

Former Matt Petroleum Site
ONEIDA COUNTY, NEW YORK

Site Management Plan

NYSDEC Site Number: B00192-6

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SITE MANAGEMENT PLAN

1.0 INTRODUCTION AND DESCRIPTION OF REMEDIAL PROGRAM

1.1 Introduction

This document is required as an element of the remedial program at Former Matt Petroleum Site located at 102 Leland Avenue, Utica, New York (hereinafter referred to as the “Site”) under the New York State (NYS) Environmental Restoration Program (ERP) administered by New York State Department of Environmental Conservation (NYSDEC). The Site was investigated in accordance with State Assistance Contract (SAC) #C302579 and remediated in accordance with 6NYCRR Part 375.

1.1.1 General

Matt Petroleum Corporation entered into an ERP with the New York State Department of Environmental Conservation (NYSDEC) to remediate a 4.5 acre property located in Oneida County, Utica, New York. This ERP required the Remedial Party, The City of Utica, to investigate and remediate contaminated media at the Site. A figure showing the Site location and boundaries of this 4.5-acre Site is provided in Figure 1. The boundaries of the Site are more fully described in the metes and bounds Site description that is part of the Environmental Easement (Appendix C).

After completion of the remedial work described in the Remedial Action Work Plan, some contamination was left in the subsurface at this Site, which is hereafter referred to as ‘remaining contamination.’ This Site Management Plan (SMP) was prepared to manage and/or address remaining contamination at the Site until the Environmental Easement is extinguished in accordance with ECL Article 71, Title 36. All reports associated with the Site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State.

This SMP was prepared by GES, on behalf of NYSDEC, in accordance with the requirements in NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation, dated October, 2010, and the guidelines provided by the NYSDEC. This

SMP addresses the means for implementing the Institutional Controls (ICs) and Engineering Controls (ECs) that are required by the Environmental Easement for this Site.

1.1.2 Purpose

The Site contains contamination left after completion of the remedial action. Institutional Controls and Engineering Controls have been incorporated into the Site remedy to control exposure to remaining contamination during the use of the Site to ensure protection of public health and the environment. An Environmental Easement granted to the NYSDEC, and recorded with the Oneida County Clerk, will require compliance with this SMP and all ECs and ICs placed on the Site. The ICs place restrictions on Site use, and mandate operation, maintenance, monitoring and reporting measures for all ECs and ICs. This SMP specifies the methods necessary ensure compliance with all ECs and ICs required by the Environmental Easement for contamination that remains at the Site. This plan has been approved by the NYSDEC, and compliance with this plan is required by the grantor of the Environmental Easement and the grantor's successors and assigns. This SMP may only be revised with the approval of the NYSDEC.

This SMP provides a detailed description of all procedures required to manage remaining contamination at the Site after completion of the Remedial Action, including: (1) implementation and management of all Engineering and Institutional Controls; (2) performance of periodic inspections, certification of results, and submittal of Periodic Review Reports; and (5) defining criteria for termination of treatment system operations.

To address these needs, this SMP includes: (1) an Engineering and Institutional Control Plan for implementation and management of EC/ICs.

This plan also includes a description of Periodic Review Reports for the periodic submittal of data, information, recommendations, and certifications to NYSDEC.

It is important to note that:

- This SMP details the Site-specific implementation procedures that are required by the Environmental Easement. Failure to properly implement the SMP is a violation of the environmental easement, which is grounds for revocation of the Certificate of Completion (COC);

- Failure to comply with this SMP is also a violation of Environmental Conservation Law, 6NYCRR Part 375 for the Site, and thereby subject to applicable penalties.

1.1.3 Revisions

Revisions to this plan will be proposed in writing to the NYSDEC's project manager. In accordance with the Environmental Easement for the Site, the NYSDEC will provide a notice of any approved changes to the SMP, and append these notices to the SMP that is retained in its files.

1.2 Site Background

1.2.1 Site Location and Description

The Site is located in the City of Utica County of Oneida, New York and is identified as Block 319.5-1 and Lot 31 on the City of Utica, County of Oneida Tax Map. The Site is an approximately 4.5-acre area bounded by the Mohawk River to the northeast; the City of Utica Bus garage, the East Olive Oil Company, and railroad lines to the south; Leland Avenue, the City of Utica Fire Training Facility (a former public bulk storage (PBS) facility), and the Universal Waste (salvage yard) to the east; and a former PBS facility to the west (see Figure 2 and Appendix B).

1.2.2 Site History

The property was the site of a former brickyard during the first half of the 1900s. From approximately 1950 to the early 1990s the property was used as a bulk petroleum terminal. Since the 1990s the Site has remained unused.

In 2004, as an interim remedial measure (IRM), 17 above ground storage tanks (ASTs) ranging in size from 750,000 to 1.5 million gallons, were cleaned and removed from the Site. Additional smaller tanks, buildings, pipelines, and other structures were dismantled.

The Site was divided into two operable units (Operable Unit No.1 and Operable Unit No. 2). An operable unit represents a portion of a remedial program for a site that for technical or administrative reasons can be addressed separately to investigate, eliminate or mitigate a release, threat of release or exposure pathway resulting from the Site contamination.

Operable Unit No. 1 (OU1) includes the on-Site area. A Record of Decision (ROD) was signed on June 29, 2007 for OU1, which required the Site to be remediated via excavation of soils and ex-situ treatment using a soil turning/biological treatment process and replacement. In 2010, 46,475.70 tons of heavily contaminated soils were removed from the Site and an off-Site area along the bank of the Mohawk River. Approximately 75% of OU1 was remediated and backfilled with clean soil. An additional 20,000 cubic yards of petroleum contaminated soils remain on-Site awaiting mechanical soil turning in order to meet soil cleanup objectives (SCOs).

Operable Unit No. 2 (OU2) consists of off-Site areas including the sediments, surface water and soil along the banks of the Mohawk River in proximity to the Site. The Remedial Investigation for OU2 studied areas upstream, adjacent and downstream of the Site.

From July 11, 2011 through August 20, 2012, GES, on behalf of the NYSDEC, conducted field activities associated with the completion of the second phase of the remedial remedy for OU1. The activities included, preliminary soil evaluation of existing windrows staged in 2010, excavation and turning of the remaining impacted soils on-Site, dewatering as necessary, and final grading and seeding of the property. The results of the field activities are summarized in the Final Engineering Report dated December 4, 2012.

Several subsurface investigations were conducted at the Site to evaluate soil and groundwater quality. Previous subsurface investigations performed by others at the Site included:

- Site Investigation Report – Volume I, Operable Unit No. 1 (OU1), dated August 2005, prepared by Plumley Engineering.
- Site Investigation Report – Volume II, Operable Unit No. 1 (OU1), dated August 2005, prepared by Plumley Engineering.
- Site Investigation Report – Volume III, Operable Unit No. 1 (OU1), dated August 2005, prepared by Plumley Engineering.
- Remedial Alternatives Report, dated November 2006, prepared by Plumley Engineering

- Record of Decision for the Matt Petroleum Site, Operable Unit No. 1, dated June 29, 2007, prepared by the NYSDEC.
- Subsurface Investigation Report, Operable Unit No. 2, dated November 5, 2009, prepared by OP-TECH Environmental.
- Former Matt/Grace Petroleum Removal Action Report, dated May 28, 2010, prepared by OP-TECH Environmental.
- Record of Decision for the Matt Petroleum Site, Operable Unit No. 2, dated March 2011, prepared by the NYSDEC.
- Final Engineering Report, dated December 4, 2012, prepared by GES.

1.2.3 Geologic Conditions

The descriptions of soils encountered during historical investigation activities indicate that the overburden material at the Site generally consisted of brown medium to fine grained sand with varying amounts of silt from the ground surface to approximately 8.0 feet below grade (fbg). Within the upper horizon of this sand layer, fragments of brick and coal, which are indicative of industrial fill, were also observed. Below 8.0 fbg, a fining downward sequence of silt and clay has been observed to approximately 20.0 fbg. The saturated groundwater interface was observed at depths ranging from 10.0 to 12.0 fbg. Bedrock was not encountered during historical drilling activities.

1.3 Summary of Remedial Investigation Findings

A Remedial Investigation (RI) was performed to characterize the nature and extent of contamination at the Site. The results of the RI are described in detail in the following reports:

- Site Investigation Report – Volume I, Operable Unit No. 1 (OU1), dated August 2005, prepared by Plumley Engineering.
- Site Investigation Report – Volume II, Operable Unit No. 1 (OU1), dated August 2005, prepared by Plumley Engineering.
- Site Investigation Report – Volume III, Operable Unit No. 1 (OU1), dated August 2005, prepared by Plumley Engineering.

- Remedial Alternatives Report, dated November 2006, prepared by Plumley Engineering
- Record of Decision for the Matt Petroleum Site, Operable Unit No. 1, dated June 29, 2007, prepared by the NYSDEC.
- Subsurface Investigation Report, Operable Unit No. 2, dated November 5, 2009, prepared by OP-TECH Environmental.
- Former Matt/Grace Petroleum Removal Action Report, dated May 28, 2010, prepared by OP-TECH Environmental.
- Record of Decision for the Matt Petroleum Site, Operable Unit No. 2, dated March 2011, prepared by the NYSDEC.
- Final Engineering Report, dated December 4, 2012, prepared by GES.

Generally, the RI determined that remediation of soil was required at the Site but that additional investigation or remediation or other environmental media or ecological resources were not required. A qualitative human health exposure assessment was performed and potential exposure pathways were evaluated. The Site is located in a remote industrial area of the City of Utica and is fenced off. Access to contaminated sediments adjacent to the Site is not likely. Surface water near the Site is not used by any public water supplies and the area is served by a municipal water supply

Below is a summary of Site conditions when the RI was performed in 2011:

Soil

During the first half of the 1900's, the Site was utilized as a brickyard. Between the 1950s to the 1990s, the Site operated as a PBS terminal. It has been indicated in past reports that during this period, numerous major and minor petroleum releases occurred during the terminals operations. The various grades of petroleum products ranging from lighter gasoline and diesel fuel products to heavier No. 6 fuel oil products were stored at the terminal.

In 2011, a RI was conducted to define the nature and extent of any contamination resulting from previous activities at the Site. The data identified contaminants of concern for the Site. The contaminants of concern identified for this Operable Unit were:

1,2,4-trimethylbenzene	Naphthalene
1,3,5-trioxane, 2,4,6-trimethyl-ethylbenzene	Toluene
Xylene (mixed)	benzene

Seventy-seven soil borings and six test pits were completed at the Site. Fifty of seventy-seven soil borings and six of six test pit samples showed the presence of VOCs in the subsurface soils and twenty-one of the fifty samples contained either individual VOCs or total VOCs at concentrations that were above the soil standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs. Sixty-five of seventy-seven samples contained one or more individual SVOCs at concentrations that were above the soil SCGs. Four soil boring samples were collected for metals analysis. One sample contained cyanide at 2.15 ppm, another sample contained mercury at 0.6 ppm, arsenic at 14.9 ppm and zinc at 115 ppm, each above their respective SCGs.

The primary contaminants of concern for OU2, the off-Site area, were VOCs and SVOCs. The remedial investigation showed that contamination in subsurface soils along the bank of the Mohawk River was consistent with previous investigations for OU1. This contamination originated from the upland portion of the Site or OU1. The RI has also shown that impacts to both surface water and sediment exist, however, the sediment impacts are due to a separate downgradient source.

In the spring of 2004, demolition of on-Site structures including ten bulk petroleum tanks, three aboveground oil blending tanks, a slop tank, an oil/water separator, five loading racks, two pump houses, aboveground and buried piping, and four buildings was completed. Following the demolition, the Site consisted of a rough graded lot with one building and a chain link fence around the entire perimeter. A comprehensive investigation of surface soils, subsurface soils, and groundwater was completed across the Site in September of 2005.

On June 29, 2007, an Environmental Restoration Record of Decision (ROD) for OU1 was completed by the NYSDEC using data collected from previously completed subsurface investigations and pilot studies. The remedial remedy selected for OU1 included two parts; Excavation and off-Site disposal of soils which are deemed un-

treatable and/or heavily contaminated. Excavation, on-Site ex-situ treatment using a soil turning method and replacement of other impacted soils.

The first phase of the remediation included the removal, transportation, and off-Site disposal of a large percentage of the grossly contaminated soil mass. The second phase of the remediation would include the excavation and on-Site ex-situ bioremediation of the remaining soil contaminant mass not removed during the first phase.

In the first quarter of 2010, the NYSDEC contracted Op-Tech Environmental Services, Inc. (Op-Tech) to implement the remedial remedy selected by the ROD for OU1. It was determined that the best approach to implement the remedy would be in two phases. The first phase was excavation and off-Site disposal of the grossly contaminated soil mass. The second phase was the excavation and on-Site ex-situ bioremediation of the remaining contaminated soil not removed during the first phase. Op-Tech completed the first phase by removing 46,475.70 tons of petroleum impacted soils from the Site and transported these soils to Ontario County Landfill and Seneca Meadows Landfill for disposal. During excavation activities, a 2,000 gallon underground storage tank (UST) was discovered and removed from the Site. Op-Tech also completed part of the second phase of the remedial remedy by excavating 10,000 cubic yards of impacted soils and staging them in windrows for future ex-situ treatment using a soil turning method.

Between October 19 and October 28, 2011 and May 21 through August 20, 2012 approximately 25,782 cubic yards of soil from the Site were mechanically turned utilizing an AlluTM bucket technology attached to a standard excavator. All soils displaying any nuisance characteristics were treated on-Site until the soils met the established Site criteria. The Site criteria included the absence of olfactory indications of petroleum odors, absence of visual indications of petroleum staining, and photo ionization detector (PID) readings less than 50 ppm along the sidewall and bottom of the excavation. Confirmatory sampling identified that the NYSDEC CP-51 SCO for Unrestricted Use were met for all areas, with the exception of one sidewall sample (Sidewall 19 (5-6fbg)). Only two compounds, Benzo(a)pyrene and Benzo(b)fluoranthene, were detected in the sidewall sample at a concentration of 1,100 ug/kg. These two compounds exceeded the Unrestricted SCOs. However, these levels are below the

NYSDEC CP-51 SCO Restricted Use Protection of Groundwater. Attached as Figure 5 is a copy of the Confirmatory Sample Location Map.

Once all of the excavated soils had been adequately treated, placed back in the open excavations, and compacted the Site was graded based on guidance from the NYSDEC. It is estimated that after the final grading, some areas of the Site were raised approximately 2 feet from the initial grade. In order to mitigate future surface water runoff to the north, two drainage trenches were installed parallel to the Mohawk River. These trenches are designed to intercept any surface water runoff and creating a means for the water to infiltrate into the subsurface prior to reaching the river. Grass seed was planted along the Northern portion of the property to help reduce surface water runoff.

Site-Related Groundwater

Based upon the remedial investigation, the primary contaminants of concern for OU1 include VOCs, SVOCs, and inorganics (metals). Site contamination impacted the groundwater resource throughout the Site. Eleven of sixteen monitoring wells contained VOCs, and eight of these contained one or more VOCs at a concentration that exceeds the groundwater SCGs. Five of sixteen monitoring wells contained SVOCs, and one of these contained one SVOC at a concentration exceeding the groundwater SCGs. Four monitoring wells sampled were analyzed for metals and displayed elevated iron and manganese levels, and one well also had elevated magnesium and sodium concentrations.

Off-Site surface water and sediment contamination levels found adjacent to the Site are only slightly above SCGs.

During the 2012 subsurface activities the on-Site monitoring wells were destroyed.

Site-Related Soil Vapor Intrusion

All buildings on-Site were demolished. Therefore, no sampling for soil vapor, sub-slab vapor and/or air was required.

Underground Storage Tanks and On-Site Structures

In 2004, as an IRM, 17 ASTs ranging in size from 750,000 to 1.5 million gallons, were cleaned and removed from the Site. Additional smaller tanks, buildings, pipelines, and other structures were also dismantled.

A list of the ASTs and USTs dismantled are:

1. AST-1 Kerosene (413,800 gallons)
2. AST-2 No. 6 Fuel Oil (720,300 gallons)
3. AST-3 Light Distillate (720,300 gallons)
4. AST-4 No. 6 Fuel Oil (1,551,200 gallons)
5. AST-5 Light Distillate (1,039,500 gallons)
6. AST-6 Light Distillate (1,220,800 gallons)
7. AST-7 No. 6 Fuel Oil (1,789,200 gallons)
8. AST-8 No. 2 Fuel Oil (1,789,200 gallons)
9. AST-9 No. 6 Fuel Oil (986,000 gallons)
10. AST-10 No. 2 Fuel Oil (2,260,500 gallons)
11. AST-11 through 13 Horizontal Fuel Blending Tanks (25,000 gallons each)
12. AST-14 Horizontal Tank (10,000 gallons)
13. UST-1 Waste Oil (750 gallons)
14. UST-2 Waste Oil (750 gallons)
15. UST-3 No. 2 Fuel Oil (1,000 gallons)
16. UST-4 No. 2 Fuel Oil (750 gallons)
17. UST-5 Diesel (2,000 gallons)
18. A boiler house used to heat residual petroleum products and an adjacent pump room
19. A maintenance bay in the north end of the main building
20. A garage located adjacent to the former AST-9
21. An oil/water separator (25,000 gallons)
22. Fuel oil spills to the ground and around the dispenser loading racks
23. Five loading racks
24. Various small containers of chemicals, petroleum products and other car products

1.4 Summary of Remedial Actions

The Site was remediated in accordance with the NYSDEC-approved Work Plan for Site Investigation/Remedial Alternatives Report dated January 2004, the Remedial Alternatives Report dated November 2006, the Record of Decision OU1 dated June 29, 2007, and Record of Decision OU2 dated March 2011.

The following is a summary of the Remedial Actions performed at the Site:

1. In 2004, as an IRM, 17 above ground storage tanks ranging in size from 750,000 to 1.5 million gallons, were cleaned and removed from the Site. Additional smaller tanks, buildings, pipelines, and other structures were dismantled.
2. Between May 14 and May 18, 2004 a total of 79 soils borings, 45 test pits, 26 temporary groundwater monitoring wells, and 16 permanent groundwater monitoring wells were completed to assess both soil and groundwater conditions at the Site. This investigation also included assessment of both on-Site and off-Site contaminant migration. A total of 92 subsurface and surface soil samples were collected and analyzed each for VOCs and SVOCs, 10 samples for metals, and 11 samples for poly-chlorinated biphenyls (PCBs). A total of 33 groundwater samples were collected for analysis of both VOCs and SVOCs, four of which were also analyzed for metals and PCBs.

The results of this investigation indicated that substantial soil and groundwater contamination existed at the Site. Either a zone of grossly contaminated soil or an area of concern (AOC) exists across approximately 65% of the Site. The nature of Site contamination within the area of concern is mainly one of residual contamination, while the zones of grossly contaminated soil contain free product and significant groundwater contaminant concentrations. Virtually the entire Site contains groundwater with dissolved phase petroleum constituents, primarily VOCs with scant SVOC exceedances, at concentrations above the groundwater Standards, SCGs for one or more compounds. Over half of the Site soil samples,

representing approximately two-thirds of the Site, contained total VOCs at concentrations exceeding the soil SCGs. However, only 10 of 75 subsurface soil samples contained one or more SVOC at concentrations above the soil SCGs.

Off-Site migration of Site contaminants occurred along Leland Avenue, into the Mohawk River through groundwater discharge, and into a low-lying wet area. However, in three off-Site groundwater sample locations only one VOC compound was detected at a concentration slightly above the groundwater SCGs and no SVOCs were detected above the SCG. Details of this investigation are reported in *Site Investigation Report, Volume I* dated August 2005.

3. A ROD was signed on June 29, 2007 for OU1, which required the Site to be remediated utilizing a soil turning/biological treatment process. OU2 consists of off-Site areas including the sediments, surface water and soil along the banks of the Mohawk River in proximity to the Site.

The remedial remedy selected for OU1 included two parts; Excavation and off-Site disposal of soils which are deemed un-treatable and/or heavily contaminated. Excavation, on-Site ex-situ treatment using a soil turning method and replacement of other impacted soils.

The first phase of the remediation included the removal, transportation, and off-Site disposal of a large percentage of the grossly contaminated soil mass. In 2010, the excavations of 46,475.70 tons of heavily contaminated soils were removed from the Site and along the Mohawk River. This resulted in approximately 75% of the Site being remediated and backfilled with clean soil.

The second phase of the remediation included the excavation and on-Site ex-situ bioremediation of the remaining soil contaminant mass not removed during the first phase.

4. In 2011-2012, approximately 25,782 cubic yards of soil from the Site were mechanically turned utilizing an AlluTM bucket. Soils were treated on-Site until they met the established site criteria including the absence of olfactory indications of petroleum odors, absence of visual indications of petroleum staining, and PID readings less than 50 ppm. Soils were placed back in the open excavations and the Site was graded.

Confirmatory sampling identified that the NYSDEC CP-51 SCO for Unrestricted Use were met for all areas, with the exception of one sidewall sample (Sidewall Sample S19). Only two compounds, Benzo(a)pyrene and Benzo(b)fluoranthene, were detected in a sidewall sample at a concentration of 1,100 ug/kg. These two compounds exceeded the Unrestricted SCOs. However, these levels are below the NYSDEC CP-51 SCO Restricted Use Protection of Groundwater. Details of the remedial activities completed above are reported in the *Final Engineering Report* dated December 4, 2012.

Site Development and implementation of a Site Management Plan for long term management of remaining contamination as required by the Environmental Easement, which includes plans for: (1) Institutional and Engineering Controls, (2) inspection, and (3) reporting;

1.4.1 Removal of Contaminated Materials from the Site

A list of the soil cleanup objectives (SCOs) for the primary contaminants of concern (COCs) and applicable land use for this Site is provided in Table 1.

Figures showing areas where excavation was performed are shown in Figures 4a (*Final Engineering Report*, dated December 4, 2012 prepared by GES) and 3b (*Former Matt/Grace Petroleum Removal Action Report*, dated May 28, 2010 prepared by OP-TECH).

In 2010, OP-TECH was responsible for removal and disposal of 46,475.79 tons of petroleum-impacted soils. Petroleum-impacted soils were transported to both the Ontario County Landfill, located in Flint, New York and Seneca Meadows Landfill, located in Waterloo, New York.

Between October 19 and October 28, 2011 and May 21 through August 20, 2012 approximately 25,782 cubic yards of soil from the Site were mechanically turned utilizing an AlluTM bucket technology attached to a standard excavator. All soils displaying any nuisance characteristics were treated on-Site until the soils met the established Site criteria. The Site criteria included the absence of olfactory indications of petroleum odors, absence of visual indications of petroleum staining, and PID readings less than 50 ppm along the sidewall and bottom of the excavation.

Confirmatory sampling identified that the NYSDEC CP-51 SCO for Unrestricted Use were met for all areas, with the exception of one sidewall sample. Only two compounds, Benzo(a)pyrene and Benzo(b)fluoranthene, were detected in the sample at a concentration of 1,100 ug/kg. These two compounds exceeded the Unrestricted SCOs. However, these levels were below the NYSDEC CP-51 SCO Restricted Use Protection of Groundwater.

1.4.2 Site-Related Treatment Systems

No long-term treatment systems were installed as part of the Site remedy.

1.4.3 Remaining Contamination

As stated in section 1.4.1 confirmatory samples were collected during the October 2011 and May through August 2012 remedial activities. The confirmatory samples identified that the NYSDEC CP-51 SCO for Unrestricted Use were met for all areas, with the exception of one sidewall sample. Only two compounds, Benzo(a)pyrene and Benzo(b)fluoranthene, were detected in the sample at a concentration of 1,100 ug/kg. These two compounds exceeded the Unrestricted SCOs. However, these levels were below the NYSDEC CP-51 SCO Restricted Use Protection of Groundwater.

Table 2 and Figure 5 summarize the results of all soil samples remaining at the Site after completion of Remedial Action that exceed the Track 1 (unrestricted) SCOs.

2.0 ENGINEERING AND INSTITUTIONAL CONTROL PLAN

2.1 Introduction

2.1.1 General

Since remaining contaminated soil exists beneath the Site, Engineering Controls and Institutional Controls (EC/ICs) are required to protect human health and the environment. This Engineering and Institutional Control Plan describes the procedures for the implementation and management of all EC/ICs at the Site. The EC/IC Plan is one component of the SMP and is subject to revision by NYSDEC.

2.1.2 Purpose

This plan provides:

- A description of all EC/ICs on the Site;
- The basic implementation and intended role of each EC/IC;
- A description of the key components of the ICs set forth in the Environmental Easement;
- A description of the features to be evaluated during each required inspection and periodic review;
- A description of plans and procedures to be followed for implementation of EC/ICs, such as the implementation of the Excavation Work Plan for the proper handling of remaining contamination that may be disturbed during maintenance or redevelopment work on the Site; and
- Any other provisions necessary to identify or establish methods for implementing the EC/ICs required by the Site remedy, as determined by the NYSDEC.

2.2 Engineering Controls

2.2.1 Engineering Control Systems

The Engineering controls completed at this Site were in order to mitigate future surface water runoff. This was completed by installing two approximately 300ft drainage

trenches and silt fence running parallel to the Mohawk River. Also an approximate area of 150ft by 300ft parallel to the Mohawk River was hydro seeded to further aid in erosion and sediment control.

Other Engineering controls are not necessary at this Site.

2.2.2 Criteria for Completion of Remediation/Termination of Remedial Systems

Generally, remedial processes are considered completed when effectiveness monitoring indicates that the remedy has achieved the remedial action objectives identified by the decision document. The framework for determining when remedial processes are complete is provided in Section 6.6 of NYSDEC DER-10.

The Site was mechanically turned utilizing an Allu™ bucket technology attached to a standard excavator. All soils displaying any nuisance characteristics were treated on-Site until the soils met the established Site criteria. The Site criteria included the absence of olfactory indications of petroleum odors, absence of visual indications of petroleum staining, and PID readings less than 50 ppm along the sidewall and bottom of the excavations.

2.2.2.1 Composite Cover System

The composite cover system is a permanent control and the quality and integrity of this system will be inspected annually, regular intervals in perpetuity.

2.2.2.2 Monitored Natural Attenuation

Currently there are no monitoring wells located on-Site. Therefore, groundwater monitoring activities to assess natural attenuation is not required.

2.3 Institutional Controls

A series of Institutional Controls is required by the ROD to: (1) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (3) limit the use and development of the Site to Industrial uses only. Adherence to these Institutional Controls on the Site is required by the Environmental Easement and will be implemented under this Site Management Plan. These Institutional Controls are:

- Compliance with the Environmental Easement and this SMP by the Grantor and the Grantor's successors and assigns;
- All Engineering Controls on the Controlled Property must be inspected at a frequency and in a manner defined in the SMP.
- Soil vapor and/or sub-slab testing may be required if development activities are conducted on-Site to monitor environmental or public health ;
- Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in this SMP;

Institutional Controls identified in the Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement.

The Site has a series of Institutional Controls in the form of Site restrictions. Adherence to these Institutional Controls is required by the Environmental Easement. Site restrictions that apply to the Controlled Property are:

- The property may only be used for Industrial/ restricted commercial use provided that the long-term Engineering and Institutional Controls included in this SMP are employed.
- The property may not be used for a higher level of use, such as unrestricted, restricted residential, use without additional remediation and amendment of the Environmental Easement, as approved by the NYSDEC;
- Any buildings developed on-Site must be above grade. No basement or underground structures can be developed on this Site.
- All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with this SMP;
- The use of the groundwater underlying the property is prohibited without treatment rendering it safe for intended use;
- The potential for vapor intrusion must be evaluated for any buildings developed in the area noted on Figure 5, and any potential impacts that are identified must be monitored or mitigated;
- Vegetable gardens and farming on the property are prohibited;

- The Site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

2.3.1 Excavation Work Plan

The Site has been remediated for Industrial/restricted commercial use. Any future intrusive work that will penetrate the soil cover or cap, or encounter or disturb the remaining contamination, the Excavation Work Plan (EWP) that is attached as Appendix A to this SMP. Any work conducted pursuant to the EWP must also be conducted in accordance with the procedures defined in a Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP) prepared for the Site. A sample HASP is attached as Appendix D to this SMP that is in current compliance with DER-10, and 29 CFR 1910, 29 CFR 1926, and all other applicable Federal, State and local regulations. Based on future changes to State and federal health and safety requirements, and specific methods employed by future contractors, the HASP and CAMP will be updated and re-submitted with the notification provided in Section A-1 of the EWP. Any intrusive construction work will be performed in compliance with the EWP, HASP and CAMP, and will be included in the periodic inspection and certification reports submitted under the Site Management Reporting Plan (See Section 5).

The Site owner and associated parties preparing the remedial documents submitted to the State, and parties performing this work, are completely responsible for the safe performance of all intrusive work, the structural integrity of excavations, proper disposal of excavation de-water, control of runoff from open excavations into remaining contamination, and for structures that may be affected by excavations (such as building foundations and bridge footings). The Site owner will ensure that Site development activities will not interfere with, or otherwise impair or compromise, the engineering or institutional controls described in this SMP.

2.3.2 Soil Vapor Intrusion Evaluation

All buildings on-Site were demolished during remedial activities. Therefore, no sampling for soil vapor, sub slab vapor and/or air was required.

Prior to the construction of any enclosed structures located over areas that contain remaining contamination and the potential for soil vapor intrusion (SVI) has been identified (see Figure 5), a SVI evaluation will need to be performed to determine whether any mitigation measures are necessary to eliminate potential exposure to vapors in the proposed structure. Alternatively, an SVI mitigation system may be installed as an element of the building foundation without first conducting an investigation. This mitigation system will include a vapor barrier and passive sub-slab depressurization system that is capable of being converted to an active system.

Prior to conducting an SVI investigation or installing a mitigation system, a work plan will be developed and submitted to the NYSDEC and NYSDOH for approval. This work plan will be developed in accordance with the most recent NYSDOH “Guidance for Evaluating Vapor Intrusion in the State of New York”. Measures to be employed to mitigate potential vapor intrusion will be evaluated, selected, designed, installed, and maintained based on the SVI evaluation, the NYSDOH guidance, and construction details of the proposed structure.

Preliminary (invalidated) SVI sampling data will be forwarded to the NYSDEC and NYSDOH for initial review and interpretation. Upon validation, the final data will be transmitted to the agencies, along with a recommendation for follow-up action, such as mitigation. .

2.4 Inspections and Notifications

2.4.1 Inspections

Inspections of all remedial components installed at the Site will be conducted at the frequency specified in the SMP Monitoring Plan schedule. A comprehensive Site-wide inspection will be conducted annually, regardless of the frequency of the Periodic Review Report. The inspections will determine and document the following:

- Whether Engineering Control continue to perform as designed;

- If these controls continue to be protective of human health and the environment;
- Compliance with requirements of this SMP and the Environmental Easement;
- If Site records are complete and up to date; and
- Changes, or needed changes, to the remedial or monitoring system;

Inspections will be conducted in accordance with the procedures set forth in the Monitoring Plan of this SMP (Section 3). The reporting requirements are outlined in the Periodic Review Reporting section of this plan (Section 5).

If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs, an inspection of the Site will be conducted within 5 days of the event to verify the effectiveness of the EC/ICs implemented at the Site by a qualified environmental professional as determined by NYSDEC.

2.4.2 Notifications

Notifications will be submitted by the property owner to the NYSDEC as needed for the following reasons:

- 60-day advance notice of any proposed changes in Site use that are required under the terms of the ERP, 6NYCRR Part 375, and/or Environmental Conservation Law.
- 7-day advance notice of any proposed ground-intrusive activities pursuant to the Excavation Work Plan.
- Verbal notice by noon of the following day of any emergency, such as a fire, flood, or earthquake that reduces or has the potential to reduce the effectiveness of EC in place at the Site, with written confirmation within 7 days that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.
- Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action shall be submitted to the NYSDEC within 45 days and shall describe and document actions taken to restore the effectiveness of the ECs.

Any change in the ownership of the Site or the responsibility for implementing this SMP will include the following notifications:

- At least 60 days prior to the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser has been provided with a copy of the ERP, and all approved work plans and reports, including this SMP
- Within 15 days after the transfer of all or part of the Site, the new owner's name, contact representative, and contact information will be confirmed in writing.

2.5 Contingency Plan

Emergencies may include injury to personnel, fire or explosion, environmental release, or serious weather conditions.

2.5.1 Emergency Telephone Numbers

In the event of any environmentally related situation or unplanned occurrence requiring assistance the Owner or Owner's representative(s) should contact the appropriate party from the contact list below. For emergencies, appropriate emergency response personnel should be contacted. These emergency contact lists must be maintained in an easily accessible location at the Site.

Table 3-1: Emergency Contact Numbers

Medical, Fire, and Police:	911
One Call Center:	(800) 272-4480 (3 day notice required for utility mark out)
Poison Control Center:	(800) 222-1222
Pollution Toxic Chemical Oil Spills:	(800) 424-8802
NYSDEC Spills Hotline	(800) 457-7362
Faxton St. Luke's Healthcare	(315) 624-6000

Table 3-2: Contact Numbers

NYSDEC Regional Remediation Engineer	(315) 785-2513
NYSDEC Region 6	(315) 785-2513
City of Utica, Department of Engineering Eugene Santa Croce	Phone: (315) 792-0152 Fax: (315) 792-0236

* Note: Contact numbers subject to change and should be updated as necessary

2.5.2 Map and Directions to Nearest Health Facility

Site Location: 201 Leland Avenue
Utica, New York 13501 (Location A)

Nearest Hospital Name: Faxton St. Luke's Healthcare

Hospital Location: 1656 Champlin Avenue
Utica, New York 13501 (Location B)

Hospital Telephone: (315) 624-6000

Directions to the Hospital:

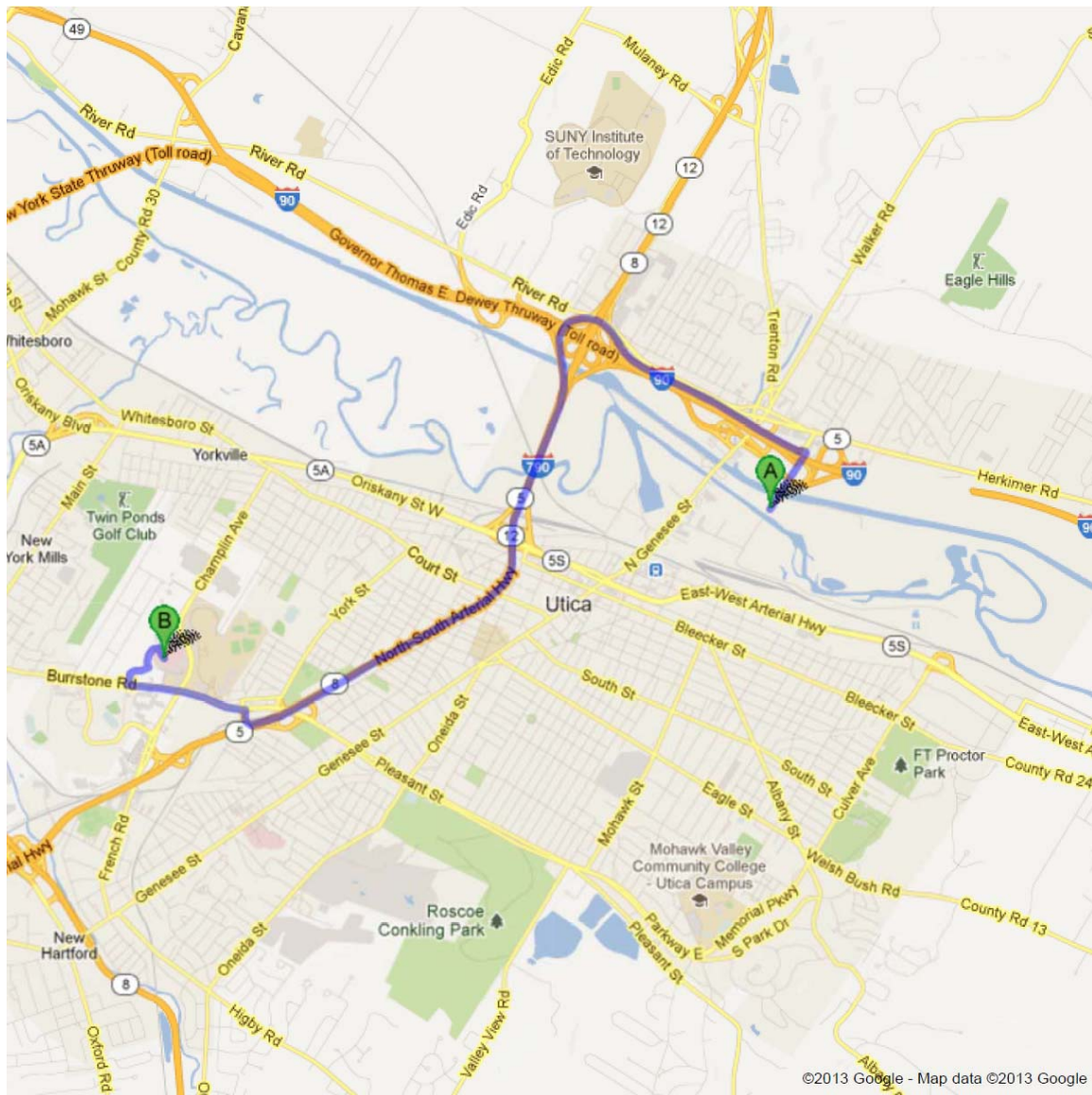
1. Head northeast on Leland Ave toward Incinerator Rd go 0.4 miles
2. Turn left onto State Highway 5 go 0.3 miles
3. Continue onto I-790 go 0.7 miles
4. Take the I-790 W/NY-5 W/NY-8 S/NY-12 S exit toward Downtown Utica go 1.0 miles
5. Merge onto I-790 W/NY-12 S/NY-5 W go 0.5 miles
6. Continue onto New York 8 S/NY-12 S/NY-5 W go 2.0 miles
7. Take the exit toward Utica College go 0.3 miles
8. Turn left onto Burrstone Rd go 0.7 miles
9. Turn right at Notre Dame Ln go 0.2 miles
10. Take the 1st left go 0.1 miles
11. Turn right go 351 feet
12. Arrive at the Hospital (Faxton St. Luke's)

Total Distance: 6.2 miles

Total Estimated Time: 12 minutes

Figure 3

Map Showing Route from the Site to the Hospital:



2.5.3 Response Procedures

As appropriate, the fire department and other emergency response group will be notified immediately by telephone of the emergency. The emergency telephone number list is found at the beginning of this Contingency Plan (Table 3-1). The list will also be posted prominently at the Site and made readily available to all personnel at all times.

2.5.3.1 Spill Procedures

Should a petroleum spill occur, as per the Navigation Law Article 12; 17 NYCRR 32.3 and 32.4 states, that the DEC Hotline 1-800-457-7362 be notified of a discharge immediately, but in no case later than two hours after discharge.

Should a non-petroleum spill occur, it should be properly contained if possible, and then the Owner should be contacted immediately. The Owner will determine what agencies, if any, need to be notified and will make these notifications.

2.5.3.2 Evacuation Plan

In the event that an emergency alarm sounds at the facility, Site personnel will comply with the facilities specific emergency evacuation procedures.

2.5.3.3 Management of Change – Contingency Plan

Should the contingency plan need to be modified, the modification should be noted on the cover of the SMP, included herein and provided to the NYSDEC for inclusion in the Master File.

3.0 INSPECTION & SITE MONITORING PLAN

3.1 Introduction

3.1.1 General

This Inspection and Monitoring Plan describes the measures for evaluating the performance and effectiveness of the remedy and to confirm that the remedy continues to be effective for the protection of public health and the environment. This Monitoring Plan may only be revised with the approval of NYSDEC.

3.1.2 Purpose and Schedule

With the exceptions noted in Section 1.4.3, all soil containing contaminants in excess of Industrial SCOs have been remediated or on-Site ex-situ bioremediation (i.e., removed and disposed of grossly contaminated soils and completed on-Site bioremediation of the remaining soil contaminants via mechanically turning the soil). However, routine inspection shall be performed to ensure all ICs remain in place and the SMP is being implemented as required.

This Inspection & Sampling Plan describes the methods to be used for:

- Assessing compliance with applicable NYSDEC standards, criteria and guidance, and Part 375 SCOs for soil;
- Any sampling and analysis conducted during implementation of the Excavation Work Plan (Appendix A);
- Evaluating Site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment; and

To adequately address these issues, this Plan provides information on:

- Analytical requirements;
- Reporting requirements;
- Annual inspection and periodic certification.

The Inspection programs is summarized in Table 4-1 and outlined in detail in Sections 3.2 and 3.3 below.

Table 4-1: Monitoring/Inspection Schedule

Monitoring Program	Frequency*	Matrix	Analysis
Confirmation Soil Sample	One Time, if required by NYSDEC	Soil	TAL metals; TCL volatiles and semi-volatiles; TCL pesticides and PCBs
Site Wide Inspection	Annual	Not Applicable	None

* The frequency of events will be conducted as specified until otherwise approved by NYSDEC and NYSDOH

3.2 Confirmation Soil Sampling

During any future soil excavation or implementation of an Excavation Work Plan (Appendix A), confirmation samples will need to be collected.

3.3 Media Monitoring Program

As a result of 2012 remedial action program and the post remedial action sampling program, no further monitoring is required for the Site. In addition, the Site is served by public water and sanitary sewer systems.

3.4 Site-Wide Inspection

Site-wide inspections will be performed on a regular schedule at a minimum of once a year. During these inspections, an inspection form will be completed. The form will compile sufficient information to assess the following:

- Compliance with all ICs, including Site usage;
- An evaluation of the condition and continued effectiveness of ECs;
- General Site conditions at the time of the inspection; and
- Documentation of any soil disturbance activities.

3.5 Quality Assurance/Quality Control

Sampling is not required. However, sampling may be necessary during implementation of soil disturbance activities. Any sampling and analyses will be

performed in accordance with the requirements of the NYSDEC CP-51 Soil Cleanup Guidance. All sampling and analyses will need to be performed in accordance with the requirements of a Quality Assurance Project Plan (QAPP) prepared for the Site. The main components of a QAPP include:

- QA/QC Objectives for Data Measurement;
- Sampling Program:
 - o Sample containers will be properly washed, decontaminated, and appropriate preservative will be added (if applicable) prior to their use by the analytical laboratory. Containers with preservative will be tagged as such.
 - o Sample holding times will be in accordance with the NYSDEC ASP requirements.
 - o Field QC samples (e.g., trip blanks, coded field duplicates, and matrix spike/matrix spike duplicates) will be collected as necessary.
- Sample Tracking and Custody;
- Calibration Procedures:
 - o All field analytical equipment will be calibrated immediately prior to each day's use. Calibration procedures will conform to manufacturer's standard instructions.
 - o The laboratory will follow all calibration procedures and schedules as specified in USEPA SW-846 and subsequent updates that apply to the instruments used for the analytical methods.
- Analytical Procedures;
- Preparation of a Data Usability Summary Report (DUSR), which will present the results of data validation, including a summary assessment of laboratory data packages, sample preservation and chain of custody procedures, and a summary assessment of precision, accuracy, representativeness, comparability, and completeness for each analytical method.

3.6 Reporting Requirements

Forms and any other information generated during inspections and any sampling events will be kept on file on-Site. All forms, and other relevant reporting formats used during the monitoring/inspection events, will be (1) subject to approval by NYSDEC and (2) submitted at the time of the Periodic Review Report, as specified in the Reporting Plan of this SMP.

All inspection and any sampling results will be reported to NYSDEC on a periodic basis in the Periodic Review Report. The report (or letter) will include, at a minimum:

- Date of event;
- Personnel conducting inspection or sampling;
- Description of the activities performed;
- Type of samples collected (e.g., soil, sub-slab vapor, indoor air, outdoor air, etc.);
- Copies of all field forms completed (e.g., inspection form, chain-of-custody documentation, etc.);
- Sampling results in comparison to appropriate standards/criteria;
- A figure illustrating sample type and sampling locations;
- Copies of all laboratory data sheets and the required laboratory data deliverables required for all points sampled (to be submitted electronically in the NYSDEC-identified format); and
- Any observations, conclusions, or recommendations.

Data will be reported in hard copy or digital format as determined by NYSDEC. A summary of the inspection and sampling program deliverables are summarized in Table 5-1 below.

Table 5-1: Schedule of Monitoring/Inspection Reports

Task	Reporting Frequency*
Soil sampling (if any structures are developed on-Site or the ground is disturbed)	Once, if needed
Air sampling (if any structures are developed on-Site for potential vapor intrusion)	Once, if needed
Site Wide Inspection	Report results in Annual Letter

* The frequency of events will be conducted as specified until otherwise approved by NYSDEC

4.0 OPERATION AND MAINTENANCE PLAN

4.1 Introduction

The Site remedy does not rely on any mechanical systems, such as sub-slab depressurization systems or air sparge/ soil vapor extraction systems to protect public health and the environment. Therefore, the operation and maintenance of such components is not included in this SMP.

5.0 INSPECTIONS, REPORTING, AND CERTIFICATIONS

5.1 Site Inspections

5.1.1 Inspection Frequency

All inspections will be conducted at the frequency specified in the schedules provided in Section 3 Inspection and Sampling Plan. At a minimum, a Site-wide inspection will be conducted annually. If an emergency, such as a natural disaster occurs, an inspection of the Site will be conducted within 5 days of the event to verify the effectiveness of the EC/ICs implemented at the Site by a qualified environmental professional as determined by the NYSDEC.

5.1.2 Inspection Forms, Sampling Data, and Maintenance Reports

A general Site-wide inspection form will be completed during the Site-wide inspection (see Appendix E). These forms are subject to NYSDEC revision.

All applicable inspection forms and other records, including all media sampling data, generated for the Site during the reporting period will be provided in electronic format in the Periodic Review Report.

5.1.3 Evaluation of Records and Reporting

The results of the inspection will be evaluated as part of the EC/IC certification to confirm that the:

- EC/ICs are in place, are performing properly, and remain effective;
- The Inspection and Sampling Plan is being implemented;
- The Site remedy continues to be protective of public health and the environment and is performing as designed in the Remedial Action Work Plan (RAWP) and Final Engineering Report (FER).

5.2 Certification of Engineering and Institutional Controls

After the last inspection of the reporting period, a qualified environmental professional will prepare the following certification:

For each institutional or engineering control identified for the Site, I certify that all of the following statements are true:

- The inspection of the Site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction;
- The institutional control and/or engineering control employed at this Site is unchanged from the date the control was put in place, or last approved by the Department;
- Nothing has occurred that would impair the ability of the control to protect the public health and environment;
- Nothing has occurred that would constitute a violation or failure to comply with any Site management plan for this control;
- Access to the Site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control;
- Use of the Site is compliant with the environmental easement;
- To the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the Site remedial program; and
- The information presented in this report is accurate and complete.
- I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, [name], of [business address], am certifying as [Owner or Owner's Designated Site Representative] [I have been authorized and designated by all Site owners to sign this certification] for the Site.

The signed certification will be included in the Periodic Review Report described below.

- No new information has come to my attention, including groundwater monitoring data from wells located at the Site boundary, if any, to indicate that the assumptions made in the qualitative exposure assessment of off-Site contamination are no longer valid; and

Every five years the following certification will be added:

- The assumptions made in the qualitative exposure assessment remain valid.

The signed certification will be included in the Periodic Review Report described below.

5.3 Periodic Review Letter

A Periodic Review Report will be submitted to the Department every year, beginning eighteen months after the Certificate of Completion or equivalent document eg., Satisfactory Completion Letter, No Further Action Letter, etc. is issued. In the event that the Site is subdivided into separate parcels with different ownership, a single Periodic Review Report will be prepared that addresses the Site. The report will be prepared in accordance with NYSDEC DER-10 and submitted within 45 days of the end of each certification period. Media sampling results will also be incorporated into the Periodic Review Report, if applicable. The report will include:

- Identification, assessment and certification of all ECs/ICs required by the remedy for the Site;
- Results of the required annual Site inspections and severe condition inspections, if applicable;
- All applicable inspection forms and other records generated for the Site during the reporting period in electronic format;
- Data summary tables and graphical representations of contaminants of concern, if required, by media (groundwater, soil vapor, soil), which include a listing of all compounds analyzed, along with the applicable standards, with all exceedances highlighted. These will include a presentation of past data as part of an evaluation of contaminant concentration trends;
- Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period will be submitted electronically in a NYSDEC-approved format;
- A Site evaluation, which includes the following:

- o The compliance of the remedy with the requirements of the Site-specific RAWP, ROD or Decision Document;
- o Any new conclusions or observations regarding Site contamination based on inspections or data generated by the Monitoring Plan for the media being monitored;
- o Recommendations regarding any necessary changes to the remedy and/or Inspection and Site Monitoring Plan; and
- o The overall performance and effectiveness of the remedy.

The Periodic Review Report will be submitted in hard-copy and electronic (PDF) format, to the NYSDEC Central Office and Regional Office in which the Site is located, and in electronic format to NYSDEC Central Office, Regional Office and the NYSDOH Bureau of Environmental Exposure Investigation.

5.4 Corrective Measures Plan

If any component of the remedy is found to have failed, or if the periodic certification cannot be provided due to the failure of an institutional or engineering control, a corrective measures plan will be submitted to the NYSDEC for approval. This plan will explain the failure and provide the details and schedule for performing work necessary to correct the failure. Unless an emergency condition exists, no work will be performed pursuant to the corrective measures plan until it is approved by the NYSDEC.

Table 1

NYSDEC Recommended Soil Clean-Up Objectives for Detected Constituents

NYSDEC Former Matt Petroleum Facility (Spills #88-09026)
201 Leland Avenue
Utica, New York

Analyte	NYSDEC CP-51 SCO UnRestricted Use	NYSDEC CP-51 SCO Protection of Groundwater	Units
EPA 8270 STARS			
Acenaphthene	20,000	98,000	ug/kg
Acenaphthylene	100,000	107,000	ug/kg
Anthracene	100,000	1,000,000	ug/kg
Benzo(a)anthracene	1,000	1,000	ug/kg
Benzo(a)pyrene	1,000	22,000	ug/kg
Benzo(b)fluoranthene	1,000	1,700	ug/kg
Benzo(g,h,i)perylene	100,000	1,000,000	ug/kg
Benzo(k)fluoranthene	800	1,700	ug/kg
Chrysene	1,000	1,000	ug/kg
Dibenz(a,h)anthracene	330	1,000,000	ug/kg
Fluoranthene	100,000	1,000,000	ug/kg
Fluorene	30,000	386,000	ug/kg
Indeno(1,2,3-cd)pyrene	500	8,200	ug/kg
Naphthalene	12,000	12,000	ug/kg
Phenanthrene	100,000	1,000,000	ug/kg
Pyrene	100,000	1,000,000	ug/kg
EPA 8260 STARS			
Benzene	60	60	ug/kg
Ethylbenzene	1,000	1,000	ug/kg
Toluene	700	700	ug/kg
m-Xylene & p-Xylene	260**	1,600	ug/kg
o-Xylene	260**	1,600	ug/kg
Xylenes, Total	260**	1,600	ug/kg
Isopropylbenzene	2,300	2,300	ug/kg
N-Propylbenzene	3,900	3,900	ug/kg
4-Isopropyltoluene	10,000	10,000	ug/kg
1,2,4-Trimethylbenzene	3,600	3,600	ug/kg
1,3,5-Trimethylbenzene	8,400	8,400	ug/kg
n-Butylbenzene	12,000	12,000	ug/kg
sec-Butylbenzene	11,000	11,000	ug/kg
Naphthalene	12,000	12,000	ug/kg
Methyl tert-butyl ether	930	930	ug/kg
tert-Butylbenzene	5,900	5,900	ug/kg

Table 2

SUMMARY OF SOIL QUALITY (VOCs and SVOCs)

NYSDEC Former Matt Petroleum Facility (Spills #88-09026)
201 Leland Avenue
Utica, New York

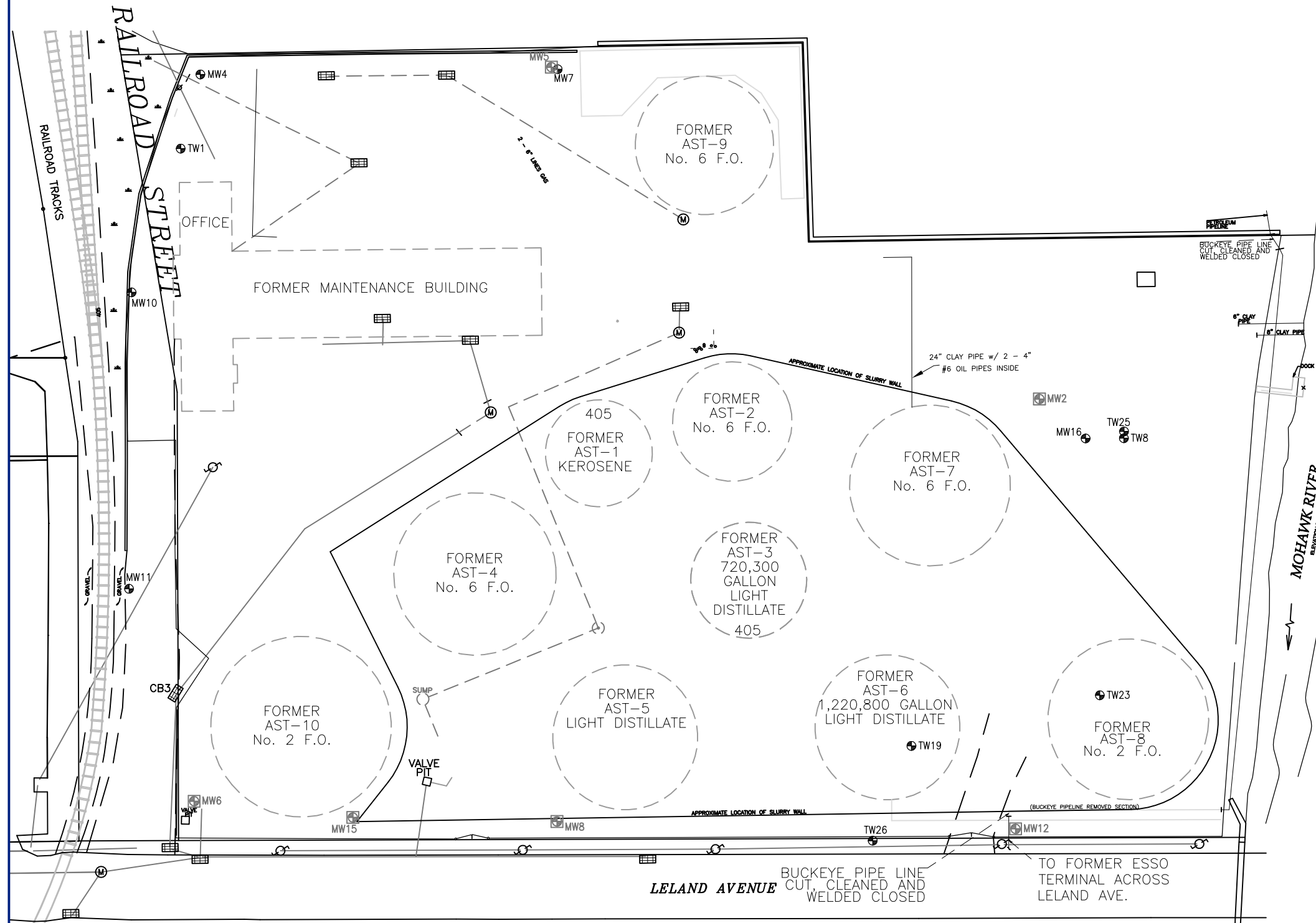
			BOTTOM 1 (8-8.5 fbg) 5/31/2012	BOTTOM 2 (6-7 fbg) 6/4/2012	BOTTOM 3 (5-5.5 fbg) 6/5/2012	SIDEWALL 1 (4.5-5 fbg) 6/5/2012	SIDEWALL 2 (4-5 fbg) 6/14/2012	SIDEWALL 3 (4-5 fbg) 6/15/2012	BOTTOM 4 (7 fbg) 6/15/2012	SIDEWALL K3 (10-12 fbg) 7/3/2012	SIDEWALL K5 (6-8 fbg) 7/3/2012	SIDEWALL K8 (4 fbg) 7/3/2012	SIDEWALL L2 (8-10 fbg) 7/5/2012	Sidewall O6 (5 fbg) 7/16/2012	Sidewall O1 (4 fbg) 7/16/2012	Sidewall P4 (5 fbg) 7/16/2012	SIDEWALL Q16 (4-5 fbg) 7/24/2012	SIDEWALL S18 (5-6 fbg) 7/31/2012	SIDEWALL S19 (5-6 fbg) 7/31/2012
Analyte	NYSDEC CP-51 SCO UnRestricted Use	NYSDEC CP-51 SCO Protection of Groundwater	200	9.8	12.0	187	146	6.8	0.3	1.9	16.2	0	6.2	7.4	1.1	24.7	4.4	38.7	5
EPA 8270 STARS																			
Acenaphthene	20,000	98,000	ND	10 J	58 J	190 J	300	ND	ND	ND	17 J	34 J	ND	8.1 J	ND	ND	ND	ND	11 J
Acenaphthylene	100,000	107,000	ND	ND	ND	140 J	56 J	ND	ND	ND	5.8 J	5.1 J	ND	8.6 J	ND	ND	ND	ND	200 J
Anthracene	100,000	1,000,000	38 J	ND	25 J	110 J	870	53 J	ND	17 J	23 J	ND	ND	ND	ND	ND	ND	76 J	120 J
Benzo(a)anthracene	1,000	1,000	15 J	12 J	21 J	18 J	56 J	160 J	ND	87 J	65 J	18 J	36 J	ND	ND	440 J	27 J	280 J	630
Benzo(a)pyrene	1,000	22,000	ND	ND	16 J	9.7 J	7.1 J	170 J	ND	95 J	49 J	37 J	40 J	ND	ND	ND	25 J	270 J	1,100
Benzo(b)fluoranthene	1,000	1,700	7.5 J	8.7 J	23 J	14 J	11 J	200 J	ND	79 J	65 J	ND	44 J	ND	ND	540 J	37 J	360 J	1,100
Benzo(g,h,i)perylene	100,000	1,000,000	ND	ND	20 J	9.5 J	ND	ND	ND	32 J	14 J	ND	ND	ND	ND	ND	ND	ND	590
Benzo(k)fluoranthene	800	1,700	5.2 J	5.5 J	10 J	7.8 J	4.8 J	90 J	ND	50 J	43 J	ND	24 J	ND	ND	ND	20 J	230 J	400
Chrysene	1,000	1,000	9.4 J	9.7 J	24 J	17 J	62 J	150 J	ND	77 J	73 J	13 J	34 J	ND	ND	510 J	29 J	300 J	630
Dibenz(a,h)anthracene	330	1,000,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	86 J
Fluoranthene	100,000	1,000,000	ND	14 J	31 J	50 J	260	360 J	ND	200 J	170 J	39 J	59 J	ND	ND	1,000 J	51 J	360 J	1,100
Fluorene	30,000	386,000	87 J	17 J	150 J	450	830	ND	ND	ND	31 J	47 J	ND	23 J	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	500	8,200	ND	ND	13 J	ND	ND	ND	ND	27 J	16 J	ND	ND	ND	ND	250 J	ND	120 J	420
Naphthalene	12,000	12,000	ND	ND	190 J	100 J	22 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	100,000	1,000,000	200 J	47 J	180 J	520	2,700	270 J	ND	79 J	26 J	30 J	27 J	26 J	ND	740 J	ND	190 J	310
Pyrene	100,000	1,000,000	39 J	20 J	43 J	65 J	980	260 J	ND	240	160 J	34 J	67 J	ND	ND	870 J	42 J	350 J	1,400
Total SVOCs STARS			401.1	143.9	804	1,701	6,158.9	1,713	ND	983	757.8	257.1	331	65.7	ND	4,350	231	2,536	8,097
EPA 8260 STARS																			
Benzene	60	60	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	1,000	1,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	700	700	ND	ND	0.52 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m-Xylene & p-Xylene	260**	1,600	ND	ND	1.6 J	ND	ND	ND	ND	ND	4.4 J	1.8 J	ND	ND	ND	ND	ND	ND	ND
o-Xylene	260**	1,600	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes, Total	260**	1,600	ND	ND	1.6 J	ND	ND	ND	ND	ND	4.4 J	1.8 J	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	2,300	2,300	11	1.6 J	12	28	1.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Propylbenzene	3,900	3,900	16	1.4 J	8.1	38	2.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Isopropyltoluene	10,000	10,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	3,600	3,600	2.4 J	ND	ND	ND	ND	ND	ND	ND	2 J	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	8,400	8,400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	12,000	12,000	ND	ND	2.1 J	ND	6.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	11,000	11,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	12,000	12,000	2.3 J	0.88 J	1.7 J	ND	1.7 J	ND	ND	ND	ND	ND	ND	2.4 J	1.4 J	1.4 J	ND	ND	ND
Methyl tert-butyl ether	930	930	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	5,900	5,900	1.1 J	ND	1.2 J	5.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total BTEX			ND	ND	2.12	ND	ND	ND	ND	ND	4.4	1.8	ND	ND	ND	ND	ND	ND	ND
Total VOCs STARS			32.8	3.88	27.22	71.9	12.8	ND	ND	ND	6.4	1.8	ND	2.4	1.4	1.4	ND	ND	ND

Notes:
All concentrations reported in ug/kg
ND = none detected above laboratory limit
Bold type indicates that compound exceeds NYSDEC CP-51 Recommended Soil Cleanup Objectives for UnRestricted Use
J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
**= No SCO for this compound



LEGEND

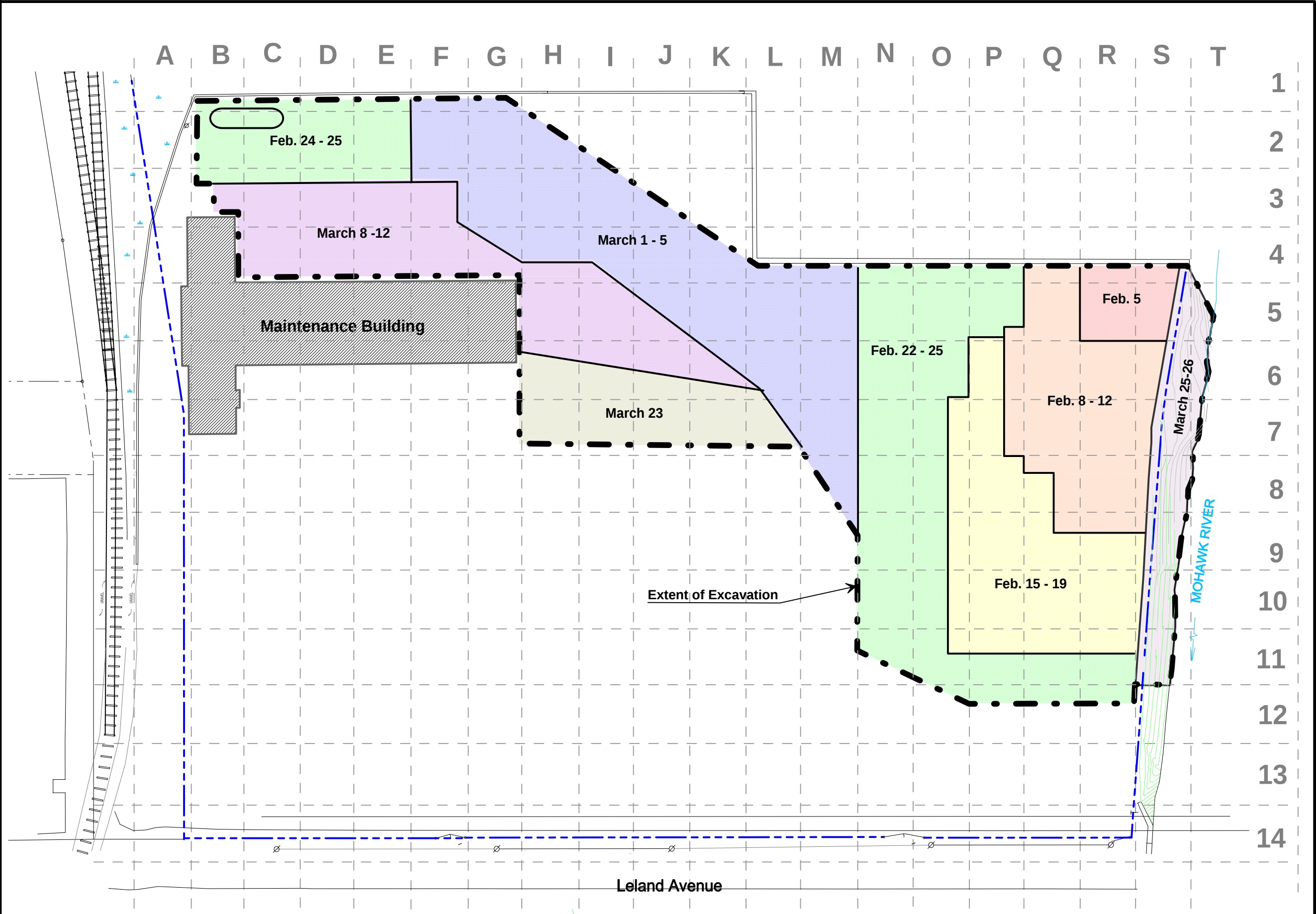
- PROPERTY BOUNDARY
- x - FENCE
- [Hatched Box] CATCH BASIN
- (M) UTILITY MANHOLE
- (P) UTILITY POLE
- (W) MONITORING WELL
- (W with cross) DESTROYED MONITORING WELL



DRAFTED BY: E.M.E. (N.J.)	SITE MAP		
CHECKED BY: KAT	NYSDEC SPILL #88-09026 201 LELAND AVENUE UTICA, NEW YORK		
REVIEWED BY: JD	Groundwater & Environmental Services, Inc. 300 GATEWAY PARK DRIVE, NORTH SYRACUSE, NY 13212		
NORTH 	SCALE IN FEET 0 APPROXIMATE 60	DATE 11-5-12	FIGURE 1



DRAFTED BY: KAT	SITE LOCATION MAP		
CHECKED BY: KAT	FORMER MATT PETROLEUM SITE 102 LELAND AVENUE UTICA, NEW YORK		
REVIEWED BY: JD	Groundwater & Environmental Services, Inc. 300 GATEWAY PARK DRIVE, NORTH SYRACUSE, NY 13212		
NORTH 	SCALE IN FEET  0 APPROXIMATE 250	DATE 10-3-12	FIGURE 2




OP-TECH Environmental Services, Inc.
 150 Rotterdam Industrial Park Schenectady, NY 12306 (Tel 518-355-0197 / Fax 518-355-3256)

Site Excavation Map

Matt/Grace Petroleum Bulk Storage Facility
 211 Leland Av.
 Utica, NY

NYSDEC Spill No.: 0802496		PIN No.: 04249	
Project No.: AD600479	Approx. Scale: 1 inch = 50 feet	Date: April 2010	

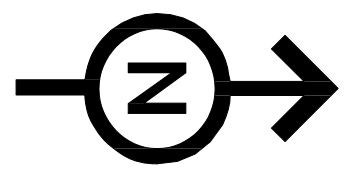
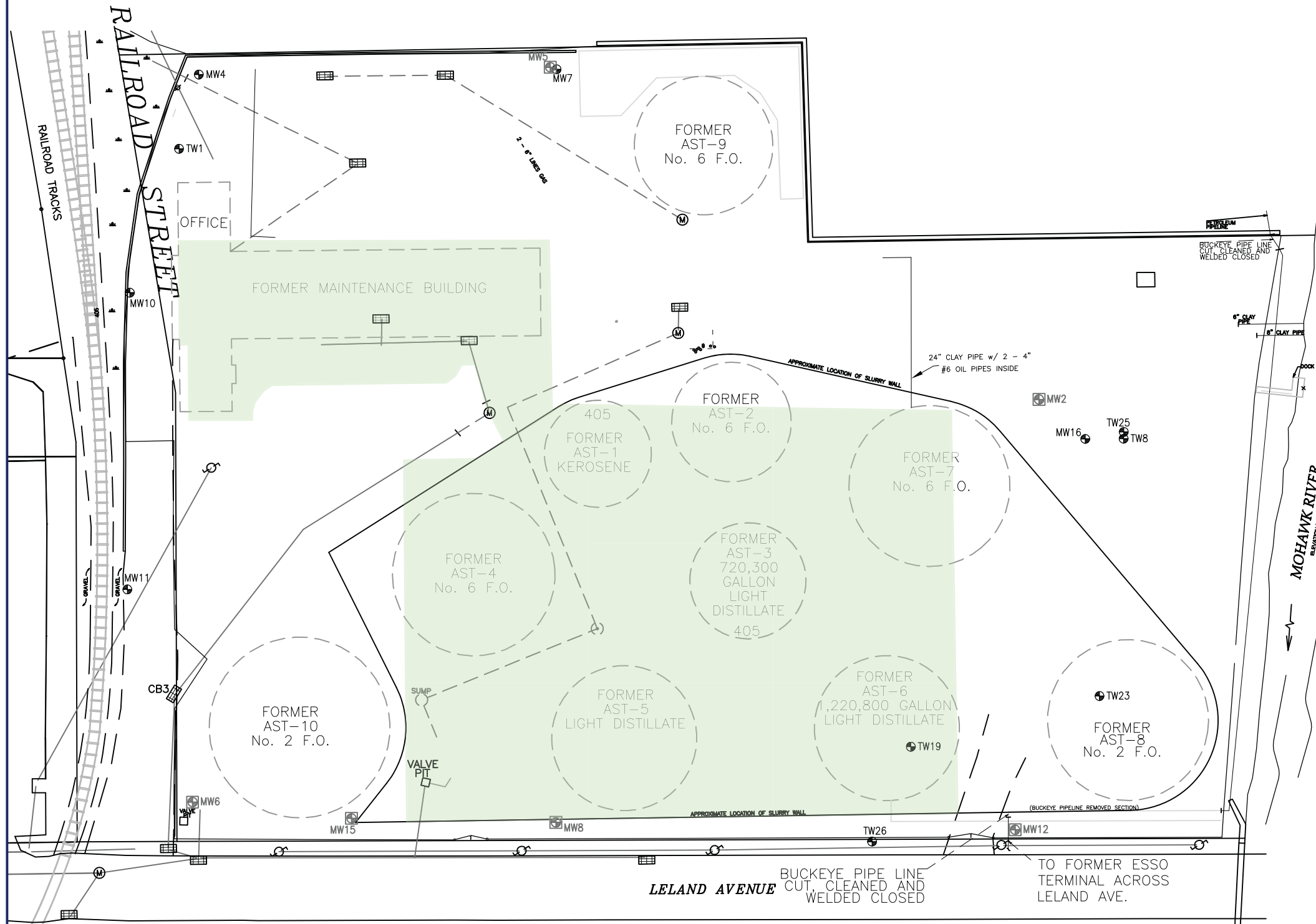


Figure 4a

LEGEND

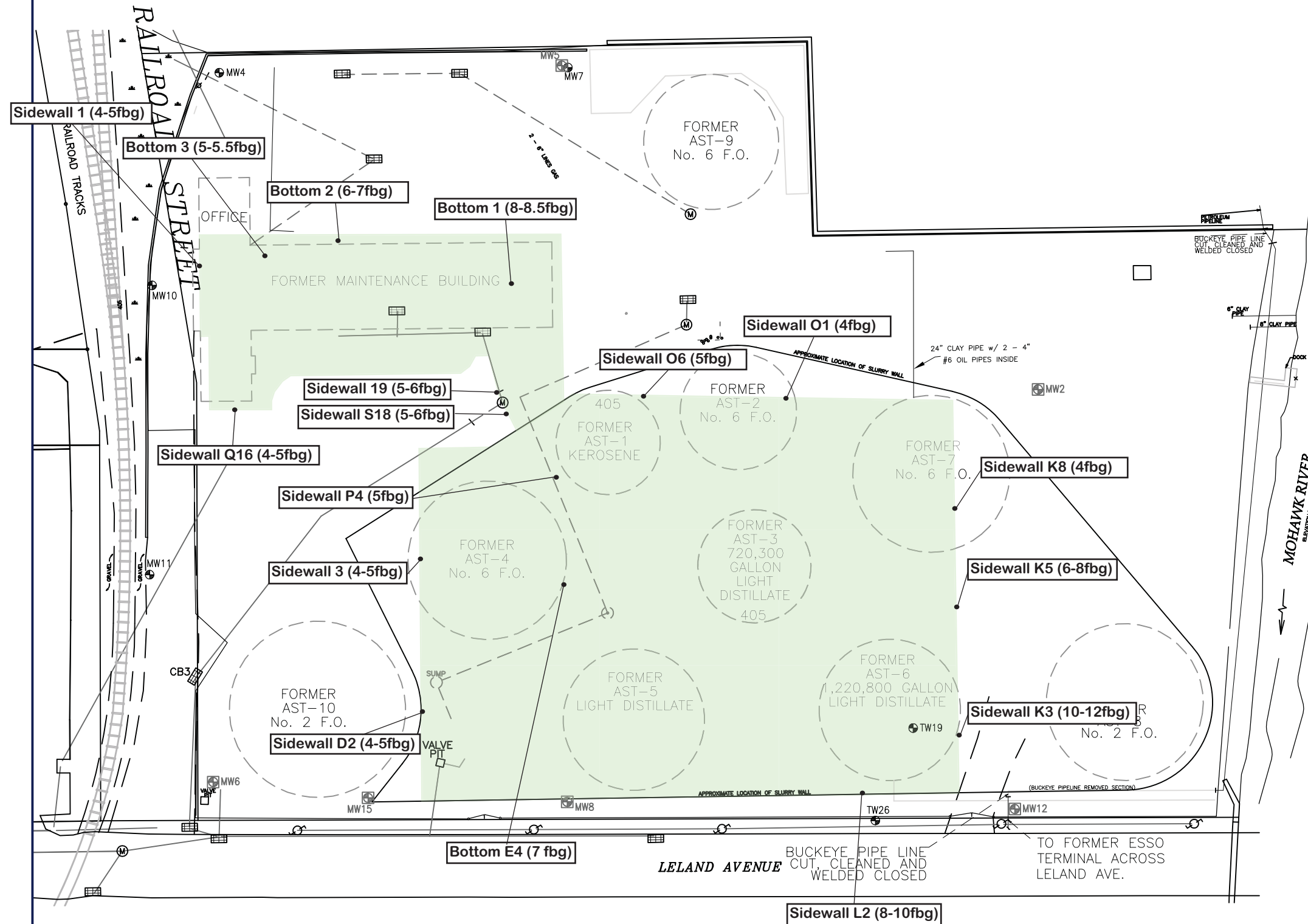
- PROPERTY BOUNDARY
- x - FENCE
- [Grid Symbol] CATCH BASIN
- (M) UTILITY MANHOLE
- (P) UTILITY POLE
- (W) MONITORING WELL
- (W with cross) DESTROYED MONITORING WELL
- [Green Shaded Area] PROPOSED EXCAVATION AREA



DRAFTED BY: E.M.E. (N.J.)	APPROXIMATE EXCAVATION AREA		
CHECKED BY: KAT	NYSDEC SPILL #88-09026 201 LELAND AVENUE UTICA, NEW YORK		
REVIEWED BY: JD	Groundwater & Environmental Services, Inc. 300 GATEWAY PARK DRIVE, NORTH SYRACUSE, NY 13212		
NORTH 	SCALE IN FEET 0 APPROXIMATE 60	DATE 11-5-12	FIGURE 4b

LEGEND

- PROPERTY BOUNDARY
- x - FENCE
- CATCH BASIN
- UTILITY MANHOLE
- UTILITY POLE
- MONITORING WELL
- DESTROYED MONITORING WELL
- PROPOSED EXCAVATION AREA



DRAFTED BY: E.M.E. (N.J.)	CONFIRMATORY SAMPLE LOCATION MAP		
CHECKED BY: KAT	NYSDEC SPILL #88-09026 201 LELAND AVENUE UTICA, NEW YORK		
REVIEWED BY: JD	Groundwater & Environmental Services, Inc. 300 GATEWAY PARK DRIVE, NORTH SYRACUSE, NY 13212		
NORTH 	SCALE IN FEET 0 APPROXIMATE 60	DATE 11-5-12	FIGURE 4

APPENDIX A

Excavation Work Plan

APPENDIX A – EXCAVATION WORK PLAN

A-1 NOTIFICATION

At least 15 days prior to the start of any activity that is anticipated to encounter remaining contamination, the Site owner or their representative will notify the Department. Currently, this notification will be made to:

Peter S. Ouderkirk, P.E.
Environmental Remediation Division of Environmental Remediation
317 Washington Street
Watertown, New York 13601

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent, plans for Site re-grading, intrusive elements or utilities to be installed below the soil cover, estimated volumes of contaminated soil to be excavated and any work that may impact an engineering control,
- A summary of environmental conditions anticipated in the work areas, including the nature and concentration levels of contaminants of concern, potential presence of grossly contaminated media, and plans for any pre-construction sampling;
- A schedule for the work, detailing the start and completion of all intrusive work,
- A summary of the applicable components of this EWP,
- A statement that the work will be performed in compliance with this EWP and 29 CFR 1910.120,
- A copy of the contractor's health and safety plan, in electronic format, if it differs from the HASP provided in Appendix D of this document,
- Identification of disposal facilities for potential waste streams,
- Identification of sources of any anticipated backfill, along with all required chemical testing results.

A-2 SOIL SCREENING METHODS

Visual, olfactory and instrument-based soil screening will be performed by a qualified environmental professional during all remedial and development excavations into known or potentially contaminated material (remaining contamination). Soil screening will be performed regardless of when the invasive work is done and will include all excavation and invasive work performed during development, such as excavations for foundations and utility work, after issuance of the COC.

Soils will be segregated based on previous environmental data and screening results into material that requires off-Site disposal, material that requires testing, material that can be returned to the subsurface, and material that can be used as cover soil.

A-3 STOCKPILE METHODS

Soil stockpiles will be continuously encircled with a berm and/or silt fence. Hay bales will be used as needed near catch basins, surface waters and other discharge points.

Stockpiles will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced.

Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by NYSDEC.

A-4 MATERIALS EXCAVATION AND LOAD OUT

A qualified environmental professional or person under their supervision will oversee all invasive work and the excavation and load-out of all excavated material.

The owner of the property and its contractors are solely responsible for safe execution of all invasive and other work performed under this Plan.

The presence of utilities and easements on the Site will be investigated by the qualified environmental professional. It will be determined whether a risk or impediment to the planned work under this SMP is posed by utilities or easements on the Site.

Loaded vehicles leaving the Site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State, local, and NYSDOT requirements (and all other applicable transportation requirements).

A truck wash will be operated on-Site. The qualified environmental professional will be responsible for ensuring that all outbound trucks will be washed at the truck wash before leaving the Site until the activities performed under this section are complete.

Locations where vehicles enter or exit the Site shall be inspected daily for evidence of off-Site soil tracking.

The qualified environmental professional will be responsible for ensuring that all egress points for truck and equipment transport from the Site are clean of dirt and other materials derived from the Site during intrusive excavation activities. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to Site-derived materials.

A-5 MATERIALS TRANSPORT OFF-SITE

All transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 NYCRR Part 364. Haulers will be appropriately licensed and trucks properly placarded.

Material transported by trucks exiting the Site will be secured with tight-fitting covers. Loose-fitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.

All trucks will be washed prior to leaving the Site. Truck wash waters will be collected and disposed of off-Site in an appropriate manner.

Trucks will be prohibited from stopping and idling in the neighborhood outside the project Site.

Egress points for truck and equipment transport from the Site will be kept clean of dirt and other materials during Site remediation and development.

Queuing of trucks will be performed on-Site in order to minimize off-Site disturbance. Off-Site queuing will be prohibited.

A-6 MATERIALS DISPOSAL OFF-SITE

All soil/fill/solid waste excavated and removed from the Site will be treated as contaminated and regulated material and will be transported and disposed in accordance with all local, State (including 6NYCRR Part 360) and Federal regulations. If disposal of soil/fill from this Site is proposed for unregulated off-Site disposal (i.e. clean soil removed for development purposes), a formal request with an associated plan will be made to the NYSDEC. Unregulated off-Site management of materials from this Site will not occur without formal NYSDEC approval.

Off-Site disposal locations for excavated soils will be identified in the pre-excavation notification. This will include estimated quantities and a breakdown by class of disposal facility if appropriate, i.e. hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, C/D recycling facility, etc. Actual disposal quantities and associated documentation will be reported to the NYSDEC in the Periodic Review Report. This documentation will include: waste profiles, test results, facility acceptance letters, manifests, bills of lading and facility receipts.

Non-hazardous historic fill and contaminated soils taken off-Site will be handled, at minimum, as a Municipal Solid Waste per 6NYCRR Part 360-1.2. Material that does not meet Track 1 unrestricted SCOs is prohibited from being taken to a New York State recycling facility (6NYCRR Part 360-16 Registration Facility).

A-7 MATERIALS REUSE ON-SITE

Chemical criteria for on-Site reuse of material have been approved by NYSDEC and are listed in Table 2. The qualified environmental professional will ensure that procedures defined for materials reuse in this SMP are followed and that unacceptable material does not remain on-Site. Contaminated on-Site material, including historic fill and contaminated soil, that is acceptable for re-use on-Site will be placed below the demarcation layer or impervious surface, and will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines.

Any demolition material proposed for reuse on-Site will be sampled for asbestos and the results will be reported to the NYSDEC for acceptance. Concrete crushing or processing on-Site will not be performed without prior NYSDEC approval. Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the Site will not be reused on-Site.

A-8 FLUIDS MANAGEMENT

All liquids to be removed from the Site, will be handled, transported and disposed in accordance with applicable local, State, and Federal regulations. Dewatering, purge and development fluids will not be recharged back to the land surface or subsurface of the Site, but will be managed off-Site.

Discharge of water generated during large-scale construction activities to surface waters (i.e. a local pond, stream or river) will be performed under a SPDES permit.

A-9 COVER SYSTEM RESTORATION

After the completion of soil removal and any other invasive activities the cover system will be restored in a manner that complies with the RAWP, decision document, or Record of Decision. If the type of cover system changes from that which exists prior to the excavation (i.e., a soil cover is replaced by asphalt), this will constitute a modification of the cover element of the remedy and the upper surface of the 'Remaining Contamination. A figure showing the modified surface will be included in the subsequent Periodic Review Report and in any updates to the Site Management Plan.

A-10 BACKFILL FROM OFF-SITE SOURCES

All materials proposed for import onto the Site will be approved by the qualified environmental professional and will be in compliance with provisions in this SMP prior to receipt at the Site.

Material from industrial Sites, spill Sites, or other environmental remediation Sites or potentially contaminated Sites are not permitted to be imported to this Site.

All imported soils must meet the backfill and cover soil quality standards established in 6NYCRR 375-6.7(d). Soils that meet 'exempt' fill requirements under 6

NYCRR Part 360, but do not meet backfill or cover soil objectives for this Site, will not be imported onto the Site without prior approval by NYSDEC. Solid waste is not permitted to be imported onto this Site.

Trucks entering the Site with imported soils will be securely covered with tight fitting covers. Imported soils will be stockpiled separately from excavated materials and covered to prevent dust releases.

A-11 STORMWATER POLLUTION PREVENTION

Barriers and hay bale checks will need to be installed and inspected once a week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by NYSDEC. All necessary repairs shall be made immediately.

Accumulated sediments will be removed as required to keep the barrier and hay bale check functional.

All undercutting or erosion of the silt fence toe anchor shall be repaired immediately with appropriate backfill materials.

Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.

Erosion and sediment control measures identified in the SMP shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters

Silt fencing or hay bales will be installed around the entire perimeter of the construction area.

A-12 CONTINGENCY PLAN

If underground tanks or other previously unidentified contaminant sources are found during post-remedial subsurface excavations or development related construction,

excavation activities will be suspended until sufficient equipment is mobilized to address the condition.

Sampling will need to be performed on product, sediment and surrounding soils, etc. as necessary to determine the nature of the material and proper disposal method. Chemical analysis will be performed for a full list of analytes (TAL metals; TCL volatiles and semi-volatiles; TCL pesticides and PCBs), unless the Site history and previous sampling results provide a sufficient justification to limit the list of analytes. In this case, a reduced list of analytes will be proposed to the NYSDEC for approval prior to sampling.

Identification of unknown or unexpected contaminated media identified by screening during invasive Site work will be promptly communicated by phone to NYSDEC's Project Manager. Reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline.

A-13 ODOR CONTROL PLAN

This odor control plan is capable of controlling emissions of nuisance odors off-Site. Specific odor control methods to be used on a routine basis will include volatile organic compounds. If nuisance odors are identified at the Site boundary, or if odor complaints are received, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all odor events and of any other complaints about the project. Implementation of all odor controls, including the halt of work, is the responsibility of the property owner's Remediation Engineer, and any measures that are implemented will be discussed in the Periodic Review Report.

All necessary means will be employed to prevent on- and off-Site nuisances. At a minimum, these measures will include: (a) limiting the area of open excavations and size of soil stockpiles; (b) shrouding open excavations with tarps and other covers; and (c) using foams to cover exposed odorous soils. If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include: (d) direct load-out

of soils to trucks for off-Site disposal; (e) use of chemical odorants in spray or misting systems; and, (f) use of staff to monitor odors in surrounding neighborhoods.

If nuisance odors develop during intrusive work that cannot be corrected, or where the control of nuisance odors cannot otherwise be achieved due to on-Site conditions or close proximity to sensitive receptors, odor control will be achieved by sheltering the excavation and handling areas in a temporary containment structure equipped with appropriate air venting/filtering systems.

A-14 DUST CONTROL PLAN

A dust suppression plan that addresses dust management during invasive on-Site work will include, at a minimum, the items listed below:

- Dust suppression will be achieved through the use of a dedicated on-Site water truck for road wetting. The truck will be equipped with a water cannon capable of spraying water directly onto off-road areas including excavations and stockpiles.
- Clearing and grubbing of larger Sites will be done in stages to limit the area of exposed, unvegetated soils vulnerable to dust production.
- Gravel will be used on roadways to provide a clean and dust-free road surface.
- On-Site roads will be limited in total area to minimize the area required for water truck sprinkling.

A-15 OTHER NUISANCES

A plan for rodent control will be developed and utilized by the contractor prior to and during Site clearing and Site grubbing, and during all remedial work.

A plan will be developed and utilized by the contractor for all remedial work to ensure compliance with local noise control ordinances.

APPENDIX B

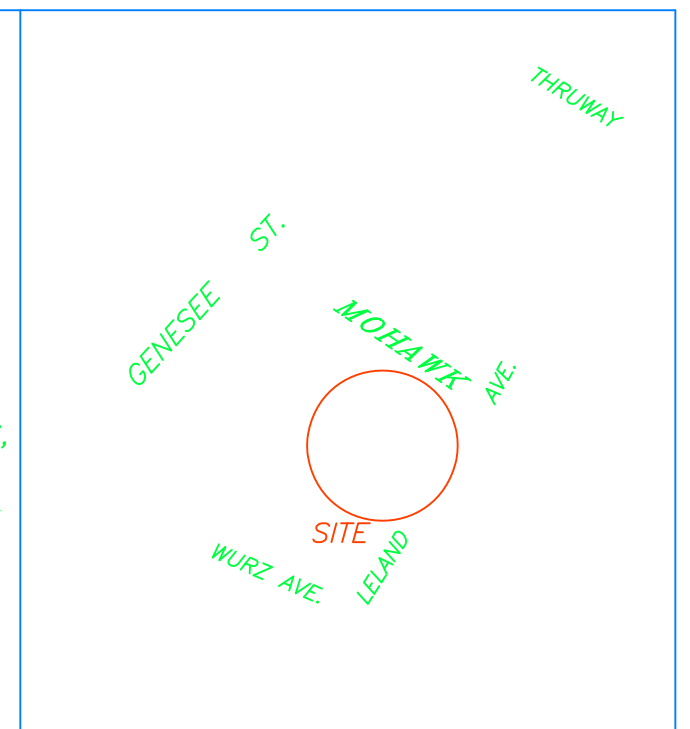
ALTA/ACSM Land and Title Survey

EASEMENTS & RIGHTS OF WAY

- 1.) Right of way for a spur track, referred to as "Weaver Siding", beginning at the northerly line of land now or formerly of New York Central Railroad Company east of Leland Avenue and extending to and along Railroad Street to the lands of the Standard Oil Company, now Buckeye Terminals, LLC, for a perpetual railroad connection with now or formerly, the New York Central Railroad Company's railroad for the benefit of the herein surveyed property. Said right of way is to be used in common with others. See Liber 2224 of Deeds at Page 89, recorded June 28, 1985.
- 2.) Right of way granted to Frank Burgess, now Herkimer Petroleum, to construct a spur or sidetrack from the property herein surveyed, and over and across Railroad Street, to connect with the above mentioned spur. See agreement in Liber 831 of Deeds at Page 147, recorded March 26, 1924.
- 3.) Right of Way, in common with others, to the use of a 50' strip of land extending northerly from Wurz Avenue easterly of and adjoining the lands of Standard Oil Company, now Buckeye Terminals, LLC, and also that 50' strip of land known as Railroad Street, extending easterly from Standard Oil Company, now Buckeye Terminals, LLC, along and southerly of the subject premises, so as to connect with Leland Avenue. See Liber 772 of Deeds at Page 56, recorded March 2, 1920.
- 4.) Easement granted to the Board of Commissioners for changing the channel of the Mohawk River per Liber 634 of Deeds at Page 7, recorded May 18, 1907.
- 5.) Right of Way to Utica Gas and Electric Company per Liber 630 of Deeds at Page 468, recorded March 24, 1908. No evidence of said right of way found in the field.
- 6.) Subject to an agreement for the placement of an 8" pipe line per Liber 1598 of Deeds at Page 345 recorded October 8, 1958. No evidence of pipeline found in field.

MAP REFERENCES

1. "Lands of F.G. & C.C. Weaver." by S.E. Babcock, Chief Engineer, dated December 27, 1900 and recorded May 18, 1907 in the Oneida County Clerk's Office in Map Book 2 at Page 22-A.
2. "Lands of F.G. & C.C. Weaver." by S.E. Babcock, Chief Engineer, dated December 27, 1900 and recorded May 18, 1907 in the Oneida County Clerk's Office in Map Book 2 at Page 23-A.
3. "Survey of Land Owned By George F. Weaver's Sons Co." by Walter Melius, Civ. Engr., dated November 6, 1917 and recorded March 2, 1920 in the Oneida County Clerk's Office in Map Book 3 at Page 48-A.
4. "Map Showing Property of Geo. F. Weaver's Sons Co." by Kemper McLaughlin Co., Inc., Civil Engineers, dated April 22, 1926 and recorded May 18, 1926 in the Oneida County Clerk's Office in Map Book 32 at Page 19.



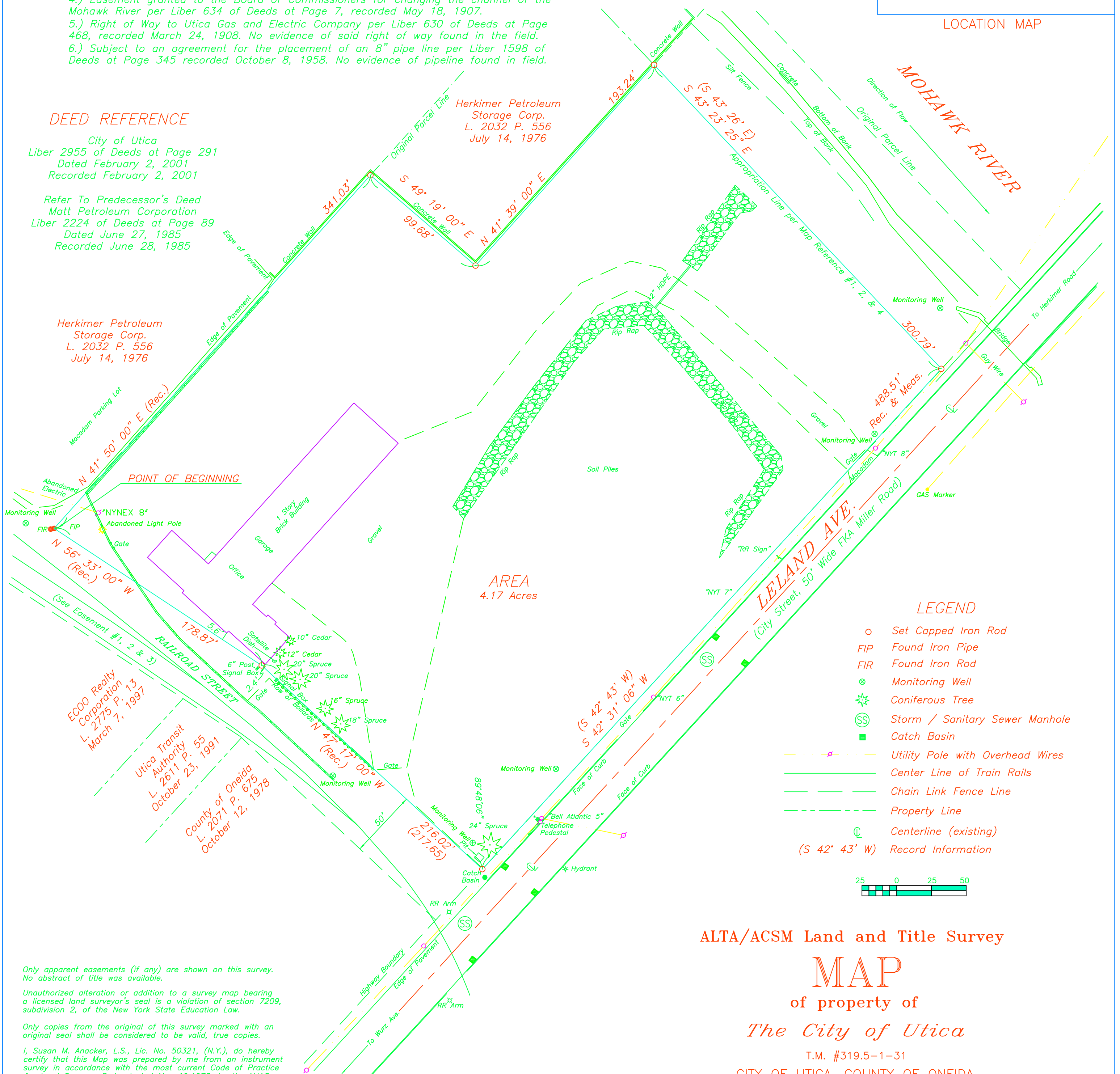
LOCATION MAP

DEED REFERENCE

City of Utica
Liber 2955 of Deeds at Page 291
Dated February 2, 2001
Recorded February 2, 2001

Refer To Predecessor's Deed
Matt Petroleum Corporation
Liber 2224 of Deeds at Page 89
Dated June 27, 1985
Recorded June 28, 1985

Herkimer Petroleum
Storage Corp.
L. 2032 P. 556
July 14, 1976



Only apparent easements (if any) are shown on this survey.
No abstract of title was available.

Unauthorized alteration or addition to a survey map bearing a licensed land surveyor's seal is a violation of section 7209, subdivision 2, of the New York State Education Law.

Only copies from the original of this survey marked with an original seal shall be considered to be valid, true copies.

I, Susan M. Anacker, L.S., Lic. No. 50321, (N.Y.), do hereby certify that this Map was prepared by me from an instrument survey in accordance with the most current Code of Practice for Land Surveys, first adopted May 19, 1973, by the N.Y.S. Association of Professional Land Surveyors.
This Certification shall run only to the following:

- 1.) City of Utica
- 2.) New York State

ALTA/ACSM Land and Title Survey

MAP of property of The City of Utica

T.M. #319.5-1-31

CITY OF UTICA, COUNTY OF ONEIDA
STATE OF NEW YORK

Dated: April 23, 2010

Scale: 1" = 50'

Drawn By: S.D.A.

Survey and Map by: Susan M. Anacker, Professional Land Surveyor
Susan M. Anacker, L.S. Lic # 50321
11082 Davis Road East, Deerfield, New York 13502
(315) 724-6800

April 23, 2010

ORIGINAL STAMPED IN RED INK

APPENDIX C

Environmental Easement

When this report was submitted the NYSDEC and the City of Utica were working on finalizing the Environmental Easement. Following completion of the Easement a copy will be attached to this Site Management Plan in place of this page.

APPENDIX D

Health and Safety Plan

Example Former Matt Petroleum HASP

NYSDEC ~ #88-09026
FORMER MATT PETROLEUM
201 Leland Ave.
Utica, NY 13501

EMERGENCY PHONE NUMBERS

Local Police **911**

Local Fire **911**

Local Rescue **911**

Local Hospital: Name, Telephone Number & Address:

FAXTON St. LUKE'S HEALTHCARE (315) 624-6000

1656 CHAMPLIN AVE.

UTICA, NY 13501

Directions to Hospital: **See Attached Map and Directions**

National Response Center (NRC): **1-800-424-8802**

The NRC should be contacted in the event of a significant chemical release. Once notified, the NRC will activate a federal response to the spill. *Please confirm with the client and project manager to determine if the spill should be reported.*

Poison Control Center: **1-800-222-1222**

The Poison Control Center should be contacted in the event of accidental poisoning. They will provide information on immediate treatment for the poisoning.

Nearest Telephone: **Company Cell Phone With Staff**

Groundwater & Environmental Services, Inc. Contacts:

Title: _____

Office: _____
Cell Phone: _____

Title: _____

Office: _____
Cell Phone: _____

Title: _____

Office: _____
Cell Phone: _____

NYSDEC Representative:

Peter Ouder Kirk

Office: **(315) 785-2523**

Cell: **(315) 778-0457**

State Agency Representative

NYS DEC Region 6

Office: **(315) 785-2513**

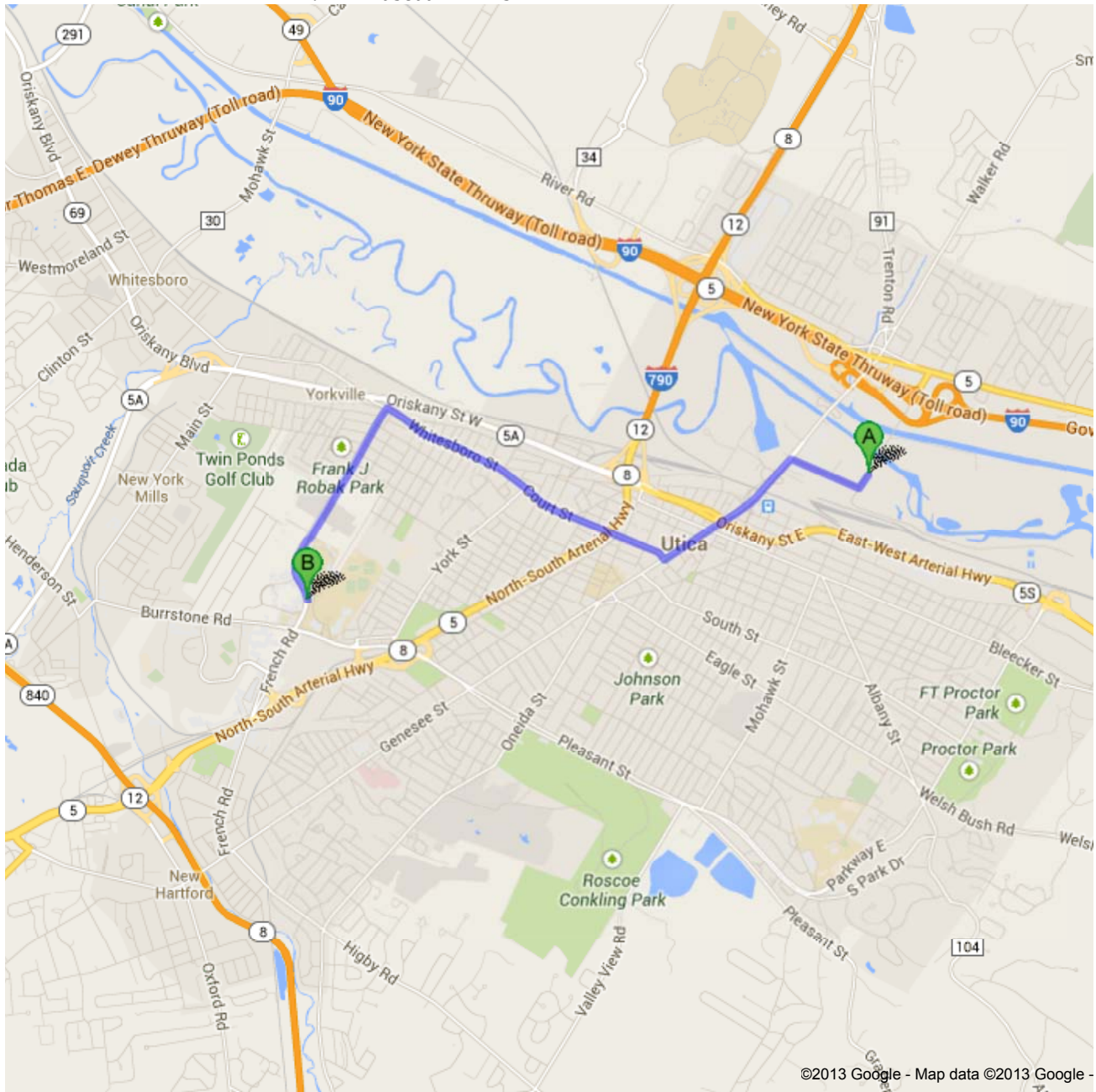
**DO NOT TRANSPORT SERIOUSLY INJURED
CALL LOCAL RESCUE**

HOSPITAL ROUTE MAPS

FIGURE 1



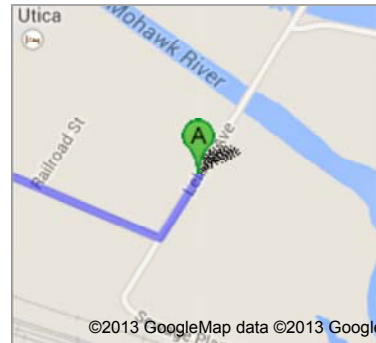
**Directions to Faxton St. Luke's Healthcare: St.
Luke's Campus**
(315) 624-6000
1656 Champlin Ave, Utica, NY 13502
4.4 mi – about 12 mins



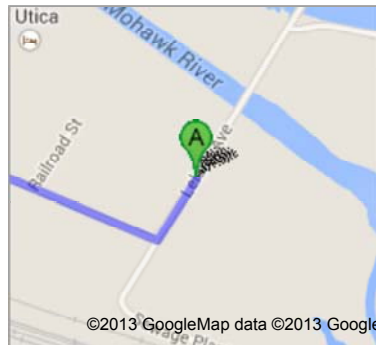


Leland Ave

Former Matt Petroleum
201 Leland Ave.
Utica, New York 13501



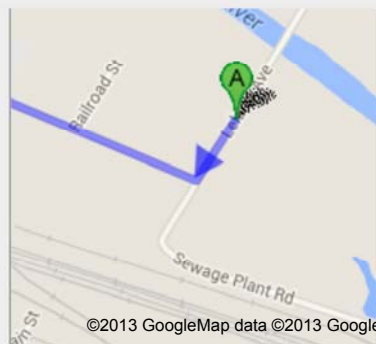
1. Head **southwest** on **Leland Ave** toward **Wurz Ave**



go 489 ft
total 489 ft



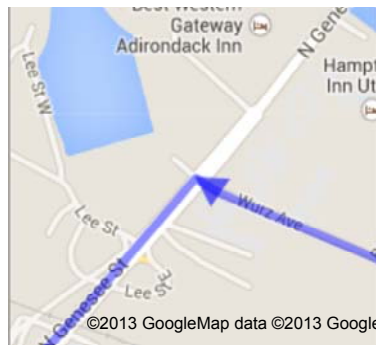
2. Take the 1st right onto **Wurz Ave**
About 1 min



go 0.4 mi
total 0.5 mi



3. Take the 1st left onto **N Genesee St**
About 3 mins



go 0.9 mi
total 1.4 mi



4. Turn right onto **Court St**
About 3 mins



go 1.1 mi
total 2.5 mi

5. Continue onto **Whitesboro St**
About 1 min



go 0.7 mi
total 3.2 mi



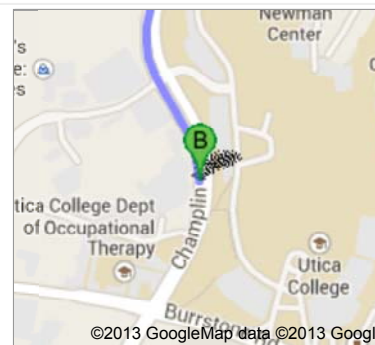
6. Turn left onto **Champlin Ave**
Destination will be on the right
About 2 mins



go 1.2 mi
total 4.4 mi



Faxton St. Luke's Healthcare: St. Luke's Campus
1656 Champlin Ave, Utica, NY 13502



These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

Map data ©2013 Google

Directions weren't right? Please find your route on maps.google.com and click "Report a problem" at the bottom left.

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FIGURES

Figure 1 Route to Local Hospital Map

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Attachment B	Exposure Monitoring Program for the Contaminants of Concern
Attachment C	Material Safety Data Sheets (If available for client)
Attachment D	Job Safety Analysis Sheets and Daily Site Safety Checklists
Attachment E	Pre-entry Meeting Notes
Attachment F	Sign-off Sheet
Attachment G	Incident/Injury Case Management
Attachment H	Site Specific Decontamination Plan

1.0

INTRODUCTION

1.1 APPROVALS

Prepared By: _____ Date: _____
(Employee - title)

Reviewed by: _____ Date: _____
(Employee - Project Manager)

Approved By: _____ Date: _____
(Employee - Local Health and Safety Officer)

1.2 SITE BACKGROUND

Project Name: _____ NYSDEC Utica

Site Address: _____ 201 Leland Ave, Utica, NY 13501

Nearest Intersection: _____ Incinerator Road and Leland Ave.

Township/Municipality: _____ Utica

County: _____ Oneida

Additional Site Information: Former Matt Petroleum Location –

1.3 SCOPE OF WORK

Task 1 - _____ General Site Activities – Site Visit

Task 2 - _____

Task 3 - _____

Task 4 - _____

Task 5 - _____

Task 6 _____

Task 7 _____

Task 8 _____

Task 9 _____

Task 10 _____

2.0 PROJECT ORGANIZATION AND RESPONSIBILITIES

<u>Responsibility</u>	<u>Name</u>	<u>Task Description</u>
Project Manager	_____	Oversee and coordinate all budget and technical aspects for the project
Local Health & Safety Officer	_____	Coordinate all health and safety operations for the project site
Site Supervisor	_____	Oversee and coordinate all health and safety aspects from the project site

3.0 OSHA TRAINING REQUIREMENTS

3.1 GENERAL TRAINING REQUIREMENTS

All personnel performing activities covered by this plan must be trained in accordance with the requirements of 29 CFR 1910.120(e). The Project Manager will verify and document that all personnel meet the applicable training requirements prior to the start of site work, including:

- OSHA 1910.120 initial 40-hour training
- OSHA annual eight-hour refresher training within the last year
- OSHA eight-hour supervisory training for on-site managers and supervisors
- At least one employee will have American Red Cross (or equivalent) first aid and CPR training, and will be present on-site at all times

Documentation for training certification will be maintained by the Local HSO.

Subcontractors chosen to perform well drilling, excavation, materials disposal, utility installation in trenches, and any other site activities where the potential exists for contact with contaminants must provide written documentation of HAZWOPER training, for each of his employees who will be involved in activities at this site, before the start of work.

3.2 PRE-ENTRY MEETING

A Pre-entry meeting reviewing the Site Specific Health and Safety Plan for all proposed work location personnel shall be held and documented in this HASP and in the site log. This meeting shall be prior to the commencement of any on-site work activities.

A site-specific briefing is provided to all site visitors who enter this site beyond the site entry point. For visitors, the site-specific briefing provides information about site hazards, the site lay-out including work zones and places of refuge, the emergency alarm system and emergency evacuation procedures, and other pertinent safety and health requirements as appropriate.

3.3 FIRST AID/CPR TRAINING

At least one member of the staff assigned to the project will have American Red Cross (or equivalent) First Aid and cardiopulmonary resuscitation (CPR) training. At least one trained individual will be present on-site at all times. The Local HSO will maintain all training documentation.

4.0 MEDICAL SURVEILLANCE REQUIREMENTS

4.1 GENERAL MEDICAL SURVEILLANCE REQUIREMENTS

All personnel performing activities requiring the use of an air-purifying respirator covered by this plan must be active participants in an ongoing medical monitoring program in accordance with the requirements of 29 CFR 1910.120(f). Subcontractors chosen to perform selected site activities must provide written documentation of such, for each employee who will be involved in activities at this site, before the start of work.

4.2 DRUG AND ALCOHOL COMPLIANCE

All personnel performing activities covered by this plan must have had a negative drug and alcohol screen performed within the last 12 months.

4.3 ACCIDENT / INCIDENT MEDICAL SURVEILLANCE

As a follow-up to a work-related injury, all employees are entitled and encouraged to seek medical attention. All accidents and potential exposures must be reported **immediately** to the Local HSO, who will coordinate with CHSSE to arrange for appropriate medical attention. Depending on the type of incident, it may be critical to perform tests within 24 to 48 hours. *Failure to report an injury or incident immediately will result in disciplinary action.*

Events surrounding near-miss accidents/injuries will be recorded in the daily log and documented in accordance with the Incident Reporting Procedures.

5.0 HAZARD ASSESSMENT

Job Safety Analyses (JSAs) are required for all appropriate site activities. Each JSA must identify and quantify the health and safety hazards associated with each task and site operation, and to evaluate risks to workers. Using this information, appropriate control methods are selected to mitigate or (preferably) eliminate the identified risks.

5.1 CHEMICAL HAZARDS

5.1.1 Contaminant Characterization and Potential Routes of Exposure

The main routes of exposure for field personnel include:

- Inhalation of contaminant vapors;
- Inhalation of contaminated particulate matter;
- Ingestion of contaminated material; or
- Dermal absorption of contaminated material.
- Injection of contaminated material

Site personnel can reduce their exposure potential by:

- Using the proper PPE;
- Practicing contamination avoidance;
- Following proper decontamination procedures; and
- Observing good personnel hygiene.

5.1.2 General Chemical Data

In order to protect site personnel from the hazards associated with site contaminants of concern found during projects at Sites, an Exposure Monitoring Program will be implemented to control potential chemical exposures. **Attachment B** contains this program along with data tables on the contaminants of concern. These tables provide information on each contaminant's characteristics, such as routes of exposure, health hazards, ionization potentials, exposure limits, etc. All hazardous chemicals brought on-site by personnel or its subcontractors will be managed in accordance with 29 CFR 1910.1200 and the Hazard Communication Program. This will include: proper labeling, an inventory list of all hazardous materials brought onsite, and a copy of each chemical's Material Safety Data Sheet (MSDS) will be maintained on-site. **Attachment C** contains MSDSs of hazardous substances generally used by personnel.

5.2 PHYSICAL HAZARDS

A variety of physical hazards may be present, but these hazards are similar to those associated with any field project.

5.2.1 Slips/Trips/Falls/Cuts

- * Utilize proper housekeeping practices, such as removal of debris and tools from the work area to keep the area clear of trip hazards.
- * Use caution tape or barricade fencing where warranted to keep unauthorized personnel from entering the work area.
- * Replace manhole covers securely to prevent tripping and vehicle accidents.
- * Use hose cutters when cutting piping.
- * Walkways and work spaces will be kept clear of cords, hoses, pipes, etc. that cause trip hazards.
- * If trip hazards cannot be removed from the work area, they shall be taped down and

cones shall be placed to identify the hazard.

5.2.2 Excessive Noise

- * Use hearing protection during loud mechanical operations such as drilling, Geoprobings and excavating operations, inside a remedial shed when equipment is operating loudly or in other high decibel situations.

5.2.3 Airborne Particulate (ears, eyes, nose, mouth, inhalation)

- * Eye protection is to be worn at all times on site.
- * Respiratory protection is to be worn when site activities cause excessive particulates, such as performing carbon change-outs.

5.2.4 On-site Traffic

- * Safety vest shall be worn and safety cones placed around the worksite as specified in the *Traffic Control Procedures*.
- * Use caution tape or barricade fencing where warranted to keep unauthorized personnel from entering the work area.

5.2.5 Ladder Safety

- * Ladders must be inspected prior to use. Any damaged ladder will be discarded immediately.
- * Painted ladders are forbidden.
- * Never stand on the top step of the ladder.
- * Extension ladders must extend 36" beyond work area.
- * Pitch ladders at a 4:1 ratio.
- * Extension and straight ladders must be tied off.
- * Fall protection must be worn when working at heights six (6) feet or more above ground.

5.2.6 Air Compressor

- * Eye protection is to be worn at all times on site.
- * Hot steam will burn skin upon contact.
- * Use proper pressure relief valves before performing O&M on an air compressor.

5.2.7 Electrical

- * Inspect all electrical equipment and extension cords prior to use.
 - * All electrical circuits and equipment must be grounded in accordance with the NEC regulations.
 - * Spark producing equipment is not to be used in operating remedial system sheds.
 - * Lockout/Tagout procedures will be in effect if equipment is to be repaired. *
- Use three-pronged plugs and heavy-duty extension cords.
- * A GFCI is required when using an extension cord.
 - * Workers must not have wet hands or be standing in water while plugging/unplugging

energized equipment.

- * **Plugs and receptacles will be kept out of water (unless they are approved for submersion).**

5.2.8 Power Tools

- * Equipment will be inspected for defects prior to use.
- * Eye protection is to be worn at all times on site.
- * Employees using tools that may subject their hands to an injury, such as cuts, abrasions, punctures, or burns will wear protective gloves.
- * Loose or frayed clothing, dangling jewelry, or loose long hair will not be worn when working with power tools.
- * A GFCI will be used with all power tool operations.
- * Shielding or guarding will be in effect if applicable.

5.2.9 Back Strain

- * Utilize proper lifting procedures when loading and unloading heavy equipment.
- * Bend down at the knees rather than bending the back.
- * Use a mechanical lifting device or a lifting aid such as hand carts, drum dollies or lift gates when lifting heavy objects.

5.2.10 Site Security

- * Do not permit anyone who is not properly trained and outfitted with the appropriate PPE to enter the Exclusion or Contamination Reduction Zones
- * Use caution tape or barricade fencing where warranted to keep unauthorized personnel from entering the work area.
- * On sites where it is believed that security is an issue, two employees will be used for all field work. The “buddy-system” will be in place and the two employees will be in constant communication and within each others line of sight. There will be a cellular phone available to call 911 if a violent condition presents itself.
- * When acts of violence occur or when an employee(s) feels that they are being placed in a threatening position they must immediately leave the site.
- * All potential acts of violence or threats by non- personnel must be immediately reported to the Site Operations Manager and the Local Health and Safety Officer. The situation will be discussed to determine future action on the site in question.
- * If any employee notices suspicious persons or activities in a office or in the vicinity of a work area, he or she should immediately report the observation to his or her supervisor or Site Operations Manager.

5.2.11 Biological Hazards (insects, snakes, poisonous plants and animals)

- * Do not touch or contact poisonous plants, such as poison ivy/poison oak.
- * If available, apply an over-the-counter barrier cream, such as Ivy Block® to prevent contact with plant oils.
- * Wash hands and arms immediately with soap and water if skin contacts the plants.

- * Wear long pants with socks pulled over legs to prevent skin contact with plants and insects.
- * Inspect yourself carefully for insects or ticks after being outdoors.
- * Spray any wasp/hornet nests with an insect repellent from a safe distance recommended by the product's manufacturer.
- * **Do not antagonize snakes or wild animals.**

5.2.12 **Heat Stress**

- * Know and recognize the signs and symptoms of heat-related illnesses, as follows:
Heat cramps
Heat exhaustion:
 Cool, moist, pale, or flushed skin
 Headache
 Nausea
 Dizziness, weakness and exhaustion
Heat stroke:
 Red, hot, dry, skin
 Changes in consciousness
 Rapid, weak pulse
 Rapid, shallow breathing
- * Adjust work schedules to provide time intervals for intake of juices, juice products and water in an area free from contamination.

5.2.13 **Cold Stress**

- * Know and recognize the signs and symptoms of cold-related illnesses, as follows:
Frostbite:
 Lack of feeling in the affected area
 Skin that appears waxy, is cold to the touch or is discolored (flushed, white, yellow or blue)
Hypothermia:
 Shivering
 Numbness
 Glassy stare
 Apathy
 Loss of consciousness
- * Have appropriate clothing available and dress in layers to protect against cold weather.
- * Adjust work schedules to provide sufficient rest periods in a heated area for warming up during operations conducted in cold weather.

5.2.14 **Confined Space (CS) Entry**

- * Confined Space Entry is prohibited unless authorized by the project manager or local health and safety officer.
- * The *Confined Space Entry Requirements* must be followed, including but not limited to air monitoring, presence of attendant and permit completion.

5.2.15 Fall Hazards

- * OSHA-approved man-lifts and ladders will be used for access to elevated locations.
- * Employees must wear a safety belt with a lanyard attached to the boom or basket when working from a man-lift.
- * If the elevated location is inaccessible by a man-lift, CHSSE shall be contacted to determine the appropriate fall protection.

5.2.16 Hot Work

- * A hot work permit will be completed prior to the start of the work.
- * The Site Supervisor will conduct a safety briefing on hot work rules and procedures, and all hot work participants will sign the permit.
- * Hot work will not be performed if there is a possibility of an explosive atmosphere or an oxygen-enriched atmosphere.
- * The Site Supervisor will designate a person for fire watch duty, who will have access to a properly rated fire extinguisher and will remain on-duty for one-half hour after the hot work is complete.
- * All hot work equipment will be inspected daily, prior to use. If the equipment is found to be defective, it will be removed from the site, or tagged with a "Do Not Use" sign until it is repaired.
- * All welding and cutting personnel will be trained in the safe operation of their equipment.

5.3 RADIOLOGICAL HAZARDS

If site-specific potential radiological information becomes available, the hazards will be addressed in an addendum to the HASP. Ionizing Radiation action levels can be found in Attachment B, Table 2.

6.0 SITE CONTROL MEASURES

6.1 SITE ZONES

A controlled work area should be established in the immediate vicinity of the site activities covered by this plan. Only those persons who can comply with the requirements of this plan should be allowed into this area during any work activities, which may result in exposure to the hazards associated with the specific task being performed. The work site should be marked off with at least the following items from the Traffic Control Procedures: Four (4) traffic cones with flags reaching 70 inches in combined height, caution tape, two (2) work area signs or barricades at the site entrances and a flashing amber light on the company vehicle.

When activities involve invasive activities on sites in which the Project Manager, Local HSO or the CHS have determined the area to be highly-contaminated, a three-zone system will be used to control the potential spread of contamination. These zones are characterized by the presence or absence of chemical and biological hazards and the activities contained within them.

Zone boundaries should clearly marked at all times and the flow of personnel among the zones must controlled. The site should be monitored for changing conditions that may warrant adjustment of zone boundaries. Zone boundaries are adjusted as necessary to protect personnel and clean areas. Whenever boundaries are adjusted, zone markings must also be changed and workers immediately notified of the change.

For the purpose of this plan, the following definition of terms is provided:

Exclusion Zone - The immediate area of the work activity to be performed or an area fully enclosing the hazards present. Personnel and equipment will enter and exit the Exclusion Zone from the designated access points in the Contamination Reduction Zone (CRZ).

Contamination Reduction Zone - The transition area between the contaminated and uncontaminated area. Based on monitoring results, the CRZ boundaries may be adjusted to ensure that the Support Zone remains uncontaminated. Workers and equipment exit the Exclusion Zone through the designated access point(s) into the CRZ. Workers and equipment are then decontaminated in the CRZ, according to the procedures specified in the Decontamination section of this HASP. Workers and equipment then exit the CRZ into the Support Zone through the designated access points.

If necessary, emergency decontamination procedures are implemented. Emergency decontamination procedures are described in **Section 9.2** of this HASP and in **Attachment H** (if necessary).

Support Zone - The Support Zone is the clean area of the site, beyond the outer boundary of the CRZ. There should be no contamination in this zone. Administrative, clerical, and other support functions are based in the Support Zone.

Air and surface monitoring are conducted in the Support Zone as needed to ensure that it remains uncontaminated. If contamination is detected, zone boundaries are adjusted until corrective action is taken and monitoring results indicate that this zone is again uncontaminated.

6.2 COMMUNICATIONS

Emergency numbers are listed on the cover of this HASP. Work will not be conducted on-site without access to a telephone, and site personnel will be informed of its location. If a telephone is not available on site, a cell phone will be made available for emergency use.

7.0

PERSONAL PROTECTIVE EQUIPMENT

7.1 GENERAL

Site safety and health hazards are eliminated or reduced to the greatest extent possible through engineering controls and work practices. Where hazards are still present, a combination of engineering controls, work practices, and PPE are used to protect employees.

The level of protection worn by site personnel will be enforced by the Site Supervisor. Levels of protection may be upgraded or downgraded at the discretion of the Local HSO, or CHS, based on real-time air monitoring data and prior site experience. Any changes in the level of protection will be documented. Levels of protection less than those designated in this HASP must first be approved by the CHS.

7.2 LEVEL D PROTECTION

Level D PPE provides minimal protection against chemical hazards. A respirator is not required. Level D PPE includes:

- Cotton coveralls or long pants and a shirt with sleeves
- Reflective safety vest or hi-visibility shirt.
- Safety glasses
- Steel-toe/steel-shank work boots
- Work gloves
- Hearing protection (as required by task)
- Hard Hat (as required by task)
- Chemical resistant gloves (as required by task)

7.3 MODIFIED LEVEL C PROTECTION

Modified Level C PPE includes the items listed in Section 7.2 above, and the following items:

- Full-face APR or Half-face APR respirator equipped with the appropriate chemical cartridges

7.4 LEVEL C PROTECTION

Level C PPE provides a higher level of respiratory and skin protection against chemical hazards than Level D. Level C PPE includes the items listed in Section 7.2 above, and the following items:

- Poly-coated Tyvek (yellow) or Saranex® (shiny white)
- Steel-toe/steel-shank work boots and chemical resistant over-boots, or chemical resistant steel-toe/steel shank boots
- Chemical resistant inner gloves

- Chemical resistant outer gloves
- Seal arm, leg, and zipper joints with tape, as required
- Half-face or full-face, air-purifying respirator equipped with appropriate cartridges

7.5 LEVEL A AND B PROTECTION

Level A PPE should be worn when the highest level of respiratory and skin protection is needed, or if the contaminants of concern are unknown. Level B PPE should be worn when the highest level of respiratory protection is required, but a lesser level of skin protection is needed. The tasks covered under this HASP do not require the use of Level A or B PPE.

Separate Health and Safety Plans will be developed for Level A/Level B investigations and for Emergency Responses, which may involve the use of Level A and/or Level B health and safety measures.

8.0 DECONTAMINATION

8.1 GENERAL

At a minimum, the procedures outlined below shall be followed for decontamination:

- Remove gross contamination from tools, respirator, monitoring equipment, boots, etc., prior to leaving the “exclusion zone”, using paper towels, handi-wipes, etc.
- Completely decontaminate soiled equipment in the Contamination Reduction Zone using detergent and water and dispose of all cleaning materials as follows.
 1. Due to the small quantity of waste generated during decontamination, it is allowable in most states to dispose of lightly contaminated materials in the site dumpster. It is important, however, to ensure that there is no chance of vapor generation or fluid leaking from the dumpster. At no time are materials containing free product to be disposed of in this manner. In this case, arrangements must be made for use of labeled drums and proper disposal.
 2. All decontamination materials including protective sheeting, rags, sorbents, disposable personal protective equipment, and decontamination fluids should be carefully screened with a Photo-ionization Detector (PID) prior to disposal to determine relative levels of contamination.
 3. Lightly contaminated decontamination fluids should either be treated via the site treatment system prior to discharge or disposed of via the sanitary sewer system. Highly contaminated decontamination fluids must be stored in labeled drums and

proper disposal arrangements must be made.

Note: All Federal, State, County and/or City requirements regarding disposal must be complied with.

- Dispose of contaminated gloves, Tyvek suits, used cartridges, paper towels, etc., by placing in a plastic bag and discarding in accordance with applicable standards.
- Wash hands and face thoroughly with soap and water before lunch or coffee breaks, and as soon as practical after finishing work for the day.
- Particular care should be taken to protect any skin injuries. If open wounds exist on hands or forearms, handling chemicals should be restricted or eliminated.
- Shower as soon as possible.
- A site-specific decontamination plan (if required) is located in **Attachment H**.

9.0 EMERGENCY ACTION PLAN

9.1 PERSONAL INJURY WITHIN THE EXCLUSION ZONE

Site operations shall be temporarily halted and all site personnel shall assemble in the Contamination Reduction Zone. The Site Supervisor shall evaluate the nature of the injury and, if indicated by the hazards present on site, the injured person shall be decontaminated to the extent possible prior to movement to the Support Zone.

Contact shall be made for an ambulance and with the designated medical facility (if required). An individual certified in Standard First Aid and Adult CPR may choose to initiate the appropriate first aid. No persons shall reenter the Exclusion Zone until:

- a. The conditions resulting in the emergency have been corrected;
- b. The hazards have been reassessed;
- c. The Site Safety Plan has been reviewed; and
- d. Site personnel have been briefed on any changes in the Site Safety Plan.

9.2 PERSONAL INJURY WITHIN THE DECONTAMINATION ZONE

The Site Supervisor shall evaluate the nature of the injury and, if indicated by the hazards present on site, the injured person shall be decontaminated to the extent possible prior to movement to the Support Zone.

Contact shall be made for an ambulance and with the designated medical facility (if required). An individual certified in Standard First Aid and Adult CPR may choose to initiate the

appropriate first aid.

If the injury increases risk to other site workers, all site personnel shall move to the Contamination Reduction Zone and site activities will stop until the risks can be assessed and either removed or minimized.

9.3 PERSONAL INJURY WITHIN THE SUPPORT ZONE

The Site Supervisor will assess the nature of the injury and determine if the cause of injury or loss of the injured person will affect continuation of site operations. If the injury will not affect the safety or performance of other site workers, operations may continue, with the person certified in first aid initiating the appropriate first aid and necessary follow up as stated above.

If the injury increases risk to other site workers, all site personnel shall move to the Contamination Reduction Zone and site activities will stop until the risks can be assessed and either removed or minimized.

9.4 FIRE/EXPLOSION

If a fire is observed in the incipient phase (i.e., when it begins) and if the site personnel witnessing the fire feel secure in attempting to control the fire, the individual can attempt to extinguish the fire by using the onsite fire extinguisher. The fire extinguisher should be a 10 or 20 pound (lb) dry chemical, Class A, B, and C extinguisher and is adequate for paper and wood based products (A), flammable and combustible liquids (B), and electrical (C) type fires.

If there is no fire extinguisher available or if site personnel do not feel secure in attempting to extinguish the fire, site personnel shall perform the following:

- Secure the site, if possible.
- Evacuate the area using the nearest safe pathway from the area.
- Proceed to the nearest phone and call 911 and provide the emergency operator all required information. This will activate the emergency response system.

If more than one individual is on the site team, the individual activating the evacuation plan shall verbally communicate to the other site personnel that there is an emergency condition and that they should evacuate from the work area. If contact cannot be made verbally with the other site personnel,

any of the following systems can be used as long as the system is audible above background noise. The system can be the site vehicle horn, a whistle, an air horn, or other acceptable device. The system used for initiating an evacuation from the site shall be discussed during the tailgate meeting with the other site personnel prior to beginning the workday. The system that is decided upon shall be documented in the site logbook.

If an explosion or other unsafe condition occurs that the site supervisor had determined will place the other site personnel at risk, then the evacuation system described above should be activated immediately.

9.5 PERSONAL PROTECTIVE EQUIPMENT FAILURE

If any site worker experiences a failure or alteration of protective equipment that affects the protection factor, that person and his/her buddy, if applicable, shall immediately leave the Exclusion Zone. Reentry shall not be permitted until the equipment has been repaired or replaced.

9.6 EQUIPMENT FAILURE

If any other equipment on site fails to operate properly, the Site Supervisor shall be notified and then determine the effect of this failure on continuing operations. If the failure will affect the safety of personnel, all personnel shall leave the Exclusion Zone until the situation is evaluated and appropriate actions are taken.

10.0 STANDARD OPERATING SAFETY PROCEDURES, ENGINEERING CONTROLS, AND WORK PRACTICES

10.1 WORK PERMITS

Work permits will be required for Confined Space Entry, and Hot Work. These permits must be obtained from the Local Health and Safety Officer prior to site work.

10.2 GENERAL SITE RULES

The following general site rules apply to all personnel while on the site:

- Before daily site operations begin, the daily site safety checklist will be completed, the subcontractor's training documentation will be reviewed (as required by section 3 of this plan), and a pre-entry briefing will be held to review the site's health and safety plan concerns and emergency procedures. This meeting will be registered in this Health and

Safety Plan. Attendance will be documented.

- One site worker will be assigned to keep the daily log for all health and safety-specific site activities, unless otherwise specified.
- All personnel will wear steel-toe safety boots. Hard hats will be worn when working near heavy equipment (drill rigs, excavating equipment, etc.), when individuals are working overhead, when required in the Job Safety Analysis (JSA), or when required by the client.
- Eye protection and high visibility clothing/reflective safety vests will be worn at all times while on site.
- Possession of alcohol or illegal substances on the job site or consumption during hours of site operations is strictly prohibited.
- Food and/or beverages are not permitted in the site's Exclusion or Contamination Reduction Zones. Food and/or beverages will be permitted in the Support Zone, if proper decontamination procedures are being followed.
- Smoking is not permitted on site. Chewing tobacco, snuff, application of cosmetics and/or lip balm are not permitted in the site's Exclusion or Contamination Reduction Zones.
- A change in level of protection will be based on air monitoring equipment readings taken in the breathing zone.
- Field personnel will use air monitoring equipment and not their nose to determine site contamination (i.e., sniffing sampled soils or water in jars, confined spaces, open bore holes or trenches, etc.). Odors detected during the course of standard operating procedures, however, should be noted in the daily log.
- Field personnel should not stand with their head directly over a well when it is being opened.
- First Aid Kit(s) and Fire Extinguisher(s) will be available in all company vehicles and/or within 50 feet of the working area.

Note: Hot work activities require that a person onsite shall act as a fire watch with a Class A, B, C dry chemical extinguisher within 10 feet of the activity, and all necessary work requirements are satisfied.

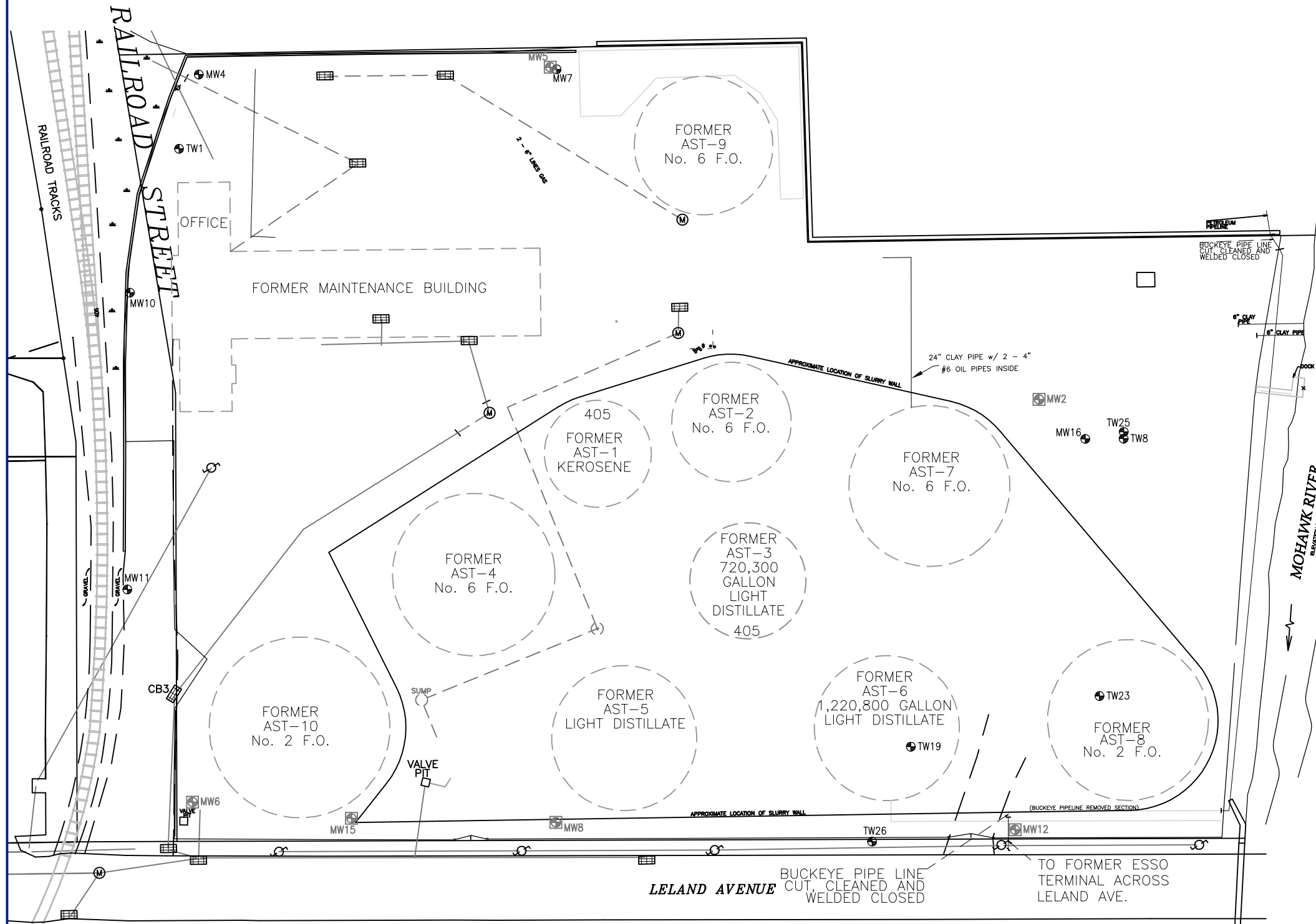
Any revisions to the final Site-Specific Health and Safety Plan must be reviewed by the Project/Case Manager and approved by the Local Health and Safety Officer or a Principal Hydrogeologist, at a minimum.

ATTACHMENT A

SITE MAPS

LEGEND

- PROPERTY BOUNDARY
- x - FENCE
- [Hatched Box] CATCH BASIN
- (M) UTILITY MANHOLE
- (P) UTILITY POLE
- (W) MONITORING WELL
- (W with cross) DESTROYED MONITORING WELL



DRAFTED BY: E.M.E. (N.J.)	SITE MAP		
CHECKED BY: KAT	NYSDEC SPILL #88-09026 201 LELAND AVENUE UTICA, NEW YORK		
REVIEWED BY: JD	Groundwater & Environmental Services, Inc. 300 GATEWAY PARK DRIVE, NORTH SYRACUSE, NY 13212		
NORTH 	SCALE IN FEET 0 APPROXIMATE 60	DATE 11-5-12	FIGURE 1



DRAFTED BY: KAT	SITE LOCATION MAP		
CHECKED BY: KAT	FORMER MATT PETROLEUM SITE 102 LELAND AVENUE UTICA, NEW YORK		
REVIEWED BY: JD			
NORTH 	Groundwater & Environmental Services, Inc. 300 GATEWAY PARK DRIVE, NORTH SYRACUSE, NY 13212		
	SCALE IN FEET  0 APPROXIMATE 250	DATE 10-3-12	FIGURE 2

ATTACHMENT B

EXPOSURE MONITORING PROGRAM FOR THE CONTAMINATES OF CONCERN

EXPOSURE MONITORING PROGRAM

REAL-TIME MONITORING

Photo-ionization Detector (PID): Real-time monitoring for volatile organic compounds (VOCs) will be conducted using a photo-ionization detector (PID). The PID will be used to monitor employee breathing zones during all invasive activities. **Table 1** lists PID action levels and response requirements

Combustible Gas Indicator/Oxygen Level Meter: Real-time monitoring for combustible gases and oxygen levels will be conducted using a Combustible Gas Indicator (CGI)/Oxygen Level Meter. The CGI will test for the presence of combustible gases by continuously monitoring the lower explosive limit (LEL) of organic vapors. The CGI will be used to monitor the LEL prior to, and during, Confined Space (CS) entries and during work near an excavation in contaminated soil. The Oxygen Level Meter will detect an oxygen-deficient or oxygen-enriched atmosphere, and will be used prior to, and during, all CS entry activities. If ionizing radiation is suspected at a site, a Geiger counter will be used to measure exposure under guidance of a Health Physicist. **Table 2** lists CGI, Oxygen Level Meter, and ionizing radiation action levels and response requirements.

Depending on the Contaminants of Concern, other forms of real-time monitoring equipment may be required to quantify chemical hazards and protect workers from exposure. These may include, but are not limited to bio-aerosol monitors, detector tubes, dust monitors, etc.

- Calibration of Real-Time Monitoring Equipment: Monitoring and calibration protocols will be performed in accordance with the manufacturer's guidelines. Calibration will be performed, at a minimum, prior to each day's use.
- Calibration logs will be maintained by the Local HSO.

ACTION LEVELS

Tables 1 and 2 list the action levels and response requirements for a PID and CGI/Oxygen Level Meter. Changing levels of protection, upgrading respiratory protection, or changing work practices is based on maintaining the upper limit of the action level for approximately 10 minutes sustained in the breathing zone (i.e., a non-transient reading) or at the discretion of the Site Supervisor. If changes in protection levels are required, the Site Supervisor will first notify the Local HSO or the CHS to determine if administrative or engineering controls can be implemented to mitigate or eliminate the hazard.

Table 1 provides action levels that must be complied with when petroleum products such as gasoline are the known site contaminants. If the site contains other potential site contaminants, appropriate action levels must be determined based on established chemical exposure limits and monitoring instrument response factors.

TABLE 1 OVM ACTION LEVELS	
Meter Response (Breathing Zone)	Action Required
PID response <5 units above background	No respiratory protection required (i.e., Level D)
PID response >5 units above background (Bkgd) and < 50 units above Bkgd.	Stop work. Investigate the cause of elevated VOC measurements. Contact the Project Manager or office and determine if administrative or engineering controls can be implemented to mitigate or eliminate the elevated readings. If not medically qualified to wear respiratory protection, leave work zone. If the elevated readings cannot be reduced below 5 units above background or eliminated, and if medically qualified, fit tested and trained to wear respiratory protection, then upgrade to Modified Level C, half-face respiratory protection.
PID response >50 units and < 250 units above Bkgd.	Stop work. Investigate the cause of elevated VOC measurements. Contact the Project Manager or office and determine if administrative or engineering controls can be implemented to mitigate or eliminate the elevated readings. If not medically qualified to wear respiratory protection, leave work zone. If the elevated readings cannot be reduced below 5 units above background or eliminated, and if medically qualified, fit tested and trained to wear respiratory protection, then upgrade to Modified Level C, full-face respiratory protection.
PID response > 250 above Bkgd.	Retreat from site*

***Note 1:** If a retreat becomes necessary, the Local HSO or CHS will be consulted in regard to adding mechanical ventilation or possible changes in work practices. Work will not resume until appropriate corrective measures are implemented.

***Note 2:** Because direct reading instruments cannot indicate or are not compound specific, concentrations shown on the instruments shall be related to units above background and not parts per million (ppm).

TABLE 2 CGI/O2/RADIATION LEVEL ACTION LEVELS	
Meter Response	Action
CGI response < 10 % LEL	Continue normal operations.
CGI response > 10 % and <20 % LEL	Eliminate all sources of ignition from the work area; implement continuous monitoring. However if work is being done in a confined space, retreat from work area.*
CGI response > 20 % LEL	Discontinue operations; allow to vent; retreat from work area.*
Oxygen level < 19.5%	Retreat from work area.*
Oxygen level > 23.5%	Retreat from work area.*
3X background to <2 mR/hr	Radiation above background levels (normally 0.01-0.02 mR/hr) signifies possible source(s) radiation present. Continue investigation with caution. Perform thorough monitoring. Consult with a health physicist.
>2mR/hr	Potential radiation hazard. Evacuate site. Continue investigation only upon the advice of a health physicist

TABLE 3 RETAIL PETROLEUM MATERIALS OF CONCERN					
Contaminant	OSHA TWA (ppm)	ACGIH TLV (ppm)	Hazards	Entry Routes	IP
Benzene	1	10	1,2,4,5,6,9	Inh, Abs, Ing, Con	9.24
Xylene	100	100	1,2,3,4,5,6,7,10	Inh, Abs, Ing, Con	8.56
Ethylbenzene	100	100	1,2,3,10	Inh, Ing, Con	8.76
Toluene	200	50	1,2,3,4,5,7,10	Inh, Abs, Ing, Con	8.82

TWA = Time Weighted Average in parts per million (ppm)

C = Ceiling

IP = Ionization Potential

1 = irritant to skin

2 = irritant to eyes

3 = irritant to respiratory system

4 = may cause headache

5 = may cause dizziness, lightheadedness

6 = may cause nausea and vomiting

7 = may cause liver and kidney damage

8 = irritant to GI tract

9 = carcinogen/possible carcinogen

10 = may cause damage to CNS

***Note:** If a retreat becomes necessary, the Local HSO or CHS will be consulted about adding mechanical ventilation, or possible changes in work practices.

ATTACHMENT C

SITE MATERIAL SAFETY DATA SHEETS (MSDS)

ATTACHMENT D

**JOB SAFETY ANALYSIS SHEETS AND DAILY SITE
SAFETY CHECKLISTS**

DAILY SITE SAFETY CHECKLIST

Site Name: _____
 Address: _____

 Individual's Name: _____ Date: _____

Task and date of entry: _____

This checklist is to be completed on a daily basis. The date should be noted in the space provided. The employee completing the checklist should verify that each item is correct and initial in the last space provided.

Date:

1. Proper training certificates have been obtained from all onsite personnel.
2. The site-specific HASP has been reviewed and signed by GES employees and GES-hired subcontractors.
3. The daily site-safety meeting has been conducted.
4. Applicable JSAs are onsite, reviewed by staff to ensure all tasks/jobs are covered, and site specific JSA modifications occur when needed.
5. Fire extinguishers are available for use and are fully charged.
6. A fully-stocked first aid kit & eye wash bottle is readily available.
7. Any potential tripping hazards have been removed from site.
8. All vessels containing flammable or corrosive material are properly labeled.
9. Proper personal protective equipment is being used for present conditions.
10. Equipment onsite is checked and in safe working order.
11. Safety cones and flags or barricades have been utilized to mark out work area along with all required signage (No Smoking, No Trespassing, Work Area...).
12. No person onsite has the appearance of being under the influence of motor skill altering substances.
13. All workers onsite are clothed in an appropriate manner (highly visible clothing, no tank tops, muscle shirts or shorts).
14. Electrical power-operated tools shall be properly grounded and used with a Ground-Fault Circuit Interrupter (GFCI).
15. All required permits (GES and/or client) are completed by an authorized individual.
16. When working alone, has a phone call been placed to the PM to discuss site conditions, review the Scope of Work, LPS requirements, and coordinate communications for the day? Note: The frequency/amount of additional calls from the field should be established during the PM's discussion with the individual. A call must always occur prior to leaving the site.
17. Prior to leaving the site for the day, the GES site supervisor has conducted a meeting with onsite staff to review worker conditions (possible injuries), JSA revisions, discuss possible Near Losses/ Losses, and activities scheduled for the next day.
18. All health and safety concerns have been communicated to the Local Health and Safety Officer and Project Manager

I verify and initial that the above information is correct by initialing in the boxes to the right:

[illegible]

ATTACHMENT E

PRE-ENTRY MEETING NOTES

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

ATTACHMENT F

SIGN OFF SHEET

SITE SAFETY AND HEALTH PLAN COMPLIANCE AGREEMENT

All project personnel, including visitors, must follow the requirements of this Site Safety Plan. In order to document individual agreement with this requirement, all personnel must complete this “Site Safety and Health Plan Compliance Agreement.” These agreements will be kept in this Site Safety Plan and will become part of the permanent project record upon completion of site activities.

By signing below, I have read the Site Health and Safety Plan (HASP), or I have been verbally advised of its contents. I understand, and I agree to comply with all of its provisions. I understand that I could be prohibited from working on the project, and I may be subject to disciplinary actions for violating any of the health and safety requirements specified in the HASP.

NAME	SIGNATURE	DATE	(TIME IN/OUT)
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____
13. _____	_____	_____	_____
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15. _____	_____	_____	_____
16. _____	_____	_____	_____
17. _____	_____	_____	_____
18. _____	_____	_____	_____
19. _____	_____	_____	_____
20. _____	_____	_____	_____
21. _____	_____	_____	_____
22. _____	_____	_____	_____

ATTACHMENT G

INCIDENT/INJURY CASE MANAGEMENT

ALL accidents, injuries, property damages, or releases (Loss or Near Loss) shall be reported to GES' on-site supervisor ASAP but no later than the end of the shift.

Injury Case Management is a collaborative process which:

- Helps ensure prompt, adequate, and appropriate medical care is provided
- Assesses, plans, implements, coordinates, monitors, and evaluates options
- Can minimize the impact of an impairment (resulting from potentially work-related injury or illness)
- Preserves as much as practicable the individual's functional capacity.

Medical injuries or emergencies within each field location will be managed by the following method:

- If an injury or medical condition occurs that cannot be treated by providing basic first aid to the individual, the GES PM and Site Operations Manager are notified by the GES Oversight person.
- Onsite, individuals who are certified in cardiopulmonary resuscitation (CPR)/First Aid will be requested to respond to the individual's location.
- Following this evaluation the GES VP, HSSE and client program manager, must be contacted regarding the individual's condition and injury management approach onsite and offsite.

Following an assessment of the individual's condition, if responding GES personnel feel that outside medical response personnel (emergency care) are necessary:

- The 911 emergency response system will be activated, if necessary.
- Provide the 911 emergency operator all of the information that is requested.
- The injured individual (GES or subcontractor employee) will be accompanied by other GES staff (i.e., PM, LHSO, Site Supervisor) so that desired injury management information will be communicated to the attending physician.

If an individual requires medical treatment *beyond basic first aid*, but the initial assessment determines that the individual does not require emergency care, then:

- The PM, Site Operations Manager, and CHSSE will be contacted PRIOR to leaving the site.
- The individual will be scheduled for an appointment at the occupational clinic near each office.
- If the injured individual is a subcontractor, then the individual will be directed to visit an occupational clinic established by the subcontracting company.
- If there is no clinic established, the individual will be scheduled at a GES clinic.

The individual will be accompanied to their examination by the GES LHSO or other GES or subcontractor management staff. Desired injury management information will be communicated to the attending physician that will include but not be limited to:

- Any required or alternative medication (over the counter medication)
- Any workplace restrictions versus lost time are discussed with the attending physician.
- The GES VP, HSSE will also contact the attending physician regarding the examination, diagnosis and the GES injury management approach.

ATTACHMENT H

SITE-SPECIFIC DECONTAMINATION PLAN

DECONTAMINATION PLAN

1. Personnel Decontamination

Section 7 lists the specific levels of protection required. Consistent with the levels of protection required, step by step procedures for personnel decontamination for each Level of Protection are attached.

2. Levels of Protection Required for Decontamination Personnel

The levels of protection required for personnel assisting with decontamination will be:

☐ Level B ☐ Level C ☐ Level D

Modifications include:

--

3. Disposition of Decontamination Wastes

(Provide a description of daily, weekly, and end of project waste disposition including identification of storage area, hauler, and final disposal site if applicable.)

--

4. Equipment Decontamination

A procedure for decontamination steps required for non-sampling equipment and heavy machinery follows:

--

5. Sampling Equipment Decontamination

Sampling equipment will be decontaminated in accordance with the following procedure:

--

LEVEL C DECONTAMINATION PROCEDURES (if required)

[Check indicated Functions or add steps as necessary]:

STEP	FUNCTION	DESCRIPTION OF PROCESS, SOLUTION AND CONTAINER
☐	Segregated equipment drop	_____
☐	Boot cover and glove wash	_____
☐	Boot cover and glove rinse	_____
☐	Tape removal - outer glove/boot	_____
☐	Boot cover removal	_____
☐	Outer glove removal	_____
-----HOT-LINE-----		
☐	Suit/safety boot wash	_____
☐	Suit/boot/glove rinse	_____
☐	Safety boot removal	_____
☐	Suit Removal	_____
☐	Inner glove wash	_____
☐	Inner glove rinse	_____
☐	Face piece removal	_____
☐	Inner glove removal	_____
☐	Inner clothing removal	_____
-----CRC/SAFE ZONE BOUNDARY-----		
☐	Field wash	_____
☐	Redress	_____

APPENDIX E

Site-wide Inspection Form

APPENDIX E

SITE MANAGEMENT PLAN ANNUAL SITE-WIDE INSPECTION TO BE COMPLETED BY OWNER ANNUALLY

Site Name: Former Matt Petroleum Date: _____
Site No.: B00192-6 Inspected By: _____
Site Address: 201 Leland Ave., Utica, New York Inspector's Signature: _____
Owner: _____ Inspector's Address: _____
Owner Address: _____

Site Management Plan (SMP) Compliance	YES	NO	N/A	Comments
Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?				
Has the Environmental Deed Restriction been upheld?				
Has the site-use restriction been upheld (Industrial or Restricted Commercial)?				
Has the groundwater use restriction been upheld?				
Has all intrusive work been conducted in accordance with the SMP?				
Was the Excavation Work Plan followed?				
Has the trench area along the northern portion of the property been maintained?				
Is the property free from intrusive work?				
Are all records related to the site maintained and up-to-date?				
Document the general site conditions at the time of the site inspection:				