



**INTERIM REMEDIAL MEASURES
WORK PLAN
FORMER SIGNORE FACILITY
ELLICOTVILLE, NEW YORK
BROWNFIELD CLEANUP PROGRAM
SITE NO. C905034**

PREPARED FOR:

New York State Department of Environmental Conservation
Region 9
Buffalo, New York

PREPARED BY:

GZA GeoEnvironmental of New York
Buffalo, New York

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1.0 INTRODUCTION

1.1 PURPOSE AND OBJECTIVE

This Interim Remedial Measures (IRM) Work Plan has been developed by GZA GeoEnvironmental of New York (GZA), on behalf of Iskalo Ellicottville Holdings, LLC (Iskalo), for IRM activities associated with the Former Signore Facility Brownfield Cleanup Program (BCP) Site No. C905034 located at 55-57 Jefferson Street, Ellicottville, New York (see Figures 1 and 2). The work described in this IRM Work Plan is being done under a New York State Department of Environmental Conservation (NYSDEC) BCP Agreement. This IRM Work Plan presents the project scope, objectives, planned activities, sampling procedures and reporting requirements.

The objective of the IRM Work Plan is to address the removal of underground storage tanks (USTs) and associated petroleum impacted soils located within two accessible outside areas of concern, AOC-1 and AOC-2. There are three USTs present in AOC-1 and one UST in AOC-2. Two additional UST areas were also identified; however, contaminated soil was not encountered in association with these two USTs. These two USTs will also be removed during the IRM work.

1.2 PROJECT BACKGROUND

The Former Signore Facility is located at 55-57 Jefferson Street in the Village of Ellicottville, Cattaraugus County, New York. Ellicottville is located approximately 60 miles south of Buffalo, New York, and is a popular ski-resort area. General adjoining land uses are residential and recreational. The entire property is approximately 55 acres of which 8.43 acres (Signore BCP Area, see Figure 2) are occupied by the former Signore building (168,000 square feet), other ancillary buildings and parking areas. The remaining acreage is vacant, undeveloped land. The property consists of approximately 21 acres of “flat land” area and about 34 acres of hill side.

The property has been used for manufacturing purposes for over 50 years. It is reported that a tool and die operation occupied a garage associated with the residential dwelling that was formerly present at the property. The Signore BCP Area was primarily used for the manufacturing of metal products. The existing Signore building has undergone various expansions since 1952. The actual development date for the property is unknown, but occurred sometime between the 1940s and 1952 as the property was identified as vacant woodland between 1922 and 1939.

The property is listed on the NYSDEC State Superfund Program as Site number 905023. In 1986, the Signore facility undertook a soil and groundwater sampling program which identified low concentrations of volatile organic compounds (VOCs) at the Site. Both downgradient public and private drinking water wells were affected. The contamination was attributed to spills, leakage and other plant operations.

In August 1989, Signore entered into an Administrative Order on Consent #89-258-89-03 to perform a Remedial Investigation/Feasibility Study (RI/FS) at the Site and three Interim Remedial Measures (IRMs). The three IRMs included the following.

1. Installation of an interceptor well upgradient of the Town drinking water well;
2. Connection of 34 residential properties to the municipal water supply source;
3. Installation of an interceptor well on a downgradient portion of the Signore property.

The IRM activities were completed and in operation by January 1992. The contaminant of concern was identified as trichloroethene (TCE) and trichloroethane (TCA). Additional volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, or polychlorinated biphenyl's (PCBs) were not identified on the Site during the RI.

In 1993, the Site was reclassified from a Class #2 to a Class #4, as it has been properly closed. However, NYSDEC requires groundwater monitoring at on and off-site locations on a semi-annual basis, which Iskalo is continuing to perform. Long term monitoring data has shown a general decrease in site contaminants and off-site migration.

In 2002, the on-Site interceptor well and the Town Well interceptor well were shut down, as approved by NYSDEC, due to long-term sampling results at both wells indicating either non-detect concentrations or levels below State drinking water standards.

In October 2007, GZA completed a Phase II ESA at the Site as part of due diligence services for Iskalo. GZA's work included observing soil probes at 29 locations and test pit excavations at eight locations. During the Phase II activities, VOC contamination and separate phase petroleum (SPP) product were identified impacting soil and groundwater at the Site (see Appendix A for Analytical Summary Tables from Phase II ESA). Three areas of concern (AOC) were identified where the contaminant concentrations were greater than the NYSDEC recommended soil cleanup objectives (Part 375 criteria). The attached Figure 3 identifies the three AOCs and a brief description of each AOC follows below. AOC-1 and AOC-2 are to be address by this IRM Work Plan. AOC-3 is located beneath the existing building and will be addressed at a later time after the building is demolished.

1. AOC-1 – Petroleum underground storage tank (UST) Area – Three 1,000-gallon USTs, located on the eastern portion of the Site, were closed in-place in December 1986. Three test pits and four soil probes were completed in the area. SPP product and petroleum impacted soil was identified during test pit completion. GZA contacted NYSDEC and Spill #707350 was assigned to the Site on October 3, 2007. Analytical test results identified petroleum compounds at concentrations greater than the NYSDEC Unrestricted Use Soil Cleanup Objective (SCO). Additionally, 1,2,4-trimethylbenzene (TMB) was detected at a concentration greater than the Restricted Residential SCO. Additional soil probes were performed to further delineate the petroleum impacted soil. One apparent downgradient groundwater sample was collected south of the Petroleum UST Area, which identified impacted groundwater.

2. AOC-2 – One 1,000-gallon UST Area – The historic contents of a UST identified on the southwest side of the main building are unknown. The UST was reportedly closed in the late 1980s. GZA completed one test pit and four soil probes in the area of the UST. SPP product was identified during the test pit completion. Analytical test results identified several compounds, including toluene, ethylbenzene, and xylenes at concentrations greater than the Unrestricted Use SCO. Additionally, toluene and m&p xylene were detected at concentrations greater than the Restricted Residential SCO. One groundwater sample was collected from the south side of the UST. Total VOCs were detected at a concentration of 17 ppm.
3. AOC-3 – Paint Kitchen Area – VOC impacted soil was identified in the area within the main building identified as the paint kitchen and spray booth area. Additionally, a former septic system was also present in the area. “Product” was identified during the soil probe investigation. Analytical test results identified several compounds at concentrations above Unrestricted Use SCO. Additionally, ethylbenzene, m&p xylene, o-xylene, n-propylbenzene, 1,3,5-TMB, and 1,2,4-TMB was detected at concentrations above Restricted Residential SCO. Two compounds (1,3,5-TMB and 1,2,4-TMB) were detected at two locations at concentrations greater than the Restricted Industrial SCOs. Two groundwater samples were collected from within Area 3. Total VOCs were detected at a concentration of 43 ppm and 64 ppm.

Groundwater impacts from the identified VOCs in AOC-1, -2 and -3 appear to be within the upper groundwater zone, present at the Site at approximately 10 to 12 feet below ground surface (bgs).

Also during the Phase II ESA work, three additional UST areas were identified. Contaminated soil requiring remediation was not encountered at these three locations, based on analytical soil data, field screening results and observations.

A 500-gallon UST was reportedly¹ located along the western portion of the facility, on the western side of the Maintenance building. This UST was a spill collection tank used to temporarily store liquids spilled in the maintenance building. Three test pits completed in the vicinity of this UST, did not identify the presence of a tank. Analytical results of a soil sample collected from a test pit sample from 6 to 7 feet bgs identified four VOCs below their respective Unrestricted SCOs. Therefore, no additional work will be completed in this vicinity as part of the IRM.

A 1,000-gallon UST was reportedly¹ located along the western portion of the facility between the Paint Storage and Maintenance Buildings. This UST was an emergency dump tank used to temporarily store flammable liquids underground if a fire occurred at the facility. A test pit completed to approximately 6 feet bgs in the vicinity of this UST did not identify the presence of

¹ “Remedial Investigation Report, Signore Facility, Ellicottville, New York, Volume 1 of 2” dated April 1991. Prepared by Lozier/Groundwater Associates for Signore, Inc.

a tank. Field observations and field screening with an OVM did not identify impacted soil at this location. Therefore, no additional work will be completed in this vicinity as part of the IRM.

The owner of the property in October 2007 was Signore, Inc. No further work has been completed and the spills status remains “open”. Iskalo took ownership of the property on February 11, 2008. In May 2008, Iskalo submitted a BCP Application to NYSDEC for the 8.43-acre portion (Signore BCP Area) of the property. The Signore BCP Area was accepted into the BCP in January 2011, when NYSDEC issued and executed a Brownfield Cleanup Agreement with Iskalo.

1.3 PROJECT DESCRIPTION

The IRM activities will involve the removal of underground storage tanks (USTs) and associated impacted soils located within AOC-1 and AOC-2. There are three USTs present in AOC-1 and one UST in AOC-2. Two additional USTs will also be removed during the IRM work. Contamination was not identified within these two UST locations during previous investigations. If during removal, contaminated soil is encountered, it will be managed accordingly along with the soil from AOC-1 and AOC-2. See Figure 3 for the approximate locations of AOC-1, AOC 2 and six USTs to be removed.

1.4 PROJECT MANAGEMENT AND ORGANIZATION

1.4.1 Personnel

The general responsibilities of key project personnel are listed below.

NYSDEC Project Manager - Chad Staniszewski will have the responsibility for regulatory oversight for the work associated with BCP Site No. C905034.

Iskalo Development Project Manager – Paul B. Iskalo will have the responsibility for implementing the project and has the authority to commit funding necessary to meet the objectives and requirements.

Project Manager - Christopher Boron will be responsible for managing the implementation of the activities associated with the BCP investigation, remediation and coordinating the collection of data during the project. The Project Manager is responsible for technical quality control and project oversight.

Quality Assurance (QA) Officer – Daniel Troy P.E., will report to the Project Manager and will be responsible for ensuring that QA/QC procedures are being followed. The QA Officer will be responsible for overseeing the review of field and laboratory data.

The QA Officer will monitor the performance of the laboratory to verify that the Data Quality Objectives for the project are met.

Field QA Officer – Jennifer Davide will be responsible for the overall operation of the field team and reports directly to the Project Manager.

1.4.2 Specific Tasks and Services

GZA will obtain subcontractor specialists for services relating to underground storage tank and contaminated soil removal, soil disposal, laboratory/analytical services and data validation services. The subcontractors to be utilized will be determined at a later time.

2.0 DESCRIPTION OF IRM FIELD ACTIVITIES

2.1 GENERAL FIELD ACTIVITIES

General field activities include site meetings, mobilization, implementing the health and safety plan, UST and soil excavations, tank cleaning, and analytical testing, equipment decontamination and handling of investigation wastes. Subcontractors will be used for removal and analytical testing of the USTs and soil excavations.

2.1.1 Site Meeting

A Site “kick-off” meeting will be held with Iskalo, GZA and the earth work subcontractor(s) prior to initiating field work activities. The purpose of the meeting will be to orient field team members, Iskalo staff and subcontractors with the Site, project personnel, Site background, scope of work, potential dangers, health and safety requirements, site-specific security and safety protocols, emergency contingencies and other field procedures. NYSDEC staff are welcome to attend and will be notified at least seven (7) days in advance of the meeting.

2.1.2 Mobilization

Following approval of the IRM Work Plan by NYSDEC, the Underground Facilities Protection Organization (UFPO) will be contacted at 1-800-962-7962 to clear exploration locations. Utility clearance will require three working days by UFPO. GZA and its subcontractors will then mobilize necessary materials and equipment to the Site.

2.1.3 Health and Safety

It is anticipated that the work to be completed at the Site will be done at level D personal protection. Should health and safety monitoring during field activities warrant an upgrade to level C protection, work will stop, Site conditions will be re-evaluated prior to further investigation activities. See Section 6.0 for additional information on Health and Safety.

2.2 AIR SURVEILLANCE AND MONITORING

During the IRM excavation activities, air surveillance screening for total volatile organics for

health and safety concerns will be performed with a portable organic vapor meter (OVM) equipped with a photoionization detector (PID) using a 10.6 electron volt (eV) bulb. Additional details are presented in the Site-specific Health and Safety Plan (see Section 6.0).

2.3 UST AND SOIL EXCAVATIONS

AOC 1 – Three Petroleum USTs and Petroleum Impacted Soil Area

Three 1,000-gallon USTs are located on the eastern portion of the Site, which formerly contained gasoline and diesel fuel. It is reported that these USTs were closed-in-place in December 1986 by removing the contents and sludge, cleaning the inside of the tanks and filling each tank with concrete.

Petroleum impacted soil was identified during the test pits completed during the Phase II ESA adjacent to the three USTs. The contaminated area identified is estimated to be approximately 45 feet by 100 feet (4,500 square feet), with a depth of ranging between 4 and 8 feet bgs, based on test pits. The estimated volume is approximately 1,000 cubic yards or about 1,500 tons of potentially impacted soil (see Figure 3).

AOC 2 – Emergency Dump UST and Impacted Soil Area

One 1,000-gallon UST is located along the western side of the building during Phase II ESA test pit completion. It is unknown if this UST was closed-in-place.

Analytical test results identified several compounds in the soil at concentrations greater than the Unrestricted Use SCO and total VOCs in the groundwater were detected at a concentration of 17 ppm. The contaminated area was estimated to be approximately 50 feet by 30 feet (1,500 square feet), with impacts extending to the water table at approximately 12 feet bgs, based on Phase II ESA test pit TP-5 and soil probes SP-23, -24, and -25. The estimated volume is approximately 670 cubic yards or about 1,000 tons of potentially impacted soil (see Figure 3).

1,520 gallon Emergency Dump UST

A 1,520-gallon concrete UST is located along the western side of the building. This UST was an emergency dump tank used to temporarily store flammable liquids underground if a fire occurred at the facility. This UST is currently filled with water.

Impacted soil was not was identified during Phase II ESA activities in the vicinity of this UST during the Phase II ESA. Therefore, the remedial action anticipated to be completed at this location is to remove the water within UST and breakup the concrete UST for disposal (see Figure 3). The water inside the UST will be sampled for VOCs, SVOCs, PCBs and metals to determine if contaminants are present. If no contaminants are present, GZA will request approval from the Ellicottville Waste Water Treatment Facility to discharge to the sanitary sewer system at the Site. However, if the water is determined to be impacted it will be containerized for

proper off-site disposal. Additionally, if impacted materials are identified during the UST excavation, they will also be excavated and properly staged for disposal.

6,000 gallon Steel Emergency Dump UST

A 6,000-gallon steel UST is located along the western portion of the facility, on the north side of the Paint Storage building. This UST was an emergency dump tank used to temporarily store flammable liquids underground if a fire occurred at the facility. It is reported that this UST was closed-in-place in December 1987 by removing the contents and sludge, cleaning the inside of the tank and filling it with concrete.

Impacted soil was not identified during Phase II ESA activities in the vicinity of this UST during the Phase II ESA. Therefore, the remedial action anticipated to be completed at this location is to remove the steel UST and properly dispose (see Figure 3). If the UST does contain material other than concrete, it will be removed and properly characterized for disposal. If impacted materials are identified during the excavation, they will also be excavated and properly staged to be characterized for disposal.

General UST and Soil Removal Procedures

The following are the general UST removal procedures that will be followed for the seven USTs and impacted soil areas.

- Prior to the start of the subsurface soil work, a decontamination pad will be built to allow equipment used during the excavation and UST removal activities to be decontaminated. The pad will be constructed on a stable onsite surface using a minimum of 6-mil plastic sheeting and allow water generated during the decontamination processes to be contained and transferred to 55-gallon drums for characterization and proper disposal. Upon completion of the excavation work, the decontamination pad will be disposed of with impacted soils stockpile for off-site disposal at a permitted disposal facility.
- Overburden soil excavated to facilitate the removal of the UST will be field screened to determine if the soil is potentially impacted. Non-impacted soil (those registering 5 ppm or less on an OVM during field screening) will be excavated and stockpiled onsite on 6-mil plastic and covered with 6-mil plastic for reuse onsite.
- Tank contents (i.e., liquids and tank sludge, if any) will be removed, containerized and characterized for proper off-site disposal. The tank contents will be properly disposed of by the contractor and disposal documentation will be provided.
- Residual product within connecting piping will be flushed back into the USTs, removed and containerized with its respective tank contents.
- The Contractor will remove the USTs from the excavation. The USTs which have not been closed-in-place will be cleaned by the Contractor.

- Concrete USTs will be broken up after cleaning and stockpiled for off-site disposal. The concrete will be properly disposed of by the contractor and disposal documentation will be provided.
- USTs which have been closed in place (three USTs associated with AOC-1 and the 6,000 gallon UST) will be disposed of as a whole at a permitted disposal facility. If the closed-in-place tanks cannot be disposed of as a whole, the steel will be strip/removed from interior concrete contents and either recycled or disposed of at an approved disposal facility. The concrete fill material will be broken up to be either recycled or disposed of at an approved disposal facility.
- Water from the UST cleaning process will be contained in NYS DOT-approved 55-gallon drums or extracted using a vacuum truck, pending the volume needed to clean the USTs. Water will be properly disposed of by the contractor and disposal documentation will be provided.
- The USTs will be cut into manageable pieces and/or crushed and removed from the Site to be either recycled or disposed of at an approved disposal facility. The contractor will supply disposal or recycling records.
- Once the USTs have been removed from the excavation an assessment will be made of the excavation side walls and bottom of the UST areas. The excavation side walls and bottom will be field screened with an OVM to assess for additional petroleum contamination.
- Soils determined to be impacted, within the UST areas, based on visual observations and field screening (registering 5 ppm or greater), will be excavated and stockpiled onsite on 6-mil plastic and covered with 6-mil plastic. The excavation work will include removal of grossly contaminated soils, SPP and groundwater which contains sources of mobile contamination.
- The excavated soils stockpiled for off-site disposal will be analyzed for landfill characterization, as required by the selected landfill. After approval for disposal from the landfill facility, the soil will be loaded into dump trucks or dump trailers, covered, and transported by a licensed hauler to a permitted solid waste landfill for proper disposal. Disposal documentation will be provided.
- Post-excavation soil samples will be collected from the side walls and bottom of each excavation in accordance with NYSDEC guidelines to confirm that the remaining soil meets the NYDSEC SCOs. One sidewall sample will be collected from each excavation sidewall that is less than 30 linear feet. If an excavation sidewall exceeds 30 linear feet, then one sample will be collected for every 30 linear feet. A minimum of one bottom sample will be collected from each UST excavation area. One sample will be collected for every 500 square feet of bottom excavation area.

- Confirmatory samples will be analyzed for Target Compound List (TCL) VOCs via EPA Method 8260 and SVOCs via EPA Method 8270 STARS².
- The excavation areas will be barricaded to keep personnel away from the excavation while awaiting analytical results and prior to backfilling. If post-excavation soil samples indicate that impacted soil remains, it is anticipated that additional soil will be excavated for off-Site disposal.
- If groundwater is encountered within an excavation, a sample will be collected for TCL VOC analysis.
- After the post-excavation soil samples are reviewed and evaluated to be acceptable, and prior to backfilling, PVC injection piping may be installed along the bottom of the excavation to facilitate additive injections at a later time, especially if the excavation and contamination extend down to or below the groundwater table.
- Photographic documentation of the IRM activities will be done and included in the IRM Report (see Section 4.0).
- Upon soil excavation completion, equipment will be decontaminated prior to being removed from the Site at the decontamination pad location.
- Suitable backfill material shall be placed and compacted in lifts within the excavation areas.

2.4 ENVIRONMENTAL ANALYTICAL TESTING PROGRAM

The estimated environmental testing program is summarized in Table 1. The actual number of samples will vary based on the size of excavations, observations and engineering judgment. The samples collected as part of this IRM will be subject to analytical testing methodologies that follow NYSDEC Analytical Service Protocol (ASP) Category B deliverables and allow for the development of a data usability summary report (DUSR). Further information regarding sampling and testing methodologies can be found in the QAPP (see Section 5.0).

² Spill Technology and Remediation Series (STARS) Memo #1, Petroleum-Contaminated Soil Guidance Policy, New York State Department of Environmental Conservation, August 1992.

3.0 DATA DOCUMENTATION

Field notes will be kept during the IRM work, in addition to daily field summaries that will be generated summarizing the field work and become part of the project file. The daily field summaries will include the following daily information for the IRM activities:

- Date;
- Meteorological conditions (temperature, wind, precipitation);
- Site conditions (e.g., dry, damp, dusty, etc.);
- Identification of crew members (GZA and subcontractor present) and other personnel (e.g., agency or site owner) present;
- Description of field activities;
- Location(s) where work is performed;
- Samples collected;
- Problems encountered and corrective actions taken;
- Records of field measurements or descriptions recorded; and
- Notice of modifications to the scope of work.

Photographic documentation of the IRM activities will be done. Pertinent photographs will be included in the IRM Report.

4.0 IRM ACTIVITIES REPORT

An IRM Activities Report will be prepared summarizing the work conducted as part of the UST and impacted soil removals. The report will include the following.

- Provide a summary of the activities completed as part of the IRM Work;
- Present the analytical data from the confirmatory samples collected;
- Provide figures showing the size and location of IRM activities along with confirmatory sample locations;
- Provide pertinent photographic documentation of the activities completed;
- Present the disposal documentation of the various material generated for disposal; and
- Present the findings, conclusions and recommendations resulting from the IRM work. The report will be submitted to NYSDEC for review.

5.0 QUALITY ASSURANCE/QUALITY CONTROL

The Quality Assurance Project Plan (QAPP) to be used for the Former Signore Facility IRM activities is the “Quality Assurance Project Plan, Former Signore Facility, Ellicottville, New

York, Brownfield Cleanup Program, Site No. C905034” dated May 2011. The QAPP presents the sampling procedures, analytical methods and QA/QC procedures associated with the activities planned for BCP Site. Protocols for sample collection, sample handling and storage, Chain of Custody procedures, and laboratory and field analyses are described or specifically referenced to related investigation documents.

6.0 HEALTH AND SAFETY PROTOCOLS

The health and safety protocols to be used for the Former Signore Facility IRM activities are in the “Health and Safety Plan, Former Signore Facility, Ellicottville, New York, Brownfield Cleanup Program, Site No. C905034” dated May 2011. The Health and Safety Plan (HASP) presents the specific health and safety protocols associated with the activities planned for BCP Site.

7.0 CITIZEN PARTICIPATION

The Citizen Participation (CP) component for the Former Signore Facility BCP Site discussed in the “Brownfield Cleanup Program, Citizen Participation Plans, Former Signore Facility, 55 Jefferson Street, Village of Ellicottville, Cattaraugus County, New York, Site Number: C905034” dated March 2011. The CP Plan outlines how members of the affected and interested public are provided with information about how NYSDEC will inform and involve them during the investigation and remediation of the Site. Information such as project contacts, document repositories, site contact lists, and CP activities are provided in the CP Plan.

8.0 SCHEDULE

The following schedule is proposed for the IRM field activities and IRM Report preparation.

Activity:	Duration:	Anticipated Date:
Submit IRM Work Plans:		May 20, 2011
NYDEC Review of IRM Work Plans:	30 days	June 20, 2011
Address NYSDEC Comment, if any and resubmit:	15 days	July 5, 2011
NYDEC Accepts IRM Work Plans:	15 days	July 20, 2011
Perform IRM Activities:	60 days	July 21 – September 30, 2011
Submittal of IRM Report	90 days	December 31, 2011

TABLES

Table 1
 Estimated IRM Analytical Testing Program Summary
 Former Signore Facility
 BCP Site No. C905034
 Ellicottville, New York

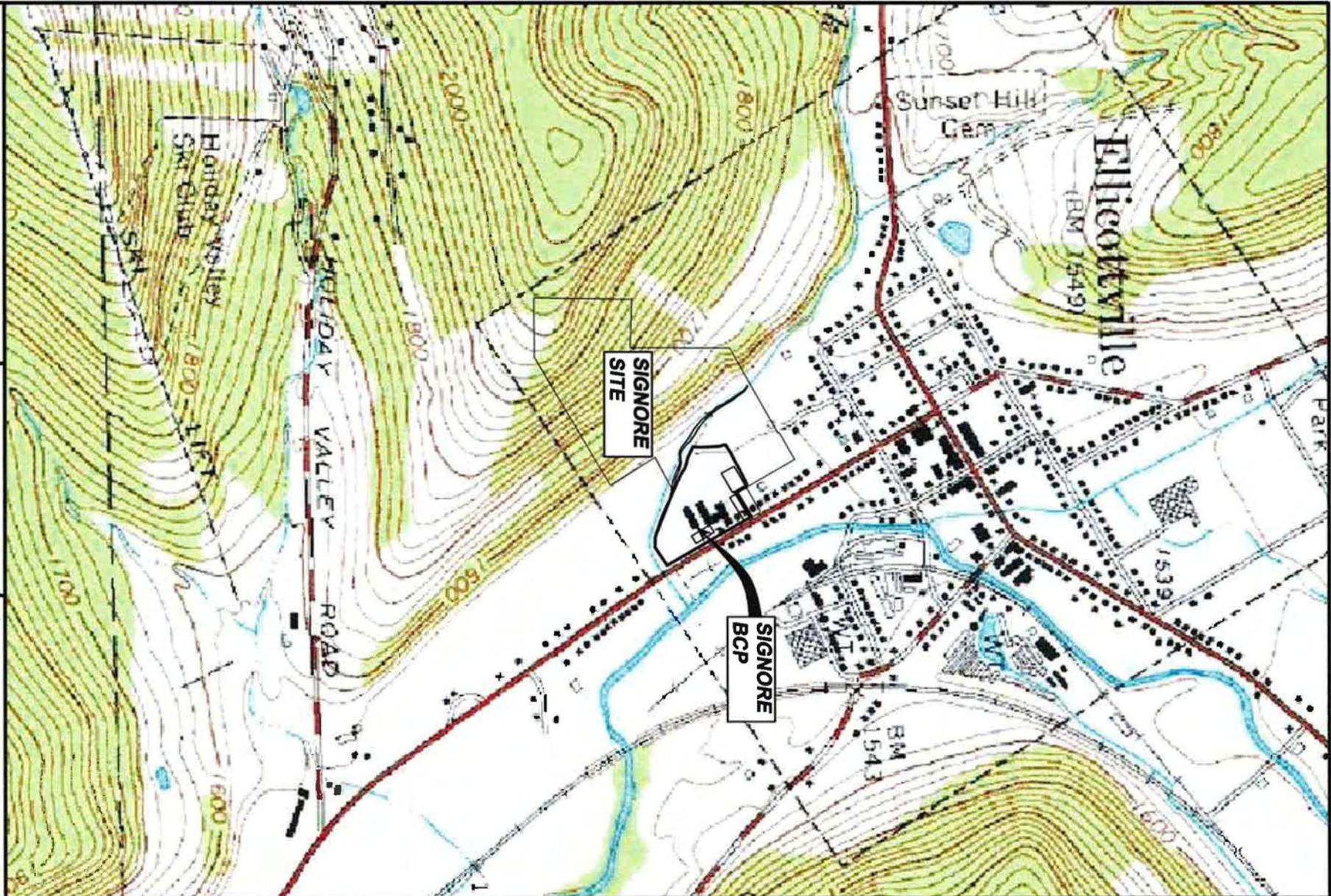
Location	VOCs TCL	SVOCs STARS	VOCs TCL	SVOCs STARS	Water Sample for Chacterization *	WASTE CHARACTERIZATION **
AOC-1						
	SOIL	SOIL	WATER	WATER	WATER	SOIL
Confirmatory	21	21	0	0	0	3
Duplicate	1	1	0	0	0	0
MS/MSD	2	2	0	0	0	0
Rinsate	2	2	0	0	0	0
Total	26	26	0	0	0	3
AOC-2						
Confirmatory	9	9	1	1	0	1
Duplicate	1	1	1	1	0	0
MS/MSD	2	2	2	2	0	0
Rinsate	0	0	0	0	0	0
Total	12	12	4	4	0	1
1000 Gallon Concrete Dump Tank						
Various ¹	0	0	0	0	0	0
Duplicate	0	0	0	0	0	0
MS/MSD	0	0	0	0	0	0
Rinsate	0	0	0	0	0	0
Total	0	0	0	0	0	0
1520 Gallon Concrete Dump Tank						
Various ¹	0	0	0	0	1	0
Duplicate	0	0	0	0	0	0
MS/MSD	0	0	0	0	0	0
Rinsate	0	0	0	0	0	0
Total	0	0	0	0	1	0
6000 Gallon Steel Emergency Dump Tank						
Various ¹	5	5	0	0	0	0
Duplicate	0	0	0	0	0	0
MS/MSD	0	0	0	0	0	0
Rinsate	0	0	0	0	0	0
Total	5	5	0	0	0	0
	43	43	4	4	1	4

Notes:

- MS/MSD - Matrix Spike/Matrix Spike Duplicate.
- TCL VOCs - Target Compound List Volatile Organic Compounds.
- TCL SVOCs - Target Compound List Semi-volatile Organic Compounds.
- TAL Metals - Target Analyte List Metals.
- TCL PCBs - Target Compound List Polychlorinated Biphenyls.
- ** = Water Characterization will include VOC, SVOC, PCB & METALS
- ** = Waste Characterization parameters will be based on the disposal facility criteria.

FIGURES

NOTE:
 BASE MAP ADAPTED FROM U.S.G.S.
 TOPOGRAPHIC MAPS DOWNLOADED
 FROM TERRASERVER.MICROSOFT.COM



IRM WORK PLAN
FORMER SIGNORE FACILITY
 ELLICOTTVILLE, NEW YORK
 BROWNFIELD CLEANUP PROGRAM

SITE NO. C905034

LOCUS PLAN

SCALE IN FEET



DRAWN BY: DEW

DATE: MAY 2011



**GZA GeoEnvironmental of
 New York**

PROJECT NO.
21.0056367.30

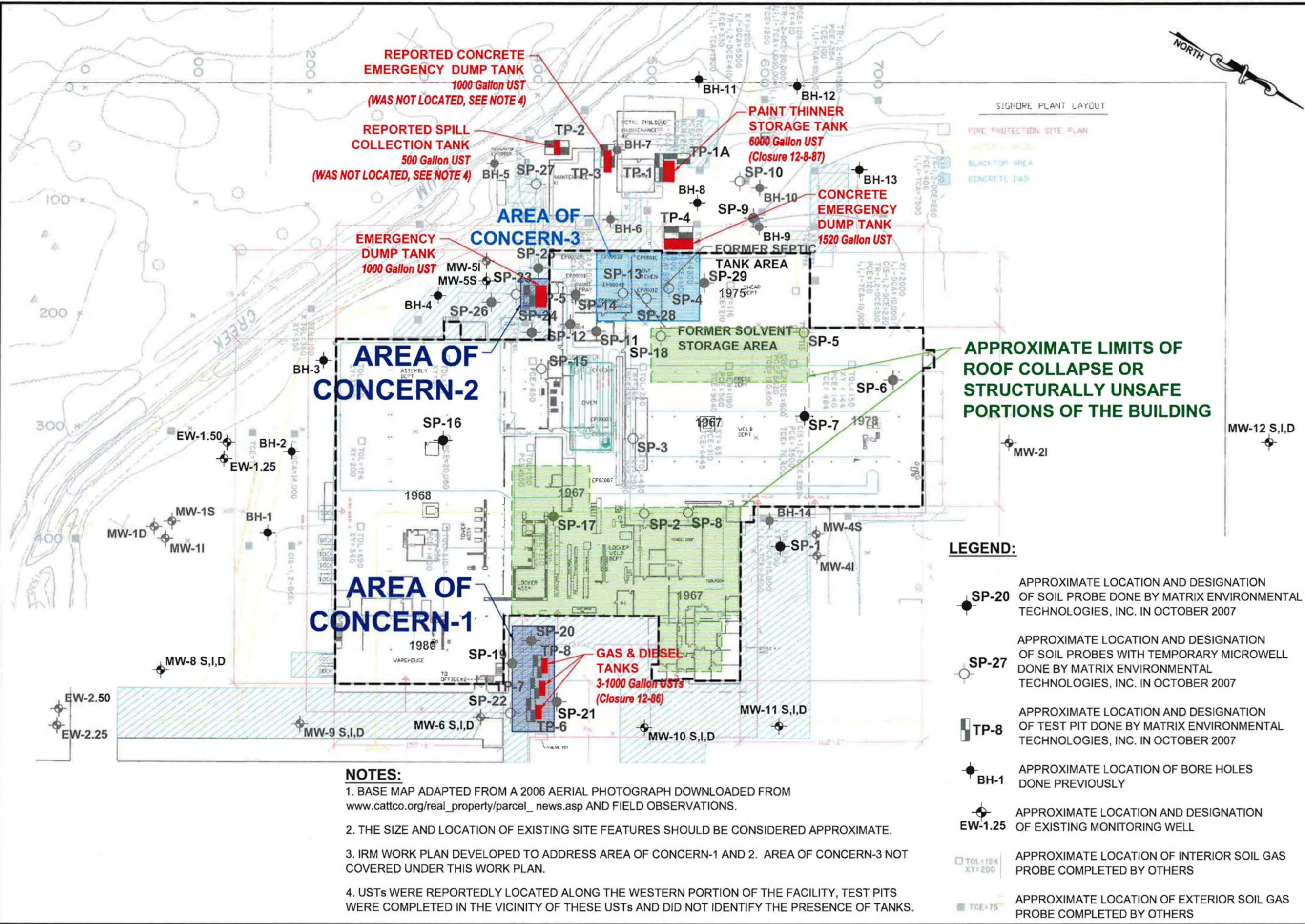
FIGURE NO.
1



NOTES:

1. BASE MAP ADAPTED FROM A 2006 AERIAL PHOTOGRAPH AND PROPERTY LINES DOWNLOADED FROM <http://maps.catcoo.org/webSite/ParcelViewer.htm> AND FIELD OBSERVATIONS.
2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.

PROJECT No. 21.0056367.30 FIGURE No. 2	IRM WORK PLAN FORMER SIGNORE FACILITY ELLICOTTVILLE, NEW YORK BROWNFIELD CLEANUP PROGRAM	APPROXIMATE SCALE IN FEET 0 100 200 400 	DRAWN BY: DEW DATE: MAY 2011
	SITE NO. C905034 SITE LIMIT PLAN	GZA GeoEnvironmental of New York	



NOTES:

1. BASE MAP ADAPTED FROM A 2006 AERIAL PHOTOGRAPH DOWNLOADED FROM www.cattco.org/real_property/parcel_news.asp AND FIELD OBSERVATIONS.
2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.
3. IRM WORK PLAN DEVELOPED TO ADDRESS AREA OF CONCERN-1 AND 2. AREA OF CONCERN-3 NOT COVERED UNDER THIS WORK PLAN.
4. USTs WERE REPORTEDLY LOCATED ALONG THE WESTERN PORTION OF THE FACILITY, TEST PITS WERE COMPLETED IN THE VICINITY OF THESE USTs AND DID NOT IDENTIFY THE PRESENCE OF TANKS.

LEGEND:

- SP-20** APPROXIMATE LOCATION AND DESIGNATION OF SOIL PROBE DONE BY MATRIX ENVIRONMENTAL TECHNOLOGIES, INC. IN OCTOBER 2007
- SP-27** APPROXIMATE LOCATION AND DESIGNATION OF SOIL PROBES WITH TEMPORARY MICROWELL DONE BY MATRIX ENVIRONMENTAL TECHNOLOGIES, INC. IN OCTOBER 2007
- TP-8** APPROXIMATE LOCATION AND DESIGNATION OF TEST PIT DONE BY MATRIX ENVIRONMENTAL TECHNOLOGIES, INC. IN OCTOBER 2007
- BH-1** APPROXIMATE LOCATION OF BORE HOLES DONE PREVIOUSLY
- EW-1.25** APPROXIMATE LOCATION AND DESIGNATION OF EXISTING MONITORING WELL
- TOL=124 XY=200** APPROXIMATE LOCATION OF INTERIOR SOIL GAS PROBE COMPLETED BY OTHERS
- TCE=75** APPROXIMATE LOCATION OF EXTERIOR SOIL GAS PROBE COMPLETED BY OTHERS

DRAWN BY: DEW	DATE: MAY 2011	 GZA GeoEnvironmental of New York
APPROXIMATE SCALE IN FEET 		
IRM WORK PLAN FORMER SIGNORE FACILITY ELLICOTTVILLE, NEW YORK BROWNFIELD CLEANUP PROGRAM SITE NO. C905034 AOC-1, AOC-2 & UST LOCATION PLAN		
PROJECT No.		21.0056367.30
FIGURE No.		3

APPENDIX A

Soil Analytical Testing Results Summary
Signore Facility
55-57 Jefferson
Ellicottville, New York

Parameter	Unrestricted Use Soil Cleanup Objectives	Restricted Soil Cleanup Objectives (SCO)			SP - 3 14-16ft. 10/02/2007 Result	SP - 4 10-12ft. 10/02/2007 Result	SP - 2 10-12ft. 10/02/2007 Result	SP - 1 18-20ft. 10/02/2007 Result	TP-1 9-11ft. 10/03/2007 Result	TP - 2 6-7ft. 10/03/2007 Result	TP - 4 9ft. 10/03/2007 Result	TP - 1A 9ft. 10/03/2007 Result	TP - 5 7ft. 10/03/2007 Result	TP - 5 9.5ft. 10/03/2007 Result	TP - 4 10-11ft. 10/03/2007 Result	TP - 5 12ft. 10/03/2007 Result	TP - 6 7-8ft. 10/03/2007 Result	TP - 7 8ft. 10/03/2007 Result	TP - 7 7-8ft. 10/03/2007 Result
		Restricted Residential	Restricted Commercial	Restricted Industrial															
Volatile Organic Compounds - EPA Method 8260 TCL (ug/kg)																			
1,1-Dichloroethene	330	100,000	500,000	1,000,000	<	<	<	<	<	140	<	<	<	<	<	<	<	<	<
1,1-Dichloroethane	270	26,000	240,000	480,000	<	<	<	<	<	260	<	<	<	<	<	<	<	<	<
1,1,1-Trichloroethane	680	100,000	500,000	1,000,000	<	<	<	<	<	520	<	<	<	<	<	<	<	<	<
Benzene	60	4,800	44,000	89,000	<	<	<	<	<	<	<	<	<	<	<	<	<	800	2,900
Trichloroethene	470	21,000	200,000	400,000	150	<	73	130	<	<	<	<	<	<	<	<	<	<	<
Toluene	700	100,000	500,000	1,000,000	<	<	<	<	<	<	<	<	330,000	250,000	<	13,000	<	390	29,000
Tetrachloroethene	1,300	19,000	150,000	300,000	100	<	220	64	<	<	<	<	<	<	<	<	<	<	<
Ethylbenzene	1,000	41,000	390,000	780,000	<	78,000	<	<	<	<	<	<	38,000	32,000	<	1,900	<	4,300	16,000
m&p-Xylene	260	100,000	500,000	1,000,000	<	310,000	<	<	<	<	<	<	160,000	160,000	<	9,900	69	22,000	81,000
o-Xylene	260	100,000	500,000	1,000,000	<	130,000	<	<	<	<	<	<	49,000	56,000	<	1,800	<	4,700	27,000
Isopropylbenzene	NV	NV	NV	NV	<	34,000	<	<	<	<	<	<	1,500	1,800	<	<	<	380	1,200
n-Propylbenzene	3,900	100,000	500,000	1,000,000	<	250,000	<	<	<	<	<	<	1,100	1,300	<	<	65	2,200	6,400
1,3,5-Trimethylbenzene	8,400	52,000	190,000	380,000	<	550,000	<	<	<	<	<	<	630	930	<	<	70	6,100	20,000
1,2,4-Trimethylbenzene	3,600	52,000	190,000	380,000	<	1,400,000	<	<	<	<	<	<	1,000	1,400	<	<	140	19,000	53,000
sec-Butylbenzene	11,000	100,000	500,000	1,000,000	<	21,000	<	<	<	<	<	<	<	<	<	<	<	240	780
p-Isopropyltoluene	NV	NV	NV	NV	<	26,000	<	<	<	<	<	<	<	<	<	<	<	430	1,400
n-Butylbenzene	12,000	100,000	500,000	1,000,000	<	32,000	<	<	<	<	<	<	<	<	<	<	<	950	2,500
Naphthalene	12,000	100,000	500,000	1,000,000	<	<	<	<	<	99	<	<	<	<	<	<	<	1,200	3,200
Total VOCs					250	2,831,000	293	194		1,019			581,230	503,430		26,600	344	62,690	244,380
Semi-Volatile Organic Compounds - EPA Method 8270 STARS (ug/kg)																			
Naphthalene	12,000	100,000	500,000	1,000,000	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	<	2,000	730
2-Methylnaphthalene	NV	NV	NV	NV	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	<	4,000	1,300
Phenanthrene	100,000	100,000	500,000	1,000,000	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	<	450	<

Parameter	Unrestricted Use Soil Cleanup Objectives	Restricted Soil Cleanup Objectives (SCO)			TP - 8 7-8ft. 10/03/2007 Result	SP - 16 10-12 10/03/2007 Result	SP - 9 4-6ft. 10/03/2007 Result	SP - 13 10-12 10/03/2007 Result	SP - 15 14-16 10/03/2007 Result	SP-19 2-4 10/05/2007 Result	SP-20 8-10 10/05/2007 Result	SP-21 8-10 10/05/2007 Result	SP-22 8-10 10/05/2007 Result	SP-23 8-10 10/05/2007 Result	SP-24 8-10 10/05/2007 Result	SP-25 8-10 10/05/2007 Result	SP-26 8-10 10/05/2007 Result	SP-28 8-10 10/05/2007 Result	SP-29 8-10 10/05/2007 Result
		Restricted Residential	Restricted Commercial	Restricted Industrial															
Volatile Organic Compounds - EPA Method 8260 TCL (ug/kg)																			
1,1-Dichloroethene	330	100,000	500,000	1,000,000	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
1,1-Dichloroethane	270	26,000	240,000	480,000	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
1,1,1-Trichloroethane	680	100,000	500,000	1,000,000	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
Benzene	60	4,800	44,000	89,000	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
Trichloroethene	470	21,000	200,000	400,000	<	260	<	<	<	<	<	<	<	<	<	<	<	<	60
Toluene	700	100,000	500,000	1,000,000	<	<	<	<	<	86	<	<	<	<	<	<	<	<	<
Tetrachloroethene	1,300	19,000	150,000	300,000	<	1,200	<	<	<	<	<	<	<	<	<	<	<	<	<
Ethylbenzene	1,000	41,000	390,000	780,000	<	<	<	2,300	19,000	<	1,000	<	<	<	<	<	<	34,000	<
m&p-Xylene	260	100,000	500,000	1,000,000	<	<	<	8,700	33,000	<	3,600	<	<	<	<	<	<	140,000	<
o-Xylene	260	100,000	500,000	1,000,000	<	<	<	2,300	900	<	210	<	<	<	<	<	<	44,000	<
Isopropylbenzene	NV	NV	NV	NV	<	<	<	2,000	940	<	660	<	<	<	<	<	<	21,000	<
n-Propylbenzene	3,900	100,000	500,000	1,000,000	<	<	<	17,000	570	<	730	<	<	<	<	<	<	150,000	<
1,3,5-Trimethylbenzene	8,400	52,000	190,000	380,000	<	<	<	34,000	<	<	1,700	<	<	<	<	<	<	350,000	<
1,2,4-Trimethylbenzene	3,600	52,000	190,000	380,000	<	<	<	90,000	<	<	4,700	<	<	<	<	<	<	910,000	96
sec-Butylbenzene	11,000	100,000	500,000	1,000,000	<	<	<	1,600	<	<	110	<	<	<	<	<	<	13,000	<
p-Isopropyltoluene	NV	NV	NV	NV	<	<	<	2,300	<	<	220	<	<	<	<	<	<	20,000	<
n-Butylbenzene	12,000	100,000	500,000	1,000,000	<	<	<	2,300	<	<	520	<	<	<	<	<	<	19,000	<
Naphthalene	12,000	100,000	500,000	1,000,000	<	<	<	<	<	1,100	<	<	<	<	<	<	<	<	<
Total VOCs					0	1,460	0	162,500	54,410		14,636							1,701,000	156
Semi-Volatile Organic Compounds - EPA Method 8270 STARS (ug/kg)																			
Naphthalene	12,000	100,000	500,000	1,000,000	<	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
2-Methylnaphthalene	NV	NV	NV	NV	<	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Phenanthrene	100,000	100,000	500,000	1,000,000	<	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

- Notes:
1. Compounds detected in one or more samples are presented on this table. Refer to Attachment C for list of all compounds included in analysis.
 2. Analytical testing completed by GZA GeoEnvironmental Laboratory.
 3. ug/kg = part per billion and mg/kg = parts per million.
 4. < indicates compound was not detected.
 5. Bold indicates value exceeds the Unrestricted Use Soil Cleanup Objectives
 6. Blue shading indicates value exceeds the Restricted Residential Use Soil Cleanup Objectives
 7. Yellow shading indicates value exceeds the Restricted Commercial Use Soil Cleanup Objectives
 8. Red shading indicates value exceeds the Restricted Industrial Use Soil Cleanup Objectives

Groundwater Analytical Testing Results Summary
 Signore Facility
 55-57 Jefferson Street
 Ellicottville, New York

Parameter	Class GA Criteria	MW - 4 - S 10/02/2007	MW - 9 - I 10/02/2007	MW - 1 - I 10/02/2007	MW - 5 - S 10/02/2007	MW - 5 - I 10/02/2007	EW - 1.25 10/02/2007	SP - 10 10/04/2007	SP - 3 10/04/2007	SP - 5 10/04/2007	SP - 15 10/04/2007	SP - 8 10/04/2007	SP - 4 10/04/2007	SP - 27 10/05/2007	SP - 28 10/05/2007	SP - 23 10/05/2007	SP - 22 10/05/2007
VOC - EPA Method 8260 STARS (ug/L)																	
Acetone	50	<	<	<	<	<	<	50	<	<	<	<	<	<	<	<	<
1,1-Dichloroethene	5	<	<	<	<	<	<	<	2.6	<	<	<	<	<	<	<	<
1,1-Dichloroethane	5	<	<	5.3	1.2	<	<	<	4.7	<	<	<	<	<	<	<	<
cis-1,2-Dichloroethene	5	<	<	6.5	<	<	1.1	<	30	<	<	<	<	<	<	<	<
1,1,1-Trichloroethane	5	<	1.1	<	4.8	<	<	4.2	19	<	<	<	<	<	<	<	<
Benzene	1	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	250
Trichloroethene	5	<	3.8	<	19	<	5.1	<	180	<	<	<	<	<	<	<	<
Toluene	5	<	<	<	<	<	<	<	<	<	<	3.0	<	<	<	11000	2.9
Tetrachloroethene	5	<	<	<	1.7	<	<	1.0	32	<	<	1.9	<	<	<	<	<
Ethylbenzene	5	<	<	<	<	<	<	<	<	<	12000	<	2100	<	1100	700	62
m&p-Xylene	5	<	<	<	<	<	<	3.3	<	<	28000	1.1	7800	<	4300	4200	73
o-Xylene	5	<	<	<	<	<	<	1.1	<	<	5800	<	3500	<	1200	1200	24
Isopropylbenzene	5	<	<	<	<	<	<	<	<	<	400	<	420	<	490	<	<
N-Propylbenzene	5	<	<	<	<	<	<	<	<	<	<	<	2400	<	3200	<	3.9
1,3,5-Trimethylbenzene	5	<	<	<	<	<	<	<	<	<	<	<	5800	<	7000	<	2.5
1,2,4-Trimethylbenzene	5	<	<	<	<	<	<	<	<	<	<	<	21000	<	46000	<	46
sec-Butylbenzene	5	<	<	<	<	<	<	<	<	<	<	<	99	<	170	<	<
p-Isopropyltoluene	5	<	<	<	<	<	<	<	<	<	<	<	150	<	290	<	<
1,3-Dichlorobenzene	3	<	<	<	<	<	<	<	<	<	<	<	<	<	240	<	<
n-Butylbenzene	5	<	<	<	<	<	<	<	<	<	<	<	110	<	<	<	<
Naphthalene	10	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	8.0

Notes:

1. Compounds detected in one or more samples are presented on this table.
2. Analytical testing completed by GZA GeoEnvironmental Laboratory.
3. NYSDEC Class GA criteria obtained from Division of Water Technical and Operational Guidance Series (TOGS 1.1.1), June 1998.
4. ug/L = part per billion (ppb).
5. Blank indicates compound was not detected.
6. Shaded area indicates analyte concentration exceeds Class GA standard/and or guidance value.
7. * = 5ug/L criteria is for total xylenes