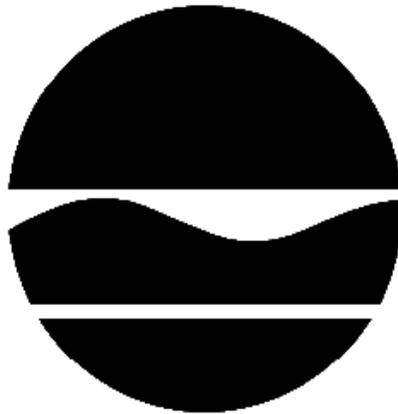


# PROPOSED REMEDIAL ACTION PLAN

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General Electric Co. Auburn  
State Superfund Project  
Auburn/Aurelius, Cayuga County  
Site No. 706006  
January 2016



Prepared by  
Division of Environmental Remediation  
New York State Department of Environmental Conservation

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Auburn/Aurelius, Cayuga County  
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## **SECTION 1: SUMMARY AND PURPOSE OF THE PROPOSED PLAN**

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), is proposing a remedy for the above referenced site. The disposal of hazardous wastes at the site has resulted in threats to public health and the environment that would be addressed by the remedy proposed by this Proposed Remedial Action Plan (PRAP). The disposal of hazardous wastes at this site, as more fully described in Section 6 of this document, has contaminated various environmental media. The proposed remedy is intended to attain the remedial action objectives identified for this site for the protection of public health and the environment. This PRAP identifies the preferred remedy, summarizes the other alternatives considered, and discusses the reasons for the preferred remedy.

The New York State Inactive Hazardous Waste Disposal Site Remedial Program (also known as the State Superfund Program) is an enforcement program, the mission of which is to identify and characterize suspected inactive hazardous waste disposal sites and to investigate and remediate those sites found to pose a significant threat to public health and environment. The New York State Hazardous Waste Management Program (also known as the RCRA Program) also requires corrective action for releases of hazardous waste to the environment. This site is subject to both programs.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York; (6 NYCRR) Parts 373 and 375. As a site also subject to RCRA, this PRAP also constitutes the draft Statement of Basis required for the site under Part 373. This document is a summary of the information that can be found in the site-related reports and documents in the document repository identified below.

## **SECTION 2: CITIZEN PARTICIPATION**

The Department seeks input from the community on all PRAPs. This is an opportunity for public participation in the remedy selection process. The public is encouraged to review the reports and documents, which are available at the following repository:

Seymour Public Library  
Attn: Ms. Danette Davis  
176-178 Genesee Street

Auburn, NY 13021  
Phone: 315-252-2571

**A public comment period has been set from:**

**1/13/2016 to 2/11/2016**

**A public meeting is scheduled for the following date:**

**1/27/2016 at 7:00PM**

**Public meeting location:**

**Memorial City Hall, 1<sup>st</sup> Floor, 24 South Street, Auburn, NY 13021**

At the meeting, the findings of the remedial investigation (RI) and the feasibility study (FS) will be presented along with a summary of the proposed remedy. After the presentation, a question-and-answer period will be held, during which verbal or written comments may be submitted on the PRAP.

Written comments may also be sent through 2/11/2016 to:

Jessica Laclair  
NYS Department of Environmental Conservation  
Division of Environmental Remediation  
625 Broadway  
Albany, NY 12233  
jess.laclair@dec.ny.gov

The Department may modify the proposed remedy or select another of the alternatives presented in this PRAP based on new information or public comments. Therefore, the public is encouraged to review and comment on the proposed remedy identified herein. Comments will be summarized and addressed in the responsiveness summary section of the Record of Decision (ROD). The ROD is the Department's final selection of the remedy for this site.

**Receive Site Citizen Participation Information By Email**

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, Voluntary Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at <http://www.dec.ny.gov/chemical/61092.html>.

### **SECTION 3: SITE DESCRIPTION AND HISTORY**

**Location:** The General Electric former Powerex site is located in an urban commercial area. The site consists of 55.4 acres of land located on the boundary of the town of Aurelius and the City of Auburn. The site is on West Genesee Street approximately 1/4 mile west of Veterans Memorial Parkway.

**Site Features:** The main site feature is the inactive production facility surrounded by parking areas and fields. Since the plant closed all that remains is the unoccupied manufacturing building and the concrete slabs of small sheds.

**Current Zoning and Land Use:** The site is currently inactive and zoned for industrial use. The surrounding parcels are currently used for a combination of small businesses and residences. The nearest residential area is on the south side of West Genesee Street, across from the site.

**Past Use of the Site:** The facility was used for electronics manufacturing. Waste industrial solvents were disposed of in one or two unlined evaporation ponds located on the property. This disposal took place from approximately 1952 to 1970. Solvents were also disposed of in underground waste solvent storage tanks located on-site which may have leaked.

**RCRA Status:** The former Powerex site, in addition to being a class 2 in active hazardous waste disposal site, is also subject to the requirements of the Resource Conservation and Recovery Act, as amended (RCRA) and its implementing regulations including New York State's authorized hazardous waste program. The site does not presently have an operating permit but is subject to "interim status" requirements. An underground storage tank, above ground storage tank and a container storage area have all been closed under RCRA. Pursuant to RCRA, the site has an obligation to address contamination pursuant to RCRA corrective action requirements as well as the State Superfund.

**Site Geology and Hydrogeology:** The geology of the area is characterized by unconsolidated glacial deposits (soils) underlain by bedrock. The uppermost unit is overburden material (site soils) consisting of glacial lacustrine clay, silts and glacial till ranging from approximately 5 to 25 feet thick. The upper portion of the bedrock is composed of limestones of the Onondaga Formation and represents the shallow bedrock unit. Below the Onondaga Formation lies the Manlius Formation, referred to in the site Reports and Documents as the intermediate unit. The deeper bedrock units encountered at the site are, in order of depth, limestones and dolomites of the Rondout, Cobleskill and the Bertie Formations. In general, the deep bedrock is more fractured and more transmissive than the shallow and intermediate bedrock. Within the Bertie Formation is an interval comprised primarily of gypsum which has an average thickness of 5 feet. This is referred to in the site Reports as the D3 zone. This gypsum rich interval is pitted and has occasional voids from dissolution. This interval transmits large amounts of water and represents an important pathway for significant offsite contaminant migration.

The overburden groundwater flows toward local surface water bodies such as Crane Brook and the Owasco River, and also provides recharge to the underlying units. The depth to the overburden groundwater ranges from six to eleven feet. However this unit is greatly influenced by seasonal

fluctuations and during the late fall, winter and early spring the water table occurs very close to the ground surface. In some areas of the site the seasonal range in the water table exceeds 11 feet. The shallow groundwater generally flows northward. The shallow zones can become dewatered locally, indicating that vertical fracturing extends through the underlying zones. The deep groundwater flows to the south. The deep aquifer receives groundwater recharge through fractures or karst features connecting the units. The site features also include swallets which directly connect the shallow groundwater to the deep zone. The contaminated deep groundwater, at a depth of 150 feet, is moving laterally in a southwestern direction from the site towards Union Springs and Cayuga Lake. The site contains surface drainage features that carry storm water away from the site. During periods of high groundwater, contaminated groundwater from the site has the potential to infiltrate the drainage ditches and move off site.

Related Site: The deep groundwater plume leaving the site is known as the Cayuga County Groundwater Contamination Superfund (CCGC) site and was placed on the National Priorities List (NPL) [NYS Registry ID No. 706012]. The off-site groundwater plume of contamination is being addressed by EPA pursuant to an EPA ROD issued in March 29, 2013. The CCGC ROD is being implemented through an order issued to GE under CERCLA. Remedial actions at the CCGC site are not the focus of this proposed decision document, however, the success of the remedy for the former GE Powerex site is important to the full realization of the benefits of the remedy selected by EPA for the CCGC site.

A site location map is attached as Figure 1.

#### **SECTION 4: LAND USE AND PHYSICAL SETTING**

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, alternatives (or an alternative) that restrict(s) the use of the site to industrial use as described in Part 375-1.8(g) are/is being evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the investigation to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is included in the Tables for the media being evaluated in Exhibit A. The unrestricted use Soil Cleanup Objectives (SCOs) and the protection of Groundwater SCOs are the same for the site contaminants of concern.

#### **SECTION 5: ENFORCEMENT STATUS**

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past or present owners and operators, waste generators, and haulers.

The PRPs for the site, documented to date, include:

General Electric Company

The Department and General Electric entered into a Consent Order (Index No. A7-0286-92-08) on March 31, 1993 and Amended (Index No. A7-0352-97-03) on May 12, 1997. The Order obligates the responsible party to implement a RI/FS only and the amendment allows the responsible party to propose and implement interim actions. After the remedy is selected, the Department will approach the PRPs to implement the selected remedy. If an agreement cannot be reached with the PRPs, the Department will evaluate the site for further action under the State Superfund. The PRPs are subject to legal actions by the state for recovery of all response costs the state has incurred.

## **SECTION 6: SITE CONTAMINATION**

### **6.1: Summary of the Remedial Investigation**

A Remedial Investigation (RI) has been conducted. The purpose of the RI was to define the nature and extent of any contamination resulting from previous activities at the site. The field activities and findings of the investigation are described in the RI Report.

The following general activities are conducted during an RI:

- Research of historical information,
- Geophysical survey to determine the lateral extent of wastes,
- Test pits, soil borings, and monitoring well installations,
- Sampling of waste, surface and subsurface soils, groundwater, and soil vapor,
- Sampling of surface water and sediment,
- Ecological and Human Health Exposure Assessments.

The analytical data collected on this site includes data for:

- groundwater
- surface water
- soil

#### **6.1.1: Standards, Criteria, and Guidance (SCGs)**

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs

for drinking water and soil vapor intrusion. The tables found in Exhibit A list the applicable SCGs in the footnotes. For a full listing of all SCGs see: <http://www.dec.ny.gov/regulations/61794.html>

### **6.1.2: RI Results**

The data have identified contaminants of concern. A "contaminant of concern" is a hazardous waste that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized in Exhibit A. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

acetone	cis-1,2-dichloroethene
methylene chloride	trichloroethene (TCE)
vinyl chloride	toluene
trans-1,2-dichloroethene	tetrachloroethene (PCE)

As illustrated in Exhibit A, the contaminant(s) of concern exceed the applicable SCGs for:

- groundwater
- surface water
- soil

### **6.2: Interim Remedial Measures**

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Record of Decision.

The following IRM(s) has/have been completed at this site based on conditions observed during the RI.

#### **IRM - Tank Removal**

The Laboratory Waste Solvent Tank IRM consisted of the excavation and removal of two 500 gallon underground tanks. These tanks were installed along the east side of the plant building in 1960 and were reportedly used to collect waste solvents. These solvents were gravity fed by underground piping from the laboratory just inside the east wall of the building. The tanks were reportedly emptied periodically by pumping their contents into 55 gallon drums which were then taken to the Drum Storage Building and emptied into the drain leading to the North Evaporation Pit. Use of these two tanks was discontinued in 1966-1967. The tanks and surrounding soil were excavated and removed in 1994. Sampling of the base and walls of excavation had detections of VOCs above the protection of groundwater SCOs and indicated further work was needed. The excavation was backfilled with the excavated soils and subsurface investigation activities were started.

#### **Access Restriction Interim Remedial Action**

In December 1994, a chain link fence was constructed around the site to reduce the possibility of direct contact with site contaminants. The fence is regularly inspected and maintained to ensure it remains effective.

#### Surface Water Interim Action

The Surface Water Interim Action Enhancement system addresses potential recharge of the shallow groundwater into the storm sewers. The action consisted of sliplining existing drainage piping and installing additional piping in order to prevent contaminated site groundwater from infiltrating into the storm water drainage piping, which would allow contaminants to migrate off site.

The storm sewer discharges water to the drainage ditch via Outfall 001, which is located near the northwest corner of the site. The drainage ditch goes offsite toward the northwest, converges with another drainage ditch and then heads north towards Crane Brook. The Surface Water Interim Action Enhancement system began operation in early 1996 with enhancements in 1997 and 2001. It was designed to remove VOCs, primarily TCE and cis-1,2-DCE, from surface water in the storm sewer system at the site. The Surface Water Interim Action Enhancement consists of a forced air bubbler system that aerates the water passing through the last storm sewer catch basin, catch basin CB-16, prior to flowing into the drainage ditch at Outfall 001. Through monitoring it has been shown that the system has been effective. Outfall 001 is sampled quarterly and the results have been non-detect.

#### Shallow Bedrock Groundwater Interim Action

In May 2001, a dual phase extraction system began operation and continues to treat shallow groundwater. Groundwater and soil vapors are pulled out by vacuum from extraction wells in the source areas; the North Evaporation Pit, the Former Waste Solvent Tanks, West Evaporation Pit and Former Laboratory Waste Solvent Tanks. The extracted air and water are then treated by an onsite catalytic oxidizer unit and a low-profile air stripper, respectively. This system was designed to remove contamination and also contain contaminated shallow groundwater to limit migration. Monthly sampling of the system indicates that contaminant mass is being removed. The underground storage tanks were also removed from the Former Waste Solvent Tanks area during the construction of this system.

### **6.3: Summary of Environmental Assessment**

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water.

Based upon the resources and pathways identified and the toxicity of the contaminants of ecological concern at this site, a Fish and Wildlife Resources Impact Analysis (FWRIA) was deemed not necessary for OU 01.

## Nature and Extent of Contamination:

Sampling has confirmed high levels of volatile organic compounds (VOCs) indicating the likely presence of dense non-aqueous phase liquid (DNAPL) in site soil and groundwater. The DNAPL contains a high percentage of liquid TCE. Based upon investigations, the primary contaminants of concern include the volatile organic compounds (VOCs) trichloroethene (TCE) and its daughter products cis-1,2-dichloroethene (DCE), trans-1,2-dichloroethene (DCE), and vinyl chloride (VC).

Soils – TCE was the most commonly detected VOC in the subsurface soils with concentrations ranging from 0.001 to 14,000ppm compared to the protection of groundwater Soil Cleanup Objective (SCO) of 0.47 ppm. Other contaminants exceeding the protection of groundwater SCOs are cis-1,2-DCE and VC. The contaminated soils exceeding the protection of groundwater SCOs are found to a depth of 16' or the top of bedrock. For the 55.4 acre site only 4.25 acres of surface soils exceed the protection of groundwater SCOs and these soils surround the building to the north, west and east. Less than half an acre of surface soils exceed the industrial use SCOs and are located in the Waste Solvent Tank Area, North Evaporation Pit and West Evaporation Pit, surrounding the building to the north and west. The remaining acreage of the site, mostly to the north and west, meet unrestricted use SCOs and the protection of groundwater SCOs for VOCs. Soils were analyzed for metals and results were below the residential use SCOs. Soil contamination does not extend off-site.

Soil Vapor – Soil vapor was not evaluated at the site because it is unoccupied. The potential for Soil Vapor Intrusion will be evaluated for any off-site buildings that may be impacted by the shallow groundwater contamination to the west of the site.

Groundwater – TCE, cis-1,2-DCE and vinyl chloride are the most commonly detected VOCs found in the overburden, shallow, and deep groundwater that exceed groundwater standards (5 ppb for TCE and cis-1,2-DCE; and 2 ppb for VC). The overburden groundwater had detections of TCE, cis-1,2-DCE and VC at 1,900ppm, 640ppm and 36ppm respectively. The VOC impacts in the overburden groundwater are in the North Evaporation Pit, West Evaporation Pit and Waste Solvent Tank. The overburden concentrations decrease rapidly with increasing distance from the primary source areas and migrated offsite. The overburden groundwater is greatly influenced by seasonal fluctuations with ranges exceeding 11 feet in locations. The shallow groundwater had detections of TCE, cis-1,2-DCE and VC at 840ppm, 340ppm and 100ppm respectively in the primary source areas. TCE concentrations decreased downgradient from the source areas and was not detected in shallow groundwater offsite. However, cis-1,2-DCE and VC have migrated offsite in the shallow groundwater to the northwest of the facility and are above the NYSDEC Class GW groundwater standard. The deep groundwater had detections of TCE, cis-1,2-DCE and VC at 646ppm, .12ppm and 5.5ppm respectively. The deep groundwater has migrated offsite and is being addressed by EPA through an order issued to GE under CERCLA.

Surface Water – Prior to the Surface Water Interim Action Enhancement system IRM, on-site surface water exceeded the SCGs for TCE (values up to 240 ppb compared to the SCG of 5 ppb), cis-1,2-DCE (values up to 100 ppb compared to the SCG of 5 ppb) and vinyl chloride (values up to 3.9 ppb compared to the SCG of 2ppb). IRM system monitoring has demonstrated that the IRM has been effective; sampling results are non-detect for VOCs.

#### **6.4: Summary of Human Exposure Pathways**

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure*.

The site is fenced and covered by asphalt or concrete, people will not come into contact with contaminated groundwater or soil unless they dig below the surface. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into the overlying buildings and affect the indoor air quality. This process similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. The potential for soil vapor intrusion to occur on-site will be evaluated should the site building be re-occupied and/or if new construction occurs.

#### **6.5: Summary of the Remediation Objectives**

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objectives for this site are:

##### **Groundwater**

###### **RAOs for Public Health Protection**

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

###### **RAOs for Environmental Protection**

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Prevent the discharge of contaminants to surface water.
- Remove the source of ground or surface water contamination.

##### **Soil**

###### **RAOs for Public Health Protection**

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

###### **RAOs for Environmental Protection**

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

##### **Soil Vapor**

###### **RAOs for Public Health Protection**

Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

## **SECTION 7: SUMMARY OF THE PROPOSED REMEDY**

To be selected, the remedy must be protective of human health and the environment, be cost-effective, comply with other statutory requirements, and utilize permanent solutions, alternative technologies or resource recovery technologies to the maximum extent practicable. The remedy must also attain the remedial action objectives identified for the site, which are presented in Section 6.5. Potential remedial alternatives for the Site were identified, screened and evaluated in the FS report.

A summary of the remedial alternatives that were considered for this site is presented in Exhibit B. Cost information is presented in the form of present worth, which represents the amount of money invested in the current year that would be sufficient to cover all present and future costs associated with the alternative. This enables the costs of remedial alternatives to be compared on a common basis. As a convention, a time frame of 30 years is used to evaluate present worth costs for alternatives with an indefinite duration. This does not imply that operation, maintenance, or monitoring would cease after 30 years if remediation goals are not achieved. A summary of the Remedial Alternatives Costs is included as Exhibit C.

The basis for the Department's proposed remedy is set forth at Exhibit D.

The proposed remedy is referred to as the Treatment of Soils to Protection of Groundwater SCOs, Treatment of Groundwater, and a Site Management Plan (SMP) remedy as depicted in Figures 3 (impacted soil areas), 4, 5, and 6 (respectively the impacted overburden, shallow and deep groundwater areas). This remedy is also referred to as "Alternative 6" in the attached exhibits.

The estimated present worth cost to implement the remedy is \$23,350,000. The cost to construct the remedy is estimated to be \$13,410,000 and the estimated average annual cost is \$800,700.

The elements of the proposed remedy are as follows:

### 1. Remedy Design

A remedial design program will be implemented to provide the details necessary for the construction, operation, maintenance, and monitoring of the remedial program. This includes soil sampling from the un-used northeastern portion of the site in order to confirm that soil quality meets applicable SCOs. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DEC's guidance for Green Remediation (DER-31). The major green remediation components are as follows;

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;

- Reducing direct and indirect greenhouse gas and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

## 2. Enhanced Bioremediation of Soil

In-situ enhanced biodegradation will be employed to treat contaminants in soil that exceed the protection of groundwater SCOs in the areas of the former solvent tanks, evaporation pits and fire training area, an approximately 4.25 acre area in a phased approach. The ongoing biological breakdown of contaminants through anaerobic reductive dechlorination will be enhanced by injecting Emulsified Vegetable Oil (EVO) into the subsurface, via injection wells located in the above areas, to promote microbe growth to breakdown the contaminants in the soil through reductive dechlorination.

The soil treatment will be conducted in a phased approach toward meeting the protection of groundwater (PGW) SCOs. Recognizing that in areas of the site the large seasonal fluctuation in groundwater levels could result in recontamination of soil from the bedrock groundwater, treatment of the soil in these areas to achieve the PGW SCOs will be deferred until the bedrock insitu treatment is complete. Given these limitations, the Department will set an interim objective for soils treatment during the design. Once these limitations have abated, the soil which was not treated to meet the PGW SCOS will be treated to achieve these goals. Interim Soil Treatment Objectives will be based upon the degree to which the groundwater fluctuation resulting in recontamination; distribution of VOCs in soils; and physical properties of soils limit the ability of the treatment process to achieve the SCOs for protection of groundwater, as follows:

- Areas where recontamination due to groundwater fluctuation is a limiting factor will be treated to VOC concentrations (determined in design and approved by the Department) which exceed the anticipated level of recontamination based upon equilibrium partitioning. Areas where the limiting factors are the distribution of VOCs in soils, and the properties of the soils, will be treated to VOC concentration (determined in design and approved by the Department) based upon the ability for the treatment technology to be feasibly implemented.
- Once the limitation on soil treatment due to recontamination has abated (i.e. when the shallow bedrock remediation has sufficiently progressed), the soils which were not treated to meet groundwater protection SCOs due to this limitation will be treated to meet these goals;
- Soils for which treatment was deferred, or for which the initial level of treatment is above the groundwater SCOs, will be evaluated to allow for a better understanding of the rates of natural attenuation in these soils. This evaluation will be used in the design of the final

stage of soil treatment to aid in the determination of which remaining soils can be feasibly treated.

### 3. Enhanced Bioremediation of Overburden and Shallow Groundwater

In-situ enhanced biodegradation will be employed to treatment contaminants in overburden and shallow groundwater in the primary source areas, surrounding the building to the north, west and east. The biological breakdown of contaminants through reductive dechlorination would be enhanced by injecting a lactate and EVO solution into the subsurface to promote microbe growth. The location and depth of injection would be determined during the remedial design.

### 4. Enhanced Bioremediation of Deep Groundwater

In-situ enhanced biodegradation will be employed to treatment contaminants in deep groundwater in the primary source areas. The biological breakdown of contaminants through biotic and abiotic degradation would be enhanced by injecting an electron donor(s) and an iron source into the deep bedrock unit, often referred to as D3.

### 5. Surface Water

Continue operation, maintenance and monitoring of the existing Surface Water Interim Action Enhancement to address any potential recharge of the shallow water into the storm sewers.

### 6. Soil Vapor Intrusion Investigation

An evaluation of the potential for soil vapor intrusion for any offsite buildings that may be impacted by the contaminated shallow groundwater to the west of the site will be undertaken during the design phase. Based on this evaluation any actions necessary to address exposures related to soil vapor intrusion into these building will be implemented.

### 7. Institutional Controls

Imposition of an institutional control in the form of an environmental easement for the controlled property that:

- requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- allows the use and development of the controlled property for industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and
- requires compliance with the Department approved Site Management Plan.

### 8. Site Management Plan

A Site Management Plan is required, which includes the following:

- a. an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The Environmental Easement and site management plan would be used to restrict land use for the facility and require the continued management of engineering controls.

Engineering Controls: The existing Surface Water Interim Action must be operated, maintained, and monitored to maintain protectiveness of human health and the environment.

This plan includes, but may not be limited to:

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
  - a provision for evaluation of the potential for soil vapor intrusion should the on-site building become occupied and for any new buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
  - descriptions of the provisions of the environmental easement including any land use, and/or groundwater and/or surface water use restrictions;
  - provisions for the management and inspection of the identified engineering controls;
  - maintaining site access controls and Department notification;
  - the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls; and
  - A provision for investigation beneath the existing on-site building if the building is demolished to determine if further remedial action (such as excavation or a soil cover) is warranted.
- b. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
    - monitoring of groundwater to assess the performance and effectiveness of the remedy; and
    - a schedule of monitoring and frequency of submittals to the Department;
    - monitoring for vapor intrusion should the on-site building become occupied and for any new buildings developed on the site , as may be required by the Institutional and Engineering Control Plan discussed above.
  - c. an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, optimization, monitoring, inspection, and reporting of any mechanical or physical components of the remedy. The plan includes, but is not limited to:
    - compliance monitoring of treatment systems to ensure proper O&M as well as providing the data for any necessary permit or permit equivalent reporting;

- maintaining site access controls and Department notification; and
- providing the Department access to the site and O&M records.

## **Exhibit A**

### **Nature and Extent of Contamination**

This section describes the findings of the Remedial Investigation (RI) for all environmental media that were evaluated. As described in Section 6.1, samples were collected from various environmental media to characterize the nature and extent of contamination.

For each medium for which contamination was identified, a table summarizes the findings of the investigation. The tables present the range of contamination found at the site in the media and compares the data with the applicable Standards, Criteria and Guidance (SCGs) for the site. The contaminants are arranged into volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides/ polychlorinated biphenyls (PCBs), and inorganics (metals and cyanide). For comparison purposes, the SCGs are provided for each medium that allows for unrestricted use. For soil, if applicable, the Restricted Use SCGs identified in Section 4 and Section 6.1.1 are also presented.

### **Waste/Source Areas**

As described in the RI report, waste/source materials were identified at the site and are impacting groundwater, soil and surface water.

Wastes are defined in 6 NYCRR Part 375-1.2 (aw) and include solid, industrial and/or hazardous wastes. Source areas are defined in 6 NYCRR Part 375 (au). Source areas are areas of concern at a site where substantial quantities of contaminants are found which can migrate and release significant levels of contaminants to another environmental medium. Wastes and source areas were identified at the site include,

The points of release were identified in primary areas at the site, the North Evaporation Pit, Former Waste Solvent Tanks, the Former Laboratory Waste Solvent Tank, the West Evaporation Pit and the Fire Training Areas. Dense non-aqueous phase liquid (DNAPL), containing a high percentage of liquid TCE, is present in the overburden, shallow, intermediate and deep groundwater at the site. There is a large hydraulic head difference between the shallow and deep bedrock hydrogeologic units and it is likely that DNAPL migrated downward through vertical fractures below one and/or more of the primary points of release. The DNAPL has migrated from the site in the deep bedrock to the south toward Union Springs and Cayuga Lake. The plume leaving the site is being addressed by EPA through an order issued to GE in relation to the Cayuga Plume NPL site [NYS Registry ID No. 706012].

The waste/source areas identified will be addressed in the remedy selection process.

### **Groundwater**

Samples were collected from surface water and overburden, shallow, intermediate and deep groundwater monitoring wells to assess conditions on and off-site. The results indicate that contamination in the overburden, shallow, intermediate and deep groundwater at the site exceeds the SCGs for volatile organic compounds. The primary groundwater contaminants are trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE) and vinyl chloride (VC) associated with operations at the former GE Powerex site. As noted on Figure 3, the primary groundwater contamination is associated with the North Evaporation Pit, Former Waste Solvent Tanks, Purported Fire Training Area, Purported West Evaporation Pit and Former Laboratory Waste Solvent Tanks surrounding the building on the north, west and east side.

**Table #1 - Overburden Groundwater**

Detected Constituents	Concentration Range Detected (ppb)*	SCG <sup>b</sup>	Frequency Exceeding SCG
<b>VOCs</b>			
1,1,1,2-Tetrachloroethane	0-23.6	5	1/10
1,1,1-Trichloroethane	0-23,000	5	19/145
1,1,2,2-Tetrachloroethane	0-160	5	1/145
1,1,2-Trichloroethane	0-222	1	4/145
1,1-Dichloroethane	0-730	5	5/145
1,1-Dichloroethene	0-2,870	5	16/145
1,2,4-Trimethylbenzene	0-57.9	5	2/10
1,2-Dichlorobenzene	0-69	3	3/39
1,2-Dichloroethane	0-12.3	0.6	2/145
1,2-Dichloroethene (total)	0-640,000	5	10/14
1,3,5-Trimethylbenzene	0-18.4	5	2/10
2-Butanone	0-6,300	50	1/41
2-hexanone	0-3,600	50	1/41
Acetone	0-3,600,000	50	23/41
Benzene	0-39.6	1.0	4/145
Bromomethane	0-6.9	5	1/145
Carbon tetrachloride	0-190	5	3/145
Chloroform	0-550	7	5/145
Chloromethane	0-22.4	5	1/145
Cis-1,2-Dichloroethene	0-380,000	5	92/133
Cis-1,3-dichloropropene	0-10	0.4	1/145
Dichlorodifluoromethane	0-14.2	5	1/36
Ethylbenzene	0-3,870	5	23/145
Isopropyl benzene	0-19.8	5	1/36
m&p-Xylenes	0-11,000	5	29/108
Methylene chloride	0-210,000	5	20/145
Naphthalene	0-12.9	10	1/10
N-Propylbenzene	0-12.5	5	1/10
o-Xylene	0-4,700	5	16/108
Tetrachloroethene	0-45,200	5	35/145
Toluene	0-5,400	5	43/145
Trans-1,2-Dichloroethane	0-1,200	5	19/133
Trichloroethene	0-1,900,000	5	105/145
Trifluorotrichloroethane	0-3,580	5	5/26
Vinyl chloride	0-36,000	2	52/145
Xylenes (total)	0-20,300	5	15/50

a - ppb: parts per billion, which is equivalent to micrograms per liter, ug/L, in water.

b- SCG: Standard Criteria or Guidance - Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1), 6 NYCRR Part 703, Surface water and Groundwater Quality Standards, and Part 5 of the New York State Sanitary Code (10 NYCRR Part 5).

The results indicate that contamination in the overburden groundwater at the site exceeds the SCGs for volatile organic compounds (VOC) north and west of the building and a small area on the east side of the building. The overburden groundwater had detections of TCE, cis-1,2-DCE and VC at concentrations of 1,900ppm, 640ppm and 36ppm, respectively. Semi-volatile organic compounds (SVOCs) phenol, 1,2-dichlorobenzene, 4-methylphenol and 2-methylphenol were detected at low concentrations above the NYSDEC's Class GA groundwater criteria in the vicinity of the primary source areas but are not a significant concern at the facility. The data indicate that no pesticides or PCBs were detected in overburden groundwater.

**Table #2 - Shallow Groundwater**

Detected Constituents	Concentration Range Detected (ppb)*	SCG <sup>b</sup>	Frequency Exceeding SCG
<b>VOCs</b>			
1,1,1-Trichloroethane	0-11,000	5	178/1,729
1,1,2-Trichloroethane	0-120	1	8/1,729
1,1-Dichloroethane	0-3,800	5	115/1,729
1,1-Dichloroethene	0-3,500	5	289/1,729
1,2,4-Trimethylbenzene	0-66.3	5	8/76
1,2-Dichlorobenzene	0-72	3	12/370
1,2-Dichloroethane	0-14.6	0.6	6/1,729
1,2-Dichloroethene (total)	0-340,000	5	16/27
1,3,5-Trimethylbenzene	0-22.6	5	7/76
2-Butanone	0-1,600	50	6/767
2-Phenylbutane	0-6.5	5	2/74
Acetone	0-2,400,000	50	307/742
Benzene	0-180	1.0	94/1,723
Carbon disulfide	0-130	60	1/1,723
Chlorobenzene	0-6.8	5	2/1,729
Chloroethane	0-7.5	5	16/1,729
Chloroform	0-940	7	8/1,729
Chloromethane	0-350	5	4/1,729
Cis-1,2-Dichloroethene	0-800,000	5	1,502/1,708
Cis-1,3-dichloropropene	0-130	0.4	1/1,729
Cymene	0-7.2	5	2/76
Dichlorodifluoromethane	0-47	5	3/360
Ethylbenzene	0-5,200	5	254/1,723
Isopropyl benzene	0-15	5	4/360
m&p-Xylenes	0-19,000	5	380/1,451
Methyl tert butyl ether	0-58	10	1/346
Methylene chloride	0-300,000	5	117/1,729
N-Butylbenzene	0-13.9	5	2/76
N-Propylbenzene	0-10.5	5	5/76
o-Xylene	0-3,770	5	192/1,453
Tetrachloroethene	0-15,000	5	98/1,729
Toluene	0-11,000	5	464/1,723
Trans-1,2-Dichloroethane	0-7,000	5	525/1,708
Trichloroethene	0-840,000	5	1,011/1,728
Trifluorotrchloroethane	0-2,820	5	85/284
Vinyl chloride	0-100,000	2	1,468/1,729
Xylenes (total)	0-13,800	5	123/387

a - ppb: parts per billion, which is equivalent to micrograms per liter, ug/L, in water.

b- SCG: Standard Criteria or Guidance - Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1), 6 NYCRR Part 703, Surface water and Groundwater Quality Standards, and Part 5 of the New York State Sanitary Code (10 NYCRR Part 5).

The results indicate that contamination in the shallow groundwater at the site exceeds the SCGs for volatile organic compounds (VOC) north and west of the building and a small area on the east side of the building. The shallow groundwater had detections of TCE, cis-1,2-DCE and VC at concentrations of 840ppm, 340ppm and 100ppm, respectively. SVOCs were detected at low concentrations above the NYSDEC's Class GA groundwater criteria in the immediate vicinity of the North Evaporation Pit and Waste Solvent Tank areas. Shallow groundwater has not been significantly impacted by SVOCs. Pesticides were detected at low concentrations in one well in the North Evaporation Pit area. The data indicate that no PCBs were detected in shallow groundwater. The offsite shallow groundwater data indicates the potential for soil vapor intrusion.

**Table #3 - Deep Groundwater**

Detected Constituents	Concentration Range Detected (ppb)*	SCG <sup>b</sup>	Frequency Exceeding SCG
<b>VOCs</b>			
1,1,1-Trichloroethane	0-17.1	5	2/613
1,1,2-Trichloroethane	0-1.8	1	1/613
1,1-Dichloroethane	0-35.3	5	4/613
1,1-Dichloroethene	0-239	5	42/613
1,2,4-Trimethylbenzene	0-15.7	5	1/41
1,2-Dichlorobenzene	0-18.5	3	4/272
1,2-Dichloroethene (total)	0-12	5	2/17
1,3,5-Trimethylbenzene	0-5.6	5	2/50
2-Butanone	0-87.8	50	1/434
Acetone	0-38,000	50	77/434
Benzene	0-411	1.0	8/608
Carbon disulfide	0-350	60	4/608
Chlorobenzene	0-11.6	5	4/613
Chloroform	0-269	7	20/613
Chloromethane	0-7.9	5	3/613
Cis-1,2-Dichloroethene	0-91,700	5	218/596
Cis-1,3-dichloropropene	0-3.4	0.4	2/621
Ethylbenzene	0-712	5	27/608
m&p-Xylenes	0-2,150	5	25/421
Methylene chloride	0-105	5	3/613
o-Xylene	0-526	5	9/421
Tetrachloroethene	0-63.8	5	5/613
Toluene	0-3,800	5	71/608
Trans-1,2-Dichloroethane	0-1,260	5	104/596
Trichloroethene	0-646,000	5	133/613
Trifluorotrichloroethane	0-3,510	5	31/223
Vinyl chloride	0-5,500	2	236/613
Xylenes (total)	0-2,680	5	32/253

a - ppb: parts per billion, which is equivalent to micrograms per liter, ug/L, in water.

b- SCG: Standard Criteria or Guidance - Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1), 6 NYCRR Part 703, Surface water and Groundwater Quality Standards, and Part 5 of the New York State Sanitary Code (10 NYCRR Part 5).

The results indicate that contamination in the deep groundwater at the site exceeds the SCGs for volatile organic compounds (VOC) to the north, west, east and south of the building. The deep groundwater had detections of TCE, cis-1,2-DCE and VC at concentrations of 646ppm, .12ppm and 5.5ppm, respectively. SVOCs were detected at low concentrations below the NYSDEC's Class GA groundwater criteria. Deep groundwater has not been adversely impacted by SVOCs. The data indicate that no pesticides or PCBs were detected in deep groundwater.

Based on the findings of the RI, the past disposal of hazardous waste has resulted in the contamination of groundwater. The site contaminants that are considered to be the primary contaminants of concern which will drive the remediation of groundwater to be addressed by the remedy selection process are: TCE, cis,1,2-DCE and vinyl chloride.

## Soil

Soil samples were collected at the site during the RI. The results identify VOCs as the primary contaminants of concern and the distribution is limited to the immediate vicinity of the on-site source areas: the North Evaporation Pit, Waste Solvent Tank Area, West Evaporation Pit, the Laboratory Waste Solvent Tanks Area and the Fire Training Area. Soils were also analyzed for inorganics. The results were below the restricted residential use SCOs and it was determined that metals were not a contaminant of concern at this site. Soil contamination does not extend off-site.

**Table #4 - Soil**

Detected Constituents	Concentration Range Detected (ppm)*	Protection of GW SCG <sup>b</sup> (ppm)	Frequency Exceeding Protection of GW	Industrial Restricted Use SCG <sup>c</sup> (ppm)	Frequency Exceeding Industrial Restricted SCG
<b>VOCs</b>					
1,1,1-Trichloroethane	0.001-60	0.68	22/398	1000	0/398
1,1-Dichloroethane	0.002-1.2	0.27	3/398	480	0/398
1,1-Dichloroethene	0.001-0.79	0.33	1/398	1000	0/398
1,2-Dichloroethane	0.002-0.05	0.02	3/398	60	0/398
1,2-Dichloroethene (total)	0.0007-41	5	47/201		0/201
Acetone	0.002-2800	0.05	126/348	1000	6/348
Carbon tetrachloride	0.003-4.8	0.76	3/398	44	0/398
cis-1,2-Dichloroethene	0.001-96	0.25	90/321	1000	0/321
Ethylbenzene	0.0006-370	1.0	58/398	780	0/398
m&p-Xylenes	0.066-71	5	12/38		0/38
Methylene chloride	0.001-64	0.05	49/398	1000	0/398
o-Xylene	0.001-96	5	26/159		0/159
Tetrachloroethene	0.0009-1200	1.3	48/398	300	2/398
Toluene	0.001-930	0.7	68/398	1000	0/398
Trans-1,2-Dichloroethane	0.001-1.6	0.19	1/347	1000	0/347
Trichloroethene	0.001-14000	0.47	210/398	400	29/398
Vinyl chloride	0.001-12	0.02	31/398	27	0/398
Xylenes (total)	0.0007-6700	0.26	78/348	1000	4/348

a - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;

b - SCG: Part 375-6.8(b), Restricted Use Soil Cleanup Objectives for the Protection of Groundwater.

c - SCG: Part 375-6.8(b), Restricted Use Soil Cleanup Objectives for the Protection of Public Health for Industrial Use, unless otherwise noted.

The primary areas at the site, the North Evaporation Pit, Former Waste Solvent Tanks, the Former Laboratory Waste Solvent Tank, the West Evaporation Pit and the Fire Training Area all had detections of several VOCs including TCE, cis-1,2-DCE and VC, that exceeded the Protection of Groundwater SCOs. The contaminated soils at the site exceeding the protection of groundwater SCOs are found to a depth of 16' or the top of bedrock. The North Evaporation Pit had detections of TCE, acetone and xylene (total) exceeding the industrial use Soil Cleanup Objectives (SCOs). The Waste Solvent Tank Area had detections of TCE and PCE exceeding the industrial use SCOs. The West Evaporation Pit area only had TCE exceeding the industrial use SCOs for VOCs. No VOCs were detected in soil samples exceeding industrial use SCOs in the Laboratory Waste Solvent Tanks area and the purported Fire Training Pit area. For the 55.4 acre site only 4.25 acres of surface soils exceed the protection of groundwater SCOs and these soils surround the building to the north, west and east. Less than half an acre of surface soils exceed the industrial use SCOs and are located in the Waste Solvent Tank Area, North Evaporation Pit and West Evaporation Pit, surrounding the building to the north and west. The remaining acreage of the site, mostly to the north and west, meet unrestricted use SCOs and the protection of groundwater SCOs.

Based on the findings of the Remedial Investigation, the past disposal of hazardous waste has resulted in the contamination of soil. The site contaminants identified in soil which are considered to be the primary contaminants of concern, to be addressed by the remedy selection process are, TCE, cis-1,2-DCE, vinyl chloride, xylenes (total) and PCE.

### Surface Water

**Table #5 - Surface Water**

Detected Constituents	Concentration Range Detected (ppb) <sup>a</sup>	SCG <sup>b</sup> (ppb)	Frequency Exceeding SCG
VOCs			
cis-1,2-dichloroethene	ND-100	5	10/12
Trichloroethene	ND-240	5	11/12
Vinyl chloride	ND-3.9	2	1/12

a - ppb: parts per billion, which is equivalent to micrograms per liter, ug/L, in water.

b-SCG: Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1) and 6 NYCRR Part 703: Surface Water and Groundwater Quality Standards.

Surface water contamination identified during the RI was addressed during the IRM described in Section 6.2.

The Surface Water Interim Action Enhancement was designed to remove residual VOCs, primarily TCE and cis-1,2-DCE, from surface water in the storm sewer system at the site and has been effective. The Surface Water Interim Action Enhancement consists of a forced air bubbler system that aerates the water passing through the last storm sewer catch basin, catch basin CB-16, prior to flowing into the drainage ditch at Outfall 001. Outfall 001 is sampled quarterly and the results have been non-detect.

## **Exhibit B**

### **Description of Remedial Alternatives**

The following alternatives were considered based on the remedial action objectives (see Section 6.5) to address the contaminated media identified at the site as described in Exhibit A. (Note that the Alternatives presented in this document represent combinations of alternatives presented in the FS Report. These combined Alternatives were developed and included here to aid in the public's understanding of the possible remedies for the site.)

In-situ enhanced biodegradation is the chosen remedy for the overburden and shallow groundwater for the combined alternatives. The basis for this selection was the reliability of this method to reduce VOCs; minimize migration and be protective of human health and the environment. The selected remedy is cost effective while actively addressing the source areas.

In-situ enhanced biotic/abiotic degradation applied upgradient of the primary source areas is the chosen remedy for the deep groundwater for the combined alternatives. The basis for this selection was that it directly addresses the source areas, is cost effective compared to the other alternatives and will work in conjunction with the remedy selected by USEPA in the March 2013 ROD for Area 1 of the Cayuga County Groundwater Contamination Superfund Site.

#### **Alternative 1: No Action**

The No Action Alternative is evaluated as a procedural requirement and as a basis for comparison. This alternative leaves the site in its present condition and does not provide any additional protection to public health and the environment.

#### **Alternative 2: Institutional Controls with Site Management and Monitored Natural Attenuation**

This alternative includes institutional controls and implementation of a site management plan. Groundwater would be monitored for site related contamination and for monitored natural attenuation (MNA) indicators which would provide an understanding of the biological activity breaking down the contamination. Reports of the attenuation would be provided after 3 years, and active remediation would be proposed if it appears that natural processes alone would not address the contamination.

Imposition of an institutional control in the form of an environmental easement for the controlled property that:

- requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- allows the use and development of the controlled property industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and
- requires compliance with the Department approved Site Management Plan.

A Site Management Plan is required, which includes the following:

- a. an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The Environmental Easement and site management plan would be used to restrict land use for the facility and require the continued management of engineering controls.

Engineering Controls: The existing Surface Water Interim Action must be operated, maintained, and monitored to maintain protectiveness of human health and the environment.

This plan includes, but may not be limited to:

- o an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
  - o a provision for evaluation of the potential for soil vapor intrusion should the on-site building become occupied and for any new buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
  - o descriptions of the provisions of the environmental easement including any land use, and/or groundwater and/or surface water use restrictions;
  - o provisions for the management and inspection of the identified engineering controls;
  - o maintaining site access controls and Department notification;
  - o the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls; and
  - o a provision for investigation beneath the existing on-site building if the building is demolished to determine if further remedial action (such as excavation or a soil cover) is warranted.
- b. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
    - o monitoring of groundwater to assess the performance and effectiveness of the remedy; and
    - o a schedule of monitoring and frequency of submittals to the Department;
    - o monitoring for vapor intrusion should the on-site building become occupied and for any new buildings developed on the site, as may be required by the Institutional and Engineering Control Plan discussed above.
- c. an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, optimization, monitoring, inspection, and reporting of any mechanical or physical components of the remedy. The plan includes, but is not limited to:
    - o compliance monitoring of treatment systems to ensure proper O&M as well as providing the data for any necessary permit or permit equivalent reporting;
    - o maintaining site access controls and Department notification; and
    - o providing the Department access to the site and O&M records.

<i>Present Worth:</i> .....	<i>\$1,823,000</i>
<i>Capital Cost:</i> .....	<i>\$292,100</i>
<i>Annual Costs:</i> .....	<i>\$118,650</i>

**Alternative 3: Containment of the Soils above Industrial Use Soil Cleanup Objectives (SCOs), Treatment of the Shallow and Deep Groundwater, Continued O&M of Surface Water Interim Action Enhancement System and Institutional Controls with Site Management Plan**

A site cover would be required to allow industrial use of the site. The cover would consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper one foot of exposed surface soil would exceed the applicable soil cleanup objectives (SCOs). The primary areas that would require a cover are the North Evaporation Pit, Waste Solvent Tank and West Evaporation Pit areas. These areas comprise less than half an acre of the 55 acre site and are shown on Figure 3. Where the soil cover would be required it would be a minimum of one foot of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for industrial use. The soil cover would be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the site would meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d).

In-situ enhanced biodegradation would be employed for the treatment of VOCs in the overburden and shallow groundwater in the primary source areas. The biological breakdown of contaminants through reductive dechlorination would be enhanced by injecting a lactate and EVO solution into the subsurface to promote microbe growth. The location and depth of injection would be determined during the remedial design.

In-situ enhanced biodegradation would also be employed to treat VOCs in the deep groundwater upgradient of the North Evaporation Pit and Waste Solvent Tank areas. The biological breakdown of contaminants through biotic and abiotic degradation would be enhanced by injecting an electron donor(s) and an iron source into the D3 unit.

The continued O&M and monitoring of the existing Surface Water Interim Action Enhancement system would treat any potential recharge of the shallow water into the storm sewers. The system is designed to remove residual VOCs, primarily TCE and cis-1,2-DCE, from surface water in the storm sewer system at the facility. The system consists of an air sparging unit that aerates the water passing through the last storm sewer catch basin prior to flowing into the drainage ditch at the northwest corner of the site.

An evaluation of the potential for soil vapor intrusion for any offsite buildings that may be impacted by the contaminated shallow groundwater to the west of the site, including implementing actions recommended to address exposures related to soil vapor intrusion.

This alternative would include the institutional controls and site management elements of Alternative 2.

<i>Present Worth:</i> .....	\$10,180,000
<i>Capital Cost:</i> .....	\$5,091,000
<i>Annual Costs:</i> .....	\$466,000

**Alternative 4: Asphalt Cap of the Soils above Protection of Groundwater Soil Cleanup Objectives (SCOs), Treatment of the Shallow and Deep Groundwater, Continued O&M of Surface Water Interim Action Enhancement System and Institutional Controls with Site Management Plan**

On-site soils which exceed the protection of groundwater SCOs will be capped. The engineered cap will be placed over an approximately 4.25 acre area surrounding the building to the north, west and east, as indicated on Figure 3. The cap will be inspected and maintained as part of the Site Management Plan.

In-situ enhanced biodegradation would be employed for the treatment of VOCs in the overburden and shallow groundwater in the primary source areas. The biological breakdown of contaminants through reductive dechlorination would be enhanced by injecting a lactate and EVO solution into the subsurface to promote microbe growth. The location and depth of injection would be determined during the remedial design.

In-situ enhanced biodegradation would also be employed to treat VOCs in the deep groundwater upgradient of the North Evaporation Pit and Waste Solvent Tank areas. The biological breakdown of contaminants through biotic and abiotic degradation would be enhanced by injecting an electron donor(s) and an iron source into the D3 unit.

The continued O&M and monitoring of the existing Surface Water Interim Action Enhancement system would treat any potential recharge of the shallow water into the storm sewers. The system is designed to remove residual VOCs, primarily TCE and cis-1,2-DCE, from surface water in the storm sewer system at the facility. The system consists of an air sparging unit that aerates the water passing through the last storm sewer catch basin prior to flowing into the drainage ditch at the northwest corner of the site.

An evaluation of the potential for soil vapor intrusion for any offsite buildings that may be impacted by the contaminated shallow groundwater to the west of the site, including implementing actions recommended to address exposures related to soil vapor intrusion.

This alternative would include the institutional controls and site management elements of Alternative 2.

<i>Present Worth:</i> .....	\$13,058,000
<i>Capital Cost:</i> .....	\$7,190,000
<i>Annual Costs:</i> .....	\$472,400

**Alternative 5: Treat Soils to Industrial Use Soil Cleanup Objectives (SCOs); Treat Shallow and Deep Groundwater; Continued O&M of Surface Water Interim Action Enhancement System and Institutional Controls with Site Management Plan**

In-situ enhanced biodegradation will be employed to treat contaminants in soils in areas that exceed the industrial use SCOs. The biological breakdown of contaminants through anaerobic reductive dechlorination will be enhanced by injecting EVO into the subsurface to promote microbe growth via injection wells. The areas that will be focused on during the remedial design are the North Evaporation Pit, Waste Solvent Tank area and the West Evaporation Pit. A vegetated soil cover would be installed over the soil that needs to be addressed to prevent contact during treatment with soil exceeding industrial use SCOs and/or with probable DNAPL, and for the purposes of site restoration. Asphalt in the Waste Solvent Tank area would be repaired as needed after well installation.

In-situ enhanced biodegradation would be employed for the treatment of VOCs in the overburden and shallow groundwater in the primary source areas. The biological breakdown of contaminants through reductive dechlorination would be enhanced by injecting a lactate and EVO solution into the subsurface to promote microbe growth. The location and depth of injection would be determined during the remedial design.

In-situ enhanced biodegradation would also be employed to treat VOCs in the deep groundwater upgradient of the North Evaporation Pit and Waste Solvent Tank areas. The biological breakdown of contaminants through

biotic and abiotic degradation would be enhanced by injecting an electron donor(s) and an iron source into the D3 unit.

The continued O&M and monitoring of the existing Surface Water Interim Action Enhancement system would treat any potential recharge of the shallow water into the storm sewers. The system is designed to remove residual VOCs, primarily TCE and cis-1,2-DCE, from surface water in the storm sewer system at the facility. The system consists of an air sparging unit that aerates the water passing through the last storm sewer catch basin prior to flowing into the drainage ditch at the northwest corner of the site.

An evaluation of the potential for soil vapor intrusion for any offsite buildings that may be impacted by the contaminated shallow groundwater to the west of the site, including implementing actions recommended to address exposures related to soil vapor intrusion.

This alternative would include, all of the institutional control and site management elements of Alternative 2.

*Present Worth:* ..... \$13,062,000  
*Capital Cost:* ..... \$6,615,000  
*Annual Costs:* ..... \$520,200

**Alternative 6: Treat Soils to Protection of Groundwater Soil Cleanup Objectives (SCOs); Treat Shallow and Deep Groundwater; Continued O&M of Surface Water Interim Action Enhancement System and Implementation of a Site Management Plan**

In-situ enhanced biodegradation will be employed to treat contaminants in soils that exceed the protection of groundwater SCOs in a phased approach. The areas that will be focused on during the remedial design are the North Evaporation Pit, Former Waste Solvent Tank, Fire Training Area, West Evaporation Pit and Former Laboratory Waste Solvent Tanks surrounding the building on the north, west and east side. The biological breakdown of contaminants through anaerobic reductive dechlorination will be enhanced by injecting EVO into the subsurface to promote microbe growth via injection wells. A vegetated soil cover would be installed over the soil that needs to be addressed to prevent contact during treatment with soil exceeding industrial use SCOs and/or with probable DNAPL, and for the purposes of site restoration. Asphalt in the Waste Solvent Tank area would be repaired as needed after well installation.

In-situ enhanced biodegradation would be employed for the treatment of VOCs in the overburden and shallow groundwater in the primary source areas. The biological breakdown of contaminants through reductive dechlorination would be enhanced by injecting a lactate and EVO solution into the subsurface to promote microbe growth. The location and depth of injection would be determined during the remedial design.

In-situ enhanced biodegradation would also be employed to treat VOCs in the deep groundwater upgradient of the North Evaporation Pit and Waste Solvent Tank areas. The biological breakdown of contaminants through biotic and abiotic degradation would be enhanced by injecting an electron donor(s) and an iron source into the D3 unit.

The continued O&M and monitoring of the existing Surface Water Interim Action Enhancement system would treat any potential recharge of the shallow water into the storm sewers. The system is designed to remove residual VOCs, primarily TCE and cis-1,2-DCE, from surface water in the storm sewer system at the facility. The system

consists of an air sparging unit that aerates the water passing through the last storm sewer catch basin prior to flowing into the drainage ditch at the northwest corner of the site.

An evaluation of the potential for soil vapor intrusion for any offsite buildings that may be impacted by the contaminated shallow groundwater to the west of the site, including implementing actions recommended to address exposures related to soil vapor intrusion.

This alternative would include, all of the institutional control and site management elements of Alternative 2.

<i>Present Worth:</i> .....	\$26,052,000
<i>Capital Cost:</i> .....	\$14,871,000
<i>Annual Cost:</i> .....	\$892,500

**Exhibit C**

**Remedial Alternative Costs**

Remedial Alternative	Capital Cost (\$)	Average Annual Cost (\$)	Total Present Worth (\$)
Alternative 1: No Action	0	0	0
Alternative 2: Institutional Controls with Site Management and Monitored Natural Attenuation	\$292,100 Soil - \$53,100 GW - \$117,000 D3GW - \$77,000 SW - \$45,000	\$121,320 Soil - \$11,300 GW - \$64,200 D3GW - \$37,650 SW - \$8,170	\$1,666,000 Soil - \$193,000 GW - \$914,000 D3GW - \$544,100 SW - \$146,000
Alternative 3: Containment of the Soils above Industrial Use SCOs, Treatment of the Shallow and Deep Groundwater, Continued O&M of Surface Water Interim Action Enhancement System and Institutional Controls with a Site Management Plan	\$5,091,000 Soil - \$136,000 GW - \$3,160,000 D3GW - \$1,750,000 SW - \$45,000	\$469,000 Soil - \$21,700 GW - \$259,000 D3GW - \$150,000 SW - \$38,300	\$10,917,000 Soil - \$405,000 GW - \$6,380,000 D3GW - \$3,610,000 SW - \$522,000
Alternative 4: Asphalt Cap of the Soils above Protection of Groundwater SCOs, Treatment of the Shallow and Deep Groundwater, Continued O&M of Surface Water Interim Action Enhancement System and Institutional Controls with a Site Management Plan	\$7,190,000 Soil - \$2,235,000 GW - \$3,160,000 D3GW - \$1,750,000 SW - \$45,000	\$472,400 Soil - \$25,100 GW - \$259,000 D3GW - \$150,000 SW - \$38,300	\$13,058,000 Soil - \$2,546,000 GW - \$6,380,000 D3GW - \$3,610,000 SW - \$522,000
Alternative 5: Treatment of Soils to Industrial Use SCOs; Treatment of Shallow and Deep Groundwater; Continued O&M of Surface Water Interim Action Enhancement System and Institutional Controls with a Site Management Plan	\$6,615,000 Soil - \$1,660,000 GW - \$3,160,000 D3GW - \$1,750,000 SW - \$45,000	\$520,000 Soil - \$72,300 GW - \$259,000 D3GW - \$150,000 SW - \$38,300	\$13,062,000 Soil - \$2,550,000 GW - \$6,380,000 D3GW - \$3,610,000 SW - \$522,000
Alternative 6: Treatment of Soils to Protection of Groundwater SCOs; Treatment of Shallow and Deep Groundwater; Continued O&M of Surface Water Interim Action Enhancement System and Institutional Controls with a Site Management Plan	\$13,410,000 Soil - \$8,455,000 GW - \$3,160,000 D3GW - \$1,750,000 SW - \$45,000	\$800,700 Soil - \$353,400 GW - \$259,000 D3GW - \$150,000 SW - \$38,300	\$23,350,000 Soil - \$12,831,000 GW - \$6,380,000 D3GW - \$3,610,000 SW - \$522,000

## Exhibit D

### **SUMMARY OF THE PROPOSED REMEDY**

The Department is proposing Alternative 6 Treatment of Soils to Protection of Groundwater SCOs; Treatment of Shallow and Deep Groundwater; Continued O&M of Surface Water Interim Action Enhancement System and Institutional Controls with a Site Management Plan as the remedy for this site. Alternative 6 would achieve the remediation goals for the site by treating soils to protection of groundwater SCOs, using an in-situ enhanced bioremediation technology for overburden and shallow groundwater; biotic and abiotic degradation of the contaminated deep groundwater, the continued operation and maintenance of the Surface Water Interim Action Enhancement system, and provisions for evaluating soil vapor intrusion and implementing actions to address related exposures. The elements of this remedy are described in Section 7. The areas the proposed remedy would address are depicted in Figures 3-6 for soils, overburden groundwater, shallow groundwater, deep groundwater and surface water, respectively.

### **Basis for Selection**

The proposed remedy is based on the results of the RI and the evaluation of alternatives. The criteria to which potential remedial alternatives are compared are defined in 6 NYCRR Part 375. A detailed discussion of the evaluation criteria and comparative analysis is included in the FS report.

The first two evaluation criteria are termed "threshold criteria" and must be satisfied in order for an alternative to be considered for selection.

1. Protection of Human Health and the Environment. This criterion is an overall evaluation of each alternative's ability to protect public health and the environment.

The proposed remedy (Alternative 6) would satisfy this criterion by treating the contaminated soils that exceed the protection of groundwater SCOs (which are lower than the industrial use SCOs), using in-situ enhanced biodegradation to treat TCE in shallow groundwater, treating the deep groundwater using in-situ enhanced biotic/abiotic degradation, continuing to operate, maintain and monitor the existing Surface Water Interim Action Enhancement system, providing for evaluation and corresponding mitigation of potential soil vapor intrusion exposures, and restricting on-site groundwater use. Alternative 6 eliminates any threat associated with impacted soil, addresses the groundwater source areas and treats surface water from the storm sewer before being discharge to a drainage ditch. Alternative 1 does not provide any protection to public health and the environment and will not be evaluated further. Alternative 2 does not prevent exposures to contaminated surface soils that exceed applicable SCOs and therefore is not protective of human health nor is it protective of the environment since no actions would be taken to reduce the sources of contamination to groundwater. Therefore, Alternative 2 will not be evaluated further. Alternatives 3, 4, 5 and 6 would also all be protective of human health and the environment.

2. Compliance with New York State Standards, Criteria, and Guidance (SCGs). Compliance with SCGs addresses whether a remedy will meet environmental laws, regulations, and other standards and criteria. In addition, this criterion includes the consideration of guidance which the Department has determined to be applicable on a case-specific basis.

Alternative 3 and 4 would rely on natural attenuation to achieve the protection of groundwater SCOs which would likely not be achievable for a very long time. As a result, contaminated soil would continue to be a source of contamination to groundwater although the site cap under Alternative 4 would reduce infiltration induced impacts

to groundwater while the soil cover under Alternative 3 would also reduce infiltration but to a lesser degree. Alternative 5 would be expected to achieve protection of groundwater SCO's sooner than Alternative 3 and 4 since soils exceeding industrial use SCO's would be treated. Alternative 6 would achieve the protection of groundwater SCO's by direct treatment of all soils that exceed the corresponding SCO's. As a result, Alternative 6 would also best lead to achievement of groundwater standards.

The next six "primary balancing criteria" are used to compare the positive and negative aspects of each of the remedial strategies.

3. Long-term Effectiveness and Permanence. This criterion evaluates the long-term effectiveness of the remedial alternatives after implementation. If wastes or treated residuals remain on-site after the selected remedy has been implemented, the following items are evaluated: 1) the magnitude of the remaining risks, 2) the adequacy of the engineering and/or institutional controls intended to limit the risk, and 3) the reliability of these controls.

Alternative 6 has the greatest long-term effectiveness and permanence since site soils would be treated to achieve protection of groundwater/unrestricted use SCO's and therefore, soils would not need long-term management or institutional controls. Soils would continue to impact groundwater under Alternatives 3, 4 and 5 so these alternatives are less effective in the long term.

4. Reduction of Toxicity, Mobility or Volume. Preference is given to alternatives that permanently and significantly reduce the toxicity, mobility or volume of the wastes at the site.

Alternative 6 would have the highest reductions of toxicity, mobility and volume, as the contaminated soils (109,700 cubic yards) exceeding protection of groundwater SCO's would be treated. The next highest reductions of toxicity, mobility and volume would be achieved by Alternative 5 where soils exceeding industrial use SCO's (11,400 cubic yards) would be addressed. Alternative 4 would provide some reduction in mobility from soils to groundwater via reduction of storm water infiltration provided by the cap and Alternative 3 would do the same but to a lesser degree since the soil cover would allow more infiltration than the cap.

5. Short-term Impacts and Effectiveness. The potential short-term adverse impacts of the remedial action upon the community, the workers, and the environment during the construction and/or implementation are evaluated. The length of time needed to achieve the remedial objectives is also estimated and compared against the other alternatives.

Alternative 3 through 6 would each have short term impacts on the community (noise, increased traffic, air emissions) which could be effectively controlled with standard construction practices and safety measures. Alternatives 3 and 4 have more truck traffic due to importation of cover and cap materials compared to Alternatives 5 and 6. However Alternatives 5 and 6 would require construction of more injection points for treatment of soils than would be provided under Alternatives 3 and 4, which do not treat soils. Risks to remedial workers would be comparable among alternatives. Alternative 3 would have lower greenhouse gas emissions, fuel/energy use and water use than Alternatives 4, 5 and 6.

6. Implementability. The technical and administrative feasibility of implementing each alternative are evaluated. Technical feasibility includes the difficulties associated with the construction of the remedy and the ability to monitor its effectiveness. For administrative feasibility, the availability of the necessary personnel and materials is evaluated along with potential difficulties in obtaining specific operating approvals, access for construction, institutional controls, and so forth.

Alternatives 3 through 6 are each implementable. Alternatives 5 and 6 are less implementable than Alternatives 3 and 4 due to the need for relocation of sewers, decommissioning and/or replacement of monitoring/pumping wells and associated piping in order to treat soils.

7. Cost-Effectiveness. Capital costs and annual operation, maintenance, and monitoring costs are estimated for each alternative and compared on a present worth basis. Although cost-effectiveness is the last balancing criterion evaluated, where two or more alternatives have met the requirements of the other criteria, it can be used as the basis for the final decision.

Alternative 6 is the most expensive alternative due to the relatively large volume/area of soils to be treated but this is the only alternative that actively addresses the source of groundwater contamination in soils. Alternatives 4 and 5 have similar present worth costs and are comparable with respect to their effectiveness in addressing the source of groundwater contamination posed by soils. Alternative 3, which is the least costly alternative, does the least to address the source of groundwater contamination posed by soils.

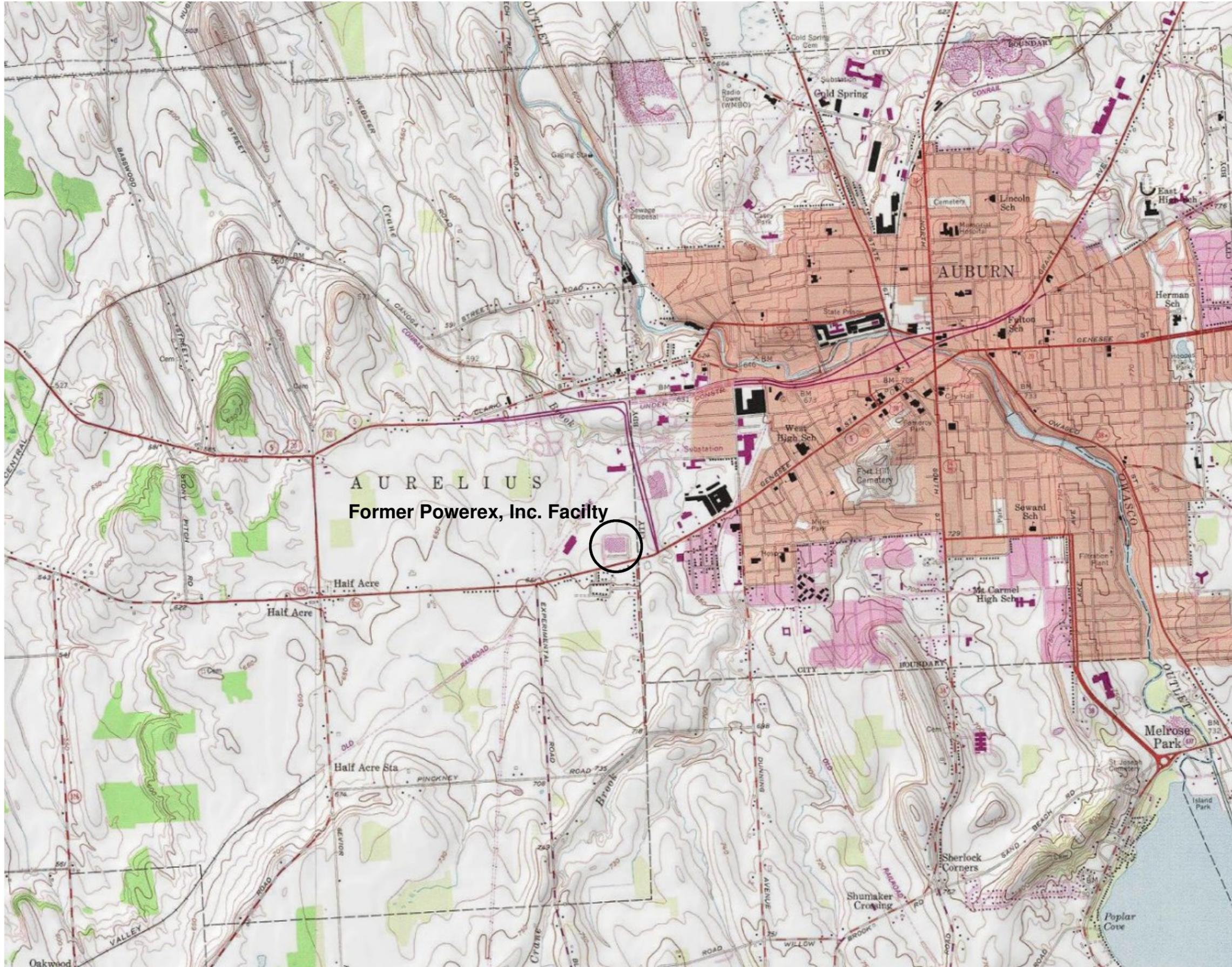
8. Land Use. When cleanup to pre-disposal conditions is determined to be infeasible, the Department may consider the current, intended, and reasonable anticipated future land use of the site and its surroundings in the selection of the soil remedy.

The anticipated future use of the site is industrial. Each of the alternatives would allow for industrial site use.

The final criterion, Community Acceptance, is considered a "modifying criterion" and is taken into account after evaluating those above. It is evaluated after public comments on the Proposed Remedial Action Plan have been received.

9. Community Acceptance. Concerns of the community regarding the investigation, the evaluation of alternatives, and the PRAP are evaluated. A responsiveness summary will be prepared that describes public comments received and the manner in which the Department will address the concerns raised. If the selected remedy differs significantly from the proposed remedy, notices to the public will be issued describing the differences and reasons for the changes.

Alternative 6 is being proposed because, as described above, it satisfies the threshold criteria and provides the best balance of the balancing criterion.



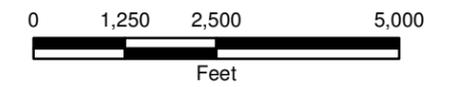
**FIGURE 1**



Former Powerex, Inc. Facility  
Remedial Investigation Report

General Electric Company  
Albany, New York

**SITE LOCATION MAP**



MARCH 2012  
48217

Figure 2  
Former Powerex Boundary  
Site #706006

**Areas of Concern**

- 1 - West Evaporation Pit
- 2 - Former waste Solvent Tank
- 3 - North Evaporation Pit
- 4 - Fire Training Area
- 5 - Former Laboratory Solvent Tanks

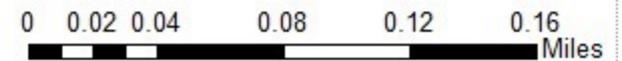
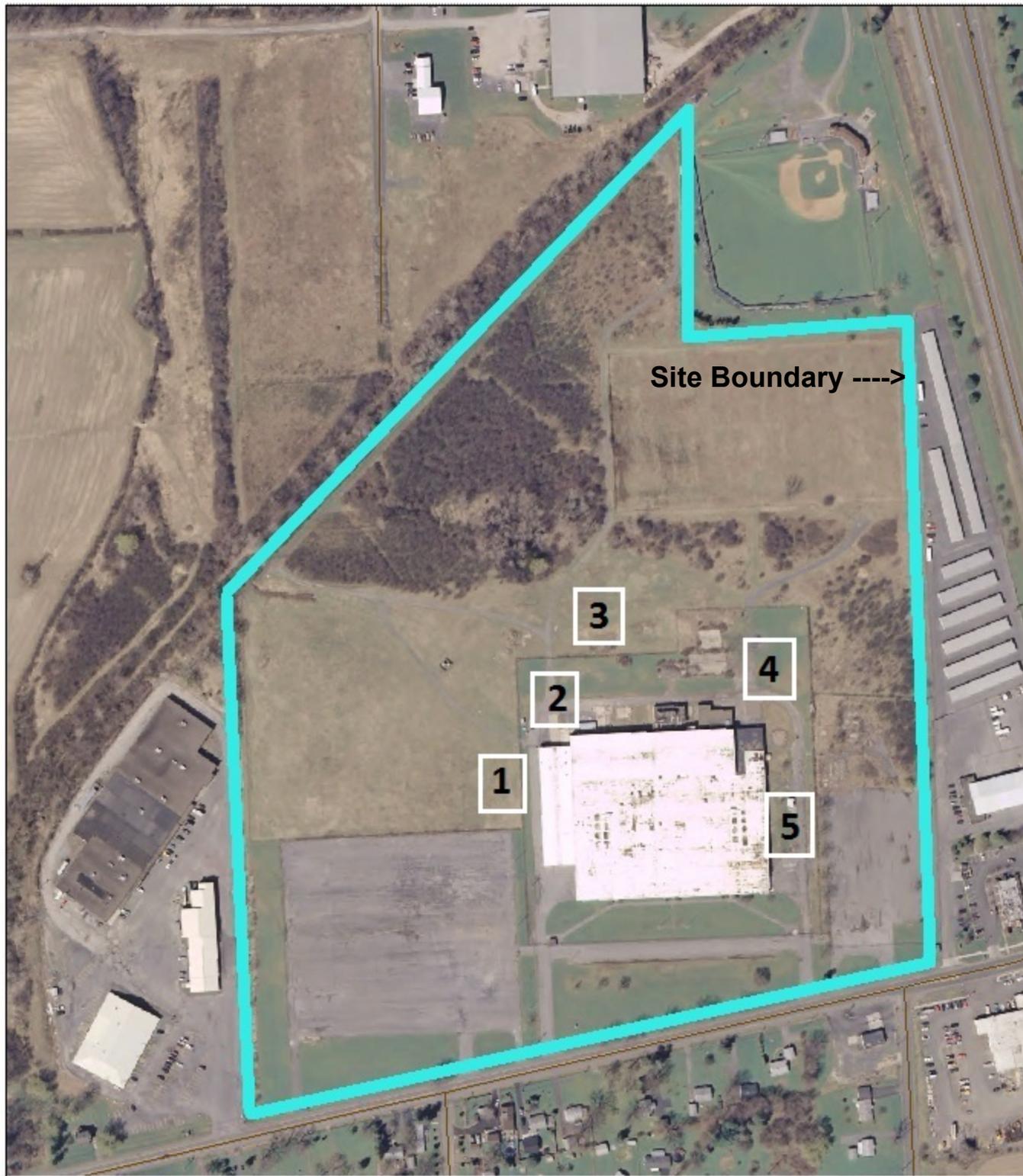


FIGURE 3

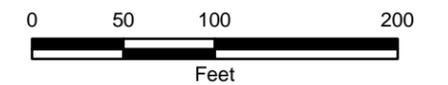


LEGEND

- SOIL BORING LOCATION
- TEST PIT LOCATION WITH ANALYTICAL DATA
- PART 375 UNRESTRICTED USE SCO EXCEEDANCE FOR VOCs
- TEST PIT LOCATION WITH NO ANALYTICAL DATA
- AREA OF UNRESTRICTED USE SCO EXCEEDANCES
- POTENTIAL PRESENCE OF DNAPL

FORMER POWEREX, INC. FACILITY  
FEASIBILITY STUDY REPORT  
GENERAL ELECTRIC COMPANY  
ALBANY, NEW YORK

ESTIMATED AREAS AND VOLUMES OF SOIL EXCEEDING UNRESTRICTED USE SCOs



AUGUST 2014  
612.48217



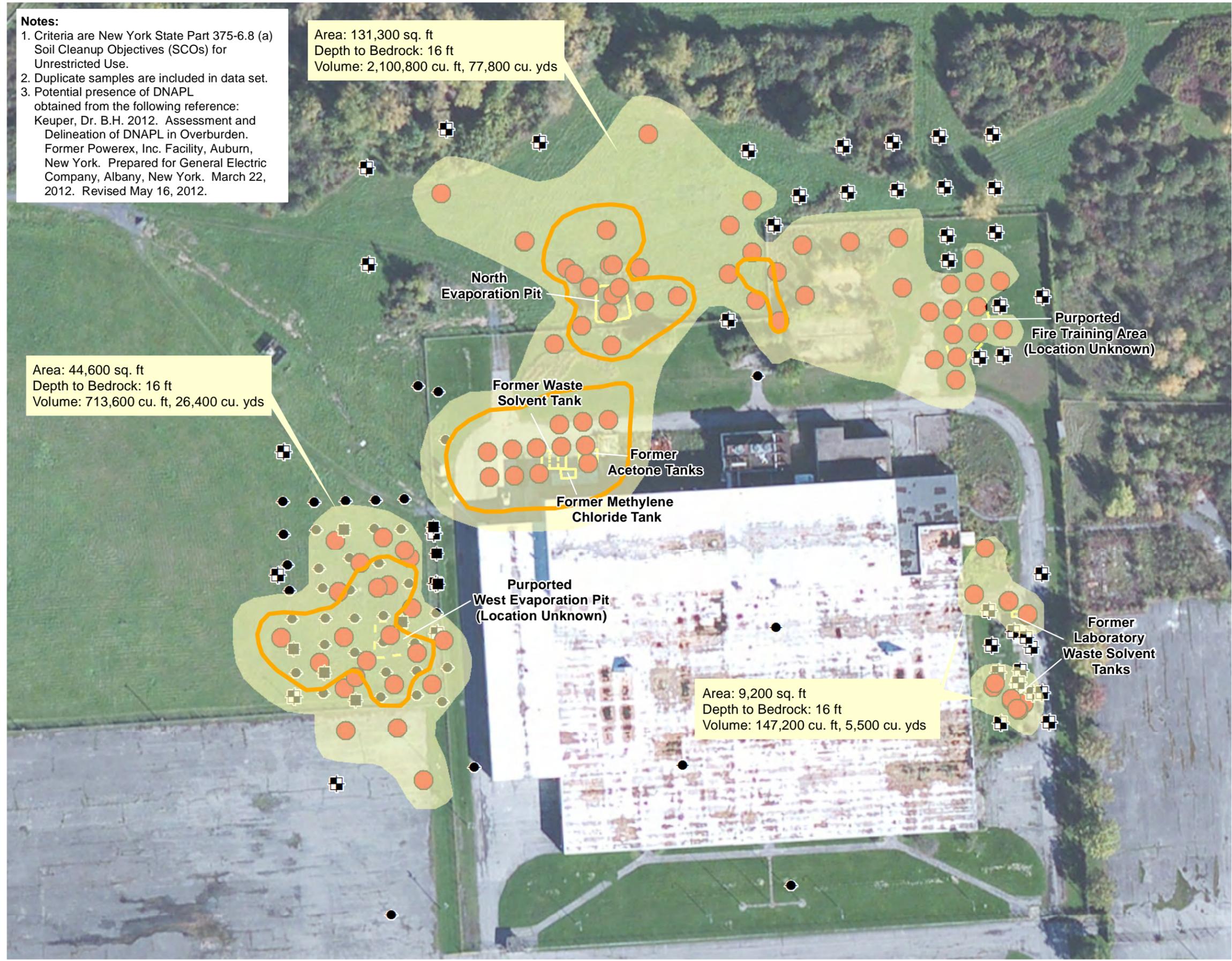
**Notes:**

1. Criteria are New York State Part 375-6.8 (a) Soil Cleanup Objectives (SCOs) for Unrestricted Use.
2. Duplicate samples are included in data set.
3. Potential presence of DNAPL obtained from the following reference:  
Keuper, Dr. B.H. 2012. Assessment and Delineation of DNAPL in Overburden. Former Powerex, Inc. Facility, Auburn, New York. Prepared for General Electric Company, Albany, New York. March 22, 2012. Revised May 16, 2012.

Area: 131,300 sq. ft  
Depth to Bedrock: 16 ft  
Volume: 2,100,800 cu. ft, 77,800 cu. yds

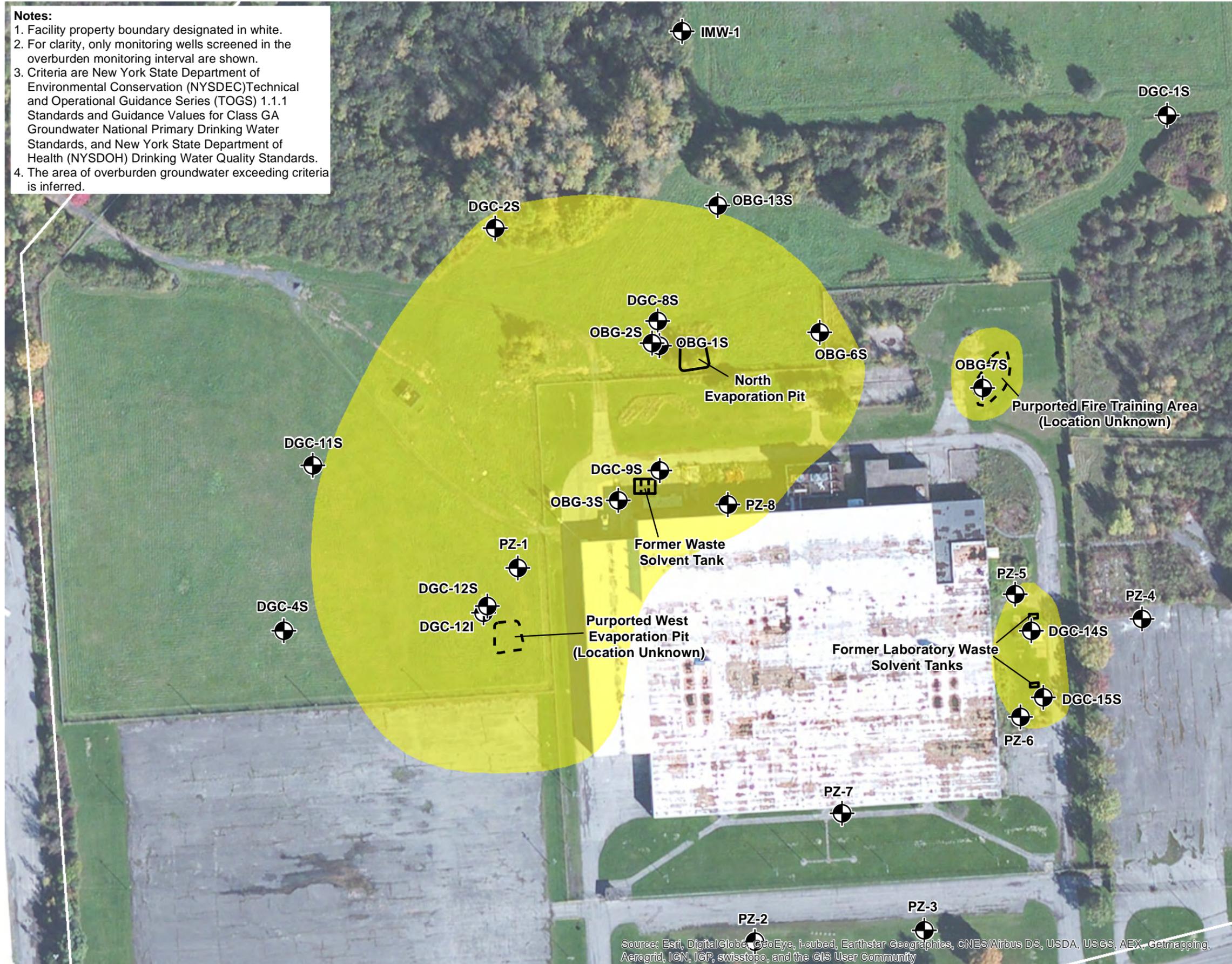
Area: 44,600 sq. ft  
Depth to Bedrock: 16 ft  
Volume: 713,600 cu. ft, 26,400 cu. yds

Area: 9,200 sq. ft  
Depth to Bedrock: 16 ft  
Volume: 147,200 cu. ft, 5,500 cu. yds



**Notes:**

1. Facility property boundary designated in white.
2. For clarity, only monitoring wells screened in the overburden monitoring interval are shown.
3. Criteria are New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) 1.1.1 Standards and Guidance Values for Class GA Groundwater National Primary Drinking Water Standards, and New York State Department of Health (NYSDOH) Drinking Water Quality Standards.
4. The area of overburden groundwater exceeding criteria is inferred.



Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

**FIGURE 4**

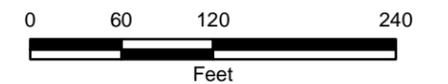


**LEGEND**

-  MONITORING WELL LOCATION
-  AREA OF OVERBURDEN GROUNDWATER THAT EXCEEDS CRITERIA

FORMER POWEREX,  
INC. FACILITY  
FEASIBILITY STUDY REPORT  
GENERAL ELECTRIC COMPANY  
ALBANY, NEW YORK

**AREA OF  
OVERBURDEN  
GROUNDWATER  
THAT EXCEEDS  
CRITERIA**

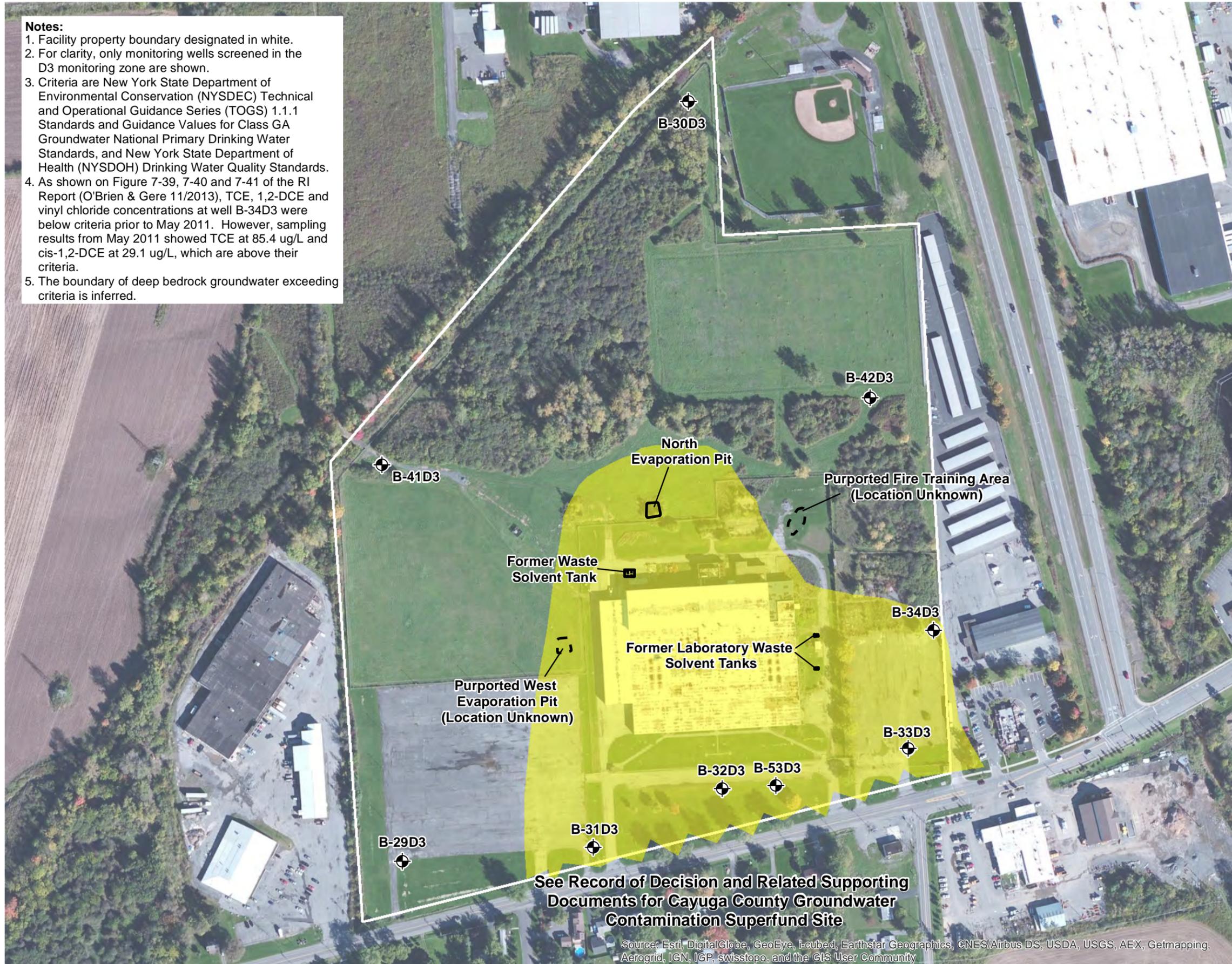


AUGUST 2014  
612.48217





- Notes:**
1. Facility property boundary designated in white.
  2. For clarity, only monitoring wells screened in the D3 monitoring zone are shown.
  3. Criteria are New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) 1.1.1 Standards and Guidance Values for Class GA Groundwater National Primary Drinking Water Standards, and New York State Department of Health (NYSDOH) Drinking Water Quality Standards.
  4. As shown on Figure 7-39, 7-40 and 7-41 of the RI Report (O'Brien & Gere 11/2013), TCE, 1,2-DCE and vinyl chloride concentrations at well B-34D3 were below criteria prior to May 2011. However, sampling results from May 2011 showed TCE at 85.4 ug/L and cis-1,2-DCE at 29.1 ug/L, which are above their criteria.
  5. The boundary of deep bedrock groundwater exceeding criteria is inferred.



Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

**FIGURE 6**

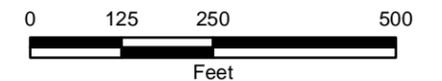


**LEGEND**

-  MONITORING WELL LOCATION
-  AREA OF DEEP BEDROCK (I.E., D3 MONITORING) INTERVAL GROUNDWATER THAT EXCEEDS CRITERIA

FORMER POWEREX,  
INC. FACILITY  
FEASIBILITY STUDY REPORT  
GENERAL ELECTRIC COMPANY  
ALBANY, NEW YORK

**AREA OF  
DEEP BEDROCK  
(i.e., D3 MONITORING)  
INTERVAL  
GROUNDWATER  
THAT EXCEEDS  
CRITERIA**



AUGUST 2014  
612.48217

