPT) and Split-Barrel Sampling of Soils.*

American Society for Testing and Materials, 2010. *ASTM D2487: Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System).*

American Society for Testing and Materials, 2009a. *ASTM D2488: Standard Practice for Description and Identification of Soils (Visual-Manual Procedure).*

FOP 054.2

SOIL DESCRIPTION PROCEDURES USING THE VISUAL-MANUAL METHOD

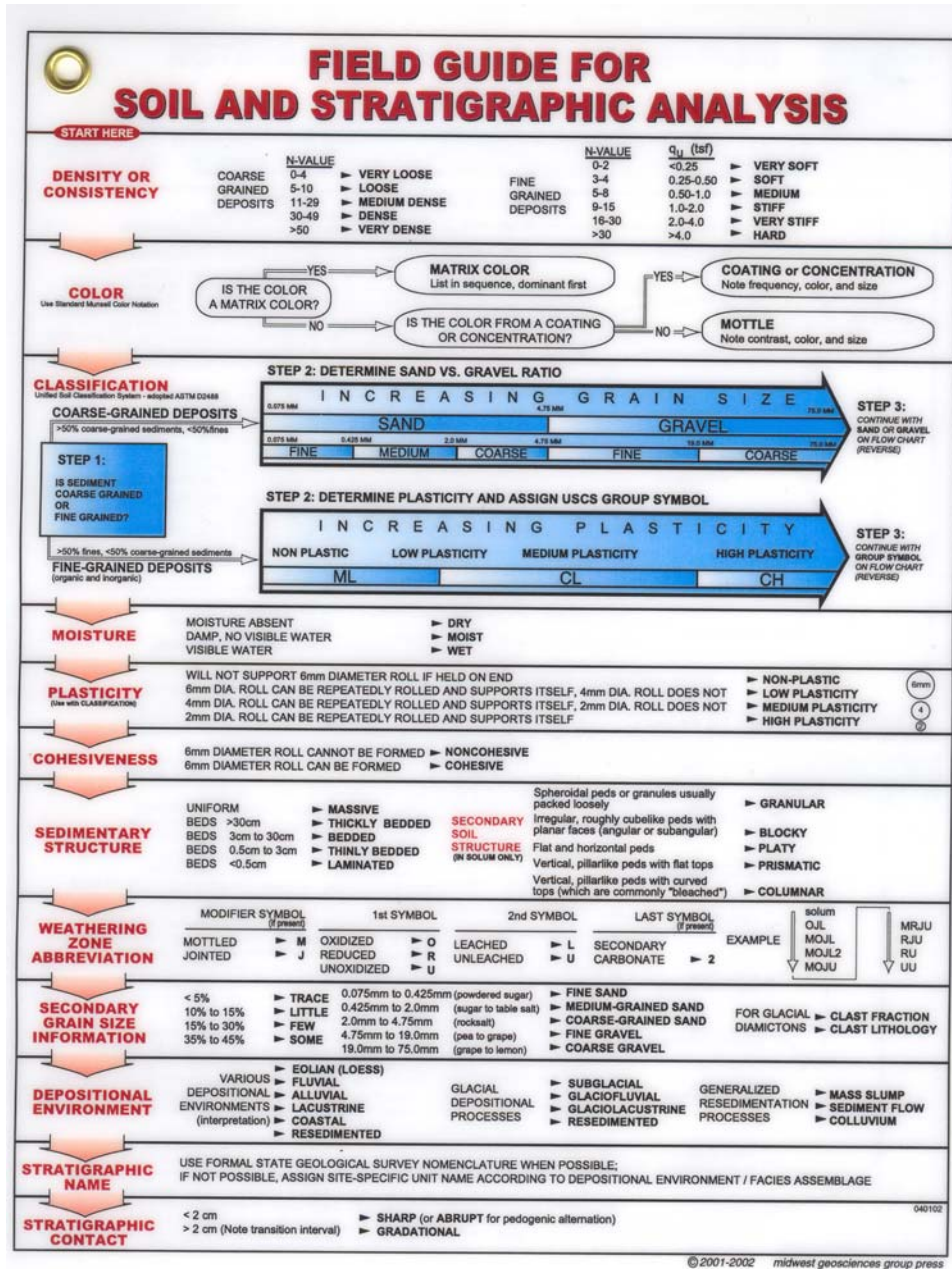
State of California, Department of Transportation, Engineering Service Center,
Office of Structural Foundations, August 1996. *Soil & Rock Logging Classification Manual
(Field Guide)*, by Joseph C. de Larios.

Benchmark FOPs:

- 010 *Calibration and Maintenance of Portable Flame Ionization Detector*
- 011 *Calibration and Maintenance of Portable Photoionization Detector*
- 015 *Documentation Requirements for Drilling and Well Installation*
- 025 *Hand Augering Procedures*
- 032 *Management of Investigation-Derived Waste*
- 046 *Sample Labeling, Storage and Shipment Procedures*
- 047 *Screening of Soil Samples for Organic Vapors During Drilling Activities*
- 058 *Split-Spoon Sampling Procedures*
- 065 *Test Pit Excavation and Logging Procedures*

SOIL DESCRIPTION PROCEDURES
USING THE VISUAL-MANUAL METHOD

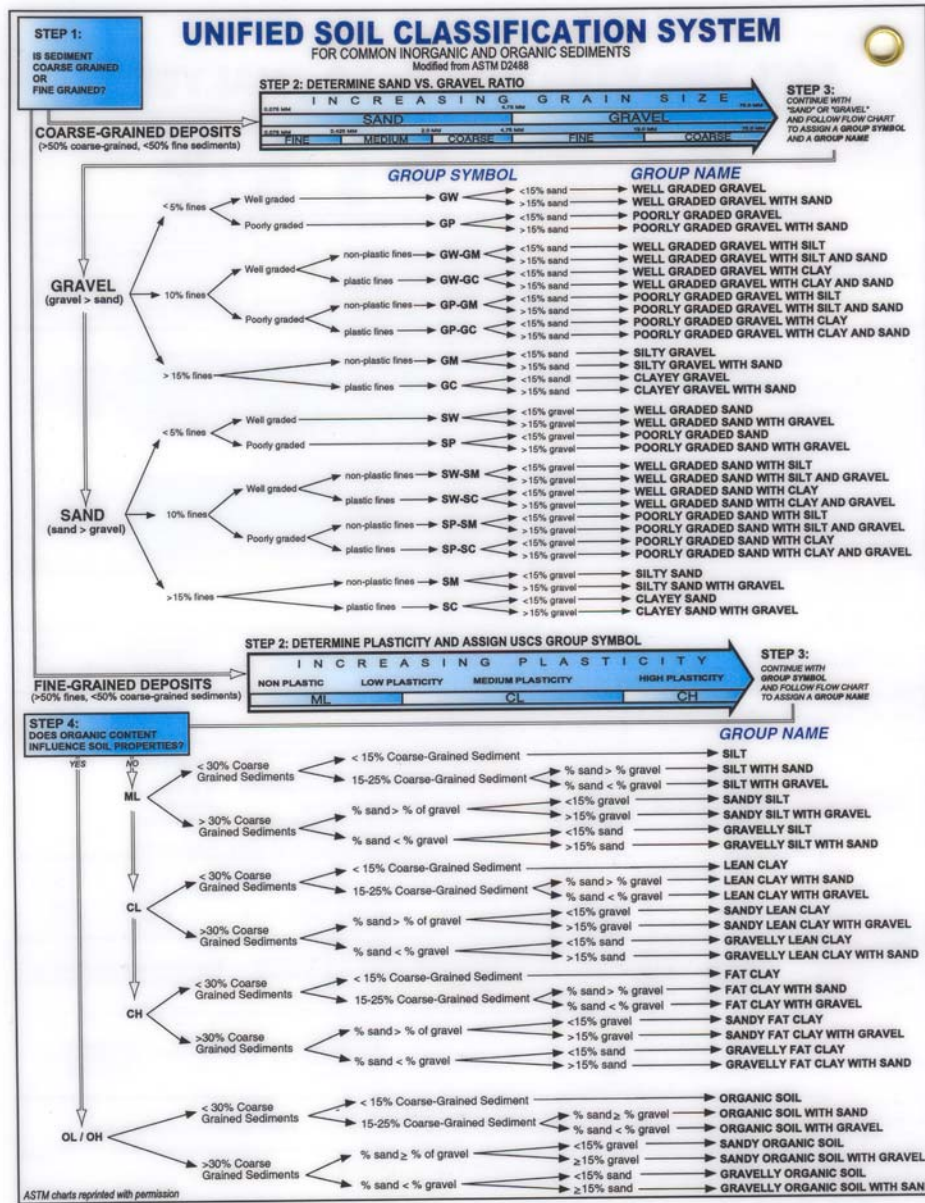
FIGURE 1
FIELD GUIDE FOR SOIL AND STRATIGRAPHIC ANALYSIS



SOIL DESCRIPTION PROCEDURES
USING THE VISUAL-MANUAL METHOD

FIGURE 2

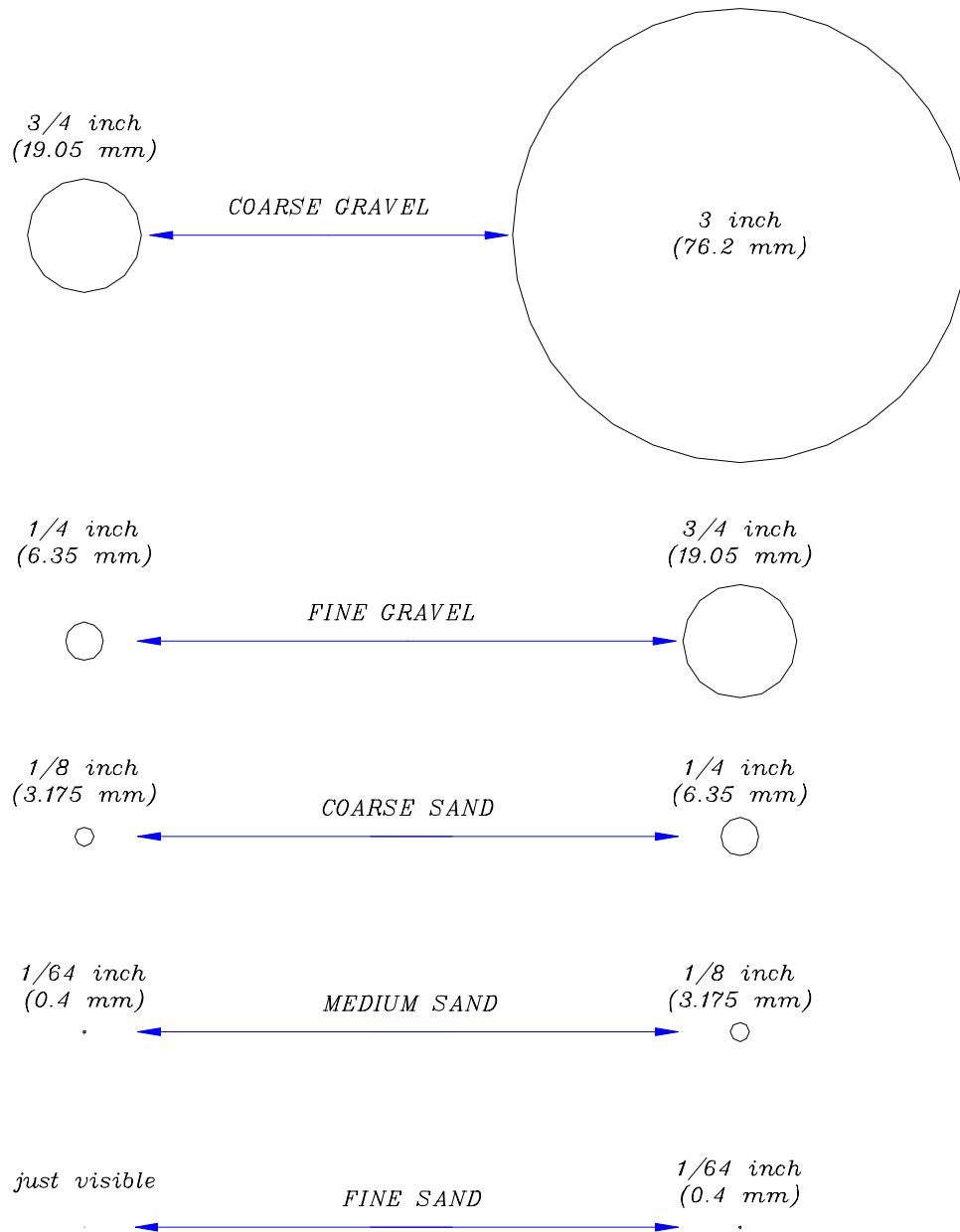
USCS SOIL CLASSIFICATION FLOW CHART
(MODIFIED FROM ASTM D2488)



SOIL DESCRIPTION PROCEDURES
USING THE VISUAL-MANUAL METHOD

FIGURE 3

ILLUSTRATION OF PARTICLE SIZES



FOP 054.2

SOIL DESCRIPTION PROCEDURES USING THE VISUAL-MANUAL METHOD

FIGURE 4

GRAIN-SIZE SCALE (MODIFIED WENTWORTH SCALE)

Grain size refers to the physical dimensions of particles of rock or other solid. This is different from the crystallite size, which is the size of a single crystal inside the solid (a grain can be made of several single crystals). Grain sizes can range from very small colloidal particles, through clay, silt, sand, and gravel, to boulders. Size ranges define limits of classes that are given names in the Wentworth scale used in the United States. The Krumbein *phi* (φ) scale, a modification of the Wentworth scale created by W. C. Krumbein, is a logarithmic scale computed by the equation: $\varphi = -\log_2(\text{grain size in mm})$.

φ scale	Size range (metric)	Size range (approx. inches)	Aggregate name (Wentworth Class)
< -8	> 256 mm	> 10.1 in	Boulder
-6 to -8	64–256 mm	2.5–10.1 in	Cobble
-5 to -6	32–64 mm	1.26–2.5 in	Very coarse gravel
-4 to -5	16–32 mm	0.63–1.26 in	Coarse gravel
-3 to -4	8–16 mm	0.31–0.63 in	Medium gravel
-2 to -3	4–8 mm	0.157–0.31 in	Fine gravel
-1 to -2	2–4 mm	0.079–0.157 in	Very fine gravel
0 to -1	1–2 mm	0.039–0.079 in	Very coarse sand
1 to 0	½–1 mm	0.020–0.039 in	Coarse sand
2 to 1	¼–½ mm	0.010–0.020 in	Medium sand
3 to 2	125–250 μm	0.0049–0.010 in	Fine sand
4 to 3	62.5–125 μm	0.0025–0.0049 in	Very fine sand
8 to 4	3.90625–62.5 μm	0.00015–0.0025 in	Silt
> 8	< 3.90625 μm	< 0.00015 in	Clay
<10	< 1 μm	< 0.000039 in	Colloid

In some schemes "gravel" is anything larger than sand (>2.0 mm), and includes "granule", "pebble", "cobble", and "boulder" in the above table. In this scheme, "pebble" covers the size range 4 to 64 mm (-2 to -6 φ).

FOP 054.2

SOIL DESCRIPTION PROCEDURES
USING THE VISUAL-MANUAL METHOD

Project No: Borehole Number:

Project:

Client: Logged By:

Site Location: Checked By:



Benchmark Environmental Engineering & Science, PLLC
726 Exchange Street, Suite 624
Buffalo, NY
(716) 856-0599

SUBSURFACE PROFILE			SAMPLE				PID VOCs ppm 0 25 50	Lab Sample	Well Completion Details or Remarks
Elev. /Depth	Symbol	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPTN-Value	Recovery (ft)	Symbol			
0.0 0.0		Ground Surface							
<div style="font-size: 100px; opacity: 0.3; transform: rotate(-30deg); pointer-events: none;">SAMPLE</div>									

Drilled By: Hole Size:
 Drill Rig Type: Stick-up:
 Drill Method: Datum:
 Drill Date(s): Sheet: 1 of 1



FIELD OPERATING PROCEDURES

Split-Spoon Sampling
Procedures

SPLIT-SPOON SAMPLING PROCEDURES

PURPOSE

This guideline presents the methods for using a split-spoon sampler (see Figure 1) for collecting soil samples from a boring and for estimating the relative in-situ compressive strength of subsurface materials (ASTM D 1586). Representative samples for lithologic description, geochemical analysis, and geotechnical testing will be collected from the subsurface materials using the split-spoon sampler.

PROCEDURE

1. Place plastic sheeting on a sturdy surface to prevent the split-spoon and its contents from coming in contact with the surface (several layers of sheeting may be placed on the surface so that they may be removed between each sample or as needed).
2. Lower the sampling string to the base of the borehole. Measure the portion of the sampling string that extends above surrounding grade (i.e. the stickup). The depth of sampling will equal the total length of the string (sampler plus rods) minus the stickup length.
3. Measure sampling depths to an accuracy of 0.1 feet. If field measurements indicate the presence of more than 0.3 feet of disturbed materials in the base of the borehole (i.e. slough), the sampler will be used to remove this material, after which a second sampling trip will be made.
4. Select additional sampler components as required (i.e., leaf spring core retainer for clays or a sand trap for non-cohesive sands). If a retainer or trap is not used, a spacer ring will be used to hold the liners in position inside the sampler.
5. For driving samples, attach the drive head sub and hammer to the drill rods without the weight resting on the rods. For pushing samples using the rig hydraulics, skip to Step 9.

FOP 058.0

SPLIT-SPOON SAMPLING PROCEDURES

6. Mark four 6-inch intervals on the drill rods relative to a reference point on the drill rig. With the sampler resting on the bottom of the hole, drive the sampler with the 140 lb. hammer falling freely over a 30-inch fall until 24 inches have been penetrated or 50 blows applied.
7. Record the number of blows per 6 inches. Determine the “N” value by adding the blows for the 6 to 12-inch and 12 to 18-inch intervals of each sample drive.
8. After penetration is complete, remove the sampling string. Avoid removing sampling string by hitting up on the string with the hammer as this can cause the sample to fall from the bottom of the split-spoon sampler. The sampling string should be removed via cable lifting or rig hydraulics. If sample retention has been poor, let the sampling string rest in place for at least 3 minutes, then rotate clockwise at least 3 times before removing from the borehole.
9. For pushed samples (i.e., using rig hydraulics), mark four 6-inch intervals on the drill rods relative to a reference point on the rig. Use the rig pull-down to press the sampler downward until 24 inches have been penetrated or no further progress can be made with the full weight of the rig on the sampler.
10. Remove the split-spoon sampler from the sampling string and place on the plastic-covered surface.
11. Open the split-spoon sampler only when the TurnKey field geologist is prepared to describe and manage the sample.
12. Describe the sample in accordance with the Unified Soil Classification System in accordance with the TurnKey’s FOP: Soil Description Procedures Using the Unified Soil Classification System (USCS).
13. Record all information in accordance with TurnKey’s FOP: Documentation Requirements for Drilling and Well Installation.



FOP 058.0

SPLIT-SPOON SAMPLING PROCEDURES

14. Collect a portion of the sample for field screening as described in the TurnKey's FOP: Screening of Soil Samples for Organic Vapors During Drilling Activities.
15. If applicable, collect soil samples for volatile organic constituents (VOCs). If applicable, collect sample for semi-volatile, metals, geotechnical, or other off-site analysis.
16. The samples will be labeled, stored and shipped in accordance with the TurnKey's FOP: Sample Labeling, Storage and Shipment Procedures.

ATTACHMENTS

Figure 1; Split Spoon Sampler Schematic

REFERENCES

TurnKey FOPs:

- 015 *Documentation Requirements for Drilling and Well Installation*
- 046 *Sample Labeling, Storage and Shipment Procedures*
- 047 *Screening of Soil Samples for Organic Vapors During Drilling Activities*
- 054 *Soil Description Procedures Using the Unified Soil Classification System (USCS)*

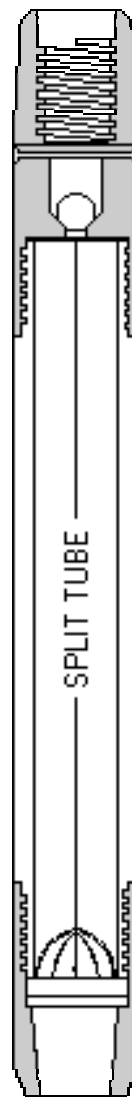


FOP 058.0

SPLIT-SPOON SAMPLING PROCEDURES

FIGURE 1

SPLIT SPOON SAMPLER SCHEMATIC



FIELD OPERATING PROCEDURES

Surface and Subsurface
Soil Sampling
Procedures

FOP 063.2

SURFACE AND SUBSURFACE SOIL SAMPLING PROCEDURES

PURPOSE

This procedure describes the methods for sampling surface soil and subsurface soil samples for physical and chemical laboratory analysis during intrusive activities such as test pitting, hand augering, drilling, surface soil sampling etc. Typical health and safety related issues should be addressed in the Project Health and Safety Plan.

PRE-SAMPLING PROCEDURES

1. Review project objectives and the Project Health and Safety Plan (HASP).
2. Conduct tailgate health and safety meeting with project team and/or subcontractor(s) by completing the Tailgate Safety Meeting Form (sample attached).
3. Calibrate air-monitoring equipment in accordance with the appropriate Benchmark's Field Operating Procedures or manufacturers recommendations for calibration of field meters.
4. Commence intrusive activities in accordance with specific Benchmark FOPs (test pitting, hand augering, drilling etc.) or as directed by the Project Work Plan.
5. Conduct air monitoring as required by the HASP, Project Work Plan or Benchmark's FOP Real-Time Air Monitoring During Intrusive Activities. Record all results on the Real Time Air Monitoring Log (sample attached).
6. Decontaminate all non-dedicated stainless steel (or Pyrex glass) equipment in accordance with Benchmark's Non-disposable and Non-dedicated Sampling Equipment Decontamination procedures.
7. Collect soil samples in accordance with the following sections.

FOP 063.2

SURFACE AND SUBSURFACE SOIL SAMPLING PROCEDURES

SURFACE SOIL/FILL SAMPLING PROCEDURES

Collection of surface soil/fill samples facilitates the evaluation of potential health risks to current site receptors that may be exposed to soil/fill via direct contact, incidental ingestion, or inhalation of airborne particulates. The following procedure is in accordance with NYSDEC sampling protocol of surface soil/fill material.

1. Collect all soil samples using dedicated (or decontaminated non-dedicated) sampling tools (i.e., spoons, trowels, bowls etc.), preferably constructed of stainless steel.
2. If the sample area is vegetated, then collect the surface soil sample from 0 to 2 inches below ground surface (bgs) following removal of the sod.
3. If there is no soil present within the sample area (i.e., only slag, concrete, mixed with fines), excavate an area 12 inches by 12 inches by 6 inches deep, screen the material to less than 1/8 inch (No. 4 sieve), and submit the screened material for analysis. If there is not enough material to completely fill the sample jar, then expand the excavation 3 inches in all four directions screening the additional material. Expand the excavation in this manner until sufficient sample volume is obtained. Volatile organic analysis of surface soil/fill utilizing this method will yield negatively biased results and should not be performed.

SURFACE/SUBSURFACE SOIL SAMPLING PROCEDURES

1. Collect all soil samples using dedicated (or decontaminated non-dedicated) sampling tools (i.e., spoons, trowels, bowls etc.), preferably constructed of stainless steel.

Surface soil samples are typically collected from 0 to 6 inches below ground surface (bgs). Subsurface soils are typically sampled from varying depths greater than 6-inches bgs based on field observations and as directed by the Project Work Plan.

FOP 063.2

SURFACE AND SUBSURFACE SOIL SAMPLING PROCEDURES

2. Transfer samples for chemical (VOC, SVOC, Metals etc.) and physical (i.e., Atterberg Limits, Grain Size, Permeability etc.) analytical testing by direct grab (i.e., directly from the bucket of the excavation equipment, split-spoon sampler, hand auger etc.) using the dedicated (or decontaminated non-dedicated) sampling tools into appropriate laboratory-supplied containers and seal. The chemical or physical laboratory selected to perform the analysis should determine minimum sample volume for analysis.
3. Prepare collected samples in accordance with Benchmark's FOP: Sample Labeling, Storage and Shipment Procedures. Do not allow the chemical soil samples to freeze during storage and shipping. It should be noted, ice is not required for physical soil samples and all physical soil samples should be kept at the collected soil moisture by securing with a tight sealing lid. Do not allow physical soil samples to gain or lose moisture from the collected soil moisture prior to analysis.
4. Record all sampling details (i.e., depth and location) in the Project Field Book; appropriate Benchmark log sheets depending on method of intrusion (i.e., drilling, test pitting, hand augering etc.); and on the Soil/Sediment Sample Collection Summary Log (sample attached).

PARAMETER-SPECIFIC PROCEDURES

1. Volatile Organic Compound (VOCs): Transfer sufficient soil volume to fill the laboratory-supplied container (typically 4 ounces) by packing the soil sample with the sampling tool to the top of the container leaving no headspace. At no time should a gloved hand (i.e., latex, nitrile etc.) be used to pack the sample into the sample container as the sample may be compromised via cross-contamination.
2. All Other Parameters: All other parameters include, but are not limited to, Semi-VOCs (SVOCs), polychlorinated biphenyls (PCBs), herbicides, pesticides, total metals etc. Transfer sufficient soil volume to fill the laboratory-supplied container by packing the soil sample with the sampling

FOP 063.2

SURFACE AND SUBSURFACE SOIL SAMPLING PROCEDURES

tool to the top of the container. Unless otherwise indicated by the laboratory or the Project Work Plan, the sample jar for all other parameters does not have to be packed completely leaving no headspace as with the VOC containers.

ATTACHMENTS

Tailgate Safety Meeting Form (sample)
Soil/Sediment Sample Collection Summary Log (sample)
Real Time Air Monitoring Log (sample)

REFERENCES

Benchmark FOPs:

- 006 *Calibration and Maintenance of Combustible Gas/Oxygen Meter*
- 010 *Calibration and Maintenance of Portable Flame Ionization Detector*
- 011 *Calibration and Maintenance of Portable Photoionization Detector*
- 040 *Non-disposable and Non-dedicated Sampling Equipment Decontamination*
- 046 *Sample Labeling, Storage and Shipment Procedures*
- 073 *Real-Time Air Monitoring During Intrusive Activities*

FOP 063.2

SURFACE AND SUBSURFACE SOIL SAMPLING PROCEDURES



TAILGATE SAFETY MEETING FORM

Project Name: _____ Date: _____ Time: _____
Project Number: _____ Client: _____
Work Activities: _____

HOSPITAL INFORMATION:

Name: _____
Address: _____ City: _____ State: _____ Zip: _____
Phone No.: _____ Ambulance Phone No. _____

SAFETY TOPICS PRESENTED:

Chemical Hazards: _____
Physical Hazards: Slips, Trips, Falls

PERSONAL PROTECTIVE EQUIPMENT:

Table with 5 columns: Activity, PPE Level, A, B, C, D. Contains 5 rows of activity and PPE level information.

New Equipment: _____

Other Safety Topic (s): Environmental Hazards (aggressive fauna)
Eating, drinking, use of tobacco products is prohibited in the Exclusion Zone (EZ)

ATTENDEES

Table with 2 columns: Name Printed, Signatures. Contains 8 rows for attendee information.

Meeting conducted by: _____



FOP 063.2

**SURFACE AND SUBSURFACE SOIL
SAMPLING PROCEDURES**



REAL TIME AIR MONITORING LOG

Date: _____
Project Name: _____
Project Number: _____
Project Location: _____
Client: _____
Purpose of Air Monitoring: _____

WEATHER CONDITIONS:
Time of Day: _____ A.M. _____ P.M.
Ambient Air Temp: _____
Wind Direction: _____
Wind Speed: _____
Precipitation: _____

Date	Personnel	Time	Air Monitoring Meter Measurement (Units)							Location/Activity/Comments
			PID (ppm)	LEL (%)	H ₂ S (ppm)	O ₂ (%)	CO (ppm)	Particulates (mg/m ³)	Other	

SAMPLE

NOTE: SEE EQUIPMENT CALIBRATION LOG FOR DESCRIPTION OF EQUIPMENT TYPE.
Prepared By: _____ Date: _____

FIELD OPERATING PROCEDURES

Test Pit Excavation and Logging Procedures

FOP 065.1

TEST PIT EXCAVATION & LOGGING PROCEDURES

PURPOSE

This procedure describes the methods for completing test pits, trenches, and other excavations that may be performed to expose subsurface soils or materials. In most cases, these pits will be mechanically excavated, using a backhoe, trackhoe, or other equipment. Because pits and other excavations can represent a substantial physical hazard, it requires a particular focus on safety procedures. The Project Health and Safety Plan identifies practices related to excavation permits, entry, and control that must be incorporated into excavation activities.

EXCAVATION PROCEDURE

1. Review project objectives and the Project Health and Safety Plan (HASP).
2. Perform excavation equipment safety checks with the operator. Specific concerns should include, but not limited to, no leaking hydraulic lines, fire extinguisher on board of the excavation equipment, operator experience etc.
3. Conduct tailgate health and safety meeting with project team and excavation operator(s) by completing the Tailgate Safety Meeting Form (sample attached).
4. Calibrate air-monitoring equipment in accordance with the appropriate Benchmark's Field Operating Procedures or manufacturers recommendations for calibration of field meters.
5. Conduct air monitoring as required by the HASP and/or Project Work Plan. Record all results on the Real Time Air Monitoring Log (sample attached).
6. Mobilize the excavation equipment to the site and position over the required location.
7. Select excavation locations, which provide necessary information for achieving objectives. Check locations with owner/operator to ensure excavation

FOP 065.1

TEST PIT EXCAVATION & LOGGING PROCEDURES

operations will not interfere with site operations, and select appropriate access routes.

8. Stake locations in the field and measure distance from locations to nearest landmarks. Survey location, if required.
9. Obtain clearances from appropriate utilities and, if buried waste/metallic objects are suspected, screen location with appropriate geophysical methods, as necessary.
10. Decontaminate excavation equipment in accordance with Benchmark's Drilling and Excavation Equipment Decontamination procedures.
11. Excavate pits. In uncontrolled areas, excavate only as many test pits as can be backfilled during the same day. Generally, allow equal time for excavation and backfilling. To the extent practicable, no pits should be left open overnight in an uncontrolled area. If sudden weather changes or other unforeseen events necessitate this, pits will be covered and/or barricaded and flagged with caution/hazard tape. These pits should be backfilled as soon as possible.
12. The Benchmark field geologist or experienced professional should determine the depth of excavation. The depth is generally limited by the safe reach of the selected equipment, but may also be limited by the stability of the excavated materials (i.e. wall stability).
13. Excavate the test pits in compliance with applicable safety regulations. In no case should a pit deeper than 4 feet be entered without first stabilizing the sidewalls by using forms, or by terracing or sloping (2:1 slope maximum) the sidewalls.
14. Excavated spoils must be placed no closer than 2 feet from the open excavation.
15. Collect soil samples from pit sidewalls in accordance with Benchmark's Surface and Subsurface Soil Sampling Procedures. If the test pit is greater than 4 feet in depth, it will not be entered for sampling. In this event, collect

FOP 065.1

TEST PIT EXCAVATION & LOGGING PROCEDURES

samples using the backhoe bucket, then fill sample containers from the center of the bucket using the stainless steel sampling equipment (i.e., spoon, spade, trowel etc.) or drive a Shelby tube or EnCore™ sampler for VOCs.

16. Record excavation observations in the Project Field Book or Test Pit Excavation Log form (sample attached). Information recorded should include:
 - Physical dimension of the pit;
 - A scaled sketch of one side of the pit showing any lithologic contacts, zones of groundwater seepage, other special features (jointing, boulders, cobbles, zones of contamination, color abnormalities, etc.)
 - General information such as project number, pit designation number, depth, date, name of responsible professional (i.e., geologist), type of excavating equipment utilized, time of excavation and backfilling, method of collecting samples and amount of sample collected (if applicable);
 - Rate of groundwater inflow, depth to groundwater and time of measurement; and
 - Unified Soil Classification System (USCS) designation of each distinctive unit.
17. Photograph each excavation, highlighting unique or important features. Use a ruler or other suitable item for scale. Include a label with the pit designation so the developed picture will be labeled.
18. Backfill pit to match the existing grade compacting in 2 to 3 foot lifts. Since the excavated material should be cover soil, the excess soil will be placed back into the hole. The Benchmark Field Team Leader will provide direction on whether excavated soils may be used as fill, or these materials are to be containerized as investigation derived waste.

FOP 065.1

TEST PIT EXCAVATION & LOGGING PROCEDURES

ATTACHMENTS

Tailgate Safety Meeting Form (sample)
Real Time Air Monitoring Log (sample)
Test Pit Excavation Log (sample)

REFERENCES

Benchmark FOPs:

- 006 *Calibration and Maintenance of Combustible Gas/Oxygen Meter*
- 010 *Calibration and Maintenance of Portable Flame Ionization Detector*
- 011 *Calibration and Maintenance of Portable Photoionization Detector*
- 018 *Drilling and Excavation Equipment Decontamination*
- 063 *Surface and Subsurface Soil Sampling Procedures*

TEST PIT EXCAVATION & LOGGING PROCEDURES



TAILGATE SAFETY MEETING FORM

Project Name: Date: Time:
Project Number: Client:
Work Activities:

HOSPITAL INFORMATION:

Name:
Address: City: State: Zip:
Phone No.: Ambulance Phone No.

SAFETY TOPICS PRESENTED:

Chemical Hazards:
Physical Hazards: Slips, Trips, Falls

PERSONAL PROTECTIVE EQUIPMENT:

Table with 5 columns: Activity, PPE Level, A, B, C, D. Contains 5 rows for activity-based PPE requirements.

New Equipment:

Other Safety Topic(s): Environmental Hazards (aggressive fauna)
Eating, drinking, use of tobacco products is prohibited in the Exclusion Zone (EZ)

ATTENDEES

Table with 2 columns: Name Printed, Signatures. Contains 8 rows for attendee information.

Meeting conducted by:

FOP 065.1

TEST PIT EXCAVATION & LOGGING PROCEDURES



TEST PIT EXCAVATION LOG

Project:	TEST PIT I.D.:
Project No.:	Excavation Date:
Client:	Excavation Method:
Location:	Logged / Checked By:

Test Pit Location: <i>NOT TO SCALE</i>		Test Pit Cross Section:		
TIME	Length: (approx.)			
Start:	Width: (approx.)			
End:	Depth: (approx.)			
Depth (fbs)	USCS Symbol & Soil Description	Pit Scan (ppm)	Photos Y/N	Samples Collected (fbs)
COMMENTS:				
GROUNDWATER ENCOUNTERED:		yes	no	If yes, depth to GW:
VISUAL IMPACTS:		yes	no	Describe:
OLFACTORY OBSERVATIONS:		yes	no	Describe:
NON-NATIVE FILL ENCOUNTERED:		yes	no	
OTHER OBSERVATIONS:		yes	no	Describe:
SAMPLES COLLECTED:		yes	no	Sample I.D.:
				Sample I.D.:
				Sample I.D.:

FIELD OPERATING PROCEDURES

Real-Time Air
Monitoring During
Intrusive Activities

FOP 073.2

REAL-TIME AIR MONITORING DURING INTRUSIVE ACTIVITIES PROCEDURE

PURPOSE

This guideline presents requirements for real-time community air monitoring and required responses during all project required intrusive activities, such as drilling, test pitting, earthwork construction etc. This procedure is consistent with the requirements for community air monitoring for all intrusive projects, including projects conducted at remediation sites, as established by the New York State Department of Health (NYSDOH) and the New York State Department of Environmental Conservation (NYSDEC). Accordingly, it follows procedures and practices outlined under NYSDEC's DER-10 (May 2010) Appendix 1A (NYSDOH's Generic Community Air Monitoring Plan) and Appendix 1B (Fugitive Dust and Particulate Monitoring).

This FOP requires real-time monitoring for constituents of concern (COC) (i.e., volatile organic compounds (VOCs), lower explosive limit (% LEL), particulates (i.e., dust) etc.) at the upwind and downwind perimeter as well as the exclusion zone of a project site during all intrusive activities. This FOP is not intended for use in establishing action levels for worker respiratory protection (see Project Health and Safety Plan (HASP) for worker protection action levels). Rather, its intent is to provide a measure of protection for the surrounding community from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The community, as referenced in this document, includes any off-site residences, public buildings/grounds and commercial or industrial establishments adjacent to the project site. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, this FOP helps to confirm that work activities did not spread contamination off-site through via air transport mechanisms. Community air monitoring shall be integrated with the construction

FOP 073.2

REAL-TIME AIR MONITORING DURING INTRUSIVE ACTIVITIES PROCEDURE

worker personal exposure-monitoring program contained in the project and site-specific HASP.

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.

MONITORING & MITIGATION PROCEDURE

Real-time air monitoring perimeter locations for monitoring stations will be established based on the location of the exclusion zone (i.e., immediate work area) and wind direction. Where wind direction is shifting or winds are calm, the downwind monitoring location will default to the perimeter location nearest the most sensitive receptor (i.e., residential property). All downwind receptors being equal, the downwind monitoring location will default to the perimeter location downwind of the prevailing winds at the site. Although additional site specific COCs may be monitored during real-time air monitoring activities, the most common COCs are discussed in this FOP, including organic vapors (i.e., VOCs), airborne particulates (i.e., fugitive dust) and combustible gases (i.e., methane) and oxygen.

FOP 073.2

REAL-TIME AIR MONITORING DURING INTRUSIVE ACTIVITIES PROCEDURE

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. 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

ORGANIC VAPORS

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. 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

FOP 073.2

REAL-TIME AIR MONITORING DURING INTRUSIVE ACTIVITIES PROCEDURE

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 be available for State (DEC and DOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.
- **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

FOP 073.2

REAL-TIME AIR MONITORING DURING INTRUSIVE ACTIVITIES PROCEDURE

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.

FOP 073.2

REAL-TIME AIR MONITORING DURING INTRUSIVE ACTIVITIES PROCEDURE

Additionally, if following the cessation of work and efforts to abate the emission source are unsuccessful, and if sustained organic vapor levels exceed 25 ppm above background within the 20-foot zone for more than 30 minutes, then the **Major Vapor Emission Response Plan** (see below) will automatically be placed into effect.

Major Vapor Emission Response Plan

Upon activation of Major Vapor Emission Response Plan, the following activities will be undertaken:

1. All Emergency Response Contacts as listed below and in the Site-Specific Health and Safety Plan will be contacted.
2. The local police authorities will immediately be contacted by the Site Safety and Health Officer and advised of the situation.
3. The Site Safety and Health Officer will determine if site workers can safely undertake source abatement measures. Abatement measures may include covering the source area with clean fill or plastic sheeting, or consolidating contaminated materials to minimize surface area. The Site Safety and Health Officer will adjust worker personal protective equipment as necessary to protect workers from over-exposure to organic vapors.

The following personnel are to be notified by the Site Safety and Health Officer in the listed sequence if the Major Vapor Emission Response Plan is activated:

Contact	Phone
Police/Fire Department	911
New York State DOH	(518) 402-7860
New York State DEC Region 8	(585) 226-2466, switchboard

FOP 073.2

REAL-TIME AIR MONITORING DURING INTRUSIVE ACTIVITIES PROCEDURE

New York State DEC Region 9	(716) 851-7220
State Emergency Response Hotline	(800) 457-7362

In addition, the Site Safety and Health Officer will provide these authorities with a description of the apparent source of the contamination and abatement measures being taken by the contractor, if any.

AIRBORNE PARTICULATES

Fugitive dust suppression and airborne particulate monitoring shall be performed during any intrusive activities involving disturbance or handling of site soil/fill materials. Fugitive dust suppression techniques will include the following minimum measures:

- Spraying potable water on all excessively dry work areas and roads.
- All fill materials leaving the site will be hauled in properly covered containers or haul trailers.
- Additional dust suppression efforts may be required as discussed below.

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

FOP 073.2

REAL-TIME AIR MONITORING DURING INTRUSIVE ACTIVITIES PROCEDURE

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 ($\mu\text{g}/\text{m}^3$) 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 $\mu\text{g}/\text{m}^3$ 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 $\mu\text{g}/\text{m}^3$ 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 $\mu\text{g}/\text{m}^3$ 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.

Visual Assessment

In conjunction with the real-time monitoring program, TurnKey personnel and any subcontractors thereof will be responsible for visually assessing fugitive dust migration from the site. If airborne dust is observed leaving the site, the work will be stopped until supplemental dust suppression techniques are employed in those areas.

Supplemental Dust Suppression

Supplemental dust suppression techniques may include but are not necessarily limited to the

FOP 073.2

REAL-TIME AIR MONITORING DURING INTRUSIVE ACTIVITIES PROCEDURE

following measures:

- Reducing the excavation size, number of excavations or volume of material handled.
- Restricting vehicle speeds.
- Applying water on buckets during excavation and dumping.
- Wetting equipment and excavation faces.
- Wetting haul roads.
- Restricting work during extreme wind conditions.
- Use of a street sweeper on paved haul roads, where feasible.

Work can resume using supplemental dust suppression techniques provided that the measures are successful in reducing the sustained downwind particulate concentration to below 150 ug/m³ of the upwind level, and in preventing visible dust migration off-site.

COMBUSTIBLE GASES & OXYGEN

Ambient combustible gas and oxygen concentrations should be measured prior to commencing intrusive activities each workday and a minimum of every 30-minutes thereafter. Air monitoring activities should be performed using equipment appropriate to measure combustible gases in percent lower explosive limit (LEL) and percent oxygen and calibrated daily. All combustible gas and oxygen readings must be recorded in the Project Field Book and/or Real-Time Air Monitoring Logs (sample attached) and, if applicable, be made available for State (DEC and DOH) personnel to review.

FOP 073.2

REAL-TIME AIR MONITORING DURING INTRUSIVE ACTIVITIES PROCEDURE

Mitigation upon the detection of various action levels of organic vapors are presented below:

Combustible Gas:

- If the sustained ambient air concentration of combustible gas at the downwind perimeter of the site exceeds a reading of 10 to 25% LEL, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 10% LEL, work activities can resume with continued monitoring.
- If sustained combustible gas levels at the downwind perimeter of the site persist at levels in excess of 25% LEL, work activities must be halted, the source of explosion hazards identified, corrective actions taken to abate emissions and monitoring continued. Following combustible gas mitigation, work activities can resume provided that the sustained total organic vapor level 200 feet downwind of the exclusions 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 a sustained value of 10% LEL.

Oxygen:

- If the sustained ambient oxygen concentration at the downwind perimeter of the site measures a reading between 19.5% - 21% oxygen, work activities can continue with extreme caution, however attempts to determine the potential source of oxygen displacement must be conducted.
- If the sustained oxygen level readily decreases below 19.5% LEL, work activities should be discontinued and all personnel must leave the area immediately.
- If the sustained oxygen level at the downwind perimeter of the site persists at levels between 21-25%, work activities can resume with caution.
- If the sustained oxygen level at the downwind perimeter of the site persists at levels exceeding 25% (fire hazard potential), work activities should be discontinued and all personnel must leave the area immediately.

FOP 073.2

**REAL-TIME AIR MONITORING DURING INTRUSIVE
ACTIVITIES PROCEDURE**

ATTACHMENTS

Real-Time Air Monitoring Log (sample)

REFERENCES

TurnKey FOPs:

- 006 *Calibration and Maintenance of Combustible Gas/Oxygen Meter*
- 010 *Calibration and Maintenance of Flame Ionization Detector*
- 011 *Calibration and Maintenance of Portable Photoionization Detector*
- 084 *Calibration and Maintenance of Portable Particulate Meter*

FOP 073.2

REAL-TIME AIR MONITORING DURING INTRUSIVE ACTIVITIES PROCEDURE



REAL TIME AIR MONITORING LOG

Date: _____
 Project Name: _____
 Project Number: _____
 Project Location: _____
 Client: _____
 Purpose of Air Monitoring: _____

WEATHER CONDITIONS:

Time of Day:	A.M.	P.M.
Ambient Air Temp:		
Wind Direction:		
Wind Speed:		
Precipitation:		

Date	Personnel	Time	Air Monitoring Meter Measurement (Units)							Location/Activity/Comments
			PID (ppm)	LEL (%)	H ₂ S (ppm)	O ₂ (%)	CO (ppm)	Particulates (mg/m ³)	Other	

NOTE: SEE EQUIPMENT CALIBRATION LOG FOR DESCRIPTION OF EQUIPMENT TYPE.

Prepared By: _____ Date: _____



FIELD OPERATING PROCEDURES

Geoprobe Drilling
Procedures

FOP 078.0

GEOPROBE DRILLING PROCEDURES

PURPOSE

This guideline presents a method for direct-push drilling a borehole through unconsolidated materials, including soils or overburden.

PROCEDURE

The following procedure will be used to drill a borehole for sampling and/or well installation, using direct-push methods and equipment.

1. Follow TurnKey's Field Operating Procedure (FOP) for Drill Site Selection Procedure prior to implementing any drilling activity.
2. Perform drill rig safety checks with the driller by completing the Drilling Safety Checklist form (sample attached).
3. Conduct tailgate health and safety meeting with project team and drillers by completing the Tailgate Safety Meeting Form (sample attached).
4. Calibrate air-monitoring equipment in accordance with the appropriate TurnKey's FOPs or manufacturers recommendations.
5. Ensure all drilling equipment (i.e., rods, 4-foot sampler, dedicated PVC sleeves) appear clean and free of soil prior to initiating any subsurface intrusion. Decontamination of drilling equipment should be in accordance with TurnKey's Drilling and Excavation Equipment Decontamination Procedures FOP.
6. Mobilize the Geoprobe™ rig to the site and position over the borehole.
7. Level and stabilize the rig and recheck the rig location against the planned drilling location.



FOP 078.0

GEOPROBE DRILLING PROCEDURES

8. Fully advance the sampler into the subsurface using an ATV-mounted direct-push Geoprobe™ drill rig and 1.5-inch diameter sampler, typically 4-feet in length and fitted with a dedicated PVC sleeve, for each four-foot core of soil.
9. Retrieve the 4-foot sample core from the driller, place on a piece of polyethylene tarp, and cut open using a sharp utility knife.
10. Visually characterize each 4-foot soil core using the Unified Soil Classification System (USCS) in accordance with TurnKey's Soil Description Procedures Using the USCS FOP.
11. Scan each 4-foot core for total volatile organic vapors with a calibrated Photovac 2020 PID equipped with a 10.6 eV lamp, and report any visual and/or olfactory observations. Record PID scan measurements in the Project Field Book and appropriate field forms.
12. If required, collect a representative soil sample for headspace determinations. In general, soil samples representative of each 4-foot core interval are collected, placed in a sealable plastic bag, and kept at or near room temperature (approximately 65-70° F) for a minimum of 15 minutes prior to measurement. Record PID headspace determination measurements in the Project Field Book and appropriate field forms.
13. Check sampler and rods periodically during drilling to ensure the boring is plumb. Adjust rig position as necessary to maintain plumb.
14. Continue drilling until reaching the assigned total depth, or until sampler refusal occurs. Sampler refusal is when the drilling penetration drops below 0.1 feet per 2 minutes, with the full weight of the rig on the sampler.
15. Plug and abandon boreholes not used for temporary well installation in accordance with TurnKey's Field Operating Procedure for Abandonment of Borehole. Boreholes to be used as temporary wells should be completed in accordance with TurnKey's Temporary Well (Piezometer) Construction Procedures FOP.

FOP 078.0

GEOPROBE DRILLING PROCEDURES

16. Decontaminate all non-dedicated drilling tools between boring locations using potable tap water and a phosphate-free detergent (i.e., Alconox™) in accordance with TurnKey's Drilling and Excavation Equipment Decontamination Procedures FOP.

OTHER PROCEDURAL ISSUES

- Borings will not be over drilled (rat holed) without the express permission of the TurnKey field supervisor. All depth measurements should be accurate to the nearest 0.1 foot, to the extent practicable.
- Potable water may be placed in the sampler stem if critically necessary for borehole control or to accomplish sampling objectives. This will be performed only with the express permission of the TurnKey field supervisor.

ATTACHMENTS

Drilling Safety Checklist (sample)
Tailgate Safety Meeting Form (sample)

REFERENCES

TurnKey FOPs:

- 001 *Abandonment of Borehole Procedures*
- 017 *Drill Site Selection Procedure*
- 018 *Drilling and Excavation Equipment Decontamination Procedures*
- 054 *Soil Description Procedures Using the USCS*
- 077 *Temporary Well (Piezometer) Construction Procedures*



FOP 078.0

GEOPROBE DRILLING PROCEDURES



DRILLING SAFETY CHECKLIST

Project: _____ Date: _____
 Project No.: _____ Drilling Company: _____
 Client: _____ Drill Rig Type: _____

ITEMS TO CHECK	OK	ACTION NEEDED
"Kill switches" installed by the manufacturer are in operable condition and all workers at the drill site are familiar with their location and how to activate them?		
"Kill switches" are accessible to workers on both sides of the rotating stem? NOTE: Optional based on location and number of switches provided by the manufacturer.		
Cables on drill rig are free of kinks, frayed wires, "bird cages" and other missing sections?		
Cables are terminated at the working end with a proper eye splice or swaged Coupling or using cable clamps?		
Cable clamps are installed with the saddle on the live or dead side? Clamps should not be alternated and should be of the correct size and number for the cable size to which it is installed. Clamps are connected to the correct parts?		
Hooks installed on hoist cables are the safety type with a rotational stop to prevent accidental separation?		
Safety latches are functional and completely close the end of the throat of the hook and have positive action to close the throat when the hook is partially displaced for connecting or disconnecting a load?		
Drive shafts, belts, chain drives and other rotating parts will be guarded to prevent accidental insertion of hands and limbs?		
Outriggers shall be extended and locked when the boom is raised off its cradle. Hydraulic outriggers must maintain pressure to continuously support and stabilize the boom when in use.		
Outriggers shall be properly supported on the ground surface to prevent settling into the soil.		
Controls are properly labeled and have freedom of movement? Controls should not be blocked or locked in the inaction position.		
Safeties on any device shall not be bypassed or neutralized.		
Controls shall be operated smoothly and cables and lifting devices shall not be jerked or operated erratically to overcome resistance.		
Slings, chokers and lifting devices are inspected before using and are in proper working order? Damaged units are removed from service and are properly tagged?		
Shackles and clevises are in proper working order and pins and screws are fully inserted before placing under a load?		
High-pressure hoses have a safety (chain, cable or strap) at each end of the hose section to prevent whipping in the event of a failure?		
Rotating parts of the drill string shall be free of sharp projections or hooks, which could entrap clothing or foreign objects?		



FOP 078.0

GEOPROBE DRILLING PROCEDURES



DRILLING SAFETY CHECKLIST

Project: _____

Date: _____

ITEMS TO CHECK	OK	ACTION NEEDED
Wire ropes should not be allowed to bend around sharp edges without cushion material.		
The exclusion zone is centered over the borehole and the radius is equal or greater than the boom height?		
The work area around the borehole shall be kept clear of trip hazards and walking surfaces should be free of slippery material.		
Workers shall not proceed higher than the drilling deck with fall restraining device and must attach the device in a manner to restrict fall less than 6 feet.		
A fire extinguisher of appropriate size shall be immediately available to the crew. The drill crew shall have received annual training on proper use of the fire extinguisher.		
<p>29 CFR 1910.333 © (3) Except where electric lines have been de-energized and visibly grounded proximate to, under, by, or near power lines, the following:</p> <p>.333 © (3) (ii) 50 kV or less - 10 feet For 50 kV or over - 10ft. Plus 4 inches for each additional kV</p> <p>TurnKey Policy: Maintain 20 feet</p>		
<p>29 CFR 1910.333 © (3) (iii) When the boom is in the down position, clearance from energized lines will be maintained as follows:</p> <p>Less than 4 feet - 10 feet 50 to 360 kV - 10 feet 365 to 720 kV - 15 feet</p>		

Name: _____ (printed)

Signed: _____ Date: _____



FOP 078.0

GEOPROBE DRILLING PROCEDURES



TAILGATE SAFETY MEETING FORM

Project Name: _____ Date: _____ Time: _____
Project Number: _____ Client: _____
Work Activities: _____

HOSPITAL INFORMATION:

Name: _____
Address: _____ City: _____ State: _____ Zip: _____
Phone No.: _____ Ambulance Phone No. _____

SAFETY TOPICS PRESENTED:

Chemical Hazards: _____
Physical Hazards: Slips, Trips, Falls

PERSONAL PROTECTIVE EQUIPMENT:

Activity: _____ B C D
Activity: _____ B C D
Activity: _____ A B C D
Activity: _____ A B C D
Activity: _____ A B C D

New Equipment: _____

Other Safety Topic (s) _____
Eating, drinking, or tobacco products is prohibited in the Exclusion Zone (EZ)

ATTENDEES

Name Printed Signatures

Meeting conducted by: _____





FIELD OPERATING PROCEDURES

Stockpile Sampling
Procedures for
Chemical Analysis

FOP 079.0

STOCKPILE SAMPLING PROCEDURES FOR CHEMICAL ANALYSIS

PURPOSE

This guideline presents a method for collecting representative soil samples from stockpiled borrow source material for chemical analysis.

GENERAL

In general, off-site soil that is brought to a Site for use as supplemental fill is subject to Quality Assurance sampling and analysis. If QA is required, all off-site soil proposed for use as Site backfill shall be documented by the subcontractor in writing to have originated from locations having no evidence of disposal or release of hazardous, toxic or radioactive substances, wastes or petroleum products. If the subcontractor designates a source as “virgin” soil, it shall be further documented in writing to be native soil material having not supported any known past industrial or commercial development or agricultural use. Borrow soils can be used as backfill once concentrations are confirmed to meet project designated criteria for the Constituents of Primary Concern (COPCs) and NYSDEC TAGM HWR-94-4046 recommended soil cleanup objectives (SCOs) or NYSDEC 6NYCRR Part 375 SCOs.

Sample collection equipment will include stainless steel mixing bowls, stainless steel mixing spoons, and a stainless steel hand auger with extension rods or a stainless steel spade or equivalent. It may be necessary to use a backhoe or drilling rig to facilitate sample collection.



**STOCKPILE SAMPLING PROCEDURES
FOR CHEMICAL ANALYSIS**

SAMPLING PLAN

1. Virgin Sources – Virgin borrow sources will be confirmed acceptable for use as site backfill through collection of a single composite soil sample representative of the borrow pit or stockpile.
2. Non-Virgin Sources – Prior to sampling, determine the amount of soil that will be sampled. The soil will be tested via collection of one composite sample per 250 cubic yards of material from each source area. If more than 1,000 cubic yards of soils are excavated from a given off-site source area and all samples of the first 1,000 cubic yards meet project designated criteria, the sample collection frequency may be reduced to one composite for each additional 1,000 cubic yards of soils from the same source area, up to 5,000 cubic yards. For borrow sources greater than 5,000 cubic yards, sampling frequency may be reduced to one sample per 5,000 cubic yards, providing all earlier samples meet project designated criteria. Sampling procedure for non-virgin sources is described in the next section.

SAMPLE COLLECTION AND HANDLING

The following procedure will be used to collect representative soil samples from a non-virgin soil stockpile.

1. Using a stainless steel spade (or hand auger), a backhoe, or drilling rig, penetrate the pile to a depth of approximately 2 to 3 feet and collect four (4) representative grab samples of approximate equal volume from the top, middle, and bottom.
2. Transfer each grab into a small stainless steel mixing bowl.
3. **VOC Analysis:** Using a clean stainless steel spoon, transfer equal amounts from each small mixing bowl into a laboratory-supplied, 4 oz. VOC sample jar. This should be performed by randomly transferring several small aliquots from each bowl, taking care to minimize disturbance of the soil.

FOP 079.0

STOCKPILE SAMPLING PROCEDURES FOR CHEMICAL ANALYSIS

4. **Other COPCs:** Transfer equal aliquots from each small bowl into a large mixing bowl and homogenize the sample. Fill the remaining laboratory-supplied jars with the homogenized soil for all other project required COPCs (i.e., SVOCs, PCBs, Pesticides, Herbicides, inorganics, etc.).
5. Label each set of jars with the following information:
 - Project and site name
 - Sample Code
 - Project Number
 - Date/Time
 - Sample type (soil composite or grab)
 - Sampler's initials
 - Sample Preservation
 - Required analysis

The sample code will consist of a unique, alphanumeric identification code keyed to the sampling location. Identify the sampling location on a field sketch.

6. Record all information associated with sample collection in the Project Field Book.
7. Label, store, and ship the samples in accordance with the Benchmark Field Operating Procedure for Sample Labeling, Storage and Shipment Procedures.
8. Clean the sampling and mixing equipment with Alconox and deionized water and repeat steps 1 through 7 for the remaining samples.

REFERENCES

Benchmark FOPs:

046 *Sample Labeling, Storage and Shipment Procedures*





FIELD OPERATING PROCEDURES

Stockpile & Borrow
Source Sampling
Procedures for Physical
Analysis

FOP 080.0

STOCKPILE & BORROW SOURCE SAMPLING PROCEDURES FOR PHYSICAL ANALYSIS

PURPOSE

This guideline presents a method for collecting representative soil samples from stockpiled borrow source material for physical analysis.

GENERAL

Generally, one of two methods will be utilized to collect soil samples for analysis. One method is to collect the samples by digging a series of representative test pits at the borrow source area and obtaining samples from those test pits. The other method involves collecting samples from representative stockpiles (normally after the material has been mechanically screened). Both procedures are discussed within this method.

Sample collection equipment will include stainless steel mixing bowls, stainless steel mixing spoons, and a stainless steel hand auger with extension rods or a stainless steel spade or equivalent. It may be necessary to use a backhoe or drilling rig to facilitate sample collection.

STOCKPILED SOIL SAMPLING METHOD

As shown in the attached Figure 1, twelve (12) samples of approximate equal volume should be collected from the top, middle and bottom of each 1000 CY stockpile by CQA personnel and composited in the field to give one representative aliquot per 1000 CY.

Stockpile Sampling Procedure

1. Using a shovel or backhoe, penetrate the pile to a depth of about two to three feet.
2. Collect a sample using the shovel.



FOP 080.0

STOCKPILE & BORROW SOURCE SAMPLING PROCEDURES FOR PHYSICAL ANALYSIS

3. Transfer the sample to a specially prepared mixing area.
4. Repeat Steps 1 through 3 at each 1,000 CY stockpile.
5. Mix subsamples using shovel into one homogenous mass and place in a properly labeled 5-gallon bucket. Fill each bucket completely and cover.
6. Attach a label to each container and record location referencing the stockpile identification number. The label may be made with permanent marker on the side (not top) of the container or using adhesive-back paper labels affixed to the side of the container. At a minimum, the labels should be identified with the following information:
 - Project Name
 - Sample number.
 - Initials of CQA inspector or sample collection personnel.
 - Date of collection.
 - Location of collection (i.e. stockpile I.D.)
7. Return remaining contents of composite sample to stockpile.
8. Deliver the samples to the laboratory for analysis as soon as possible.
9. All information pertinent to each sampling event should be recorded by sampling personnel in the field at the time of sample collection. Each report should correspond to each stockpile and will contain the following information:
 - Project Name
 - Sample number or numbers collected
 - Field observations.
 - Climatologic conditions.
 - Date and time of collection.
 - Approximate location of test pit.
 - Name of person who collected sample.

BORROW AREA TEST PIT SAMPLING METHOD

Prior to obtaining representative soil samples, test holes should be excavated at the borrow area to determine the actual depth and lateral extent of the borrow source soil material. A base line should then be established and a grid system staked in the field. Five samples



FOP 080.0

STOCKPILE & BORROW SOURCE SAMPLING PROCEDURES FOR PHYSICAL ANALYSIS

should be collected at equidistant locations for each 5000 cubic yards (CY) of soil designated for use in the borrow areas (at approximately mid-depth).

Borrow Area Sampling Procedure

1. Using a shovel, collect a representative sample at approximately mid-depth at each of the sampling locations representing 1000 CY of the proposed excavation area.
2. Transfer each sample into a labeled separate 5-gallon bucket. Fill each bucket completely and cover.
3. Attach a label to each container and record location referencing the established grid system in the borrow area. The label may be made with permanent marker on the side (not top) of the container or using adhesive-back paper labels affixed to the side of the container. At a minimum, the labels should be identified with the following information:
 - Project Name
 - Sample number.
 - Initials of CQA inspector or sample collection personnel.
 - Date of collection.
 - Location of collection (i.e. location of borrow area grid system location)
4. Deliver the samples to the laboratory for analysis as soon as possible.
5. All information pertinent to each sampling event should be recorded by sampling personnel in the field at the time of sample collection. Each report should correspond to each test pit and will contain the following information:
 - Project Name
 - Sample number or numbers collected
 - Field observations.
 - Climatologic conditions.
 - Date and time of collection.
 - Approximate location of test pit.
 - Name of person who collected sample.

ATTACHMENTS

Figure 1; Stockpile Sampling Methodology



FOP 080.0

**STOCKPILE & BORROW SOURCE SAMPLING PROCEDURES
FOR PHYSICAL ANALYSIS**

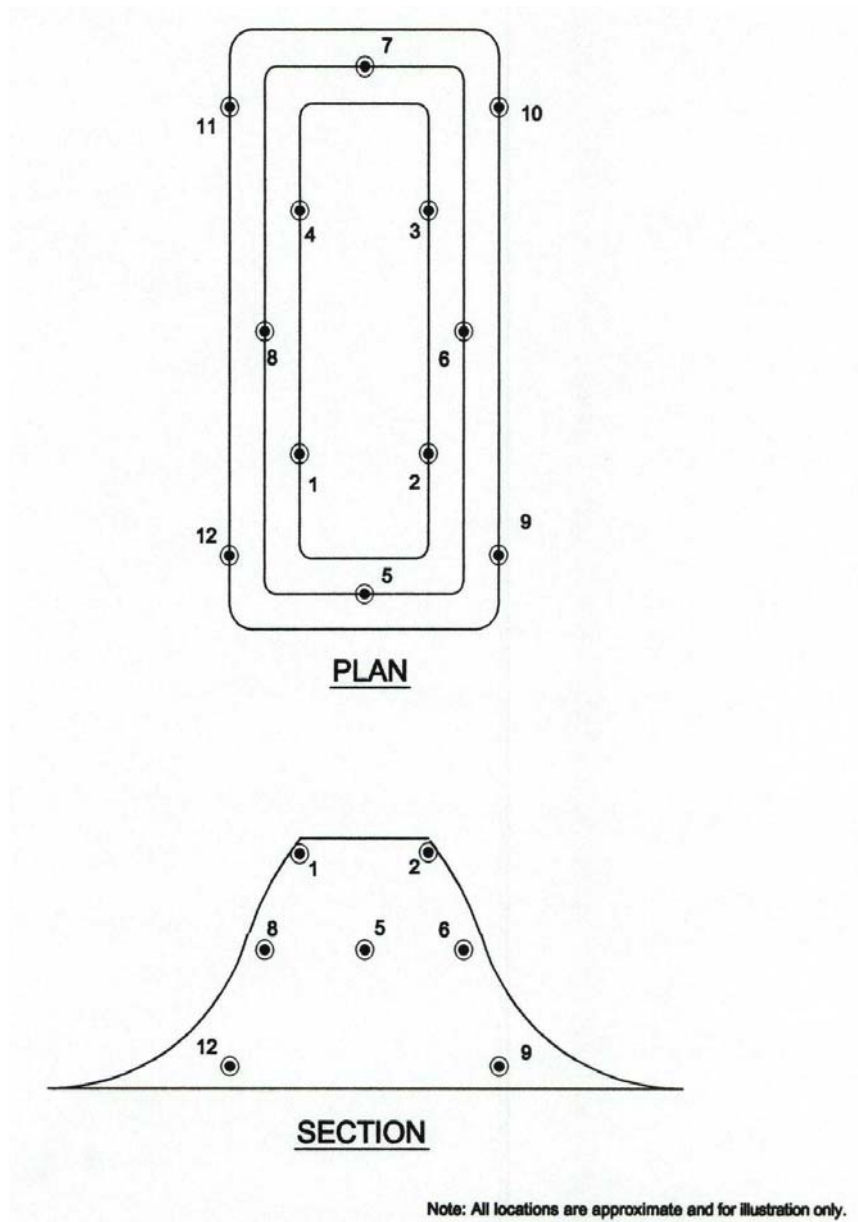
REFERENCES

None



STOCKPILE & BORROW SOURCE SAMPLING PROCEDURES
FOR PHYSICAL ANALYSIS

FIGURE 4
1,000 CY STOCKPILE SAMPLING METHODOLOGY





FIELD OPERATING PROCEDURES

Waste Sampling
Procedures

FOP 082.0

WASTE SAMPLING PROCEDURES

PURPOSE

This guideline describes the equipment and procedures that can safely be used to collect waste samples from open and closed units.

INTRODUCTION

Hazardous wastes are regulated by the USEPA under 40 CFR Parts 260-265. Therefore, many of the methods that are used to manage, store, treat, and dispose hazardous wastes and potential hazardous wastes are of concern to both the regulators and the regulated community. Samples are often required of regulated or potentially regulated materials. While it is understood that each facility and waste stream may present its own unique sampling and analytical challenges, this procedure will list equipment and enumerate procedures that have been used by the USEPA to safely and successfully sample specific waste units.

SAFETY

Sampling of waste units should be assessed for potential hazards by both the Project Manager (PM) and the site safety officer (SSO). It is the SSOs responsibility to enforce the site Health and Safety Plan (HASP), and to ensure that procedures used during waste sampling are in accordance with current company protocol. Sampling equipment contaminated during waste sampling investigations should be cleaned with laboratory detergent and rinsed with tap water prior to returning the equipment from the field. Contaminated sampling equipment that is to be discarded must be disposed of properly in accordance with the site-specific Work Plan.

It should be noted that although Benchmark does not readily perform field activities with highly hazardous materials, we do occasionally oversee contractors who do. Therefore, it is prudent on our part to recognize those situations and be prepared to ensure the activities of



FOP 082.0

WASTE SAMPLING PROCEDURES

our subcontractors comply with the site-specific HASP as well as those procedures discussed herein. Any reference within this procedure to personal protective equipment (PPE) upgrades above a modified level C (i.e., Tyvek, nitrile gloves, and full-face respirator) relates solely to our subcontractors.

QUALITY CONTROL PROCEDURES

In some instances, special decontamination procedures will be necessary and should be developed on a case-by-case basis according to the specific material encountered. Any cleaning procedures and equipment repairs conducted in the field deviating from those specified in the associated FOPs or the site-specific Work Plan, should be discussed with the Project Manager, and thoroughly documented in the Project Field Book.

All air monitoring and field analytical/screening equipment (i.e., photoionization detectors) should be checked and calibrated per manufacturer's specifications before being used to collect any waste stream unit sample (open or closed). The Field Team Leader should record all calibration results on appropriate field forms.

WASTE UNIT TYPES

Waste management units can be generally categorized into two types: open and closed. In general, open units are larger than closed units and include waste piles and surface impoundments whereas closed units include containers and tanks as well as ancillary tank equipment. Besides containers and tanks, sumps may also be considered closed units because they are designed to collect the spillage of liquid wastes and are sometimes configured as a confined space.

Although both may pose hazards, units that are open to the environment are generally less hazardous than closed units. Sampling of closed units is considered a higher hazard risk



WASTE SAMPLING PROCEDURES

because of the potential of exposure to toxic gases and flammable/explosive atmospheres. Because closed units prevent the dilution of the wastes by environmental influences, they are more likely to contain materials that have concentrated levels of hazardous constituents. While opening closed units for sampling purposes, investigators/contractor's shall use Level B PPE, air monitoring instruments to ensure that the working environment does not contain hazardous levels of flammable/explosive gasses or toxic vapors, and follow the appropriate safety requirements stipulated in the site-specific HASP.

Buried waste materials should be located and excavated with extreme caution. Once the buried waste is uncovered, the appropriate safety and sampling procedures utilized will depend on the type of waste unit.

Open Units

While open units may contain many types of wastes and come in a variety of shapes and sizes, they can be generally regarded as either waste piles or surface impoundments.

Definitions of these two types of open units from 40 CFR Part 260.10 are:

- Waste pile-- any non-containerized accumulation of solid, non-flowing hazardous waste that is used for treatment or storage and that is not a containment building.
- Surface impoundment -- "...a facility or part of a facility which is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), which is designed to hold the accumulation of liquid wastes or wastes containing free liquids, and which is not an injection well. Examples of surface impoundments are holding, storage, settling and aeration pits, ponds, and lagoons."

One of the distinguishing features between waste piles and surface impoundments is the state of the waste. Waste piles typically contain solid or non-flowing materials whereas liquid wastes are usually contained in surface impoundments. The nature of the waste will also determine the mode of delivering the waste to the unit. Wastes are commonly pumped

WASTE SAMPLING PROCEDURES

or gravity fed into impoundments while heavy equipment or trucks may be used to dump wastes in piles. Once the waste has been placed in an open unit, the state of the waste may be altered by environmental factors (e.g., temperature, precipitation, etc.).

Surface impoundments may contain several phases such as floating solids, liquid phase(s), and sludges. Waste piles are usually restricted to solids and semi-solids. All of the potential phases contained in a waste unit should be considered in developing the sample design to meet the study's objective.

Closed Units

There are a variety of designs, shapes, sizes, and functions of closed units. In addition to the challenges of the various designs and the safety requirements for sampling them, closed units are difficult to sample because they may contain liquid, solid, semi-solid/sludge, or any combination of phases. Based on the study's design, it may be necessary to obtain a cross sectional profile of the closed unit in an attempt to characterize the unit. The following are definitions of types of closed waste units described in 40 CFR Part 260.10:

- Container -- any portable device in which a material is stored, transported, treated, disposed, or otherwise handled. Examples of containers are drums, overpacks, pails, totes, and roll-offs.
- Tank -- a stationary device, designed to contain an accumulation of hazardous waste constructed primarily of non-earthen materials, which provide structural support.

Portable tanks, tank trucks, and tank cars vary in size and may range from simple to extremely complex designs. Depending on the unit's design, it may be convenient to consider some of these storage units as tanks for sampling purposes even though they meet the definition of a container.

WASTE SAMPLING PROCEDURES

- Ancillary equipment (tank) -- any device including, but not limited to, such devices as piping, fittings, flanges, valves, and pumps that is used to distribute, meter, or control the flow of hazardous waste from its point of generation to a storage or treatment tank(s), between hazardous waste storage and treatment tanks to a point of disposal on-site, or to a point of shipment for disposal off-site.
- Sump -- any pit or reservoir that meets the definition of a tank and those troughs/trenches connected to it that serve to collect hazardous wastes.

Note: some outdoor sumps may be considered open units/surface impoundments.

Although any of the closed units may not be completely sealed and may be partially open to the environment, the unit needs to be treated as a closed unit for sampling purposes until a determination can be made. Once a closed unit is opened, a review of the proposed sampling procedures and level of protection can be performed to determine if the (PPE) is suitable for the site conditions.

Samples collected from different waste units should not be composited into one sample container without additional analytical and/or field screening data to determine if the materials are compatible and will not cause an inadvertent chemical reaction.

EQUIPMENT

Selecting appropriate equipment to sample wastes is a challenging task due to the uncertainty of the physical characteristics and nature of the wastes. It may be difficult to separate, homogenize and/or containerize a waste due to its physical characteristics (viscosity, particle size, etc.). In addition, the physical characteristics of a waste may change with temperature, humidity, or pressure. Waste streams may vary depending on how and when a waste was generated, how and where it was stored/disposed, and the conditions under which it was

WASTE SAMPLING PROCEDURES

stored/disposed. Also, the physical location of the wastes or the unit configuration may prevent the use of conventional sampling equipment.

Given the uncertainties that a waste may present, it is desirable to select sampling equipment that will facilitate the collection of samples that will meet the study's objective, and that will not unintentionally bias the sample by excluding some of the sample population that is under consideration. However, due to the nature of some waste matrices or the physical constraints of some waste units, it may be necessary to collect samples knowing that a portion of the desired population was omitted due to limitations of the equipment. Any deviations from the study plan or difficulties encountered in the field concerning sample collection that may have an effect on the study's objective should be documented in a log book, reviewed with the analytical data, and presented in the report.

WASTE SAMPLING EQUIPMENT

Waste sampling equipment should be made of non-reactive materials that will neither add to nor alter the chemical or physical properties of the material that is being sampled. The attached Table 1 lists some conventional equipment for sampling waste units/phases and some potential limitations of the equipment. Another reference for selecting sampling equipment is the ASTM, Standard Guide for Selection of Sampling Equipment for Wastes and Contaminated Media Data Collection Activities, D6232-98.

WASTE SAMPLING PROCEDURES

Waste Piles

Waste piles vary in size, shape, composition, and compactness, and may vary in distribution of hazardous constituents and characteristics (strata). These variables will affect safety and access considerations. The number of samples, the type of sample(s), and the sample location(s) should be based on the study's objectives. Commonly used equipment to collect



WASTE SAMPLING PROCEDURES

samples from waste piles are listed in Table 1. All equipment should be compatible with the waste and should have been cleaned to prevent any cross contamination of the sample.

Surface Impoundments

Surface impoundments vary in size, shape, and waste content, and may vary in distribution of hazardous constituents and characteristics (strata). The number of samples, the type of sample(s), and the sample location(s) should be based on the study's objectives. Commonly used equipment to collect samples from surface impoundments are listed in Table 1. All equipment should be compatible with the waste and should have been cleaned to prevent any cross contamination of the sample.

Because of the potential danger of sampling waste units suspected of containing elevated levels of hazardous constituents, personnel should never attempt to sample surface impoundments used to manage potentially hazardous wastes from a boat. All sampling should be conducted from the banks or piers of surface impoundments. Any exception must be approved by the appropriate site safety officer and/or the Occupational Health and Safety Designee (OHSD).

Drums

Drums are the most frequent type of containers sampled by field investigators for chemical analyses and/or physical testing. Caution should be exercised by the field investigators when sampling drums because of the potential presence of explosive/flammable gases and/or toxic vapors. Therefore, the following procedures should be used when collecting samples from drums of unknown material:

1. Visually inspect all drums that are being considered for sampling for the following:
 - pressurization (bulging/dimples);
 - crystals formed around the drum opening;
 - leaks, holes, stains;

WASTE SAMPLING PROCEDURES

- labels, markings;
- composition and type (steel/poly and open/bung);
- condition, age, rust
- sampling accessibility

Drums showing evidence of pressurization and crystals should be furthered assessed to determine if remote drum opening is needed. If drums cannot be accessed for sampling, heavy equipment is usually necessary to stage drums for the sampling activities. Adequate time should be allowed for the drum contents to stabilize after a drum is handled.

2. Identify each drum that will be opened (e.g., paint sticks, spray paint, cones, etc).

LEVEL "B" PROTECTION IS REQUIRED FOR THE FOLLOWING PROCEDURES.

3. Before opening, ground each metal drum that is not in direct contact with the earth using grounding wires, alligator clips, and a grounding rod or metal structure. If a metal drum is in an overpack drum, the metal drum should be grounded.
4. Touch the drum opening equipment to the bung or lid and allow an electrical conductive path to form. Slowly remove the bung or drum ring and/or lid with spark resistant tools (brass/beryllium).
5. Screen drums for explosive gases and toxic vapor with air monitoring instruments as bung or drum lid is removed. Depending on site conditions screen for one or more of the following:
 - radioactivity
 - cyanide fumes
 - halogen vapors
 - pH
 - flash point (requires sample for testing)

Note the state, quantity, phases, and color of the drum contents. Record all relevant results, observations, and information in a logbook.

WASTE SAMPLING PROCEDURES

6. Select the appropriate sampling equipment based on the state of the material and the type of container. Sampling equipment should be made of non-reactive materials that will meet the study's objective(s).
7. Place oil wipe (as necessary), sampling equipment, and sample containers near drum(s) to be sampled.

AIR MONITORING FOR TOXIC VAPORS AND EXPLOSIVE GASES AND OXYGEN DEFICIENT ATMOSPHERES SHOULD BE CONDUCTED DURING DRUM SAMPLING.

Liquids -- Slowly lower the COLIWASA or drum thief to the bottom of the container. Close the COLIWASA with the inner rod or create a vacuum with the sampler's gloved thumb on the end of the thief and slowly remove the sampling device from the drum. Release the sample from the device into the sample container. Repeat the procedure until a sufficient sample volume is obtained.

Solids/Semi-Solids -- Use a push tube, bucket auger, or screw auger or if conditions permit a pneumatic hammer/drill to obtain the sample. Carefully use a clean stainless steel spoon to place the sample into container(s) for analyses.

8. Close the drums when sampling is complete. Segregate contaminated sampling equipment and investigative derived wastes (IDW) containing incompatible materials as determined by the drum screening procedure (Step #5). At a minimum, contaminated equipment should be cleaned with laboratory detergent and rinsed with tap water prior to returning it from the field.

Tanks

Sampling tanks is considered hazardous due to the potential for them to contain large volumes of hazardous materials and therefore, appropriate safety protocols must be

FOP 082.0

WASTE SAMPLING PROCEDURES

followed. Unlike drums, tanks may be compartmentalized or have complex designs. Preliminary information about the tank's contents and configuration should be reviewed prior to the sampling operation to ensure the safety of sampling personnel and that the study's objectives can be achieved.

In addition to having discharge valves near the bottom of tanks and bulk storage units, most tanks have hatches at the top. It is desirable to collect samples from the top hatch because of the potential for the tank's contents to be stratified. Additionally, when sampling from the discharge valve, there is a possibility of a stuck or broken valve which could cause an uncontrolled release. Investigators should not utilize valves on tanks or bulk storage devices unless they are operated by the owner or operator of the facility, or a containment plan is in place should the valve stick or break. If the investigator must sample from a tank discharge valve, the valving arrangement of the particular tank must be clearly understood to insure that the compartment(s) of interest is sampled.

Because of the many different types of designs and materials that may be encountered, only general sampling procedures that outline sampling a tank from the top hatch are listed below:

1. All relevant information concerning the tank such as the type of tank, the tank capacity, markings, condition, and suspected contents should be documented in a logbook.
2. The samplers should inspect the ladder, stairs, and catwalk that will be used to access the top hatch to ensure that they will support the samplers and their equipment.

LEVEL "B" PROTECTION IS REQUIRED FOR THE FOLLOWING PROCEDURES.



WASTE SAMPLING PROCEDURES

3. Before opening, ground each metal tank using grounding wires, alligator clips, and a grounding rod or metal structure.
4. Any vents or pressure release valves should be slowly opened to allow the unit to vent to atmospheric pressure. Air monitoring for explosive/flammable gases and toxic vapors should be conducted during the venting with the results recorded in a log book. If dangerous concentrations of gases evolve from the vent or the pressure is too great, leave the area immediately.
5. Touch tank opening equipment to the bolts in the hatch lid and allow electrical conductive path to form. Slowly remove bolts and/or hatch with spark resistant tools (brass/beryllium). If a pressure build up is encountered or detected, cease opening activities and leave the area.
6. Screen tanks for explosive/flammable gases and toxic vapors with air monitoring instruments. Depending on the study objectives and site conditions, conduct characteristic screening (e.g., pH, halogen, etc.) as desired. Collect a small volume of sample for flash point testing, if warranted. Note the state, quantity, number of phases, and color of the tank contents. Record all relevant results, observations, and information in a logbook. Compare the screening results with any pre-existing data to determine if the tank should be sampled.
7. Select the appropriate sampling equipment based on the state of the material and the type of tank. Sampling equipment should be constructed of non-reactive materials that will meet the study's objective(s).
8. Place oil wipe (as necessary), sampling equipment, and sample containers near tanks(s) to be sampled.

AIR MONITORING FOR TOXIC VAPORS, EXPLOSIVE GASES AND OXYGEN DEFICIENT ATMOSPHERES SHOULD BE CONTINUOUS DURING TANK SAMPLING.

Liquids -- Slowly lower the bailer, bacon bomb, Dipstick™, COLIWASA, or Teflon® tubing to the desired sampling depth. (NOTE: In work areas where explosive/flammable

WASTE SAMPLING PROCEDURES

atmospheres could occur, peristaltic pumps powered by 12 V. batteries should not be used.) Close the sampling device or create a vacuum and slowly remove the sampling device from the tank. Release the sample from the device into the sample container. Repeat the procedure until a sufficient sample volume is obtained.

Solids/Semi-Solids - Use a push tube, bucket auger, screw auger, Mucksucker™, or if conditions permit a pneumatic hammer/drill to obtain the sample. Carefully extrude the sample from the sampling device or use a clean stainless steel spoon to place the sample into containers for analyses.

9. Close the tank when sampling is complete. Segregate contaminated sampling equipment and investigative derived wastes (IDW) containing incompatible materials as determined by the screening procedure (Step #6). At a minimum, contaminated equipment should be cleaned with laboratory detergent and rinsed with tap water prior to returning it from the field. IDW should be managed according to Section 5.15, and Region 4's Contaminated Media Policy.

Miscellaneous Contaminated Materials

Sampling may be required of materials or equipment (e.g., documents, building materials, equipment, etc.) to determine whether or not various surfaces are contaminated by hazardous constituents, or to evaluate the effectiveness of decontamination procedures.

Wipe or swab samples may be taken on non-absorbent, smooth surfaces such as metal, glass, plastic, etc. The wipe materials must be compatible with the solvent used and the analyses to be performed, and should not come apart during use. The wipes are saturated with a solvent; methylene chloride, hexane, isopropanol or analyte free water depending on the parameters to be analyzed. The laboratory performing the analyses can provide the appropriate solvent. Wipe samples should not be collected for volatile organic compounds analysis. Sampling personnel should be aware of hazards associated with the selected solvent

FOP 082.0

WASTE SAMPLING PROCEDURES

and should take appropriate precautions to prevent any skin contact or inhalation of these solvents. All surfaces and areas selected for sampling should be based on the study's objectives. Typically, 10 cm by 10 cm templates are prepared from aluminum foil which are secured to the surface of interest. The prepared (saturated with solvent) wipe(s) is removed from its container with tongs or gloves, and used to wipe the entire area with firm strokes using only one side of the wipe. The goal is to systematically wipe the whole area. The wipe is then folded with the sample side inward and placed into the sample container. This procedure is repeated until the area is free of visible contamination or no more wipes remain. Care should be taken to keep the sample container tightly sealed to prevent evaporation of the solvent. Samplers must also take care to not touch the used side of the wipe.

For items with porous surfaces such as documents (usually business records), insulation, wood, etc., actual samples of the materials are required. It is therefore important, that during the collection and/or analyses of the sample that evidentiary material is not destroyed.

All secondary containing pails will be secured in the vehicles while transporting the samples from the field to the laboratory for analyses. In addition, each pail should indicate when protective equipment is recommended to handle the actual waste/sample material

REFERENCES

United States Environmental Protection Agency. November 2001. *Environmental Investigations Standard Operating Procedures and Quality Assurance Manual*.

Benchmark FOPs:

- 011 *Calibration and Maintenance of Portable Photoionization Detector*
- 046 *Sample Labeling, Storage and Shipment Procedures*



FOP 081.0

**GROUNDWATER SAMPLE COLLECTION PROCEDURES FOR PASSIVE
DIFFUSION BAG SAMPLERS**

**TABLE 1
SAMPLING EQUIPMENT for VARIOUS WASTE UNITS**

Equipment	Waste Units/Phases	Limitations
scoop with bracket/conduit	impoundments, piles, containers, tanks/liquids, solids, sludges	Can be difficult to collect deeper phases in multiphase wastes. Depth constraints.
spoon	impoundments, piles, containers/solids, sludges	Similar limitations as the scoop. Generally not effective in sampling liquids.
push tube	piles, containers/cohesive solids, sludges	Should not be used to sample solids with dimensions $>1/2$ the diameter of the tube. Depth constraints
auger	impoundments, piles, containers / solids	Can be difficult to use in an impoundment or a container, or for solidified wastes.
sediment sampler	impoundments, piles/solids, sludges	Should not be used to sample solids with dimensions $>1/2$ the diameter of the tube.
ponar dredge	impoundments/solids, sludges	Must have means to position equipment to desired sampling location. Difficult to decon.
COLIWASA or drum	impoundments, containers,	Not good with viscous wastes. Devices $> 7'$
thief	tanks/liquids	Require 2 samplers to use effectively.
Dipstick™ /	impoundments, containers,	Not recommended for tanks >11 feet deep.
Mucksucker™	tanks/liquids, sludges	Devices $> 7'$ require 2 samplers to use effectively
bacon bomb	impoundments, tanks/liquids	Not good with viscous wastes.
bailer	impoundments, tanks/liquids	Only if waste is homogeneous. Not good with viscous wastes
peristaltic pump with vacuum jug assembly	impoundments, tanks/liquids	Cannot be used in flammable atmospheres. Not good with viscous wastes
back-hoe bucket	piles/solids, sludges	May be difficult to access desired sampling location. Difficult to decon. Can lose volatiles.
split-spoon	piles/solids	Requires drill rig or direct push equipment.
roto-hammer	piles, containers/solids	Physically breaks up sample. May release volatiles. Not for flammable atmospheres.



FIELD OPERATING PROCEDURES

Calibration &
Maintenance of
Portable Particulate
Meter

FOP 084.0

CALIBRATION AND MAINTENANCE OF PORTABLE PARTICULATE METER

PURPOSE

This guideline describes a method for calibration of a portable particulate meter, specifically the Thermo Electron Corporation MIE DataRAM 4 (Model DR-4000). The DataRAM 4 measures the concentration of airborne particulate matter (liquid or solid), as well as mean particle size, air temperature, and humidity, providing direct and continuous readout as well as electronic recording of the information. This parameter is of interest both as a general indicator of air quality, and because of its pertinence to community air monitoring typically required at most construction/remediation/investigation sites. The DataRAM covers a wide measurement range from 0.0001 mg/m³ to 400 mg/m³. With its large capacity internal data logging capabilities with data retrieval on screen or downloaded, the DataRAM can store up to 50,000 data points, including individual point averages, particle size, temperature, and humidity with time stamp as well as overall average and maximum concentration.

Because the DataRAM meter must be factory calibrated once a year, this guideline presents a method for start-up, operation, and maintenance, which is performed to verify instrument function. All field instruments will be calibrated, verified and recalibrated at frequencies required by their respective operating manuals or manufacturer's specifications, but not less than once each year. Field personnel should have access to all operating manuals for the instruments used for the field measurements. This procedure also documents critical maintenance activities for this meter. The user should reference the manufacturer's instruction manual prior to operating this unit.

ACCURACY & PRECISION

The calibrated accuracy of the DataRAM 4 particulate meter is within $\pm 2\%$ of reading \pm precision over the temperature range of -4° to 158° F (-10° to 50° C) and 10 to 95% relative humidity (non-condensing). The precision is $\pm 1\%$ of reading or ± 0.001 mg/m³, whichever

CALIBRATION AND MAINTENANCE OF PORTABLE PARTICULATE METER

is greater (1-second averaging) and $\pm 0.3\%$ of reading or $\pm 0.0003 \text{ mg/m}^3$, whichever is greater (10-second averaging).

INSTRUMENT PANEL VIEW

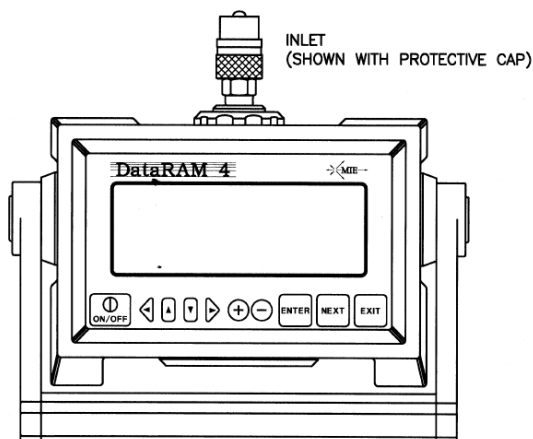


FIGURE 1. FRONT-PANEL VIEW OF DataRAM

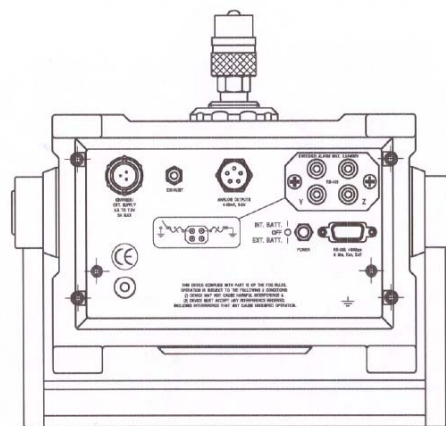


FIGURE 2. BACK-PANEL VIEW OF DataRAM

MAINTENANCE

General Guidelines

The DataRAM 4 is designed to be repaired at the factory. No user serviceable components are inside the metal enclosure of the DataRAM 4 with exception of the filter cartridge or the analytic filter holder. Access to the internal components of the unit by others than authorized MIE personnel voids warranty.

Unless a MALFUNCTION message is displayed, or other operational problems occur, the DataRAM 4 should be returned to the factory once every two years for routine check out, test, cleaning and calibration check.

Battery Charging and Cycling

If the DataRAM 4 is to be operated without its charger/power supply, i.e., deriving power from its internal battery, this battery should be fully charged before initiating a run. The

**CALIBRATION AND MAINTENANCE OF PORTABLE
PARTICULATE METER**

DataRAM 4 charger/power supply can be connected continuously to the instrument whether the DataRAM 4 is on or off. If the charger/power supply is not connected, the internal battery will discharge very slowly depending on storage temperature. Low storage temperature reduces battery capacity. High storage temperatures, however, reduce battery life which is of the order of 8 years at 20°C (68°F), and only 2 years at 40°C (104°F).

In general, the user should maintain the battery charge as high as possible in order to extend its charge/discharge cycling capacity (this characteristic differs from that of nickel-cadmium batteries).

Instrument Storage

If the DataRAM 4 is to be stored for an extended period of time (i.e., 3 months or more), place the 3-position switch on the back panel in its OFF position (mid-position), in order to minimize gradual battery discharge. This will have no effect on data retention or internal clock function. It is recommended, however, that the battery be recharged every 3 months in order to prolong battery life.

During storage always snap on quick-connect cap over the instrument inlet to protect the sensing optics from gradual dust contamination. Store DataRAM 4 in a dry environment.

Filter Replacement

To replace either of two types of filters used with DataRAM 4, place the instrument on its back rubber feet (front panel facing upward). On the bottom surface of the DataRAM, locate the large threaded plastic filter cover and holding the cross bar, rotate this cover counterclockwise. Remove cover and the filter holder within the open cavity.

HEPA Filter Cartridge Replacement

The DataRAM 4 is shipped from the factory with the HEPA filter cartridge installed. This cartridge can be identified by its metallic cover. Remove this cartridge. Clean the internal black rubber gasket against which the cartridge is normally compressed. Install new HEPA-type cartridge (MIE part no. MSA-95302) by inserting its wider ridged end first. Reposition threaded plastic cover engaging threads carefully; rotate cover clockwise, hand tightening firmly. Properly dispose of used cartridge to prevent inadvertent re-use.

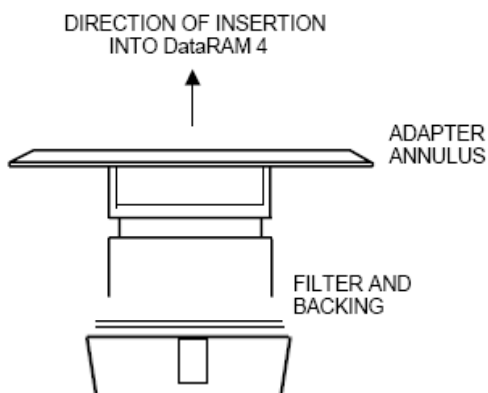
**CALIBRATION AND MAINTENANCE OF PORTABLE
PARTICULATE METER**

Analytic Filter Installation/Replacement

In order to install or replace the analytical filter holder, proceed as follows. Remove the HEPA cartridge normally in place. Remove (separate) the inlet cover (with the blue plug) of the Millipore plastic filter holder from the rest of that holder assembly containing the white membrane filter. Insert firmly the gray plastic adapter annulus into the open face of the filter holder assembly. Remove the red plastic plug from the exhaust nipple of the filter holder assembly. Ensure that all three components of the holder assembly are fully compressed to preclude any leafage. Insert the assembly into the filter cavity of the DataRAM 4 with the gray plastic adapter annulus bearing against the internal black gasket (adapter annulus inserted first). Reposition threaded plastic cover and hand-tighten carefully and firmly. Set aside HEPA cartridge for future use.

In order to remove and/or to replace the membrane filter within its holder, remove the gray plastic adapter annulus and separate (pry apart) the two transparent plastic rings that compress the membrane filter. Make sure to remove and replace only the membrane filter (using tweezers), leaving the white backing disc in the holder. A new membrane filter should then be placed over that backing and the sealing ring should then be inserted to trap and compress the filter and backing discs. For storage, the inlet cap with the blue plug should be inserted as well as the red plug on the back of the filter holder.

Analytical filter holder with adapter annulus inserted



**CALIBRATION AND MAINTENANCE OF PORTABLE
PARTICULATE METER**

Cleaning of Optical Sensing Chamber

Although the DataRAM 4 incorporates filtered air shielding of the critical optical sensing surfaces, continued sampling of airborne particles at high concentrations may result in gradual build-up of contamination on those interior surfaces of the sensing chamber components. This may cause an excessively high optical background level. If this background level does becomes excessive, the DataRAM 4 will alert the user at the completion of the zeroing sequence by the display of a BACKGROUND HIGH message. If this message is presented, the DataRAM 4 can continue to be operated providing accurate measurements. However, it is then advisable to clean the front surfaces of the optical lenses within the sensing chamber at the first convenient opportunity, as described below. The tools required for this cleaning are: an intense concentrated light source (e.g., flash light) to view the inside of the sensing chamber, denatured alcohol, a soft lint-free cloth, and the special cleaning tool provided with the DataRAM 4 consisting of a cut-off cotton swab inserted in a plastic sleeve and held by a right-angle Allen wrench.

Proceed as follows to clean the lens surfaces within the sensing chamber:

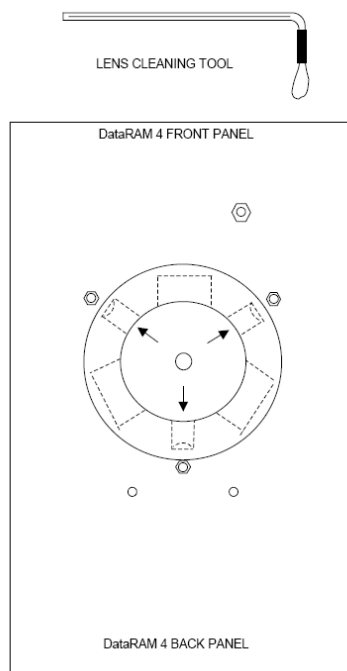
- **Make sure to shut off power completely before proceeding with cleaning**
- Install the stainless steel cover on the inlet of the DataRAM 4 to protect this fitting.
- Place the DataRAM 4 upside down on a table, resting the instrument on the inlet cover and the rear protective bumper.
- Unscrew the gray plastic cover of the filter cavity on the bottom surface of the DataRAM 4.
- Remove the filter cartridge from its cavity.
- Carefully clean the black soft filter-sealing gasket within the filter cavity by wiping it with the lint-free soft cloth. Use alcohol if necessary.
- Shine the concentrated light source into the sensing chamber located about 3 cm (1¼ in.) beyond the soft-sealing gasket in the filter cavity.
- Locate the three smaller side cavities inside the sensing chamber, identified by the arrows on that figure (see page 6). These three cavities contain the lenses of the two sources and the common detector of the DataRAM 4. The frontal surfaces of these lenses are likely to require cleaning if the instrument indicates BACKGROUND HIGH.
- Wet the cotton swab of the lens-cleaning tool with alcohol (e.g., methanol, ethanol, or rubbing alcohol).

FOP 084.0

CALIBRATION AND MAINTENANCE OF PORTABLE PARTICULATE METER

- Holding the cleaning tool by its long handle, insert this tool into the sensing chamber without touching the walls of this chamber.
- Direct the cotton swab tip towards the opening of one of the three smaller cavities as indicated by the arrows of the figure below, and insert the cotton tip into this cavity as far as it will go. Gently wipe that internal surface touched by the swab tip by a rotating motion. Carefully withdraw the swab tip from the cavity.
- Repeat previous cleaning step for the other two small cavities.
- Carefully remove the cleaning tool from the sensing chamber. Allow the alcohol to dry leaving the filter cavity open for about 15 minutes.
- Re-insert the filter cartridge into its cavity and close it with its gray plastic cover, hand-tightening it firmly. Remove the inlet cap and store on its pod on the back panel.
- Place the DataRAM 4 right side up and key ON. Proceed to check its optical background by running the ZERO/INITIALIZE check as. The message READY! should appear at the end of this check indicating that the lens contamination has been eliminated. Should the message BACKGROUND HIGH persist after completion of the above-described lens cleaning procedure, please contact the factory.

Lens cleaning tool and bottom view of open filter cavity showing location of sensor chamber lens cavities (arrows).



**CALIBRATION AND MAINTENANCE OF PORTABLE
PARTICULATE METER**

FACTORY CALIBRATION

For mass concentration measurements, each DataRAM 4 is factory calibrated against a set of reference monitors that, in turn, are periodically calibrated against a gravimetric standard traceable to the National Institute of Standards and Testing (NIST).

The primary factory reference method consists of generating a dust aerosol by means of a fluidized bed generator, and injecting continuously the dust into a mixing chamber from which samples are extracted concurrently by two reference filter collectors and by two master real-time monitors that are used for the routine calibration of every DataRAM 4.

The primary dust concentration reference value is obtained from the weight increase of the two filters due to the dust collected over a measured period of time, at a constant and known flow rate. The two master real-time monitors are then adjusted to agree with the reference mass concentration value (obtained from averaging the measurements of the two gravimetric filters) to within $\pm 1\%$.

Three primary, NIST traceable, measurements are involved in the determination of the reference mass concentration: the weight increment from the dust collected on the filter, the sampling flow rate, and the sampling time. Additional conditions that must be met are: a) suspended dust concentration uniformity at all sampling inlets of the mixing chamber; b) identical sample transport configurations leading to reference and instrument under calibration; and c) essentially 100% collection efficiency of filters used for gravimetric reference for the particle size range of the test dust.

FOP 084.0

CALIBRATION AND MAINTENANCE OF PORTABLE PARTICULATE METER

The test dust used for the MIE factory calibration of the DataRAM 4 is SAE Fine (ISO Fine) supplied by Powder Technology, Inc. It has the following physical characteristics (as dispersed into the mixing chamber):

- Mass median aerodynamic particle diameter: 2 to 3 μm
- Geometric standard deviation of lognormal size distribution: 2.5
- Bulk density: 2.60 to 2.65 g/cm^3
- Refractive index: 1.54

In addition to the mass calibration described above, the DataRAM 4 is factory calibrated using a gas with known scattering coefficient in order to adjust the relative scattering irradiance at the two source wavelengths.

ATTACHMENTS

None



FIELD OPERATING PROCEDURES

Field Quality Control
Procedures

FIELD QUALITY CONTROL PROCEDURES

PURPOSE

In addition to traditional environmental samples (e.g., soil, groundwater, wipe, vapor etc.) described in each project work plan, site-specific field quality assurance/quality control (QA/QC) samples are typically collected and analyzed to support the required third-party data usability assessment effort of a project. Site-specific QA/QC samples generally include matrix spikes, matrix spike duplicates, blind duplicates (where appropriate), and trip blanks which accompany aqueous volatile organic compound (VOC) samples only.

The number of QA/QC field samples (blind duplicate, matrix spike/matrix spike duplicate, trip blank, field blank, or equipment blank) will be designated prior to field mobilization, but final QC sample locations will be contingent upon field conditions. This procedure outlines and discusses each QA/QC sample that may be required during a project.

PROCEDURE

A brief summary of each QA/QC sample identified above is presented below. Where appropriate, the procedure to be used to collect these samples is also presented.

- **Trip Blanks** – A sufficient number of trip blanks for VOC analysis must be prepared by the laboratory and delivered to the sampling team prior to a sampling event, typically two or three 40-ml VOA vials with organic free reagent water. One sealed blank will be carried into the field per day along with the sample containers for each day that water matrix volatile organic samples are collected. Trip blanks will be transported and handled in the same manner as the actual samples. The results of the trip blank analysis will be reviewed to evaluate if the potential for sample contamination during transportation and handling exists. The trip blanks will be analyzed for the same VOCs (and method) as the project groundwater samples.
- **Blind Duplicate** – One blind duplicate must be collected and analyzed per 20 samples collected per matrix (i.e., soil, groundwater, soil vapor, etc.). The location

FIELD QUALITY CONTROL PROCEDURES

of the sample collection point will not be disclosed to the analytical laboratory, therefore the field sample containers will be returned to the laboratory identified only as the “blind duplicate.” The well or sample location will be recorded in the Project Field Book or handheld RuggedReader® Pocket PC and on the field data sheets, and the results will be compared to review analytical precision. Sample analysis will be identical to the original sample per the project work plan. The Blind Duplicate sample must be collected simultaneously from the same source under identical conditions as the original sample.

- **Matrix Spike/Matrix Spike Duplicate (MS/MSD)** – A sufficient volume of sample will be collected at one sampling location per sampling event for MS/MSD analysis per matrix (i.e., soil and groundwater only). The laboratory will report the results of the MS/MSD analysis, which will be reviewed for sampling and analysis precision and accuracy. Sample analysis will be identical to the original sample per the project work plan. The MS/MSD sample must be collected simultaneously from the same source under identical conditions as the original sample.

- **Equipment (Rinsate) Blank** – In general, dedicated sampling equipment is used to minimize field decontamination time and avoid the need for equipment blanks; however there may be instances where the use of non-dedicated equipment cannot be avoided. An equipment blank will be collected for each day of sampling activity when non-dedicated sampling equipment is used. These equipment blank samples will be used as a QC check of the decontamination procedures for sampling equipment. Sample analysis for the equipment blank will consist of the most comprehensive parameter list used for risk assessment in which the non-dedicated equipment was used for environmental sample collection. During most projects, every effort to use dedicated sampling equipment should be made in order to minimize field decontamination time and avoid the need for equipment blanks. Equipment Blank sampling procedure is as follows:
 - Non-dedicated equipment are to be decontaminated in accordance with TurnKey’s Non-disposable and Non-dedicated Sampling Equipment Decontamination procedures prior to use in the field. If organic-free

FOP 085.0

FIELD QUALITY CONTROL PROCEDURES

- deionized water (generally provided by the laboratory) is not available for decontamination, equipment will be allowed to thoroughly air dry.
- Once properly rinsed or allowed to air dry, analyte-free water (provided by the laboratory) is poured appropriately over or through the decontaminated sample collection device, collected in a sample container, and returned to the laboratory as a sample.
 - **Field Blank** – A field blank is a sample of the unused final decontamination rinse water that is collected at the sampling site and returned to the laboratory as a sample. Sample analysis for the field blank will consist of the most comprehensive parameter list used during the investigation.
 - **Split Sample** – A split sample is a sample that has been portioned into two or more containers from a single sample container or sample mixing container. Samples for VOC analysis should never be mixed prior to splitting.
 - **Blank Wipe Samples** – There are two types of blank wipe samples, an equipment blank and a field blank that may be required per the project work plan, both are described below:
 - Equipment Blank – Required only if reusable templates are used for wipe sample collection. The decontaminated template is wiped with a hexane saturated swab. The swab is placed in the appropriate sample container and returned to the laboratory as a sample.
 - Field Blank – Clean disposable gloves are wiped with a hexane saturated swab. The swab is placed in the appropriate sample container and returned to the laboratory as a sample.

REFERENCES

TurnKey FOPs:

040 *Non-disposable and Non-dedicated Sampling Equipment Decontamination*



Collection of Groundwater Samples for Perfluorooctanoic Acid (PFOA) and Perfluorinated Compounds (PFCs) from Monitoring Wells Sample Protocol

Samples collected using this protocol are intended to be analyzed for perfluorooctanoic acid (PFOA) and other perfluorinated compounds by Modified (Low Level) Test Method 537.

The procedure used must be consistent with the NYSDEC March 1991 Sampling Guidelines and Protocols http://www.dec.ny.gov/docs/remediation_hudson_pdf/sgpsect5.pdf with the following materials limitations.

At this time acceptable materials for sampling include: stainless steel, high density polyethylene (HDPE), PVC, silicone, acetate and polypropylene. Equipment blanks should be generated at least daily. Additional materials may be acceptable if pre-approved by NYSDEC. Requests to use alternate equipment should include clean equipment blanks. **NOTE: Grunfos pumps and bladder pumps are known to contain PFC materials (e.g. Teflon™ washers for Grunfos pumps and LDPE bladders for bladder pumps).** All sampling equipment components and sample containers should not come in contact with aluminum foil, low density polyethylene (LDPE), glass or polytetrafluoroethylene (PTFE, Teflon™) materials including sample bottle cap liners with a PTFE layer. Standard two step decontamination using detergent and clean water rinse will be performed for equipment that does come in contact with PFC materials. Clothing that contains PTFE material (including GORE-TEX®) or that have been waterproofed with PFC materials must be avoided. Many food and drink packaging materials and “plumbers thread seal tape” contain PFCs.

All clothing worn by sampling personnel must have been laundered multiple times. The sampler must wear nitrile gloves while filling and sealing the sample bottles.

Pre-cleaned sample bottles with closures, coolers, ice, sample labels and a chain of custody form will be provided by the laboratory.

1. Fill two pre-cleaned 500 mL HDPE or polypropylene bottle with the sample.
2. Cap the bottles with an acceptable cap and liner closure system.
3. Label the sample bottles.
4. Fill out the chain of custody.
5. Place in a cooler maintained at $4 \pm 2^{\circ}$ Celsius.

Collect one equipment blank for every sample batch, not to exceed 20 samples.

Collect one field duplicate for every sample batch, not to exceed 20 samples.

Collect one matrix spike / matrix spike duplicate (MS/MSD) for every sample batch, not to exceed 20 samples.

Request appropriate data deliverable (Category A or B) and an electronic data deliverable.

Groundwater Sampling for Emerging Contaminants

July 2018

Issue: DER has committed to analyzing representative groundwater samples at remediation sites for emerging contaminants (1,4-dioxane and PFAS) as described in the below guidance.

Implementation

A UIS project specific to this Emerging Contaminant Sampling Initiative, will be automatically added to all sites, except: Class 03 and Class C sites.

Class 02 and 04 State Superfund sites located in Region 1 must be sampled by the end of 2018. This is true even if that will require a separate sampling event. For all other sites (i.e., SSF, BCP, RCRA Corrective Action), PMs should include emerging contaminants in the next scheduled sampling event. Only groundwater sampling is required. The number of samples should be similar to the number of samples where “full TAL/TCL sampling” would typically be required. The date that the sampling event is scheduled to take place should be entered into the UIS as the planned project start date. The actual end date will be the date that the data is entered into EQuIS. If sampling is not feasible (e.g., the site no longer has any monitoring wells in place), the project may be terminated upon approval of the Bureau Director with the basis for termination included in the project status.

Upon a new site being brought into any program (i.e., SSF, BCP), PFAS and 1,4-dioxane will be incorporated into the investigation of groundwater as part of the standard “full TAL/TCL” sampling. A full list of chemicals to be sampled is available [here](#). Until an SCO is established for PFAS, soil samples do not need to be analyzed for PFAS unless groundwater contamination is detected. Separate guidance will be developed for addressing sites where emerging contaminants are found in the groundwater. The analysis currently performed for SVOCs in soil is adequate for evaluation of 1,4-dioxane, which already has an established SCO.

Analysis and Reporting

Labs should provide a full category B deliverable. If the sampling is completed by a consultant, a DUSR should be prepared by an independent 3rd party data validator. If sampling is completed by DEC staff with a lab callout, the data should be reviewed by a DEC chemist, but a full DUSR is not necessarily required, depending on the chemist’s opinion of the data quality and the needs of the project. QA/QC samples should be collected as required in DER-10, Section 2.3(c). The electronic data submission should meet the requirements provided at: <https://www.dec.ny.gov/chemical/62440.html> ,

The work plan should explicitly describe analysis and reporting requirements.

PFAS sample analysis:

Currently, ELAP does not offer certification for PFAS compounds in matrices other than finished drinking water. However, laboratories analyzing environmental samples (ex. soil, sediments, and groundwater) are required, by DER, to hold ELAP certification for PFOA and PFOS in drinking water by EPA Method 537 or ISO 25101.

Modified EPA Method 537 is the preferred method to use for groundwater samples due to the ability to achieve 2 ng/L (ppt) reporting limits. If contract labs or work plans submitted by responsible parties indicate that they are not able to achieve similar reporting limits, the project manager should discuss this with a DER chemist. Note: Reporting limits for PFOA and PFOS should not exceed 2 ng/L.

PFAS sample reporting: DER has developed a PFAS target analyte list (below) with the intent of achieving reporting consistency between labs for commonly reportable analytes. It is expected that reported results for PFAS will include, at a minimum, all the compounds listed. This list may be updated in the future as new information is learned and as labs develop new capabilities. If lab and/or matrix specific issues are encountered for any particular compounds, the NYSDEC project manager will make case-by-case decisions as to whether particular analytes may be temporarily or permanently discontinued from analysis for each site. Any technical lab issues should be brought to the attention of a DER chemist.

Some sampling using this full PFAS target analyte list is needed to understand the nature of contamination. It may also be critical to differentiate PFAS compounds associated with a site from other sources of these chemicals. Like routine refinements to parameter lists based on investigative findings, the full PFAS target analyte list may not be needed for all sampling intended to define the extent of contamination. Project managers may approve a shorter analyte list (e.g., just the UCMR3 list) for some reporting on a case by case basis.

1,4-Dioxane Analysis and Reporting: The method detection limit (MDL) for 1,4-dioxane should be no higher than 0.35 µg/l (ppb). Although ELAP offers certification for both EPA Method 8260 SIM and EPA Method 8270 SIM, DER is advising the use of method 8270 SIM. EPA Method 8270 SIM provides a more robust extraction procedure, uses a larger sample volume, and is less vulnerable to interference from chlorinated solvents.

Full PFAS Target Analyte List

Group	Chemical Name	Abbreviation	CAS Number
Perfluoroalkyl sulfonates	Perfluorobutanesulfonic acid	PFBS	375-73-5
	Perfluorohexanesulfonic acid	PFHxS	355-46-4
	Perfluoroheptanesulfonic acid	PFHpS	375-92-8
	Perfluorooctanesulfonic acid	PFOS	1763-23-1
	Perfluorodecanesulfonic acid	PFDS	335-77-3
Perfluoroalkyl carboxylates	Perfluorobutanoic acid	PFBA	375-22-4
	Perfluoropentanoic acid	PFPeA	2706-90-3
	Perfluorohexanoic acid	PFHxA	307-24-4
	Perfluoroheptanoic acid	PFHpA	375-85-9
	Perfluorooctanoic acid	PFOA	335-67-1
	Perfluorononanoic acid	PFNA	375-95-1
	Perfluorodecanoic acid	PFDA	335-76-2
	Perfluoroundecanoic acid	PFUA/PFUdA	2058-94-8
	Perfluorododecanoic acid	PFDoA	307-55-1
	Perfluorotridecanoic acid	PFTriA/PFTrDA	72629-94-8
Perfluorotetradecanoic acid	PFTA/PFTeDA	376-06-7	
Fluorinated Telomer Sulfonates	6:2 Fluorotelomer sulfonate	6:2 FTS	27619-97-2
	8:2 Fluorotelomer sulfonate	8:2 FTS	39108-34-4
Perfluorooctane-sulfonamides	Perfluorooctanesulfonamide	FOSA	754-91-6
Perfluorooctane-sulfonamidoacetic acids	N-methyl perfluorooctanesulfonamidoacetic acid	N-MeFOSAA	2355-31-9
	N-ethyl perfluorooctanesulfonamidoacetic acid	N-EtFOSAA	2991-50-6

Bold entries depict the 6 original UCMR3 chemicals