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**Rochester Gas & Electric**

# Site Characterization Work Plan

Park Street Former MGP site
Geneseo, New York

July 2015

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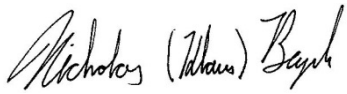

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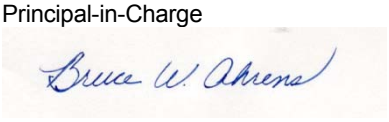

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**Site Characterization Work Plan**

Park Street Former MGP Site

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# Table of Contents

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**Acronyms and Abbreviations**

| | |
|---|---|
| bgs | below ground surface |
| BTEX | benzene, toluene, ethylbenzene, and xylenes |
| DER | Department of Environmental Remediation |
| DNAPL | dense non-aqueous phase liquid |
| DUSR | Data Usability Summary Report |
| EDR | Environmental Data Resources, Inc. |
| ELAP | Environmental Laboratory Accreditation Program |
| FSP | Field Sampling Plan |
| HSA | hollow-stem auger |
| IRM | interim remedial measure |
| mg/kg | milligrams per kilogram |
| MGP | manufactured gas plant |
| NAPL | non-aqueous phase liquid |
| NYSDEC | New York State Department of Environmental Conservation |
| PAH | polycyclic aromatic hydrocarbon |
| PID | photoionization detector |
| PVC | polyvinyl chloride |
| QAPP | Quality Assurance Project Plan |
| QA/QC | quality assurance/quality control |

| | |
|---|---|
| RGE | Rochester Gas & Electric |
| SCR | Site Characterization Report |
| SCWP | Site Characterization Work Plan |
| SUNY | State University of New York |
| SVOC | Semivolatile organic compounds |
| TAGM | Technical and Administrative Guidance Memorandum |
| TAL | Target Analyte List |
| TCL | Target Compound List |
| USEPA | United States Environmental Protection Agency |
| UST | underground storage tanks |
| VOC | volatile organic compound |

# 1. Introduction

## 1.1 General

This document comprises the *Site Characterization Work Plan* (SCWP) for evaluating the presence of environmental impacts associated with Rochester Gas & Electric's (RGE's) Park Street former manufactured gas plant (MGP) site located in the Village of Geneseo, New York. The site is being investigated under the New York State Department of Environmental Conservation (NYSDEC) Voluntary Cleanup Agreement No. V00731. This SCWP has been prepared consistent with the requirements of NYSDEC Department of Environmental Remediation's (DER's) *DER-10 Technical Guidance for Site Investigation and Remediation* dated May 2010 (DER-10).

This SCWP describes the overall investigation strategy and provides details of the investigation techniques and sampling requirements and incorporates the site characterization objectives identified in DER-10. This SCWP includes a site- and task-specific *Health and Safety Plan* (**Appendix A**) that is consistent with Occupational Safety and Health Administration 1910.120 requirements and presents health and safety protocols to be followed by personnel during investigation activities. In addition, conformance with State University of New York (SUNY) Geneseo health and safety protocols will also be required during all field activities. The SUNY Geneseo health and safety requirements are included as **Appendix B**. Methodologies and protocols to be followed during the completion of the field activities are presented in the *Field Sampling Plan* (FSP) (**Appendix C**); analytical procedures and requirements be followed for the laboratory analysis of samples collected during investigation activities are presented in the *Quality Assurance Project Plan* (QAPP) (**Appendix D**). The *Community Air Monitoring Plan* that will be implemented during field activities is included as **Appendix E**. A *Citizen Participation Plan* consistent with Section 5 of DER-23, *Citizen Participation Handbook for Remedial Programs, Voluntary Cleanup Programs* is included as **Appendix F**.

## 1.2 Site Description

The Park Street former MGP site is located at 6 Park Street in the Village of Geneseo, Livingston County, New York (**Figure 1**). The former gas works operations covered approximately ¾ of an acre that was located on what is now the eastern side of the SUNY Geneseo campus (**Figure 2**).

The site property, which is owned by SUNY, is bound on the north by commercial buildings and School Street; on the west by a SUNY academic building complex (the Brodie Fine Arts building), by Park Street and a city park on the south; and on the east by a SUNY parking lot and commercial buildings along the west side of Main Street. The Park Street site straddles the boundary between the village commercial district and the SUNY campus. Most of the area occupied by the former MGP is either paved or located under buildings. The eastern portion of the site is a paved parking lot (L-Lot), and the western portion is covered by a campus access road, buildings, and small landscaped area.

The Brodie Fine Arts building is a square building complex that includes an inner courtyard and a high-rise tower at the east side of the complex. Based on correlation between current campus maps and historical Sanborn Fire Insurance (Sanborn) maps, the east side of the former gas production building was located under the parking lot and access road, and the west side of the gas house and the gas holder was under the east end of the Brodie Fine Arts building.

### 1.3 Site History

According to Haley & Aldrich (September 2009), the Park Street MGP site was built on Park Street in 1860 (the date the gas works features are shown on the first Sanborn Fire Insurance map is 1885) and most likely operated as a coal carbonization MGP facility until January 1906. During this time the plant consisted of one building, which presumably housed the gas retorts, and one gas holder. The 1906 Sanborn notes a small lime house (lime was often used in gas purification), a paint shop on the north side of the gas house, and a coal shed to the northeast. The 1900 Sanborn map shows a small electric generating plant further northeast of the MGP, on School Street; it is possible that the coal house was associated with this facility. The 1913 Sanborn map shows that the gas house and gas holder were gone from the site. The electric generating building is identified as a hardware store on the 1930 through 1949 Sanborn maps, and this building still remains today. A survey map dated 1973 identifies this building as a book store.

The western portion of the site was acquired first by SUNY; however, the date of the acquisition is unknown. SUNY acquired the eastern portion around 1973 (GEI, 2014).

### 1.4 Surrounding Area Environmental Setting

Review of available Sanborn maps show that several businesses, including a filling station and an auto sales and service center historically existed adjacent to the eastern site boundary (i.e., at a higher topographic elevation). In addition, ARCADIS contracted Environmental Data Resources, Inc. (EDR) to perform a search of available state and federal environmental records for the surrounding area. Relevant findings are as follows:

- The State Leaking Storage Tank List (NY LTANKS) dated March 19, 2015 indicates that there are four NY LTANKS sites located hydraulically upgradient within approximately 0.5 mile of the site; the closest being at the corner of Main Street and Route 20A (approximately 300 feet hydraulically upgradient from the site).

- The NY Spills list dated March 19, 2015 indicates that there were 30 spill sites hydraulically upgradient from the site within approximately 660 feet.

- Two sites with registered underground storage tanks (USTs) exist between the site and Main Street (128 Main Street and 137 Main Street) approximately 70 feet hydraulically upgradient from the site.

- One solid waste facility/landfill site exists within 0.5 miles of the site (119 Main Street).

- No wells were found on the Local/Regional Water Agency Records; however, one public water supply well was identified ⅛ mile east-northeast (i.e., hydraulically upgradient) of the site and three wells were identified within ¼ to ½ mile northeast of the site on the State Database Well Information database.

- Four sites located immediately upgradient and to the east and southeast of the site underwent subsurface investigations/delineation upon discovery of petroleum impacts in subsurface soil:

  - 119 Main Street – Encountered petroleum-impacted soil and subsequently removed approximately 500 to 1,000 tons of soil. (Beyond extent of areas shown on Figures 2 and 3).

  - 120 Main Street – Encountered petroleum-impacted soil during subsurface investigation near abandoned tanks. EDR search results dated March 19, 2015 did not indicate that impacted soil has been removed or remediated.

  - 128 Main Street – Approximately 400 tons of impacted soil was removed during removal of three USTs and bioremediated onsite. Endpoint sampling within the excavation was conducted.

  - 137 Main Street – During service station upgrade activities, impacted soil was discovered during removal of two USTs. Impacted soil was removed, treated onsite, and disposed offsite (beyond extent of areas shown on Figures 2 and 3).

A copy of the EDR report is included on compact disc as **Appendix G.** The information provided in the EDR report has been incorporated into the SCWP investigation strategy.

### 1.5 Summary of Previous Investigations

No previous formal environmental studies or investigations have been identified at the site.

During a Park Street entrance improvement program conducted by SUNY in 2002, the east side of the SUNY property was developed as a parking lot. In September 2002 during final preparation for paving, a stone/brick containment structure was discovered approximately 4 feet below ground surface (bgs) that contained a black tarry material. Based on comparison of photographs taken during construction activities (Geneseo Department of Environmental Health and Safety, 2003), figures provided in the *Cost Estimate for Environmental Management* (GEI, 2014), and available Sanborn maps from 1885 to 1906, the structure

appears to have been located between the north side of the former MGP works building and the south side of the former coal house; however, the structure does not appear on any historical mapping.

Following discussions with SUNY Geneseo in 2002 the NYSDEC determined that the structure, liquid material inside and outside the structure, and the surrounding soil containing visible impacts would be excavated and transported to an off-site disposal facility. During excavation, sidewall samples were collected for laboratory analysis and results compared to NYSDEC Technical and Administrative Guidance Memorandum (TAGM) 4046 soil cleanup objectives. When laboratory results indicated an exceedance of TAGM levels, or when visible coal tar was encountered, excavation continued. The final excavation depth was approximately 20 feet bgs, terminating at the bedrock surface. An area near the center of the excavation was excavated an additional 5 feet into the fractured bedrock to approximately 25 feet bgs. The approximate location of the coal tar structure and the areal limits of the excavation are shown on **Figure 2**. Excavation endpoint samples indicated that three of the four "overburden" (i.e., sidewall) samples met the TAGM 4046 levels for total benzene, toluene, ethylbenzene, and xylenes (BTEX) (less than 10 milligrams per kilogram [mg/kg]) and total polycyclic aromatic hydrocarbons (PAHs) (less than 500 mg/kg), and five of the six samples of fractured bedrock (i.e., excavation bottom) met these levels. In January 2003 the excavation activities were terminated prior to arrival of students for the spring semester. Structural fill was placed into the excavation and compacted. The SUNY Department of Environmental Health and Safety prepared a report documenting remedial activities performed (Report of Activities at LL-Lot, June 2003). The remedial excavation was considered to be an interim remedial measure (IRM) by the NYSDEC. As detailed in the 2003 report, the tar and the structure containing the tar, along with approximately 800 tons of tar-impacted soil and 3,200 gallons of impacted water that accumulated in the excavation were sent off site for disposal. The parking lot and access roads currently found at the site were then constructed.

### 1.6 Geology

The site is located on the west side of the downtown area of the Village of Geneseo. The village is built on a topographic bench on the hillside that defines the east side of the Genesee River Valley. The site is at an elevation of approximately 760 feet, with the base of the hillside and the start of the valley floor at approximately 560 feet. The Genesee River meanders in the valley to the west of the site.

Regional surficial geological maps indicate that native overburden material in the Geneseo area is likely glacial till (Cadwell, 1988). Bedrock beneath the site is mapped as middle to upper Devonian aged shale and limestone (Fisher et al., 1970). Descriptions of the soil and bedrock were not documented during SUNY's remedial excavation of the parking lot; however, the overburden was found to be approximately 20 feet thick, with a large amount of fill material present (composition not specified). The upper portion of bedrock was found to be weathered and fractured such that the upper approximately 5 feet could be excavated. Photographs of bedrock taken during the excavation IRM show that the upper portion of rock is heavily fractured.

### 1.7 Hydrogeology

The Genesee River meanders within the Genesee River Valley; its closest point to the site is approximately 4,500 feet northwest. According to GEI (Cost Estimate for Environmental Management, Park Street Former MGP Site, 2014) a small stream historically crossed the site prior to development of the MGP; however, maps showing the stream or physical indications of the stream have not been found. Based on the topography and location of the nearest regional surface water feature (i.e., Genesee River), groundwater flow beneath the site is likely to the northwest, following the local topography. Very little groundwater was encountered during the 2002-2003 excavation, suggesting that the water table occurs at or below the bedrock surface.

### 1.8 Nature and Extent of Impacts

As indicated above, no formal subsurface investigations have been conducted at the site. The discovery of tar in a buried subsurface structure and surrounding soil in the eastern portion of the site (parking lot) indicates that at least some portion of soil beneath the site had been impacted by MGP residuals. The stone/brick structure and its contents and surrounding impacted soil (i.e., source material ) were removed by SUNY Geneseo in 2002-2003; however, it is possible that volatile organic compounds (VOCs), specifically BTEX, PAHs, and potentially cyanide, may still be present in soil and groundwater outside the limits of the excavation. During the remedial excavation conducted in 2002-2003, soil containing tar was removed down to the fractured bedrock surface (approximately 20 feet bgs), and in the center of the excavation down an additional 5 feet into the fractured bedrock. As such, it is also possible that coal tar may be present in bedrock outside the limits of the excavation and/or near the locations of other former MGP-related structures (e.g., holder, gas house). It is also possible that impacts extend to groundwater.

According to GEI (2014), the small stream that was present at the site was purportedly used as a disposal point for coal ash from the electric generating plant located northeast from the former MGP (GEI, 2014). Given the proximity of the former electric generating plant and the alleged disposal practices of the plant, there is potential for coal ash unrelated to the MGP to be present on the site. GEI (2014) also reported that oily wastes from adjacent former garage properties were deposited on the site. Sanborn maps indicate that a garage and a filling station were located on the east and southeast side of the block, respectively, upgradient of the former MGP site.

## 2. Site Characterization Scope of Work

The scope of work presented in this section is based on the available documentation and information noted in Section 1.

### 2.1 Objectives

Given the inherent difficulties with conducting an environmental investigation on an active college campus, the field aspects of the site characterization work will progress in a dynamic fashion, whereby field data will be evaluated in real-time. Planned investigation locations may be modified as needed, and new locations potentially added, as necessary and practicable, to complete the characterization in one mobilization. Although not a requirement of the site characterization, the objective of this investigation is to gather sufficient data to evaluate the presence of MGP-residuals in the subsurface, if any, while RGE has less encumbered access to the SUNY campus during the summer break. As mentioned, while this SCWP identifies the quantity and locations of sampling locations, the final quantity and locations may vary as determined by real-time decisions, and based on discussions with RGE and the NYSDEC.

For efficiency a phased approach to data collection will be used. Initial sampling locations will be located to evaluate the presence/absence of impacts in soil/bedrock and groundwater proximal to the former excavation area, followed by “step-out” locations to define the extent of impacts to soil, bedrock, and groundwater, as necessary and practical.

Surface soil samples are not proposed as part of the SCWP because the site is largely covered by impervious surfaces (e.g., asphalt, buildings). In addition, existing grassed areas within the parking lot and Brodie Fine Arts building courtyard have been significantly re-worked subsequent to closure of MGP operations in 1906.

The SCWP has been constructed to be used as a reference document during the field investigation.

### 2.2 Site Surveys

As part of the development of this SCWP, a site survey was performed from May 31 to June 5, 2015 to locate physical features and utilities within the anticipated investigation area with the intent of gathering information required to build a site base map. The survey was performed by Fisher Associates, a New York State-licensed surveyor. The survey area encompassed an area of approximately 7 acres, bounded by the east side of Main Street, the north side of School Street (extended), the south side of Park Street, and the western leg of College Circle. Prior to completing the base mapping survey, NYS One Call (811) was contacted to identify and mark public utilities in the work area and SUNY Geneseo marked the locations of private underground utility lines the university had installed in and around parking Lot L (i.e., the anticipated area of subsurface investigation). These utilities were also located by Fisher Associates.

A geophysical survey, consisting of ground-penetrating radar and radio detection, was also conducted at the site from May 30 to June 1, 2015 by Underground Services (SoftDig). The purpose of the geophysical survey was to locate subgrade utilities and potential structures (e.g., former MGP structures).

The information discussed above has been compiled and incorporated into the site base map presented as **Figure 2**. The survey prepared by Fishers Associates is included as **Appendix H;** the figure prepared by Underground Services (SoftDig) is included as **Appendix I**.

### 2.3 Soil Boring and Monitoring Well Installation

Twelve soil borings will be drilled through the overburden to the top of bedrock in a phased approach, and seven of those will be advanced into bedrock and completed as bedrock monitoring wells. The purpose of the soil borings and monitoring wells will be to collect soil, bedrock, and groundwater data for assessing the presence and extent of MGP-related impacts at the site and hydraulic gradient, to the extent practicable during the site characterization. Proposed locations and installation methodologies are described below.

#### 2.3.1 Soil Borings

Five soil borings (SB-1 through SB-5) will be advanced through the overburden to the top of bedrock. The locations of the borings are shown on **Figure 3**. The purpose of the borings will be to collect soil data for assessing the presence of MGP-related impacts in overburden at various areas of the site. The rationale for the location of each of the soil borings is provided in **Table 1**, below.

**Table 1 – Soil Boring Location Rationale**

| Location | Rationale |
|---|---|
| SB-1 through SB-4 | Located outside the limits of the remedial excavation completed by SUNY Geneseo in 2002/2003 to evaluate the potential presence of MGP-related impacts around the outside the walls of the excavation. SB-4 will also be located in the approximate area of the former paint shop and will be completed as a bedrock well (Section 2.3.1). |
| SB-5 | Located within the footprint of the former coal house. Information collected at this location will be used to evaluate the potential presence of MGP-related impacts associated with the former coal house and to identify the extent of impacts outside the northern side of the 2002/2003 excavation (note that a sample collected from the north wall of the 2002/2003 excavation possessed the highest total PAH concentration [549 mg/kg]). |

As stated in **Section 2.2**, geophysical methods, along with One Call and property owner's mark outs, were used to identify subsurface utilities at the site. The locations of these utilities have been included on **Figure 3**, and will be considered when selecting final soil boring and monitoring well locations in the field.

As identified in the above table and shown on **Figure 3**, SB-1 through SB-4 will be located outside the perimeter of the 2002-2003 excavation. The approximate extent of the excavation, as presented in *Report of*

*Activities at LL-Lot* (Geneseo Department of Environmental Health and Safety, 2003), is also shown on **Figure 3**.

The soil borings will be drilled using a conventional drilling rig and standard hollow-stem auger (HSA) and split-spoon sampling techniques in accordance with the procedures described in the FSP. Soil samples will be collected continuously at each boring from grade to their final depth using 2-inch-diameter by 2-foot-long split-spoon samplers. A 3-inch-diameter sampler may be used if recovery with the 2-inch sampler is poor. Soil recovered from each 2-foot interval will be visually characterized for color, texture, and moisture content as described in the FSP. Soil samples will be headspace-screened with a PID. The presence of staining, non-aqueous phase liquid (NAPL), and obvious odors encountered in the soil will be noted/recorded.

Soil borings will be advanced to competent rock that will be determined based on auger refusal. Drilling will not be performed through any subsurface structures or confining layers where significant quantities of NAPL are encountered to prevent potential downward migration.

At seven additional locations, borings will be advanced into bedrock and completed as bedrock monitoring wells, as described in Section 2.3.2.

### 2.3.2 Monitoring Well Installation

As discussed in **Section 1.7**, the water table was not encountered during the excavation IRM completed by SUNY Geneseo in 2002-2003. The excavation terminated at approximately 20 feet below grade on what was believed to be the top of bedrock. An area near the center of the excavation was excavated to approximately 25 feet below grade. Based on this information, it is assumed that the water table lies below the bedrock surface. As such, groundwater monitoring wells installed during the site characterization will be constructed to monitor groundwater within bedrock; however, if the water table is encountered at least 2 feet above the top of bedrock during drilling, RGE and NYSDEC will be contacted to discuss the potential need to install an overburden monitoring well at that particular location.

The locations of the seven bedrock monitoring wells (MW-1 through MW-7) are also shown on **Figure 3**. The rationale for each of the wells is provided in the table below.

**Table 2 – Monitoring Well Location Rationale**

| Location | Rationale |
|---|---|
| MW-1 | Located in the parking lot within the area excavated to 25 feet bgs by SUNY in 2002/2003. The purpose of this well is to evaluate the potential presence of MGP-related impacts in shallow groundwater below the area that was heavily impacted (i.e., source area) and on the bedrock surface. |

| Location | Rationale |
|---|---|
| MW-2<br>MW-3 | Located in the parking lot (L-Lot) east/southeast of the excavation area. Information collected at these locations will be used to evaluate groundwater flow direction in the shallow bedrock and groundwater quality upgradient from the excavation area (i.e., groundwater coming on to the site). |
| MW-4 | Located at SB-4 (Section 2.3.1) in a lawn area approximately 50 feet in the assumed downgradient direction (northwest) from the 2002/2003 excavation area (and MW-1). Information collected at this location will be used to evaluate groundwater flow direction in shallow bedrock and groundwater quality immediately downgradient from the excavation area and in the approximate area of the former paint shop. |
| MW-5<br>MW-6 | Located west and southwest of the 2002/2003 excavation area. Information collected at this location will be used to evaluate groundwater flow direction and groundwater quality in shallow bedrock downgradient and side gradient from the excavation area. |
| MW-7 | Located in a courtyard area approximately 100 feet west of the former gas holder. Information collected at this location will be used to evaluate groundwater flow direction in shallow bedrock and groundwater quality side- and downgradient from the former gas holder. |

The bedrock monitoring wells will be constructed using the following procedures:

- At each well location, a boring will be advanced to the top of competent bedrock (auger refusal) using HSA drilling techniques with continuous split-spoon sampling, as described in the FSP. Recovered soil cores will be logged and characterized as discussed in the FSP. Logging and characterization of soil cores will include screening for NAPL. Based on field observations during the installation of the overburden soil borings, soil samples may be retained and sent for laboratory analysis (however, not from MW-1 as this area was backfilled with clean fill materials).

- The upper approximately 2 feet of competent bedrock will be continuously cored using the bedrock drilling methods described in the FSP. Retrieved bedrock core samples will be logged and characterized in accordance with procedures in the FSP (lithology, color, mechanical breaks, fractures, structure, and rock quality designation). The presence of visible staining, NAPL, and obvious odors encountered in the soil and bedrock will be noted.

- A nominal 6-inch outside diameter roller bit will be used to ream a 2-foot deep corehole, creating a bedrock socket.

- A permanent, 4-inch-diameter black steel casing will be installed into the 2-foot-deep bedrock socket and the annulus around the casing will be grouted using neat cement grout via the tremie method from the bottom of the casing to ground surface. The grout will be allowed to set for a minimum of 12 hours, or as otherwise specified by the manufacturer.

- After allowing the grout to cure, the borehole will be advanced 20 feet below the steel casing by continuously coring the bedrock using HQ coring tools and the bedrock drilling methods described in

FSP. If possible, each of the wells will be completed using an open-hole construction. If, based on competency of the bedrock and discussions with the driller it is decided that the open hole could collapse or be obstructed by loose bedrock ledges, the well will be constructed using Schedule 40 polyvinyl chloride (PVC) well material. A PVC well would be constructed as follows:

  - After the bedrock borehole is drilled to final depth, a 2-inch-diameter, 20 foot-long Schedule 40 PVC, 0.020-inch slotted well screen, attached to an appropriate length Schedule 40 PVC riser pipe, will be inserted into the open corehole to the bottom of the hole.

  - Grade #1 silica sand will be placed in the annulus between the PVC material and borehole wall to approximately 2 feet above the top of the screen.

  - A 2-foot bentonite seal will be emplaced above the filter sand by pouring bentonite pellets into the annular space and hydrating the pellets.

  - Once the pellets have been hydrated, the remainder of the annular space will be filled with a cement/bentonite grout to approximately 1-foot below grade using the tremie-grout method.

- If dense non-aqueous phase liquid (DNAPL) is encountered during drilling at any of the five proposed bedrock monitoring well locations, or is suspected to be near a proposed monitoring well location, the bedrock monitoring well will be constructed using PVC material as described above. In addition, a 2-foot-long Schedule 40 PVC sump will be installed on the bottom of the 20-foot-long well screen. Sumps will be installed by carefully pumping a volume of cement/bentonite grout to the bottom of the corehole that is slightly greater than the volume of the annular space between the sump and corehole wall. A 4-inch-diameter shale trap or K-packer will be positioned where the sump meets the screen. The sump/shale trap/screen/riser assembly will be installed by pushing the sump through the grout to the bottom of the borehole. Water and any excess grout that enter the sump will then be promptly bailed or pumped from the sump. The filer sand and seals would then be installed above the sump/shale trap as described above.

- Surface completions will be constructed using a heavy duty 8-inch-diameter flush-mounted curb box and locking well caps will be fitted to the well heads.

- The new wells will be developed in accordance with well development procedures identified in the FSP.

Bedrock cores will be placed in core boxes for retention and storage by RGE. As discussed above, the bedrock wells will be constructed using an open-hole construction. Although not currently proposed in the SCWP, open-hole construction will provide flexibility for additional investigations at the particular monitoring well, if warranted. Such additional investigation could include down-hole geophysical logging, packer testing, and/or drilling the well deeper.

### 2.4 Equipment Decontamination

The drilling and sampling equipment will be cleaned prior to initiating the boring, coring, and sampling activities; between each location; and at the completion of the investigation activities. Cleaning water and residuals will be appropriately containerized in designated areas for subsequent disposal. Procedures for equipment decontamination are provided in the QAPP (**Appendix D**).

### 2.5 Soil Sampling and Analyses

Soil samples will be selected for laboratory analysis from the following intervals in each overburden soil boring (SB-1 through SB-5), as applicable:

- At the interval where, based on PID readings and visual and olfactory observation, the strongest evidence of impacts are identified.
- At the soil/water interface (if encountered).
- From the interval of apparent non-impacted material located below impacted soil (in borings where impacts are apparent) based upon field observations to provide data for vertical delineation.
- From the interval of soil on the bedrock surface.

Based on conditions encountered, a minimum of two soil samples from each overburden boring (SB-1 through SB-5) will be submitted for laboratory analysis (sample from the soil/bedrock interface and one additional sample to document extent of impacts). Up to four samples may be sent for analyses from soil boring with obvious impacts.

As mentioned above, based on conditions encountered at MW-2 through MW-7, additional soil samples may be sent for analysis. One of the two soil samples will be collected from the interval of soil on the bedrock surface and the other samples will be collected based on visual/olfactory observations and PID screening results. Samples will be submitted to an Environmental Laboratory Accreditation Program- (ELAP-) certified laboratory under proper chain-of-custody. Laboratory analyses will be performed in accordance with United States Environmental Protection Agency (USEPA) SW-846 methodologies.

Analytical test methods, detection and reporting limits are described in the QAPP (**Appendix D**).

Quality assurance/quality control (QA/QC) samples will be collected as required by the QAPP. Soil samples will be submitted to the contract laboratory for analysis of:

- Target Compound List (TCL) VOCs by USEPA SW-846 Method 8260B

- Semivolatile organic compounds (SVOCs) by USEPA SW-846 Method 8270C
- Target Analyte List (TAL) Metals by USEPA SW-846 Method 6010
- Total Cyanide by USEPA Method 9012A

Analytical methods, sample handling procedures, and laboratory protocols are described in the FSP and QAPP.

### 2.6 Groundwater Gauging and Sample Collection

Two gauging events will be conducted to measure static groundwater levels, confirm groundwater flow direction beneath the site, and determine the presence/absence of NAPL. Gauging measurements and field observations (e.g., well integrity) will be recorded in the field notebook.

One groundwater sampling event will be conducted. Prior to sampling, wells will be purged, and field measurements of turbidity, conductivity, dissolved oxygen, oxidation-reduction potential, pH, and temperature will be recorded.

Wells that do not contain NAPL will be sampled using low-flow purge sampling techniques. All monitoring well sampling activities will be recorded in a field book, and low-flow parameters documented on the groundwater sampling log (or similar) included in the FSP (**Appendix D**). Purging will continue until field parameters stabilize. A Standard Operating Procedure describing Low-Flow Groundwater Sampling methodology, along with gauging and purging requirements, is also included as the FSP.

At monitoring wells where NAPL is present and recoverable, if any, samples of the NAPL will be collected using a bailer. Samples of NAPL collected from the wells will be submitted for analysis of:

- Dynamic Viscosity
- Density
- Surface and Interfacial Tension

These analyses will be run at a temperature that approximates the ambient groundwater temperature as measured during the groundwater sampling events.

QA/QC samples will be collected as required by the QAPP.

### 2.7 Groundwater Analyses

Collected groundwater samples will be submitted under chain-of-command to a New York State Department of Health ELAP-certified laboratory for analysis of:

- TCL VOCs by USEPA SW-846 Method 8260B
- TCL SVOCs by USEPA SW-846 Method 8270C
- TAL Metals USEPA SW-846 Method 6000/7000
- Total Cyanide by USEPA Method 9013A

A summary of the groundwater (and soil) sampling requirements is included in the Sampling and Analysis Summary table (**Table 3**).

### 2.8 Soil Gas Sampling

Soil vapor samples will be collected in the vicinity of the former MGP structures and 2002/2003 excavation to evaluate if soil vapors attributed to residuals associate with former MGP operations exist. Specifically, soil vapor samples will be collected along the exterior of the eastern facade of the Brodie Fine Arts building, along the west side of the Brodie Fine Arts building within the courtyard, and north of the area excavated by SUNY in 2003/2003. The rationale for each of the soil vapor sampling locations is provided in the table below.

Table 3 – Soil Vapor Sampling Location Rationale

| Location | Rationale |
|---|---|
| SV-1<br>SV-2 | Located in the grasses area north of the excavation performed by SUNY in 2002/2003. Information from these locations will be used to evaluate soil vapor in the vicinity of the former coal house and former paint shop. |
| SV-3<br>SV-4<br>SV-5 | Located along the eastern side of the Brodie Fine Arts building. Information from these locations will be used to evaluate the presence of MGP-related vapors between the 2002/2003 excavation and the Brodie Fine Arts building. |
| SV-6<br>SV-7 | Located within the eastern end of the courtyard to evaluate the presence of soil vapors associated with the former gas holder. |

2.8.1 Sample Collection

Soil vapor sampling points will be installed in the unsaturated zone from approximately 3 to 4 feet bgs and will consist of 1½ -inch-diameter, 12-inch-long, expendable stainless steel points (AMS, or similar) temporarily installed using a hammer and rod. A hydrated bentonite mix will be used to seal the borehole and prevent short-circuiting to surface ambient air. Laboratory grade polyethylene tubing of the appropriate diameter will connect the sampling point to a 6-liter SUMMA® canister, in which the soil vapor samples will be collected. After installation of the points, and prior to collecting a soil vapor sample, the sampling point and tubing will be purged (one to three volumes of the sample probe and associated tubing) and screened for VOC vapors using a photoionization detector (PID). PID readings will be recorded in the field notebook.

An analytical laboratory (to be determined) will provide batch-certified clean SUMMA® canisters with an initial vacuum of approximately 26 inches of mercury for sample collection. Each SUMMA® canister will be equipped with a flow regulator pre-set by the laboratory to provide uniform sample collection over a 6-hour sampling period. The valve on the SUMMA® canister will be closed when a minimum of 4 inches of mercury vacuum remains in the canister, leaving a vacuum in the canister as a means for the laboratory to verify the canister did not leak while in transit. Detailed descriptions of the soil vapor point installation and soil vapor sampling procedures are provided in FSP (**Appendix C**).

Field personnel will document the following information (at a minimum) in the project field notebook:

- weather conditions (precipitation, temperature and wind direction) 24 hours prior to, and during, the sampling activities
- date and time (start and end time) each sample was collected
- sample identification
- identification numbers of laboratory samplers/regulators/devices
- purge volumes
- volume of soil vapor extracted
- vacuum pressure of canister (before and after sample is collected)
- chain of custody identification

### 2.8.2 Laboratory Analysis

SUMMA® canisters will be shipped in one batch to the laboratory within 3 days of sample collection. Samples will be submitted for laboratory analysis in accordance with the USEPA Compendium Method TO-15, entitled *Determination of VOCs In Air Collected In Specially-Prepared Canisters And Analyzed By Gas Chromatography/Mass Spectrometry (GC/MS)*. In addition to the TO-15 Target Analyte List, the samples will be analyzed for:

- n-alkanes (n-butane, n-pentane, n-hexane, n-heptane, n-octane, n-nonane, n-decane, n-undecane and n-dodecane)
- isopropyl benzene
- naphthalene
- branched alkanes (isopentane, 2,3-dimethylpentane, 2,2,4-trimethylpentane, butylcyclohexane, isooctane, and 2,3-dimethylheptane) (to be reported by the laboratory as tentatively identified compounds [TICs])
- other indicator compounds (indene, indane, 1,2,3-trimethylbenzene, and thiopene) (to be reported by the laboratory as TICs)
- helium (tracer gas)

Laboratory analysis will be performed on a standard turnaround for reporting of analytical results (i.e., 15 business days for preliminary results; 20 business days for delivery of full data packages). The laboratory will provide Category B-equivalent data packages.

### 2.8.3 Quality Control/Quality Assurance

A helium tracer gas will be used as a quality assurance/quality control tool to document the integrity of the soil vapor probe seal and to confirm that infiltration of ambient air is not occurring. An inverted plastic bucket will be used as an enclosure to keep the tracer gas in contact with the probe during integrity testing, as described in the NYSDOH's guidance document entitled "*Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York*" (NYSDOH, 2006). A detailed procedure for administering tracer gas to verify the integrity of the soil vapor probe seal is provided in the FSP (**Appendix C**).

One blind field duplicate sample will be collected and submitted for analysis. Field duplicates are typically collected at a rate of one blind duplicate per 20 samples, or at a minimum of one per site.

On the day that the air samples are collected, the sampling personnel will avoid conducting any activities that may interfere with the results of the sampling event. These activities include wearing cologne, after-shave, operating a gasoline pump (i.e., filling a car or truck with gasoline) and using cosmetics (including hairspray, nail polish, and nail polish removers).

A summary of the soil vapor sampling requirements is included in the Sampling and Analysis Summary table (**Table 4**).

### 2.9 Investigation Support Activities

#### 2.9.1 Permitting/Access Agreements

RGE is responsible for securing access to the site. Subsequent to NYSDEC approval of the SCWP, no additional permits or approvals are required.

#### 2.9.2 Utility Clearance

Prior to conducting any intrusive work, appropriate utility clearance actions will be completed as required by ARCADIS' and RGE's utility clearance protocols for intrusive activities. Utility clearance will be completed using a minimum of three reliable lines of evidence. The presence of existing utilities will be investigated and cleared by locating and marking, and where appropriate, visually verifying. At a minimum, the following clearance activities will be completed:

- ARCADIS will call One Call (811) a minimum of 3 days prior to the start of intrusive work so that any utility lines can be identified, marked out, and (if possible) verified based on surface features. Renewal calls will be made in accordance with the timeframes allowed in the regulations.

- The Site Map showing previously identified on-site locations of aboveground and underground utilities near the field work will be reviewed.

- Mechanical clearing (e.g., using a vacuum truck or air knife) of the top 5 feet of soil will also be conducted at each soil boring/monitoring well location.

In addition, ARCADIS will perform a site inspection. ARCADIS will also complete a Utility Inspection Checklist prior beginning intrusive field work (**Appendix J**).

#### 2.9.3 Post Field Work Surveying

Following completion of soil boring and monitoring well installation, locations of the soil borings and monitoring wells will be surveyed by a New York State licensed surveyor. The survey will include the

location, ground-surface elevation, and top of casing/measuring point elevations for monitoring wells. The survey will be tied to the New York State Plane Coordinate System and to Mean Sea Level.

#### 2.9.4 Investigation-Derived Waste Management

All investigation-derived waste generated during the investigation will be containerized in Department of Transportation-approved 55-gallon drums, labeled as investigation-derived waste, sampled for waste disposal characteristics, and temporarily staged in a secure Conex-type container while awaiting laboratory results. Upon receipt of laboratory results, ARCADIS, serving as an authorized agent for RGE, will arrange for disposal of the wastes.

### 2.10 Community Air Monitoring

Due to the potential presence of MGP related residuals in the subsurface, a community air monitoring plan (CAMP) will be implemented during all subsurface intrusive work performed on site. A CAMP requires real-time monitoring for volatile organic componds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area. The site CAMP, including specific monitoring procedures, action thresholds and mitigation responses are provided in **Appendix E.**

# 3. Reporting

## 3.1 Data Review/Data Usability Summary Report (DUSR) Preparation

The analytical data packages and associated QA/QC information for the soil and groundwater samples will be reviewed to determine if they meet the project-specific criteria for data quality and data use as identified in the QAPP (**Appendix D**). A complete record of each of these samples' history will be available for documenting its progress from the time of sample collection, to arrival at the laboratory, processing and analysis at the laboratory, and sample receipt and reporting.

The data usability summary review will include the use of dated entries, signed by analysts and supervisors on worksheets and logbooks used for all samples; the use of sample tracking and numbering systems to logically follow the progress of samples through the laboratory and the use of quality control criteria to reject, accept, or qualify specific data.

Upon completion of the data usability summary review, a DUSR will be prepared and included as an appendix to the Site Characterization Report (SCR).

## 3.2 Site Characterization Report

The SCR will be prepared in accordance with Section 3.13 of DER-10. Per DER-10:

- If the data collected support the conclusion that a remedial investigation is NOT required, the SCR will present and fully discuss all of the information collected during the site characterization, including results from the site surveys, EDR search, lithology, soil and groundwater data, along with supporting notes and stratigraphic logs/cross-sections, sample location maps, etc.

- If the data collected warrant transitioning the site characterization into a remedial investigation, the SCR will include summary discussions of the data collected (i.e., sample summary tables of sample results, soil boring logs and monitoring well construction details, stratigraphic logs/cross-sections, sample location maps) as required by Sections 3.13(e) and 3.13(f), along with a remedial investigation work plan.

Environmental data will be submitted to the NYSDEC website in the applicable EqUIS database format. A draft SCR will be prepared for RGE review prior to submission to the NYSDEC. RGE comments/edits will be incorporated into the SCR and one paper copy and three compact disks containing the entire SCR will be submitted to the NYSDEC for review and approval.

## 4. Schedule

A Project Schedule (Gantt chart) is included as **Figure 4**. It is RGE's objective to complete the field aspects of the site characterization prior to the start of the 2015 fall semester at SUNY Geneseo. The intrusive portions of the field activities (i.e., installation of the soil borings and monitoring wells, along with well development) are anticipated to require approximately 2 weeks to complete. As shown on the Project Schedule, expedited review, incorporation of revisions, field preparation, and mobilization timeframes are required to meet this objective.

## 5. References

Cadwell, D.H. 1988. Surficial geologic map of New York; Niagara Sheet, 1988. New York State Museum Map and Chart Series No. 40, scale 1:250,000

D.W. Fisher, Y.W. Isachsen, and L.V. Rickard. 1970. Geologic Map of New York State: Niagara Sheet, New York State Museum and Science Service, Map and Chart Series No. 15, scale 1:250000.

GEI Consultants. 2014. Cost Estimate for Environmental Management, Park Street Former MGP Site. December 2014.

Geneseo Department of Environmental Health and Safety. 2003. Report of Activities at LL-Lot, SUNY Geneseo. June 2003.

Haley and Aldrich. 2009. Geneseo Gas and Light – Historical Research (letter correspondence). September 2009.

New York State Department of Environmental Conservation. 2010. Division of Environmental Remediation. DER-10 Technical Guidance for Site Investigation and Remediation. May 2010.

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**Tables**

**Table 4**
**Sampling and Analysis Summary**

| Site Characterization | Media | Laboratory Analysis | Quantity of Samples | Field QA/QC Samples | | | Laboratory QA/QC Samples | | Total |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Trip Blanks[1] | Field Blind Dups[3] | Equip Rinse Blanks[2] | MS/MSD | MSB/LCS | |
| SB-1 through SB-5 | Soil | TCL VOCs | 10 (min) | 2 | 1 | 0 | 1 / 1 | 0 | 15 |
| | | TCL SVOCs | 10 (min) | 0 | 1 | 0 | 1 / 1 | 0 | 13 |
| | | TAL Metals | 10 (min) | 0 | 1 | 0 | 1 / 1 | 0 | 13 |
| | | Total Cyanide | 10 (min) | 0 | 1 | 0 | 1 / 1 | 0 | 13 |
| MW-2 through MW-7 | Soil | TCL VOCs | 12[4] | 2 | 1 | 0 | 1 / 1 | 0 | 17 |
| | | TCL SVOCs | 12[4] | 0 | 1 | 0 | 1 / 1 | 0 | 15 |
| | | TAL Metals | 12[4] | 0 | 1 | 0 | 1 / 1 | 0 | 15 |
| | | Total Cyanide | 12[4] | 0 | 1 | 0 | 1 / 1 | 0 | 15 |
| MW-1 through MW-7 | Water | TCL VOCs | 7 | 1 | 1 | 0 | 1 / 1 | 0 | 11 |
| | | TCL SVOCs | 7 | 0 | 1 | 0 | 1 / 1 | 0 | 10 |
| | | TAL Metals | 7 | 0 | 1 | 0 | 1 / 1 | 0 | 10 |
| | | Total Cyanide | 7 | 0 | 1 | 0 | 1 / 1 | 0 | 10 |
| SV-1 through SV-7 | Soil Gas | TO-15[5] | 7 | 0 | 1 | 0 | 0 / 0 | 0 | 8 |

**Notes:**

1. One trip blank will be collected per cooler per day of samples for TCL VOC analysis (assume 2 days).
2. Equipment rinse blanks will be collected at a frequency of one per 20 if re-use equipment; not required if using disposable equipment (table assumes disposable equipment will be used)
3. Blind duplicate will be collected at a frequency of one per 20 and sent to the laboratory for analysis
4. Assumes two samples will be collected from the overburden at each location during installation of MW-2 through MW-7
5. TO-15 Target Analyte List plus project-specific analyte list

TCL VOC analysis by USEPA SW-846 Method 8260B

TCL SVOC analysis by USEPA SW-846 Method 8270C

TAL Metals by USEPA Method 6000/7000

Total Cyanide by USEPA Method 9013A

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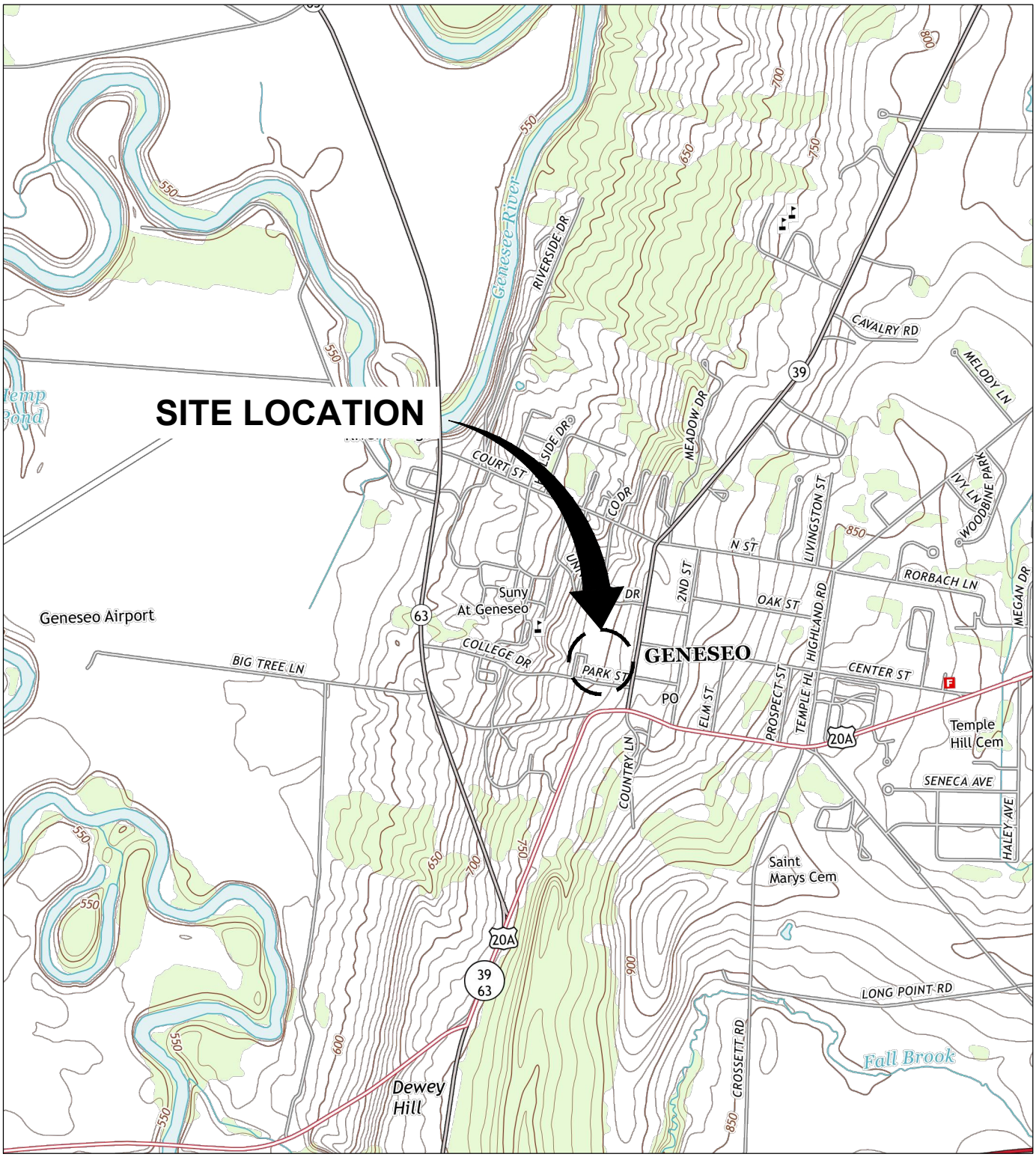
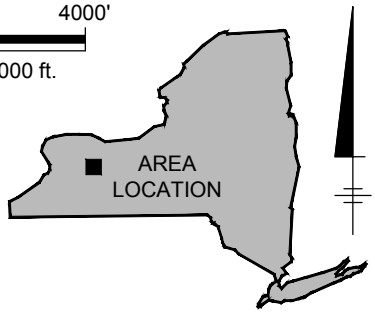
**Figures**




REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., GENESEO, NY, 2013

0 2000' 4000'

Approximate Scale: 1 in. = 2000 ft.




ROCHESTER GAS & ELECTRIC
PARK STREET FORMER MGP SITE
**SITE CHARACTERIZATION WORK PLAN**

## SITE LOCATION MAP

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FIGURE
**1**


**NOTE:**

1. FORMER LOCATIONS OF GAS WORKS STRUCTURES FROM SANBORN LIBRARY, LLC 1906 MAP.

**SOURCE:**

1. BASEMAP INFORMATION PROVIDED BY FISHER ASSOCIATES, LLC. DATED JUNE, 2015. FILENAME: GENESEO TOPO.DWG. GEOREFERENCED TO NEW YORK STATE PLANE NAD83 COORDINATE SYSTEM.

0 60' 120'

GRAPHIC SCALE

ROCHESTER GAS & ELECTRIC
PARK STREET FORMER MGP SITE
**SITE CHARACTERIZATION WORK PLAN**

**SITE MAP**

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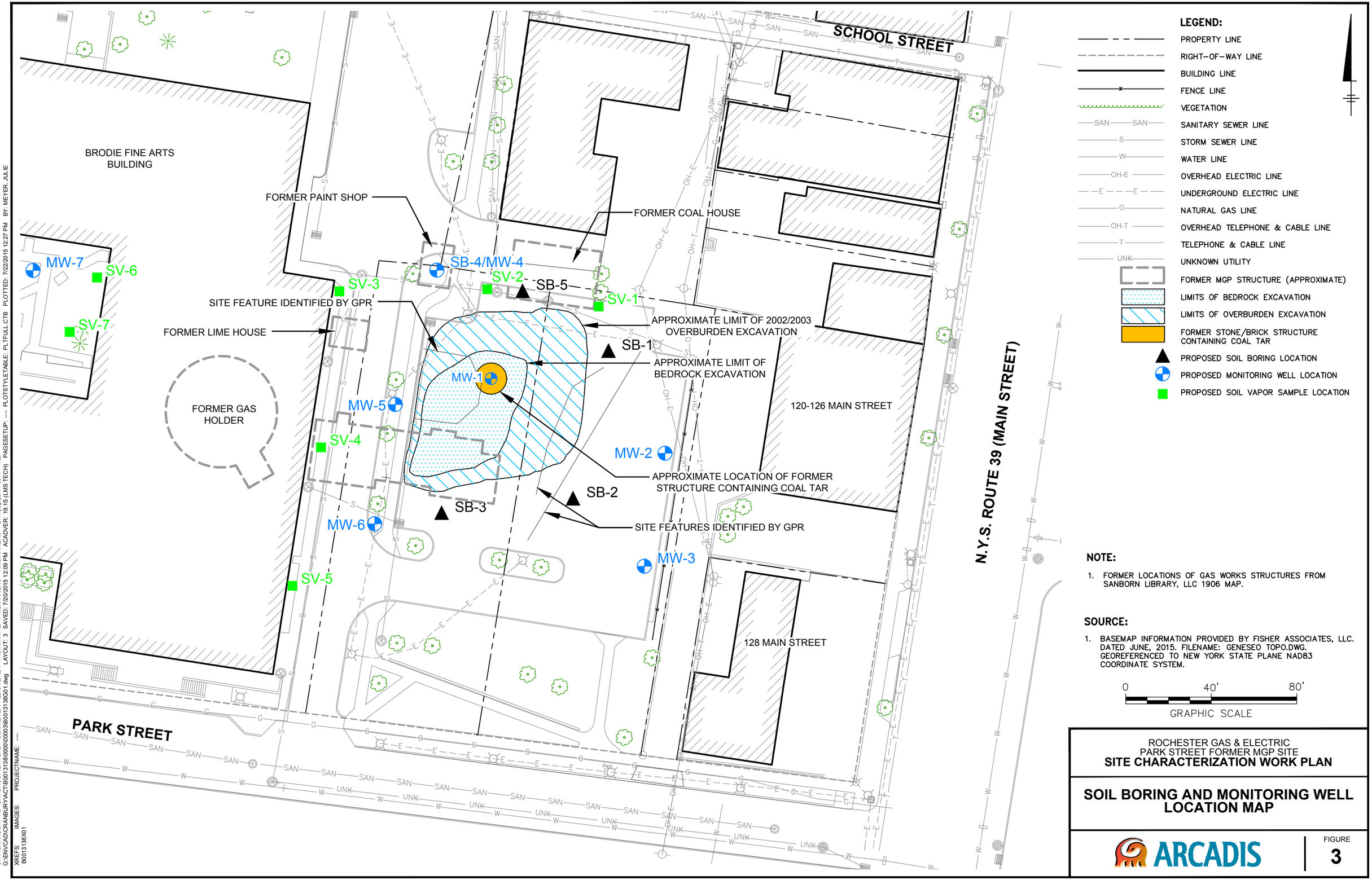
FIGURE
**2**

CITY:GRANBURY-NJ DIV/GROUP:ENVCAD DB:JMEYER LD:JMEYER PIC:K.WHITE PM:B.AHRENS TM:B.AHRENS LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCAD\GRANBURY\ACTIVE\B0013138\0000\0003\B0013138B01.dwg LAYOUT: 2 SAVED: 6/24/2015 9:52 AM ACADVER: 19.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 6/25/2015 2:31 PM BY: MEYER, JULIE
XREFS: IMAGES: PROJECTNAME: ----
B0013138X01Sanborn Maps 1906.jpg
SB and MW Locations.jpg




**LEGEND:**

- PROPERTY LINE
- RIGHT-OF-WAY LINE
- BUILDING LINE
- FENCE LINE
- VEGETATION
- SANITARY SEWER LINE
- STORM SEWER LINE
- WATER LINE
- OVERHEAD ELECTRIC LINE
- UNDERGROUND ELECTRIC LINE
- NATURAL GAS LINE
- OVERHEAD TELEPHONE & CABLE LINE
- TELEPHONE & CABLE LINE
- UNKNOWN UTILITY
- FORMER MGP STRUCTURE (APPROXIMATE)
- LIMITS OF BEDROCK EXCAVATION
- LIMITS OF OVERBURDEN EXCAVATION
- FORMER STONE/BRICK STRUCTURE CONTAINING COAL TAR
- PROPOSED SOIL BORING LOCATION
- PROPOSED MONITORING WELL LOCATION
- PROPOSED SOIL VAPOR SAMPLE LOCATION

**NOTE:**

1. FORMER LOCATIONS OF GAS WORKS STRUCTURES FROM SANBORN LIBRARY, LLC 1906 MAP.

**SOURCE:**

1. BASEMAP INFORMATION PROVIDED BY FISHER ASSOCIATES, LLC. DATED JUNE, 2015. FILENAME: GENESEO TOPO.DWG. GEOREFERENCED TO NEW YORK STATE PLANE NAD83 COORDINATE SYSTEM.

0 40' 80'

GRAPHIC SCALE

ROCHESTER GAS & ELECTRIC
PARK STREET FORMER MGP SITE
**SITE CHARACTERIZATION WORK PLAN**

**SOIL BORING AND MONITORING WELL LOCATION MAP**

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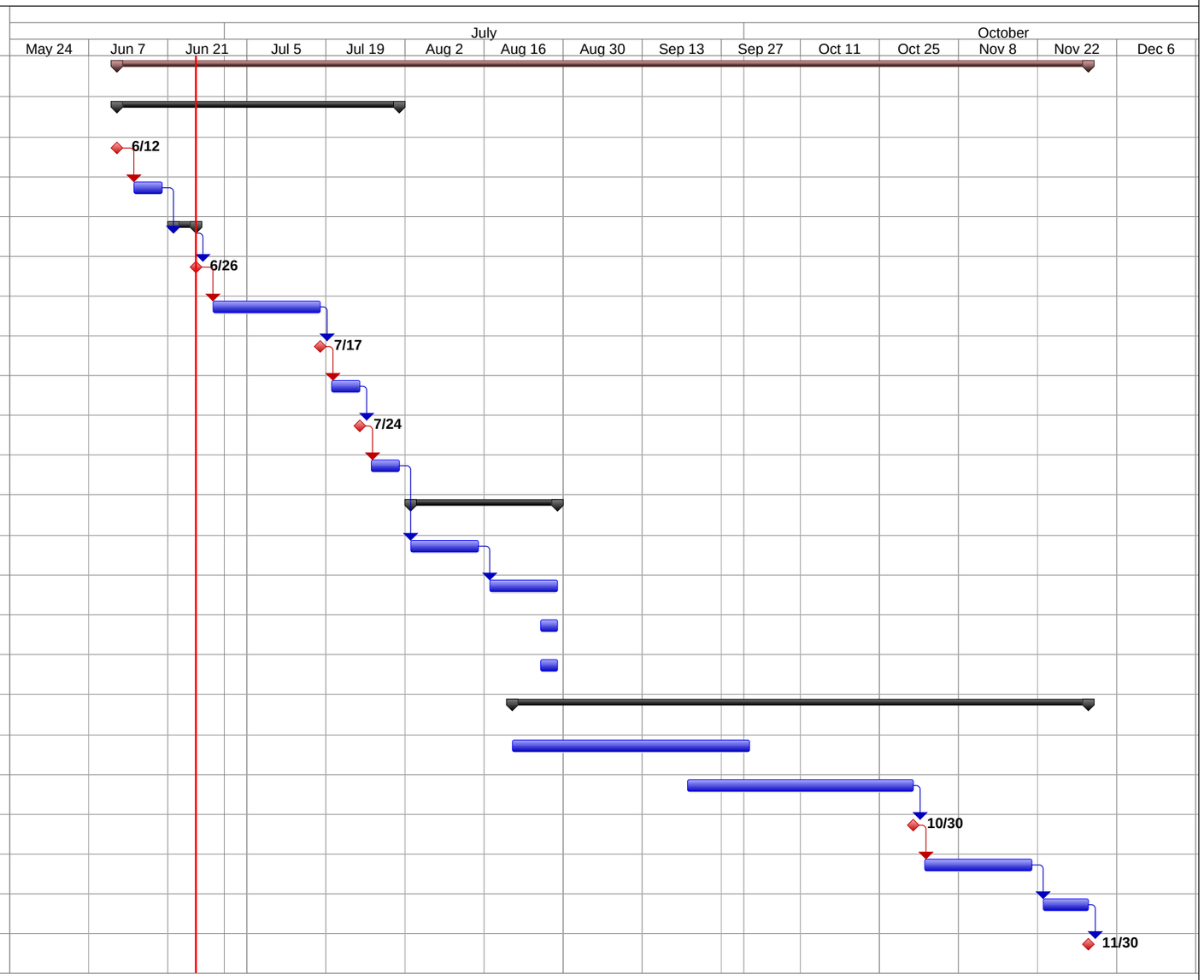
FIGURE
**3**

Figure 4
RG&E / Park Street Former MGP Site
Project Schedule

**June 11, 2015**

| ID | Task Name | Duration | Start | Finish |
|---|---|---|---|---|
| 1 | **SITE CHARACTERIZATION** | **122 days** | **Fri 6/12/15** | **Mon 11/30/15** |
| 2 | **Prepare SCWP** | **36 days** | **Fri 6/12/15** | **Fri 7/31/15** |
| 3 | Draft SCWP to RG&E | 0 days | Fri 6/12/15 | Fri 6/12/15 |
| 4 | RG&E Review SCWP | 5 days | Mon 6/15/15 | Fri 6/19/15 |
| 5 | Incorporate RG&E Comments/Edits | 4 days | Mon 6/22/15 | Thu 6/25/15 |
| 6 | SCWP to NYSDEC | 0 days | Fri 6/26/15 | Fri 6/26/15 |
| 7 | NYSDEDC Review Draft SCWP | 15 days | Mon 6/29/15 | Fri 7/17/15 |
| 8 | NYSDEC Comment/Edits to RG&E | 0 days | Fri 7/17/15 | Fri 7/17/15 |
| 9 | Finalize SCWP | 5 days | Mon 7/20/15 | Fri 7/24/15 |
| 10 | Revised SCWP to NYSDEC | 0 days | Fri 7/24/15 | Fri 7/24/15 |
| 11 | NYSDEC Approve SCWP | 5 days | Mon 7/27/15 | Fri 7/31/15 |
| 12 | **Site Characterization Field Activities** | **20 days** | **Mon 8/3/15** | **Fri 8/28/15** |
| 13 | Preparation for Field Activities | 10 days | Mon 8/3/15 | Fri 8/14/15 |
| 14 | Install SBs/MWs | 10 days | Mon 8/17/15 | Fri 8/28/15 |
| 15 | Groundwater Gauging Event #1 | 3 days | Wed 8/26/15 | Fri 8/28/15 |
| 16 | Gauge and Sample Groundwater | 3 days | Wed 8/26/15 | Fri 8/28/15 |
| 17 | **Perpare SC Report** | **72 days** | **Fri 8/21/15** | **Mon 11/30/15** |
| 18 | Laboratory Analyses | 30 days | Fri 8/21/15 | Thu 10/1/15 |
| 19 | Prepare Text, Tables, Figures | 30 days | Mon 9/21/15 | Fri 10/30/15 |
| 20 | Draft SC Report to RG&E | 0 days | Fri 10/30/15 | Fri 10/30/15 |
| 21 | RG&E Review | 15 days | Mon 11/2/15 | Fri 11/20/15 |
| 22 | Incorporate RG&E Comments/Edits | 6 days | Mon 11/23/15 | Mon 11/30/15 |
| 23 | Draft SC Report to NYSDEC | 0 days | Mon 11/30/15 | Mon 11/30/15 |



**Appendix A**

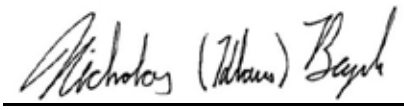
Health and Safety Plan

# Site Specific Health and Safety Plan

Project Name: Park Street Former MGP Site

Project Number: B0013138
Client Name: RGE
Date: 4/24/2015
Revision: 0

Approvals:

HASP Developer:  4/24/2015
Nicholas Beyrle

5/12/2015

HASP Reviewer: X 

Project Manager: ARCADIS HASP Reviewer
Signed by: Zuck, Daniel

# Emergency Information

**Site Address:** State University of New York Geneseo
6 Park Street
Geneseo, NY 14454

**Emergency Phone Numbers:**

| | | |
|---|---|---|
| Emergency (fire, police, ambulance) | | 911 |
| Emergency (facility specific, if applicable): | | |
| Fire/Ambulance - Geneseo Fire and | | 585-243-1200 |
| Police - Village of Geneseo | | 585-243-2420 |
| Emergency Other (specify): | Sheriff - Livingston County | 585-243-7100 |
| Client Contact | Christopher Keipper | 585-771-4560 |
| WorkCare (non-life-threatening injury/illness) | | 1-800-455-6155 |
| Project H&S | Nicholas Beyrle | 585-662-4044 |
| Task Manager | Bruce Ahrens | 585-662-4034 |
| Project Manager | Bruce Ahrens | 585-662-4034 |
| Corporate H&S Specialist | Julie Santaniello | 978-551-0033 |
| Corporate H&S Director | Denis Balcer | 614-985-9114 |

**Hospital Name and Address:** Noyes Memorial Hoisptal
111 Clara Barton St
Dansville, NY 14437

Hospital Phone Number: 585-335-6001

**Incident Notification Process**

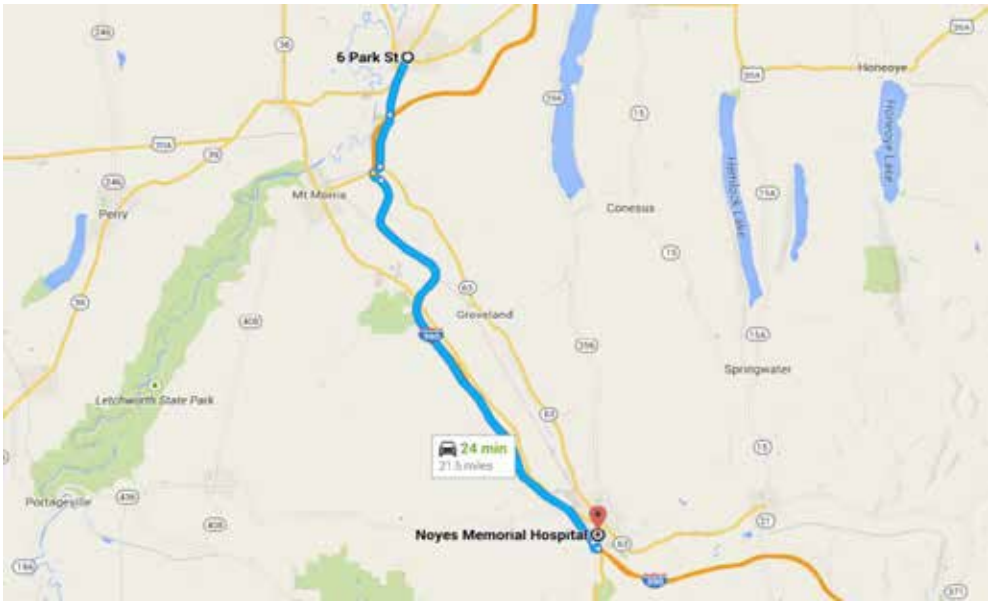
| | | |
|---|---|---|
| 1 | Dial 911/Facility Emergency Number/WorkCare as applicable | |
| 2 | Contact PM/Supervisor | Bruce Ahrens |
| 3 | Contact Corporate H&S | Julie Santaniello |
| 4 | Contact Client | Christopher Keipper |

*Complete below, as applicable, or clear cell contents:*

Location of Assembly Area(s): South side of Brodie Fine Arts Building

Nearest Storm Shelter: Brodie Fine Arts Building

**Route to the Hospital**




To: Noyes Memorial Hospital, 111 Clara Barton Street, Dansville, NY 14437
From: SUNY Geneseo, 6 Park Street, Geneseo, New York 14454

Driving Directions Total Distance: 21.5 miles

- Head EAST on Park Street.
- Turn RIGHT onto Main St 0.7 mile.
- Turn RIGHT onto South St 0.1 mile.
- Turn RIGHT onto South St 0.1 mile.
- South St turns LEFT and becomes Mt Morris Rd 2.0 mile.
- Continue onto NY-63 South 1.9 mile.
- Continue onto NY-408 South 0.3 mile.
- Turn LEFT onto I-390 South to Corning 16.3 mile.
- Take exit 4 for NY-36 toward Dansville/Hornell 0.4 mile.
- Turn LEFT onto NY-36 North/Clara Barton St 0.5 mile.
- Arrive at Noyes Memorial Hospital.

**General Information**

***Site Type (select all applicable where work will be conducted):***

- [x] Active
- [ ] Bridge
- [x] Buildings
- [ ] Commercial
- [ ] Construction
- [ ] Government
- [ ] Inactive
- [x] Industrial
- [ ] Landfill
- [ ] Marine
- [ ] Mining
- [x] Parking Lot/Private Roadway
- [ ] Railroad
- [ ] Remote Area
- [ ] Residential
- [ ] Retail
- [ ] Roadway (public, inlcuing right-of-way)
- [ ] Secure
- [ ] Unknown
- [ ] Unsecured
- [ ] Utility
- [x] Other (specify): College Campus

***Surrounding Area and Topography (select one):***

- [ ] Surrounding area and topography are presented in the project work plan
- [x] Surrounding area and topography (*briefly describe*):
  Site is located on SUNY Geneseo Campus. Site topography is mostly flat asphalt.

***Site Background (select one):***

- [x] Site background is presented in the project work plan
- [ ] Site background (*briefly describe)*:

**Project Tasks**
The following tasks are identified for this project:

*Examples: "Drilling/soil sampling", "Surveying", "General Inspections", "Construction Management/Inspections"*

1 General Site Work
2 Drilling/Soil Sampling
3 Groundwater Sampling
4 Soil Vapor/Air Sampling
5

☐ Subcontractor H&S information is attached
☐ ARCADIS Standards apply to augment JSA *[list standard(s) below]*
☑ Utility clearance required.
☑ ARCADIS Field H&S Handbook sections apply *(list below)*

Comments:
Section III-F. General Housekeeping, Personal Hygiene and Field Sanitation
Section III-G. Site Security, Work Zone and Decontamination for HAZWOPER Sites
Section III-GG. HAZWOPER and HAZMAT Response
Section III-II. Drums and other Material Handling
Section III-H. Personal Safety and Other Unique Site Conditions
Section III-NN. Backing Safety

**Roles and Responsibilities**

| *Name* | *Role* | *Additional Responsibilities (Describe)* |
|---|---|---|
| 1 Bruce Ahrens | PM | • Obtain client-specific health and safety information and communicate with the client on health and safety issues.<br>• Report all injuries, illnesses and near-misses to the client representative, lead incident investigations, and ensure that any recommendations made are implemented. |
| 2 Bruce Ahrens | TM | • Review all applicable H&S Standards, and ensure that project activities conform to all requirements.<br>• Communicate with the Site Safety Officer (SSO) on health and safety issues. |
| 3 Nicholas (Klaus) Beyrle or Current | Field Lead/ SSO | • Ensure site visitors have been informed of the hazards related to ARCADIS work.<br>• Coordinate activities during emergency situations.<br>• Communicate with the Project Manager on health and safety issues.<br>• Ensure that necessary site-specific training is performed (both initial and "tailgate" safety briefings).<br>• Ensure that work is performed in a safe manner and that necessary safety equipment is maintained and used at the Site. |
| 4 Various | Field Staff | • Abide by HASP/JSAs/AUS Procedures<br>• Support SSO |

**Training**

| *All ARCADIS employees are required to have the following training:* | *Selected ARCADIS employees are required to have the following additional training:* |
|---|---|

| | | | Names or Numbers from above |
|---|---|---|---|
| ☑ | 40 hr HAZWOPER w current refresh. | ☐ Not applicable | |
| ☐ | 24 hr HAZWOPER | ☑ First aid/CPR/BBP | All onsite field staff |
| ☐ | 10 hr Construction | ☐ 30 hr Construction | |
| ☐ | HazMat #1 (Ground/Air/MOT) | ☐ 10 hr Construction | |
| ☐ | HazMat #4 (MOT) | ☑ HazMat #1 (Gr./Air/MOT) | Staff collecting samples |
| ☐ | HazCom/Emergency Action Plan | ☐ HazMat #4 (MOT) | |
| ☑ | H&S Orientation (classroom); or | ☐ Confined space entrant | |
| ☐ | H&S Orientation (on-line) | ☐ Confined space rescue | |
| ☑ | PPE | ☐ Excavation CP | |
| ☐ | Respiratory protection | ☐ Electrical (NFPA 70E) | |
| ☐ | MSHA | ☐ Lockout/Tagout | |
| ☑ | Smith System (on-line) | ☐ H&S Orientation (class) | |
| ☐ | OTS/eRailsafe | ☑ Hazwoper 8-HR Sprvsr | All onsite field staff |
| ☐ | Client specific: | ☐ Smith Sys. (hands on) | |
| | | ☐ Boating safety | |
| ☐ | Other: | ☐ Other: | |

**Hazard Analysis**

| Risk Assessment Matrix | | Likelihood Ratings** (likelihood that incident would occur) | | | |
|---|---|---|---|---|---|
| Consequences Ratings* | | A | B | C | D |
| People | Property | 0 Almost impossible | 1 Possible but unlikely | 2 Likely to happen | 3 Almost certain to happen |
| 1 - Slight or no health | Slight or no damage | 0 - Low | 1 - Low | 2 - Low | 3 - Low |
| 2 - Minor health effect | Minor damage | 0 - Low | 2 - Low | 4 - Medium | 6 - Medium |
| 3 - Major health effect | Local damage | 0 - Low | 3 - Low | 6 - Medium | 9 - High |
| 4 - Fatalities | Major damage | 0 - Low. | 4 - Medium. | 8 - High | 12 - High |

**Division**
Environment

**Business Unit**
REM

**Task 1: General Site Work**

***Hazardous Activity #1***

Field-Ambient environment - exposure heat, cold, sun, weather, etc

Hazard Types (unmitigated ranking H-High, M-Medium, L-Low):

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Biological | M | Chemical | M | Driving | L | Electrical | L |
| Environmental | L | Gravity | L | Mechanical | L | Motion | L |
| Personal Safety | L | Pressure | L | Radiation | L | Sound | L |

Overall Unmitigated Risk: Medium  Mitigated Risk: Medium  if utilizing:
**Primary Controls:** TRACK PPE (see HASP "PPE" section) Field H&S Handbook

**Secondary Controls:** H&S Standards Engineering Controls Admin. Controls Specialized Equipment

***Hazardous Activity #2***

Field-Mobilization/Demobilization - from a site

Hazard Types (unmitigated ranking H-High, M-Medium, L-Low):

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Biological | - | Chemical | L | Driving | M | Electrical | - |
| Environmental | - | Gravity | M | Mechanical | - | Motion | L |
| Personal Safety | - | Pressure | - | Radiation | - | Sound | - |

Overall Unmitigated Risk: Medium  Mitigated Risk: Low  if utilizing:
**Primary Controls:** TRACK Field H&S Handbook Engineering Controls

**Secondary Controls:** JSAs Job Briefing/Site Awareness PPE (see HASP "PPE" section) Admin. Controls

***Hazardous Activity #3***

Field-Biological - insects, spiders, snakes, etc

Hazard Types (unmitigated ranking H-High, M-Medium, L-Low):

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Biological | M | Chemical | - | Driving | - | Electrical | - |
| Environmental | - | Gravity | - | Mechanical | - | Motion | - |
| Personal Safety | - | Pressure | - | Radiation | - | Sound | - |

Overall Unmitigated Risk: Medium  Mitigated Risk: Low  if utilizing:
**Primary Controls:** TRACK Engineering Controls PPE (see HASP "PPE" section)

**Secondary Controls:** JSAs HASP Job Briefing/Site Awareness PPE (see HASP "PPE" section) Housekeeping

***Hazardous Activity #4***

Field-Sampling - sample cooler preparation

Hazard Types (unmitigated ranking H-High, M-Medium, L-Low):

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Biological | - | Chemical | M | Driving | - | Electrical | - |
| Environmental | - | Gravity | M | Mechanical | L | Motion | L |
| Personal Safety | M | Pressure | - | Radiation | - | Sound | - |

Overall Unmitigated Risk: Medium  Mitigated Risk: Low  if utilizing:
**Primary Controls:** TRACK JSAs Engineering Controls PPE (see HASP "PPE" section) See HASP "Monitoring" section

**Secondary Controls:** Job Briefing/Site Awareness Admin. Controls Work Plan

| Risk Assessment Matrix | | Likelihood Ratings** (likelihood that incident would occur) | | | |
|---|---|---|---|---|---|
| Consequences Ratings* | | A | B | C | D |
| People | Property | 0 Almost impossible | 1 Possible but unlikely | 2 Likely to happen | 3 Almost certain to happen |
| 1 - Slight or no health | Slight or no damage | 0 - Low | 1 - Low | 2 - Low | 3 - Low |
| 2 - Minor health effect | Minor damage | 0 - Low | 2 - Low | 4 - Medium | 6 - Medium |
| 3 - Major health effect | Local damage | 0 - Low | 3 - Low | 6 - Medium | 9 - High |
| 4 - Fatalities | Major damage | 0 - Low. | 4 - Medium. | 8 - High | 12 - High |

**Task 2:** Drilling/Soil Sampling

### *Hazardous Activity #1*

Field-Drilling - Mechanical method (drill rig, DPT, etc)

Hazard Types (unmitigated ranking H-High, M-Medium, L-Low):

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Biological | - | Chemical | L | Driving | - | Electrical | M |
| Environmental | - | Gravity | H | Mechanical | H | Motion | H |
| Personal Safety | - | Pressure | M | Radiation | - | Sound | H |

Overall Unmitigated Risk: High  Mitigated Risk: Medium  if utilizing:

**Primary Controls:** TRACK Engineering Controls Admin. Controls PPE (see HASP "PPE" section) JSAs Inspections

**Secondary Controls:** Job Briefing/Site Awareness H&S Standards Cont/Emerg. Planning

### *Hazardous Activity #2*

Chemical-Corrosives - working with or exposure to corrosives in laboratory work, sample bottle preservatives, decon chemicals, etc

Hazard Types (unmitigated ranking H-High, M-Medium, L-Low):

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Biological | - | Chemical | H | Driving | - | Electrical | - |
| Environmental | L | Gravity | - | Mechanical | - | Motion | - |
| Personal Safety | - | Pressure | - | Radiation | - | Sound | - |

Overall Unmitigated Risk: Medium  Mitigated Risk: Low  if utilizing:

**Primary Controls:** TRACK JSAs Engineering Controls PPE (see HASP "PPE" section)

**Secondary Controls:** H&S Standards Job Briefing/Site Awareness Hazcom Training MSDS (see also HASP Hazcom section) Admin. Controls Specialized Equipment Housekeeping

### *Hazardous Activity #3*

Field-Utilities- pre-Clearing utilities with mechanical means (air knife, vacuum excavation, hydro knife, etc)

Hazard Types (unmitigated ranking H-High, M-Medium, L-Low):

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Biological | - | Chemical | L | Driving | - | Electrical | L |
| Environmental | - | Gravity | M | Mechanical | M | Motion | M |
| Personal Safety | - | Pressure | M | Radiation | - | Sound | M |

Overall Unmitigated Risk: Medium  Mitigated Risk: Low  if utilizing:

**Primary Controls:** TRACK H&S Standards Job Briefing/Site Awareness PPE (see HASP "PPE" section) JSAs

**Secondary Controls:** Specialized Equipment Engineering Controls Admin. Controls

### *Hazardous Activity #4*

Field-Mobilization/Demobilization - from a site

Hazard Types (unmitigated ranking H-High, M-Medium, L-Low):

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Biological | - | Chemical | L | Driving | M | Electrical | - |
| Environmental | - | Gravity | M | Mechanical | - | Motion | L |
| Personal Safety | - | Pressure | - | Radiation | - | Sound | - |

Overall Unmitigated Risk: Medium  Mitigated Risk: Low  if utilizing:

**Primary Controls:** TRACK Field H&S Handbook Engineering Controls

**Secondary Controls:** JSAs Job Briefing/Site Awareness PPE (see HASP "PPE" section) Admin. Controls

| Risk Assessment Matrix | | Likelihood Ratings** (likelihood that incident would occur) | | | |
|---|---|---|---|---|---|
| Consequences Ratings* | | A | B | C | D |
| People | Property | 0 Almost impossible | 1 Possible but unlikely | 2 Likely to happen | 3 Almost certain to happen |
| 1 - Slight or no health | Slight or no damage | 0 - Low | 1 - Low | 2 - Low | 3 - Low |
| 2 - Minor health effect | Minor damage | 0 - Low | 2 - Low | 4 - Medium | 6 - Medium |
| 3 - Major health effect | Local damage | 0 - Low | 3 - Low | 6 - Medium | 9 - High |
| 4 - Fatalities | Major damage | 0 - Low. | 4 - Medium. | 8 - High | 12 - High |

**Task 3: Groundwater Sampling**

### *Hazardous Activity #1*

Chemical-Corrosives - working with or exposure to corrosives in laboratory work, sample bottle preservatives, decon chemicals, etc

Hazard Types (unmitigated ranking H-High, M-Medium, L-Low):

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Biological | - | Chemical | H | Driving | - | Electrical | - |
| Environmental | L | Gravity | - | Mechanical | - | Motion | - |
| Personal Safety | - | Pressure | - | Radiation | - | Sound | - |

Overall Unmitigated Risk: Medium  Mitigated Risk: Low  if utilizing:

**Primary Controls:** TRACK JSAs Engineering Controls PPE (see HASP "PPE" section)

**Secondary Controls:** H&S Standards Job Briefing/Site Awareness Hazcom Training MSDS (see also HASP Hazcom section) Admin. Controls Specialized Equipment Housekeeping

### *Hazardous Activity #2*

Field-Measurement - water levels and well sounding

Hazard Types (unmitigated ranking H-High, M-Medium, L-Low):

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Biological | - | Chemical | L | Driving | - | Electrical | - |
| Environmental | - | Gravity | L | Mechanical | - | Motion | M |
| Personal Safety | - | Pressure | - | Radiation | - | Sound | - |

Overall Unmitigated Risk: Low  Mitigated Risk: Low  if utilizing:

**Primary Controls:** TRACK JSAs PPE (see HASP "PPE" section)

**Secondary Controls:** Job Briefing/Site Awareness

### *Hazardous Activity #3*

Field-Sampling - monitoring well sampling with electric, pneumatic or other non-manual pump

Hazard Types (unmitigated ranking H-High, M-Medium, L-Low):

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Biological | - | Chemical | L | Driving | - | Electrical | L |
| Environmental | - | Gravity | L | Mechanical | - | Motion | M |
| Personal Safety | - | Pressure | - | Radiation | - | Sound | - |

Overall Unmitigated Risk: Low  Mitigated Risk: Low  if utilizing:

**Primary Controls:** TRACK JSAs Engineering Controls PPE (see HASP "PPE" section) Inspections

**Secondary Controls:** Job Briefing/Site Awareness

### *Hazardous Activity #4*

General-Shipping - HazMat samples to laboratories for analysis

Hazard Types (unmitigated ranking H-High, M-Medium, L-Low):

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Biological | - | Chemical | M | Driving | - | Electrical | - |
| Environmental | M | Gravity | - | Mechanical | - | Motion | - |
| Personal Safety | - | Pressure | - | Radiation | - | Sound | - |

Overall Unmitigated Risk: Medium  Mitigated Risk: Medium  if utilizing:

**Primary Controls:** TRACK HazMat #1 Training Shipping Determination Admin. Controls Inspections

**Secondary Controls:** PPE (see HASP "PPE" section) Housekeeping

| Risk Assessment Matrix | | Likelihood Ratings** (likelihood that incident would occur) | | | |
|---|---|---|---|---|---|
| Consequences Ratings* | | A | B | C | D |
| People | Property | 0 Almost impossible | 1 Possible but unlikely | 2 Likely to happen | 3 Almost certain to happen |
| 1 - Slight or no health | Slight or no damage | 0 - Low | 1 - Low | 2 - Low | 3 - Low |
| 2 - Minor health effect | Minor damage | 0 - Low | 2 - Low | 4 - Medium | 6 - Medium |
| 3 - Major health effect | Local damage | 0 - Low | 3 - Low | 6 - Medium | 9 - High |
| 4 - Fatalities | Major damage | 0 - Low. | 4 - Medium. | 8 - High | 12 - High |

**Task 4: Soil Vapor/Air Sampling**

***Hazardous Activity #1***

Field-Sampling - indoor and ambient air sampling

Hazard Types (unmitigated ranking H-High, M-Medium, L-Low):

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Biological | - | Chemical | L | Driving | - | Electrical | - |
| Environmental | - | Gravity | L | Mechanical | - | Motion | L |
| Personal Safety | - | Pressure | - | Radiation | - | Sound | - |

Overall Unmitigated Risk: Low  Mitigated Risk: Low if utilizing:

**Primary Controls:** TRACK JSAs Work Plan

**Secondary Controls:** TKI SOP (as applicable) Job Briefing/Site Awareness Engineering Controls Admin. Controls PPE (see HASP "PPE" section)

***Hazardous Activity #2***

Field-Sampling - subslab vapor screening/sampling

Hazard Types (unmitigated ranking H-High, M-Medium, L-Low):

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Biological | - | Chemical | M | Driving | - | Electrical | M |
| Environmental | - | Gravity | L | Mechanical | M | Motion | L |
| Personal Safety | - | Pressure | L | Radiation | - | Sound | M |

Overall Unmitigated Risk: Medium  Mitigated Risk: Low if utilizing:

**Primary Controls:** TRACK JSAs Engineering Controls PPE (see HASP "PPE" section) See HASP "Monitoring" section

**Secondary Controls:** Job Briefing/Site Awareness Admin. Controls Work Plan

***Hazardous Activity #3***

Field-Contaminated media (contact with impacted soil, water, air, sediment, etc)

Hazard Types (unmitigated ranking H-High, M-Medium, L-Low):

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Biological | - | Chemical | H | Driving | - | Electrical | - |
| Environmental | M | Gravity | - | Mechanical | - | Motion | - |
| Personal Safety | - | Pressure | - | Radiation | M | Sound | - |

Overall Unmitigated Risk: High  Mitigated Risk: Low if utilizing:

**Primary Controls:** TRACK JSAs Engineering Controls PPE (see HASP "PPE" section)

**Secondary Controls:** H&S Standards HASP Admin. Controls HAZWOPER Training

***Hazardous Activity #4***

General-Lifting and movement of equipment of varying weights at varying frequencies by manual methods

Hazard Types (unmitigated ranking H-High, M-Medium, L-Low):

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Biological | - | Chemical | - | Driving | - | Electrical | - |
| Environmental | - | Gravity | - | Mechanical | - | Motion | - |
| Personal Safety | M | Pressure | - | Radiation | - | Sound | - |

Overall Unmitigated Risk: Medium  Mitigated Risk: Medium if utilizing:

**Primary Controls:** TRACK Engineering Controls Job Rotation

**Secondary Controls:** JSAs Job Briefing/Site Awareness Specialized Equipment Admin. Controls Engineering Controls

**Hazard Communication (HazCom)/Global Harmonization System (GHS)**

☐ HAZCOM/GHS for this project is managed by the client or general contractor

*List the chemicals anticipated to be used by **ARCADIS** on this project per HazCom/GHS requirements.*
(Modify quantities as needed)

| | **Acids/Bases** | Qty |
|---|---|---|
| ☐ | Not applicable | |
| ☐ | Hydrochloric acid | <500 ml |
| ☐ | Nitric acid | <500 ml |
| ☐ | Sulfuric acid | <500 ml |
| ☐ | Sodium hydroxide | <500 ml |
| ☐ | Zinc acetate | <500 ml |
| ☐ | Ascorbic acid | <500 ml |
| ☐ | Acetic acid | <500 ml |
| ☐ | Other: | |

| | **Decontamination** | Qty |
|---|---|---|
| ☐ | Not applicable | |
| ☑ | Alconox | ≤ 5 lbs |
| ☐ | Liquinox | ≤ 1 gal |
| ☐ | Acetone | ≤ 1 gal |
| ☑ | Methanol | ≤ 1 gal |
| ☐ | Hexane | ≤ 1 gal |
| ☑ | Isopropyl alcohol | ≤ 4 gal |
| ☑ | Nitric acid | ≤ 1 L |
| ☐ | Other: | |

| | **Calibration** | Qty. |
|---|---|---|
| ☐ | Not applicable | |
| ☑ | Isobutylene/air | 1 cyl |
| ☐ | Methane/air | 1 cyl |
| ☐ | Pentane/air | 1 cyl |
| ☐ | Hydrogen/air | 1 cyl |
| ☐ | Propane/air | 1 cyl |
| ☐ | Hydrogen sulfide/air | 1 cyl |
| ☐ | Carbon monoxide/air | 1 cyl |
| ☑ | pH standards (4,7,10) | ≤ 1 gal |
| ☑ | Conductivity standards | ≤ 1 gal |
| ☐ | Other: | |

| | **Fuels** | Qty. |
|---|---|---|
| ☑ | Not applicable | |
| ☐ | Gasoline | ≤ 5 gal |
| ☐ | Diesel | ≤ 5 gal |
| ☐ | Kerosene | ≤ 5 gal |
| ☐ | Propane | 1 cyl |
| ☐ | Other: | |

| | **Kits** | | Qty. |
|---|---|---|---|
| ☑ | Not applicable | | |
| ☐ | Hach (specify): | | 1 kit |
| ☐ | DTECH (specify): | | 1 kit |
| ☑ | EPA 5035 Soil (specify kit): | Methanol | 1 kit |
| ☑ | Other: | Sodium Bicarbonate | |

| | **Remediation** | Qty. |
|---|---|---|
| ☑ | Not applicable | |
| ☐ | | |
| ☐ | | |
| ☐ | | |
| ☐ | | |
| ☐ | | |

| | **Other:** | Qty. |
|---|---|---|
| ☐ | Not applicable | |
| ☑ | Spray paint | ≤ 6 cans |
| ☐ | WD-40 | ≤ 1 can |
| ☐ | Pipe cement | ≤ 1 can |
| ☐ | Pipe primer | ≤ 1 can |
| ☐ | Mineral spirits | ≤ 1 gal |

| | Qty. |
|---|---|
| ☐ | |
| ☐ | |
| ☐ | |
| ☐ | |
| ☐ | |
| ☐ | |

*Material safety data sheets (MSDSs)/Safety Data Sheets (SDSs) must be available to field staff.*
*Indicate below how MSDS information will be provided:*

☐ Not applicable
☐ Printed copy in company vehicle
☐ Printed copy in the project trailer/office
☑ Printed copy attached
☐ Electronic copy on field computer

☐ Contractor MSDSs/SDSs are not applicable
☐ Contractor MSDSs/SDSs are attached
☑ Contractor MSDSs/SDSs will be on site and located: With the HASP as an Attachment

☐ Bulk quantities of the following materials will be stored: _____

Contact the project H&S contact for information in determining code and regulatory requirements associated with bulk storage of materials.

**Monitoring**

☐ Chemical air monitoring is not required for this project.

*For projects requiring air monitoring, list the relevant constituents representing a hazard to site workers.*

| Constituent | Max. Conc. | Units | TWA | Units | STEL | Units | IDLH | Units | LEL/UEL (%) | VD Air=1 | VP (mm Hg) | IP (eV) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 5 | ppm | 0.5 | p | 2.5 | p | 500 | p,N | 1.2/7.8 | 2.8 | 75 | 9.24 |
| Toluene | 1 | ppm | 20 | p | 150 | p,N | 500 | p,N | 1.1/7.1 | 3.1 | 21 | 8.82 |
| Ethylbenzene | 1 | ppm | 20 | p | 125 | p | 800 | p,N | 0.8/6.7 | 3.7 | 874 | 8.86 |
| Xylenes | 1 | ppm | 100 | p | 150 | p | 900 | p,N | 1.1/7.0 | 3.7 | 9 | 8.44 |
| None | 1 | | 9999 | - | 0 | - | 0 | - | 0 | 0 | 0 | 0 |
| None | | | 9999 | - | 0 | - | 0 | - | 0 | 0 | 0 | 0 |

Notes: TWAs are ACGIH 8 hr-TLVs unless noted.

p-ppm m-mg/m3 c2- ceiling (2 hr) se-sensitizer "#N/A" -Constituent is not in database, manually enter information
s- skin c-ceiling "9999" - NA O-OSHA PEL
r- resipirable i-inhalable N-NIOSH 10 hr REL

Monitoring Equipment and General Protocols

*Air monitoring is required for any task or activity where employees have potential exposure to vapors or particulates above the TWA. Action levels below are appropriate for most situations. Contact the project H&S contact for all stop work situations. Select monitoring frequency and instruments to be used.*

Monitoring Frequency: 15 min intervals when conducting sub-surface activities or products containing VOCs

Indicator Tube/Chip Frequency: Indicator tube/chip monitoring not required

| | Instrument | Action Levels | | | Actions |
|---|---|---|---|---|---|
| ☑ | Photoionization Detector | | < | 0.768 | Continue work |
| | | 0.768 | - | 1.536 | Sustained >5 min. continuous monitor, review eng. controls and PPE, proceed with caution |
| | Lamp (eV): 10.6 | | > | 1.536 | Sustained >5 min. stop work, contact SSO |
| ☐ | Flame Ionization Detector (FID) | | < | 0.0 | Continue work |
| | | 0.0 | - | 0.0 | Sustained >5 min. continuous monitor, review eng. controls and PPE, use caution |
| | | | > | 0.0 | Sustained >5 min. stop work, contact SSO |
| ☐ | LEL/O2 Meter | 0-5% LEL | | | Continue work |
| | | >5-10% LEL | | | Continuous monitor, review eng. controls, proceed with caution |
| | | >10% LEL | | | Stop work, evacuate, contact SSO |
| | | 19.5%-23.5% O2 | | | Normal, continue work |
| | | <19.5% O2 | | | O2 deficient, stop work, evacuate, cont. SSO |
| | | >23.5% O2 | | | O2 enriched, stop work, evacuate, contact SSO |
| ☐ | Indicator: ☐ tube ☐ chip | ≤PEL/TLV | | | Continue work |
| | | >PEL/TLV | | | Stop work, review eng. controls and PPE, contact SSO |
| | Compound(s): | | | | |
| ☑ | Particulate Monitor (mists, aerosols, dusts in mg/m$^3$) | | < | 2.5 | Continue work |
| | | 2.5 | - | 5.00 | Use engineering controls, monitor continuously |
| | | | > | 5.00 | Stop work, review controls, contact SSO |
| ☐ | Other: | Specify: | | | Specify: |

**Personal Protective Equipment (PPE)**

***See JSA for the task being performed for PPE requirements***. *If the work is not conducted under a JSA, refer to the governing document for PPE requirements. At a minimum, the following checked PPE is required for* <u>*all tasks during field work*</u> *not covered by a JSA on this project:*

Level D or Level D Modified:

- ☑ Hard hat
- ☑ Safety glasses
- ☐ Safety goggles
- ☐ Face shield
- ☑ Hearing protection
- ☐ Rain suit
- ☐

Other: _____

- ☐ Snake chaps/guards
- ☐ Briar chaps
- ☐ Chainsaw chaps
- ☐ Sturdy boot
- ☑ Steel toe boot
- ☐ Metatarsal boot

_____

_____

- ☐ Coveralls:
- ☐ Apron:
- ☐ Chem. resistant gloves:
- ☐ Gloves other:
- ☐ Chemical boot:
- ☐ Boot other:
- ☑ Traffic vest:
- ☐ Life vest:

Specify Type:

_____
_____
_____
_____
_____
_____

Required for all exterior building

_____
_____

Task specific PPE: The PPE specified in a JSA is automatically the PPE requirement for all work governed by the JSA.

Comments:

**~ If at anytime there is a new project task, Stop Work must me implemented until a revised Hazards Analysis can be conducted, JSA developed and tailgate meeting completed to eliminate potential hazards.**

~ Field H&S Handbook references can be found in the JSAs provided as an Attachment.

~ A three point utility clearance will be performed prior to initiating any intrusive work at the Site(ONE-Call does not count as a line of evidence unless work is conducted in a right-of-way or roadway). A utility clearance checklist is provided as an Attachment

**Medical Surveillance (*check all that apply*)**

- ☐ Medical Surveillance is not required for this project.
- ☑ HAZWOPER medical surveillance applies to all ARCADIS site workers on the project.
- ☑ HAZWOPER medical surveillance applies to all subcontractors on the project.
- ☐ HAZWOPER medical surveillance applies to all site workers on the project except:

- ☐ Other medical surveillance required (describe type and who is required to participate):
- ☐ Client drug and/or alcohol testing required.

**Hazardous Materials Shipping and Transportation (*check all that apply*)**

- ☐ Not applicable, no materials requiring a Shipping Determination will be transported or shipped
- ☑ A Shipping Determination has been reviewed and provided to field staff
- ☐ A Shipping Determination is attached
- ☐ All HazMat will be transported under Materials of Trade by ARCADIS
- ☐ Other (specify):

**Roadway Work Zone Safety (*check all that apply*)**

- ☐ Not applicable for this project
- ☐ All or portions of the work conducted under a TCP
- ☑ All or portions of the work conducted under a STAR Plan
- ☐ TCP or STAR Plan provided to field staff
- ☐ TCP or STAR Plan attached
- ☐ Other (specify):

**ARCADIS Commercial Motor Vehicles (CMVs)**

This section is applicable to ARCADIS operated vehicles only

- ☑ This project will **<u>not</u>** utilize CMV drivers
- ☐ This project will utilize CMV drivers

**Site Control (*check all that apply*)**

- ☐ Not applicable for this project.
- ☐ Site control protocols are addressed in JSA or other supporting document (attach)
- ☑ Maintain an exclusion zone of 25 ft. around the active work area
- ☐ Site control is integrated into the STAR Plan or TCP for the project
- ☐ Level C site control - refer to Level C Supplement attached
- ☐ Other (specify):

**Decontamination (*check all that apply*)**

- ☐ Not applicable for this project.
- ☑ Decontamination protocols are addressed in JSA or other governing document (attach)
- ☑ Level D work- wash hands and face prior to consuming food, drink or tobacco.
- ☐ Level D Modified work- remove coveralls and contain, wash hands and face prior to consuming food, drink or tobacco. Ensure footwear is clean of site contaminants
- ☐ Level C work - refer to the Level C supplement attached.
- ☐ Other (specify):

**Sanitation *(check all that apply)***

- ☑ Mobile operation with access to off-site restrooms and potable water
- ☐ Restroom facilities on site provided by client or other contractor
- ☐ Project to provide portable toilets (1 per 20 workers)
- ☐ Potable water available on site
- ☐ Project to provide potable water (assume 1 gal./person/day)
- ☐ Project requires running water (hot and cold, or tepid) with soap and paper towels

**Safety Briefings (*check all that apply*)**

- ☑ Safety briefing required daily
- ☐ Safety briefing required twice a day
- ☐ Safety briefings required at the following frequency: _____
- ☐ Subcontractors to participate in ARCADIS safety briefings
- ☐ ARCADIS to participate in client/contractor safety briefings
- ☐ Other (specify):

**Safety Equipment and Supplies**

***Safety equipment/supply requirements are addressed in the JSA for the task being performed***. *If work is not performed under a JSA, the following safety equipment is required to be present on site in good condition (Check all that apply):*

- ☑ First aid kit
- ☐ Bloodborne pathogens kit
- ☑ Fire extinguisher
- ☐ Eyewash (ANSI compliant)
- ☑ Eyewash (bottle)
- ☑ Drinking water
- ☐ Other: _____

- ☐ Insect repellent
- ☐ Sunscreen
- ☐ Air horn
- ☐ Traffic cones
- ☐ 2-way radios
- ☐ Heat stress monitor

_____

**H&S Program (*check all that apply*)**

- ☐ H&S metrics are provided on the account level, refer to account guidance
- ☑ TIP required at the following frequency on this project:
  *Select One:* _____ mhrs 1 time(s) per Define: Field Mobilization
- ☐ H&S Field Assessment required at the following frequency on this project:
  *Select One:* _____ mhrs _____ time(s) _____ Define: _____
- ☐ Other (specify):

List tasks anticipated for TIP activity:

Groundwater Sampling
Drilling/Soil Sampling
Air Sampling

**Signatures**

I have read, understand and agree to abide by the requirements presented in this health and safety plan. I understand that I have the absolute right to stop work if I recognize an unsafe condition affecting my work until corrected.

| Printed Name | Signature | Date |
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Add additional sheets if necessary

- ☐ Subcontractor Acknowledgement Form attached

**You have an absolute right to STOP WORK if unsafe conditions exist!**

**Attachment A - MSDS**

*Material Safety Data Sheet Collection*
Genium group inc.
1171 RiverFront Center, Amsterdam, NY 12010
(518) 842-4111

**Isopropyl Alcohol**
**ISO5300**

Issue Date: 2006-06

## Section 1 - Chemical Product and Company Identification 61

**Material Name:** Isopropyl Alcohol **CAS Number:** 67-63-0
**Chemical Formula:** $C_3H_8O$
**Structural Chemical Formula:** $(CH_3)_2CHOH$
**EINECS Number:** 200-661-7
**ACX Number:** X1001458-1
**Synonyms:** ALCOJEL; ALCOOL ISOPROPILICO; ALCOOL ISOPROPYLIQUE; ALCOSOLVE; ALCOSOLVE 2; AVANTIN; AVANTINE; CHROMAR; COMBI-SCHUTZ; (COMPONENT OF) HIBISTAT; DIMETHYL CARBINOL; DIMETHYLCARBINOL; EPA PESTICIDE CHEMICAL CODE 047501; HARTOSOL; 2-HYDROXYPROPANE; IMSOL A; IPA; ISOHOL; ISOPROPANOL; ISOPROPYL ALCOHOL; ISO-PROPYLALKOHOL; LUTOSOL; 1-METHYLETHANOL; 1-METHYLETHYL ALCOHOL; PETROHOL; PRO; 2-PROPANOL; I-PROPANOL; N-PROPAN-2-OL; PROPAN-2-OL; PROPOL; 2-PROPYL ALCOHOL; I-PROPYL ALCOHOL; SEC-PROPYL ALCOHOL; I-PROPYLALKOHOL; SECONDARY PROPYL ALCOHOL; SPECTRAR; STERISOL HAND DISINFECTANT; TAKINEOCOL; VISCO 1152
**Derivation:** Treating propylene with sulfuric acid and then hydrolyzing or direct hydration of propylene using superheated steam. Most commonly available as rubbing alcohol (70% IPA).
**General Use:** As a solvent for gums, shellac, and essential oils, chemical intermediate, dehydrating agent, vehicle for germicidal compounds, de-icing agent for liquid fuels; for denaturing ethyl alcohol, preserving pathological specimens; in extraction of alkaloids, quick-drying inks and oils, and an ingredient of skin lotions, cosmetics, window cleaner, liquid soaps, and pharmaceuticals.

## Section 2 - Composition / Information on Ingredients

| Name | CAS | % |
|---|---|---|
| Isopropyl alcohol | 67-63-0 | 100% vol. |

Most commonly sold as 70% isopropyl alcohol (rubbing alcohol).

**OSHA PEL**
TWA: 400 ppm; 980 mg/m$^3$.

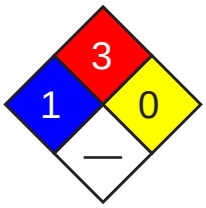
**NIOSH REL**
TWA: 400 ppm (980 mg/m$^3$); STEL: 500 ppm (1225 mg/m$^3$).

**DFG (Germany) MAK**
TWA: 200 ppm; PEAK: 400 ppm.

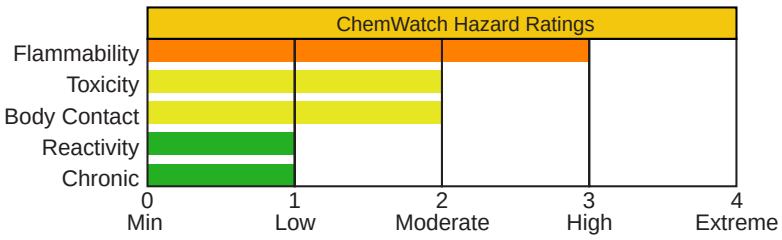
**ACGIH TLV**
TWA: 200 ppm; STEL: 400 ppm.

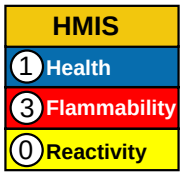
**IDLH Level**
2000 ppm (10% LEL).

## Section 3 - Hazards Identification



Fire Diamond




**ANSI Signal Word**

**Warning!**


Flammable

### ☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Volatile liquid. Irritating to eyes/respiratory tract. Other Acute Effects: CNS depression, possible dermatitis, systemic toxicity. Flammable

### Potential Health Effects

**Target Organs:** Eyes, skin, respiratory system.
**Primary Entry Routes:** Inhalation, ingestion, skin contact/absorption.

**Acute Effects**

**Inhalation:** Vapor inhalation is irritating to the respiratory tract and can cause central nervous system depression at high concentrations. Volunteers exposed to 400 ppm for 3 to 5 min experienced mild eye and respiratory irritation. At 800 ppm, irritation was not severe, but most people found the air uncomfortable to breathe.

**Eye:** Exposure to the vapor or direct contact with the liquid causes irritation and possible corneal burns.

**Skin:** Some irritation may occur after prolonged exposure.

**Ingestion:** Accidental ingestions have provided the most information on isopropyl alcohol toxicity. Symptoms include nausea and vomiting, headache, facial flushing, dizziness, lowered blood pressure, mental depression, hallucinations and distorted perceptions, difficulty breathing, respiratory depression, stupor, unconsciousness, and coma. Kidney insufficiency including oliguria (reduced urine excretion), anuria (absent urine excretion), nitrogen retention, and edema (fluid build-up in tissues) may occur. One post-mortem examination in a case of heavy ingestion showed extensive hemorrhagic tracheobronchitis, broncho pneumonia, and hemorrhagic pulmonary edema. Death can occur in 24 to 36 h post-ingestion due to respiratory paralysis.

**Carcinogenicity:** NTP - Not listed; IARC - Group 3, Not classifiable as to carcinogenicity to humans; OSHA - Not listed; NIOSH - Not listed; ACGIH - Not listed; EPA - Not listed; MAK - Not listed.

**Medical Conditions Aggravated by Long-Term Exposure:** Dermatitis or respiratory or kidney disorders.

**Chronic Effects:** Repeated skin contact can cause drying of skin and delayed hypersensitivity reactions in some individuals.

## Section 4 - First Aid Measures

See DOT ERG

**Inhalation:** Remove exposed person to fresh air and support breathing as needed.

**Eye Contact:** *Do not* allow victim to rub or keep eyes tightly shut. Gently lift eyelids and flush immediately and continuously with flooding amounts of water until transported to an emergency medical facility. Consult a physician immediately.

**Skin Contact:** *Quickly* remove contaminated clothing. Rinse with flooding amounts of water for at least 15 min. Wash exposed area with soap and water. For reddened or blistered skin, consult a physician.

**Ingestion:** Never give anything by mouth to an unconscious or convulsing person. Contact a poison control center. Unless the poison control center advises otherwise, have the *conscious and alert* person drink 1 to 2 glasses of water to dilute. Vomiting may be contraindicated because of the rapid onset of central nervous system depression. Gastric lavage is preferred.

***After first aid, get appropriate in-plant, paramedic, or community medical support.***

**Note to Physicians:** Diagnostic test: acetone in urine. Isopropyl alcohol is oxidized in the body to acetone where it is excreted by the lungs or kidneys. Some acetone may be further metabolized to acetate, formate, and finally carbon dioxide. Probable oral lethal dose is 240 mL.

## Section 5 - Fire-Fighting Measures

See DOT ERG

**Flash Point:** 53 °F (12 °C), Closed Cup

**Burning Rate:** 2.3 mm/min.

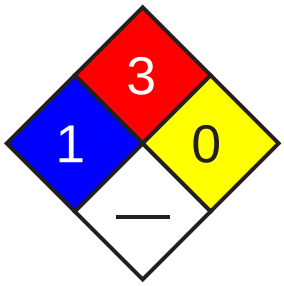
**Autoignition Temperature:** 750°F (399°C)

**LEL:** 2 % v/v

**UEL:** 12.7 % v/v at 200 °F

**Flammability Classification:** Class 1B Flammable Liquid

**Extinguishing Media:** Carbon dioxide, dry chemical, water *spray* (solid streams can spread fire), alcohol- resistant foam, or fog.



Fire Diamond

**General Fire Hazards/Hazardous Combustion Products:** Carbon oxides and acrid smoke. Container may explode in heat of fire. Vapors may travel to an ignition source and flash back. Isopropyl alcohol poses an explosion hazard indoors, outdoors, and in sewers.

**Fire-Fighting Instructions:** If possible without risk, move container from fire area. Apply cooling water to container side until well after fire is out. Stay away from ends of tanks. For massive fire in cargo area, use monitor nozzles or unmanned hose holders; if impossible, withdraw and let fire burn. Withdraw immediately if you hear a rising sound from venting safety device or notice any tank discoloration due to fire. *Do not* release runoff from fire control methods to sewers or waterways. Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full facepiece operated in pressure-demand or positive-pressure mode. Structural firefighters' protective clothing provides only limited protection.

## Section 6 - Accidental Release Measures

See DOT ERG

**Spill/Leak Procedures:** Notify safety personnel, isolate and ventilate area, deny entry, and stay upwind. Shut off ignition sources. Cleanup personnel should protect against vapor inhalation and skin/eye contact. Water spray may reduce vapor, but may not prevent ignition in closed spaces.

**Small Spills:** Take up with earth, sand, vermiculite, or other absorbent, noncombustible material and place in suitable containers.

**Large Spills:** For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways.

**Regulatory Requirements:** Follow applicable OSHA regulations (29 CFR 1910.120).

## Section 7 - Handling and Storage

**Handling Precautions:** Use non-sparking tools to open containers.
Never eat, drink, or smoke in work areas. Practice good personal hygiene after using isopropyl alcohol, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

**Recommended Storage Methods:** Store in a cool, dry, well-ventilated area away from heat, ignition sources, and incompatibles (Sec 10). Install electrical equipment of Class 1, Group D.

**Regulatory Requirements:** Follow applicable OSHA regulations.

## Section 8 - Exposure Controls / Personal Protection

**Engineering Controls:** To prevent static sparks, electrically ground and bond all equipment used with and around IPA. Provide general or local exhaust ventilation systems to maintain airborne levels below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred since it prevents contaminant dispersion into the work area by controlling it at its source.

**Administrative Controls:** Consider preplacement and periodic medical exams of exposed workers with emphasis on the skin, kidneys, and respiratory system. Be extra cautious when using IPA concurrently with carbon tetrachloride because animal studies have shown it enhances carbon tetrachloride's toxicity.

**Personal Protective Clothing/Equipment:** Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Nitrile rubber (breakthrough time > 8 hr), Neoprene and Teflon (breakthrough time > 4 hr) are suitable materials for PPE. Do not use PVA, PVC or natural rubber (breakthrough time < 1 hr). Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face-protection regulations (29 CFR 1910.133). Because contact lens use in industry is controversial, establish your own policy.

**Respiratory Protection:** Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. For < 1000 ppm, use any powered, air purifying respirator with organic vapor cartridges or any chemical cartridge respirator with a full facepiece and organic vapor cartridge(s). For < 10,000 ppm, use any supplied-air respirator (SAR) operated in continuous-flow mode. For < 12,000 ppm, use any air- purifying, full facepiece respirator (gas mask) with a chin-style, front-or back-mounted organic vapor canister or any SCBA or SAR with a full facepiece. For emergency or entrance into unknown concentrations, use any SCBA or SAR (with auxiliary SCBA) with a full facepiece and operated in pressure-demand or other positive-pressure mode. For emergency or nonroutine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA. *Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.* If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

**Other:** Separate contaminated work clothes from street clothes. Launder before reuse. Remove isopropyl alcohol from your shoes and clean personal protective equipment. Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

## Section 9 - Physical and Chemical Properties

**Appearance/General Info:** Colorless with a slight odor and bitter taste.

**Physical State:** Liquid
**Odor Threshold:** 7.84 to 490 mg/m$^3$
**Vapor Pressure (kPa):** 44 mm Hg at 25 °F (77 °C)
**Formula Weight:** 60.09
**Density:** 0.78505 at 68°F (20 °C)
**Refractive Index:** 1.375 at 68 °F (20 °C)
**Boiling Point:** 180.5 °F (82.5 °C)
**Freezing/Melting Point:** -129.1 °F (-89.5 °C)
**Viscosity:** 2.1 cP at 77 °F (25 °C)
**Surface Tension:** 20.8 dyne/cm at 77 °F (25 °C)
**Ionization Potential (eV):** 10.10 eV
**Critical Temperature:** 455 °F (235 °C)
**Critical Pressure:** 47 atm
**Water Solubility:** > 10 %
**Other Solubilities:** Soluble in alcohol, ether, chloroform, and benzene. Insoluble in salt solutions.

## Section 10 - Stability and Reactivity

**Stability/Polymerization/Conditions to Avoid:** Isopropyl alcohol is stable at room temperature in closed containers under normal storage and handling conditions. Hazardous polymerization does not occur. Exposure to heat, ignition sources, and incompatibles.

**Storage Incompatibilities:** Include acetaldehyde, chlorine, ethylene oxide, acids and isocyanates, hydrogen + palladium, nitroform, oleum, phosgene, potassium *t*-butoxide, oxygen (forms unstable peroxides), trinitromethane, barium perchlorate, tetrafluoroborate, chromium trioxide, sodium dichromate + sulfuric acid, aluminum, aluminum triisopropoxide, and oxidizers. Will attack some forms of plastic, rubber, and coatings.

**Hazardous Decomposition Products:** Thermal oxidative decomposition of isopropyl alcohol can produce carbon oxides and acrid smoke.

## Section 11 - Toxicological Information

**Acute Oral Effects:**

Rat, oral, $LD_{50}$: 5045 mg/kg caused a change in righting reflex, and somnolence (general depressed activity).

Human, oral, $TD_{Lo}$: 223 mg/kg caused hallucinations, distorted perceptions, lowered blood pressure, and a change in pulse rate.

Human, oral, $LD_{Lo}$: 3570 mg/kg caused coma, respiratory depression, nausea, and vomiting.

**Irritation Effects:**

Rabbit, eye: 100 mg caused severe irritation.

Rabbit, skin: 500 mg caused mild irritation.

**Other Effects:**

Rat, inhalation: 3500 ppm/7 hr given from 1 to 19 days of pregnancy caused fetotoxicity.

See *RTECS* NT8050000, for additional data.

## Section 12 - Ecological Information

**Environmental Fate:** On soil, IPA will volatilize or leach into groundwater. Biodegradation is possible but rates are not found in available literature. It will volatilize (est. half-life = 5.4 days) or biodegrade in water. It is not expected to bioconcentrate in fish. In the air, it reacts with photochemically produced hydroxyl radicals with a half-life of one to several days. Because it is soluble, removal by rain, snow or other precipitation is possible.

**Ecotoxicity:** Guppies (*Poecilia reticulata*) $LC_{50}$ = 7,060 ppm/7 days; fathead minnow (*Pimephales promelas*) $LC_{50}$ = 11,830 mg/L/1 hr. BOD = 133 %/5 days.

**Octanol/Water Partition Coefficient:** log $K_{ow}$ = 0.05

## Section 13 - Disposal Considerations

**Disposal:** Microbial degradation is possible by oxidizing isopropyl alcohol to acetone by members of the genus *Desulfovibrio*. Spray waste into incinerator (permit-approved facilities only) equipped with an afterburner and scrubber. Isopropyl alcohol can be settled out of water spills by salting with sodium chloride. Note: Salt may harm aquatic life, so weigh the benefits against possible harm before application. Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, state, and local regulations. Triple rinse containers.

## Section 14 - Transport Information

### DOT Hazardous Materials Table Data (49 CFR 172.101):


**Shipping Name and Description:** Isopropanol *or* Isopropyl alcohol
**ID:** UN1219
**Hazard Class:** 3 - Flammable and combustible liquid
**Packing Group:** II - Medium Danger
**Symbols:**
**Label Codes:** 3 - Flammable Liquid
**Special Provisions:** IB2, T4, TP1
**Packaging:** **Exceptions:** 150 **Non-bulk:** 202 **Bulk:** 242
**Quantity Limitations:** **Passenger aircraft/rail:** 5 L **Cargo aircraft only:** 60 L
**Vessel Stowage:** **Location:** B **Other:**

## Section 15 - Regulatory Information

**EPA Regulations:**

**RCRA 40 CFR:** Not listed
**CERCLA 40 CFR 302.4:** Not listed
**SARA 40 CFR 372.65:** Listed
**SARA EHS 40 CFR 355:** Not listed
**TSCA:** Listed

## Section 16 - Other Information

**Disclaimer:** Judgments as to the suitability of information herein for the purchaser's purposes are necessarily the purchaser's responsibility. Although reasonable care has been taken in the preparation of such information, Genium Group, Inc. extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the purchaser's intended purpose or for consequences of its use.

*Material Safety Data Sheet Collection*
Genium group inc.
1171 RiverFront Center, Amsterdam, NY 12010
(518) 842-4111

Issue Date: 2006-06



## Section 1 - Chemical Product and Company Identification 61

**Material Name:** Isobutene **CAS Number:** 115-11-7
**Chemical Formula:** $C_4H_8$
**Structural Chemical Formula:** $(CH_3)_2C=CH_2$
**EINECS Number:** 204-066-3
**ACX Number:** X1003822-9
**Synonyms:** Isobutene; ISOBUTYLENE; ASYM-DIMETHYLETHYLENE; GAMMA-BUTYLENE; 1,1-DIMETHYLETHYLENE; ISO-BUTENE; ISOBUTENE; ISOPROPYLIDENEMETHYLENE; LIQUEFIED PETROLEUM GAS; 2-METHYL-1-PROPENE; 2-METHYLPROPENE; 2-METHYLPROPYLENE; 1-PROPENE,2-METHYL-; PROPENE,2-METHYL-; UNSYM. DIMETHYLETHYLENE
**General Use:** Production of butene polymers used as adhesives, tackifiers, oil additives.
Butyl rubbers, copolymer resins with butadiene, acrylates and methacrylates.
Also to produce anti-oxidants for foods, food supplements, plastics and in production of isooctane and high-octane aviation gasoline.
Used in closed pressurized systems, fitted with safety relief valve.
Vented gas is flammable, denser than air and will spread. Vent path must not contain ignition sources, pilot lights, bare flames.

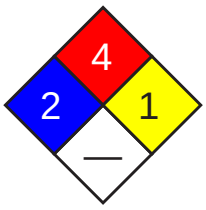
## Section 2 - Composition / Information on Ingredients

| Name | CAS | % |
|---|---|---|
| isobutene | 115-11-7 | >99 |

**OSHA PEL** **NIOSH REL**

**ACGIH TLV**

## Section 3 - Hazards Identification



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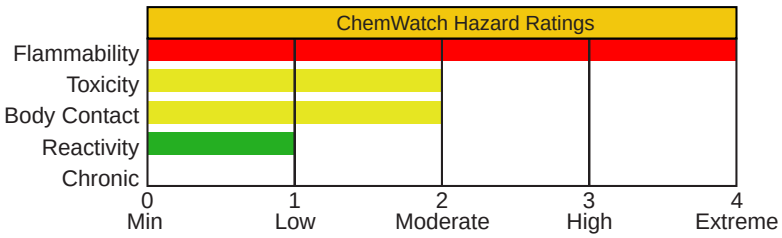
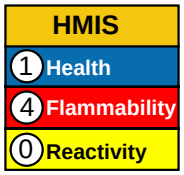



**ANSI Signal Word**

**Danger!**


Flammable

### ☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Colorless gas. Acute Effects: Simple asphyxiant which can displace available oxygen; initial symptoms: rapid respiration, air hunger, diminished mental alertness, impaired muscular coordination. Can form explosive mixtures in air. Flammable.

### Potential Health Effects

**Target Organs:** None reported
**Primary Entry Routes:** inhalation
**Acute Effects**
**Inhalation:** The gas is a simple asphyxiant (precludes access to oxygen) and is harmful if exposure is prolonged and inhalation may cause loss of consciousness.

Acute effects from inhalation of high concentrations of gas / vapor are pulmonary irritation, including coughing, with nausea; central nervous system depression - characterized by headache and dizziness, increased reaction time, fatigue and loss of coordination.
If exposure to highly concentrated atmosphere of gas is prolonged this may lead to narcosis, unconsciousness, even coma, and unless resuscitated, death.
Iso-butene is a simple asphyxiant and may have a narcotic action.
Material is highly volatile and may quickly form concentrated atmosphere in confined or unventilated area. Vapor is heavier than air and may displace and replace air in breathing zone, acting as a simple asphyxiant. This may happen with little warning of overexposure.
Hydrocarbons may sensitize the heart to adrenalin and other circulatory catecholamines; as a result cardiac arrhythmias and ventricular fibrillation may occur. Abrupt collapse may produce traumatic injury.
Central nervous system (CNS) depression may be evident early. Symptoms of moderate poisoning may include giddiness, headache, dizziness and nausea.
Serious poisonings may result in respiratory depression and may be fatal.
The paraffin gases C1-4 are practically non-toxic below their lower flammability limits (18000-50000 ppm). Above this level, incidental effects include CNS depression and irritation but these are reversible upon cessation of the exposure. The C3 and iso-C5 hydrocarbons show increasing narcotic properties; branching of the chain also enhances the effect.
The C4 hydrocarbons appear to be more highly neurotoxic than the C3 and C5 members. Several fatalities due to voluntary inhalation of butane have been reported, possibly due to central, respiratory and circulatory effects resulting from anesthesia, laryngeal edema, chemical pneumonia or the combined effects of cardiac toxicity and increased sympathomimetic effects.
Inhalation of petroleum gases may produce narcosis, due in part to olefinic impurities. Displacement of oxygen in the air may cyanosis.
If present in sufficient quantity these gases may reduce the oxygen level to below 18% producing asphyxiation.
Symptoms include rapid respiration, mental dullness, lack of coordination, poor judgement, nausea and vomiting.
The onset of cyanosis may lead to unconsciousness and death.

**Eye:** The liquid is highly discomforting and may cause severe cold burns and is capable of causing pain and severe conjunctivitis.
Corneal injury may develop, with possible permanent impairment of vision, if not promptly and adequately treated.
The gas is regarded as non-irritating to the eyes.

**Skin:** Vaporizing liquid causes rapid cooling and contact may cause cold burns, frostbite.The liquid is discomforting to the skin and may rapidly cause severe cold burns.
Bare unprotected skin should not be exposed to this material.
There is no evidence of skin absorption but contact may cause frostbite,

**Ingestion:** Overexposure is unlikely in this form.
Considered an unlikely route of entry in commercial/industrial environments.
The liquid is highly discomforting if swallowed and may cause severe cold burns.

**Carcinogenicity:** NTP - Not listed; IARC - Not listed; OSHA - Not listed; NIOSH - Not listed; ACGIH - Not listed; EPA - Not listed; MAK - Not listed.

**Chronic Effects:** Chronic overexposure may produce dermatitis.

## Section 4 - First Aid Measures

**Inhalation:** Avoid becoming a casualty and remove to fresh air.
Lay patient down. If breathing is shallow or has stopped, ensure clear airway and apply resuscitation.
If available, medical oxygen should be administered by trained personnel.
Transport to hospital or doctor, without delay.


**Eye Contact:** Immediately hold the eyes open and flush continuously for at least 15 minutes with fresh running water. Ensure irrigation under eyelids by occasionally lifting the upper and lower lids.
Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

**Skin Contact:** In case of cold burns (frost-bite): Bathe the affected area immediately in cold water for 10 to 15 minutes, immersing if possible and without rubbing.
Do not apply hot water or radiant heat. Apply a clean, dry dressing.
Transport to hospital or doctor.

**Ingestion:** Contact a Poison Control Center. DO NOT induce vomiting. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water (or milk) to rinse out mouth. Then provide liquid slowly and as much as casualty can comfortably drink. Transport to hospital or doctor without delay.

***After first aid, get appropriate in-plant, paramedic, or community medical support.***

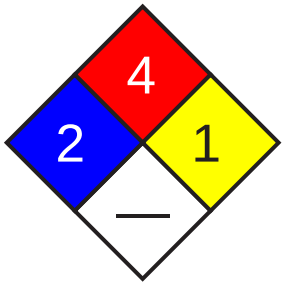
**Note to Physicians:** For acute or short-term repeated exposures to petroleum distillates or related hydrocarbons:
1.Primary threat to life from pure petroleum distillate ingestion and/or inhalation is respiratory failure.

2.Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases ($pO_2$ <50 mm Hg or $pCO_2$ >50 mm Hg) should be intubated.
3.Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.
4.A chest x-ray should be taken immediately after stabilization of breathing and circulation to document aspiration and detect the presence of pneumothorax.
5.Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitization to catecholamines.
Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.
6.Lavage is indicated in patients who require decontamination; ensure use of cuffed endotracheal tube in adult patients.

## Section 5 - Fire-Fighting Measures

**Flash Point:** -76.111 °C
**Autoignition Temperature:** 465 °C
**LEL:** 1.8% v/v
**UEL:** 9.6% v/v
**Extinguishing Media:** Water spray or fog; dry chemical powder.
Carbon dioxide.
Foam.

See DOT ERG



Fire Diamond

**General Fire Hazards/Hazardous Combustion Products:** Flammable gas. Liquid and vapor are highly flammable.
Dangerous hazard when exposed to heat, flame and oxidizers.
Gas may form explosive mixtures with air over a wide area.
Decomposes on heating and produces toxic fumes of carbon monoxide (CO) and carbon dioxide ($CO_2$).
**Fire Incompatibility:** Avoid contamination with oxidizing agents i.e. nitrates, oxidizing acids, chlorine bleaches, pool chlorine etc. as ignition may result.
**Fire-Fighting Instructions:** Contact fire department and tell them location and nature of hazard.
May be violently or explosively reactive. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or waterways. Consider evacuation.
Do not extinguish burning gas. If safe to do so, stop flow of gas.
If flow of gas cannot be stopped, leave gas to burn.
Cool fire-exposed containers with water spray from a protected location.
Do not approach cylinders suspected to be hot.
If safe to do so, remove containers from path of fire.
Fight fire from a safe distance, with adequate cover.

## Section 6 - Accidental Release Measures

**Small Spills:** Avoid breathing vapor and any contact with liquid or gas. Protective equipment including respirator should be used. Do NOT enter confined spaces where gas may have accumulated. Shut of all sources of possible ignition and increase ventilation. Clear area of personnel. Stop leak only if safe to so do. Remove leaking cylinders to safe place. Release pressure under safe controlled conditions by opening valve. Keep area clear of personnel until gas has dispersed.

See DOT ERG

**Large Spills:** DO NOT touch the spill material. Shut off all possible sources of ignition and increase ventilation. Restrict access to area. Clear area of personnel and move upwind.
May be violently or explosively reactive. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or waterways. Consider evacuation.
Avoid spraying water onto liquid pools.
Use extreme caution to avoid a violent reaction.
Stop leak if safe to do so.
DO NOT enter confined places where gas may have collected. Remove leaking cylinders to a safe place. Fit vent pipes. Release pressure under safe, controlled conditions by opening valve. Burn issuing gas at vent pipes.
Do not exert excessive pressure on valve; do not attempt to operate damaged valve.
Keep area clear of personnel until gas has dispersed
**Regulatory Requirements:** Follow applicable OSHA regulations (29 CFR 1910.120).

## Section 7 - Handling and Storage

**Handling Precautions:** Use good occupational work practices. Use in a well-ventilated area.

Obtain a work permit before attempting any repairs.
Do not attempt repair work on lines, vessels under pressure.
Atmospheres must be tested and O.K. before work resumes after leakage.
Wear protective clothing and gloves when handling containers.
No smoking, bare lights, heat or ignition sources.
Use spark-free tools when handling. Ground all lines and equipment.
Prevent concentration in hollows and sumps. DO NOT enter confined spaces until atmosphere has been checked.
Gas may travel a considerable distance to source of ignition.
Vapor may ignite on pumping or pouring due to static electricity.
Avoid physical damage to containers.
DO NOT transfer gas from one cylinder to another.
Natural gases contain a contaminant, radon-222, a naturally occurring radioactive gas. During subsequent processing, radon tends to concentrate in liquified petroleum streams and in product streams having similar boiling points.
Industry experience indicates that the commercial product may contain small amounts of radon-222 and its radioactive decay products (radon daughters). The actual concentration of radon-222 and radioactive daughters in process equipment (IE lines, filters, pumps and reactor units) may reach significant levels and produce potentially damaging levels of gamma radiation. A potential external radiation hazard exists at or near any pipe, valve or vessel containing a radon enriched stream or containing internal deposits of radioactive material. Field studies, however, have not shown that conditions exist that expose the worker to cumulative exposures in excess of general population limits. Equipment containing gamma-emitting decay products should be presumed to be internally contaminated with alpha- emitting decay products which may be hazardous if inhaled or ingested.
During maintenance operations that require the opening of contaminated process equipment, the flow of gas should be stopped and a four hour delay enforced to allow gamma-radiation to drop to background levels. Protective equipment (including high efficiency particulate respirators (P3) suitable for radionucleotides or supplied air) should be worn by personnel entering a vessel or working on contaminated process equipment to prevent skin contamination or inhalation of any residue containing alpha-radiation.
Airborne contamination may be minimized by handling scale and/or contaminated materials in a wet state.

**Recommended Storage Methods:** Packaging as recommended by manufacturer.
Check that containers are clearly labeled.
Cylinder fitted with valve protector cap.
Ensure the use of equipment rated for cylinder pressure.
Ensure the use of compatible materials of construction.
Cylinder valve must be closed when not in use or when empty.
Cylinder must be properly secured either in use or in storage.
WARNING: Suckback into cylinder may result in rupture.
Use back-flow preventive device in piping.

**Regulatory Requirements:** Follow applicable OSHA regulations.

## Section 8 - Exposure Controls / Personal Protection

**Engineering Controls:** Use in a well-ventilated areaIf gas concentrations are high: or If risk of overexposure exists, wear NIOSH-approved respirator.
Correct fit is essential to obtain adequate protection.
Used in closed pressurized systems; fitted with temperature and pressure safety relief valves which are vented to allow safe dispersal.
Provide adequate ventilation in warehouse or closed storage areas.

**Personal Protective Clothing/Equipment:**

**Eyes:** Safety glasses with side shields; or as required, chemical goggles.
Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them.

**Hands/Feet:** Protective gloves eg. leather gloves or gloves with leather facing. Neoprene rubber gloves.
Safety footwear.

**Other:** Operators should be trained in correct use & maintenance of respirators Ensure that there is ready access to breathing apparatus.
Protective overalls, closely fitted at neck and wrist. Eye-wash unit.
IN CONFINED SPACES:
1. Non-sparking protective boots.
2. Static-free clothing.
3. Ensure availability of lifeline.
Staff should be trained in all aspects of rescue work.
Ensure there is ready access to an emergency shower.

## Section 9 - Physical and Chemical Properties

**Appearance/General Info:** Easily liquified flammable gas or colorless highly volatile liquid. Packed as liquid under pressure and remains liquid only under pressure. Sudden release of pressure or leakage may result in rapid vaporization with generation of large volume of highly flammable / explosive gas. Strong gasoline odor. Floats and boils on water giving a flammable / explosive, visible cloud. Soluble in alcohol, ether, benzene and sulphuric acid.

**Physical State:** Liquefied gas
**Odor Threshold:** 1.3 to 3.0 mg/m$^3$
**Vapor Pressure (kPa):** 182 kPa at 10 °C
**Vapor Density (Air=1):** 2.01
**Formula Weight:** 56.11
**Specific Gravity ($H_2O$=1, at 4 °C):** 0.59
**Evaporation Rate:** Very rapid
**pH:** Not applicable
**pH (1% Solution):** Not applicable.
**Boiling Point:** -6.9 °C (20 °F)
**Freezing/Melting Point:** -140.35 °C (-220.63 °F)
**Volatile Component (% Vol):** 100
**Water Solubility:** Practically insoluble in water

## Section 10 - Stability and Reactivity

**Stability/Polymerization/Conditions to Avoid:** Product is considered stable. Hazardous polymerization will not occur.
**Storage Incompatibilities:** Avoid contact with oxidizing agents.

The interaction of alkenes and alkynes with nitrogen oxides and oxygen may produce explosive addition products; these may form at very low temperatures and explode on heating to higher temperatures (the addition products from 1,3-butadiene and cyclopentadiene form rapidly at -150 °C and ignite or explode on warming to -35 to -15 C). These derivatives ("pseudo- nitrosites") were formerly used to characterize terpene hydrocarbons.

Exposure to air must be kept to a minimum so as to limit the build-up of peroxides which will concentrate in bottoms if the product is distilled.

The product must not be distilled to dryness if the peroxide concentration is substantially above 10 ppm (as active oxygen) since explosive decomposition may occur. Distillate must be immediately inhibited to prevent peroxide formation. The effectiveness of the antioxidant is limited once the peroxide levels exceed 10 ppm as active oxygen. Addition of more inhibitor at this point is generally ineffective.

Prior to distillation it is recommended that the product should be washed with aqueous ferrous ammonium sulfate to destroy peroxides; the washed product should be immediately re-inhibited.

A range of exothermic decomposition energies for double bonds is given as 40-90 kJ/mol. The relationship between energy of decomposition and processing hazards has been the subject of discussion; it is suggested that values of energy released per unit of mass, rather than on a molar basis (J/g) be used in the assessment. For example, in "open vessel processes" (with man-hole size openings, in an industrial setting), substances with exothermic decomposition energies below 500 J/g are unlikely to present a danger, whilst those in "closed vessel processes" (opening is a safety valve or bursting disk) present some danger where the decomposition energy exceeds 150 J/g.

Avoid reactions with oxidizing agents, organic acids, inorganic acids halogenated compounds, polymerizable esters, oxygen, cyanohydrins and molten sulphur.

## Section 11 - Toxicological Information

**Toxicity**
Inhalation (rat) $LC_{50}$: 620000 mg/m$^3$/4h

**Irritation**
Nil reported

See *RTECS* UD 0890000, for additional data.

## Section 12 - Ecological Information

**Environmental Fate:** No data found.
**Ecotoxicity:** No data found.
**BCF:** no food chain concentration potential
**Biochemical Oxygen Demand (BOD):** none

## Section 13 - Disposal Considerations

**Disposal:** Consult manufacturer for recycling options.
Discharge to burning flare. Return empty cylinders to supplier.

## Section 14 - Transport Information

### DOT Hazardous Materials Table Data (49 CFR 172.101):

**Note:** This material has multiple possible HMT entries. Choose the appropriate one based on state and condition of specific material when shipped.

**Shipping Name and Description:** Isobutylene *see also* Petroleum gases, liquefied
**ID:** UN1055
**Hazard Class:** 2.1 - Flammable gas
**Packing Group:**
**Symbols:**
**Label Codes:** 2.1 - Flammable Gas
**Special Provisions:** 19, T50
**Packaging:** **Exceptions:** 306 **Non-bulk:** 304 **Bulk:** 314, 315
**Quantity Limitations:** **Passenger aircraft/rail:** Forbidden **Cargo aircraft only:** 150 kg
**Vessel Stowage:** **Location:** E **Other:** 40


**Shipping Name and Description:** Petroleum gases, liquefied *or* Liquefied petroleum gas
**ID:** UN1075
**Hazard Class:** 2.1 - Flammable gas
**Packing Group:**
**Symbols:**
**Label Codes:** 2.1 - Flammable Gas
**Special Provisions:** T50
**Packaging:** **Exceptions:** 306 **Non-bulk:** 304 **Bulk:** 314, 315
**Quantity Limitations:** **Passenger aircraft/rail:** Forbidden **Cargo aircraft only:** 150 kg
**Vessel Stowage:** **Location:** E **Other:**


## Section 15 - Regulatory Information

**EPA Regulations:**

**RCRA 40 CFR:** Not listed
**CERCLA 40 CFR 302.4:** Not listed
**SARA 40 CFR 372.65:** Not listed
**SARA EHS 40 CFR 355:** Not listed
**TSCA:** Listed

## Section 16 - Other Information

**Disclaimer:** Judgments as to the suitability of information herein for the purchaser's purposes are necessarily the purchaser's responsibility. Although reasonable care has been taken in the preparation of such information, Genium Group, Inc. extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the purchaser's intended purpose or for consequences of its use.

# Material Safety Data Sheet

## Section 1 – Chemical Product and Company Identification

Catalog Numbers: CS7000-A, CS7000-B, CS7000-C, CS7000-D, CS7000-P, CS7000-Q, CS7000-G, CS7000-T
Product Identity: Conductivity Std., 7000 umho/cm

**Chemical Family:** Not Applicable
**Synonyms:** Not Applicable
**Recommended Use:** Laboratory chemicals

Manufacturer's Name: AquaPhoenix Scientific, Inc., 9 Barnhart Dr., Hanover, PA 17331, (866) 632-1291
Emergency Contact Number (24hr): Chemtel (800) 255-3924

**Issue Date:** 01/08/07
**Revision Date:** 06/05/08, 05/12/10, 02/19/12

## Section 2 – Hazard Identification

**Emergency Overview:** Non-flammable, non-corrosive, non-toxic. Does not present significant health hazards. Wash areas of contact with water.
**Appearance:** Clear, colorless liquid **Odor:** Odorless
**Target Organs**: Eyes, skin
**Potential Health Effects/ Routes of Exposure:**
**Eyes:** May cause slight irritation.
**Skin:** May cause slight irritation.
**Ingestion:** Large doses may cause upset stomach.
**Inhalation:** Not likely to be a hazard.
**Chronic Effect / Carcinogenicity:** None (IARC, NTP, OSHA)
**Aggravated Medical Conditions** No information available
These chemicals are not considered hazardous by OSHA.
See section 11 for toxicological information. See section 12 for potential environmental effects.

## Section 3 – Composition, Information on Ingredients

Potassium Chloride, CAS# 7447-40-7, < 0.5% w/v
Water, purified, CAS# 7732-18-5, >99% w/v

## Section 4 – First Aid

**Eyes:** Immediately flush eyes with water for at least 15 minutes. Immediately get medical assistance.
**Skin:** Flush with water for 15 minutes. Get medical assistance if irritation develops.
**Ingestion:** DO NOT induce vomiting. Dilute with water or milk. Get medical assistance.
**Inhalation:** Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen.
**Notes to Physician** Treat symptomatically.

## Section 5 – Fire Fighting Measures

**Flash Point:** Not Applicable **Autoignition Temperature** No information available.
**Explosion Limits Upper** No data available **Lower** No data available
**Extinguishing Media:** Use means suitable to extinguishing surrounding fire.
**Unsuitable Extinguishing Media:** No information available
**Fire & Explosion Hazards:** Not considered to be a fire or explosion hazard.
**Fire Fighting Instructions / Equipment:** Use normal procedures. Use protective clothing. Use NIOSH-approved breathing equipment.

**Hazardous Combustion Products:** No information Available
**Sensitivity to mechanical impact** No information available.
**Sensitivity to static discharge** No information available.
**Specific Hazards Arising from the Chemical:** No information available
**NFPA Rating:** (estimated) Health: 1; Flammable: 0; Reactivity: 0

## Section 6 – Accidental Release Measures

**Personal Precautions** Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.
**Environmental Precautions** Not relevant considering the small amounts used.
**Methods for Containment and Clean Up** Absorb with suitable material. Always obey local regulations. Always obey local regulations.

## Section 7 – Handling and Storage

**Handling:** Wash hands after handling. Avoid contact with skin and eyes.
**Storage:** Protect from freezing and physical damage.

## Section 8 – Exposure Controls, Personal Protection

Potassium Chloride, CAS# 7447-40-7, ACGIH TLV: NA, OSHA PEL: NA
Water, purified, CAS# 7732-18-5, ACGIH TLV: NA, OSHA PEL: NA

**Engineering Measures/ General Hygiene:** Normal ventilation is adequate. Ensure eyewash and safety showers are available.
**Personal Protection Equipment: Skin Protection:** Chemical resistant gloves.
**Eye/Face Protection:** Safety Glasses or goggles. **Respiratory Protection:** Normal ventilation is adequate

## Section 9 – Physical and Chemical Properties

**Appearance/Physical State:** Clear, colorless liquid
**Odor:** Odorless
**Boiling Point:** Approx 100.1C
**Melting Point:** Approx (-6)-0 C
**Vapor Density:** No Information Available
**Evaporation Rate:** No Information Available
**pH:** Not Available
**Flammability:** No Information Available
**Solubility:** Infinite
**Relative Density:** No Information Available
**% Volatility:** No Information Available
**Specific Gravity:** 1-1.01
**Vapor Pressure:** No Information Available
**Flash Point:** Not Applicable
**Coefficient of water/oil distribution:** Not Available
**Odor Threshold:** Not Available
**Decomposition Temperature:** No Information Available
**Partition Coefficient n-octanol/water:** No data available
**Molecular Weight:** Not available

## Section 10 – Stability and Reactivity

**Chemical Stability:** Stable under normal conditions of use and storage.
**Incompatible Materials** Strong Oxidizing agents, Lithium, Bromine, Trifluoride.
**Conditions to Avoid:** No Information Available.
**Hazardous Decomposition Products:** Oxides of Sodium and fumes of Chloride.
**Hazardous Polymerization:** Does not occur
**Hazardous Reactions:** None under normal processing.

## Section 11 – Toxicological Information

**Routes of Exposure/Symptoms/Corrosiveness** – See Section 2
LD50 orl-rat: 3020 mg/kg LC50 inhalation-rat: Not Available
**Irritation:** No Information Available
**Toxicologically Synergistic:** No Information Available
**Chronic Exposure**

**Carcinogenicity** No Information Available
**Sensitization** No information available.
**Mutagenic Effects** No information available.
**Reproductive Effects** No information available.
**Developmental Effects (Immediate/Delayed)** No information available.
**Teratogenicity** No information available.
**Other Adverse Effects** No Information Available.
**Endocrine Disruptor Information** No information available

**Section 12 – Ecological Information**

**Ecotoxicity:** Not Available.
**Persistence and Degradability:** No Information Available **Mobility:** No Information Available
**Bioaccumulation/ Accumulation:** No Information Available

**Section 13 – Disposal Considerations**

**Waste Disposal/Waste Disposal of Packaging:** Dilute with water.
All chemical waster generators must determine whether a discarded chemical is classified as hazardous waste. Comply with all local, state, and federal regulations.

**Section 14 – Transport Information**

**DOT - Not Regulated**

**Section 15 – Regulatory Information (not meant to be all inclusive)**

**OSHA Status:** These chemicals are not considered hazardous by OSHA.
**Canada DSL:** These chemicals are listed on the Canada DSL list.
**TSCA:** The components of this solution are listed on the TSCA Inventory
**SARA Title III Section 313:** Not Applicable
**RCRA Status:** Not Applicable
**CERCLA Reportable Quantity:** Not Applicable
**WHMIS:** Not Applicable.
This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR

**Section 16 – Additional Information**

**Disclaimer: The information on this MSDS applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to determine the suitability and completeness of this information for his own particular use. No warranty is implied regarding the accuracy of the data or the results to be obtained from the products use.**

# Material Safety Data Sheet

## Section 1 – Chemical Product and Company Identification

Catalog Numbers: BU5004-A, BU5004-B, BU5004-C, BU5004-D, BU5004-P, BU5004-Q, BU5004-G, BU5004-T

Product Identity: Buffer Solution, pH 4.00

**Chemical Family:** Not Applicable
**Synonyms:** Not Applicable
**Recommended Use:** Laboratory chemicals

Manufacturer's Name: AquaPhoenix Scientific, Inc., 9 Barnhart Dr., Hanover, PA 17331, (866) 632-1291
Emergency Contact Number (24hr): Chemtel (800) 255-3924

**Issue Date:** 12/28/06
**Revision Date:** 6/5/08, 02/25/10, 09/14/10, 02/19/12

## Section 2 – Hazard Identification

**Emergency Overview:** Non-flammable, non-corrosive, non-toxic. Does not present significant health hazards. Wash areas of contact with water.
**Appearance:** Clear, reddish liquid **Odor:** Odorless
**Target Organs**: Eyes, skin
**Potential Health Effects/ Routes of Exposure:**
**Eyes:** May cause slight irritation.
**Skin:** May cause slight irritation.
**Ingestion:** May cause diarrhea, nausea, vomiting, and cramps.
**Inhalation:** Not likely to be a hazard.
**Chronic Effect / Carcinogenicity:** None (IARC, NTP, OSHA)
**Aggravated Medical Conditions** No information available
These chemicals are not considered hazardous by OSHA.
See section 11 for toxicological information. See section 12 for potential environmental effects.

## Section 3 – Composition, Information on Ingredients

Potassium Acid Phthalate, CAS# 877-24-7, <1% w/v
Water, purified, CAS# 7732-18-5, >98% w/v

## Section 4 – First Aid

**Eyes:** Immediately flush eyes with water for at least 15 minutes. Immediately get medical assistance.
**Skin:** Flush with water for 15 minutes. Get medical assistance if irritation develops.
**Ingestion:** DO NOT induce vomiting. Dilute with water or milk. Get medical assistance.
**Inhalation:** Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen.
**Notes to Physician** Treat symptomatically.

## Section 5 – Fire Fighting Measures

**Flash Point:** Not Applicable **Autoignition Temperature** No information available.
**Explosion Limits Upper** No data available **Lower** No data available
**Extinguishing Media:** Use means suitable to extinguishing surrounding fire.
**Unsuitable Extinguishing Media:** No information available
**Fire & Explosion Hazards:** Not considered to be a fire or explosion hazard.

**Fire Fighting Instructions / Equipment:** Use normal procedures. Use protective clothing. Use NIOSH-approved breathing equipment.
**Hazardous Combustion Products:** No information Available
**Sensitivity to mechanical impact** No information available.
**Sensitivity to static discharge** No information available.
**Specific Hazards Arising from the Chemical:** No information available
**NFPA Rating:** (estimated) Health: 1; Flammable: 0; Reactivity: 0

## Section 6 – Accidental Release Measures

**Personal Precautions** Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.
**Environmental Precautions** No information available.
**Methods for Containment and Clean Up** Absorb with suitable material. Always obey local regulations.

## Section 7 – Handling and Storage

**Handling:** Wash hands after handling. Avoid contact with skin and eyes.
**Storage:** Protect from freezing and physical damage.

## Section 8 – Exposure Controls, Personal Protection

Potassium Acid Phthalate, CAS# 877-24-7, ACGIH TLV: NA, OSHA PEL: NA
Water, purified, CAS# 7732-18-5, ACGIH TLV: NA, OSHA PEL: NA

**Engineering Measures/ General Hygiene:** Normal ventilation is adequate. Ensure eyewash and safety showers are available.
**Personal Protection Equipment: Skin Protection:** Chemical resistant gloves.
**Eye/Face Protection:** Safety Glasses or goggles. **Respiratory Protection:** Normal ventilation is adequate

## Section 9 – Physical and Chemical Properties

**Appearance/Physical State:** Clear, reddish liquid

| | |
|---|---|
| **Odor:** Odorless | **% Volatility:** No Information Available |
| **Boiling Point:** Approx 100C | **Specific Gravity:** Approx 1 |
| **Melting Point:** Approx 0 C | **Vapor Pressure:** No Information Available |
| **Vapor Density:** No Information Available | **Flash Point:** Not Applicable |
| **Evaporation Rate:** No Information Available | **Coefficient of water/oil distribution:** Not Available |
| **pH:** 4.0 | **Odor Threshold:** Not Available |
| **Flammability:** No Information Available | **Decomposition Temperature:** No Information Available |
| **Solubility:** Infinite | **Partition Coefficient n-octanol/water:** No data available |
| **Relative Density:** No Information Available | **Molecular Weight:** Not available |

## Section 10 – Stability and Reactivity

**Chemical Stability:** Stable under normal conditions of use and storage.
**Incompatible Materials** Nitric Acid.
**Conditions to Avoid:** No Information Available.
**Hazardous Decomposition Products:** Oxides of potassium and carbon.
**Hazardous Polymerization:** Does not occur
**Hazardous Reactions:** None under normal processing.

## Section 11 – Toxicological Information

**Routes of Exposure/Symptoms/Corrosiveness** – See Section 2
LD50 orl-rat: 3200 mg/kg (Potassium Acid Phthalate) LC50 inhalation-rat: NA
**Irritation:** No Information Available
**Toxicologically Synergistic:** No Information Available

**Chronic Exposure**
**Carcinogenicity** No Information Available
**Sensitization** No information available.
**Mutagenic Effects** No information available.
**Reproductive Effects** No information available.
**Developmental Effects (Immediate/Delayed)** No information available.
**Teratogenicity** No information available.
**Other Adverse Effects** No Information Available.
**Endocrine Disruptor Information** No information available

## Section 12 – Ecological Information

**Ecotoxicity:** Not Available.
**Persistence and Degradability:** No Information Available **Mobility:** No Information Available
**Bioaccumulation/ Accumulation:** No Information Available

## Section 13 – Disposal Considerations

**Waste Disposal/Waste Disposal of Packaging:** Dilute with water.
All chemical waster generators must determine whether a discarded chemical is classified as hazardous waste. Comply with all local, state, and federal regulations.

## Section 14 – Transport Information

**DOT - Not Regulated**

## Section 15 – Regulatory Information (not meant to be all inclusive)

**OSHA Status:** These chemicals are not considered hazardous by OSHA.
**Canada DSL:** These chemicals are listed on Canada's DSL list.
**TSCA:** The components of this solution are listed on the TSCA Inventory
**SARA Title III Section 313:** Not Applicable
**RCRA Status:** Not Applicable
**CERCLA Reportable Quantity:** Not Applicable
**WHMIS:** Not Applicable.
This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR

## Section 16 – Additional Information

**Disclaimer: The information on this MSDS applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to determine the suitability and completeness of this information for his own particular use. No warranty is implied regarding the accuracy of the data or the results to be obtained from the products use.**

# Material Safety Data Sheet

## Section 1 – Chemical Product and Company Identification

Catalog Numbers: BU5010-A, BU5010-B, BU5010-C, BU5010-D, BU5010-P, BU5010-Q, BU5010-G, BU5010-T

Product Identity: Buffer Solution, pH 10.00

**Chemical Family:** Not Applicable
**Synonyms:** Not Applicable
**Recommended Use:** Laboratory chemicals

Manufacturer's Name: AquaPhoenix Scientific, Inc., 9 Barnhart Dr., Hanover, PA 17331, (866) 632-1291
Emergency Contact Number (24hr): Chemtel (800) 255-3924

**Issue Date:** 12/28/06
**Revision Date:** 6/5/08, 06/03/10, 02/19/12

## Section 2 – Hazard Identification

**Emergency Overview:** Non-flammable, non-corrosive, non-toxic. Does not present significant health hazards. Wash areas of contact with water.
**Appearance:** Clear, blue liquid **Odor:** Odorless
**Target Organs**: Eyes, skin
**Potential Health Effects/ Routes of Exposure:**
**Eyes:** May cause slight irritation.
**Skin:** May cause slight irritation.
**Ingestion:** May cause diarrhea, nausea, vomiting, and cramps.
**Inhalation:** Not likely to be a hazard.
**Chronic Effect / Carcinogenicity:** None (IARC, NTP, OSHA)
**Aggravated Medical Conditions** No information available
These chemicals are not considered hazardous by OSHA.
See section 11 for toxicological information. See section 12 for potential environmental effects.

## Section 3 – Composition, Information on Ingredients

Sodium Bicarbonate, CAS# 144-55-8, <0.5% w/v
Sodium Carbonate, CAS# 497-19-8, <0.5% w/v
Water, purified, CAS# 7732-18-5, >99% w/v

## Section 4 – First Aid

**Eyes:** Immediately flush eyes with water for at least 15 minutes. Immediately get medical assistance.
**Skin:** Flush with water for 15 minutes. Get medical assistance if irritation develops.
**Ingestion:** DO NOT induce vomiting. Dilute with water or milk. Get medical assistance.
**Inhalation:** Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen.
**Notes to Physician** Treat symptomatically.

## Section 5 – Fire Fighting Measures

**Flash Point:** Not Applicable **Autoignition Temperature** No information available.
**Explosion Limits Upper** No data available **Lower** No data available
**Extinguishing Media:** Use means suitable to extinguishing surrounding fire.
**Unsuitable Extinguishing Media:** No information available
**Fire & Explosion Hazards:** Not considered to be a fire or explosion hazard.

**Fire Fighting Instructions / Equipment:** Use normal procedures. Use protective clothing. Use NIOSH-approved breathing equipment.
**Hazardous Combustion Products:** No information Available
**Sensitivity to mechanical impact** No information available.
**Sensitivity to static discharge** No information available.
**Specific Hazards Arising from the Chemical:** No information available
**NFPA Rating:** (estimated) Health: 1; Flammable: 0; Reactivity: 0

## Section 6 – Accidental Release Measures

**Personal Precautions** Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.
**Environmental Precautions** No information available.
**Methods for Containment and Clean Up** Absorb with suitable material. Always obey local regulations.

## Section 7 – Handling and Storage

**Handling:** Wash hands after handling. Avoid contact with skin and eyes.
**Storage:** Protect from freezing and physical damage.

## Section 8 – Exposure Controls, Personal Protection

Sodium Bicarbonate, CAS# 144-55-8, ACGIH TLV: NA, OSHA PEL: NA
Sodium Carbonate, CAS# 497-19-8, ACGIH TLV: NA, OSHA PEL: NA
Water, purified, CAS# 7732-18-5, ACGIH TLV: NA, OSHA PEL: NA

**Engineering Measures/ General Hygiene:** Normal ventilation is adequate. Ensure eyewash and safety showers are available.
**Personal Protection Equipment: Skin Protection:** Chemical resistant gloves.
**Eye/Face Protection:** Safety Glasses or goggles. **Respiratory Protection:** Normal ventilation is adequate

## Section 9 – Physical and Chemical Properties

**Appearance/Physical State:** Clear, blue liquid

**Odor:** Odorless
**Boiling Point:** Approx 100C
**Melting Point:** Approx 0 C
**Vapor Density:** No Information Available
**Evaporation Rate:** No Information Available
**pH:** 10.0
**Flammability:** No Information Available
**Solubility:** Infinite
**Relative Density:** No Information Available

**% Volatility:** No Information Available
**Specific Gravity:** Approx 1
**Vapor Pressure:** No Information Available
**Flash Point:** Not Applicable
**Coefficient of water/oil distribution:** Not Available
**Odor Threshold:** Not Available
**Decomposition Temperature:** No Information Available
**Partition Coefficient n-octanol/water:** No data available
**Molecular Weight:** Not available

## Section 10 – Stability and Reactivity

**Chemical Stability:** Stable under normal conditions of use and storage.
**Incompatible Materials** None identified.
**Conditions to Avoid:** No Information Available.
**Hazardous Decomposition Products:** Oxides of sodium.
**Hazardous Polymerization:** Does not occur
**Hazardous Reactions:** None under normal processing.

## Section 11 – Toxicological Information

**Routes of Exposure/Symptoms/Corrosiveness** – See Section 2
LD50 orl-rat: 4090 mg/kg (Sodium Carbonate), 4220 mg/kg (Sodium Bicarbonate) LC50 inhalation-rat: NA
**Irritation:** No Information Available

**Toxicologically Synergistic:** No Information Available
**Chronic Exposure**
**Carcinogenicity** No Information Available
**Sensitization** No information available.
**Mutagenic Effects** No information available.
**Reproductive Effects** No information available.
**Developmental Effects (Immediate/Delayed)** No information available.
**Teratogenicity** No information available.
**Other Adverse Effects** No Information Available.
**Endocrine Disruptor Information** No information available

## Section 12 – Ecological Information

**Ecotoxicity:** Not Available.
**Persistence and Degradability:** No Information Available **Mobility:** No Information Available
**Bioaccumulation/ Accumulation:** No Information Available

## Section 13 – Disposal Considerations

**Waste Disposal/Waste Disposal of Packaging:** Dilute with water.
All chemical waster generators must determine whether a discarded chemical is classified as hazardous waste. Comply with all local, state, and federal regulations.

## Section 14 – Transport Information

**DOT - Not Regulated**

## Section 15 – Regulatory Information (not meant to be all inclusive)

**OSHA Status:** These chemicals are not considered hazardous by OSHA.
**Canada DSL:** These chemicals are listed on Canada's DSL list.
**TSCA:** The components of this solution are listed on the TSCA Inventory
**SARA Title III Section 313:** Not Applicable
**RCRA Status:** Not Applicable
**CERCLA Reportable Quantity:** None Reported
**WHMIS:** Not Applicable.
This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR

## Section 16 – Additional Information

**Disclaimer: The information on this MSDS applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to determine the suitability and completeness of this information for his own particular use. No warranty is implied regarding the accuracy of the data or the results to be obtained from the products use.**

# Material Safety Data Sheet

## Section 1 – Chemical Product and Company Identification

Catalog Numbers: BU5007-A, BU5007-B, BU5007-C, BU5007-D, BU5007-P, BU5007-Q, BU5007-G, BU5007-T

Product Identity: Buffer Solution, pH 7.00

**Chemical Family:** Not Applicable
**Synonyms:** Not Applicable
**Recommended Use:** Laboratory chemicals

Manufacturer's Name: AquaPhoenix Scientific, Inc., 9 Barnhart Dr., Hanover, PA 17331, (866) 632-1291
Emergency Contact Number (24hr): Chemtel (800) 255-3924

**Issue Date:** 12/28/06
**Revision Date:** 06/24/09, 08/26/10, 02/19/12, 08/02/12

## Section 2 – Hazard Identification

**Emergency Overview:** Non-flammable, non-corrosive, non-toxic. Does not present significant health hazards. Wash areas of contact with water.
**Appearance:** Clear, yellowish liquid **Odor:** Odorless
**Target Organs**: Eyes, skin
**Potential Health Effects/ Routes of Exposure:**
**Eyes:** May cause slight irritation.
**Skin:** May cause slight irritation.
**Ingestion:** May cause diarrhea, nausea, vomiting, and cramps.
**Inhalation:** Not likely to be a hazard.
**Chronic Effect / Carcinogenicity:** None (IARC, NTP, OSHA)
**Aggravated Medical Conditions** No information available
These chemicals are not considered hazardous by OSHA.
See section 11 for toxicological information. See section 12 for potential environmental effects.

## Section 3 – Composition, Information on Ingredients

Sodium Hydroxide, CAS# 1310-73-2, <1% v/v
Potassium Phosphate, Monobasic, CAS# 7778-77-0, <1% w/v
Sorbic Acid, CAS# 110-44-1, <1% w/v
Water, purified, CAS# 7732-18-5, >99% w/v

## Section 4 – First Aid

**Eyes:** Immediately flush eyes with water for at least 15 minutes. Get medical assistance immediately.
**Skin:** Flush with water for 15 minutes. Get medical assistance if irritation develops.
**Ingestion:** DO NOT induce vomiting. Dilute with water or milk. Get medical assistance.
**Inhalation:** Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen.
**Notes to Physician** Treat symptomatically.

## Section 5 – Fire Fighting Measures

**Flash Point:** Not Applicable **Autoignition Temperature:** No information available.
**Explosion Limits Upper** No data available **Lower** No data available
**Extinguishing Media:** Use means suitable to extinguishing surrounding fire.
**Unsuitable Extinguishing Media:** No information available

**Fire & Explosion Hazards:** Not considered to be a fire or explosion hazard.
**Fire Fighting Instructions / Equipment:** Use normal procedures. Use protective clothing. Use NIOSH-approved breathing equipment.
**Hazardous Combustion Products:** No information Available
**Sensitivity to mechanical impact** No information available.
**Sensitivity to static discharge** No information available.
**Specific Hazards Arising from the Chemical:** No information available
**NFPA Rating:** (estimated) Health: 1; Flammable: 0; Reactivity: 0

## Section 6 – Accidental Release Measures

**Personal Precautions** Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.
**Environmental Precautions** No information available.
**Methods for Containment and Clean Up** Absorb with suitable material. Always obey local regulations.

## Section 7 – Handling and Storage

**Handling:** Wash hands after handling. Avoid contact with skin and eyes.
**Storage:** Protect from freezing and physical damage.

## Section 8 – Exposure Controls, Personal Protection

Sodium Hydroxide, CAS# 1310-73-2, ACGIH TLV: 2 mg/m3, OSHA PEL: 2mg/m3
Potassium Phosphate, Monobasic, CAS# 7778-77-0, ACGIH TLV: NA, OSHA PEL: NA
Sorbic Acid, CAS# 110-44-1, ACGIH TLV: NA, OSHA PEL: NA
Water, purified, CAS# 7732-18-5, ACGIH TLV: NA, OSHA PEL: NA

**Engineering Measures/ General Hygiene:** Normal ventilation is adequate. Ensure eyewash and safety showers are available.
**Personal Protection Equipment: Skin Protection:** Chemical resistant gloves.
**Eye/Face Protection:** Safety Glasses or goggles. **Respiratory Protection:** Normal ventilation is adequate

## Section 9 – Physical and Chemical Properties

**Appearance/Physical State:** Clear, yellow liquid
**Odor:** Odorless
**Boiling Point:** Approx 100C
**Melting Point:** Approx 0 C
**Vapor Density:** No Information Available
**Evaporation Rate:** No Information Available
**pH:** 7.0
**Flammability:** No Information Available
**Solubility:** Infinite
**Relative Density:** No Information Available
**% Volatility:** No Information Available
**Specific Gravity:** Approx 1
**Vapor Pressure:** No Information Available
**Flash Point:** Not Applicable
**Coefficient of water/oil distribution:** Not Available
**Odor Threshold:** Not Available
**Decomposition Temperature:** No Information Available
**Partition Coefficient n-octanol/water:** Not Available
**Molecular Weight:** Not available

## Section 10 – Stability and Reactivity

**Chemical Stability:** Stable under normal conditions of use and storage.
**Incompatible Materials** None identified.
**Conditions to Avoid:** No Information Available.
**Hazardous Decomposition Products:** Oxides of phosphorus.
**Hazardous Polymerization:** Does not occur.
**Hazardous Reactions:** None under normal processing.

## Section 11 – Toxicological Information

**Routes of Exposure/Symptoms/Corrosiveness** – See Section 2

LD50 orl-rat: 1350mg/kg (Sodium Hydroxide) 1700mg/kg (Potassium Phosphate, Monobasic)
LC50 inhalation-rat: NA
**Irritation:** No Information Available.
**Toxicologically Synergistic:** No information available.
**Chronic Exposure**
**Carcinogenicity** No information available
**Sensitization** No information available.
**Mutagenic Effects** No information available.
**Reproductive Effects** No information available.
**Developmental Effects (Immediate/Delayed)** No information available.
**Teratogenicity** No information available.
**Other Adverse Effects** No information available.
**Endocrine Disruptor Information** No information available

## Section 12 – Ecological Information

**Ecotoxicity:** Not Available.
**Persistence and Degradability:** No Information Available **Mobility:** No Information Available
**Bioaccumulation/ Accumulation:** No Information Available

## Section 13 – Disposal Considerations

**Waste Disposal/Waste Disposal of Packaging:** Dilute with water.
All chemical waste generators must determine whether a discarded chemical is classified as hazardous waste. Comply with all local, state, and federal regulations.

## Section 14 – Transport Information

**DOT - Not Regulated**

## Section 15 – Regulatory Information (not meant to be all inclusive)

**OSHA Status:** These chemicals are not considered hazardous by OSHA.
**Canada DSL:** These chemicals are listed on Canada's DSL list.
**TSCA:** These chemicals are listed on the TSCA Inventory.
**SARA Title III Section 313:** Not Applicable
**RCRA Status:** Not Applicable
**CERCLA Reportable Quantity:** Sodium Hydroxide – 1000lb
**WHMIS:** Not Applicable.
This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR

## Section 16 – Additional Information

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RUST-OLEUM CORP -- LABOR SAVER MARKING PAINTS, 2533 -- 8010-00N021794

========== Product Identification ==========

Product ID:LABOR SAVER MARKING PAINTS, 2533
MSDS Date:09/29/1987
FSC:8010
NIIN:00N021794
MSDS Number: BLRYV
=== Responsible Party ===
Company Name:RUST-OLEUM CORP
Address:11 HAWTHORN PARKWAY
City:VERNON HILLS
State:IL
ZIP:60061
Country:US
Info Phone Num:312-367-7700
Emergency Phone Num:312-864-8200
Preparer's Name:MJS
CAGE:08882
=== Contractor Identification ===
Company Name:RUST-OLEUM CORP
Address:11 HAWTHORN PARKWAY
Box:City:VERNON HILLS
State:IL
ZIP:60061-1583
Country:US
Phone:847-367-7700
CAGE:08882

========== Composition/Information on Ingredients ==========

Ingred Name:PROPANE
CAS:74-98-6
RTECS #:TX2275000
Fraction by Wt: 16-18%
OSHA PEL:1000 PPM
ACGIH TLV:ASPHYXIANT; 9192

Ingred Name:PROPANE, 2-METHYL-; (ISOBUTANE). VP: 40 PSIA. LEL: 1.9%
CAS:75-28-5
RTECS #:TZ4300000
Fraction by Wt: 10-12%

Ingred Name:TITANIUM DIOXIDE
CAS:13463-67-7
RTECS #:XR2275000
Fraction by Wt: 0-8%
OSHA PEL:15 MG/M3 TDUST
ACGIH TLV:10 MG/M3 TDUST; 9293

Ingred Name:SUPP DATA:CAUSE BLINDNESS IF INGESTED.
RTECS #:9999999ZZ

Ingred Name:METHYL ALCOHOL (METHANOL) (SARA III)
CAS:67-56-1
RTECS #:PC1400000
Fraction by Wt: 0-4%
OSHA PEL:S,200PPM/250STEL
ACGIH TLV:S,200PPM/250STEL; 93
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS

Ingred Name:TOLUENE (SARA III)
CAS:108-88-3
RTECS #:XS5250000
Fraction by Wt: 0-18%
OSHA PEL:200 PPM/150 STEL
ACGIH TLV:50 PPM; 9293
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

Ingred Name:HEXANE (N-HEXANE)
CAS:110-54-3
RTECS #:MN9275000
Fraction by Wt: 6-10%
OSHA PEL:500 PPM

ACGIH TLV:50 PPM; 9293
EPA Rpt Qty:1 LB
DOT Rpt Qty:1 LB

Ingred Name:XYLENES (O-,M-,P- ISOMERS)  (SARA III)
CAS:1330-20-7
RTECS #:ZE2100000
Fraction by Wt: 5-20%
OSHA PEL:100 PPM/150 STEL
ACGIH TLV:100 PPM/150STEL;9192
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

Ingred Name:ETHYLENE GLYCOL  (SARA III)
CAS:107-21-1
RTECS #:KW2975000
Fraction by Wt: 0-4%
OSHA PEL:C 50 PPM
ACGIH TLV:C 50 PPM,VAPOR; 9192
EPA Rpt Qty:1 LB
DOT Rpt Qty:1 LB

Ingred Name:VM&P NAPHTHA. VP: 2 @ 20C. LEL: 0.9%
CAS:64742-89-8
Fraction by Wt: 1-3%
OSHA PEL:300 PPM;400 PPM STEL
ACGIH TLV:300 PPM

========== Hazards Identification ==========

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.
Routes of Entry: Inhalation:YES  Skin:NO  Ingestion:YES
Reports of Carcinogenicity:NTP:NO  IARC:NO  OSHA:NO
Health Hazards Acute and Chronic:(ACUTE) INHAL: ANESTHETIC, IRRIT OF RESP TRACT/ACUTE NERV SYS DEPRESS CHARACT BY HDCH, DIZZ, STAG, CONFUSN, UNCON/ COMA. SKIN/EYE: PRIMARY IRRITANT WHICH DEFATS SKIN & CAN LEAD TO DERMAT W/ RPTD OVERE XP. INGEST: GI IRRIT, NAUS, VOMIT & DIARR. (CHRONIC) RPTS HAVE SHOWN RPTD & PRLNGD OCCUP OVEREXP TO (SEE EFTS OF OVEREXP
Explanation of Carcinogenicity:NOT RELEVANT
Effects of Overexposure:HLTH HAZ: SOLV W/PERM BRAIN & NERV SYS DMG. OVEREXP TO XYLOL & TOLUENE IN LAB ANIMALS HAS SHOWN LIVER, KIDNEY, SPLEEN & EYE DMG AS WELL AS ANEMIA. IN HUMANS, OVEREXP HAS BEEN FOUND TO CAUSE LIVER & CA RDIAC ABNORMALITIES. OVEREXP TO HEXANE IN HIGH VAP CONC (1000-1500 PPM) OVER A PERIOD OF SEV MONTHS HAS BEEN (SUPP DATA)
Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

========== First Aid Measures ==========

First Aid:INHAL: REMOVE FROM EXPOS, RESTORE BRTHG & NOTIFY MD. EYE: FLUSH IMMED W/LRG AMTS OF WATER FOR AT LEAST 15 MIN. NOTIFY MD. SKIN: WASH AFFECTED AREA W/SOAP & WATER, REMOVE CONTAM CLTHG & WASH BEFORE REU SE. WASH HANDS BEFORE EATING/SMOKING. INGEST: DO NOT INDUCE VOMIT. KEEP PERSON WARM, QUIET & GET MD. ASPIR OF MATL IN LUNGS CAN CAUSE CHEM PNEUM WHICH CAN BE FATAL.

========== Fire Fighting Measures ==========

Flash Point Method:TCC
Flash Point:<0F,<-18C
Lower Limits:SEE INGRED
Extinguishing Media:NFPA CLASS B EXTINGUISHERS (CO2, DRY CHEMICAL OR FOAM).
Fire Fighting Procedures:WEAR NIOSH/MSHA APPRVD SCBA & FULL PROT EQUIP . WATER SPRAY MAY BE INEFFECTIVE. WATER MAY BE USED TO COOL CLSD CNTNRS TO PVNT PRESS BUILDUP (SUPP DATA)
Unusual Fire/Explosion Hazard:KEEP CNTNRS TIGHTLY CLSD. ISOLATE FROM HEAT, ELEC EQUIP, SPARKS & OPEN FLAME. CLSD CNTNRS MAY EXPLODE WHEN EXPSD TO EXTREME HEAT. DO NOT APPLY TO HOT SURFACES.

========== Accidental Release Measures ==========

Spill Release Procedures:REMOVE ALL SOURCES OF IGNITION, VENTILATE AREA AND REMOVE WITH INERT ABSORBENT AND NONSPARKING TOOLS.
Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

========== Handling and Storage ==========

Handling and Storage Precautions:DO NOT STORE ABOVE 120F. DO NOT PUNCTURE.
Other Precautions:INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING CONTENTS CAN BE HARMFUL OR FATAL.

========== Exposure Controls/Personal Protection ==========

Respiratory Protection:USE NIOSH/MSHA APPROVED CHEMICAL CARTRIDGE RESPIRATOR (TC23C) TO REMOVE SOLID AIRBORNE PARTICLES OF OVERSPRAY AND ORGANIC VAPORS DURING SPRAY APPLICATION. IN CONFINED AREAS: USE NIOSH/MSHA APPROVED SU PPLIED-AIR RESPIRATOR OR HOODS (TC19C).
Ventilation:PROVIDE GENERAL OR LOCAL EXHAUST VENT IN VOLUME & PATTERN TO KEEP TLV OF MOST HAZ INGREDS BELOW ACCEPTABLE LIMIT.
Protective Gloves:IMPERVIOUS GLOVES .
Eye Protection:CHEMICAL WORKERS GOGGLES .
Other Protective Equipment:NONE SPECIFIED BY MANUFACTURER.
Work Hygienic Practices:WASH HANDS BEFORE EATING OR SMOKING.
Supplemental Safety and Health
FIRE FIGHT PROC: AND POSSIBLE AUTOIGNITION OR EXPLOSION. IF WATER IS USED, FOG NOZZLES ARE PREFERRED. EFTS OF OVEREXP: SHOWN TO CAUSE PERIPHERAL POLYNEUROPATHY WHICH HAS THE POTENTIAL OF BECOMING IRRE VERSIBLE. OVEREXP TO METHYL ALCOHOL HASBEEN SHOWN TO AFFECT CNS, ESPECIALLY OPTIC NERVE. MAY BE FATAL OR (SEE ING 10)

========== Physical/Chemical Properties ==========

HCC:F2
Boiling Pt:B.P. Text:<0F,<-18C
Vapor Pres:SEE INGRED
Vapor Density:HVR/AIR
Evaporation Rate & Reference:SLOWER THAN ETHER
Appearance and Odor:NONE SPECIFIED BY MANUFACTURER.

========== Stability and Reactivity Data ==========

Stability Indicator/Materials to Avoid:YES
STRONG OXIDIZING AGENTS.
Stability Condition to Avoid:NONE SPECIFIED BY MANUFACTURER.
Hazardous Decomposition Products:BY OPEN FLAME - CO AND CO2.

========== Disposal Considerations ==========

Waste Disposal Methods:DISPOSE OF ACCORDING TO LOCAL, STATE AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

*Material Safety Data Sheet Collection*
Genium group inc.
1171 RiverFront Center, Amsterdam, NY 12010
(518) 842-4111

**Methanol**
**MET1440**

Issue Date: 2006-06

## Section 1 - Chemical Product and Company Identification 61

**Material Name:** Methanol **CAS Number:** 67-56-1
**Chemical Formula:** $CH_4O$
**Structural Chemical Formula:** $CH_3OH$
**EINECS Number:** 200-659-6
**ACX Number:** X1001287-2
**Synonyms:** ALCOHOL,METHYL; ALCOOL METHYLIQUE; ALCOOL METILICO; CARBINOL; X-CIDE 402 INDUSTRIAL BACTERICIDE; COAT-B1400; COLONIAL SPIRIT; COLONIAL SPIRITS; COLUMBIAN SPIRIT; COLUMBIAN SPIRITS; EPA PESTICIDE CHEMICAL CODE 053801; EUREKA PRODUCTS CRIOSINE DISINFECTANT; EUREKA PRODUCTS,CRIOSINE; FREERS ELM ARRESTER; IDEAL CONCENTRATED WOOD PRESERVATIVE; METANOL; METANOLO; METHANOL; METHYL ALCOHOL; METHYL HYDRATE; METHYL HYDROXIDE; METHYLALKOHOL; METHYLOL; METYLOWY ALKOHOL; MONOHYDROXYMETHANE; PMC REJEX-IT F-40ME; PYROLIGNEOUS SPIRIT; PYROXYLIC SPIRIT; PYROXYLIC SPIRITS; SURFLO-B17; WILBUR-ELLIS SMUT-GUARD; WOOD ALCOHOL; WOOD NAPHTHA; WOOD SPIRIT
**Derivation:** Prepared by wood pyrolysis; non-catalytic oxidation of hydrocarbons; as a by-product in the fisher-tropsch synthesis; or by reduction of carbon monoxide.
**General Use:** Used as an industrial solvent; starting material for organic synthesis; antifreeze for windshield washer fluid; in fuel antifreezes; gasoline octane booster; fuel for stoves; extractant for oils; denaturing ethanol; softening agent; food additive; in paint, varnish removers, and embalming fluids; in the manufacture of photographic film, celluloid, textile soap, wood stains, coated fabrics, shatterproof glass, paper coating, waterproofing formulations, artificial leather, dyes.

## Section 2 - Composition / Information on Ingredients

| Name | CAS | % |
|---|---|---|
| Methanol | 67-56-1 | ca 100% vol |

**Trace Impurities:** (Grade A): Acetone and aldehydes < 30 ppm, acetic acid < 30 ppm

**OSHA PEL**
TWA: 200 ppm; 260 mg/m$^3$.

**ACGIH TLV**
TWA: 200 ppm; STEL: 250 ppm; skin.

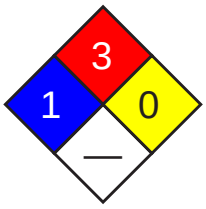
**EU OEL**
TWA: 260 mg/m$^3$ (200 ppm).

**NIOSH REL**
TWA: 200 ppm (260 mg/m$^3$); STEL: 250 ppm (325 mg/m$^3$); skin.

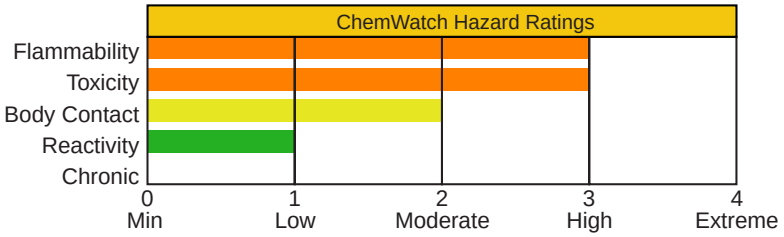
**IDLH Level**
6000 ppm.

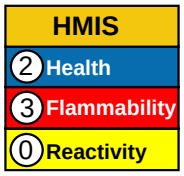
**DFG (Germany) MAK**
TWA: 200 ppm; PEAK: 800 ppm; skin.

## Section 3 - Hazards Identification



Fire Diamond




**ANSI Signal Word**
**Warning!**


Flammable

### ☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Colorless liquid; slight alcohol odor when pure or disagreeably pungent odor. Irritating to eyes/skin/respiratory tract. Other Acute Effects: headache, visual disturbance, blindness, respiratory failure. Chronic Effects: reproductive effects reported in animal testing. Flammable; moderate explosion hazard.

## Potential Health Effects

**Target Organs:** Eyes, skin, central nervous system (CNS), gastrointestinal (GI) tract, respiratory system
**Primary Entry Routes:** Inhalation, ingestion, skin and/or eye contact/absorption
**Acute Effects**
**Inhalation:** Irritation, breathing difficulty, headache, drowsiness, vertigo, light-headedness, nausea, vomiting, acidosis (decreased blood alkalinity), visual disturbance, and at high concentrations, CNS damage, convulsions, circulatory collapse, respiratory failure, coma and blindness can result from inhalation of methanol vapor. Concentration >= 200 ppm may cause headache; 50,000 ppm can cause death within 1-2 hrs.
**Eye:** Contact with liquid may result in irritation, inflamed lids, light sensitization, and superficial lesions.
**Skin:** Contact may cause irritation, dermatitis, swelling, scaling, and systemic effects.
**Ingestion:** GI irritation and systemic effects. Symptoms may be delayed 18-48 hours. Fatal dose - 2 to 8 ounces.
**Carcinogenicity:** NTP - Not listed; IARC - Not listed; OSHA - Not listed; NIOSH - Not listed; ACGIH - Not listed; EPA - Not listed; MAK - Not listed.
**Medical Conditions Aggravated by Long-Term Exposure:** None reported.
**Chronic Effects:** Exposure to methanol vapors has caused conjunctivitis, headache, giddiness, insomnia, GI disturbance, impaired vision. CNS damage is also likely. Methanol is slowly eliminated from the body; exposure is considered cumulative over the short term.

## Section 4 - First Aid Measures

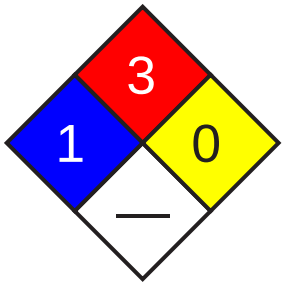
See DOT ERG

**Inhalation:** Remove exposed person to fresh air and support breathing as needed.
**Eye Contact:** *Do not* allow victim to rub or keep eyes tightly shut. Gently lift eyelids and flush immediately and continuously with flooding amounts of water for at least 15 minutes. Consult a physician or ophthalmologist if pain or irritation develops.
**Skin Contact:** *Quickly* remove contaminated clothing. Rinse with flooding amounts of water for at least 15 min. Wash exposed area with soap and water. For reddened or blistered skin, consult a physician.
**Ingestion:** Never give anything by mouth to an unconscious or convulsing person. Contact a poison control center. Unless the poison control center advises otherwise, have the *conscious and alert* person drink 1 to 2 glasses of water, then induce vomiting.
***After first aid, get appropriate in-plant, paramedic, or community medical support.***
**Note to Physicians:** Follow emesis with rehydration, correction of acidosis, and folate to enhance formate oxidation. Consider IV administration of ethanol (if blood methanol >20 mg/dL) to show metabolic oxidation of methanol. Assay formic acid in urine, blood pH and plasma bicarbonate.

## Section 5 - Fire-Fighting Measures

See DOT ERG

**Flash Point:** 54 °F (12 °C), Closed Cup
**Burning Rate:** 1.7 mm/min
**Autoignition Temperature:** 867 °F (464 °C)
**LEL:** 6.0% v/v
**UEL:** 36% v/v
**Flammability Classification:** OSHA Class IB Flammable Liquid.
**Extinguishing Media:** Use dry chemical, carbon dioxide, water spray, fog or alcohol-resistant foam. A water spray may be used to cool fire-exposed containers, and flush spills away from ignition sources.
**General Fire Hazards/Hazardous Combustion Products:** Heating methanol to decomposition can produce carbon oxides ($CO_x$), formaldehyde, acrid smoke, and irritating fumes. Can form explosive mixtures in the air. The heavier-than-air vapors of methanol may travel along low-lying surfaces to distant sources of ignition and flash back to the material source. Containers may explode in heat of fire.



Fire Diamond

**Fire-Fighting Instructions:** *Do not* scatter material with any more water than needed to extinguish fire. *Do not* release runoff from fire control methods to sewers or waterways. Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full facepiece operated in pressure-demand or positive-pressure mode.

## Section 6 - Accidental Release Measures

See DOT ERG

**Spill/Leak Procedures:** Isolate spill area for at least 330-660 feet (100-200 m) in all directions. Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Ground all equipment used when handling this product. *Do not* touch or walk through spilled material. Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas. A vapor suppressing foam may be used to reduce vapors.
**Small Spills:** Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Use clean non-sparking tools to collect absorbed material.

**Large Spills:** Dike far ahead of liquid spill for later disposal. *Do not* release into sewers or waterways. Ground all equipment. Use non-sparking tools.

**Regulatory Requirements:** Follow applicable OSHA regulations (29 CFR 1910.120).

## Section 7 - Handling and Storage

**Handling Precautions:** Avoid vapor inhalation, and skin and eye contact. Use only with ventilation sufficient to reduce airborne concentrations to non-hazardous levels (see Sec. 2). Wear protective gloves, goggles, and clothing (see Sec. 8). Keep away from heat and ignition sources. Ground and bond all containers during transfers to prevent static sparks. Use non-sparking tools to open and close containers.

Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

**Recommended Storage Methods:** Store in tightly closed container in cool, well-ventilated area, away from heat, ignition sources and incompatibles (see Sec. 10). Equip drums with self-closing valves, pressure vacuum bungs, and flame arrestors.

**Regulatory Requirements:** Follow applicable OSHA regulations. Also 29 CFR 1910.106 for Class 1B Flammable Liquids.

## Section 8 - Exposure Controls / Personal Protection

**Engineering Controls:** To prevent static sparks, electrically ground and bond all containers and equipment used in shipping, receiving, or transferring operations. Provide general or local exhaust ventilation systems to maintain airborne concentrations as low as possible. Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

**Administrative Controls:** Enclose operations and/or provide local explosion-proof exhaust ventilation at the site of chemical release. Where possible, transfer methanol from drums or other storage containers to process containers. Minimize sources of ignition in surrounding areas.

**Personal Protective Clothing/Equipment:** Wear chemically protective gloves, boots, aprons, and gauntlets of butyl rubber, Teflon, Viton, Saranex, 4H, Responder, Trellchem HPS, or Tychem 10000 (Breakthrough Time (BT) >8 hr) to prevent skin contact. Natural rubber, neoprene, nitrile rubber, polyethylene, polyvinyl alcohol and CPF 3 may degrade after contact and are not recommended. Wear splash-proof chemical safety goggles, and face shield, per OSHA eye- and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

**Respiratory Protection:** Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/ NIOSH-approved respirator. For concentrations <= 2000 ppm, use a supplied air respirator; <= 5000 ppm, supplied air (SA) respirator in continuous flow mode; <= 6000 ppm, SA respirator with tight-fitting face mask operated in continuous flow mode, or SCBA with full facepiece, or SA respirator with full facepiece; > IDLH/unknown/emergency, SCBA with full facepiece operated in pressure-demand or other positive-pressure mode, or SA respirator with full facepiece operated in pressure-demand or other positive-pressure mode in combination with auxiliary SCBA operated in pressure-demand or other positive-pressure mode. For escape, use an appropriate escape-type SCBA. *Warning! Air-purifying respirators do not protect workers in oxygen- deficient atmospheres.* If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

**Other:** Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment. Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

## Section 9 - Physical and Chemical Properties

**Appearance/General Info:** Colorless; slight alcohol odor when pure, disagreeably pungent odor when crude.

**Physical State:** Liquid

**Odor Threshold:** 13.1150 to 26840 mg/m$^3$

**Vapor Pressure (kPa):** 127 mm Hg at 77 °F (25 °C)

**Vapor Density (Air=1):** 1.11

**Bulk Density:** 6.59 lbs/gal at 68 F (20 °C)

**Formula Weight:** 32.04

**Density:** 0.796 g/mL at 59 °F (15 °C)

**Specific Gravity ($H_2O$=1, at 4 °C):** 0.81 at 0 °C/4 °C

**Refractive Index:** 1.3292 at 68 °F (20 °C)

**pH:** Slightly acidic

**Boiling Point:** 148 °F (64.7 °C) at 760 mm Hg

**Freezing/Melting Point:** -144.04 °F (-97.8 °C)

**Viscosity:** 0.614 mPa sec

**Surface Tension:** 22.61 dynes/cm

**Ionization Potential (eV):** 10.84 eV

**Water Solubility:** Miscible

**Other Solubilities:** Ethanol, acetone, benzene, chloroform, DMSO, ether, ketones, most organic solvents.

## Section 10 - Stability and Reactivity

**Stability/Polymerization/Conditions to Avoid:** Methanol is stable at room temperature in closed containers under normal storage and handling conditions. Hazardous polymerization cannot occur. Vapor inhalation, oxidizers.

**Storage Incompatibilities:** Include beryllium dihydride, metals (potassium, magnesium), oxidants (barium perchlorate, bromine, chlorine, hydrogen peroxide, sodium hypochlorite, phosphorus trioxide), potassium tertbutoxide, carbon tetrachloride and metals, chloroform and heat, diethyl zinc, alkyl aluminum salts, acetyl bromide, chloroform and sodium hydroxide, cyanuric chloride, nitric acid, chromic anhydride, lead perchlorate.

**Hazardous Decomposition Products:** Thermal oxidative decomposition of methanol can produce carbon oxides ($CO_x$), formaldehyde, acrid smoke, and irritating fumes.

## Section 11 - Toxicological Information

**Acute Oral Effects:**

Rat, oral, $LD_{50}$: 5628 mg/kg.

Human, oral, $LD_{Lo}$: 428 mg/kg produced toxic effects: behavioral - headache; lungs, thorax, or respiration - other changes.

Human, oral, $LD_{Lo}$: 143 mg/kg produced optic nerve neuropathy, dyspnea, nausea or vomiting.

**Acute Inhalation Effects:**

Rat, inhalation, $LC_{50}$: 64000 ppm/4 hr.

Human, inhalation, $TC_{Lo}$: 300 ppm produced visual field changes, headache; lungs, thorax, or respiration - other changes.

**Acute Skin Effects:**

Rabbit, skin, $LD_{50}$: 15800 mg/kg.

Monkey, skin, $LD_{Lo}$: 393 mg/kg.

**Irritation Effects:**

Rabbit, standard Draize test: 100 mg/24 hr resulted in moderate irritation.

Rabbit, standard Draize test: 20 mg/24 hr resulted in moderate irritation.

**Other Effects:**

Rat, oral: 10 µmol/kg resulted in DNA damage.

Rat, inhalation: 50 $mg/m^3$/12 hr/13 weeks intermittently produced degenerative changes to brain and coverings; muscle contraction or spasticity.

Rat, inhalation: 2610 ppm/6 hr/4 weeks intermittently produced toxic effects: endocrine - changes in spleen weight.

Multiple Dose Toxicity Effects - Rat, oral: 12 g/kg/8 weeks intermittently produced toxic effects: behavioral - ataxia; behavioral - alteration of operant conditioning.

Human, lymphocyte: 300 mmol/L resulted in DNA inhibition.

Rat (female), oral: 7500 mg/kg, administered during gestational days 17-19 produced effects on newborn - behavioral.

Rat (female), oral: 35295 mg/kg administered during gestational days 1-15 produced effects on the fertility index; pre implantation mortality; and post-implantation mortality.

Rat (female), inhalation: 20000 ppm/7 hr, administered during gestational days 1-22 produced specific developmental abnormalities - musculoskeletal system; cardiovascular (circulatory) system; urogenital system.

Rat (male), oral: 200 ppm/20 hr, 78 weeks prior to mating produced paternal effects - testes, epididymis, sperm duct.

See *RTECS* PC1400000, for additional data.

## Section 12 - Ecological Information

**Environmental Fate:** Bioconcentration (BCF, estimated at 0.2) is not expected to be significant. Physical removal from air can occur via rainfall. Relatively rapid evaporation from dry surfaces is likely to occur. If released to the atmosphere, it degrades via reaction with photochemically produced hydroxyl radicals with an approximate half-life of 17.8 days. If released to water or soil, biodegradation is expected to occur. A low $K_{oc}$ indicates little sorption and high mobility in the soil column.

**Ecotoxicity:** Trout, $LC_{50}$: 8,000 mg/L/48 hr; *Pimephales promelas* (fathead minnow) $LC_{50}$: 29.4 g/L/96 hr.

**Henry's Law Constant:** 4.55 $x10^{-6}$ atm-$m^3$/mole at 77 °F (25 °C)

**Octanol/Water Partition Coefficient:** log $K_{ow}$ = -0.77

**Soil Sorption Partition Coefficient:** $K_{oc}$ = 0.44

## Section 13 - Disposal Considerations

**Disposal:** Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, state, and local regulations.

## Section 14 - Transport Information

### DOT Hazardous Materials Table Data (49 CFR 172.101):

**Note:** This material has multiple possible HMT entries. Choose the appropriate one based on state and condition of specific material when shipped.

**Shipping Name and Description:** Methanol
**ID:** UN1230
**Hazard Class:** 3 - Flammable and combustible liquid
**Packing Group:** II - Medium Danger
**Symbols:** + I


**Label Codes:** 3 - Flammable Liquid, 6.1 - Poison *or* Poison Inhalation Hazard *if inhalation hazard, Zone A or B*
**Special Provisions:** IB2, T7, TP2
**Packaging:** **Exceptions:** 150 **Non-bulk:** 202 **Bulk:** 242
**Quantity Limitations:** **Passenger aircraft/rail:** 1 L **Cargo aircraft only:** 60 L
**Vessel Stowage:** **Location:** B **Other:** 40

**Shipping Name and Description:** Methanol
**ID:** UN1230
**Hazard Class:** 3 - Flammable and combustible liquid
**Packing Group:** II - Medium Danger
**Symbols:** D - Domestic transportation


**Label Codes:** 3 - Flammable Liquid
**Special Provisions:** IB2, T7, TP2
**Packaging:** **Exceptions:** 150 **Non-bulk:** 202 **Bulk:** 242
**Quantity Limitations:** **Passenger aircraft/rail:** 1 L **Cargo aircraft only:** 60 L
**Vessel Stowage:** **Location:** B **Other:**

## Section 15 - Regulatory Information

**EPA Regulations:**

**RCRA 40 CFR:** Listed U154 Ignitable Waste
**CERCLA 40 CFR 302.4:** Listed per RCRA Section 3001 5000 lb (2268 kg)
**SARA 40 CFR 372.65:** Listed
**SARA EHS 40 CFR 355:** Not listed
**TSCA:** Listed

## Section 16 - Other Information

**Disclaimer:** Judgments as to the suitability of information herein for the purchaser's purposes are necessarily the purchaser's responsibility. Although reasonable care has been taken in the preparation of such information, Genium Group, Inc. extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the purchaser's intended purpose or for consequences of its use.

*Material Safety Data Sheet Collection*
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Issue Date: 2006-06



## Section 1 - Chemical Product and Company Identification 61

**Material Name:** Nitric Acid **CAS Number:** 7697-37-2
**Chemical Formula:** $HNO_3$
**Structural Chemical Formula:** $HNO_3$
**EINECS Number:** 231-714-2
**ACX Number:** X1002177-5
**Synonyms:** ACIDE NITRIQUE; ACIDO NITRICO; AQUA FORTIS; AZOTIC ACID; AZOTOWY KWAS; ENGRAVER'S ACID; ENGRAVERS ACID; HYDROGEN NITRATE; KYSELINA DUSICNE; NITAL; NITRIC ACID; NITRIC ACID OTHER THAN RED FUMING WITH >70% NITRIC ACID; NITRIC ACID OTHER THAN RED FUMING WITH NOT >70% NITRICACID; NITROUS FUMES; NITRYL HYDROXIDE; RED FUMING NITRIC ACID (RFNA); SALPETERSAURE; SALPETERZUUROPLOSSINGEN; WHITE FUMING NITRIC ACID (WFNA)
**General Use:** Manufacture of organic and inorganic nitrates and nitro compounds for fertilizers, dye intermediates and many organic chemicals.
Used for etching and cleaning metals.
Operators should be trained in procedures for safe use of this material.

## Section 2 - Composition / Information on Ingredients

| Name | CAS | % |
|---|---|---|
| nitric acid | 7697-37-2 | >95 |

**OSHA PEL**
TWA: 2 ppm; 5 mg/m$^3$.

**ACGIH TLV**
TWA: 2 ppm; STEL: 4 ppm.

**EU OEL**
STEL: 2.6 mg/m$^3$ (1 ppm).

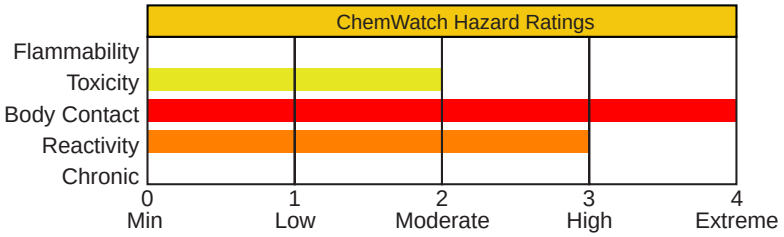
**NIOSH REL**
TWA: 2 ppm (5 mg/m$^3$); STEL: 4 ppm (10 mg/m$^3$).

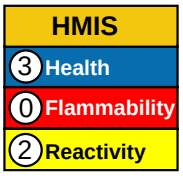
**IDLH Level**
25 ppm.

**DFG (Germany) MAK**
TWA: 2 ppm; PEAK: 2 ppm.

## Section 3 - Hazards Identification

Fire Diamond




**ANSI Signal Word**

**Danger!**


Corrosive

### ☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Clear to yellow fuming liquid; acrid, suffocating odor. Corrosive. Other Acute Effects: lung damage. Chronic Effects: tooth erosion, bronchitis. Strong oxidizer.

### Potential Health Effects

**Target Organs:** eyes, skin, respiratory system, teeth
**Primary Entry Routes:** inhalation, ingestion, skin contact, eye contact
**Acute Effects**
**Inhalation:** The vapor is extremely discomforting and corrosive to the upper respiratory tract and lungs and the material presents a hazard from a single acute exposure or from repeated exposures over long periods.
Inhalation hazard is increased at higher temperatures.
Reactions may occur following a single acute exposure or may only appear after repeated exposures.

Reactions may not occur on exposure but response may be delayed with symptoms only appearing many hours later.
The material may produce respiratory tract irritation which produces an inflammatory response involving the recruitment and activation of many cell types, mainly derived from the vascular system. Unlike most organs the lung can respond to a chemical insult or agent by first trying to remove or neutralize the irritant and then repairing the damage. The repair process, which initially developed to protect mammalian lungs from foreign matter and antigens, may however, cause further damage the lungs when activated by hazardous chemicals. The result is often the impairment of gas exchange, the primary function of the lungs.
Inhalation of nitric acid mist or fumes at 2 to 25 ppm over an 8 hour period may cause pulmonary irritation and symptoms of lung damage.
Only several minutes of exposure to concentrated atmosphere i.e. 200 ppm may cause severe pulmonary damage and even fatality. Death may be delayed for several days.
Exposure to nitric acid fumes (with concurrent inhalation of nitrogen dioxide and nitric oxide) may elicit prompt irritation of the upper respiratory tract leading to coughing, gagging, chest pain, dyspnea, cyanosis if concentrations are sufficiently high and duration of exposure sufficiently long, pulmonary edema.

**Eye:** The liquid is extremely corrosive to the eyes and contact may cause rapid tissue destruction and is capable of causing severe damage with loss of sight.
The vapor is extremely discomforting to the eyes and is capable of causing pain and severe conjunctivitis.
Corneal injury may develop, with possible permanent impairment of vision, if not promptly and adequately treated.
The material may produce moderate eye irritation leading to inflammation.
Repeated or prolonged exposure to irritants may produce conjunctivitis.
Eye contact with concentrated acid may give no pain, whilst diluted solution causes intense pain and both can cause permanent eye damage or blindness. Burns may result in shrinkage of the eyeball, symblepharon (adhesions between tarsal and bulbar conjunctivae), permanent corneal opacification, and visual impairment leading to blindness.

**Skin:** The liquid is extremely corrosive to the skin and contact may cause tissue destruction with severe burns.
Bare unprotected skin should not be exposed to this material.
The vapor is highly discomforting to the skin.
The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterized by skin redness (erythema) and swelling (edema) which may progress to vesiculation, scaling and thickening of the epidermis. Histologically there may be intercellular edema of the spongy layer (spongiosis) and intracellular edema of the epidermis.
Skin contact causes yellow discoloration of the skin, blisters and scars that may not heal. The skin may be stained bright-yellow or yellowish brown due to the formation of xanthoproteic acid. Dilute solutions may harden the epithelium without producing overt corrosion.

**Ingestion:** Considered an unlikely route of entry in commercial/industrial environments.
The material is extremely corrosive if swallowed and is capable of causing burns to mouth, throat, esophagus, with extreme discomfort, pain and may be fatal.
Even a small amount causes severe corrosion of the stomach, burning pain, vomiting and shock, possibly causing non-healing scarring of the gastrointestinal tract and stomach. Death may be delayed 12 hours to 14 days or to several months. Such late fatalities are attributed to a chemical lobular pneumonitis secondary to aspiration. Survivors show stricture of the gastric mucosa and subsequent pernicious anemia.

**Carcinogenicity:** NTP - Not listed; IARC - Not listed; OSHA - Not listed; NIOSH - Not listed; ACGIH - Not listed; EPA - Not listed; MAK - Not listed.

**Chronic Effects:** Prolonged or repeated overexposure to low concentrations of vapor may cause chronic bronchitis, corrosion of teeth, even chemical pneumonitis.

## Section 4 - First Aid Measures

**Inhalation:** Remove to fresh air.
Lay patient down. Keep warm and rested.
If available, administer medical oxygen by trained personnel.
If breathing is shallow or has stopped, ensure clear airway and apply resuscitation. Transport to hospital or doctor, without delay.


**Eye Contact:** Immediately hold the eyes open and flush continuously for at least 15 minutes with fresh running water. Ensure irrigation under eyelids by occasionally lifting the upper and lower lids.
Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Immediately transport to hospital or doctor. DO NOT delay.

**Skin Contact:** Immediately flush body and clothes with large amounts of water, using safety shower if available.
Quickly remove all contaminated clothing, including footwear.
Wash affected areas with water (and soap if available) for at least 15 minutes. Transport to hospital or doctor. DO NOT delay.

**Ingestion:** Contact a Poison Control Center.
Do NOT induce vomiting. Give a glass of water.
Immediately transport to hospital or doctor. DO NOT delay.

***After first aid, get appropriate in-plant, paramedic, or community medical support.***

**Note to Physicians:** For acute or short-term repeated exposures to strong acids:

1.Airway problems may arise from laryngeal edema and inhalation exposure.
Treat with 100% oxygen initially.
2.Respiratory distress may require cricothyroidotomy if endotracheal intubation is contraindicated by excessive swelling.
3. Intravenous lines should be established immediately in all cases where there is evidence of circulatory compromise.
4.Strong acids produce a coagulation necrosis characterized by formation of a coagulum (eschar) as a result of the desiccating action of the acid on proteins in specific tissues.

INGESTION:

1.Immediate dilution (milk or water) within 30 minutes post-ingestion is recommended.
2.Do not attempt to neutralize the acid since exothermic reaction may extend the corrosive injury.
3.Be careful to avoid further vomiting since re-exposure of the mucosa to the acid is harmful. Limit fluids to one or two glasses in an adult.
4.Charcoal has no place in acid management.
5.Some authors suggest the use of lavage within 1 hour of ingestion.

SKIN:

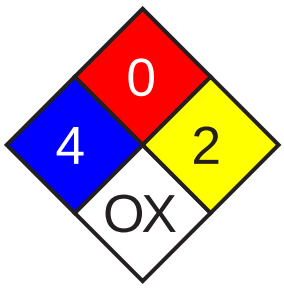
1.Skin lesions require copious saline irrigation. Treat chemical burns as thermal burns with non-adherent gauze and wrapping.
2.Deep second-degree burns may benefit from topical silver sulfadiazine.

EYE:

1.Eye injuries require retraction of the eyelids to ensure thorough irrigation of the conjunctival cul-de-sacs. Irrigation should last at least 20-30 minutes. Do not use neutralizing agents or any other additives. Several liters of saline are required.
2.Cycloplegic drops (1% cyclopentolate for short-term use or 5% homatropine for longer term use), antibiotic drops, vasoconstrictive agents, or artificial tears may be indicated dependent on the severity of the injury.
3.Steroid eye drops should only be administered with the approval of a consulting ophthalmologist.

## Section 5 - Fire-Fighting Measures

**Flash Point:** Nonflammable
**Autoignition Temperature:** Not applicable
**LEL:** Not applicable
**UEL:** Not applicable
**Extinguishing Media:** Water spray or fog; foam, dry chemical powder, or BCF (where regulations permit).
Carbon dioxide.

Fire Diamond

**General Fire Hazards/Hazardous Combustion Products:** Will not burn but increases intensity of fire.
Heating may cause expansion or decomposition leading to violent rupture of containers.
Heat affected containers remain hazardous.
Contact with combustibles such as wood, paper, oil or finely divided metal may cause ignition, combustion or violent decomposition.
May emit irritating, poisonous or corrosive fumes.
Decomposes on heating and produces toxic fumes of nitrogen oxides ($NO_x$) and nitric acid.

**Fire Incompatibility:** Oxidizing agents as a class are not necessarily combustible themselves, but can increase the risk and intensity of fire in many other substances.
Reacts vigorously with water and alkali.
Avoid reaction with organic materials/compounds, powdered metals, reducing agents and hydrogen sulfide ($H_2S$) as ignition may result.
Reacts with metals producing flammable/explosive hydrogen gas.

**Fire-Fighting Instructions:** Contact fire department and tell them location and nature of hazard.
May be violently or explosively reactive. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or waterways. Consider evacuation.
Fight fire from a safe distance, with adequate cover.
Extinguishers should be used only by trained personnel.
Use water delivered as a fine spray to control fire and cool adjacent area.
Avoid spraying water onto liquid pools.
Do not approach containers suspected to be hot.
Cool fire-exposed containers with water spray from a protected location.
If safe to do so, remove containers from path of fire.
If fire gets out of control withdraw personnel and warn against entry.
Equipment should be thoroughly decontaminated after use.

## Section 6 - Accidental Release Measures

**Small Spills:** Dangerous levels of nitrogen oxides may form during spills of nitric acid.
Wear fully protective PVC clothing and breathing apparatus.
Clean up all spills immediately. No smoking, bare lights, ignition sources.
Avoid all contact with any organic matter including fuel, solvents, sawdust, paper or cloth and other incompatible materials, as ignition may result.
Avoid breathing dust or vapors and all contact with skin and eyes.
Control personal contact by using protective equipment.
Contain and absorb spill with dry sand, earth, inert material or vermiculite. DO NOT use sawdust as fire may result.
Scoop up solid residues and seal in labeled drums for disposal.
Neutralize/decontaminate area.
Use soda ash or slaked lime to neutralize.

See DOT ERG

**Large Spills:** DO NOT touch the spill material. Restrict access to area.
Clear area of personnel and move upwind. Contact fire department and tell them location and nature of hazard.
May be violently or explosively reactive. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or waterways. Consider evacuation.
No smoking, flames or ignition sources. Increase ventilation.
Contain spill with sand, earth or other clean, inert materials.
NEVER use organic absorbents such as sawdust, paper, cloth; as fire may result. Avoid any contamination by organic matter.
Use spark-free and explosion-proof equipment.
Collect any recoverable product into labeled containers for possible recycling. DO NOT mix fresh with recovered material.
Collect residues and seal in labeled drums for disposal.
Wash area and prevent runoff into drains. Decontaminate equipment and launder all protective clothing before storage and reuse.
If contamination of drains or waterways occurs advise emergency services.
DO NOT USE WATER OR NEUTRALIZING AGENTS INDISCRIMINATELY ON LARGE SPILLS.

**Regulatory Requirements:** Follow applicable OSHA regulations (29 CFR 1910.120).

## Section 7 - Handling and Storage

**Handling Precautions:** Avoid generating and breathing mist. Do not allow clothing wet with material to stay in contact with skin.
Avoid all personal contact, including inhalation.
Wear protective clothing when risk of exposure occurs.
Use in a well-ventilated area.
WARNING: To avoid violent reaction, ALWAYS add material to water and NEVER water to material.
Avoid smoking, bare lights or ignition sources.
Avoid contact with incompatible materials.
When handling, DO NOT eat, drink or smoke.
Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Work clothes should be laundered separately.
Launder contaminated clothing before reuse.
Use good occupational work practices. Observe manufacturer's storing and handling recommendations. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.

**Recommended Storage Methods:** Stainless steel drum. Check that containers are clearly labeled.
Packaging as recommended by manufacturer.

**Regulatory Requirements:** Follow applicable OSHA regulations.

## Section 8 - Exposure Controls / Personal Protection

**Engineering Controls:** Use in a well-ventilated area.
Local exhaust ventilation may be required for safe working, i. e. , to keep exposures below required standards; otherwise, PPE is required.
If risk of overexposure exists, wear NIOSH-approved respirator.
Correct fit is essential to obtain adequate protection.
In confined spaces where there is inadequate ventilation, wear full-face air supplied breathing apparatus.

**Personal Protective Clothing/Equipment:**

**Eyes:** Chemical goggles. Full face shield.
DO NOT wear contact lenses. Contact lenses pose a special hazard; soft contact lenses may absorb irritants and all lenses concentrate them.

**Hands/Feet:** Bare unprotected skin should not be exposed to this material. Impervious, gauntlet length gloves i.e., butyl rubber gloves or Neoprene rubber gloves or wear chemical protective gloves, e.g. PVC.

Wear safety footwear or safety gumboots, e.g. Rubber.

**Respiratory Protection:**

Exposure Range >2 to <25 ppm: Supplied Air, Constant Flow/Pressure Demand, Half Mask

Exposure Range 25 to unlimited ppm: Self-contained Breathing Apparatus, Pressure Demand, Full Face

**Other:** Operators should be trained in procedures for safe use of this material.

Acid-resistant overalls or Rubber apron or PVC apron.

Ensure there is ready access to an emergency shower.

Ensure that there is ready access to eye wash unit.

Ensure that there is ready access to breathing apparatus.

**Glove Selection Index:**

BUTYL ..... Best selection
HYPALON ..... Best selection
NEOPRENE..... Best selection
NEOPRENE/NATURAL..... Best selection
PE/EVAL/PE ..... Best selection
SARANEX-23 ..... Best selection
NATURAL RUBBER..... Satisfactory; may degrade after 4 hours continuous immersion
NATURAL+NEOPRENE..... Satisfactory; may degrade after 4 hours continuous immersion
PVC..... Poor to dangerous choice for other than short-term immersion
NITRILE+PVC..... Poor to dangerous choice for other than short-term immersion

## Section 9 - Physical and Chemical Properties

**Appearance/General Info:** Clear, colorless to slightly yellow liquid. Sharp strong odor.
CAUTION: exothermic dilution hazard.
HIGHLY CORROSIVE. Corrosive to most metals. Powerful oxidizing agent.
Darkens to brownish color on aging and exposure to light.

**Physical State:** Liquid
**Odor Threshold:** 0.75 to 2.50 mg/m$^3$
**Vapor Pressure (kPa):** 8.26
**Vapor Density (Air=1):** 1.5
**Formula Weight:** 63.02
**Specific Gravity ($H_2O$=1, at 4 °C):** 1.3-1.42
**pH:** < 1

**pH (1% Solution):** 1
**Boiling Point:** 83 °C (181 °F) at 760 mm Hg
**Freezing/Melting Point:** -42 °C (-43.6 °F)
**Volatile Component (% Vol):** 100 (nominal)
**Decomposition Temperature (°C):** Not applicable
**Water Solubility:** Soluble in all proportions

## Section 10 - Stability and Reactivity

**Stability/Polymerization/Conditions to Avoid:** Presence of heat source and direct sunlight. Storage in unsealed containers. Hazardous polymerization will not occur.

**Storage Incompatibilities:** Segregate from reducing agents, finely divided combustible materials, combustible materials, sawdust, metals and powdered metals.

Avoid contamination of water, foodstuffs, feed or seed.

Segregate from alkalies, oxidizing agents and chemicals readily decomposed by acids, i.e. cyanides, sulfides, carbonates.

## Section 11 - Toxicological Information

**Toxicity**

Oral (human) $LD_{Lo}$: 430 mg/kg
Inhalation (rat) $LC_{50}$: 2500 ppm/1 hr
Unreported (man) $LD_{Lo}$: 110 mg/kg

**Irritation**

Nil reported

See *RTECS* QU 5775000, for additional data.

## Section 12 - Ecological Information

**Environmental Fate:** No data found.

**Ecotoxicity:** $LC_{50}$ Starfish 100-300 mg/l/48 hr /Aerated water conditions; $LC_{50}$ Shore crab 180 mg/l/48 hr /Static, aerated water conditions; $LC_{50}$ Cockle 330-1000 mg/l/48 hr /Aerated water conditions

**BCF:** no food chain concentration potential

**Biochemical Oxygen Demand (BOD):** none

## Section 13 - Disposal Considerations

**Disposal:** Recycle wherever possible. Special hazards may exist - specialist advice may be required.
Consult manufacturer for recycling options.
Follow applicable federal, state, and local regulations.
Treat and neutralize at an approved treatment plant.
Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.
Puncture containers to prevent reuse and bury at an authorized landfill.

## Section 14 - Transport Information

### DOT Hazardous Materials Table Data (49 CFR 172.101):

**Note:** This material has multiple possible HMT entries. Choose the appropriate one based on state and condition of specific material when shipped.

**Shipping Name and Description:** Nitric acid *other than red fuming, with more than 70 percent nitric acid*


**ID:** UN2031
**Hazard Class:** 8 - Corrosive material
**Packing Group:** I - Great Danger
**Symbols:**
**Label Codes:** 8 - Corrosive, 5.1 - Oxidizer
**Special Provisions:** B47, B53, T10, TP2, TP12, TP13
**Packaging:** **Exceptions:** None **Non-bulk:** 158 **Bulk:** 243
**Quantity Limitations:** **Passenger aircraft/rail:** Forbidden **Cargo aircraft only:** 2.5 L
**Vessel Stowage:** **Location:** D **Other:** 44, 66, 89, 90, 110, 111

**Shipping Name and Description:** Nitric acid *other than red fuming, with not more than 70 percent nitric acid*


**ID:** UN2031
**Hazard Class:** 8 - Corrosive material
**Packing Group:** II - Medium Danger
**Symbols:**
**Label Codes:** 8 - Corrosive
**Special Provisions:** B2, B47, B53, IB2, T8, TP2, TP12
**Packaging:** **Exceptions:** None **Non-bulk:** 158 **Bulk:** 242
**Quantity Limitations:** **Passenger aircraft/rail:** Forbidden **Cargo aircraft only:** 30 L
**Vessel Stowage:** **Location:** D **Other:**

**Shipping Name and Description:** Nitric acid, red fuming


**ID:** UN2032
**Hazard Class:** 8 - Corrosive material
**Packing Group:** I - Great Danger
**Symbols:** + - Override definitions
**Label Codes:** 8 - Corrosive, 5.1 - Oxidizer, 6.1 - Poison *or* Poison Inhalation Hazard *if inhalation hazard, Zone A or B*
**Special Provisions:** 2, B9, B32, B74, T20, TP2, TP12, TP13, TP38, TP45
**Packaging:** **Exceptions:** None **Non-bulk:** 227 **Bulk:** 244
**Quantity Limitations:** **Passenger aircraft/rail:** Forbidden **Cargo aircraft only:** Forbidden
**Vessel Stowage:** **Location:** D **Other:**

## Section 15 - Regulatory Information

**EPA Regulations:**
**RCRA 40 CFR:** Not listed
**CERCLA 40 CFR 302.4:** Listed per CWA Section 311(b)(4) 1000 lb (453.5 kg)
**SARA 40 CFR 372.65:** Listed
**SARA EHS 40 CFR 355:** Listed
**RQ:** 1000 lb
**TPQ:** 1000 lb
**TSCA:** Listed

## Section 16 - Other Information

**Disclaimer:** Judgments as to the suitability of information herein for the purchaser's purposes are necessarily the purchaser's responsibility. Although reasonable care has been taken in the preparation of such information, Genium Group, Inc. extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the purchaser's intended purpose or for consequences of its use.

# Safety Data Sheet
## according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS

**Printing date:** 31.12.2013 **Revision:** 31.12.2013

## 1 Identification of the substance/mixture and of the company/undertaking

· **1.1 Product identifier**

· **Trade name: ALCONOX**

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.

· **Application of the substance / the mixture:** Cleaning material/ Detergent

· **1.3 Details of the supplier of the Safety Data Sheet**

· **Manufacturer/Supplier:**
Alconox, Inc.
30 Glenn St., Suite 309
White Plains, NY 10603
Phone: 914-948-4040

· **Further information obtainable from:** Product Safety Department

· **1.4 Emergency telephone number:**
ChemTel Inc.
(800)255-3924, +1 (813)248-0585

## 2 Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**

GHS05 corrosion

Eye Dam. 1; H318: Causes serious eye damage.

GHS07

Skin Irrit. 2; H315: Causes skin irritation.

· **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

Xi; Irritant

R38-41: Irritating to skin. Risk of serious damage to eyes.

· **Information concerning particular hazards for human and environment:**
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

· **Classification system:**
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.

(Contd. on page 2)

# Safety Data Sheet
## according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS

**Printing date:** 31.12.2013 **Revision:** 31.12.2013

**Trade name: ALCONOX**

(Contd. of page 1)

· **Hazard pictograms**

GHS05

· **Signal word:** Danger

· **Hazard-determining components of labelling:**
sodium dodecylbenzene sulfonate
· **Hazard statements**
H315: Causes skin irritation.
H318: Causes serious eye damage.
· **Precautionary statements**
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P264: Wash thoroughly after handling.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310: Immediately call a POISON CENTER or doctor/physician.
P321: Specific treatment (see on this label).
P362: Take off contaminated clothing and wash before reuse.
P332+P313: If skin irritation occurs: Get medical advice/attention.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.
· **Hazard description:**
· **WHMIS-symbols:**
D2B - Toxic material causing other toxic effects

· **NFPA ratings (scale 0 - 4)**


Health = 1
Fire = 0
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**


Health = 1
Fire = 0
Reactivity = 0

| · **HMIS Long Term Health Hazard Substances** |
|---|
| None of the ingredients is listed. |

· **2.3 Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

(Contd. on page 3)

# Safety Data Sheet
**according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS**

**Printing date:** 31.12.2013 **Revision:** 31.12.2013

**Trade name: ALCONOX**

(Contd. of page 2)

## 3 Composition/information on ingredients

· **3.2 Mixtures**
· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

| | | |
|---|---|---|
| CAS: 68081-81-2 | sodium dodecylbenzene sulfonate<br>Xn R22; Xi R36<br>Acute Tox. 4, H302; Eye Irrit. 2, H319 | 10-25% |
| CAS: 497-19-8<br>EINECS: 207-838-8<br>Index number: 011-005-00-2 | Sodium Carbonate<br>Xi R36<br>Eye Irrit. 2, H319 | 2,5-10% |
| CAS: 7722-88-5<br>EINECS: 231-767-1 | tetrasodium pyrophosphate<br>substance with a Community workplace exposure limit | 2,5-10% |
| CAS: 151-21-3<br>EINECS: 205-788-1 | sodium dodecyl sulphate<br>Xn R21/22; Xi R36/38<br>Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Irrit. 2, H319 | 2,5-10% |

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

## 4 First aid measures

· **4.1 Description of first aid measures**
· **After inhalation:** Supply fresh air; consult doctor in case of complaints.
· **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
· **After eye contact:**
Remove contact lenses if worn.
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
· **After swallowing:**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; call for medical help immediately.
· **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
· **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

## 5 Firefighting measures

· **5.1 Extinguishing media**
· **Suitable extinguishing agents:**
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

(Contd. on page 4)

# Safety Data Sheet
## according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS

**Printing date:** 31.12.2013 **Revision:** 31.12.2013

**Trade name: ALCONOX**

(Contd. of page 3)

· **5.2 Special hazards arising from the substance or mixture:** No further relevant information available.
· **5.3 Advice for firefighters**
· **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.
· **Additional information:** No further relevant information available.

## 6 Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Product forms slippery surface when combined with water.
· **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
· **6.3 Methods and material for containment and cleaning up:**
Pick up mechanically.
Clean the affected area carefully; suitable cleaners are:
Warm water
· **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

## 7 Handling and storage

· **7.1 Precautions for safe handling**
Prevent formation of dust.
Keep receptacles tightly sealed.
· **Information about fire - and explosion protection:** No special measures required.

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** No special requirements.
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:** Protect from humidity and water.
· **7.3 Specific end use(s):** No further relevant information available.

## 8 Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· **8.1 Control parameters**

| · **Ingredients with limit values that require monitoring at the workplace:** | |
|---|---|
| **7722-88-5 tetrasodium pyrophosphate** | |
| REL (USA) | 5 mg/m³ |
| TLV (USA) | TLV withdrawn |
| EV (Canada) | 5 mg/m³ |

(Contd. on page 5)

# Safety Data Sheet
## according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS

**Printing date:** 31.12.2013 **Revision:** 31.12.2013

**Trade name: ALCONOX**

(Contd. of page 4)

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the skin.
Avoid contact with the eyes and skin.
· **Respiratory protection:**
Not required under normal conditions of use.
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
· **Protection of hands:**


Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
· **Material of gloves**
Butyl rubber, BR
Nitrile rubber, NBR
Natural rubber, NR
Neoprene gloves
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.
· **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Eye protection:**


Safety glasses

· **Body protection:** Protective work clothing

(Contd. on page 6)

# Safety Data Sheet
## according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS

**Printing date:** 31.12.2013 **Revision:** 31.12.2013

**Trade name: ALCONOX**

(Contd. of page 5)

## 9 Physical and chemical properties

| | |
|---|---|
| · **9.1 Information on basic physical and chemical properties** | |
| · **General Information** | |
| · **Appearance:** | |
| **Form:** | Powder |
| **Colour:** | White |
| · **Odour:** | Odourless |
| · **Odour threshold:** | Not determined. |
| · **pH-value (10 g/l) at 20 °C:** | 9,5 (- NA for Powder form) |
| · **Change in condition** | |
| **Melting point/Melting range:** | Not Determined. |
| **Boiling point/Boiling range:** | Undetermined. |
| · **Flash point:** | Not applicable. |
| · **Flammability (solid, gaseous):** | Not determined. |
| · **Ignition temperature:** | |
| **Decomposition temperature:** | Not determined. |
| · **Self-igniting:** | Product is not self-igniting. |
| · **Danger of explosion:** | Product does not present an explosion hazard. |
| · **Explosion limits:** | |
| **Lower:** | Not determined. |
| **Upper:** | Not determined. |
| · **Vapour pressure:** | Not applicable. |
| · **Density at 20 °C:** | 1,1 g/cm³ |
| · **Relative density** | Not determined. |
| · **Vapour density** | Not applicable. |
| · **Evaporation rate** | Not applicable. |
| · **Solubility in / Miscibility with water:** | Soluble. |
| · **Partition coefficient (n-octanol/water):** | Not determined. |
| · **Viscosity:** | |
| **Dynamic:** | Not applicable. |
| **Kinematic:** | Not applicable. |
| · **Solvent content:** | |
| **Organic solvents:** | 0,0 % |
| **Solids content:** | 100 % |
| · **9.2 Other information** | No further relevant information available. |

(Contd. on page 7)

# Safety Data Sheet
## according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS

**Printing date:** 31.12.2013 **Revision:** 31.12.2013

**Trade name: ALCONOX**

(Contd. of page 6)

## 10 Stability and reactivity

· **10.1 Reactivity**
· **10.2 Chemical stability**
· **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
· **10.3 Possibility of hazardous reactions**
Reacts with acids.
Reacts with strong alkali.
Reacts with strong oxidizing agents.
· **10.4 Conditions to avoid:** No further relevant information available.
· **10.5 Incompatible materials:** No further relevant information available.
· **10.6 Hazardous decomposition products:**
Carbon monoxide and carbon dioxide
Phosphorus compounds
Sulphur oxides (SOx)

## 11 Toxicological information

· **11.1 Information on toxicological effects**
· **Acute toxicity:**
· **Primary irritant effect:**
· **On the skin:** Irritant to skin and mucous membranes.
· **On the eye:** Strong irritant with the danger of severe eye injury.
· **Sensitization:** No sensitizing effects known.
· **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Irritant
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

## 12 Ecological information

· **12.1 Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **12.2 Persistence and degradability:** No further relevant information available.
· **12.3 Bioaccumulative potential:** Not worth-mentioning accumulating in organisms
· **12.4 Mobility in soil:** No further relevant information available.
· **Additional ecological information:**
· **General notes:**
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
· **12.5 Results of PBT and vPvB assessment**
· **PBT:** Not applicable.

(Contd. on page 8)

# Safety Data Sheet
## according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS

**Printing date:** 31.12.2013 **Revision:** 31.12.2013

**Trade name: ALCONOX**

(Contd. of page 7)

· **vPvB:** Not applicable.
· **12.6 Other adverse effects:** No further relevant information available.

## 13 Disposal considerations

· **13.1 Waste treatment methods**
· **Recommendation**
Smaller quantities can be disposed of with household waste.
Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.
The surfactant used in this product complies with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

· **Uncleaned packaging:**
· **Recommendation:** Disposal must be made according to official regulations.
· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

## 14 Transport information

| | |
|---|---|
| · **14.1 UN-Number**<br>· **DOT, ADR, IMDG, IATA, ICAO** | Not Regulated |
| · **14.2 UN proper shipping name**<br>· **DOT, ADR, IMDG, IATA, ICAO** | Not Regulated |
| · **14.3 Transport hazard class(es)**<br>· **DOT, ADR, IMDG, IATA, ICAO**<br>· **Class** | Not Regulated |
| · **14.4 Packing group**<br>· **DOT, ADR, IMDG, IATA, ICAO** | Not Regulated |
| · **14.5 Environmental hazards:**<br>· **Marine pollutant:** | No |
| · **14.6 Special precautions for user** | Not applicable. |
| · **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** | Not applicable. |
| · **UN "Model Regulation":** | Not Regulated |

(Contd. on page 9)

**Printing date:** 31.12.2013 **Revision:** 31.12.2013

**Trade name: ALCONOX**

(Contd. of page 8)

## 15 Regulatory information

· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
· **United States (USA)**
· **SARA**

| · **Section 355 (extremely hazardous substances):** |
|---|
| None of the ingredients is listed. |
| · **Section 313 (Specific toxic chemical listings):** |
| None of the ingredients is listed. |
| · **TSCA (Toxic Substances Control Act):** |
| All ingredients are listed. |

· **Proposition 65 (California):**

| · **Chemicals known to cause cancer:** |
|---|
| None of the ingredients is listed. |
| · **Chemicals known to cause reproductive toxicity for females:** |
| None of the ingredients is listed. |
| · **Chemicals known to cause reproductive toxicity for males:** |
| None of the ingredients is listed. |
| · **Chemicals known to cause developmental toxicity:** |
| None of the ingredients is listed. |

· **Carcinogenic Categories**

| · **EPA (Environmental Protection Agency)** |
|---|
| None of the ingredients is listed. |
| · **IARC (International Agency for Research on Cancer)** |
| None of the ingredients is listed. |
| · **TLV (Threshold Limit Value established by ACGIH)** |
| None of the ingredients is listed. |
| · **NIOSH-Ca (National Institute for Occupational Safety and Health)** |
| None of the ingredients is listed. |
| · **OSHA-Ca (Occupational Safety & Health Administration)** |
| None of the ingredients is listed. |

(Contd. on page 10)

# Safety Data Sheet
## according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS

**Printing date:** 31.12.2013 **Revision:** 31.12.2013

**Trade name: ALCONOX**

(Contd. of page 9)

· **Canada**

| · **Canadian Domestic Substances List (DSL)** | |
|---|---|
| All ingredients are listed. | |
| · **Canadian Ingredient Disclosure list (limit 0.1%)** | |
| None of the ingredients is listed. | |
| · **Canadian Ingredient Disclosure list (limit 1%)** | |
| 497-19-8 | Sodium Carbonate |
| 7722-88-5 | tetrasodium pyrophosphate |
| 151-21-3 | sodium dodecyl sulphate |

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**
H302: Harmful if swallowed.
H312: Harmful in contact with skin.
H315: Causes skin irritation.
H319: Causes serious eye irritation.

R21/22: Harmful in contact with skin and if swallowed.
R22: Harmful if swallowed.
R36: Irritating to eyes.
R36/38: Irritating to eyes and skin.

· **Abbreviations and acronyms:**
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
ACGIH: American Conference of Governmental Industrial Hygienists
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)

**Attachment B - Blank TIP Form**

## Task Improvement Process

### General

| | |
|---|---|
| **TIP ID** | |
| **Observed Company** | |
| **Observation Type** | |
| **TIP Form** | |
| **Task Observed** | |
| **Observee Name** | |
| **Observer Name** | |
| **Observation Date** | |
| **Project Number** | |
| **Project Name** | |
| **Supervisor** | |
| **Equipment On Site** | |
| **Pertinent Information** | |

### Observations

| Task | Correct | Questionable | Comments |
|---|---|---|---|
| **H&S - Field Multi-task (General)** | | | |
| **General** | | | |
| PPE worn according to HASP/JLA specifications and inspected before use | ☐ | ☐ | |
| STOP work authority used where appropriate | ☐ | ☐ | |
| **Body Use/Positioning** | | | |
| Proper lifting/pushing / pulling techniques used (no awkward positions/posture; no twisting or excessive reaching; no straining; no excessive weight; load under control/stable; etc.) | ☐ | ☐ | |
| Body parts away from pinch points (clear or protected from being caught between objects/equipment or from contacting sharp objects/edges, etc.) | ☐ | ☐ | |
| Body parts not in the Line of Fire (protected from being struck by traffic, equipment, falling/flying objects, etc.) | ☐ | ☐ | |
| **Work Procedures/Environment** | | | |
| Correct type and number of barricades/warning devices/cones | ☐ | ☐ | |
| Communication with others when necessary (hand signals, flags, etc.) | ☐ | ☐ | |
| Right tools and equipment selected for the job and inspected before use | ☐ | ☐ | |

**Observations**

| Task | Correct | Questionable | Comments |
|---|---|---|---|
| Tools and equipment used properly | ☐ | ☐ | |
| Housekeeping performed (work areas and pathways clear of hazards, uneven surfaces addressed, etc.) | ☐ | ☐ | |
| Slip/trip/fall hazards addressed (path selected and cleared, eyes on path, speed, footing, etc.) | ☐ | ☐ | |
| Proper energy control (electrical systems grounded, lock out / tag out performed, isolated, cords / fixtures in good condition, GFCI inspected and utilized when appropriate and used properly, etc.) | ☐ | ☐ | |
| Protected from overhead/underground utilities (proper clearance, properly marked, spotters as necessary, etc.) | ☐ | ☐ | |
| Safe work on/near water (appropriate flotation device, appropriate boat for body of water and operation of boat, etc.) | ☐ | ☐ | |
| Chemical/Radiation protection (decontamination ones set up properly, air monitoring completed and logged, etc.) | ☐ | ☐ | |
| Fall from elevated height prevention (maintains 3 -points of contact, appropriate ladder, mounting/dismounting vehicle/equipment, fall arrest system, etc.) | ☐ | ☐ | |
| Any additional safety issues identified? | ☐ | ☐ | |

**TIP Summary**

**Enter the details of the TIP and follow-up discussion. Provide details on how any questionable items were resolved.**

| | |
|---|---|
| Discussion following the TIP led by | |
| Date of follow-up discussion | |
| Positive Comments | |
| Discussion Summary Completed | ☐ Supervisor Led<br>☐ Peer to Peer<br>☐ ARCADIS Employee to Subcontractor |
| Summary of Questionable Items | |

**Action Items (Optional)**

**Assign appropriate action items based on the observations made. You can add more than one action item if needed.**

| Item No. | Action Item | Responsible Person | Due Date | Completed Date |
|---|---|---|---|---|
| 1 | | | | |
| 2 | | | | |

## Action Items (Optional)

**Assign appropriate action items based on the observations made. You can add more than one action item if needed.**

| Item No. | Action Item | Responsible Person | Due Date | Completed Date |
|---|---|---|---|---|
| 3 | | | | |

## Standard Review

| Reviewed By | Position / Title | Completed Date |
|---|---|---|
| | | |
| | | |

## Quality Review

| Reviewed By | Position / Title | Completed Date |
|---|---|---|
| | | |

## Field Validation and Verification Review

| Reviewed By | Position / Title | Completed Date |
|---|---|---|
| | | |

## Task Improvement Process

### General

| | |
|---|---|
| **TIP ID** | |
| **Observed Company** | |
| **Observation Type** | |
| **TIP Form** | |
| **Task Observed** | |
| **Observee Name** | |
| **Observer Name** | |
| **Observation Date** | |
| **Project Number** | |
| **Project Name** | |
| **Supervisor** | |
| **Equipment On Site** | |
| **Pertinent Information** | |

### Observations

| Task | Correct | Questionable | Comments |
|---|---|---|---|
| **H&S - Drilling-Borings/Well Installation** | | | |
| **Equipment Care and Maintenance** | | | |
| PPE worn according to HASP/JLA specifications and inspected before use | ☐ | ☐ | |
| STOP work authority used where appropriate | ☐ | ☐ | |
| Electrical systems grounded, lock out / tag out performed, cords / fixtures in good condition | ☐ | ☐ | |
| Corded portable power tool or other cord connected equipment plugged into a GFCI whip and GFCI whip plugged directly into power source (electrical outlet) | ☐ | ☐ | |
| GFCI whip inspected, tested, and appropriate size for the equipment | ☐ | ☐ | |
| Wheel chocks in place on heavy vehicles and trailers | ☐ | ☐ | |
| Tool selection/use appropriate for job and inspected before | ☐ | ☐ | |
| Air monitoring equipment is on site, calibrated | ☐ | ☐ | |
| Containers with hazardous materials properly labeled; other containers appropriately labeled; compressed gas bottles separated, secured & upright | ☐ | ☐ | |
| Drill rig appropriate for task, inspected prior to use and in good condition | ☐ | ☐ | |

**Observations**

| Task | Correct | Questionable | Comments |
|---|---|---|---|
| High energy systems -mud/air/water (hose condition, hose routing, whip checks, and pop offs) inspected and functional | ☐ | ☐ | |
| Hoisting equipment, slings, tag lines and chains inspected prior to use, in good condition and used properly | ☐ | ☐ | |
| Emergency shut-off locations functional | ☐ | ☐ | |
| **Work Environment** | | | |
| Onsite vehicles and equipment located and marked properly, backed in when possible | ☐ | ☐ | |
| Underground utility, piping locates completed and locations marked, utilities and structures checklist used and minimum of 3 lines of evidence | ☐ | ☐ | |
| Maintains appropriate distance between equipment and power lines/ overhead obstructions | ☐ | ☐ | |
| Exclusion zone set up properly with correct type and number of barricades | ☐ | ☐ | |
| Work areas and pathways designated and clear of trip/slip hazards; uneven surfaces identified/addressed | ☐ | ☐ | |
| **Work Procedures (Driller)** | | | |
| Proper lifting/pushing/pulling techniques | ☐ | ☐ | |
| 3 points of contact maintained on ladders/steps, no jumping from equipment/platforms | ☐ | ☐ | |
| Pinch points and rotating hazards marked or guarded | ☐ | ☐ | |
| Follows sawcutting and jackhammering procedures and best management practices including mitigation of dust hazards | ☐ | ☐ | |
| Drill rig blocking stable; drill rig not moved when mast is up; spotters used when rig is moved | ☐ | ☐ | |
| Flying debris hazards addressed | ☐ | ☐ | |
| Proper use of tools to handle soil, water during drilling or hole clearance | ☐ | ☐ | |
| Using correct cutting tools to open liners containing soils | ☐ | ☐ | |
| Good housekeeping maintained | ☐ | ☐ | |
| Surface water/run-off diverted from boring | ☐ | ☐ | |
| Soil/water/waste materials stored properly, labeling complete | ☐ | ☐ | |
| Rig movement completely stopped before approaching with workers clear before beginning rotation/movement; rods, auger, casing moved properly, guided with lines | ☐ | ☐ | |
| Use of proper methods to break rods (no use of cheater bars, etc) | ☐ | ☐ | |
| Tag/sand lines used during hoist operations | ☐ | ☐ | |
| Maintain safe distance from moving equipment at full reach | ☐ | ☐ | |

**Observations**

| Task | Correct | Questionable | Comments |
|---|---|---|---|
| Fall protection available and used at heights greater than 6’ | ☐ | ☐ | |
| Open holes protected Proper tools used when installing or opening well lids; well heads closed/locked | ☐ | ☐ | |
| Hands clear of cable when developing new wells | ☐ | ☐ | |
| Personnel deconned per HASP/JLA | ☐ | ☐ | |
| Equipment deconned per HASP/JLA (pressure washer used properly) | ☐ | ☐ | |
| Equipment in passenger compartment/bed of vehicle secured; load distributed evenly | ☐ | ☐ | |
| Any additional safety issues identified? | ☐ | ☐ | |
| **Work Procedures (ARCADIS)** | | | |
| Observee performing required air monitoring at specified intervals | ☐ | ☐ | |
| Uses proper lifting techniques | ☐ | ☐ | |
| Not using awkward body positions or heavy lifting when logging samples | ☐ | ☐ | |
| Not using hand tools or hands near borehole to obtain cuttings when rig is in operating | ☐ | ☐ | |
| Using correct cutting tools to open liners containing soils | ☐ | ☐ | |
| Maintains communication with driller | ☐ | ☐ | |
| Maintains good housekeeping in work area and in vehicle | ☐ | ☐ | |
| Maintains safe distance from drill stem when rig is operating | ☐ | ☐ | |
| Establishes work area upwind of drill rig to extent possible | ☐ | ☐ | |
| Has established and maintains any required exclusion zones specified by the HASP or JLA | ☐ | ☐ | |
| Use best practices to perform decontamination of soil sampling equipment (avoids over spraying, contain rinsate, avoids spraying towards body, etc) | ☐ | ☐ | |
| Any additional safety issues identified? | ☐ | ☐ | |

**TIP Summary**

**Enter the details of the TIP and follow-up discussion. Provide details on how any questionable items were resolved.**

| | |
|---|---|
| Discussion following the TIP led by | |
| Date of follow-up discussion | |
| Positive Comments | |
| Discussion Summary Completed | ☐ Supervisor Led<br>☐ Peer to Peer<br>☐ ARCADIS Employee to Subcontractor |
| Summary of Questionable Items | |

## Action Items (Optional)

Assign appropriate action items based on the observations made. You can add more than one action item if needed.

| Item No. | Action Item | Responsible Person | Due Date | Completed Date |
|---|---|---|---|---|
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |

## Standard Review

| Reviewed By | Position / Title | Completed Date |
|---|---|---|
| | | |
| | | |

## Quality Review

| Reviewed By | Position / Title | Completed Date |
|---|---|---|
| | | |

## Field Validation and Verification Review

| Reviewed By | Position / Title | Completed Date |
|---|---|---|
| | | |

## Task Improvement Process

### General

| | |
|---|---|
| **TIP ID** | |
| **Observed Company** | |
| **Observation Type** | |
| **TIP Form** | |
| **Task Observed** | |
| **Observee Name** | |
| **Observer Name** | |
| **Observation Date** | |
| **Project Number** | |
| **Project Name** | |
| **Supervisor** | |
| **Equipment On Site** | |
| **Pertinent Information** | |

### Observations

| Task | Correct | Questionable | Comments |
|---|---|---|---|
| **H&S - Groundwater Sampling** | | | |
| **Equipment Care and Maintenance** | | | |
| PPE worn according to HASP/JLA specifications and inspected before use | ☐ | ☐ | |
| Spill kit, absorbent pads, or other materials available to contain spills. Storm drains or surface water drainage areas protected | ☐ | ☐ | |
| Required monitoring equipment calibrated and used | ☐ | ☐ | |
| Right tools for the job are identified, available, inspected and in good condition | ☐ | ☐ | |
| Electrical systems:<br>a) Grounded<br>b) Lock out / tag out performed | ☐ | ☐ | |
| Battery powered equipment properly connected and disconnected (connect positive then negative, disconnect negative then positive) | ☐ | ☐ | |
| Corded portable power tool or other cord connected equipment is plugged into a GFCI whip and the GFCI whip is plugged directly into the power source (electrical outlet) | ☐ | ☐ | |
| GFCI whip has been inspected and tested, and is appropriate size for the equipment | ☐ | ☐ | |
| Battery posts protected from short circuit | ☐ | ☐ | |

**Observations**

| Task | Correct | Questionable | Comments |
|---|---|---|---|
| Air monitoring equipment is on site, calibrated according to manufacturer instructions | ☐ | ☐ | |
| STOP work authority used where appropriate | ☐ | ☐ | |
| **Work Environment** | | | |
| Exclusion zone set up properly with correct type and number of barricades, warning devices, delineators | ☐ | ☐ | |
| Site specific traffic hazards addressed | ☐ | ☐ | |
| Well manhole/vault inspected for hazards | ☐ | ☐ | |
| Proper tools or equipment used to remove well manhole/vault covers | ☐ | ☐ | |
| Standing water in well manholes/vaults adequately removed prior to opening well | ☐ | ☐ | |
| Observee not directly over well equipped with water tight cap when removing cap | ☐ | ☐ | |
| Vapors in well allowed to ventilate after opening well | ☐ | ☐ | |
| Well headspace vapor concentration measured when required by HASP or work plan | ☐ | ☐ | |
| Work areas and pathways designated and clear of trip/slip hazards; uneven surfaces addressed | ☐ | ☐ | |
| **Work Procedures: Well Gauging/Purging/Sampling** | | | |
| Knee pads used when kneeling for extended periods of time | ☐ | ☐ | |
| Proper lifting/pushing/pulling techniques | ☐ | ☐ | |
| Correct body positioning (e.g., not bending at waist to gauge wells) | ☐ | ☐ | |
| Proper handling of sample bottles (for example, hand positioning, PPE, not over tightening lids and avoiding glass bottle contact with other objects) | ☐ | ☐ | |
| Dedicated bailers, disposable bailers or properly decontaminated sampling equipment placed in well, water level indicators and oil/water interface probes properly decontaminated | ☐ | ☐ | |
| Purge water containerized or disposed of per the HASP/JLA | ☐ | ☐ | |
| Purge water is containerized, observee is using the proper labeling and marking requirements as required by the project work plan and/or shipping determination | ☐ | ☐ | |
| DOT HazMat #1 trained person collecting samples | ☐ | ☐ | |
| **Work Procedures: Free Product Purg/Bail/Samp/Coll** | | | |
| PPE as specified in HASP/JLA is donned | ☐ | ☐ | |
| Ensured vehicles and structures adequately ventilated to minimize organic vapor levels | ☐ | ☐ | |

**Observations**

| Task | Correct | Questionable | Comments |
|---|---|---|---|
| Free product is managed for shipment in accordance with the project shipping determination | ☐ | ☐ | |
| Purge water, product, decontamination rinsate water, and other wastes properly stored and secured; disposable equipment containerized or disposed of properly | ☐ | ☐ | |
| **Work Procedures: End of Job** | | | |
| All well caps/plugs and well/vault lids secure and locked | ☐ | ☐ | |
| Housekeeping/site left in proper condition and secured | ☐ | ☐ | |
| Materials of Trade (e.g., compressed gas cylinders, preservatives, calibration solutions) properly secured during transport | ☐ | ☐ | |
| Items stowed in vehicle properly | ☐ | ☐ | |
| Any additional safety issues identified? | ☐ | ☐ | |

**TIP Summary**

**Enter the details of the TIP and follow-up discussion. Provide details on how any questionable items were resolved.**

| | |
|---|---|
| Discussion following the TIP led by | |
| Date of follow-up discussion | |
| Positive Comments | |
| Discussion Summary Completed | ☐ Supervisor Led<br>☐ Peer to Peer<br>☐ ARCADIS Employee to Subcontractor |
| Summary of Questionable Items | |

**Action Items (Optional)**

**Assign appropriate action items based on the observations made. You can add more than one action item if needed.**

| Item No. | Action Item | Responsible Person | Due Date | Completed Date |
|---|---|---|---|---|
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |

**Standard Review**

| Reviewed By | Position / Title | Completed Date |
|---|---|---|
| | | |

| Standard Review | | |
|---|---|---|
| **Reviewed By** | **Position / Title** | **Completed Date** |
| | | |

| Quality Review | | |
|---|---|---|
| **Reviewed By** | **Position / Title** | **Completed Date** |
| | | |

| Field Validation and Verification Review | | |
|---|---|---|
| **Reviewed By** | **Position / Title** | **Completed Date** |
| | | |

**Attachment C - Utility Checklist**

# Utilities and Structures Checklist

Project: _____
Project Number: _____
Date: _____

Work locations applicable to this clearance checklist **(Photo Document Work Locations)**:

**THIS FORM MUST BE COMPLETED IN ENTIRETY PRIOR TO BEGINNING ANY INTRUSIVE WORK**

**Pre-Field Work**

One Call or "811" notified 48-72 hours in advance of work? ☐ Yes ☐ No

Utility companies notified during the One Call process ☐ See attached ticket

_____ _____ _____ _____
_____ _____ _____ _____

List any other utilities requiring notification: ☐ None

_____ _____ _____ _____

Private Locator Contacted ☐ Yes ☐ No

Plan private utility clearance subcontractor assignments, areas, required clearance equipment, depth of clearance needed, types of utilities

Client provided utility maps or "as built" drawings showing utilities? ☐ Yes ☐ No

**Field Work** - This must be completed on site, by staff who have a minimum of one year of field experience in identifying utilities

**Lines of Evidence** - Must have **3 Reliable Lines of Evidence** Prior to Starting any Intrusive Work

☐ One Call/"811"

Utility Markings Present: ☐ Paint ☐ Pin flags/stakes ☐ Other ☐ None

☐ Client Provided Maps/Drawings **OR** ☐ Maps/Drawings requested but not provided

☐ Client Clearance Name(s)/Affiliation(s) _____

☐ Interview(s): Name(s)/Affiliation(s) _____

_____

Did person(s) interviewed indicate depths of any utilities in the subsurface?

☐ Yes, depths provided:

☐ Did not know or refused to answer

Additional Comments:

☐ Site Inspection & Complete Site Sketch **(Photo Document Marked Utilities & Utility Structures)**

☐ GPR

☐ Air-Knife

☐ Hydro-Knife

☐ Public Records/Maps

☐ Radiofrequency

☐ Metal Detector

☐ Handauger

☐ Potholing

☐ Probing

☐ Private Locator: Name and Company: _____

☐ Marine Locator: Name and Company: _____

☐ Other: _____

_____

**Tips for Successful Utility Location:**

1. Don't forget to look up
2. Be on site when utilizing private utility locators
3. Select alternate/backup locations during clearance process
4. Mark out all known utilities. Leave nothing to question
5. No hammering- no pickaxes-no digging bars-no hurrying or shortcutting
6. No excessive turning or downward force of handaugers/shovels, etc.
7. Utilities may run directly under asphalt/concrete or be > 5 ft. in depth

T R A C K

**Site Inspection**

ARCADIS
Infrastructure · Water · Environment · Buildings

# Utilities and Structures Checklist

During the site inspection look for the following **("YES" requires additional investigation and must be marked properly prior to performing intrusive work)**:

| | | Utility Color Codes | | |
|---|---|---|---|---|
| a) | Natural gas line present (evidence of a gas meter)? | Yellow | ☐ Yes | ☐ No |
| b) | Evidence of electric lines: | Red | | |
| | i) Conduits to ground from electric meter or along wall? | | ☐ Yes | ☐ No |
| | ii) Light poles, electric devices with no overhead lines? | | ☐ Yes | ☐ No |
| | iii) Overhead electric lines present? | | ☐ Yes | ☐ No |
| c) | Evidence of sewer drains: | Green | | |
| | i) Restrooms or kitchen on site? | | ☐ Yes | ☐ No |
| | ii) Sewer cleanouts present? | | ☐ Yes | ☐ No |
| | iii) Combined sewer /storm lines or multiple sewer lines? | | ☐ Yes | ☐ No |
| d) | Evidence of water lines: | Blue | | |
| | i) Water meter on site or multiple water lines? | | ☐ Yes | ☐ No |
| | ii) Fire hydrants in vicinity of work? | | ☐ Yes | ☐ No |
| | iii) Irrigation systems? (Sprinkler heads, valve boxes, controls in building) | | ☐ Yes | ☐ No |
| e) | Evidence of storm drains: | Green | | |
| | i) Open curbside or slotted grate storm drains | | ☐ Yes | ☐ No |
| | ii) Gutter down spouts going into ground | | ☐ Yes | ☐ No |
| f) | Evidence of telecommunication lines: | Orange | | |
| | i) Fiber optic warning signs in areas? | | ☐ Yes | ☐ No |
| | ii) Lines from cable boxes running into ground? | | ☐ Yes | ☐ No |
| | iii) Conduits from power poles running into ground? | | ☐ Yes | ☐ No |
| | iv) Aboveground boxes or housings or wires in work area? | | ☐ Yes | ☐ No |
| g) | Underground storage tanks: | | | |
| | i) Tank pit present? | | ☐ Yes | ☐ No |
| | ii) Product lines running to dispensers/buildings? | | ☐ Yes | ☐ No |
| | iii) Vent present away from tank pit? | | ☐ Yes | ☐ No |
| h) | Do utilities enter or exit existing structures/buildings? | | ☐ Yes | ☐ No |
| | If Yes, confirm the utility markings outside of structure/building match up. | | | |
| i) | Proposed excavation marked in white? | White | ☐ Yes | ☐ No |
| j) | Overhead Utilities/Communication Lines **Look Up**: | | | |
| | i) Overhead electrical conduit, pipe chases, cable trays ? | | ☐ Yes | ☐ No |
| | ii) Overhead fire sprinkler system? | | ☐ Yes | ☐ No |
| | iii) Other overhead lines/utilities, product lines, AC condenser lines? | | ☐ Yes | ☐ No |
| k) | Aboveground Power lines in or near the work area: | | | |
| | i) < 50 kV within 10 ft. of work area? | | ☐ Yes | ☐ No |
| | ii) >50 - 200 kV within 15 ft. of work area? | | ☐ Yes | ☐ No |
| | iii) >200-350 kV within 20 ft. of work area? | | ☐ Yes | ☐ No |
| | iv) >350-500 kV within 25 ft. of work area? | | ☐ Yes | ☐ No |
| | v) >500-750 kV within 35 ft. or work area? | | ☐ Yes | ☐ No |
| | vi) >750-1000 kV within 45 ft. of work area? | | ☐ Yes | ☐ No |
| l) | Other: | | | |
| | i) Evidence of linear asphalt or concrete repair? | | ☐ Yes | ☐ No |
| | ii) Evidence of linear ground subsidence or change in vegetation? | | ☐ Yes | ☐ No |
| | iii) Unmarked manholes or valve covers in work area? | | ☐ Yes | ☐ No |
| | iv) Warning signs ("Call Before you Dig", etc.) on or adjacent to site? | | ☐ Yes | ☐ No |
| | v) Utility color markings not illustrated in this checklist? | | ☐ Yes | ☐ No |

Do not initiate intrusive work if utilities are suspected to be present in area and are not located, if markings are over 14 days old, or if clearance methods provide incomplete or conflicting information. Do not perform intrusive work within 30 inches of a utility marking without receiving pre-approval by Corporate H&S .

Name and Signature of person completing the checklist: _____

Date: _____ _____

**Attachment D - Tailgate H&S Form**

ARCADIS

Document Control Number:TGM - _____

TGM + *project number plus date as follows: xxxxxxxx.xxxx.xxxxx - dd/mm/year*

# TAILGATE HEALTH & SAFETY MEETING FORM

This form documents the tailgate meeting conducted in accordance with the Project HASP. Personnel who perform work operations on-site during the day are required to attend this meeting and to acknowledge their attendance, at least daily.

| **Project Name:** | | | **Project Location:** |
|---|---|---|---|
| **Date:** | **Time:** | **Conducted by:** | **Signature/Title:** |
| **Client:** | | **Client Contact:** | **Subcontractor companies:** |

## TRACKing the Tailgate Meeting

**T**hink through the Tasks (list the tasks for the day):

1 _____ 3 _____ 5 _____

2 _____ 4 _____ 6 _____

**Other Hazardous Activities -** Check the box if there are any other ARCADIS, Client or other party activities that may pose hazards to ARCADIS operations ☐ If there are none, write "None" here: _____

If yes, describe them here: _____

How will they be controlled? _____

**Prework Authorization -** check activities to be conducted that require permit issuance or completion of a checklist or similar before work begins:

| | Doc # | | Doc # | | Doc # |
|---|---|---|---|---|---|
| ☐ Not applicable | | ☐ Working at Height | | ☐ Confined Space | |
| ☐ Energy Isolation (LOTO) | | ☐ Excavation/Trenching | | ☐ Hot Work | |
| ☐ Mechanical Lifting Ops | | ☐ Overhead & Buried Utilities | | ☐ Other permit | |

**Discuss following questions** (for some review previous day's post activities). **Check if yes :**

| | | |
|---|---|---|
| ☐ Incidents from day before to review? | ☐ Lessons learned from the day before? | ☐ Any Stop Work Interventions yesterday? |
| ☐ Any corrective actions from yesterday? | ☐ Will any work deviate from plan? | ☐ If deviations, notify PM & client |
| ☐ JSAs or procedures are available? | ☐ Field teams to "dirty" JSAs, as needed? | ☐ All equipment checked & OK? |
| ☐ Staff has appropriate PPE? | ☐ Staff knows Emergency Plan (EAP)? | ☐ Staff knows gathering points? |

☐ Topics from Corp H&S to cover?

Comments: _____

**R**ecognize the hazards (check all those that are discussed) (Examples are provided) and **A**ssess the Risks (Low, Medium, High - circle risk level) - Provide an overall assessment of hazards to be encountered today and briefly list them under the hazard category.

| | | |
|---|---|---|
| ☐ Gravity (i.e., ladder, scaffold, trips) (L M H) | ☐ Motion (i.e., traffic, moving water) (L M H) | ☐ Mechanical (i.e., augers, motors) (L M H) |
| ☐ Electrical (i.e., utilities, lightning) (L M H) | ☐ Pressure (i.e., gas cylinders, wells) (L M H) | ☐ Environment (i.e., heat, cold, ice) (L M H) |
| ☐ Chemical (i.e., fuel, acid, paint) (L M H) | ☐ Biological (i.e., ticks, poison ivy) (L M H) | ☐ Radiation (i.e., alpha, sun, laser) (L M H) |
| ☐ Sound (i.e., machinery, generators) (L M H) | ☐ Personal (i.e. alone, night, not fit) (L M H) | ☐ Driving (i.e. car, ATV, boat, dozer) (L M H) |

**Continue TRACK Process on Page 2**

# TAILGATE HEALTH & SAFETY MEETING FORM - Pg. 2

**Control** the hazards (Check all and discuss those methods to control the hazards that will be implemented for the day): Review the HASP, applicable JSAs, and other control processes. Discuss and document any additional control processes.

| | | | | | |
|---|---|---|---|---|---|
| X | **STOP WORK AUTHORITY** (Must be addressed in every Tailgate meeting - (*See statements below*) | | | | |
| | Elimination | | Substitution | | Isolation |
| | Engineering controls | | Administrative controls | | Monitoring |
| | General PPE Usage | | Hearing Conservation | | Respiratory Protection |
| | Personal Hygiene | | Exposure Guidelines | | Decon Procedures |
| | Emergency Action Plan (EAP) | | Fall Protection | | Work Zones/Site Control |
| | JSA to be developed/used ***(specify)*** | | TIP conducted ***(specify job/JSA)*** | | Traffic Control |
| | | | | | Other ***(specify)*** |

## Signature and Certification Section - Site Staff and Visitors

| Name/Company/Signature | Initial & Sign in Time | Initial & Sign out Time | I have read and understand the HASP |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**Important Information and Numbers**

All site staff should arrive fit for work. If not, they should report to the supervisor any restrictions or concerns.

In the event of an injury, employees will call WorkCare at 1.800.455.6155 and then notify the field supervisor who will, in turn, notify Corp H&S at 1.720.344.3844.

In the event of a motor vehicle accident, employees will notify the field supervisor who will then notify Corp H&S at 1.720.344.3844 and then Corp Legal at 1.720.344.3756.

In the event of a utility strike or other damage to property of a client or 3rd party, employees will immediately notify the field supervisor, who will then immediately notify Corp Legal at 1.678.373.9556 and Corp H&S at 1.720.344.3500

**Visitor Name/Co - not involved in work**

In Out

In Out

In Out

In Out

**I will STOP** the job any time anyone is concerned or uncertain about health & safety or if anyone identifies a hazard or additional mitigation not recorded in the site, project, job or task hazard assessment.

**I will be** alert to any changes in personnel, conditions at the work site or hazards not covered by the original hazard assessments.

If it is necessary to **STOP THE JOB,** I will perform **TRACK**; and then amend the hazard assessments or the HASP as needed.

**I will not assist** a subcontractor or other party with their work unless it is absolutely necessary and then only after I have done TRACK and I have thoroughly controlled the hazard.

## Post Daily Activities Review - Review at end of day or before next day's work (Check those applicable and explain:)

- ☐ Lessons learned and best practices learned today: _____
- ☐ Incidents that occurred today: _____
- ☐ Any Stop Work interventions today? _____
- ☐ Corrective/Preventive Actions needed for future work: _____
- ☐ Any other H&S issues: _____

## Keep H&S 1st in all things

**WorkCare** - 1.800.455.6155

**Attachment E - JSAs**

# Job Safety Analysis

## General

| | | | |
|---|---|---|---|
| **JSA ID** | 7272 | **Status** | (3) Completed |
| **Job Name** | General Industry-Site inspection/walkover - commercial/manufacturin | **Created Date** | 4/9/2012 |
| **Task Description** | Walkover-building | **Completed Date** | 04/18/2012 |
| **Template** | True | **Auto Closed** | False |

## Client / Project

| | |
|---|---|
| **Client** | ARCADIS-AGMI |
| **Project Number** | 000000100000 |
| **Project Name** | GENERAL OVERHEAD |
| **PIC** | |
| **Project Manager** | NO PROJECT MANAGER |

## User Roles

| Role | Employee | Due Date | Completed Date | Supervisor | Active |
|---|---|---|---|---|---|
| Developer | Byers, Susan | 4/30/2012 | 4/9/2012 | Edwards, Lauren | o |
| HASP Reviewer | Edwards, Lauren | 4/23/2012 | 4/18/2012 | Balcer, Denis | þ |

## Job Steps

| Job Step No. | Job Step Description | | Potential Hazard | Critical Action | H&S Reference |
|---|---|---|---|---|---|
| 1 | PPE verification | 1 | Lack of adequate PPE at the facility could lead to injury | Prior to traveling to the site, ask the facility representative/escort for information on the types of PPE required. Verify that all necessary PPE is being worn and that PPE is in good working condition. | ARC HSGE015, ARC Field H&S Handbook Sec III-R. |
| 2 | Site safety orientation | 1 | Inability to quickly and safely exit an unfamiliar facility during an emergency | At the start of the site walk, ask the facility representative/escort for information regarding alarms, evacuation routes, and assembly areas. | |
| | | 2 | Inability to recognize hazards prior to handling chemicals | At the start of the site walk, ask the facility representative/escort for the location of Material Safety Data Sheets. | |
| 3 | Building inspection and site walk | 1 | Slips, trips and falls | Use caution when walking on uneven or wet surfaces. Use proper footwear with good traction. Pay attention to where you are walking-including foot placement. Walk in designated areas and pathways. Maintain a safe distance from open holes and unprotected edges. Use handrails on stairways. | ARC HSIH008, ARC HSGE007, ARC HSFS021, ARC HSFS003, ARC HSIH013, Elevated Heights JSA, FHSB |
| | | 2 | Acute exposure to hazardous chemicals | Wear appropriate gloves and eye protection when examining containers holding chemicals, wastes, and other potentially hazardous materials. Note the location of nearby eyewash stations and safety showers. Do not handle containers that are unlabeled or that are leaking. Do not open any chemical containers. | |
| | | 3 | Falling from ladders | Climb ladders slowly, one person at a time. Maintain three points of contact. Do not climb fixed ladders that require fall protection (above 24 feet). Do not use portable ladders | |
| | | 4 | Falling from elevated heights | Do not walk on elevated areas (greater than 4 feet above lower level) unless protected with a guardrail. Do not walk on scaffolding. | |
| | | 5 | Falling from roofs | Do not walk on building roofs unless edges are protected with guardrails and skylights are guarded with railing or screens. | |
| | | 6 | Hearing damage | Wear hearing protection when noise exceeds 85 dBA and in any areas labeled as requiring | ARC Field H&S Handbook Sec III-L |

| | | | | |
|---|---|---|---|---|
| | | | hearing protection. | |
| | | 7 | Hazardous atmosphere or entrapment in a confined space | Do not enter confined spaces, crawl spaces, tanks, utility vaults, or trenches. | ARC Field H&S Handbook Sec III-Y |
| | | 8 | Vehicle / pedestrian accidents | Use caution when walking in areas with vehicle or forklift traffic. Establish eye contact with equipment operators. Maintain a safe distance from moving vehicles and equipment. | |
| | | 9 | Heat illness | If the site walk involves the inspection of outdoor areas in weather conditions that pose a risk for heat illness (based on temperature, humidity, and sunshine), apply sunscreen and bring drinking water to the site walk. | ARC Field H&S Handbook Sec III-M |
| | | 10 | Entrapment and pinch points in automatic gates | Do not walk through or underneath automatic gates designed for vehicles or forklifts. | |

## PPE — Personal Protective Equipment

| Type | Personal Protective Equipment | Description | Required |
|---|---|---|---|
| **Eye Protection** | safety glasses | | Required |
| **Foot Protection** | steel-toe boots | | Required |
| **Hand Protection** | chemical resistant gloves (specify type) | as appropriate for chemical hazards | Required |
| **Head Protection** | hard hat | | Required |
| **Hearing Protection** | ear plugs | In excessive noise areas | Required |
| **Miscellaneous PPE** | traffic vest--Class II or III | | Required |

## Supplies

| Type | Supply | Description | Required |
|---|---|---|---|
| **Communication Devices** | mobile phone | | Required |
| **Miscellaneous** | flashlight | | Recommended |

## Review Comments

| Reviewer | | Comments |
|---|---|---|
| **Employee:**<br>**Role**<br>**Review Type**<br>**Completed Date** | Edwards, Lauren<br>HASP Reviewer<br>Approve<br>4/18/2012 | |

# Job Safety Analysis

## General

| | | | |
|---|---|---|---|
| **JSA ID** | 4053 | **Status** | (3) Completed |
| **Job Name** | Infrastructure-Sewer sampling/inspection/measurements | **Created Date** | 12/7/2010 |
| **Task Description** | Confined Space Entry | **Completed Date** | 12/08/2010 |
| **Template** | True | **Auto Closed** | False |

## Client / Project

| | |
|---|---|
| **Client** | ARCADIS-AGMI |
| **Project Number** | 000000100000 |
| **Project Name** | GENERAL OVERHEAD |
| **PIC** | |
| **Project Manager** | NO PROJECT MANAGER |

## User Roles

| Role | Employee | Due Date | Completed Date | Supervisor | Active |
|---|---|---|---|---|---|
| Developer | Casaletta, Robert | 4/23/2012 | 12/7/2010 | Kundert, Brian | o |
| Developer | Rill, Rick | 4/23/2012 | 12/7/2010 | Kirsch, Clair | þ |
| Developer | Tansey, Jason | 4/23/2012 | 12/7/2010 | Stevenson, Robert | o |
| HASP Reviewer | Cameron, Anya | 12/21/2010 | 12/8/2010 | Edwards, Lauren | o |
| Quality Reviewer | Vogelsong, William | 12/8/2010 | 12/8/2010 | Suarez, Gustavo | þ |

## Job Steps

| Job Step No. | Job Step Description | | Potential Hazard | Critical Action | H&S Reference |
|---|---|---|---|---|---|
| 1 | Inspect all entry equipment and verify that air monitoring equipment is calibrated and functioning properly. | 1 | Injury or death | Verify that the multigas monitor is properly calibrated and functioning. The meter must have the ability to measure oxygen, lower explosive limit (LEL),hydrogen sulfide (H2S), and carbon monoxide (CO). | ARCADIS H&S Standard (ARC HSFS003) Confined Space Entry/ ARC Field H&S Handbook Sec III-Y |
| | | 2 | Injury or death | Verify that all equipment is explosion proof or intrinsically safe. | |
| | | 3 | Injury or death. | Inspect entry equipment (ladder, tri-pod, winch, harness, and other mechanisms) to assure they are in good working condition. | |
| 2 | Check weather forecast and coordinate entry operations with client's employees, police, fire and EMS agencies | 1 | Rain storm can cause flooding in confined space. | Check the weather forecast and weather history to ensure that there is not a chance of flooding during the entry into the confined space. | ARC Field H&S Handbook Sec III-I |
| | | 2 | Injury in the confined space, as a result of emergency situations or incidents. | As applicable, contact the client, local safety forces (police & fire) and local EMS for any rescue type situations associated with the Confined Space entry work. Ensure that staff have the necessary training associated with emergency situations in the confined space. | ARC Field H&S Handbook Sec III-Y |
| 3 | Pre-entry meeting | 1 | Injury due to personnel not knowing their job requirements. | Assign the roles of entrants, attendants, and supervisor to employees with the required Confined Space training. | ARCADIS H&S Standard (ARC HSFS003) Confined Space Entry, ARC Field H&S Handbook Sec III-Y |
| | | 2 | Injury or death | Discuss the emergency procedures and review the names of personnel that will be contacted in the event of an emergency. | |
| | | 3 | Injury or death | Conduct a Tailgate Meeting to review the planned work activities and associated hazards for the confined space work period. | |
| | | 4 | Injury or death | Complete the Confined Space Entry Checklist in Section 5 of the ARCADIS H&S | |

| | | | | | |
|---|---|---|---|---|---|
| | | | | Standard (HSFS003 Confined Space Entry). | |
| 4 | Prepare site and enter confined space. | 1 | Traffic hazards | Use the buddy system to set up traffic control equipment and devices. Refer to the STAR plan or Traffic Control Plan to ensure proper setup. | ARCADIS H&S Standard (ARC HSFS003) Confined Space Entry/ ARC Field H&S Handbook Sec III-Y. |
| | | 2 | Injury, death, and inadequate oxygen levels. | Test the air in confined space with multi gas detector prior to entry. Obtain readings at top, middle, and bottom of confined space to determine atmospheric conditions. | |
| | | 3 | Injury and death, inadequate oxygen, low lighting conditions. | A multi gas meter will be used to continually monitor the air conditions in the confined space. The attendant and the entrant will be in constant contact throughout the entry. Entrant will proceed slowly and will not lose contact with the attendant for any reason while in the confined space. | |
| | | 4 | Slips, trips, falls, and pinch points | Wear steel-toe boots and leather gloves when lifting heavy objects. Bend at the knees when lifting and have a clear path to the location before lifting it.Use buddy system if object is too heavy or bulky. | |
| 5 | Demobilization | 1 | Traffic hazards, lifting strain, pinch points. | Use the buddy system while removing traffic controls. Wear leather gloves while handling barricades and confined space equipment. Bend at the knees when lifting heavy objects. Have a clear path and a location to place the objects before moving it. Cleanup entry equipment and work area. | |

## PPE — Personal Protective Equipment

| Type | Personal Protective Equipment | Description | Required |
|---|---|---|---|
| **Dermal Protection** | chemical protective suit (specify type) | Tyvek | Required |
| | coveralls | | Recommended |
| | long sleeve shirt/pants | | Required |
| **Eye Protection** | safety glasses | | Required |
| **Foot Protection** | outer boot covers | | Recommended |
| | steel-toe boots | | Required |
| **Hand Protection** | work gloves (specify type) | Leather & nitrile | Required |
| **Head Protection** | hard hat | | Required |
| **Miscellaneous PPE** | other | fall arrest rescue harness and tripod | Required |
| | traffic vest--Class II or III | | Required |
| **Respiratory Protection** | supplied air | | Required |

## Supplies

| Type | Supply | Description | Required |
|---|---|---|---|
| **Communication Devices** | mobile phone | | Required |
| | walkie talkie | | Recommended |
| **Miscellaneous** | auxilary lighting | Intrinsically safe Headlamp | Required |
| | fire extinguisher | | Required |
| | first aid kit | | Required |
| | flashlight | Intrinsically safe | Required |
| | Other | ladder or tripod w/winch | Required |
| | Other | duct Tape | Required |
| | Other | Multi Gas meter | Required |
| **Personal** | eye wash (specify type) | Eye saline | Required |
| | insect repellant | deet>90 | Recommended |

| | | | |
|---|---|---|---|
| | water/fluid replacement | | Recommended |
| **Traffic Control** | barricades | | Required |
| | traffic cones | | Required |

## Review Comments

| Reviewer | | Comments |
|---|---|---|
| **Employee:**<br>**Role**<br>**Review Type**<br>**Completed Date** | Cameron, Anya<br>HASP Reviewer<br>Approve<br>12/8/2010 | I would remind staff to complete confined space entry checklists which are mandatory and cover most of this information. Otherwise, this is a great reference guide. |
| **Employee:**<br>**Role**<br>**Review Type**<br>**Completed Date** | Vogelsong, William<br>Quality Reviewer<br>NA<br>12/8/2010 | Excellent; suggest advising, discussing, coordinating entry operations with client's H&S Mngr prior to. |

# Job Safety Analysis

## General

| | | | |
|---|---|---|---|
| **JSA ID** | 45 | **Status** | (3) Completed |
| **Job Name** | Environmental-Groundwater Sampling and free product recovery | **Created Date** | 2/4/2009 |
| **Task Description** | Groundwater sampling | **Completed Date** | 02/06/2009 |
| **Template** | True | **Auto Closed** | False |

## Client / Project

| | |
|---|---|
| **Client** | ARCADIS-AGMI |
| **Project Number** | 000000100000 |
| **Project Name** | GENERAL OVERHEAD |
| **PIC** | |
| **Project Manager** | NO PROJECT MANAGER |

## User Roles

| Role | Employee | Due Date | Completed Date | Supervisor | Active |
|---|---|---|---|---|---|
| Developer | Coppola, Mija | 6/12/2012 | 2/4/2009 | Mcburney, Lowell | þ |
| HASP Reviewer | Coppola, Mija | 2/6/2009 | 2/6/2009 | Mcburney, Lowell | þ |

## Job Steps

| Job Step No. | Job Step Description | | Potential Hazard | Critical Action | H&S Reference |
|---|---|---|---|---|---|
| 1 | Stage at pre-determined sampling location and set up work zone and sampling equipment | 1 | Personnel could be hit by vehicular traffic | Set up cones and establish work area. Position vehicle so that field crew is protected from site traffic. Unload as close to work area as safely possible. | ARC Field H&S Handbook Sec III-G |
| | | 2 | Sampling equipment, tools and monitoring well covers can cause tripping hazard | Keep equipment picked up and use TRACK to assess changes. | |
| 2 | Open wells to equilibrate and gauge wells | 1 | When squatting, personnel can be difficult to see by vehicular traffic. | Wear class II traffic vest if wells are located proximal to vehicular traffic. Use tall cones and the buddy system if practicable. | |
| | | 2 | Pinchpoints on well vault can pinch or lacerate fingers | Use correct tools to open well vault/cap. Wear leather gloves when removing well vault lids, and chemical protective gloves while gauging. Wear proper PPE including safety boots, knee pads and safety glasses. | |
| | | 3 | Lifting sampling equipment can cause muscle strain | Unload as close to work area as safely possible; use proper lifting and reaching techniques and body positioning; don't carry more than you can handle, and get help moving heavy or awkward objects. | |
| | | 4 | Pressure can build up inside well causing cap to release under pressure | Keep head away from well cap when removing. If pressure relief valves are on well use prior to opening well | |
| 3 | Begin Purging Well and Collecting Parameter Measurements | 1 | Electrical shock can occur when connecting/disconnecting pump from the battery. | Make sure equipment is turned off when connecting/disconnecting. Wear leather gloves. Use GFCIs when using powered tools and pumps. Do not use in the rain or run electrical cords through wet areas. | ARC Field H&S Handbook Sec III-AA |
| | | 2 | Purge water can spill or leak from equipment | Stop purging activities immediately, stop leakage and block any drainage grate with absorbent pads. Call PM to notify them of any reportable spill. | |
| | | 3 | Water spilling on the ground can cause muddy/slippery conditions | Be careful walking in work area when using plastic around well to protect from spillage | |
| | | 4 | Lacerations can occur when cutting materials such as plastic tubing | When cutting tubing, use tubing cutter. No open fixed blades should ever be used. When possible wear work gloves, leather type. | |

| | | | | | |
|---|---|---|---|---|---|
| | | 5 | Purge water can splash into eyes | Pour water slowly into buckets/drums to minimize splashing. Wear safety glasses. | |
| 4 | Collect GW or Free Product Sample | 1 | Working with bailer rope can cause rope burns on hands. | Slowly raise and lower the rope or string for the bailer. Wear appropriate gloves for the task. | |
| | | 2 | Sample containers could break or leak preservative | Discard any broken sampleware or glass properly. Do not overtighten sample containers. Wear chemical protective gloves. | |
| 5 | Recovery of Free Product from well | 1 | Exposure to free product | Additional chemical protection may be necessary based on the type of product. Additionally, safety goggles, a faceshield, or respiratory protection may be required. Verify in the HASP. | |
| 6 | Staging of Well Purge water and/or Free Product | 1 | Muscle strains can occur when moving purge water or drums | If using buckets, do not fill buckets up to the top. Always keep lid on buckets when traveling or moving them to another location. Only half fill buckets so when dumping the buckets weigh less. See drum handling JSA for movement of drums. | ARC Field H&S Handbook Sec III-II |

## PPE — Personal Protective Equipment

| Type | Personal Protective Equipment | Description | Required |
|---|---|---|---|
| **Dermal Protection** | long sleeve shirt/pants | | Recommended |
| **Eye Protection** | safety glasses | | Required |
| **Foot Protection** | steel-toe boots | | Required |
| **Hand Protection** | chemical resistant gloves (specify type) | Nitrile | Required |
| | work gloves (specify type) | leather | Required |
| **Head Protection** | hard hat | | Required |
| **Hearing Protection** | ear plugs | | Recommended |
| **Miscellaneous PPE** | other | Knee pads | Required |

## Supplies

| Type | Supply | Description | Required |
|---|---|---|---|
| **Communication Devices** | mobile phone | | Required |
| **Decontamination** | Decon supplies (specify type) | alconox, DI water, spray bottle | Required |
| **Miscellaneous** | fire extinguisher | | Required |
| | first aid kit | | Required |
| | flashlight | | Required |
| **Personal** | eye wash (specify type) | bottle | Required |
| | insect repellant | | Recommended |
| | sunscreen | | Recommended |
| **Traffic Control** | barricades | | Recommended |
| | traffic cones | | Required |

## Review Comments

| Reviewer | | Comments |
|---|---|---|
| **Employee:**<br>**Role**<br>**Review Type**<br>**Completed Date** | Coppola, Mija<br>HASP Reviewer<br>Approve<br>2/6/2009 | |

# Job Safety Analysis

## General

| | | | |
|---|---|---|---|
| **JSA ID** | 6684 | **Status** | (3) Completed |
| **Job Name** | Environmental-Air Monitoring | **Created Date** | 1/24/2012 |
| **Task Description** | Indoor Air Sampling | **Completed Date** | 01/25/2012 |
| **Template** | True | **Auto Closed** | False |

## Client / Project

| | |
|---|---|
| **Client** | ARCADIS-AGMI |
| **Project Number** | 000000100000 |
| **Project Name** | GENERAL OVERHEAD |
| **PIC** | |
| **Project Manager** | NO PROJECT MANAGER |

## User Roles

| Role | Employee | Due Date | Completed Date | Supervisor | Active |
|---|---|---|---|---|---|
| Developer | Edwards, Lauren | 5/22/2012 | 1/24/2012 | Balcer, Denis | þ |
| HASP Reviewer | Edwards, Lauren | 2/7/2012 | 1/25/2012 | Balcer, Denis | þ |
| Quality Reviewer | Lee, Johannes | 2/6/2012 | 2/6/2012 | Proffitt, David | þ |

## Job Steps

| Job Step No. | Job Step Description | | Potential Hazard | Critical Action | H&S Reference |
|---|---|---|---|---|---|
| 1 | Driving to and from sampling locations. | 1 | Striking or being struck by another object or vehicle | Follow the 5 Keys of Smith System Driving | ARC Field H&S Handbook Sec III-U, Motor Vehicle Safety HS Standard ARCHSGE004 |
| 2 | Approach residence and communicate with occupant | 1 | Hostile or agitated occupants. Occupants may be potentially violent. | Use Stop Work Authority. Never approach a residence alone; always use the buddy system. Always have a cell phone. Do not attempt to enter a residence or communicate with it's occupants, if you feel threatened in any way. Leave the property and call 911 if there is clear and present danger. Call PM after contacting the appropriate authorities. Do not attempt to interact with the occupants but leave the area and wait for authorities. Communicate regurlarly with PM, giving addresses of each residence prior to entry. | ARC Field H&S Handbook Sec III-H, Stop Work Authority HS Standard ARCHSGE009 |
| 3 | Enter home to conduct sampling activities | 1 | Hostile or agitated occupants. Occupants may be potentially violent. Weapons may be present. Illegal drug use may be occurring. | Use Stop Work Authority. Never approach a residence alone; always use the buddy system. Always have a cell phone. Do not attempt to enter a residence or communicate with its occupants, if you feel threatened in any way. Leave the property and call 911 if there is clear and present danger. Call PM after contacting the appropriate authorities. Do not attempt to interact with the occupants but leave the area and wait for authorities. Communicate regurlary with PM, giving addresses of each residence prior to entry. | Tailgate Meeting HS Standard, PPE HS Standard, Motor Vehicle Safety HS Standard, ARC Field H&S Handbook Sec III-H |
| | | 2 | Personal hygiene issues in the residence such as extreme filth, animal and/or pet feces, insect infestation. | Use Stop Work Authority. Contact PM and re-evaluate hazards. Do not attempt to communicate with occupants of the residence regarding the conditions of the home. Consult with HR, Legal Department, H&S, project management team, supervisor and client as necessary to determine the safest approach. Re-entry may require additional PPE. | |
| | | 3 | Visible and excessive rodent feces. | Contact PM and re-evaluate hazards. Do not attempt to communicate with occupants of the residence regarding the conditions of the home. If it is determined the re-entry is | |

| | | | | | |
|---|---|---|---|---|---|
| | | | | possible. Level C PPE must be worn, including a minimum P100 particulate air purifying respirator (APR). | |
| 4 | Sample Canister - sampling prep, collection and shipping | 1 | Heavy Lifting | Use a dolly, when necessary, to move canisters to and from your vehicle. Practice good lifting techniques and keep your back straight. Avoid twisting or awkward movements/positions. Remove canisters from the box and transport individually. If the box or other equipment are too heavy, request assistance in lifting. | ARC Field H&S Handbook Sec III-EE |
| | | 2 | Cuts or lacerations from opening the box of canisters | Use appropriate cutting tools such as safety knives and cut away from your body when opening the box. | |
| | | 3 | Pinch points | Use proper tools for adjusting canister valves. Wear gloves when necessary | |
| | | 4 | Limited visibility - evening hours | Have a flashlight available or a head lamp for hands free light. Try and schedule work during daylight hours and end sampling events early enough to allow for clean up before dusk. | |
| 5 | Sub-Slab soil vapor sampling | 1 | Slips, trips, falls. Pinch points. Eye injury from debris. Injury from lifting and carrying equipment. | Wear work gloves when handling equipment/materials. Practice good housekeeping. Unload equipment as close to work area as possible. Keep equipment and supplies organized. Wear work gloves when handling equipment/materials. Use correct size wrenches when assembling sampling train. Use safety goggles. Practice good lifting techniques and keep your back straight. Avoid twisting or awkward movements/positions. Use two people to lift items heavier than 50 pounds. | ARC Field H&S Handbook Sec III--AA,CC,L. |
| | | 2 | Electrical shock from the improper use of power tools (electric hammer drill) | Wear appropriate gloves. Do not remove any safety guards from power tools. Inspect power cords for damage/wear. Be aware of potential for hidden electric sources. Make sure your power source is rated appropriately for the equipment being used. Always unplug equipment before peforming any repairs. | |
| | | 3 | Lacerations from cutting of sample tubing | Use appropriate cutting device and wear gloves when handling blades. Collect purged soil vapor in a Tedlar bag. Discharge purged soil vapor outside building. | |
| | | 4 | Exposure to constituents in soil vapor | Collect purged soil vapor in a Tedlar bag. Discharge purged soil vapor outside building. Perform air monitoring to monitor exposure. | |
| | | 5 | Excessive noise generated by hammer drill operation | During drilling operations, hearing protection should be used. | |

| **PPE** | **Personal Protective Equipment** | | |
|---|---|---|---|
| **Type** | **Personal Protective Equipment** | **Description** | **Required** |
| **Eye Protection** | faceshield | | Required |
| | safety glasses | | Required |
| | safety goggles | When using electric hammer drill | Required |
| **Foot Protection** | boots | | Required |
| | steel-toe boots | w/ steel shank | Required |
| **Hand Protection** | chemical resistant gloves (specify type) | Nitrile | Required |
| | work gloves (specify type) | Leather | Required |
| **Head Protection** | hard hat | If wearing does not cause hazard | Required |
| **Hearing Protection** | ear plugs | | Required |
| **Miscellaneous PPE** | other | Fall protection when working at heights | Required |

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|---|---|---|---|
| **Respiratory Protection** | full face respirator | When sampling friable asbestos | Required |

## Supplies

| Type | Supply | Description | Required |
|---|---|---|---|
| **Communication Devices** | mobile phone | | Required |
| **Miscellaneous** | fire extinguisher | | Required |
| | first aid kit | | Required |
| | flashlight | | Recommended |
| **Personal** | eye wash (specify type) | | Required |

## Review Comments

| Reviewer | | Comments |
|---|---|---|
| **Employee:**<br>**Role**<br>**Review Type**<br>**Completed Date** | Edwards, Lauren<br>HASP Reviewer<br>Approve<br>1/25/2012 | |
| **Employee:**<br>**Role**<br>**Review Type**<br>**Completed Date** | Lee, Johannes<br>Quality Reviewer<br>NA<br>2/6/2012 | 1. Reads like the possibility exists for the building structure to be unsound. If so, beware of trip and fall hazards that may be presented by poor flooring/floor cover conditiion.<br>2. If sampling involves access to attic spaces, will need to have adequate load-supporting temporary stepping platforms between ceiling joists.<br>3. Operations requiring climbing/crawling with hands would indicte the need for hands-free illumination (head/hat-mounted lamps). |

# Job Safety Analysis

## General

| | | | |
|---|---|---|---|
| **JSA ID** | 166 | **Status** | (3) Completed |
| **Job Name** | Environmental-Sample cooler handling | **Created Date** | 5/1/2009 |
| **Task Description** | Sample cooler handling | **Completed Date** | 05/13/2009 |
| **Template** | True | **Auto Closed** | False |

## Client / Project

| | |
|---|---|
| **Client** | ARCADIS-AGMI |
| **Project Number** | 000000100000 |
| **Project Name** | GENERAL OVERHEAD |
| **PIC** | |
| **Project Manager** | NO PROJECT MANAGER |

## User Roles

| Role | Employee | Due Date | Completed Date | Supervisor | Active |
|---|---|---|---|---|---|
| Developer | Coppola, Mija | 12/19/2011 | 5/11/2009 | Mcburney, Lowell | þ |
| HASP Reviewer | Moyers, Sam | 5/25/2009 | 5/13/2009 | Kundert, Brian | þ |

## Job Steps

| Job Step No. | Job Step Description | | Potential Hazard | Critical Action | H&S Reference |
|---|---|---|---|---|---|
| 1 | Transfer field samples to sample packing area | 1 | Lifting heavy coolers may result in muscle strain especially to lower back. | Use proper lifting techniques and keep back straight. Use buddy system for large coolers, Use mechanical aids like hand trucks if readily available to move coolers. Do not over fill coolers with full sample containers for temporary movement to the sample prep area. Ensure an adequate supply of sample coolers are in field. | |
| | | 2 | Hazards to hands from broken glass caused by over tightening lids or improper placement in cooler | Inspect all bottles and bottle caps for cracks/leaks before and after filling container. Do not over tighten sample lids. Clean up any broken bottles immediately, avoid contact with sample preservatives. Wear leather gloves when handling broken glass. | |
| | | 3 | Exposure to chemicals ( acid preservatives or site contaminants) on the exterior of sample bottles after filling. | Wear protective gloves for acid preservatives and safety glasses with side shields during all sample container handling activities (before and after filling), Once filled follow project specific HASP PPE requirements for skin and eye protection. | |
| | | 4 | Samples containing hazardous materials may violate DOT/IATA HazMat shipping regulations | All persons filling a sample bottle or preparing a cooler for shipment must have complete ARCADIS DOT HazMat shipping training. Compare the samples collected to the materials described in the Shipping Determination for the Project and ensure consistent. Re-perform all Shipping determinations if free product is collected and not anticipated during planning. | |
| 2 | Sample cooler selection | 1 | Sample coolers with defective handles, lid hinges, lid hasps cracked or otherwise damaged may result in injury (cuts to hands, crushing of feet if handle breaks etc) | Only use coolers that are new or in like new condition, No rope handled coolers unless part of the manufacturer's handle design. | ARCADIS Shipping Guide US-001 |
| | | 2 | Selection of excessively large coolers introduces lifting hazards once the cooler is filled. | Select coolers and instruct lab to only provide coolers of a size appropriate for the material being shipped. For ordinary sample shipping sample coolers should be 48 quart capacity or smaller to reduce lifting hazards. | |
| 3 | Pack Samples | 1 | Pinch points and abrasions | Beware that lid could slam shut; block/brace | |

| | | | | | |
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| | | | to hands from cooler lid closing unexpectedly | if needed; be wary of packing in strong winds. New coolers may be more prone to self closing, tilt cooler back slightly to facilitate keeping lid open. | |
| | | 2 | Awkward body positions and contact stress to legs and knees when preparing coolers on irregular or hard ground surfaces. | Plan cooler prep activities. Situate cooler where neutral body positions can be maintained if practical, like truck tailgate. Avoid cooler prep on rough gravel surfaces unless knees and legs protected during kneeling. | |
| | | 3 | Frostbite or potential for oxygen deficiency when packing with dry ice. Contact cold stress to fingers handling blue ice or wet ice | Dry ice temperature is -109.30F. Wear thermal protective gloves. DO NOT TOUCH with bare skin! Dry ice sublimates at room temp and could create oxygen deficiency in closed environment. Maintain adequate ventilation! Do not keep dry ice in cab of truck. Wear gloves when handling blue ice or gaging wet ice. Dry Ice is DOT regulated for air shipping, follow procedures in Shipping Determination. | |
| 4 | Sealing, labeling and Marking Cooler | 1 | Cuts to hands and forearms from strapping tape placement or removing old tape and labels | Do not use a fixed, open-blade knife to remove old tags/labels, USE SCISSORS or other safety style cutting device. Only use devices designed for cutting. Do not hurry through task. | |
| | | 2 | Lifting and awkward body position hazards from taping heavy coolers, dropping coolers on feet during taping. | Do not hurry through the taping tasks, ensure samples in cooler are evenly distributed in cooler to reduce potential for overhanging cooler falling off edge of tailgate/table when taping. | |
| | | 3 | Improper labeling and marking may result in violation of DOT/IATA HazMat shipping regulations delaying shipment or resulting in regulatory penalty | Do not deviate from ARCADIS Shipping Guide or Shipping Determination marking or labeling requirements. | |
| 5 | Offering sample cooler to a carrier or lab courier for shipment. | 1 | Lifting heavy coolers may result in muscle strain especially to lower back. | See lifting hazard controls above. | |
| | | 2 | Carrier refusal to accept cooler may cause shipping delay and/or result in violation of DOT HazMat shipping regulations. | Promptly report all rejected and refused shipments to the ARCADIS DOT Program Manager. Do Not re-offer shipment if carrier requires additional labels markings or paperwork inconsistent with your training or Shipping Determination without contacting the ARCADIS DOT Compliance Manager. | |

## PPE — Personal Protective Equipment

| Type | Personal Protective Equipment | Description | Required |
|---|---|---|---|
| **Eye Protection** | safety glasses | | Required |
| **Hand Protection** | chemical resistant gloves (specify type) | nitrile | Required |
| | work gloves (specify type) | leather | Required |

## Supplies

| Type | Supply | Description | Required |
|---|---|---|---|
| **Miscellaneous** | Other | Scissors | Required |

## Review Comments

| Reviewer | | Comments |
|---|---|---|
| **Employee:**<br>**Role**<br>**Review Type**<br>**Completed Date** | Moyers, Sam<br>HASP Reviewer<br>Revise<br>5/11/2009 | Kevlar is required? Leather work gloves are listed. i suggest just leather gloves. |

| | | |
|---|---|---|
| **Employee:** | Moyers, Sam | |
| **Role** | HASP Reviewer | |
| **Review Type** | Approve | |
| **Completed Date** | 5/13/2009 | |

# Job Safety Analysis

## General

| | | | |
|---|---|---|---|
| **JSA ID** | 44 | **Status** | (3) Completed |
| **Job Name** | Environmental-Drilling, soil sampling, well installation | **Created Date** | 2/4/2009 |
| **Task Description** | Drilling, soil sampling, and well installation | **Completed Date** | 02/04/2009 |
| **Template** | True | **Auto Closed** | False |

## Client / Project

| | |
|---|---|
| **Client** | ARCADIS-AGMI |
| **Project Number** | 000000100000 |
| **Project Name** | GENERAL OVERHEAD |
| **PIC** | |
| **Project Manager** | NO PROJECT MANAGER |

## User Roles

| Role | Employee | Due Date | Completed Date | Supervisor | Active |
|---|---|---|---|---|---|
| Developer | Coppola, Mija | 6/28/2012 | 2/4/2009 | Mcburney, Lowell | þ |
| HASP Reviewer | Coppola, Mija | 2/6/2009 | 2/2/2009 | Mcburney, Lowell | þ |

## Job Steps

| Job Step No. | Job Step Description | | Potential Hazard | Critical Action | H&S Reference |
|---|---|---|---|---|---|
| 1 | Set up necessary traffic and public access controls | 1 | Struck by vehicle due to improper traffic controls | Use a buddy system for placing site control cones and/or signage. Position vehicle so that you are protected from moving traffic. Wear Class II traffic vest | ARC Field H&S Handbook Sec III-G |
| 2 | Utility Clearance | 1 | Potential to encounter underground or above ground utilities while drilling. | Complete utility clearance in accordance with the ARCADIS Utility Clearance H&S Standard. | ARCADIS H&S Standard ARCHSFS019, ARC Field H&S Handbook Sec III-MM |
| 3 | General drill rig operation | 1 | Excessive noise is generated by rig operation. | When the engine is used at high RPMs or soil samples are being collected, use hearing protection. | ARC Field H&S Handbook Sec III-L |
| | | 2 | During drill rig operation, surfaces will become hot and cause burns if touched, and COCs in the soils more readily vaporize generating airborne contaminates. | Due to friction and lack of a drilling fluid, heat will be produced during this method. Mainly drill augers. Be careful handling split spoons. Wear proper work gloves. When soils and parts become heated, the COC could volatilize. Air monitoring should always be performed in accordance with the HASP. | |
| | | 3 | Moving parts of the drilling rig can pull you in causing injury. Pinch points on the rig and auger connections can cause pinching or crushing of body parts. | Stay at least 5 feet away from moving parts of the drill rig. Know where the kill switch is, and have the drillers test it to verify that it is working. Do not wear loose clothing, and tie long hair back. Avoid wearing jewelry while drilling. Cone off the work area to keep general public away from the drilling rig. | |
| | | 4 | Dust and debris can cause eye injury and soil cuttings and/or water could contain COCs. | Wear safety glasses and stay as far away from actual drilling operation as practicable. Wear appropriate gloves to protect from COCs. | ARC Field H&S Handbook Sec III-R |
| | | 5 | Drilling equipment laying on the ground (i.e. augers, split spoons, decon equipment, coolers, etc), create a tripping hazard. Water from decon buckets generate mud and cause a slipping hazard. | Keep equipment and trash picked up, and store away from the primary work area. | ARC Field H&S Handbook Sec III-F |
| | | 6 | The raised derrick can strike overhead utilities, tree limbs or other elevated items | Never move the rig with the derrick up. Ensure there is proper clearance to raise the derrick, and that you are far enough away from overhead power lines. See the | |

| | | | | | |
|---|---|---|---|---|---|
| | | | | Utility Clearance H&S Standard for guidance. | |
| 4 | Mudd rotary drilling | 1 | The raised derrick can strike overhead utilities, tree limbs or other elevated items. | Never move the rig with the derrick up. Ensure there is proper clearance to raise the derrick, and that you are far enough away from overhead power lines. See the Utility Location H&S policy and procedure for guidance. | |
| | | 2 | This technology uses fluid, which collects with sediments in large basin. Fluid can splash out and cause slipping/mud hazard. Liquid mixture can splash into your eyes. | Wear rubber boots if needed, and keep clear of muddy/wet area as much as practicable. If area becomes excessively muddy, consider mud spikes or covering the area with a material that improves traction. Wear safety glasses. | |
| 5 | Hollow stem auger drilling | 1 | All hazards in step 3 apply. Additionally,The raised derrick can strike overhead utilities, tree limbs or other elevated items | Never move the rig with the derrick up. Ensure there is proper clearance to raise the derrick, and that you are far enough away from overhead power lines. See the Utility Location H&S policy and procedure for guidance. | |
| | | 2 | Hands or fingers can get caught and crushed if trying to clean by hand or with tools while the auger is still turning. | Auger should always be stopped and clutch disengaged prior to cleaning. | |
| 6 | Air Rotary Drilling | 1 | This drilling method works with high air pressure and can generate flying debris that can strike your body or get in your eyes. | When the drill rig is being driven into media, it will produce flying debris. The flaps behind the drill rig should stay closed whenever possible to reduce the risk of flying debris. Safety glasses and hard hat should always be worn when the drill rig is operating. When penetrating asphalt, protect surrounding cars that may be present to avoid damage to pain or windshields. | |
| | | 2 | The raise derrick can strike overhead utilities, tree limbs or other elevated items. | Never move this rig with the derrick up. Ensure there is proper clearance to raise the derrick and that you are far enough away from overhead power lines. See the Utility clearance H&S Standard for guidance. | |
| | | 3 | When drilling through bedrock prior to groundwater, dust can be produced from pulverization. Inhalation of dusts/powder can occur. | Supplemental water should be used to manage dust and/or dust masks should be used if necessary. | |
| 7 | Reverse rotary drilling | 1 | This method will use fresh water to pump out drill cuttings through the center of the casing. Water/sediment mixture is generated and could cause contact with impacted soils or groundwater. | Ensure the pit construction can hold the amount of cuttings that are anticipated. Air monitoring should also be used of pit area. | |
| | | 2 | Fire hydrants are often used for water source. Hydrants deliver water at high pressure. Pressurized water can cause flying parts/debris and excessive slipping hazards. | Water usage from fire hydrants should be cleared with local municipalities prior to use. Only persons that know how to use the hydrant should be performing this task. Ensure all connections are tight, and hose line is not run over to cut by traffic. Any leaks from the hydrant should be reported immediately. | |
| | | 3 | Settling pit construction can cause tripping hazard from excavated soils, and plastic sheeting can cause slipping. | Cone off the area to keep the general public/visitors away from the settling pit. Ensure proper sloping of excavation. | |
| | | 4 | The raised derrick can strike overhead utilities, tree limbs or other elevated items. | Never move the rig with the derrick up. Ensure there is proper clearance to raise the derrick, and that you are far enough away from overhead power lines. See the Utility Location H&S policy and procedure for guidance. | |

| | | | | | |
|---|---|---|---|---|---|
| 8 | Rotosonic drilling | 1 | Fire hydrants are often used for water source. Hydrants deliver water at high pressure. Pressurized water can cause flying parts/debris and excessive slipping hazards. | Water usage from fire hydrants should be cleared with local muncipalities prior to use. Only persons that know how to use the hydrant should be performing this task. Ensure all connections are tight, and hose line is not run over to cut by traffic. Any leaks from the hydrant should be reported immediately. | |
| | | 2 | This method requires a lot of clearance. The drill head can turn 90 degrees to attach to the next drill flight or casing. This usually requires a large support truck to park directly behind the rig. As the drill head raises the new casing flight is angled down at the same time until it can be turned completely vertical. | Ensure sufficient overhead clearance. | |
| | | 3 | Heavy lifting of cores can cause muscle strain. | Always use 2 people to move core containers. Use caution moving core samples to layout area. Plan layout area to ensure adequate aisle space between core runs for logging. Keep back straight and use job rotation. | |
| | | 4 | The rotosonic drill head can move very quickly up and down while working on a borehole. Moving parts can strike someone or catch body parts. | The operator and helper must communicate and stay clear of the path of the drill head. The drill utilizes two large hydraulic clamps to continuously hold casings while load/unloading previous casings. Do not wear loose clothing. | |
| 9 | Direct push drilling | 1 | The drill rods will be handled by workers most of the time rather than the rig doing it, therefore pinch points can cause lacerations and crushing of fingers/body parts. | Keep a minimum of 5 feet away from drill rig operation and moving parts. | |
| | | 2 | The direct push rigs are usually meant to fit in spaces where larger rig can't. Tight spaces can pin workers. | Do not put yourself between the rig and a fixed object. Use Spotters or a tape measure to ensure clearances in tight areas. Pre-plan equipment movement from one location to the next. | |
| | | 3 | Some direct push equipment is controlled by wireless devices. These controls can fail and equipment can strike workers or cause damage to property. | The drill rig should be used in a large open area to test wireless controls prior to moving to boring locations. The operator of the rig will test the kill switch with wireless remote prior to use. Operator will stay in range of rig while moving so that wireless signal will not be too weak and cause errors to the controls. | |
| | | 4 | Sampling sleeves must be cut to obtain access to soil. Cutting can cause lacerations. | It's preferable to let the driller cut the sleeves open. Many drillers have holders for the sleeve to allow for stability when cutting.<br>If you cut the sleeves, use a hook blade, change blade regularly, and cut away from the body. | |
| | | 5 | Soil cores may contain contaminated media. | Wear nitrile gloves and saftey glasses for protection from contaminated media when logging soil borings. | |
| 10 | Rock coring | 1 | Flying debris can hit workers or cause debris to get in eyes. | Rock chips or overburden may become airborne from drilling method. Wear safety glasses and hard hat and remain at a safe distance from back of drill rig. | |
| | | 2 | Heavy lifting of cores can cause muscle strain. | Always use 2 people to move core containers. Use caution moving core samples to layout area. Plan layout area to ensure adequate aisle space between core runs for logging. Keep back straight and use job rotation. | |
| 11 | Sample collection and processing | 1 | Injuries can result from pinch points on sampling | Care should be taken when opening sampling equipment. Look at empty | Sample Cooler Handling JSA |

| | | | | | |
|---|---|---|---|---|---|
| | | | equipment, and from breakage of sample containers. | containers before picking them up, and do not over-tighten container caps. Use dividers to store containers in the cooler so they do not break. | |
| | | 2 | Lifting heavy coolers can cause back injuries. | Use two people to move heavy coolers. Use proper lifting techniques. | |
| 12 | Monitoring well installation | 1 | Same hazards as in Step 3 with general drill rig operation | See step 3 | |
| | | 2 | Monitoring well construction materials can clutter the work area causing tripping hazards. | Well construction materials should be picked up during the well installation process. | |
| | | 3 | Heavy lifting can cause muscle strains, and cutting open bags can cause lacerations. | Well construction materials are usually 50 lbs or greater. Team lift or use drill rig to hoist bags. Always use work gloves while cutting open bags. | |
| | | 4 | Well pack material (i.e. sand, grout, bentonite) can become airborne and get in your eyes. | Wear safety glasses for protection from airborne sand and dust. | |
| | | 5 | Cutting the top of the well to size can cause jagged/sharp edges on the top of the well casing. | Wear gloves when working with the top of the well casing, and file any sharp jagged edges that resulted from cutting to size. | |
| 13 | Soil cutting and purge water management | 1 | Moving full drums can cause back injury, or pinching/crushing injury. | Preferably have the drilling contractor move full drums with their equipment. If this is not practicable, use lift assist devices such as drum dollies, lift gates, etc. Employ proper lifting techniques, and perfrom TRACK to identify pinch/crush points. Wear leather work gloves, and clear all walking and work areas of debris prior to moving a drum. | ARC Field H&S Handbook Sec III-II |

**PPE** **Personal Protective Equipment**

| Type | Personal Protective Equipment | Description | Required |
|---|---|---|---|
| **Eye Protection** | safety glasses | | Required |
| **Foot Protection** | steel-toe boots | | Required |
| **Hand Protection** | chemical resistant gloves (specify type) | Nitrile | Required |
| | work gloves (specify type) | leather | Required |
| **Head Protection** | hard hat | | Required |
| **Hearing Protection** | ear plugs | | Required |
| **Miscellaneous PPE** | traffic vest--Class II or III | | Required |
| **Respiratory Protection** | dust mask | | Recommended |

**Supplies**

| Type | Supply | Description | Required |
|---|---|---|---|

| | | | |
|---|---|---|---|
| **Communication Devices** | mobile phone | | Required |
| **Decontamination** | Decon supplies (specify type) | Driller to provide and manage | Recommended |
| **Miscellaneous** | fire extinguisher | | Required |
| | first aid kit | | Required |
| **Personal** | eye wash (specify type) | bottle | Required |
| | water/fluid replacement | | Recommended |
| **Traffic Control** | traffic cones | | Required |

## Review Comments

| Reviewer | | Comments |
|---|---|---|
| **Employee:**<br>**Role**<br>**Review Type**<br>**Completed Date** | Coppola, Mija<br>HASP Reviewer<br>Approve<br>2/2/2009 | |

**Attachment F - STAR**

**Site Traffic Awareness and Response (STAR) Plan**
Revision 3, 9/18/2013

## 1.0 General

| | |
|---|---|
| Project Name: | Park Street Former MGP |
| Project Number: | B0013138 |
| STAR Plan Developer Name: | Nicholas (Klaus) Beyrle |
| Reviewed By: | |
| Duration of Work (hours or days): | 10 hrs, daily |
| Time Restrictions (describe below): | None |

Comments:

## 2.0 Work Description

*Provide a brief description of expected site traffic conditions:*
Plant workers and trucks arriving/departing. All work areas are not located in main paths for vehicular traffic.

☐ Work is planned on off site properties but not in the public right-of-way.

To facilitate identification of traffic controls to use, check all that apply to this project:
*Notes: Time at a specific location on the project site ("> 8 hours at MW-1" etc). Exclude activities such as monitor well pad setting times where equipment is not at location. Indicate controls to protect monitor well pads in comments below.*

**Short Duration Work (<1 hour)**

- ☑ Water-level gauging and well sounding
- ☐ Surface soil sampling using manual methods
- ☐ Intermediate depth soil sampling using DPT
- ☑ Shallow monitor well purging and sampling
- ☐ Product recovery using manual methods
- ☐ Surveying
- ☐ Other (specify):

**Intermediate Duration Work (1-8 hours)**

- ☐ Intermediate/deep or > 2 in. diameter well sampling
- ☐ Slug testing and similar tests
- ☐ Deep handauger sampling (>20 ft depth)
- ☐ Manual soil sampling through concrete/asphalt
- ☐ Deep soil sampling using DPT (>40 ft depth)
- ☑ Soil sampling using other automated drilling method
- ☐ Other (specify):

**Long Duration Work (>8 hours)**

- ☐ Deep monitor well installation (>50 ft depth)
- ☑ Monitor wells with surface casing installation
- ☑ Intermediate depth monitor wells ≥ 4 in. diam.
- ☐ Long term product recovery using equipment
- ☐ Long term pump testing
- ☐ Other (specify):

Comments:

Traffic Type:
*Check all that apply:*

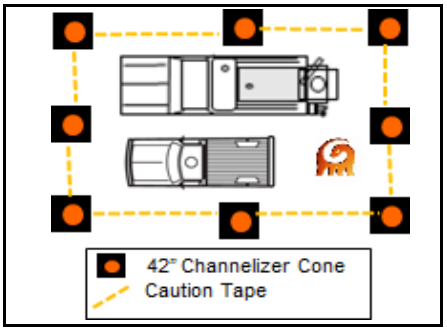
- ☑ Automobiles
- ☐ Straight truck
- ☐ Semi truck
- ☐ Other:
- ☐ Forklifts
- ☑ Bicycles
- ☑ Pedestrian
- ☐ Construction equipment

### 3.0 Traffic Control Layout

The following DOT Fact Sheets and/or diagrams are applicable to this project:
*Notes: DOT Fact Sheets have numbered scenarios, select the appropriate scenario(s) for the project and indicate duration [Short (S), Intermediate (I), Long (L)]. Manually revise diagrams, if needed, to convey requirements.*

1 2 3 4 5 6 7 8 9 S I L

- ☐ DOT Facts-302a Retail Gas Station/Small Business Parking Lot (<1 Hour)
  - ☐ With Truck ☐ Without Truck
- ☐ DOT Facts-302b Retail Gas Station/Small Business Parking Lot (1-8 Hours)
- ☐ DOT Facts-302c Retail Gas Station/Small Business (>8 Hours)
- ☐ DOT Facts-302e Multi-business Parking Lot
- ☑ DOT Facts-302e Facility Parking Area
- ☐ Parking Garage (develop drawing for controls)
- ☐ Other (specify): _____
- ☐ STAR Select controls to the right will be used _____




How will the above documents be communicated to field staff?
(excludes STAR Select)

- ☐ The above documents are attached to this STAR Plan
- ☑ The above documents are appropriate without significant modification and are available to field staff in the

  Field Guide for Roadway Work Zone Safety.

### 4.0 Required Traffic Control Devices and Phasing

Tasks on this project may be implemented both individually or concurrently. Selection and number of traffic control devices required will be dependent on the scope of work.

Traffic control device help: DOT Facts-302d

| *Check all that apply:* | | | Number: |
|---|---|---|---|
| ☐ Channelizer cone (42 inch height, 10 lb base) | | | |
| ☐ Channelizer cone (42 inch height, 30 lb base) | | | |
| ☑ Traffic cones (≥ 18 inches tall) | | | 8 |
| ☐ Barricade | ☐ Type I | ☐ Type II | |
| ☐ Flags for cones | | | |
| ☐ Lights (for night work) | ☐ | ☐ | |
| ☐ Plastic fencing (rolls) | | | |
| ☐ Caution tape (rolls) | | | |
| ☐ Other (specify): | | | |

*Phasing:*
1) Position truck as shield, if practical
2) Deploy traffic control devices
3) Affix flags, caution tape or fencing as prescribed in fact sheet
4) Unload project equipment
5) Commence work
6) SSO to maintain controls
7) Remove controls in opposite order

☐ Additional client requirements are attached

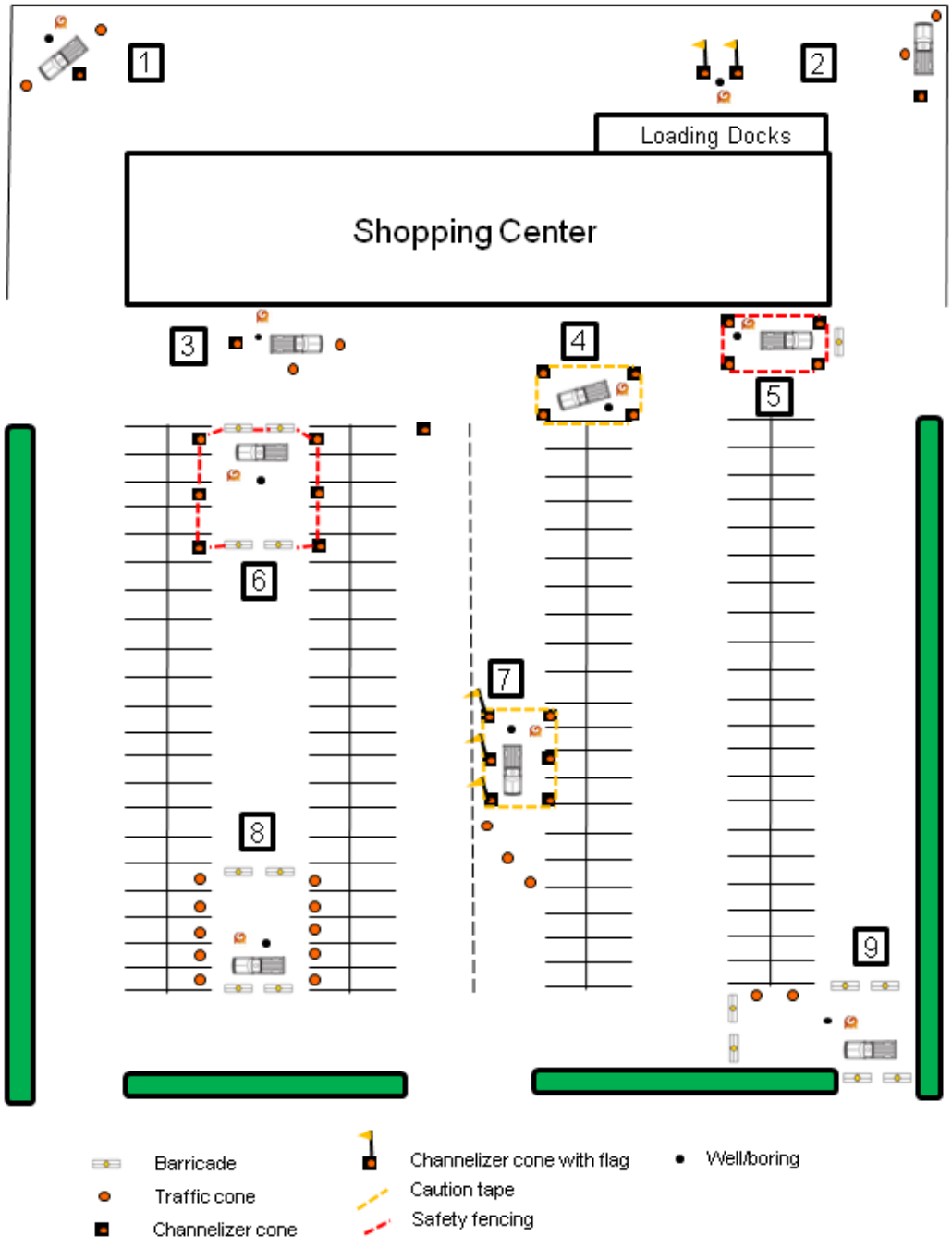
If vehicle equipped with high intensity strobe or rotating lights, the lights should be utilized during work. If the vehicle is not equipped with supplemental lighting devices, use vehicle flashers (be aware of battery drain when using any of the lighting devices) should be considered.
Personal protective equipment required for this work is listed in the applicable project Job Safety Analysis (JSA) or project specific HASP. A Class II (minimum) high visibility vest is required.

### 5.0 Approvals

| | Printed Name | Date | Signature |
|---|---|---|---|
| Plan Developer: | Nicholas (Klaus) Beyrle | 4/24/2015 | Nicholas (Klaus) Beyrle |
| Plan Reviewer: | | | |

# DOT Facts-302e
# Recommended Best Practices for Multiple Business and Large Facility Parking Areas

**The following configurations should be considered for traffic protection in retail parking areas for multiple businesses (strip malls, etc) and large facility parking lots.**




Revision 2, 9/16/2013

**General Guidelines for Safety:**

- **Use the vehicle as a shield when possible. Orient the rear of the ARCADIS vehicle away from site entrances and areas of increased backing or movement of other vehicles, when practical. Traffic cones used in scenarios above in conjunction with the parked vehicle should be consistent with the ARCADIS Cone and Spotter Program (see ARC HSGE-024 for more information)**
- **All channelizer cones shall be at least 42 inches in height**
- **Always work facing the area with greatest traffic movement and least protection**
- **Always assume vehicles will move in either direction (frontwards or backwards)**
- **Always use TRACK to predict traffic movement and stage vehicle and Control Zones in manner that offers protection without impairing site entrance or blocking access to loading docks when possible. STAR Plan requirements should be reviewed against HASP exclusion zone requirements for consistency.**
- **If there is a perceived drivable space or if there is an unused parking space, you must assume that someone will attempt to access or drive to/through the location. Plan, deploy and work accordingly. Block off parking spaces with cones during off hours to ensure no vehicles will occupy the planned work zone.**
- **Class II high visibility vest (minimum) to be worn at all times (refer to HASP or JLA for additional requirements, if any).**
- **Discuss with site operator or manager times of lower traffic volume and attempt to schedule work activity during traffic lulls. When working near dumpsters and loading docks find out when the dumpsters are emptied and avoid loading docks during planned delivery times.**
- **Warning lights shall be used for night work on both the channelizer drums and barricades, if used. Cones used during night work for taper purposes must have retroflective tape.**
- **Areas in green above may appear to be site property but may actually be within the roadway right-or way. Work performed in the right-of-way has additional requirements. See ARC DOT-301 for more information.**

**Scenario Descriptions:**

1) **Locations to the rear of strip malls and similar operations generally have low traffic volume and low pedestrian activities. Use the truck as a shield to the extent possible and deploy channelizer cone in direction of expected traffic exposure. This scenario may be used for short duration (< 1 hour) and intermediate duration (1-8 hours) daylight work activities. Since deliveries by larger vehicles are generally performed during night hours, long duration (>8 hours) and night time work should employ recommendations described in scenario #5 below, even in these low traffic areas.**
2) **Locations near loading docks involve large vehicle backing with limited visibility. Tight space and work zone proximity to other active operations may preclude the use of the vehicle as a shield in these areas. Work in these areas should use channelizer cones with flags to increase work zone awareness even if the vehicle is being used as a shield. When backing activities are occurring, work should be suspended and employees should leave the area until the backing operations are complete (leaving the traffic control devices in place).**
3) **Short duration work (<1 hour) in high traffic and pedestrian areas should use the vehicle as a shield with the front of the vehicle facing oncoming traffic. A channelizer cone should be deployed in the vicinity of the work zone near the ARCADIS employee's work area**
4) **Intermediate duration work (1-8 hours) in high traffic and pedestrian areas should use the vehicle as a shield with the front of the vehicle facing oncoming traffic. The work zone**

**should be defined with channelizer cones (10 pound base weight recommended) and caution tape. Leave sufficient space to allow access to all areas of the vehicle.**

5) **Long duration work (> 8 hours) and night work in high traffic and pedestrian areas should use the vehicle as a shield with the front of the vehicle facing oncoming traffic. Utilize standard orange plastic safety fencing and channelizing cones ( 30 pound base weight recommended) to delineate the work zone. Use of lighted barricades (Type I or II preferred) on the end facing oncoming traffic is recommended, if work is performed near site entrances.**
6) **Complete lane closure in areas of higher traffic and pedestrian flow should utilize barricades (Type I or II preferred) in sufficient number to clearly indicate the lanes are closed. Signs may be used in conjunction with the barricades to further communicate the closure. Channelizer cones should be used in conjunction with caution tape (intermediate duration) and safety fencing (long duration) closure. Place the vehicle as a shield in the area of highest exposure to traffic (at the lane entrance end as shown in the example above) and create adequate buffer zone on the end with lower traffic exposure.**
7) **Large parking areas may have a central thoroughfare leading to a red light at the city street. These areas may have increased traffic control, have wider lanes and traffic may drive in these areas at higher speeds. Work zones in these areas should use the vehicle as a shield with the front of the vehicle facing oncoming traffic. Channelizer cones should be used in conjunction with caution tape (intermediate duration) and safety fencing (long duration) lane closure. If parking spaces across the lanes are useable, use flags with the channelizer cones to increase awareness of the work zone to backing drivers. A taper, using standard traffic cones, may be used to help control traffic control through the area. If these locations have high volumes of traffic, consider using flaggers.**
8) **Work zones away from the active business area of the site and having low traffic and pedestrian flow may be configured using lesser requirements. Use barricades (Type I or II preferred) to close lanes and orient vehicle as a shield in the area of highest traffic exposure. Create a buffer between the work area and the area of lesser traffic exposure. Standard traffic cones may be used to delineate the work zone. Use of this scenario requires an understanding of traffic flow and patterns throughout the planned duration of the work activity. If conditions change, use of controls as described in scenario #6 should be used.**
9) **Complete lane closure involving an entrance should rely on barricades as the primary method of traffic control. Type I, II or III barricades should be used at the site entrance (Type III if the entrance has high traffic volume) for both intermediate and long duration work. Type I or II barricades are recommended for lane closures. Use the vehicle as a shield in the area of highest traffic exposure (usually the entrance). If vehicle or pedestrian traffic is persistent or heavy, controls using caution tape or safety fencing should be employed in conjunction with additional barricades or channelizer cones.**

**Appendix B**

SUNY Geneseo Construction Project Rules

## CONSTRUCTION PROJECT RULES

**Project No.**_____ **Date** _____

**PRIME CONTRACTOR:** _____

CAMPUS PROJECT REPRESENTATIVE NAME _____

**GENERAL CONTRACTOR RESPONSIBLE FOR ALL KEYS**

Key No. After execution of contract_____

Signature_____

**EMERGENCY NUMBERS ARE REQUIRED**

Project Manager: _____ Office _____

Home Ph : _____ Cell Ph:_____

Site Superintendent: _____

Home Ph: _____ Cell Ph: _____

Subcontractors

1._____

Home Ph:_____ Cell Ph: _____

**EMPLOYER IDENTIFICATION**

A) Company issued or campus issued identification badges are to be worn as required

**STORAGE/STAGING LOCATION**

Lot_____

**PARKING LOCATION**

Lot _____

**HEALTH/SAFETY ISSUES**

| | | |
|---|---|---|
| A) Asbestos | ____Applicable | ____Not Applicable College If Required |
| B) Confined Space | ____Applicable | _____Not Applicable |
| C) Lockout/Tagout | ____Applicable | _____Not Applicable |
| D) Chemicals | ____Applicable | _____Not Applicable |

## SUNY Geneseo Campus Rules, Regulations and Information

**Facilities Planning And Construction:**

585-245-5511 –office
585-245-5015 –fax
Office Hours – 8:00 a.m. – 4:15 p.m. Monday through Friday
Summer Hours – 8:00 a.m. – 4:00 p.m. Monday through Friday

**Emergency Phone Numbers:**

University Police – 585-245-5651
Campus Emergency – x5222 (24 hours)
Maintenance Center – 585-245-5661
(*Blue light phones are directly connected to University Police*)

**Campus Rules and Regulations:**

-RESPECT COLLEGE COMMUNITY
-No contractor shall have contact with students at any time.
-Appropriate work clothes, including shirts, to be worn at all times
-Shorts and tank/crop tops are not appropriate.
-No offensive or controversial clothing
-The campus is a smoke free campus (no smoking in any building or within 50 feet of doors and windows).

**Campus Parking:**

-One contractor vehicle allowed to park at construction site.
-All other vehicles will be assigned to a designated parking lot.
-Parking permits are issued through Facilities Planning & Construction
-Campus Speed Limit is 15 M.P.H.
-Vehicle Owners are responsible for paying any parking/speeding violations.

**Contractor Responsibilities:**

-The General Contractor will provide emergency contact numbers.
-All workers will carry an I.D. badge or company issued clothing while on campus.
-The General Contractor is responsible for all keys. Sub-contractors cannot sign for keys.
-The General Contractor will provide certified payrolls monthly.

**Construction Project Rules:**

-The construction site is to be cleaned daily.
-Construction debris and refuse is to be removed weekly.
-Campus dumpsters are not for Contractor waste.
-Coordinate sites of work with College well in advance of activities.
-No cutting or welding permitted without notice.
-48 hour notice for all campus shutdowns as a campus minimum.
-If required, the campus EHS office will handle all OSHA/PESH, NYSDOL and NYDEC regulations along with all health/safety issues. (x5512)
-Contractor shall communicate only with the Facilities Planning & Construction office or the consultant.

**Appendix C**

Field Sampling Plan

ARCADIS
Infrastructure · Water · Environment · Buildings

Imagine the result

**Rochester Gas & Electric**

# Field Sampling Plan

Park Street Former MGP Site
Geneseo, New York

June 2015

# Field Sampling Plan

Park Street Former MGP Site

Prepared for:
Rochester Gas & Electric

Prepared by:
ARCADIS of New York, Inc.
295 Woodcliff Drive
Third Floor
Suite 301
Fairport
New York 14450
Tel 585 385 0090
Fax 585 385 4198

Our Ref.:
B0013138.0000

Date:
June 2015

ARCADIS

# Table of Contents

# 1. Introduction

## 1.1 General

This *Field Sampling Plan* (FSP) supports the Site Characterization Work Plan (SCWP) prepared by ARCADIS of New York, Inc. (ARCADIS) for the Park Street Former Manufactured Gas Plant (MGP) Site located in Geneseo, New York (site).

This FSP addresses the field procedures and sample collection methods to be used during implementation of the SCWP field activities. In addition, field sampling procedures for other media (e.g., test pit installation) are included in the event that future intrusive work is conducted within potentially MGP-impacted areas of the site. The FSP should be used in conjunction with the Work Plan, the *Quality Assurance Project Plan* (QAPP), and an approved *Health and Safety Plan* (HASP). The SCWP presents the site background and defines the required sampling program. The QAPP presents the quality assurance/quality control procedures to be used during field activities, as well as a description of the general field and laboratory procedures.

## 1.2 Objectives

The purpose of the FSP is to describe the field procedures and sample collection methods to be used during implementation of the SCWP field activities, in addition to field sampling procedures for other media (e.g., test pit installation) in the event that future intrusive work is conducted within potential MGP-impacted areas of the site.

## 1.3 Overview of Investigation Field Activities

The following activities may be conducted at the site:

- soil boring advancement
- test pit excavation
- bedrock coring
- monitoring well installation
- measurement of fluid levels
- collection of soil samples

- groundwater sampling
- bailing of non-aqueous phase liquid (NAPL) from NAPL recovery wells
- indoor air/soil gas sampling

Sampling locations and rationale for each field sampling activity are described in the SCWP, and therefore, are not further described in this FSP.

A site location map and a figure with sampling locations have been prepared for the site to support the field investigation. These figures are presented in the SCWP.

## 2. Field Activities

### 2.1 General Field Guidelines

Underground utilities will be identified prior to any drilling or subsurface sampling. Public and privately owned utilities will be located by contacting responsible agencies by phone so that their underground utilities can be marked at the site. In addition, geophysical methods such as ground penetrating radar and electromagnetic survey will be used to identify utilities within the work area. Other potential onsite hazards, such as traffic, overhead power lines, and building hazards, will be identified during a site reconnaissance visit.

The following is a general list of equipment necessary for sample collection:

- stainless steel spoons and bowls for compositing soil samples
- appropriate sample containers provided by the laboratory (kept closed and in laboratory-supplied coolers until the samples are collected)
- pre-preserved sample containers for aqueous samples
- chain-of-custody record forms
- log book, field sampling records, and indelible ink pens and markers
- laboratory-grade soap (such as Alconox®), reagent grade solvents and acids, and distilled water to be used for decontaminating equipment between sampling stations
- buckets, plastic wash bins, and scrub brushes for decontaminating equipment
- camera
- stakes to identify sampling locations
- shipping labels and forms
- knife
- packing/shipping material for samples bottles
- clear plastic tape

- duct tape
- aluminum foil
- re-closable plastic bags
- portable field instruments, including a photoionization detector (PID), water quality parameter meter, conductivity meter, turbidity meter, and water-level indicator

Field log books will be maintained by the field team leader and other team members to provide a daily record of significant events, observations, and measurements during the field investigation.

Information pertinent to the field investigation and/or sampling activities will also be recorded in the log books. The books will be bound with consecutively numbered pages. Entries in the log book will include, at a minimum, the following information:

- name of author, date of entry, and physical/environmental conditions during field activity
- purpose of sampling activity
- location of sampling activity
- name of field crew members
- name of any site visitors
- sample media (e.g., soil, groundwater)
- sample collection method
- number and volume of sample(s) taken
- description of sampling point(s)
- volume of groundwater removed before sampling (where appropriate)
- preservatives used
- date and time of collection

- sample identification number(s)
- field observations
- any field measurements made, such as, but not limited to, pH, temperature, conductivity, water level

All original data recorded in field log books and chain of custody records will be written with indelible ink. If an error is made on an original document assigned to one individual, that individual will make all corrections simply by crossing a single line through the error and entering the correct information. The erroneous information will not be erased. Any subsequent error discovered on an original document will be corrected by the person who made the entry. All subsequent corrections will be initialed and dated.

### 2.2 Sample Labeling, Packing, and Shipping

Each sample will be given a unique identification. With this type of identification, no two samples will have the same label.

Samples will be promptly labeled upon collection with the following information:

- project number and site
- unique sample identification
- analysis required
- date and time sampled
- sample type (composite or grab)
- preservative, if applicable

Clear tape will be secured over the sample label and the chain of custody will be initiated. A sample chain of custody form is included on **Figure C-1**.

Appropriate sample containers, preservation methods, and laboratory holding times for each sample type will be applied as identified in the QAPP.

If samples are to be shipped by commercial carrier (e.g., FedEx), sample bottles/jars will be packed in coolers containing the following:

- a drain plug (if present) that has been sealed with duct tape
- 1 to 2 inches of bubble wrap on the bottom of the cooler
- ice packaged in resealable plastic bags
- sufficient bubble wrap to fill in the remaining area
- the completed chain of custody in a resealable plastic bag, taped in place on the inside cover of the cooler

The cooler will then be sealed with tape. Appropriate shipping labels, such as "this-end-up" and "fragile" stickers will be affixed to the cooler. Samples will be hand delivered or delivered by an express carrier within a time frame such that sample holding times are not exceeded. The express carrier will not be required to sign the chain of custody form; however, the shipping receipt should be retained by the sampler and forwarded to the project files.

### 2.3 Equipment Decontamination

#### 2.3.1 Drill Rig Decontamination

A decontamination pad will be lined with plastic sheeting on a surface sloped to a sump. The sump must also be lined and of sufficient volume to contain approximately 20 gallons of decontamination water. All drilling equipment, including rear-end of drilling rig, augers, bits, rods, tools, split spoon samplers, tremie pipe, etc., will be cleaned on the decontamination pad with a high-pressure hot water "steam cleaner" unit and scrubbed with a wire brush, as needed, to remove dirt, grease, and oil before beginning work in the project area. If heavy accumulation of tars or oils is present on the downhole tools, a citrus-based cleaner (e.g., Citra-Solv®) may be used to aid in equipment cleaning. Tools, drill rods, and augers will be placed on sawhorses, decontaminated pallets, or polyethylene plastic sheets following steam cleaning. Direct contact with the ground will be avoided. The back of the drill rig and augers, rods, and tools will be decontaminated between each drilling location according to the above procedures. Decontamination water will be contained in a dedicated plastic tank or 55-gallon open-top drums located onsite. All open-top drums will remain closed when not in use.

Following decontamination of all heavy site equipment, the decontamination pad will be decommissioned. The decommissioning will be completed by:

- Transferring the bulk of the remaining liquids and solids into the drums, tanks, and roll-offs to be provided by RGE or the drilling subcontractor for these materials.

- Rolling the sheeting used in the decontamination pad onto itself to prevent discharge of the remaining materials to the ground surface. Once rolled up, the polyethylene sheeting will be placed in the roll-off or drums used for disposal of personal protective equipment (PPE) and disposable equipment.

Unless sealed in manufacturer's packaging, polyvinyl chloride (PVC) monitoring well casing screens will be decontaminated by the above procedures before installation.

#### 2.3.2 Sampling Equipment Decontamination

Prior to collecting samples to be submitted for chemical analysis, if any, all non-dedicated bowls, spoons, hand augers, bailers, and filtering equipment will be washed with potable water and a detergent (such as Alconox®). Decontamination may take place at the sampling location as long as all liquids are contained in pails and buckets. The sampling equipment will then be rinsed with potable water, followed by a 10% "pesticide-grade" methanol rinse, and finally a distilled water rinse. When sampling for inorganic constituents in an aqueous phase, an additional rinse step will be added prior to the rinse with methanol. The rinse step will entail a rinse with a 10% "ultra pure-grade" nitric acid followed by a distilled water rinse. Between rinses, equipment will be placed on polyethylene sheets or aluminum foil, if necessary. At no time will washed equipment be placed directly on the ground. Equipment will be either be used immediately or wrapped in plastic or aluminum foil for storage or transportation from the designated decontamination area to the sampling location.

### 2.4 Subsurface and Staged Soil Sampling Method

Continuous soil sampling will be conducted during drilling in the overburden. Continuous core samples of overburden materials will be collected. At select locations designated for geotechnical data collection, the Standard Penetration Test (American Society for Testing and Materials [ASTM] D 1586 84) and hollow-stem augers or flush-joint casing will be used during drilling to collect split-spoon samples from the unconsolidated fill and soils beneath the site. If required, samples selected for laboratory analysis will be based on:

- Their position in relation to potential source areas.

- The visual presence of source materials.

- The relative levels of volatile organics based on PID field screening measurements.
- The discretion of the onsite geologist.

Samples selected for laboratory analysis will be placed in appropriate containers provided by the laboratory. Sample containers for volatile organic analyses will be filled first. Soil samples collected for volatile organic compound (VOC) analysis will be using methanol preservation or analyzed using United States Environmental Protection Agency Method 5035. Next, a sufficient amount of the remaining soil will be homogenized by mixing the sample in a decontaminated stainless steel tray, bowl or disposable resalable plastic bag with a decontaminated stainless steel trowel, disposable scoop or nitrile-gloved hand. Laboratory-supplied sample containers for other analytes will then be filled. Duplicate samples will be collected at the frequency detailed in the QAPP (Appendix E of the SCWP) by alternately filling two sets of sample containers.

If required, representative portions of each soil sample will be placed in a 1 pint jar or re-closable plastic bag, labeled, and stored onsite. This container will be labeled with:

- site
- boring number
- interval sampled
- date
- initials of sampling personnel

These soil samples will be screened for organic vapors using a PID. In addition, a geologist will be onsite during the drilling operations to describe each sample. Soil samples will be described using the methods described in the soil description standard operating procedure (SOP), included as **Attachment C-3**.

For samples that may be submitted for chemical analysis, split-spoons, or any portion of the drilling rig that may contact the sample, will be decontaminated, as specified in Section 2.3.2, after each sample is collected. Sample descriptions, PID readings, and location will be recorded in the field book or on the field drilling log presented on **Figure C-2**. Calibration, operation, and maintenance procedures are included as **Attachment C-1** for one type of PID commonly used in the field. The procedures to be followed will be dependent on the PID acquired for this project, as described in the equipment manual.

### 2.5 Soil Boring/Monitoring Well Installation and Development

Where required, soil borings and/or monitoring wells will be installed to the depths and at the locations defined in the SCWP. After completion of drilling and well installation, all new wells will be developed to establish hydraulic connection between the well and the formation. The following procedures will be used to drill borings and install and develop monitoring wells.

#### 2.5.1 Drilling and Geological Logging Methods

Drilling and geological logging methods to be completed in connection with monitoring well installation are as follows:

- Boreholes in the overburden will be drilled using hollow-stem augers.
- Continuous soil sampling will be conducted during advancement of soil borings and/or monitoring wells using the either split-spoons of a macrocore sampler. Boreholes will be drilled by first advancing the sampler ahead of the lead auger obtain a soil sample, followed by advancing the auger drill stem to stabilize the borehole.
- Split-spoon sampling will be conducted during the advancement of soil borings for geotechnical data collection. Sampling will be performed in accordance with ASTM Specification D 1586 08 for standard penetration test and split-spoon sampling, unless otherwise authorized by the field geologist.
- The designated field geologist will log borehole geology and monitoring well specifications in the field book and/or field forms.
- A plywood sheet or tub may be placed around the auger or casing when drilling to contain cuttings.
- Soil cuttings will be placed in a drum or roll-off supplied by RGE or the drilling subcontractor. Decontamination water will be placed in plastic tanks/drums supplied by RGE or the drilling subcontractor. Soil cuttings and decontamination water will be picked up and containerized at the end of each work day. The roll-offs or open-top drums used to contain the solids will be covered when not in use.

Results from the drilling efforts will be recorded in the field book.

2.5.2 Monitoring Well Specifications

**Figure C-3** shows details of a typical monitoring well construction for shallow wells installed in unconsolidated sediments that do not penetrate a presumed confining layer, above which dense non-aqueous phase liquid (DNAPL) is known or suspected to exist. The overburden monitoring wells will be installed according to the following specifications:

- PVC 2-inch-diameter, threaded, flush joint casing and 10-foot-long, 0.020 inch slot screens will be installed.
- A sump, 2 feet in length and grouted in with cement, may be attached to the bottom of the screen for potential collection of DNAPL, if present.
- The top of the casing will extend approximately 2 feet above ground surface given site-specific considerations; otherwise, flush-mount casings will be used.
- The annulus around the screens will be backfilled with an appropriate size of silica sand, such as Morie #1 sand, to a minimum height of 1 foot above the top of the screen, assuming there is sufficient room to install an appropriate surface seal above the sand.
- An approximately 1-foot-thick chipped bentonite seal or slurry (30 gallons water to 25 to 30 pounds bentonite, or relative proportions) will be placed above the sand pack. The pellet seal must be allowed to partially hydrate before placing grout above the seal.
- The remainder of the annular space will be filled with a cement/bentonite grout to approximately 2 feet below grade. The grout will be placed with a tremie pipe from the bottom up. The grout will consist of a cement mixture of one 94-pound bag of Portland cement, approximately 5 pounds of granular bentonite, and approximately 7 gallons of water. The grout will be allowed to set for a minimum of 24 hours before wells are developed.
- Each monitoring well will have a vented cap and a 4-inch-diameter steel casing with a locking cap placed over the monitoring well. The protective casing will extend approximately 1 to 2 feet below ground surface and be set in concrete. In some areas, it may be necessary to provide flush-mounted casings.
- A concrete seal or pad, approximately 2 feet in diameter and 1.5 feet below grade, will be installed.
- A weep hole will be drilled through the protective standpipe casing just above the top of the concrete seal to allow water between the inner and outer casing to drain.

- The top of the PVC well casing and outer protective casing will be marked and the elevation determined by survey to the nearest 0.01 foot, relative to a fixed benchmark or datum.
- The measuring point on all wells will be on the innermost PVC casing at the highpoint of the casing, if any.

The following characteristics of each newly installed well will be recorded in the field log book:

- date/time of construction
- drilling method and drilling fluid used
- approximate well location
- borehole diameter and well casing diameter
- well depth
- drilling and lithologic logs
- casing materials
- screen materials and design
- casing and screen joint type
- screen slot size/length
- filter pack material/size
- filter pack placement method
- sealant materials
- sealant placement method
- surface seal design/construction
- well development procedure

- type of protective well cap
- detailed drawing of well (including dimensions)

#### 2.5.3 Monitoring Well Development and Well Redevelopment

A minimum of 24 hours after installation, monitoring wells will be developed by surging/bailing using a centrifugal pump and dedicated polyethylene tubing, or by Waterra positive displacement pumps and dedicated polyethylene tubing or other methods at the discretion of the field geologist. The development water will be contained in a tank on site or in drums to be provided by RGE or the drilling subcontractor. Wells will be developed until water removed from the is reasonably free of visible sediment (50 nephelometric turbidity units [NTUs]), if possible, or until the turbidity levels stabilize, assuming a minimum of 10 well volumes of water have been removed from the monitoring well during development. Following development, wells will be allowed to recover for at least 1 week before groundwater is purged and sampled. All monitoring of well development will be overseen by a field geologist and the duration, method of development, and approximate volume of water removed will be recorded in the field book.

In the event of sufficient sedimentation of existing site well, redevelopment of those wells may be required. Procedures for redevelopment of wells will be the same as for newly installed wells.

### 2.6 Rock Coring and Sample Collection

Prior to placing the core barrel into the hole, the driller will use air/water circulation to remove cuttings in the boring that may clog the barrel. Drilling rods will be carefully centered in initial borehole, if any, to reduce the potential for core breakage. The driller will maintain drilling bit pressure and water pressure at a consistent level throughout drilling, and runs will be completed without interruption, to the extent practical, so penetration rates (in feet per minute) can be determined.

Core samples will be placed in core boxes with increasing depths aligned left to right and core runs separated by wood blocks. Man-made breaks will be marked with a pen across the break. Wood blocks will be labeled and placed at the end of each core run to indicate run. A wooden space will be inserted if no sample is recovered and labeled “L.C.” (lost core) with corresponding depth.

The following materials will be available during rock coring and sampling activities, as required:

- Core boxes
- Permanent marking pen for labeling boxes and cores

- Wood blocks to separate core runs in core boxes
- Field logbook
- Rock coring logs
- Hand lens
- Pen knife
- 10% solution of hydrochloric acid if drilling through carbonate rock
- Water-level probe
- Munsell rock color chart
- Tape measure
- Rock hammer
- Submersible pump
- Rubber hammer (for tapping rock core out of core barrel)

The supervising geologist or geotechnical engineer will record the following parameters related to the core drilling process:

- penetration rates, drilling time, and core run length (i.e., minutes per foot)
- amount of water loss or gain
- drill type and size

The following rock core characteristics will be described in the field, as appropriate:

- lithology (rock type)
- friability/fissibility

- color
- strength of intact rock
- thickness
- weathered state
- particle angularity/shape
- voids
- particle sizes
- structure/bedding (bedding planes, joints, fractures) orientation
- Rock Quality Designation
- rock core recovery length
- description of discontinuities and fillings (including interpretation of natural vs. artificial bedrock fractures)
- formation name (if known)
- water content
- texture
- odors/discoloration
- hardness
- fossil type
- depth to water
- Munsell color
- geologic contacts when observed

A key to abbreviations that may be used when describing rock core descriptions is presented below.

| | |
|---|---|
| BkN | broken |
| CAL | calcareous or calcite |
| Cl | clay |
| F | foliation |
| Fe | iron staining on joint surface |
| GOG | gouge |
| HJ | horizontal joint |
| J | joint * |
| J//F | joint is parallel to foliation |
| JxF | joint crosses foliation |
| L | laminae |
| // | parallel |
| M | mud in opening |
| MB | mechanical break |
| N | angle of fracture surface from horizontal, where N is the angle in degrees |
| QTZ | quartz |
| s | solution enlargement |
| S | stratification |
| sa | sand |

| | |
|---|---|
| si | silt |
| SZ | sheer zone |
| U | unfoliated or unstratified |
| v | vuggy |
| VJ | vertical joint |
| w | weathered |
| WZ | weathered zone |
| X | crossing |
| Z | zone |

* “Joint” indicates any natural fracture.

The geologist/geotechnical engineer will document drilling events in the field logbook. Documented drilling events will include:

- drilling start and finish dates
- project name and location
- project number and client
- corehole numbers
- sample number and depth
- sample type and size
- type of drilling equipment
- casing size

- names of contractor's drillers
- weather conditions

It is advisable to photograph recovered core in the labeled core box. The core should be wet when photographed to improve contrast and visibility of rock features.

### 2.7 Fluid-Level Measurements

The following procedure will be used to measure fluid-level depths at monitoring wells and surface-water gauges:

- Decontaminate the water-level probe or oil/water interface probe (for wells expected to contain NAPL).
- Measure the static fluid-level, fluid interfaces (i.e., NAPL/water interface), and sound the bottom of the well (if applicable) with reference to the surveyed elevation mark on the top of the PVC casing or surface-water gauge. Record all measurements to nearest 0.01 foot and record in the field book.

The measurements will be made in as short a timeframe as practical to minimize temporal fluctuations in hydraulic conditions. Two rounds of fluid-level elevations will be collected, as discussed in the RD Work Plan.

### 2.8 Low-Flow Groundwater Sampling Procedures for Monitoring Wells

This protocol describes procedures to be used to collect groundwater samples. No wells will be sampled until well development has been performed. During precipitation events, groundwater sampling will be discontinued until precipitation ceases. When one round of water levels is taken to generate water-elevation data, water levels will be taken consecutively at one time prior to sampling or other activities. Additional procedural information is located in the Low-Flow Groundwater Purging and Sampling SOP, included as **Attachment C-4**.

The following materials, as required, shall be available during groundwater sampling:

- sample pump
- sample tubing
- power source (i.e., generator, battery)

- PID
- appropriate health and safety equipment, as specified in the HASP
- plastic sheeting (for each sampling location)
- dedicated or disposable bailers
- new disposable polypropylene rope
- buckets to measure purge water
- water-level probe
- 6-foot rule with gradation in hundredths of a foot
- conductivity/temperature meter
- pH meter
- turbidity meter
- dissolved oxygen (DO) meter
- oxidation-reduction potential (ORP) meter
- appropriate water sample containers
- appropriate blanks (trip blank supplied by the laboratory)
- appropriate transport containers (coolers) with ice and appropriate labeling, packing, and shipping materials
- groundwater sampling logs
- chain of custody forms
- indelible ink pens

- site map with well locations and groundwater contour maps
- keys to wells

The following 21 steps detail the monitoring well sampling procedures:

1. Review materials checklist to confirm that the appropriate equipment has been acquired.
2. Identify site and well sampled on sampling log sheets, including date, arrival time, and weather conditions. Identify the personnel and equipment used and other pertinent data requested on the logs (**Attachment C-2**).
3. Label all sample containers using an appropriate label.
4. Use safety equipment, as required in the HASP.
5. Place plastic sheeting adjacent to the well to use as a clean work area.
6. Establish the background reading with the PID and record the reading on the field log.
7. Remove lock from the well, and if rusted or broken, replace with a new keyed-alike lock.
8. Unlock and open the well cover while standing upwind of the well. Remove well cap and place on the plastic sheeting. Insert PID probe in the breathing zone above the well casing following instructions in the HASP.
9. Set out on plastic sheeting the dedicated or disposable sampling device and meters.
10. Prior to sampling, groundwater elevations will be measured at each monitoring well and the presence of light non-aqueous phase liquid (LNAPL) or DNAPL (if any) within the well will be evaluated. Obtain a water-level depth and bottom of well depth using an electric well probe and record on the sampling log sheet. Clean the well probe after each use with a soapy (Alconox®) water wash and a tap water rinse. (Note: water levels will be measured at all wells prior to initiating a sampling event).
11. After groundwater elevations are measured and NAPLs are determined not to be present, groundwater will be purged from the wells. If NAPLs are determined to be present, then a groundwater sample will not be collected; rather, a representative NAPL sample may be collected (if required) using a peristaltic pump or other method determined by the Field Manager/Site Supervisor.

12. Pump, safety cable, electrical lines, and/or tubing (for peristaltic pumps) will be lowered slowly into the well to a depth corresponding to the center of the saturated screen section of the well.

13. Measure the water level again with the pump in the well before starting the pump. Start pumping the well at 100 to 500 milliliters per minute. Ideally, the pump rate should cause little water-level drawdown in the well (less than 0.3 feet and the water level should stabilize). The water level should be monitored every 3 to 5 minutes (or as appropriate) during pumping. Care should be taken not to cause the pump suction to be broken or entrainment of air in the sample. Record pumping rate adjustments and depths to water. Pumping rates should, if needed, be reduced to the minimum capabilities of the pump to avoid pumping the well dry and/or to confirm stabilization of indicator parameters. If the recharge rate of the well is very low, purging should be interrupted so as not to cause the drawdown within the well to advance below the pump. However, a steady flow rate should be maintained to the extent practicable. Sampling should commence as soon as the volume in the well has recovered sufficiently to permit sample collection.

14. During well purging, monitor the field indicator parameters (e.g., turbidity, temperature, specific conductance, pH, DO, and ORP) every 3 to 5 minutes (or as appropriate). The well is considered stabilized and ready for sample collection when the indicator parameters have stabilized for three consecutive readings as follows (Puls and Barcelona, 1996):

    ±0.1 for pH
    ±3% for specific conductance (conductivity)
    ±10 mv for ORP
    ±10% for turbidity and DO

Note that turbidity and DO usually require the longest time to achieve stabilization. As such, sampling may be allowed prior to stabilization of turbidity and/or DO if all other parameters have stabilized. The decision to sample under this scenario must be agreed to by the Project Manager.

The pump must not be removed from the well between purging and sampling. If parameters have stabilized, but turbidity is not in the range of the 50 NTU goal, the pump flow rate should be decreased to no more than 100 millimeters per minute. Measurement of the indicator parameters should continue every 3 to 5 minutes. Measurements for parameters may be taken using a flow-thru cell or in a clean container such as a glass beaker.

15. Fill in the sample label and cover the label with clear packing tape to secure the label onto the container.

16. After the groundwater quality parameters have stabilized, as discussed above, obtain the groundwater sample needed for analysis directly from the sampling device in the appropriate container and tightly screw on the caps. Note that groundwater samples collected for analysis of VOCs cannot be collected

using a peristaltic pump. If purging the well using a peristaltic pump, collect all other types of samples (e.g., semivolatile organic compounds [SVOCs], inorganics, etc.) prior to collecting the sample for VOC analysis. Once other samples are collected, remove the peristaltic pump tubing and collect the VOC samples using a new disposable polyethylene bailer. The bailer should be gently lowered to the approximate depth at which the pump intake was set, and then retrieved.

17. Secure with packing material and store at 4 degrees Celsius ($^{o}$C) on wet ice in an insulated transport container provided by the laboratory.

18. If required, after all sampling containers have been filled, remove one additional volume of groundwater. Check the calibration of the meters and then measure and record on the field log the physical appearance, pH, ORP, DO, temperature, turbidity, and conductivity.

19. Record the time sampling procedures were completed on the field logs.

20. Place all disposable sampling materials (plastic sheeting, disposable bailers, and health and safety equipment) in appropriately labeled containers. Go to the next well and repeat Step 1 through Step 21 until all wells are sampled.

21. Complete the procedures for packaging, shipping, and handling with associated chain of custody forms (Section 2.2).

### 2.9 Surface Soil Sampling

If required, surface soil samples will be collected from below the vegetative sod layer or sub-base material (if these materials are present at the selected locations) at a depth of approximately 0 to 2 inches below the vegetative sod layer or sub-base material. Sub-samples will be collected from within a 1-square-meter area centered on the sampling location and evenly distributed throughout the square meter area. Each sample will be visually characterized for color, texture, and moisture content.

A grab sample will also be placed into a container or Ziploc® resealable plastic bag (or equivalent) for headspace screening using a PID to measure the relative concentration of total VOC vapors, if any. Equipment, materials, and procedures for collecting surface soil grab samples are presented below.

The following equipment and materials will be available, as required, during the surface soil sampling:

- appropriate health and safety equipment
- camera

- cleaning equipment
- aluminum or stainless steel tray
- measuring device
- appropriate sample containers and forms
- coolers with ice
- field book

The procedures for collecting surface soil samples are presented below:

1. Don PPE (as required by the HASP).

2. Identify sample locations from the sample location plan and note locations in the field notebook. Locations should not be selected in areas covered with crushed stone or hard-packed gravel.

3. Eight sub-soil samples will be collected from a 1-square-meter area centered on the sampling location by carefully cutting into and removing the surface material (e.g., sod, sub-base) with a precleaned stainless steel scoop. The sub-samples will be collected from 0 to 2 inches below the surficial material and placed into a stainless steel or aluminum tray.

4. Gently mix the soil in the tray and obtain one surface soil sample and place it into an 8-ounce jar or Ziploc® resealable plastic bag (or equivalent) and screen the headspace with a PID. Record PID reading in field book. Visually characterize the soil for presence of stains and classify according to ASTM soil classification procedures.

5. Obtain one composite sample and place into appropriate sample containers provided by the analytical laboratory for SVOC, inorganic, and total cyanide analysis.

6. Based on the presence of staining, collect a grab sample from 0 to 2 inches from one of the eight sub-sample locations and place into an appropriate sample container provided by the analytical laboratory for VOC analysis.

7. Fill out sample labels, in accordance with procedures in Section 2.2, and affix the labels on the containers. Also, label the sample bottle caps with the sample ID.

8. Place the sample containers on ice in an insulated transportation cooler.

9. Discard gloves and stainless steel scoop in designated location.

10. Handle, pack, and ship the samples with appropriate chain of custody procedures in accordance with Section 2.2.

Record all other appropriate information in the field log book.

### 2.10 Test Pit Excavation

If required, test pits/trenches will be excavated using a backhoe equipped with a bucket. If residues are visually observed in the test pit/trenches, the contents may also be sampled.

The following materials will be available, as required, during test pit excavation:

- backhoe with bucket
- shovel
- plastic sheeting
- stainless steel hand trowel
- stainless steel pan
- appropriate sample containers and packing materials, if required
- potable water
- steam cleaning equipment
- appropriate health and safety equipment, as required by the HASP
- PID
- camera/video camera
- test pit/trench log

2.10.1 Procedures for Test Pit Excavation

The following procedures will be used to excavate test pits.

1. Identify the test pit/trench number on an appropriate log or in the designated field notebook, as well as with the temperature, weather, date, time, and personnel at the site.

2. Set up a decontamination station and decontaminate the backhoe, bucket, shovel, and other sampling apparatus with a high-pressure steam rinse using a tap water source.

3. Put on appropriate health and safety equipment.

4. Place the plastic sheeting on the ground next to the test pit/trench location.

5. Position the backhoe and personnel at upwind (to the extent feasible) locations of the test pit/trench area.

6. Turn on the PID. Measure and record on the test pit/trench log background PID readings on the log or in the field book.

7. Excavate the soil with the backhoe in approximately 1 foot increments. At each interval, examine and classify the soils according to applicable standards. Record these observations in the test pit/trench log or field book. Also, screen the soil samples with a PID. These measurements will also be recorded in the test pit/trench log (or field book).

8. If the contents of the test pit/trench visually appear to consist of site residues, the test pit/trench contents may be sampled. If sampling is required, the test pit/trench will be sampled with a shovel if the test pit/trench is less than 3 feet deep. If the test pit/trench is greater than 3 feet deep, then the test pit/trench will be sampled with the backhoe bucket. The contents of the bucket will then be sampled with a cleaned stainless steel hand trowel.

9. If sampling is required, the samples will be collected in the appropriate containers and placed immediately in a cooler of wet ice to maintain a 4ºC temperature for preservation. Volatile organic samples will be collected immediately after sample retrieval. Next, a sufficient amount of the remaining soil will be removed from the sampling device and homogenized by mixing thoroughly in a clean stainless steel pan with a clean stainless steel trowel. Samples will be selected for analytical characterization only if visible residues are present and/or relatively high PID screening readings are measured.

10. The test pit/trench will be terminated when significant residues are encountered, the top of the water table is reached, or to the maximum reach of the backhoe, whichever occurs first.

11. Soils generated during drilling will be staged on plastic during excavation, monitored for PID readings and visual observations, then placed back into the test pit/trench. Clean fill will be placed at the surface.

12. A labeled stake will be placed at the test pit/trench location.

13. A photograph of each location before, during, and after each test pit/trench is excavated will be taken.

14. The backhoe, backhoe bucket, and all tools used at the test pit/trench area will be decontaminated using a high-pressure steam rinse using a tap water source. Decontamination water and residual materials associated with decontamination will be contained.

### 2.11 Soil Vapor/Indoor Air Sampling

Soil vapor, indoor air, and ambient air samples will be collected in general accordance with the New York State Department of Health (NYSDOH) "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" (NYSDOH, October 2006). Indoor air and ambient sampling points only require the SUMMA® canister and regulator as described below. Soil vapor sampling points are described in detail below and in **Attachment C-5** *Soil-Gas Sampling and Analysis Using USEPA Method TO-17 and TO-15*.

#### 2.11.1 Soil Vapor Sampling

Soil vapor sampling points will consist of expendable stainless steel screens installed at the required depth with clean fine sand or glass beads placed around the screen as a filter medium. A hydrated bentonite mix will be used as a plug (minimum 2 feet thick) to seal the borehole and prevent short-circuiting to the surface. Laboratory-grade polyethylene tubing of the appropriate diameter will connect the sampling point to a 6-liter SUMMA® canister, in which the soil vapor sample will be collected. The remaining annulus around the tubing can be filled with bentonite, grout or collapsed formation. Prior to collecting a soil vapor sample, the sampling point and tubing will be purged one to three volumes of the sample probe and tube and screened for VOC vapors using a photoionization detector (PID). PID readings will be recorded in the field notebook. Construction details for a typical soil vapor monitoring point are provided on **Figure C-4**.

Samples will be collected using a 6-liter SUMMA® canister with an attached, pre-set flow regulator. The laboratory will provide batch-certified-clean canisters with and initial vacuum of approximately 29 inches of mercury (in. of Hg) for sample collection. Flow regulators will be pre-set by the laboratory to provide uniform sample collection over an approximate 2-hour sampling period (e.g., flow rate of approximately 50 milliliters per minute [mL/min]). The valve on the SUMMA® canister will be closed when approximately 2 in. of Hg

vacuum remains in the canister, leaving a vacuum in the canister as a means for the laboratory to verify that the canister does not leak while in transit.

Field personnel will document the following information (at a minimum) in the project field notebook or on the field soil-gas sampling log presented on **Figure C-5**:

- weather conditions (precipitation, temperature and wind direction) 24 hours prior to, and during, the sampling activities
- date and time (start and end time) each sample was collected
- sample identification
- identification of laboratory samplers/regulators/devices
- purge volumes
- volume of soil vapor extracted
- vacuum pressure of canister (before and after sample collection)
- chain of custody identification

### 2.11.2 Soil Vapor Sample Collection

Preparation of SUMMA®-Type Canister and Collection of Sample

1. Record the following information in the field notebook, if appropriate (contact the local airport or other suitable information source [e.g., site-specific measurements, weatherunderground.com] to obtain the information):
    a. wind speed and direction
    b. ambient temperature
    c. barometric pressure
    d. relative humidity

2. Connect a short piece of Teflon tubing to the soil vapor sampling port using a twist-to-lock fitting.

3. Connect a portable vacuum pump to the sample tubing. Purge 1 to 2 (target 1.5) volumes of air from the vapor probe and sampling line using a portable pump [purge volume = 1.5 Pi r2h] at a rate of approximately 100 mL/min. Measure organic vapor levels with the PID. Lower flow rates may be necessary in silt or clay to avoid excessive vacuum. Vacuum is >136 inches of water column are clearly excessive. Other sources site a cutoff of >10 inches of water column.

4. Check the seal established around the soil vapor probe by using a tracer gas (e.g., helium) or other method established in the state guidance documents. Refer to **Attachment C-6**, *Administering Helium Tracer Gas for Leak Checks of Soil Gas or Sub-Slab Sampling Points.*

5. Remove the brass or stainless steel plug from the SUMMA® canister and connect the flow controller with in-line particulate filter and vacuum gauge to the SUMMA® canister. Do not open the valve on the SUMMA® canister. Record in the field notebook and chaon of custody (COC) form the flow controller number with the appropriate SUMMA® canister number.

6. Connect the Teflon sample collection tubing to the flow controller and the SUMMA® canister valve. Record in the field notebook the time sampling began and the canister pressure.

7. Connect the other end of the polyethylene tubing to the sub-slab sampling port.

8. Open the SUMMA® canister valves. Record in the field notebook the time sampling began and the canister pressure.

9. Take a photograph of the SUMMA® canister and surrounding area.

Termination of Sample Collection

1. Arrive at the SUMMA® canister location at least 10 to 15 minutes prior to the end of the required sampling interval (e.g., 30 to 60 minutes).

2. Record the final vacuum pressure. Stop collecting the sample by closing the SUMMA® canister valves. The canister should have a minimum amount of vacuum (approximately 2 inches of Hg or slightly greater).

3. Record the date and local time (24-hour basis) of valve closing in the field notebook, sample collection log and COC form.

4. Remove the particulate filter and flow controller from the SUMMA® canister, re-install the brass plug on the canister fitting, and tighten with the appropriate wrench.

5. Package the canister and flow controller in the shipping container supplied by the laboratory for return shipment to the laboratory. The SUMMA® canister does not require preservation with ice or refrigeration during shipment.

6. Complete the appropriate forms and sample labels as directed by the laboratory (e.g., affix card with a string).

Complete the COC form and place the requisite copies in a shipping container. Close the shipping container and affix a custody seal to the container closure. Ship the container to the laboratory via overnight carrier (e.g., FedEx) for analysis.

### 2.12 Measurement of Fluid Levels

Fluid levels will be measured using an electronic fluid-level indicator (sounder), steel tape, pressure transducer, or stream gauge at established reference points (e.g. top of casing, stream gauge).

The following materials will be available, as required:

- appropriate health and safety equipment, as specified in the HASP
- laboratory-type soap (Alconox or equivalent)
- electronic water-level indicator (sounder) or pressure transducer
- PID
- analyte-free water
- indelible ink pen

#### 2.12.1 Well Fluid Level Gauging

The following procedures will be used to obtain fluid levels:

1. Identify site and well number in field book, as well as with the date, time, personnel, and weather conditions using indelible ink. Use safety equipment, as specified in the HASP. Clean the water-level

indicator, in accordance with section 2.3.2. Contain rinse water in a portable container that will be transferred to an onsite container.

2. Unlock and open the well cover while standing upwind from the well. Record PID reading in well headspace.

3. Locate a measuring reference point on the well casing. If one is not found, create a reference point by notching the inner casing (or outer if an inner casing is not present) with a hacksaw. All downhole measurements will be taken from one reference point. Document the creation of any new reference point or alteration of the existing reference point.

4. Measure to the nearest 0.01-foot and record the height of the inner and outer casing from reference point to ground level.

5. Lower the water-level indicator probe down the well. Take depth measurements of light product (if any), water, dense product (if any), and bottom. Double check all measurements and record depths to the nearest 0.01-foot.

6. Clean the instrument(s), as specified in section 2.3.2.

7. Compare the depth of the well to previous records.

8. Lock the well when all activities are completed.

#### 2.12.2 Surface-Water Elevation Measurement at Surface-Water Gauges

1. Identify site and surface-water gauge number in field book, as well as with the date, time, personnel, and weather conditions using indelible ink.

2. Use safety equipment, as specified in the HASP.

3. Clean the water-level indicator, as specified in section 2.3.2. Contain rinse water in a portable container that will be transferred to an onsite container.

4. Locate a measuring reference point on the surface-water gauge. If one is not found, create a reference point by notching the surface-water gauge with a hacksaw. The surface-water elevation measurement will be taken from one reference point. Document the creation of any new reference point or alteration of the existing reference point.

5. Lower the water-level indicator until it touches the bottom of the staff gauge. Record the depth of the water body. Take water-level measurements as the probe is drawn back up through the water column. Double check all measurements and record depths to the nearest 0.01-foot. Double check that the water level measured inside the stream gauge appears to coincide with the observable level of the waste body outside the stream gauge.

6. Clean the instrument(s), as specified in section 2.3.2.

7. Compare the measurements to previous records.

### 2.13 NAPL Bailing

In the event that NAPL product, either LNAPL or DNAPL, is discovered during well gauging, it will be removed via appropriately sized disposable bailers. Bailing will continue until there is no longer recoverable product retrieved in the bailer. All material brought up in the bailer (groundwater and product) will be dumped into a bucket immediately adjacent to the well. Upon completion of bailing of NAPL from a well, the bailed material will be transferred to an onsite storage container (e.g. 55-gallon drum) for storage pending disposal.

### 2.14 Air Monitoring

Air monitoring will be conducted with a PID and dust monitor during all intrusive activities and only a PID during sampling activities. The PID will be used to monitor organic vapors in the breathing zone and borehole and to screen samples for analysis, and the dust monitor will be used to monitor particulate concentration in the breathing zone for particulates less than 10 microns in diameter.

The PID and dust monitor readings will be recorded in the field book during trenching and drilling activities. The instruments will be calibrated at least once each day and more frequently, if needed. A detailed procedure for the PID calibration is included as **Attachment C-1**.

## 3. Field Instruments

All field-screening equipment will be calibrated immediately prior to each day's use and more frequently, if required. The calibration procedures will conform to the manufacturer's standard instructions. Records of all instrument calibration will be maintained by the field personnel. Copies of all of the instrument manuals will be maintained onsite by the field personnel.

### 3.1 Portable Photoionization Analyzer

The photoionization analyzer will be a Photovac MicroTip (or equivalent), equipped with a 10.6 electron volt (eV) lamp. The Photovac is capable of ionizing and detecting compounds with an ionization potential of less than 10.6 eV. This accounts for up to 73% of the VOCs on the Target Compound List. Calibration will be performed according to the procedures outlined in **Attachment C-1**.

### 3.2 Dust Monitor

The dust monitor will be an MIE DataRAM (or equivalent) and will be calibrated at the start of each day of use. Calibration and maintenance of the dust monitor will be conducted in accordance with the manufacturer’s specifications. The calibration data will be recorded in field notebooks.

### 3.3 pH Meter

The pH meter will be calibrated at the start of each day of use and after very high or low readings, as required by this FSP. National Institute of Standards and Technology traceable standard buffer solutions that bracket the expected pH range will be used. The standards will most likely be a pH of 7.0 and 10.0 standard units. The pH calibration and slope knobs will be used to set the meter to display the value of the standard being checked. The calibration data will be recorded in field notebooks.

### 3.4 Specific Conductivity Meter

Calibration checks using the appropriate conductivity standard for the meter will be performed at the start of each day of use and after very high or low readings, as required by this FSP. Readings must be within 5% to be acceptable. The thermometer of the meter will be calibrated against the field laboratory thermometer on a weekly basis.

### 3.5 Dissolved Oxygen Meter

The DO meter will be calibrated and the condition of the DO sensor will checked at the start of each day of use. Calibration and maintenance of the DO meter will be conducted in accordance with the manufacturer's specifications. The calibration data will be recorded in field notebooks.

### 3.6 Water-Level Meter

The water-level cable will be checked once to a standard to assess if the meter has been correctly calibrated by the manufacturer or vendor. If the markers are incorrect, the meter will be sent back to the manufacturer or vendor.

### 3.7 Turbidity Meter

The turbidity meter will be calibrated daily prior to use. Calibration and maintenance will be conducted in accordance with the manufacturer's specifications. Calibration and maintenance information will be recorded in the field notebook.

### 3.8 Oxidation-Reduction Potential Meter

The ORP meter will be calibrated at the start of each day of use. Calibration and maintenance of the ORP meter will be conducted in accordance with the manufacturer's specifications. The calibration data will be recorded in the field notebook.

## 4. References

ARCADIS 2008a. *Site Characterization Work Plan for the Park Street Former MGP Site*, Geneseo, New York. June 2015.

ARCADIS 2008b. *Quality Assurance Project Plan for the Park Street Former MGP Site*, Geneseo, New York. June 2015.

American Society for Testing and Materials 2008. *Standard Test Method for Standard Penetration Test (SPT) and Split-Barrel Sampling of Soils.* February 2008.

NYSDOH. Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006) Puls and Barcelona, 1996.

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**Figures**

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ID#:

# CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page ___ of ___

Lab Work Order #

**Send Results to:**

| | |
|---|---|
| Contact & Company Name: | Telephone: |
| Address: | Fax: |
| City State Zip | E-mail Address: |
| Project Name/Location (City, State): | Project #: |
| Sampler's Printed Name: | Sampler's Signature: |

| Sample ID | Collection Date | Collection Time | Type (✓) Comp | Type (✓) Grab | Matrix |
|---|---|---|---|---|---|
| | | | | | |
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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Preservative | | | | | | | | |
| Filtered (✓) | | | | | | | | |
| # of Containers | | | | | | | | |
| Container Information | | | | | | | | |

**PARAMETER ANALYSIS & METHOD**

**REMARKS**

**Keys**

**Preservation Key:**
A. $H_2SO_4$
B. HCL
C. $HNO_3$
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

**Container Information Key:**
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

**Matrix Key:**
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: _____

**Special Instructions/Comments:**

☐ **Special QA/QC Instructions(✓):**

| Laboratory Information and Receipt | | Relinquished By | Received By | Relinquished By | Laboratory Received By |
|---|---|---|---|---|---|
| Lab Name: | Cooler Custody Seal (✓) | Printed Name: | Printed Name: | Printed Name: | Printed Name: |
| ☐ Cooler packed with ice (✓) | ☐ Intact ☐ Not Intact | Signature: | Signature: | Signature: | Signature: |
| Specify Turnaround Requirements: | Sample Receipt: | Firm: | Firm/Courier: | Firm/Courier: | Firm: |
| Shipping Tracking #: | Condition/Cooler Temp: _____ | Date/Time: | Date/Time: | Date/Time: | Date/Time: |



**Distribution:** WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by BBL

**Date Start/Finish:** 8/9/2008 - 8/10/2008
**Drilling Company:** Drillers, Inc.
**Driller's Name:** Joe Smith
**Drilling Method:** Hollow Stem Auger
**Auger Size:** 4.25" ID
**Rig Type:** CME-55
**Sampling Method:** 2" Split Spoon

**Northing:** 617984.1848
**Easting:** 559115.8392
**Casing Elevation:** NA

**Borehole Depth:** 26' bgs
**Surface Elevation:** 682.35' AMSL

**Descriptions By:** Katherine Murray

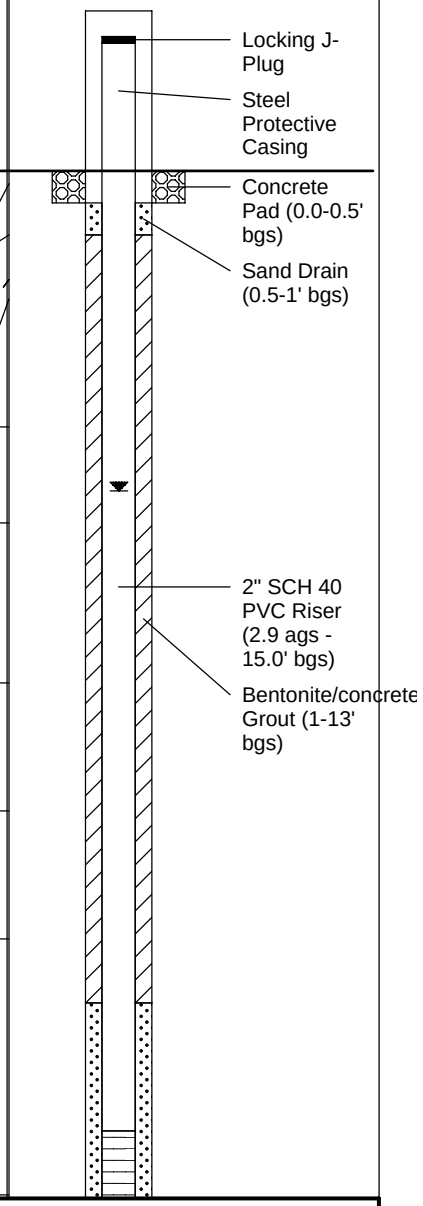
**Well/Boring ID:** **EXAMPLE BORING**

**Client:** XYZ Chemical Plant, An ABC Company

**Location:** Smith Street Site Syracuse, NY

**DRAFT**

| DEPTH | ELEVATION | Sample Run Number | Sample/Int/Type | Recovery (feet) | Blow Counts | N - Value | PID Headspace (ppm) | Geologic Column | Stratigraphic Description |
|---|---|---|---|---|---|---|---|---|---|
| | 685 | | | | | | | | |
| 0 | | 1 | 0-2 | 2.0 | 1<br>1<br>2<br>5 | 3 | 1.1 | | Asphalt surface.<br>Black-gray coarse GRAVEL, some fine Sand, moist.<br>Dark brown to brown fine SAND and Coal SLAG, some medium to coarse Sand, moist. |
| | 680 | 2 | 2-4 | 1.2 | 1<br>2<br>3<br>5 | 5 | 0.0 | | Light gray to white ASH, little rust colored mottles, moist to wet.<br>Dark gray fine SAND and SILT, trace Clay, slightly plastic, some rust colored layers, wet. |
| 5 | | 3 | 4-6 | 1.1 | 1<br>2<br>1<br>5 | 3 | 0.0 | | Dark gray SILT and CLAY, little fine Gravel, little coarse Sand, medium plasticity, soft, wet.<br>Gravel content increasing to some below 4.7' bgs. |
| | 675 | 4 | 6-8 | 1.3 | 7<br>8<br>1<br>8 | 9 | 0.0 | | Red to yellow-brown fine to medium GRAVEL and coarse SAND, little Silt, trace Clay, wet. |
| | | 5 | 8-10 | 0.3 | 1<br>2<br>5<br>4 | 7 | 0.0 | | Brown fine to coarse SAND, some fine Gravel, little Silt, moist. |
| 10 | | 6 | 10-12 | 0.0 | 6<br>18<br>50/0.3 | NA | NA | | No Recovery. |
| | 670 | 7 | 12-14 | 1.4 | 6<br>5<br>4<br>6 | 9 | 3.5 | | Red to yellow-brown fine to medium GRAVEL and coarse SAND, little Silt, saturated. |
| 15 | | 8 | 14-16 | 1.5 | 2<br>9<br>1<br>2 | 10 | 4.5 | | Color change to brown below 14' bgs. |




**Remarks:** bgs = below ground surface; NA = Not Applicable/Available; AMSL = Above Mean Sea Level.

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**Client:** XYZ Chemical Plant,
An ABC Company

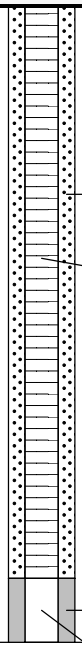
**Site Location:**
Smith Street Site
Syracuse, NY

**Well/Boring ID:** **EXAMPLE BORING**

**Borehole Depth:** 26' bgs

**DRAFT**

| DEPTH | ELEVATION | Sample Run Number | Sample/Int/Type | Recovery (feet) | Blows / 6 Inches | N - Value | PID Headspace (ppm) | Geologic Column | Stratigraphic Description | Well/Boring Construction |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 9 | 16-18 | 2.0 | 3 2 1 1 | 3 | 0.0 | | Brown fine to medium GRAVEL and coarse SAND, little Silt, saturated. | |
| | 665 | 10 | 18-20 | 2.0 | 1 1 2 2 | 3 | 0.0 | | | |
| 20 | | 11 | 20-22 | 2.0 | 5 4 1 2 | 5 | 0.0 | | | |
| | 660 | 12 | 22-24 | 1.6 | 4 13 12 9 | 15 | 87 | | | |
| 25 | | 13 | 24-26 | 1.7 | 3 12 9 15 | 21 | 112 | | | |
| | 655 | | | | | | | | | |
| 30 | | | | | | | | | | |
| | 650 | | | | | | | | | |
| 35 | | | | | | | | | | |

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**Remarks:** bgs = below ground surface; NA = Not Applicable/Available; AMSL = Above Mean Sea Level.

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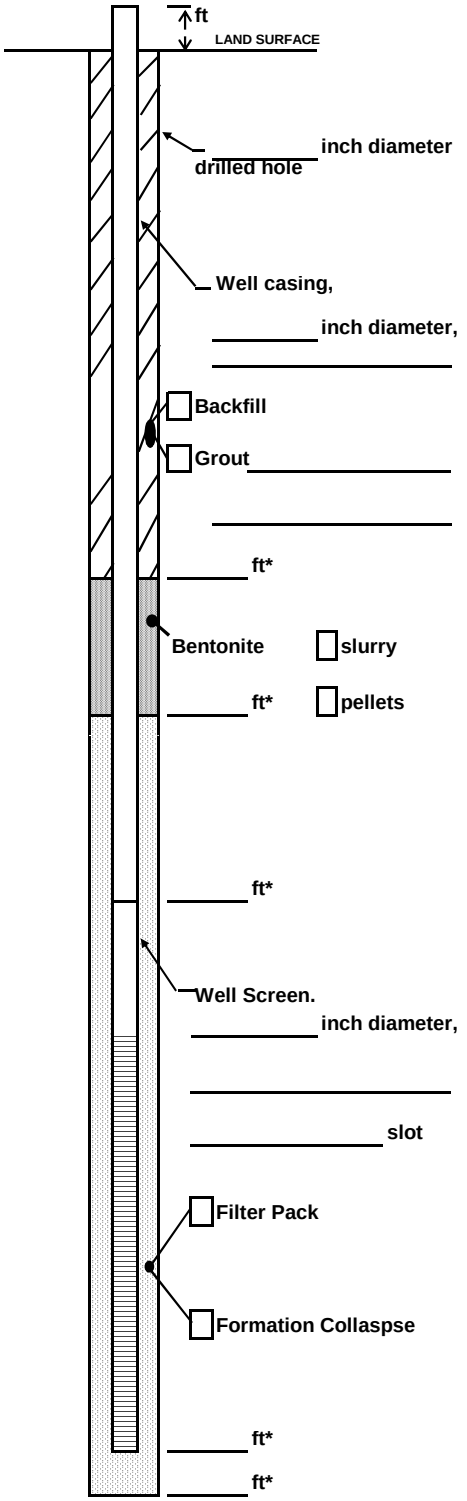
# Well Construction Log

**(Unconsolidated)**




**Project Name and No.** _____

**Well** _____ **Town/City** _____

**County** _____ **State** _____

**Permit No.** _____

**Land-Surface Elevation and Datum:**

_____ **feet** ☐ **Surveyed**

☐ **Estimated**

**Installation Date(s)** _____

**Drilling Method** _____

**Drilling Contractor** _____

**Drilling Fluid** _____

**Development Technique(s) and Date(s)**

**Fluid Loss During Drilling** _____ **gallons**

**Water Removed During Development** _____ **gallons**

**Static Depth to Water** _____ **feet below M.P.****

**Pumping Depth to Water** _____ **feet below M.P.****

**Pumping Duration** _____ **hours**

**Yield** _____ **gpm** **Date** _____

**Specific Capacity** _____ **gpm/ft**

**Well Purpose** _____

**Remarks** _____

*** Depth Below Land Surface**

****Measuring Point is Top of Well Casing Unless Otherwise Noted.**

**Prepared by** _____

**Date Start/Finish:** March 2009
**Drilling Company:** Zebra
**Driller's Name:**
**Drilling Method:** Direct Push
**Auger Size:**
**Rig Type:** Geoprobe
**Sampling Method:**

**Northing:**
**Easting:**
**Casing Elevation:**
**Borehole Depth:** 21'
**Surface Elevation:**
**Descriptions By:**

**Well/Boring ID:** TYPICAL

**Client:** Consolidated Edison Company of New York,

**Location:** Former East 11th Street Works Site

| DEPTH | ELEVATION | Sample Run Number | Sample/Int/Type | Recovery (feet) | Blow Counts | N - Value | PID Headspace (ppm) | Analytical Sample | Geologic Column | Stratigraphic Description | Well/Boring Construction |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 0 | | | | | | | | | SAND with some Rock and Gravel pieces, Concrete chunks, poorly sorted; loose, dry; brown, NVI. Decriptions taken during utility clearance. [FILL] | Sand Drain |
| 5 | -5 | | | | | | | | | Poorly sorted SAND; some fine to medium angular to subrounded Gravel; trace Silt; dry; brown to gray; NVI. | Borehole backfilled with hydrated Bentonite; 1/4" Poly Tubing |
| 10 | -10 | | | | | | | | | Coarse Gravel fragment in spoon; soils becoming damp. | |
| 15 | -15 | | | | | | | | | Traces of light-colored SAND | Dry Bentonite pellets |
| 20 | -20 | | | | | | | | | END OF BORING AT 21' bgs. | 1.6"x12" Stainless Steel Wire-Wrapped Screen |

**Remarks:**

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Project Number: B0043013
Data File: SV-7.dat

Template:
Date: 3/2/2009 RA

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# Soil-Gas Sample Collection Log

**Sample ID:**

| | | | |
|---|---|---|---|
| **Client:** | | **Date/Day:** | |
| **Project:** | | **Weather:** | |
| **Location:** | | **Temperature:** | |
| **Project #:** | | **Wind Speed/Direction:** | |
| **Samplers:** | | **Subcontractor:** | |
| **Logged By:** | | **Equipment:** | |
| **Coordinates:** | | **Moisture Content of Sampling Zone (circle one):** | Dry / Moist |
| **Sampling Depth:** | | **Approximate Purge Volume:** | |
| **Time of Collection:** | | **Background PID Ambient Air Reading:** | |

**Nearby Groundwater Monitoring Wells/Water Levels:**

| Well ID | Depth to Groundwater (ft) |
|---|---|
| | |
| | |
| | |

**SUMMA Canister Information:**

**Size (circle one):** 1 L 6 L
**Canister ID:** _____

**Flow Controller ID:** _____

**Tracer Gas Information (if applicable)**

**Tracer Gas:**

:

| Canister Pressure (inches Hg): | | |
|---|---|---|
| **Reported By Laboratory** | **Measured Prior to Sample Collection** | **Measured Following Sample Collection** |
| | | |

| Tracer Gas Concentration (if applicable): | | |
|---|---|---|
| **Measured in Purge Effluent** | **Measured in 'Concentrated' Area Prior to Sample Collection** | **Measured in 'Concentrated' Area Following Sample Collection** |
| | | |

**General Observations/Notes:**

**Approximating One-Well Volume (for purging):**
When using 1¼-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of ¼-inch tubing will have a volume of approximately 10 mL.

**Attachment C-1**

Calibration, Operation, and Maintenance Procedures

ARCADIS

# INSTRUMENT CALIBRATION FORM

**Project** _____

**Project No.** _____

**Site Location** _____

**Date** _____

**Time** _____

**Prepared by** _____

| | | | |
|---|---|---|---|
| ☐ Ph Cond Tempmeter<br>Model Oakton 300 Services<br>Serial 121686 | ☐ Turbidity Meter<br>Model 2020 Lamotte<br>Serial 3597-3502 | ☐ D.O. Meter<br>Model #55/25 FT<br>Serial 00H0611 | ☐ ORP Meter<br>Model 00702-70<br>Serial 55386 |
| ☐ Multiprobe<br>Model YSI 600 XL<br>Serial 02J0183A1 | ☐ Turbidity Meter<br>Model 2020 Lamotte<br>Serial | ☐ D.O. Meter<br>Model<br>Serial | ☐ ORP Meter<br>Model<br>Serial |
| ☐ PID<br>Model Photovac 2020<br>Serial ED HF 358 | ☐ PID<br>Model Photovac 2020<br>Serial | ☐ pH Cond Temp<br>Model Oakton 300 Series<br>Serial 197765 | ☐ Rental<br>Model<br>Serial |

***Check appropriate box for equipment calibrated. If two similar items are calibrated, please note two checks under calibration successful***

| **Parameter PID (ppmv)** | **Value** | **Calibration Successful** |
|---|---|---|
| Zero | | |
| Span | | |

| **ph (si Units)** | **Value** | **Calibration Successful** |
|---|---|---|
| 4.00 | | |
| 7.00 | | |
| 10.00 | | |

| **Conductivity (umhos)** | **Value** | **Calibration Successful** |
|---|---|---|
| 84 umhos | | |
| 1413 uhmos | | |
| Other | | |

| **Turbidity (NTU)** | **Value** | **Calibration Successful** |
|---|---|---|
| 1.0 NTU | | |
| 10 NTU | | |
| 40 NTU | | |
| Other | | |

| **Parameter D.O.** | **Calibration Successful** |
|---|---|
| 100% Saturated Air | |
| Barometer Adjustment | |
| Elevation Adjustment | |

| *** ORP (Mv)** | **Calibration Successful** |
|---|---|
| Hydroquinone (240) (Black) | |
| Zobel Solution (237) (yellow) | |
| Temperature Based Chart Calibration | |
| * Adjusted | |

*** No adjustment on some meters just a probe check, others are adjustable**

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Infrastructure · Water · Environment · Buildings

Imagine the result

**Rochester Gas & Electric**

# Calibration, Operation, and Maintenance Procedures

Park Street Former MGP Site
Geneseo, New York

June 2015

# Calibration, Operation, and Maintenance Procedures

Park Street Former MGP Site

Prepared for:
Rochester Gas & Electric

Prepared by:
ARCADIS of New York, Inc.
295 Woodcliff Drive
Third Floor
Suite 301
Fairport
New York 14450
Tel 585 385 0090
Fax 585 385 4198

Our Ref.:
B0013138.0000

Date:
June 2015

ARCADIS

# Table of Contents

## 1. Introduction

The MiniRAE 2000 measures relative total concentrations of organic and inorganic vapors in the field and will be calibrated daily prior to use. The MiniRAE 2000 does not carry an Intrinsic Safety Rating and will be used in a controlled environment only. The MiniRAE 2000 will be used to screen soil samples, the head space of soil/water samples, and to monitor the breathing and work zones.

## 2. Materials

- MiniRAE 2000 Photoionization Detector (PID)
- Isobutylene calibration gas tank with pressure regulator and up to four other selected span gases
- Zero span gas (clean outdoor air or zero grade gas)
- Gas sampling bag with plastic tubing to connect PID probe to calibration gas
- Flow regulator
- PID calibration and maintenance log

## 3. Calibration Procedures

1. Turn on the MiniRAE 2000 and monitor the ambient air. If there is any doubt of the air quality, then zero grade gas will be obtained.

2. Connect the regulator to the span gas cylinder. Hand-tighten the fittings.

3. Open the valve on the gas bag by turning the valve stem fully counterclockwise.

4. Attach the gas bag to the regulator. Hand-tighten the fittings.

5. Turn the regulator knob counterclockwise half a turn to start the gas flow.

6. Fill the gas bag half full and then close the regulator fully clockwise to turn off the flow of gas.

7. Fill the gas bag and then turn the valve clockwise.

8. Press “MODE” and “N” at the same time to enter the set-up screens. To cycle through the screens press “MODE.” Press “Y” for span cal and “Y” again for zero point. Press “Y” to set the zero point.

9. When screen displays “CAL GAS” press “Y” and calibrate the unit with isobutylene calibration gas.

10. Press and hold “MODE” for a few seconds and the display will return to normal screening mode.

11. After 7 hours of use, recharge the battery pack.

12. Record the date, time, your initials, calibration gas, and concentration on the MiniRAE 2000 Calibration and Maintenance Log (Attachment 1).

## 4. Operation Procedures

1. Use the health and safety equipment, as required by the Health and Safety Plan.
2. Calibrate the instrument, as described in Section 3.
3. Measure and record the background PID reading.
4. If the PID will be used for more than 7 hours during optimal weather conditions (50 degrees or greater) or during extreme cold or precipitation, have a fully charged battery available for use.
5. In the event of precipitation, fully cover the instrument, leaving the probe accessible for measurements.
6. Measure and record PID reading.

## 5. Maintenance Procedures

1. At the end of each day or when the battery is fully discharged, recharge batteries overnight.
2. Store the instrument in the protective case when not in use.
3. Keep records of operation, maintenance, calibration problems and repairs.
4. A replacement instrument will be available onsite or ready for overnight shipment, if necessary.
5. The MiniRAE 2000 will be sent back to the manufacturer for service if needed.

**Attachment C-2**

Field Sampling Logs

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# Water Sampling Log

Project _____ Project No. _____

Site Location _____ Date _____

Well No. _____ Replicate No. _____ Weather _____

Sampling Personnel _____ Sampling Time: Begin _____ End _____

**Purge Data**

Measuring Point (describe) _____

Sounded Well Depth (ft bmp) _____

Depth to Water (ft bmp) _____

Depth to Packer (ft bmp) _____

Water Column in Well (ft) _____

Casing Diameter _____

Gallons in Well _____

Gallons Purged

Prior to Sampling _____

Pump Intake

Setting (ft bmp) _____

Packer Pressure (psi) _____

Pumping Rate (gpm) _____

Evacuation Method _____

Sampling Method _____

Purge Time Begin _____ End _____

**Field Parameters**

Color _____

Odor _____

Appearance _____

| | I | 1V | 2V | 3V |
|---|---|---|---|---|
| pH (s.u.) | | | | |
| Conductivity (mS/cm) or (µmhos/cm) [1)] | | | | |
| Temperature (°C) | | | | |
| DO (mg/L) | | | | |
| ORP (mV) | | | | |
| Turbidity (NTU) | | | | |
| Time | | | | |
| DTW (ft bmp) | | | | |

Remarks: _____

| Parameter | Container | No. | Preservative |
|---|---|---|---|
| | | | |
| | | | |
| | | | |

**PID Reading** _____

Well Casing Volumes

| Gal./Ft. | | | | |
|---|---|---|---|---|
| | $1^{1/4}$" = 0.06 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 |
| | $1^{1/2}$" = 0.09 | 2-½" = 0.26 | 3-½" = 0.50 | 6" = 1.47 |

**1) Circle one unit type**

**Attachment C-3**

Soil Description Standard Operating Procedure

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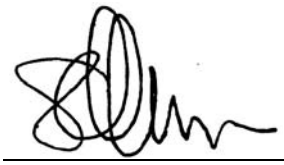
# Soil Description

Rev. #: 0

Rev Date: May 20, 2008

**Approval Signatures**

Prepared by:  Date: 5/22/08

Reviewed by:  Date: 5/22/08
(Technical Expert)

Reviewed by  Date: 5/22/08
(Technical Expert)

## I. Scope and Application

This ARCADIS standard operating procedure (SOP) describes proper soil description procedures. This SOP should be followed for all unconsolidated material unless there is an established client-required specific SOP or regulatory-required specific SOP. In cases where there is a required specific SOP, it should be followed and should be referenced and/or provided as an appendix to reports that include soil classifications and/or boring logs. When following a required non-ARCADIS SOP, additional information required by this SOP should be included in field notes with client approval.

This SOP has been developed to emphasize field observation and documentation of details required to:

- make hydrostratigraphic interpretations guided by depositional environment/geologic settings;
- provide information needed to understand the distribution of constituents of concern; properly design wells, piezometers, and/or additional field investigations; and develop appropriate remedial strategies.

This SOP incorporates elements from various standard systems such as ASTM D2488-06, Unified Soil Classification System, Burmister and Wentworth. However, none of these standard systems focus specifically on contaminant hydrogeology and remedial design. Therefore, although each of these systems contain valuable guidance and information related to correct descriptions, strict application of these systems can omit information critical to our clients and the projects that we perform.

This SOP does not address details of health and safety; drilling method selection; boring log preparation; sample collection; or laboratory analysis. Refer to other ARCADIS SOPS, the project work plans including the quality assurance project plan, sampling plan, and health and safety plan (HASP), as appropriate.

## II. Personnel Qualifications

Soil descriptions will be completed only by persons who have been trained in ARCADIS soil description procedures. Field personnel will complete training on the ARCADIS soil description SOP in the office and/or in the field under the guidance of an experienced field geologist. For sites where soil descriptions have not previously been well documented, soil descriptions should be performed only by trained persons with a degree in geology or a geology-related discipline.

## III. Equipment List

The following equipment should be taken to the field to facilitate soil descriptions:

- field book, field forms or PDA to record soil descriptions;
- field book for supplemental notes;
- this SOP for Soil Descriptions and any project-specific SOP (if required);
- field card showing Wentworth scale;
- Munsell® soil color chart;
- tape measure divided into tenths of a foot;
- stainless steel knife or spatula;
- hand lens;
- water squirt bottle;
- jar with lid;
- personal protective equipment (PPE), as required by the HASP; and
- digital camera.

## IV. Cautions

Drilling and drilling-related hazards including subsurface utilities are discussed in other SOPs and site-specific HASPs and are not discussed herein.

Soil samples may contain hazardous substances that can result in exposure to persons describing soils. Routes for exposure may include dermal contact, inhalation and ingestion. Refer to the project specific HASP for guidance in these situations.

## V. Health and Safety Considerations

Field activities associated with soil sampling and description will be performed in accordance with a site-specific HASP, a copy of which will be present on site during such activities. Know what hazardous substances may be present in the soil and understand their hazards. Always avoid the temptation to touch soils with bare hands, detect odors by placing soils close to your nose, or tasting soils.

## VI. Procedure

1. Select the appropriate sampling method to obtain representative samples in accordance with the selected sub-surface exploration method, e.g. split-spoon or Shelby sample for hollow-stem drilling, Lexan or acetate sleeves for dual-tube direct push, etc.

2. Proceed with field activities in required sequence. Although completion of soil descriptions is often not the first activity after opening sampler, identification of stratigraphic changes is often necessary to select appropriate intervals for field screening and/or selection of laboratory samples.

3. Examine all of each individual soil sample (this is different than examining each sample selected for laboratory analysis), and record the following for each stratum:

- depth interval;
- principal component with descriptors, as appropriate;
- amount and identification of minor component(s) with descriptors as appropriate;
- moisture;
- consistency/density;
- color; and
- additional description or comments (recorded as notes).

The above is described more fully below.

**DEPTH**

To measure and record the depth below ground level (bgl) of top and bottom of each stratum, the following information should be recorded.

1. Measured depth to the top and bottom of sampled interval. Use starting depth of sample based upon measured tool length information and the length of sample interval.

2. Length of sample recovered, not including slough (material that has fallen into hole from previous interval), expressed as fraction with length of recovered sample as numerator over length of sampled interval as denominator (e.g. 14/24 for 14 inches recovered from 24-inch sampling interval that had 2 inches of slough discarded).

3. Thickness of each stratum measured sequentially from the top of recovery to the bottom of recovery.

4. Any observations of sample condition or drilling activity that would help identify whether there was loss from the top of the sampling interval, loss from the bottom of the sampling interval, or compression of the sampling interval. Examples: 14/24, gravel in nose of spoon; or 10/18 bottom 6 inches of spoon empty.

**DETERMINATION OF COMPONENTS**

Obtain a representative sample of soil from a single stratum. If multiple strata are present in a single sample interval, each stratum should be described separately. More specifically, if the sample is from a 2-foot long split-spoon where strata of coarse sand, fine sand and clay are present, then the resultant description should be of the three individual strata unless a combined description can clearly describe the interbedded nature of the three strata. Example: Fine Sand with interbedded lenses of Silt and Clay, ranging between 1 and 3 inches thick.

Identify principal component and express volume estimates for minor components on logs using the following standard modifiers.

| Modifier | Percent of Total Sample (by volume) |
|---|---|
| and | 36 - 50 |
| some | 21 - 35 |
| little | 10 - 20 |
| trace | <10 |

Determination of components is based on using the Udden-Wentworth particle size classification (see below) and measurement of the average grain size diameter. Each size grade or class differs from the next larger grade or class by a constant ratio of ½. Due to visual limitations, the finer classifications of Wentworth's scale cannot be distinguished in the field and the subgroups are not included. Visual determinations in the field should be made carefully by comparing the sample to the field gauge card that shows Udden-Wentworth scale or by measuring with a ruler. Use of field sieves s

recommended to assist in estimating percentage of coarse grain sizes. Settling test or wash method (Appendix X4 of ASTM D2488) is recommended for determining presence and estimating percentage of clay and silt.

| Udden-Wenworth Scale<br>Modified ARCADIS, 2008 | | | |
|---|---|---|---|
| Size Class | Millimeters | Inches | Standard Sieve # |
| Boulder | 256 – 4096 | 10.08+ | |
| Large cobble | 128 - 256 | 5.04 -10.08 | |
| Small cobble | 64 - 128 | 2.52 – 5.04 | |
| Very large pebble | 32 – 64 | 0.16 - 2.52 | |
| Large pebble | 16 – 32 | 0.63 – 1.26 | |
| Medium pebble | 8 – 16 | 0.31 – 0.63 | |
| Small pebble | 4 – 8 | 0.16 – 0.31 | No. 5 + |
| Granule | 2 – 4 | 0.08 – 0.16 | No.5 – No.10 |
| Very coarse sand | 1 -2 | 0.04 – 0.08 | No.10 – No.18 |
| Coarse sand | ½ - 1 | 0.02 – 0.04 | No.18 - No.35 |
| Medium sand | ¼ - ½ | 0.01 – 0.02 | No.35 - No.60 |
| Fine sand | 1/8 -¼ | 0.005 – 0.1 | No.60 - No.120 |
| Very fine sand | 1/16 – 1/8 | 0.002 – 0.005 | No. 120 – No. 230 |
| Silt (subgroups not included) | 1/256 – 1/16 | 0.0002 – 0.002 | Not applicable (analyze by pipette or hydrometer) |
| Clay (subgroups not included | 1/2048 – 1/256 | .00002 – 0.0002 | |

Identify components as follows. Remove particles greater than very large pebbles (64-mm diameter) from the soil sample. Record the volume estimate of the greater than very large pebbles. Examine the sample fraction of very large pebbles and smaller particles and estimate the volume percentage of the pebbles, granules, sand, silt and clay. Use the jar method, visual method, and/or wash method (Appendix X4 of ASTM D2488) to estimate the volume percentages of each category.

Determination of actual dry weight of each Udden-Wentworth fraction requires laboratory grain-size analysis using sieve sizes corresponding to Udden-Wentworth fractions and is highly recommended to determine grain-size distributions for each hydrostratigraphic unit.

Lab or field sieve analysis is advisable to characterize the variability and facies trends within each hydrostratigraphic unit. Field sieve-analysis can be performed on selected samples to estimate dry weight fraction of each category using ASTM D2488 Standard Practice for Classification of Soils for Engineering Purposes as guidance, but replace required sieve sizes with the following Udden-Wentworth set: U.S. Standard sieve mesh sizes 6; 12; 20; 40; 70; 140; and 270 to retain pebbles; granules; very coarse sand; coarse sand; medium sand; fine sand; and very fine sand, respectively.

**PRINCIPAL COMPONENT**

The principal component is the size fraction or range of size fractions containing the majority of the volume. Examples: the principal component in a sample that contained 55% pebbles would be “Pebbles”; or the principal component in a sample that was 20% fine sand, 30% medium sand and 25% coarse sand would be “Fine to coarse Sand” or for a sample that was 40% silt and 45% clay the principal component would be “Clay and Silt”.

Include appropriate descriptors with the principal component. These descriptors vary for different particle sizes as follows.

Angularity – Describe the angularity for very coarse sand and larger particles in accordance with the table below (ASTM D-2488-06). Figures showing examples of angularity are available in ASTM D-2488-06 and the ARCADIS Soil Description Field Guide.

| Description | Criteria |
|---|---|
| Angular | Particles have sharp edges and relatively plane sides with unpolished surfaces. |
| Subangular | Particles are similar to angular description but have rounded edges. |
| Subrounded | Particles have nearly plane sides but have well-rounded corners and edges. |
| Rounded | Particles have smoothly curved sides and no edges. |

Plasticity – Describe the plasticity for silt and clay based on observations made during the following test method (ASTM D-2488-06).

- As in the dilatancy test below, select enough material to mold into a ball about ½ inch (12 mm) in diameter. Mold the material, adding water if necessary, until it has a soft, but not sticky, consistency.

- Shape the test specimen into an elongated pat and roll by hand on a smooth surface or between the palms into a thread about 1/8 inch (3 mm) in diameter. (If the sample is too wet to roll easily, it should be spread into a thin layer and allowed to lose some water by evaporation.) Fold the sample threads and reroll repeatedly until the thread crumbles at a diameter of about 1/8 inch. The thread will crumble when the soil is near the plastic limit.

| Description | Criteria |
|---|---|
| Nonplastic | A $^{1}/_{8}$ inch (3 mm) thread cannot be rolled at any water content. |
| Low | The thread can barely be rolled and the lump cannot be formed when drier than the plastic limit. |
| Medium | The thread is easy to roll and not much time is required to reach the plastic limit. The thread cannot be rerolled after reaching the plastic limit. The lump crumbles when drier than the plastic limit. |
| High | It takes considerable time rolling and kneading to reach the plastic limit. The thread can be rolled several times after reaching the plastic limit. The lump can be formed without crumbling when drier than the plastic limit |

Dilatancy – Describe the dilatancy for silt and silt-sand mixtures using the following field test method (ASTM D-2488-06).

- From the specimen select enough material to mold into a ball about ½ inch (12 mm) in diameter. Mold the material adding water if necessary, until it has a soft, but not sticky, consistency.
- Smooth the ball in the palm of one hand with a small spatula.
- Shake horizontally, striking the side of the hand vigorously with the other hand several times.
- Note the reaction of water appearing on the surface of the soil.
- Squeeze the sample by closing the hand or pinching the soil between the fingers, and not the reaction as none, slow, or rapid in accordance with the table below. The reaction is the speed with which water appears while shaking and disappears while squeezing.

| Description | Criteria |
|---|---|
| None | No visible change in the specimen. |
| Slow | Water appears slowly on the surface of the specimen during shaking and does not disappear or disappears slowly upon squeezing. |
| Rapid | Water appears quickly on the surface of the specimen during shaking and disappears quickly upon squeezing. |

**MINOR COMPONENT(S)**

The minor component(s) are the size fraction(s) containing less than 50% volume. Example: the identified components are estimated to be 60% medium sand to granules, 25 % silt and clay; 15 % pebbles – there are two identified minor components: silt and clay; and pebbles.

Include a standard modifier to indicate percentage of minor components (see Table on Page 5) and the same descriptors that would be used for a principal component. Plasticity should be provided as a descriptor for the silt and clay. Dilatancy should be provided for silt and silt-sand mixtures. Angularity should be provided as a descriptor for pebbles and coarse sand. For the example above, the minor constituents with

modifiers could be: some silt and clay, low plasticity; little medium to large pebbles, sub-round.

**SORTING**

Sorting is the opposite of grading, which is a commonly used term in the USCS or ASTM methods to describe the uniformity of the particle size distribution in a sample. Well-sorted samples are poorly graded and poorly sorted samples are well graded. ARCADIS prefers the use of sorting for particle size distributions and grading to describe particle size distribution trends in the vertical profile of a sample or hydrostratigraphic unit because of the relationship between sorting and the energy of the depositional process. For soils with sand-sized or larger particles, sorting should be determined as follows:

- Well sorted – the range of particle sizes is limited (e.g. the sample is comprised of predominantly one or two grain sizes)
- Poorly sorted – a wide range of particle sizes are present

You can also use sieve analysis to estimate sorting from a sedimentological perspective; sorting is the statistical equivalent of standard deviation. Smaller standard deviations correspond to higher degree of sorting (see Remediation Hydraulics, 2008).

**MOISTURE**

Moisture content should be described for every sample since increases or decreases in water content is critical information. Moisture should be described in accordance with the table below (percentages should not be used unless determined in the laboratory).

| Description | Criteria |
|---|---|
| Dry | Absence of moisture, dry to touch, dusty. |
| Moist | Damp but no visible water. |
| Wet (Saturated) | Visible free water, soil is usually below the water table. |

**CONSISTENCY or DENSITY**

This can be determined by standard penetration test (SPT) blow counts (ASTM D-1586) or field tests in accordance with the tables below. For SPT blow counts the N-value is used. The N-value is the blows per foot for the 6" to 18" interval. Example: for 24-inch spoon, recorded blows per 6-inch interval are: 4/6/9/22. Since the second interval is 6" to12", the third interval is 12" to 18", the N value is 6+9, or 15. Fifty blow counts for less than 6 inches is considered refusal.

**Fine-grained soil – Consistency**

| Description | Criteria |
|---|---|
| Very soft | N-value < 2 or easily penetrated several inches by thumb. |
| Soft | N-value 2-4 or easily penetrated one inch by thumb. |
| Medium stiff | N-value 9-15 or indented about ¼ inch by thumb with great effort. |
| Very stiff | N-value 16-30 or readily indented by thumb nail. |
| Hard | N-value > than 30 or indented by thumbnail with difficulty |

**Coarse-grained soil – Density**

| Description | Criteria |
|---|---|
| Very loose | N-value 1- 4 |
| Loose | N-value 5-10 |
| Medium dense | N-value 11-30 |
| Dense | N-value 31- 50 |
| Very dense | N-value >50 |

**COLOR**

Color should be described using simple basic terminology and modifiers based on the Munsell system. Munsell alpha-numeric codes are required for all samples. If the sample contains layers or patches of varying colors this should be noted and all representative colors should be described. The colors should be described for moist

samples. If the sample is dry it should be wetted prior to comparing the sample to the Munsell chart.

**ADDITIONAL COMMENTS (NOTES)**

Additional comments should be made where observed and should be presented as notes with reference to a specific depth interval(s) to which they apply. Some of the significant information that may be observed includes the following.

- **Odor** - You should not make an effort to smell samples by placing near your nose since this can result in unnecessary exposure to hazardous materials. However, odors should be noted if they are detected during the normal sampling procedures. Odors should be based upon descriptors such as those used in NIOSH "Pocket Guide to Chemical Hazards", e.g. "pungent" or "sweet" and should not indicate specific chemicals such as "phenol-like" odor or "BTEX" odor.
- Structure
- Bedding planes (laminated, banded, geologic contacts )
- Presence of roots, root holes, organic material, man-made materials, minerals, etc.
- Mineralogy
- Cementation
- NAPL presence/characteristics, including sheen (based on client-specific guidance)
- Reaction with HCl (typically used only for special soil conditions)
- Origin, if known (capital letters: LACUSTRINE; FILL; etc.)

**EXAMPLE DESCRIPTIONS**

51.4 to 54.0' Clay, some silt, medium to high plasticity; trace small to large pebbles, subround to subangular up to 2" diameter; moist; stiff; dark grayish brown (10YR 4/2) NOTE: Lacustrine; laminated 0.01 to 0.02 feet thick, laminations brownish yellow (10 YR 4/3).

32.5 to 38.0' Sand, medium to Pebbles, coarse; sub-round to sub-angular; trace silt; poorly sorted; wet; grayish brown (10YR5/2). NOTE: sedimentary, igneous and metamorphic particles.

Unlike the first example where a density of cohesive soils could be estimated, this rotosonic sand and pebble sample was disturbed during drilling (due to vibrations in a loose Sand and Pebble matrix) so no density description could be provided. Neither sample had noticeable odor so odor comments were not included.

The standard generic description order is presented below.

- Depth

- Principal Components
    - Angularity for very coarse sand and larger particles
    - Plasticity for silt and clay
    - Dilatancy for silt and silt-sand mixtures
- Minor Components
- Sorting
- Moisture
- Consistency or Density
- Color
- Additional Comments

## VII. Waste Management

Project-specific requirements should be identified and followed. The following procedures, or similar waste management procedures are generally required.

Water generated during cleaning procedures will be collected and contained onsite in appropriate containers for future analysis and appropriate disposal. PPE (such as gloves, disposable clothing, and other disposable equipment) resulting from personnel cleaning procedures and soil sampling/handling activities will be placed in plastic bags. These bags will be transferred into appropriately labeled 55-gallon drums or a covered roll-off box for appropriate disposal.

Soil materials will be placed in sealed 55-gallon steel drums or covered roll-off boxes and stored in a secured area. Once full, the material will be analyzed to determine the appropriate disposal method.

## VIII. Data Recording and Management

Upon collection of soil samples, the soil sample should be logged on a standard boring log and/or in the field log book depending on Data Quality Objectives (DQOs) for the task/project. Two examples of standard boring logs are presented below.

The general scheme for soil logging entries is presented above; however, depending on task/project DQOs, specific logging entries that are not applicable to task/project goals may be omitted at the project manager's discretion. In any case, use of a consistent logging procedure is required.

Completed logs and/or logbook will be maintained in the task/project field records file. Digital photographs of typical soil types observed at the site and any unusual features should be obtained whenever possible. All photographs should include a ruler or common object for scale. Photo location, depth and orientation must be recorded in the daily log or log book and a label showing this information in the photo is useful.

**ARCADIS** Page ____ of ____

**Sample Log**

Well/Boring _____ Project Name and No. _____

Site Location _____ Drilling Started _____ Drilling Completed _____

Total Depth Drilled _____ feet Hole Diameter _____ inches Sampling Interval _____ feet

Length and Diameter of Sampling Device _____ Type of Sampling Device _____

Drilling Method _____ Drilling Fluid Used _____

Drilling Contractor _____ Driller _____ Helper _____

Prepared By _____ Hammer Weight _____ Hammer Drop _____ Inches

| Sample Depth (feet below land surface) From | To | Sample Recovery (feet) | Time/Hydraulic Pressure or Blows per 6 inches | Sample Description | PID (ppm) |
|---|---|---|---|---|---|
| | | | | | |
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http://team/Sites/Offices/North/Northeast Area/Northeast Area Geoscience Forms/Sample Core Log XLS - Sheet1

## IX. Quality Assurance

Soil descriptions should be completed only by appropriately trained personnel. Descriptions should be reviewed by an experienced field geologist for content, format and consistency. Edited boring logs should be reviewed by the original author to assure that content has not changed.

## X. References

ARCADIS Soil Description Field Guide, 2008 (in progress)

Munsell® Color Chart – available from Forestry Suppliers, Inc.- Item 77341 "Munsell® Color Soil Color Charts

Field Gauge Card that Shows Udden-Wentworth scale – available from Forestry Suppliers, Inc. – Item 77332 "Sand Grain Sizing Folder"

ASTM D-1586, Test Method for Penetration Test and Split-Barrel Sampling of Soils

ASTM D-2488-00, Standard Practice for Description and Identification of Soils (Visual-Manual Procedure)

United States Bureau of Reclamation. Engineering Geology Field Manual. United States Department of Interior, Bureau of Reclamation. http://www.usbr.gov/pmts/geology/fieldmap.htm

Petrology of Sedimentary Rocks, Robert L. Folk, 1980, p. 1-48

NIOSH Pocket Guide to Chemical Hazards

Remediation Hydraulics, Fred C. Payne, Joseph A. Quinnan, and Scott T. Potter, 2008, p 59-63

**Attachment C-4**

Low-Flow Groundwater Purging and Sampling Procedures for Monitoring Wells

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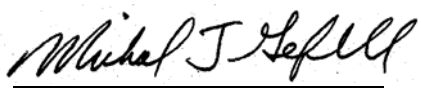
# Low-Flow Groundwater Purging and Sampling Procedures for Monitoring Wells

Rev. #: 4

Rev Date: February 2, 2011

**Approval Signatures**

Prepared by:  Date: 2/2/2011

Reviewed by:  Date: 2/2/2011

(Technical Expert)

## I. Scope and Application

Groundwater samples will be collected from monitoring wells to evaluate groundwater quality. The protocol presented in this standard operating procedure (SOP) describes the procedures to be used to purge monitoring wells and collect groundwater samples. This protocol has been developed in accordance with the United States Environmental Protection Agency (USEPA) Region I Low Stress (Low Flow) Purging and Sampling Procedures for the Collection of Groundwater Samples from Monitoring Wells (USEPA SOP No. GW0001; July 30, 1996). Both filtered and unfiltered groundwater samples may be collected using this low-flow sampling method. Filtered samples will be obtained using a 0.45-micron disposable filter. No wells will be sampled until well development has been performed in accordance with the procedures presented in the SOP titled Monitoring Well Development, unless that well has been sampled or developed within the prior 1-year time period. Groundwater samples will not be collected within 1 week following well development.

## II. Personnel Qualifications

ARCADIS personnel directing, supervising, or leading groundwater sample collection activities should have a minimum of 2 years of previous groundwater sampling experience. ARCADIS personnel providing assistance to groundwater sample collection and associated activities should have a minimum of 6 months of related experience or an advanced degree in environmental sciences, engineering, hydrogeology, or geology.

The supervisor of the groundwater sampling team will have at least 1 year of previous supervised groundwater sampling experience.

Prior to mobilizing to the field, the groundwater sampling team should review and be thoroughly familiar with relevant site-specific documents including but not limited to the site work plan, field sampling plan, QAPP, HASP, and historical information. Additionally, the groundwater sampling team should review and be thoroughly familiar with documentation provided by equipment manufacturers for all equipment that will be used in the field prior to mobilization.

## III. Equipment List

Specific to this activity, the following materials (or equivalent) will be available:

- Health and safety equipment (as required in the site Health and Safety Plan [HASP]).

- Site Plan, well construction records, prior groundwater sampling records (if available).
- Sampling pump, which may consist of one or more of the following:
  - submersible pump (e.g., Grundfos Redi-Flo 2);
  - peristaltic pump (e.g., ISCO Model 150); and/or
  - bladder pump (e.g., Marschalk System 1, QED Well Wizard, Geotech, etc.).
- Appropriate controller and power source for pump:
  - Submersible and peristaltic pumps require electric power from either a generator or a deep cell battery.
  - Submersible pumps such as Grundfos require a pump controller to run the pump
  - Bladder pumps require a pump controller and a gas source (e.g., air compressor or compressed $N_2$ or $CO_2$ gas cylinders).
- Teflon® tubing or Teflon®-lined polyethylene tubing of an appropriate size for the pump being used. For peristaltic pumps, dedicated Tygon® tubing (or other type as specified by the manufacturer) will also be used through the pump apparatus.
- Water-level probe (e.g., Solinist Model 101).
- Water-quality (temperature/pH/specific conductivity/ORP/turbidity/dissolved oxygen) meter and flow-through measurement cell. Several brands may be used, including:
  - YSI 6-Series Multi-Parameter Instrument;
  - Hydrolab Series 3 or Series 4a Multiprobe and Display; and/or
  - Horiba U-10 or U-22 Water Quality Monitoring System.
- Supplemental turbidity meter (e.g., Horiba U-10, Hach 2100P, LaMotte 2020). Turbidity measurements collected with multi-parameter meters have been shown to sometimes be unreliable due to fouling of the optic lens of the

turbidity meter within the flow-through cell. A supplemental turbidity meter will be used to verify turbidity data during purging if such fouling is suspected. Note that industry improvements may eliminate the need for these supplemental measurements in the future.

- Appropriate water sample containers (supplied by the laboratory).
- Appropriate blanks (trip blank supplied by the laboratory).
- 0.45-micron disposable filters (if field filtering is required).
- Large glass mixing container (if sampling with a bailer).
- Teflon® stirring rod (if sampling with a bailer).
- Cleaning equipment.
- Groundwater sampling log (attached) or bound field logbook.

Note that in the future, the client may acquire different makes/models of some of this equipment if the listed makes/models are no longer available, or as a result of general upgrades or additional equipment acquisitions. In the event that the client uses a different make/model of the equipment listed, the client will use an equivalent type of equipment (e.g., pumps, flow-through analytical cells) and note the specific make/model of the equipment used during a sampling event on the groundwater sampling log. In addition, should the client desire to change to a markedly different sampling methodology (e.g., discrete interval samplers, passive diffusion bags, or a yet to be developed technique), the client will submit a proposed SOP for the new methodology for USEPA approval prior to implementing such a change.

The maintenance requirements for the above equipment generally involve decontamination or periodic cleaning, battery charging, and proper storage, as specified by the manufacturer. For operational difficulties, the equipment will be serviced by a qualified technician.

## IV. Cautions

If heavy precipitation occurs and no cover over the sampling area and monitoring well can be erected, sampling must be discontinued until adequate cover is provided. Rain water could contaminate groundwater samples.

Do not use permanent marker or felt-tip pens for labels on sample container or sample coolers – use indelible ink. The permanent markers could introduce volatile constituents into the samples.

It may be necessary to field filter some parameters (e.g., metals) prior to collection, depending on preservation, analytical method, and project quality objectives.

Store and/or stage empty and full sample containers and coolers out of direct sunlight.

To mitigate potential cross-contamination, groundwater samples are to be collected in a pre-determined order from least impacted to impacted based on previous analytical data. If no analytical data are available, samples are collected in order of upgradient, then furthest downgradient to source area locations.

Be careful not to over-tighten lids with Teflon liners or septa (e.g., 40 mL vials). Over-tightening can cause the glass to shatter or impair the integrity of the Teflon seal.

## V. Health and Safety Considerations

Use caution and appropriate cut resistant gloves when tightening lids to 40 mL vials. These vials can break while tightening and can lacerate hand. Amber vials (thinner glass) are more prone to breakage.

If thunder or lighting is present, discontinue sampling and take cover until 30 minutes have passed after the last occurrence of thunder or lighting.

Use caution when removing well caps as well may be under pressure, cap can dislodge forcefully and cause injury.

Use caution when opening protective casing on stickup wells as wasps frequently nest inside the tops of the covers. Also watch for fire ant mounds near well pads when sampling in the south or western U.S.

## VI. Procedure

Groundwater will be purged from the wells using an appropriate pump. Peristaltic pumps will initially be used to purge and sample all wells when applicable. If the depth to water is below the sampling range of a peristaltic pump (approximately 25 feet), submersible pumps or bladder pumps will be used provided the well is constructed with a casing diameter greater than or equal to 2 inches (the minimum well diameter capable of accommodating such pumps). Bladder pumps are preferred over peristaltic and submersible pumps if sampling of VOCs is required to prevent volatilization. For smaller diameter wells where the depth to water is below the sampling range of a

peristaltic pump, alternative sampling methods (i.e., bailing or small diameter bladder pumps) will be used to purge and sample the groundwater. Purge water will be collected and containerized.

1. Calibrate field instruments according to manufacturer procedures for calibration.

2. Measure initial depth to groundwater prior to placement of pumps.

3. Prepare and install pump in well: For submersible and non-dedicated bladder pumps, decontaminate pump according to site decontamination procedures. Non-dedicated bladder pumps will require a new Teflon® bladder and attachment of an air line, sample discharge line, and safety cable prior to placement in the well. Attach the air line tubing to the air port on the top of the bladder pump. Attach the sample discharge tubing to the water port on the top of the bladder pump. Care should be taken not to reverse the air and discharge tubing lines during bladder pump set-up as this could result in bladder failure or rupture. Attach and secure a safety cable to the eyebolt on the top of bladder pump (if present, depending on pump model used). Slowly lower pump, safety cable, tubing, and electrical lines into the well to a depth corresponding to the approximate center of the saturated screen section of the well. Take care to avoid twisting and tangling of safety cable, tubing, and electrical lines while lowering pump into well; twisted and tangled lines could result in the pump becoming stuck in the well casing. Also, make sure to keep tubing and lines from touching the ground or other surfaces while introducing them into the well as this could lead to well contamination. If a peristaltic pump is being used, slowly lower the sampling tubing into the well to a depth corresponding to the approximate center of the saturated screen section of the well. The pump intake or sampling tube must be kept at least 2 feet above the bottom of the well to prevent mobilization of any sediment present in the bottom of the well.

4. If using a bladder pump, connect the air line to the pump controller output port. The pump controller should then be connected to a supply line from an air compressor or compressed gas cylinder using an appropriate regulator and air hose. Take care to tighten the regulator connector onto the gas cylinder (if used) to prevent leaks. Teflon tape may be used on the threads of the cylinder to provide a tighter seal. Once the air compressor or gas cylinder is connected to the pump controller, turn on the compressor or open the valve on the cylinder to begin the gas flow. Turn on the pump controller if an on/off switch is present and verify that all batteries are charged and fully operating before beginning to pump.

5. Connect the pump discharge water line to the bottom inlet port on the flow-through cell connected to the water quality meter.

6. Measure the water level again with the pump in the well before starting the pump. Start pumping the well at 200 to 500 milliliters (mL) per minute (or at lower site-specific rate if specified). The pump rate should be adjusted to cause little or no water level drawdown in the well (less than 0.3 feet below the initial static depth to water measurement) and the water level should stabilize. The water level should be monitored every 3 to 5 minutes (or as appropriate, lower flow rates may require longer time between readings) during pumping if the well diameter is of sufficient size to allow such monitoring. Care should be taken not to break pump suction or cause entrainment of air in the sample. Record pumping rate adjustments and depths to water. If necessary, pumping rates should be reduced to the minimum capabilities of the pump to avoid pumping the well dry and/or to stabilize indicator parameters. A steady flow rate should be maintained to the extent practicable. Groundwater sampling records from previous sampling events (if available) should be reviewed prior to mobilization to estimate the optimum pumping rate and anticipated drawdown for the well in order to more efficiently reach a stabilized pumping condition.

   If the recharge rate of the well is very low, alternative purging techniques should be used, which will vary based on the well construction and screen position. For wells screened across the water table, the well should be pumped dry and sampling should commence as soon as the volume in the well has recovered sufficiently to permit collection of samples. For wells screened entirely below the water table, the well should be pumped until a stabilized level (which may be below the maximum displacement goal of 0.3 feet) can be maintained and monitoring for stabilization of field indicator parameters can commence. If a lower stabilization level cannot be maintained, the well should be pumped until the drawdown is at a level slightly higher than the bentonite seal above the well screen. Sampling should commence after one well volume has been removed and the well has recovered sufficiently to permit collection of samples.

   During purging, monitor the field indicator parameters (e.g., turbidity, temperature, specific conductance, pH, etc.) every 3 to 5 minutes (or as appropriate). Field indicator parameters will be measured using a flow-through analytical cell or a clean container such as a glass beaker. Record field indicator parameters on the groundwater sampling log. The well is considered stabilized and ready for sample collection when turbidity values remain within 10% (or within 1 NTU if the turbidity reading is less than 10 NTU), the specific conductance and temperature values remain within 3%, ORP readings remain within ± 10 mV and pH remains within 0.1 units for three consecutive readings collected at 3- to 5-minute intervals (or other appropriate interval, alternate stabilization goals may exist in different geographic regions, consult the site-specific Work Plan for stabilization criteria). If the field indicator parameters do not stabilize within 1 hour of the start of purging, but the groundwater turbidity is

below the goal of 50 NTU and the values for all other parameters are within 10%, the well can be sampled. If the parameters have stabilized but the turbidity is not in the range of the 50 NTU goal, the pump flow rate should be decreased to a minimum rate of 100 mL/min to reduce turbidity levels as low as possible. Dissolved oxygen is extremely susceptible to various external influences (including temperature or the presence of bubbles on the DO meter); care should be taken to minimize the agitation or other disturbance of water within the flow-through cell while collecting these measurements. If air bubbles are present on the DO probe or in the discharge tubing, remove them before taking a measurement. If dissolved oxygen values are not within acceptable range for the temperature of groundwater (Attachment 1), then again check for and remove air bubbles on probe before re-measuring. If the dissolved oxygen value is 0.00 or less, then the meter should be serviced and re-calibrated. If the dissolved oxygen values are above possible results, then the meter should be serviced and re-calibrated.

During extreme weather conditions, stabilization of field indicator parameters may be difficult to obtain. Modifications to the sampling procedures to alleviate these conditions (e.g., measuring the water temperature in the well adjacent to the pump intake) will be documented in the field notes. If other field conditions exist that preclude stabilization of certain parameters, an explanation of why the parameters did not stabilize will also be documented in the field logbook.

7. Complete the sample label(s) and cover the label(s) with clear packing tape to secure the label onto the container.

8. After the indicator parameters have stabilized, collect groundwater samples by diverting flow out of the unfiltered discharge tubing into the appropriate labeled sample container. If a flow-through analytical cell is being used to measure field parameters, the flow-through cell should be disconnected after stabilization of the field indicator parameters and prior to groundwater sample collection. Under no circumstances should analytical samples be collected from the discharge of the flow-through cell. When the container is full, tightly screw on the cap. Samples should be collected in the following order: VOCs, TOC, SVOCs, metals and cyanide, and others (or other order as defined in the site-specific Work Plan).

9. If sampling for total and filtered metals and/or PCBs, a filtered and unfiltered sample will be collected. Install an in-line, disposable 0.45-micron particle filter on the discharge tubing after the appropriate unfiltered groundwater sample has been collected. Continue to run the pump until an initial volume of “flush” water has been run through the filter in accordance with the manufacturer’s directions (generally 100 to 300 mL). Collect filtered groundwater sample by diverting flow

out of the filter into the appropriately labeled sample container. When the container is full, tightly screw on the cap.

10. Secure with packing material and store at 4°C in an insulated transport container provided by the laboratory.

11. Record on the groundwater sampling log or bound field logbook the time sampling procedures were completed, any pertinent observations of the sample (e.g., physical appearance, and the presence or lack of odors or sheens), and the values of the stabilized field indicator parameters as measured during the final reading during purging (Attachment 2 – Example Sampling Log).

12. Turn off the pump and air compressor or close the gas cylinder valve if using a bladder pump set-up. Slowly remove the pump, tubing, lines, and safety cable from the well. Do not allow the tubing or lines to touch the ground or any other surfaces which could contaminate them. .

13. If tubing is to be dedicated to a well, it should be folded to a length that will allow the well to be capped and also facilitate retrieval of the tubing during later sampling events. A length of rope or string should be used to tie the tubing to the well cap. Alternatively, if tubing and safety line are to be saved and reused for sampling the well at a later date they may be coiled neatly and placed in a clean plastic bag that is clearly labeled with the well ID. Make sure the bag is tightly sealed before placing it in storage.

14. Secure the well and properly dispose of personal protective equipment (PPE) and disposable equipment.

15. Complete the procedures for packaging, shipping, and handling with associated chain-of-custody.

16. Complete decontamination procedures for flow-through analytical cell and submersible or bladder pump, as appropriate.

17. At the end of the day, perform calibration check of field instruments.

If it is not technically feasible to use the low-flow sampling method, purging and sampling of monitoring wells may be conducted using the bailer method as outlined below:

1. Don appropriate PPE (as required by the HASP).

2. Place plastic sheeting around the well.

3. Clean sampling equipment.

4. Open the well cover while standing upwind of the well. Remove well cap and place on the plastic sheeting. Insert PID probe approximately 4 to 6 inches into the casing or the well headspace and cover with gloved hand. Record the PID reading in the field log. If the well headspace reading is less than 5 PID units, proceed; if the headspace reading is greater than 5 PID units, screen the air within the breathing zone. If the breathing zone reading is less than 5 PID units, proceed. If the PID reading in the breathing zone is above 5 PID units, move upwind from well for 5 minutes to allow the volatiles to dissipate. Repeat the breathing zone test. If the reading is still above 5 PID units, don appropriate respiratory protection in accordance with the requirements of the HASP. Record all PID readings. For wells that are part of the regular weekly monitoring program and prior PID measurements have not resulted in a breathing zone reading above 5 PID units, PID measurements will be taken monthly.

5. Measure the depth to water and determine depth of well by examining drilling log data or by direct measurement. Calculate the volume of water in the well (in gallons) by using the length of the water column (in feet), multiplying by 0.163 for a 2-inch well or by 0.653 for a 4-inch well. For other well diameters, use the formula:

   Volume (in gallons) = π TIMES well radius (in feet) squared TIMES length of water column (in feet) TIMES 7.481 (gallons per cubic foot)

6. Measure a length of rope or twine at least 10 feet greater than the total depth of the well. Secure one end of the rope to the well casing and secure the other end to the bailer. Test the knots and make sure the rope will not loosen. Check bailers so that all parts are intact and will not be lost in the well.

7. Lower bailer into well and remove one well volume of water. Contain all water in appropriate containers.

8. Monitor the field indicator parameters (e.g., turbidity, temperature, specific conductance, and pH). Measure field indicator parameters using a clean container such as a glass beaker or sampling cups provided with the instrument. Record field indicator parameters on the groundwater sampling log.

9. Repeat Steps 7 and 8 until three or four well volumes have been removed. Examine the field indicator parameter data to determine if the parameters have stabilized. The well is considered stabilized and ready for sample collection when turbidity values remain within 10% (or within 1 NTU if the turbidity reading is less than 10 NTU), the specific conductance and temperature values remain

within 3%, and pH remains within □0.1 units for three consecutive readings collected once per well volume removed.

10. If the field indicator parameters have not stabilized, remove a maximum of five well volumes prior to sample collection. Alternatively, five well volumes may be removed without measuring the field indicator parameters.

11. If the recharge rate of the well is very low, wells screened across the water table may be bailed dry and sampling should commence as soon as the volume in the well has recovered sufficiently to permit collection of samples. For wells screened entirely below the water table, the well should only be bailed down to a level slightly higher than the bentonite seal above the well screen. The well should not be bailed completely dry, to maintain the integrity of the seal. Sampling should commence as soon as the well volume has recovered sufficiently to permit sample collection.

12. Following purging, allow water level in well to recharge to a sufficient level to permit sample collection.

13. Complete the sample label and cover the label with clear packing tape to secure the label onto the container.

14. Slowly lower the bailer into the screened portion of the well and carefully retrieve a filled bailer from the well causing minimal disturbance to the water and any sediment in the well.

15. The sample collection order (as appropriate) will be as follows:

    a. VOCs;

    b TOC;

    c. SVOCs;

    d. metals and cyanide; and

    e. others.

16. When sampling for volatiles, collect water samples directly from the bailer into 40-mL vials with Teflon®-lined septa.

17. For other analytical samples, remove the cap from the large glass mixing container and slowly empty the bailer into the large glass mixing container. The

sample for dissolved metals and/or filtered PCBs should either be placed directly from the bailer into a pressure filter apparatus or pumped directly from the bailer with a peristaltic pump, through an in-line filter, into the pre-preserved sample bottle.

18. Continue collecting samples until the mixing container contains a sufficient volume for all laboratory samples.

19. Mix the entire sample volume with the Teflon® stirring rod and transfer the appropriate volume into the laboratory jar(s). Secure the sample jar cap(s) tightly.

20. If sampling for total and filtered metals and/or PCBs, a filtered and unfiltered sample will be collected. Sample filtration for the filtered sample will be performed in the field using a peristaltic pump prior to preservation. Install new medical-grade silicone tubing in the pump head. Place new Teflon® tubing into the sample mixing container and attach to the intake side of pump tubing. Attach (clamp) a new 0.45-micron filter (note the filter flow direction). Turn the pump on and dispense the filtered liquid directly into the laboratory sample bottles.

21. Secure with packing material and store at 4°C in an insulated transport container provided by the laboratory.

22. After sample containers have been filled, remove one additional volume of groundwater. Measure the pH, temperature, turbidity, and conductivity. Record on the groundwater sampling log or bound field logbook the time sampling procedures were completed, any pertinent observations of the sample (e.g., physical appearance, and the presence or lack of odors or sheens), and the values of the field indicator parameters.

23. Remove bailer from well, secure well, and properly dispose of PPE and disposable equipment.

24. If a bailer is to be dedicated to a well, it should be secured inside the well above the water table, if possible. Dedicated bailers should be tied to the well cap so that inadvertent loss of the bailer will not occur when the well is opened.

25. Complete the procedures for packaging, shipping, and handling with associated chain-of-custody.

## VII. Waste Management

Materials generated during groundwater sampling activities, including disposable equipment, will be placed in appropriate containers. Containerized waste will be disposed of by the client consistent with the procedures identified in the HASP.

## VIII. Data Recording and Management

Initial field logs and chain-of-custody records will be transmitted to the ARCADIS PM at the end of each day unless otherwise directed by the PM. The groundwater team leader retains copies of the groundwater sampling logs.

## IX. Quality Assurance

In addition to the quality control samples to be collected in accordance with this SOP, the following quality control procedures should be observed in the field:

- Collect samples from monitoring wells in order of increasing concentration, to the extent known based on review of historical site information if available.
- Equipment blanks should include the pump and tubing (if using disposable tubing) or the pump only (if using tubing dedicated to each well).
- Collect equipment blanks after wells with higher concentrations (if known) have been sampled.
- Operate all monitoring instrumentation in accordance with manufacturer's instructions and calibration procedures. Calibrate instruments at the beginning of each day and verify the calibration at the end of each day. Record all calibration activities in the field notebook.
- Clean all groundwater sampling equipment prior to use in the first well and after each subsequent well using procedures for equipment decontamination.

## X. References

United States Environmental Protection Agency (USEPA). 1986. RCRA Groundwater Monitoring Technical Enforcement Guidance Document (September 1986).

USEPA Region II. 1998. *Ground Water Sampling Procedure Low Stress (Low Flow) Purging and Sampling*.

USEPA. 1991. Handbook Groundwater, Volume II Methodology, Office of Research and Development, Washington, DC. USEPN62S, /6-90/016b (July, 1991).

U.S. Geological Survey (USGS). 1977. National Handbook of Recommended Methods for Water-Data Acquisition: USGS Office of Water Data Coordination. Reston, Virginia.

# Attachment 1

# Groundwater Sampling Log

**Attachment 2**

**Oxygen Solubility in Fresh Water**

| **Temperature (degrees C)** | **Dissolved Oxygen** (mg/L) |
|---|---|
| 0 | 14.6 |
| 1 | 14.19 |
| 2 | 13.81 |
| 3 | 13.44 |
| 4 | 13.09 |
| 5 | 12.75 |
| 6 | 12.43 |
| 7 | 12.12 |
| 8 | 11.83 |
| 9 | 11.55 |
| 10 | 11.27 |
| 11 | 11.01 |
| 12 | 10.76 |
| 13 | 10.52 |
| 14 | 10.29 |
| 15 | 10.07 |
| 16 | 9.85 |
| 17 | 9.65 |
| 18 | 9.45 |
| 19 | 9.26 |
| 20 | 9.07 |
| 21 | 8.9 |
| 22 | 8.72 |
| 23 | 8.56 |
| 24 | 8.4 |
| 25 | 8.24 |
| 26 | 8.09 |
| 27 | 7.95 |
| 28 | 7.81 |
| 29 | 7.67 |
| 30 | 7.54 |
| 31 | 7.41 |
| 32 | 7.28 |
| 33 | 7.16 |
| 34 | 7.05 |
| 35 | 6.93 |

Reference: Vesilind, P.A., *Introduction to Environmental Engineering*, PWS Publishing Company, Boston, 468 pages (1996).

**Attachment C-5**

Soil-Gas Sampling and Analysis Using USEPA Method TO-17 and TO-15

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# Soil-Gas Sampling and Analysis Using USEPA Method TO-17 and TO-15

SOP #112409

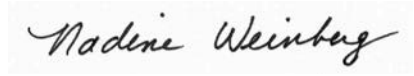
Rev. #: 2

Rev Date: August 11, 2014

**Approval Signatures**

Prepared by:  Date: 8/11/2014

Mitch Wacksman, Eric Epple and Andrew Gutherz

Approved by:  Date: 8/11/2014

Nadine Weinberg

## I. Scope and Application

This document describes the procedures to collect subsurface soil-gas samples from sub-slab sampling ports and soil vapor monitoring points for the analysis of volatile organic compounds (VOCs) including volatile polyaromatic hydrocarbons (PAHs) by United States Environmental Protection Agency (USEPA) Method TO-17 (TO-17) and USEPA Method TO-15.

The TO-17 method uses a glass or stainless steel tube packed with a sorbent material. Sorbents of increasing strength and composition are packed within the tube. The specific sorbent material packed within each tube is selected based on the target compounds and desired reporting limits. A measured volume of soil-gas is passed through the tube during sample collection.

The TO-15 method uses 1-liter 3-liter or 6-liter SUMMA® passivated stainless steel canister. An evacuated SUMMA canister (less than 28 inches of mercury [Hg]) will provide a recoverable whole-gas sample of approximately 5 liters when allowed to fill to a vacuum of approximately 6 inches of Hg. The whole-air sample is then analyzed for VOCs using a quadrupole or ion-trap gas chromatograph/mass spectrometer (GS/MS) system to provide compound detection limits of 0.5 parts per billion volume (ppbv). Optionally the canister sample can also be analyzed for fixed gasses such as Helium, Carbon dioxide and oxygen. .

Following sample collection the TO-17 tube and TO-15 canister is sent to the laboratory where the sampling media is analyzed for the target compounds.

The following sections list the necessary equipment and provide detailed instructions for the collection of soil-gas samples for analysis using TO-17 and TO-15.

Soil vapor samples can be collected from sub-slab sample probes or soil-vapor ports. Refer to the appropriate standard operating procedure (SOP) from the ARCADIS SOP library for a description of construction methods.

## II. Personnel Qualifications

ARCADIS field sampling personnel will have current health and safety training, including 40-hour HAZWOPER training, site supervisor training, site-specific training, first-aid, and cardiopulmonary resuscitation (CPR), as needed. ARCADIS field sampling personnel will be well versed in the relevant standard operating procedures (SOPs) and possess the required skills and experience necessary to successfully complete the desired field work. ARCADIS personnel responsible for leading soil-gas sample collection activities must have previous soil-gas sampling experience.

## III. Health and Safety Considerations

All sampling personnel should review the appropriate health and safety plan (HASP) and job loss analysis (JLA) prior to beginning work to be aware of all potential hazards associated with the job site and the specific task. Field sampling equipment must be carefully handled to minimize the potential for injury and the spread of hazardous substances. For sub-slab vapor probe installation, drilling with an electric concrete impact drill should be done only by personnel with prior experience using such a piece of equipment and with the appropriate health and safety measures in place as presented in the JLA

## IV Equipment List

The equipment required for collect soil-gas samples for analysis using method TO-15 and TO-17 is presented below:

- Appropriate personal protective equipment (PPE; as presented in the site specific HASP and the JLA)
- TO-17 tubes pre-packed by the laboratory with the desired sorbent. Specific sorbents will be recommended by the laboratory considering the target compound list and the necessary reporting limits;
- TO-17 sample flow rate calibration tubes (provided by the laboratory);
- Stainless steel SUMMA® canisters (1-liter, 3-liter, or 6-liter; order at least 5% extra, if feasible) (batch certified canisters or individual certified canisters as required by the project)
- Flow controllers with in-line particulate filters and vacuum gauges; flow controllers are pre-calibrated to specified sample duration (e.g., 30 minutes, 8 hours, 24 hours) or flow rate (e.g., 200 milliliters per minute [mL/min]); confirm with the laboratory that the flow controller comes with an in-line particulate filter and pressure gauge (order at least 5% extra, if feasible). Flow rate should be selected based on expected soil type (see below).
- Two decontaminated Swagelok or stainless-steel or comparable two-way ball or needle valve (sized to match sample tubing).
- 1/4-inch outer diameter (OD) tubing (Teflon® or Teflon-lined polyethylene);
- Stainless steel or comparable Swagelok® or equivalent compression fittings for 1/4-inch OD tubing;

- Stainless steel “T” fitting (if sample train will be assembled with an inline vacuum gauge a four-way fitting will be needed);
- Three Stainless steel duplicate “T” fittings ;
- 2 Portable vacuum pumps capable of producing very low flow rates (e.g., 10 to 200 mL/min) with vacuum gauge;
- Vacuum gauge if monitoring vacuum reading during sample collection is necessary and portable vacuum pump is not equipped with a vacuum gauge;
- Rotameter or an electric flow sensor if vacuum pump does not have a flow gauge (Bios DryCal or equivalent);
- Tracer gas testing supplies (refer to Adminstering Tracer Gas SOP #41699);
- Photoionization Detector (PID) (with a lamp of 11.7 eV);
- Appropriate-sized open-end wrench (typically 9/16-inch, 1/2-inch , and 3/4-inch);
- 2 Tedlar bags;
- Portable weather meter, if appropriate;
- Chain-of-custody (COC) form;
- Sample collection log;
- Gel ice; and
- Field notebook.

## V. Cautions

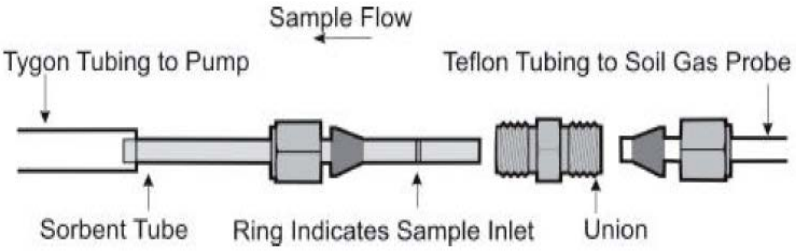
The following cautions and field tips should be reviewed and considered prior to collecting soil-gas samples.

- Sampling personnel should not handle hazardous substances (such as gasoline), permanent marking pens (sharpies), wear/apply fragrances, or smoke cigarettes/cigars before and/or during the sampling event.

- Care should be taken to ensure that the appropriate sorbent is used in the TO-17 tube preparation. Sorbent should be selected in consultation with the analytical laboratory and in consideration of the target compound list, the necessary reporting limits and the expected range of concentrations in field samples. The expected range of concentrations in field samples may be estimated from previous site data, release history and professional judgment informed by the conceptual site model.

- Flow rates for sample collection with TO-17 sorbent tubes should be determined well in advance of field work in consultation with the laboratory.

- Flow direction on the TO-17 sorbent tubes must be considered. Sorbent tubes are specifically designed to absorb lighter end compound at the influent side of the tube and heavier compounds toward the effluent side of the sorbent tube. Confirm flow direction with analytical laboratory or supplier. The picture below shows a ring indicator on a sorbent tube; this indicates the influent end of the sorbent tube. This ring may also hold labeling clips used to identify the sample. If removed during sample collection or to identify flow direction, remember to replace upon completion. An arrow indicating flow direction may also be printed on the sorbent tube.




- TO-17 sorbent tubes must be oriented vertically during sampling to ensure equal distribution of compounds along the sorbent media.

- A Shipping Determination must be performed, by DOT-trained personnel, for all environmental samples that are to be shipped, as well as some types of environmental equipment/supplies that are to be shipped.

- At the sampling location, keep the tubes in their storage and transportation container to equilibrate with ambient temperature prior to attaching to the sample train.

- Always use clean gloves when handling sampling tubes.

- Seal clean, blank sorbent tubes and sampled tubes using inert, Swagelok®-type fittings and PTFE ferrules. Wrap capped tubes individually in uncoated aluminum foil. Use clean, sealable glass jars or metal cans containing a small packet of activated charcoal or activated charcoal/silica gel for storage and transportation of multiple tubes. This activated charcoal is not analyzed, but serves as a protection for the analytical sorbent tube. Store the multi-tube storage container in a clean environment at 4ºC.

- Keep the sample tubes inside the storage container during transportation and only remove them at the monitoring location after the tubes have reached ambient temperature. Store sampled tubes in a refrigerator at 4ºC inside the multi-tube container until ready for analysis.

- The purge flow rate of 100 ml/min should be suitable for a variety of silt and sand conditions but will not be achievable in some clays without excessive vacuum. A low vacuum (<10" of mercury) should be maintained. Record the measured flow rate and vacuum pressure during sample collection.

  The cutoff value for vacuum differs in the literature from 10" of water column (ITRC 2007) to 136" of water column or 10" of mercury (http://www.dtsc.ca.gov/lawsregspolicies/policies/SiteCleanup/upload/SMBR_ADV_activesoilgasinvst.pdf). A detailed discussion of the achievable flow rates in various permeability materials can be found in Nicholson 2007. Related issues of contaminant partitioning are summarized in ASTM D5314-92. Passive sampling approaches can be considered as an alternative for clay soils. However most passive sampling approaches are not currently capable of quantitative estimation of soil gas concentration.

- It is important to record the canister pressure, start and stop times and ID on a proper field sampling form. You should observe and record the time/pressure at a mid-point in the sample duration. It is a good practice to lightly tap the pressure gauge with your finger before reading it to make sure it isn't stuck.

- Ensure that there is still measureable vacuum in the SUMMA® after sampling. Sometimes the gauges sent from labs have offset errors, or they stick.

- When sampling carefully consider elevation. If your site is over 2,000' above sea level or the difference in elevation between your site and your lab is more than 2,000' then pressure effects will be significant. If you take your samples at a high elevation they will contain less air for a given ending pressure reading. High elevation samples analyzed at low elevation will result in more dilution at the lab, which could affect reporting limits. Conversely low elevation

samples when received at high elevation may appear to not have much vacuum left in them. http://www.uigi.com/Atmos_pressure.html.

- If possible, have equipment shipped a two or three days before the sampling date so that all materials can be checked. Order replacements if needed.

- Requesting extra canisters and extra sorbent tubes from the laboratory should also be considered to ensure that you have enough equipment on site in case of an equipment failure.

- Shallow exterior soil-gas sampling should not proceed within 5 days following a significant rain event (1/2-inch of rainfall or more).

## VI. Procedure

### Soil-Gas Sample Preparation

Selection of Sorbent and Sampling Volume (to be completed prior to sampling event)

1. Identify the necessary final reporting limit for the target compound(s) in accordance with the project quality assurance plan and/or in consultation with the data end user.

2. Identify the necessary method reporting limit(s). The laboratory will be helpful in providing this information as it is typically specific to the sensitivity of the instrumentation.

3. The minimum sampling volume is the volume of soil-gas sample that must be drawn through the sorbent in order to achieve the desired final reporting limit. Calculate the minimum sampling volume using the following equation:

$$Minimum\ Sampling\ Volume\ (L) = \frac{Final\ Reporting\ Limit\ (\mu g)}{Action\ Level\ (\mu g/m^3)} \times \frac{1{,}000\ L}{m^3}$$

Where:

L = liters

µg = microgram

m = meter

4. If a timed sample duration is specified in the work plan, calculate the minimum flow rate. The minimum flow rate is the flow rate necessary to achieve the minimum sampling volume using the following formula:

$$Minimum\ Flow\ Rate\ (L/min) = \frac{Minimum\ Sampling\ Volume\ (L)}{Sample\ Duration\ (min)}$$

Where:

min = minutes

Then compare the minimum flow rate calculated to the requirements for maximum soil gas sampling without excessive danger of short circuiting, normally stated as 0.2 liters/minute, although it can be lower in tight soils. Soil vapor sampling flow rates should not exceed 200 ml/min.

5. Compare the minimum sampling volume to the safe sampling volume (SSV) for the sorbents selected. SSV for specific sorbents can be provide by the manufacture or the laboratory, being used (Table 1 and Appendix 1 in Method TO-17). Ensure that the compound will not breakthrough when sampling the volume calculated above.

**Soil-Gas Sample Collection**

Calibration of the sample pump prior to assembly of sampling train

1. Attach the sample flow rate calibration tube provided by the laboratory to the inlet of the sample pump using a section of tubing. Attach the flow calibrator to the inlet of the sample flow rate calibration tube. The sample flow rate calibration tube should be clearly marked by the laboratory with an arrow indicating flow direction (or as otherwise specified by the laboratory).

2. Turn on the sample pump and adjust the flow rate on the sample pump to achieve the desired minimum flow rate (calculated above) as measured by the flow calibrator.

3. Repeat until each sampling pump has been properly calibrated to its appropriate flow rate.

Assembly of combined TO-17 and TO-15 sampling train

1. Record the following information in the field notebook, if appropriate (contact the local airport or other suitable information source [e.g., site-specific measurements, weatherunderground.com] to obtain the information):

    a. wind speed and direction;

    b. ambient temperature;

    c. barometric pressure; and

    d. relative humidity.

2. If samples are being collected from temporary or permanent soil vapor points simply remove the cap or plug and proceed to step 3. When collecting samples from a sub-slab port remove the cap or plug from the sampling port. Connect a short piece of Teflon or Teflon-lined tubing to the sampling port using a Swagelok or equivalent stainless-steel or comparable compression fitting.

3. Connect the Teflon or Teflon-lined tubing to a stainless steel T fitting using a Swagelok or equivalent stainless-steel or comparable compression fitting.

4. Remove the brass cap from the SUMMA® canister and connect the flow controller with in-line particulate filter and vacuum gauge to the SUMMA® canister. Do not open the valve on the SUMMA® canister. Record in the field notebook and COC form the flow controller number with the appropriate SUMMA® canister number.

5. Connect the flow controller to the stainless steel T fitting using a Swagelok or equivalent stainless-steel or comparable compression fitting. The TO-15 leg of the combined sampling train is now complete.

6. Attach a length of Teflon or Teflon-lined tubing to the free end of the stainless steel T fitting using a Swagelok or equivalent stainless-steel or comparable compression fitting.

7. Connect TO-17 sorbent tubes with vertical orientation and the correct flow direction using compression fittings and appropriate T's.

8. Complete the remainder of the sampling train as depicted in Figure 1.

Purge Sampling Assembly and Sampling Point Prior to Sample Collection.

1. Ensure the two-way valve next to the flow rate calibration tube is open and the two way valve next to the TO-17 sampling tubes is closed. Purge three volumes of air from the vapor probe and sampling line using the portable pump. Measure organic vapor levels with the PID. Lower flow rates may be necessary in silt or clay to avoid excessive vacuum. Vacuum reading greater than 136 inches of water column are clearly excessive. Other available sources cite a cutoff of greater than 10 inches of water column.

2. Check the seal established around the soil vapor probe and the sampling train fittings by using a tracer gas (e.g., helium) or other method established in applicable regulatory guidance documents. [Note: Refer to ARCADIS SOP "Administering Tracer Gas," adapted from NYSDOH 2005, for procedures on tracer gas use.]

3. When three volumes of air have been purged from the vapor probe and sampling line stop the purge pump and close the valve next to the flow rate calibration tube.

TO-15 Sample Collection

1. Open the SUMMA® canister valve to initiate sample collection. Record on the sample log (attached) the time sampling began and the canister pressure.

   If the initial vacuum pressure registered is not between -30 and -25 inches of Hg, then the SUMMA® canister is not appropriate for use and another canister should be used.

2. Take a photograph of the SUMMA® canister and surrounding area (unless photography is restricted by the property owner).

3. Check the SUMMA canister approximately half way through the sample duration and note progress on sample logs.

TO-15 Sample Termination

1. Arrive at the SUMMA® canister location at least 10 to 15 minutes prior to the end of the sampling interval.

2. Record the final vacuum pressure. Stop collecting the sample by closing the SUMMA® canister valves. The canister should have a minimum amount of vacuum (approximately 6 inches of Hg or slightly greater).

3. Record the date and time of valve closing in the field notebook, sample collection log, and COC form.

TO-17 Sample Collection

1. Record in the field notebook and COC form the tube number on the TO-17 tube.

2. Open the two-way valve next to the TO-17 tubes

3. Turn on the sample pump to begin sample collection. Use a stopwatch to ensure accuracy in pumping time. Record in the field notebook and the field sample log the time sampling began and the flow rate from each of the sample pumps.

Termination of Sample Collection

1. Stop the sample pumps after the desired volume of soil-gas has passed through the sorbent, and close the two-way valves next to the TO-17 sample tubes.

2. Record the stop time.

3. Detach the Tedlar bag from each sample pump and measure the helium concentration in the soil-gas collected by the Tedlar bag. Record any detections in the field book and sample collection log.

4. Open the two-way valve to permit flow through the flow rate calibration tube. Reconnect each of the sampling pumps and measure the flow rate. Record the post-sampling flow rates in the field log book and the sample collection logs. The post-sampling flow rate should match within 10% of the pre-sample flow rate. Average the pre-sampling and post-sampling flow rate and record in the field log book, and the sample collection log.

5. Calculate the sample volume using the average of the pre-sample and post-sample flow rate. Record the sample volume in the field log book, the sample collection log, and on the COC.

6. Package the tubes according to laboratory protocol on gel ice and ship to the laboratory for analysis.

## VII. Waste Management

The waste materials generated during sampling activities should be minimal. PPE, such as gloves and other disposable equipment (i.e., tubing), will be collected by field personnel for proper disposal.

## VIII. Data Recording and Management

Measurements will be recorded in the field notebook at the time of measurement with notations of the project name, sample date, sample start and finish time, sample location (e.g., GPS coordinates, distance from permanent structure), tube type and number and sample volume. Field sampling logs and COC records will be transmitted to the Project Manager.

## IX. Quality Assurance

Duplicate samples should be collected in the field as a quality assurance step. Generally, duplicates are taken of 10% of samples, but project specific requirements should take precedence. Duplicate soil gas samples should be collected via a split sample train, allowing the primary and duplicate sample to be collected from the soil-gas probe simultaneously.

Quality assurance planning for method TO-17 should take careful note of the method requirement for distributed volume pairs. Although in some circumstances this requirement may be waived, this does constitute a deviation from the method as written. It is wise to discuss this decision with clients and/or regulators before sampling.

Soil-gas sample analysis will be performed using USEPA TO-17 methodology for a site specific constituent list defined in the work plan. Constituent lists and reporting limits must be discussed with the laboratory prior to mobilizing for sampling. Quality assurance parameters should be confirmed with the laboratory prior to sampling. Field quality assurance parameters should be defined in the site-specific work plan. A trip blank sample should accompany each shipment of soil-gas samples to the laboratory for analysis. Trip blanks assess potential sample contamination resulting from the transportation and storing of samples. Soil-gas sample analysis will generally be performed using USEPA TO-15 methodology or a project specific constituent list. Method TO-15 uses a quadrupole or ion-trap GC/MS with a capillary column to provide optimum detection limits (typically 0.5-ppbv for most VOCs).

## X. References

New York State Department of Health (NYSDOH). 2005. DRAFT "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" February 23, 2005.

AirToxics Ltd. "Sorbent & Solution Sampling Guide."

**Attachment C-6**

Administering Helium Tracer Gas for Leak Checks of Soil Gas or Sub-Slab Sampling Points

ARCADIS
Infrastructure, environment, facilities

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# Administering Helium Tracer Gas for Leak Checks of Soil Gas or Sub-slab Sampling Points

SOP #416199

Rev. #: 3

Rev Date: July 7, 2010

**Approval Signatures**

Prepared by: _____ Date: 07/07/2010
Mitch Wacksman and Andrew Gutherz

Approved by: _____ Date: 07/07/2010
Christopher Lutes and Nadine Weinberg

## I. Scope and Application

When collecting subsurface vapor samples as part of a vapor intrusion evaluation, a tracer gas serves as a quality assurance/quality control method to verify the integrity of the vapor port seal and the numerous connections comprising the sample train. Without the use of a tracer, verification that a soil vapor sample has not been diluted by ambient or indoor air is difficult.

This standard operating procedure (SOP) focuses on using helium as a tracer gas. However, depending on the nature of the contaminants of concern, other compounds can be used as a tracer including sulfur hexafluoride (SF6), butane and propane (or other gases). In all cases, the protocol for using a tracer gas is consistent and includes the following basic steps: (1) enrich the atmosphere in the immediate vicinity of the sample port where ambient air could enter the sampling train during sampling with the tracer gas; and (2) measure a vapor sample from the sample tubing for the presence of elevated concentrations (> 10%) of the tracer. A plastic pail, bucket, garbage can or even a plastic bag can serve to keep the tracer gas in contact with the port during the testing.

There are two basic approaches to testing for the tracer gas:

1. Include the tracer gas in the list of target analytes reported by the laboratory; and/or

2. Use a portable monitoring device to analyze a sample of soil vapor for the tracer prior to sampling for the compounds of concern. (Note that tracer gas samples can be collected via syringe, Tedlar bag, etc. They need not be collected in SUMMA® canisters or minicans.)

This SOP focuses on monitoring helium using a portable sampling device, although helium can also be analyzed by the laboratory along with other volatile organic compounds (VOCs). Real-time tracer sampling is generally preferred as the results can be used to confirm the integrity of the port seals prior to formal sample collection.

During the initial stages of a subsurface vapor sampling program, tracer gas samples should be collected at each of the sampling points. If the results of the initial samples indicate that the port seals are adequate, the Project Manager can consider reducing the number of locations at which tracer gas samples are used in future monitoring rounds. At a minimum, at least 5% of the subsequent samples should be supported with tracer gas analyses. When using permanent soil vapor points as part of a long-term monitoring program, the port should be tested prior to the first sampling event. Tracer gas testing of subsequent sampling events may often be reduced or eliminated unless conditions have changed at the site. Soil gas port integrity should certainly be

rechecked with Tracer gas if land clearing/grading activities, freeze thaw cycles, or soil dessication may have occurred. Points should also be rechecked if more than 2 years have elapsed since the last check of that port.

## II. Personnel Qualifications

ARCADIS field sampling personnel will have current health and safety training, including 40-hour HAZWOPER training, site supervisor training, site-specific training, first-aid, and cardiopulmonary resuscitation (CPR), as needed. ARCADIS field sampling personnel will be well versed in the relevant SOPs and possess the required skills and experience necessary to successfully complete the desired field work. ARCADIS personnel responsible for leading the tracer gas testing must have previous experience conducting similar tests.

## III. Health and Safety Considerations

Field sampling equipment must be carefully handled to minimize the potential for injury and the spread of hazardous substances. All sampling personnel should review the appropriate health and safety plan (HASP) and job safety analysis (JSA) prior to beginning work to be aware of all potential hazards associated with the job site and the specific task. Field staff should review the attachment on safely handling compressed gas cylinders prior to commencing field work.

## IV. Equipment List

The equipment required to conduct a helium tracer gas test is presented below:

- Appropriate PPE for site (as required by the Health and Safety Plan)
- Helium (laboratory grade)
- Regulator for helium tank
- Shroud (plastic bucket, garbage can, etc)
    - The size of the shroud should be sufficient to fit over the sample port. It is worth noting that using the smallest shroud possible will miminze the volume of helium needed; this may be important when projects require a large number of helium tracer tests.
    - The shroud will need to have three small holes in it. These holes will include one on the top (to accommodate the sample tubing), and two

on the side (one for the helium detector probe, and one for the helium line).

- The shroud should ideally enclose the sample port and as much as possible of the sampling train.

- Helium detector capable of measuring from 1 - 100% (Dielectric MGD-2002, Mark Model 9522, or equivalent)
- Tedlar bags
- Seal material for shroud (rubber gasket, modeling clay, bentonite, etc) to keep helium levels in shroud high in windy conditions. Although the sealing material is not in direct contact with the sample if leakage does not occur, sealing materials with high levels of VOC emissions should be avoided, since they could contaminate a sample if a leak occurs.
- Sample logs
- Field notebook

## V. Cautions

Helium is an asphyxiant! Be cautious with its use indoors! Never release large volumes of helium within a closed room!

Compressed gas cylinders should be handled with caution; see attachment on the use and storage of compressed gasses before beginning field work.

Care should be taken not to pressurize the shroud while introducing helium. If the shroud is completely air tight and the helium is introduced quickly, the shroud can be over-pressurized and helium can be pushed into the ground. Provide a relief valve or small gap where the helium can escape.

Because minor leakage around the port seal should not materially affect the usability of the soil vapor sampling results, the mere presence of the tracer gas in the sample should not be a cause for alarm. Consequently, portable field monitoring devices with detection limits in the low ppm range are more than adequate for screening samples for the tracer. If high concentrations (> 10%) of tracer gas are observed in a sample, the port seal should be enhanced and fittings within the sampling train should be should be checked and/or tightened to reduce the infiltration of ambient air and the tracer test readministered. If the problem cannot be rectified, a new sample point should be installed or an alternate sampling train used.

## VI. Procedure

The procedure used to conduct the helium tracer test should be specific to the shroud being used and the methods of vapor point installation. The helium tracer test can be conducted when using temporary or permanent sampling points and inside or outside a facility. When using the tracer gas within indoor areas you must provide adequate ventilation as helium is an asphyxiant.

1. Attach Teflon or nylon (Nylaflow) sample tubing to the sample point. This can be accomplished utilizing a number of different methods depending on the sample install (i.e., most typically Swage-Lok brand compression fittings, but some quick release fittings could also be used etc.).

2. Place the shroud over the sample point and tubing.

3. Pull the tubing through hole in top of shroud. Seal opening at top of shroud with modeling clay.

4. Place weight on top of shroud to help maintain a good seal with the ground.

5. Insert helium tubing and helium detector probe into side of shroud. Seal both with modeling clay to prevent leaks.

6. Fill shroud with helium. Fill shroud slowly, allowing atmospheric air to escape either by leaving a gap where the shroud meets the ground surface or by providing a release value on the side of the shroud.

7. Use the helium detector to monitor helium concentration within the shroud from the lowest hole drilled in the shroud (bottom of the shroud nearest where the sample tubing intersects the ground). Helium should be added until the environment inside the shroud has > 60% helium.

8. Purge the sample point through the sample tubing into a Tedlar bag using a hand held sampling pump. The purge rate should at least match the sample collection rate but not exceed 100 ml/min. Test the air in the Tedlar bag for helium using portable helium detector. If the point is free of leaks there should be very low helium in the purge air from the soil. The natural concentration of helium in the atmosphere is 0.00052% by volume and there are few if any natural sources of helium to soil gas.

9. If > 10% helium is noted in purge air, add more clay or other material to the seal the sample port and repeat the testing procedure. If the seal cannot be fixed, re-install sample point.

10. Monitor and record helium level in shroud before, during and after tracer test.

11. Monitor and record helium level in purge exhaust.

12. At successful completion of tracer test and sample point purging, the soil vapor sample can be collected (if the helium shroud must be removed prior to sample collection be mindful not disturb the sample tubing and any established seals).

## VII. Data Recording and Management

Measurements will be recorded on the sample logs at the time of measurement with notations of the project name, sample date, sample start and finish time, sample location, and the helium concentrations in both the shroud and the purge air before, during, and after tracer testing. Any problems encountered should also be recorded in the field notes.

## ATTACHMENT: Compressed Gases—Use and Storage

In general, a compressed gas is any material contained under pressure that is dissolved or liquefied by compression or refrigeration. Compressed gas cylinders should be handled as high-energy sources and therefore as potential explosives and projectiles. Prudent safety practices should be followed when handling compressed gases since they expose workers to both chemical and physical hazards.

**Handling**

- Safety glasses with side shields (or safety goggles) and other appropriate personal protective equipment should be worn when working with compressed gases.
- Cylinders should be marked with a label that clearly identifies the contents.
- All cylinders should be checked for damage prior to use. Do not repair damaged cylinders or valves. Damaged or defective cylinders, valves, etc., should be taken out of use immediately and returned to the manufacturer/distributor for repair.
- All gas cylinders (full or empty) should be rigidly secured to a substantial structure at 2/3 height. Only two cylinders per restraint are allowed in the laboratory and only soldered link chains or belts with buckles are acceptable. Cylinder stands are also acceptable but not preferred.
- Handcarts shall be used when moving gas cylinders. Cylinders must be chained to the carts.
- All cylinders must be fitted with safety valve covers before they are moved.
- Only three-wheeled or four-wheeled carts should be used to move cylinders.
- A pressure-regulating device shall be used at all times to control the flow of gas from the cylinder.
- The main cylinder valve shall be the only means by which gas flow is to be shut off. The correct position for the main valve is all the way on or all the way off.
- Cylinder valves should never be lubricated, modified, forced, or tampered with.
- After connecting a cylinder, check for leaks at connections. Periodically check for leaks while the cylinder is in use.
- Regulators and valves should be tightened firmly with the proper size wrench. Do not use adjustable wrenches or pliers because they may damage the nuts.
- Cylinders should not be placed near heat or where they can become part of an electrical circuit.
- Cylinders should not be exposed to temperatures above 50 °C (122 °F). Some rupture devices on cylinders will release at about 65 °C (149 °F). Some small cylinders, such as lecture bottles, are not fitted with rupture devices and may explode if exposed to high temperatures.

- Rapid release of a compressed gas should be avoided because it will cause an unsecured gas hose to whip dangerously and also may build up enough static charge to ignite a flammable gas.
- Appropriate regulators should be used on each gas cylinder. Threads and the configuration of valve outlets are different for each family of gases to avoid improper use. Adaptors and homemade modifications are prohibited.
- Cylinders should never be bled completely empty. Leave a slight pressure to keep contaminants out.

**Storage**

- When not in use, cylinders should be stored with their main valve closed and the valve safety cap in place.
- Cylinders must be stored upright and not on their side. All cylinders should be secured.
- Cylinders awaiting use should be stored according to their hazard classes.
- Cylinders should not be located where objects may strike or fall on them.
- Cylinders should not be stored in damp areas or near salt, corrosive chemicals, chemical vapors, heat, or direct sunlight. Cylinders stored outside should be protected from the weather.

## *Special Precautions*

Flammable Gases

- No more than two cylinders should be manifolded together; however several instruments or outlets are permitted for a single cylinder.
- Valves on flammable gas cylinders should be shut off when the laboratory is unattended and no experimental process is in progress.
- Flames involving a highly flammable gas should not be extinguished until the source of the gas has been safely shut off; otherwise it can reignite causing an explosion.

Acetylene Gas Cylinders

- Acetylene cylinders must always be stored upright. They contain acetone, which can discharge instead of or along with acetylene. Do not use an acetylene cylinder that has been stored or handled in a nonupright position until it has remained in an upright position for at least 30 minutes.
- A flame arrestor must protect the outlet line of an acetylene cylinder.
- Compatible tubing should be used to transport gaseous acetylene. Some tubing like copper forms explosive acetylides.

Lecture Bottles

- All lecture bottles should be marked with a label that clearly identifies the contents.
- Lecture bottles should be stored according to their hazard classes.
- Lecture bottles that contain toxic gases should be stored in a ventilated cabinet.
- Lecture bottles should be stored in a secure place to eliminate them from rolling or falling.
- Lecture bottles should not be stored near corrosives, heat, direct sunlight, or in damp areas.
- To avoid costly disposal fees, lecture bottles should only be purchased from suppliers that will accept returned bottles (full or empty). Contact the supplier before purchasing lecture bottles to ensure that they have a return policy.
- Lecture bottles should be dated upon initial use. It is advised that bottles be sent back to the supplier after one year to avoid accumulation of old bottles.

**Appendix D**

Quality Assurance Project Plan

ARCADIS
Infrastructure · Water · Environment · Buildings

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**Rochester Gas & Electric**

# Quality Assurance Project Plan

Park Street Former MGP Site
Geneseo, New York

June 2015

# Quality Assurance Project Plan

Park Street Former MGP Site

Prepared for:
Rochester Gas & Electric

Prepared by:
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Our Ref.:
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Date:
June 2015

ARCADIS

# Table of Contents

**Acronyms**

| | |
|---|---|
| ARCADIS | ARCADIS of New York, Inc. |
| ASP | Analytical Services Protocol |
| CLP | Contract Laboratory Program |
| DQO | data quality objective |
| EDD | electronic data deliverable |
| FSP | *Field Sampling Plan* |
| HASP | *Health and Safety Plan* |
| MGP | manufactured gas plant |
| MS/MSD | matrix spike/matrix spike duplicate |
| NYSDEC | New York State Department of Environmental Conservation |
| ORP | oxidation-reduction potential |
| OSHA | Occupational Safety and Health Administration |
| QA/QC | quality assurance/quality control |
| QAM | Quality Assurance Manager |
| QAPP | *Quality Assurance Project Plan* |
| RPD | relative percent difference |
| SCWP | Site Characterization Work Plan |
| SDG | sample delivery ground |
| SUNY | State University of New York |

| | |
|---|---|
| SVOC | semivolatile organic compound |
| TOC | total organic carbon |
| USEPA | United States Environmental Protection Agency |
| VOC | volatile organic compound |

ARCADIS

**Preface**

This *Quality Assurance Project Plan* (QAPP) presents the sampling and analytical methods and procedures that will be used during implementation of the Site Characterization Work Plan (SCWP) prepared by ARCADIS of New York, Inc. (ARCADIS) for the Park Street Former Manufactured Gas Plant (MGP) Site located in Geneseo, New York (site).

This QAPP was prepared in a manner consistent with the following reference and guidance documents:

- United States Environmental Protection Agency's (USEPA's) *Test Methods for Evaluating Solid Waste, SW-846* (USEPA, 1996)

- The USEPA's guidance document entitled *EPA Requirements for Quality Assurance Project Plans for Environmental Operations, EPA-QA/R-5* (USEPA, 2001), which replaces QAMS-005/80 *Interim Guidance and Specifications for Preparing Quality Assurance Project Plans* (USEPA, 1980)

- the National Enforcement Investigations Center *Policies and Procedures Manual* (USEPA, 1991)

Information contained in this QAPP has been organized into the following sections:

| Section | Content |
|---|---|
| **Project Management** | |
| 1 | Project Organization and Responsibilities |
| 2 | Project Background |
| 3 | Project Description |
| 4 | Quality Objectives and Criteria for Measurement Data |
| 5 | Special Training Requirements/Certification |
| 6 | Documentation and Records |
| **Measurement/Data Acquisition** | |
| 7 | Sampling Process Design |
| 8 | Sampling Method Requirements |
| 9 | Sample Handling and Custody Requirements |
| 10 | Analytical Procedures |
| 11 | Quality Control Requirements |
| 12 | Instrument/Equipment Testing, Inspection, and Maintenance Requirements |
| 13 | Instrument Calibration and Frequency |
| 14 | Inspection/Acceptance Requirements for Supplies and Consumables |
| 15 | Data Acquisition Requirements for Nondirect Measurements |
| 16 | Data Management |
| **Assessment/Oversight** | |
| 17 | Assessment and Response Actions |
| 18 | Reports to Management |

| Section | Content |
|---|---|
| **Data Validation and Usability** | |
| 19 | Data Review, Validation, and Verification |
| 20 | Validation and Verification Methods |
| 21 | Reconciliation with User Requirements |
| 22 | References |

Details are provided in the subsequent sections.

# 1. Project Organization and Responsibilities

## 1.1 Project Organization

Intrusive work conducted within potentially impacted areas of the Park Street Former MGP site, as identified in the SCWP will require integration of personnel from the organizations identified below, collectively referred to as the project team. A description of the responsibilities of each member of the project team is presented in Section 1.2.

| Title | Company/Organization | Name | Phone Number |
|---|---|---|---|
| RGE Project Manager | RGE | Christopher Keipper, PMP | 585.771.4560 |
| Property Owner | State University of New York at Geneseo | Chuck Reyes | 585.245.5512 |
| NYSDEC Project Manager | NYSDEC | Sarah Saucier | 518.402.9662 |

### 1.1.1 Analytical Laboratory Services and Subcontractors

The analytical services and contractor performing intrusive activities will be determined prior to initiation of field work. Laboratory and subcontractor management personnel are listed below.

| Title | Company/Organization | Name | Phone Number |
|---|---|---|---|
| Laboratory Project Manager | To be determined | | |
| Contractors/Consultants | To be determined | | |

### 1.1.2 Quality Assurance Staff

Individuals conducting intrusive work within potentially MGP-impacted areas identified in the SCWP will identify quality assurance (QA) personnel. In addition to the contractor's personnel, the following personnel have been assigned to this project component:

| Title | Company/Organization | Name | Phone Number |
|---|---|---|---|
| RGE QA Manager | RGE | Christopher Keipper, PMP | 585.771.4560 |
| NYSDEC QC Manager | NYSDEC | Sarah Saucier | 518.402.9662 |

## 1.2 Team Member Responsibilities

This section of the *Quality Assurance Project Plan* (QAPP) discusses the responsibilities and duties of the project team members.

#### 1.2.1 RGE

RGE Project Manager

1. Overall understanding of the nature and extent of MGP-related impacts remaining at the site.
2. Understands proposed intrusive activities within potentially MGP impacted areas.
3. Understand the Work Plan, QAPP, and Field Sampling Plan (FSP) requirements.
4. Ensure Work Plan requirements are implemented.
5. Review results, reports, and all documents prepared by contractors conducting work within potentially impacted areas.
6. Confirm that corrective actions are taken for deficiencies cited during audits of the field activities.

#### 1.2.2 Property Owner

State University of New York (SUNY) Geneseo

1. Ensure that all the requirements of the SCWP, QAPP, and FSP are followed for all proposed intrusive work conducted within potentially MGP-impacted area.
2. Communicate/notify the project team regarding proposed intrusive work to be conducted within potentially MGP-impacted areas.

#### 1.2.3 NYSDEC

NYSDEC Project Manager

1. Ensure that all the requirements of the SCWP, QAPP, and FSP are followed for all proposed intrusive work conducted within potentially MGP-impacted areas.
2. Review results, reports, and all documents prepared by contractors conducting work within potentially impacted areas.
3. Overall understanding of the nature and extent of MGP-related impacts remaining at the site.

4. Provide review and approval of contractor's work plans for work proposed within potentially MGP-impacted areas.

#### 1.2.4 Contractors/Consultants

Contractor Project Manager/Field Personnel

1. Management and coordination of all aspects of the project with an emphasis on adhering to the requirements of the SCWP, QAPP, and FSP.
2. Oversight of required media sampling.
3. Oversight of field analysis and collection of QA samples.
4. Reduction of field data calibration and maintenance.
5. Review of the field instrumentation, maintenance, and calibration to maintain quality data.
6. Preparation of draft reports and other key documents.
7. Maintenance of field files of notebooks and logs and calculations.
8. Coordination of field and laboratory schedules.
9. Perform field procedures associated with the tasks and subtasks presented in Section 3.
10. Perform field analyses and collect QA samples maintain sample custody.
11. Prepare field records and logs.
12. Calibrate, operate, and maintain field equipment.
13. Reduce field data.

Quality Assurance Manager

1. Review laboratory data packages.
2. Oversee and interface with the analytical laboratories.

3. Coordinate field quality assurance/quality control (QA/QC) activities with task managers, including audits of field activities, concentrating on field analytical measurements and practices to meet data quality objectives (DQOs).

4. Review field reports.

5. Review audit reports.

6. Prepare a QA/QC report that includes an evaluation of field and laboratory data and data validation reports.

#### 1.2.5 Laboratory Subcontractor (to be determined)

General responsibilities and duties include:

1. Perform sample analyses.

2. Supply sample containers and shipping cartons.

3. Maintain laboratory custody of samples.

4. Strictly adhere to laboratory protocols.

Laboratory Project Manager

1. Serve as primary communication link between ARCADIS and laboratory staff.

2. Monitor workloads and confirm availability of resources.

3. Oversee preparation of analytical reports.

4. Supervise in-house chain of custody.

Quality Assurance Officer

1. Supervise technical staff in QA/QC procedures.

2. Conduct audits of all laboratory activities.

1.2.6 Data Validator

1. Provide independent validation of analytical data.

1.2.7 Drilling Subcontractor (to be determined)

1. Performance of groundwater monitoring well installations and test borings in accordance with the SCWP protocols.

2. Decontamination of drilling and sampling equipment.

## 2. Project Background

The following summarizes background information for the project site. Additional information can be found in the SCWP.

### 2.1 Site Location and Description

The Park Street former MGP site is located at 6 Park Street in the Village of Geneseo, Livingston County, New York. The Park Street site covers approximately 3/4 of an acre and is located on the eastern side of the SUNY Geneseo campus. The eastern portion of the site is paved, and the western portion is covered by buildings and landscaping.

The site, which is owned by SUNY, is bound on the north by commercial buildings and School Street; on the west by a SUNY academic building complex (the Brodie Fine Arts building), by Park Street and a city park on the south; and on the east by a SUNY parking lot and commercial buildings along the west side of Main Street. The Park Street site straddles the boundary between the village commercial district and the SUNY campus.

The Brodie Fine Arts building is a square building complex that includes an inner courtyard and a high-rise tower at the east side of the complex. Based on the overlay of historic with modern structures, the east side of the former gas production building was likely located under the parking lot and driveway, and the west side of the gas house and the gas holder was under the east end of the Brodie building.

### 2.2 Objectives

This document presents QA/QC requirements for conducting investigative activities at the Park Street Former MGP site. A SCWP was prepared by ARCADIS for the Park Street Former MGP Site located in Geneseo, New York (site) in accordance with the *Technical Guidance for Site Investigation and Remediation*, DER-10 (draft) (DER-10) (NYSDEC, 2002). This QAPP was prepared to be an attachment for the SCWP.

## 3. Quality Objectives and Criteria for Measurement Data

DQOs are qualitative and quantitative statements that specify the quality of data required to support decisions made during site-related activities and are based on end uses of the data to be collected. Preliminary DQOs were identified to confirm that data generated during field investigations will be of adequate quality and sufficient quantity to form a sound basis for decision making relative to the above objectives. DQOs have been specified for each data collection activity or investigation. The DQOs presented herein address investigation efforts only and do not cover health and safety issues, which are addressed in detail in the Health and Safety Plan (HASP) for this project.

A DQO summary for the sampling investigation efforts is presented below. The summary consists of stated DQOs relative to data uses, data types, data quantity, sampling and analytical methods, and data measurement performance criteria.

Three data categories have been defined to address various analytical data uses and the associated QA/QC effort and methods required to achieve the desired levels of quality. These categories are:

*Screening Data:* Screening data affords a quick assessment of site characteristics or conditions. This objective for data quality is applicable to data collection activities that involve rapid, non-rigorous methods of analysis and QA. This objective is generally applied to physical and/or chemical properties of samples, degree of contamination relative to concentration differences, and preliminary health and safety assessment.

*Screening Data with Definitive Confirmation:* Screening data allows rapid identification and quantitation, although the quantitation can be relatively imprecise. This objective for data quality is available for data collection activities that require qualitative and/or quantitative verification of a select portion of sample findings (10% or more). This objective can also be used to verify less rigorous laboratory-based methods.

*Definitive Data:* Definitive data are generated using analytical methods, such as approved USEPA reference methods. Data are analyte-specific, with confirmation of analyte identity and concentration. Methods produce raw data (e.g., chromatograms, spectra, digital values) in the form of paper printouts or computer-generated electronic files.

For this project, three levels of data reporting have been defined. They are as follows:

*Level 1 – Minimal Reporting:* Minimal or “results only” reporting is used for analyses that, either due to their nature (i.e., field monitoring) or the intended data use (i.e., preliminary screening), do not generate or require extensive supporting documentation.

*Level 2 – Modified Reporting:* Modified reporting is used for analyses that are performed following standard USEPA-approved methods and QA/QC protocols and that, based on the intended data use, require some supporting documentation but not, however, full "Contract Laboratory Program-type" (CLP-type) reporting.

*Level 3 – Full Reporting:* Full "CLP-type" reporting is used for those analyses that, based on intended data use, require full documentation. This reporting level would include Analytical Services Protocol (ASP) Superfund and Category B reporting.

The analytical methods to be used during the intrusive activities will be USEPA SW-846 methods with NYSDEC ASP Revision 2000, QA/QC requirements, and Category B reporting deliverables.

### 3.1 Data Quality Objectives for Intrusive Soil Sampling and Staged Soil Sampling

Excavation and/or soil borings will be advanced to varying depths. Subsurface soil samples will be visually characterized and may not require laboratory analyses.

However, in the event laboratory analyses are required, soil samples may be collected from excavation, boring or staged sources and submitted for analysis. In this instance, it is anticipated that samples may be collected for:

- Volatile organic compounds (VOCs) USEPA SW-846 Method 8260
- Semivolatile organic compounds (SVOCs) USEPA SW-846 Method 8270
- Inorganics USEPA SW-846 Method 6010

The number of required QA/QC samples is summarized in **Table 2**. **Table 1** presents the parameters to be analyzed under each of the methods described above with the laboratory quantitation limits.

### 3.2 Data Quality Objectives for Groundwater

The number of groundwater QA/QC samples is summarized in **Table 2**. **Table 1** presents the parameters to be analyzed under each of the methods described above with the laboratory quantitation limits. Samples will be analyzed for:

- Benzene, toluene, ethylbenzene, xylene USEPA SW-846 Method 8260
- Polycyclic Aromatic Hydrocarbon USEPA SW-846 Method 8270

As described in the SCWP, both hydrogeologic and water quality data are required to meet the objective of this task. Hydrogeologic data may include water-level information and hydraulic conductivity values that will be used to calculate other hydrogeologic parameters. Groundwater quality data may include field parameters, including pH, oxidation-reduction potential (ORP), turbidity, temperature, conductivity, and dissolved oxygen, as well as the laboratory parameters described below.

Groundwater level measurement procedures, field parameter measurement procedures, and groundwater sampling methods are provided in the FSP.

### 3.3 Data Quality Objectives for Waste Characterization

In the event that activities create either liquid or soil waste requiring disposal, samples will be collected and analyzed for:

- VOCs USEPA SW-846 Method 8260
- SVOCs USEPA SW-846 Method 8270
- Inorganics USEPA SW-846 Method 6010
- Pesticides/Herbicides USEPA SW-846 Method 8081
- Polychlorinated Biphenyl USEPA SW-846 8082
- Ignitability, Reactivity, Corrosivity

## 4. Special Training Requirements/Certification

Compliant with the Occupational Safety and Health Administration's (OSHA's) final rule, *Hazardous Waste Operations and Emergency Response*, 29 Code of Federal Regulations Part 1910.120(e), all personnel performing work in potentially MGP-impacted areas will have completed the requirements for OSHA 40-hour Hazardous Waste Operations and Emergency Response training. Persons in field supervisory positions will have also completed the additional OSHA 8-hour Supervisory Training.

## 5. Documentation and Records

### 5.1 General

Samples of the various media may be collected, as described in the SCWP. Detailed descriptions of the documentation and reporting requirements are presented below.

### 5.2 Field Documentation

Field personnel will provide comprehensive documentation covering all aspects of field sampling, field analysis, and sample chain of custody. This documentation constitutes a record that allows reconstruction of all field events to aid in data review and interpretation process. All documents, records, and information relating to performance of field work will be retained in the project file.

The various forms of documentation to be maintained throughout the action include:

- *Daily Production Documentation* – A field notebook consisting of a waterproof, bound notebook that will contain a record of all activities performed at the site.

- *Sampling Information* – Detailed notes will be made as to the exact site of sampling, physical observations, and weather conditions (as appropriate).

- *Sample Chain of Custody* – Chain of custody forms will provide the record of responsibility for sample collection, transport, and submittal to the laboratory. Chain of custody forms will be filled out at each sampling site, at a group of sampling sites, or at the end of each day of sampling by ARCADIS field personnel designated to be responsible for sample custody. In the event that samples are relinquished by the designated sampling person to other sampling or field personnel, the chain of custody form will be signed and dated by the appropriate personnel to document the sample transfer. The original chain of custody form will accompany the samples to the laboratory, and copies will be forwarded to the project files. A sample chain of custody form is included in **Attachment D-1**.

  Persons will have custody of samples when the samples are in their physical possession, in their view after being in their possession, or in their physical possession and secured so they cannot be tampered with. In addition, when samples are secured in a restricted area accessible only to authorized personnel, they will be deemed to be in the custody of such authorized personnel.

- *Field Equipment, Calibration, and Maintenance Logs* – To document calibration and maintenance of field instrumentation, calibration and maintenance logs will be maintained for each piece of field equipment that is not factory calibrated.

## 5.3 Laboratory Documentation

### 5.3.1 Laboratory Project Files

The laboratory will establish a file for all pertinent data. The file will include all correspondence, faxed information, phone logs, and chain of custody forms. The laboratory will retain all project files and data packages for a period of 5 years.

### 5.3.2 Laboratory Logbooks

Workbooks, bench sheets, instrument logbooks, and instrument printouts will be used to trace the history of samples through the analytical process and document and relate important aspects of the work, including the associated quality controls. As such, all logbooks, bench sheets, instrument logs, and instrument printouts will be part of the permanent record of the laboratory.

Each page or entry will be dated and initialed by the analyst at the time of entry. Errors in entry will be crossed out in indelible ink with a single stroke, corrected without the use of whiteout or by obliterating or writing directly over the erroneous entry, and initialed and dated by the individual making the correction. Pages of logbooks that are not used will be completed by lining out unused portions.

Information regarding the sample, analytical procedures performed, and the results of the testing will be recorded on laboratory forms or personal notebook pages by the analyst. These notes will be dated and will also identify the analyst, the instrument used, and the instrument conditions.

Laboratory notebooks will be periodically reviewed by the laboratory group leaders for accuracy, completeness, and compliance to this QAPP. All entries and calculations will be verified by the laboratory group leader. If all entries on the pages are correct, then the laboratory group leader will initial and date the pages. Corrective action will be taken for incorrect entries before the laboratory group leader signs.

### 5.3.3 Computer Tape and Hard Copy Storage

All electronic files will be maintained on CD-ROM for 5 years; hard copy data packages will be maintained in files for 5 years.

### 5.4 Data Reporting Requirements

#### 5.4.1 Field Data Reporting

Information collected in the field through visual observation, manual measurement, and/or field instrumentation will be recorded in field notebooks or data sheets and/or on forms. Such data will be reviewed by the appropriate Task Manager for adherence to the work plan and for consistency. Concerns identified as a result of this review will be discussed with the field personnel, corrected if possible, and, as necessary, incorporated into the data evaluation process.

Where appropriate, field data forms and calculations will be processed and included in appendices to a Site Action Report (when generated). Original field logs, documents, and data reductions will be kept in the project file.

#### 5.4.2 Laboratory Data Reporting

The laboratory is responsible for preparing ASP Category B data packages for all VOC, SVOC, and total organic carbon (TOC) data, reduced data packages, and case narratives for all other analyses.

All data reports for all parameters will include, at a minimum, the following items:

*Narrative* – Summary of activities that took place during the course of sample analysis, including the following information:

- laboratory name and address
- date of sample receipt
- cross reference of laboratory identification number to contractor sample identification
- analytical methods used
- deviations from specified protocol
- corrective actions taken

Included with the narrative will be any sample handling documents, including field and internal chain of custody forms, air bills, and shipping tags.

*Analytical Results* – Reported according to analysis type, including the following information, as acceptable:

- sample ID
- laboratory ID
- date of collection
- date of receipt
- date of extraction
- date of analysis
- detection limits

Sample results on report forms will be collected for dilutions. Soil samples will be reported on a dry weight basis. Unless otherwise specified, results will be reported uncorrected for blank contamination.

Data for volatile and semi-volatile analyses will be expanded to include all supporting documentation necessary to provide a Category B package. This additional documentation will include, but is not limited to, all raw data required to recalculate any result, including printouts, chromatograms, and quantitation reports. The report also will include standards used in calibration and calculation of analytical results; sample extraction, digestion, and other preparation logs; standard preparation logs; instrument run logs; and moisture content calculations.

### 5.5 Project File

Project documentation will be placed in project files for document management. Project files typically consist of the following components:

1. Agreements/Proposals (filed chronologically)
2. Change Orders/Purchase Orders (filed chronologically)
3. Invoices (filed chronologically)
4. Project Management (filed by topic)

5. Correspondence (filed chronologically)
6. Notes and Data (filed by topic)
7. Public Relations Information (filed by topic)
8. Regulatory Documents (filed chronologically)
9. Marketing Documents (filed chronologically)
10. Final Reports/Presentations (filed chronologically)
11. Draft Reports/Presentations (filed chronologically)
12. Documents Prepared by Others (filed chronologically)

Final reports (including QA Reports) are filed in a designated folder within the project file. Analytical laboratory documentation (when received) and field data will also be filed in a designated folder within the project file. Filed materials may be removed and signed out by authorized personnel on a temporary basis only.

## 6. Sampling Process Design

Information regarding the sampling design and rationale and associated sampling locations can be found in the SCWP.

## 7. Sampling Method Requirements

Soil and groundwater samples will be collected, as necessary, as described in the FSP. The FSP also contains procedures that will be followed to install monitoring wells; measure water levels; perform field measurements; and handle, package, and ship collected samples.

## 8. Sample Handling and Custody Requirements

### 8.1 Sample Containers and Preservation

Appropriate sample containers, preservation methods, and laboratory holding times for the samples are shown in **Table 3**.

The analytical laboratory will supply appropriate sample containers and preservatives, as necessary. Bottles will be purchased pre-cleaned to USEPA Office of Solid Waste and Emergency Response Directive 9240.05A requirements. Field personnel will be responsible for properly labeling containers and preserving samples (as appropriate).

### 8.2 Packing, Handling, and Shipping Requirements

Sample packaging and shipment procedures are designed to confirm that samples will arrive at the laboratory, with the chain of custody intact.

Samples will be packaged for shipment as outlined below:

- Confirm that all sample containers have the sample labels securely affixed to the container with clear packing tape.
- Check the caps on the sample containers to confirm that they are properly sealed.
- Wrap the sample container cap with clear packing tape to prevent it from becoming loose.
- Complete the chain of custody form with the required sampling information and confirm that the recorded information matches the sample labels. (Note: If the designated sampler relinquishes the samples to other sampling or field personnel for packing or other purposes, the sampler will complete the chain of custody prior to this transfer. The appropriate personnel will sign and date the chain of custody form to document the sample custody transfer.)
- Using duct tape, secure the outside drain plug at the bottom of the cooler.
- Wrap sample containers in bubble wrap or other cushioning material.
- Place 1 to 2 inches of cushioning material at the bottom of the cooler.
- Place the sealed sample containers into the cooler.

- Place ice in plastic bags and seal. Place loosely in the cooler.
- Fill the remaining space in the cooler with cushioning material.
- Place chain of custody forms in a plastic bag and seal. Tape the forms to the inside of the cooler lid.
- Close the lid of the cooler, lock, and secure with duct tape.
- Wrap strapping tape around both ends of the cooler at least twice.
- Mark the cooler on the outside with the following information: shipping address, return address, “Fragile” labels, and arrows indicating “this side up.” Cover the labels with clear plastic tape. Place a signed custody seal over the cooler lid.

All samples will be packaged by field personnel and transported as low-concentration environmental samples. The samples will be hand-delivered or delivered by an express carrier within 48 hours of the time of collection. All shipments will be accompanied by the chain of custody form identifying the contents. The original form will accompany the shipment; copies will be retained by the sampler for the sampling office records. If the samples are sent by common carrier, a bill of lading should be used. Receipts or bills of lading will be retained as part of the permanent project documentation. Commercial carriers are not required to sign off on the chain of custody form, as long as the forms are sealed inside the sample cooler and the custody seals remain intact.

Sample custody seals and packing materials for filled sample containers will be provided by the analytical laboratory. The filled, labeled, and sealed containers will be placed in a cooler on ice and carefully packed to eliminate the possibility of container breakage. Trip blank(s) of analyte-free water will be provided by the laboratory and included in each cooler containing aqueous samples to be analyzed for VOCs.

Procedures for packing, handling, and shipping environmental samples are included in the FSP.

### 8.3 Field Custody Procedures

The objective of field sample custody is to confirm that samples are not tampered with from the time of sample collection through the time of transport to the analytical laboratory. Persons will have “custody of samples” when the samples are in their physical possession, in their view after being in their possession, or in physical possession and secured so they cannot be tampered with. In addition, when samples are secured in a restricted area accessible only to authorized personnel, they will be deemed to be in the custody of such authorized personnel.

Field custody documentation consists of both field logbooks and field chain of custody forms.

### 8.3.1 Field Logbooks

Field logbooks will provide the means of recording data collecting activities performed. As such, entries will be described in as much detail as possible so that persons going to the site could reconstruct a particular situation without reliance on memory.

Field logbooks will be bound field survey books or notebooks. Logbooks will be assigned to field personnel, but will be stored in a secure location when not in use. Each logbook will be identified by the project-specific document number. The title page of each logbook will contain the following:

- person to whom the logbook is assigned
- logbook number
- project name
- project start date
- end date

Entries into the logbook will contain a variety of information. At the beginning of each entry, the date, start time, weather, names of all sampling team members present, level of personal protection being used, and the signature of the person making the entry will be entered. The names of visitors to the site, field sampling or investigation team personnel, and the purpose of their visit will also be recorded in the field logbook.

Measurements made and samples collected will be recorded. All entries will be made in ink, and no erasures will be made. If an incorrect entry is made, the information will be crossed out with a single strike mark. Whenever a sample is collected or a measurement is made, a detailed description of the location of the station shall be recorded. The number of the photographs taken of the station, if any, will also be noted. All equipment used to make measurements will be identified, as well as with the date of calibration.

Samples will be collected following sampling procedures documented in the FSP. The equipment used to collect samples will be noted, as well as with the time of sampling, sample description, depth at which the sample was collected, volume, and number of containers. Sample identification numbers will be assigned prior to sample collection. Field duplicate samples, which will receive an entirely separate sample identification number, will be noted under sample description.

### 8.3.2 Sample Labeling

Preprinted sample labels will be affixed to sample bottles prior to delivery at the sampling site. The following information is required in each sample label.

- project
- date collected
- time collected
- location
- sampler
- analysis to be performed
- preservative
- sample number

### 8.3.3 Field Chain of Custody Forms

Completed chain of custody forms will be required for all samples to be analyzed. Chain of custody forms will be initiated by the sampling crew in the field. The chain of custody forms will contain the sample's unique identification number, sample date and time, sample description, sample type, preservation (if any), and analyses required. The original chain of custody form will accompany the samples to the laboratory. Copies of the chain of custody will be made prior to shipment (or multiple copy forms used) for field documentation. The chain of custody forms will remain with the samples at all times. The samples and signed chain of custody forms will remain in the possession of the sampling crew until the samples are delivered to the express carrier (e.g., FedEx) or hand delivered to a mobile or permanent laboratory, or placed in secure storage.

Sample labels will be completed for each sample using waterproof ink, unless prohibited by weather conditions. The labels will include sample information, such as sample number and location, type of sample, date and time of sampling, sampler's name or initials, preservation, and analyses to be performed. The completed sample labels will be affixed to each sample bottle and covered with clear tape.

Whenever samples are collocated with a source or government agency, a separate Sample Receipt will be prepared for those samples and marked to indicate with whom the samples are being collocated. The person relinquishing the samples to the facility or agency should request the representative's signature, acknowledging sample receipt. If the representative is unavailable or refuses, this is noted in the "Received By" space.

### 8.4 Management of Investigation-Derived Materials and Wastes

Disposable equipment, debris, and decontamination rinsate (e.g., tap and distilled water containing small amounts of solvent) will be containerized during sampling events and labeled for appropriate disposal.

### 8.5 Laboratory Procedures

#### 8.5.1 General

Upon sample receipt, laboratory personnel will be responsible for sample custody. A field chain of custody form will accompany all samples requiring laboratory analysis. Samples will be kept secured in the laboratory until all stages of analysis are complete. All laboratory personnel having samples in their custody will be responsible for maintaining sample integrity.

#### 8.5.2 Sample Receipt and Storage

Upon sample receipt, the laboratory sample custodian will verify the package seal, open the package, verify sample integrity, and compare the contents against the field chain of custody. If a sample container is broken, the sample is in an inappropriate container, has not been preserved by appropriate means, or if there is a discrepancy between the chain of custody and the sample shipment, ARCADIS will be notified. The laboratory sample custodian will then log the samples in, assign a unique laboratory identification number to each, and label the sample bottle with the laboratory identification number. The project name, field sample code, date sampled, date received, analysis required, storage location and date, and action for final disposition will be recorded in the laboratory information management system.

#### 8.5.3 Sample Chain of Custody and Documentation

Laboratory chain of custody and documentation will follow procedures consistent with Exhibit F of the New York State Department of Environmental Conservation (NYSDEC) ASP 2000.

8.5.4 Sample Analysis

Analysis of an acceptable sample will be initiated by worksheets that contain all pertinent information for analysis. The analyst will sign and date the laboratory chain of custody form when removing the samples from storage.

Samples will be organized into sample delivery groups (SDGs) by the laboratory. A SDG may contain up to 20 field samples (field duplicates, trip blanks, and rinse blanks are considered field samples for the purposes of SDG assignment). All field samples assigned to a single SDG shall be received by the laboratory over a maximum of 7 calendar days, and must be processed through the laboratory (preparation, analysis, and reporting) as a group. Every SDG must include a minimum of one site-specific matrix/matrix spike duplicate (MS/MSD) pair, which shall be received by the laboratory at the start of the SDG assignment.

Each SDG will be self-contained for all of the required QC samples. All parameters within an SDG will be extracted and analyzed together in the laboratory. At no time will the laboratory be allowed to run any sample (including QC samples) at an earlier or later time than the rest of the SDG. These rules for analysis will confirm that the QC samples for an SDG are applicable to the field samples of the same SDG and that the best possible comparisons can be made.

8.5.5 Sample Storage Following Analysis

The remaining samples will be maintained by the laboratory for 1 month after the final report is delivered to ARCADIS. After this period, samples will be disposed of in accordance with applicable rules and regulations.

# 9. Analytical Procedures

## 9.1 Field Analytical Procedures

Field analytical procedures may include measurement of pH, ORP, turbidity, temperature, conductivity, dissolved oxygen, and groundwater levels. Specific field measurement protocols are provided in the FSP.

## 9.2 Laboratory Analytical Procedures

Laboratory analytical requirements presented in the subsections below include a general summary of requirements, specifics related to each sample medium that may be analyzed, and details of the methods to be used for this project. SW-846 methods with NYSDEC, ASP, 2000 Revision, QA/QC and reporting deliverables requirements will be used for all analytes.

### 9.2.1 General

The attached tables summarize general analytical requirements:

| Table | Title |
|---|---|
| Table 1 | Parameters, Methods, and Quantitation Limits |
| Table 2 | Environmental and Quality Control Sample Analyses |
| Table 3 | Sample Containers, Preservation Methods, and Holding Times Requirements |

### 9.2.2 Sample Metrics

#### *9.2.2.1 Soil*

Analyses in this category will relate to soil samples. Analyses will be performed following methods listed in **Table 2**. Results will be reported as dry weight, in units presented in **Table 1**. Moisture content will be reported separately.

### 9.2.3 Analytical Requirements

Primary sources to describe analytical methods to be used during investigation are provided in USEPA SW-846 Test Methods for Evaluating Solid Waste, Third Edition and USEPA Methods for Chemical Analysis of Water and Waste with NYSDEC ASP 2000 Revision, QA/QC and reporting deliverables requirements. Detailed information regarding QC procedures, including MS/MSDs, MS blanks, and surrogate recoveries is provided in NYSDEC, ASP 2000 Revision, Exhibit E.

## 10. Quality Control Requirements

### 10.1 Quality Assurance Indicators

The overall QA objective for this QAPP is to develop and implement procedures for sampling, chain of custody, laboratory analysis, instrument calibration, data reduction and reporting, internal QC, audits, preventive maintenance, and corrective action such that valid data will be generated. These procedures are presented or referenced in the following sections of the QAPP. Specific QC checks are discussed in Section 11.2.

QA indicators are generally defined in terms of five parameters:

1. representativeness
2. comparability
3. completeness
4. precision
5. accuracy

Each parameter is defined below. Specific objectives for the site actions are set forth in other sections of this QAPP, as referenced below.

#### 10.1.1 Representativeness

Representativeness is the degree to which sampling data accurately and precisely represent site conditions, and is dependent on sampling and analytical variability. The investigation activities have been designed to assess the presence of constituents at the time of sampling. The SCWP presents the rationale for sample quantities and location. The FSP and this QAPP present field sampling methodologies and laboratory analytical methodologies. The use of the prescribed field and laboratory analytical methods with associated holding times and preservation requirements are intended to provide representative data.

#### 10.1.2 Comparability

Comparability is the degree of confidence with which one data set can be compared to another. Comparability between this investigation, and to the extent possible, with existing data will be maintained through consistent sampling and analytical methodology set forth in the FSP and this QAPP, SW-846

analytical methods with NYSDEC ASP Revision 2000 QA/QC requirements and Category B reporting deliverables, and through use of QA/QC procedures and appropriately trained personnel.

#### 10.1.3 Completeness

Completeness is defined as a measure of the amount of valid data obtained from an event and/or investigation compared to the amount that was expected to be obtained under normal conditions. This will be determined upon assessment of the analytical results, as discussed in Section 11.6.

#### 10.1.4 Precision

Precision is the measure of reproducibility of sample results. The goal is to maintain a level of analytical precision consistent with project objectives. To maximize precision, sampling and analytical procedures will be followed. All work for this investigation will adhere to established protocols presented in the SCWP. Checks for analytical precision will include the analysis of MSDs, laboratory duplicates, and field duplicates. Checks for field measurement precision will include obtaining duplicate field measurements. Further discussion of precision QC checks is provided in Section 11.4.

#### 10.1.5 Accuracy

Accuracy is the deviation of a measurement from the true value of a known standard. Both field and analytical accuracy will be monitored through initial and continuing calibration of instruments. In addition, internal standards, MS, blank spikes, and surrogates (system monitoring compounds) will be used to assess the accuracy of the laboratory analytical data. Further discussion of these QC samples is provided in Section 11.4.

### 10.2 Field Quality Control Checks

#### 10.2.1 Field Measurements

To verify quality of data using field instrumentation, duplicate measurements will be obtained and reported for all field analytical measurements.

#### 10.2.2 Sample Containers

Certified, clean sample containers in accordance with Exhibit I of the NYSDEC ASP Revision 2000 (Eagle Picher pre-cleaned containers or equivalent) will be supplied by the laboratory.

#### 10.2.3 Field Duplicates

Field duplicates will be collected for groundwater and source material/soil samples to check reproducibility of sampling methods. Field duplicates will be prepared as discussed in the FSP. In general, source material/soil and groundwater sample field duplicates will be analyzed at a 5% frequency (every 20 samples). **Table 2** provides an estimated number of field duplicates for each applicable parameter and matrix.

#### 10.2.4 Rinse Blanks

Rinse blanks are used to monitor cleanliness of sampling equipment and effectiveness of cleaning procedures. Rinse blanks will be prepared and submitted for analysis at a frequency of 1 per day (when sample equipment cleaning occurs) or once for every 20 samples collected, whichever is less. Rinse blanks will be prepared by filling sample containers with analyte-free water (supplied by the laboratory), which has been routed through a cleaned sampling device. When dedicated sampling devices are used or sample containers are used to collect the samples, rinse blanks will not be necessary. **Table 2** provides an estimated number of rinse blanks collected during the investigation activities.

#### 10.2.5 Trip Blanks

Trip blanks will be used to assess whether site samples have been exposed to non-site-related volatile constituents during storage and transport. Trip blanks will be analyzed at a frequency of once per day, per cooler containing groundwater samples to be analyzed for VOCs. A trip blank will consist of a container filled with analyte-free water (supplied by the laboratory), which remains unopened with field samples throughout the sampling event. Trip blanks will only be analyzed for aqueous VOCs. **Table 2** provides an estimated number of trip blanks collected for each matrix and parameter during the investigation activities.

### 10.3 Analytical Laboratory Quality Control Checks

Internal QC procedures are specified in the analytical methods. These specifications include types of QC checks required (method blanks, reagent/preparation blanks, MS/MSDs, calibration standards, internal standards, surrogate standards, specific calibration check standards, laboratory duplicate/replicate analysis), compounds and concentrations to be used, and the QC acceptance criteria.

#### 10.3.1 Method Blanks

Method blanks will serve as a measure of contamination attributable to a variety of sources, including glassware, reagents, and instrumentation. The method blank will be initiated at the beginning of an analytical procedure and is carried through the entire process.

10.3.2 Matrix Spike/Matrix Spike Duplicates

The MS will serve as a measure of method accuracy in a given matrix. The MS and the MSDs together will serve as a measure of method precision.

10.3.3 Surrogate Spikes

Surrogate spikes are organic compounds that have similar properties to those being tested. They will serve as indicators of method performance and accuracy in organic analyses.

10.3.4 Laboratory Duplicates

Laboratory duplicates will serve to measure method precision in inorganic and supplemental analyses.

10.3.5 Calibration Standards

Calibration check standards analyzed within a particular analytical series provide insight regarding the instruments' stability. A calibration check standard will be analyzed at the beginning and end of an analytical series, or periodically throughout a series containing a large number of samples.

In general, calibration check standards will be analyzed after every 12 hours or more frequently, as specified in the applicable analytical method. In analyses where internal standards are used, a calibration check standard will only be analyzed in the beginning of an analytical series. If results of the calibration check standard exceed specified tolerances, then all samples analyzed since the last acceptable calibration check standard will be reanalyzed.

Laboratory instrument calibration standards will be selected utilizing the guidance provided in the analytical methods, as summarized in Section 13.

10.3.6 Internal Standards

Internal standard areas and retention times will be monitored for organic analyses performed by gas chromatograph/mass spectrometer methods. Method-specified internal standard compounds will be spiked into all field samples, calibration standards, and QC samples after preparation and prior to analysis. If internal standard areas in one or more samples exceed the specified tolerances, then cause will be investigated, the instrument will be recalibrated, if necessary, and all affected samples will be reanalyzed.

The acceptability of internal standard performance will be determined using guidance provided within the analytical methods.

10.3.7 Reference Standards/Control Samples

Reference standards are standards of known concentration and independent in origin from the calibration standards. The intent of reference standard analysis is to provide insight into the analytical proficiency within an analytical series. This includes preparation of calibration standards, validity of calibration, sample preparation, instrument set up, and premises inherent in quantitation. Reference standards will be analyzed at frequencies specified within the analytical methods.

### 10.4 Data Precision Assessment Procedures

Field precision is difficult to measure because of temporal variations in field parameters. However, precision will be controlled through the use of experienced field personnel, properly calibrated meters, and duplicate field measurements. Field duplicates will be used to assess precision for the entire measurement system, including sampling, handling, shipping, storage, preparation, and analysis.

Laboratory data precision for organic analyses will be monitored through the use of MSDs, laboratory duplicate, and field duplicates as identified in **Table 2**.

Precision of data will be measured by calculation of the relative percent differences (RPDs) of duplicate sample sets.

The RPD can be calculated by the following equation:

$$RPD = \frac{(A-B)}{(A+B)/2} \times 100$$

Where:

A = analytical result from one of two duplicate measurements

B = analytical result from the second measurement

Precision objectives for MSD and laboratory duplicate analyses are identified in the NYSDEC ASP Revision 2000.

### 10.5 Data Accuracy Assessment Procedures

Accuracy of field measurements will be controlled by experienced field personnel, properly calibrated field meters, and adherence to established protocols. Accuracy of field meters will be assessed by review of calibration and maintenance logs.

Laboratory accuracy will be assessed via the use of MS, surrogate spikes, and internal standards. Where available and appropriate, QA performance standards will be analyzed periodically to assess laboratory accuracy. Accuracy will be calculated as a percent recovery as follows:

$$\text{Accuracy} = \frac{A-X}{B} \times 100$$

Where:

A = value measured in spiked sample or standard

X = value measured in original sample

B = true value of amount added to sample or true value of standard

This formula is derived under the assumption of constant accuracy over the original and spiked measurements. If any accuracy calculated by this formula is outside of acceptable levels, data will be evaluated to determine whether the deviation represents unacceptable accuracy, or variable, but acceptable accuracy. Accuracy objectives for MS recoveries and surrogate recovery objectives are identified in the NYSDEC ASP, 2000 Revision.

### 10.6 Data Completeness Assessment Procedures

Completeness of a field or laboratory data set will be calculated by comparing the number of samples collected or analyzed to the proposed number.

$$\text{Completeness} = \frac{\text{No. Valid Samples Collected or Analyzed}}{\text{No. Proposed Samples Collected or Analyzed}} \times 100$$

As general guidelines, overall project completeness is expected to be at least 90%. The assessment of completeness will require professional judgment to determine data usability for intended purposes.

## 11. Instrument/Equipment Testing, Inspection, and Maintenance Requirements

Preventive maintenance schedules have been developed for both field and laboratory instruments. A summary of maintenance activities to be performed is presented below.

### 11.1 Field Instruments and Equipment

Prior to any field sampling, each piece of field equipment will be inspected to confirm that it is operational. If the equipment is not operational, it must be serviced prior to use. All meters that require charging or batteries will be fully charged or have fresh batteries. If instrument servicing is required, it is the responsibility of the Field Activities Task Manager to follow the maintenance schedule and arrange for prompt service.

Field instrumentation to be used in this study includes meters to measure pH, ORP, turbidity, temperature, conductivity, dissolved oxygen, and groundwater levels. Field equipment also includes sampling devices for groundwater. A logbook will be kept for each field instrument. Each logbook contains records of operation, maintenance, calibration, and any problems and repairs. The Field Activities Task Manager will review calibration and maintenance logs.

Field equipment returned from a site will be inspected to confirm it is in working order. This inspection will be recorded in the logbook or field notebooks as appropriate. It will also be the obligation of the last user to record any equipment problems in the logbook.

Non-operational field equipment will be either repaired or replaced. Appropriate spare parts will be made available for field meters. A summary of preventive maintenance requirements for field instruments, and details regarding field equipment maintenance, operation, and calibration, are provided in the FSP.

### 11.2 Laboratory Instruments and Equipment

#### 11.2.1 General

Only qualified personnel will service instruments and equipment. Repairs, adjustments, and calibrations are documented in the appropriate logbook or data sheet.

#### 11.2.2 Instrument Maintenance

Preventive maintenance of laboratory equipment will follow guidelines recommended by the manufacturer. A malfunctioning instrument will be repaired by in-house staff or through a service call by the manufacturer, as appropriate.

The laboratory will maintain a sufficient supply of spare parts for its instruments to minimize downtime. Whenever possible, backup instrumentation will be retained.

Whenever practical, analytical equipment will be maintained under a service contract. The contract allows for preventative system maintenance and repair on an “as-needed” basis. The laboratory has sufficiently trained staff to allow for the day-to-day maintenance of equipment.

#### 11.2.3 Equipment Monitoring

On a daily basis, the operation of balances, incubators, ovens, refrigerators, and water purification systems will be checked and documented. Any discrepancies will be immediately reported to the appropriate laboratory personnel for resolution.

## 12. Instrument Calibration and Frequency

### 12.1 Field Equipment Calibration Procedures and Frequency

Specific procedures for performing and documenting calibration and maintenance for equipment measuring conductivity, temperature, pH, groundwater levels, and surface-water levels are provided in the FSP. Calibration checks will be performed daily when measuring pH, ORP, turbidity, temperature, conductivity, and dissolved oxygen. Field equipment operation, calibration, and maintenance procedures are provided in the FSP.

### 12.2 Laboratory Equipment Calibration Procedures and Frequency

Instrument calibration will follow specifications provided by the instrument manufacturer or specific analytical method used. Analytical methods for target constituents are identified separately below.

Volatile Organics

Equipment calibration procedures will follow guidelines presented in NYSDEC ASP 2000 Revision, Exhibit E, Part III.

Semivolatile Organics

Equipment calibration procedures will follow guidelines presented in NYSDEC ASP 2000 Revision, Exhibit E, Part IV.

Metals and Cyanide

Equipment calibration procedures will follow guidelines presented in NYSDEC ASP 2000 Revision, Exhibit E, Part VII.

Total Organic Carbon

Equipment calibration procedures will follow guidelines presented in Lloyd Kahn Method.

Supplemental Parameters

Additional parameters (chemical oxygen demand, nitrate, ammonia, sulfate, sulfide, orthophosphate, alkalinity, methane, reactive sulfide, and reactive cyanide) will be calibrated according to their respective methods, following the guidance presented in NYSDEC ASP 2000, Exhibit E, Part VIII.

## 13. Inspection/Acceptance Requirements for Supplies and Consumables

The laboratory shall inspect/test all supplies and consumables prior to use with samples. Documentation shall be maintained for all associated testing and analyses.

## 14. Data Management

The purpose of the data management is to confirm that all of the necessary data are accurate and readily accessible to meet analytical and reporting objectives of the project. Field investigations will encompass a large number of samples and a variety of sample matrices and analytes from a large geographic area. From the large amount of resulting data, the need arises for a structured, comprehensive, and efficient program for management of data.

The data management program established for the project includes field documentation and sample QA/QC procedures, methods for tracking and managing data, and a system for filing all site-related information. More specifically, data management procedures will be employed to efficiently process information collected such that data are readily accessible and accurate. These procedures are described in detail in the following section.

The data management plan has five elements:

1. Sample Designation System
2. Field Activities
3. Sample Tracking and Management
4. Data Management System
5. Document Control and Inventory

### 14.1 Sample Designation System

A concise and easily understandable sample designation system is an important part of project sampling activities. It provides a unique sample number that will facilitate both sample tracking and easy resampling of select locations to evaluate data gaps, if necessary. The sample designation system to be employed during sampling activities will be consistent, yet flexible enough to accommodate unforeseen sampling events or conditions. A combination of letters and numbers will be used to yield a unique sample number for each field sample collected.

### 14.2 Field Activities

Field activities designed to gather information necessary to make decisions regarding offsite areas require consistent documentation and accurate record keeping. During site activities, standardized procedures will

be used for documentation of field activities, data security, and QA. These procedures are described in further detail in the following subsections.

#### 14.2.1 Field Documentation

Complete and accurate record keeping is a critical component of field investigation activities. When interpreting analytical results and identifying data trends, investigators realize that field notes are an important part of the review and validation process. To confirm that all aspects of field investigation are thoroughly documented, several different information records, each with its own specific reporting requirements, will be maintained, including:

- field logs
- instrument calibration records
- chain-of-custody forms

A description of each of these types of field documentation is provided below.

Field Logs

The personnel performing the activities will keep field logs that detail all observations and measurements made during the investigation. Data will be recorded directly into site-dedicated, bound notebooks, with each entry dated and signed. To confirm at any future date that notebook pages are not missing, each page will be sequentially numbered. Erroneous entries will be corrected by crossing out the original entry, initialing it, and then documenting the proper information. In addition, certain media sampling locations will be surveyed to accurately record their locations. The survey crew will use their own field logs and will supply the sampling location coordinates to the File Custodian.

Instrument Calibration Records

As part of data quality assurance procedures, field monitoring and detection equipment will be routinely calibrated. Instrument calibration confirms that equipment used is of the proper type, range, accuracy, and precision to provide data compatible with specified requirements and desired results. Calibration procedures for the various types of field instrumentation are described in Section 13.1. In order to demonstrate that established calibration procedures have been followed, calibration records will be prepared and maintained to include, as appropriate, the following:

- calibration date and time

- type and identification number of equipment
- calibration frequency and acceptable tolerances
- identification of individual(s) performing calibration
- reference standards used
- calibration data
- information on calibration success or failure

The calibration record will serve as a written account of monitoring or detection equipment QA. All erratic behavior or failures of field equipment will be subsequently recorded in the calibration log.

**Chain of Custody Forms**

Chain of custody forms are used as a means of documenting and tracking sample possession from time of collection to the time of disposal. A chain of custody form will accompany each field sample collected, and one copy of the form will be filed in the field office. All field personnel will be briefed on the proper use of the chain of custody procedure. A more thorough description of the chain of custody forms is located in the Standard Operating Procedures.

#### 14.2.2 Data Security

Measures will be taken during the field investigation to confirm that samples and records are not lost, damaged, or altered. When not in use, all field notebooks will be stored at the field office in a locked, fireproof cabinet. Access to these files will be limited to the field personnel who utilize them.

### 14.3 Sample Management and Training

A record of all field documentation, as well as analytical and QA/QC results, will be maintained to confirm the validity of data used in the site analysis. To effectively execute such documentation, carefully constructed sample tracking and data management procedures will be used throughout the sampling program.

Sample tracking will begin with the completion of chain of custody forms, as described in Section 9.3.3. On a daily basis, the completed chain of custody forms associated with samples collected that day will be faxed from the project office to the QA Manager (QAM). Copies of all completed chain of custody forms will be

maintained in the field office. On the following day, the QAM will telephone the laboratory to verify receipt of samples.

When analytical data are received from the laboratory, the QAM will review the incoming analytical data packages against the information on the chains of custody to confirm that the correct analyses were performed for each sample and that results for all samples submitted for analysis were received. Any discrepancies noted will be promptly followed-up by the QAM.

### 14.4 Data Management System

In addition to the sample tracking system, a data management system may be implemented. The central focus of the data management system will be the development of a personal computer-based project database. The project database, to be maintained by the Database Administrator, will combine pertinent geographical, field, and analytical data. Information that will be used to populate the database will be derived from three primary sources: surveying of sampling locations, field observations, and analytical results. Each of these sources is discussed in the following sections.

#### 14.4.1 Computer Hardware

If required, the database will be constructed on Pentium®-based personal computer work stations connected through a Novell network server. The Novell network will provide access to various hardware peripherals, such as, but not limited to, laser printers, backup storage devices, image scanners, and modems. Computer hardware will be upgraded to industrial and corporate standards, as necessary, in the future.

#### 14.4.2 Computer Software

If required, the database will be written in Microsoft Access, running in a Windows operating system.

#### 14.4.3 Surveying Information

In general, each location sampled will be surveyed to confirm that accurate documentation of sample locations for mapping and geographic information system purposes (if appropriate) to facilitate the resampling of select sample locations during future monitoring programs, if needed, and for any potential remediation activities. The surveying activities that will occur in the field will consist of the collection of information that will be used to compute a northing and easting in state plane coordinates for each sample location and the collection of information to compute elevations relative to the National Geodetic Vertical Datum of 1988 for select sample locations, as appropriate. All field books associated with the surveying activities will be stored as a record of the project activities.

Conventional surveying techniques will be used to gather information, such as the angle and distance between the sample location and the control monument, as well as point attributes. Control monuments will be established using global positioning system techniques. The surveying software allows the rapid computation of a location's state plane coordinates.

Differential leveling techniques will be used to gather information to be used to compute a sample location's (or top-of-casing for groundwater monitoring wells) elevation. During the differential leveling process, which includes at least one benchmark of known elevation, detailed field notes will be kept in a field book.

#### 14.4.4 Field Observations

An important part of information that will ultimately reside in the data management system for use during the project will originate in the observations that are recorded in the field.

Following each sampling event, a status memorandum may be prepared by the field personnel who performed the sampling activities. The purpose of the status memo is to present a summary and a record of the sampling event. Topics to be discussed include the locations sampled, the sampling methodologies used, QA/QC procedures, blind duplicate and MS/MSD sample identification numbers, equipment decontamination procedures, personnel involved in the activity, and any other noteworthy events that occurred.

Tables are typically attached to the memorandum and are used to summarize measurements that were recorded in the field books. It is anticipated that these tables will be developed using a personal computer spreadsheet program to reduce possible transcription error and to facilitate the transfer of information to the data management system. For example, for soil samples, the table would present the sampling date and time, soil depth, depth of soil recovered in a given core, the depth increment submitted for analysis, and a description of the lithology.

Status memos are valuable tools to keep project personnel informed on the details of the field activities and are also invaluable during the development of the final report. Each status memo will be reviewed for accuracy and completeness by the respective sampling activity manager. Following the approval and finalization of each memo, the status memo will be used to transfer field observations into the data management system.

All pertinent field data will be manually entered into the appropriate database tables from the chain of custody forms and field notebooks.

14.4.5 Analytical Results

Analytical results provided by the laboratory will generally be available in both a digital and a hard copy format. Upon receipt of each analytical package, the original chain of custody form will be placed in the project files. The data packages will be examined to confirm that the correct analyses were performed for each sample submitted and that all of the analyses requested on the chain of custody form were performed. If discrepancies are noted, the QAM will be notified and will promptly follow up with the laboratory to resolve any issues.

Where appropriate, the data packages will be validated in accordance with the procedures presented in Section 20. Any data that does not meet the specified standards will be flagged pending resolution of the issue. The flag will not be removed from the data until the issue associated with the sample results is resolved. Although flags may remain for certain data, the use of that data may not necessarily be restricted.

Following completion of the data validation (if necessary), the digital files of analytical data will be processed to populate the appropriate database tables. Specific fields include:

- sample identification number
- date sampled
- date analyzed
- parameter name
- analytical result
- units
- detection limit
- qualifier(s)

The individual electronic data deliverables (EDDs) supplied by the laboratory in either an ASCII comma separated value format or in a Microsoft Excel 97 worksheet, will be loaded into the appropriate database table. Any analytical data that cannot be provided by the laboratory in electronic format will be entered manually.

After entry into the database, the EDD data will be compared to the field information previously entered into the database to confirm that all requested analytical data have been received.

### 14.4.6 Data Analysis and Reporting

The database management system will have several functions to facilitate review and analysis of the data. Data entry screens will be developed to assist in the keypunching of field observations. Routines will also be developed to permit the user to scan analytical data from a given site for a given media. Several output functions that have been developed by ARCADIS will be appropriately modified for use in the data management system.

A valuable function of the data management system will be the generation of tables of analytical results from the project databases. The capability of the data management system to directly produce tables reduces the redundant manual entry of analytical results during report preparation and precludes transcription errors that may occur otherwise. This data management system function creates a digital comma-delimited ASCII file of analytical results and qualifiers for a given media. The ASCII file is then processed through a spreadsheet, which transforms the comma-delimited file into a table of rows and columns. Tables of analytical data will be produced as part of data interpretation tasks and the reporting of data.

Another function of the data management system will be to create digital files of analytical results and qualifiers suitable for transfer to mapping/presentation software. A function has been created by ARCADIS that creates a digital file consisting of sample location number, state plane coordinates, sampling date, and detected constituents and associated concentrations and analytical qualifiers. The file is then transferred to an AutoCAD work station, where another program has been developed to plot a location's analytical data in a "box" format at the sample location (represented by the state plane coordinates). This routine greatly reduces the redundant keypunching of analytical results and facilitates the efficient production of interpretative and presentation graphics.

The data management system also has the capability of producing a digital file of select parameters that exists in one or more of the databases. This type of custom function is accomplished on an interactive basis and is best used for transferring select information into a number of analysis tools, such as statistical or graphing programs.

### 14.5 Document Control and Inventory

Each contractor performing intrusive work within potentially MGP-impacted areas is required to maintain project files. Copies of appropriate portions of the project files will be sent to:

- NYSDEC Project Manager
- RGE Project manager

ARCADIS maintains project files in its Fairport, New York office. Each client project is assigned a file/job number (e.g., for the remedial activities, 130.42). Each file is then broken down into the following subfiles:

1. Agreements/Proposals (filed chronologically)
2. Change Orders/Purchase Orders (filed chronologically)
3. Invoices (filed chronologically)
4. Project Management (filed by topic)
5. Correspondence (filed chronologically)
6. Notes and Data (filed by topic)
7. Public Relations Information (filed by topic)
8. Regulatory Documents (filed chronologically)
9. Marketing Documents (filed chronologically)
10. Final Reports/Presentations (filed chronologically)
11. Draft Reports/Presentations (filed chronologically)
12. Documents Prepared by Others (filed chronologically)

Originals, when possible, are placed in the files. These are the central files and will serve as the site-specific files for the off-site investigations.

## 15. Assessment and Response Actions

Performance and systems audits will be completed in the field and the laboratory during the investigation activities, as described below.

### 15.1 Field Audits

The following field performance and systems audits will be completed during this project.

#### 15.1.1 Performance Audits

The appropriate Task Manager will monitor field performance. Field performance audit summaries will contain an evaluation of field measurements and field meter calibrations to verify that measurements are taken according to established protocols. The project QAM will review all field reports and communicate concerns to the Project Manager and/or Task Managers, as appropriate. In addition, the QAM will review the rinse and trip blank data to identify potential deficiencies in field sampling and cleaning procedures.

#### 15.1.2 Internal Systems Audits

A field internal systems audit is a qualitative evaluation of all components of field QA/QC. The systems audit compares scheduled QA/QC activities from this document with actual QA/QC activities completed. The appropriate Task Manager will periodically confirm that work is being performed consistent with the work plan, the FSP, and the HASP.

### 15.2 Laboratory Audits

The laboratory will perform internal audits consistent with NYSDEC ASP, 2000 Revision, Exhibit E.

In addition to the laboratory's internal audits and participation in state and federal certification programs, the laboratory sections at the laboratory are audited by representatives of the regulatory agency issuing certification. Audits are usually conducted on an annual basis and focus on laboratory conformance to the specific program protocols for which the laboratory is seeking certification. The auditor reviews sample handling and tracking documentation, analytical methodologies, analytical supportive documentation, and final reports. The audit findings are formally documented and submitted to the laboratory for corrective action, if necessary.

RGE reserves the right to conduct an on-site audit of the laboratory prior to the start of analyses for the project. Additional audits may be performed during the course of the project, as deemed necessary.

### 15.3 Corrective Action

Corrective actions are required when field or analytical data are not within the objectives specified in this QAPP, the FSP, or the SCWP. Corrective actions include procedures to promptly investigate, document, evaluate, and correct data collection and/or analytical procedures. Field and laboratory corrective action procedures are described below.

#### 15.3.1 Field Procedures

When conducting field work, if a condition is noted that would have an adverse effect on data quality, corrective action will be taken so as not to repeat this condition. Condition identification, cause, and corrective action implemented will be documented on a Corrective Action Report Form and reported to the appropriate Project Manager and Task Manager.

Examples of situations that would require corrective actions are provided below:

1. Protocols, as defined by this QAPP, the FSP, or the SCWP, have not been followed.

2. Equipment is not in proper working order or properly calibrated.

3. QC requirements have not been met.

4. Issues resulting from performance or systems audits.

Project personnel will continuously monitor ongoing work performance in the normal course of daily responsibilities.

#### 15.3.2 Laboratory Procedures

In the laboratory, when a condition is noted to have an adverse effect on data quality, corrective action will be taken so as not to repeat this condition. Condition identification, cause, and corrective action to be taken will be documented and reported to the appropriate Project Manager and Task Manager.

Corrective action may be initiated, at a minimum, under the following conditions:

1. Specific laboratory analytical protocols have not been followed.

2. Predetermined data acceptance standards are not obtained.

3. Equipment is not in proper working order or calibrated.

4. Sample and test results are not completely traceable.

5. QC requirements have not been met.

6. Issues resulting from performance or systems audits.

Laboratory personnel will continuously monitor ongoing work performance in the normal course of daily responsibilities.

## 16. Reports to Management

### 16.1 Internal Reporting

The analytical laboratory will submit analytical reports to the contractor for review. If required, the contractor, or ARCADIS will, in turn, submit the reports to the data validator for review. Supporting data (i.e., historic data, related field or laboratory data) will also be reviewed to evaluate data quality, as appropriate. The QAM will incorporate results of the data validation reports (if required) and assessments of data usability into a summary report (if required) that will be submitted to the Project Manager and appropriate Task Managers. If required, this QAPP will be filed in the project file and will include the following:

1. Assessment of data accuracy, precision, and completeness for both field and laboratory data.

2. Results of the performance and systems audits.

3. Significant QA/QC problems, solutions, corrections, and potential consequences.

4. Analytical data validation report.

### 16.2 Reporting

Upon sample transport to the laboratory, a copy of the chain of custody will be forwarded to RGE. Upon receipt of the ASP – Category B Data Package from the laboratory, the QAM will determine if the data package has met the required DQOs. The analytical data package will be submitted to RGE's Project Manager and will also be incorporated into the reports.

## 17. Data Review, Validation, and Verification

After field and laboratory data are obtained, these data may be subject to:

1. Validation of the data.

2. Reduction or manipulation of the data mathematically or otherwise into meaningful and useful forms.

3. Organization, interpretation, and reporting of the data.

### 17.1 Field Data Reduction, Validation, and Reporting

#### 17.1.1 Field Data Reduction

Information that is collected in the field through visual observation, manual measurement, and/or field instrumentation will be recorded in field notebooks, log sheets, and/or other appropriate forms. Such data will be reviewed by the appropriate Task Manager for adherence to the work plan and consistency of data. Any concerns identified as a result of this review will be discussed with the field personnel, corrected if possible, and, as necessary, incorporated into the data evaluation process.

#### 17.1.2 Field Data Validation

Field data calculations, transfers, and interpretations will be conducted by the field personnel and reviewed for accuracy by the appropriate Task Manager and the QAM. Task Managers will recalculate at least 5% of all data reductions. Field documentation and data reduction prepared by field personnel will be reviewed by the appropriate Task Manager and QAM. All logs and documents will be checked for:

1. general completeness

2. readability

3. usage of appropriate procedures

4. appropriate instrument calibration and maintenance

5. reasonableness in comparison to present and past data collected

6. correct sample locations

7. correct calculations and interpretations

#### 17.1.3 Field Data Reporting

Where appropriate, field data forms and calculations will be processed and included in appendices to the reports. The original field logs, documents, and data reductions will be kept in the project file.

### 17.2 Laboratory Data Reduction, Review, and Reporting

#### 17.2.1 Laboratory Data Reduction

Laboratory analytical data will be directly transferred from the instrument to the computer or the data reporting form (as applicable). Calculation of sample concentrations will be performed using the appropriate regression analysis program, response factors, and dilution factors (where applicable).

#### 17.2.2 Laboratory Data Review

All data will be subject to multi-level review by the laboratory. The group leader will review all data reports prior to release for final data report generation, and the laboratory director will review a cross section of the final data reports. All final data reports are reviewed by the laboratory QAM prior to shipment.

If discrepancies or deficiencies exist in the analytical results, then corrective action will be taken, as discussed in Section 17. Deficiencies discovered as a result of internal data review, as well as the corrective actions to be used to rectify the situation, will be documented on a Corrective Action Form. This form will be submitted to the Project Manager.

## 18. Validation and Verification Methods

Data validation entails a review of the QC data and the raw data to verify that the laboratory was operating within required limits, the analytical results are correctly transcribed from the instrument, and which, if any, environmental samples are related to any out-of-control QC samples. The objective of data validation is to identify any questionable or invalid laboratory measurements.

Data validation will consist of data screening, checking, reviewing, editing, and interpreting to document analytical data quality and determine if the quality is sufficient to meet the DQOs. The data validation will also include a review of completeness and compliance, including the elements provided in **Table 4**.

The data validator will use the most recent versions of the USEPA functional guidelines for data validation with NYSDEC ASP 2000 Revision, QA/QC and reporting deliverables requirements available at the time of project initiation and for the entire duration of the project, as guidance, where appropriate.

The data validator will verify reduction of laboratory measurements and laboratory reporting of analytical parameters are in accordance with the procedures specified for each analytical method (i.e., perform laboratory calculations in accordance with the method-specific procedure).

If required, upon receipt of the laboratory data, the following reduction, validation, and reporting scheme will be executed by the data validator:

1. Laboratory data will be screened to confirm that the necessary QC procedures (e.g., detection limit verification, initial calibration, continuing calibration, duplicates, spikes, blanks) have been performed. QC information not included or of insufficient frequency will be identified in the validation report, including a discussion of the implications.

2. QC supporting information will subsequently be screened to identify QC data outside established control limits. If out-of-control data are discovered, documentation of appropriate corrective action will be reviewed. Out-of-control data without appropriate corrective action shall result in designation of the affected data as qualified or rejected, as appropriate.

   It should be noted that the existence of qualified results does not automatically invalidate data. This point is repeatedly emphasized in the USEPA functional guidelines for data validation and is inherently acknowledged by the very existence of the data validation/flagging guidelines. The goal to produce the best possible data does not necessarily mean producing data without QC qualifiers. Qualified data can provide useful information.

Resolution of any issues regarding laboratory performance or deliverables will be handled between the data validator, laboratory Project Manager, and the ARCADIS Project Manager.

Upon completion of the data validation (if required), a data usability summary report addressing the following topics will be prepared.

1. assessment of the data package
2. description of any protocol deviations
3. failures to reconcile reported and/or raw data
4. assessment of any compromised data
5. laboratory case narrative
6. overall appraisal of the analytical data
7. table of site name, sample quantities, data submitted to the laboratory, year of protocol used, matrix, and fractions analyzed

## 19. Reconciliation with User Requirements

The data results will be examined to determine the performance that was achieved for each data usability criteria. The performance will then be compared with the project objectives. Of particular note will be samples at or near action levels. All deviations from objectives will be noted. Additional action may be warranted when performance does not meet performance objectives for critical data. Action options may include any or all of the following:

- retrieval of missing information
- request for additional explanation or clarification
- reanalysis of sample from extract (when appropriate)
- recalculation or reinterpretation of results by the laboratory

These actions may improve the data quality, reduce uncertainty, and may eliminate the need to qualify or reject data.

If these actions do not improve the data quality to an acceptable level, the following actions may be taken:

- extrapolation of missing data from existing data points
- use of historical data
- evaluation of the critical/noncritical nature of the sample

If the data gap cannot be resolved by these actions, an evaluation of the data bias and potential for false negatives and positives can be performed. If the resultant uncertainty level is unacceptable, then the following action must be taken:

- additional sample collection and analysis

## 20. References

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**Tables**

**Table 1**
**Parameter, Methods, and Quantitation Limits**

**Quality Assurance Project Plan**
**Rochester Gas & Electric**
**Park Street Former MGP Site**

| Parameter | Quantitation Limit[1] | |
|---|---|---|
| **Volatile Organics Method 8260** | **Water (µg/L)** | **Soil (µg/kg)[2]** |
| Chloromethane | 5 | 5 |
| Bromomethane | 5 | 5 |
| Vinyl Chloride | 5 | 5 |
| Chloroethane | 5 | 5 |
| Methylene Chloride | 3 | 3 |
| Acetone | 5 | 5 |
| Carbon Disulfide | 5 | 5 |
| 1,1-Dichloroethylene | 5 | 5 |
| 1,1-Dichloroethane | 5 | 5 |
| 1,2-Dichloroethylene (total) | 5 | 5 |
| Chloroform | 5 | 5 |
| 1,2-Dichloroethane | 2 | 2 |
| 2-Butanone | 5 | 5 |
| 1,1,1-Trichloroethane | 5 | 5 |
| Carbon Tetrachloride | 2 | 2 |
| Bromodichloromethane | 1 | 1 |
| 1,2-Dichloropropane | 1 | 1 |
| cis-1,3-Dichloropropene | 5 | 5 |
| Trichloroethane | 5 | 5 |
| Dibromochloromethane | 5 | 5 |
| 1,1,2-Trichloroethane | 3 | 3 |
| Benzene | 1 | 1 |
| trans-1,3-Dichloropropene | 5 | 5 |
| Bromoform | 4 | 4 |
| 4-Methyl-2-pentanone | 5 | 5 |
| 2-Hexanone | 5 | 5 |
| Tetrachloroethene | 1 | 1 |
| Toluene | 5 | 5 |
| 1,1,2,2-Tetrachloroethane | 1 | 1 |
| Chlorobenzene | 5 | 5 |
| Ethylbenzene | 4 | 4 |
| Styrene | 5 | 5 |
| 2-Chloroethyl Vinyl Ether | 5 | 5 |
| 1,2-Dichlorobenzene | 5 | 5 |
| 1,3-Dichlorobenzene | 5 | 5 |
| 1,4-Dichlorobenzene | 5 | 5 |
| Vinyl Acetate | 5 | 5 |
| Total Xylenes | 5 | 5 |
| **Semivolatile Organics Method 8270** | **Water (µg/L)** | **Soil (µg/kg)** |
| 1,2,4-Trichlorobenzene | 1 | 33 |
| 1,2-Dichlorobenzene | 10 | 330 |
| 1,2-Diphenylhydrazine | 10 | 330 |
| 1,3-Dichlorobenzene | 10 | 330 |
| 1,4-Dichlorobenzene | 10 | 330 |
| 1,4-Dioxane | 10 | 330 |
| 2,4,5-Trichlorophenol | 10 | 330 |
| 2,4,6-Trichlorophenol | 10 | 330 |
| 2,4-Dichlorophenol | 10 | 330 |

**Table 1**
**Parameter, Methods, and Quantitation Limits**

**Quality Assurance Project Plan**
**Rochester Gas & Electric**
**Park Street Former MGP Site**

| Parameter | Quantitation Limit[1] | |
|---|---|---|
| **Semivolatile Organics Method 8270 (Cont'd.)** | **Water (µg/L)** | **Soil (µg/kg)** |
| 2,4-Dimethylphenol | 10 | 330 |
| 2,4-Dinitrophenol | 40 | 1300 |
| 2,4-Dinitrotoluene | 2 | 67 |
| 2,6-Dinitrotoluene | 2 | 67 |
| 2-Chloronaphthalene | 10 | 330 |
| 2-Chlorophenol | 10 | 330 |
| 2-Methylnaphthalene | 10 | 330 |
| 2-Methylphenol | 10 | 330 |
| 2-Nitroaniline | 20 | 670 |
| 2-Nitrophenol | 10 | 330 |
| 3,3'-Dichlorobenzidene | 20 | 670 |
| 3-Nitroaniline | 20 | 670 |
| 4,6-Dinitro-2-methylphenol | 40 | 1300 |
| 4-Bromophenyl-phenylether | 10 | 330 |
| 4-Chloro-3-methylphenol | 10 | 330 |
| 4-Chloroaniline | 10 | 330 |
| 4-Chlorophenyl-phenylether | 10 | 330 |
| 4-Methylphenol | 10 | 330 |
| 4-Nitroaniline | 20 | 670 |
| 4-Nitrophenol | 40 | 1300 |
| Acenaphthene | 10 | 330 |
| Acenaphthylene | 10 | 330 |
| Acetophenone | 10 | 330 |
| Aniline | 10 | 330 |
| Anthracene | 10 | 330 |
| Atrazine | 10 | 330 |
| Benzaldehyde | 10 | 330 |
| Benzidine | 40 | 1300 |
| Benzo(a)anthracene | 1 | 33 |
| Benzo(a)pyrene | 1 | 33 |
| Benzo(b)fluoranthene | 1 | 33 |
| Benzo(g,h,i)perylene | 10 | 330 |
| Benzo(k)fluoranthene | 1 | 33 |
| Benzoic Acid | 10 | 330 |
| Benzyl Alcohol | 10 | 330 |
| bis(2-chloroethoxy)methane | 10 | 330 |
| bis(2-chloroethyl)ether | 1 | 33 |
| bis(2-chloroisopropyl)ether | 10 | 330 |
| bis(2-ethylhexyl)phthalate | 10 | 330 |
| Butylbenzylphthalate | 10 | 330 |
| Caprolactam | 10 | 330 |
| Carbazole | 10 | 330 |
| Chrysene | 10 | 330 |
| Dibenzo(a,h)anthracene | 1 | 33 |
| Dibenzofuran | 10 | 330 |
| Diethylphthalate | 10 | 330 |
| Dimethylphthalate | 10 | 330 |
| Di-n-butyl phthalate | 10 | 330 |
| Di-n-octyl phthalate | 10 | 330 |

**Table 1**
**Parameter, Methods, and Quantitation Limits**

**Quality Assurance Project Plan**
**Rochester Gas & Electric**
**Park Street Former MGP Site**

| Parameter | Quantitation Limit[1] | |
|---|---|---|
| **Semivolatiles Method 8270 (Cont'd.)** | **Water (µg/L)** | **Soil (µg/kg)** |
| Diphenyl | 10 | 330 |
| Fluoranthene | 10 | 330 |
| Fluorene | 10 | 330 |
| Hexachlorobenzene | 1 | 33 |
| Hexachlorobutadiene | 2 | 67 |
| Hexachlorocyclopentadiene | 10 | 330 |
| Hexachloroethane | 1 | 33 |
| Indeno(1,2,3-cd)pyrene | 1 | 33 |
| Isophorone | 10 | 330 |
| N,N-Dimethylaniline | 1 | 33 |
| Naphthalene | 10 | 330 |
| Nitrobenzene | 1 | 33 |
| N-Nitrosodimethylamine | 10 | 330 |
| N-Nitroso-di-n-propylamine | 1 | 33 |
| N-Nitrosodiphenylamine | 10 | 330 |
| Pentachlorophenol | 40 | 1300 |
| Phenanthrene | 10 | 330 |
| Phenol | 10 | 330 |
| Pyrene | 10 | 330 |
| Pyridine | 10 | 330 |
| **TAL Metals (6010/7470)** | **Water (µg/L)** | **Soil (µg/kg)** |
| Aluminum | -- | 40 |
| Antimony | -- | 2 |
| Arsenic | -- | 1 |
| Barium | -- | 40 |
| Beryllium | -- | 0.4 |
| Cadmium | -- | 1 |
| Calcium | -- | 1000 |
| Chromium | -- | 2 |
| Cobalt | -- | 10 |
| Copper | -- | 5 |
| Iron | -- | 30 |
| Lead | -- | 1 |
| Magnesium | -- | 1000 |
| Manganese | -- | 3 |
| Mercury | -- | 0.033 |
| Nickel | -- | 8 |
| Potassium | -- | 1000 |
| Selenium | -- | 1 |
| Silver | -- | 2 |
| Sodium | -- | 1000 |
| Thallium | -- | 2 |
| Vanadium | -- | 10 |
| Zinc | -- | 6 |
| **Supplemental Parameters** | **Water (µg/L)** | **Soil (mg/kg)** |
| Total Organic Carbon (Lloyd Kahn) | NA | 100 |
| Chloride Method 325.3 | 1,000 | -- |

**Table 1**
**Parameter, Methods, and Quantitation Limits**

**Quality Assurance Project Plan**
**Rochester Gas & Electric**
**Park Street Former MGP Site**

| Parameter | Quantitation Limit[1] | |
|---|---|---|
| **Supplemental Parameters (Cont'd.)** | **Water (µg/L)** | **Soil (mg/kg)** |
| Nitrate Method 353.2 | 100 | -- |
| Ammonia Method 350.1 | 100 | -- |
| Iron Method 200.7 | 150 | -- |
| Manganese Method 200.7 | 15 | -- |
| Sulfate Method 375.4 | 5,000 | -- |
| Sulfide Method 376.1 | 1,000 | -- |
| Orthophosphate Method 365.2 | 30 | -- |
| Alkalinity Method 310.1 | 5,000 | -- |
| Methane Method 3810 | -- | -- |
| Reactive Sulfide | -- | 20 |
| Reactive Cyanide | -- | 25 |
| TCLP Benzene | -- | 1 |
| Total Sulfur | -- | 50 |
| Chemical Oxygen Demand | -- | 120 |

**Notes:**
[1] Specific quantitation limits are highly matrix dependent. The quantitation limits listed are for guidance and may not always be achievable due to matrix interference.
[2] Quantitation limits for source materials/soil/sediment are based on wet weight. The quantitation limits calculated by the laboratory for source materials/soil/sediment (calculated on a dry weight basis) will be higher.
µg/L = micrograms per liter
µg/kg = micrograms per kilogram
mg/kg = milligrams per kilogram

**Table 2**
**Environmental and Quality Control Analyses**

**Quality Assurance Project Plan**
**Rochester Gas & Electric**
**Park Street Former MGP Site**

| Environmental Sample Matrix/ Laboratory Parameters | Field QC Analyses | | | | | Laboratory QC Analyses[1,2] | |
|---|---|---|---|---|---|---|---|
| | Trip Blank | Field Duplicate | Rinse Blank[3] | MS | MSD | MSB | Lab Duplicate |
| **Soils** | | | | | | | |
| Volatile Organics Method 8260 | -- | 1/20 | 1/20 | 1/20 | 1/20 | 1/20 | -- |
| Semivolatile Organics Method 8270 | -- | 1/20 | 1/20 | 1/20 | 1/20 | 1/20 | -- |
| Polychlorinated Biphenyls (PCBs) Method 8082 | -- | 1/20 | 1/20 | 1/20 | 1/20 | 1/20 | -- |
| TAL Metals Method 6010 (Mercury Method 7470/7471) (Cyanide Method 9010) | -- | 1/20 | 1/20 | 1/20 | 1/20 | 1/20 | -- |
| Total Sulphur Bomb Method D129 | -- | -- | -- | -- | -- | -- | -- |
| Chemical Oxygen Demand Hach Method 8034 | -- | -- | -- | -- | -- | -- | -- |
| Total Organic Carbon (TOC) (Lloyd Kahn) | -- | 1/20 | -- | 1/20 | 1/20 | 1/20 | -- |
| TCLP Benzene (1311/8260) | -- | -- | -- | -- | -- | -- | -- |

**Table 2**
**Environmental and Quality Control Analyses**

**Quality Assurance Project Plan**
**Rochester Gas & Electric**
**Park Street Former MGP Site**

| Environmental Sample Matrix/ Laboratory Parameters | Field QC Analyses | | | | | Laboratory QC Analyses[1,2] | |
|---|---|---|---|---|---|---|---|
| | Trip Blank | Field Duplicate | Rinse Blank[3] | MS | MSD | MSB | Lab Duplicate |
| Reactive Sulfide Method SW846 Chapter 7.3 | -- | -- | -- | -- | -- | -- | -- |
| Reactive Cyanide Method SW846 Chapter 7.3 | -- | -- | -- | -- | -- | -- | -- |
| **Groundwater** | | | | | | | |
| Volatile Organics Method 8260 | 1/cooler | 1/20 | -- | 1/20 | 1/20 | 1/20 | -- |
| Semivolatile Organics Method 8270 | -- | 1/20 | -- | 1/20 | 1/20 | 1/20 | -- |
| Nitrate Method 353.2 | -- | 1/20 | -- | -- | -- | -- | -- |
| Ammonia Method 350.1 | -- | 1/20 | -- | -- | -- | -- | -- |
| Total Iron & Manganese Method 200.7 | -- | 1/20 | -- | -- | -- | -- | -- |
| Dissolved Iron & Manganese Method 200.7 | -- | 1/20 | -- | -- | -- | -- | -- |
| Sulfate Method 375.4 | -- | 1/20 | -- | -- | -- | -- | -- |
| Sulfide Method 376.1 | -- | 1/20 | -- | -- | -- | -- | -- |
| Orthophosphate Method 365.2 | -- | 1/20 | -- | -- | -- | -- | -- |

**Table 2**
**Environmental and Quality Control Analyses**

**Quality Assurance Project Plan**
**Rochester Gas & Electric**
**Park Street Former MGP Site**

| Environmental Sample Matrix/ Laboratory Parameters | Field QC Analyses | | | | | Laboratory QC Analyses[1,2] | |
|---|---|---|---|---|---|---|---|
| | Trip Blank | Field Duplicate | Rinse Blank[3] | MS | MSD | MSB | Lab Duplicate |
| Alkalinity Method 310.1 | -- | 1/20 | -- | -- | -- | -- | -- |
| Methane Method 3810 | -- | 1/20 | -- | -- | -- | -- | -- |

**Notes:**
[1] The number of laboratory QC analyses is based on the frequencies given for the number of environmental samples estimated, not including field QC analyses (i.e., rinse and trip blanks).
[2] Laboratory QC analyses are listed only for those parameters that must be performed on site samples. The laboratory is required to analyze QC samples for the remaining parameters at the frequency listed in the associated analytical method.
[3] Rinse blank samples will be collected only when nondedicated sampling devices are used. Rinse blanks will be collected at a frequency of one per day of use or one per 20 samples, whichever is less.
QC = quality control
MS = matrix spike
MSB = matrix spike blank
MSD = matrix spike duplicate
TAL = Target Analyte List.
TOC = total organic carbon
TCLP = toxicity characteristic leaching procedure
DNAPL = dense nonaqueous phase liquid

**Table 3**
**Sample Containers, Preservation, and Holding Times Requirements**

**Quality Assurance Project Plan**
**Rochester Gas & Electric**
**Park Street Former MGP Site**

| Parameter | Container | Preservation | Maximum Holding Time from VTSR |
|---|---|---|---|
| **Groundwater Samples** | | | |
| Volatile Organics | (2) 40-mL Teflon®-lined septa (glass) | Cool 4ºC<br>HCl to pH <2 | 7 days (unpreserved)<br>10 days (preserved) |
| Semivolatile Organics | (2) 1-liter containers (glass) | Cool 4ºC | 5 days extraction; 40 days analysis |
| Nitrate | (1) 500-mL container (plastic/glass) | Cool 4ºC | 48 hours (from collection) |
| Ammonia | (1) 500-mL container (plastic/glass) | $H_2SO_4$<br>Cool 4ºC | 26 days |
| Iron | (1) 1,000-mL container (plastic/glass) | $HNO_3$<br>Cool 4ºC | 6 months |
| Manganese | (1) 1,000-mL container (plastic/glass) | $HNO_3$<br>Cool 4ºC | 6 months |
| Sulfate | (1) 500-ml container (plastic/glass) | Cool 4ºC | 26 days |
| Sulfide | (1) 500-mL container (plastic/glass) | Cool 4ºC<br>Zinc acetate<br>NaOH to pH>12 | 5 days |
| Orthophosphate | (1) 500-mL container (plastic/glass) | Cool 4ºC<br>Filter Immediately | 48 hours (from collection) |
| Alkalinity | (1) 500-mL container (plastic/glass) | Cool 4ºC | 12 days |
| Methane | (2) 40-mL Teflon®-lined septa (glass) | Cool 4ºC<br>HCl to pH<2 | 12 days |
| **Soil Samples** | | | |
| Volatile Organics | (1) 4-oz container (glass) | Cool 4ºC | 10 days |
| Semivolatile Organics | (1) 4-oz container (glass) | Cool 4ºC | 5 days extraction; 40 days analysis |
| TAL Metals | (1) 250-mL wide mouth container (glass) | Cool 4ºC | 180 days; 28 days for mercury; 14 days for cyanide |
| TOC | (1) 8-oz container (glass) | Cool 4ºC | 14 days |
| Total Sulfur | (1) 10-oz container (glass) | Cool 4ºC | -- |
| Reactive Sulfide | (1) 8-oz container (glass) | Cool 4ºC | 5 days |
| Reactive Cyanide | (1) 8-oz container (glass) | Cool 4ºC | 12 days |
| TCLP Benzene | (1) 4-oz container (glass) | Cool 4ºC | 10 days |
| Chemical Oxygen Demand | (2) 4-oz wide mouth container (glass) | Cool 4ºC | 26 days |

**Table 3**
**Sample Containers, Preservation, and Holding Times Requirements**

**Quality Assurance Project Plan**
**Rochester Gas & Electric**
**Park Street Former MGP Site**

**Notes:**
VTSR = Verifiable time of sample receipt. Samples must be delivered to laboratory within 48 hours from day of collection.
mL = milliliters
oz = ounce
$^{o}$C = degrees Celsius
TOC = total organic carbon
TCLP = toxicity characteristic leaching procedure
$H_2SO_4$ = sulfuric acid
$HNO_3$ = nitric acid
NaOH = sodium hydroxide

**Table 4**
**Data Validation Checklist – Laboratory Analytical Data**

**Quality Assurance Project Plan**
**Rochester Gas & Electric**
**Park Street Former MGP Site**

| | |
|---|---|
| **REVIEW FOR COMPLETENESS** | |
| 1. | Chain of custody forms included. |
| 2. | Sample preparation and analysis summary tables included. |
| 3. | Quality assurance/quality control (QA/QC) summaries of analytical data included. |
| 4. | Relevant calibration data included with analytical data. |
| 5. | Instrument and method performance data included. |
| 6. | Method detection limits documented. |
| 7. | Data report forms of examples for calculations of concentrations. |
| 8. | Raw data used in identification and quantification of the analysis required. |
| **REVIEW OF COMPLIANCE** | |
| 1. | Data package completed. |
| 2. | Quality Assurance Project Plan requirements for data met. |
| 3. | QA/QC criteria met. |
| 4. | Instrument type and calibration procedures met. |
| 5. | Initial and continuing calibration met. |
| 6. | Data reporting forms completed. |
| 7. | Problems and corrective actions documented. |

**Attachment D-1**

Sample Chain of Custody Form

ARCADIS
*Infrastructure, environment, facilities*

ID#:

# CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page ___ of ___

Lab Work Order #

**Send Results to:**

| | |
|---|---|
| Contact & Company Name: | Telephone: |
| Address: | Fax: |
| City State Zip | E-mail Address: |
| Project Name/Location (City, State): | Project #: |
| Sampler's Printed Name: | Sampler's Signature: |

| Sample ID | Collection Date | Collection Time | Type (✓) Comp | Type (✓) Grab | Matrix |
|---|---|---|---|---|---|
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|---|---|---|---|---|---|---|---|---|
| Preservative | | | | | | | | |
| Filtered (✓) | | | | | | | | |
| # of Containers | | | | | | | | |
| Container Information | | | | | | | | |

**PARAMETER ANALYSIS & METHOD**

**REMARKS**

**Keys**

**Preservation Key:**
A. $H_2SO_4$
B. HCL
C. $HNO_3$
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

**Container Information Key:**
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

**Matrix Key:**
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: _____

**Special Instructions/Comments:**

☐ **Special QA/QC Instructions(✓):**

| Laboratory Information and Receipt | | Relinquished By | Received By | Relinquished By | Laboratory Received By |
|---|---|---|---|---|---|
| Lab Name: | Cooler Custody Seal (✓) | Printed Name: | Printed Name: | Printed Name: | Printed Name: |
| ☐ Cooler packed with ice (✓) | ☐ Intact ☐ Not Intact | Signature: | Signature: | Signature: | Signature: |
| Specify Turnaround Requirements: | Sample Receipt: | Firm: | Firm/Courier: | Firm/Courier: | Firm: |
| Shipping Tracking #: | Condition/Cooler Temp: _____ | Date/Time: | Date/Time: | Date/Time: | Date/Time: |



**Distribution:** WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by BBL

**Appendix E**

Community Air Monitoring Plan

# New York State Department of Health

# Generic Community Air Monitoring Plan

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical- specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust and odors at a minimum around the work areas.

## Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for volatile organic compounds (VOCs) and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate NYSDEC/NYSDOH staff.

**Continuous monitoring** will be required for all ground intrusive activities and during 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/purgins, 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. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less – but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

All 15-minute readings must be recorded and be available for State (DEC and DOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

## Particulate Monitoring, Response Levels and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/$m^3$) 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 mcg/$m^3$ 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 mcg/$m^3$ 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 mcg/$m^3$ 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.

**Appendix F**

Citizen Participation Plan

ARCADIS
Infrastructure · Water · Environment · Buildings

Imagine the result

**Rochester Gas & Electric**

# Citizen Participation Plan

Park Street Former MGP Site
Geneseo, New York

July 2015

# Citizen Participation Plan

Park Street Former MGP Site

Prepared for:
Rochester Gas & Electric

Prepared by:
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Our Ref.:
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Date:
July 2015

ARCADIS

# Table of Contents

# 1. Introduction

## 1.1 Overview

Citizen participation is an integral component of remedial programs in New York State. Input from affected or interested individuals and organizations on the remedial program helps ensure outcomes that account for both technical and human concerns for protecting public health and the environment. A project-specific plan is a mechanism to inform and involve community residents, public and private leaders, and other stakeholders. This *Citizen Participation Plan* (CPP) documents the planned project-specific public outreach activities and resources organized for the remedial program associated with the RGE Park Street Former Manufactured Gas Plant (MGP) site located in Geneseo, New York (site).

## 1.2 Purpose

The primary purpose of this CPP is to outline the communication methods that, based on applicable New York State law and New York State Department of Environmental Conservation (NYSDEC) regulations and guidance, provide for constructive communication of program activities between the stakeholders and other interested parties. This CPP has been prepared in accordance with the NYSDEC guidance document entitled "DER-23 *Citizen Participation Handbook for Remedial Programs"* (NYSDEC, 2010). This document includes methods intended to inform interested parties of program developments, elicit responses and public involvement and provide a central point of contact for inquiries regarding the remedial program for the Park Street Former MGP Site. This CPP presents the planned communication and outreach activities, describes how interested individuals and groups can participate in the remedial program, and provides a variety of reference materials to facilitate gaining access to project-specific information and management personnel.

Both the NYSDEC and RGE are committed to implementation of this CPP as required by 6 NYCRR Part 375, applicable NYSDEC guidance, and the NYSDEC Voluntary Cleanup Agreement No. V00731. As required by 6 NYCRR Part 375-1.10, NYSDEC and RGE will review and update this CPP to account for significant changes in the Park Street Former MGP Site remedial program.

## 2. Manufactured Gas Plants

Manufactured gas sites were used in the United States from the approximate 1800's to the approximate 1950's to produce a gas that could be distributed and used as fuel. Using a variety of processes, these plants used coal, or a mixture of coal, oil, and water to produce flammable gas for distribution to neighboring homes and businesses. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils, ash, and other compounds are potentially hazardous to human health and the environment. The byproducts from this process were frequently disposed of directly at the plant site and can remain or migrate slowly, serving as a continuous source of soil and groundwater contamination.

## 3. Project Steps

### 3.1 Investigation

The site characterization investigation presented in the *Site Characterization Work Plan* (ARCADIS, 2015) of the site is tentatively scheduled to take place during summer recess 2015. The goal of the investigation will be to characterize the extent and degree of impacted soil, bedrock, and groundwater beneath the site. This will involve careful examination of regional surface and bedrock geology, knowledge of processes conducted at the former MGP and collection of localized qualitative and quantitative field data.

### 3.2 Remedial Design

A remedial design will be prepared following results from investigation activities. Currently, no remedial design has been submitted or approved for the site.

### 3.3 Remediation

During a Park Street entrance improvement program conducted by State University of New York (SUNY) in 2002, a stone/brick containment structure was discovered approximately 4 feet below ground surface that contained a black tarry material. The NYSDEC determined that the liquid material and surrounding soil containing visible impacts would be excavated and transported for offsite disposal. Later identified as an interim remedial measure, this involved excavation and offsite disposal of tar and the structure containing the tar, along with approximately 800 tons of tar-impacted soil, and 3,200 gallons of impacted water that accumulated in the excavation.

# 4. Site Background and Environmental Activities

## 4.1 Site Background

### 4.1.1 Location and Description

The Park Street former MGP site is located at 6 Park Street in the Village of Geneseo, Livingston County, New York (**Figure 1**). The Park Street site covers approximately 3/4 of an acre and is located on the eastern side of the SUNY Geneseo campus. The eastern portion of the site is paved, and the western portion is covered by buildings and landscaping (**Figure 2**).

The site, which is owned by SUNY, is bound on the north by commercial buildings and School Street; on the west by a SUNY academic building complex (the Brodie Fine Arts building), by Park Street and a city park on the south; and on the east by a SUNY parking lot and commercial buildings along the west side of Main Street. The Park Street site straddles the boundary between the village commercial district and the SUNY campus.

### 4.1.2 Site History

According to Haley & Aldrich (September 2009), the Park Street MGP site was built on Park Street in 1860 (the date the gas works features are shown on the first Sanborn Fire Insurance map is 1885) and most likely operated as a coal carbonization MGP facility until January 1906. During this time the plant consisted of one building, which presumably housed the gas retorts, and one gas holder. The 1906 Sanborn noted a small lime house and a paint shop on the north side of the gas house, and a coal shed to the northeast. The 1900 Sanborn map showed a small electric generating plant further northeast of the MGP, on School Street; it is possible that the coal house was associated with this facility. The 1913 Sanborn map showed that the gas house and gas holder were gone from the site. The electric generating building was identified as a hardware store from 1930 through 1949, and the building remains in existence today. A survey map dated 1973 identified this building as a book store. The western portion of the site was acquired by SUNY first, followed by the eastern portion.

### 4.1.3 Environmental Activities

To achieve the investigation goals, field work will be required to collect pertinent analytical and non-analytical (lithologic) data. Environmental activities to collect this data will initially include a survey of the site layout and utilities and the following:

- Advancement of soil borings

- Installation of monitoring wells
- Coring/investigation of bedrock
- Soil and groundwater sampling

In addition, excavation of test pits and soil vapor sampling may be conducted as part of future investigation activities.

## 5. Citizen Participation Activities

This section presents the specific citizen participation and outreach activities planned for implementation during the remedial program and to be implemented in accordance with 6 NYCRR Part 375 and with NYSDEC Program Policy DER-23, *Citizen Participation Handbook for Remedial Programs* (NYSDEC, 2010). Operating under project-specific citizen participation goals, clearly defined objectives will be achieved by implementing a range of communication tools and methods. The planned activities are geared toward making project-specific information (e.g., work plans, technical reports, information sheet summaries) available to the public; facilitating communication among stakeholders including the creation of contact lists; scheduling and conducting public meetings; establishing comment periods; and notifying the public of document availability, public meetings, comment periods, and major program milestones.

### 5.1 Completed Citizen Participation Activities

No citizen participation activities have been completed to date.

### 5.2 Anticipated Future Citizen Participation Activities

Anticipated future citizen participation activities to foster effective and open communication among stakeholders and interested parties, RGE, the New York State Department of Health (NYSDOH) and the NYSDEC, include:

- Participation of interested public in the decision making process for remedial actions.
- Public participation that reflects the diversity of interests and perspectives found within a community.
- Public comments at formal milestones, in addition to public input throughout the site remedial process.
- Communication among interested parties and regulatory agencies that promotes exchange of information and strengthens trust among the parties.

## 6. Project Contacts

The following is a list of project contacts overseeing the Park Street Former MGP Site project. For questions related to any aspect of the former MGP Site, please contact the following staff:

**NYSDEC Project Manager** (for project-related issues)
Sarah Saucier
NYSDEC
Division of Environmental Remediation
625 Broadway, 11th Floor
Albany, New York 12233-7014
Phone: 518.402.9662
Fax: 518.402.9679

**NYSDOH Representative** (for site-related health concerns)
Anthony Perretta
NYSDOH
ESP Corning Tower, Rm 1787
Albany, New York 12237
Phone: 518.402.7860

**RGE Project Manager** (RGE Representative)
Christopher Keipper, PMP
RGE
1300 Scottsville Road
Rochester, New York 14624
Phone: 585.771.4560

## 7. Site Contact List

The following is a list of contacts in the vicinity of the site and individuals/entities who would otherwise have the potential to be affected by field investigation activities. The intent of this list is to identify individuals/organizations to receive fact sheets and updates on the status of the project, and to all listed parties who wish to be notified.

**Elected Officials**

Livingston County
*Chief Executive Officer (Chairman of the Board of Supervisors)*
Eric R. Gott
PO Box 43
Livonia, New York 14487
Phone: 585.243.7030

*Planning Board Chairperson*
Angela Ellis
Livingston County Government Center
6 Court Street, Room 305
Geneseo, New York 14454
Phone: 585.243.7550

Town of Geneseo
*Chairman of the Board of Supervisors*
William Wadsworth
4630 Millennium Drive
Geneseo New York 14454
Phone: 585.991.5005

*Planning Board Chairperson*
Dwight Folts
9 Oak Street
Geneseo, New York 14454
Phone: 585.243.4904

Village of Geneseo
*Mayor*
Richard Hatheway
119 Main Street
Geneseo New York 14454
Phone: 585.243.1177

*Planning Board Chairperson*
David Woods

119 Main Street
Geneseo New York 14454
Phone: 585.243.1177

**Public Water Supplier**

*Village of Geneseo Water and Sewer Department*
275 Riverside Drive
Geneseo, New York 14454
Director: Steve McTarnaghan
Phone: 585.243.3220

**School/Day Care Center**

*Geneseo Central School District*
4050 Avon Rd
Geneseo, New York 14454
Superintendent: Tim Hayes
Elementary Principal: RJ Chesterton
Middle & High School Principal: Michael Salatel
Phone: 585.243.3450

*Kid Start Daycare Center*
SUNY Geoeseo Campus
Holcomb Building
Geneseo, New York
Phone: 585.245.5686

*Geneseo Nursery School*
31 Center Street
Geneseo, New York 14454
Director: Megan Conklin
Phone: 585.243.0669

**Adjacent Properties**

*John W Chanler Agency Inc*
128 Main Street
Geneseo, New York 14454
Phone: 585-243-5520

*Geneseo Computers*
126 Main Street
Geneseo, New York 14454
Phone: 585.243.4870

*Livingston County News*
122 Main Street
Geneseo, New York 14454
Phone: 585.243.0296

*Café Shiloh*
120 Main Street
Geneseo, New York 14454
Phone: 585.243.3714

## 8. Document Repository

Two document repositories will be established in publicly accessible locations that have accommodations necessary to house and make project-related documents available for community reference and review. The use of document repositories is intended to maximize public access to site information while minimizing abuse, destruction or theft of project documentation.

The document repositories for the Park Street Former MGP Site are:

Wadsworth Library
24 Center Street
Geneseo, New York 14454
585.243.0440

NYSDEC
Division of Environmental Remediation
625 Broadway, 11th Floor
Albany, New York 12233-7014
518.402.9662
Attn: Sarah Saucier

## 9. Interested Public

There are many ways to reach and communicate with the community and other interested parties as this CPP is implemented over the course of the remedial program. A variety of outreach tools and methods will be used to ensure proper communication with the interested parties that include various organizations, public and business leaders and a diverse assemblage of individuals of all ages, education backgrounds and cultures.

Interested parties will be informed and invited to participate in the planned citizen participation activities through appropriate means such as mailings to the contact list, legal notice in newspapers, press releases, information sheets and other documents made available in the document repository.

Specific public participation activities will be implemented as required by 6 NYCRR Part 375 and current NYSDEC guidance.

In addition, an availability session may be conducted by the NYSDEC prior to the start of environmental activities at the site. An availability session is an informal gathering of the NYSDEC staff, RGE representatives and the public. The NYSDEC will distribute public notification at least 2 weeks prior to the scheduled session. The availability session would be used to describe to the public the upcoming environmental activities. Sessions would provide citizens the opportunity to interact with project experts one-on-one.

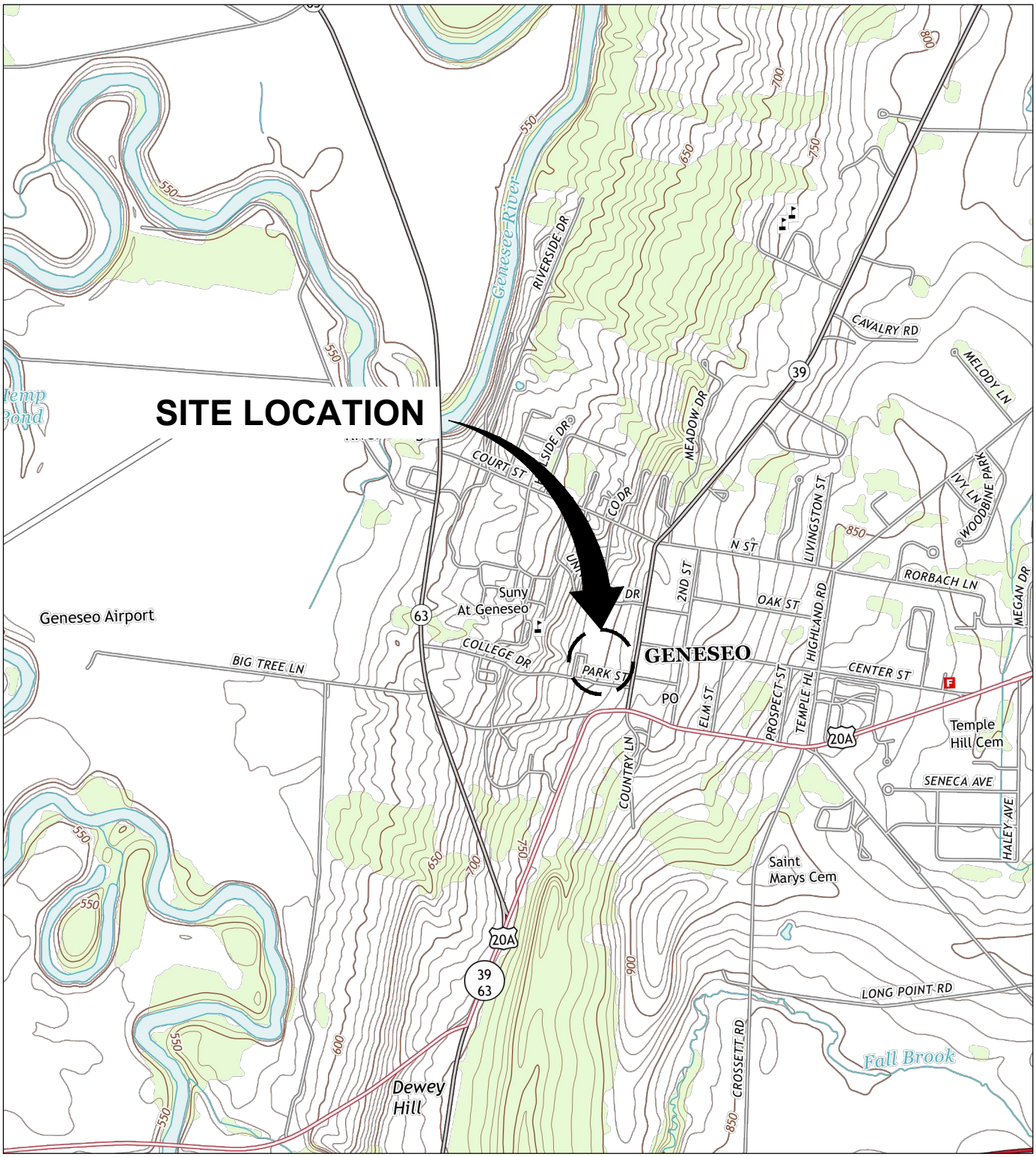
## 10. References

ARCADIS. 2015. *Site Characterization Work Plan.* June, 2015

NYSDEC. 2010. *DER-23. Citizen Participation Handbook for Remedial Programs.* January, 2010.

ARCADIS

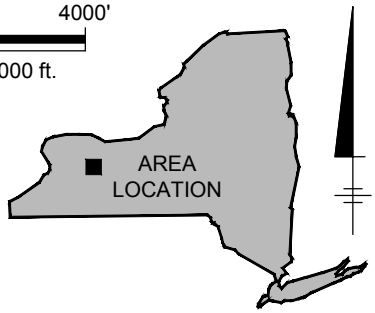
**Figures**




REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., GENESEO, NY, 2013

0 2000' 4000'

Approximate Scale: 1 in. = 2000 ft.




ROCHESTER GAS & ELECTRIC
PARK STREET FORMER MGP SITE
**SITE CHARACTERIZATION WORK PLAN**

## SITE LOCATION MAP

ARCADIS

FIGURE
**1**


**NOTE:**

1. FORMER LOCATIONS OF GAS WORKS STRUCTURES FROM SANBORN LIBRARY, LLC 1906 MAP.

**SOURCE:**

1. BASEMAP INFORMATION PROVIDED BY FISHER ASSOCIATES, LLC. DATED JUNE, 2015. FILENAME: GENESEO TOPO.DWG. GEOREFERENCED TO NEW YORK STATE PLANE NAD83 COORDINATE SYSTEM.

0 60' 120'

GRAPHIC SCALE

ROCHESTER GAS & ELECTRIC
PARK STREET FORMER MGP SITE
**SITE CHARACTERIZATION WORK PLAN**

**SITE MAP**

ARCADIS

FIGURE
**2**

CITY:GRANBURY-NJ DIV/GROUP:ENVCAD DB:JMEYER LD:JMEYER PIC:K.WHITE PM:B.AHRENS TM:B.AHRENS LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCAD\GRANBURY\ACTIVE\B0013138\0000\0003\B0013138B01.dwg LAYOUT: 2 SAVED: 6/24/2015 9:52 AM ACADVER: 19.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 6/25/2015 2:31 PM BY: MEYER, JULIE
XREFS: IMAGES: PROJECTNAME: ----
B0013138X01Sanborn Maps 1906.jpg
SB and MW Locations.jpg

**Attachment A**

Fact Sheet (to be provided by the New York State Department of Environmental Conservation)

**Appendix G**

Environmental Data Resources Report (on Compact Disc)

**Park Street Former MGP Site**
6 Park Street
Geneseo, NY 14454

Inquiry Number: 4283198.2s
May 04, 2015

# The EDR Radius Map™ Report with GeoCheck®

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

# TABLE OF CONTENTS



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

# 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

6 PARK STREET
GENESEO, NY 14454

### COORDINATES

| | |
|---|---|
| Latitude (North): | 42.7952000 - 42° 47' 42.72'' |
| Longitude (West): | 77.8183000 - 77° 49' 5.88'' |
| Universal Tranverse Mercator: | Zone 18 |
| UTM X (Meters): | 269509.8 |
| UTM Y (Meters): | 4741710.5 |
| Elevation: | 753 ft. above sea level |

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

| | |
|---|---|
| Target Property Map: | 42077-G7 GENESEO, NY |
| Most Recent Revision: | 1978 |

### AERIAL PHOTOGRAPHY IN THIS REPORT

| | |
|---|---|
| Portions of Photo from: | 20110603 |
| Source: | USDA |

## MAPPED SITES SUMMARY

Target Property Address:
6 PARK STREET
GENESEO, NY 14454

Click on Map ID to see full detail.

| MAP ID | SITE NAME | ADDRESS | DATABASE ACRONYMS | RELATIVE ELEVATION | DIST (ft. & mi.) DIRECTION |
|---|---|---|---|---|---|
| A1 | SUNY GENESEO CLARK S | SUNY GENESEO CLARK S | NY Spills | Lower | 1 ft. |
| A2 | SUNY GENESEO | CLARK BUILDING | NY Spills | Lower | 1 ft. |
| A3 | SUNY GENESEO | 101 CLARK BLDG 1 COL | NY Spills | Lower | 1 ft. |
| B4 | MOBIL MINI MART | SOUTH MAIN STREET | NY Spills | Higher | 1 ft. |
| C5 | GENESEO GAS WORKS | PARK AND MAIN STREET | EDR MGP | Higher | 1 ft. |
| C6 | SUNY GENESEO BRODIE | SUNY GENESEO BRODIE | NY Spills | Lower | 1 ft. |
| A7 | SUNY GENESEO | CLARK SERVICE BUILDI | NY Spills | Lower | 1 ft. |
| A8 | STATE UNIVERSITY OF | 1 COLLEGE CIR - 118 | RCRA-SQG, FINDS, NY MANIFEST, NY MANIFEST, US AIRS | Lower | 1 ft. |
| A9 | SUNY GENESEO | 1 COLLEGE CIRCLE | NY Spills, NY AIRS | Lower | 1 ft. |
| A10 | STATE UNIVERSITY OF | ONE COLLEGE CIRCLE | PA MANIFEST | Lower | 1 ft. |
| A11 | SUNY GENESEO | 102 CLARK- SUNY GENE | NY Spills | Lower | 1 ft. |
| A12 | SUNY COLLEGE AT GENE | 116 CLARK BUILDING | NY UST, NY HIST UST, NY AST, NY HIST AST | Lower | 1 ft. |
| A13 | SUNY GENESEO COLLEGE | 1 COLLEGE CRCL (UNIO | NY Spills | Lower | 1 ft. |
| B14 | | 116 MAIN ST | EDR US Hist Cleaners | Higher | 5, 0.001, |
| B15 | FORMER AUTO DEALER | 120 MAIN STREET | NY Spills | Higher | 6, 0.001, East |
| D16 | | 108 MAIN ST | EDR US Hist Cleaners | Higher | 7, 0.001, ENE |
| B17 | ONE STOP | 128 MAIN STREET | NY UST | Higher | 12, 0.002, SE |
| B18 | MOBIL MINI MART | 128 MAIN STREET | NY Spills | Higher | 12, 0.002, SE |
| B19 | GENESEO TOWN VILLAGE | 119 MAIN STREET | NY SWF/LF, NY Spills | Higher | 16, 0.003, East |
| B20 | CHESTNUT & PARK STRE | CHESTNUT & PARK STRE | NY Spills | Higher | 25, 0.005, SE |
| 21 | GENESEO COLLEGE/ DOT | 3 PARK ST OR 295 MAR | NY Spills | Lower | 28, 0.005, WSW |
| B22 | | 131 MAIN ST | EDR US Hist Cleaners | Higher | 29, 0.005, SE |
| B23 | PRESTIGE/NUNDA CLEAN | 131 MAIN STREET | NY DRYCLEANERS | Higher | 29, 0.005, SE |
| B24 | WASTE MANAGEMENT | 131 MAIN STREET | NY Spills | Higher | 29, 0.005, SE |
| D25 | GENESEO FAMILY RESTA | 105 MAIN STREET | NY Spills | Higher | 43, 0.008, ENE |
| B26 | SUNY GENESEO | 1 PARK PLACE | NY Spills | Higher | 47, 0.009, SE |
| B27 | | 5 CHESTNUT ST | EDR US Hist Cleaners | Higher | 52, 0.010, ESE |
| B28 | (FORMER) GENESEE VAL | 137 MAIN STREET | NY Spills | Higher | 69, 0.013, SE |
| B29 | SUGAR CREEK #197 | 137 MAIN ST | RCRA-CESQG, NY MANIFEST | Higher | 69, 0.013, SE |
| B30 | 7-ELEVEN INC #35124 | 137 MAIN STREET | NY UST | Higher | 69, 0.013, SE |
| B31 | 7-ELEVEN INC #35124 | 137 MAIN STREET | NY AST | Higher | 69, 0.013, SE |
| A32 | EMERY WORLDWIDE | SUNY AT GENESEO | NY Spills | Lower | 75, 0.014, WNW |
| A33 | SUNY GENESEO | GREEN SCIENCE BUILDI | NY Spills | Lower | 75, 0.014, WNW |
| A34 | SUNY GENESEO | SUNY GENESEO | NY Spills | Lower | 75, 0.014, WNW |
| 35 | SUNY GENESEO | BAILEY SCIENCE BUILD | NY Spills | Lower | 210, 0.040, NNW |
| E36 | COMMUNITY PUBLICATIO | 3 CENTER ST | RCRA NonGen / NLR, FINDS, NY MANIFEST | Higher | 276, 0.052, NE |
| 37 | SUNY GENESEO | ERWIN BUILDING | NY Spills | Lower | 305, 0.058, NW |
| F38 | CITGO STATION | ROUTE 20A & ROUTE 39 | NY LTANKS | Higher | 341, 0.065, SSE |
| F39 | MARQUART (TJ) & SONS | ROUTE 20 & ROUTE 39 | NY Spills | Higher | 351, 0.066, SSE |

## MAPPED SITES SUMMARY

Target Property Address:
6 PARK STREET
GENESEO, NY 14454

Click on Map ID to see full detail.

| MAP ID | SITE NAME | ADDRESS | DATABASE ACRONYMS | RELATIVE ELEVATION | DIST (ft. & mi.) DIRECTION |
|---|---|---|---|---|---|
| 40 | 17 CENTER STREET | 17 CENTER STREET | NY Spills | Higher | 466, 0.088, ENE |
| E41 | 57 MAIN STREET WATER | I/F/O 57 MAIN STREET | NY Spills | Higher | 499, 0.095, NE |
| 42 | GENESEO SCHOOL DISTR | 8 SOUTH STREET | NY Spills | Higher | 534, 0.101, SE |
| G43 | BEHIND BIG TREE INN | 46 MAIN STEET | NY Spills | Higher | 599, 0.113, NNE |
| G44 | 45 MAIN STREET GAS L | 45 MAIN STREET | NY Spills | Higher | 621, 0.118, NNE |
| 45 | SUNY GENESEO | PARK STREET EXTENSIO | NY Spills | Lower | 627, 0.119, West |
| 46 | SUNY AT GENESEO | WILSON CLARK SERVICE | NY LTANKS | Lower | 817, 0.155, WNW |
| 47 | LIVINGSTON COUNTY SH | COURT AND MAIN STREE | NY LTANKS | Higher | 1680, 0.318, NNE |
| 48 | SUNY GENESEO | S PARKING LOT | NY LTANKS | Lower | 2023, 0.383, SW |
| H49 | NYS ARMORY/NATIONAL | 34 AVON ROAD ROUTE 3 | NY LTANKS, NY Spills | Higher | 2454, 0.465, NNE |
| H50 | NYS ARMORY-GENESEO | 34 AVON ROAD - ROUTE | NY LTANKS, NY Spills | Higher | 2454, 0.465, NNE |
| 51 | GENESEO GAS LIGHT CO | COURT STREET | EDR MGP | Lower | 3189, 0.604, NNW |

# EXECUTIVE SUMMARY

## 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
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 CERCLIS NFRAP site List*

CERC-NFRAP ---------- CERCLIS No Further Remedial Action Planned

### *Federal RCRA CORRACTS facilities list*

CORRACTS ---------- Corrective Action Report

### *Federal RCRA non-CORRACTS TSD facilities list*

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

### *Federal RCRA generators list*

RCRA-LQG ---------- RCRA - Large Quantity Generators

### *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 SHWS ---- Inactive Hazardous Waste Disposal Sites in New York State
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 Faciliy Listing
NY CBS UST ---- Chemical Bulk Storage Database
NY MOSF UST ---- Major Oil Storage Facilities Database
NY CBS AST ---- Chemical Bulk Storage Database
NY MOSF AST ---- Major Oil Storage Facilities Database
NY CBS ---- Chemical Bulk Storage Site Listing
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 ENG CONTROLS ---- Registry of Engineering Controls
NY INST CONTROL ---- Registry of Institutional Controls
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
NY BROWNFIELDS ---- Brownfields Site List

**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 SWRCY ---- Registered Recycling Facility List
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
TRIS ---- Toxic Chemical Release Inventory System
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
SSTS ---- Section 7 Tracking Systems
ICIS ---- Integrated Compliance Information System
PADS ---- PCB Activity Database 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 SPDES ---- State Pollutant Discharge Elimination System
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
PCB TRANSFORMER ---- PCB Transformer Registration Database
PRP ---- Potentially Responsible Parties
2020 COR ACTION ---- 2020 Corrective Action Program List
COAL ASH DOE ---- Steam-Electric Plant Operation Data
COAL ASH EPA ---- Coal Combustion Residues Surface Impoundments List
US FIN ASSUR ---- Financial Assurance Information
EPA WATCH LIST ---- EPA WATCH LIST

**EDR HIGH RISK HISTORICAL RECORDS**

***EDR Exclusive Records***

EDR US Hist Auto Stat ---- EDR Exclusive Historic Gas Stations

# EXECUTIVE SUMMARY

## EDR RECOVERED GOVERNMENT ARCHIVES

### *Exclusive Recovered Govt. Archives*

NY RGA LF ---------- Recovered Government Archive Solid Waste Facilities List
NY RGA HWS ---------- Recovered Government Archive State Hazardous Waste Facilities List

## SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

## STANDARD ENVIRONMENTAL RECORDS

### *Federal RCRA generators list*

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 12/09/2014 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***STATE UNIVERSITY OF*** | ***1 COLLEGE CIR - 118*** | ***0 - 1/8 (0.000 mi.)*** | ***A8*** | ***16*** |

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 12/09/2014 has revealed that there is 1 RCRA-CESQG site within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***SUGAR CREEK #197*** | ***137 MAIN ST*** | ***SE 0 - 1/8 (0.013 mi.)*** | ***B29*** | ***116*** |

# EXECUTIVE SUMMARY

***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 04/08/2015 has revealed that there is 1 NY SWF/LF site within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***GENESEO TOWN VILLAGE*** | ***119 MAIN STREET*** | ***E 0 - 1/8 (0.003 mi.)*** | ***B19*** | ***99*** |

***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 03/19/2015 has revealed that there are 6 NY LTANKS sites within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| CITGO STATION | ROUTE 20A & ROUTE 39 | SSE 0 - 1/8 (0.065 mi.) | F38 | 142 |
| Program Number: 8801374 | | | | |
| Spill Number/Closed Date: 8801374 / 5/13/1988 | | | | |
| Site ID: 125857 | | | | |
| LIVINGSTON COUNTY SH | COURT AND MAIN STREE | NNE 1/4 - 1/2 (0.318 mi.) | 47 | 157 |
| Program Number: 8181205 | | | | |
| Spill Number/Closed Date: 8181205 / 1/1/1983 | | | | |
| Site ID: 98738 | | | | |
| ***NYS ARMORY/NATIONAL*** | ***34 AVON ROAD ROUTE 3*** | ***NNE 1/4 - 1/2 (0.465 mi.)*** | ***H49*** | ***159*** |
| Program Number: 9609264 | | | | |
| Spill Number/Closed Date: 9609264 / 2/28/2000 | | | | |
| Site ID: 168192 | | | | |
| ***NYS ARMORY-GENESEO*** | ***34 AVON ROAD - ROUTE*** | ***NNE 1/4 - 1/2 (0.465 mi.)*** | ***H50*** | ***162*** |
| Program Number: 8800030 | | | | |
| Program Number: 8903188 | | | | |
| Spill Number/Closed Date: 8800030 / 10/31/1988 | | | | |
| Spill Number/Closed Date: 8903188 / 6/27/1989 | | | | |
| Site ID: 191170 | | | | |
| Site ID: 138359 | | | | |

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| SUNY AT GENESEO | WILSON CLARK SERVICE | WNW 1/8 - 1/4 (0.155 mi.) | 46 | 156 |
| Program Number: 9402622 | | | | |
| Spill Number/Closed Date: 9402622 / 6/9/1995 | | | | |
| Site ID: 290293 | | | | |
| SUNY GENESEO | S PARKING LOT | SW 1/4 - 1/2 (0.383 mi.) | 48 | 158 |
| Program Number: 9906985 | | | | |
| Spill Number/Closed Date: 9906985 / 9/13/1999 | | | | |
| Site ID: 270858 | | | | |

# EXECUTIVE SUMMARY

***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 03/30/2015 has revealed that there are 3 NY UST sites within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ONE STOP<br>Id/Status:: 8-390704 | 128 MAIN STREET | SE 0 - 1/8 (0.002 mi.) | B17 | 94 |
| 7-ELEVEN INC #35124<br>Id/Status:: 8-408409 | 137 MAIN STREET | SE 0 - 1/8 (0.013 mi.) | B30 | 119 |

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***SUNY COLLEGE AT GENE***<br>Id/Status:: 8-013595 | ***116 CLARK BUILDING*** | ***0 - 1/8 (0.000 mi.)*** | ***A12*** | ***74*** |

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 03/30/2015 has revealed that there are 2 NY AST sites within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| 7-ELEVEN INC #35124<br>Facility Id: 8-408409 | 137 MAIN STREET | SE 0 - 1/8 (0.013 mi.) | B31 | 126 |

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***SUNY COLLEGE AT GENE***<br>Facility Id: 8-013595 | ***116 CLARK BUILDING*** | ***0 - 1/8 (0.000 mi.)*** | ***A12*** | ***74*** |

**ADDITIONAL ENVIRONMENTAL RECORDS**

***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.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***SUNY COLLEGE AT GENE***<br>Facility Status: 1<br>PBS Number: 8-013595<br>Tank Status: 3 | ***116 CLARK BUILDING*** | ***0 - 1/8 (0.000 mi.)*** | ***A12*** | ***74*** |

# 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 03/19/2015 has revealed that there are 30 NY Spills sites within approximately 0.125 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| MOBIL MINI MART<br>Site ID: 99357<br>Spill Number/Closed Date: 8908961 / 12/10/1989<br>spillno: 8908961 | SOUTH MAIN STREET | 0 - 1/8 (0.000 mi.) | B4 | 12 |
| FORMER AUTO DEALER<br>Site ID: 492440<br>Spill Number/Closed Date: 1311534 / 12/8/2014<br>spillno: 1311534 | 120 MAIN STREET | E 0 - 1/8 (0.001 mi.) | B15 | 93 |
| MOBIL MINI MART<br>Site ID: 155294<br>Spill Number/Closed Date: 9614427 / 4/8/1998<br>spillno: 9614427 | 128 MAIN STREET | SE 0 - 1/8 (0.002 mi.) | B18 | 98 |
| ***GENESEO TOWN VILLAGE***<br>Site ID: 331741<br>Spill Number/Closed Date: 0480050 / 12/12/2008<br>spillno: 0480050 | ***119 MAIN STREET*** | ***E 0 - 1/8 (0.003 mi.)*** | ***B19*** | ***99*** |
| CHESTNUT & PARK STRE<br>Site ID: 180400<br>Spill Number/Closed Date: 9970450 / 12/5/2000<br>spillno: 9970450 | CHESTNUT & PARK STRE | SE 0 - 1/8 (0.005 mi.) | B20 | 103 |
| WASTE MANAGEMENT<br>Site ID: 255008<br>Spill Number/Closed Date: 0202853 / 6/18/2002<br>spillno: 0202853 | 131 MAIN STREET | SE 0 - 1/8 (0.005 mi.) | B24 | 106 |
| GENESEO FAMILY RESTA<br>Site ID: 402207<br>Spill Number/Closed Date: 0805162 / 8/4/2008<br>spillno: 0805162 | 105 MAIN STREET | ENE 0 - 1/8 (0.008 mi.) | D25 | 107 |
| SUNY GENESEO<br>Site ID: 296503<br>Site ID: 296502<br>Spill Number/Closed Date: 9502098 / 5/18/1995<br>Spill Number/Closed Date: 9502097 / 5/18/1995<br>spillno: 9502098<br>spillno: 9502097 | 1 PARK PLACE | SE 0 - 1/8 (0.009 mi.) | B26 | 108 |
| (FORMER) GENESEE VAL<br>Site ID: 219726<br>Site ID: 219725<br>Site ID: 338684<br>Spill Number/Closed Date: 9201855 / Not Reported<br>Spill Number/Closed Date: 0413045 / 3/24/2005<br>Spill Number/Closed Date: 9712331 / 4/30/1999<br>spillno: 9712331<br>spillno: 9201855<br>spillno: 0413045 | 137 MAIN STREET | SE 0 - 1/8 (0.013 mi.) | B28 | 112 |

# EXECUTIVE SUMMARY

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| MARQUART (TJ) & SONS<br>Site ID: 310086<br>Spill Number/Closed Date: 8602856 / 8/1/1986<br>spillno: 8602856 | ROUTE 20 & ROUTE 39 | SSE 0 - 1/8 (0.066 mi.) | F39 | 143 |
| 17 CENTER STREET<br>Site ID: 156378<br>Spill Number/Closed Date: 9614947 / 5/27/2003<br>spillno: 9614947 | 17 CENTER STREET | ENE 0 - 1/8 (0.088 mi.) | 40 | 144 |
| 57 MAIN STREET WATER<br>Site ID: 503453<br>Spill Number/Closed Date: 1409806 / Not Reported<br>spillno: 1409806 | I/F/O 57 MAIN STREET | NE 0 - 1/8 (0.095 mi.) | E41 | 146 |
| GENESEO SCHOOL DISTR<br>Site ID: 406472<br>Spill Number/Closed Date: 0809036 / 10/28/2010<br>spillno: 0809036 | 8 SOUTH STREET | SE 0 - 1/8 (0.101 mi.) | 42 | 150 |
| BEHIND BIG TREE INN<br>Site ID: 139883<br>Spill Number/Closed Date: 0404213 / 7/21/2004<br>spillno: 0404213 | 46 MAIN STEET | NNE 0 - 1/8 (0.113 mi.) | G43 | 152 |
| 45 MAIN STREET GAS L<br>Site ID: 465280<br>Spill Number/Closed Date: 1202510 / 2/5/2013<br>spillno: 1202510 | 45 MAIN STREET | NNE 0 - 1/8 (0.118 mi.) | G44 | 153 |

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| SUNY GENESEO CLARK S<br>Site ID: 285071<br>Spill Number/Closed Date: 9406632 / 8/12/1994<br>spillno: 9406632 | SUNY GENESEO CLARK S | 0 - 1/8 (0.000 mi.) | A1 | 8 |
| SUNY GENESEO<br>Site ID: 83649<br>Site ID: 83648<br>Spill Number/Closed Date: 0270383 / 9/24/2002<br>Spill Number/Closed Date: 0070175 / 6/14/2000<br>spillno: 0270383<br>spillno: 0070175 | CLARK BUILDING | 0 - 1/8 (0.000 mi.) | A2 | 9 |
| SUNY GENESEO<br>Site ID: 177070<br>Spill Number/Closed Date: 0270173 / 6/5/2002<br>spillno: 0270173 | 101 CLARK BLDG 1 COL | 0 - 1/8 (0.000 mi.) | A3 | 11 |
| SUNY GENESEO BRODIE<br>Site ID: 86709<br>Spill Number/Closed Date: 9410295 / 6/9/1995<br>spillno: 9410295 | SUNY GENESEO BRODIE | 0 - 1/8 (0.000 mi.) | C6 | 13 |
| SUNY GENESEO<br>Site ID: 197978<br>Spill Number/Closed Date: 0270491 / 12/13/2002<br>spillno: 0270491 | CLARK SERVICE BUILDI | 0 - 1/8 (0.000 mi.) | A7 | 15 |
| ***SUNY GENESEO***<br>Site ID: 144505<br>Site ID: 331912<br>Site ID: 331913<br>Site ID: 383481<br>Site ID: 144510<br>**Additional key fields are available in the Map Findings section*<br>Spill Number/Closed Date: 1406621 / 9/22/2014<br>Spill Number/Closed Date: 0905338 / 8/7/2009<br>Spill Number/Closed Date: 1006737 / 11/16/2010<br>Spill Number/Closed Date: 9806587 / 6/25/2003<br>Spill Number/Closed Date: 0070236 / 7/6/2000<br>**Additional key fields are available in the Map Findings section* | ***1 COLLEGE CIRCLE*** | ***0 - 1/8 (0.000 mi.)*** | ***A9*** | ***47*** |

# EXECUTIVE SUMMARY

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| SUNY GENESEO<br>Site ID: 180354<br>Spill Number/Closed Date: 9110445 / 1/5/1993<br>spillno: 9110445 | 102 CLARK- SUNY GENE | 0 - 1/8 (0.000 mi.) | A11 | 73 |
| SUNY GENESEO COLLEGE<br>Site ID: 272797<br>Spill Number/Closed Date: 9602368 / 5/20/1996<br>spillno: 9602368 | 1 COLLEGE CRCL (UNIO | 0 - 1/8 (0.000 mi.) | A13 | 91 |
| GENESEO COLLEGE/ DOT<br>Site ID: 451648<br>Spill Number/Closed Date: 1104061 / 2/29/2012<br>spillno: 1104061 | 3 PARK ST OR 295 MAR | WSW 0 - 1/8 (0.005 mi.) | 21 | 104 |
| EMERY WORLDWIDE<br>Site ID: 248661<br>Spill Number/Closed Date: 8804587 / 8/25/1988<br>spillno: 8804587 | SUNY AT GENESEO | WNW 0 - 1/8 (0.014 mi.) | A32 | 128 |
| SUNY GENESEO<br>Site ID: 240727<br>Spill Number/Closed Date: 0370595 / 2/18/2004<br>spillno: 0370595 | GREEN SCIENCE BUILDI | WNW 0 - 1/8 (0.014 mi.) | A33 | 129 |
| SUNY GENESEO<br>Site ID: 268978<br>Site ID: 225997<br>Site ID: 379740<br>Site ID: 405639<br>Site ID: 86918<br>Spill Number/Closed Date: 0750064 / 4/12/2007<br>Spill Number/Closed Date: 9516297 / 7/6/1998<br>Spill Number/Closed Date: 7980216 / 2/16/1979<br>Spill Number/Closed Date: 9108024 / 8/5/1994<br>Spill Number/Closed Date: 0808254 / 10/22/2008<br>spillno: 7980216<br>spillno: 9516297<br>spillno: 0750064<br>spillno: 0808254<br>spillno: 9108024 | SUNY GENESEO | WNW 0 - 1/8 (0.014 mi.) | A34 | 130 |
| SUNY GENESEO<br>Site ID: 243711<br>Spill Number/Closed Date: 8080826 / 8/29/1980<br>spillno: 8080826 | BAILEY SCIENCE BUILD | NNW 0 - 1/8 (0.040 mi.) | 35 | 135 |
| SUNY GENESEO<br>Site ID: 360827<br>Spill Number/Closed Date: 0551731 / 3/15/2006<br>spillno: 0551731 | ERWIN BUILDING | NW 0 - 1/8 (0.058 mi.) | 37 | 141 |
| SUNY GENESEO<br>Site ID: 79969<br>Spill Number/Closed Date: 9801496 / 5/4/1998<br>spillno: 9801496 | PARK STREET EXTENSIO | W 0 - 1/8 (0.119 mi.) | 45 | 155 |

***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 12/09/2014 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***COMMUNITY PUBLICATIO*** | ***3 CENTER ST*** | ***NE 0 - 1/8 (0.052 mi.)*** | ***E36*** | ***137*** |

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 01/01/2015 has revealed that there are 3 NY MANIFEST sites within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***SUGAR CREEK #197***<br>EPA ID: NYR000170837 | ***137 MAIN ST*** | ***SE 0 - 1/8 (0.013 mi.)*** | ***B29*** | ***116*** |
| ***COMMUNITY PUBLICATIO***<br>EPA ID: NYR000004002<br>EPA ID: NYD000004002 | ***3 CENTER ST*** | ***NE 0 - 1/8 (0.052 mi.)*** | ***E36*** | ***137*** |

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***STATE UNIVERSITY OF***<br>EPA ID: NYD073669350 | ***1 COLLEGE CIR - 118*** | ***0 - 1/8 (0.000 mi.)*** | ***A8*** | ***16*** |

PA MANIFEST: Hazardous waste manifest information.

A review of the PA MANIFEST list, as provided by EDR, and dated 01/01/2015 has revealed that there is 1 PA MANIFEST site within approximately 0.25 miles of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| STATE UNIVERSITY OF<br>Generator EPA Id: NYD073669350 | ONE COLLEGE CIRCLE | 0 - 1/8 (0.000 mi.) | A10 | 72 |

NJ MANIFEST: Hazardous waste manifest information.

A review of the NJ MANIFEST list, as provided by EDR, and dated 01/01/2015 has revealed that there is 1 NJ MANIFEST site within approximately 0.25 miles of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***STATE UNIVERSITY OF***<br>EPA ID: NYD073669350 | ***1 COLLEGE CIR - 118*** | ***0 - 1/8 (0.000 mi.)*** | ***A8*** | ***16*** |

NY DRYCLEANERS: A listing of all registered drycleaning facilities.

A review of the NY DRYCLEANERS list, as provided by EDR, and dated 01/12/2015 has revealed that there is 1 NY DRYCLEANERS site within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| PRESTIGE/NUNDA CLEAN<br>Facility Id: 8-2426-00011 | 131 MAIN STREET | SE 0 - 1/8 (0.005 mi.) | B23 | 106 |

**EDR HIGH RISK HISTORICAL RECORDS**

***EDR Exclusive Records***

EDR MGP: The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

A review of the EDR MGP list, as provided by EDR, has revealed that there are 2 EDR MGP sites within approximately 1 mile of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| GENESEO GAS WORKS | PARK AND MAIN STREET | 0 - 1/8 (0.000 mi.) | C5 | 13 |
| **Lower Elevation** | **Address** | **Direction / Distance** | **Map ID** | **Page** |
| GENESEO GAS LIGHT CO | COURT STREET | NNW 1/2 - 1 (0.604 mi.) | 51 | 166 |

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 4 EDR US Hist Cleaners sites within approximately 0.25 miles of the target property.

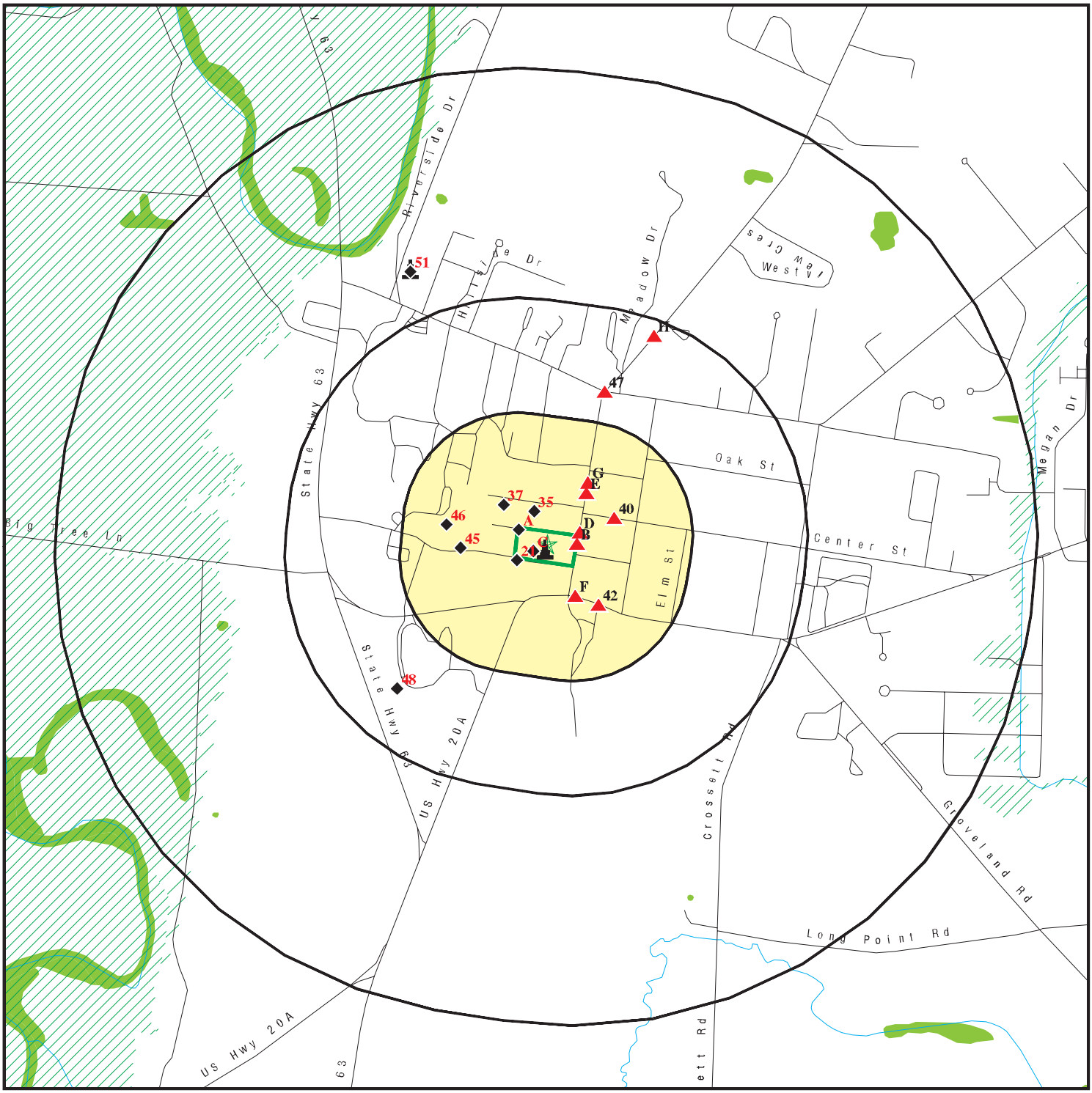
| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| Not reported | 116 MAIN ST | 0 - 1/8 (0.001 mi.) | B14 | 92 |
| Not reported | 108 MAIN ST | ENE 0 - 1/8 (0.001 mi.) | D16 | 94 |
| Not reported | 131 MAIN ST | SE 0 - 1/8 (0.005 mi.) | B22 | 106 |
| Not reported | 5 CHESTNUT ST | ESE 0 - 1/8 (0.010 mi.) | B27 | 111 |

# EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 1 records.

| Site Name | Database(s) |
|---|---|
| GENESEO VILLAGE DPW | NY LTANKS |

# OVERVIEW MAP - 4283198.2S




0 1/4 1/2 1 Miles

- 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
- National Wetland Inventory
- State Wetlands

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: Park Street Former MGP Site | CLIENT: ARCADIS U.S., Inc. |
| ADDRESS: 6 Park Street<br>Geneseo NY 14454 | CONTACT: Nicholas Beyrle |
| LAT/LONG: 42.7952 / -77.8183 | INQUIRY #: 4283198.2s<br>DATE: May 04, 2015 7:56 pm |

# DETAIL MAP - 4283198.2S


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

0 1/16 1/8 1/4 Miles

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: | Park Street Former MGP Site | CLIENT: | ARCADIS U.S., Inc. |
| ADDRESS: | 6 Park Street<br>Geneseo NY 14454 | CONTACT: | Nicholas Beyrle |
| LAT/LONG: | 42.7952 / -77.8183 | INQUIRY #: | 4283198.2s |
| | | DATE: | May 04, 2015 7:57 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** | | | | | | | | |
| ***Federal NPL site list*** | | | | | | | | |
| 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 |
| ***Federal Delisted NPL site list*** | | | | | | | | |
| Delisted NPL | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| ***Federal CERCLIS list*** | | | | | | | | |
| CERCLIS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| FEDERAL FACILITY | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Federal CERCLIS NFRAP site List*** | | | | | | | | |
| CERC-NFRAP | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Federal RCRA CORRACTS facilities list*** | | | | | | | | |
| CORRACTS | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| ***Federal RCRA non-CORRACTS TSD facilities list*** | | | | | | | | |
| RCRA-TSDF | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Federal RCRA generators list*** | | | | | | | | |
| RCRA-LQG | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| RCRA-SQG | 0.250 | | 1 | 0 | NR | NR | NR | 1 |
| RCRA-CESQG | 0.250 | | 1 | 0 | NR | NR | NR | 1 |
| ***Federal institutional controls / engineering controls registries*** | | | | | | | | |
| 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 |
| ***Federal ERNS list*** | | | | | | | | |
| ERNS | TP | | NR | NR | NR | NR | NR | 0 |
| ***State- and tribal - equivalent CERCLIS*** | | | | | | | | |
| NY SHWS | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| NY VAPOR REOPENED | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| ***State and tribal landfill and/or solid waste disposal site lists*** | | | | | | | | |
| NY SWF/LF | 0.500 | | 1 | 0 | 0 | NR | NR | 1 |
| ***State and tribal leaking storage tank lists*** | | | | | | | | |
| NY LTANKS | 0.500 | | 1 | 1 | 4 | NR | NR | 6 |
| 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 |
|---|---|---|---|---|---|---|---|---|
| ***State and tribal registered storage tank lists*** | | | | | | | | |
| NY TANKS | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| NY UST | 0.250 | | 3 | 0 | NR | NR | NR | 3 |
| NY CBS UST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| NY MOSF UST | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| NY AST | 0.250 | | 2 | 0 | NR | NR | NR | 2 |
| NY CBS AST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| NY MOSF AST | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| NY CBS | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| 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 |
| ***State and tribal institutional control / engineering control registries*** | | | | | | | | |
| NY ENG CONTROLS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| NY INST CONTROL | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| NY RES DECL | 0.125 | | 0 | NR | NR | NR | NR | 0 |
| ***State and tribal voluntary cleanup sites*** | | | | | | | | |
| NY VCP | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| INDIAN VCP | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***State and tribal Brownfields sites*** | | | | | | | | |
| NY ERP | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| NY BROWNFIELDS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| **ADDITIONAL ENVIRONMENTAL RECORDS** | | | | | | | | |
| ***Local Brownfield lists*** | | | | | | | | |
| US BROWNFIELDS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Local Lists of Landfill / Solid Waste Disposal Sites*** | | | | | | | | |
| ODI | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| DEBRIS REGION 9 | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| NY SWRCY | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| NY SWTIRE | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| INDIAN ODI | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Local Lists of Hazardous waste / Contaminated Sites*** | | | | | | | | |
| 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 |
| ***Local Lists of Registered Storage Tanks*** | | | | | | | | |
| NY HIST UST | 0.250 | | 1 | 0 | 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 | | 30 | NR | NR | NR | NR | 30 |
| 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 | | 1 | 0 | NR | NR | NR | 1 |
| 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 | | 3 | 0 | NR | NR | NR | 3 |
| PA MANIFEST | 0.250 | | 1 | 0 | NR | NR | NR | 1 |
| NJ MANIFEST | 0.250 | | 1 | 0 | NR | NR | NR | 1 |
| NY DRYCLEANERS | 0.250 | | 1 | 0 | NR | NR | NR | 1 |
| 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 |
| PCB TRANSFORMER | TP | | NR | NR | NR | NR | NR | 0 |
| PRP | TP | | NR | NR | NR | NR | NR | 0 |
| 2020 COR ACTION | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| COAL ASH DOE | 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 |
|---|---|---|---|---|---|---|---|---|
| COAL ASH EPA | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| US AIRS | TP | | NR | NR | NR | NR | NR | 0 |
| US FIN ASSUR | TP | | NR | NR | NR | NR | NR | 0 |
| EPA WATCH LIST | TP | | NR | NR | NR | NR | NR | 0 |
| **EDR HIGH RISK HISTORICAL RECORDS** | | | | | | | | |
| ***EDR Exclusive Records*** | | | | | | | | |
| EDR MGP | 1.000 | | 1 | 0 | 0 | 1 | NR | 2 |
| EDR US Hist Auto Stat | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| EDR US Hist Cleaners | 0.250 | | 4 | 0 | NR | NR | NR | 4 |
| **EDR RECOVERED GOVERNMENT ARCHIVES** | | | | | | | | |
| ***Exclusive Recovered Govt. Archives*** | | | | | | | | |
| NY RGA LF | TP | | NR | NR | NR | NR | NR | 0 |
| NY RGA HWS | TP | | NR | NR | NR | NR | NR | 0 |
| - Totals -- | | 0 | 56 | 1 | 4 | 1 | 0 | 58 |

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

**A1** **SUNY GENESEO CLARK SVC BL** **NY Spills** **S102130207**
**SUNY GENESEO CLARK SVC BL** **N/A**
**< 1/8** **GENESEO, NY**
**1 ft.**

**Site 1 of 13 in cluster A**

**Relative:**
**Lower**

**Actual:**
**743 ft.**

SPILLS:

| | |
|---|---|
| Facility ID: | 9406632 |
| Facility Type: | ER |
| DER Facility ID: | 231174 |
| Site ID: | 285071 |
| DEC Region: | 8 |
| Spill Date: | 8/12/1994 |
| Spill Number/Closed Date: | 9406632 / 8/12/1994 |
| Spill Cause: | Equipment Failure |
| Spill Class: | Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken. |
| SWIS: | 2626 |
| Investigator: | CAHETTEN |
| Referred To: | Not reported |
| Reported to Dept: | 8/12/1994 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Commercial Vehicle |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | 8/12/1994 |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 8/17/1994 |
| Spill Record Last Update: | 9/30/2004 |
| Spiller Name: | Not reported |
| Spiller Company: | RYDER TRUCK |
| 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 "CH"08/12/94: ENVIRONMENTAL PROD & SVCS HIRED BY RYDER TO CLEANUP SPILL. NO FURTHER ACTION NEEDED. 09/28/95: This is additional information about material spilled from the translation of the old spill file: 90 WT OIL. |
| Remarks: | LOCATION OF SPILL IS BETWEEN CLARK SERVICE BLDG A & B; REAR END ON TRACTOR TRAILER TRUCK SOMEHOW BROKE & 90 ST GEAR OIL LEAKED TO ROAD SURFACE IN LOADING DOCK AREA. CONTACT: KIM DALTON 245-5662. |

Material:

| | |
|---|---|
| Site ID: | 285071 |
| Operable Unit ID: | 1004054 |
| Operable Unit: | 01 |
| Material ID: | 379666 |
| Material Code: | 0022 |
| Material Name: | Waste Oil/Used Oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 5 |
| Units: | Gallons |

**SUNY GENESEO CLARK SVC BL (Continued)** **S102130207**

Recovered: No
Resource Affected: Not reported
Oxygenate: False

Tank Test:

---

**A2**
**< 1/8**
**1 ft.**

**SUNY GENESEO**
**CLARK BUILDING**
**GENESEO, NY**

**NY Spills** **S104653682**
**N/A**

**Site 2 of 13 in cluster A**

**Relative:**
**Lower**

**Actual:**
**743 ft.**

SPILLS:

| | |
|---|---|
| Facility ID: | 0270383 |
| Facility Type: | ER |
| DER Facility ID: | 76956 |
| Site ID: | 83649 |
| DEC Region: | 8 |
| Spill Date: | 9/24/2002 |
| Spill Number/Closed Date: | 0270383 / 9/24/2002 |
| 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: | 2626 |
| Investigator: | DLTILTON |
| Referred To: | Not reported |
| Reported to Dept: | 9/24/2002 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | 9/24/2002 |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 9/24/2002 |
| Spill Record Last Update: | 9/26/2002 |
| Spiller Name: | KIM DALTON FERRIS |
| Spiller Company: | SUNY GENESEO |
| Spiller Address: | 1 COLLEGE CIRCLE |
| Spiller City,St,Zip: | GENESEO, NY 14454- |
| Spiller Company: | 001 |
| Contact Name: | KIM DALTON FERRIS |
| Contact Phone: | (585) 245-5512 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was "DT" |
| Remarks: | DURING FUELING OF A TRUCK, 2 CUPS OF DIESEL SPILLED TO THE GROUND. CLEANUP IS COMPLETE. NO FURTHER ACTION NEEDED BY SPILLS. |

Material:

| | |
|---|---|
| Site ID: | 83649 |
| Operable Unit ID: | 867396 |
| Operable Unit: | 01 |
| Material ID: | 510645 |

**SUNY GENESEO (Continued)** **S104653682**

| | |
|---|---|
| Material Code: | 0008 |
| Material Name: | Diesel |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 1 |
| Units: | Gallons |
| Recovered: | Yes |
| Resource Affected: | Not reported |
| Oxygenate: | False |

Tank Test:

| | |
|---|---|
| Facility ID: | 0070175 |
| Facility Type: | ER |
| DER Facility ID: | 76956 |
| Site ID: | 83648 |
| DEC Region: | 8 |
| Spill Date: | 6/14/2000 |
| Spill Number/Closed Date: | 0070175 / 6/14/2000 |
| 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: | 2626 |
| Investigator: | DLTILTON |
| Referred To: | Not reported |
| Reported to Dept: | 6/14/2000 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | 6/14/2000 |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 6/14/2000 |
| Spill Record Last Update: | 3/9/2011 |
| Spiller Name: | ABOVE CALLER |
| Spiller Company: | SUNY GENESEO |
| Spiller Address: | 1 COLLEGE CIRCLE |
| Spiller City,St,Zip: | GENESEO, NY 14454- |
| Spiller Company: | 001 |
| Contact Name: | KIM FERRIS |
| Contact Phone: | (716) 245-5512 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was "DT".03/09/11: PAPER FILE REMOVED PER FILE RETENTION POLICY. |
| Remarks: | A HOSE SPLIT ON A GAS PUMP, SPILLING APPROXIMATELY 10 GALLONS OF GASOLINE TO THE GROUND. GASOLINE WAS UNABLE TO BE CLEANED UP DUE TO HEAVY RAINS. NO FURTHER ACTION NEEDED. CLOSED. |

Material:

| | |
|---|---|
| Site ID: | 83648 |
| Operable Unit ID: | 836015 |
| Operable Unit: | 01 |

**SUNY GENESEO (Continued)** **S104653682**

| | |
|---|---|
| Material ID: | 538029 |
| Material Code: | 0009 |
| Material Name: | Gasoline |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 10 |
| Units: | Gallons |
| Recovered: | No |
| Resource Affected: | Not reported |
| Oxygenate: | False |

Tank Test:

---

**A3** **SUNY GENESEO** **NY Spills** **S106004224**
**101 CLARK BLDG 1 COLLEGE** **N/A**
**< 1/8** **GENESEO, NY**
**1 ft.**

**Site 3 of 13 in cluster A**

**Relative:**
**Lower**

**Actual:**
**743 ft.**

SPILLS:

| | |
|---|---|
| Facility ID: | 0270173 |
| Facility Type: | ER |
| DER Facility ID: | 148811 |
| Site ID: | 177070 |
| DEC Region: | 8 |
| Spill Date: | 6/5/2002 |
| Spill Number/Closed Date: | 0270173 / 6/5/2002 |
| 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: | 2626 |
| Investigator: | PRMILLER |
| Referred To: | Not reported |
| Reported to Dept: | 6/5/2002 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Institutional, Educational, Gov., Other |
| 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: | 6/17/2002 |
| Spill Record Last Update: | 6/27/2003 |
| Spiller Name: | KIM DALTON FERRIS |
| Spiller Company: | SUNY GENESEO |
| Spiller Address: | 1 COLLEGE CIRCLE |
| Spiller City,St,Zip: | GENESEO, NY 14454- |
| Spiller Company: | 001 |
| Contact Name: | KIMBERLY DALTON-FERRIS |
| Contact Phone: | (585) 245-5512 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was "PM" |

**SUNY GENESEO (Continued)** **S106004224**

Remarks: DURING A PBS INSPECTION, MINOR CONTAMINATION WAS NOTICED IN THE TANK SUMP PUMP. PIPING APPEARS TO TO BE THE SOURCE OF THE DRIP INSIDE THE PUMP. FACILITY TO PERFORM NECESARY REPAIRS TO CORRECT THE PROBLEM.

Material:

| | |
|---|---|
| Site ID: | 177070 |
| Operable Unit ID: | 867288 |
| Operable Unit: | 01 |
| Material ID: | 510430 |
| Material Code: | 0001A |
| Material Name: | #2 Fuel Oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 4 |
| Units: | Gallons |
| Recovered: | No |
| Resource Affected: | Not reported |
| Oxygenate: | False |

Tank Test:

---

**B4** **MOBIL MINI MART** **NY Spills** **S103567935**
**SOUTH MAIN STREET** **N/A**
**< 1/8** **GENESEO, NY 14454**
**1 ft.**

**Site 1 of 16 in cluster B**

**Relative: Higher**

**Actual: 770 ft.**

SPILLS:

| | |
|---|---|
| Facility ID: | 8908961 |
| Facility Type: | ER |
| DER Facility ID: | 88289 |
| Site ID: | 99357 |
| DEC Region: | 8 |
| Spill Date: | 12/10/1989 |
| Spill Number/Closed Date: | 8908961 / 12/10/1989 |
| Spill Cause: | Other |
| Spill Class: | Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken. |
| SWIS: | 2626 |
| Investigator: | BWFINSTE |
| Referred To: | Not reported |
| Reported to Dept: | 12/10/1989 |
| CID: | Not reported |
| Water Affected: | ON LAND |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Fire Department |
| Cleanup Ceased: | 12/10/1989 |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 12/13/1989 |
| Spill Record Last Update: | 3/23/2006 |
| Spiller Name: | Not reported |
| Spiller Company: | MOBIL MINI MART |
| Spiller Address: | SOUTH MAIN STREET |

**MOBIL MINI MART (Continued)** **S103567935**

Spiller City,St,Zip: GENESEO, NY 14454
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 "BF"12/10/89: 12/10/89 GENESEO FIRE DEPT. CONTAINED SPILL WITH SPEEDY-DRY AND ABSORBED SAME; SPEEDY-DRY DOUBLE BAGGED AND DISPOSED OF IN DUMPSTER AS PER BRUCE FINSTER. 09/28/95: This is additional information about material spilled from the translation of the old spill file: MOTOR OIL,TRANS FLUID.NO FURTHER ACTION NECESSARY. 03/23/06: PAPER FILE REMOVED PER FILE RETENTION POLICY.
Remarks: FIRE IN OFFICE AREA OF MINI MART RESULTED IN 5-10 GALLON OIL/TRANSMISSION FLUID/WINDSHIELD WIPER FLUID SPILL TO PARKING LOT.

Material:

Tank Test:

---

**C5** **GENESEO GAS WORKS** **EDR MGP** **1008407936**
**PARK AND MAIN STREET** **N/A**
**< 1/8** **GENESEO, NY 14454**
**1 ft.**

**Site 1 of 2 in cluster C**

**Relative: Higher**

**Actual: 753 ft.**

Manufactured Gas Plants:
No additional information available

---

**C6** **SUNY GENESEO BRODIE F ART** **NY Spills** **S102130312**
**SUNY GENESEO BRODIE F ART** **N/A**
**< 1/8** **GENESEO, NY**
**1 ft.**

**Site 2 of 2 in cluster C**

**Relative: Lower**

**Actual: 749 ft.**

SPILLS:
Facility ID: 9410295
Facility Type: ER
DER Facility ID: 79511
Site ID: 86709
DEC Region: 8
Spill Date: 11/1/1994
Spill Number/Closed Date: 9410295 / 6/9/1995
Spill Cause: Equipment Failure
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS: 2626
Investigator: VOLLMER
Referred To: Not reported
Reported to Dept: 11/1/1994
CID: Not reported
Water Affected: Not reported
Spill Source: Institutional, Educational, Gov., Other
Spill Notifier: Responsible Party
Cleanup Ceased: 5/17/1995

**SUNY GENESEO BRODIE F ART (Continued)** **S102130312**

| | |
|---|---|
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 11/3/1994 |
| Spill Record Last Update: | 12/23/2003 |
| Spiller Name: | Not reported |
| Spiller Company: | SUNY GENESEO |
| Spiller Address: | Not reported |
| Spiller City,St,Zip: | GENESEO, 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 "BS"11/01/94: ELEVATOR PIT IS CONCRETE. ELEVATOR SHAFT IS A CASED HOLE WHICH EXTENDS BENEATH PIT INTO BEDROCK. IT IS NOT BELIEVED THAT OIL ENTERED THIS OPENING. JM SPOKE W/KIM DAULTON-PIT TO BE PUMPED OUT... 11/01/94: INVESTIGATE TO DETERMINE WHERE OIL CAME FROM. OIL/WATER TO BE PLACED INTO 55 GAL DRUMS & PICKED UP BY WASTE OIL HAULER DURING ROUTINE PICKUP. 01/17/95: CH TELCON W/KIM DAULTON; SHE REPORTS THAT WATER CAME UP IN ELEVATOR SHAFT BEFORE WATER COULD BE PUMPED. WATER DISPLACED HYDRAULIC OIL FROM THE CONTAINMENT UNIT WHERE IT WAS TRAPPED & FLOATED IT UPWARD.01/17/95: ...SUNY EMPLOYEES PADDED OFF OIL AND RECOVERED APPROXIMATELY 1/2 GAL VERSUS THE 25 GAL ORIGINALLY REPORTED. 04/20/95: BS MET ON SITE W/DAULTON OF SUNY GENESEO TO DISCUSS SPILL. DAULTON SAID THAT APPROX 1 GAL OF HYDRAULIC FLUID WAS SPILLED AND NOT 25 GALS AS REPORTED. DAULTON SAID THEY CLEANED UP BY PUMPING... 04/20/95: ...OUT WATER/OIL MIXTURE INTO DRUMS AND DISPOSED OF PROPERLY. DAULTON TO SEND COPIES OF DISPOSAL RECEIPTS. 06/09/95: RECEIVED WRITTEN INCIDENT REPORT INDICATING OILY FILM WAS ABSORBED & DEBRIS DOUBLE-BAGGED & PLACED INTO ON SITE DUMPSTER. WATER IN DRUM WAS THEN DUMPED INTO ONSITE SANITARY SEWER. NO FURTHER ACTION. 12/23/03: PAPER FILE REMOVED PER FILE RETENTION POLICY. |
| Remarks: | WHILE WORKING ON HYDRAULIC LIFT FOR ELEVATOR WITHIN BRODIE FINE ARTS BLDG IT WAS DISCOVERED THAT HYDRAULIC OIL WAS ON TOP OF WATER WITHIN ELEVATOR SHAFT. CONTACT: KIM DAULTON |

Material:

| | |
|---|---|
| Site ID: | 86709 |
| Operable Unit ID: | 1008058 |
| Operable Unit: | 01 |
| Material ID: | 376167 |
| Material Code: | 0022 |
| Material Name: | Waste Oil/Used Oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 1 |
| Units: | Gallons |
| Recovered: | No |
| Resource Affected: | Not reported |
| Oxygenate: | False |

Tank Test:

**A7**
**< 1/8**
**1 ft.**

**Relative: Lower**

**Actual: 743 ft.**

**SUNY GENESEO** **NY Spills** **S106010012**
**CLARK SERVICE BUILDING** **N/A**
**GENESEO, NY**

**Site 4 of 13 in cluster A**

SPILLS:

| | |
|---|---|
| Facility ID: | 0270491 |
| Facility Type: | ER |
| DER Facility ID: | 164773 |
| Site ID: | 197978 |
| DEC Region: | 8 |
| Spill Date: | 12/13/2002 |
| Spill Number/Closed Date: | 0270491 / 12/13/2002 |
| 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: | 2626 |
| Investigator: | DLTILTON |
| Referred To: | Not reported |
| Reported to Dept: | 12/13/2002 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Commercial Vehicle |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | 12/13/2002 |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 12/13/2002 |
| Spill Record Last Update: | 12/18/2002 |
| Spiller Name: | KIM DALTON FERRIS |
| Spiller Company: | SUNY GENESEO |
| Spiller Address: | 1 COLLEGE CIRCLE |
| Spiller City,St,Zip: | GENESEO, NY 14454- |
| Spiller Company: | 001 |
| Contact Name: | KIM DALTON FERRIS |
| Contact Phone: | (585) 245-5512 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was "DT" |
| Remarks: | A HYDRAULIC LINE ON A DUMP TRUCK RUPTURED, SPILLING 5 GALLONS OF HTDRAULIC OIL TO SOME ASPHALT. ALL MATERIAL HAS BEEN CLEANED UP. NO FURTHER ACTION IS NEEDED BY SPILLS. |

Material:

| | |
|---|---|
| Site ID: | 197978 |
| Operable Unit ID: | 865251 |
| Operable Unit: | 01 |
| Material ID: | 510769 |
| Material Code: | 0010 |
| Material Name: | Hydraulic Oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 5 |
| Units: | Gallons |
| Recovered: | 5 |
| Resource Affected: | Not reported |

**SUNY GENESEO (Continued)** **S106010012**

Oxygenate: False

Tank Test:

---

**A8** **STATE UNIVERSITY OF NEW YORK AT GENESEO** **RCRA-SQG** **1000397717**
**1 COLLEGE CIR - 118 CLARK** **FINDS** **NYD073669350**
**< 1/8** **GENESEO, NY 14454** **NJ MANIFEST**
**1 ft.** **NY MANIFEST**
**Site 5 of 13 in cluster A** **US AIRS**

**Relative: Lower**

**Actual: 743 ft.**

RCRA-SQG:

| | |
|---|---|
| Date form received by agency: | 02/14/2014 |
| Facility name: | STATE UNIVERSITY OF NEW YORK AT GENESEO |
| Facility address: | 1 COLLEGE CIR - 118 CLARK<br>GENESEO, NY 14454 |
| EPA ID: | NYD073669350 |
| Mailing address: | COLLEGE CIR - 118 CLARK<br>GENESEO, NY 14454 |
| Contact: | DARLENE M NECASTER |
| Contact address: | COLLEGE CIR -118 CLARK<br>GENESEO, NY 14454 |
| Contact country: | US |
| Contact telephone: | (585) 245-5812 |
| Contact email: | NECASTER@GENESEO.EDU |
| EPA Region: | 02 |
| Land type: | State |
| 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: | STATE UNIVERSITY OF NEW YORK AT GENESEO |
| Owner/operator address: | COLLEGE CIRCLE-118 CLARK<br>GENESEO, NY 14454 |
| Owner/operator country: | US |
| Owner/operator telephone: | (585) 245-5812 |
| Legal status: | State |
| Owner/Operator Type: | Owner |
| Owner/Op start date: | 01/01/1948 |
| Owner/Op end date: | Not reported |

| | |
|---|---|
| Owner/operator name: | STATE OF NEW YORK |
| Owner/operator address: | NOT REQUIRED<br>NOT REQUIRED, WY 99999 |
| Owner/operator country: | Not reported |
| 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: | STATE UNIVERSITY OF NEW YORK AT GENESEO |
| Owner/operator address: | COLLEGE CIRCLE-118 CLARK |

**STATE UNIVERSITY OF NEW YORK AT GENESEO (Continued)** **1000397717**

GENESEO, NY 14454
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: State
Owner/Operator Type: Operator
Owner/Op start date: 01/01/1948
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

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D005
. Waste name: BARIUM

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D009
. Waste name: MERCURY

. Waste code: D010
. Waste name: SELENIUM

. Waste code: D011
. Waste name: SILVER

. Waste code: D022
. Waste name: CHLOROFORM

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2,

**STATE UNIVERSITY OF NEW YORK AT GENESEO (Continued)** **1000397717**

TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: B007
. Waste name: B007

Historical Generators:
Date form received by agency: 02/27/2008
Site name: STATE UNIVERSITY OF NEW YORK @ GENESEO
Classification: Large Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D009
. Waste name: MERCURY

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: D039
. Waste name: TETRACHLOROETHYLENE

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: P028
. Waste name: BENZENE, (CHLOROMETHYL)- (OR) BENZYL CHLORIDE

. Waste code: P042
. Waste name: 1,2-BENZENEDIOL, 4-[1-HYDROXY-2-(METHYLAMINO)ETHYL]-, (R)- (OR) EPINEPHRINE

. Waste code: P105
. Waste name: SODIUM AZIDE

**STATE UNIVERSITY OF NEW YORK AT GENESEO (Continued)** **1000397717**

. Waste code: U111
. Waste name: 1-PROPANAMINE, N-NITROSO-N-PROPYL- (OR) DI-N-PROPYLNITROSAMINE

. Waste code: U117
. Waste name: ETHANE, 1,1'-OXYBIS-(I) (OR) ETHYL ETHER (I)

. Waste code: U404
. Waste name: ETHANAMINE, N,N-DIETHYL- (OR) TRIETHYLAMINE

. Waste code: B004
. Waste name: B004

Date form received by agency: 01/01/2007
Site name: STATE UNIVERSITY OF NEW YORK @ GENESEO
Classification: Small Quantity Generator

Date form received by agency: 02/24/2006
Site name: STATE UNIVERSITY OF NEW YORK @ GENESEO
Classification: Large Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D005
. Waste name: BARIUM

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D011
. Waste name: SILVER

. Waste code: D019
. Waste name: CARBON TETRACHLORIDE

. Waste code: D022
. Waste name: CHLOROFORM

. Waste code: D024
. Waste name: M-CRESOL

. Waste code: P028

**STATE UNIVERSITY OF NEW YORK AT GENESEO (Continued)** **1000397717**

. Waste name: BENZENE, (CHLOROMETHYL)- (OR) BENZYL CHLORIDE

. Waste code: P029
. Waste name: COPPER CYANIDE (OR) COPPER CYANIDE CU(CN)

. Waste code: P048
. Waste name: 2,4-DINITROPHENOL (OR) PHENOL, 2,4-DINITRO-

. Waste code: P078
. Waste name: NITROGEN DIOXIDE (OR) NITROGEN OXIDE NO2

. Waste code: P098
. Waste name: POTASSIUM CYANIDE (OR) POTASSIUM CYANIDE K(CN)

. Waste code: P105
. Waste name: SODIUM AZIDE

. Waste code: U004
. Waste name: ACETOPHENONE (OR) ETHANONE, 1-PHENYL-

. Waste code: U007
. Waste name: 2-PROPENAMIDE (OR) ACRYLAMIDE

. Waste code: U012
. Waste name: ANILINE (I,T) (OR) BENZENAMINE (I,T)

. Waste code: B007
. Waste name: B007

Date form received by agency: 02/23/2006
Site name: STATE UNIVERSITY OF NEW YORK @ GENESEO
Classification: Small Quantity Generator

Date form received by agency: 03/01/2004
Site name: STATE UNIVERSITY OF NEW YORK AT GENESEO
Classification: Large Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D005
. Waste name: BARIUM

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

**STATE UNIVERSITY OF NEW YORK AT GENESEO (Continued)** **1000397717**

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D010
. Waste name: SELENIUM

. Waste code: D011
. Waste name: SILVER

. Waste code: D018
. Waste name: BENZENE

. Waste code: D039
. Waste name: TETRACHLOROETHYLENE

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE(BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: P012
. Waste name: ARSENIC OXIDE AS2O3 (OR) ARSENIC TRIOXIDE

. Waste code: P096
. Waste name: HYDROGEN PHOSPHIDE (OR) PHOSPHINE

. Waste code: P105

**STATE UNIVERSITY OF NEW YORK AT GENESEO (Continued)** **1000397717**

. Waste name: SODIUM AZIDE

. Waste code: U122
. Waste name: FORMALDEHYDE

Date form received by agency: 01/01/2001
Site name: STATE UNIVERSITY OF NEW YORK AT GENESCO
Classification: Large Quantity Generator

Date form received by agency: 07/14/1999
Site name: STATE UNIVERSITY COLLEGE AT GENESEO
Classification: Small Quantity Generator

Date form received by agency: 03/29/1996
Site name: STATE UNIVERSITY OF NEW YORK AT GENESEO
Classification: Large Quantity Generator

Date form received by agency: 11/21/1985
Site name: STATE UNIVERSITY COLLEGE AT GENESEO
Classification: Large Quantity Generator

. Waste code: D000
. Waste name: Not Defined

Facility Has Received Notices of Violations:
Regulation violated: SR - 373-3.9
Area of violation: Generators - General
Date violation determined: 06/19/2003
Date achieved compliance: 07/21/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/24/2003
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 - 372.2(a)(2)
Area of violation: Generators - General
Date violation determined: 06/19/2003
Date achieved compliance: 07/21/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/24/2003
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: 10/25/2013
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

**STATE UNIVERSITY OF NEW YORK AT GENESEO (Continued)** **1000397717**

Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/21/2008
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/19/2003
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 07/21/2003
Evaluation lead agency: State

Evaluation date: 09/18/2001
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/15/1995
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

FINDS:

Registry ID: 110000838504

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 redesign to support facility operating permits required under Title V of the Clean Air Act.

AIR SYNTHETIC MINOR

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.

HAZARDOUS WASTE BIENNIAL REPORTER

FIS (New York - Facility Information System) is New York's Department of Environmental Conservation (DEC) information system for tracking

**STATE UNIVERSITY OF NEW YORK AT GENESEO (Continued)** **1000397717**

environmental facility information found across the State.

CRITERIA AND HAZARDOUS AIR POLLUTANT INVENTORY

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 that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

NJ MANIFEST:

| | |
|---|---|
| EPA Id: | NYD073669350 |
| Mail Address: | 1 COLLEGE CIRCLE |
| Mail City/State/Zip: | GENESEO 14454 |
| Facility Phone: | 7162455512 |
| Emergency Phone: | Not reported |
| Contact: | Not reported |
| Comments: | Not reported |
| SIC Code: | Not reported |
| County: | 00 |
| Municipal: | 00 |
| Previous EPA Id: | Not reported |
| Gen Flag: | X |
| Trans Flag: | Not reported |
| TSDF Flag: | Not reported |
| Name Change: | Not reported |
| Date Change: | Not reported |

Manifest:

| | |
|---|---|
| Manifest Number: | 000022455VES |
| EPA ID: | NYD073669350 |
| Date Shipped: | 10/19/2007 |
| 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: | 10/19/2007 |
| Date Trans2 Transported Waste: | 10/30/2007 |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |

**STATE UNIVERSITY OF NEW YORK AT GENESEO (Continued)** **1000397717**

| | |
|---|---|
| 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: | 10/31/2007 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | GENESEO 14454 |
| Reason Load Was Rejected: | Not reported |

| | |
|---|---|
| Manifest Number: | 000239605VES |
| EPA ID: | NYD073669350 |
| Date Shipped: | 06/17/2008 |
| 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: | 06/17/2008 |
| Date Trans2 Transported Waste: | 06/24/2008 |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | 07/07/2008 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |

**STATE UNIVERSITY OF NEW YORK AT GENESEO (Continued)** **1000397717**

Manifest Discrepancy Type: Not reported
Data Entry Number: Not reported
Was Load Rejected: GENESEO 14454
Reason Load Was Rejected: Not reported

Waste:
Manifest Year: 2008 New Jersey Manifest Data
Waste Code: D002
Hand Code: H141
Quantity: 37 P

Manifest Year: 2008 New Jersey Manifest Data
Waste Code: D002
Hand Code: H141
Quantity: 57 P

Manifest Year: 2008 New Jersey Manifest Data
Waste Code: F002
Hand Code: H141
Quantity: 100 P

Manifest Year: 2008 New Jersey Manifest Data
Waste Code: D009
Hand Code: H141
Quantity: 1 P

Manifest Year: 2008 New Jersey Manifest Data
Waste Code: D009
Hand Code: H141
Quantity: 101 P

Manifest Year: 2008 New Jersey Manifest Data
Waste Code: D001
Hand Code: H141
Quantity: 27 P

Manifest Year: 2008 New Jersey Manifest Data
Waste Code: P012
Hand Code: H141
Quantity: 1 P

Manifest Number: 000526322VES
EPA ID: NYD073669350
Date Shipped: 12/15/2011
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: Not reported
Date Trans2 Transported Waste: Not reported
Date Trans3 Transported Waste: Not reported

**STATE UNIVERSITY OF NEW YORK AT GENESEO (Continued)** **1000397717**

| | |
|---|---|
| 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 |
| Generator EPA Facility Name: | SUNY GENESEO |
| Transporter-1 EPA Facility Name: | VEOLIA ES TECHNICAL SOLUTIONS CORP |
| Transporter-2 EPA Facility Name: | FREEHOLD CARTAGE INC |
| TSDF EPA Facility Name: | VEOLIA ES TECHNICAL SOLUTIONS LLC |
| QTY Units: | Pounds |
| Transporter SEQ ID: | 1.00 |
| Transporter-1 Date: | 12/15/2011 |
| Waste SEQ ID: | 1.00 |
| 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: | 12/30/2011 |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | GENESEO 14454 |
| Reason Load Was Rejected: | Not reported |

Waste:

| | |
|---|---|
| Manifest Year: | 2011 New Jersey Manifest Data |
| Waste Code: | D009 |
| Hand Code: | H141 |
| Quantity: | 1.00 Pounds |

| | |
|---|---|
| Manifest Year: | 2011 New Jersey Manifest Data |
| Waste Code: | P105 |
| Hand Code: | H141 |
| Quantity: | 1.00 Pounds |

| | |
|---|---|
| Manifest Number: | 000250220VES |
| EPA ID: | NYD073669350 |
| Date Shipped: | 12/31/2008 |
| 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: | 12/31/2008 |
| Date Trans2 Transported Waste: | 01/13/2009 |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |

**STATE UNIVERSITY OF NEW YORK AT GENESEO (Continued)** **1000397717**

| | |
|---|---|
| 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: | 01/14/2009 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | GENESEO 14454 |
| Reason Load Was Rejected: | Not reported |

Waste:

| | |
|---|---|
| Manifest Year: | 2008 New Jersey Manifest Data |
| Waste Code: | F003 |
| Hand Code: | H141 |
| Quantity: | 214 P |
| Manifest Year: | 2008 New Jersey Manifest Data |
| Waste Code: | D001 |
| Hand Code: | H141 |
| Quantity: | 100 P |
| Manifest Year: | 2008 New Jersey Manifest Data |
| Waste Code: | D001 |
| Hand Code: | H141 |
| Quantity: | 37 P |
| Manifest Year: | 2008 New Jersey Manifest Data |
| Waste Code: | D009 |
| Hand Code: | H141 |
| Quantity: | 1 P |
| Manifest Year: | 2008 New Jersey Manifest Data |
| Waste Code: | D016 |
| Hand Code: | H141 |
| Quantity: | 200 P |
| Manifest Year: | 2008 New Jersey Manifest Data |
| Waste Code: | D001 |
| Hand Code: | H141 |
| Quantity: | 227 P |
| Manifest Number: | 000369037VES |
| EPA ID: | NYD073669350 |
| Date Shipped: | 06/23/2009 |
| TSDF EPA ID: | NJD980536593 |
| Transporter EPA ID: | NJD080631369 |

**STATE UNIVERSITY OF NEW YORK AT GENESEO (Continued)** **1000397717**

| | |
|---|---|
| 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: | 06/23/2009 |
| Date Trans2 Transported Waste: | 07/01/2009 |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | 07/07/2009 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | GENESEO 14454 |
| Reason Load Was Rejected: | Not reported |

Waste:

| | |
|---|---|
| Manifest Year: | 2009 New Jersey Manifest Data |
| Waste Code: | D001 |
| Hand Code: | H141 |
| Quantity: | 68 P |

| | |
|---|---|
| Manifest Year: | 2009 New Jersey Manifest Data |
| Waste Code: | D009 |
| Hand Code: | H141 |
| Quantity: | 2 P |

| | |
|---|---|
| Manifest Number: | 000021730VES |
| EPA ID: | NYD073669350 |
| Date Shipped: | 01/08/2007 |
| 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 |

**STATE UNIVERSITY OF NEW YORK AT GENESEO (Continued)** **1000397717**

| | |
|---|---|
| Transporter 8 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | 01/08/2007 |
| Date Trans2 Transported Waste: | 01/15/2007 |
| 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: | 01/17/2007 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | GENESEO 14454 |
| Reason Load Was Rejected: | Not reported |

Waste:

| | |
|---|---|
| Manifest Year: | 2007 New Jersey Manifest Data |
| Waste Code: | D002 |
| Hand Code: | H14 |
| Quantity: | 60 P |
| | |
| Manifest Year: | 2007 New Jersey Manifest Data |
| Waste Code: | D003 |
| Hand Code: | H14 |
| Quantity: | 1 P |
| | |
| Manifest Year: | 2007 New Jersey Manifest Data |
| Waste Code: | U080 |
| Hand Code: | H14 |
| Quantity: | 69 P |
| | |
| Manifest Year: | 2007 New Jersey Manifest Data |
| Waste Code: | D001 |
| Hand Code: | H14 |
| Quantity: | 5 P |
| | |
| Manifest Year: | 2007 New Jersey Manifest Data |
| Waste Code: | D001 |
| Hand Code: | H14 |
| Quantity: | 2 P |
| | |
| Manifest Year: | 2007 New Jersey Manifest Data |
| Waste Code: | F003 |
| Hand Code: | H14 |

**STATE UNIVERSITY OF NEW YORK AT GENESEO (Continued)** **1000397717**

| | |
|---|---|
| Quantity: | 127 P |
| Manifest Year: | 2007 New Jersey Manifest Data |
| Waste Code: | D002 |
| Hand Code: | H14 |
| Quantity: | 18 P |
| Manifest Year: | 2007 New Jersey Manifest Data |
| Waste Code: | F003 |
| Hand Code: | H14 |
| Quantity: | 252 P |
| Manifest Year: | 2007 New Jersey Manifest Data |
| Waste Code: | D009 |
| Hand Code: | H14 |
| Quantity: | 1 P |
| Manifest Year: | 2007 New Jersey Manifest Data |
| Waste Code: | D001 |
| Hand Code: | H14 |
| Quantity: | 45 P |
| Manifest Number: | 000250867VES |
| EPA ID: | NYD073669350 |
| Date Shipped: | 03/13/2008 |
| 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: | 03/13/2008 |
| Date Trans2 Transported Waste: | 03/14/2008 |
| 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: | 03/20/2008 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |

**STATE UNIVERSITY OF NEW YORK AT GENESEO (Continued)** **1000397717**

| | |
|---|---|
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | GENESEO 14454 |
| Reason Load Was Rejected: | Not reported |

Waste:

| | |
|---|---|
| Manifest Year: | 2008 New Jersey Manifest Data |
| Waste Code: | F003 |
| Hand Code: | H141 |
| Quantity: | 127 P |

| | |
|---|---|
| Manifest Year: | 2008 New Jersey Manifest Data |
| Waste Code: | D001 |
| Hand Code: | H141 |
| Quantity: | 107 P |

| | |
|---|---|
| Manifest Year: | 2008 New Jersey Manifest Data |
| Waste Code: | D009 |
| Hand Code: | H141 |
| Quantity: | 10 P |

| | |
|---|---|
| Manifest Year: | 2008 New Jersey Manifest Data |
| Waste Code: | D002 |
| Hand Code: | H141 |
| Quantity: | 227 P |

| | |
|---|---|
| Manifest Number: | NJA3091682 |
| EPA ID: | NYD073669350 |
| Date Shipped: | 03/28/2006 |
| 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: | 03/28/2006 |
| Date Trans2 Transported Waste: | 04/10/2006 |
| 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: | 04/11/2006 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |

**STATE UNIVERSITY OF NEW YORK AT GENESEO (Continued)** **1000397717**

| | |
|---|---|
| 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: | 06080622 |
| Was Load Rejected: | GENESEO 14454 |
| Reason Load Was Rejected: | Not reported |

| | |
|---|---|
| Manifest Number: | 000526322VES |
| EPA ID: | NYD073669350 |
| Date Shipped: | 12/15/2011 |
| 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: | 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 |
| Generator EPA Facility Name: | SUNY GENESEO |
| Transporter-1 EPA Facility Name: | VEOLIA ES TECHNICAL SOLUTIONS CORP |
| Transporter-2 EPA Facility Name: | FREEHOLD CARTAGE INC |
| TSDF EPA Facility Name: | VEOLIA ES TECHNICAL SOLUTIONS LLC |
| QTY Units: | Pounds |
| Transporter SEQ ID: | 1.00 |
| Transporter-1 Date: | 12/15/2011 |
| Waste SEQ ID: | 2.00 |
| 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: | 12/30/2011 |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | GENESEO 14454 |
| Reason Load Was Rejected: | Not reported |

Waste:

| | |
|---|---|
| Manifest Year: | 2011 New Jersey Manifest Data |
| Waste Code: | D009 |
| Hand Code: | H141 |
| Quantity: | 1.00 Pounds |

**STATE UNIVERSITY OF NEW YORK AT GENESEO (Continued)** **1000397717**

| | |
|---|---|
| Manifest Year: | 2011 New Jersey Manifest Data |
| Waste Code: | P105 |
| Hand Code: | H141 |
| Quantity: | 1.00 Pounds |

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYD073669350 |
| Country: | USA |
| Location Address 1: | 1 COLLEGE CIRCLE-118 CLARK |
| Location Address 2: | Not reported |
| Location City: | GENESEO |
| Location State: | NY |
| Location Zip Code: | 14454 |
| Location Zip Code 4: | Not reported |

Mailing Info:

| | |
|---|---|
| Name: | SUNY GENESEO |
| Contact: | KIMBERLY DALTON-FERRIS |
| Address: | 1 COLLEGE CIRCLE |
| City/State/Zip: | GENESEO, NY 14454 |
| Country: | USA |
| Phone: | 585-245-5512 |

Manifest:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | MAD039322250 |
| Trans2 State ID: | NYD982792814 |
| Generator Ship Date: | 04/28/2014 |
| Trans1 Recv Date: | 04/28/2014 |
| Trans2 Recv Date: | 05/01/2014 |
| TSD Site Recv Date: | 05/05/2014 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD073669350 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID: | OHD000816629 |
| Waste Code: | Not reported |
| Quantity: | 55 |
| Units: | P - Pounds |
| Number of Containers: | 1 |
| Container Type: | CF - Fiber or plastic boxes, cartons |
| Handling Method: | L Landfill. |
| Specific Gravity: | 1 |
| Year: | 2014 |
| Manifest Tracking Num: | 007470124FLE |
| Import Ind: | N |
| Export Ind: | N |
| Discr Quantity Ind: | N |
| Discr Type Ind: | N |
| Discr Residue Ind: | N |
| Discr Partial Reject Ind: | N |

**STATE UNIVERSITY OF NEW YORK AT GENESEO (Continued)** **1000397717**

| | |
|---|---|
| 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: | MAD039322250 |
| Trans2 State ID: | NYD982792814 |
| Generator Ship Date: | 04/28/2014 |
| Trans1 Recv Date: | 04/28/2014 |
| Trans2 Recv Date: | 05/01/2014 |
| TSD Site Recv Date: | 05/05/2014 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD073669350 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID: | OHD000816629 |
| Waste Code: | Not reported |
| Quantity: | 1 |
| Units: | P - Pounds |
| Number of Containers: | 1 |
| 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 |
| Year: | 2014 |
| Manifest Tracking Num: | 007470124FLE |
| 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: | MAD039322250 |
| Trans2 State ID: | NYD982792814 |
| Generator Ship Date: | 04/28/2014 |
| Trans1 Recv Date: | 04/28/2014 |
| Trans2 Recv Date: | 05/01/2014 |
| TSD Site Recv Date: | 05/07/2014 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD073669350 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID: | NCD000648451 |

**STATE UNIVERSITY OF NEW YORK AT GENESEO (Continued)** **1000397717**

| | |
|---|---|
| Waste Code: | Not reported |
| Quantity: | 210 |
| 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: | 2014 |
| Manifest Tracking Num: | 007470125FLE |
| 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: | MAD039322250 |
| Trans2 State ID: | NYD982792814 |
| Generator Ship Date: | 04/28/2014 |
| Trans1 Recv Date: | 04/28/2014 |
| Trans2 Recv Date: | 05/01/2014 |
| TSD Site Recv Date: | 05/07/2014 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD073669350 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID: | NCD000648451 |
| Waste Code: | Not reported |
| Quantity: | 1 |
| Units: | P - Pounds |
| Number of Containers: | 1 |
| Container Type: | DF - Fiberboard or plastic drums (glass) |
| Handling Method: | B Incineration, heat recovery, burning. |
| Specific Gravity: | 1 |
| Year: | 2014 |
| Manifest Tracking Num: | 007470125FLE |
| 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 |

**STATE UNIVERSITY OF NEW YORK AT GENESEO (Continued)** **1000397717**

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | MAD039322250 |
| Trans2 State ID: | NYD982792814 |
| Generator Ship Date: | 04/28/2014 |
| Trans1 Recv Date: | 04/28/2014 |
| Trans2 Recv Date: | 05/01/2014 |
| TSD Site Recv Date: | 05/07/2014 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD073669350 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID: | NCD000648451 |
| Waste Code: | Not reported |
| Quantity: | 40 |
| 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: | 2014 |
| Manifest Tracking Num: | 007470125FLE |
| 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: | MAD039322250 |
| Trans2 State ID: | NYD982792814 |
| Generator Ship Date: | 04/28/2014 |
| Trans1 Recv Date: | 04/28/2014 |
| Trans2 Recv Date: | 05/01/2014 |
| TSD Site Recv Date: | 05/07/2014 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD073669350 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID: | NCD000648451 |
| Waste Code: | Not reported |
| Quantity: | 25 |
| Units: | P - Pounds |
| Number of Containers: | 1 |
| 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 |

**STATE UNIVERSITY OF NEW YORK AT GENESEO (Continued)** **1000397717**

| | |
|---|---|
| Year: | 2014 |
| Manifest Tracking Num: | 007470125FLE |
| 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: | PAR000524041 |
| Trans2 State ID: | NJD080631369 |
| Generator Ship Date: | 01/30/2014 |
| Trans1 Recv Date: | 01/30/2014 |
| Trans2 Recv Date: | 01/30/2014 |
| TSD Site Recv Date: | 02/05/2014 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD073669350 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID: | OHD093945293 |
| Waste Code: | Not reported |
| Quantity: | 2400 |
| Units: | P - Pounds |
| Number of Containers: | 12 |
| Container Type: | DM - Metal drums, barrels |
| Handling Method: | B Incineration, heat recovery, burning. |
| Specific Gravity: | 1 |
| Year: | 2014 |
| Manifest Tracking Num: | 000609206VES |
| 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: | MAD039322250 |
| Trans2 State ID: | NYD982792814 |
| Generator Ship Date: | 04/28/2014 |
| Trans1 Recv Date: | 04/28/2014 |

**STATE UNIVERSITY OF NEW YORK AT GENESEO (Continued)** **1000397717**

| | |
|---|---|
| Trans2 Recv Date: | 05/01/2014 |
| TSD Site Recv Date: | 05/07/2014 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD073669350 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID: | NCD000648451 |
| Waste Code: | Not reported |
| Quantity: | 30 |
| 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: | 2014 |
| Manifest Tracking Num: | 007470125FLE |
| 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: | MAD039322250 |
| Trans2 State ID: | NYD982792814 |
| Generator Ship Date: | 04/28/2014 |
| Trans1 Recv Date: | 04/28/2014 |
| Trans2 Recv Date: | 05/01/2014 |
| TSD Site Recv Date: | 05/07/2014 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD073669350 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID: | NCD000648451 |
| Waste Code: | Not reported |
| Quantity: | 15 |
| Units: | P - Pounds |
| Number of Containers: | 1 |
| Container Type: | DF - Fiberboard or plastic drums (glass) |
| Handling Method: | B Incineration, heat recovery, burning. |
| Specific Gravity: | 1 |
| Year: | 2014 |
| Manifest Tracking Num: | 007470125FLE |
| Import Ind: | N |
| Export Ind: | N |
| Discr Quantity Ind: | N |
| Discr Type Ind: | N |

**STATE UNIVERSITY OF NEW YORK AT GENESEO (Continued)** **1000397717**

| | |
|---|---|
| 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: | MAD039322250 |
| Trans2 State ID: | NYD982792814 |
| Generator Ship Date: | 04/28/2014 |
| Trans1 Recv Date: | 04/28/2014 |
| Trans2 Recv Date: | 05/01/2014 |
| TSD Site Recv Date: | 05/07/2014 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD073669350 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID: | NCD000648451 |
| Waste Code: | Not reported |
| Quantity: | 4 |
| Units: | P - Pounds |
| Number of Containers: | 1 |
| Container Type: | DF - Fiberboard or plastic drums (glass) |
| Handling Method: | B Incineration, heat recovery, burning. |
| Specific Gravity: | 1 |
| Year: | 2014 |
| Manifest Tracking Num: | 007470125FLE |
| 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: | MAD039322250 |
| Trans2 State ID: | NYD982792814 |
| Generator Ship Date: | 04/28/2014 |
| Trans1 Recv Date: | 04/28/2014 |
| Trans2 Recv Date: | 05/01/2014 |
| TSD Site Recv Date: | 05/07/2014 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD073669350 |
| Trans1 EPA ID: | Not reported |

**STATE UNIVERSITY OF NEW YORK AT GENESEO (Continued)** **1000397717**

| | |
|---|---|
| Trans2 EPA ID: | Not reported |
| TSDF ID: | NCD000648451 |
| Waste Code: | Not reported |
| Quantity: | 440 |
| Units: | P - Pounds |
| Number of Containers: | 2 |
| Container Type: | CF - Fiber or plastic boxes, cartons |
| Handling Method: | B Incineration, heat recovery, burning. |
| Specific Gravity: | 1 |
| Year: | 2014 |
| Manifest Tracking Num: | 007470125FLE |
| 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: | MAD039322250 |
| Trans2 State ID: | NYD982792814 |
| Generator Ship Date: | 05/28/2014 |
| Trans1 Recv Date: | 05/28/2014 |
| Trans2 Recv Date: | 06/05/2014 |
| TSD Site Recv Date: | 06/17/2014 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD073669350 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID: | NCD000648451 |
| Waste Code: | Not reported |
| Quantity: | 1 |
| 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: | 2014 |
| Manifest Tracking Num: | 007468455FLE |
| 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 |

**STATE UNIVERSITY OF NEW YORK AT GENESEO (Continued)** **1000397717**

Mgmt Method Type Code: H141

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: MAD039322250
Trans2 State ID: NYD982792814
Generator Ship Date: 04/28/2014
Trans1 Recv Date: 04/28/2014
Trans2 Recv Date: 05/01/2014
TSD Site Recv Date: 05/07/2014
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD073669350
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID: NCD000648451
Waste Code: Not reported
Quantity: 220
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: 2014
Manifest Tracking Num: 007470125FLE
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: TXR000077970
Generator Ship Date: 12/21/2009
Trans1 Recv Date: 12/21/2009
Trans2 Recv Date: 12/22/2009
TSD Site Recv Date: 12/29/2009
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD073669350
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID: ILD098642424
Waste Code: Not reported
Quantity: 68.0
Units: P - Pounds
Number of Containers: 1.0

**STATE UNIVERSITY OF NEW YORK AT GENESEO (Continued)** **1000397717**

| | |
|---|---|
| Container Type: | DM - Metal drums, barrels |
| Handling Method: | B Incineration, heat recovery, burning. |
| Specific Gravity: | 1.0 |
| Year: | 2009 |
| Manifest Tracking Num: | 000380194VES |
| 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: | H040 |

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NJD080631369 |
| Trans2 State ID: | NJD054126164 |
| Generator Ship Date: | 12/21/2009 |
| Trans1 Recv Date: | 12/21/2009 |
| Trans2 Recv Date: | 12/23/2009 |
| TSD Site Recv Date: | 12/28/2009 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD073669350 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID: | NJD980536593 |
| Waste Code: | Not reported |
| Quantity: | 27.0 |
| 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: | 2009 |
| Manifest Tracking Num: | 000380201VES |
| 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 |

**STATE UNIVERSITY OF NEW YORK AT GENESEO (Continued)** **1000397717**

| | |
|---|---|
| Trans2 State ID: | TXR000077970 |
| Generator Ship Date: | 12/21/2009 |
| Trans1 Recv Date: | 12/21/2009 |
| Trans2 Recv Date: | 12/22/2009 |
| TSD Site Recv Date: | 12/29/2009 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD073669350 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID: | ILD098642424 |
| Waste Code: | Not reported |
| Quantity: | 2.0 |
| 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: | 2009 |
| Manifest Tracking Num: | 000380194VES |
| 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: | H040 |

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | TXR000050930 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 10/02/2009 |
| Trans1 Recv Date: | 10/02/2009 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 10/02/2009 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD073669350 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID: | NYD980753784 |
| Waste Code: | Not reported |
| Quantity: | 9.0 |
| Units: | G - Gallons (liquids only)* (8.3 pounds) |
| Number of Containers: | 1.0 |
| Container Type: | DM - Metal drums, barrels |
| Handling Method: | R Material recovery of more than 75 percent of the total material. |
| Specific Gravity: | 1.0 |
| Year: | 2009 |
| Manifest Tracking Num: | 002103921SKS |
| Import Ind: | N |

**STATE UNIVERSITY OF NEW YORK AT GENESEO (Continued)** **1000397717**

| | |
|---|---|
| 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: | 12/21/2009 |
| Trans1 Recv Date: | 12/21/2009 |
| Trans2 Recv Date: | 12/23/2009 |
| TSD Site Recv Date: | 12/28/2009 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD073669350 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID: | NJD980536593 |
| Waste Code: | Not reported |
| Quantity: | 17.0 |
| 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: | 2009 |
| Manifest Tracking Num: | 000380201VES |
| 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: | 06/23/2009 |
| Trans1 Recv Date: | 06/23/2009 |
| Trans2 Recv Date: | 07/01/2009 |
| TSD Site Recv Date: | 07/07/2009 |
| Part A Recv Date: | Not reported |

**STATE UNIVERSITY OF NEW YORK AT GENESEO (Continued)** **1000397717**

| | |
|---|---|
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD073669350 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID: | NJD980536593 |
| Waste Code: | Not reported |
| Quantity: | 2.0 |
| 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: | 2009 |
| Manifest Tracking Num: | 000369037VES |
| 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: | TXR000077970 |
| Generator Ship Date: | 12/21/2009 |
| Trans1 Recv Date: | 12/21/2009 |
| Trans2 Recv Date: | 12/22/2009 |
| TSD Site Recv Date: | 12/29/2009 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD073669350 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID: | ILD098642424 |
| 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: | B Incineration, heat recovery, burning. |
| Specific Gravity: | 1.0 |
| Year: | 2009 |
| Manifest Tracking Num: | 000380194VES |
| 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 |

**STATE UNIVERSITY OF NEW YORK AT GENESEO (Continued)** **1000397717**

Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: H040

AIRS (AFS):

Compliance and Violation Data Major Sources:
EPA plant ID: 110000838504
Plant name: STATE UNIVERSITY OF NEW YORK AT GENESEO
Plant address: 1 COLLEGE CIR
GENESEO, NY 14454
County: LIVINGSTON
Region code: 02
Dunn & Bradst #: Not reported
Air quality cntrl region: 160
Sic code: 8221
Sic code desc: Not reported
North Am. industrial classf: 611310
NAIC code description: Colleges, Universities, and Professional Schools
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: SOURCE OWNED OR OPERATED BY THE STATE
Current HPV: Not reported

---

**A9** **SUNY GENESEO** **NY Spills S102130409**
**1 COLLEGE CIRCLE** **NY AIRS N/A**
**< 1/8** **GENESEO, NY 14454**
**1 ft.**

**Site 6 of 13 in cluster A**

**Relative:**
**Lower**

**Actual:**
**743 ft.**

SPILLS:
Facility ID: 1406621
Facility Type: ER
DER Facility ID: 309153
Site ID: 500098
DEC Region: 8
Spill Date: 9/19/2014
Spill Number/Closed Date: 1406621 / 9/22/2014
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: 2626
Investigator: TGHALL
Referred To: Not reported
Reported to Dept: 9/22/2014
CID: Not reported
Water Affected: Not reported
Spill Source: Institutional, Educational, Gov., Other
Spill Notifier: Responsible Party
Cleanup Ceased: 9/22/2014
Cleanup Meets Std: True
Last Inspection: Not reported

**SUNY GENESEO (Continued)** **S102130409**

| | |
|---|---|
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 9/22/2014 |
| Spill Record Last Update: | 9/24/2014 |
| Spiller Name: | CHUCK REYES |
| Spiller Company: | SUNY GENESEO |
| Spiller Address: | 1 COLLEGE CIRCLE |
| Spiller City,St,Zip: | GENESEO, NY 14454 |
| Spiller Company: | 999 |
| Contact Name: | Not reported |
| Contact Phone: | Not reported |
| DEC Memo: | 09/22/2014: NO FURTHER ACTION IS ANTICIPATED BY SPILLS UNIT AT THIS TIME-CLOSED. |
| Remarks: | MATERIAL RELEASED FROM NEW COOLING UNIT. REPAIRS HAVE BEEN MADE. |

Material:

| | |
|---|---|
| Site ID: | 500098 |
| Operable Unit ID: | 1249500 |
| Operable Unit: | 01 |
| Material ID: | 2251115 |
| Material Code: | 1581A |
| Material Name: | REFRIGERANT |
| Case No.: | Not reported |
| Material FA: | Other |
| Quantity: | 6 |
| Units: | Pounds |
| Recovered: | No |
| Resource Affected: | Not reported |
| Oxygenate: | False |

Tank Test:

| | |
|---|---|
| Facility ID: | 0905338 |
| Facility Type: | ER |
| DER Facility ID: | 366749 |
| Site ID: | 417600 |
| DEC Region: | 8 |
| Spill Date: | 8/7/2009 |
| Spill Number/Closed Date: | 0905338 / 8/7/2009 |
| Spill Cause: | Human Error |
| Spill Class: | Possible release with minimal potential for fire or hazard or Known release with no damage. No DEC Response. No corrective action required. |
| SWIS: | 2626 |
| Investigator: | dltilton |
| Referred To: | Not reported |
| Reported to Dept: | 8/7/2009 |
| CID: | Not reported |
| 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 |

**SUNY GENESEO (Continued)** **S102130409**

| | |
|---|---|
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 8/7/2009 |
| Spill Record Last Update: | 8/7/2009 |
| Spiller Name: | Not reported |
| Spiller Company: | Not reported |
| Spiller Address: | Not reported |
| Spiller City,St,Zip: | Not reported |
| Spiller Company: | Not reported |
| Contact Name: | DARLENE MECISTER |
| Contact Phone: | (585) 245-5812 |
| DEC Memo: | Not reported |
| Remarks: | CALLER STATES THAT WHILE MOWING LAWN, DRIVER STRUCK CURB SPILLING TWO QUARTS OF OIL TO THE BLACKTOP. ABSORBENT PADS APPLIED AND SPILL CLEANED UP. NO FURTHER ACTION IS NEEDED BY SPILLS . CLOSED. |

Material:

| | |
|---|---|
| Site ID: | 417600 |
| Operable Unit ID: | 1173816 |
| Operable Unit: | 01 |
| Material ID: | 2165855 |
| Material Code: | 0015 |
| Material Name: | Motor Oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 0.5 |
| Units: | Gallons |
| Recovered: | 0.5 |
| Resource Affected: | Not reported |
| Oxygenate: | False |

Tank Test:

| | |
|---|---|
| Facility ID: | 1006737 |
| Facility Type: | ER |
| DER Facility ID: | 309153 |
| Site ID: | 440106 |
| DEC Region: | 8 |
| Spill Date: | 8/5/2010 |
| Spill Number/Closed Date: | 1006737 / 11/16/2010 |
| Spill Cause: | Equipment Failure |
| Spill Class: | Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken. |
| SWIS: | 2626 |
| Investigator: | MFZAMIAR |
| Referred To: | Not reported |
| Reported to Dept: | 9/22/2010 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | 11/16/2010 |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |

**SUNY GENESEO (Continued)** **S102130409**

| | |
|---|---|
| Remediation Phase: | 0 |
| Date Entered In Computer: | 9/22/2010 |
| Spill Record Last Update: | 11/16/2010 |
| Spiller Name: | Not reported |
| Spiller Company: | SUNY GENESEO |
| Spiller Address: | 1 COLLEGE CIRCLE |
| Spiller City,St,Zip: | GENESEO, NY 14454 |
| Spiller Company: | 999 |
| Contact Name: | CHUCK REYES |
| Contact Phone: | (585) 245-5512 |
| DEC Memo: | DEPARTMENT TO INSPECT. REYES TO CONTINUE TO MONITOR SUMP AND NOTIFY DEPARTMENT OF ANY CHANGES.10/5/10 MZ ON SITE WITH CHUCK REYES AND JEFF KAPLAN (FACILITIES PLANNING) TO INSPECT SITE. INSPECTED PIT THAT IS THE BOTTOM OF THE MOVING STAGE FOR THE THEATRE. NO VISUAL EVIDENCE OF IMPACTS. THERE IS A SUMP CROCK THAT COLLECTS ANY WATER THAT INFILTRATES INTO THE PIT. SUNY GENESEO TO EITHER INSTALL AN OIL SENSOR IN THE CROCK (THAT WILL ALARM/NOTIFY MAINTENANCE IF OIL ENTERS THE CROCK) OR PIPE IT TO AN OIL/WATER SEPARATOR. MZ STATED THAT IF IT IS PIPED TO AN OIL/WATER SEPARATOR THEY MUST NOTIFY THE MUNICIPALITY IN CHARGE OF THE SEWER THAT THE SEPARATOR WILL DISCHARGE TO. IF THEY OPT FOR THE SENSOR, THEN A CONTINGENCY PLAN MUST BE DEVELOPED THAT DISCUSSES WHAT WILL BE DONE IF THE ALARM IS TRIGGERED. REYES TO NOTIFY DEPT OF THEIR DECISION.MZ STATED THAT IF OIL SEEPAGE INCREASES/BECOME SUBSTANTIAL, THEN THE DEPT MUST BE NOTIFIED AND A SUBSURFACE INVESTIGATION WILL NEED TO BE CONDUCTED.11/16/10 MZ TELCON WITH CHUCK REYES TO CHECK ON STATUS OF EITHER SUMP CROCK ALARM OR OIL/WATER SEPARATOR. THE SCHOOL IS CURRENTLY WORKING WITH CONSULTANTS/CONTRACOTRS TO INSTALL AN OIL/WATER SEPARATOR. REYES STATED THAT THYE WILL CONTACT THE TOWN OF GENESEO WASTE WATER TREATMENT PLANT REGARDING ANY PERMITS NEEDED.NO FURTHER ACTION REQUIRED BY SPILLS. |
| Remarks: | CALLER STATED THAT AN OLD HYDRAULIC LIFT THAT WAS PART OF THE STAGE WAS REPLACED. THERE IS A CREEK RUNNING UNDER THE BUILDING AND WATER ENTRY THROUGH THE FLOOR WAS COMMON. A SUMP WAS INSTALLED TO CONTROL WATER ENTRY AND THE FLOOR HAD A WATERPROOF MATERIAL APPLIED. WATER COMING THROUGH A CRACK IN THE WALL (APPROXIMATELY 1 FOOT ABOVE FLOOR) HAD OIL NOTED IN IT. WATER WAS CLEANED UP FROM FLOOR AND PUT INTO DRUM AND IT WAS ESTIMATED THAT ABOUT 5-10 GALLONS WAS OIL. THE CRACK HAS SINCE BEEN PATCHED. THE SUMP IS LOCATED NEAR THE CRACK IN THE WALL AND THERE IS A SLIGHT OIL SHEEN/RESIDUE ON THE WATER IN THE SUMP. IN THE PROCESS OF INSTALLING AN OIL ALARM AND AN OIL/WATER SEPARATOR. |

Material:

| | |
|---|---|
| Site ID: | 440106 |
| Operable Unit ID: | 1190727 |
| Operable Unit: | 01 |
| Material ID: | 2185795 |
| Material Code: | 0010 |
| Material Name: | Hydraulic Oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Gallons |
| Recovered: | 5 |
| Resource Affected: | Not reported |
| Oxygenate: | False |

**SUNY GENESEO (Continued)** **S102130409**

Tank Test:

| | |
|---|---|
| Facility ID: | 9806587 |
| Facility Type: | ER |
| DER Facility ID: | 123165 |
| Site ID: | 144508 |
| DEC Region: | 8 |
| Spill Date: | 8/27/1998 |
| Spill Number/Closed Date: | 9806587 / 6/25/2003 |
| Spill Cause: | Equipment Failure |
| Spill Class: | Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken. |
| SWIS: | 2626 |
| Investigator: | TGHALL |
| Referred To: | Not reported |
| Reported to Dept: | 8/27/1998 |
| CID: | 233 |
| Water Affected: | Not reported |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | 12/1/1998 |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 8/27/1998 |
| Spill Record Last Update: | 5/10/2007 |
| Spiller Name: | ABOVE CALLER |
| Spiller Company: | SUNY GENESEO |
| Spiller Address: | 1 COLLEGE CIRCLE |
| Spiller City,St,Zip: | GENESEO, ZZ |
| Spiller Company: | 001 |
| Contact Name: | ABOVE CALLER |
| Contact Phone: | Not reported |
| DEC Memo: | 09/07/98: L.C.H.D. NOTIFIED OF INCIDENT / WILL FOLLOWUP.11/9/98: TW PHONE CONVERSATION WITH CALLER. THE CONTRCTOR WILL BE ON-SITE TO SAMPLE ON 11/10/98, WITH THE ACTUAL CLEANUP DATE TO BE SET LATER.12/1/98: TH ON SITE WITH FERRIS. VAC TRUCK REMOVING AFFECTED SOILS AND DEBRIS FROM BOREHOLE AT FORMER ELEVATOR SHAFT LOCATION. AS PER FERRIS, AFTER SOILS ARE REMOVED A NEW CASING WILL BE INSTALLED AND SHAFT WILL BE ALLOWED TO RECHARGE WITH (PERCHED) GROUNDWATER. A WATER SAMPLE WILL THEN BE COLLECTED FOR EPA 8270 W/10 TICS. FERRIS TO UPDATE DEPT. AND FORWARD CLOSURE REPORT. 06/25/2003 NO FURTHER ACTION NEEDED. |
| Remarks: | A hydro cylinder sprung a leak. It appears to be leaking approximately 30 feet underground. The cylinder will be pumped out. The cylinder is attached to an elevator shaft. SUNY Geneseo to hire a company to remediate the site and update the Department. Spillage is closer to 50 gallons. Trying to get OGS involved. |

Material:

| | |
|---|---|
| Site ID: | 144508 |
| Operable Unit ID: | 1067810 |
| Operable Unit: | 01 |
| Material ID: | 563640 |

**SUNY GENESEO (Continued)** **S102130409**

| | |
|---|---|
| Material Code: | 0010 |
| Material Name: | Hydraulic Oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 20 |
| Units: | Gallons |
| Recovered: | No |
| Resource Affected: | Not reported |
| Oxygenate: | False |

Tank Test:

| | |
|---|---|
| Facility ID: | 0070236 |
| Facility Type: | ER |
| DER Facility ID: | 123165 |
| Site ID: | 144501 |
| DEC Region: | 8 |
| Spill Date: | 7/6/2000 |
| Spill Number/Closed Date: | 0070236 / 7/6/2000 |
| 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: | 2626 |
| Investigator: | DLTILTON |
| Referred To: | Not reported |
| Reported to Dept: | 7/6/2000 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | 7/6/2000 |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 7/6/2000 |
| Spill Record Last Update: | 3/9/2011 |
| Spiller Name: | ABOVE CALLER |
| Spiller Company: | SUNY GENESEO |
| Spiller Address: | 1 COLLEGE CIRCLE |
| Spiller City,St,Zip: | GENESEO, NY 14454- |
| Spiller Company: | 001 |
| Contact Name: | KIM DALTON FERRIS |
| Contact Phone: | (716) 245-5512 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was "DT".03/09/11: PAPER FILE REMOVED PER FILE RETENTION POLICY. |
| Remarks: | A RELIEF VALVE MALFUNCTIONED, RELEASING R-22 TO THE AIR. THE UNIT TO BE REPAIRED. NO FURTHER ACTION NEEDED BY SPILLS. CLOSED. COPY TO AIR. |

Material:

| | |
|---|---|
| Site ID: | 144501 |
| Operable Unit ID: | 836065 |
| Operable Unit: | 01 |
| Material ID: | 538080 |

**SUNY GENESEO (Continued)** **S102130409**

| | |
|---|---|
| Material Code: | 1350A |
| Material Name: | CHLORODIFLUOROMETHANE |
| Case No.: | 00075456 |
| Material FA: | Hazardous Material |
| Quantity: | 25 |
| Units: | Pounds |
| Recovered: | No |
| 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:

| | |
|---|---|
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | EIC001 |
| Process Id: | 004EI |
| Contaminant Name/cas: | PM25-PRI |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.36836826 |
| Unit: | TON |
| Auth Type Code: | Not reported |

| | |
|---|---|
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | FHTGPT |
| Process Id: | 02FFP |
| Contaminant Name/cas: | PM25-PRI |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.14885855 |
| Unit: | TON |
| Auth Type Code: | Not reported |

| | |
|---|---|
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | FHTGPT |
| Process Id: | 02FFP |
| Contaminant Name/cas: | 85018 |

**SUNY GENESEO (Continued)** **S102130409**

| | |
|---|---|
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.0005 |
| Unit: | LB |
| Auth Type Code: | Not reported |
| | |
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | FHTGPT |
| Process Id: | 02FFP |
| Contaminant Name/cas: | 83329 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.0001 |
| Unit: | LB |
| Auth Type Code: | Not reported |
| | |
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | FHTGPT |
| Process Id: | 02FFP |
| Contaminant Name/cas: | 7782492 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.0009 |
| Unit: | LB |
| Auth Type Code: | Not reported |
| | |
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | FHTGPT |
| Process Id: | 02FFP |
| Contaminant Name/cas: | SO2 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.01181999 |
| Unit: | TON |
| Auth Type Code: | Not reported |
| | |
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |

**SUNY GENESEO (Continued)** **S102130409**

Emission Unit Id: FHTGPT
Process Id: 02FFP
Contaminant Name/cas: 7439921
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.01
Unit: LB
Auth Type Code: Not reported

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36051
DEC Id: 8242600012
Emission Unit Id: FHTGPT
Process Id: 02FFP
Contaminant Name/cas: 110543
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 47.6699981
Unit: LB
Auth Type Code: Not reported

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36051
DEC Id: 8242600012
Emission Unit Id: FHTGPT
Process Id: 02FFP
Contaminant Name/cas: 108883
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.09
Unit: LB
Auth Type Code: Not reported

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36051
DEC Id: 8242600012
Emission Unit Id: FHTGPT
Process Id: 02FFP
Contaminant Name/cas: CO
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 1.65480004
Unit: TON
Auth Type Code: Not reported

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported

**SUNY GENESEO (Continued)** **S102130409**

| | |
|---|---|
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | FHTGPT |
| Process Id: | 02FFP |
| Contaminant Name/cas: | 50000 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 1.98000001 |
| Unit: | LB |
| Auth Type Code: | Not reported |

| | |
|---|---|
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | FHTGPT |
| Process Id: | 02FFP |
| Contaminant Name/cas: | 191242 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0 |
| Unit: | LB |
| Auth Type Code: | Not reported |

| | |
|---|---|
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | EIC001 |
| Process Id: | 004EI |
| Contaminant Name/cas: | SO2 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.02925 |
| Unit: | TON |
| Auth Type Code: | Not reported |

| | |
|---|---|
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | FHTGPT |
| Process Id: | 01FFP |
| Contaminant Name/cas: | 50000 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 13.0399999 |
| Unit: | LB |
| Auth Type Code: | Not reported |

**SUNY GENESEO (Continued)** **S102130409**

| | |
|---|---|
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | FHTGPT |
| Process Id: | 02FFP |
| Contaminant Name/cas: | 218019 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0 |
| Unit: | LB |
| Auth Type Code: | Not reported |

| | |
|---|---|
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | EIC001 |
| Process Id: | 004EI |
| Contaminant Name/cas: | 85018 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.0011 |
| Unit: | LB |
| Auth Type Code: | Not reported |

| | |
|---|---|
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | EIC001 |
| Process Id: | 004EI |
| Contaminant Name/cas: | 50328 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.0001 |
| Unit: | LB |
| Auth Type Code: | Not reported |

| | |
|---|---|
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | EIC001 |
| Process Id: | 004EI |
| Contaminant Name/cas: | 7440020 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.2 |

**SUNY GENESEO (Continued)** **S102130409**

| | |
|---|---|
| Unit: | LB |
| Auth Type Code: | Not reported |
| | |
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | FHTGPT |
| Process Id: | 02FFP |
| Contaminant Name/cas: | 206440 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.0001 |
| Unit: | LB |
| Auth Type Code: | Not reported |
| | |
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | FHTGPT |
| Process Id: | 01FFP |
| Contaminant Name/cas: | VOC |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.020655 |
| Unit: | TON |
| Auth Type Code: | Not reported |
| | |
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | FHTGPT |
| Process Id: | 02FFP |
| Contaminant Name/cas: | 56553 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0 |
| Unit: | LB |
| Auth Type Code: | Not reported |
| | |
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | FHTGPT |
| Process Id: | 02FFP |
| Contaminant Name/cas: | 120127 |

**SUNY GENESEO (Continued)** **S102130409**

| | |
|---|---|
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.0001 |
| Unit: | LB |
| Auth Type Code: | Not reported |
| | |
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | EIC001 |
| Process Id: | 004EI |
| Contaminant Name/cas: | CO |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 4.095 |
| Unit: | TON |
| Auth Type Code: | Not reported |
| | |
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | EIC001 |
| Process Id: | 004EI |
| Contaminant Name/cas: | 7782492 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.0023 |
| Unit: | LB |
| Auth Type Code: | Not reported |
| | |
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | FHTGPT |
| Process Id: | 01FFP |
| Contaminant Name/cas: | PM10-PRI |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.31239498 |
| Unit: | TON |
| Auth Type Code: | Not reported |
| | |
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |

**SUNY GENESEO (Continued)** **S102130409**

Emission Unit Id: EIC001
Process Id: 004EI
Contaminant Name/cas: PM10-PRI
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.36836499
Unit: TON
Auth Type Code: Not reported

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36051
DEC Id: 8242600012
Emission Unit Id: EIC001
Process Id: 004EI
Contaminant Name/cas: 50000
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 4.90999984
Unit: LB
Auth Type Code: Not reported

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36051
DEC Id: 8242600012
Emission Unit Id: EIC001
Process Id: 004EI
Contaminant Name/cas: 129000
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.0005
Unit: LB
Auth Type Code: Not reported

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36051
DEC Id: 8242600012
Emission Unit Id: EIC001
Process Id: 004EI
Contaminant Name/cas: 120127
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.0002
Unit: LB
Auth Type Code: Not reported

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported

**SUNY GENESEO (Continued)** **S102130409**

| | |
|---|---|
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | EIC001 |
| Process Id: | 004EI |
| Contaminant Name/cas: | 110543 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 117.980003 |
| Unit: | LB |
| Auth Type Code: | Not reported |

| | |
|---|---|
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | FHTGPT |
| Process Id: | 02FFP |
| Contaminant Name/cas: | 7440417 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.0005 |
| Unit: | LB |
| Auth Type Code: | Not reported |

| | |
|---|---|
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | EIC001 |
| Process Id: | 004EI |
| Contaminant Name/cas: | 206440 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.0003 |
| Unit: | LB |
| Auth Type Code: | Not reported |

| | |
|---|---|
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | EIC001 |
| Process Id: | 004EI |
| Contaminant Name/cas: | 71432 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.12999999 |
| Unit: | LB |
| Auth Type Code: | Not reported |

**SUNY GENESEO (Continued)** **S102130409**

| | |
|---|---|
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | EIC001 |
| Process Id: | 004EI |
| Contaminant Name/cas: | 56553 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.0001 |
| Unit: | LB |
| Auth Type Code: | Not reported |

| | |
|---|---|
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | FHTGPT |
| Process Id: | 02FFP |
| Contaminant Name/cas: | 7440484 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.0033 |
| Unit: | LB |
| Auth Type Code: | Not reported |

| | |
|---|---|
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | FHTGPT |
| Process Id: | 02FFP |
| Contaminant Name/cas: | 7439976 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.01 |
| Unit: | LB |
| Auth Type Code: | Not reported |

| | |
|---|---|
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | EIC001 |
| Process Id: | 004EI |
| Contaminant Name/cas: | 7440439 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.1 |

**SUNY GENESEO (Continued)** **S102130409**

| | |
|---|---|
| Unit: | LB |
| Auth Type Code: | Not reported |
| | |
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | EIC001 |
| Process Id: | 004EI |
| Contaminant Name/cas: | 91203 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.03999999 |
| Unit: | LB |
| Auth Type Code: | Not reported |
| | |
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | FHTGPT |
| Process Id: | 02FFP |
| Contaminant Name/cas: | 7440382 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.0079 |
| Unit: | LB |
| Auth Type Code: | Not reported |
| | |
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | FHTGPT |
| Process Id: | 02FFP |
| Contaminant Name/cas: | 50328 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0 |
| Unit: | LB |
| Auth Type Code: | Not reported |
| | |
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | FHTGPT |
| Process Id: | 01FFP |
| Contaminant Name/cas: | NOX |

**SUNY GENESEO (Continued)** **S102130409**

| | |
|---|---|
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 3.26160009 |
| Unit: | TON |
| Auth Type Code: | Not reported |
| | |
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | FHTGPT |
| Process Id: | 01FFP |
| Contaminant Name/cas: | CO |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.6795 |
| Unit: | TON |
| Auth Type Code: | Not reported |
| | |
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | EIC001 |
| Process Id: | 004EI |
| Contaminant Name/cas: | 7440417 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.0012 |
| Unit: | LB |
| Auth Type Code: | Not reported |
| | |
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | FHTGPT |
| Process Id: | 02FFP |
| Contaminant Name/cas: | 7440439 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.03999999 |
| Unit: | LB |
| Auth Type Code: | Not reported |
| | |
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |

**SUNY GENESEO (Continued)** **S102130409**

Emission Unit Id: FHTGPT
Process Id: 02FFP
Contaminant Name/cas: 71432
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.05
Unit: LB
Auth Type Code: Not reported

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36051
DEC Id: 8242600012
Emission Unit Id: EIC001
Process Id: 004EI
Contaminant Name/cas: 7439921
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.03999999
Unit: LB
Auth Type Code: Not reported

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36051
DEC Id: 8242600012
Emission Unit Id: FHTGPT
Process Id: 02FFP
Contaminant Name/cas: 91203
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.01
Unit: LB
Auth Type Code: Not reported

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36051
DEC Id: 8242600012
Emission Unit Id: FHTGPT
Process Id: 02FFP
Contaminant Name/cas: 7440020
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.07999999
Unit: LB
Auth Type Code: Not reported

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported

**SUNY GENESEO (Continued)** **S102130409**

| | |
|---|---|
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | FHTGPT |
| Process Id: | 01FFP |
| Contaminant Name/cas: | SO2 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 9.64890035 |
| Unit: | TON |
| Auth Type Code: | Not reported |

| | |
|---|---|
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | EIC001 |
| Process Id: | 004EI |
| Contaminant Name/cas: | 86737 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.0003 |
| Unit: | LB |
| Auth Type Code: | Not reported |

| | |
|---|---|
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | EIC001 |
| Process Id: | 004EI |
| Contaminant Name/cas: | 7440484 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.0082 |
| Unit: | LB |
| Auth Type Code: | Not reported |

| | |
|---|---|
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | EIC001 |
| Process Id: | 004EI |
| Contaminant Name/cas: | 108883 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.21999999 |
| Unit: | LB |
| Auth Type Code: | Not reported |

**SUNY GENESEO (Continued)** **S102130409**

| | |
|---|---|
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | EIC001 |
| Process Id: | 004EI |
| Contaminant Name/cas: | 83329 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.0002 |
| Unit: | LB |
| Auth Type Code: | Not reported |

| | |
|---|---|
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | EIC001 |
| Process Id: | 004EI |
| Contaminant Name/cas: | 7440382 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.01 |
| Unit: | LB |
| Auth Type Code: | Not reported |

| | |
|---|---|
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | FHTGPT |
| Process Id: | 02FFP |
| Contaminant Name/cas: | NOX |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 1.97 |
| Unit: | TON |
| Auth Type Code: | Not reported |

| | |
|---|---|
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | FHTGPT |
| Process Id: | 02FFP |
| Contaminant Name/cas: | 7440473 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.05 |

**SUNY GENESEO (Continued)** **S102130409**

| | |
|---|---|
| Unit: | LB |
| Auth Type Code: | Not reported |
| | |
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | FHTGPT |
| Process Id: | 02FFP |
| Contaminant Name/cas: | 207089 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0 |
| Unit: | LB |
| Auth Type Code: | Not reported |
| | |
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | FHTGPT |
| Process Id: | 02FFP |
| Contaminant Name/cas: | 205992 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.0001 |
| Unit: | LB |
| Auth Type Code: | Not reported |
| | |
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | EIC001 |
| Process Id: | 004EI |
| Contaminant Name/cas: | NOX |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 4.875 |
| Unit: | TON |
| Auth Type Code: | Not reported |
| | |
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | EIC001 |
| Process Id: | 004EI |
| Contaminant Name/cas: | 191242 |

**SUNY GENESEO (Continued)** **S102130409**

| | |
|---|---|
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.0001 |
| Unit: | LB |
| Auth Type Code: | Not reported |
| | |
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | EIC001 |
| Process Id: | 004EI |
| Contaminant Name/cas: | 207089 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.0001 |
| Unit: | LB |
| Auth Type Code: | Not reported |
| | |
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | FHTGPT |
| Process Id: | 02FFP |
| Contaminant Name/cas: | 129000 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.0002 |
| Unit: | LB |
| Auth Type Code: | Not reported |
| | |
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | EIC001 |
| Process Id: | 004EI |
| Contaminant Name/cas: | 205992 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.0002 |
| Unit: | LB |
| Auth Type Code: | Not reported |
| | |
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |

**SUNY GENESEO (Continued)** **S102130409**

Emission Unit Id: EIC001
Process Id: 004EI
Contaminant Name/cas: 218019
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.0001
Unit: LB
Auth Type Code: Not reported

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36051
DEC Id: 8242600012
Emission Unit Id: EIC001
Process Id: 004EI
Contaminant Name/cas: 7440473
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.12999999
Unit: LB
Auth Type Code: Not reported

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36051
DEC Id: 8242600012
Emission Unit Id: FHTGPT
Process Id: 02FFP
Contaminant Name/cas: PM10-PRI
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.14885499
Unit: TON
Auth Type Code: Not reported

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported
Expiration Date: Not reported
County Fips: 36051
DEC Id: 8242600012
Emission Unit Id: FHTGPT
Process Id: 02FFP
Contaminant Name/cas: 86737
Epa Control Code: Not reported
Contol Eff: Not reported
Emissions: 0.0001
Unit: LB
Auth Type Code: Not reported

Permit Type: Not reported
Permit Status: Not reported
Issue Date: Not reported

**SUNY GENESEO (Continued)** **S102130409**

| | |
|---|---|
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | FHTGPT |
| Process Id: | 02FFP |
| Contaminant Name/cas: | 7439965 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.01 |
| Unit: | LB |
| Auth Type Code: | Not reported |

| | |
|---|---|
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | FHTGPT |
| Process Id: | 01FFP |
| Contaminant Name/cas: | 7439921 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.34 |
| Unit: | LB |
| Auth Type Code: | Not reported |

| | |
|---|---|
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | EIC001 |
| Process Id: | 004EI |
| Contaminant Name/cas: | 7439965 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.02999999 |
| Unit: | LB |
| Auth Type Code: | Not reported |

| | |
|---|---|
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | EIC001 |
| Process Id: | 004EI |
| Contaminant Name/cas: | 7439976 |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.02 |
| Unit: | LB |
| Auth Type Code: | Not reported |

**SUNY GENESEO (Continued)** **S102130409**

| | |
|---|---|
| Permit Type: | Not reported |
| Permit Status: | Not reported |
| Issue Date: | Not reported |
| Expiration Date: | Not reported |
| County Fips: | 36051 |
| DEC Id: | 8242600012 |
| Emission Unit Id: | FHTGPT |
| Process Id: | 01FFP |
| Contaminant Name/cas: | PM25-PRI |
| Epa Control Code: | Not reported |
| Contol Eff: | Not reported |
| Emissions: | 0.07809969 |
| Unit: | TON |
| Auth Type Code: | Not reported |

---

**A10** **STATE UNIVERSITY OF NEW YORK AT GENESEO** **PA MANIFEST** **S111771573**
**ONE COLLEGE CIRCLE** **N/A**
**< 1/8** **GENESEO, NY 14454**
**1 ft.**

**Site 7 of 13 in cluster A**

**Relative: Lower**

**Actual: 743 ft.**

Manifest Details:

| | |
|---|---|
| Year: | 2010 |
| Manifest Number: | 007931504JJK |
| Manifest Type: | TSD Copy |
| Generator EPA Id: | NYD073669350 |
| Generator Date: | 09/27/2010 |
| Mailing Address: | Not reported |
| Mailing City,St,Zip: | Not reported |
| Contact Name: | Not reported |
| Contact Phone: | 315-737-3827 |
| TSD EPA Id: | PAD067098822 |
| TSD Date: | Not reported |
| TSD Facility Name: | CYCLE CHEM INC |
| TSD Facility Address: | 550 INDUSTRIAL DRIVE |
| TSD Facility City: | LEWISBERRY |
| TSD Facility State: | PA |
| Facility Telephone: | Not reported |
| Page Number: | 1 |
| Line Number: | 1 |
| Waste Number: | D002 |
| Container Number: | 1 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Waste Quantity: | 20 |
| Unit: | Gallons (liquids only) |
| Handling Code: | Not reported |
| TSP EPA Id: | Not reported |
| Date TSP Sig: | Not reported |

| | |
|---|---|
| Year: | 2010 |
| Manifest Number: | 007931504JJK |
| Manifest Type: | TSD Copy |
| Generator EPA Id: | NYD073669350 |
| Generator Date: | 09/27/2010 |
| Mailing Address: | Not reported |
| Mailing City,St,Zip: | Not reported |
| Contact Name: | Not reported |
| Contact Phone: | 315-737-3827 |

**STATE UNIVERSITY OF NEW YORK AT GENESEO (Continued)** **S111771573**

| | |
|---|---|
| TSD EPA Id: | PAD067098822 |
| TSD Date: | Not reported |
| TSD Facility Name: | CYCLE CHEM INC |
| TSD Facility Address: | 550 INDUSTRIAL DRIVE |
| TSD Facility City: | LEWISBERRY |
| TSD Facility State: | PA |
| Facility Telephone: | Not reported |
| Page Number: | 1 |
| Line Number: | 2 |
| Waste Number: | D002 |
| Container Number: | 1 |
| Container Type: | Metal drums, barrels, kegs |
| Waste Quantity: | 20 |
| Unit: | Gallons (liquids only) |
| Handling Code: | Not reported |
| TSP EPA Id: | Not reported |
| Date TSP Sig: | Not reported |

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**A11** **SUNY GENESEO** **NY Spills** **S102126957**
**102 CLARK- SUNY GENESEO** **N/A**
**< 1/8** **GENESEO, NY 14454**
**1 ft.**

**Site 8 of 13 in cluster A**

**Relative:**
**Lower**

**Actual:**
**743 ft.**

SPILLS:

| | |
|---|---|
| Facility ID: | 9110445 |
| Facility Type: | ER |
| DER Facility ID: | 151278 |
| Site ID: | 180354 |
| DEC Region: | 8 |
| Spill Date: | 1/4/1992 |
| Spill Number/Closed Date: | 9110445 / 1/5/1993 |
| Spill Cause: | Equipment Failure |
| Spill Class: | Known release that creates a file or hazard. DEC Response. Willing Responsible Party. Corrective action taken. |
| SWIS: | 2626 |
| Investigator: | CAHETTEN |
| Referred To: | Not reported |
| Reported to Dept: | 1/4/1992 |
| CID: | Not reported |
| Water Affected: | SURFACE WATERS |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | 1/5/1993 |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1/7/1992 |
| Spill Record Last Update: | 3/22/2006 |
| Spiller Name: | MICHAEL DAILY |
| Spiller Company: | SUNY GENESEO |
| Spiller Address: | 102 CLARK RD |
| Spiller City,St,Zip: | GENESEO, NY 14454-1456 |
| Spiller Company: | 001 |
| Contact Name: | MICHAEL DAILY |
| Contact Phone: | (716) 243-2197 |

**SUNY GENESEO (Continued)** **S102126957**

DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "CH".01/04/92: DAILY SAYS THAT WILL PUT ABSORBENT PIGS OUT TO CONTAIN SPILL. HE FEELS THEY CAN CONTAIN SPILL & CONDUCT CLEANUP. CH RESPONDS TO SCENE 01-05 TO GIVE SUNY ADDITIONAL ABSORBENTS. 01/05/92: SPILL IS NOT CONTAINED & IS STILL MIGRATING DOWN STREAM. CH INSTALLS BOOM AHEAD OF SPILL TO CONTAIN IT. INSTRUCTS SUNY GENESEO TO HIRE CONTRACTOR & CONDUCT CLEANUP. 01/06/92: SUNY GENESEO HIRES ENV PRODUCTS TO DO CLEANUP. SPILL APPEARS TO BE 200-500 GALS RATHER THAN 50 GALLONS AS REPORTED. 01/06/92: KEN KASPHZAK, DIR OF ENV HEALTH & SAFETY CALLED TO SAY THAT 2 DAMS PUT UP & PUTTING IN 3RD. ENV. PRODUCTS HIRED TO HELP IN CLEANUP. THEY HAVE VACUUMED UP A GOOD AMOUNT OF PRODUCT. 01/06/92: THEY ARE STARTING TO CLEAN VEGETATION FROM BANKS. THEY ARE DRUMMING UP CONTAMINATED SPILL DEBRIS. 01/13/92: CH INSPECTS SITE ON 01-10-92 & 01-13-92. THE DITCH ALONG FIELD HAS BEEN TRENCHED & CLEANED OUT. EPS HAS BEEN VACUUMING OUT PRODUCT COLLECTING AT ALL DAMS. EPS MEN HAVE GONE THROUGH WOODS & PADDED UP AN ESTIMATED 2000 GAL OF PRODUCT. THEY HAVE APPROX THREE 20 CU YDS OF ROLL OFFS AND 30 DRUMS. 20 DRUMS OF LIQUID, 10 DRUMS OF DEBRIS. SUNY WILL CONTINUE TO MONITOR STREAM & CLEAN UP AS NECESSARY. 01/05/93: CLEANUP WAS COMPLETED SOMETIME IN THE SPRING. CH DID A FOLLOW-UP INSPECTION AND WALKED ENTIRE LENGTH OF STREAM FINDING CLEANUP COMPLETE. NO FURTHER ACTION NECESSARY.03/22/06: PAPER FILE REMOVED PER FILE RETENTION POLICY.

Remarks: FUEL LINE APPARENTLY RUPTURED IN PREHEAT CHAMBER. STEAM FROM CHAMBER HAS BLOW OFF WHICH RELEASED OIL TO STORM SEWER. SEWER DISCHARGES NEAR ATHLETIC FIELD TO DITCH WHICH CROSSES ROUTE 63 & TO GENESEE RIVER.

Material:

| | |
|---|---|
| Site ID: | 180354 |
| Operable Unit ID: | 960454 |
| Operable Unit: | 01 |
| Material ID: | 418985 |
| Material Code: | 0003A |
| Material Name: | #6 Fuel Oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 200 |
| Units: | Gallons |
| Recovered: | No |
| Resource Affected: | Not reported |
| Oxygenate: | False |

Tank Test:

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**A12** **SUNY COLLEGE AT GENESEO** **NY UST U003078334**
**116 CLARK BUILDING** **NY HIST UST N/A**
**< 1/8** **GENESEO, NY 14454** **NY AST**
**1 ft.** **NY HIST AST**

**Site 9 of 13 in cluster A**

**Relative: Lower**

**Actual: 743 ft.**

UST:

| | |
|---|---|
| Id/Status: | 8-013595 / Active |
| Program Type: | PBS |
| Region: | STATE |
| DEC Region: | 8 |
| Expiration Date: | 09/02/2016 |
| UTM X: | 269423.26098000002 |

**SUNY COLLEGE AT GENESEO (Continued)** **U003078334**

UTM Y: 4741979.6255999999
Site Type: School

Affiliation Records:

Site Id: 47584
Affiliation Type: Facility Owner
Company Name: SUNY COLLEGE AT GENESEO
Contact Type: DIRECTOR, ENVIRONMENTAL HEALTH & SAFETY
Contact Name: CHUCK REYES
Address1: 1 COLLEGE CIRCLE
Address2: Not reported
City: GENESEO
State: NY
Zip Code: 14454
Country Code: 001
Phone: (585) 245-5663
EMail: Not reported
Fax Number: Not reported
Modified By: tfgrasek
Date Last Modified: 2/15/2008

Site Id: 47584
Affiliation Type: Mail Contact
Company Name: SUNY COLLEGE AT GENESEO
Contact Type: Not reported
Contact Name: CHUCK REYES
Address1: ENVIRONMENTAL HEALTH & SAFETY OFFICE
Address2: 118 CLARK BLDG, 1 COLLEGE CIRCLE
City: GENESEO
State: NY
Zip Code: 14454
Country Code: 001
Phone: (585) 245-5512
EMail: REYES@GENESEO.EDU
Fax Number: Not reported
Modified By: MAPERSSO
Date Last Modified: 8/24/2006

Site Id: 47584
Affiliation Type: On-Site Operator
Company Name: SUNY COLLEGE AT GENESEO
Contact Type: Not reported
Contact Name: GEORGE STOOKS
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 001
Phone: (585) 245-5663
EMail: Not reported
Fax Number: Not reported
Modified By: wlsteven
Date Last Modified: 2/21/2008

Site Id: 47584
Affiliation Type: Emergency Contact
Company Name: SUNY COLLEGE AT GENESEO

**SUNY COLLEGE AT GENESEO (Continued)** **U003078334**

| | |
|---|---|
| Contact Type: | Not reported |
| Contact Name: | UNIVERSITY POLICE |
| Address1: | Not reported |
| Address2: | Not reported |
| City: | Not reported |
| State: | NN |
| Zip Code: | Not reported |
| Country Code: | 999 |
| Phone: | (585) 245-5651 |
| EMail: | Not reported |
| Fax Number: | Not reported |
| Modified By: | tfgrasek |
| Date Last Modified: | 2/15/2008 |

Tank Info:

| | |
|---|---|
| Tank Number: | 001 |
| Tank ID: | 141089 |
| Tank Status: | Closed - Removed |
| Material Name: | Closed - Removed |
| Capacity Gallons: | 1000 |
| Install Date: | Not reported |
| Date Tank Closed: | 05/01/1994 |
| Registered: | True |
| Tank Location: | Underground |
| Tank Type: | Steel/carbon steel |
| Material Code: | 0009 |
| Common Name of Substance: | Gasoline |
| Tightness Test Method: | 02 |
| Date Test: | 09/01/1993 |
| Next Test Date: | Not reported |
| Pipe Model: | Not reported |
| Modified By: | TRANSLAT |
| Last Modified: | 03/04/2004 |

Equipment Records:

A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
G00 - Tank Secondary Containment - None
J02 - Dispenser - Suction Dispenser
C02 - Pipe Location - Underground/On-ground
F00 - Pipe External Protection - None
I00 - Overfill - None
B00 - Tank External Protection - None
H00 - Tank Leak Detection - None

| | |
|---|---|
| Tank Number: | 002 |
| Tank ID: | 141090 |
| Tank Status: | Closed - Removed |
| Material Name: | Closed - Removed |
| Capacity Gallons: | 1000 |
| Install Date: | Not reported |
| Date Tank Closed: | 05/01/1994 |
| Registered: | True |
| Tank Location: | Underground |

**SUNY COLLEGE AT GENESEO (Continued)** **U003078334**

Tank Type: Steel/carbon steel
Material Code: 0009
Common Name of Substance: Gasoline

Tightness Test Method: 02
Date Test: 09/01/1993
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
G00 - Tank Secondary Containment - None
J02 - Dispenser - Suction Dispenser
C02 - Pipe Location - Underground/On-ground
F00 - Pipe External Protection - None
I00 - Overfill - None
B00 - Tank External Protection - None
H00 - Tank Leak Detection - None

Tank Number: 007
Tank ID: 141094
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 25000
Install Date: 08/01/1981
Date Tank Closed: 03/01/1996
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:

B01 - Tank External Protection - Painted/Asphalt Coating
C02 - Pipe Location - Underground/On-ground
F00 - Pipe External Protection - None
I04 - Overfill - Product Level Gauge (A/G)
A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
G00 - Tank Secondary Containment - None
J02 - Dispenser - Suction Dispenser
H00 - Tank Leak Detection - None

Tank Number: 008
Tank ID: 141095
Tank Status: Closed - Removed

**SUNY COLLEGE AT GENESEO (Continued)** **U003078334**

Material Name: Closed - Removed
Capacity Gallons: 25000
Install Date: 08/01/1981
Date Tank Closed: 07/12/2000
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: 20
Date Test: 03/01/1996
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

C02 - Pipe Location - Underground/On-ground
F00 - Pipe External Protection - None
I04 - Overfill - Product Level Gauge (A/G)
A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
G00 - Tank Secondary Containment - None
J02 - Dispenser - Suction Dispenser
B07 - Tank External Protection - Retrofitted Sacrificial Anode
H00 - Tank Leak Detection - None

Tank Number: 009
Tank ID: 141096
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 25000
Install Date: 08/01/1981
Date Tank Closed: 07/12/2000
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: 20
Date Test: 03/01/1996
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
G00 - Tank Secondary Containment - None
J02 - Dispenser - Suction Dispenser
C02 - Pipe Location - Underground/On-ground
F00 - Pipe External Protection - None
I04 - Overfill - Product Level Gauge (A/G)
B07 - Tank External Protection - Retrofitted Sacrificial Anode

**SUNY COLLEGE AT GENESEO (Continued)** **U003078334**

H00 - Tank Leak Detection - None

Tank Number: 010
Tank ID: 141097
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 25000
Install Date: 08/01/1991
Date Tank Closed: 07/12/2000
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: 20
Date Test: 03/01/1996
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
G00 - Tank Secondary Containment - None
J02 - Dispenser - Suction Dispenser
C02 - Pipe Location - Underground/On-ground
F00 - Pipe External Protection - None
I04 - Overfill - Product Level Gauge (A/G)
B02 - Tank External Protection - Original Sacrificial Anode
H00 - Tank Leak Detection - None

Tank Number: 011
Tank ID: 141098
Tank Status: Closed - In Place
Material Name: Closed - In Place
Capacity Gallons: 10000
Install Date: 12/01/1949
Date Tank Closed: 05/01/1994
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:

C02 - Pipe Location - Underground/On-ground
F00 - Pipe External Protection - None

**SUNY COLLEGE AT GENESEO (Continued)** **U003078334**

I04 - Overfill - Product Level Gauge (A/G)
A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
G00 - Tank Secondary Containment - None
J02 - Dispenser - Suction Dispenser
B00 - Tank External Protection - None
H00 - Tank Leak Detection - None

| | |
|---|---|
| Tank Number: | 012 |
| Tank ID: | 154464 |
| Tank Status: | In Service |
| Material Name: | In Service |
| Capacity Gallons: | 2500 |
| Install Date: | 05/01/1994 |
| Date Tank Closed: | Not reported |
| Registered: | True |
| Tank Location: | Underground |
| Tank Type: | Equivalent technology |
| 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: | MAPERSSO |
| Last Modified: | 10/03/2013 |

Equipment Records:

B04 - Tank External Protection - Fiberglass
E04 - Piping Secondary Containment - Double-Walled (Underground)
A03 - Tank Internal Protection - Fiberglass Liner (FRP)
C02 - Pipe Location - Underground/On-ground
F04 - Pipe External Protection - Fiberglass
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm
K01 - Spill Prevention - Catch Basin
F05 - Pipe External Protection - Jacketed
J02 - Dispenser - Suction Dispenser
L09 - Piping Leak Detection - Exempt Suction Piping
D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
G04 - Tank Secondary Containment - Double-Walled (Underground)
I03 - Overfill - Automatic Shut-Off

| | |
|---|---|
| Tank Number: | 013 |
| Tank ID: | 154465 |
| Tank Status: | In Service |
| Material Name: | In Service |
| Capacity Gallons: | 1000 |
| Install Date: | 05/01/1994 |
| Date Tank Closed: | Not reported |
| Registered: | True |
| Tank Location: | Underground |
| Tank Type: | Equivalent technology |
| Material Code: | 0008 |
| Common Name of Substance: | Diesel |

**SUNY COLLEGE AT GENESEO (Continued)** **U003078334**

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: MAPERSSO
Last Modified: 10/03/2013

Equipment Records:

F05 - Pipe External Protection - Jacketed
J02 - Dispenser - Suction Dispenser
L09 - Piping Leak Detection - Exempt Suction Piping
A03 - Tank Internal Protection - Fiberglass Liner (FRP)
C02 - Pipe Location - Underground/On-ground
F04 - Pipe External Protection - Fiberglass
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm
K01 - Spill Prevention - Catch Basin
B04 - Tank External Protection - Fiberglass
E04 - Piping Secondary Containment - Double-Walled (Underground)
D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
G04 - Tank Secondary Containment - Double-Walled (Underground)
I03 - Overfill - Automatic Shut-Off

Tank Number: 016
Tank ID: 158226
Tank Status: In Service
Material Name: In Service
Capacity Gallons: 20000
Install Date: 08/01/2000
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Equivalent technology
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: MAPERSSO
Last Modified: 10/03/2013

Equipment Records:

A03 - Tank Internal Protection - Fiberglass Liner (FRP)
F04 - Pipe External Protection - Fiberglass
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm
J05 - Dispenser - On Site Heating System (Supply/Return)
K01 - Spill Prevention - Catch Basin
L09 - Piping Leak Detection - Exempt Suction Piping
B04 - Tank External Protection - Fiberglass
E04 - Piping Secondary Containment - Double-Walled (Underground)
C03 - Pipe Location - Aboveground/Underground Combination
D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
G04 - Tank Secondary Containment - Double-Walled (Underground)
I03 - Overfill - Automatic Shut-Off

**SUNY COLLEGE AT GENESEO (Continued)** **U003078334**

| | |
|---|---|
| Tank Number: | 017 |
| Tank ID: | 158227 |
| Tank Status: | In Service |
| Material Name: | In Service |
| Capacity Gallons: | 20000 |
| Install Date: | 08/01/2000 |
| Date Tank Closed: | Not reported |
| Registered: | True |
| Tank Location: | Underground |
| Tank Type: | Equivalent technology |
| 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: | MAPERSSO |
| Last Modified: | 10/03/2013 |

Equipment Records:

A03 - Tank Internal Protection - Fiberglass Liner (FRP)
F04 - Pipe External Protection - Fiberglass
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm
J05 - Dispenser - On Site Heating System (Supply/Return)
K01 - Spill Prevention - Catch Basin
L09 - Piping Leak Detection - Exempt Suction Piping
B04 - Tank External Protection - Fiberglass
E04 - Piping Secondary Containment - Double-Walled (Underground)
C03 - Pipe Location - Aboveground/Underground Combination
D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
G04 - Tank Secondary Containment - Double-Walled (Underground)
I03 - Overfill - Automatic Shut-Off

| | |
|---|---|
| Tank Number: | 018 |
| Tank ID: | 158228 |
| Tank Status: | In Service |
| Material Name: | In Service |
| Capacity Gallons: | 20000 |
| Install Date: | 08/01/2000 |
| Date Tank Closed: | Not reported |
| Registered: | True |
| Tank Location: | Underground |
| Tank Type: | Equivalent technology |
| 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: | MAPERSSO |
| Last Modified: | 10/03/2013 |

Equipment Records:

L09 - Piping Leak Detection - Exempt Suction Piping

**SUNY COLLEGE AT GENESEO (Continued)** **U003078334**

A03 - Tank Internal Protection - Fiberglass Liner (FRP)
F04 - Pipe External Protection - Fiberglass
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm
J05 - Dispenser - On Site Heating System (Supply/Return)
K01 - Spill Prevention - Catch Basin
B04 - Tank External Protection - Fiberglass
E04 - Piping Secondary Containment - Double-Walled (Underground)
C03 - Pipe Location - Aboveground/Underground Combination
D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
G04 - Tank Secondary Containment - Double-Walled (Underground)
I03 - Overfill - Automatic Shut-Off

HIST UST:

| | |
|---|---|
| PBS Number: | 8-013595 |
| SPDES Number: | Not reported |
| Emergency Contact: | UNIVERSITY POLICE |
| Emergency Telephone: | (716) 245-5651 |
| Operator: | GARY GIRARDET |
| Operator Telephone: | (716) 245-5663 |
| Owner Name: | SUNY COLLEGE AT GENESEO |
| Owner Address: | 1 COLLEGE CIRCLE |
| Owner City,St,Zip: | GENESEO, NY 14454 |
| Owner Telephone: | (716) 245-5663 |
| Owner Type: | State Government |
| Owner Subtype: | State University of New York |
| Mailing Name: | SUNY COLLEGE AT GENESEO |
| Mailing Address: | ENVIRONMENTAL HEALTH & SAFETY OFFICE |
| Mailing Address 2: | 101 CLARK BLDG, 1 COLLEGE CIRCLE |
| Mailing City,St,Zip: | GENESEO, NY 14454 |
| Mailing Contact: | KIMBERLY DALTON FERRIS |
| Mailing Telephone: | (716) 245-5512 |
| 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: | 1 COLLEGE CIRCLE |
| SWIS ID: | 2426 |
| Old PBS Number: | Not reported |
| Facility Type: | SCHOOL |
| Inspected Date: | 08/30/1989 |
| Inspector: | CS |
| Inspection Result: | Not reported |
| Federal ID: | Not reported |
| Certification Flag: | False |
| Certification Date: | 07/16/2001 |
| Expiration Date: | 09/02/2006 |
| Renew Flag: | False |
| Renewal Date: | Not reported |
| Total Capacity: | 63500 |
| 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: | GENESEO |

**SUNY COLLEGE AT GENESEO (Continued)** **U003078334**

County Code: 24
Town or City: 26
Region: 8

Tank Id: 001
Tank Location: UNDERGROUND
Tank Status: Closed-Removed
Install Date: Not reported
Capacity (gals): 1000
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: 09/01/1993
Next Test Date: Not reported
Missing Data for Tank: No Missing Data
Date Closed: 05/01/1994
Test Method: Tank Auditor
Deleted: False
Updated: True
Lat/long: Not reported

Tank Id: 002
Tank Location: UNDERGROUND
Tank Status: Closed-Removed
Install Date: Not reported
Capacity (gals): 1000
Product Stored: UNLEADED 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: 09/01/1993
Next Test Date: Not reported
Missing Data for Tank: No Missing Data
Date Closed: 05/01/1994
Test Method: Tank Auditor
Deleted: False
Updated: True
Lat/long: Not reported

**SUNY COLLEGE AT GENESEO (Continued)** **U003078334**

AST:

| | |
|---|---|
| Region: | STATE |
| DEC Region: | 8 |
| Site Status: | Active |
| Facility Id: | 8-013595 |
| Program Type: | PBS |
| UTM X: | 269423.26098000002 |
| UTM Y: | 4741979.6255999999 |
| Expiration Date: | 09/02/2016 |
| Site Type: | School |

Affiliation Records:

| | |
|---|---|
| Site Id: | 47584 |
| Affiliation Type: | Facility Owner |
| Company Name: | SUNY COLLEGE AT GENESEO |
| Contact Type: | DIRECTOR, ENVIRONMENTAL HEALTH & SAFETY |
| Contact Name: | CHUCK REYES |
| Address1: | 1 COLLEGE CIRCLE |
| Address2: | Not reported |
| City: | GENESEO |
| State: | NY |
| Zip Code: | 14454 |
| Country Code: | 001 |
| Phone: | (585) 245-5663 |
| EMail: | Not reported |
| Fax Number: | Not reported |
| Modified By: | tfgrasek |
| Date Last Modified: | 2/15/2008 |

| | |
|---|---|
| Site Id: | 47584 |
| Affiliation Type: | Mail Contact |
| Company Name: | SUNY COLLEGE AT GENESEO |
| Contact Type: | Not reported |
| Contact Name: | CHUCK REYES |
| Address1: | ENVIRONMENTAL HEALTH & SAFETY OFFICE |
| Address2: | 118 CLARK BLDG, 1 COLLEGE CIRCLE |
| City: | GENESEO |
| State: | NY |
| Zip Code: | 14454 |
| Country Code: | 001 |
| Phone: | (585) 245-5512 |
| EMail: | REYES@GENESEO.EDU |
| Fax Number: | Not reported |
| Modified By: | MAPERSSO |
| Date Last Modified: | 8/24/2006 |

| | |
|---|---|
| Site Id: | 47584 |
| Affiliation Type: | On-Site Operator |
| Company Name: | SUNY COLLEGE AT GENESEO |
| Contact Type: | Not reported |
| Contact Name: | GEORGE STOOKS |
| Address1: | Not reported |
| Address2: | Not reported |
| City: | Not reported |
| State: | NN |
| Zip Code: | Not reported |
| Country Code: | 001 |

**SUNY COLLEGE AT GENESEO (Continued)** **U003078334**

| | |
|---|---|
| Phone: | (585) 245-5663 |
| EMail: | Not reported |
| Fax Number: | Not reported |
| Modified By: | wlsteven |
| Date Last Modified: | 2/21/2008 |

| | |
|---|---|
| Site Id: | 47584 |
| Affiliation Type: | Emergency Contact |
| Company Name: | SUNY COLLEGE AT GENESEO |
| Contact Type: | Not reported |
| Contact Name: | UNIVERSITY POLICE |
| Address1: | Not reported |
| Address2: | Not reported |
| City: | Not reported |
| State: | NN |
| Zip Code: | Not reported |
| Country Code: | 999 |
| Phone: | (585) 245-5651 |
| EMail: | Not reported |
| Fax Number: | Not reported |
| Modified By: | tfgrasek |
| Date Last Modified: | 2/15/2008 |

Tank Info:

| | |
|---|---|
| Tank Number: | 004 |
| Tank Id: | 141091 |
| Material Code: | 0008 |
| Common Name of Substance: | Diesel |

Equipment Records:

A00 - Tank Internal Protection - None
D00 - Pipe Type - No Piping
G00 - Tank Secondary Containment - None
J02 - Dispenser - Suction Dispenser
B01 - Tank External Protection - Painted/Asphalt Coating
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
I00 - Overfill - None
H00 - Tank Leak Detection - None

| | |
|---|---|
| Tank Location: | 3 |
| Tank Type: | Steel/Carbon Steel/Iron |
| Tank Status: | Closed - Removed |
| Pipe Model: | Not reported |
| Install Date: | Not reported |
| Capacity Gallons: | 300 |
| Tightness Test Method: | NN |
| Date Test: | Not reported |
| Next Test Date: | Not reported |
| Date Tank Closed: | 05/01/1994 |
| Register: | True |
| Modified By: | TRANSLAT |
| Last Modified: | 03/04/2004 |
| Material Name: | Diesel |

**SUNY COLLEGE AT GENESEO (Continued)** **U003078334**

Tank Number: 005
Tank Id: 141092
Material Code: 0008
Common Name of Substance: Diesel

Equipment Records:
B01 - Tank External Protection - Painted/Asphalt Coating
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
I04 - Overfill - Product Level Gauge (A/G)
A00 - Tank Internal Protection - None
D00 - Pipe Type - No Piping
G01 - Tank Secondary Containment - Diking (Aboveground)
J02 - Dispenser - Suction Dispenser
H00 - Tank Leak Detection - None

Tank Location: 3
Tank Type: Steel/Carbon Steel/Iron
Tank Status: Closed - Removed
Pipe Model: Not reported
Install Date: Not reported
Capacity Gallons: 500
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: 05/01/1994
Register: True
Modified By: TRANSLAT
Last Modified: 03/04/2004
Material Name: Diesel

Tank Number: 006
Tank Id: 141093
Material Code: 0008
Common Name of Substance: Diesel

Equipment Records:
A00 - Tank Internal Protection - None
D00 - Pipe Type - No Piping
G01 - Tank Secondary Containment - Diking (Aboveground)
J02 - Dispenser - Suction Dispenser
B01 - Tank External Protection - Painted/Asphalt Coating
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
I04 - Overfill - Product Level Gauge (A/G)
H00 - Tank Leak Detection - None

Tank Location: 3
Tank Type: Steel/Carbon Steel/Iron
Tank Status: Closed - Removed
Pipe Model: Not reported
Install Date: Not reported
Capacity Gallons: 500
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: 05/01/1994

**SUNY COLLEGE AT GENESEO (Continued)** **U003078334**

| | |
|---|---|
| Register: | True |
| Modified By: | TRANSLAT |
| Last Modified: | 03/04/2004 |
| Material Name: | Diesel |
| | |
| Tank Number: | 014 |
| Tank Id: | 155009 |
| Material Code: | 0008 |
| Common Name of Substance: | Diesel |

Equipment Records:

A00 - Tank Internal Protection - None
D10 - Pipe Type - Copper
F06 - Pipe External Protection - Wrapped
G01 - Tank Secondary Containment - Diking (Aboveground)
H99 - Tank Leak Detection - Other
B01 - Tank External Protection - Painted/Asphalt Coating
I04 - Overfill - Product Level Gauge (A/G)
C01 - Pipe Location - Aboveground

| | |
|---|---|
| Tank Location: | 3 |
| Tank Type: | Steel/Carbon Steel/Iron |
| Tank Status: | Tank Converted to Non-Regulated Use |
| Pipe Model: | Not reported |
| Install Date: | 02/01/1995 |
| Capacity Gallons: | 275 |
| 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: | Diesel |
| | |
| Tank Number: | 015 |
| Tank Id: | 155010 |
| Material Code: | 0008 |
| Common Name of Substance: | Diesel |

Equipment Records:

B01 - Tank External Protection - Painted/Asphalt Coating
I04 - Overfill - Product Level Gauge (A/G)
A00 - Tank Internal Protection - None
D10 - Pipe Type - Copper
F06 - Pipe External Protection - Wrapped
G01 - Tank Secondary Containment - Diking (Aboveground)
H99 - Tank Leak Detection - Other
C01 - Pipe Location - Aboveground

| | |
|---|---|
| Tank Location: | 3 |
| Tank Type: | Steel/Carbon Steel/Iron |
| Tank Status: | Tank Converted to Non-Regulated Use |
| Pipe Model: | Not reported |
| Install Date: | 02/01/1995 |
| Capacity Gallons: | 275 |

**SUNY COLLEGE AT GENESEO (Continued)** **U003078334**

| | |
|---|---|
| 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: | Diesel |

HIST AST:

| | |
|---|---|
| PBS Number: | 8-013595 |
| SWIS Code: | 2426 |
| Operator: | GARY GIRARDET |
| Facility Phone: | (716) 245-5663 |
| Facility Addr2: | 1 COLLEGE CIRCLE |
| Facility Type: | SCHOOL |
| Emergency: | UNIVERSITY POLICE |
| Emergency Tel: | (716) 245-5651 |
| Old PBSNO: | Not reported |
| Date Inspected: | 08/30/1989 |
| Inspector: | CS |
| Result of Inspection: | Not reported |
| Owner Name: | SUNY COLLEGE AT GENESEO |
| Owner Address: | 1 COLLEGE CIRCLE |
| Owner City,St,Zip: | GENESEO, NY 14454 |
| Federal ID: | Not reported |
| Owner Tel: | (716) 245-5663 |
| Owner Type: | State Government |
| Owner Subtype: | 06 |
| Mailing Contact: | KIMBERLY DALTON FERRIS |
| Mailing Name: | SUNY COLLEGE AT GENESEO |
| Mailing Address: | ENVIRONMENTAL HEALTH & SAFETY OFFICE |
| Mailing Address 2: | 101 CLARK BLDG, 1 COLLEGE CIRCLE |
| Mailing City,St,Zip: | GENESEO, NY 14454 |
| Mailing Telephone: | (716) 245-5512 |
| 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: | 07/16/2001 |
| Expiration: | 09/02/2006 |
| Renew Flag: | False |
| Renew Date: | Not reported |
| Total Capacity: | 63500 |
| 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: | GENESEO |
| County Code: | 24 |
| Town or City Code: | 26 |
| Region: | 8 |

| | |
|---|---|
| Tank ID: | 004 |

**SUNY COLLEGE AT GENESEO (Continued)** **U003078334**

| | |
|---|---|
| Tank Location: | ABOVEGROUND ON SADDLES LEGS, STILTS, RACK, OR CRADLE |
| Tank Status: | Closed-Removed |
| Install Date: | Not reported |
| Capacity (Gal): | 300 |
| Product Stored: | DIESEL |
| Tank Type: | Steel/carbon steel |
| Tank Internal: | 0 |
| Tank External: | 1 |
| Pipe Location: | None |
| Pipe Type: | NONE |
| Pipe Internal: | None |
| Pipe External: | 0 |
| Tank Containment: | None |
| Leak Detection: | 0 |
| Overfill Protection: | 0 |
| Dispenser Method: | Suction |
| Date Tested: | Not reported |
| Next Test Date: | Not reported |
| Missing Data for Tank: | No Missing Data |
| Date Closed: | 05/01/1994 |
| Test Method: | Not reported |
| Deleted: | False |
| Updated: | True |
| SPDES Number: | Not reported |
| Lat/Long: | Not reported |

| | |
|---|---|
| Tank ID: | 005 |
| Tank Location: | ABOVEGROUND ON SADDLES LEGS, STILTS, RACK, OR CRADLE |
| Tank Status: | Closed-Removed |
| Install Date: | Not reported |
| Capacity (Gal): | 500 |
| Product Stored: | DIESEL |
| Tank Type: | Steel/carbon steel |
| Tank Internal: | 0 |
| Tank External: | 1 |
| Pipe Location: | None |
| Pipe Type: | NONE |
| Pipe Internal: | None |
| Pipe External: | 0 |
| Tank Containment: | 8 |
| Leak Detection: | 0 |
| Overfill Protection: | 4 |
| Dispenser Method: | Suction |
| Date Tested: | Not reported |
| Next Test Date: | Not reported |
| Missing Data for Tank: | No Missing Data |
| Date Closed: | 05/01/1994 |
| Test Method: | Not reported |
| Deleted: | False |
| Updated: | True |
| SPDES Number: | Not reported |
| Lat/Long: | Not reported |

| | |
|---|---|
| Tank ID: | 006 |
| Tank Location: | ABOVEGROUND ON SADDLES LEGS, STILTS, RACK, OR CRADLE |

**SUNY COLLEGE AT GENESEO (Continued)** **U003078334**

| | |
|---|---|
| Tank Status: | Closed-Removed |
| Install Date: | Not reported |
| Capacity (Gal): | 500 |
| Product Stored: | DIESEL |
| Tank Type: | Steel/carbon steel |
| Tank Internal: | 0 |
| Tank External: | 1 |
| Pipe Location: | None |
| Pipe Type: | NONE |
| Pipe Internal: | None |
| Pipe External: | 0 |
| Tank Containment: | 8 |
| Leak Detection: | 0 |
| Overfill Protection: | 4 |
| Dispenser Method: | Suction |
| Date Tested: | Not reported |
| Next Test Date: | Not reported |
| Missing Data for Tank: | No Missing Data |
| Date Closed: | 05/01/1994 |
| Test Method: | Not reported |
| Deleted: | False |
| Updated: | True |
| SPDES Number: | Not reported |
| Lat/Long: | Not reported |

---

**A13** **SUNY GENESEO COLLEGE UNIO** **NY Spills** **S102244686**
**1 COLLEGE CRCL (UNION)** **N/A**
**< 1/8** **GENESEO, NY**
**1 ft.**

**Site 10 of 13 in cluster A**

**Relative:** **Lower**

**Actual:** **743 ft.**

SPILLS:

| | |
|---|---|
| Facility ID: | 9602368 |
| Facility Type: | ER |
| DER Facility ID: | 221998 |
| Site ID: | 272797 |
| DEC Region: | 8 |
| Spill Date: | 5/19/1996 |
| Spill Number/Closed Date: | 9602368 / 5/20/1996 |
| Spill Cause: | Equipment Failure |
| Spill Class: | Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken. |
| SWIS: | 2626 |
| Investigator: | DLTILTON |
| Referred To: | Not reported |
| Reported to Dept: | 5/20/1996 |
| CID: | 312 |
| Water Affected: | Not reported |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | 5/20/1996 |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 5/20/1996 |
| Spill Record Last Update: | 5/21/1996 |

**SUNY GENESEO COLLEGE UNIO (Continued)** **S102244686**

| | |
|---|---|
| Spiller Name: | KIM DALTON |
| Spiller Company: | SUNY GENESEO COL UNION |
| Spiller Address: | 1 COLLEGE CIRCLE |
| Spiller City,St,Zip: | GENESEO, NY 14454- |
| Spiller Company: | 001 |
| Contact Name: | KIM DALTON |
| Contact Phone: | ( ) 245-5512 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was "DT" |
| Remarks: | R-22 is material released. When workers arrived this morning they noted a hole in the manifold and which had lost 300 lbs of refrigerant - air conditioning unit shut down and is being repaired. |

Material:

| | |
|---|---|
| Site ID: | 272797 |
| Operable Unit ID: | 1029838 |
| Operable Unit: | 01 |
| Material ID: | 352190 |
| Material Code: | 0050A |
| Material Name: | FREON |
| Case No.: | Not reported |
| Material FA: | Other |
| Quantity: | 300 |
| Units: | Gallons |
| Recovered: | No |
| Resource Affected: | Not reported |
| Oxygenate: | False |

Tank Test:

---

**B14** **EDR US Hist Cleaners** **1014978895**
**116 MAIN ST** **N/A**
**< 1/8** **GENESEO, NY 14454**
**0.001 mi.**
**5 ft.** **Site 2 of 16 in cluster B**

**Relative:**
**Higher**

**Actual:**
**771 ft.**

EDR Historical Cleaners:

| | |
|---|---|
| Name: | WASHTUB LAUNDRY |
| Year: | 2005 |
| Address: | 116 MAIN ST |
| Name: | WASHTUB LAUNDRY |
| Year: | 2007 |
| Address: | 116 MAIN ST |
| Name: | WASHTUB LAUNDRY |
| Year: | 2008 |
| Address: | 116 MAIN ST |

**B15** **FORMER AUTO DEALER** **NY Spills** **S116553398**
**East** **120 MAIN STREET** **N/A**
**< 1/8** **GENESEO, NY 14454**
**0.001 mi.**
**6 ft.** **Site 3 of 16 in cluster B**

**Relative:**
**Higher**

**Actual:**
**771 ft.**

SPILLS:

| | |
|---|---|
| Facility ID: | 1311534 |
| Facility Type: | ER |
| DER Facility ID: | 447374 |
| Site ID: | 492440 |
| DEC Region: | 8 |
| Spill Date: | 3/11/2014 |
| Spill Number/Closed Date: | 1311534 / 12/8/2014 |
| Spill Cause: | Unknown |
| Spill Class: | Known release that creates potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken. |
| SWIS: | 2626 |
| Investigator: | DLTILTON |
| Referred To: | Not reported |
| Reported to Dept: | 3/11/2014 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Other |
| Cleanup Ceased: | 12/8/2014 |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 3/11/2014 |
| Spill Record Last Update: | 12/9/2014 |
| Spiller Name: | Not reported |
| Spiller Company: | Not reported |
| Spiller Address: | Not reported |
| Spiller City,St,Zip: | Not reported |
| Spiller Company: | Not reported |
| Contact Name: | JON HEERKENS |
| Contact Phone: | (585) 454-6110 |
| DEC Memo: | 12/08/2014 CLOSURE LETTER ISSUED. PAPER FILE REMOVED PER FILE RETENTION POLICY. |
| Remarks: | CALLER STATES THE WHILE PERFORMING GEOPROBE POINTS NEAR ABANDONED TANKS, PETROLEUM CONTAMINATED SOILS ENCOUNTERED. TO DELINEATE AREA AND REMOVE TANKS. TANKS TO BE REGISTERED. |

Material:

| | |
|---|---|
| Site ID: | 492440 |
| Operable Unit ID: | 1241967 |
| Operable Unit: | 01 |
| Material ID: | 2242483 |
| 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 |

**FORMER AUTO DEALER (Continued)** **S116553398**

Tank Test:

---

**D16** **EDR US Hist Cleaners** **1014972920**
**ENE** **108 MAIN ST** **N/A**
**< 1/8** **GENESEO, NY 14454**
**0.001 mi.**
**7 ft.** **Site 1 of 2 in cluster D**

**Relative:**
**Higher**

**Actual:**
**771 ft.**

EDR Historical Cleaners:

| | |
|---|---|
| Name: | WASHTUB LAUNDROMAT |
| Year: | 2002 |
| Address: | 108 MAIN ST |
| Name: | WASHTUB LAUNDROMAT |
| Year: | 2003 |
| Address: | 108 MAIN ST |
| Name: | WASHTUB LAUNDROMAT |
| Year: | 2008 |
| Address: | 108 MAIN ST |
| Name: | WASHTUB LAUNDROMAT |
| Year: | 2009 |
| Address: | 108 MAIN ST |
| Name: | WASHTUB LAUNDROMAT INC |
| Year: | 2010 |
| Address: | 108 MAIN ST |
| Name: | THE WASHTUB LAUNDROMAT INC |
| Year: | 2011 |
| Address: | 108 MAIN ST |
| Name: | THE WASHTUB LAUNDROMAT INC |
| Year: | 2012 |
| Address: | 108 MAIN ST |

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**B17** **ONE STOP** **NY UST** **U003314768**
**SE** **128 MAIN STREET** **N/A**
**< 1/8** **GENESEO, NY 14454**
**0.002 mi.**
**12 ft.** **Site 4 of 16 in cluster B**

**Relative:**
**Higher**

**Actual:**
**773 ft.**

UST:

| | |
|---|---|
| Id/Status: | 8-390704 / Unregulated/Closed |
| Program Type: | PBS |
| Region: | STATE |
| DEC Region: | 8 |
| Expiration Date: | 03/31/2002 |
| UTM X: | 269618.25367000001 |
| UTM Y: | 4741880.7477500001 |
| Site Type: | Retail Gasoline Sales |

Affiliation Records:

| | |
|---|---|
| Site Id: | 49489 |

**ONE STOP (Continued)** **U003314768**

| | |
|---|---|
| Affiliation Type: | Facility Owner |
| Company Name: | GARY L LEAST |
| Contact Type: | Not reported |
| Contact Name: | Not reported |
| Address1: | 35 NORTH STREET |
| Address2: | Not reported |
| City: | GENESEO |
| State: | NY |
| Zip Code: | 14454 |
| Country Code: | 001 |
| Phone: | (716) 243-2788 |
| EMail: | Not reported |
| Fax Number: | Not reported |
| Modified By: | TRANSLAT |
| Date Last Modified: | 3/4/2004 |

| | |
|---|---|
| Site Id: | 49489 |
| Affiliation Type: | Mail Contact |
| Company Name: | GARY L LEAST |
| Contact Type: | Not reported |
| Contact Name: | Not reported |
| Address1: | PO BOX 10 |
| Address2: | Not reported |
| City: | GENESEO |
| State: | NY |
| Zip Code: | 14454 |
| Country Code: | 001 |
| Phone: | (716) 243-1530 |
| EMail: | Not reported |
| Fax Number: | Not reported |
| Modified By: | TRANSLAT |
| Date Last Modified: | 3/4/2004 |

| | |
|---|---|
| Site Id: | 49489 |
| Affiliation Type: | On-Site Operator |
| Company Name: | ONE STOP |
| Contact Type: | Not reported |
| Contact Name: | CLOSED |
| Address1: | Not reported |
| Address2: | Not reported |
| City: | Not reported |
| State: | NN |
| Zip Code: | Not reported |
| Country Code: | 001 |
| Phone: | (716) 243-1530 |
| EMail: | Not reported |
| Fax Number: | Not reported |
| Modified By: | TRANSLAT |
| Date Last Modified: | 3/4/2004 |

| | |
|---|---|
| Site Id: | 49489 |
| Affiliation Type: | Emergency Contact |
| Company Name: | GARY L LEAST |
| Contact Type: | Not reported |
| Contact Name: | GARY L LEAST |
| Address1: | Not reported |
| Address2: | Not reported |

**ONE STOP (Continued)** **U003314768**

| | |
|---|---|
| City: | Not reported |
| State: | NN |
| Zip Code: | Not reported |
| Country Code: | 001 |
| Phone: | (716) 243-1530 |
| EMail: | Not reported |
| Fax Number: | Not reported |
| Modified By: | TRANSLAT |
| Date Last Modified: | 3/4/2004 |

Tank Info:

| | |
|---|---|
| Tank Number: | 001 |
| Tank ID: | 147415 |
| Tank Status: | Closed - Removed |
| Material Name: | Closed - Removed |
| Capacity Gallons: | 6000 |
| Install Date: | 09/01/1977 |
| Date Tank Closed: | 03/01/1997 |
| Registered: | True |
| Tank Location: | Underground |
| Tank Type: | Steel/carbon steel |
| Material Code: | 0009 |
| Common Name of Substance: | Gasoline |

| | |
|---|---|
| Tightness Test Method: | 00 |
| Date Test: | 11/01/1986 |
| Next Test Date: | Not reported |
| Pipe Model: | Not reported |
| Modified By: | TRANSLAT |
| Last Modified: | 03/04/2004 |

Equipment Records:

C02 - Pipe Location - Underground/On-ground
F00 - Pipe External Protection - None
A00 - Tank Internal Protection - None
D02 - Pipe Type - Galvanized Steel
G00 - Tank Secondary Containment - None
J02 - Dispenser - Suction Dispenser
I00 - Overfill - None
B00 - Tank External Protection - None
H00 - Tank Leak Detection - None

| | |
|---|---|
| Tank Number: | 002 |
| Tank ID: | 147416 |
| Tank Status: | Closed - Removed |
| Material Name: | Closed - Removed |
| Capacity Gallons: | 3000 |
| Install Date: | 09/01/1977 |
| Date Tank Closed: | 03/01/1997 |
| Registered: | True |
| Tank Location: | Underground |
| Tank Type: | Steel/carbon steel |
| Material Code: | 0009 |
| Common Name of Substance: | Gasoline |

**ONE STOP (Continued)** **U003314768**

Tightness Test Method: 00
Date Test: 11/01/1986
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

C02 - Pipe Location - Underground/On-ground
F00 - Pipe External Protection - None
A00 - Tank Internal Protection - None
D02 - Pipe Type - Galvanized Steel
G00 - Tank Secondary Containment - None
J02 - Dispenser - Suction Dispenser
I00 - Overfill - None
B00 - Tank External Protection - None
H00 - Tank Leak Detection - None

Tank Number: 003
Tank ID: 147417
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 2000
Install Date: 09/01/1977
Date Tank Closed: 03/01/1997
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0009
Common Name of Substance: Gasoline

Tightness Test Method: 00
Date Test: 11/01/1986
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

A00 - Tank Internal Protection - None
D02 - Pipe Type - Galvanized Steel
G00 - Tank Secondary Containment - None
J02 - Dispenser - Suction Dispenser
C02 - Pipe Location - Underground/On-ground
F00 - Pipe External Protection - None
I00 - Overfill - None
B00 - Tank External Protection - None
H00 - Tank Leak Detection - None

**B18**
**SE**
**< 1/8**
**0.002 mi.**
**12 ft.**

**MOBIL MINI MART**
**128 MAIN STREET**
**GENESEO, NY 14454**

**Site 5 of 16 in cluster B**

**NY Spills** **S103570404**
**N/A**

**Relative:**
**Higher**

**Actual:**
**773 ft.**

SPILLS:

| | |
|---|---|
| Facility ID: | 9614427 |
| Facility Type: | ER |
| DER Facility ID: | 131540 |
| Site ID: | 155294 |
| DEC Region: | 8 |
| Spill Date: | 3/11/1997 |
| Spill Number/Closed Date: | 9614427 / 4/8/1998 |
| Spill Cause: | Other |
| Spill Class: | Known release that creates potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken. |
| SWIS: | 2626 |
| Investigator: | SARODABA |
| Referred To: | Not reported |
| Reported to Dept: | 3/11/1997 |
| CID: | 366 |
| Water Affected: | Not reported |
| Spill Source: | Gasoline Station or other PBS Facility |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | True |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 3/13/1997 |
| Spill Record Last Update: | 3/9/2011 |
| Spiller Name: | GARY LEAST |
| Spiller Company: | GARY LEAST |
| Spiller Address: | 35 NORTH STREET |
| Spiller City,St,Zip: | GENESEO, NY 14454- |
| 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 "SR"4/17/97: B FINSTER SENDS GARY LEATS RESPONSIBILITY LETTER/STIPULATION.4/22/97: EXECUTED STIPULATION AGREEMENT SENT TO GARY LEAST.5/9/97: NATURE'S WAY SUBMITS SUMMARY LETTER/ANALYTICAL.10/24/97 NATURE'S WAY SUBMITTAL DOCUMENTS SUCCESSFUL BIOREMEDIATION OF 400 TONS CONTAM. SOIL. CONFIRMATORY SOIL SAMPLING OF SIDEWALLS AND BOTTOM OF UST EXCAVATION MET STARS CRITERIA.03/20/98: TRANSFERRED BS TO SR.04/06/98: CLOSURE LETTER SENT BY S RODABAUGH TO MR. LEAST.03/09/11: PAPER FILE REMOVED PER FILE RETENTION POLICY. |
| Remarks: | CALLER REPORTED GASOLINE CONTAMINATED SOIL ENCOUNTERED DURING THE COURSE OF REMOVING 3 GASOLINE UST'S. |

Material:

| | |
|---|---|
| Site ID: | 155294 |
| Operable Unit ID: | 1045817 |
| Operable Unit: | 01 |
| Material ID: | 339534 |
| Material Code: | 0009 |
| Material Name: | Gasoline |

**MOBIL MINI MART (Continued)** **S103570404**

| | |
|---|---|
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 0 |
| Units: | Gallons |
| Recovered: | No |
| Resource Affected: | Not reported |
| Oxygenate: | False |

Tank Test:

---

**B19** **GENESEO TOWN VILLAGE HALL** **NY SWF/LF** **S103593021**
**East** **119 MAIN STREET** **NY Spills** **N/A**
**< 1/8** **GENESEO, NY 14454**
**0.003 mi.**
**16 ft.** **Site 6 of 16 in cluster B**

**Relative:**
**Higher**

**Actual:**
**771 ft.**

SWF/LF:

| | |
|---|---|
| Flag: | INACTIVE |
| Region Code: | 8 |
| Phone Number: | Not reported |
| Owner Name: | TOWN OF GENESEO |
| Owner Type: | Municipal |
| Owner Address: | 119 MAIN STREET |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | GENESEO, NY 14454 |
| 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 - construction and demolition debris |
| Activity Number: | [26D03] |
| Active: | No |
| East Coordinate: | Not reported |
| North Coordinate: | Not reported |
| Accuracy Code: | Not reported |
| Regulatory Status: | None |
| Waste Type: | Not reported |
| Authorization #: | Not reported |
| Authorization Date: | Not reported |
| Expiration Date: | Not reported |

SPILLS:

| | |
|---|---|
| Facility ID: | 0480050 |
| Facility Type: | ER |
| DER Facility ID: | 266662 |
| Site ID: | 331741 |
| DEC Region: | 8 |
| Spill Date: | 9/30/2004 |
| Spill Number/Closed Date: | 0480050 / 12/12/2008 |
| Spill Cause: | Unknown |
| Spill Class: | Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken. |

**GENESEO TOWN VILLAGE HALL (Continued)** **S103593021**

| | |
|---|---|
| SWIS: | 2626 |
| Investigator: | dbdake |
| Referred To: | Not reported |
| Reported to Dept: | 10/1/2004 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Notifier: | Other |
| Cleanup Ceased: | 12/12/2008 |
| Cleanup Meets Std: | True |
| Last Inspection: | 11/19/2008 |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 10/1/2004 |
| Spill Record Last Update: | 12/15/2008 |
| Spiller Name: | Not reported |
| Spiller Company: | Not reported |
| Spiller Address: | Not reported |
| Spiller City,St,Zip: | Not reported |
| Spiller Company: | Not reported |
| Contact Name: | DICK HATHAWAY |
| Contact Phone: | (585) 243-1177 |
| DEC Memo: | 5/5/06: DEC LEAD TRANSFERRED FROM TWALSH TO DDAKE FOR FOLLOWUP. NO ADDITIONAL INFORMATION FOUND IN FILE. DATABASE SEARCH - NO OTHER SPILLS AT THIS LOCATION AND NO REGISTERED TANKS.5/8/06: DD TELECON WITH DOUG WELCH (585-202-9782) WHO WILL LOOK INTO HIS FILES AND SEE WHAT INFORMATION IS AVAILABLE AND GET BACK TO DEC. NO USTs ON THE SITE - SOMETIME IN THE LATE 70s HE THOUGHT TANKS WERE REMOVED. DOUG LATER LEFT A VOICEMAIL AND STATED THAT HE FOUND NO ADDITIONAL INFORMATION AND DEC NEEDS TO CONTACT CLARK PATTERSON.5/11/06: DD TELECON WITH NORM GARDNER AT CLARK PATTERSON (585-454-7600), WHO STATED THAT THE SITE IS GOING UNDER CONSTRUCTION SOON, AND THAT 'IMPACTS WILL BE DEALT WITH AT THAT TIME.' A GEOTECHNICAL DRILLER SAID THERE WERE PETROLEUM ODORS OBSERVED IN 2004 DRILLING EVENT, AND THE AREA WILL BE REPAVING AREA. NO SAMPLES WERE COLLECTED. ACCORDING TO GARDNER, THE ADJACENT BUILDING HAS NO BASEMENT AND THE SOURCE MAY HAVE BEEN A NUMBER OF OLD ABOVEGROUND TANKS. DD INFORMED GARDENER THAT ADDITIONAL INFORMATION NEEDS TO BE SUBMITTED TO DEC (LOCATION OF CONTAMINATION) ALONG WITH INVESTIGATION/PROPOSED REMEDIAL PLAN. DD TELECON WITH DOUG WELCH (VILLAGE SUPERINTENDENT) - HE THOUGHT THERE WERE USTs REMOVED YEARS AGO. AN ELEVATOR SHAFT IS BEING INSTALLED ADJACENT TO THE BUILDING. WELCH WAS HOPING THAT CLARK PATTERSON WOULD HAVE SUFFICIENT DATA/INFORMATION. DEC WILL SEND RESPONSIBILITY LETTER TO MAYOR RICHARD HATHAWAY AT VILLAGE, WHICH WILL REQUEST SUBSURFACE INVESTIGATION AND PROPOSED REMEDIAL ACTIONS, IF NECESSARY (letter dated 5/11/06; response requested by 5/26/06).5/15/06: DD RECEIVES PHONE CALL FROM GENESEO MAYOR DICK HATHAWAY (585-245-5291) , WHO RECEIVED DEC LETTER AND IS LOOKING FOR AVAILABLE INFORMATION. HATHAWAY THOUGHT SOIL SAMPLES MAY HAVE BEEN COLLECTED FOR LAB ANALYSIS IN 2004. A PLANNED BUILDING ADDITION WILL EXTEND WITHIN 10-FEET OF REPORTED IMPACTED AREA. REMEDIAL PLAN MAY BE TO EXCAVATE IMPACTED SOIL DURING UPCOMING CONSTRUCTION.5/31/06: DD TELECON WITH SANDY BRENNAN (243-3385), WHO WAS ASSIGNED THE PROJECT FROM MAYOR HATHAWAY. SHE WILL LOOK INTO FILES AND CONTACT CLARK PATTERSON. DISCUSSED POSSIBILITY OF VILLAGE DPW PERSONNEL DIGGING TEST PITS. DD LATER RECEIVES FAX FROM SANDY BRENNAN WHICH INCLUDES SITE SKETCH WITH |

**GENESEO TOWN VILLAGE HALL (Continued)** **S103593021**

SOIL BORINGS LOCATIONS AND BORING LOGS (5). A PETROLEUM SHEEN AND ODOR WAS REPORTED BY DRILLERS AT B04-3, WHICH IS LOCATED DUE EAST OF CURRENT TOWN/VILLAGE HALL BUILDING AND DUE EAST OF PROPOSED ADDITION IN AN ASPHALT AREA. THE IMPACTS WERE OBSERVED AT APPROX. 5-FEET BGS IN GRAVEL. BRENNAN TO GET BACK TO DEC WITH PROPOSED PLAN OF INVESTIGATION.9/27/06: DD LEAVES MESSAGE WITH SANDY BRENNAN - NEVER HEARD BACK FROM HER - DEC REQUESTED RESPONSE/INVESTIGATION WORK PLAN.10/2/06: VOICEMAIL MESSAGE RECEIVED FROM SANDY BRENNAN - THEY PLAN ON USING A BULLDOZER TO INSPECT THE SUSPECT AREA. THE BUILDING ADDITION HAS BEEN PUT OFF UNTIL NEXT YEAR. DEC TO BE CONTACTED {MESSAGE LEFT WITH BRENNAN ON 10/6).10/16/06: VOICEMAIL MESSAGE RECEIVED FROM SANDY BRENNAN - A BACKHOE WILL BE USED 10/18/06 UNDER SUPERVISION OF GEOLOGIST TO DIG TEST PITS.10/18/06: DD ONSITE WITH TOWN/VILLAGE PERSONNEL WHO ARE EXCAVATING A # OF TEST PITS WITH A BACKHOE. PETROLEUM IMPACTS (LIKELY GASOLINE) ENCOUNTERED IN SOILS IN 4 OF 7 TEST PITS. PERCHED WATER FOUND IN ONLY ONE TEST PIT THAT WAS FILLED WITH PEA GRAVEL (LIKELY BACKFILL FROM FORMER UST - SHEEN ON WATER AND EMULSIFIED PRODUCT). GAVE PERMISSION TO TRANSPORT AND TEMPORARILY STAGE CONTAMINATED SOIL AT VILLAGE'S WWTP ON RIVERSIDE DRIVE. ONSITE GEOLOGIST ESTIMATES APPROX. 500 TO 1000 TONS OF CONTAMINATED SOILS. RP TO LOOK INTO POSSIBLE BIOCELL. A # OF SAMPLES WERE COLLECTED FOR LAB ANALYSIS FOR VOCs.11/22/06: DD TELECON WITH DOUG WELCH (202-9782) - DEC APPROVES PUTTING OFF EXCAVATION OF CONTAMINATED SOIL UNTIL NEXT MAY 2007 WHEN COLLEGE IS OUT OF SESSION, AS LONG AS A WORK PLAN IS SUBMITTED TO DEC. TOWN/VILLAGE WILL DECIDE ON POSSIBILITY OF BIOCELL, WHICH WILL NEED TO BE APPROVED BY DEC. WELCH WAS INSTRUCTED TO HAVE EXISTING CONTAMINATED SOIL PILE PROPERLY DISPOSED AT LANDFILL SOON, AND FAX DEC DISPOSAL RECEIPTS. 1/11/07: DD TELECON WITH DOUG WELCH - OPTECH DID NOT RUN THE ANALYSIS ON A SOIL SAMPLE COLLECTED IN OCTOBER 2006 THAT IS ACCEPTABLE TO THEIR PREFERRED DISPOSAL FACILITY. WELCH DECIDED TO GO WITH EXISTING SOIL PROFILE AND HAVE OPTECH DISPOSE SOIL SOON AT A DIFFERENT FACILITY.2/2/07: DEC RECEIVES FAX OF SOIL DISPOSAL RECEIPTS FOR 23.77 TONS OF SOIL AT HIGH ACRES LANDFILL. DD SENDS DOUG WELCH EMAIL REQUESTING BIOCELL WORK PLAN, IF THAT IS THE APPROACH THE TOWN IS GOING TO TAKE THIS COMING SPRING.5/11/07: DD TELECON WITH DOUG WELCH (585-202-9782) - HE'S WORKING WITH RUSS SAVAGE OF NATURE'S WAY TO PREPARE CORRECTIVE ACTION PLAN, WHICH WILL LIKELY INCLUDE BIOCELL. DEC MAY ISSUE EMERGENCY WASTE TRANSPORTERS PERMIT. A BIOCELL WORK PLAN WILL BE REQUIRED/DEC TO INSPECT PROPOSED BIOCELL LOCATION IF APPLICABLE. 6/13/07: DD TELECON WITH DOUG WELCH - SOIL TO EXCAVATED AND TRANSPORTED UNDER EMERGENCY WASTE HAULERS PERMIT BY TOWN TO NEAR WWTP AREA AND STOCKPILED. DEPENDING ON QUANTITY, SOIL TO BE EITHER DISPOSED PROMPTLY OR A BIOCELL PACKAGE WILL BE SUBMITTED FOR REVIEW. WILL NEED TOWN APPROVAL.06/14/07: B FINSTER MET WITH DOUG WELCH,GENESEO VILLAGE DPW SUPT., AT VILLAGE STP SITE WHERE VILLAGE WANTS TO PROPOSE A BIOCELL FOR STORAGE AND TREATMENT OF CONTAMINATED SOIL FROM TOWN/VILLAGE HALL. SITE IS LEVEL AND NO NEARBY HOMES IN AREA- SITE LOOKS GOOD FOR A BIOCELL. WE WILL AWAIT PROPOSAL FROM VILLAGE OF GENESEO VIA NATURE'S WAY. DEPENDING ON CONTAMINATED SOIL AMOUNT EXCAVATED, THE VILLAGE OF GENESEO MAY CHOOSE TO DISPOSE OF THIS SOIL IN AN APPROVED LANDFILL.6/20/07: DD TELECON WITH DOUG WELCH - CONTAMINATED SOIL EXCAVATION WORK IS SCHEDULED TO START ON 6/25/07. NATURE'S WAY TO ASSIST/SUPERVISE, AND VILLAGE TRUCKS TO HAUL SOIL TO TEMPORARY STAGING AREA AT #235 RIVERSIDE DRIVE. DISCUSSED NEED FOR CONFIRMATORY SOIL SAMPLING, POSSIBLE DEWATERING, ETC. WELCH TO PICK UP DEC ISSUED EMERGENCY WASTE TRANSPORTER PERMITS TOMORROW AT AVON

**GENESEO TOWN VILLAGE HALL (Continued)** **S103593021**

OFFICE.06/23/2007: PM ON SITE, EXCAVATION UNDERWAY USING VILLAGE EQUIPMENT WITH OVERSITE BY NATURE'S WAY. NATURE'S WAY INSPECTOR SCREENING SOILS WITH PID AND HAS DEFINED CONTAMINATION IN EVERY DIRECTION EXCEPT THE SOUTH TOWARD THE BUILDING. MUCH OF THE CONTAMINATION APPEARS TO BE CONTAINED IN OLD SAND THE THE FORMER TANK WAS LIKELY PLACED IN. THE SOILS ARE BEING STAGED AT THE SEWAGE TREATMENT PLANT ON 6 MIL PLASTIC. SOIL APPEARS TO BE FAIRLY DRY THOUGH HAS A STRONG GASOLINE ODOR. 7/12/07: DD TELECON WITH DOUG WELCH (202-9782) - DIGOUT HAS BEEN COMPLETED AND CONTAMINATED SOIL IS CURRENTLY STOCKPILED. NATURES WAY IS PREPARING A BIOCELL APPROVAL PACKAGE (800 TO 900 TONS+/-) ALONG WITH CONFIRMATORY SOIL ANALYTICAL RESULTS. NO GROUNDWATER ENCOUNTERED.08/02/07: DDAKE AND INTERN INSPECTED CONTAMINATED SOIL STOCKPILE AND NOTICED THAT THE POLY IS COVERING MOST OF THE PILE BUT SOME IS EXPOSED. DDAKE TO FOLLOW UP WITH TOWN ABOUT HAVING IT RECOVERED WITH POLY. FOLLOW UP WITH DDAKE FOR STATUS.08/10/07: EXCAVATION DOCUMENTATION RECEIVED FROM NATURES WAY. BEDROCK ENCOUNTERED AT APPROX. 8-FEET BGS. APPROX. 700-CUBIC YARDS OF CONTAMINATED SOILS EXCAVATED AND STOCKPILED OFFSITE (PENDING BIOCELL APPROVAL/CONSTRUCTION). THREE SIDEWALL COMPOSITE SAMPLES COLLECTED AND ANALYZED FOR VOCs - ALL COMPOUNDS BELOW TAGMs. NO MENTION OF GROUNDWATER. NO ANALYSIS FOR SOLVENT COMPOUNDS. {analytical results later sent for solvents - not detected}8/20/07:
DD TELECON WITH GREG WEBER AND DAVID WALKER OF NATURE'S WAY - WORK PLAN COMING THIS WEEK. NO GROUNDWATER ENCOUNTERED IN THE EXCAVATION - PID READINGS OF SOILS JUST ABOVE BEDROCK (SHALE?) WERE DETECTED. DD TELECON WITH DOUG WELCH - WILL REQUIRE A GW MONITORING WELL IN BEDROCK (LETTER TO BE SENT ONCE BIOCELL WORKPLAN IS RECEIVED). A SOIL STOCKPILE SOIL SAMPLE IS LATER FAXED TO DECS - NON-DETECT FOR SOLVENT COMPOUNDS.08/31/07: PROPOSED BIO-CELL REMEDIATION WORK PLAN RECEIVED FROM NATURES WAY ENVIRONMENTAL.5/19/08: DD SENDS DOUG WELCH EMAIL REQUESTING UPDATE ON THIS SITE - SPECIFICALLY NEED BIOCELL SUMMARY REPORT AND WANT TO ENSURE THE BIOCELL IS BEING MAINTAINED AND TILLED ROUTINELY.5/20/08: EMAIL RECEIVED FROM DOUG WELCH: There was nothing
done to the bio-cell over the winter months. Nature's Way has been
here this Spring....excavator brought in to stir the pile on 4/16,
sprayed the bugs on the pile on 4/17 & 5/6. I will contact Nature's
Way and try to get you a schedule of tiling & reports. Any problems,
let me know, Doug Welch07/10/08: LETTER RECEIVED FROM NATURE'S WAY REGARDING BIO-REMEDIATION ACTIVITIES OF SOILS.11/11/08: LETTER RECEIVED FROM NATURE'S WAY REGARDING BIO-REMEDIATION ACTIVITIES OF SOILS.11/19/08: DDAKE OF SPILLS UNIT ONSITE - NATURES WAY ENV. IS TURNING OVER THE BIOCELL SOIL AND SCREENING WITH A PID METER. AT NUMEROUS LOCATIONS, I INSPECT THE SOIL AND DO NOT OBSERVE ANY PETROLEUM ODORS OR STAINING. ALL PID METER READINGS ARE NON-DETECT. I CONTCAT GREG WEBER OF NATURES WAY AND SUGGEST THEY SUBMIT A # OF GRAB/COMPOSITE CONFIRMATORY SOIL SAMPLES TO THE LAB, TO HOPEFULLY CLOSE OUT THE SPILL/BIOCELL TREATMENT. THE TOWN IS REPORTEDLY GOING TO PUSH THE SOIL NEXT TO THEA DJACENT HILL AND USE ONSITE AS FILL.12/10/08: REQUEST FOR CLOSURE/CLEARANCE RECEIVED FROM NATURES WAY. LETTER INCLUDES CONFIRMATORY SOIL ANALYTICLA RESULTS FROM GRAB/COMPOSITE SOIL SAMPLES - ALL VOCs NON-DETECT.12/12/08: BASED ON INFORMATION PROVIDED, NO FURTHER ACTIONS REQUIRED BY SPILLS UNIT AT THIS TIME/SPILL FILE CLOSED. SOILS IN BIOCELL TO BE USED ONSITE AS FILL BY TOWN. 12/12/08: DD SENDS NO FURTHER ACTION LETTER TO JASON FRAZIER AT VILLAGE OF GENESEO.12/15/08 PAPER FILE REMOVED PER FILE RETENTION POLICY.

Remarks: WHILE PERFORMING GEOTECHNICAL WORK FOR AN EXPANSION PROJECT AT THE

**GENESEO TOWN VILLAGE HALL (Continued)** **S103593021**

TOWN HALL IN GENESEO, CONTAMINATION WAS ENCOUNTERED. WILL BE SAMPLING FOR IDENTIFICATION PURPOSES NEAR THE REAR OR EAST SIDE OF THE BUILDING.

Material:

| | |
|---|---|
| Site ID: | 331741 |
| Operable Unit ID: | 1094046 |
| Operable Unit: | 01 |
| Material ID: | 574156 |
| Material Code: | 0066A |
| Material Name: | UNKNOWN PETROLEUM |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 0 |
| Units: | Not reported |
| Recovered: | No |
| Resource Affected: | Not reported |
| Oxygenate: | False |

Tank Test:

---

**B20** **CHESTNUT & PARK STREETS** **NY Spills** **S104283490**
**SE** **CHESTNUT & PARK STREETS** **N/A**
**< 1/8** **GENESEO, NY**
**0.005 mi.**
**25 ft.** **Site 7 of 16 in cluster B**

**Relative:**
**Higher**

**Actual:**
**773 ft.**

SPILLS:

| | |
|---|---|
| Facility ID: | 9970450 |
| Facility Type: | ER |
| DER Facility ID: | 151307 |
| Site ID: | 180400 |
| DEC Region: | 8 |
| Spill Date: | 10/26/1999 |
| Spill Number/Closed Date: | 9970450 / 12/5/2000 |
| Spill Cause: | Unknown |
| 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: | 2626 |
| Investigator: | PRMILLER |
| Referred To: | Not reported |
| Reported to Dept: | 10/27/1999 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Unknown |
| Spill Notifier: | Other |
| Cleanup Ceased: | 12/5/2000 |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 10/27/1999 |
| Spill Record Last Update: | 3/9/2011 |
| Spiller Name: | Not reported |
| Spiller Company: | UNKNOWN |

**CHESTNUT & PARK STREETS (Continued)** **S104283490**

Spiller Address: Not reported
Spiller City,St,Zip: NY
Spiller Company: 999
Contact Name: CALLER
Contact Phone: (716) 395-9080
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "PM"12/5/00: CONTAMINATION LIKELY FROM NATURAL SOURCES. SEWER INSTALL COMPLETE. NO FURTHER ACTION REQUIRED AT THIS TIME BY NYSDEC SPILLS.03/09/11: PAPER FILE REMOVED PER FILE RETENTION POLICY.
Remarks: Geotechnical borings being conducted by Vanderhorst Drilling in preparation for a sewer installation by the Village of Geneseo revealed odor of petroleum at 15 to 19 feet below ground surface and just above bedrock. Ken Pike of EARTHWORKS took samples of soil in this interval and sent to Paradigm Labs for fingerprinting. Results revealed 908 ppm and 175 ppm in two soil samples of #6 fuel oil. Research as to the source suggests the potential source may be naturally occurring oils shales prevalent in the area. Nearby the former Geneseo Gas Works extracted gas from these shales. Ken Pike to keep Department informed as to the progress of the sewer installation in case conditions change or more information is becomes available.

Material:
Site ID: 180400
Operable Unit ID: 1090904
Operable Unit: 01
Material ID: 291220
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:

---

**21**
**WSW**
**< 1/8**
**0.005 mi.**
**28 ft.**

**Relative:**
**Lower**

**Actual:**
**745 ft.**

**GENESEO COLLEGE/ DOTY BLD** **NY Spills** **S111158651**
**3 PARK ST OR 295 MARY GENISOM DR** **N/A**
**GENESEO, NY**

SPILLS:
Facility ID: 1104061
Facility Type: ER
DER Facility ID: 406203
Site ID: 451648
DEC Region: 8
Spill Date: 7/13/2011
Spill Number/Closed Date: 1104061 / 2/29/2012
Spill Cause: Unknown
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: 2626

**GENESEO COLLEGE/ DOTY BLD (Continued)** **S111158651**

| | |
|---|---|
| Investigator: | TPWALSH |
| Referred To: | Not reported |
| Reported to Dept: | 7/13/2011 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 7/13/2011 |
| Spill Record Last Update: | 2/29/2012 |
| Spiller Name: | Not reported |
| Spiller Company: | GENESEO COLLEGE/ DOTY BLD |
| Spiller Address: | Not reported |
| Spiller City,St,Zip: | NY |
| Spiller Company: | 999 |
| Contact Name: | MEL BARTHOLOW |
| Contact Phone: | (315) 374-6282 |
| DEC Memo: | WHILE INSTALLING A STORM DRAIN, SOIL WITH AN ODOR WAS NOTED. SAMPLES WERE TAKEN TO PARADIGM LAB TO DETERMINE IF THE ODOR WAS PETROLEUM, AND THE ANALYTICAL RESULTS INDICATED #6 FUEL OIL. AREA WAS FORMERLY GENESEO HIGH SCHOOL.02/29/12 DT CONVERSATION WITH MEL BARTHOLOW, 2 YARDS OF CONTAMINATED SOILS WERE REMOVED AND DISPOSED OF PROPERLY. NO OTHER CONTAMINATION WAS ENCOUNTERED. NO FURTHER ACTION IS NEEDED BY SPILLS. CLOSED. |
| Remarks: | tests confirm soil contamination. clean up pending. |

Material:

| | |
|---|---|
| Site ID: | 451648 |
| Operable Unit ID: | 1201833 |
| Operable Unit: | 01 |
| Material ID: | 2198395 |
| Material Code: | 0066A |
| Material Name: | UNKNOWN PETROLEUM |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Resource Affected: | Not reported |
| Oxygenate: | False |

Tank Test:

**B22**
**SE**
**< 1/8**
**0.005 mi.**
**29 ft.**

**EDR US Hist Cleaners** **1014987592**
**N/A**

**131 MAIN ST**
**GENESEO, NY 14454**

**Site 8 of 16 in cluster B**

**Relative:**
**Higher**

**Actual:**
**774 ft.**

EDR Historical Cleaners:

| | |
|---|---|
| Name: | PRESTIGE CLEANERS |
| Year: | 1999 |
| Address: | 131 MAIN ST |
| Name: | PRESTIGE CLEANERS |
| Year: | 2000 |
| Address: | 131 MAIN ST |

---

**B23**
**SE**
**< 1/8**
**0.005 mi.**
**29 ft.**

**PRESTIGE/NUNDA CLEANERS** **NY DRYCLEANERS** **S110247672**
**131 MAIN STREET** **N/A**
**GENESEO, NY 14454**

**Site 9 of 16 in cluster B**

**Relative:**
**Higher**

**Actual:**
**774 ft.**

DRYCLEANERS:

| | |
|---|---|
| Facility ID: | 8-2426-00011 |
| Phone Number: | 585-243-4849 |
| Region: | Not reported |
| Registration Effective Date: | N/A |
| Inspection Date: | 11AUG23 |
| Install Date: | 86/09 |
| Drop Shop: | Not reported |
| Shutdown: | Y |
| Alternate Solvent: | Not reported |
| Current Business: | Not reported |

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**B24**
**SE**
**< 1/8**
**0.005 mi.**
**29 ft.**

**WASTE MANAGEMENT** **NY Spills** **S106004640**
**131 MAIN STREET** **N/A**
**GENESEO, NY**

**Site 10 of 16 in cluster B**

**Relative:**
**Higher**

**Actual:**
**774 ft.**

SPILLS:

| | |
|---|---|
| Facility ID: | 0202853 |
| Facility Type: | ER |
| DER Facility ID: | 208889 |
| Site ID: | 255008 |
| DEC Region: | 8 |
| Spill Date: | 6/18/2002 |
| Spill Number/Closed Date: | 0202853 / 6/18/2002 |
| 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: | 2626 |
| Investigator: | DLTILTON |
| Referred To: | Not reported |
| Reported to Dept: | 6/18/2002 |
| CID: | 396 |
| Water Affected: | Not reported |
| Spill Source: | Commercial Vehicle |

**WASTE MANAGEMENT (Continued)** **S106004640**

| | |
|---|---|
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | 6/18/2002 |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 6/18/2002 |
| Spill Record Last Update: | 6/20/2002 |
| Spiller Name: | MIA IOANNONE |
| Spiller Company: | WASTE MANAGEMENT OF NY |
| Spiller Address: | 1661 MT READ BOULEVARD |
| Spiller City,St,Zip: | ROCHESTER, NY 14606- |
| Spiller Company: | 001 |
| Contact Name: | MIA IOANNONE |
| Contact Phone: | (716) 254-7574 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was "DT" |
| Remarks: | A hydraulic line broke on a Waste Management truck spilling 15 gallons of oil to the ground. The cleanup is complete, however, 1 gallon of hydraulic fluid did get into a drain, but was recovered. No further action needed by Spills. |

Material:

| | |
|---|---|
| Site ID: | 255008 |
| Operable Unit ID: | 853701 |
| Operable Unit: | 01 |
| Material ID: | 520689 |
| Material Code: | 0010 |
| Material Name: | Hydraulic Oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 15 |
| Units: | Gallons |
| Recovered: | 15 |
| Resource Affected: | Not reported |
| Oxygenate: | False |

Tank Test:

---

**D25** **GENESEO FAMILY RESTAURANT** **NY Spills** **S109206863**
**ENE** **105 MAIN STREET** **N/A**
**< 1/8** **GENESEO, NY 14454**
**0.008 mi.**
**43 ft.** **Site 2 of 2 in cluster D**

**Relative:**
**Higher**

**Actual:**
**771 ft.**

SPILLS:

| | |
|---|---|
| Facility ID: | 0805162 |
| Facility Type: | ER |
| DER Facility ID: | 351411 |
| Site ID: | 402207 |
| DEC Region: | 8 |
| Spill Date: | 8/4/2008 |
| Spill Number/Closed Date: | 0805162 / 8/4/2008 |
| Spill Cause: | Other |
| Spill Class: | Possible release with minimal potential for fire or hazard or Known release with no damage. DEC Response. Willing Responsible Party. |

**GENESEO FAMILY RESTAURANT (Continued)** **S109206863**

Corrective action taken.
SWIS: 2626
Investigator: prmiller
Referred To: Not reported
Reported to Dept: 8/4/2008
CID: 444
Water Affected: Not reported
Spill Source: Commercial Vehicle
Spill Notifier: Responsible Party
Cleanup Ceased: 8/4/2008
Cleanup Meets Std: True
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 8/4/2008
Spill Record Last Update: 8/13/2008
Spiller Name: MIA IOANNONE
Spiller Company: GENESEO FAMILY RESTAURANT
Spiller Address: 105 MAIN STREET
Spiller City,St,Zip: GENESEO, NY 14454
Spiller Company: 999
Contact Name: MIA IOANNONE
Contact Phone: (585) 254-7574 232
DEC Memo: NO FURTHER ACTION REQUIRED BY SPILLS UNIT. SPILL CLOSED.
Remarks: WHEN DRIVER PUT DOWN DUMPSTER IT KNICKED THE BARREL AND CAUSED SPILL. ALL HAS BEEN CLEANED UP.

Material:
Site ID: 402207
Operable Unit ID: 1158975
Operable Unit: 01
Material ID: 2150083
Material Code: 0820A
Material Name: COOKING OIL
Case No.: Not reported
Material FA: Other
Quantity: 50
Units: Gallons
Recovered: 50
Resource Affected: Not reported
Oxygenate: False

Tank Test:

---

**B26** **SUNY GENESEO** **NY Spills** **S102130549**
**SE** **1 PARK PLACE** **N/A**
**< 1/8** **GENESEO, NY**
**0.009 mi.**
**47 ft.** **Site 11 of 16 in cluster B**

**Relative: Higher**

**Actual: 774 ft.**

SPILLS:
Facility ID: 9502098
Facility Type: ER
DER Facility ID: 239950
Site ID: 296503
DEC Region: 8

**SUNY GENESEO (Continued)** **S102130549**

| | |
|---|---|
| Spill Date: | 5/18/1995 |
| Spill Number/Closed Date: | 9502098 / 5/18/1995 |
| 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: | 2626 |
| Investigator: | BWFINSTE |
| Referred To: | Not reported |
| Reported to Dept: | 5/18/1995 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | 5/18/1995 |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 5/19/1995 |
| Spill Record Last Update: | 9/30/2004 |
| Spiller Name: | Not reported |
| Spiller Company: | SUNY GENESEO |
| Spiller Address: | SAME |
| 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 "JF"05/18/95: SUNY GENESEO APPLIED SPEEDY DRI THEN PUT IN DOUBLE BAGS & INTO DUMPSTER. NO FURTHER ACTION REQUIRED. |
| Remarks: | BACKHOE LINE RUPTURED SPILLING APPROX 5 GALS OF HYDRAULIC OIL TO PAVEMENT. |

Material:

| | |
|---|---|
| Site ID: | 296503 |
| Operable Unit ID: | 1016520 |
| Operable Unit: | 01 |
| Material ID: | 367165 |
| Material Code: | 0010 |
| Material Name: | Hydraulic Oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 0 |
| Units: | Not reported |
| Recovered: | No |
| Resource Affected: | Not reported |
| Oxygenate: | False |
| Site ID: | 296503 |
| Operable Unit ID: | 1016520 |
| Operable Unit: | 01 |
| Material ID: | 367166 |
| Material Code: | 0016A |
| Material Name: | NON PCB OIL |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 5 |

**SUNY GENESEO (Continued)** **S102130549**

| | |
|---|---|
| Units: | Gallons |
| Recovered: | No |
| Resource Affected: | Not reported |
| Oxygenate: | False |

Tank Test:

| | |
|---|---|
| Facility ID: | 9502097 |
| Facility Type: | ER |
| DER Facility ID: | 239950 |
| Site ID: | 296502 |
| DEC Region: | 8 |
| Spill Date: | 5/12/1995 |
| Spill Number/Closed Date: | 9502097 / 5/18/1995 |
| 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: | 2626 |
| Investigator: | BWFINSTE |
| Referred To: | Not reported |
| Reported to Dept: | 5/18/1995 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | 5/18/1995 |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 5/19/1995 |
| Spill Record Last Update: | 9/30/2004 |
| Spiller Name: | Not reported |
| Spiller Company: | SUNY GENESEO |
| Spiller Address: | SAME |
| 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 "JF"05/18/95: MATERIAL CONTAINED ON LAWN MOWER. SUNY PERSONNEL WIPED UP W/RAGS. NO FURTHER ACTION REQUIRED. 09/28/95: This is additional information about material spilled from the translation of the old spill file: HYDRAULIC FLUID. |
| Remarks: | LEAKING HYDRAULIC LINE ON LAWN MOWER CAUSED SPILL OF APPROX 2 QTS OF HYDRAULIC OIL. |

Material:

| | |
|---|---|
| Site ID: | 296502 |
| Operable Unit ID: | 1016518 |
| Operable Unit: | 01 |
| Material ID: | 367164 |
| Material Code: | 0016A |
| Material Name: | NON PCB OIL |

**SUNY GENESEO (Continued)** **S102130549**

| | |
|---|---|
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 1 |
| Units: | Gallons |
| Recovered: | No |
| Resource Affected: | Not reported |
| Oxygenate: | False |

Tank Test:

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**B27** **EDR US Hist Cleaners** **1015067588**
**ESE** **5 CHESTNUT ST** **N/A**
**< 1/8** **GENESEO, NY 14454**
**0.010 mi.**
**52 ft.** **Site 12 of 16 in cluster B**

**Relative:**
**Higher**

**Actual:**
**772 ft.**

EDR Historical Cleaners:

| | |
|---|---|
| Name: | CRESCO DRY CLEANERS & LAUNDROMAT |
| Year: | 1999 |
| Address: | 5 CHESTNUT ST |
| Name: | CRESCO DRY CLEANERS |
| Year: | 2001 |
| Address: | 5 CHESTNUT ST |
| Name: | CRESCO DRY CLEANERS |
| Year: | 2002 |
| Address: | 5 CHESTNUT ST |
| Name: | CRESCO DRY CLEANERS & LNDRMT |
| Year: | 2003 |
| Address: | 5 CHESTNUT ST |
| Name: | CRESCO DRY CLRS & LAUNDROMAT |
| Year: | 2004 |
| Address: | 5 CHESTNUT ST |
| Name: | CRESCO DRY CLEANERS & LAUNDROMAT |
| Year: | 2005 |
| Address: | 5 CHESTNUT ST |
| Name: | CRESCO DRY CLEANERS & LAUNDROMAT |
| Year: | 2006 |
| Address: | 5 CHESTNUT ST |
| Name: | CRESCO DRY CLEANERS & LAUNDROMAT |
| Year: | 2007 |
| Address: | 5 CHESTNUT ST |
| Name: | CRESCO DRY CLEANERS & LAUNDROMAT |
| Year: | 2008 |
| Address: | 5 CHESTNUT ST |
| Name: | CRESCO DRY CLEANERS & LAUNDROMAT |
| Year: | 2009 |
| Address: | 5 CHESTNUT ST |

**(Continued)** **1015067588**

Name: CRESCO DRY CLEANERS
Year: 2010
Address: 5 CHESTNUT ST

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**B28** **(FORMER) GENESEE VALLEY SERVICE** **NY Spills** **S102127146**
**SE** **137 MAIN STREET** **N/A**
**< 1/8** **GENESEO, NY 14454**
**0.013 mi.**
**69 ft.** **Site 13 of 16 in cluster B**

**Relative:**
**Higher**

**Actual:**
**776 ft.**

SPILLS:

| | |
|---|---|
| Facility ID: | 9201855 |
| Facility Type: | ER |
| DER Facility ID: | 49006 |
| Site ID: | 219725 |
| DEC Region: | 8 |
| Spill Date: | 5/13/1992 |
| Spill Number/Closed Date: | 9201855 / Not Reported |
| Spill Cause: | Unknown |
| Spill Class: | Known release that creates potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken. |
| SWIS: | 2626 |
| Investigator: | TGHALL |
| Referred To: | Not reported |
| Reported to Dept: | 5/13/1992 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Gasoline Station or other PBS Facility |
| Spill Notifier: | DEC |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | 4/25/1995 |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 1 |
| Date Entered In Computer: | 5/19/1992 |
| Spill Record Last Update: | 3/4/2014 |
| Spiller Name: | Not reported |
| Spiller Company: | GARY LEAST |
| Spiller Address: | 35 NORTH STREET |
| Spiller City,St,Zip: | GENESEO, NY 14454 |
| Spiller Company: | 001 |
| Contact Name: | Not reported |
| Contact Phone: | Not reported |
| DEC Memo: | 05/13/92: BUELL OIL IS GOING TO INSTALL USED TANKS WHICH WILL BE RECERTIFIED. BUELL LEASING SITE. TANKS TO BE REMOVED 04-13-92. ON 04-14-92 TANK PITS WILL BE EXCAVATED TO CLEAN SOIL. BUELL LEASING SITE. IF CLEAN SOIL IS NOT FOUND A REMEDIAL PLAN WILL BE DEVELOPED. 05/14/92: CH MEETS ON SITE W/R SAVAGE. THERE IS SMALL AMOUNT OF PRODUCT ON THE WATER. SOILS AT THE EDGES OF EXCAVATION APPEAR TO BE CLAYS. WATER IS BEING PUMPED OUT OF PITS AND INTO TANK FOR LATER DISPOSAL. SAVAGE WANTS TO TREAT SOME EXCAVATED SOIL ON SITE. HE WONDERS IF THEY COULD MOVE SOIL OFF SITE FOR TREATMENT. I TELL HIM THAT FINAL SAY IS UP TO DAN DAVID OF SOLID OF SOLID WASTE, BUT I DOUBT IF HE WILL APPROVE IT. ADVISE SAVAGE THAT ADDITIONAL SOIL VAPOR SURVEY WILL NEED TO BE DONE ALONG W/WELLS. SEND LETTER TO GARY LEAST, PROPERTY OWNER, REQUESTING FURTHER INVESTIGATION AND REMEDIAL WORK. BUELL IS HANDLING REMEDIATION. 08/05/92: CH DOES SITE CHECK. SOIL |

**(FORMER) GENESEE VALLEY SERVICE (Continued)** **S102127146**

VENT WELLS BEING MANIFOLDED TOGETHER. ALSO PIPING CONTRACTOR ON SITE PIPING UP TANKS & DISPENSER. PROPERTY OWNER GARY LEAST ON SITE. THERE ARE 3 CLEANED TANKS ON SITE. ACCORDING TO LEAST THESE TANKS WERE GOING TO KINGSTON FARM. I TALK TO RUSS SAVAGE ON TELEPHONE. HE SAYS THE SOIL PILES ARE ABOUT TO BE STARTED FOR BIOREMEDIATION. SOIL GAS SURVEY TO BE DONE 08-11-92. DEC WILL PLACE MONITORING WELLS AT THAT TIME. 08/11/92: NATURES WAY IS ON SITE CONDUCTING ADDITIONAL SOIL GAS SURVEY TO DEFINE HORIZONTAL PLUME. HIGH READINGS ARE ENCOUNTERED ALONG SOUTH EASTERN EDGE OF PROPERTY. VAPOR PLUME DOES NOT EXTEND TO THE WEST ACROSS THE MAIN STREET. WELL LOCTIONS ARE PLACED FOR THREE MONITORING WELLS. 10/21/93: CH MEETS GARY LEAST & AUSTIN WADSWORTH AT SITE. MR WADSWORTH WANTS REMEDIATED SOIL FOR DISPOSAL ON HIS FARM DIRECTLY SOUTH OF SERVICE STATION. CH INSPECTS AREA WHERE SOIL WILL BE PLACED FOR FILL. AREA IS IN ISOLATED AREA AWAY FROM HOMES. NEAREST RESIDENT IS 300-400 YDS. NO WATER SUPPLY OR STREAMS IN AREA. THERE WILL BE NO ELEVATED CHANGE GREATER THAN 1 FT. CH SPEAKS TO D DAVID REG SOLID WASTE ENG - HE VERBALLY OKAYS SITE. 06/23/94: CH REFERRED TO DT FOR FOLLOW UP.04/25/95: DT ON SITE; BAILED ALL FOUR WELLS AND NOTED NO EVIDENCE OF PETROLEUM, VAPORS OR SHEEN. 02/04/1998: CONTAMINATED SOIL WAS ENCOUNTERED DURING PUMP ISLAND INSTALLATION WORK. SEE SPILL #9712331 FOR MORE INFORMATION. 11/06/2003: SPILL REACTIVATED BASED ON SIGNIFICANT SOIL CONTAMINATION BEING ENCOUNTERED IN APRIL 1998 DURING DISPENSER UPGRADE AT FACILITY (SPILL #9712331).03/15/2005: POTENTIAL LINE LEAK REPORTED ON 6000 GALLON UNLEADED SYSTEM. SEE SPILL #0413045 FOR MORE INFORMATION.11/20/2009: LETTER SENT TO WILSON FARMS (CURRENT OWNER OF TANK SYSTEM) REQUESTING WORK TO DEFINE EXTENT OF CONTAMINATION AND SUBMIT RAP.12/01/2009: VERBAL REPLY TO LETTER FROM WILSON FARMS(DICK HALL). THEY ARE NOT ACCEPTING RESPONSIBILITY AT THIS TIME BUT WILL GRANT DEPARTMENT ACCESS TO SITE.05/29/13 DT ON SITE, MEET WITH KEITH STAHLE OF AECOM. HAND CLEARING AREAS WHERE WELLS WILL BE PLACED. VACUUM TRUCK BEING USED AS CLEARING PROGRESSES. DRILLING WILL COMMENCE 05/30/13.07/24/2013: SUBSURFACE INVESTIGATION REPORT RECEIVED FROM AECOM. SOIL AND GROUNDWATER CONTAMINATION ABOVE STANDARDS WAS IDENTIFIED (MW-5, MW-7). CONTINUED MONITORING AND FURTHER DELINEATION IS PROPOSED.03/03/2014: SUPPLEMENTAL SUBSURFACE INVESTIGATION REPORT RECEIVED FROM AECOM.

Remarks: RUSS SAVAGE OF NATURE'S WAY OVERSEEING TANK REPLACEMENT AT THIS SITE. TWO 4,000 GAL & TWO 6,000 GAL TANKS BEING REMOVED. EVIDENCE OF GASOLINE IN SOIL & ON WATER IN TANK EXCAVATION. CONTACT. GARY LEAST

Material:

| | |
|---|---|
| Site ID: | 219725 |
| Operable Unit ID: | 965939 |
| Operable Unit: | 01 |
| Material ID: | 413143 |
| Material Code: | 0009 |
| Material Name: | Gasoline |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 1 |
| Units: | Gallons |
| Recovered: | No |
| Resource Affected: | Not reported |
| Oxygenate: | False |

Tank Test:

**(FORMER) GENESEE VALLEY SERVICE (Continued)** **S102127146**

| | |
|---|---|
| Facility ID: | 0413045 |
| Facility Type: | ER |
| DER Facility ID: | 49006 |
| Site ID: | 338684 |
| DEC Region: | 8 |
| Spill Date: | 3/15/2005 |
| Spill Number/Closed Date: | 0413045 / 3/24/2005 |
| Spill Cause: | Unknown |
| Spill Class: | Known release that creates potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken. |
| SWIS: | 2626 |
| Investigator: | DBDAKE |
| Referred To: | Not reported |
| Reported to Dept: | 3/15/2005 |
| CID: | 444 |
| Water Affected: | Not reported |
| Spill Source: | Gasoline Station or other PBS Facility |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | 3/24/2005 |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 3/15/2005 |
| Spill Record Last Update: | 2/10/2011 |
| Spiller Name: | RICHARD HALL |
| Spiller Company: | TOPS MARKET |
| Spiller Address: | 6363 MAIN STREET |
| Spiller City,St,Zip: | WILLIAMSVILLE, NY 14221 |
| Spiller Company: | 001 |
| Contact Name: | KIMBERLY WILEY |
| Contact Phone: | (585) 243-5110 |
| DEC Memo: | 3/15/05: D DAKE CALLED KIMBERLY WILLEY AT THE STATION AT 1150 HRS (SHE IS FILLING IN FOR MANAGER WHO IS OUT ON MEDICAL LEAVE). A 160-GALLON DISCREPENCY HAS BEEN OBSERVED IN INVENTORY FOR A 6K GASOLINE UST(ALSO REPORTEDLY LOST 76 GALLONS LAST WEEK). THE TANK HAS BEEN TAKEN OUT- OF-SERVICE (CONTAINS APPROXIMATELY 1,500 GALLONS NOW). TANK #003, A PREMIUM UNLEADED GASOLINE TANK, WILL BE TESTED BY OKAR TOMORROW 3/16/05. ON 3/14, OKAR INSPECTED THE SUBMERSIBLE PUMP AND COULDN'T FIND A LEAK. REQUESTED HER TO INSPECT OBSERVATION WELLS AROUND THE TANK. KIMBERLY CALLED D DAKE BACK AT 1220 HRS. INSPECTED WELLS AND DID NOT FIND PETROLEUM - WATER IS CLEAR. REQUESTED CAREFULLY GAUGING THE TANK EVERY FEW HOURS AND CALL DEC IF ANY CHANGES ARE OBSERVED (MAY HAVE TO PUMP OUT THE TANK). 3/18/05: DD CONTACTED GAS STATION. KIMBERLY IS NOT WORKING TODAY. SPOKE WITH ANGIE. OKAR DID TEST THE LINE AND THE SUPER UNLEADED TANK ON 3/16. EVERYTHING REPORTEDLY PASSED BUT A SMALL LEAK/DRIP AT THE METER (IN DISPENSER?) WAS FOUND. THEY PLACED A BAG OVER THE LEAK AND OKAR WILL REPAIR IT IN THE FUTURE. THE TANK HAS BEEN PUT BACK INTO SERVICE. INFORMED ANGIE THAT DEC WOULD CONTACT OKAR. DD TELECON WITH CHUCK NORRIS OF OKAR AT 1528. INFORMED DEC THEY ONLY TESTED THE SUPER UNLEADED LINES (YESTERDAY) AND THEY PASSED - FOUND SMALL LEAK AT METER - A SMALL QUANTITY OF GASOLINE WAS IN THE POLY SUMP THAT WAS CLEANED UP. ACCORDING TO CHUCK, NOONE TOLD OKAR TO TEST THE TANK, AND HE SAID HE KNEW NOTHING ABOUT THE INVENTORY PROBLEM. HE WASN'T SURE IF THEIR TECH CHECKED THE INTERSTITIAL SPACE. DD LEFT MESSAGE WITH |

**(FORMER) GENESEE VALLEY SERVICE (Continued)** **S102127146**

DICK HALL OF WILSON FARMS/TOPS AT 1542 REQUESTING ADDITIONAL INFORMATION AND EXPRESSING CONCERN THAT TANK WAS NOT TESTED AND WAS PUT BACK IN SERVICE. DICK HALL 716-635-5493.3/21/05: DD CONTACTED BY MARK BECKER AFTER LEAVING A FEW MESSAGES WITH DICK HALL. MARK INFORMED DD THAT THEY BELIEVE THERE WAS NO LOSS - WAS DUE TO SLOPPY STICK READING BY STORE EMPLOYEE. THEY HAVE CAREFULLY REVIEWED THE INVENTORY SINCE (ALL OK); ALSO TESTED LINES, LEAK DETECTION, AND CALIBRATION (OK). THEY WILL KEEP AN EYE ON THE INVENTORY. DD REQUESTED MARK SEND SHORT LETTER FOR FILE AND SPILL WILL BE CLOSED.3/22/05: LINE TESTING RESULTS RECEIVED IN MAIL FROM OKAR/CA NORRIS FOR TESTING ON 3/17/05.3/23/05: DEC RECEIVES SHORT LETTER FROM TOPS (MARK BECKER) SUMMARIZING THEIR ACTIONS. WILL KEEP CLOSE EYE ON INVENTORY. NO FURTHER ACTIONS REQUIRED BY SPILLS UNIT AT THIS TIME - SPILLFILE CLOSED.02/10/11: PAPER FILE REMOVED PER FILE RETENTION POLICY.

Remarks: WILSON PERSONNEL BELIEVE THERE IS A LEAKING LINE ON A GAS TANK. THE TANK WILL BE CHECKED TOMORROW.

Material:

| | |
|---|---|
| Site ID: | 338684 |
| Operable Unit ID: | 1100616 |
| Operable Unit: | 01 |
| Material ID: | 580911 |
| 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: | 9712331 |
| Facility Type: | ER |
| DER Facility ID: | 49006 |
| Site ID: | 219726 |
| DEC Region: | 8 |
| Spill Date: | 2/3/1998 |
| Spill Number/Closed Date: | 9712331 / 4/30/1999 |
| Spill Cause: | Housekeeping |
| Spill Class: | Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken. |
| SWIS: | 2626 |
| Investigator: | TGHALL |
| Referred To: | Not reported |
| Reported to Dept: | 2/4/1998 |
| CID: | 199 |
| Water Affected: | Not reported |
| Spill Source: | Gasoline Station or other PBS Facility |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | 4/30/1999 |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |

**(FORMER) GENESEE VALLEY SERVICE (Continued)** **S102127146**

| | |
|---|---|
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2/4/1998 |
| Spill Record Last Update: | 3/9/2011 |
| Spiller Name: | Not reported |
| Spiller Company: | GARY LEAST |
| Spiller Address: | Not reported |
| Spiller City,St,Zip: | GENESEO, NY - |
| Spiller Company: | 001 |
| Contact Name: | Not reported |
| Contact Phone: | Not reported |
| DEC Memo: | 03/23/98: TRANSFERED BS TO SR.09/25/98: TRANSFERED SR TO TH.05/13/2002: STAFF MEETS WITH MIKE SAUNDERS, PROPERTY OWNED BY GARY LEAST. CONTAMINATION ISSUE NOT RESOLVED FROM SOIL GAS SURVEY PERFORMED IN 1992. NO SOIL SAMPLES TAKEN TO SHOW SITE MEETS STANDARDS.04/30/1999: DISPOSAL DOCUMENTATION RECEIVED IN SPILLS UNIT FOR 102.27 TONS OF CONTAMINATED SOIL THAT WAS EXCAVATED AS PART OF SYSTEM UPGRADE WORK ~APRIL 1998. FURTHER CONTAMINATION REMAINS AT THIS SITE AND WILL BE ADDRESSED UNDER SPILL #9201855.03/14/07 PAPER FILE WITH SPILL NO. 9201855.03/09/11: PAPER FILE REMOVED PER FILE RETENTION POLICY. |
| Remarks: | While digging to install a third pump island petroleum contaminatedsoil was encountered. Material being staged on site. Chuck NorrisOKAR Equipment doing work |

Material:

| | |
|---|---|
| Site ID: | 219726 |
| Operable Unit ID: | 1055088 |
| Operable Unit: | 01 |
| Material ID: | 326945 |
| 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:

---

**B29** **SUGAR CREEK #197** **RCRA-CESQG 1012211676**
**SE** **137 MAIN ST** **NY MANIFEST NYR000170837**
**< 1/8** **GENESEO, NY 14454**
**0.013 mi.**
**69 ft.** **Site 14 of 16 in cluster B**

**Relative: Higher**

**Actual: 776 ft.**

RCRA-CESQG:

| | |
|---|---|
| Date form received by agency: | 12/04/2009 |
| Facility name: | SUGAR CREEK #197 |
| Facility address: | 137 MAIN ST<br>GENESEO, NY 14454 |
| EPA ID: | NYR000170837 |
| Mailing address: | WEHRLE DR<br>WILLIAMSVILLE, NY 14221 |

**SUGAR CREEK #197 (Continued)** **1012211676**

| | |
|---|---|
| Contact: | MARK BECKER |
| Contact address: | WEHRLE DR<br>WILLIAMSVILLE, NY 14221 |
| Contact country: | US |
| Contact telephone: | (716) 204-4311 |
| Contact email: | MBECKER@WILSONFARMS.COM |
| 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: | WILSON FARMS INC |
| Owner/operator address: | Not reported<br>Not reported |
| Owner/operator country: | Not reported |
| Owner/operator telephone: | Not reported |
| Legal status: | Private |
| Owner/Operator Type: | Operator |
| Owner/Op start date: | 06/15/2005 |
| Owner/Op end date: | Not reported |

| | |
|---|---|
| Owner/operator name: | J&J REAL ESTATE |
| Owner/operator address: | N CENTER<br>PERRY, NY 14530 |
| Owner/operator country: | US |
| Owner/operator telephone: | Not reported |
| Legal status: | Private |
| Owner/Operator Type: | Owner |
| Owner/Op start date: | 01/01/1995 |
| 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 |

**SUGAR CREEK #197 (Continued)** **1012211676**

Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

NY MANIFEST:
EPA ID: NYR000170837
Country: USA
Location Address 1: 137 MAIN STREET
Location Address 2: Not reported
Location City: GENESEO
Location State: NY
Location Zip Code: 14454
Location Zip Code 4: Not reported

Mailing Info:
Name: WILSON FARMS #197
Contact: MARK BECKER
Address: 137 MAIN ST
City/State/Zip: GENESEO, NY 14454
Country: USA
Phone: 716-204-4311

Manifest:

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: TXR000050930
Trans2 State ID: NJD071629976
Generator Ship Date: 06/22/2010
Trans1 Recv Date: 06/22/2010
Trans2 Recv Date: 06/28/2010
TSD Site Recv Date: 07/11/2010
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000170837
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID: KYD053348108
Waste Code: Not reported
Quantity: 2700.0
Units: P - Pounds
Number of Containers: 6.0
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 1.0
Year: 2010
Manifest Tracking Num: 003316460FLE
Import Ind: N
Export Ind: N
Discr Quantity Ind: N
Discr Type Ind: N
Discr Residue Ind: N

**SUGAR CREEK #197 (Continued)** **1012211676**

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

---

**B30** **7-ELEVEN INC #35124** **NY UST** **U004064513**
**SE** **137 MAIN STREET** **N/A**
**< 1/8** **GENESEO, NY 14454**
**0.013 mi.**
**69 ft.** **Site 15 of 16 in cluster B**

**Relative:**
**Higher**

**Actual:**
**776 ft.**

UST:
Id/Status: 8-408409 / Active
Program Type: PBS
Region: STATE
DEC Region: 8
Expiration Date: 07/28/2015
UTM X: 269604.78959
UTM Y: 4741830.7385499999
Site Type: Retail Gasoline Sales

Affiliation Records:
Site Id: 49735
Affiliation Type: Mail Contact
Company Name: 7-ELEVEN INC
Contact Type: Not reported
Contact Name: MARK BECKER
Address1: PO BOX 711
Address2: (GASOLINE COMPLIANCE)
City: DALLAS
State: TX
Zip Code: 75221
Country Code: 001
Phone: (716) 830-9807
EMail: MARK.BECKER@7-11.COM
Fax Number: Not reported
Modified By: MAPERSSO
Date Last Modified: 1/13/2014

Site Id: 49735
Affiliation Type: On-Site Operator
Company Name: 7-ELEVEN INC #35124
Contact Type: Not reported
Contact Name: 7-ELEVEN INC
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 001
Phone: (585) 243-5110
EMail: Not reported
Fax Number: Not reported
Modified By: MAPERSSO
Date Last Modified: 3/25/2013

**7-ELEVEN INC #35124 (Continued)** **U004064513**

| | |
|---|---|
| Site Id: | 49735 |
| Affiliation Type: | Emergency Contact |
| Company Name: | JOHN MCCLURG - J&J REAL ESTATE |
| Contact Type: | Not reported |
| Contact Name: | AECOM |
| Address1: | Not reported |
| Address2: | Not reported |
| City: | Not reported |
| State: | NN |
| Zip Code: | Not reported |
| Country Code: | 999 |
| Phone: | (800) 239-0295 |
| EMail: | Not reported |
| Fax Number: | Not reported |
| Modified By: | MAPERSSO |
| Date Last Modified: | 3/25/2013 |

| | |
|---|---|
| Site Id: | 49735 |
| Affiliation Type: | Facility Owner |
| Company Name: | JOHN MCCLURG - J&J REAL ESTATE |
| Contact Type: | REGION GAS COMPLIANCE SPECIALIST |
| Contact Name: | MARK BECKER |
| Address1: | 125 NORTH CENTER STREET |
| Address2: | Not reported |
| City: | PERRY |
| State: | NY |
| Zip Code: | 14530 |
| Country Code: | 001 |
| Phone: | (585) 237-6131 |
| EMail: | Not reported |
| Fax Number: | Not reported |
| Modified By: | MAPERSSO |
| Date Last Modified: | 3/25/2013 |

Tank Info:

| | |
|---|---|
| Tank Number: | 001 |
| Tank ID: | 156050 |
| Tank Status: | In Service |
| Material Name: | In Service |
| Capacity Gallons: | 8000 |
| Install Date: | 12/01/1992 |
| Date Tank Closed: | Not reported |
| Registered: | True |
| Tank Location: | Underground |
| Tank Type: | Steel/carbon steel |
| Material Code: | 2712 |
| Common Name of Substance: | Gasoline/Ethanol |

| | |
|---|---|
| Tightness Test Method: | 03 |
| Date Test: | 07/22/2009 |
| Next Test Date: | Not reported |
| Pipe Model: | E |
| Modified By: | MAPERSSO |
| Last Modified: | 03/25/2013 |

Equipment Records:

**7-ELEVEN INC #35124 (Continued)** **U004064513**

B01 - Tank External Protection - Painted/Asphalt Coating
C02 - Pipe Location - Underground/On-ground
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm
K01 - Spill Prevention - Catch Basin
A00 - Tank Internal Protection - None
D11 - Pipe Type - Flexible Piping
F05 - Pipe External Protection - Jacketed
J01 - Dispenser - Pressurized Dispenser
B02 - Tank External Protection - Original Sacrificial Anode
E04 - Piping Secondary Containment - Double-Walled (Underground)
L02 - Piping Leak Detection - Interstitial - Manual Monitoring
G04 - Tank Secondary Containment - Double-Walled (Underground)
I01 - Overfill - Float Vent Valve
L07 - Piping Leak Detection - Pressurized Piping Leak Detector

| | |
|---|---|
| Tank Number: | 002A |
| Tank ID: | 156051 |
| Tank Status: | In Service |
| Material Name: | In Service |
| Capacity Gallons: | 6000 |
| Install Date: | 12/01/1992 |
| 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: | 03/01/1997 |
| Next Test Date: | Not reported |
| Pipe Model: | E |
| Modified By: | MAPERSSO |
| Last Modified: | 03/25/2013 |

Equipment Records:

B01 - Tank External Protection - Painted/Asphalt Coating
C02 - Pipe Location - Underground/On-ground
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm
K01 - Spill Prevention - Catch Basin
A00 - Tank Internal Protection - None
D11 - Pipe Type - Flexible Piping
F05 - Pipe External Protection - Jacketed
J01 - Dispenser - Pressurized Dispenser
B02 - Tank External Protection - Original Sacrificial Anode
E04 - Piping Secondary Containment - Double-Walled (Underground)
L02 - Piping Leak Detection - Interstitial - Manual Monitoring
G04 - Tank Secondary Containment - Double-Walled (Underground)
I01 - Overfill - Float Vent Valve
L07 - Piping Leak Detection - Pressurized Piping Leak Detector

| | |
|---|---|
| Tank Number: | 002B |
| Tank ID: | 156052 |
| Tank Status: | In Service |

**7-ELEVEN INC #35124 (Continued)** **U004064513**

| | |
|---|---|
| Material Name: | In Service |
| Capacity Gallons: | 6000 |
| Install Date: | 12/01/1992 |
| Date Tank Closed: | Not reported |
| Registered: | True |
| Tank Location: | Underground |
| Tank Type: | Steel/carbon steel |
| Material Code: | 2712 |
| Common Name of Substance: | Gasoline/Ethanol |
| Tightness Test Method: | 03 |
| Date Test: | 03/01/1997 |
| Next Test Date: | Not reported |
| Pipe Model: | E |
| Modified By: | MAPERSSO |
| Last Modified: | 03/25/2013 |

Equipment Records:

A00 - Tank Internal Protection - None
D11 - Pipe Type - Flexible Piping
F05 - Pipe External Protection - Jacketed
J01 - Dispenser - Pressurized Dispenser
B01 - Tank External Protection - Painted/Asphalt Coating
C02 - Pipe Location - Underground/On-ground
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
I02 - Overfill - High Level Alarm
K01 - Spill Prevention - Catch Basin
B02 - Tank External Protection - Original Sacrificial Anode
E04 - Piping Secondary Containment - Double-Walled (Underground)
L02 - Piping Leak Detection - Interstitial - Manual Monitoring
G04 - Tank Secondary Containment - Double-Walled (Underground)
I01 - Overfill - Float Vent Valve
L07 - Piping Leak Detection - Pressurized Piping Leak Detector

| | |
|---|---|
| Tank Number: | 101 |
| Tank ID: | 149514 |
| Tank Status: | Closed - Removed |
| Material Name: | Closed - Removed |
| Capacity Gallons: | 6000 |
| Install Date: | 06/01/1972 |
| Date Tank Closed: | 08/01/1992 |
| Registered: | True |
| Tank Location: | Underground |
| Tank Type: | Steel/carbon steel |
| Material Code: | 0009 |
| Common Name of Substance: | Gasoline |
| Tightness Test Method: | 05 |
| Date Test: | 03/01/1990 |
| Next Test Date: | Not reported |
| Pipe Model: | Not reported |
| Modified By: | TRANSLAT |
| Last Modified: | 03/04/2004 |

Equipment Records:

C00 - Pipe Location - No Piping
A00 - Tank Internal Protection - None

**7-ELEVEN INC #35124 (Continued)** **U004064513**

D00 - Pipe Type - No Piping
F07 - Pipe External Protection - Retrofitted Sacrificial Anode
G00 - Tank Secondary Containment - None
H99 - Tank Leak Detection - Other
J01 - Dispenser - Pressurized Dispenser
I00 - Overfill - None
B07 - Tank External Protection - Retrofitted Sacrificial Anode

| | |
|---|---|
| Tank Number: | 102 |
| Tank ID: | 149515 |
| Tank Status: | Closed - Removed |
| Material Name: | Closed - Removed |
| Capacity Gallons: | 6000 |
| Install Date: | 06/01/1972 |
| Date Tank Closed: | 08/01/1992 |
| Registered: | True |
| Tank Location: | Underground |
| Tank Type: | Steel/carbon steel |
| Material Code: | 0009 |
| Common Name of Substance: | Gasoline |
| Tightness Test Method: | 05 |
| Date Test: | 03/01/1990 |
| Next Test Date: | Not reported |
| Pipe Model: | Not reported |
| Modified By: | TRANSLAT |
| Last Modified: | 03/04/2004 |

Equipment Records:

C00 - Pipe Location - No Piping
A00 - Tank Internal Protection - None
D00 - Pipe Type - No Piping
F07 - Pipe External Protection - Retrofitted Sacrificial Anode
G00 - Tank Secondary Containment - None
H99 - Tank Leak Detection - Other
J01 - Dispenser - Pressurized Dispenser
I00 - Overfill - None
B07 - Tank External Protection - Retrofitted Sacrificial Anode

| | |
|---|---|
| Tank Number: | 103 |
| Tank ID: | 149516 |
| Tank Status: | Closed - Removed |
| Material Name: | Closed - Removed |
| Capacity Gallons: | 4000 |
| Install Date: | 06/01/1972 |
| Date Tank Closed: | 08/01/1992 |
| Registered: | True |
| Tank Location: | Underground |
| Tank Type: | Steel/carbon steel |
| Material Code: | 0009 |
| Common Name of Substance: | Gasoline |
| Tightness Test Method: | 05 |
| Date Test: | 03/01/1990 |
| Next Test Date: | Not reported |
| Pipe Model: | Not reported |

**7-ELEVEN INC #35124 (Continued)** **U004064513**

Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

I00 - Overfill - None
B07 - Tank External Protection - Retrofitted Sacrificial Anode
C00 - Pipe Location - No Piping
A00 - Tank Internal Protection - None
D00 - Pipe Type - No Piping
F07 - Pipe External Protection - Retrofitted Sacrificial Anode
G00 - Tank Secondary Containment - None
H99 - Tank Leak Detection - Other
J01 - Dispenser - Pressurized Dispenser

Tank Number: 104
Tank ID: 149517
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 4000
Install Date: 06/01/1972
Date Tank Closed: 08/01/1992
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0009
Common Name of Substance: Gasoline

Tightness Test Method: 05
Date Test: 03/01/1990
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

A00 - Tank Internal Protection - None
D00 - Pipe Type - No Piping
F07 - Pipe External Protection - Retrofitted Sacrificial Anode
G00 - Tank Secondary Containment - None
H99 - Tank Leak Detection - Other
J01 - Dispenser - Pressurized Dispenser
C00 - Pipe Location - No Piping
I00 - Overfill - None
B07 - Tank External Protection - Retrofitted Sacrificial Anode

Tank Number: 105
Tank ID: 149518
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 500
Install Date: 06/01/1972
Date Tank Closed: 08/01/1992
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0001

**7-ELEVEN INC #35124 (Continued)** **U004064513**

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:

A00 - Tank Internal Protection - None
D00 - Pipe Type - No Piping
F07 - Pipe External Protection - Retrofitted Sacrificial Anode
G00 - Tank Secondary Containment - None
J02 - Dispenser - Suction Dispenser
C00 - Pipe Location - No Piping
I00 - Overfill - None
B07 - Tank External Protection - Retrofitted Sacrificial Anode
H00 - Tank Leak Detection - None

Tank Number: 106
Tank ID: 149519
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 500
Install Date: 06/01/1972
Date Tank Closed: 08/01/1992
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: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

A00 - Tank Internal Protection - None
D00 - Pipe Type - No Piping
F07 - Pipe External Protection - Retrofitted Sacrificial Anode
G00 - Tank Secondary Containment - None
J02 - Dispenser - Suction Dispenser
I00 - Overfill - None
C00 - Pipe Location - No Piping
B07 - Tank External Protection - Retrofitted Sacrificial Anode
H00 - Tank Leak Detection - None

**B31** **7-ELEVEN INC #35124** **NY AST** **A100296188**
**SE** **137 MAIN STREET** **N/A**
**< 1/8** **GENESEO, NY 14454**
**0.013 mi.**
**69 ft.** **Site 16 of 16 in cluster B**

**Relative:**
**Higher**

**Actual:**
**776 ft.**

AST:

| | |
|---|---|
| Region: | STATE |
| DEC Region: | 8 |
| Site Status: | Active |
| Facility Id: | 8-408409 |
| Program Type: | PBS |
| UTM X: | 269604.78959 |
| UTM Y: | 4741830.7385499999 |
| Expiration Date: | 07/28/2015 |
| Site Type: | Retail Gasoline Sales |

Affiliation Records:

| | |
|---|---|
| Site Id: | 49735 |
| Affiliation Type: | Mail Contact |
| Company Name: | 7-ELEVEN INC |
| Contact Type: | Not reported |
| Contact Name: | MARK BECKER |
| Address1: | PO BOX 711 |
| Address2: | (GASOLINE COMPLIANCE) |
| City: | DALLAS |
| State: | TX |
| Zip Code: | 75221 |
| Country Code: | 001 |
| Phone: | (716) 830-9807 |
| EMail: | MARK.BECKER@7-11.COM |
| Fax Number: | Not reported |
| Modified By: | MAPERSSO |
| Date Last Modified: | 1/13/2014 |

| | |
|---|---|
| Site Id: | 49735 |
| Affiliation Type: | On-Site Operator |
| Company Name: | 7-ELEVEN INC #35124 |
| Contact Type: | Not reported |
| Contact Name: | 7-ELEVEN INC |
| Address1: | Not reported |
| Address2: | Not reported |
| City: | Not reported |
| State: | NN |
| Zip Code: | Not reported |
| Country Code: | 001 |
| Phone: | (585) 243-5110 |
| EMail: | Not reported |
| Fax Number: | Not reported |
| Modified By: | MAPERSSO |
| Date Last Modified: | 3/25/2013 |

| | |
|---|---|
| Site Id: | 49735 |
| Affiliation Type: | Emergency Contact |
| Company Name: | JOHN MCCLURG - J&J REAL ESTATE |
| Contact Type: | Not reported |
| Contact Name: | AECOM |
| Address1: | Not reported |
| Address2: | Not reported |
| City: | Not reported |

**7-ELEVEN INC #35124 (Continued)** **A100296188**

| | |
|---|---|
| State: | NN |
| Zip Code: | Not reported |
| Country Code: | 999 |
| Phone: | (800) 239-0295 |
| EMail: | Not reported |
| Fax Number: | Not reported |
| Modified By: | MAPERSSO |
| Date Last Modified: | 3/25/2013 |

| | |
|---|---|
| Site Id: | 49735 |
| Affiliation Type: | Facility Owner |
| Company Name: | JOHN MCCLURG - J&J REAL ESTATE |
| Contact Type: | REGION GAS COMPLIANCE SPECIALIST |
| Contact Name: | MARK BECKER |
| Address1: | 125 NORTH CENTER STREET |
| Address2: | Not reported |
| City: | PERRY |
| State: | NY |
| Zip Code: | 14530 |
| Country Code: | 001 |
| Phone: | (585) 237-6131 |
| EMail: | Not reported |
| Fax Number: | Not reported |
| Modified By: | MAPERSSO |
| Date Last Modified: | 3/25/2013 |

Tank Info:

| | |
|---|---|
| Tank Number: | 004 |
| Tank Id: | 159350 |
| Material Code: | 2722 |
| Common Name of Substance: | Kerosene [#1 Fuel Oil] (Resale/Redistribute) |

Equipment Records:

C01 - Pipe Location - Aboveground
E00 - Piping Secondary Containment - None
F01 - Pipe External Protection - Painted/Asphalt Coating
H00 - Tank Leak Detection - None
K00 - Spill Prevention - None
B01 - Tank External Protection - Painted/Asphalt Coating
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
I02 - Overfill - High Level Alarm

| | |
|---|---|
| Tank Location: | 3 |
| Tank Type: | Steel/Carbon Steel/Iron |
| Tank Status: | In Service |
| Pipe Model: | Not reported |
| Install Date: | 03/01/1997 |
| Capacity Gallons: | 500 |
| Tightness Test Method: | NN |
| Date Test: | Not reported |
| Next Test Date: | Not reported |
| Date Tank Closed: | Not reported |

**7-ELEVEN INC #35124 (Continued)** **A100296188**

| | |
|---|---|
| Register: | True |
| Modified By: | MAPERSSO |
| Last Modified: | 03/25/2013 |
| Material Name: | Kerosene [#1 Fuel Oil] (Resale/Redistribute) |

---

**A32** **EMERY WORLDWIDE** **NY Spills** **S102128516**
**WNW** **SUNY AT GENESEO** **N/A**
**< 1/8** **GENESEO, NY**
**0.014 mi.**
**75 ft.** **Site 11 of 13 in cluster A**

**Relative:**
**Lower**

**Actual:**
**740 ft.**

SPILLS:

| | |
|---|---|
| Facility ID: | 8804587 |
| Facility Type: | ER |
| DER Facility ID: | 204012 |
| Site ID: | 248661 |
| DEC Region: | 8 |
| Spill Date: | 8/25/1988 |
| Spill Number/Closed Date: | 8804587 / 8/25/1988 |
| Spill Cause: | Equipment Failure |
| Spill Class: | Not reported |
| SWIS: | 2626 |
| Investigator: | PCLINDEN |
| Referred To: | Not reported |
| Reported to Dept: | 8/25/1988 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Commercial Vehicle |
| Spill Notifier: | Affected Persons |
| Cleanup Ceased: | 8/25/1988 |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 12/2/2003 |
| Spill Record Last Update: | 12/2/2003 |
| Spiller Name: | Not reported |
| Spiller Company: | EMERY AIR FREIGHT |
| 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 "PL"08/25/88: VILLAGE SPREAD SAND OVER AFFECTED VILLAGE ROADWAY. PL ADVISED KASPRYAK TO USE STRAW TO SOAK UP THE 10 GAL OF OIL POOLED ON WATER PUDDLE. ADVISED DISPOSAL OF SMALL QUANTITY IN DUMPSTER. |
| Remarks: | BROKEN VALVE ON BOTTOM OF FUEL TANK WHEN DRIVER HIT AN ELEVATED SECTION OF ROADWAY. |

Material:

| | |
|---|---|
| Site ID: | 248661 |
| Operable Unit ID: | 921741 |
| Operable Unit: | 01 |
| Material ID: | 456524 |
| Material Code: | 0008 |
| Material Name: | Diesel |

**EMERY WORLDWIDE (Continued)** **S102128516**

| | |
|---|---|
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 35 |
| Units: | Gallons |
| Recovered: | No |
| Resource Affected: | Not reported |
| Oxygenate: | False |

Tank Test:

---

**A33** **SUNY GENESEO** **NY Spills** **S106382637**
**WNW** **GREEN SCIENCE BUILDING** **N/A**
**< 1/8** **GENESEO, NY**
**0.014 mi.**
**75 ft.** **Site 12 of 13 in cluster A**

**Relative:**
**Lower**

**Actual:**
**740 ft.**

SPILLS:

| | |
|---|---|
| Facility ID: | 0370595 |
| Facility Type: | ER |
| DER Facility ID: | 197960 |
| Site ID: | 240727 |
| DEC Region: | 8 |
| Spill Date: | 2/9/2004 |
| Spill Number/Closed Date: | 0370595 / 2/18/2004 |
| Spill Cause: | Unknown |
| Spill Class: | Known release that creates potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken. |
| SWIS: | 2626 |
| Investigator: | CAHETTEN |
| Referred To: | Not reported |
| Reported to Dept: | 2/10/2004 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | 2/18/2004 |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2/10/2004 |
| Spill Record Last Update: | 2/10/2011 |
| Spiller Name: | KIM DALTON FERRIS |
| Spiller Company: | SUNY GENESEO |
| Spiller Address: | 1 COLLEGE CIRCLE |
| Spiller City,St,Zip: | GENESEO, NY 14454- |
| Spiller Company: | 001 |
| Contact Name: | KIM DALTON FERRIS |
| Contact Phone: | (585) 245-5512 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was "CH"WATER TESTS CAME BACK CLEAN. HOWEVER, SOIL SAMPLES SHOWED 277 PPB OF ACETONE. TO TRY AND DIG OUT OF CONTAMINATION AND DISPOSE OF PROPERLY.02/17/2004: PM TELCON WITH KIM DALTON FERRIS, CONTAMINATION IN GROUND FROM ACETONE CONTAMINATION USED TO CLEAN BRICKS. THEY HAVE DUG OUT OF IT, TAKEN SAMPLES AND PLAN TO POUR CONCRETE TOMORROW |

**SUNY GENESEO (Continued)** **S106382637**

2/28/04.02/18/04: CH AND DT INSPECT THE SITE. THE EXCAVATION IS MIDWAY ALONG THE WEST WALL OF GREEN SCIENCE BLDG. AND IS APPROXIMATELY 10 FT DEEP BY 15 FT WIDE BY 20 FEET LONG. A WORKER DIGGING IN THE BOTTOM OF THE EXCAVATION SAYS THERE ARE NO ODORS PRESENT. BEDROCK (FRACTURED SHALE) IS PRESENT FROM APPROXIMATELY 6 FT BGS TO DEPTH. WATER IN THE HOLE IS CLEAN. KIM DALTON FERRIS OF SUNY GENESEO STATES THAT THE CONFIRMATORY SAMPLES OF THE EXCAVATION WERE CLEAN. NO FUTHER ACTION NECESSARY.02/10/11: PAPER FILE REMOVED PER FILE RETENTION POLICY.

Remarks: CALLER STATES THAT WHILE EXCAVATING AROUND THE SCIENCE BUILDING, TO A DEPTH OF 5 FEET, A SHEEN WAS NOTED ON THE WATER IN THE EXCAVATION. WATER TO BE PUMPED TO A FRAQ TANK AND SAMPLED. NO CONTAMINATED SOILS ENCOUNTERED AT THIS POINT.

Material:

| | |
|---|---|
| Site ID: | 240727 |
| Operable Unit ID: | 883632 |
| Operable Unit: | 01 |
| Material ID: | 494105 |
| 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:

---

**A34** **SUNY GENESEO** **NY Spills** **S102130829**
**WNW** **SUNY GENESEO** **N/A**
**< 1/8** **GENESEO, NY 14454**
**0.014 mi.**
**75 ft.** **Site 13 of 13 in cluster A**

**Relative:**
**Lower**

**Actual:**
**740 ft.**

SPILLS:

| | |
|---|---|
| Facility ID: | 0750064 |
| Facility Type: | ER |
| DER Facility ID: | 329234 |
| Site ID: | 379740 |
| DEC Region: | 8 |
| Spill Date: | 4/12/2007 |
| Spill Number/Closed Date: | 0750064 / 4/12/2007 |
| 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: | 2626 |
| Investigator: | tghall |
| Referred To: | Not reported |
| Reported to Dept: | 4/12/2007 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Notifier: | Responsible Party |

**SUNY GENESEO (Continued)** **S102130829**

| | |
|---|---|
| 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: | 4/12/2007 |
| Spill Record Last Update: | 4/12/2007 |
| Spiller Name: | Not reported |
| Spiller Company: | SUNY GENESEO |
| Spiller Address: | Not reported |
| Spiller City,St,Zip: | GENESEO, NY |
| Spiller Company: | 001 |
| Contact Name: | CHUCK REYES |
| Contact Phone: | (585) 245-5512 |
| DEC Memo: | 04/12/2007: AIR DIVISION COPIED ON REPORT. NO FURTHER ACTION REQUIRED BY SPILLS UNIT AT THIS TIME-CLOSED. |
| Remarks: | RELEASE OF R-22 REFRIGERANT DISCOVERED DURING SYSTEM REPAIRS. |

Material:

| | |
|---|---|
| Site ID: | 379740 |
| Operable Unit ID: | 1137224 |
| Operable Unit: | 01 |
| Material ID: | 2127180 |
| Material Code: | 1581A |
| Material Name: | REFRIGERANT |
| Case No.: | Not reported |
| Material FA: | Other |
| Quantity: | 300 |
| Units: | Pounds |
| Recovered: | No |
| Resource Affected: | Not reported |
| Oxygenate: | False |

Tank Test:

| | |
|---|---|
| Facility ID: | 9516297 |
| Facility Type: | ER |
| DER Facility ID: | 186549 |
| Site ID: | 225997 |
| DEC Region: | 8 |
| Spill Date: | 3/19/1996 |
| Spill Number/Closed Date: | 9516297 / 7/6/1998 |
| Spill Cause: | Equipment Failure |
| Spill Class: | Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken. |
| SWIS: | 2626 |
| Investigator: | SARODABA |
| Referred To: | Not reported |
| Reported to Dept: | 3/19/1996 |
| CID: | 312 |
| Water Affected: | Not reported |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |

**SUNY GENESEO (Continued)** **S102130829**

| | |
|---|---|
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 3/19/1996 |
| Spill Record Last Update: | 7/6/1998 |
| Spiller Name: | KIM DALTON |
| Spiller Company: | SUNY GENESEO |
| Spiller Address: | 1 COLLEGE CIRCLE |
| Spiller City,St,Zip: | GENESEO, NY 14454- |
| Spiller Company: | 001 |
| Contact Name: | KIM DALROW |
| Contact Phone: | Not reported |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was "SR"03/19/98: TRANSFERRED BS TO SR.06/26/98 SR CONTACTED KIM DALTON, SPILL DEBRIS WAS DISPOSED OF AND NO FURTHER ACTION NEEDED. |
| Remarks: | diesel generator lost an unk amount of fuel to ground - soil being excavated and staged on site |

Material:

| | |
|---|---|
| Site ID: | 225997 |
| Operable Unit ID: | 1030920 |
| Operable Unit: | 01 |
| Material ID: | 352821 |
| 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:

| | |
|---|---|
| Facility ID: | 7980216 |
| Facility Type: | ER |
| DER Facility ID: | 219081 |
| Site ID: | 268978 |
| DEC Region: | 8 |
| Spill Date: | 2/16/1979 |
| Spill Number/Closed Date: | 7980216 / 2/16/1979 |
| Spill Cause: | Equipment Failure |
| Spill Class: | Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken. |
| SWIS: | 2626 |
| Investigator: | BWFINSTE |
| Referred To: | Not reported |
| Reported to Dept: | 2/16/1979 |
| CID: | Not reported |
| Water Affected: | NONE |
| Spill Source: | Unknown |
| Spill Notifier: | Affected Persons |
| Cleanup Ceased: | 2/16/1979 |
| Cleanup Meets Std: | True |

**SUNY GENESEO (Continued)** **S102130829**

| | |
|---|---|
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 12/2/2003 |
| Spill Record Last Update: | 3/23/2006 |
| Spiller Name: | VAN QUAL |
| Spiller Company: | SUNY GENESEO |
| Spiller Address: | 1 COLLEGE CIRCLE |
| Spiller City,St,Zip: | GENESEO, NY 14454 |
| Spiller Company: | 001 |
| Contact Name: | VAN QUAL |
| Contact Phone: | Not reported |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was "BF".2004/02/19 - RCVD_Time was previously blank and replaced with Spill_Time to fix a data translation problem... Bob Corcoran.09/28/95: This is additional information about material spilled from the translation of the old spill file: FREON GAS.I FORWARDED INFO AND CALLED TO ART FOSSA IN AIR RESOURCES. CONCERN WAS THAT 2-3000 PEOPLE WOULD BE IN ARENA ON 2/16/79 PM AND WHAT EFFECT THERE WOULD BE. I ADVISED ART TO CONTACT HEALTH DEPT., AND VILLAGE FIRE DEPT. NO FURTHER ACTION NECESSARY BY SPILLS. 03/23/06: PAPER FILE REMOVED PER FILE RETENTION POLICY. |
| Remarks: | CRACKED FREON PRESSURE LINE VENTED FREON GAS INTO ICE ARENA AND MACHINE EQUIPMENT ROOM. TWO WORKERS WERE AFFECTED BY FREON GAS - DIZZINESS AND NAUSEA. |

Material:

Tank Test:

| | |
|---|---|
| Facility ID: | 9108024 |
| Facility Type: | ER |
| DER Facility ID: | 79678 |
| Site ID: | 86918 |
| DEC Region: | 8 |
| Spill Date: | 10/25/1991 |
| Spill Number/Closed Date: | 9108024 / 8/5/1994 |
| Spill Cause: | Equipment Failure |
| Spill Class: | Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken. |
| SWIS: | 2626 |
| Investigator: | DLTILTON |
| Referred To: | Not reported |
| Reported to Dept: | 10/25/1991 |
| CID: | Not reported |
| Water Affected: | ON LAND |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | 8/5/1994 |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | True |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 10/28/1991 |

**SUNY GENESEO (Continued)** **S102130829**

| | |
|---|---|
| Spill Record Last Update: | 3/22/2006 |
| Spiller Name: | KEN CASPERZAK |
| Spiller Company: | SUNY GENESEO |
| Spiller Address: | 1 COLLEGE CIRCLE |
| Spiller City,St,Zip: | GENESEO, NY 14454 |
| Spiller Company: | 001 |
| Contact Name: | KEN CASPERZAK |
| Contact Phone: | (716) 245-5512 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was "DT".10/25/91: P MILLER ONSITE; SLIGHT CONTAMINATION BELOW PUMP, APPEARS TO HAVE EMANATED FROM LEAKING BUSHING IN SUCTION PUMPS. DISPENSER PUMPS ARE TO BE REPLACED. CHECKED INVENTORY, DAILY RECORDS KEPT BUT OVER/SHORT NOT CALCULATED. CHERYL SCHMIDT WILL VISIT TO CHECK RECORDS. DIANE CUOZZO 245-5662 KEEPS INVENTORY AT CLARK SERVICE BLDG.08/05/94: MINOR CONTAMINATION ENCOUNTERED. NO FURTHER ACTION NEEDED. 03/22/06: PAPER FILE REMOVED PER FILE RETENTION POLICY. |
| Remarks: | CLARK SERVICE BLDG WEST IS LOCATION. IN THE PROCESS OF REMOVIN GASOLINE DISPENSERS CONCRETE WAS REMOVED & GASOLINE CONTAMINATION WAS ENCOUNTERED IN THE SOIL. CONTACT PERSON: KEN CASPERZAK |

Material:

| | |
|---|---|
| Site ID: | 86918 |
| Operable Unit ID: | 958488 |
| Operable Unit: | 01 |
| Material ID: | 420194 |
| 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: | 0808254 |
| Facility Type: | ER |
| DER Facility ID: | 329234 |
| Site ID: | 405639 |
| DEC Region: | 8 |
| Spill Date: | 10/22/2008 |
| Spill Number/Closed Date: | 0808254 / 10/22/2008 |
| Spill Cause: | Equipment Failure |
| Spill Class: | Not reported |
| SWIS: | 2626 |
| Investigator: | tghall |
| Referred To: | Not reported |
| Reported to Dept: | 10/22/2008 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Commercial Vehicle |
| Spill Notifier: | Affected Persons |
| Cleanup Ceased: | 10/22/2008 |
| Cleanup Meets Std: | False |

**SUNY GENESEO (Continued)** **S102130829**

| | |
|---|---|
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 10/22/2008 |
| Spill Record Last Update: | 5/11/2009 |
| Spiller Name: | Not reported |
| Spiller Company: | Not reported |
| Spiller Address: | Not reported |
| Spiller City,St,Zip: | Not reported |
| Spiller Company: | Not reported |
| Contact Name: | Not reported |
| Contact Phone: | Not reported |
| DEC Memo: | 10/22/2008: CLEANUP COMPLETED BY SUNT PERSONNEL. WASTE (SPEEDY DRY AND PADS) DISPOSED OF IN COMMERCIAL DUMPSTER. NO FURTHER ACTION REQUIRED AT THIS TIME-CLOSED. |
| Remarks: | FLUID LEAK FROM DUMPTRUCK. A SMALL AMOUNT ENTERED STORM SEWER. CLEANUP COMPLETE. |

Material:

| | |
|---|---|
| Site ID: | 405639 |
| Operable Unit ID: | 1162255 |
| Operable Unit: | 01 |
| Material ID: | 2153491 |
| Material Code: | 0010 |
| Material Name: | Hydraulic Oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 1 |
| Units: | Gallons |
| Recovered: | Yes |
| 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.

---

**35**
**NNW**
**< 1/8**
**0.040 mi.**
**210 ft.**

**Relative:**
**Lower**

**Actual:**
**746 ft.**

**SUNY GENESEO** **NY Spills** **S102130980**
**BAILEY SCIENCE BUILDING** **N/A**
**GENESEO, NY 14454**

SPILLS:

| | |
|---|---|
| Facility ID: | 8080826 |
| Facility Type: | ER |
| DER Facility ID: | 200176 |
| Site ID: | 243711 |
| DEC Region: | 8 |
| Spill Date: | 8/26/1980 |
| Spill Number/Closed Date: | 8080826 / 8/29/1980 |
| Spill Cause: | Equipment Failure |
| Spill Class: | Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken. |
| SWIS: | 2626 |

**SUNY GENESEO (Continued)** **S102130980**

| | |
|---|---|
| Investigator: | BWFINSTE |
| Referred To: | Not reported |
| Reported to Dept: | 8/27/1980 |
| CID: | Not reported |
| Water Affected: | GENESEE RIVER |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Notifier: | Affected Persons |
| Cleanup Ceased: | 8/29/1980 |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 12/2/2003 |
| Spill Record Last Update: | 3/23/2006 |
| Spiller Name: | MIKE DAILY |
| Spiller Company: | GENESEO SUNY |
| Spiller Address: | 1 COLLEGE CIRCLE |
| Spiller City,St,Zip: | GENESEO, NY 14454 |
| Spiller Company: | 001 |
| Contact Name: | MIKE DAILY |
| Contact Phone: | Not reported |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was "BF".2004/02/19 - Spill_Time was previously blank and replaced with RCVD_Time to fix a data translation problem... Bob Corcoran.SPEEDY DRY PLACED ON FLOOR TO PREVENT FLOW INTO FLOOR DRAIN. ADDITIONAL VOLUMES OF PCB OIL WERE DISCOVERED ON SITE, MAY BE 50-60 GALLONS IN TOTAL. SPEEDY DRY ALSO PLACED AS BEFORE. AN EMPLOYEE SPILLED POSSIBLE PCB OIL ON HIS SKIN DURING CLEANUP. MAY BE PCB POISONED.ECO BANKER ON SCENE 8/27/80, C WITTEBERG ON SCENE 8/29/80.03/23/06: PAPER FILE REMOVED PER FILE RETENTION POLICY. |
| Remarks: | CAPACITORS 20 IN ALL ARE ASKEREL TYPE; 4 OF THE 20 ARE LEAKING DROPS OF OIL IN FLOW. THE AMOUNT SPILL WAS ABOUT 1 QUART, AND ALMOST ALL OF THAT QUART WAS RECOVERED. |

Material:

| | |
|---|---|
| Site ID: | 243711 |
| Operable Unit ID: | 892533 |
| Operable Unit: | 01 |
| Material ID: | 483870 |
| Material Code: | 0017A |
| Material Name: | PCB OIL |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 0 |
| Units: | Gallons |
| Recovered: | No |
| Resource Affected: | Not reported |
| Oxygenate: | False |

Tank Test:

**E36** **COMMUNITY PUBLICATIONS INC** **RCRA NonGen / NLR** **1000990441**
**NE** **3 CENTER ST** **FINDS** **NYR000004002**
**< 1/8** **GENESEO, NY 14454** **NY MANIFEST**
**0.052 mi.**
**276 ft.** **Site 1 of 2 in cluster E**

**Relative:**
**Higher**

**Actual:**
**775 ft.**

RCRA NonGen / NLR:

| | |
|---|---|
| Date form received by agency: | 01/01/2007 |
| Facility name: | COMMUNITY PUBLICATIONS INC |
| Facility address: | 3 CENTER ST<br>GENESEO, NY 144541201 |
| EPA ID: | NYR000004002 |
| Mailing address: | PO BOX 66<br>GENESEO, NY 14454 |
| Contact: | Not reported |
| Contact address: | PO BOX 66<br>GENESEO, NY 14454 |
| 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: | COMMUNITY PUBLICATIONS INC |
| Owner/operator address: | 3 CENTER ST - PO BOX 66<br>GENESEO, NY 14454 |
| Owner/operator country: | US |
| Owner/operator telephone: | (716) 243-2211 |
| Legal status: | Private |
| Owner/Operator Type: | Owner |
| Owner/Op start date: | Not reported |
| Owner/Op end date: | Not reported |

| | |
|---|---|
| Owner/operator name: | COMMUNITY PUBLICATIONS INC |
| Owner/operator address: | 3 CENTER ST - PO BOX 66<br>GENESEO, NY 14454 |
| Owner/operator country: | US |
| Owner/operator telephone: | (716) 243-2211 |
| 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 |

**COMMUNITY PUBLICATIONS INC (Continued)** **1000990441**

Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 01/01/2006
Site name: COMMUNITY PUBLICATIONS INC
Classification: Not a generator, verified

Date form received by agency: 07/08/1999
Site name: COMMUNITY PUBLICATIONS INC
Classification: Not a generator, verified

Date form received by agency: 05/01/1995
Site name: COMMUNITY PUBLICATIONS INC
Classification: Small Quantity Generator

. Waste code: D000
. Waste name: Not Defined

. Waste code: D011
. Waste name: SILVER

Violation Status: No violations found

FINDS:

Registry ID: 110004513134

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: NYD000004002
Country: USA
Location Address 1: 3 CENTER ST
Location Address 2: Not reported
Location City: GENESEO
Location State: NY
Location Zip Code: 14454
Location Zip Code 4: Not reported

Mailing Info:
Name: COMMUNITY PUBLICATIONS
Contact: ANDREW O BYRNE
Address: 3 CENTER ST
City/State/Zip: GENESEO, NY 14454
Country: USA
Phone: 716-243-2211

**COMMUNITY PUBLICATIONS INC (Continued)** **1000990441**

Manifest:

| | |
|---|---|
| Document ID: | NJA2143847 |
| Manifest Status: | Completed copy |
| Trans1 State ID: | 08690 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 06/13/1995 |
| Trans1 Recv Date: | 06/13/1995 |
| Trans2 Recv Date: | / / |
| TSD Site Recv Date: | 06/16/1995 |
| Part A Recv Date: | 06/22/1995 |
| Part B Recv Date: | 06/30/1995 |
| Generator EPA ID: | NYD000004002 |
| Trans1 EPA ID: | ILD984908202 |
| Trans2 EPA ID: | Not reported |
| TSDF ID: | NJD002182897 |
| Waste Code: | D011 - SILVER 5.0 MG/L TCLP |
| Quantity: | 00276 |
| 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: | 1995 |

| | |
|---|---|
| Document ID: | NJA2143848 |
| Manifest Status: | Completed copy |
| Trans1 State ID: | 08690 |
| Trans2 State ID: | 08690 |
| Generator Ship Date: | 05/26/1995 |
| Trans1 Recv Date: | 05/26/1995 |
| Trans2 Recv Date: | 05/30/1995 |
| TSD Site Recv Date: | 05/31/1995 |
| Part A Recv Date: | 06/22/1995 |
| Part B Recv Date: | 06/14/1995 |
| Generator EPA ID: | NYD000004002 |
| Trans1 EPA ID: | ILD984908202 |
| Trans2 EPA ID: | ILD984908202 |
| TSDF ID: | NJD002182897 |
| Waste Code: | D011 - SILVER 5.0 MG/L TCLP |
| Quantity: | 00539 |
| 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: | 1995 |

| | |
|---|---|
| EPA ID: | NYR000004002 |
| Country: | USA |
| Location Address 1: | 3 CENTER ST |
| Location Address 2: | Not reported |
| Location City: | GENESEO |
| Location State: | NY |
| Location Zip Code: | 14454 |
| Location Zip Code 4: | Not reported |

**COMMUNITY PUBLICATIONS INC (Continued)** **1000990441**

Mailing Info:

| | |
|---|---|
| Name: | COMMUNITY PUBLICATIONS |
| Contact: | ANDRW O BYRDE |
| Address: | 3 CENTER ST |
| City/State/Zip: | GENESEO, NY 14454 |
| Country: | USA |
| Phone: | 716-243-2211 |

Manifest:

| | |
|---|---|
| Document ID: | NJA2167505 |
| Manifest Status: | Completed copy |
| Trans1 State ID: | 08690 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 07/25/1995 |
| Trans1 Recv Date: | 07/25/1995 |
| Trans2 Recv Date: | / / |
| TSD Site Recv Date: | 07/28/1995 |
| Part A Recv Date: | / / |
| Part B Recv Date: | 08/14/1995 |
| Generator EPA ID: | NYR000004002 |
| Trans1 EPA ID: | ILD984908202 |
| Trans2 EPA ID: | Not reported |
| TSDF ID: | NJD002182897 |
| Waste Code: | D011 - SILVER 5.0 MG/L TCLP |
| Quantity: | 00276 |
| 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: | 1995 |

| | |
|---|---|
| Document ID: | NJA4406240 |
| Manifest Status: | Completed after the designated time period for a TSDF to get a copy to the DEC |
| Trans1 State ID: | NYHN3167 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 03/21/1997 |
| Trans1 Recv Date: | 03/21/1997 |
| Trans2 Recv Date: | / / |
| TSD Site Recv Date: | 03/31/1997 |
| Part A Recv Date: | / / |
| Part B Recv Date: | 05/08/1997 |
| Generator EPA ID: | NYR000004002 |
| Trans1 EPA ID: | ILD984908202 |
| Trans2 EPA ID: | Not reported |
| TSDF ID: | MAD982755639 |
| Waste Code: | D011 - SILVER 5.0 MG/L TCLP |
| Quantity: | 00240 |
| 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: | 100 |
| Year: | 1997 |

**COMMUNITY PUBLICATIONS INC (Continued)** **1000990441**

| | |
|---|---|
| Document ID: | NJA2167506 |
| 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: | 08/18/1995 |
| Trans1 Recv Date: | 08/18/1995 |
| Trans2 Recv Date: | / / |
| TSD Site Recv Date: | 08/22/1995 |
| Part A Recv Date: | 09/06/1995 |
| Part B Recv Date: | 09/14/1995 |
| Generator EPA ID: | NYR000004002 |
| Trans1 EPA ID: | ILD984908202 |
| Trans2 EPA ID: | Not reported |
| TSDF ID: | NJD002182897 |
| Waste Code: | D011 - SILVER 5.0 MG/L TCLP |
| Quantity: | 00509 |
| Units: | P - Pounds |
| Number of Containers: | 001 |
| Container Type: | DM - Metal drums, barrels |
| Handling Method: | B Incineration, heat recovery, burning. |
| Specific Gravity: | 100 |
| Year: | 1995 |

---

**37** **SUNY GENESEO** **NY Spills** **S107658334**
**NW** **ERWIN BUILDING** **N/A**
**< 1/8** **GENESEO, NY 14454**
**0.058 mi.**
**305 ft.**

**Relative:**
**Lower**

**Actual:**
**733 ft.**

SPILLS:

| | |
|---|---|
| Facility ID: | 0551731 |
| Facility Type: | ER |
| DER Facility ID: | 311020 |
| Site ID: | 360827 |
| DEC Region: | 8 |
| Spill Date: | 3/10/2006 |
| Spill Number/Closed Date: | 0551731 / 3/15/2006 |
| Spill Cause: | Equipment Failure |
| Spill Class: | Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken. |
| SWIS: | 2626 |
| Investigator: | DLTILTON |
| Referred To: | Not reported |
| Reported to Dept: | 3/10/2006 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 3/10/2006 |
| Spill Record Last Update: | 5/3/2006 |
| Spiller Name: | CHUCK REYES |
| Spiller Company: | SUNY GENESEO |

**SUNY GENESEO (Continued)** **S107658334**

Spiller Address: ONE COLLEGE CIRCLE
Spiller City,St,Zip: GENESEO, NY 14454
Spiller Company: 001
Contact Name: CHUCK REYES
Contact Phone: (585) 519-2073
DEC Memo: 03/10/06 SUNY GENESEO TO HIRE CONTRACTOR TO PERFORM CLEANUP. SUNY TO INFORM DEC OF THE CONTRACTOR THAT HAS BEEN HIRED.03/13/06 PER TELEPHONE CONVERSATION WITH CHUCK REYES, MODERN DISPOSAL HAS BEEN HIRED TO PERFORM CLEANUP ON 03/15/06.
Remarks: AS A RESULT OF AN ELEVATOR TEST, HYDRAULIC LINE BROKE SPILLING APPROXIMATELY EIGHT GALLONS OF MATERIAL TO PIT.

Material:
Site ID: 360827
Operable Unit ID: 1117942
Operable Unit: 01
Material ID: 2108457
Material Code: 0010
Material Name: Hydraulic Oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 8
Units: Gallons
Recovered: Not reported
Resource Affected: Not reported
Oxygenate: False

Tank Test:

---

**F38** **CITGO STATION** **NY LTANKS** **S100155568**
**SSE** **ROUTE 20A & ROUTE 39** **N/A**
**< 1/8** **GENESEO, NY**
**0.065 mi.**
**341 ft.** **Site 1 of 2 in cluster F**

**Relative:**
**Higher**

**Actual:**
**781 ft.**

LTANKS:
Site ID: 125857
Spill Number/Closed Date: 8801374 / 5/13/1988
Spill Date: 5/13/1988
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: 5/13/1988
Cleanup Meets Standard: True
SWIS: 2626
Investigator: BWFINSTE
Referred To: Not reported
Reported to Dept: 5/13/1988
CID: Not reported
Water Affected: Not reported
Spill Notifier: Police Department
Last Inspection: Not reported
Recommended Penalty: False
UST Involvement: True
Remediation Phase: 0

**CITGO STATION (Continued)** **S100155568**

| | |
|---|---|
| Date Entered In Computer: | 6/6/1988 |
| Spill Record Last Update: | 5/15/1996 |
| Spiller Name: | Not reported |
| Spiller Company: | CITGO STATION |
| Spiller Address: | ROUTE 20A & 39 |
| Spiller City,St,Zip: | GENESEO, NY 14459 |
| Spiller County: | 001 |
| Spiller Contact: | Not reported |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 8 |
| DER Facility ID: | 108856 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was "BF"05/13/88: ON SITE VISIT BY BF INDICATED ONLY SLIGHT FUMES OF GAS. FIRE DEPT USED EXPLOSIVE METER - DID NOT REGISTER. TANK INVENTORY IS GOOD. TANKS RECENTLY TESTED OK. 05/13/88: PROBLEM IS FROM RESIDUAL OF PAST PROBLEM - SEVERAL YEARS AGO. |
| Remarks: | INITIAL REPORT INDICATED THAT GAS WAS FOUND IN TELEPHONE MANHOLE ON OPPOSITE SIDE OF ROUTE 39 FROM CITGO STATION. |

Material:

| | |
|---|---|
| Site ID: | 125857 |
| Operable Unit ID: | 918515 |
| Operable Unit: | 01 |
| Material ID: | 460519 |
| 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:

---

**F39** **MARQUART (TJ) & SONS** **NY Spills** **S102127688**
**SSE** **ROUTE 20 & ROUTE 39** **N/A**
**< 1/8** **LEICESTER, NY 14481**
**0.066 mi.**
**351 ft.** **Site 2 of 2 in cluster F**

**Relative:**
**Higher**

**Actual:**
**781 ft.**

SPILLS:

| | |
|---|---|
| Facility ID: | 8602856 |
| Facility Type: | ER |
| DER Facility ID: | 250313 |
| Site ID: | 310086 |
| DEC Region: | 8 |
| Spill Date: | 7/31/1986 |
| Spill Number/Closed Date: | 8602856 / 8/1/1986 |
| Spill Cause: | Traffic Accident |
| Spill Class: | Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken. |
| SWIS: | 2630 |
| Investigator: | BWFINSTE |

**MARQUART (TJ) & SONS (Continued)** **S102127688**

| | |
|---|---|
| Referred To: | Not reported |
| Reported to Dept: | 7/31/1986 |
| CID: | Not reported |
| Water Affected: | TRIB OF GENESEE RIV. |
| Spill Source: | Commercial Vehicle |
| Spill Notifier: | Local Agency |
| Cleanup Ceased: | 8/1/1986 |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 8/12/1986 |
| Spill Record Last Update: | 3/22/2006 |
| Spiller Name: | Not reported |
| Spiller Company: | TJ MARQUART |
| Spiller Address: | BOX 80 |
| Spiller City,St,Zip: | BLISS, NY 14024 |
| Spiller Company: | 001 |
| Contact Name: | Not reported |
| Contact Phone: | Not reported |
| DEC Memo: | / / : MVA INVOLVING TRACTOR TRAILER. FUEL CLEANED UP. / / : LIVINGSTON CO SHERIFF'S DEPT INVESTIGATED 7/31/86.03/22/06: PAPER FILE REMOVED PER FILE RETENTION POLICY. |
| Remarks: | MOTOR VEHICLE ACCIDENT INVOLVING TRACTOR-TRAILER |

Material:

| | |
|---|---|
| Site ID: | 310086 |
| Operable Unit ID: | 899599 |
| Operable Unit: | 01 |
| Material ID: | 475713 |
| 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 |

Tank Test:

---

**40**
**ENE**
**< 1/8**
**0.088 mi.**
**466 ft.**

**Relative:**
**Higher**

**Actual:**
**778 ft.**

**17 CENTER STREET**
**17 CENTER STREET**
**GENESEO, NY 14454**

**NY Spills** **S103570441**
**N/A**

SPILLS:

| | |
|---|---|
| Facility ID: | 9614947 |
| Facility Type: | ER |
| DER Facility ID: | 132358 |
| Site ID: | 156378 |
| DEC Region: | 8 |
| Spill Date: | 3/27/1997 |
| Spill Number/Closed Date: | 9614947 / 5/27/2003 |

**17 CENTER STREET (Continued)** **S103570441**

| | |
|---|---|
| Spill Cause: | Other |
| Spill Class: | Known release that creates potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken. |
| SWIS: | 2626 |
| Investigator: | TGHALL |
| Referred To: | Not reported |
| Reported to Dept: | 3/27/1997 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Unknown |
| Spill Notifier: | Other |
| Cleanup Ceased: | 5/27/2003 |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 3/27/1997 |
| Spill Record Last Update: | 3/17/2011 |
| Spiller Name: | Not reported |
| Spiller Company: | VILLAGE OF GENESEO |
| Spiller Address: | Not reported |
| Spiller City,St,Zip: | ZZ |
| Spiller Company: | 001 |
| Contact Name: | CALLER |
| Contact Phone: | (0 ) - |
| DEC Memo: | 03/27/97 LIVINGSTON CO HEALTH DEPT NOTIFIED.03/27/97 TANK SIZE ESTIMATED TO BE BETWEEN 1 & 2,000 GALLONS. RESPONSIBILITY FOR REMOVAL TO BE DETERMINED BETWEEN VILLAGE AND DOT. ONCE DETERMINATION IS MADE, BONNIE HAIR WILL CONTACT DEC. UNKNOWN IF ANY CONTAMINATION HAS BEEN RELEASED FROM TANK. REPORT TAKEN BY P MILLER.03/20/98: TRANSFERRED BS TO SR.09/25/98: TRANSFERED SR TO TH.05/27/2003: SITE INACTIVATED/CLOSED PER DEPARTMENTS PRIORITIZATION POLICY. 03/17/11: PAPER FILE REMOVED PER FILE RETENTION POLICY. |
| Remarks: | village of geneseo discovered tank under side walk and within r.o.w. of roadway. dot personnel placed probe in tank and measured 9" of water and 3" of product believed to be kerosene |

Material:

| | |
|---|---|
| Site ID: | 156378 |
| Operable Unit ID: | 1042521 |
| Operable Unit: | 01 |
| Material ID: | 340046 |
| Material Code: | 0012A |
| Material Name: | Kerosene |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 0 |
| Units: | Gallons |
| Recovered: | No |
| Resource Affected: | Not reported |
| Oxygenate: | False |

Tank Test:

**E41**
**NE**
**< 1/8**
**0.095 mi.**
**499 ft.**

**57 MAIN STREET WATER MAIN**
**I/F/O 57 MAIN STREET**
**GENESEO, NY 14454**

**Site 2 of 2 in cluster E**

**NY Spills** **S117394236**
**N/A**

**Relative:**
**Higher**

**Actual:**
**775 ft.**

SPILLS:

| | |
|---|---|
| Facility ID: | 1409806 |
| Facility Type: | ER |
| DER Facility ID: | 458381 |
| Site ID: | 503453 |
| DEC Region: | 8 |
| Spill Date: | 12/31/2014 |
| Spill Number/Closed Date: | 1409806 / Not Reported |
| Spill Cause: | Unknown |
| Spill Class: | Known release that creates potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken. |
| SWIS: | 2626 |
| Investigator: | DBDAKE |
| Referred To: | Not reported |
| Reported to Dept: | 1/5/2015 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Gasoline Station or other PBS Facility |
| Spill Notifier: | Local Agency |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | 1/20/2015 |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 1 |
| Date Entered In Computer: | 1/5/2015 |
| Spill Record Last Update: | 3/5/2015 |
| Spiller Name: | Not reported |
| Spiller Company: | Not reported |
| Spiller Address: | Not reported |
| Spiller City,St,Zip: | NN |
| Spiller Company: | 999 |
| Contact Name: | Not reported |
| Contact Phone: | Not reported |
| DEC Memo: | 01/05/2015: PETE MILLER TELCON WITH JASON FRAZIER - DPW SUPERINTENDENT; RECOMMENDED INVESTIGATION BE PERFORMED PRIOR TO WATER MAIN WORK NEXT SUMMER WITH CONTIGENCIES IN PLACE TO HANDLE POTENTIAL CONTAMINATION THAT MAY BE ENCOUNTERED. SPILL ASSIGNED TO DDAKE OF SPILLS FOR FOLLOWUP. BASED ON DATABASE SEARCH, NO PBS FACILITIES REGISTERED IN THIS AREA; ONE SPILL (CLOSED) FOUND AT #45 MAIN STREET FROM JUNE 2012 (SPILL #1202510), WHICH IS PROPERTY/BUILDING TO IMMEDIATE NORTH. IN JUNE 2012, DDS ENCOUNTERED SHALLOW GASOLINE-CONTAMINATED SOIL WHILE WORKING FOR RGE INSTALLING A GAS SERVICE. IMPACTS (54 PPM) ENCOUNTERED AT DEPTH OF 4.5-FEET BGS. 01/06/2015: PER JON HEERKENS OF LABELLA, SUSPECT UST WAS IN RIGHT-OF-WAY BUT IN VILLAGE OWNED AREA AND THEY WILL INVESTIGATE THE AREA (STREET, CURBLINE AND SIDEWALK). A 1938 SANBORN MAP SHOWS THREE TO FOUR USTs IN FRONT OF #57 MAIN STREET, AS WELL AS A UST BEHIND/NORTH OF #41 BUILDING (TO NORTHEAST). EMAIL RECEIVED FROM JON HEERKENS AT LABELLA: I was contacted this morning by Jason from the Village of Geneseo regarding the above referenced spill. He told me he encountered a suspect fill pipe and soils that had gasoline odors near a water valve that required repair. I told him I would check the |

**57 MAIN STREET WATER MAIN (Continued)** **S117394236**

Sanborn Maps and get back to him.Luckily we had copies in the office and there are 3-4 gasoline tanks (1938 version)that were/are located in front of the building. I suggested that we submit a proposal to conduct a Geoprobe investigation to determine the order of magnitude of the impact and characterize the soils for disposal, then we can submit a suggested workplan and remedial strategy cost analysis. The Village desires to get this cleaned up prior to a water main replacement project which is scheduled for this May.01/06/2015: DDAKE OF SPILLS CONTACTS MICHAEL ARLAUCKAS OF DDS (585-359-7450) TO SEE IF THERE IS INFORMATION AVAILABLE ON SPILL #1202510 (PHOTOS, SITE SKETCH, LAB ANALYTICAL ETC). ARLAUCKAS LATER SENDS EMAIL WITH ATTACHMENTS (SITE PHOTO SHOWING WHERE IMPACTS WERE ENCOUNTERED, WASTE DISPISAL PROFILE/RECEIPTS, AND SOIL ANALYTICAL RESULTS) - SAVED TO eDOCS FOR SPILL #1202510. ONE SOIL SAMPLE WAS ANALYZED FOR VOCs LABELED 'HOLE' WHICH WAS NON-DETECT FOR ALL COMPOUNDS. A TOTAL OF 3.69-TONS OF SOIL WAS DISPOSED AT LOCAL LANDFILL/RGE WAS LISTED AS GENERATOR. PHOTO SHOWS WORK AREA TO BE IN SIDEWALK IN FRONT OF (WEST SIDE OF) BUILDING) IN SIDEWALK AREA.1/20/15: DDAKE OF SPILLS ONSITE WITH LABELLA ASSOCIATES, WHO ARE USING A SMALL DIRECT PUSH RIG TO ADVANCE A # OF SOIL BORINGS IN THE AREA IN FRONT OF #45 THRU #57 MAIN STREET. PER NICK, THEY ARE NOT INSTALLING MICROWELLS OR COLLECTING GROUNDWATER SAMPLES, ONLY SOIL SAMPLES WILL BE SUBMITTED FOR LAB ANALYSIS. A MAJORITY OF THE BORINGS ARE IN THE ASPHALT PARKING AREA, BETWEEN THE DRIVING LANES AND THE SIDEWALKS IN FRONT OF THE BUILDINGS. LABELLA FOCUSED DRILLING IN THE AREA WHERE THE VILLAGE RECENTLY FOUND A LEAKING WATER VALVE, AND WORKED IN A LINE TO THE NORTH AND SOUTH IN AN ATTEMPT TO DELINEATE SOIL IMPACTS. THERE ARE SUSPECT USTs IN THE AREA OF THE WATER VALVE (VILLAGE PERSONNEL REPORTEDLY DID NOT SEE TANKS BUT THEY DID OBSERVE STEEL PIPING). GROUNDWATER ENCOUNTERED APPROX. 4-FEET BGS +/-; GETTING REFUSAL APPPROX. 9-10 FEET BGS. TWO BORINGS EXHIBITED PID READINGS ABOVE 1,000 PPM, AND ALL (SO FAR) WERE IMPACTED. ONE BORING ADVANCED ON THE WEST SIDE OF THE WATER MAIN EXHIBITED DARK FREE PRODUCT AND VERY STRONG WEATHERED GASOLINE ODORS. NUMEROUS UNDERGROUND UTILITIES IN THE AREA.3/3/15: EMAIL RECEIVED FROM HEERKENS AT LABELLA (SAVED TO EDOCS) - THEY MET WITH THE VILLAGE ENGINEERS AND DECIDED THAT SOIL REMOVAL PROJECT SHOULD OCCUR AT SAME TIME AS WATER MAIN PROJECT THIS COMING SUMMER. THEY WOULD LIKE TO CONSTRUCT A BIOCELL AT THEIR DPW PROPERTY (WHERE A PREVIOUS BIOCELL WAS LOCATED). IMAPCTED SOILS BENEATH THE SIDEWALK WILL EITHER BE EXCAVATED OR TREATED IN-PLACE. POSSIBLE BUILDING PROTECTIVE MEASURES WOULD BE IMPLEMENTED (SUB-SLAB DEPRESSURIZATION SYSTEMS?). FORMAL RAP TO BE SUBMITTED (DEC WILL NEED SEPARATE BIOCELL PROPOSAL PLAN).

Remarks: WHILE VILLAGE OF GENESEO DPW CONDUCTED REPAIR OF WATER MAIN NEAR 57 MAIN STREET, ENCOUNTERED SUSPICIOUS STANDPIPE IN AREA THAT IS BELIEVED TO BE LOCATION OF A FORMER FORD DEALERSHIP. AN ODOR OF PETROLEUM WAS NOTICED COMING FROM THE STANDPIPE AND AN UNDERGROUND STORAGE TANK MAY BE SUSPECTED. EXCAVATION HAS BEEN BACKFILLED AT THIS POINT, HOWEVER, VILLAGE PLANS WATER MAIN UPGRADE NEXT SUMMER AND WORK WILL LIKELY ENCOMPASS THE AREA WHERE THE STANDPIPE WAS ENCOUNTERED.

Material:
Site ID: 503453
Operable Unit ID: 1252809
Operable Unit: 01
Material ID: 2254954
Material Code: 0066A
Material Name: UNKNOWN PETROLEUM

**57 MAIN STREET WATER MAIN (Continued)** **S117394236**

| | |
|---|---|
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Resource Affected: | Not reported |
| Oxygenate: | False |

Tank Test:

| | |
|---|---|
| Facility ID: | 1409806 |
| Facility Type: | ER |
| DER Facility ID: | 458381 |
| Site ID: | 503453 |
| DEC Region: | 8 |
| Spill Date: | 12/31/2014 |
| Spill Number/Closed Date: | 1409806 / Not Reported |
| Spill Cause: | Unknown |
| Spill Class: | Known release that creates potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken. |
| SWIS: | 2626 |
| Investigator: | DBDAKE |
| Referred To: | Not reported |
| Reported to Dept: | 1/5/2015 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Gasoline Station or other PBS Facility |
| Spill Notifier: | Local Agency |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | 1/20/2015 |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 1 |
| Date Entered In Computer: | 1/5/2015 |
| Spill Record Last Update: | 3/5/2015 |
| Spiller Name: | JASON FRAZIER |
| Spiller Company: | VILLAGE OF GENESEO |
| Spiller Address: | Not reported |
| Spiller City,St,Zip: | GENESEO, NY |
| Spiller Company: | 999 |
| Contact Name: | Not reported |
| Contact Phone: | Not reported |
| DEC Memo: | 01/05/2015: PETE MILLER TELCON WITH JASON FRAZIER - DPW SUPERINTENDENT; RECOMMENDED INVESTIGATION BE PERFORMED PRIOR TO WATER MAIN WORK NEXT SUMMER WITH CONTIGENCIES IN PLACE TO HANDLE POTENTIAL CONTAMINATION THAT MAY BE ENCOUNTERED. SPILL ASSIGNED TO DDAKE OF SPILLS FOR FOLLOWUP. BASED ON DATABASE SEARCH, NO PBS FACILITIES REGISTERED IN THIS AREA; ONE SPILL (CLOSED) FOUND AT #45 MAIN STREET FROM JUNE 2012 (SPILL #1202510), WHICH IS PROPERTY/BUILDING TO IMMEDIATE NORTH. IN JUNE 2012, DDS ENCOUNTERED SHALLOW GASOLINE-CONTAMINATED SOIL WHILE WORKING FOR RGE INSTALLING A GAS SERVICE. IMPACTS (54 PPM) ENCOUNTERED AT DEPTH OF 4.5-FEET BGS. 01/06/2015: PER JON HEERKENS OF LABELLA, SUSPECT UST WAS IN RIGHT-OF-WAY BUT IN VILLAGE OWNED AREA AND THEY WILL INVESTIGATE THE AREA (STREET, CURBLINE AND SIDEWALK). A 1938 SANBORN MAP SHOWS THREE |

**57 MAIN STREET WATER MAIN (Continued)** **S117394236**

TO FOUR USTs IN FRONT OF #57 MAIN STREET, AS WELL AS A UST BEHIND/NORTH OF #41 BUILDING (TO NORTHEAST). EMAIL RECEIVED FROM JON HEERKENS AT LABELLA: I was contacted this morning by Jason from the Village of Geneseo regarding the above referenced spill. He told me he encountered a suspect fill pipe and soils that had gasoline odors near a water valve that required repair. I told him I would check the Sanborn Maps and get back to him.Luckily we had copies in the office and there are 3-4 gasoline tanks (1938 version)that were/are located in front of the building. I suggested that we submit a proposal to conduct a Geoprobe investigation to determine the order of magnitude of the impact and characterize the soils for disposal, then we can submit a suggested workplan and remedial strategy cost analysis. The Village desires to get this cleaned up prior to a water main replacement project which is scheduled for this May.01/06/2015: DDAKE OF SPILLS CONTACTS MICHAEL ARLAUCKAS OF DDS (585-359-7450) TO SEE IF THERE IS INFORMATION AVAILABLE ON SPILL #1202510 (PHOTOS, SITE SKETCH, LAB ANALYTICAL ETC). ARLAUCKAS LATER SENDS EMAIL WITH ATTACHMENTS (SITE PHOTO SHOWING WHERE IMPACTS WERE ENCOUNTERED, WASTE DISPISAL PROFILE/RECEIPTS, AND SOIL ANALYTICAL RESULTS) - SAVED TO eDOCS FOR SPILL #1202510. ONE SOIL SAMPLE WAS ANALYZED FOR VOCs LABELED 'HOLE' WHICH WAS NON-DETECT FOR ALL COMPOUNDS. A TOTAL OF 3.69-TONS OF SOIL WAS DISPOSED AT LOCAL LANDFILL/RGE WAS LISTED AS GENERATOR. PHOTO SHOWS WORK AREA TO BE IN SIDEWALK IN FRONT OF (WEST SIDE OF) BUILDING) IN SIDEWALK AREA.1/20/15: DDAKE OF SPILLS ONSITE WITH LABELLA ASSOCIATES, WHO ARE USING A SMALL DIRECT PUSH RIG TO ADVANCE A # OF SOIL BORINGS IN THE AREA IN FRONT OF #45 THRU #57 MAIN STREET. PER NICK, THEY ARE NOT INSTALLING MICROWELLS OR COLLECTING GROUNDWATER SAMPLES, ONLY SOIL SAMPLES WILL BE SUBMITTED FOR LAB ANALYSIS. A MAJORITY OF THE BORINGS ARE IN THE ASPHALT PARKING AREA, BETWEEN THE DRIVING LANES AND THE SIDEWALKS IN FRONT OF THE BUILDINGS. LABELLA FOCUSED DRILLING IN THE AREA WHERE THE VILLAGE RECENTLY FOUND A LEAKING WATER VALVE, AND WORKED IN A LINE TO THE NORTH AND SOUTH IN AN ATTEMPT TO DELINEATE SOIL IMPACTS. THERE ARE SUSPECT USTs IN THE AREA OF THE WATER VALVE (VILLAGE PERSONNEL REPORTEDLY DID NOT SEE TANKS BUT THEY DID OBSERVE STEEL PIPING). GROUNDWATER ENCOUNTERED APPROX. 4-FEET BGS +/-; GETTING REFUSAL APPPROX. 9-10 FEET BGS. TWO BORINGS EXHIBITED PID READINGS ABOVE 1,000 PPM, AND ALL (SO FAR) WERE IMPACTED. ONE BORING ADVANCED ON THE WEST SIDE OF THE WATER MAIN EXHIBITED DARK FREE PRODUCT AND VERY STRONG WEATHERED GASOLINE ODORS. NUMEROUS UNDERGROUND UTILITIES IN THE AREA.3/3/15: EMAIL RECEIVED FROM HEERKENS AT LABELLA (SAVED TO EDOCS) - THEY MET WITH THE VILLAGE ENGINEERS AND DECIDED THAT SOIL REMOVAL PROJECT SHOULD OCCUR AT SAME TIME AS WATER MAIN PROJECT THIS COMING SUMMER. THEY WOULD LIKE TO CONSTRUCT A BIOCELL AT THEIR DPW PROPERTY (WHERE A PREVIOUS BIOCELL WAS LOCATED). IMAPCTED SOILS BENEATH THE SIDEWALK WILL EITHER BE EXCAVATED OR TREATED IN-PLACE. POSSIBLE BUILDING PROTECTIVE MEASURES WOULD BE IMPLEMENTED (SUB-SLAB DEPRESSURIZATION SYSTEMS?). FORMAL RAP TO BE SUBMITTED (DEC WILL NEED SEPARATE BIOCELL PROPOSAL PLAN).

Remarks: WHILE VILLAGE OF GENESEO DPW CONDUCTED REPAIR OF WATER MAIN NEAR 57 MAIN STREET, ENCOUNTERED SUSPICIOUS STANDPIPE IN AREA THAT IS BELIEVED TO BE LOCATION OF A FORMER FORD DEALERSHIP. AN ODOR OF PETROLEUM WAS NOTICED COMING FROM THE STANDPIPE AND AN UNDERGROUND STORAGE TANK MAY BE SUSPECTED. EXCAVATION HAS BEEN BACKFILLED AT THIS POINT, HOWEVER, VILLAGE PLANS WATER MAIN UPGRADE NEXT SUMMER AND WORK WILL LIKELY ENCOMPASS THE AREA WHERE THE STANDPIPE WAS ENCOUNTERED.

**57 MAIN STREET WATER MAIN (Continued)** **S117394236**

Material:

| | |
|---|---|
| Site ID: | 503453 |
| Operable Unit ID: | 1252809 |
| Operable Unit: | 01 |
| Material ID: | 2254954 |
| Material Code: | 0066A |
| Material Name: | UNKNOWN PETROLEUM |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Resource Affected: | Not reported |
| Oxygenate: | False |

Tank Test:

---

**42**
**SE**
**< 1/8**
**0.101 mi.**
**534 ft.**

**GENESEO SCHOOL DISTRICT BUS GARAGE** **NY Spills** **S109373530**
**8 SOUTH STREET** **N/A**
**GENESEO, NY 14454**

**Relative:**
**Higher**

**Actual:**
**785 ft.**

SPILLS:

| | |
|---|---|
| Facility ID: | 0809036 |
| Facility Type: | ER |
| DER Facility ID: | 355732 |
| Site ID: | 406472 |
| DEC Region: | 8 |
| Spill Date: | 11/10/2008 |
| Spill Number/Closed Date: | 0809036 / 10/28/2010 |
| Spill Cause: | Unknown |
| Spill Class: | Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken. |
| SWIS: | 2626 |
| Investigator: | dbdake |
| Referred To: | WATER |
| Reported to Dept: | 11/10/2008 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Notifier: | Other |
| Cleanup Ceased: | 10/28/2010 |
| Cleanup Meets Std: | False |
| Last Inspection: | 10/18/2010 |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 11/10/2008 |
| Spill Record Last Update: | 2/4/2011 |
| Spiller Name: | Not reported |
| Spiller Company: | GENESEO SCHOOL DISTRICT |
| Spiller Address: | 8 SOUTH STREET |
| Spiller City,St,Zip: | GENESEO, NY 14454 |
| Spiller Company: | 999 |
| Contact Name: | DAVE ENGERT |

**GENESEO SCHOOL DISTRICT BUS GARAGE (Continued)** **S109373530**

Contact Phone: (585) 746-2986
DEC Memo: SCHOOL DISTRICT NOTIFIED BY EPA SEVERAL YEARS AGO TO REMOVE FLOOR DRAINS.11/12/2008: DD TELECON WITH DAVE ENGERT OF SAW - # OF BORINGS DRILLED IN VICINITY OF ASTs, FEW BY THE CURRENT PUMP ISLAND (SOME IMPACTS LIKELY FROM OVERFILLS), AND THEY ALSO WERE INFORMED WHERE OLD USTs USED TO BE LOCATED AND ADVANCED SOME BORINGS AT THAT LOCATION. SAMPLES SUBMITTED TO LAB. FLOOR DRAINS IMPROPERLY DISCHARGE TO A DITCH (IMPACTS FOUND). REPORT TO FOLLOW.11/20/08 PHASE 2 ESA RECEIVED FROM SAW ENVIRONMENTAL.4/27/09: DD SENDS JON HEERKENS OF SAW ENVIRONMENTAL A SHORT EMAIL INQUIRING OF STATUS OF SPILL - NEED REMEDIAL ACTION PLAN.10/15/09: DD SENDS JON HEERKENS OF SAW ENVIRONMENTAL A SHORT EMAIL INQUIRING OF STATUS OF SPILL - NEED REMEDIAL ACTION PLAN. RETURN EMAIL RECEIVED: I will call the engineering firm for the School District and see what their plans and timeline are.2/3/10: NO RESPONSE FROM SAW/SCHOOL DISTRICT; REQUEST MADE AGAIN FOR UPDATE/SCHEDULE.7/14/2010 WHILE PERFORMING A PBS INSPECTION SPILLAGE (WASTE OIL AND DIESEL) AROUND TANK 005 AND TANK 006 SECONDARY CONTAINMENT WAS NOTED. (REPORTED AS SPILL 1004160, WHICH IS CLOSED WITH ADDITIONAL WORK BEING DONE UNDER THIS SPILL) 7/20/10: DD TELECON WITH TOM CURTIN OF SCHOOL DISTRICT (243-3450 X4168; CELL 245-4188). THEY HAD PLANS ON POSSIBLY MOVING OR MODIFYING THE BUS GARAGE COMPLEX AND WANTED TO WAIT TO DO REMEDIAL WORK UNTIL THEN, BUT THAT PLAN IS CURRENTLY UP IN THE AIR. DD STATES THAT REMEDIAL WORK (PROPOSED DIGOUT IN TWO AREAS) BE PERFORMED THIS SUMMER WHEN SCHOOL ISNT IN SESSION. CURTIN STATES THE OTHER SPILL AREAS WERE CLEANED UP (FOUND LAST WEEK DURING PBS INSPECTION) AND THEY MAY CHOOSE TO INSTALL AN OIL/WATER SEPARATOR. NEED TO CHECK WITH LOCAL CODE ENFORCEMENT OFFICE AND DEC'S WATER DIVISION. CURTAIN TO MEET WITH SUPERINTENDENT AND DISCUSS CLEANUP. DEC MAY ISSUE A STIP.8/31/10: SIGNED STIPULATION AGREEMENT RECEIVED FROM GENESEO SCHOOL DISTRICT.10/14/10: TOM CURTIN CALLS DEC AND INFORMS THAT SAW COMPLETED THE REMEDIAL WORK (DIGOUT) YESTERDAY). DEC WAS NEVER NOTIFIED. THE EXCAVATION HAS BEEN BACKFILLED AND CLOSURE REPORT WILL BE SENT TO DEPARTMENT.10/18/10: DD DRIVES BY SITE - TWO EXCAVATION HAVE BEEN BACKFILLED TO GRADE WITH CRUSHER RUN (ON WOUTH ENDS OF TWO MAIN BUILDINGS). NO SOIL STOCKPILES ONSITE. MINOR WATER (NO PETROLEUM SHEEN) OBSERVED IN SECONDARY CONTAINMENT DIKES FOR TWO ASTs.No groundwater. Most of the impacts in the ditch area (floor drain discharge) was in crushed stone. It looks like at some point in the past a hole was dug and filled with stone. They were probably having drainage issues and that's why they put in the stone. All the stone was removed along with a rind of impacted native soils. The stone was wet and gray/black stained, but no standing water. Confirmatory samples were collected from native soils after impacted stuff was removed.10/25/10: DD RECEIVES FROM SAW ENV A REMEDIAL ACTIVITY REPORT FOR RECENT DIGOUT AT TWO AREAS. REPORT INCLUDES CONFIRMATORY SOIL ANALYTICAL RESULTS FROM BOTTOM AND SIDEWALL SAMPLES OF TWO EXCAVATIONS. ANALYTICAL RESULTS VERY LOW (BELOW TAGMs) OR NON-DETECT FOR ALL VOCs AND SVOCs. APPROX. 65 TONS OF SOIL REMOVED FROM EASTERN FLOOR DRAIN DISCHARGE AREA, AND APPROX. 40 TONS FROM WESTERN FORMER UST AREA, AND TRANSPORTED/DISPOSED OFFSITE AT LANDFILL (DISPOSAL RECEIPTS INCLUDED). DAVE ENGERT OF SAW CONTACTED - NO MENTION OF GROUNDWATER ENCOUNTERED IN EITHER EXCAVATION. FOLLOWING RESPONSE FROM ENGERT: No groundwater. Most of the impacts in the ditch area (floor drain discharge) was in crushed stone. It looks like at some point in the past a hole was dug and filled with stone. They were probably having drainage issues and that's why they put in the stone. All the

**GENESEO SCHOOL DISTRICT BUS GARAGE (Continued)** **S109373530**

stone was removed along with a rind of impacted native soils. The stone was wet and gray/black stained, but no standing water. Confirmatory samples were collected from native soils after impacted stuff was removed. The west excavation (UST area) was only about 5 feet deep, no water.10/28/10: BASED ON REVIEW OF SUMMARY REPORT AND CONFIRMATORY ANALYTCAL RESULTS, PETROLEUM COMPOUNDS BELOW TAGMs OR NON-DETECT IN CONFIRMATORY SOIL SAMPLES. NO FURTHER ACTIONS REQUIRED BY SPILLS UNIT AT THIS TIME FOR PAST PETROLEUM DISCHARGES/SPILL FILE CLOSED.02/04/11: PAPER FILE REMOVED PER FILE RETENTION POLICY.

Remarks: WHILE CONDUCTING PHASE II INVESTIGATION, DETECTED CONTAMINATION IN ONE BORING OF 52 PPM ON A PID. BORING IN THE PRESUMED LOCATION OF FORMER UNDERGROUND STORAGE TANKS. CURRENT TANKS ARE ABOVEGROUND. FLOOR DRAINS FROM GARAGE ALSO DRAIN TO ROADSIDE DITCH WHERE OIL AND WATER NOTED IN THE DITCH.

Material:

| | |
|---|---|
| Site ID: | 406472 |
| Operable Unit ID: | 1163059 |
| Operable Unit: | 01 |
| Material ID: | 2154360 |
| Material Code: | 0066A |
| Material Name: | UNKNOWN PETROLEUM |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Resource Affected: | Not reported |
| Oxygenate: | False |

Tank Test:

---

**G43** **BEHIND BIG TREE INN** **NY Spills** **S106471235**
**NNE** **46 MAIN STEET** **N/A**
**< 1/8** **GENESEO, NY**
**0.113 mi.**
**599 ft.** **Site 1 of 2 in cluster G**

**Relative: Higher**

**Actual: 774 ft.**

SPILLS:

| | |
|---|---|
| Facility ID: | 0404213 |
| Facility Type: | ER |
| DER Facility ID: | 119482 |
| Site ID: | 139883 |
| DEC Region: | 8 |
| Spill Date: | 7/20/2004 |
| Spill Number/Closed Date: | 0404213 / 7/21/2004 |
| 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: | 2626 |
| Investigator: | DLTILTON |
| Referred To: | Not reported |
| Reported to Dept: | 7/20/2004 |
| CID: | 444 |
| Water Affected: | CATCH BASIN |
| Spill Source: | Commercial Vehicle |

**BEHIND BIG TREE INN (Continued)** **S106471235**

| | |
|---|---|
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | 7/21/2004 |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 7/20/2004 |
| Spill Record Last Update: | 7/23/2004 |
| Spiller Name: | JASON ZINC |
| Spiller Company: | WASTE MANAGEMENT |
| Spiller Address: | 1661 MT READ BOULEVARD |
| Spiller City,St,Zip: | ROCHESTER, NY |
| Spiller Company: | 001 |
| Contact Name: | MIA IOANNONE |
| Contact Phone: | (585) 254-7574 232 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was "DT"07/21/2004: CLEANUP IS COMPLETE. NO FURTHER ACTION IS NEEDED BY SPILLS. |
| Remarks: | A HYDRAULIC HOSE BROKE ON A WASTE MANAGEMENT TRUCK SPILLING OIL TO THE GROUND. CLEANUP IS PENDING DUE TO DRAINS BEING INVOLVED. LIVINGSTON COUNTY NOTIFIED. |

Material:

| | |
|---|---|
| Site ID: | 139883 |
| Operable Unit ID: | 887443 |
| Operable Unit: | 01 |
| Material ID: | 488224 |
| Material Code: | 0010 |
| Material Name: | Hydraulic Oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 0 |
| Units: | Pounds |
| Recovered: | No |
| Resource Affected: | Not reported |
| Oxygenate: | False |

Tank Test:

---

**G44** **45 MAIN STREET GAS LINE** **NY Spills** **S112146864**
**NNE** **45 MAIN STREET** **N/A**
**< 1/8** **GENESEO, NY**
**0.118 mi.**
**621 ft.** **Site 2 of 2 in cluster G**

**Relative: Higher**

**Actual: 774 ft.**

SPILLS:

| | |
|---|---|
| Facility ID: | 1202510 |
| Facility Type: | ER |
| DER Facility ID: | 419648 |
| Site ID: | 465280 |
| DEC Region: | 8 |
| Spill Date: | 6/13/2012 |
| Spill Number/Closed Date: | 1202510 / 2/5/2013 |
| Spill Cause: | Unknown |
| Spill Class: | Known release with minimal potential for fire or hazard. DEC Response. Unable/unwilling Responsible Party. Corrective action taken. (ISR) |

**45 MAIN STREET GAS LINE (Continued)** **S112146864**

| | |
|---|---|
| SWIS: | 2626 |
| Investigator: | DLTILTON |
| Referred To: | Not reported |
| Reported to Dept: | 6/13/2012 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Unknown |
| Spill Notifier: | Affected Persons |
| 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: | 6/13/2012 |
| Spill Record Last Update: | 1/7/2015 |
| Spiller Name: | Not reported |
| Spiller Company: | Not reported |
| Spiller Address: | Not reported |
| Spiller City,St,Zip: | Not reported |
| Spiller Company: | Not reported |
| Contact Name: | TOM WOELFLE |
| Contact Phone: | (585) 202-2641 |
| DEC Memo: | 06/13/12 DDS TO DISPOSE OF STOCKPILED CONTAMINTED SOILS, AND TO SAMPLE EXCAVATION, RUNNING TEST METHOD 8260 AND FORWARD TO THIS DEPARTMENT.02/05/13 DT: DEPARTMENT DID NOT RECEIVE ANY DOCUMENTATION OF REPORTABLE LEVELS FROM SAMPLING. NO FURTHER ACTION IS NEEDED BY SPILLS. CLOSED.1/6/15: DDAKE OF SPILLS CONTACTS MICHAEL ARLAUCKAS OF DDS (585-359-7450) TO SEE IF THERE IS INFORMATION AVAILABLE ON THIS SITE (PHOTOS, SITE SKETCH, LAB ANALYTICAL ETC). ARLAUCKAS LATER SENDS EMAIL WITH ATTACHMENTS (SITE PHOTO SHOWING WHERE IMPACTS WERE ENCOUNTERED, WASTE DISPISAL PROFILE/RECEIPTS, AND SOIL ANALYTICAL RESULTS) - SAVED TO eDOCS. ONE SOIL SAMPLE WAS ANALYZED FOR VOCs LABELED 'HOLE' WHICH HAS NON-DETECT FOR ALL COMPOUNDS. A TOTAL OF 3.69-TONS OF SOIL WAS DISPOSED AT LOCAL LANDFILL/RGE WAS LISTED AS GENERATOR. NOTE THAT SPILL #1409806 WAS CALLED IN TO THE DEPARTMENT ON 1/5/15 AT #57 MAIN STREET, WHICH IS NEXT DOOR/BUILDING TO DIRECT SOUTH. |
| Remarks: | CALLER STATES THAT WHILE SUB CONTRACTING FOR R.G. & E., ALLEY ALONG SIDE OF 45 MAIN STREET. DIGGING TO INSTALL GAS LINE, ENCOUNTERED GASOLINE CONTAMINATED SOILS ENCOUNTERED TO A DEPTH OF 4 1/2 FEET. METER READINGS TO 54 PPM. CONTAMINTAED SOILS PLACED ON PLASTIC AND COVERED. |

Material:

| | |
|---|---|
| Site ID: | 465280 |
| Operable Unit ID: | 1215305 |
| Operable Unit: | 01 |
| Material ID: | 2213430 |
| 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 |

**45 MAIN STREET GAS LINE (Continued)** **S112146864**

Tank Test:

---

**45**
**West**
**< 1/8**
**0.119 mi.**
**627 ft.**

**SUNY GENESEO** **NY Spills** **S103274105**
**PARK STREET EXTENSION** **N/A**
**GENESEO, NY**

**Relative:**
**Lower**

**Actual:**
**695 ft.**

SPILLS:

| | |
|---|---|
| Facility ID: | 9801496 |
| Facility Type: | ER |
| DER Facility ID: | 74167 |
| Site ID: | 79969 |
| DEC Region: | 8 |
| Spill Date: | 5/4/1998 |
| Spill Number/Closed Date: | 9801496 / 5/4/1998 |
| 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: | 2626 |
| Investigator: | TGHALL |
| Referred To: | Not reported |
| Reported to Dept: | 5/4/1998 |
| CID: | 999 |
| Water Affected: | Not reported |
| Spill Source: | Passenger Vehicle |
| Spill Notifier: | Affected Persons |
| 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: | 5/5/1998 |
| Spill Record Last Update: | 5/7/1998 |
| Spiller Name: | Not reported |
| Spiller Company: | UNKNOWN |
| 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 "TH" |
| Remarks: | A CAR HIT A CURB PUTTING A HOLE IN THE GAS TANK. GASOLINE SPILLED TO THE PAVEMENT. NO SEWERS WERE IMPACTED. ALTHOUGH NOT A CAMPUS CAR, SUNY PERSON TO CLEAN UP WITH SPEEDI DRI. NO FURTHER ACTION NECESSARY. CLOSED 05/04/98. |

Material:

| | |
|---|---|
| Site ID: | 79969 |
| Operable Unit ID: | 1062041 |
| Operable Unit: | 01 |
| Material ID: | 323429 |
| Material Code: | 0009 |
| Material Name: | Gasoline |

**SUNY GENESEO (Continued)** **S103274105**

| | |
|---|---|
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 5 |
| Units: | Gallons |
| Recovered: | No |
| Resource Affected: | Not reported |
| Oxygenate: | False |

Tank Test:

---

**46**
**WNW**
**1/8-1/4**
**0.155 mi.**
**817 ft.**

**SUNY AT GENESEO** **NY LTANKS** **S101102568**
**WILSON CLARK SERVICE BLDG** **N/A**
**GENESEO, NY 14454**

**Relative:**
**Lower**

**Actual:**
**663 ft.**

LTANKS:

| | |
|---|---|
| Site ID: | 290293 |
| Spill Number/Closed Date: | 9402622 / 6/9/1995 |
| Spill Date: | 5/23/1994 |
| Spill Cause: | Tank 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: | 5/17/1995 |
| Cleanup Meets Standard: | True |
| SWIS: | 2626 |
| Investigator: | VOLLMER |
| Referred To: | Not reported |
| Reported to Dept: | 5/23/1994 |
| 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: | 5/26/1994 |
| Spill Record Last Update: | 3/22/2006 |
| Spiller Name: | Not reported |
| Spiller Company: | SUNY GENESEO |
| Spiller Address: | Not reported |
| Spiller City,St,Zip: | GENESEO, ZZ |
| Spiller County: | 001 |
| Spiller Contact: | Not reported |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 8 |
| DER Facility ID: | 311647 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was "BS"05/23/94: CONTACT: KIM DAULTON. JM SPOKE TO DAULTON; TANK REMOVAL CONTAINUING. CONTAMIANTED SOIL BEING STAGED ON SITE. 05/23/94: MARCHITELL ON SITE W/KIM DALTON; TANK OUT OF GROUND. EXCAVATION BEING BACKFILLED. APPROX 10 YDS OF SOIL REMOVED AT WHICH POINT IT IS BELIEVED THAT ALL CONTAMIANTION REMOVED. SAMPLE TAKEN TO .. 05/23/94: ..CONFIRM. ARRANGEMENTS BEING MADE FOR OFFSITE DISPOSAL. RESULTS TO |

**SUNY AT GENESEO (Continued)** **S101102568**

BE SENT TO THIS OFFICE.06/15/94: RECEIVED ANALYTICAL RESULTS OF EPA METHOD 8021 AND 8270 (BASE/NEUTRALS) FROM SOIL SAMPLE FROM BASE OF TANK REMOVED. ANALYSES DID NOT IDENTIDY PRESENCE OF ANY CONTAMINANTS. PROCEEDING WITH RESTORATION OF SITE. 04/20/95: BS MET ON SITE W/DAULTON, SUNY GENESEO TO DISCUSS SPILL. DAULTON SHOWED ME FORMER UNDERGROUND TANK PIT AREA W/IN PAVED PARKING LOT. AREA BACKFILLED & REPAVED. TO SEND COPIES OF DISPOSAL RECEIPTS. 05/17/95: RECEIVED COPY OF DISPOSAL RECEIPTS VERIFYING PROPER DISPOSAL OF CONTAMINATED SOIL. NO FURTHER ACTION REQUIRED.03/22/06: PAPER FILE REMOVED PER FILE RETENTION POLICY.

Remarks: DURING THE REMOVAL OF A 500 GAL UNDERGROUND STORAGE TANK, CONTAMINATION WAS ENCOUNTERED IN THE SOIL SURROUNDING THE TANK. ENVIRON PRODUCTS & SVCS DOING THE TANK REMOVAL.

Material:

| | |
|---|---|
| Site ID: | 290293 |
| Operable Unit ID: | 999691 |
| Operable Unit: | 01 |
| Material ID: | 382803 |
| 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:

---

**47**
**NNE**
**1/4-1/2**
**0.318 mi.**
**1680 ft.**

**Relative:**
**Higher**

**Actual:**
**770 ft.**

**LIVINGSTON COUNTY SHERIFF** **NY LTANKS** **S101508586**
**COURT AND MAIN STREET** **N/A**
**GENESEO, NY 14454**

LTANKS:

| | |
|---|---|
| Site ID: | 98738 |
| Spill Number/Closed Date: | 8181205 / 1/1/1983 |
| Spill Date: | 12/4/1981 |
| 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: | 1/1/1983 |
| Cleanup Meets Standard: | True |
| SWIS: | 2626 |
| Investigator: | PCLINDEN |
| Referred To: | Not reported |
| Reported to Dept: | 12/4/1981 |
| CID: | Not reported |
| Water Affected: | GROUNDWATER |
| Spill Notifier: | Other |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |

**LIVINGSTON COUNTY SHERIFF (Continued)** **S101508586**

| | |
|---|---|
| UST Involvement: | True |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 12/2/2003 |
| Spill Record Last Update: | 3/23/2006 |
| Spiller Name: | Not reported |
| Spiller Company: | LIVINGSTON COUNTY SHERIFF |
| Spiller Address: | COURT AND MAIN STREET |
| Spiller City,St,Zip: | GENESEO, NY 14454 |
| Spiller County: | 001 |
| Spiller Contact: | SKIP PERRY-DOT |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 8 |
| DER Facility ID: | 87808 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was "PL".12/04/81: DOT USING ABSORBENT PADS.SKIP PERRY FROM DOT ON SCENE.03/23/06: PAPER FILE REMOVED PER FILE RETENTION POLICY. |
| Remarks: | WHILE REMOVING COUNTY GAOLINE TANK (UNDERGROUND), A JOINT BROKE SPILLING FUEL. |

Material:

| | |
|---|---|
| Site ID: | 98738 |
| Operable Unit ID: | 892956 |
| Operable Unit: | 01 |
| Material ID: | 484224 |
| Material Code: | 0009 |
| Material Name: | Gasoline |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 10 |
| Units: | Gallons |
| Recovered: | 10 |
| Resource Affected: | Not reported |
| Oxygenate: | False |

Tank Test:

---

**48**
**SW**
**1/4-1/2**
**0.383 mi.**
**2023 ft.**

**SUNY GENESEO** **NY LTANKS** **S104191990**
**S PARKING LOT** **N/A**
**GENESEO, NY**

**Relative:**
**Lower**

**Actual:**
**693 ft.**

LTANKS:

| | |
|---|---|
| Site ID: | 270858 |
| Spill Number/Closed Date: | 9906985 / 9/13/1999 |
| Spill Date: | 9/12/1999 |
| Spill Cause: | Tank Failure |
| Spill Source: | Passenger Vehicle |
| Spill Class: | Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken. |
| Cleanup Ceased: | 9/13/1999 |
| Cleanup Meets Standard: | False |
| SWIS: | 2626 |
| Investigator: | DLTILTON |
| Referred To: | Not reported |

**SUNY GENESEO (Continued)** **S104191990**

| | |
|---|---|
| Reported to Dept: | 9/12/1999 |
| CID: | 312 |
| 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: | 9/12/1999 |
| Spill Record Last Update: | 9/15/1999 |
| Spiller Name: | ABOVE CALLER |
| Spiller Company: | SUNY GENESEO |
| Spiller Address: | 1 COLLEGE CIRCLE |
| Spiller City,St,Zip: | GENESEO, NY 14454- |
| Spiller County: | 001 |
| Spiller Contact: | KIMBERLY DALTON |
| Spiller Phone: | (716) 245-5512 |
| Spiller Extention: | Not reported |
| DEC Region: | 8 |
| DER Facility ID: | 220493 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was "DT"09/12/99 CH ATTEMPTS TO CONTACT CALLER FOR DETAILS, HOWEVER, THERE IS NO ANSWER.09/13/99 SPILL CLEANED UP, NO FURTHER ACTION NEEDED BY SPILLS. CLOSED. |
| Remarks: | A CAMPUS VEHICLE HAD A HOLE IN THE GAS TANK SPILLING GAS TO THE BLACKTOP. THE GAS ATE THRU THE BLACKTOP. WILL DIG UP CONTAMINATED SOIL/BLACKTOP SHORTLY. |

Material:

| | |
|---|---|
| Site ID: | 270858 |
| Operable Unit ID: | 1081274 |
| Operable Unit: | 01 |
| Material ID: | 299697 |
| Material Code: | 0009 |
| Material Name: | Gasoline |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 10 |
| Units: | Gallons |
| Recovered: | No |
| Resource Affected: | Not reported |
| Oxygenate: | False |

Tank Test:

---

**H49** **NYS ARMORY/NATIONAL GUARD** **NY LTANKS S100781082**
**NNE** **34 AVON ROAD ROUTE 39** **NY Spills N/A**
**1/4-1/2** **GENESEO, NY 14454**
**0.465 mi.**
**2454 ft.** **Site 1 of 2 in cluster H**

**Relative:**
**Higher**

**Actual:**
**772 ft.**

LTANKS:

| | |
|---|---|
| Site ID: | 168192 |
| Spill Number/Closed Date: | 9609264 / 2/28/2000 |
| Spill Date: | 10/24/1996 |
| Spill Cause: | Tank Failure |

**NYS ARMORY/NATIONAL GUARD (Continued)** **S100781082**

| | |
|---|---|
| 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: | 2/28/2000 |
| Cleanup Meets Standard: | True |
| SWIS: | 2626 |
| Investigator: | TGHALL |
| Referred To: | Not reported |
| Reported to Dept: | 10/24/1996 |
| CID: | 297 |
| Water Affected: | ON LAND |
| Spill Notifier: | Responsible Party |
| Last Inspection: | 10/29/1996 |
| Recommended Penalty: | False |
| UST Involvement: | True |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 10/24/1996 |
| Spill Record Last Update: | 3/20/2007 |
| Spiller Name: | REGGIE HARRIS |
| Spiller Company: | NYS ARMORY |
| Spiller Address: | 34 AVON RD |
| Spiller City,St,Zip: | GENESEO, NY 14454- |
| Spiller County: | 001 |
| Spiller Contact: | HEIDI GABLE |
| Spiller Phone: | (518) 786-4347 |
| Spiller Extention: | Not reported |
| DEC Region: | 8 |
| DER Facility ID: | 311642 |
| DEC Memo: | 10/25/96: BS INSPECTED THE SITE & FOUND CONTRACTOR, HITCHMAN EXCAVATING, OUT OF REGION 5 AREA, IN THE PROCESS OF REMOVING A 2500 GALLON UNDERGROUND GASOLINE TANK. THERE WAS FREE PRODUCT ON THE WATER IN THE EXCAVATION, @ APPROXIMATELY 1-1/2' BELOW GROUND SURFACE. THE CONTRACTOR WAS PADDING UP FREE PRODUCT. THE TOP OF THE TANK IS NOT EXPOSED YET. HITCHMAN IS TO SUBCONTRACT OUT EP&S FOR THE TANK CLEANING & SOIL SAMPLING PROCEDURES, DUE TO THEIR UNFAMILIARITY WITH REGIONAL TANK CLOSURE POLICY. THE CONTRACTOR IS TO STOCKPILE THE CONTAMINATED SOIL ON SITE. HITCHMAN ALSO IS SCHEDULED TO REMOVE A 2500 GALLON UNDERGROUND DIESEL FUEL TANK. BS TO SUPPLY HITCHMAN WITH REGIONAL UST REMOVAL GUIDANCE.10/28/96: JM ON SITE WITH HITCHMAN EXCAVATING; TWO DOUBLE WALLED FIBERGLASS TANKS ARE OUT OF THE GROUND. SOME CONTAMINATED SOIL HAS BEEN REMOVED AND STOCKPILED ON SITE. TO CONTINUE REMOVING SOIL AND ENVIRONMENTAL PRODUCTS TO BE ON SITE TOMORROW TO TAKE SOIL AND WATER SAMPLES FROM THE EXCAVATION.10/29/96: JM ON SITE WITH RICH HICTHMAN AND RANDY KLOSKO; EXCAVATION HAD BEEN CLEANED OUT. ADDITIONAL CONTAMINATED SOIL HAS BEEN REMOVED. SOIL SAMPLES HAVE BEEN TAKEN FROM THE SIDEWALLS AND A WATER SAMPLE FROM THE BOTTOM OF THE EXCAVATION. MONITORING WELLS ARE TO BE INSTALLED IN THE BACKFILL.03/20/98: TRANSFERRED BS TO SR.09/25/98: TRANSFERED SR TO TH.01/31/00: LETTER REQUEST FOR CLOSURE DOCUMENTATION SENT TO HEIDI GABLE.02/28/00: CLOSURE REPORT RECEIVED. NO FURTHER ACTION REQUIRED BY SPILLS - CLOSED.03/14/07 PAPER FILE REMOVED PER FILE RETENTION POLICY. |
| Remarks: | CALLER DISCOVERED CONTAMINATED SOIL AFTER A TANK REMOVAL. CLEAN UP WILL BE DONE. |

Material:

| | |
|---|---|
| Site ID: | 168192 |

**NYS ARMORY/NATIONAL GUARD (Continued)** **S100781082**

Operable Unit ID: 1040581
Operable Unit: 01
Material ID: 344996
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: 9308278
Facility Type: ER
DER Facility ID: 311642
Site ID: 168191
DEC Region: 8
Spill Date: 9/16/1993
Spill Number/Closed Date: 9308278 / 4/29/1996
Spill Cause: Other
Spill Class: Known release that creates potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS: 2626
Investigator: CAHETTEN
Referred To: Not reported
Reported to Dept: 10/7/1993
CID: Not reported
Water Affected: Not reported
Spill Source: Commercial/Industrial
Spill Notifier: Responsible Party
Cleanup Ceased: 4/29/1996
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 10/8/1993
Spill Record Last Update: 3/22/2006
Spiller Name: Not reported
Spiller Company: NYS ARMORY
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 "CH"10/07/93: DUG TWO FT BELOW TANK, PID READINGS AT ZERO. NO READINGS ABOVE BACKGROUND ON WALLS. NO WATER IN EXCAVATION. CONFIMATORY SAMPLES TAKEN FROM EXCAVATION-WILL RUN 8021 METHOD. 10/07/93: DUG OUT OF CONTAMINATION. NEED DOCUMENTATION AND PROPER DISPOSAL RECEIPTS. 10/07/93: CONTACT PERSON: LESLIE T FISHER

**NYS ARMORY/NATIONAL GUARD (Continued)** **S100781082**

716-881-7417.01/24/96: SOIL SAMPLE REPORT RECEIVED FROM ADVANCED ENVIRONMENTAL SERVICES.03/22/06: PAPER FILE REMOVED PER FILE RETENTION POLICY.

Remarks: DURING THE REMOVAL OF A 1,000 GALLON UNDERGROUND STORAGE TANK, CONTAMINATION WAS ENCOUNTERED. NO VISIBLE HOLES. SUCTION SYSTEM. TPA CONSTRUCTION REMOVED & STOCKPILED APPROXIMATELY 15-20 CUBIC YARDS OF CONTAMINATED SOIL.

Material:

| | |
|---|---|
| Site ID: | 168191 |
| Operable Unit ID: | 989811 |
| Operable Unit: | 01 |
| Material ID: | 394511 |
| 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:

---

**H50** **NYS ARMORY-GENESEO** **NY LTANKS S100250812**
**NNE** **34 AVON ROAD - ROUTE 39** **NY Spills N/A**
**1/4-1/2** **GENESEO, NY 14454**
**0.465 mi.**
**2454 ft.** **Site 2 of 2 in cluster H**

**Relative:**
**Higher**

**Actual:**
**772 ft.**

LTANKS:

| | |
|---|---|
| Site ID: | 191170 |
| Spill Number/Closed Date: | 8800030 / 10/31/1988 |
| Spill Date: | 4/1/1988 |
| 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: | 10/31/1988 |
| Cleanup Meets Standard: | True |
| SWIS: | 2626 |
| Investigator: | SCHMIDT |
| Referred To: | Not reported |
| Reported to Dept: | 4/1/1988 |
| CID: | Not reported |
| Water Affected: | GROUND WATER |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 4/15/1988 |
| Spill Record Last Update: | 3/23/2006 |
| Spiller Name: | BOB TEMPLETON |
| Spiller Company: | NEW YORK STATE ARMORY |
| Spiller Address: | 34 AVON ROAD |

**NYS ARMORY-GENESEO (Continued)** **S100250812**

| | |
|---|---|
| Spiller City,St,Zip: | GENESEO, NY 14454 |
| Spiller County: | 001 |
| Spiller Contact: | BOB TEMPLETON |
| Spiller Phone: | (716) 243-0140 |
| Spiller Extention: | Not reported |
| DEC Region: | 8 |
| DER Facility ID: | 159465 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was "CS". / / : 4/26 SPOKE W/TEMPLETON. UNABLE TO TEST DUE TO VAPOR POCKET. WILL BE EXCAVATING. STEVE STOCKMAN-AES WILL BE CONTACT RE TESTING. 03/28/88: NEW OIL FURNACE INSTALLED. NOTICED FUEL OIL TANK LOST PRODUCT. THERE IS UNDERGROUND COPPER PIPE FROM TANK TO FURNACE. NEW ABOVEGROUND LINE INSTALLED. NO SIGNS OF ANY OIL IN BASEMENT (WAS AN ODOR). 04/01/88: AIR POCKET IS BELIEVED TO BE THE PROBLEM. BOB TEMPLETON, 243-0140 CHECKED TANK ON SATURDAY AND SUNDAY AND THE LEVEL IN THE TANK REMAINED CONSTANT. 04/01/88: HE IS TO CHECK ON MONDAY TO DETERMINE IF TANK IS TO BE RETESTED. 04/04/88: TEMPLETON REPORTS THAT MONITORING SHOWS NO LOSS OF PRODUCT. RETEST FORTHCOMING - MONITORING SHALL CONTINUE. 04/15/88: CONTACT PERSON, BOB TEMPLETON, 243-0140. 10/31/88: PBS,WW WILL ACCEPT SUBMITTED RESULTS AS VALID FOR RETEST HORNER EZ CHECK IN 10/88. TESTED TIGHT. NO FURTHER ACTION REQUIRED.03/23/06: PAPER FILE REMOVED PER FILE RETENTION POLICY. |
| Remarks: | A 10,000 GALLON UNDERGROUND STORAGE TANK FAILED A TIGHTNESS TEST AT -0.7924 GALLONS/HR. |

Material:

| | |
|---|---|
| Site ID: | 191170 |
| Operable Unit ID: | 916870 |
| Operable Unit: | 01 |
| Material ID: | 462755 |
| Material Code: | 0001A |
| Material Name: | #2 Fuel Oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 0 |
| Units: | Pounds |
| Recovered: | No |
| Resource Affected: | Not reported |
| Oxygenate: | False |

Tank Test:

| | |
|---|---|
| Site ID: | 191170 |
| Spill Tank Test: | 1533550 |
| 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 |

| | |
|---|---|
| Site ID: | 138359 |
| Spill Number/Closed Date: | 8903188 / 6/27/1989 |
| Spill Date: | 6/26/1989 |

**NYS ARMORY-GENESEO (Continued)** **S100250812**

| | |
|---|---|
| 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: | 6/27/1989 |
| Cleanup Meets Standard: | True |
| SWIS: | 2626 |
| Investigator: | MAGER |
| Referred To: | Not reported |
| Reported to Dept: | 6/26/1989 |
| CID: | Not reported |
| Water Affected: | GROUND WATER |
| Spill Notifier: | Responsible Party |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Involvement: | True |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 12/2/2003 |
| Spill Record Last Update: | 3/23/2006 |
| Spiller Name: | Not reported |
| Spiller Company: | NYS ARMORY |
| Spiller Address: | ROUTE 39 |
| Spiller City,St,Zip: | GENESEO, NY 14454 |
| Spiller County: | 001 |
| Spiller Contact: | DON TIMMERMAN |
| Spiller Phone: | (716) 624-9470 |
| Spiller Extention: | Not reported |
| DEC Region: | 8 |
| DER Facility ID: | 311690 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was "DM".06/26/89: 06/26/89 DM WITNESSED REMOVAL OF ONE 2,000 GAL UG GAS TANK. CONSIDERABLE SOIL CONTAMINATION WAS OBSERVED. CONTAMINATED SOIL WAS NOT BACKFILLED. EARL RHODES OF OGS-SONYEA WAS AT THE SITE.NO FURTHER ACTION NECESSARY. 03/23/06: PAPER FILE REMOVED PER FILE RETENTION POLICY. |
| Remarks: | 2,000 GAL UG TANK REMOVED BY LIVINGSTON MECHANICAL. CONSIDERABLE AMOUNT OF CONTAMINATED SOIL WAS FOUND. |

Material:

| | |
|---|---|
| Site ID: | 138359 |
| Operable Unit ID: | 928614 |
| Operable Unit: | 01 |
| Material ID: | 447301 |
| 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: | 138359 |
| Spill Tank Test: | 1535644 |

**NYS ARMORY-GENESEO (Continued)** **S100250812**

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

SPILLS:
Facility ID: 0109912
Facility Type: ER
DER Facility ID: 283054
Site ID: 138357
DEC Region: 8
Spill Date: 1/8/2002
Spill Number/Closed Date: 0109912 / 1/14/2002
Spill Cause: Deliberate
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS: 2600
Investigator: DLTILTON
Referred To: Not reported
Reported to Dept: 1/14/2002
CID: 281
Water Affected: Not reported
Spill Source: Commercial/Industrial
Spill Notifier: Citizen
Cleanup Ceased: 1/14/2002
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 1/14/2002
Spill Record Last Update: 1/24/2002
Spiller Name: Not reported
Spiller Company: SAME
Spiller Address: Not reported
Spiller City,St,Zip: NN
Spiller Company: 999
Contact Name: NONE
Contact Phone: (000) 000-0000
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was "DT"
Remarks: CALLER STATES THAT ON THE ABOVE DATE AND TIME AT BALCONI PONTIAC-BUICK, HE WITNESSED AN EMPLOYEE DUMP WHAT APPEARED TO BE ANTIFREEZE INTO THE STORM DRAIN INSIDE THE SERVICE SHOP. CALLER WISHES NOT TO BE IDENTIFIED. COPY TO LAW ENFORCEMENT. LIVINGSTON COUNTY NOTIFIED. COPY TO WATER.

Material:
Site ID: 138357
Operable Unit ID: 847032
Operable Unit: 01
Material ID: 527554

**NYS ARMORY-GENESEO (Continued)** **S100250812**

| | |
|---|---|
| Material Code: | 0028A |
| Material Name: | ETHYLENE GLYCOL |
| Case No.: | 00107211 |
| Material FA: | Hazardous Material |
| Quantity: | 2 |
| Units: | Gallons |
| Recovered: | No |
| Resource Affected: | Not reported |
| Oxygenate: | False |

Tank Test:

---

**51**
**NNW**
**1/2-1**
**0.604 mi.**
**3189 ft.**

**GENESEO GAS LIGHT CO** **EDR MGP** **1008407935**
**COURT STREET** **N/A**
**GENESEO, NY 14454**

**Relative:**
**Lower**

**Actual:**
**614 ft.**

Manufactured Gas Plants:
No additional information available

Count: 1 records. ORPHAN SUMMARY

| City | EDR ID | Site Name | Site Address | Zip | Database(s) |
|---|---|---|---|---|---|
| GENESEO | S102556154 | GENESEO VILLAGE DPW | HIGHLAND ROAD | | NY LTANKS |

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

**STANDARD ENVIRONMENTAL RECORDS**

***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: 12/16/2014
Date Data Arrived at EDR: 01/08/2015
Date Made Active in Reports: 02/09/2015
Number of Days to Update: 32

Source: EPA
Telephone: N/A
Last EDR Contact: 04/08/2015
Next Scheduled EDR Contact: 07/20/2015
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 5
Telephone 312-886-6686

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6774

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 12/16/2014
Date Data Arrived at EDR: 01/08/2015
Date Made Active in Reports: 02/09/2015
Number of Days to Update: 32

Source: EPA
Telephone: N/A
Last EDR Contact: 04/08/2015
Next Scheduled EDR Contact: 07/20/2015
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

# 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: 12/16/2014
Date Data Arrived at EDR: 01/08/2015
Date Made Active in Reports: 02/09/2015
Number of Days to Update: 32

Source: EPA
Telephone: N/A
Last EDR Contact: 04/08/2015
Next Scheduled EDR Contact: 07/20/2015
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: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 94

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 05/01/2015
Next Scheduled EDR Contact: 06/08/2015
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: 07/21/2014
Date Data Arrived at EDR: 10/07/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 04/08/2015
Next Scheduled EDR Contact: 07/20/2015
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: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 94

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 05/01/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Quarterly

***Federal RCRA CORRACTS facilities list***

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/09/2014
Date Data Arrived at EDR: 12/29/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 31

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/31/2015
Next Scheduled EDR Contact: 07/13/2015
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: 12/09/2014
Date Data Arrived at EDR: 12/29/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: (212) 637-3660
Last EDR Contact: 03/31/2015
Next Scheduled EDR Contact: 07/13/2015
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: 12/09/2014
Date Data Arrived at EDR: 12/29/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: (212) 637-3660
Last EDR Contact: 03/31/2015
Next Scheduled EDR Contact: 07/13/2015
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: 12/09/2014
Date Data Arrived at EDR: 12/29/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: (212) 637-3660
Last EDR Contact: 03/31/2015
Next Scheduled EDR Contact: 07/13/2015
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: 12/09/2014
Date Data Arrived at EDR: 12/29/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: (212) 637-3660
Last EDR Contact: 03/31/2015
Next Scheduled EDR Contact: 07/13/2015
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: 09/18/2014
Date Data Arrived at EDR: 09/19/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/26/2015
Next Scheduled EDR Contact: 06/15/2015
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: 09/18/2014
Date Data Arrived at EDR: 09/19/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/26/2015
Next Scheduled EDR Contact: 06/15/2015
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: 12/03/2014
Date Data Arrived at EDR: 12/12/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 48

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 02/16/2015
Next Scheduled EDR Contact: 06/01/2015
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: 09/29/2014
Date Data Arrived at EDR: 09/30/2014
Date Made Active in Reports: 11/06/2014
Number of Days to Update: 37

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 03/31/2015
Next Scheduled EDR Contact: 07/13/2015
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: 03/25/2015
Date Data Arrived at EDR: 03/26/2015
Date Made Active in Reports: 04/07/2015
Number of Days to Update: 12

Source: Department of Environmental Conservation
Telephone: 518-402-9622
Last EDR Contact: 03/26/2015
Next Scheduled EDR Contact: 06/01/2015
Data Release Frequency: Annually

VAPOR REOPENED: Vapor Intrustion 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: 11/01/2014
Date Data Arrived at EDR: 11/19/2014
Date Made Active in Reports: 01/12/2015
Number of Days to Update: 54

Source: Department of Environmenal Conservation
Telephone: 518-402-9814
Last EDR Contact: 02/20/2015
Next Scheduled EDR Contact: 06/01/2015
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: 04/08/2015
Date Data Arrived at EDR: 04/10/2015
Date Made Active in Reports: 04/30/2015
Number of Days to Update: 20

Source: Department of Environmental Conservation
Telephone: 518-457-2051
Last EDR Contact: 04/06/2015
Next Scheduled EDR Contact: 07/20/2015
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: 03/19/2015
Date Data Arrived at EDR: 03/19/2015
Date Made Active in Reports: 03/26/2015
Number of Days to Update: 7

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 03/19/2015
Next Scheduled EDR Contact: 06/01/2015
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
Date Data Arrived at EDR: 07/08/2005
Date Made Active in Reports: 07/14/2005
Number of Days to Update: 6

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 07/07/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

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: 01/30/2015
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 32

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 04/27/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 09/30/2014
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 10
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 04/27/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Semi-Annually

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
Date Data Arrived at EDR: 05/01/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 184
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/03/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 02/03/2015
Date Data Arrived at EDR: 02/12/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 29
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/27/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Quarterly

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: 01/08/2015
Date Data Arrived at EDR: 01/08/2015
Date Made Active in Reports: 02/09/2015
Number of Days to Update: 32
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 01/08/2015
Next Scheduled EDR Contact: 05/11/2015
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: 01/28/2015
Date Data Arrived at EDR: 01/30/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 42
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 04/27/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 09/23/2014
Date Data Arrived at EDR: 11/25/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 65
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/27/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 01/23/2015
Date Data Arrived at EDR: 02/10/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 31
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 01/26/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

***State and tribal registered storage tank lists***

TANKS: Storage Tank Faciliy Listing

This database contains records of facilities that are or have been regulated under Bulk Storage Program. Tank information for these facilities may not be releasable by the state agency.

Date of Government Version: 03/30/2015
Date Data Arrived at EDR: 04/01/2015
Date Made Active in Reports: 04/15/2015
Number of Days to Update: 14

Source: Department of Environmental Conservation
Telephone: 518-402-9543
Last EDR Contact: 04/01/2015
Next Scheduled EDR Contact: 07/13/2015
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: 03/30/2015
Date Data Arrived at EDR: 04/01/2015
Date Made Active in Reports: 04/15/2015
Number of Days to Update: 14

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 04/01/2015
Next Scheduled EDR Contact: 07/13/2015
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
Date Data Arrived at EDR: 02/20/2002
Date Made Active in Reports: 03/22/2002
Number of Days to Update: 30

Source: NYSDEC
Telephone: 518-402-9549
Last EDR Contact: 10/24/2005
Next Scheduled EDR Contact: 01/23/2006
Data Release Frequency: No Update Planned

MOSF UST: Major Oil Storage Facilities Database

Facilities that may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or greater.

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 02/20/2002
Date Made Active in Reports: 03/22/2002
Number of Days to Update: 30

Source: NYSDEC
Telephone: 518-402-9549
Last EDR Contact: 07/25/2005
Next Scheduled EDR Contact: 10/24/2005
Data Release Frequency: No Update Planned

AST: Petroleum Bulk Storage

Registered Aboveground Storage Tanks.

Date of Government Version: 03/30/2015
Date Data Arrived at EDR: 04/01/2015
Date Made Active in Reports: 04/15/2015
Number of Days to Update: 14

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 04/01/2015
Next Scheduled EDR Contact: 07/13/2015
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
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

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: 03/30/2015
Date Data Arrived at EDR: 04/01/2015
Date Made Active in Reports: 04/15/2015
Number of Days to Update: 14

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 04/01/2015
Next Scheduled EDR Contact: 07/13/2015
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: 03/30/2015
Date Data Arrived at EDR: 04/01/2015
Date Made Active in Reports: 04/15/2015
Number of Days to Update: 14

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 04/01/2015
Next Scheduled EDR Contact: 07/13/2015
Data Release Frequency: Quarterly

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: 09/30/2014
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 10

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 04/27/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Semi-Annually

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: 12/14/2014
Date Data Arrived at EDR: 02/13/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 28

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 01/26/2015
Next Scheduled EDR Contact: 05/11/2015
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: 01/29/2015
Date Data Arrived at EDR: 01/30/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 42

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 04/27/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Quarterly

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: 09/23/2014
Date Data Arrived at EDR: 11/25/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 65

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/27/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 01/23/2015
Date Data Arrived at EDR: 02/13/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 28

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 01/26/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: Semi-Annually

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: 01/30/2015
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 36

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 04/27/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 02/01/2013
Date Data Arrived at EDR: 05/01/2013
Date Made Active in Reports: 01/27/2014
Number of Days to Update: 271

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/28/2015
Next Scheduled EDR Contact: 08/10/2015
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: 02/03/2015
Date Data Arrived at EDR: 02/12/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 29

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/27/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Quarterly

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/13/2015
Next Scheduled EDR Contact: 07/27/2015
Data Release Frequency: Varies

***State and tribal institutional control / engineering control registries***

ENG CONTROLS: Registry of Engineering Controls
Environmental Remediation sites that have engineering controls in place.

Date of Government Version: 03/25/2015
Date Data Arrived at EDR: 03/26/2015
Date Made Active in Reports: 04/07/2015
Number of Days to Update: 12
Source: Department of Environmental Conservation
Telephone: 518-402-9553
Last EDR Contact: 03/26/2015
Next Scheduled EDR Contact: 06/01/2015
Data Release Frequency: Quarterly

INST CONTROL: Registry of Institutional Controls
Environmental Remediation sites that have institutional controls in place.

Date of Government Version: 03/25/2015
Date Data Arrived at EDR: 03/26/2015
Date Made Active in Reports: 04/07/2015
Number of Days to Update: 12
Source: Department of Environmental Conservation
Telephone: 518-402-9553
Last EDR Contact: 03/26/2015
Next Scheduled EDR Contact: 06/01/2015
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
Date Data Arrived at EDR: 06/30/2014
Date Made Active in Reports: 07/21/2014
Number of Days to Update: 21
Source: NYC Department of City Planning
Telephone: 212-720-3401
Last EDR Contact: 03/27/2015
Next Scheduled EDR Contact: 07/06/2015
Data Release Frequency: Varies

ENV RES DECL: Environmental Restrictive Declarations
The Environmental Restrictive Declarations (ERD) listed were recorded in connection with a zoning action against the noted Tax Blocks and Tax Lots, or portion thereof, and are available in the property records on file at the Office of the City Register for Bronx, Kings, New York and Queens counties or at the Richmond County Clerk's office. They contain environmental requirements with respect to hazardous materials, air quality and/or noise in accordance with Section 11-15 of this Resolution.

Date of Government Version: 03/06/2015
Date Data Arrived at EDR: 03/27/2015
Date Made Active in Reports: 04/23/2015
Number of Days to Update: 27
Source: New York City Department of City Planning
Telephone: 212-720-3300
Last EDR Contact: 03/24/2015
Next Scheduled EDR Contact: 07/06/2015
Data Release Frequency: Varies

***State and tribal voluntary cleanup sites***

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: 03/25/2015
Date Data Arrived at EDR: 03/26/2015
Date Made Active in Reports: 04/08/2015
Number of Days to Update: 13
Source: Department of Environmental Conservation
Telephone: 518-402-9711
Last EDR Contact: 03/26/2015
Next Scheduled EDR Contact: 06/01/2015
Data Release Frequency: Semi-Annually

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/29/2014
Date Data Arrived at EDR: 10/01/2014
Date Made Active in Reports: 11/06/2014
Number of Days to Update: 36

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 04/02/2015
Next Scheduled EDR Contact: 07/13/2015
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

***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: 03/25/2015
Date Data Arrived at EDR: 03/26/2015
Date Made Active in Reports: 04/07/2015
Number of Days to Update: 12

Source: Department of Environmental Conservation
Telephone: 518-402-9622
Last EDR Contact: 03/26/2015
Next Scheduled EDR Contact: 06/01/2015
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: 03/25/2015
Date Data Arrived at EDR: 03/26/2015
Date Made Active in Reports: 04/07/2015
Number of Days to Update: 12

Source: Department of Environmental Conservation
Telephone: 518-402-9764
Last EDR Contact: 03/26/2015
Next Scheduled EDR Contact: 06/01/2015
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: 12/22/2014
Date Data Arrived at EDR: 12/22/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 38

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/24/2015
Next Scheduled EDR Contact: 07/06/2015
Data Release Frequency: Semi-Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

***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
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39
Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137
Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/23/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: No Update Planned

SWRCY: Registered Recycling Facility List
A listing of recycling facilities.

Date of Government Version: 04/08/2015
Date Data Arrived at EDR: 04/10/2015
Date Made Active in Reports: 04/30/2015
Number of Days to Update: 20
Source: Department of Environmental Conservation
Telephone: 518-402-8705
Last EDR Contact: 04/06/2015
Next Scheduled EDR Contact: 07/20/2015
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: 04/15/2015
Next Scheduled EDR Contact: 08/03/2015
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: 05/01/2015
Next Scheduled EDR Contact: 08/17/2015
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: 02/25/2015
Date Data Arrived at EDR: 03/10/2015
Date Made Active in Reports: 03/25/2015
Number of Days to Update: 15

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/03/2015
Next Scheduled EDR Contact: 06/15/2015
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: 03/25/2015
Date Data Arrived at EDR: 03/26/2015
Date Made Active in Reports: 04/08/2015
Number of Days to Update: 13

Source: Department of Environmental Conservation
Telephone: 518-402-9622
Last EDR Contact: 03/26/2015
Next Scheduled EDR Contact: 06/01/2015
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.

Date of Government Version: 02/25/2015
Date Data Arrived at EDR: 03/10/2015
Date Made Active in Reports: 03/25/2015
Number of Days to Update: 15

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/03/2015
Next Scheduled EDR Contact: 06/15/2015
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: 02/18/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 04/27/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Varies

LIENS: Spill Liens Information
Lien information from the Oil Spill Fund.

Date of Government Version: 02/09/2015
Date Data Arrived at EDR: 02/12/2015
Date Made Active in Reports: 02/27/2015
Number of Days to Update: 15

Source: Office of the State Comptroller
Telephone: 518-474-9034
Last EDR Contact: 02/09/2015
Next Scheduled EDR Contact: 05/25/2015
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: 12/29/2014
Date Data Arrived at EDR: 12/30/2014
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 69

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/31/2015
Next Scheduled EDR Contact: 07/13/2015
Data Release Frequency: Annually

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: 03/19/2015
Date Data Arrived at EDR: 03/19/2015
Date Made Active in Reports: 03/26/2015
Number of Days to Update: 7

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 03/19/2015
Next Scheduled EDR Contact: 06/01/2015
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
Date Data Arrived at EDR: 07/08/2005
Date Made Active in Reports: 07/14/2005
Number of Days to Update: 6

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 07/07/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SPILLS 90: SPILLS90 data from FirstSearch
Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 12/14/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/12/2013
Number of Days to Update: 40

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SPILLS 80: SPILLS80 data from FirstSearch

Spills 80 includes those spill and release records available from FirstSearch databases prior to 1990. Typically, they may include chemical, oil and/or hazardous substance spills recorded before 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 80.

Date of Government Version: 11/02/2010
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 03/07/2013
Number of Days to Update: 63

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

***Other Ascertainable Records***

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/09/2014
Date Data Arrived at EDR: 12/29/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: (212) 637-3660
Last EDR Contact: 03/31/2015
Next Scheduled EDR Contact: 07/13/2015
Data Release Frequency: Varies

DOT OPS: Incident and Accident Data

Department of Transporation, 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 Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 02/03/2015
Next Scheduled EDR Contact: 05/18/2015
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: 04/14/2015
Next Scheduled EDR Contact: 07/27/2015
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: 06/06/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 09/18/2014
Number of Days to Update: 8

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 03/13/2015
Next Scheduled EDR Contact: 06/22/2015
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: 01/23/2015
Date Data Arrived at EDR: 02/13/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 24

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 03/30/2015
Next Scheduled EDR Contact: 07/13/2015
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: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 03/10/2015
Next Scheduled EDR Contact: 06/22/2015
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: 02/27/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Varies

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: 12/30/2014
Date Data Arrived at EDR: 12/31/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 29

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 03/06/2015
Next Scheduled EDR Contact: 06/15/2015
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: 01/29/2015
Next Scheduled EDR Contact: 06/08/2015
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: 12/31/2012
Date Data Arrived at EDR: 01/15/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 14

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/27/2015
Next Scheduled EDR Contact: 07/06/2015
Data Release Frequency: Every 4 Years

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 02/23/2015
Next Scheduled EDR Contact: 06/08/2015
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: 02/23/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

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: 04/10/2015
Next Scheduled EDR Contact: 08/10/2015
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: 01/23/2015
Date Data Arrived at EDR: 02/06/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 04/09/2015
Next Scheduled EDR Contact: 07/27/2015
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: 07/01/2014
Date Data Arrived at EDR: 10/15/2014
Date Made Active in Reports: 11/17/2014
Number of Days to Update: 33

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/17/2015
Next Scheduled EDR Contact: 07/27/2015
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: 12/29/2014
Date Data Arrived at EDR: 01/08/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 21

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 03/09/2015
Next Scheduled EDR Contact: 06/22/2015
Data Release Frequency: Quarterly

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: 02/27/2015
Date Data Arrived at EDR: 02/27/2015
Date Made Active in Reports: 03/25/2015
Number of Days to Update: 26

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 04/09/2015
Next Scheduled EDR Contact: 07/20/2015
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: 01/18/2015
Date Data Arrived at EDR: 02/27/2015
Date Made Active in Reports: 03/25/2015
Number of Days to Update: 26

Source: EPA
Telephone: (212) 637-3000
Last EDR Contact: 03/09/2015
Next Scheduled EDR Contact: 06/22/2015
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
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

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: 02/01/2015
Date Data Arrived at EDR: 02/13/2015
Date Made Active in Reports: 03/25/2015
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/27/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2011
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: 02/24/2015
Next Scheduled EDR Contact: 06/08/2015
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: 03/09/2015
Date Data Arrived at EDR: 03/11/2015
Date Made Active in Reports: 03/20/2015
Number of Days to Update: 9

Source: Department of Environmental Conservation
Telephone: 518-402-8056
Last EDR Contact: 03/11/2015
Next Scheduled EDR Contact: 06/22/2015
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: 01/01/2015
Date Data Arrived at EDR: 02/04/2015
Date Made Active in Reports: 02/27/2015
Number of Days to Update: 23

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 02/04/2015
Next Scheduled EDR Contact: 05/18/2015
Data Release Frequency: Annually

DRYCLEANERS: Registered Drycleaners

A listing of all registered drycleaning facilities.

Date of Government Version: 01/12/2015
Date Data Arrived at EDR: 01/13/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 16

Source: Department of Environmental Conservation
Telephone: 518-402-8403
Last EDR Contact: 03/13/2015
Next Scheduled EDR Contact: 03/30/2015
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: 11/06/2014
Date Data Arrived at EDR: 11/07/2014
Date Made Active in Reports: 11/25/2014
Number of Days to Update: 18

Source: Department of Environmental Conservation
Telephone: 518-402-8233
Last EDR Contact: 04/27/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: No Update Planned

AIRS: Air Emissions Data

Point source emissions inventory data.

Date of Government Version: 02/24/2015
Date Data Arrived at EDR: 03/20/2015
Date Made Active in Reports: 04/15/2015
Number of Days to Update: 26

Source: Department of Environmental Conservation
Telephone: 518-402-8452
Last EDR Contact: 04/27/2015
Next Scheduled EDR Contact: 08/10/2015
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: 03/17/2015
Date Data Arrived at EDR: 03/27/2015
Date Made Active in Reports: 04/23/2015
Number of Days to Update: 27

Source: New York City Department of City Planning
Telephone: 718-595-6658
Last EDR Contact: 03/24/2015
Next Scheduled EDR Contact: 07/06/2015
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: 04/14/2015
Next Scheduled EDR Contact: 07/27/2015
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: 02/18/2015
Next Scheduled EDR Contact: 06/01/2015
Data Release Frequency: Varies

COAL ASH: Coal Ash Disposal Site Listing

A listing of coal ash disposal site locations.

Date of Government Version: 01/08/2015
Date Data Arrived at EDR: 01/09/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 20

Source: Department of Environmental Conservation
Telephone: 518-402-8660
Last EDR Contact: 04/06/2015
Next Scheduled EDR Contact: 07/20/2015
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 05/01/2015
Next Scheduled EDR Contact: 08/10/2015
Data Release Frequency: Varies

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: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 02/13/2015
Next Scheduled EDR Contact: 05/25/2015
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial assurance information.

Date of Government Version: 01/06/2015
Date Data Arrived at EDR: 01/08/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 21

Source: Department of Environmental Conservation
Telephone: 518-402-8660
Last EDR Contact: 04/06/2015
Next Scheduled EDR Contact: 07/20/2015
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 02/09/2015
Next Scheduled EDR Contact: 05/25/2015
Data Release Frequency: Quarterly

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 11/25/2014
Date Data Arrived at EDR: 11/26/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 04/10/2015
Next Scheduled EDR Contact: 07/20/2015
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 02/13/2015
Next Scheduled EDR Contact: 05/25/2015
Data Release Frequency: Quarterly

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: 04/14/2015
Next Scheduled EDR Contact: 07/27/2015
Data Release Frequency: N/A

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: 03/09/2015
Date Data Arrived at EDR: 03/10/2015
Date Made Active in Reports: 03/25/2015
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 02/16/2015
Next Scheduled EDR Contact: 06/01/2015
Data Release Frequency: Quarterly

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: 10/01/2014
Date Data Arrived at EDR: 01/06/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 23

Source: Department of Environmental Conservation
Telephone: 518-402-8712
Last EDR Contact: 02/16/2015
Next Scheduled EDR Contact: 06/01/2015
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: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 03/13/2015
Next Scheduled EDR Contact: 06/22/2015
Data Release Frequency: Varies

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
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: 04/15/2015
Next Scheduled EDR Contact: 07/27/2015
Data Release Frequency: Varies

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: 10/16/2014
Date Data Arrived at EDR: 10/31/2014
Date Made Active in Reports: 11/17/2014
Number of Days to Update: 17

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/30/2015
Next Scheduled EDR Contact: 07/13/2015
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 10/16/2014
Date Data Arrived at EDR: 10/31/2014
Date Made Active in Reports: 11/17/2014
Number of Days to Update: 17

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/30/2015
Next Scheduled EDR Contact: 07/13/2015
Data Release Frequency: Annually

**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.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

**EDR RECOVERED GOVERNMENT ARCHIVES**

***Exclusive Recovered Govt. Archives***

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Conservation in New York.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/10/2014
Number of Days to Update: 193

Source: Department of Environmental Conservation
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Conservation in New York.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: Department of Environmental Conservation
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

**COUNTY RECORDS**

CORTLAND COUNTY:

Cortland County Storage Tank Listing
A listing of aboveground storage tank sites located in Cortland County.

Date of Government Version: 02/18/2015
Date Data Arrived at EDR: 02/24/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 10

Source: Cortland County Health Department
Telephone: 607-753-5035
Last EDR Contact: 02/02/2015
Next Scheduled EDR Contact: 05/18/2015
Data Release Frequency: Quarterly

Cortland County Storage Tank Listing
A listing of underground storage tank sites located in Cortland County.

Date of Government Version: 02/18/2015
Date Data Arrived at EDR: 02/24/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 10

Source: Cortland County Health Department
Telephone: 607-753-5035
Last EDR Contact: 02/02/2015
Next Scheduled EDR Contact: 05/18/2015
Data Release Frequency: Quarterly

NASSAU COUNTY:

Registered Tank Database
A listing of aboveground storage tank sites located in Nassau County.

Date of Government Version: 11/20/2013
Date Data Arrived at EDR: 11/22/2013
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 81

Source: Nassau County Health Department
Telephone: 516-571-3314
Last EDR Contact: 04/06/2015
Next Scheduled EDR Contact: 07/20/2015
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: 02/02/2015
Next Scheduled EDR Contact: 05/18/2015
Data Release Frequency: Varies

Registered Tank Database
A listing of underground storage tank sites located in Nassau County.

Date of Government Version: 11/20/2013
Date Data Arrived at EDR: 11/22/2013
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 81

Source: Nassau County Health Department
Telephone: 516-571-3314
Last EDR Contact: 04/06/2015
Next Scheduled EDR Contact: 07/20/2015
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: 02/02/2015
Next Scheduled EDR Contact: 05/18/2015
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: 12/15/2014
Date Data Arrived at EDR: 12/18/2014
Date Made Active in Reports: 01/13/2015
Number of Days to Update: 26

Source: Rockland County Health Department
Telephone: 914-364-2605
Last EDR Contact: 03/23/2015
Next Scheduled EDR Contact: 06/22/2015
Data Release Frequency: Quarterly

Petroleum Bulk Storage Database
A listing of underground storage tank sites located in Rockland County.

Date of Government Version: 12/15/2014
Date Data Arrived at EDR: 12/18/2014
Date Made Active in Reports: 01/13/2015
Number of Days to Update: 26

Source: Rockland County Health Department
Telephone: 914-364-2605
Last EDR Contact: 03/23/2015
Next Scheduled EDR Contact: 06/22/2015
Data Release Frequency: Quarterly

SUFFOLK COUNTY:

Storage Tank Database
A listing of aboveground storage tank sites located in Suffolk County.

Date of Government Version: 03/03/2015
Date Data Arrived at EDR: 03/10/2015
Date Made Active in Reports: 03/23/2015
Number of Days to Update: 13

Source: Suffolk County Department of Health Services
Telephone: 631-854-2521
Last EDR Contact: 11/03/2014
Next Scheduled EDR Contact: 02/16/2015
Data Release Frequency: No Update Planned

Storage Tank Database
A listing of underground storage tank sites located in Suffolk County.

Date of Government Version: 03/03/2015
Date Data Arrived at EDR: 03/10/2015
Date Made Active in Reports: 03/23/2015
Number of Days to Update: 13

Source: Suffolk County Department of Health Services
Telephone: 631-854-2521
Last EDR Contact: 11/03/2014
Next Scheduled EDR Contact: 02/16/2015
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: 12/11/2014
Date Data Arrived at EDR: 12/12/2014
Date Made Active in Reports: 01/13/2015
Number of Days to Update: 32

Source: Westchester County Department of Health
Telephone: 914-813-5161
Last EDR Contact: 02/02/2015
Next Scheduled EDR Contact: 05/18/2015
Data Release Frequency: Varies

Listing of Storage Tanks
A listing of underground storage tank sites located in Westchester County.

Date of Government Version: 12/11/2014
Date Data Arrived at EDR: 12/12/2014
Date Made Active in Reports: 01/13/2015
Number of Days to Update: 32

Source: Westchester County Department of Health
Telephone: 914-813-5161
Last EDR Contact: 02/02/2015
Next Scheduled EDR Contact: 05/18/2015
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: 11/17/2014
Next Scheduled EDR Contact: 03/02/2015
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

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: 04/14/2015
Next Scheduled EDR Contact: 07/27/2015
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 07/21/2014
Date Made Active in Reports: 08/25/2014
Number of Days to Update: 35

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/16/2015
Next Scheduled EDR Contact: 08/03/2015
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 07/15/2014
Date Made Active in Reports: 08/13/2014
Number of Days to Update: 29

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 02/23/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Annually

VT MANIFEST: Hazardous Waste Manifest Data
Hazardous waste manifest information.

Date of Government Version: 12/22/2014
Date Data Arrived at EDR: 02/06/2015
Date Made Active in Reports: 02/27/2015
Number of Days to Update: 21

Source: Department of Environmental Conservation
Telephone: 802-241-3443
Last EDR Contact: 04/17/2015
Next Scheduled EDR Contact: 08/03/2015
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 03/19/2015
Date Made Active in Reports: 04/07/2015
Number of Days to Update: 19

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/13/2015
Next Scheduled EDR Contact: 06/29/2015
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.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Day Care Providers
Source: Department of Health
Telephone: 212-676-2444

Flood Zone Data: This data, 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, 2005 and 2010 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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

**STREET AND ADDRESS INFORMATION**

# GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

**TARGET PROPERTY ADDRESS**

PARK STREET FORMER MGP SITE
6 PARK STREET
GENESEO, NY 14454

**TARGET PROPERTY COORDINATES**

| | |
|---|---|
| Latitude (North): | 42.7952 - 42° 47' 42.72'' |
| Longitude (West): | 77.8183 - 77° 49' 5.88'' |
| Universal Tranverse Mercator: | Zone 18 |
| UTM X (Meters): | 269509.8 |
| UTM Y (Meters): | 4741710.5 |
| Elevation: | 753 ft. above sea level |

**USGS TOPOGRAPHIC MAP**

| | |
|---|---|
| Target Property Map: | 42077-G7 GENESEO, NY |
| Most Recent Revision: | 1978 |

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**GROUNDWATER FLOW DIRECTION INFORMATION**

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

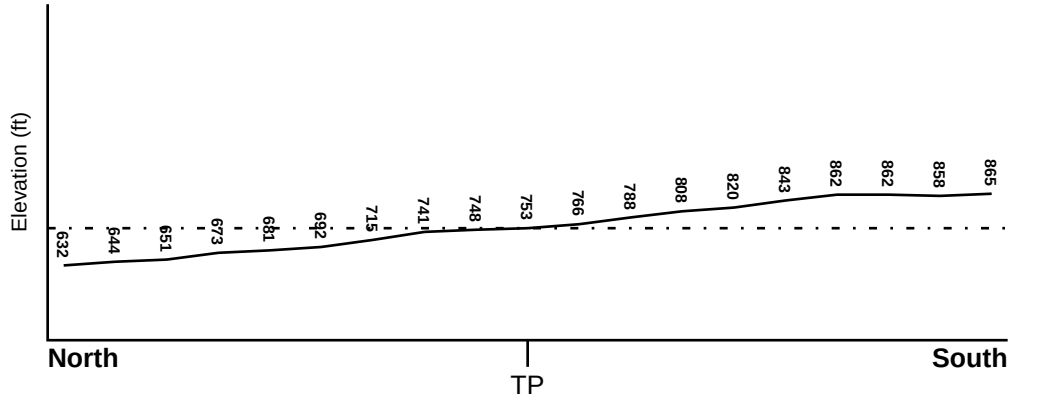
**TOPOGRAPHIC INFORMATION**

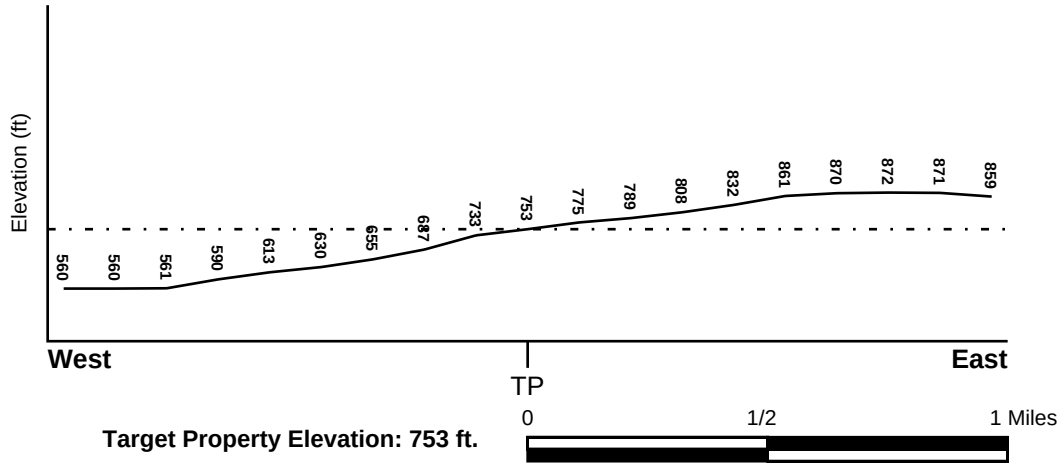
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

**TARGET PROPERTY TOPOGRAPHY**

General Topographic Gradient: General WNW

**SURROUNDING TOPOGRAPHY: ELEVATION PROFILES**







**Target Property Elevation: 753 ft.**

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

### FEMA FLOOD ZONE

| Target Property County | FEMA Flood Electronic Data |
|---|---|
| LIVINGSTON, NY | YES - refer to the Overview Map and Detail Map |

| | |
|---|---|
| Flood Plain Panel at Target Property: | 3614520001C - FEMA Q3 Flood data |
| Additional Panels in search area: | 3603840012C - FEMA Q3 Flood data<br>3612890024A - FEMA Q3 Flood data<br>3603840016C - FEMA Q3 Flood data<br>3603840014C - FEMA Q3 Flood data |

### NATIONAL WETLAND INVENTORY

| NWI Quad at Target Property | NWI Electronic Data Coverage |
|---|---|
| GENESEO | YES - refer to the Overview Map and Detail Map |

## HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

***Site-Specific Hydrogeological Data*:***

| | |
|---|---|
| Search Radius: | 1.25 miles |
| Status: | Not found |

## AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

| MAP ID | LOCATION FROM TP | GENERAL DIRECTION GROUNDWATER FLOW |
|---|---|---|
| Not Reported | | |

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**GROUNDWATER FLOW VELOCITY INFORMATION**

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

**GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY**

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

**ROCK STRATIGRAPHIC UNIT**

| | |
|---|---|
| Era: | Paleozoic |
| System: | Devonian |
| Series: | Middle Devonian |
| Code: | D2 *(decoded above as Era, System & Series)* |

**GEOLOGIC AGE IDENTIFICATION**

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

**DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY**

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

| | |
|---|---|
| Soil Component Name: | DARIEN |
| Soil Surface Texture: | silt loam |
| Hydrologic Group: | Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures. |
| Soil Drainage Class: | Somewhat poorly. Soils commonly have a layer with low hydraulic conductivity, wet state high in profile, etc. Depth to water table is 1 to 3 feet. |

Hydric Status: Soil does not meet the requirements for a hydric soil.

| | |
|---|---|
| Corrosion Potential - Uncoated Steel: | HIGH |
| Depth to Bedrock Min: | > 60 inches |
| Depth to Bedrock Max: | > 60 inches |

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | | |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | Permeability Rate (in/hr) | Soil Reaction (pH) |
| 1 | 0 inches | 10 inches | silt loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 2.00<br>Min: 0.60 | Max: 7.30<br>Min: 5.60 |
| 2 | 10 inches | 32 inches | clay loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay | Max: 0.60<br>Min: 0.20 | Max: 7.30<br>Min: 6.10 |
| 3 | 32 inches | 40 inches | clay loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay | Max: 0.60<br>Min: 0.20 | Max: 8.40<br>Min: 7.40 |
| 4 | 40 inches | 60 inches | shaly - clay loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay | Max: 0.20<br>Min: 0.06 | Max: 8.40<br>Min: 7.40 |

**OTHER SOIL TYPES IN AREA**

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: silty clay loam

Surficial Soil Types: silty clay loam

Shallow Soil Types: silty clay loam
channery - silt loam
silt loam

Deeper Soil Types: gravelly - silty clay loam
silty clay
weathered bedrock
silty clay loam
gravelly - loam
channery - silt loam
channery - loam

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

## WELL SEARCH DISTANCE INFORMATION

| DATABASE | SEARCH DISTANCE (miles) |
|---|---|
| Federal USGS | 1.000 |
| Federal FRDS PWS | Nearest PWS within 1 mile |
| State Database | 1.000 |

## FEDERAL USGS WELL INFORMATION

| MAP ID | WELL ID | LOCATION FROM TP |
|---|---|---|
| A2 | USGS40000862527 | 1/4 - 1/2 Mile NE |
| 3 | USGS40000862545 | 1/4 - 1/2 Mile NNW |
| A4 | USGS40000862526 | 1/4 - 1/2 Mile NE |

## FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

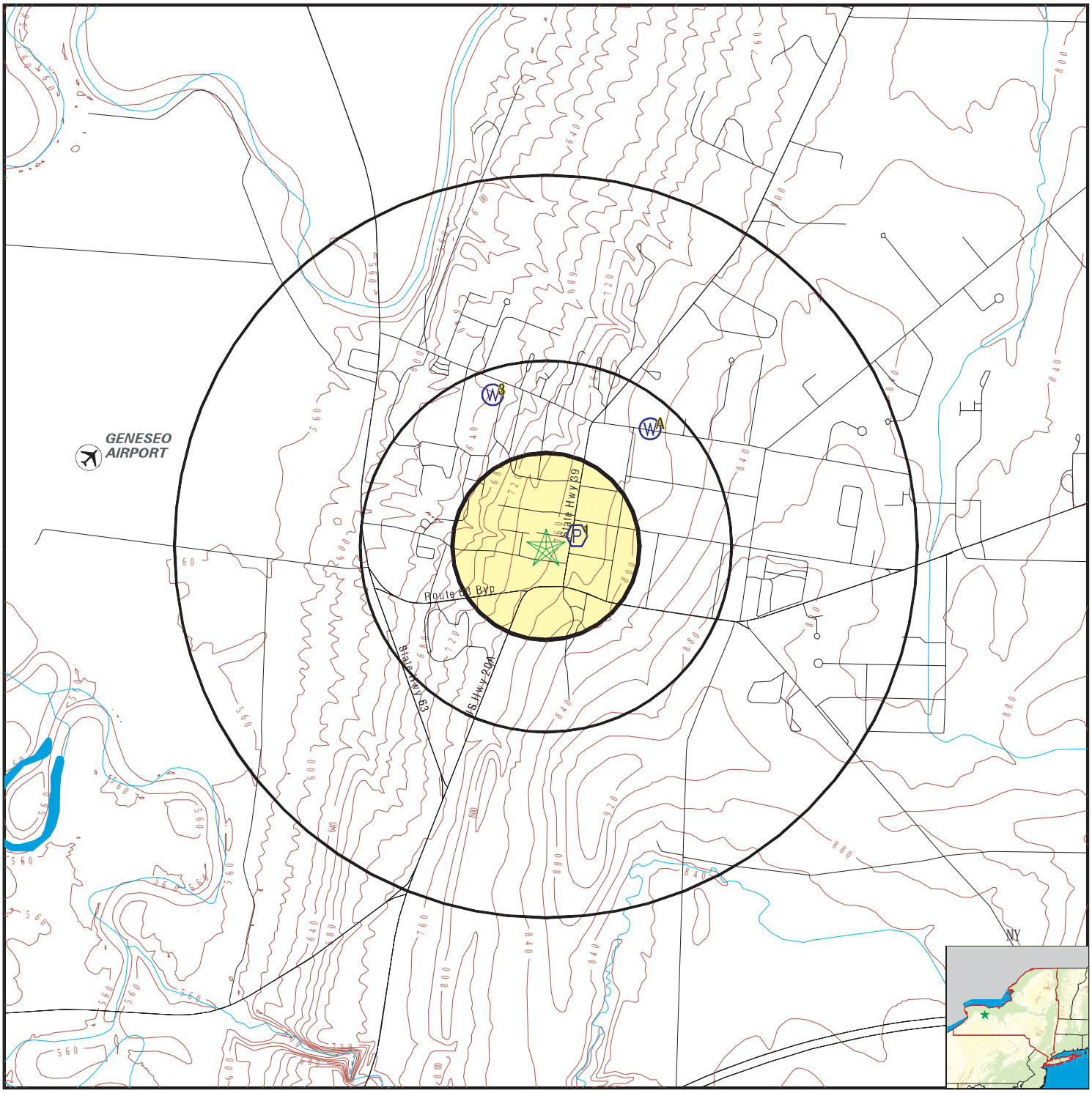
| MAP ID | WELL ID | LOCATION FROM TP |
|---|---|---|
| 1 | NY0001017 | 0 - 1/8 Mile ENE |

Note: PWS System location is not always the same as well location.

## STATE DATABASE WELL INFORMATION

| MAP ID | WELL ID | LOCATION FROM TP |
|---|---|---|
| No Wells Found | | |

# PHYSICAL SETTING SOURCE MAP - 4283198.2s




- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

| | | | |
|---|---|---|---|
| SITE NAME: | Park Street Former MGP Site | CLIENT: | ARCADIS U.S., Inc. |
| ADDRESS: | 6 Park Street<br>Geneseo NY 14454 | CONTACT: | Nicholas Beyrle |
| LAT/LONG: | 42.7952 / -77.8183 | INQUIRY #: | 4283198.2s |
| | | DATE: | May 04, 2015 7:58 pm |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**1**
**ENE**
**0 - 1/8 Mile**
**Higher** | **FRDS PWS** | **NY0001017**

| | | | |
|---|---|---|---|
| PWS ID: | NY0001017 | | |
| Date Initiated: | Not Reported | Date Deactivated: | Not Reported |
| PWS Name: | GENESEO VILLAGE<br>119 MAIN STREET<br>GENESEO, NY 14454 | | |
| Addressee / Facility: | System Owner/Responsible Party<br>HATHAWAY RICHARD B<br>MAYOR<br>119 MAIN STREET<br>GENESEO, NY 14454 | | |
| Facility Latitude: | 42 47 44 | Facility Longitude: | 077 49 01 |
| Facility Latitude: | 42 47 39 | Facility Longitude: | 077 43 15 |
| City Served: | GENESEO | | |
| Treatment Class | Not Reported | Population: | Not Reported |

Violations information not reported.

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**A2**
**NE**
**1/4 - 1/2 Mile**
**Higher** | **FED USGS** | **USGS40000862527**

| | | | |
|---|---|---|---|
| Org. Identifier: | USGS-NY | | |
| Formal name: | USGS New York Water Science Center | | |
| Monloc Identifier: | USGS-424759077484901 | | |
| Monloc name: | LV 142 | | |
| Monloc type: | Well | | |
| Monloc desc: | Not Reported | | |
| Huc code: | 04130003 | Drainagearea value: | Not Reported |
| Drainagearea Units: | Not Reported | Contrib drainagearea: | Not Reported |
| Contrib drainagearea units: | Not Reported | Latitude: | 42.799785 |
| Longitude: | -77.8133359 | Sourcemap scale: | 24000 |
| Horiz Acc measure: | 5 | Horiz Acc measure units: | seconds |
| Horiz Collection method: | Interpolated from map | | |
| Horiz coord refsys: | NAD83 | Vert measure val: | 795.00 |
| Vert measure units: | feet | Vertacc measure val: | 5.0 |
| Vert accmeasure units: | feet | | |
| Vertcollection method: | Interpolated from topographic map | | |
| Vert coord refsys: | NGVD29 | Countrycode: | US |
| Aquifername: | Not Reported | | |
| Formation type: | Till | | |
| Aquifer type: | Not Reported | | |
| Construction date: | Not Reported | Welldepth: | 28.4 |
| Welldepth units: | ft | Wellholedepth: | Not Reported |
| Wellholedepth units: | Not Reported | | |

Ground-water levels, Number of Measurements: 1

| Date | Feet below Surface | Feet to Sealevel |
|---|---|---|
| 1964-10-26 | 8.70 | |

---

**3**
**NNW** **FED USGS** **USGS40000862545**
**1/4 - 1/2 Mile**
**Lower**

| | | | |
|---|---|---|---|
| Org. Identifier: | USGS-NY | | |
| Formal name: | USGS New York Water Science Center | | |
| Monloc Identifier: | USGS-424804077491601 | | |
| Monloc name: | LV 332 | | |
| Monloc type: | Well | | |
| Monloc desc: | Not Reported | | |
| Huc code: | Not Reported | Drainagearea value: | Not Reported |
| Drainagearea Units: | Not Reported | Contrib drainagearea: | Not Reported |
| Contrib drainagearea units: | Not Reported | Latitude: | 42.8011111 |
| Longitude: | -77.8211111 | Sourcemap scale: | 24000 |
| Horiz Acc measure: | 1 | Horiz Acc measure units: | minutes |
| Horiz Collection method: | Global positioning system (GPS), uncorrected | | |
| Horiz coord refsys: | NAD83 | Vert measure val: | 650 |
| Vert measure units: | feet | Vertacc measure val: | 10 |
| Vert accmeasure units: | feet | | |
| Vertcollection method: | Interpolated from topographic map | | |
| Vert coord refsys: | NGVD29 | Countrycode: | US |
| Aquifername: | Other aquifers | | |
| Formation type: | Hamilton Group | | |
| Aquifer type: | Confined multiple aquifer | | |
| Construction date: | 20070103 | Welldepth: | 410.75 |
| Welldepth units: | ft | Wellholedepth: | 410.75 |
| Wellholedepth units: | ft | | |

Ground-water levels, Number of Measurements: 0

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**A4**
**NE** **FED USGS** **USGS40000862526**
**1/4 - 1/2 Mile**
**Higher**

| | | | |
|---|---|---|---|
| Org. Identifier: | USGS-NY | | |
| Formal name: | USGS New York Water Science Center | | |
| Monloc Identifier: | USGS-424759077484501 | | |
| Monloc name: | LV 1 | | |
| Monloc type: | Well | | |
| Monloc desc: | Not Reported | | |
| Huc code: | 04130003 | Drainagearea value: | Not Reported |
| Drainagearea Units: | Not Reported | Contrib drainagearea: | Not Reported |
| Contrib drainagearea units: | Not Reported | Latitude: | 42.799785 |
| Longitude: | -77.8122248 | Sourcemap scale: | 24000 |
| Horiz Acc measure: | 5 | Horiz Acc measure units: | seconds |
| Horiz Collection method: | Interpolated from map | | |
| Horiz coord refsys: | NAD83 | Vert measure val: | 795.00 |
| Vert measure units: | feet | Vertacc measure val: | 5 |
| Vert accmeasure units: | feet | | |
| Vertcollection method: | Interpolated from topographic map | | |
| Vert coord refsys: | NGVD29 | Countrycode: | US |
| Aquifername: | Not Reported | | |
| Formation type: | Till | | |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

| | | | |
|---|---|---|---|
| Aquifer type: | Not Reported | | |
| Construction date: | Not Reported | Welldepth: | 28.4 |
| Welldepth units: | ft | Wellholedepth: | 28.4 |
| Wellholedepth units: | ft | | |

Ground-water levels, Number of Measurements: 374

| Date | Feet below Surface | Feet to Sealevel | Date | Feet below Surface | Feet to Sealevel |
|---|---|---|---|---|---|
| 1973-09-19 | 7.89 | | 1973-08-25 | 7.25 | |
| 1973-07-25 | 6.35 | | 1973-06-25 | 4.92 | |
| 1973-05-25 | 4.40 | | 1973-04-25 | 4.89 | |
| 1973-03-25 | 4.21 | | 1973-02-25 | 4.84 | |
| 1973-01-25 | 4.98 | | 1972-12-25 | 3.57 | |
| 1972-11-25 | 4.28 | | 1972-10-25 | 6.80 | |
| 1972-09-25 | 7.13 | | 1972-08-25 | 6.11 | |
| 1972-07-25 | 5.24 | | 1972-06-28 | 3.99 | |
| 1972-05-25 | 4.52 | | 1972-04-27 | 4.30 | |
| 1972-03-25 | 4.17 | | 1972-02-25 | 4.62 | |
| 1972-01-28 | 4.48 | | 1971-12-31 | 5.58 | |
| 1971-12-02 | 7.24 | | 1970-07-24 | 6.29 | |
| 1970-06-30 | 1.11 | | 1970-05-26 | 1.70 | |
| 1970-04-24 | 2.37 | | 1970-02-25 | 2.77 | |
| 1970-01-27 | 2.27 | | 1969-10-27 | 7.10 | |
| 1969-09-26 | 7.34 | | 1969-08-26 | 6.36 | |
| 1969-07-29 | 1.50 | | 1969-06-26 | 3.59 | |
| 1969-05-23 | 2.37 | | 1969-04-25 | 3.55 | |
| 1969-03-25 | 4.53 | | 1969-02-25 | 4.94 | |
| 1969-02-11 | 4.32 | | 1968-11-25 | 5.45 | |
| 1968-10-25 | 6.52 | | 1968-09-25 | 7.10 | |
| 1968-08-26 | 6.48 | | 1968-07-26 | 5.78 | |
| 1968-06-25 | 4.97 | | 1968-05-27 | 4.83 | |
| 1968-04-25 | 4.97 | | 1968-03-25 | 4.22 | |
| 1968-02-26 | 5.11 | | 1968-01-25 | 4.97 | |
| 1967-12-27 | 4.67 | | 1967-11-27 | 3.94 | |
| 1967-10-26 | 4.02 | | 1967-10-02 | 6.72 | |
| 1967-08-25 | 6.98 | | 1967-07-26 | 6.45 | |
| 1967-06-26 | 5.66 | | 1967-05-26 | 4.76 | |
| 1967-04-26 | 4.57 | | 1967-03-28 | 4.33 | |
| 1967-02-24 | 4.69 | | 1967-01-25 | 5.84 | |
| 1966-12-27 | 5.55 | | 1966-11-25 | 6.89 | |
| 1966-10-31 | 7.10 | | 1966-09-25 | 6.00 | |
| 1966-08-25 | 6.15 | | 1966-07-25 | 5.84 | |
| 1966-06-24 | 5.20 | | 1966-05-25 | 4.79 | |
| 1966-04-29 | 4.49 | | 1966-03-25 | 4.38 | |
| 1966-02-25 | 4.45 | | 1966-01-25 | 4.76 | |
| 1965-12-31 | 4.58 | | 1965-11-24 | 6.99 | |
| 1965-10-25 | 8.26 | | 1965-09-30 | 8.13 | |
| 1965-08-26 | 7.36 | | 1965-07-25 | 6.55 | |
| 1965-06-25 | 5.99 | | 1965-05-25 | 5.02 | |
| 1965-04-30 | 4.29 | | 1965-03-28 | 4.42 | |
| 1965-02-26 | 4.79 | | 1965-01-31 | 6.73 | |
| 1964-12-31 | 8.25 | | 1964-11-30 | 9.09 | |
| 1964-10-30 | 8.78 | | 1964-09-26 | 7.97 | |
| 1964-08-28 | 7.30 | | 1964-07-28 | 6.60 | |
| 1964-06-26 | 5.50 | | 1964-05-26 | 5.00 | |
| 1964-04-25 | 4.40 | | 1964-03-25 | 3.90 | |
| 1964-02-25 | 3.90 | | 1964-01-28 | 4.20 | |
| 1963-12-24 | 6.40 | | 1963-11-26 | 7.40 | |

Ground-water levels, continued.

| Date | Feet below Surface | Feet to Sealevel |
|---|---|---|
| 1963-10-25 | 8.10 | |
| 1963-08-29 | 5.80 | |
| 1963-06-25 | 5.80 | |
| 1963-04-25 | 4.50 | |
| 1963-02-25 | 5.30 | |
| 1962-12-27 | 5.20 | |
| 1962-10-25 | 6.40 | |
| 1962-08-30 | 6.80 | |
| 1962-06-25 | 5.00 | |
| 1962-05-25 | 4.90 | |
| 1962-03-24 | 5.00 | |
| 1962-01-25 | 5.90 | |
| 1961-11-25 | 7.20 | |
| 1961-09-25 | 6.20 | |
| 1961-07-25 | 5.10 | |
| 1961-05-25 | 4.30 | |
| 1961-04-25 | 3.20 | |
| 1961-02-27 | 6.00 | |
| 1960-12-27 | 6.10 | |
| 1960-09-26 | 7.00 | |
| 1960-07-25 | 5.40 | |
| 1960-05-25 | 3.90 | |
| 1960-04-22 | 4.50 | |
| 1960-02-25 | 4.40 | |
| 1959-12-24 | 4.30 | |
| 1959-10-26 | 4.80 | |
| 1959-08-25 | 7.80 | |
| 1959-06-26 | 5.50 | |
| 1959-03-26 | 4.90 | |
| 1959-01-23 | 4.60 | |
| 1958-11-25 | 4.68 | |
| 1958-09-25 | 5.30 | |
| 1958-07-25 | 5.00 | |
| 1958-04-25 | 4.18 | |
| 1958-02-26 | 6.30 | |
| 1957-12-26 | 7.35 | |
| 1957-10-25 | 8.05 | |
| 1957-08-24 | 6.50 | |
| 1957-06-25 | 5.10 | |
| 1957-05-20 | 3.27 | |
| 1957-03-25 | 3.97 | |
| 1957-01-25 | 4.20 | |
| 1956-11-26 | 7.62 | |
| 1956-09-25 | 7.25 | |
| 1956-07-25 | 6.20 | |
| 1956-06-26 | 5.46 | |
| 1956-04-26 | 3.60 | |
| 1956-02-25 | 4.16 | |
| 1955-12-27 | 4.70 | |
| 1955-10-25 | 4.57 | |
| 1955-08-25 | 7.20 | |
| 1955-06-27 | 6.39 | |
| 1955-05-24 | 5.18 | |
| 1955-03-25 | 3.74 | |
| 1955-01-25 | 4.80 | |
| 1963-09-30 | 7.50 | |
| 1963-07-25 | 6.40 | |
| 1963-05-25 | 4.80 | |
| 1963-03-25 | 4.10 | |
| 1963-01-25 | 5.30 | |
| 1962-11-25 | 5.60 | |
| 1962-09-25 | 7.70 | |
| 1962-08-01 | 6.40 | |
| 1962-06-04 | 4.96 | |
| 1962-04-25 | 4.40 | |
| 1962-02-26 | 5.60 | |
| 1961-12-26 | 6.00 | |
| 1961-10-25 | 6.80 | |
| 1961-08-28 | 5.20 | |
| 1961-06-28 | 4.00 | |
| 1961-04-26 | 3.40 | |
| 1961-03-25 | 4.80 | |
| 1961-01-25 | 6.10 | |
| 1960-10-26 | 8.40 | |
| 1960-08-25 | 5.80 | |
| 1960-06-27 | 4.80 | |
| 1960-04-25 | 4.60 | |
| 1960-03-25 | 4.60 | |
| 1960-01-26 | 4.60 | |
| 1959-11-25 | 4.70 | |
| 1959-09-25 | 8.50 | |
| 1959-07-26 | 6.90 | |
| 1959-04-30 | 4.60 | |
| 1959-02-25 | 5.10 | |
| 1958-12-26 | 5.07 | |
| 1958-10-27 | 5.28 | |
| 1958-08-25 | 5.00 | |
| 1958-05-25 | 4.97 | |
| 1958-03-25 | 3.95 | |
| 1958-01-27 | 7.00 | |
| 1957-11-25 | 8.20 | |
| 1957-09-26 | 7.30 | |
| 1957-07-25 | 5.05 | |
| 1957-05-24 | 3.98 | |
| 1957-04-26 | 3.90 | |
| 1957-02-25 | 4.90 | |
| 1956-12-26 | 4.90 | |
| 1956-10-26 | 7.90 | |
| 1956-08-27 | 7.17 | |
| 1956-06-27 | 5.40 | |
| 1956-05-25 | 4.68 | |
| 1956-03-26 | 2.06 | |
| 1956-01-25 | 4.80 | |
| 1955-11-25 | 4.30 | |
| 1955-09-28 | 5.90 | |
| 1955-07-26 | 7.60 | |
| 1955-05-26 | 5.23 | |
| 1955-04-25 | 3.90 | |
| 1955-02-25 | 4.60 | |
| 1954-12-28 | 5.78 | |

Ground-water levels, continued.

| Date | Feet below Surface | Feet to Sealevel |
|---|---|---|
| 1954-11-26 | 5.90 | |
| 1954-09-24 | 6.65 | |
| 1954-07-24 | 6.49 | |
| 1954-05-26 | 4.88 | |
| 1954-03-25 | 4.23 | |
| 1954-01-26 | 6.05 | |
| 1953-11-25 | 8.04 | |
| 1953-09-25 | 7.70 | |
| 1953-07-27 | 6.00 | |
| 1953-06-02 | 4.38 | |
| 1953-04-29 | 4.55 | |
| 1953-02-25 | 5.80 | |
| 1953-01-07 | 8.85 | |
| 1952-10-25 | 9.42 | |
| 1952-10-04 | 9.06 | |
| 1952-07-25 | 6.87 | |
| 1952-05-27 | 4.70 | |
| 1952-03-25 | 4.00 | |
| 1952-01-25 | 4.48 | |
| 1951-11-24 | 8.40 | |
| 1951-09-25 | 6.90 | |
| 1951-07-25 | 5.84 | |
| 1951-05-25 | 4.92 | |
| 1951-03-24 | 4.20 | |
| 1951-01-25 | 4.05 | |
| 1950-11-25 | 6.76 | |
| 1950-09-25 | 7.75 | |
| 1950-07-25 | 5.99 | |
| 1950-05-25 | 4.63 | |
| 1950-03-25 | 3.55 | |
| 1950-01-25 | 8.35 | |
| 1949-11-25 | 9.50 | |
| 1949-09-26 | 7.91 | |
| 1949-07-25 | 7.48 | |
| 1949-05-26 | 5.30 | |
| 1949-03-25 | 4.59 | |
| 1949-01-25 | 4.70 | |
| 1948-11-24 | 7.00 | |
| 1948-09-27 | 7.30 | |
| 1948-07-26 | 6.10 | |
| 1948-05-25 | 4.54 | |
| 1948-03-26 | 4.10 | |
| 1948-01-27 | 5.45 | |
| 1947-11-25 | 6.10 | |
| 1947-09-25 | 5.67 | |
| 1947-07-28 | 5.64 | |
| 1947-05-26 | 4.50 | |
| 1947-03-25 | 4.23 | |
| 1947-01-27 | 4.56 | |
| 1946-11-25 | 4.98 | |
| 1946-09-25 | 6.58 | |
| 1946-07-27 | 5.73 | |
| 1946-05-25 | 4.57 | |
| 1946-03-25 | 4.74 | |
| 1946-01-25 | 4.85 | |
| 1954-10-25 | 6.30 | |
| 1954-08-25 | 6.80 | |
| 1954-06-25 | 5.17 | |
| 1954-04-24 | 3.97 | |
| 1954-02-25 | 4.08 | |
| 1953-12-24 | 6.55 | |
| 1953-10-31 | 8.25 | |
| 1953-08-31 | 7.30 | |
| 1953-06-26 | 5.34 | |
| 1953-05-25 | 4.31 | |
| 1953-03-25 | 3.87 | |
| 1953-01-24 | 7.82 | |
| 1952-11-29 | 9.74 | |
| 1952-10-23 | 9.37 | |
| 1952-08-25 | 8.07 | |
| 1952-06-26 | 5.75 | |
| 1952-04-29 | 4.50 | |
| 1952-02-25 | 4.59 | |
| 1951-12-26 | 7.20 | |
| 1951-10-25 | 8.41 | |
| 1951-08-25 | 7.02 | |
| 1951-06-26 | 5.30 | |
| 1951-04-25 | 4.41 | |
| 1951-02-24 | 3.74 | |
| 1950-12-28 | 4.65 | |
| 1950-10-25 | 7.94 | |
| 1950-08-28 | 5.25 | |
| 1950-06-26 | 5.40 | |
| 1950-04-25 | 4.40 | |
| 1950-02-25 | 5.40 | |
| 1949-12-27 | 9.54 | |
| 1949-10-25 | 9.14 | |
| 1949-08-25 | 8.45 | |
| 1949-06-27 | 6.50 | |
| 1949-04-25 | 4.65 | |
| 1949-02-25 | 4.30 | |
| 1948-12-29 | 5.80 | |
| 1948-10-25 | 7.70 | |
| 1948-08-26 | 6.30 | |
| 1948-06-25 | 5.20 | |
| 1948-04-26 | 4.78 | |
| 1948-03-02 | 4.74 | |
| 1947-12-24 | 5.00 | |
| 1947-10-25 | 6.46 | |
| 1947-08-25 | 5.79 | |
| 1947-06-25 | 5.18 | |
| 1947-04-25 | 3.97 | |
| 1947-02-24 | 4.94 | |
| 1946-12-30 | 4.47 | |
| 1946-10-26 | 5.58 | |
| 1946-08-26 | 5.95 | |
| 1946-06-25 | 5.20 | |
| 1946-04-26 | 5.14 | |
| 1946-02-25 | 5.10 | |
| 1945-12-24 | 4.75 | |

Ground-water levels, continued.

| Date | Feet below Surface | Feet to Sealevel |
|---|---|---|
| 1945-11-26 | 4.45 | |
| 1945-09-25 | 5.75 | |
| 1945-07-25 | 4.77 | |
| 1945-05-28 | 4.51 | |
| 1945-03-15 | 0.30 | |
| 1945-01-25 | 5.78 | |
| 1944-12-16 | 8.12 | |
| 1944-11-15 | 8.45 | |
| 1944-10-10 | 8.00 | |
| 1944-09-15 | 7.60 | |
| 1944-08-01 | 6.13 | |
| 1944-06-26 | 4.69 | |
| 1944-04-27 | 3.72 | |
| 1944-02-25 | 5.84 | |
| 1944-01-26 | 6.69 | |
| 1943-11-29 | 7.65 | |
| 1943-10-25 | 8.42 | |
| 1943-09-20 | 7.77 | |
| 1943-08-15 | 6.57 | |
| 1943-07-18 | 5.68 | |
| 1943-06-20 | 4.84 | |
| 1943-05-02 | 3.85 | |
| 1943-03-31 | 4.44 | |
| 1943-02-28 | 4.55 | |
| 1943-02-06 | 4.40 | |
| 1943-01-03 | 3.81 | |
| 1942-12-14 | 5.42 | |
| 1945-10-25 | 4.58 | |
| 1945-08-25 | 5.75 | |
| 1945-06-25 | 5.09 | |
| 1945-04-25 | 4.80 | |
| 1945-02-26 | 3.95 | |
| 1944-12-26 | 7.52 | |
| 1944-11-25 | 8.51 | |
| 1944-11-01 | 8.35 | |
| 1944-09-25 | 7.75 | |
| 1944-08-25 | 6.92 | |
| 1944-07-25 | 5.83 | |
| 1944-05-29 | 4.76 | |
| 1944-03-27 | 3.37 | |
| 1944-02-18 | 6.20 | |
| 1943-12-24 | 7.07 | |
| 1943-11-14 | 8.33 | |
| 1943-09-29 | 7.79 | |
| 1943-08-25 | 6.87 | |
| 1943-07-26 | 5.96 | |
| 1943-06-25 | 5.01 | |
| 1943-05-25 | 4.29 | |
| 1943-04-26 | 4.25 | |
| 1943-03-25 | 4.34 | |
| 1943-02-26 | 4.55 | |
| 1943-01-25 | 4.53 | |
| 1942-12-26 | 4.68 | |
| 1942-11-17 | 4.51 | |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
# RADON

**AREA RADON INFORMATION**

State Database: NY Radon

Radon Test Results

| County | Town | Num Tests | Avg Result | Geo Mean | Max Result |
|---|---|---|---|---|---|
| LIVINGSTON | AVON | 92 | 2.96 | 2.29 | 16.1 |
| LIVINGSTON | CALEDONIA | 97 | 29.8 | 12.39 | 157.6 |
| LIVINGSTON | CONESUS | 17 | 4.48 | 3.11 | 17.4 |
| LIVINGSTON | GENESEO | 129 | 3.16 | 2.37 | 13.9 |
| LIVINGSTON | GROVELAND | 23 | 5.06 | 3.48 | 20.6 |
| LIVINGSTON | LEICESTER | 28 | 4.18 | 2.38 | 17.8 |
| LIVINGSTON | LIMA | 91 | 5.51 | 3.59 | 38 |
| LIVINGSTON | LIVONIA | 72 | 3.72 | 2.32 | 34 |
| LIVINGSTON | MT. MORRIS | 42 | 5.78 | 3 | 58.6 |
| LIVINGSTON | NO. DANSVILLE | 80 | 7.13 | 4.76 | 43.7 |
| LIVINGSTON | NUNDA | 43 | 12.52 | 4.93 | 98.3 |
| LIVINGSTON | OSSIAN | 7 | 6.2 | 4.93 | 12.3 |
| LIVINGSTON | PORTAGE | 10 | 3.84 | 2.72 | 9.4 |
| LIVINGSTON | SPARTA | 19 | 4.76 | 3.13 | 19.2 |
| LIVINGSTON | SPRINGWATER | 18 | 10.69 | 4.5 | 85.4 |
| LIVINGSTON | W. SPARTA | 8 | 2.26 | 1.85 | 4.5 |
| LIVINGSTON | YORK | 26 | 4.11 | 2.87 | 13.3 |

Federal EPA Radon Zone for LIVINGSTON County: 1

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

---

Federal Area Radon Information for LIVINGSTON COUNTY, NY

Number of sites tested: 33

| Area | Average Activity | % <4 pCi/L | % 4-20 pCi/L | % >20 pCi/L |
|---|---|---|---|---|
| Living Area | 1.310 pCi/L | 69% | 23% | 8% |
| Basement | 3.040 pCi/L | 58% | 42% | 0% |

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

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.

## HYDROLOGIC INFORMATION

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, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Freshwater Wetlands
Source: Department of Environmental Conservation
Telephone: 518-402-8961

## HYDROGEOLOGIC INFORMATION

AQUIFLOW$^{R}$ Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

## OTHER STATE DATABASE INFORMATION

RADON

State Database: NY Radon
Source: Department of Health
Telephone: 518-402-7556
Radon Test Results

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

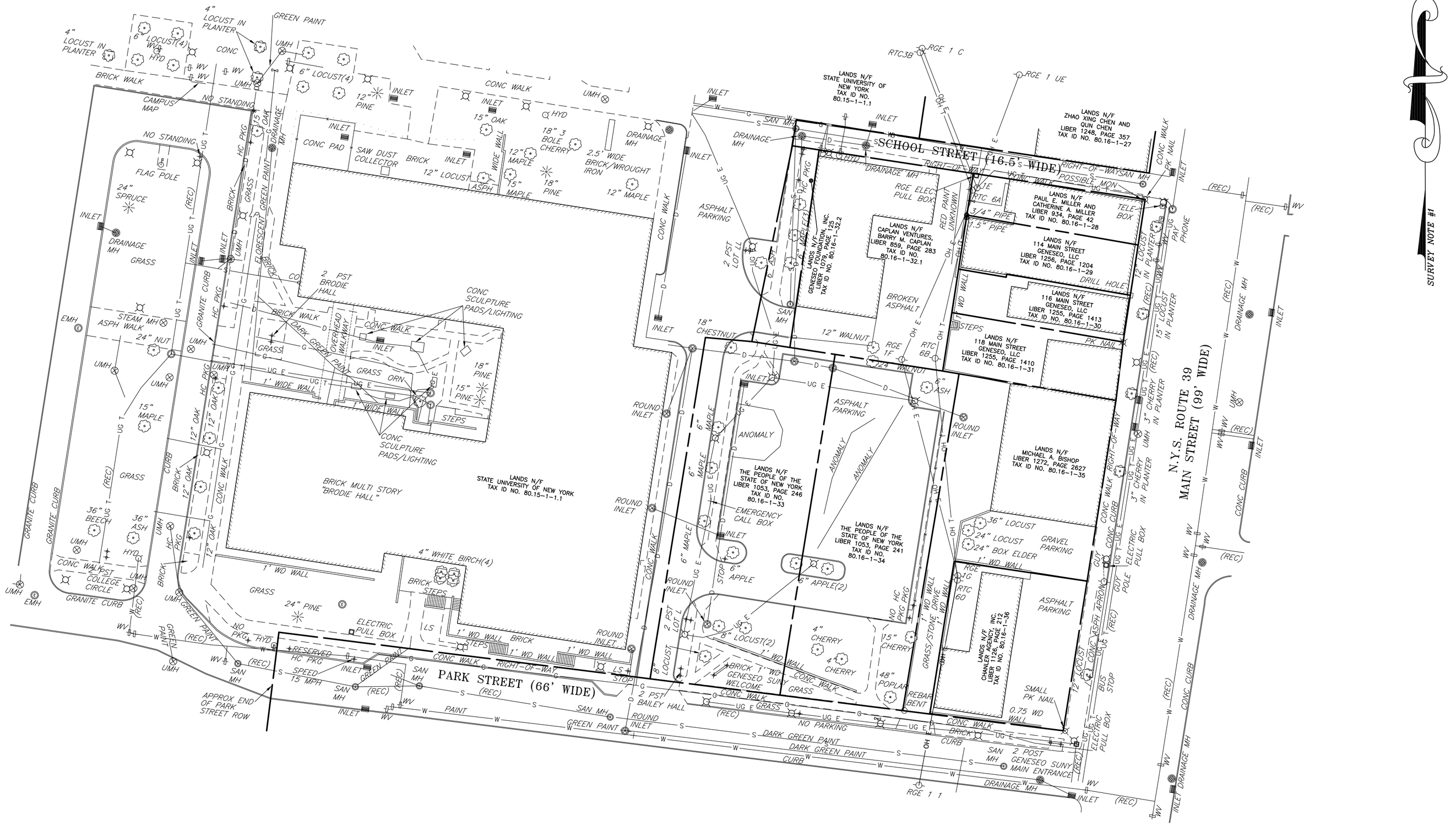
Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

**STREET AND ADDRESS INFORMATION**

**Appendix H**

Fishers Associates Survey (on Compact Disc)




SURVEY NOTE #1

## LEGEND

- PROPERTY LINE/LEASE PARCEL LINE
- RIGHT-OF-WAY LINE
- TAX MAP DIVISION LINE
- BUILDING LINE
- FENCE LINE
- EDGE OF WATER, STREAM OR DITCH
- EDGE OF WOODS, BRUSH OR LANDSCAPING
- SA — SANITARY SEWER LINE W/MANHOLE & C.O.
- ST — STORM SEWER LINE W/MH & INLETS
- W — WATER LINE W/HYDRANT, VALVE & VAULT
- E — ELECTRIC LINE W/PULLBOX, METER & MANHOLE
- G — NATURAL GAS LINE W/METER & VALVE
- OH E, OT, OC — OVERHEAD ELECTRIC, TELEPHONE & CABLE LINE
- UG T — UNDERGROUND TELEPHONE LINE W/MANHOLE
- FO — UNDERGROUND FIBER OPTIC LINE
- H — HEATING LINE (STEAM)
- TS — TRAFFIC POLE, SIGNAL & TRAFFIC PULLBOX
- TC — TRAFFIC CONTROL LINE
- UTILITY POLE, GUY, LIGHT POLE & TOP MOUNT LIGHT
- SIDEWALK LIGHT
- (33) — PARKING SPACE COUNT
- (REC) — UTILITY PLOTTED FROM RECORD INFORMATION
- SIGN, ROADWAY DELINEATOR/REFLECTOR

## SURVEY NOTES:

1. COORDINATES AND NORTH ORIENTATION SHOWN HEREON ARE REFERENCED TO THE NEW YORK STATE PLANE COORDINATE SYSTEM, WEST ZONE, TRANSVERSE MERCATOR PROJECTION, NAD 83 (2011) EPOCH 2010.00 USING GPS PROCEDURES AND THE NEW YORK STATE DOT CORS NETWORK.
2. ELEVATIONS SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (GEOID 12A) USING GPS PROCEDURES.
3. UNDERGROUND UTILITIES SHOWN HEREON WERE PLOTTED FROM VISIBLE EVIDENCE LOCATED AT THE TIME OF THE FIELD SURVEY, AND DESIGNATION MARKINGS BY A SUBSURFACE UTILITY ENGINEERING FIRM. THE LOCATIONS OF ALL UNDERGROUND UTILITIES SHOULD BE STAKED BY THE RESPECTIVE UTILITY COMPANY PRIOR TO ANY CONSTRUCTION.

40 0 40 80

SCALE: 1" = 40'

WE: FISHER ASSOCIATES, P.E., L.S., L.A. D.P.C., HEREBY CERTIFY THAT THIS MAP WAS PREPARED JUNE 11, 2015 FROM NOTES OF AN INSTRUMENT SURVEY COMPLETED BY US ON JUNE 8, 2015 USING REFERENCES AND EVIDENCE SHOWN HEREON.

THIS MAP IS SUBJECT TO ANY EASEMENTS OR ENCUMBRANCES THAT AN ABSTRACT OF TITLE MAY SHOW.

BY: _____ DATE: _____
SCOTT V. SMITH N.Y.S.P.L.S. NO. 050561

FILE NAME: G:\PROJECTS\RG&E\Geneseo Site Characterization Work Plan\Appendix H\0341511807 Appendix H.dwg
DATE/TIME: 6/26/2015 8:21:47 AM
USER: Drum, Lindsey

| REV | DESCRIPTION | DATE | BY |
|---|---|---|---|
| 7 | | | |
| 6 | | | |
| 5 | | | |
| 4 | | | |
| 3 | | | |
| 2 | | | |
| 1 | | | |



FA PROJECT NO.
152012
PROJECT MANAGER
S. SMITH
DRAWN BY:
M. MILLER
SCALE
1" = 40'
ISSUE DATE
6/11/15

FISHER ASSOCIATES
WWW.FISHERASSOC.COM
135 Calkins Road, Rochester, NY 14623
Phone: 585.334.1310

PROJECT
FORMER RG&E PROPERTY
6 PARK STREET
SUNY GENESEO CAMPUS
VILLAGE AND TOWN OF GENESEO, NY.

TITLE OF DRAWING
TOPOGRAPHIC AND BOUNDARY SURVEY

DRAWING NO.
FA - 1

SHEET 1 OF 1

**Appendix I**

Underground Services (Soft Dig)
Survey Results

N

SoftDig
Underground Services Inc.

Client: Arcadis
Site: SUNY Geneseo
Dates: 5/30 - 5/31
Project #750270

- Steam_MH
- Fire_Hyd
- Water Valve
- Gas Valve
- Light Pole
- Sanitary
- Storm_MH
- Catch Basin
- Catch Basin
- Clean Out
- Comm_MH
- Electric
- Emegency_Pbox
- Gas_Line
- Water
- Electric
- Steam
- Telephone
- Site Lighting
- Sanitary
- Storm Drain
- Unknown
- Anomaly

0 65 130 260 Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

**Appendix J**

Utilities and Structures Checklist

# Utilities and Structures Checklist

**THIS FORM MUST BE COMPLETED IN ENTIRETY PRIOR TO BEGINNING ANY INTRUSIVE WORK**

Project: _____
Project Number: _____
Form Completion Date: _____ Form Expiration Date: _____
(15 business days post form completion date)

**Pre-Field Work**

**Required:** One Call or "811" notified 48-72 hours in advance of work? #: _____
Ticket Expiration Date _____ (Review State Requirements)
Utility companies notified during the One Call process ☐ See attached ticket

_____ _____ _____ _____
_____ _____ _____ _____

List any other utilities requiring notification: ☐ None

_____ _____ _____ _____

Private Locator Contacted ☐ Yes ☐ No

Plan private utility clearance subcontractor assignments, areas, required clearance equipment, depth of clearance needed, types of utilities. When possible re-clear 811 markings to confirm utility locations.

Client provided utility maps or "as built" drawings showing utilities? ☐ Yes ☐ No

**Field Work** - This must be completed on site, by staff who have a minimum of one year of field experience in identifying utilities. Review Check list with PM or designee prior to beginning intrusive work.

**List Soil Boring / Well IDs or Excavation Locations applicable to this clearance checklist:**

**3 Reliable Lines of Evidence Required** Prior to Starting any Subsurface Intrusive Work

☐ One Call/"811" (Reliable as a line of evidence when working in public right of way or easement)
Utility Markings Present: ☐ Paint ☐ Pin flags/stakes ☐ Other ☐ None

☐ Client Provided Maps/Drawings **OR** ☐ Maps/Drawings requested but not provided
☐ Client Clearance Name(s)/Affiliation(s) _____
☐ Interview(s): Name(s)/Affiliation(s) _____
_____

Did person(s) interviewed indicate depths of any utilities in the subsurface?
☐ Yes, depths provided: ☐ Did not know or refused to answer
Additional Comments:

☐ Site Inspection (**Complete Page 2 & Photo Document Marked Utilities & Utility Structures**)
☐ Public Records / Maps / Asbuilits
☐ Private Locator: (Name and Company) _____
☐ Ground Penetrating Radar (GPR)
☐ Radiofrequency (RFLoc)
☐ Electromagnetic (EM)
☐ Metal Detector

**Soft Dig Methods**
☐ Termination Depth _____ft. bgs
☐ Potholing / Vacuum Extraction
☐ Air-Knife ☐ Hydro-Knife
☐ Probing
☐ Hand Auguring

**Tips for Successful Utility Location:**
1. Don't forget to look up
2. Be on site with Private Utility Locators
3. Ask Private Locators to "confirm" other's markings
4. Select alternate/backup locations during clearance process
5. Mark out all known utilities. Leave nothing to question
6. No hammering - no pickaxes - no digging bars - no shortcutting
7. No excessive turning or downward force of hand augers/shovels
8. Utilities may run in or directly under asphalt/concrete

☐ Other: _____
☐ Marine Locator: (Name and Company) _____

# Utilities and Structures Checklist

During the site inspection look for the following: **("YES" requires additional investigation and the utility must be marked properly prior to beginning subsurface intrusive work)**:

| Site Inspection | Utility Color Codes | Present | |
|---|---|---|---|
| a) Natural gas line present (evidence of a gas meter)? | Yellow | ☐ Yes | ☐ No |
| i) Feeder Lines to buildings or homes? | | ☐ Yes | ☐ No |
| b) Evidence of electric lines: | Red | | |
| i) Conduits to ground from electric meter or along wall? | | ☐ Yes | ☐ No |
| iii) Conduits from power poles running into ground? | | ☐ Yes | ☐ No |
| ii) Light poles, electric devices with no overhead lines? | | ☐ Yes | ☐ No |
| iii) Overhead electric lines present? (See Section l) | | ☐ Yes | ☐ No |
| c) Evidence of sewer drains: | Green | | |
| i) Restrooms or kitchen on site? | | ☐ Yes | ☐ No |
| ii) Sewer cleanouts present? | | ☐ Yes | ☐ No |
| iii) Combined sewer /storm lines or multiple sewer lines? | | ☐ Yes | ☐ No |
| d) Evidence of water lines: | Blue | | |
| i) Water meter on site or multiple water lines? | | ☐ Yes | ☐ No |
| ii) Fire hydrants in vicinity of work? | | ☐ Yes | ☐ No |
| iii) Irrigation systems? (Sprinkler heads, valve boxes, controls in building) | | ☐ Yes | ☐ No |
| e) Evidence of storm drains: | Green | | |
| i) Open curbside or slotted grate storm drains | | ☐ Yes | ☐ No |
| ii) Gutter down spouts going into ground | | ☐ Yes | ☐ No |
| f) Evidence of telecommunication lines: | Orange | | |
| i) Fiber optic warning signs in areas? | | ☐ Yes | ☐ No |
| iv) Aboveground cable boxes or housings or wires in work area? | | ☐ Yes | ☐ No |
| g) Underground storage tanks: | | | |
| i) Tank pit present, tank vent present? | | ☐ Yes | ☐ No |
| ii) Product lines running to dispensers/buildings? | | ☐ Yes | ☐ No |
| h) Do utilities enter or exit existing structures/buildings? | | | |
| If Yes, confirm the utility markings outside of structure/building match up. | | ☐ Yes | ☐ No |
| i) Proposed excavation marked in white? | White | ☐ Yes | ☐ No |
| j) Unclassed utilities / anomalies marked in pink? | Pink | ☐ Yes | ☐ No |
| k) **Overhead** Utilities/Communication Lines - **Look Up**: | | | |
| i) Overhead electrical conduit, pipe chases, cable trays, product lines? | | ☐ Yes | ☐ No |
| ii) Overhead fire sprinkler system? | | ☐ Yes | ☐ No |
| l) **Overhead** Power lines in or near the work area: | | | |
| i) < 50 kV within 10 ft. of work area? | | ☐ Yes | ☐ No |
| ii) >50 - 200 kV within 15 ft. of work area? | | ☐ Yes | ☐ No |
| iii) >200-350 kV within 20 ft. of work area? | | ☐ Yes | ☐ No |
| iv) >350-500 kV within 25 ft. of work area? | | ☐ Yes | ☐ No |
| v) >500-750 kV within 35 ft. or work area? | | ☐ Yes | ☐ No |
| vi) >750-1000 kV within 45 ft. of work area? | | ☐ Yes | ☐ No |
| m) Other: | | | |
| i) Evidence of linear asphalt or concrete repair? | | ☐ Yes | ☐ No |
| ii) Evidence of linear ground subsidence or change in vegetation? | | ☐ Yes | ☐ No |
| iii) Unmarked manholes or valve covers in work area? | | ☐ Yes | ☐ No |
| iv) Warning signs ("Call Before you Dig", etc.) on or adjacent to site? | | ☐ Yes | ☐ No |
| v) Utility color markings not illustrated in this checklist? | i.e. Purple | ☐ Yes | ☐ No |
| n) Has the Utilities & Structures Checklist been reviewed by the PM or Designee | | ☐ Yes | ☐ No |
| PM or Designee Name: _____ | | | |

Name and Signature of person completing the checklist: _____

Date: _____

Do not perform **mechanized** intrusive work within 30 inches of a utility marking without receiving pre-approval by Corporate H&S .