



Department of
Environmental
Conservation

FINAL STATEMENT OF BASIS CORRECTIVE MEASURES SELECTION

General Electric Global Research Center

Site No. 447013A

EPA ID No. NYD071094197

Niskayuna, Schenectady County

March 2015

PREPARED BY
DIVISION OF ENVIRONMENTAL REMEDIATION

DECLARATION STATEMENT – STATEMENT OF BASIS FINAL CORRECTIVE MEASURES SELECTION

General Electric Global Research Center DEC Site No. 447013A
Niskayuna, Schenectady County
March 2015

Statement of Purpose and Basis

This document presents the selected final corrective measures for the General Electric Global Research Center (GE-GRC). The remedial program was chosen in accordance with the 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) Part 373.

The proposed remedy was made available for public comment between February 27, 2015 and March 30, 2015. Comments received from the public on the corrective measures proposed in the proposed Statement of Basis (SB) are provided in the Responsiveness Summary included in Appendix A of this final Statement of Basis.

This decision is based on the Administrative Record for the New York State Department of Environmental Conservation (the Department) for the GE-GRC, included in Appendix B of the Statement of Basis.

Description of Selected Remedy

The selected remedy addresses historic releases of hazardous waste(s) and/or hazardous constituents as identified by the RCRA Facility Investigation (RFI).

The elements of the selected remedy are as follows:

For soils, excavation and off-site disposal of contaminated soil has been selected for the Former Drum Storage Area – Applied Research Building (SWMU-8) and the Parking Lot – Engineering Physics Building (AOC-2).

The remedy includes institutional controls on future use, including excavation controls regarding management of excavated soils, use of groundwater and soil vapor intrusion assessment requirements in relation to future site development. These elements of the remedy will be embodied in a site management plan, along with reporting and certification requirements to ensure that the remedy remains protective during future use of the site.

Declaration

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.

March 31, 2015

Date

A handwritten signature in dark ink, appearing to read "R. Schick", is positioned above a horizontal line.

Robert W. Schick, P.E., Director

FINAL STATEMENT OF BASIS

General Electric – Global Research Center
Niskayuna, Schenectady County
EPA RCRA No. NYD071094197/ Site No. 447013A

March 2015

SECTION 1: INTRODUCTION

The New York State Department of Environmental Conservation (Department) has determined that hazardous wastes and/or hazardous constituents were released into the environment at the facility. The Department has selected final corrective measures for the aforementioned facility. The selected corrective measure(s) is/are intended to attain the cleanup objectives identified for this facility for the protection of public health and the environment. This Statement of Basis (SB) identifies the selected corrective measure(s), summarizes the other alternatives considered, and explains the reasons for selecting the remedy. The Department will select final corrective measure(s) only after the public comment period has ended and the information submitted during this time is reviewed and considered in the decision-making process.

The purpose of this SB is to provide an opportunity for the public to be informed of and to participate in the development of the remedial program for the facility. Public input on all potential remedial alternatives, and on the information that supports the alternatives, is an important contribution to the corrective measure selection process. The Department may modify the proposed remedy or select another remedy based on new information and/or public comments. The Statement of Basis summarizes and highlights key information from the RCRA Facility Assessment (RFA), the RCRA Facility Investigation (RFI) and the Corrective Measures Study (CMS) reports, but is not a substitute for these documents. The RFA, RFI and CMS reports and the administrative record are more complete sources of information regarding the corrective measure(s).

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comments on the proposed remedy. All comments on the remedy received during the comment period were considered by the Department in selecting the remedy for the site. Site-related reports and documents were made available for review by the public at the following repositories:

**Niskayuna Branch Library
2400 Nott St E
Niskayuna, NY 12309-4321
Contact person: Librarian
Telephone (518) 386-2249**

Information about the comment period and citizen participation actions for this site is summarized in the responsiveness summary section of the Statement of Basis (see Appendix A).

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 525 acre General Electric Global Research Center (GE-GRC) facility is located north of the intersection of Van Antwerp Road and River Road in the Town of Niskayuna, Schenectady County. The facility is bounded on the north by the Mohawk River and the GE Training Center, on the east by Knolls Atomic Power Laboratory, and on the northwest and south by residential and undeveloped properties.

Site Features:

Several buildings include offices, laboratories, and support facilities with approximately 1.25 million square feet of floor space. GE-GRC is currently comprised of thirteen laboratories conducting research in various fields such as ceramics, metallurgy, electronics, environmental, and organic and inorganic chemistry. Solid and hazardous waste generation, treatment, and storage activities occur at the Site in support of its operations. The property is fenced and security clearance is required for site entry.

Site elevations ranges from 250 feet to 400 feet above mean sea level. The topography in the southwestern portion of the site gently slopes toward the Mohawk River. The topographic gradient becomes steeper in the central portion of the site, approaching the relatively flat river terrace of the lower level. The lower level terminates to the north at the near vertical escarpment of the Mohawk River gorge. A portion of the Site facilities occupy the lower level river terrace. The remainder of the facility occupies areas of relatively low relief on the upper level.

Current Zoning and Land Use:

The 525-acre GE-GRC site is zoned as Research & Development (I-R) and operates as an industrial research facility. The GE-GRC is permitted under Article 27, Title 9; 6NYCRR 373 to store hazardous wastes generated from various research projects. Program ID # NYD071094197, NYSDEC Permit #4-4224-00001/00100).

Past Use of the Site:

GE GRC was created in 1965 by the merger of GE Research Laboratory (founded in 1900 as the first United States industrial laboratory devoted to basic research) and the GE Advanced Technology Laboratories (established in 1895 to perform advanced engineering and development). Activities at the GE GRC facility began in the 1950s. The name of the site was changed from GE Corporate Research and Development to the GE Global Research Center in 2002.

Site Geology and Hydrogeology:

The overburden at the site consists of two units: 1) lacustrine sand, silt, and clay; and 2) glacial till. The western portion of the site is generally underlain by lacustrine silt, clay, and sand deposited as bottom and near-shore sediment in proglacial lakes. The material has a low to moderate permeability. The eastern portion of the site is generally underlain by till which is an unstratified mixture of clay, silt, sand, gravel, and boulders that were deposited beneath glacial ice. This material is relatively impermeable due to the moderate to high clay content. The thickness of these overburden units is variable, but in the areas of investigation, depth to bedrock was generally less than 10 feet. Groundwater has been observed in the overburden materials as discontinuous zones of perched groundwater. These perched zones have limited areal extent and provide a source of recharge to the underlying bedrock water table.

Bedrock groundwater flow is interpreted to be southwest to northeast toward eventual discharge at the escarpment above the Mohawk River.

A site location map is attached as Figure 1 and a facility map is attached as Figure 2.

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. The GE-GRC is: (1) an active research facility, (2) permitted to generate and store hazardous wastes, and (3) has no plans for closure or abandonment. Therefore, an alternative which recognizes the continued commercial/industrial use of the site was evaluated.

A comparison of the results of the RFI against commercial industrial use standards, criteria, and guidance values (SGCs) for the site contaminants is included in the Tables for the media being evaluated in exhibit A.

SECTION 5: ENFORCEMENT STATUS

6NYCRR Part 373 Hazardous Waste Management Permits include RCRA Corrective Action. This requires owners and/or operators of hazardous waste treatment, storage and disposal facilities to

investigate and, when appropriate, remediate releases of hazardous wastes and/or constituents to the environment.

On March 31, 1994, the Department issued a Part 373 Permit (Program ID # NYD071094197, NYSDEC Permit #4-4224-00001/00100) to the GE Global Research and Development. Permit was renewed on January 10, 2012. This permit allows hazardous wastes that contain volatile organic compounds (VOCs), metals, and/or PCBs to be stored at the facility.

All 373 Permits include requirements for RCRA Corrective Action (CA). This requires owners and/or operators of hazardous waste treatment, storage and disposal facilities to investigate and, when appropriate, remediate releases of hazardous wastes and/or hazardous constituents to the environment.

SECTION 6: RCRA CORRECTIVE ACTION

Article 27, Title 9, Section 27-0913, and 6NYCRR 373-2.6(l) require Corrective Action (CA), including Corrective Action beyond the facility boundary, where necessary to protect human health and the environment, for all releases of hazardous wastes and/or hazardous constituents from any SWMU at a storage, treatment, or disposal facility seeking a 6NYCRR Part 373 permit regardless of the time at which waste was placed in such unit. Pursuant to 6NYCRR 373-1.6(c)(2) the Commissioner may impose permit conditions as the Commissioner determines necessary to protect human health and the environment.

A Solid Waste Management Unit (SWMU) includes any discernible unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of hazardous or solid wastes. Such unit include any area at the facility at which solid wastes have been routinely and systematically released.

An Area of Concern (AOC) has been defined to mean an area at the facility, or an off-site area which is not at this time known to be a SWMU, where hazardous waste and/or hazardous constituents are present, or are suspected to be present, as a result of a release from the facility. The term shall include areas of potential or suspected contamination as well as actual contamination.

The implementation of Corrective Action includes: (1) a RCRA Facility Assessment (RFA), (2) a RCRA Facility Investigation, and (3) Corrective Measures.

6.1.1 RCRA FACILITY ASESMENT (RFA)

The RFA is a three phase process that includes: (1) a Preliminary Review (PR), (2) a visual site inspection (VSI), and (3) a Sampling Visit (SV).

Based on the June 3, 1997 VSI Report, as revised on Sept 24, 1998, it was determined that there had been a release(s) of hazardous waste(s) and/or hazardous constituents from the following five SWMUs and two AOC(s) that required the implementation of a RFI.

1. Former Drum Storage Area – Applied Research Building (SWMU-8)
2. Former Waste Storage Area – Applied Research Building (SWMU-9)
3. Inactive Landfill – (SWMU-16)
4. Former Waste Oil Tank Area – Metallurgy and Ceramics Building (SWMU-22)
5. Former Locations of Coal Wastewater Tanks – Engineering Systems Building (SWMU-23)
6. Parking Lot – Engineering Physics Building (AOC-2)
7. Hot Gas Cleanup Unit – Engineering Systems Building (AOC-5)

SWMU-16 is listed in the NYS Registry of Inactive Hazardous Waste sites as Site No. 447013. The site was listed on January 1, 1984 as Class 4, remediated site.

In October of 2004, subsequent to the CMS Report, an additional AOC requiring an RFI was identified during the demolition of the Resins and Insulation Building.

8. Former Resins & Insulation Building (AOC-6)

6.1.2 RCRA FACILITY INVESTIGATION (RFI)

Based on the results of the RFI, the Department has determined that hazardous wastes and/or hazardous constituents have been released at the facility. The impact of releases of hazardous wastes and/or hazardous constituents at the facility were characterized and evaluated.

The analytical data collected for the facility includes data for:

VOCs, SVOCs, pesticides and herbicides, PCBs, and inorganics

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. Based on the results, the Department determined that corrective measures were required to address some of the areas investigated. The RCRA Facility Investigation (RFI) Report contains a full discussion of the data. The nature and extent of contamination and environmental media requiring action are summarized in **Exhibit A**.

The contaminants of concern identified at this facility are:

SWMU-8	PCBs, chlorobenzenes
SWMU-9	chlordane, heptachlor epoxide
SWMU-16	1,2-dichlorobenzene, 1,2-DCA, benzene, cis-1,2-DCE, TCE
SWMU-22	petroleum hydrocarbons
SWMU-23	PAHs
AOC-2	PCBs
AOC-5	tetrachloroethene, nickel
AOC-6	chlorobenzenes

As illustrated in Exhibit A, the contaminants of concern exceed the cleanup objectives for:

SWMU-8	PCBs, chlorobenzenes
AOC-2	PCBs

6.2: INTERIM CORRECTIVE MEASURES

If at any time during an investigation, it becomes apparent that corrective actions should be taken to immediately address the spread of contamination, interim corrective measures must be taken. The design emphasis is to construct an Interim Corrective Measure (ICM) as close to a permanent system or final remedy as possible. The Department has determined that the ICM(s) are protective to human health and the environment, and could serve as part of the Final Corrective Measures at the facility.

The following ICM(s) has/have been completed at the facility.

SWMU-16 Inactive Landfill

Interim remedial measures that have been implemented for the Inactive Landfill have included:

1. installation of a bentonite clay cap and stormwater diversion trench in 1981;
2. fencing of the site to prevent unlimited access;
3. installation and semiannual sampling of upgradient (THM-12) and downgradient (MW-1, MW-2, and MW-3) monitoring wells;
4. annual inspection of landfill cap integrity; and
5. placement of an institutional control comprising the recording of landfill information (the NYSDEC inactive hazardous waste disposal site report) for the property parcel in the County Clerk's Office.

AOC-6 Former Resins and Insulation Building

Interim remedial measures that have been implemented for AOC-6 have included:

1. excavation and off-site disposal of approximately 290 yd³ of contaminated soils;
2. post excavation confirmatory sampling; and
3. site restoration.

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. The RFI report presents more a detailed discussion of any existing and potential impacts from the site.

SWMU-8

- Aroclor-1242, was detected in three soil samples at concentrations that exceeded all screening criteria.

- 1,2,4-trichlorobenzene, 1,2-dichlorobenzene, and 1,4-dichlorobenzene were detected in soil samples at concentrations which exceeded their NYSDEC TAGM 4046 SCOs. The concentrations of these constituents are below their EPA Industrial RBCs.
- This contamination will be addressed by selected CMs.

SWMU-9

- Chlordane and heptachlor epoxide, were detected at concentrations that slightly exceeded their NYSDEC TAGM 4046 SCOs.
- The detections of chlordane and heptachlor epoxide likely result from the proper use of pesticides. Heptachlor epoxide and chlordane can persist in the upper soil layer for many years and are resistant to leaching.

SWMU-16

- Benzene is present in the groundwater downgradient of SWMU-16 at concentrations (1.6ppb) that slightly exceeds the Class GA groundwater standards (1.0 ppb).
- Barium is present in the groundwater downgradient of SWMU-16 at concentrations (1580ppb) that exceed the Class GA groundwater standards (1000 ppb).
- SWMU-16 is listed in the Registry as Class 4 site.

SWMU-22

- Fluoranthrene, and pyrene, were detected at low levels well below the screening criteria insurficial soil samples.
- Four shallow soil samples were collected and analyzed for VOCs and SVOCs. No constituents were detected in these samples.

SWMU-23

- Benzo(a)anthracene, benzo(a)pyrene, and dibenzo(a,h)anthracene were detected in one initial soil sample at concentrations above screening criteria.
- Pyrene and fluoranthene were detected at concentrations in soil below screening levels.
- Benzo(a)pyrene and dibenz(a,h)anthracene), were not detected in the second round of soil samples collected from SWMU 23, but had detection limits above TAGM 4046 SCOs as a result of matrix interference.
- The detection limit for benzo(a)pyrene was well below the concentrations detected in the sample from the RFA boring S18. The detection limits for both PAHs were well below EPA Industrial RBCs.

AOC-2

- Aroclors 1242 and 1260 were found at concentrations that exceed applicable Part 375-6.8(b) commercial use SCOs.

AOC-5

- Tetrachloroethene (and other VOC) detections were below applicable Part 375-6.8(b) commercial use SCOs and protection of groundwater SCOs.

AOC-6

- Confirmatory soil samples from the excavation indicated no exceedances applicable Part 375-6.8(b) commercial use SCOs and protection of groundwater SCOs for metals, VOCs, SVOCs, PCBs, pesticides, or herbicides.

The nature and extent of contamination is detailed in Exhibit A of this document.

Fate and transport modeling presented in the RFI indicates that groundwater from SWMU-8 and AOC-2 will discharge at a very slow rate to the escarpment above the Mohawk River and any site-related constituents will evaporate on the escarpment face. Similarly, the discharge of potentially impacted groundwater into surface water is not a relevant exposure pathway to biota and off-site users

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*.

Exposures to site contaminants are not likely. The site is capped and fenced. Semi-annual sampling of monitoring wells shows no impact on groundwater. In addition, the groundwater is not used as a source for drinking water.

6.5: Summary of the Remediation Objectives

The objectives for the corrective measures have been established through the remedy selection process. The goal of the corrective measures is to protect public health and the environment and achieve unrestricted use of the site to the extent feasible.

The remedial action objectives for this site are:

Groundwater

Human Health

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

Environment

- Prevent the discharge of contaminants to surface water.
- Remove the source of ground or surface water contamination.

Soil

Human Health

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

Environment

- Prevent migration of contaminants that would result in groundwater or surface water contamination.
- Prevent impacts to biota from ingestion/direct contact with soil causing toxicity or impacts from bioaccumulation through the terrestrial food chain.

Soil Vapor

Human Health

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

SECTION 7: CORRECTIVE MEASURES STUDY (CMS)

Potential final corrective action measures for the facility were identified, screened, and evaluated in the CMS report. To be selected, the proposed final corrective measures 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 final corrective action measures for the facility must address potential routes of exposure to humans and the environment and attain the cleanup objectives identified for the facility, which are presented in **Exhibit B**.

A summary of the corrective measure alternatives that were considered for the facility is presented in **Exhibit C**. 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 maintenance. Monitoring would cease after 30 years if cleanup objectives are not achieved. A summary of the Proposed Corrective Measure Alternatives Costs is included as **Exhibit D**.

SECTION 8: ELEMENTS of the SELECTED CORRECTIVE MEASURE(S)

The basis for the Department's selected corrective measures are set forth in **Exhibit E**.

8.1 No Action Required

Based on the results of the RFI at the site and the evaluation presented here, the Department is selecting No Action as the remedy for the following three SWMUs and one AOC. The findings of the RFI indicate that these areas do not exhibit contaminants in soil above industrial use soil cleanup objectives (SCOs), nor groundwater contamination above groundwater standards.

1. Former Waste Storage Area – Applied Research Building (SWMU-9)
2. Former Waste Oil Tank Area – Metallurgy and Ceramics Building (SWMU-22)
3. Former Locations of Coal Wastewater Tanks – Engineering Systems Building (SWMU-23)
4. Hot Gas Cleanup Unit – Engineering Systems Building (AOC-5)

8.2 No Further Action Required

Based on the results of the RFI at the site, the ICMs that have been performed, and the evaluations presented here, the Department is selecting No Further Action as the remedy for the SWMU and AOC listed below. This No Further Action remedy includes the implementation of ICs/ECs as the selected remedy. The Department believes that this remedy is protective of human health and the environment and satisfies the remediation objectives described in Section 5.

1. Former Resins & Insulation Building (AOC-6)
2. Inactive Landfill (SWMU-16)

Former Resins and Insulation Building (AOC-6)

During October 2004, subsequent to submittal of the CMS Report, a new AOC (AOC-6) was identified at the former location of the Resins and Insulation Building. The Resins and Insulation Building had been demolished and excavation work for a new Research Facility Building had been initiated.

Contaminated soils were encountered over a roughly triangular area comprising approximately 5,600 square feet that encompassed the former Resins and Insulation Building. Contaminants identified in soil samples included the following organic compounds: 1,4-dichlorobenzene; 1,2-dichlorobenzene; 1,2,4-trichlorobenzene; chlorobenzene; and acetone.

The contaminated soils (approximately 290 cubic yards) were removed and properly disposed. Confirmatory soil samples from the excavation indicated no exceedance of soil cleanup objectives for VOCs, SVOCs, PCBs, pesticides, or herbicides. Confirmatory samples were not collected from the excavation floor as soils were excavated to bedrock. Metals results were consistent with background concentrations in site soils.

Based on the results of the confirmatory soil sampling results, the Department determined that No Further Action is required for AOC-6.

Inactive Landfill (SWMU-16)

The elements of the ICMs already completed and the institutional and engineering controls selected are listed below:

1. Cover System:

A site cover currently exists and will be maintained to allow industrial use of the site. Any site redevelopment will maintain a site cover, which may 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 will exceed the applicable soil cleanup objectives (SCOs).

2. 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;
- requires compliance with the Department approved Site Management Plan.

3. Site Management Plan:

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

- o 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: An Environmental Easement will be filed with the Schenectady County Clerk's Office.

Engineering Controls: A soil cover has been placed over the Inactive landfill and the area is fenced.

This plan includes, but may not be limited to:

- descriptions of the provisions of the environmental easement including any land use, groundwater and surface water use restrictions;
 - provisions for the management and inspection of the identified engineering controls;
 - maintaining site access controls and Department notification; and
 - the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.
- o Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, may not be limited to:
 - monitoring of ground water to assess the performance and effectiveness of the remedy; and
 - a schedule of monitoring and frequency of submittals to the Department.

8.3 Excavation and Off-site Disposal

Based on the results of the RFI at the site and the evaluations presented here, the Department is selecting the following elements as the remedy for the SWMU and AOC listed below:

1. Former Drum Storage Area – Applied Research Building (SWMU-8)
2. Parking Lot Engineering Physics Building (AOC-2)

The estimated present worth cost to implement and construct the remedy for SWMU-8 is estimated to be \$57,000 and the estimated average annual cost is \$0.00.

The estimated present worth cost to implement and construct the remedy for AOC-2 is estimated to be \$26,000 and the estimated average annual cost is \$0.00.

Due to the close proximity of these SWMUs to structures and appurtenances used in day-to-day operations by the GE-GRC the implementation of corrective measures has been postponed until such time as the structures will receive either major modification(s) and/or demolition.

1. Remedial Design

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per 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 gases 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. Excavation

SWMU-8

The former drum storage area located to the southeast of the Applied Research Building will be excavated to a depth of approximately 3 feet for off-site disposal at a permitted facility, of the contaminant source areas, as follows:

- all soils with PCB concentration greater than 1.0 mg/kg;
- soil containing SVOCs exceeding the NYSDEC residential SCOs; and
- soils that create a nuisance condition, as defined in Commissioner Policy CP-51 Section G.

Approximately 71 cubic yards of soil will be removed from the site. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to replace the excavated soil and complete the backfilling of the excavation and establish the designed grades at the site. The site will be paved to accommodate installation of a cover system.

AOC-2

The former drum storage area located to the southeast of the Applied Research Building will be excavated to a depth of approximately 2 feet, with off-site disposal at a permitted facility, of the contaminant source areas, as follows:

- all soils with a PCB concentration greater than 1.0 part per million (ppm);
- soil containing SVOCs exceeding the NYSDEC residential SCOs; and
- soils that create a nuisance condition, as defined in Commissioner Policy CP-51 Section G.

Approximately 32 cubic yards of soil will be removed from the site. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to complete the backfilling of the excavation and establish the designed grades at the site.

3. Institutional Control/Site Management Plan (IC/SMP)

The elements of the IC and SMP as discussed in Section 8.2 would apply to SWMU-8 and AOC-2.

STATEMENT OF BASIS

Exhibits A through E

General Electric – Global Research Center
Niskayuna, Schenectady County
EPA No. NYD071094197/ Site No. 447013A

March 2015

Exhibit A

Nature and Extent of Contamination

This section describes the findings of the RCRA Facility Investigation for all environmental media that were evaluated. As described in Section 5, samples were collected from various environmental media to characterize the nature and extent of contamination.

For each medium, a table summarizes the findings of the investigation. The tables present the range of contamination found at the facility in the media and compares the data with the applicable SCGs for the facility. The contaminants are arranged into four categories; 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 are also presented.

The section identifies the wastes found at the site and then, by environmental media, the individual contaminants in each environmental media that are associated with the disposal and/or operations identified at the facility. If this is a No Action or No Further Action SB, this section should present current site data that supports No Action/NFA.

SWMU(s)/AOC(s)

As described in the RFI report, SWMU(s)/AOC(s) were identified at the facility and are impacting groundwater, soil, surface water and/or soil vapor.

A SWMU includes any discernible unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of hazardous or solid wastes. Such units include any area at the facility where solid wastes have been routinely and systematically released. An AOC is an area at the facility, or an off-site area, which is not at the time known to be SWMU, where hazardous wastes and/or constituents are present or are suspected to be present as a result of a release from the facility. Solid wastes are defined in 6 NYCRR Part 371.1(c) and hazardous wastes are defined in 6 NYCRR Part 371.1(d).

Former Drum Storage Area – Applied Research Building (SWMU-8)

SWMU-8 is located adjacent to the Applied Research Building (ARB) as shown in Figure 2. The area was used for the temporary storage of drummed laboratory chemical wastes that may have included: D001-D043, F001-F005, and various P and U wastes. No additional information concerning the characteristics or quantities of waste stored in this area is available.

Sampling conducted in an excavation at the ARB in January 1996 determined that a release of hazardous constituents had occurred from SWMU-8. Dieldrin and PCBs were detected at concentrations exceeding screening criteria; therefore, the COCs specified for the RFI included pesticides and PCBs.

Soil samples were collected from SWMU-8 during multiple sampling events. Figure 4 shows the location of the soil borings with PCB concentrations. The results showed the following:

- One PCB, Aroclor-1242, was detected in three samples collected on July 25, 2000, at concentrations that exceeded all screening criteria.
- On April 16, 2001, five hand auger borings were drilled to the south of the ARB to delineate the contaminated soil. No PCBs were detected in the samples collected from these borings, delineating the extent of the PCB-contaminated soil in this area. The estimated area and depth of PCB-contaminated soil was determined to be 636 square feet and three feet respectively, resulting a volume of soil less than 1,908 cubic feet.
- Three pesticides were detected during the April 2001 sampling event in one sample at concentrations at concentrations below the screening criteria: heptachlor epoxide, alpha-chlordane and gamma-chlordane.
- During sampling, odors were noted from the soil from boring S8-S1. The sample collected from this boring, S8-S1-3.0, was analyzed for VOCs, in addition to PCBs and pesticides. No VOCs were detected at concentrations above screening criteria, but two SVOCs were detected as tentatively identified compounds (TICs) at concentrations above screening criteria: 1,4-dichlorobenzene and 1,2-dichlorobenzene. Additional sampling was conducted on May 24, 2001, to delineate the extent of SVOCs to the east of the ARB. Two additional borings were drilled, S8-10 and S8-S11, and samples were collected just above the bedrock surface. The samples were analyzed for SVOCs, pesticides, and PCBs. Three constituents (1,2,4-trichlorobenzene, 1,2-dichlorobenzene, and 1,4-dichlorobenzene) were detected at concentrations which exceeded their NYSDEC TAGM 4046 SCOs. The concentrations of these constituents are below their EPA Industrial RBCs. The boring locations surround the previously identified releases to the south and east. The roadway east of the ARB provides a corridor for multiple Site utilities, including hydrogen, gas, electric, and lab waste, preventing access for any further sampling. The extent of contamination to the north and west of SWMU 8 was delineated during the ARB Investigation in 1996 (Nittany Geoscience, April 1996).

The data generated from the soil boring investigation at SWMU-8 are provided in Table 1.

Contamination present at SWMU-8 will be addressed in the remedy selection process.

Former Waste Storage Area – Applied Research Building (SWMU-9)

The Waste Storage Area at the ARB was located in a now grassy area adjacent to the Lower Level Road. According to Site employees, a wooden fence once lined the Lower Level Road and terminated in the vicinity of SWMU-9. The area is underlain by brown clay soils and shale bedrock starting at a depth of 5.5 feet. The following types of laboratory wastes may have been stored in SWMU-9: D001-D043, F001-F005, and small quantities of P and U wastes. No additional information concerning the characteristics or quantities of wastes stored in this area is available.

Samples collected from SWMU-9 during the RCRA Facility Assessment - Sampling Visit (RFA-SV) contained the pesticide chlordane at a concentration above its screening criteria. The presence of chlordane is attributed to the common historic use of pesticides around the foundations of buildings, like the ARB, and wooden fences to control insects. Based on these detections, two

samples were collected from SWMU-9 during the RFI for analysis of pesticides. Two constituents, chlordane and heptachlor epoxide, were detected in the RFI samples at concentrations that slightly exceeded their NYSDEC TAGM 4046 SCOs. All detected constituent concentrations, for both the RFI and RFA-SV were below the applicable USEPA Industrial RBCs. All concentrations in RFA samples were also less than Industrial RBCs. See Figure 5 for location of soil borings.

The detections of chlordane and heptachlor epoxide likely result from the proper use of pesticides. Heptachlor epoxide and chlordane can persist in the upper soil layer for many years and are resistant to leaching. The data generated from the soil boring investigation at SWMU-9 are provided in Table 2.

Based on the very low concentrations of pesticides detected in the samples collected from SWMU-9 and because their source is likely the proper historic application of pesticides, not waste management, no further investigation or corrective action was recommended for this area.

Inactive Landfill – (SWMU-16)

This Inactive Landfill site was a chemical burial area at the General Electric (GE) Research and Development Facility property in Niskayuna and occupies 0.31 acres of the 525 acres comprising the GE-GRC. (See Figure 2) Wastes were buried in an isolated site on the property from 1948 to 1966. In 1981 the landfill was covered with a bentonite clay cap and a stormwater diversion trench was installed along the northwest border to prevent overland flow of surfacewater. There are four monitoring wells; one upgradient monitoring well (THM-12) and three downgradient (MW-1, MW-2, and MW-3) monitoring wells. Surface of the landfill cap slopes toward the northeast with drop of 20' over the 70' width. It is bordered by the GE-RDC active hazardous waste TSD facility, Old Farm (SWMU-5), to the southeast, forested lands to the southwest and northwest, and an access road to the northeast. The site is fenced to prevent unapproved access. Figure 3 shows the location of the Inactive Landfill, the location of the groundwater monitoring wells associated with the Inactive Landfill and SWMUs 5 and 24, and the groundwater contours for this SWMU. The data generated from the groundwater monitoring program at SWMU-16 are provided in Table 3.

Contamination present at SWMU-16 was addressed by the ICM(s) described in Section 6.

Former Waste Oil Tank Area – Metallurgy and Ceramics Building (SWMU-22)

The former Waste Oil Tank at the Metallurgy and Ceramics Building (M&C Building) was an underground storage tank that was used to store waste oil and possibly solvents. No additional information concerning the characteristics and quantities of wastes stored in this area is available. The tank has been removed and the area is covered by pavement.

One sample collected from SWMU-22 during the RFA-SV contained total petroleum hydrocarbons (TPH). No VOCs were detected above screening criteria; however because the NYSDEC does not have a standard for TPH, additional sampling was recommended during the RFI for semi-volatile organic compounds (SVOCs).

During the RFI, four subsurface soil samples collected from SWMU-22 were analyzed for SVOCs. Two constituents, fluoranthene, and pyrene, were detected at low levels well below the screening criteria. Additionally, four shallow soil samples were collected and analyzed for VOCs and SVOCs. No constituents were detected in these samples. See Figure 6 for location of soil borings. Although they were never detected, the detection limits for several constituents, including benzo(a)pyrene, dibenz(a,h)anthracene, and phenol, were below applicable Part 375 commercial use SCOs, but were less than EPA RBCs. There is no reason to believe that these constituents are present at SWMU 22. The data generated from the soil sampling investigation at SWMU-22 are provided in Table 4.

Based on these analyses, no further investigation or corrective action was recommended for SWMU-22.

Former Locations of Coal Wastewater Tanks – Engineering Systems Building (SWMU-23)

Coal-gasification wastewaters were stored in underground and aboveground storage tanks (SWMU 23) at the Engineering Systems Building (ESB) which contained the following types of waste: D008, D016, and D019. Tank content data from 1989 indicate the presence of lead, barium, cadmium, chromium, benzene, chloroform, carbon tetrachloride, toluene, 1,1,1-trichloroethane (TCA), tetrachloroethene (PCE), trichloroethene (TCE), dibenzofuran, cresols, total xylenes, and various polynuclear aromatic hydrocarbons (PAHs). The tanks have been removed and the area is covered with pavement.

One soil sample collected from this area during the RFA-SV contained PAHs including benzo(a)anthracene, benzo(a)pyrene, and dibenzo(a,h)anthracene at concentrations above screening criteria. Based on these results, three borings were installed and seven soil samples collected at SWMU-23 and analyzed for SVOCs during the RFI. See Figure 7 for the location of soil borings. The results showed that pyrene and fluoranthene were detected at concentrations below screening levels. Two target PAHs (benzo(a)pyrene and dibenz(a,h)anthracene), were not detected in samples collected from SWMU 23, but had detection limits above TAGM 4046 SCOs as a result of matrix interference. The detection limit for benzo(a)pyrene was well below the concentrations detected in the sample from the RFA boring S18. The detection limits for both PAHs were well below EPA Industrial RBCs.

Phenol was detected in one sample (and its field duplicate) as a tentatively identified compound (TIC) at a concentration above the TAGM 4046 SCO, but well below the EPA Industrial RBC. These values were qualified as estimated. The data generated from the soil sampling investigation at SWMU-23 are provided in Table 5.

Based on the infrequency of its detection in this SWMU and in earlier investigations, this phenol detection was determined to be either an outlier or a laboratory artifact. Based on RFA and RFI soil-sample analyses, no further soil investigation or corrective action is necessary at this SWMU.

Parking Lot – Engineering Physics Building (AOC-2)

The Engineering Physics Building (EPB) parking lot is the location of a former electrical transformer that contained transformer fluid (waste codes B003 and B007). Initial soil sampling was conducted in this area in 1990, indicating that PCBs were present in the soil in the southeast corner of the area. Additional samples were collected during the RFA-SV. PCBs (Aroclors 1248 and 1260) were detected in the 0- to 2-foot soil interval at two locations. Additional sampling was recommended for the RFI to delineate the extent of the PCBs.

Field screening, using the PCB immunoassay methods described in the Work Plan and Section 3.1.2, was conducted on samples from the five soil borings drilled in AOC-2. Seven samples were collected and analyzed for PCBs. The laboratory analyses confirmed the results of the field screening, indicating that PCBs, including Aroclors 1242 and 1260, were present in the soil in one sample collected from borings A2-S2-2.0 at concentrations below screening criteria. See Figure 8 for location of soil borings.

Based on these results, the extent of PCB-contaminated soil has been delineated and no further investigation was recommended at AOC-2. The area of PCB-contaminated soil is estimated to be less than 425 square feet. Samples collected during the RFA-SV delineated the depth of contamination exceeding screening criteria to be less than two feet. Based on these extents, the volume of PCB-impacted soil was estimated at 850 cubic feet. Potential final Corrective Measures for the PCB-impacted soils were evaluated in the Corrective Measures Study (CMS) Report. The data generated from the soil boring investigation is provided in Table 6.

Contamination present in AOC-2 will be addressed in the remedy selection process.

Hot Gas Cleanup Unit – Engineering Systems Building (AOC-5)

As part of the closure and preparation for demolition of the Gasification/Hot Gas Cleanup (HGCU) Test Facility (test facility, AOC-5), which was operated by GE for the Department of Energy (DOE), a soil investigation was conducted to determine whether the operation of the test facility had resulted in a release of hazardous waste or hazardous waste constituents that should be addressed during its pending closure. The test facility consisted of a gasifier, HGCU, and the ESB Drum Storage Area. Sampling was conducted on September 29 and 30, 1998, and follow-up sampling was conducted on April 21, 1999. Tetrachloroethene (PCE) and nickel were detected in samples at concentrations above their respective screening criteria. Additional sampling was recommended during the RFI. See Figure 6 for location of soil borings.

Nine samples were collected from this area during the RFI were analyzed for priority pollutant metals and VOCs. None of the detections of metals or VOCs exceeded the screening criteria. All of the metals detections were below the TAGM 4046 SCOs, background levels, or the site statistical background levels. The data generated from the soil boring investigation at AOC-5 are provided in Table 7. During this and all previous investigations at AOC-5, all tetrachloroethene (and other VOC) detections were less than EPA Industrial RBCs, therefore no further investigation or corrective action was recommended at AOC-5.

Based on the findings of the investigation of the facility, AOC-5 does not pose a significant threat to public health and the environment.

Former Resins & Insulation Building (AOC-6)

During October 2004, subsequent to submittal of the CMS Report, a new AOC (AOC-6) was identified at the former location of the Resins and Insulation Building (Figure 2). The Resins and Insulation Building had been demolished and excavation work for a new Research Facility Building had been initiated. Contaminated soils were encountered over a roughly triangular area comprising approximately 5,600 square feet that encompassed the former Resins and Insulation Building and SWMU-6 (Former Waste Storage Area – Hydrogen Peroxide Storage Building). Figure 9 shows the approximate location of AOC-6 in relation to its surroundings. Contaminants identified in soil samples included the following organic compounds: 1,4-dichlorobenzene; 1,2-dichlorobenzene; 1,2,4-trichlorobenzene; chlorobenzene; and acetone. The contaminated soils (approximately 290 cubic yards) were removed and properly disposed. Confirmatory soil samples from the excavation indicated no exceedances of soil cleanup objectives for VOCs, SVOCs, PCBs, pesticides, or herbicides. Figure 10 shows the location of the confirmatory sampling. Confirmatory samples were not collected from the excavation floor as soils were excavated to bedrock. Metals results were consistent with background concentrations in site soils. The data generated from the confirmatory sampling of the excavation at AOC-6 are provided in Table 8. The data generated from the characterization of excavated soil piles are provided in Tables 9 (TCLP) and Tables 10 (totals).

Based on the results of the confirmatory soil sampling results, the Department determined that no further remediation of AOC-6 is required.

Soil Vapor

GE GRC performed a vapor intrusion investigation in 2012 to evaluate the presence or absence of soil vapor intrusion associated with potential contaminant releases from SWMUs and AOCs. The work was conducted in the following buildings:

- Applied Research Building (ARB) and the adjacent Fitness Center;
- Engineering Systems Building (ESB) and the adjacent Green Energy Building;
- Chemistry and Engineering Building (CEB) and the adjacent Engineering Physics Building (EPB).

Three types of samples were collected for this investigation; ambient air samples, indoor air samples and sub-slab soil vapor samples. The On-Site Soil Vapor Pathway Investigation Summary Report contains a full discussion of the results. A total of 14 or more VOCs were detected in each of the buildings that were sampled. Most of these detections were attributed to outdoor air sources, background indoor air conditions, or indoor air sources (e.g., the use and storage chemicals in laboratories). In the case of indoor sources, the Occupational Safety and Health Administration (OSHA) regulations would apply. Based on the results of these analyses, none of the buildings were found to require mitigation. The only VOCs detected in indoor air that were attributed to vapor intrusion were the following:

For the Applied Research Building, TCE was attributed to vapor intrusion from beneath the slab. This does not represent a health risk to GE's workers because concentrations were below NYSDOH guideline values which were developed for residential settings; therefore no restrictions to the use of ARB were recommended. Annual indoor air monitoring was recommended for a five year period to document indoor air quality and to evaluate if existing building conditions change over time. However, no additional monitoring is necessary because this building is no longer regularly occupied. Should the ARB become occupied on a regular basis, annual indoor air monitoring will be conducted.

For the Engineering Systems Building, the relationship between sub-slab and indoor air PCE concentrations suggests that vapor intrusion may be occurring. However, the indoor air concentration was well below the NYSDOH guideline value for PCE and no further action was recommended.

For the Green Energy Building, the relationship between sub-slab and indoor air concentrations of PCE and TCE suggest that vapor intrusion may be occurring for these constituents. However, the indoor air concentrations were below NYSDOH guideline values which were developed for residential settings. Annual indoor air monitoring was recommended for a period of five years to document indoor air quality and to evaluate if existing building conditions change over time. However, no additional monitoring is necessary because this building is no longer regularly occupied. Should the ESB become occupied on a regular basis, annual indoor air monitoring will be conducted.

Exhibit B

SUMMARY OF THE CLEANUP OBJECTIVES

The goal for the corrective measure program is to achieve unrestricted use of the site to the extent feasible. At a minimum, the corrective measure(s) shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the facility through the proper application of scientific and engineering principles.

The soil cleanup objective for PCBs is 1 ppm, based on 6 NYCRR Part 375-6.8(b), Restricted Use Soil Cleanup Objectives (SCOs) for the Protection of Public Health. The residential use exposure scenario reflects a very conservative future site use; however, there are no institutional control or Site Management Plan requirements for cleanups that meet residential use SCOs. This PCB SCO (1 ppm) corresponds with the concentration under which PCBs are unregulated under the Toxic Substances Control Act (TSCA). The results of the RFI indicated that the soil concentrations of PCBs in both SWMU-8 and AOC-2 exceed the SCO (Figures 3 and 4; Tables 1 and 2).

The cleanup objectives for the SVOCs, which are also based on the 6 NYCRR Part 375-6.8(b) Residential Use SCOs, are as follows:

SVOC	Current NYSDEC SCO Residential (ppm)	Current NYSDEC SCO Protection of groundwater (ppm)	Maximum Boring Concentration (ppm)
1,2-dichlorobenzene	100*-	1.1	25.9
1,4-dichlorobenzene	9.8*-	1.8	214
1,2,4-trichlorobenzene	100**	NA	20.2

**These parameters were detected as SVOCs in laboratory analyses, but are considered VOCs in the Part 375 SCO tables. The SCOs for residential, restricted-residential and ecological resources use are capped at a maximum value of 100 ppm. The SCOs for protection of groundwater do not apply because there is no complete human exposure pathway for groundwater.*

***There is no SCO listed for 1,2,4-trichlorobenzene in the Part 375 SCO tables, the standard selected is the maximum value allowed for VOCs.*

Exhibit C

Description of Remedial Alternatives

Based on the conclusions of the RFI Report, only two of the ten SWMUs/AOCs identified to require a RFI were found to with contamination levels requiring Corrective Measures. The following alternatives were considered based on the cleanup objectives (see Exhibit B) to address the contaminated media identified at the facility as described in Exhibit A:

Former Drum Storage Area – Applied Research Building (SWMU-8)

Corrective Measures Alternatives identified for SWMU-8 included no action, containment, soil excavation and off-site disposal, and natural attenuation were evaluated for the small volume of SVOC-contaminated soil. The SWMU-8 Corrective Measures Alternatives are summarized as follows:

Alternative 1: No Action

The no action alternative would require no active remedy for PCB-contaminated soils in SWMU-8, but would require the implementation of an institutional control in the form of a deed notice or environmental easement that would restrict future use of this area.

Alternative 2: Containment

The containment alternative comprises a concrete cap with poured concrete walls footed into the upper bedrock. Such containment would inhibit recharge from precipitation and any potential lateral groundwater flux within the overburden. This potential alternative is tied to the planned demolition of the ARB structure. The presence of the ARB structure, and site utilities running along the southeast edge of the ARB, currently preclude excavation. However, once the site renovation in that area has begun and the ARB has been demolished, installation of a containment structure would be practicable. This remedy will also require PCB testing and appropriate disposal of demolition materials (including steel beams and doors, concrete slabs, etc.) from the ARB Former Drum Storage Area (SWMU-8) in accordance with TSCA regulations. The containment alternative would require the implementation of an institutional control in the form of a deed notice or environmental easement that would restrict future use of this area.

Alternative 3a: Soil Excavation and Off-Site Disposal

This alternative comprises the excavation and disposal of approximately 71 cubic yards of soil and concrete to a depth of 3 feet below ground in accordance with NYSDEC and EPA TSCA regulations. The excavated area would be backfilled with clean soil, graded, and restored by paving. This alternative is tied to the planned demolition of the ARB structure. The presence of the ARB structure, and site utilities running along the southeast edge of the ARB, currently preclude excavation. However, once the site renovation in that area has begun and the ARB has been demolished, the PCB-impacted soils (Figure 3) will be exposed for removal and this alternative will be practicable. Soils would be transported to either an EPA-certified chemical

waste landfill for disposal. This remedy will also require PCB testing and appropriate disposal of demolition materials (including steel beams and doors, concrete slabs, etc.) from the ARB Former Drum Storage Area (SWMU-8) in accordance with TSCA regulations.

Alternative 3b: Soil Excavation and Off-Site Disposal

This alternative comprises the excavation and disposal of approximately 71 cubic yards of soil and concrete to a depth of 3 feet below ground in accordance with NYSDEC and EPA TSCA regulations. The excavated area would be backfilled with clean soil, graded, and restored by paving. This alternative is tied to the planned demolition of the ARB structure. The presence of the ARB structure, and site utilities running along the southeast edge of the ARB, currently preclude excavation. However, once the site renovation in that area has begun and the ARB has been demolished, the PCB-impacted soils (Figure 3) will be exposed for removal and this alternative will be practicable. Soils would be transported to an EPA-certified incinerator for treatment. This remedy will also require PCB testing and appropriate disposal of demolition materials (including steel beams and doors, concrete slabs, etc.) from the ARB Former Drum Storage Area (SWMU-8) in accordance with TSCA regulations.

Alternative 4: Natural Attenuation

This alternative addresses the subarea and small volume of SVOC-impacted soil beneath the roadway east of the ARB (to a depth of 3 ft). The roadway provides a corridor for multiple site buried utilities, including hydrogen, gas, electric, sanitary, and lab waste, preventing access. Renovation work may carefully expose the site utility lines such that the SVOC-impacted soils can be removed and disposed off-site in conjunction with removal of the PCB-impacted soils. This possibility will be evaluated and GE GRC will make its best efforts to remove the SVOC-impacted soils at the time of the ARB renovation and PCB-impacted soil removal. If removal of the SVOC-impacted soil is not practicable, a new downgradient monitoring well would be installed (Figure 5) and groundwater samples would be collected quarterly for one year for analysis of SVOCs, pesticides, and PCBs. Given that the affected soil volume is very small and covered by a road, there is no undue risk to receptors, and the hydrogeologic characteristics of the environmental setting, it is reasonable to assume that natural attenuation (dispersion, dilution, and intrinsic biodegradation) will effectively reduce constituent concentrations in any possible aqueous plume. If site-specific constituents are detected at concentrations above the cleanup standards during the first four quarters of monitoring, then the need for continued monitoring would be reassessed.

Parking Lot – Engineering Physics Building (AOC-2)

Corrective Measures Alternatives identified for AOC-2 (Parking Lot of Engineering Physics Building) included no action, containment, and soil excavation and off-site disposal. The AOC-2 Corrective Measures Alternatives are summarized as follows:

Alternative 1: No Action

The no action alternative would require no active remedy for PCB-contaminated soils in AOC-2, but would be tied to the implementation of an institutional control in the form of a deed notice or environmental easement that would restrict future use of this area.

A limited groundwater performance monitoring program would be associated with Alternative 1. A new downgradient monitoring well would be installed and groundwater samples would be collected quarterly for one year for analysis of PCBs. If one or more PCBs are detected at concentrations above the proposed cleanup standards during each of the first four quarters of monitoring, then the monitoring frequency would be reassessed.

Alternative 2: Containment

The containment alternative comprises a concrete cap with poured concrete walls footed into the upper bedrock. Such containment would inhibit recharge from precipitation and any potential lateral groundwater flux within the overburden. However, the existing parking lot provides similar protection from precipitation recharge, and it is unlikely that significant groundwater flow occurs in the upper two feet of soil beneath the pavement. The containment alternative would require the implementation of an institutional control in the form of a deed notice or environmental easement that would restrict future use of this area.

A limited groundwater performance monitoring program would be associated with Alternative 2. A new downgradient monitoring well would be installed and groundwater samples would be collected quarterly for one year for analysis of PCBs. If one or more PCBs are detected at concentrations above the proposed cleanup standards during each of the first four quarters of monitoring, then the monitoring frequency would be reassessed.

Alternative 3: Soil Excavation and Off-Site Disposal

This alternative comprises the excavation and disposal of approximately 32 cubic yards of soil to a depth of 2 ft below ground. The excavated area would be backfilled with clean soil, graded, and restored by paving. Soils would be transported to a permitted facility for disposal.

Exhibit D

Corrective Measure Alternative Costs

PRESENT WORTH COSTS* FOR CORRECTIVE MEASURES ALTERNATIVES

Alternative Description	Capital Cost	One Year of Annual O&M Costs	Total Cost
SWMU-8, Alt. 3a – Soil excavation and disposal (in EPA-certified chemical waste landfill) and demolition debris testing and disposal (demolition not included). Groundwater performance monitoring for PCBs will be conducted under SWMU-8 Alt. 4.	\$105,000	\$10,000	\$115,000
SWMU-8, Alt. 3b – Soil excavation and disposal/destruction (in EPA-certified incinerator) and demolition debris testing and disposal (demolition not included). Groundwater performance monitoring for PCBs will be conducted under SWMU-8 Alt. 4.	\$280,000	\$10,000	\$290,000
SWMU-8, Alt. 4 – Natural attenuation of SVOCs and groundwater performance monitoring	\$11,500	\$10,000	\$21,500
AOC-2, Alt. 1 – No Action with groundwater performance monitoring	\$11,500	\$9,000	\$20,500
AOC-2, Alt. 3a – Excavation and disposal at High Acres Landfill.	\$33,000	-	\$33,000

*Costs are based on the CMS Report dated 2004 (the cost for an AOC-2 deed notice has been added for Alternative 1) and were adjusted for inflation (increased by 26% and rounded). The costs for excavation and disposal alternatives incorporated an assumption that field test kits would be used for most of the PCB cleanup confirmation analyses, with few verification samples (approximately 5% of the field test samples) submitted for laboratory analysis. If field test kits are not suitable to reliably demonstrate remedy attainment of PCB cleanup objectives and the number of laboratory analyses required increases, actual costs may be higher.

Exhibit E

SUMMARY OF THE SELECTED FINAL CORRECTIVE MEASURE(S)

Former Drum Storage Area – Applied Research Building (SWMU-8)

The Department has selected Alternative 3a (Excavation and Off-Site Disposal at a Chemical Waste Landfill) for SWMU-8. This alternative comprises the excavation and disposal of approximately 71 cubic yards of PCB-contaminated soil and concrete to a depth of 3 feet below ground surface. Verification samples will be collected in accordance with EPA TSCA regulations. The excavated area will be backfilled with clean soil, graded, and restored by paving. This alternative is tied to the planned demolition of the ARB structure. The presence of the ARB structure, and site utilities running along the southeast edge of the ARB, currently preclude excavation. However, once the site renovation in that area has begun and the ARB has been demolished, the PCB-impacted soils (Figure 3) will be exposed for removal and this alternative will be practicable. Soils would be transported to either an EPA-certified chemical waste landfill for disposal. This remedy will also require PCB testing and appropriate disposal of demolition materials (including steel beams and doors, concrete slabs, etc.) from the ARB Former Drum Storage Area (SWMU-8) in accordance with TSCA regulations. Alternative 1 (No Action) was not selected because it does not comply with state and Federal standards, criteria, and guidelines for the concentrations of PCBs in soil. Alternative 3b (Excavation and Off-Site Destruction at Incinerator) was not selected due to the higher cost and additional risk associated with transporting the waste materials to Texas rather than western New York.

GE-GRC will make its best efforts to remove the small volume of SVOC-impacted soils along the southeast corner of the ARB at the time of the ARB renovation and PCB-impacted soil removal. Alternative 4 (Natural Attenuation) is also selected to be applied to the SVOC-impacted soils if they cannot be safely accessed and removed. If removal of the SVOC-impacted soil is not practicable, the remedy would include the installation of a new downgradient monitoring well (Figure 5) and collection of quarterly groundwater samples for one year for analysis of SVOCs, pesticides, and PCBs. Given that the affected soil volume is very small and covered by a road, there is no undue risk to receptors, and the hydrogeologic characteristics of the environmental setting, it is reasonable to assume that natural attenuation (dispersion, dilution, and intrinsic biodegradation) will effectively reduce constituent concentrations in any possible aqueous plume. If site-specific constituents are detected at concentrations above the cleanup standards during the first four quarters of monitoring, then the need for a Site Management Plan, institutional land use controls, and continued groundwater monitoring will be evaluated.

The selected final corrective measure(s) is/are based on the results of the RFI, CMS and the evaluation of alternatives.

Alternative 1 (No Action) and Alternative 2 (Containment) were removed from further consideration for SWMU-8 for the following reasons: (1) neither of these alternatives would result in attainment of the applicable soil cleanup standards because all or some of the impacted soils would be left in place and PCBs are not readily biodegradable; (2) the maximum measured PCB soil concentration exceeds the 50 ppm disposal threshold specified under TSCA regulations; (3)

construction of the containment barrier walls and footers would locally require removal/disposal of a buried concrete slab, or the remains of same, that is apparently located just above the top of bedrock in this area (i.e., beneath soil which would also be removed/disposed); this reduces the distinction between Alternatives 2 and 3; and (4) the SWMU-8 ICM and Demolition Work Plan (Appendix A of the CMS Plan) states that demolition in this area of the ARB is to leave the ARB foundation walls, footers, and basement slabs in place; this may present obstacles to the construction of a SWMU-8 soil containment system.

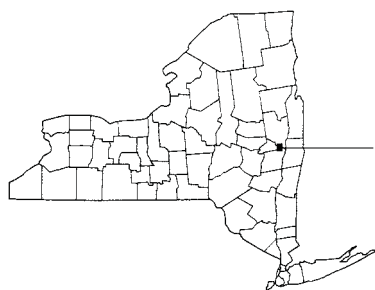
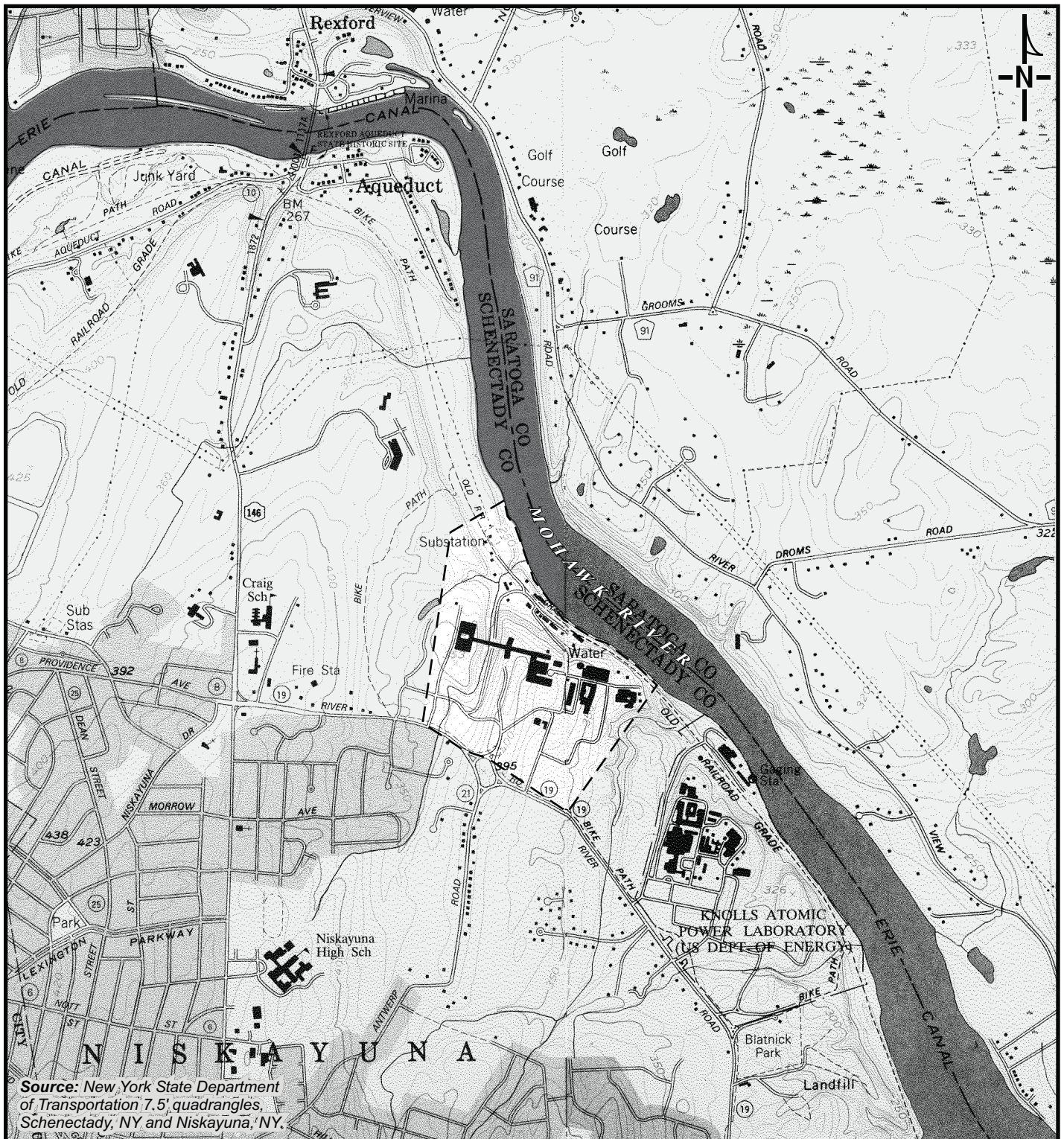
Parking Lot – Engineering Physics Building (AOC-2)

For AOC-2, the Department has selected Alternative 3 (Soil Excavation and Off-Site Disposal). This alternative comprises the excavation and disposal of approximately 32 cubic yards of soil to a depth of 2 feet below ground surface. Verification samples will be collected in accordance with NYSDEC and EPA TSCA regulations to demonstrate attainment of the SCOs. The excavated area will be backfilled with clean soil, graded, and restored by paving. Soils will be transported to a permitted facility for disposal. The selected alternative is different from the remedy recommended in the CMS, (i.e., the no action alternative). Although the no action alternative was justified in the CMS because there is no human health or environmental risk associated with leaving the impacted soil in place, Alternative 3 (Soil Excavation and Off-Site Disposal) is favored because it will reduce or eliminate potential long-term care requirements and the need for groundwater monitoring.

The selected final corrective measure(s) is/are based on the results of the RFI, CMS and the evaluation of alternatives.

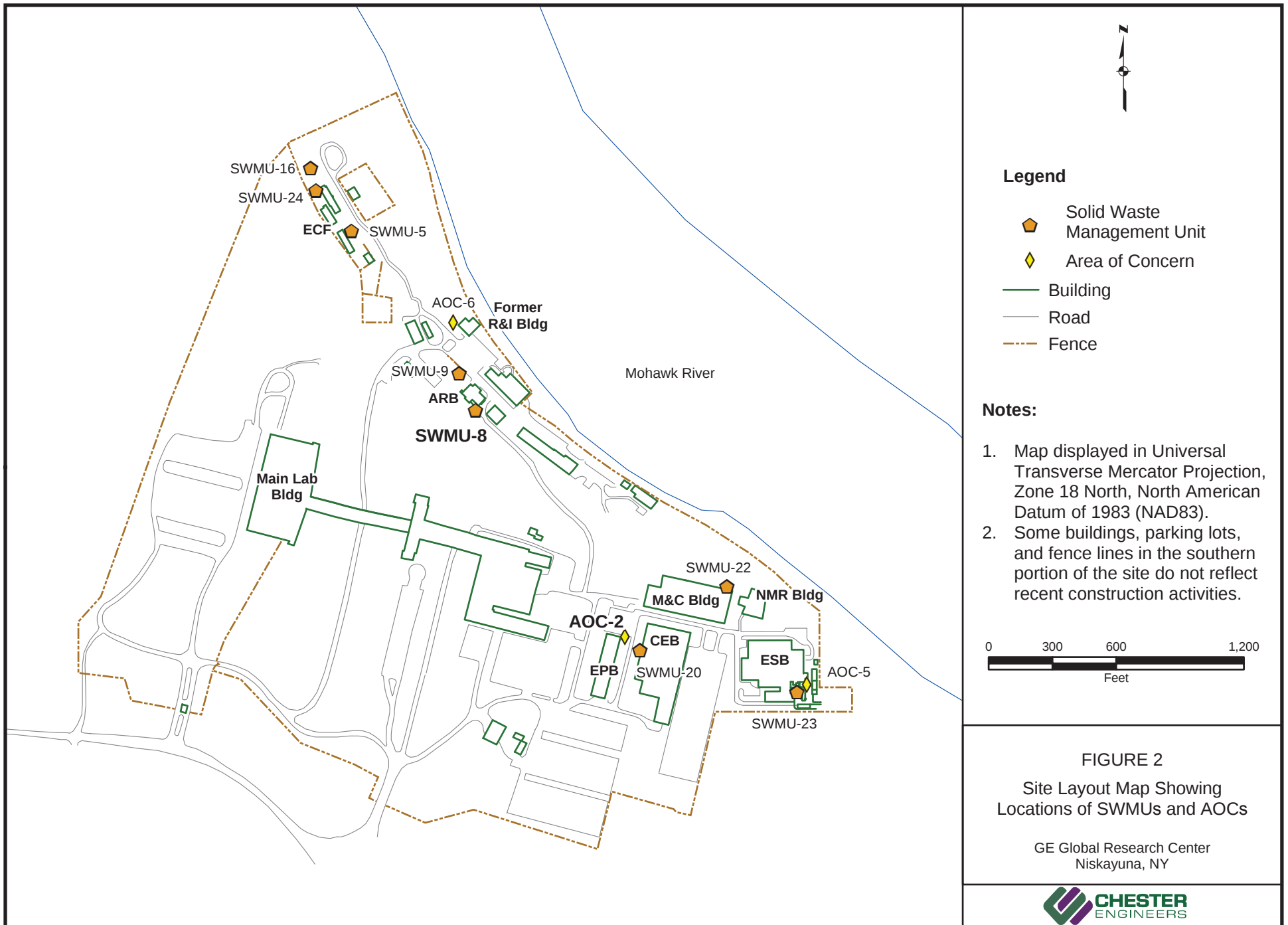
Alternative 2 (Containment) was removed from further consideration for AOC-2 because it is no more effective than Alternative 1 (No Action), for the following reasons: (1) this alternative would not result in attainment of the applicable soil cleanup standards; (2) the maximum measured PCB soil concentrations are below the key TSCA disposal threshold value of 50 ppm, such that waste soil (PCB remediation waste) may be disposed in a permitted solid waste landfill; (3) the present parking lot acts as an effective cap; (4) PCBs are relatively immobile; and (5) the small area involved.

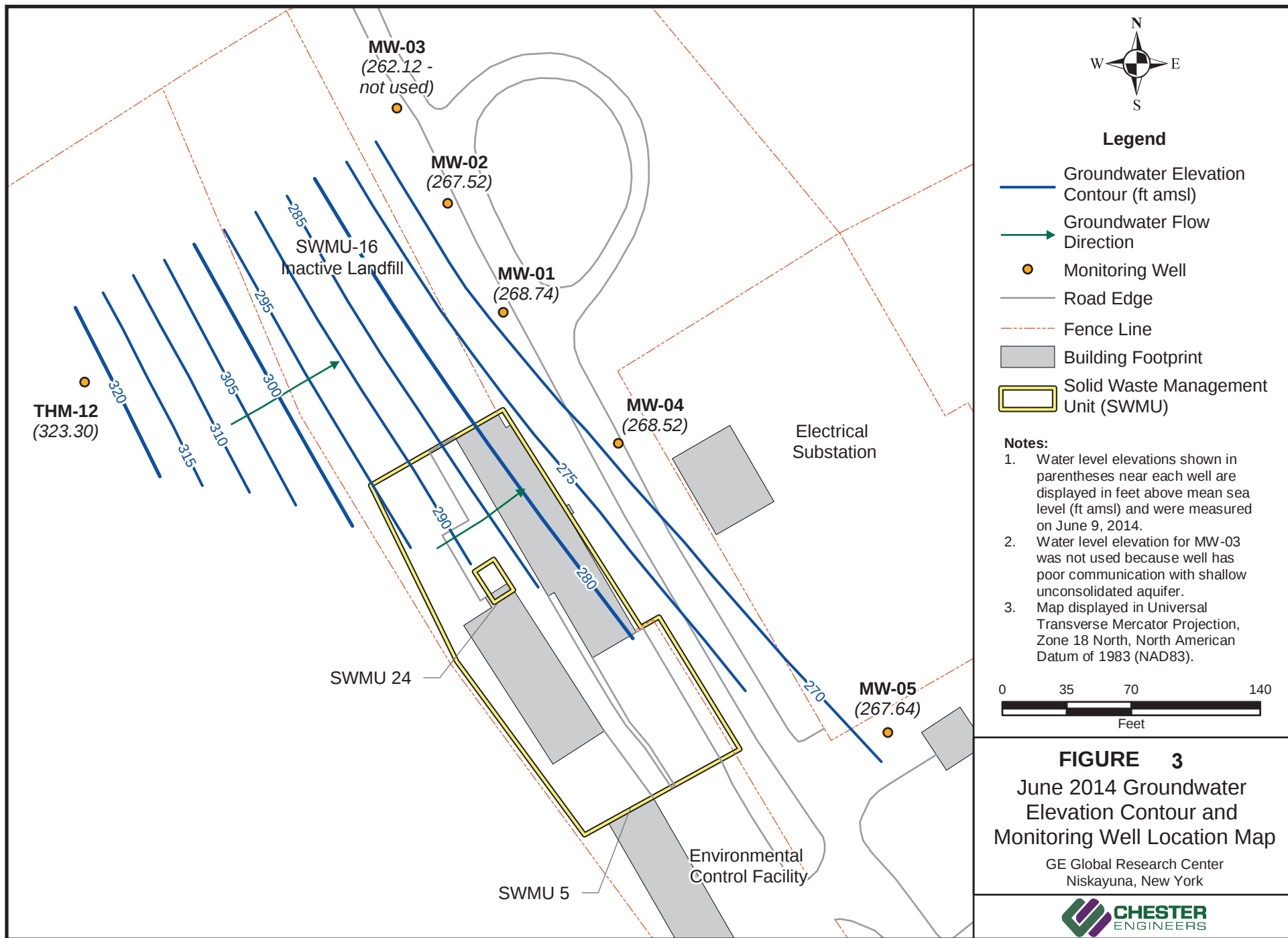
FIGURES



Quadrangle
location

FIGURE 1
Site location map,
GE Global Research Center,
Niskayuna, New York.







LEGEND

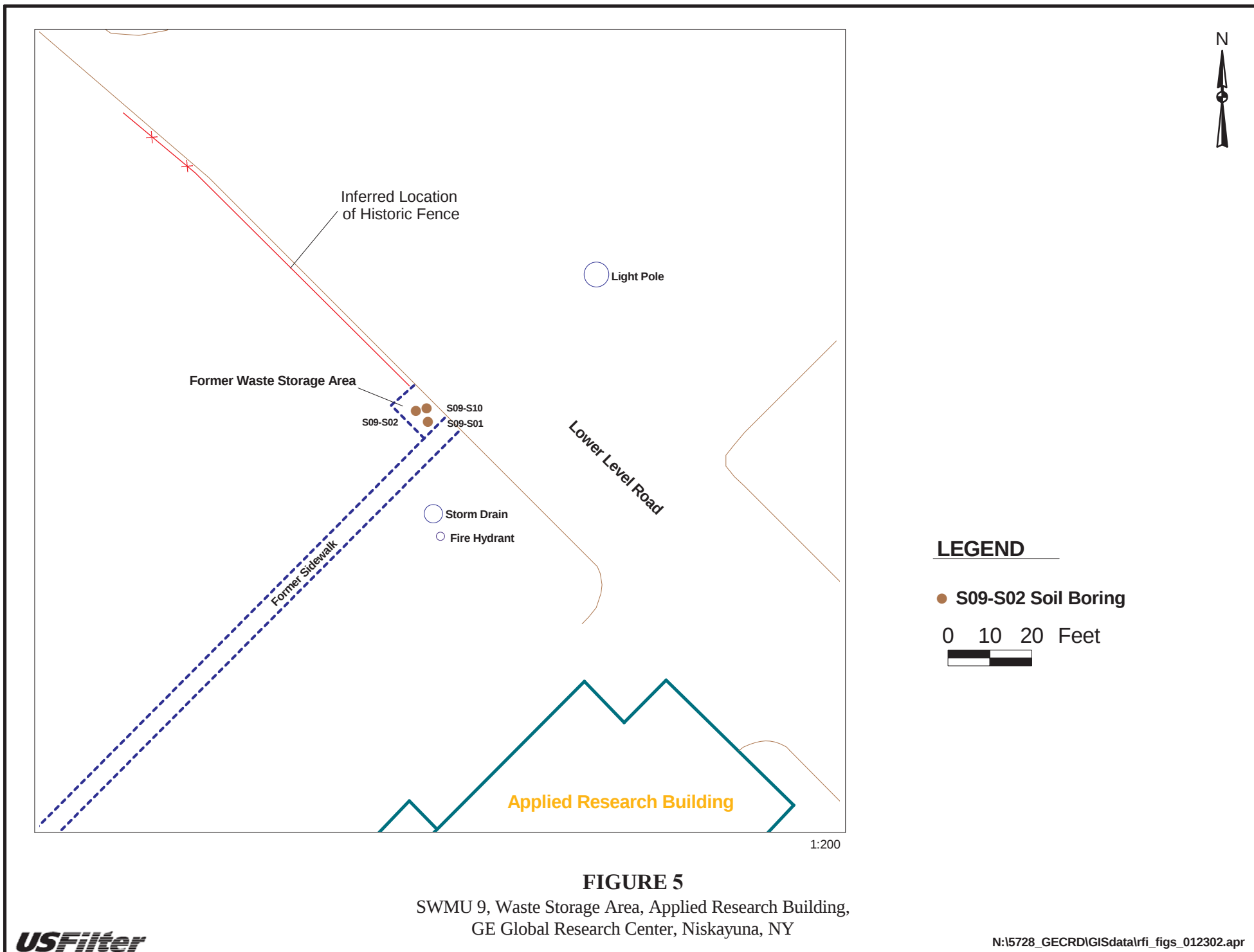
- Approximate extent of Soil Contamination
- S08-S04 Soil Boring
Total PCB Concentration (ppb)
20,900
- TAGM 4046 SCO = 10,000
Industrial RBC = 2,900

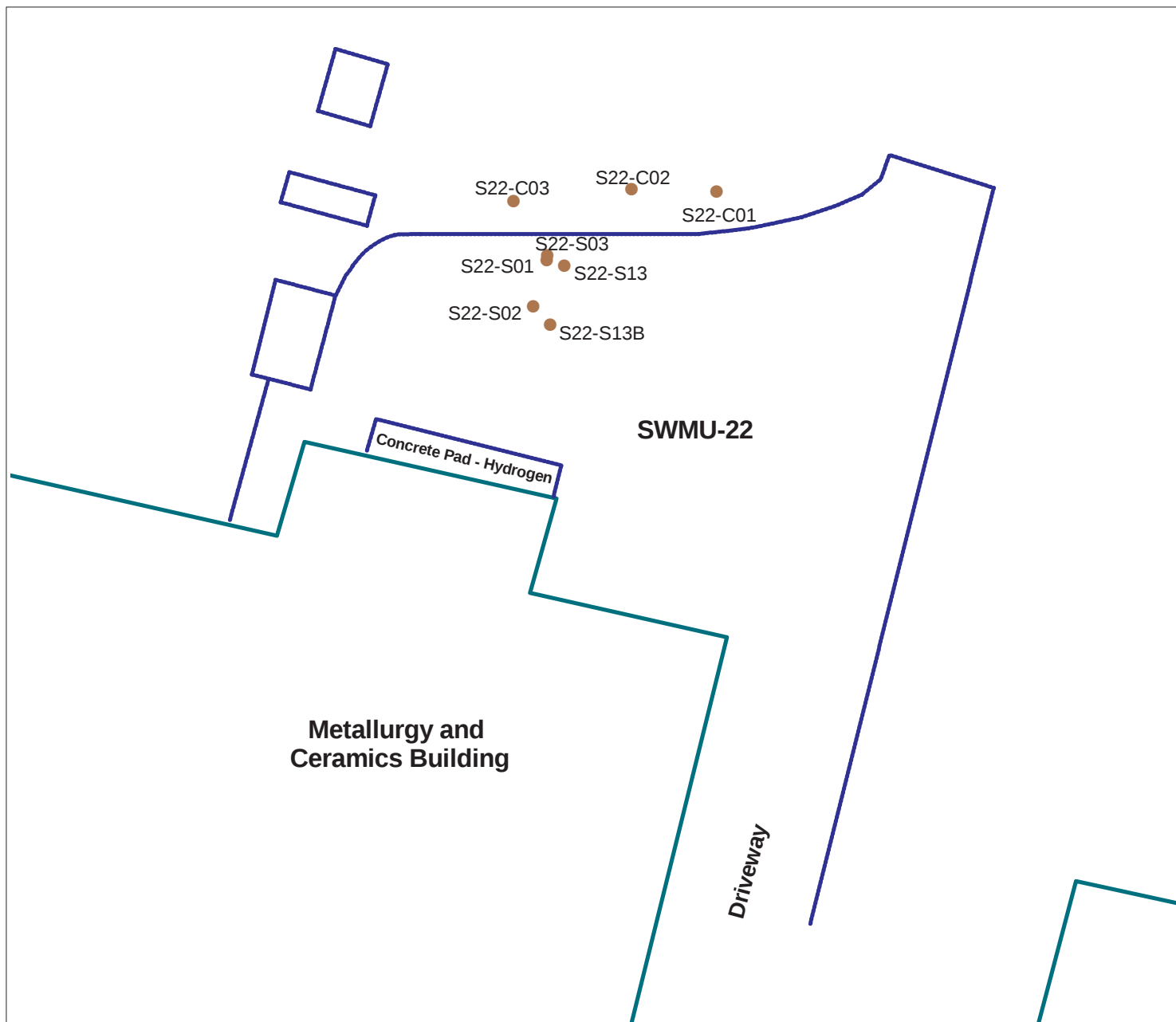
0 5 10 15 20 Feet

1:200

FIGURE 4

SWMU 8 and the Applied Research Building
GE Global Research Center, Niskayuna, New York.





1:275

FIGURE 6

SWMU 22, Waste Oil Tank, Metallurgy and Ceramics Building
GE Global Research Center, Niskayuna, New York.

**Engineering Systems
Building (ESB)**

Catch Basin

S23-SW-01

S23-S17

S23-S02

S23-S20

S23-S03

S23-S18

S23-S01

S23-S19

SWMU 23

A05-99-B6

A05-98-B3

A05-98-B4

A05-98-B5

A05-S03

A05-S01

A05-S02

A05-98-B2

A05-99-B10

A05-S04

A05-99-B9

A05-99-B7

AOC 5

A05-99-B11



1:175

LEGEND

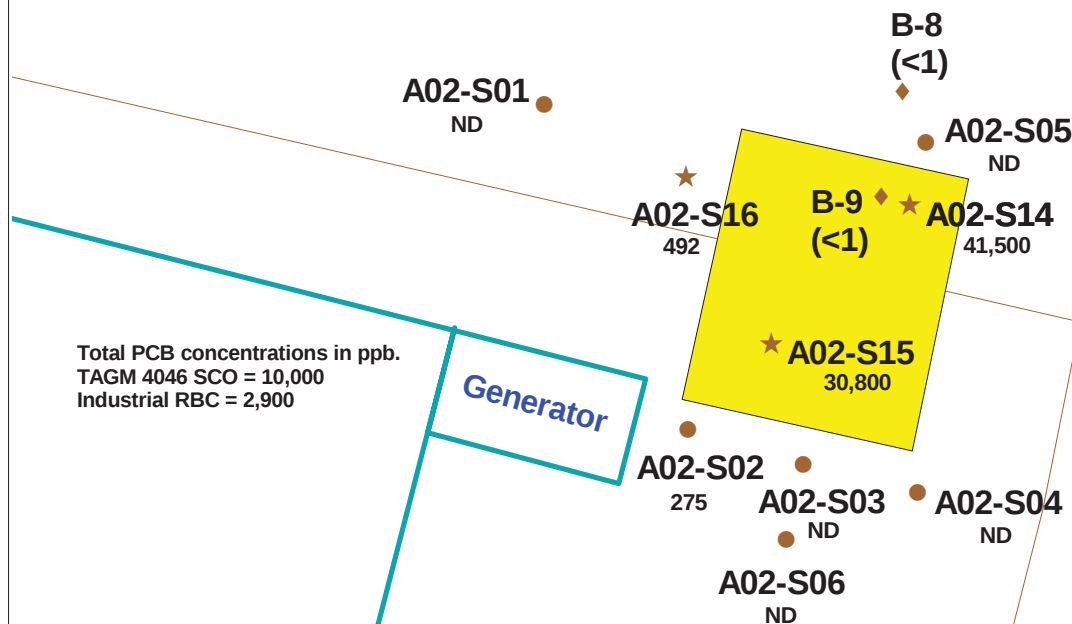
● Soil Boring Locations

8 0 8 16 Feet

FIGURE 7

SWMU-23, Former Coal Wastewater Tanks
GE Global Research Center, Niskayuna, New York.

Area of 3 PCB Pole Transformers



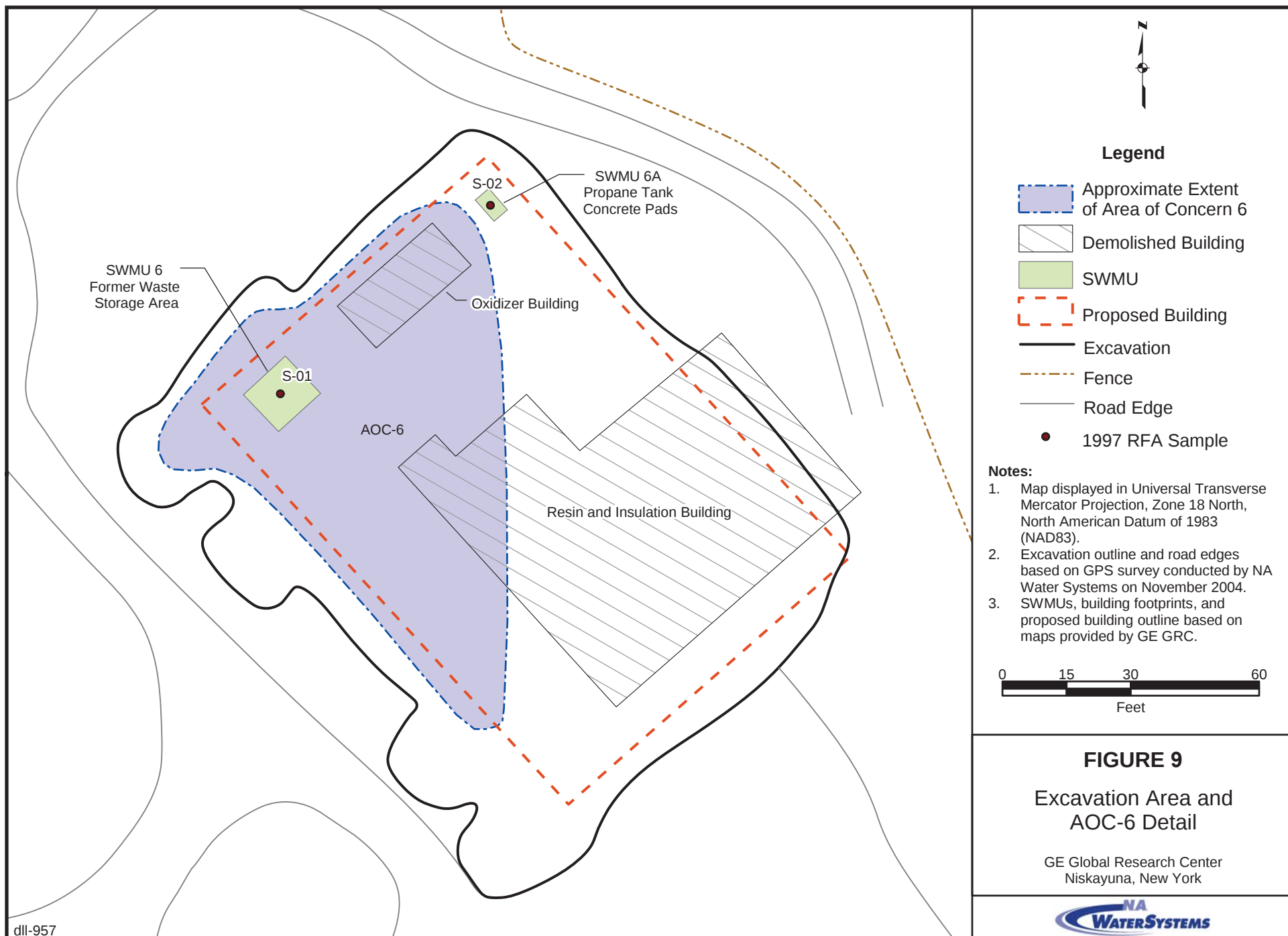
LEGEND

- ◆ 1990 soil boring location and PCB concentration in mg/kg
- ★ 1996 Soil Boring and PCB concentration in mg/kg
- RFI soil boring location and PCB concentration in mg/kg
- Approximate extent of Soil Contamination

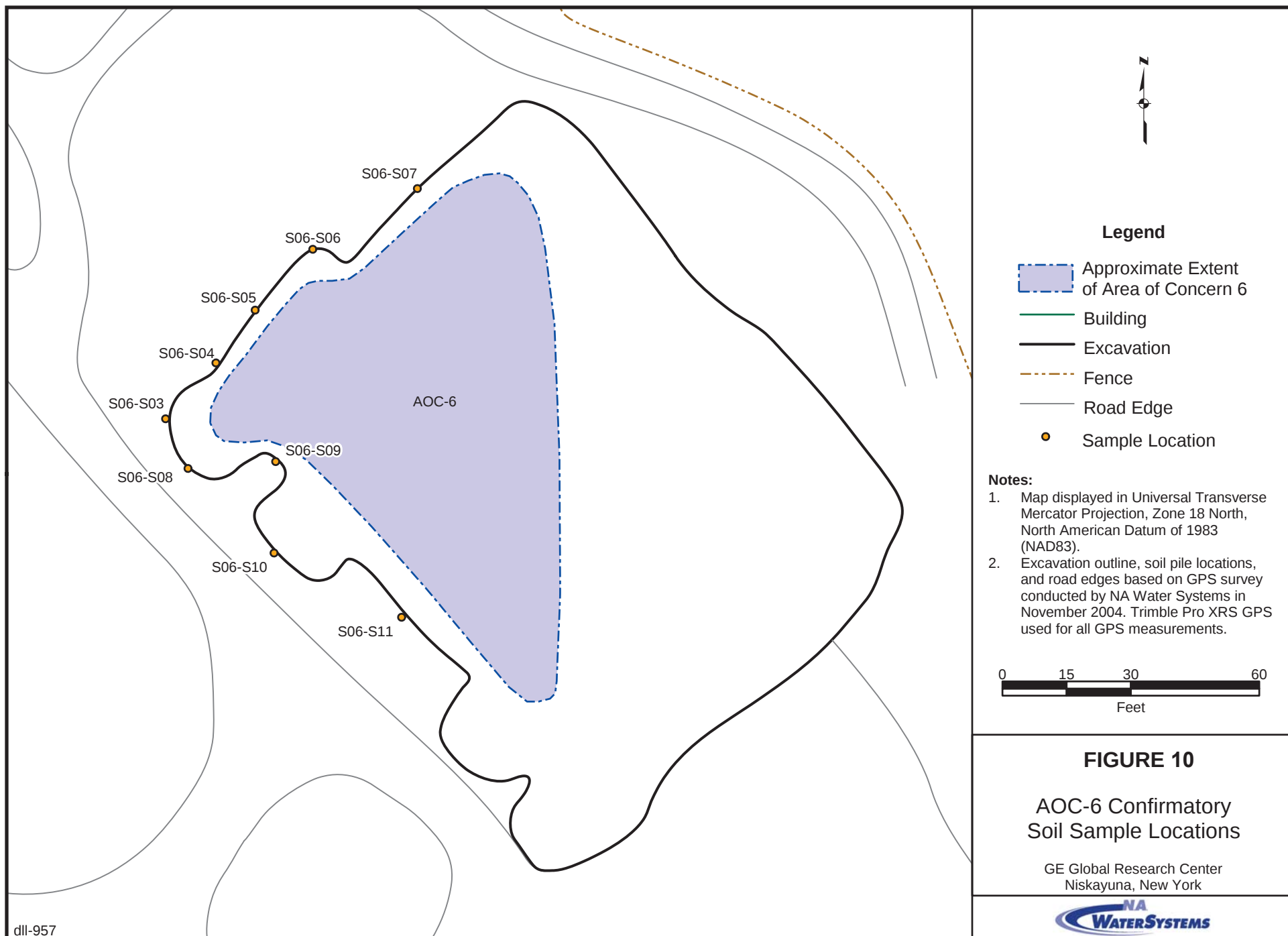
1:150

FIGURE 8

AOC-2, Engineering Physics Building parking lot,
GE Global Research Center, Niskayuna, New York.



dll-957



dll-957

TABLES

TABLE 1

Analytical Results of SWMU-8 Soil Sampling
GE Global Research Center, Niskayuna, New York
(units in ug/kg)

Parameter	TAGM 4046 RSCO	EPA Region III Industrial RBC	Sample Name					
			S08-S01	S08-S02		S08-S03		S08-
			S8-S1-3.0 6/7/2000	S8-S2-1C 7/25/2000	S8-S2-3.0 7/25/2000	S8-S3-1.0 7/25/2000	S8-S3-2.1 7/25/2000	S8-S4-1.0 7/25/2000
PCB-1016 (AROCLOR)	*1000/10000	4.1E+04	<59.4	<11,900	<18,300	<1,120	<11,700	<265
PCB-1221 (AROCLOR)	*1000/10000	1.4E+03	<59.4	<11,900	<18,300	<1,120	<11,700	<265
PCB-1232 (AROCLOR)	*1000/10000	1.4E+03	<59.4	<11,900	<18,300	<1,120	<11,700	<265
PCB-1242 (AROCLOR)	*1000/10000	1.4E+03	<59.4	359,000 i	565,000 i	22300 i	218,000 i	4100 i
PCB-1248 (AROCLOR)	*1000/10000	1.4E+03	<59.4	<11,900	<18,300	<1,120	<11,700	<265
PCB-1254 (AROCLOR)	*1000/10000	1.4E+03	<59.4	<11,900	<18,300	<1,120	<11,700	<265
PCB-1260 (AROCLOR)	*1000/10000	1.4E+03	<59.4	<11,900	<18,300	<1,120	<11,700	<265
TRICHLOROETHENE	700	7.2E+03	147 J	NA	NA	NA	NA	NA
1,4-DICHLOROBENZENE	8500	1.2E+06	10800 J	NA	NA	NA	NA	NA
1,2-DICHLOROBENZENE	7900	9.2E+07	86000 J	NA	NA	NA	NA	NA
ALPHA-CHLORDANE	540	-	NA	NA	NA	NA	NA	NA
GAMMA-CHLORDANE	540	-	NA	NA	NA	NA	NA	NA
HEPTACHLOR EPOXIDE	20	3.1E+02	<2.97	<2350	<3640	<225	<2280	<525
2,4-DICHLOROPHENOL	400	3.1E+07	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	1600	3.1E+07	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	50000	2.0E+05	NA	NA	NA	NA	NA	NA
1,2,4-TRICHLOROBENZENE	3400	1.0E+07	NA	NA	NA	NA	NA	NA
DIELDRIN	44	1.8E+02	NA	NA	NA	NA	NA	NA
TPH	-	-	NA	NA	NA	NA	NA	NA
BERYLLIUM	160	2.0E+06	NA	NA	NA	NA	NA	NA
MERCURY	100	-	NA	NA	NA	NA	NA	NA

Notes:

TAGM 4046 RSCO = Technical and Administrative Guidance

Memorandum Recommended Soil Cleanup Objective.

EPA Region III RBC = Risk-Based Concentrations under Industrial Exposure.

Shading indicates an exceedance of screening criteria.

* = Surface/subsurface total PCB criteria.

i = Aroclor 1242 was reported by lab as the best Aroclor match.

The sample exhibited an altered PCB pattern.

J = Estimated value.

NA = Not analyzed.

S8-S5A-3.0 is a duplicate of S8-S4-3.0.

NJ = Presence of an analyte has been "tentatively identified", and the associated numerical value represents its approximate concentration.

TABLE 1
Analytical Results of SWMU-8 Soil Sampling
GE Global Research Center, Niskayuna, New York
(units in ug/kg)

Parameter	TAGM 4046 RSCO	EPA Region III Industrial RBC	Sample Name						
			S04	S8-S5	S8-S6	S8-S7	S8-S8	S8-S9	S8-S10
			S8-S4-3.0 7/25/2000	S8-S5-6.0 4/17/2001	S8-S6-5.7 4/17/2001	S8-S7-5.8 4/17/2001	S8-S8-5.7 4/17/2001	S8-S9-5.5 4/17/2001	S8-S10-3.0 5/24/2001
PCB-1016 (AROCLOR)	*1000/10000	4.1E+04	<1,110	<20	<21	<21	<19	<21	<20
PCB-1221 (AROCLOR)	*1000/10000	1.4E+03	<1,110	<20	<21	<21	<19	<21	<20
PCB-1232 (AROCLOR)	*1000/10000	1.4E+03	<1,110	<20	<21	<21	<19	<21	<20
PCB-1242 (AROCLOR)	*1000/10000	1.4E+03	20,900 i	<20	<21	<21	<19	<21	<20
PCB-1248 (AROCLOR)	*1000/10000	1.4E+03	<1,110	<20	<21	<21	<19	<21	343
PCB-1254 (AROCLOR)	*1000/10000	1.4E+03	<1,110	<20	<21	<21	<19	<21	<20
PCB-1260 (AROCLOR)	*1000/10000	1.4E+03	<1,110	<20	<21	<21	<19	<21	<20
TRICHLOROETHENE	700	7.2E+03	NA	NA	NA	NA	NA	NA	NA
1,4-DICHLOROBENZENE	8500	1.2E+06	NA	NA	NA	NA	NA	NA	1130
1,2-DICHLOROBENZENE	7900	9.2E+07	NA	NA	NA	NA	NA	NA	7090
ALPHA-CHLORDANE	540	-	NA	<0.81	<0.83	<0.85	21.6 J	<0.84	NA
GAMMA-CHLORDANE	540	-	NA	<0.81	<0.83	<0.85	8.1	<0.84	NA
HEPTACHLOR EPOXIDE	20	3.1E+02	<216	<0.81	<0.83	<0.85	2.5 NJ	<0.84	<0.81
2,4-DICHLOROPHENOL	400	3.1E+07	NA	NA	NA	NA	NA	NA	237
1,3-DICHLOROBENZENE	1600	3.1E+07	NA	NA	NA	NA	NA	NA	81.1
BIS(2-ETHYLHEXYL)PHTHALATE	50000	2.0E+05	NA	NA	NA	NA	NA	NA	<80
1,2,4-TRICHLOROBENZENE	3400	1.0E+07	NA	NA	NA	NA	NA	NA	1880
DIELDRIN	44	1.8E+02	NA	NA	NA	NA	NA	NA	NA
TPH	-	-	NA	NA	NA	NA	NA	NA	NA
BERYLLIUM	160	2.0E+06	NA	NA	NA	NA	NA	NA	NA
MERCURY	100	-	NA	NA	NA	NA	NA	NA	NA

Notes:

TAGM 4046 RSCO = Technical and Administrative Guidance

Memorandum Recommended Soil Cleanup Objective.

EPA Region III RBC = Risk-Based Concentrations under Industrial Exposure.

Shading indicates an exceedance of screening criteria.

* = Surface/subsurface total PCB criteria.

i = Aroclor 1242 was reported by lab as the best Aroclor match.

The sample exhibited an altered PCB pattern.

J = Estimated value.

NA = Not analyzed.

S8-S5A-3.0 is a duplicate of S8-S4-3.0.

NJ = Presence of an analyte has been "tentatively identified", and the associated numerical value represents its approximate concentration.

TABLE 1
Analytical Results of SWMU-8 Soil Sampling
GE Global Research Center, Niskayuna, New York
(units in ug/kg)

Parameter	TAGM 4046 RSCO	EPA Region III Industrial RBC	Sample Name		
			S8-S11	SWMU-8	
			S8-S11-3.0	E10	S13
			5/24/2001	ARB-E10	ARB-S13
PCB-1016 (AROCLOR)	*1000/10000	4.1E+04	<19	NA	NA
PCB-1221 (AROCLOR)	*1000/10000	1.4E+03	<19	NA	NA
PCB-1232 (AROCLOR)	*1000/10000	1.4E+03	<19	NA	NA
PCB-1242 (AROCLOR)	*1000/10000	1.4E+03	<19	180,000	26,000
PCB-1248 (AROCLOR)	*1000/10000	1.4E+03	30.6 NJ	<80,000	<8,000
PCB-1254 (AROCLOR)	*1000/10000	1.4E+03	<19	NA	NA
PCB-1260 (AROCLOR)	*1000/10000	1.4E+03	<19	<80,000	<8,000
TRICHLOROETHENE	700	7.2E+03	NA	NA	NA
1,4-DICHLOROBENZENE	8500	1.2E+06	214,000	NA	NA
1,2-DICHLOROBENZENE	7900	9.2E+07	25,900	8900	630
ALPHA-CHLORDANE	540	-	NA	NA	NA
GAMMA-CHLORDANE	540	-	NA	NA	NA
HEPTACHLOR EPOXIDE	20	3.1E+02	<0.76	NA	NA
2,4-DICHLOROPHENOL	400	3.1E+07	188	NA	NA
1,3-DICHLOROBENZENE	1600	3.1E+07	1040	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	50000	2.0E+05	221	NA	NA
1,2,4-TRICHLOROBENZENE	3400	1.0E+07	20,200	NA	NA
DIELDRIN	44	1.8E+02	NA	<8000	130 NJ
TPH	-	-	NA	54,000	41,000
BERYLLIUM	160	2.0E+06	NA	0.98	0.67
MERCURY	100	-	NA	0.80 J	1.2 J

Notes:

TAGM 4046 RSCO = Technical and Administrative Guidance

Memorandum Recommended Soil Cleanup Objective.

EPA Region III RBC = Risk-Based Concentrations under Industrial Exposure.

Shading indicates an exceedance of screening criteria.

* = Surface/subsurface total PCB criteria.

i = Aroclor 1242 was reported by lab as the best Aroclor match.

The sample exhibited an altered PCB pattern.

J = Estimated value.

NA = Not analyzed.

S8-S5A-3.0 is a duplicate of S8-S4-3.0.

NJ = Presence of an analyte has been "tentatively identified", and the associated numerical value represents its approximate concentration.

TABLE 2
Results of SWMU-9 Soil Sampling
Global Research Center, Niskayuna, New York
 (units in ug/kg)

Parameter	TAGM 4046 SCO	EPA Region III Industrial RBC	Sample Name	
			S09-S01	S09-S02
			S9-S1-2.0	S9-S2-1.0
			6/8/2000	6/8/2000
CHLORDANE	540	1.6E+04	<146	561
HEPTACHLOR EPOXIDE	20	6.3E+02	7.3	22.1 J
DDE, 4,4-	2100	1.7E+04	<2.91	<10.2

Notes:

J = Estimated value.

Shaded cells indicate exceedance of screening criteria.

TABLE 3-1
Inactive Landfill (SWMU-16) Volatile Organic Compound (VOC) Analytical Results
GE Global Research Center, Niskayuna, NY

		Location ID	MW-01	MW-02	MW-03	THM-12	TB	EB
		Sample Date	6/10/14	6/9/14	6/10/14	6/10/14	6/11/14	6/11/14
Parameter	Units	Action Level						
1,1,1-TRICHLOROETHANE	ug/l	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-TETRACHLOROETHANE	ug/l	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-TRICHLOROETHANE	ug/l	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-DICHLOROETHANE	ug/l	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-DICHLOROETHYLENE	ug/l	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-DICHLOROBENZENE	ug/l	3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-DICHLOROETHANE	ug/l	0.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-DICHLOROPROPANE	ug/l	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-DICHLOROBENZENE	ug/l	3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-CHLOROETHYL VINYL ETHER	ug/l	ns	<10	<10	<10	<10	<10	<10
ACROLEIN	ug/l	5	<50	<50	<50	<50	<50	<50
ACRYLONITRILE	ug/l	5	<50	<50	<50	<50	<50	<50
BENZENE	ug/l	1	<1.0	1.8	<1.0	<1.0	<1.0	<1.0
BROMODICHLOROMETHANE	ug/l	ns	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
BROMOMETHANE	ug/l	5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
CARBON TETRACHLORIDE	ug/l	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
CHLOROBENZENE	ug/l	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
CHLORODIBROMOMETHANE	ug/l	ns	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
CHLOROETHANE	ug/l	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
CHLOROFORM	ug/l	7	0.89 J	<1.0	<1.0	<1.0	<1.0	<1.0
CHLOROMETHANE	ug/l	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
CIS-1,2-DICHLOROETHENE	ug/l	5	2.5	<1.0	<1.0	<1.0	<1.0	<1.0
CIS-1,3-DICHLOROPROPENE	ug/l	0.4 (a)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
DICHLORODIFLUOROMETHANE	ug/l	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
DICHLOROMETHANE	ug/l	5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
ETHYLBENZENE	ug/l	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
M-DICHLOROBENZENE	ug/l	3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TETRACHLOROETHENE	ug/l	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TOLUENE	ug/l	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TRANS-1,2-DICHLOROETHENE	ug/l	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TRANS-1,3-DICHLOROPROPENE	ug/l	0.4 (a)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TRIBROMOMETHANE	ug/l	ns	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
TRICHLOROETHYLENE	ug/l	5	3.0	<1.0	<1.0	<1.0	<1.0	<1.0
TRICHLOROFLUOROMETHANE	ug/l	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
VINYL CHLORIDE	ug/l	2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
XYLENES (TOTAL)	ug/l	5 (b)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Notes:

Action Level (NYS GWS) - Groundwater Quality Standards from 6 NYCRR, Chapter X, Part 703.5.

Shaded cells indicate an exceedance of the NYS GWS.

Bold type indicates that the analyte was detected.

ns = No promulgated standard for this compound.

J = Indicates estimated value (detected concentration lower than reporting limit)

a = Indicates that this standard applies to the sum of cis-1,3-dichloropropene and trans-1,3-dichloropropene

b = Indicates that this standard applies to the individual xylene isomers

TABLE 3-2
Inactive Landfill (SWMU-16) Total and Dissolved Metals Analytical Results
GE Global Research Center, Niskayuna, NY

		Dissolved Metals					
		Location ID	MW-01	MW-02	MW-03	THM-12	EB
		Sample Date	6/10/14	6/9/14	6/10/14	6/10/14	6/11/14
Chemical Name	Units	Action Level					
Antimony	ug/l	3	<5.0	<5.0	<5.0	<5.0	<5.0
Arsenic	ug/l	25	3.7	5.4	<3.0	<3.0	<3.0
Barium	ug/l	1000	<200	1580	201	<200	<200
Beryllium	ug/l	ns	<1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	ug/l	5	<3.0	<3.0	<3.0	<3.0	<3.0
Chromium	ug/l	50	<10	<10	<10	<10	<10
Copper	ug/l	200	<10	<10	<10	<10	<10
Lead	ug/l	25	<3.0	4.2	3.8	<3.0	<3.0
Mercury	ug/l	0.7	<0.20	<0.20	<0.20	<0.20	<0.20
Nickel	ug/l	100	<10	<10	<10	<10	<10
Selenium	ug/l	10	<10	<10	<10	<10	<10
Silver	ug/l	50	<10	<10	<10	<10	<10
Thallium	ug/l	ns	<1.0	<1.0	<1.0	<1.0	<1.0
Zinc	ug/l	ns	<20	<20	<20	<20	<20

		Total Metals					
		Location ID	MW-01	MW-02	MW-03	THM-12	EB
		Sample Date	6/10/14	6/9/14	6/10/14	6/10/14	6/11/14
Chemical Name	Units	Action Level					
Antimony	ug/l	3	<5.0	<5.0	<5.0	<5.0	<5.0
Arsenic	ug/l	25	3.2	5.2	<3.0	<3.0	<3.0
Barium	ug/l	1000	<200	1510	204	<200	<200
Beryllium	ug/l	ns	<1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	ug/l	5	<3.0	<3.0	<3.0	<3.0	<3.0
Chromium	ug/l	50	<10	<10	<10	<10	<10
Copper	ug/l	200	<10	<10	<10	<10	<10
Lead	ug/l	25	<3.0	4.7	3.6	<3.0	<3.0
Mercury	ug/l	0.7	<0.20	<0.20	<0.20	<0.20	<0.20
Nickel	ug/l	100	<10	<10	<10	<10	<10
Selenium	ug/l	10	<10	<10	<10	<10	<10
Silver	ug/l	50	<10	<10	<10	<10	<10
Thallium	ug/l	ns	<1.0	<1.0	<1.0	<1.0	<1.0
Zinc	ug/l	ns	<20	<20	<20	<20	<20

Notes:

Action Level (NYS GWS) - Groundwater Quality Standards from 6 NYCRR, Chapter X, Part 703.5.

Shaded cells indicate an exceedance of the NYS GWS.

Bold type indicates that the analyte was detected.

NS = No published standard.

TABLE 3-3
Inactive Landfill (SWMU-16) Chloride, Phenols, TDS, and TOC Analytical Results
GE Global Research Center, Niskayuna, NY

		Location ID	MW-01	MW-02	MW-03	THM-12	EB
		Sample Date	6/10/14	6/9/14	6/10/14	6/10/14	6/11/14
Chemical Name	Units	Action Level					
CHLORIDE	mg/l	250	21.4	85.0	15.2	<2.0	<2.0
PHENOLS	mg/l	0.001	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
TOTAL DISSOLVED SOLIDS	mg/l	500	284	343	422	302	<10
TOTAL ORGANIC CARBON	mg/l	ns	2.6	1.1	<1.0	2.7	<1.0

Notes:

Action Level (NYS GWS) - Groundwater Quality Standards from 6 NYCRR, Chapter X, Part 703.5.

Shaded cells indicate an exceedance of the NYS GWS.

Bold type indicates that the analyte was detected.

NS = No published standard.

TABLE 3-4
Inactive Landfill (SWMU-16) Groundwater Field Parameters
GE Global Research Center, Niskayuna, New York

	Location ID	MW-01	MW-02	MW-03	THM-12
	Date	6/10/14	6/9/14	6/10/14	6/10/14
Chemical Name	Unit				
Dissolved Oxygen	mg/L	3.17	2.29	11.76	2.94
Oxidation Reduction Potential	millivolts	59.4	-233.7	65.8	-69.8
pH	pH units	7.44	7.69	7.94	7.29
Specific Conductance	us/cm	605	828	873	652
Temperature	deg c	10.09	9.63	10.69	10.49
Turbidity	ntu	36.3	24.3	4.0	2.9
Depth to Water	ft	7.65	8.25	13.9	8.15
Reference Elevation	ft amsl	276.39	275.77	276.02	331.45
Water Level Elevation	ft amsl	268.74	267.52	262.12	323.3

Notes:

Depth to water is measured relative to the top of the inner 2" PVC riser within each well.

Depth to water measured on 6/9/2014 and 6/10/2014 (THM-12 only)

TABLE 3-5
Inactive Landfill (SWMU-16) Groundwater Sampling Historical Summary
GE Global Research Center, Niskayuna, New York

MW-01															
Sample Dates	Depth to Water (ft blw TOR)	Arsenic Filtered	Arsenic Unfiltered	Barium Filtered	Barium Unfiltered	Chloride	Manganese Filtered	Manganese Unfiltered	TDS	TOC	Total Phenols	Phenol Quant. Limit	Benzene	Benzene Quant. Limit	Vinyl Chloride
NYS GWS	ns	0.025	0.025	1	1	250	0.3	0.3	500	ns	0.001	ns	0.001	ns	0.002
Unit	ft	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
4/18/1991	8.33	0.008	0.013	0.17	0.22	34.0	0.20	0.29	235	4.5	0.003	0.002	no data	no data	no data
5/21/1991	8.65	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
6/4/1991	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
8/8/1991	9.67	0.008	<0.005	0.19	0.18	38.0	0.19	0.20	410	13.0	<0.002	0.002	ND	0.005	ND
12/3/1991	8.46	<0.005	0.013	0.19	0.35	20.0	0.03	0.93	445	2.9	0.004	0.002	no data	0.005	no data
2/14/1992	9.38	0.003	0.013	0.22	0.25	26.0	<0.02	1.57	530	3.6	0.002	0.002	no data	0.005	no data
6/23/1992	8.95	<0.005	<0.005	0.24	0.31	76.0	<0.02	0.62	588	7.2	<0.002	0.002	no data	0.005	no data
12/14/1992	8.30	0.016	0.013	1.03	0.77	1240.0	0.75	0.77	2420	2.3	<0.002	0.002	ND	0.005	ND
7/21/1993	9.05	0.015	0.014	0.49	0.39	704.0	0.38	0.49	3190	11.0	<0.002	0.002	ND	0.005	ND
12/28/1993	8.22	0.018	0.026	0.34	0.34	640.0	0.66	0.77	1320	24.0	ND	0.002	ND	0.005	ND
4/18/1994	7.53	0.007	0.013	0.26	0.30	766.0	0.05	0.66	1430	3.2	ND	0.002	ND	0.005	ND
10/19/1994	9.13	0.012	0.012	1.09	1.02	149.0	0.18	0.20	570	1.2	ND	0.002	ND	0.005	ND
5/16/1995	8.70	0.010	0.010	0.24	0.26	392.0	0.13	0.31	1650	3.7	ND	0.002	ND	0.010	ND
10/5/1995	10.25	0.009	0.011	0.24	0.28	431.0	0.24	0.50	858	5.0	ND	0.0035	ND	0.010	ND
3/27/1996	7.92	0.0086	0.010	0.21	0.24	355.0	0.18	0.21	955	2.3	ND	0.05	ND	0.001	ND
9/27/1996	8.39	0.0128	0.012	0.25	0.27	251.0	0.28	0.31	994	4.0	0.006	-	ND	0.001	0.002
4/8/1997	7.50	0.0084	0.008	0.19	0.20	260.0	0.05	0.17	889	7.1	ND	0.005	ND	0.001	ND
9/18/1997	8.26	0.0118	0.012	0.21	0.23	210.0	0.23	0.34	736	3.0	ND	0.01	ND	0.001	ND
5/19/1998	8.90	0.010	0.012	0.20	0.22	203.0	NA	NA	760	9.5	0.026	-	ND	0.005	ND
10/15/1998	8.20	0.015	0.013	0.28	0.22	190.0	NA	NA	671	2.2	0.01	0.01	ND	0.001	ND
4/30/1999	8.52	0.011	0.017	0.20	0.38	230.0	NA	NA	750	3.1	0.05	0.05	ND	0.001	ND
10/26/1999	8.09	0.013	0.014	0.2	0.26	280.0	NA	NA	843	2.9	0.05	0.05	0.7 J	0.001	.003 J
10/26/1999 *	8.09	0.0081	0.012	0.226	0.229	282.0	NA	NA	792	1.4	ND	0.050	ND	0.001	0.0024
4/13/2000	7.34	<0.010	<0.010	<0.20	<0.20	278.0	NA	NA	822	1.4	ND	0.005	0.4J	0.001	0.002J
10/18/2000	8.32	0.0106	0.016	0.218	<0.20	239.0	NA	NA	765	1.3	<0.005	0.005	0.0023	0.001	0.0049
4/18/2001	7.51	0.0057	0.009	<0.20	0.224	211.0	NA	NA	722	1.3	<0.005	0.005	<0.001	0.001	<0.002
10/17/2001	9.06	0.0099	0.009	0.273	0.304	242.0	NA	NA	747	1.2	<0.05	0.050	<0.001	0.001	<0.001
3/27/2002	7.71	0.0077	0.008	0.21	0.226	223.0	NA	NA	755	1.5	<0.005	0.005	<0.001	0.001	<0.0012
11/7/2002	8.27	0.0104	0.0128	0.257	0.289	200.0	NA	NA	746	1.4	<0.005	0.005	<0.001	0.001	0.0025
5/14/2003	7.37	0.0062	0.0100	0.206	0.22	220.0	NA	NA	748	<1.0	<0.005	0.005	<0.001	0.001	<0.001
12/4/2003	7.51	0.0069	0.0083	<.200	<.200	125.0	NA	NA	615	1.9	<0.005	0.005	<0.001	0.001	<0.001
6/23/2004	8.51	<0.005	0.0056	<0.200	<0.200	150.0	NA	NA	622	1.5	<0.005	0.005	<0.001	0.001	<0.001
11/10/2004	8.17	0.0068	0.0133	<0.200	0.266	94.5	NA	NA	508	1.2	<0.005	0.005	<0.001	0.001	0.0014
6/28/2005	8.54	<0.005	0.0092	0.206	0.247	133.0	NA	NA	611	1.4	<0.005	0.005	<0.001	0.001	<0.001
12/21/2005	8.13	<0.005	0.0095	<0.200	0.21	86.9	NA	NA	530	2.0	<0.005	0.005	<0.001	0.001	0.0016
6/27/2005	7.28	<0.008	0.0085	0.225	0.251	260.0	NA	NA	719	1.4	<0.005	0.005	<0.001	0.001	<0.001
12/18/2006	8.12	<0.008	<0.008	<0.200	<0.200	12.2	NA	NA	354	2.7	<0.005	0.005	<0.001	0.001	<0.001
6/5/2007	7.28	<0.008	<0.008	<0.200	<0.200	107.0	NA	NA	472	1.9	<0.005	0.005	<0.001	0.001	<0.001
12/18/2007	8.06	<0.003	0.0116	<0.200	0.231	17.4	NA	NA	406	2.4	<0.005	0.005	<0.001	0.001	<0.001
6/24/2008	7.48	<0.003	0.0045	<0.200	<0.200	46.3	NA	NA	362	1.8	0.008	0.005	<0.001	0.001	<0.001
12/16/2008	7.25	0.0041	0.0063	<0.200	<0.200	22.2	NA	NA	351	2.3	<0.005	0.005	<0.001	0.001	<0.001
6/23/2009	7.38	<0.003	0.0035	<0.200	<0.200	28.8	NA	NA	360	1.7	<0.005	0.005	<0.001	0.001	<0.001
12/15/2009	7.33	<0.003	0.0064	<0.200	<0.200	17.2	NA	NA	339	2.0	<0.005	0.005	<0.002	0.002	<0.002
6/22/2010	8.1	<0.003	0.0044	<0.200	<0.200	16.2	NA	NA	338	2.4	<0.005	0.005	<0.001	0.001	<0.001
12/21/2010	7.82	0.0039	<0.003	<0.200	<0.200	25.8	NA	NA	395	2	<0.005	0.005	<0.001	0.001	<0.001
6/6/2011	8.44	0.0066	0.0061	0.227	0.201	246	NA	NA	808	1.6	<0.005	0.005	<0.001	0.001	<0.001
12/6/2011	7.65	0.0041	0.0049	<0.2	<0.2	21.2	NA	NA	311	1.9	<0.005	0.005	<0.001	0.001	<0.001
5/30/2012	8.01	<0.003	<0.003	<0.2	<0.2	121	NA	NA	496	1.2	<0.005	0.005	<0.001	0.001	<0.001
12/5/2012	7.84	0.0033	0.0031	<0.2	<0.2	12.0	NA	NA	369	2.3	<0.0050	0.005	<0.001	0.001	<0.001
6/26/2013	7.71	0.0035	0.0038	<0.2	<0.2	124	NA	NA	517	2	<0.20	0.200	<0.001	0.001	<0.001
12/11/2013	7.48	<0.003	<0.003	<0.2	<0.2	13.8	NA	NA	452	2.7	<0.005	0.005	<0.001	0.001	<0.001
6/10/2014	7.65	0.0037	0.0032	<0.2	<0.2	21.4	NA	NA	284	2.6	<0.0050	0.005	<0.001	0.001	<0.001

TABLE 4-5
Inactive Landfill (SWMU-16) Groundwater Sampling Historical Summary
GE Global Research Center, Niskayuna, New York

MW-02															
Sample Dates	Depth to Water (ft blw TOR)	Arsenic Filtered	Arsenic Unfiltered	Barium Filtered	Barium Unfiltered	Chloride	Manganese Filtered	Manganese Unfiltered	TDS	TOC	Total Phenols	Phenol Quant. Limit	Benzene	Benzene Quant. Limit	Vinyl Chloride
NYS GWS	ns	0.025	0.025	1	1	250	0.3	0.3	500	ns	0.001	ns	0.001	ns	0.002
Unit	ft	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
4/18/1991	8.62	0.069	0.073	0.94	0.98	17.0	0.18	0.26	283	5.9	<0.002	0.002	no data	no data	no data
5/21/1991	8.97	0.050	0.061	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
6/4/1991	9.47	0.036	0.047	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
8/8/1991	10.23	0.024	0.033	0.88	0.96	27.0	0.19	0.59	423	8.9	0.005	0.002	ND	0.005	ND
12/3/1991	8.82	0.044	0.050	0.82	0.85	30.0	0.19	0.26	428	4.4	0.008	0.002	no data	0.005	no data
2/14/1992	9.40	0.022	0.069	0.88	0.92	22.0	0.23	0.48	445	4.6	0.003	0.002	no data	0.005	no data
6/23/1992	9.03	0.018	0.021	0.79	0.98	24.0	0.17	0.56	425	7.7	<0.002	0.002	no data	0.005	no data
12/14/1992	8.56	0.046	0.050	3.79	3.35	1230.0	0.64	0.78	2310	2.1	0.002	0.002	ND	0.005	ND
7/21/1993	9.34	0.043	0.048	2.20	2.10	460.0	0.50	0.63	1400	15.0	<0.002	0.002	ND	0.005	ND
12/28/1993	8.36	0.062	0.061	2.11	2.36	515.0	0.49	0.67	1050	27.0	ND	0.002	ND	0.005	ND
4/18/1994	7.48	0.029	0.031	0.98	1.06	128.0	0.16	0.28	515	2.5	ND	0.002	0.005	0.005	ND
10/19/1994	9.40	0.011	0.014	0.26	0.28	434.0	0.27	0.47	1020	4.2	ND	0.002	ND	0.005	ND
5/16/1995	8.83	0.047	0.053	0.95	1.24	85.0	0.14	0.50	555	3.6	ND	0.002	0.001J	0.010	ND
10/5/1995	10.92	0.022	0.040	1.21	1.68	196.0	0.19	0.86	526	11.0	0.014	0.0035	0.002J	0.010	ND
3/27/1996	7.97	0.041	0.039	1.03	0.979	76.9	0.18	0.18	453	3.4	ND	0.05	0.002J	0.001	ND
9/27/1996	8.39	0.016	0.020	1.14	1.25	86.8	0.15	0.33	465	2.6	0.008	-	0.0025J	0.001	ND
4/8/1997	7.49	0.029	0.033	0.99	1.09	34.5	0.18	0.33	426	1.8	0.0186	0.005	0.0013J	0.001	ND
9/18/1997	8.75	0.017	0.018	1.09	1.12	80.0	0.13	0.18	459	3.1	0.024	0.01	0.002	0.001	ND
5/19/1998	8.00	0.014	0.018	1.03	1.08	43.0	NA	NA	383	7.8	0.006	-	ND	0.005	ND
10/15/1998	8.69	0.12	0.140	1.07	1.04	65.9	NA	NA	409	1.6	0.012	0.01	ND	0.001	ND
4/30/1999	9.00	0.034	0.028	1.12	1.09	25.3	NA	NA	383	2.9	0.05	0.05	ND	0.001	ND
10/26/1999	8.31	0.016	0.017	1.2	1.3	97.1	NA	NA	481	2.4	0.05	0.05	0.002	0.001	ND
10/26/1999 *	8.31	0.0148	0.019	1.22	1.42	100.0	NA	NA	475	1.7	ND	0.050	0.002	0.001	ND
4/13/2000	7.48	0.017	0.019	1.07	1.16	41.3	NA	NA	369	1.0	0.051	0.005	0.002	0.001	ND
10/18/2000	8.55	0.0128	0.013	1.3	1.37	57.6	NA	NA	494	1.2	<0.005	0.005	0.0017	0.001	ND
4/18/2001	7.43	0.0151	0.014	1.27	1.31	30.7	NA	NA	409	1.6	<0.005	0.005	<0.001	0.001	<0.002
10/17/2001	9.25	0.009	0.018	1.53	1.52	< 100	NA	NA	468	<1.0	<0.05	0.050	0.0033	0.001	<0.001
3/27/2002	6.63	0.0183	0.021	1.31	1.39	47.7	NA	NA	407	1.8	<0.005	0.005	0.0018	0.001	<0.0012
11/7/2002	8.96	0.0122	0.013	1.64	1.71	118.0	NA	NA	515	1.5	<0.005	0.005	0.0021	0.001	<0.001
5/14/2003	7.75	0.0102	0.015	1.26	1.33	41.6	NA	NA	401	<1.0	<0.005	0.005	0.0019	0.001	<0.001
12/4/2003	7.99	0.0083	0.0097	1.53	1.51	64.4	NA	NA	464	1.9	<0.005	0.005	0.0024	0.001	<0.001
6/23/2004	8.84	0.0052	0.0092	1.27	1.25	40.7	NA	NA	396	1.4	<0.005	0.005	0.0023	0.001	<0.001
11/10/2004	8.27	0.0063	0.0138	1.46	1.44	69.5	NA	NA	431	1.4	<0.005	0.005	0.0022	0.001	<0.001
6/28/2005	8.89	0.0079	0.0093	1.22	1.33	30.7	NA	NA	380	1.2	0.009	0.005	0.0022	0.001	<0.001
12/21/2005	8.29	0.0095	0.0104	1.54	1.55	74.5	NA	NA	433	3.4	<0.005	0.005	0.0027	0.001	0.0011
6/27/2006	7.51	<0.008	<0.008	1.45	1.39	64.8	NA	NA	411	1.9	<0.005	0.005	0.0041	0.001	0.0010
12/19/2006	8.26	0.0095	0.0096	1.59	1.62	88.4	NA	NA	460	5.1	<0.005	0.005	0.0015	0.001	0.0006
6/5/2007	7.45	<0.008	<0.008	1.41	1.44	45.7	NA	NA	381	1.3	<0.005	0.005	0.0035	0.001	<0.001
12/18/2007	8.42	0.0047	0.0082	1.61	1.61	95.3	NA	NA	457	1.3	<0.005	0.005	0.0029	0.001	0.0004
6/24/2008	7.66	0.0081	0.0086	1.18	1.56	48.8	NA	NA	382	1.6	0.010	0.005	0.0019	0.001	0.00059 J
12/16/2008	7.51	0.0088	0.0100	1.35	1.43	97.8	NA	NA	444	1.7	<0.005	0.005	0.0011	0.001	<0.001
6/24/2009	7.54	0.006	0.0084	1.49	1.65	79.1	NA	NA	438	1.4	<0.005	0.005	0.0022	0.001	<0.001
12/15/2009	7.66	0.0075	0.0151	1.76	1.95	151	NA	NA	506	<1.0	<0.005	0.005	0.0016	0.001	<0.001
6/22/2010	8.41	0.0111	0.0107	1.2	1.14	53.4	NA	NA	398	1.3	<0.005	0.005	0.0011	0.001	<0.001
12/21/2010	8.28	0.0072	0.0083	1.96	2.01	154	NA	NA	567	1.3	<0.005	0.005	0.0016	0.001	0.00051 J
6/6/2011	8.43	0.0077	0.007	1.63	1.64	85.6	NA	NA	456	1.2	<0.005	0.005	0.002	0.001	0.0006 J
12/5/2011	8.11	0.0078	0.0081	2.71	2.72	254	NA	NA	667	1	<0.005	0.005	0.002	0.001	0.00043 J
5/29/2012	8.2	0.0048	0.0053	1.98	2.07	176	NA	NA	578	1.2	<0.005	0.005	0.002	0.001	<0.001
12/5/2012	8.88	0.0063	0.0072	2.26	2.26	201	NA	NA	633	1.6	<0.0050	0.005	0.0018	0.001	0.00041 J
6/25/2013	8.05	0.0076	0.0114	1.81	1.92	186	NA	NA	572	1.1	0.55	0.200	0.0019	0.001	<0.001
12/10/2013	8.36	0.0078	0.0096	2.15	2.18	182	NA	NA	565	1.1	<0.005	0.005	0.0017	0.001	.00042 J
6/9/2014	8.25	0.0054	0.0052	1.58	1.51	85.0	NA	NA	343	1.1	<0.0050	0.005	0.0018	0.001	<0.001

TABLE 3-5
Inactive Landfill (SWMU-16) Groundwater Sampling Historical Summary
GE Global Research Center, Niskayuna, New York

MW-03															
Sample Dates	Depth to Water (ft blw TOR)	Arsenic Filtered	Arsenic Unfiltered	Barium Filtered	Barium Unfiltered	Chloride	Manganese Filtered	Manganese Unfiltered	TDS	TOC	Total Phenols	Phenol Quant. Limit	Benzene	Benzene Quant. Limit	Vinyl Chloride
NYS GWS	ns	0.025	0.025	1	1	250	0.3	0.3	500	ns	0.001	ns	0.001	ns	0.002
Unit	ft	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
4/18/1991	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	0.002	no data	no data	no data
5/21/1991	8.49	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
6/4/1991	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
8/8/1991	10.00	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	0.002	NA	0.005	NA
12/3/1991	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	0.002	no data	0.005	no data
2/14/1992	9.05	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	0.002	no data	0.005	no data
6/23/1992	8.58	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	0.002	no data	0.005	no data
12/14/1992	9.58	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	0.002	NA	0.005	NA
7/21/1993	9.15	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	0.002	NA	0.005	NA
12/28/1993	9.87	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	0.002	NA	0.005	NA
4/18/1994	8.27	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	0.002	NA	0.005	NA
10/19/1994	9.49	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	0.002	NA	0.005	NA
5/16/1995	8.12	ND	0.003	0.30	0.40	49.0	0.05	0.15	660	3.3	ND	0.002	ND	0.010	ND
10/5/1995	15.67	ND	0.008	0.38	0.74	496.0	0.02	0.61	794	ND	ND	0.0035	ND	0.010	ND
3/27/1996	14.92	NA	ND	NA	0.29	NA	NA	0.15	NA	NA	NA	0.05	ND	0.001	ND
9/27/1996	14.95	ND	ND	0.21	0.26	43.4	0.003	0.14	715	2.9	0.01	-	ND	0.001	ND
4/8/1997	15.60	NA	NA	NA	NA	45.0	NA	NA	814	ND	ND	0.005	ND	0.001	ND
9/18/1997	16.70	NA	0.005	NA	0.33	40.0	NA	0.38	718	3.8	NA	0.01	ND	0.001	ND
5/19/1998	15.40	ND	ND	0.20	0.30	NA	NA	NA	6.3	NA	0.032	-	ND	0.005	ND
10/15/1998	17.40	NA	ND	NA	0.20	NA	NA	NA	NA	NA	NA	0.01	0.001	0.001	ND
4/30/1999	19.85	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.05	ND	0.001	ND
10/26/1999	14.88	NA	NA	NA	NA	NA	NA	NA	737	3.1	ND	0.05	ND	0.001	ND
10/26/1999 *	14.88	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.001	ND
4/13/2000	17.88	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.001	ND
10/18/2000	10.61	NA	<0.005	NA	<0.200	32.9	NA	NA	855	1.2	NA	0.005	ND	0.001	ND
4/29/2001	16.99	0.0062	0.0066	<0.200	<0.200	26.7	NA	NA	579	1.5	0.012	0.005	<0.001	0.001	<0.002
10/17/2001	17.64	<0.005	<0.005	<0.200	<0.200	<40	NA	NA	593	1.1	<0.05	0.050	<0.001	0.001	<0.001
3/27/2002	18.72	<0.005	<0.005	<0.200	<0.200	<40	NA	NA	604	1.5	<0.005	0.005	<0.001	0.001	<0.0012
11/7/2002	16.48	<0.005	<0.005	<0.200	<0.200	26.4	NA	NA	626	1.6	<0.005	0.005	<0.001	0.001	<0.001
5/14/2003	16.17	<0.005	<0.005	<0.200	<0.200	25.1	NA	NA	612	<1.0	<0.005	0.005	<0.001	0.001	<0.001
12/4/2003	16.21	<0.005	<0.005	<0.200	<0.200	no data	NA	NA	no data	1.6	<0.005	0.005	<0.001	0.001	<0.001
6/24/2004	15.90	<0.005	<0.005	<0.200	<0.200	23.3	NA	NA	620	1.1	<0.005	0.005	<0.001	0.001	<0.001
11/10/2004	16.32	<0.005	<0.005	<0.200	<0.200	no data	NA	NA	no data	<1.0	<0.005	0.005	<0.001	0.001	<0.001
6/28/2005	15.64	<0.005	<0.005	<0.200	<0.200	22.3	NA	NA	614	1.2	<0.005	0.005	<0.001	0.001	<0.001
12/21/2005	15.84	<0.005	<0.005	<0.200	<0.200	<20	NA	NA	613	1.2	<0.005	0.005	<0.001	0.001	<0.001
6/27/2006	15.85	<0.008	<0.008	<0.200	<0.200	20.2	NA	NA	583	<1.0	<0.005	0.005	<0.001	0.001	<0.001
12/19/2006	16.00	<0.008	<0.008	<0.200	<0.200	18.3	NA	NA	594	1.3	<0.005	0.005	<0.001	0.001	<0.001
6/5/2007	15.78	<0.008	<0.008	<0.200	<0.200	18.3	NA	NA	578	1.3	<0.005	0.005	<0.001	0.001	<0.001
12/18/2007	16.08	<0.003	<0.003	<0.200	0.203	18.8	NA	NA	572	1.2	<0.005	0.005	<0.001	0.001	<0.001
6/24/2008	15.92	<0.003	0.0041	<0.200	0.247	18.5	NA	NA	556	<1.0	0.010	0.005	<0.001	0.001	<0.001
12/15/2008	15.33	<0.003	0.003	<0.200	<0.200	17.7	NA	NA	545	1	<0.005	0.005	<0.001	0.001	<0.001
6/24/2009	15.71	<0.003	0.003	<0.200	<0.200	17.3	NA	NA	553	1.1	<0.005	0.005	<0.001	0.001	<0.001
12/15/2009	15.20	<0.003	<0.003	<0.200	<0.200	16.6	NA	NA	457	<1.0	<0.005	0.005	<0.001	0.001	<0.001
6/22/2010	14.84	0.0042	0.0046	<0.200	<0.200	15.8	NA	NA	522	1.5	<0.005	0.005	<0.001	0.001	<0.001
12/21/2010	13.79	<0.003	<0.003	<0.200	<0.200	15.9	NA	NA	520	1.2	<0.005	0.005	<0.001	0.001	<0.001
6/7/2011	16.04	<0.003	<0.003	<0.200	<0.200	15.4	NA	NA	513	1.2	<0.005	0.005	<0.001	0.001	<0.001
5/30/2012	15.07	<0.003	<0.003	0.211	0.209	18.1	NA	NA	520	1.5	<0.005	0.005	<0.001	0.001	<0.001
12/5/2012	14.76	<0.003	<0.003	0.257	0.236	16.0	NA	NA	510	1.4	<0.0050	0.005	<0.001	0.001	<0.001
6/26/2013	13.78	<0.003	<0.003	<0.2	<0.2	16.2	NA	NA	504	<1	<0.20	0.200	<0.001	0.001	<0.001
12/11/2013	13.76	<0.003	<0.003	0.2	0.214	15.4	NA	NA	508	1.2	<0.005	0.005	<0.001	0.001	<0.001
6/10/2014	13.9	<0.003	<0.003	0.201	0.204	15.2	NA	NA	422	<1	<0.0050	0.005	<0.001	0.001	<0.001

TABLE 3-5
Inactive Landfill (SWMU-16) Groundwater Sampling Historical Summary
GE Global Research Center, Niskayuna, New York

THM-12															
Sample Dates	Depth to Water (ft blw TOR)	Arsenic Filtered	Arsenic Unfiltered	Barium Filtered	Barium Unfiltered	Chloride	Manganese Filtered	Manganese Unfiltered	TDS	TOC	Total Phenols	Phenol Quant. Limit	Benzene	Benzene Quant. Limit	Vinyl Chloride
NYS GWS	ns	0.025	0.025	1	1	250	0.3	0.3	500	ns	0.001	ns	0.001	ns	0.002
Unit	ft	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
4/18/1991	4.96	<0.005	<0.005	0.06	0.06	1.00	0.30	0.30	245	8.4	<0.002	0.002	no data	no data	no data
8/8/1991	13.31	<0.005	<0.005	0.1	0.09	5.70	0.05	0.03	440	6.5	0.003	0.002	ND	0.005	ND
12/3/1991	4.42	<0.005	0.006	0.15	0.28	1.60	0.11	0.21	392	2.0	0.005	0.002	no data	0.005	no data
2/14/1992	8.65	<0.005	0.005	0.17	0.15	1.00	0.03	0.07	380	10.0	0.007	0.002	no data	0.005	no data
6/23/1992	7.67	<0.005	<0.005	0.1	0.13	1.80	0.05	0.04	358	17.0	<0.002	0.002	no data	0.005	no data
12/14/1992	5.96	<0.005	<0.005	0.19	0.2	1.00	0.05	0.04	265	3.0	0.003	0.002	ND	0.005	ND
7/21/1993	11.98	<0.005	<0.005	0.18	0.11	<1.0	0.04	0.04	395	42.0	<0.002	0.002	ND	0.005	ND
12/28/1993	5.47	<0.005	<0.005	0.08	0.08	<1.0	0.03	0.04	1000	25.0	<0.002	0.002	ND	0.005	ND
4/18/1994	4.36	<0.005	<0.005	0.20	0.20	<2.0	<0.05	0.05	188	3.4	<0.002	0.002	ND	0.005	ND
10/19/1994	11.29	<0.005	<0.005	0.10	0.11	1.50	0.02	0.03	423	1.0	<0.002	0.002	ND	0.005	ND
5/16/1995	8.47	0.003	ND	0.24	0.09	ND	0.052	0.02	332	4.7	ND	0.002	ND	0.010	ND
10/5/1995	39.30	ND	ND	0.23	0.62	44.0	0.084	0.093	505	7.0	0.010	0.0035	ND	0.010	ND
3/27/1996	6.81	ND	ND	0.05	0.12	ND	0.003	0.024	185	5.4	0.110	0.05	ND	0.001	ND
9/27/1996	10.98	ND	ND	0.16	0.15	ND	0.03	0.04	392	6.1	0.015	no data	ND	0.001	ND
4/8/1997	3.90	ND	ND	0.09	0.09	ND	0.09	0.14	288	1.4	0.005	0.005	ND	0.001	ND
9/18/1997	10.20	ND	ND	0.15	0.12	ND	0.05	0.04	399	10.2	0.034	0.01	ND	0.001	ND
5/19/1998	6.00	ND	ND	0.28	0.16	3.0	NA	NA	292	8.6	0.009	no data	ND	0.005	ND
10/15/1998	13.98	ND	ND	0.15	0.2	ND	NA	NA	385	9.8	0.010	0.01	0.014	0.001	ND
4/30/1999	7.35	0.01	0.010	0.20	0.20	3.0	NA	NA	316	2.5	0.050	0.05	0.004	0.001	ND
10/26/1999	4.75	ND	ND	0.16	0.2	ND	NA	NA	330	3.1	ND	0.05	ND	0.001	ND
10/26/1999 *	4.75	ND	ND	ND	ND	ND	NA	NA	349	1.6	ND	0.05	ND	0.001	ND
4/13/2000	3.52	ND	ND	ND	ND	0.9	NA	NA	246	1.8	ND	0.005	ND	0.001	ND
10/18/2000	10.20	<0.005	<0.005	<0.200	<0.200	<20	NA	NA	389	<1.0	<0.005	0.005	ND	0.001	ND
4/18/2001	5.00	<0.005	<0.005	<0.200	<0.200	<0.02	NA	NA	179	3.2	<0.005	0.005	ND	0.001	<0.002
10/17/2001	14.41	<0.005	<0.005	<0.200	<0.200	<0.02	NA	NA	366	1.0	<0.05	0.05	ND	0.001	<0.001
3/27/2002	3.22	<0.005	<0.005	<0.200	<0.200	<0.02	NA	NA	246	1.5	<0.005	0.005	ND	0.001	<0.0012
11/7/2002	9.16	<0.005	<0.005	<0.200	<0.200	<0.02	NA	NA	357	<1.0	<0.005	0.005	<0.001	0.001	<0.001
5/14/2003	4.35	<0.005	<0.005	<0.200	<0.200	<20	NA	NA	256	1.0	<0.005	0.005	<0.001	0.001	<0.001
12/4/2003	5.62	<0.005	<0.005	<0.200	<0.200	<20	NA	NA	377	1.2	<0.005	0.005	<0.001	0.001	<0.001
6/23/2004	9.75	<0.005	<0.005	<0.200	<0.200	<20	NA	NA	359	<1.0	<0.005	0.005	<0.001	0.001	<0.001
11/11/2004	10.88	<0.005	<0.005	<0.200	<0.200	<20	NA	NA	366	<1.0	<0.005	0.005	<0.001	0.001	<0.001
6/28/2005	10.43	<0.005	<0.005	<0.200	<0.200	<20	NA	NA	396	<1.0	<0.005	0.005	<0.001	0.001	<0.001
12/21/2005	7.15	<0.005	<0.005	<0.200	<0.200	<20	NA	NA	385	1.0	<0.005	0.005	<0.001	0.001	<0.001
6/27/2005	5.42	<0.008	<0.008	<0.200	<0.200	<20	NA	NA	343	<1.0	<0.005	0.005	<0.001	0.001	<0.001
12/18/2006	7.74	<0.008	<0.008	<0.200	<0.200	<2.0	NA	NA	377	<1.0	<0.005	0.005	<0.001	0.001	<0.001
6/5/2007	8.50	<0.008	<0.008	<0.200	<0.200	<2.0	NA	NA	377	<1.0	<0.005	0.005	<0.001	0.001	<0.001
12/17/2008	7.70	<0.003	<0.003	<0.200	0.255	<2.0	NA	NA	323	5.4	<0.005	0.005	<0.001	0.001	<0.001
6/23/2008	5.51	<0.003	<0.003	<0.200	<0.200	<2.0	NA	NA	339	<1.0	0.009	0.005	<0.001	0.001	<0.001
12/15/2008	4.52	<0.003	<0.003	<0.200	<0.200	<2.0	NA	NA	369	<1.0	0.0064	0.005	<0.001	0.001	<0.001
6/23/2009	5.89	<0.003	<0.003	<0.200	<0.200	<2.0	NA	NA	373	1.1	<0.005	0.005	<0.001	0.001	<0.001
12/14/2009	5.22	<0.003	<0.003	<0.200	<0.200	<2.0	NA	NA	366	<1.0	<0.005	0.005	<0.001	0.001	<0.001
6/22/2010	12	<0.003	<0.003	<0.200	<0.200	<2.0	NA	NA	393	1.1	<0.005	0.005	<0.001	0.001	<0.001
12/21/2010	6.63	<0.003	<0.003	<0.200	<0.200	<2.0	NA	NA	284	1.4	<0.005	0.005	<0.001	0.001	<0.001
6/7/2011	7.76	<0.003	<0.003	<0.200	<0.200	<2.0	NA	NA	318	2.1	<0.005	0.005	<0.001	0.001	<0.001
12/6/2011	6.8	<0.003	<0.003	<0.2	<0.2	<2	NA	NA	326	<1	<0.005	0.005	<0.001	0.001	<0.001
5/30/2012	8.04	<0.003	<0.003	<0.2	<0.2	<2	NA	NA	362	<1	<0.005	0.005	<0.001	0.001	<0.001
12/5/2012	11.01	<0.003	<0.003	<0.2	<0.2	<2.0	NA	NA	<10	2.5	<0.0050	0.005	<0.001	0.001	<0.001
6/26/2013	7.02	<0.003	<0.003	<0.2	<0.2	<2.0	NA	NA	357	1.1	<0.20	0.200	<0.001	0.001	<0.001
12/11/2013	11.25	<0.003	<0.003	<0.2	<0.2	<2	NA	NA	425	3.3	<0.005	0.005	<0.001	0.001	<0.001
6/10/2014	8.15	<0.003	<0.003	<0.2	<0.2	<2.0	NA	NA	302	2.7	<0.0050	0.005	<0.001	0.001	<0.001

TABLE 4
 Results of SWMU-22 Soil Sampling
 GE Global Research Center, Niskayuna, New York
 (units in ug/kg)

Parameter	TAGM 4046 SCO	EPA Region III Industrial RBC	Sample Name				
			S22-S01		S22-S02		S22-S03
			22-S01-0.5	22-S01-8.5	22-S02-0.5	22-S02-8.5	S22-S03-7.0
			6/5/2000	6/5/2000	6/5/2000	6/5/2000	6/7/2000
1,2,4-TRICHLOROBENZENE	3400	2.0E+07	<189	<187	<183	<180	<329
1,2-BENZPHENANTHRACENE	400	7.8E+05	<189	<187	<183	<180	<329
1,2-DICHLOROBENZENE	7900	1.8E+08	<189	<187	<183	<180	<329
1,4-DICHLOROBENZENE	8500	2.4E+05	<189	<187	<183	<180	<329
2,4,5-TRICHLOROPHENOL	100	2.0E+08	<75.7	<74.7	<73.3	<71.8	<132
2,4,6-TRICHLOROPHENOL	-	5.2E+05	<189	<187	<183	<180	<329
2,4-DICHLOROPHENOL	400	6.1E+06	<189	<187	<183	<180	<329
2,4-DIMETHYLPHENOL	-	4.1E+07	<189	<187	<183	<180	<329
2,4-DINITROPHENOL	200	4.1E+06	R	<187	<183	<180	<329
2,4-DINITROTOLUENE	-	4.1E+06	<189	<187	<183	<180	<329
2,6-DINITROTOLUENE	1000	2.0E+06	<189	<187	<183	<180	<329
2-CHLORONAPHTHALENE	-	1.6E+08	<189	<187	<183	<180	<329
2-CHLOROPHENOL	800	1.0E+07	<189	<187	<183	<180	<329
2-METHYL-4,6-DINITROPHENOL	-	2.0E+05	<189	<187	<183	<180	<329
2-METHYLNAPHTHALENE	36400	4.1E+07	<189	<187	<183	<180	<329
2-METHYLPHENOL	100	1.0E+08	<75.7	<74.7	<73.3	<71.8	<132
2-NITROANILINE	430	-	<189	<187	<183	<180	<329
2-NITROPHENOL	330	-	<189	<187	<183	<180	<329
3,3-DICHLOROBENZIDINE	-	1.3E+04	<189	<187	<183	<180	<329
3,5,5-TRIMETHYL-2-CYCLOHEXENE-1-ONE	4400	6.0E+06	<189	<187	<183	<180	<329
3-NITROANILINE	500	-	<189	<187	<183	<180	<329
4-BROMOPHENYL PHENYL ETHER	-	-	<189	<187	<183	<180	<329
4-CHLORO-3-METHYLPHENOL	240	-	<189	<187	<183	<180	<329
4-CHLOROPHENYL PHENYL ETHER	-	-	<189	<187	<183	<180	<329
4-NITROPHENOL	100	1.6E+07	<75.7	<74.7	<73.3	<71.8	<132
ACENAPHTHENE	50000	1.2E+08	<189	<187	<183	<180	<329
ACENAPHTHYLENE	41000	-	<189	<187	<183	<180	<329
ANILINE	100	1.0E+06	<75.7	<74.7	<73.3	<71.8	<132
ANTHRACENE	50000	6.1E+08	<189	<187	<183	<180	<329
BENZO(A)ANTHRACENE	224	7.8E+03	<189	<187	<183	<180	<329
BENZO(A)PYRENE	61	7.8E+02	<75.7	<74.7	<73.3	<71.8	<132
BENZO(B)FLUORANTHENE	224	7.8E+03	<189	<187	<183	<180	<329

Notes:

J = Estimated value.

R = Rejected value.

TABLE 4
Results of SWMU-22 Soil Sampling
GE Global Research Center, Niskayuna, New York
(units in ug/kg)

Parameter	TAGM 4046 SCO	EPA Region III Industrial RBC	Sample Name				
			S22-S01		S22-S02		S22-S03
			22-S01-0.5	22-S01-8.5	22-S02-0.5	22-S02-8.5	S22-S03-7.0
			6/5/2000	6/5/2000	6/5/2000	6/5/2000	6/7/2000
BENZO(G,H,I)PERYLENE	50000	-	<189	<187	<183	<180	<329
BENZO(K)FLUORANTHENE	224	7.8E+04	<189	<187	<183	<180	<329
BENZYL BUTYL PHTHALATE	50000	4.1E+08	<189	<187	<183	<180	<329
BIS(2-CHLOROETHOXY)METHANE	-	-	<189	<187	<183	<180	<329
BIS(2-CHLOROETHYL)ETHER	-	5.2E+03	<189	<187	<183	<180	<329
BIS(2-CHLOROISOPROPYL)ETHER	-	8.2E+04	<189	<187	<183	<180	<329
BIS(2-ETHYLHEXYL)PHTHALATE	50000	4.1E+05	<189	<187	<183	<180	<329
CARBAZOLE	-	2.9E+05	<189	<187	<183	<180	<329
DIBENZ(A,H)ANTHRACENE	14	7.8E+02	<189	<187	<183	<180	<329
DIBENZOFURAN	6200	8.2E+06	<189	<187	<183	<180	<329
DIETHYL PHTHALATE	7100	1.6E+09	<189	<187	<183	<180	<329
DIMETHYL PHTHALATE	2000	2.0E+10	<189	<187	<183	<180	<329
DI-N-BUTYL PHTHALATE	8100	2.0E+08	<189	<187	<183	<180	<329
DI-N-OCTYL PHTHALATE	50000	4.1E+07	<189	<187	<183	<180	<329
FLUORANTHENE	50000	8.2E+07	52.6 J	<187	<183	<180	<329
FLUORENE	50000	8.2E+07	<189	<187	<183	<180	<329
HEXACHLORO-1,3-BUTADIENE	-	7.3E+04	<189	<187	<183	<180	<329
HEXACHLOROBENZENE	410	3.6E+03	<189	<187	<183	<180	<329
HEXACHLOROCYCLOPENTADIENE	-	1.4E+07	<189	<187	<183	<180	<329
HEXACHLOROETHANE	-	4.1E+05	<189	<187	<183	<180	<329
INDENO(1,2,3-CD)PYRENE	3200	7.8E+03	<189	<187	<183	<180	<329
M-DICHLOROBENZENE	1600	1.8E+06	<189	<187	<183	<180	<329
NAPHTHALENE	13000	4.1E+07	<189	<187	<183	<180	<329
NITROBENZENE	200	1.0E+06	<189	<187	<183	<180	<329
N-NITROSO-DI-N-PROPYLAMINE	-	8.2E+02	<189	<187	<183	<180	<329
N-NITROSODIPHENYLAMINE	-	1.2E+06	<189	<187	<183	<180	<329
P-CHLOROANILINE	-	8.2E+06	<189	<187	<183	<180	<329
PENTACHLOROPHENOL	1000	4.8E+04	<189	<187	<183	<180	<329
PHENANTHRENE	50000	-	<189	<187	<183	<180	<329
PHENOL	30	1.2E+09	<37.9	<37.4	<36.6	<35.9	<65.8
P-NITROANILINE	-	-	<189	<187	<183	<180	<329
PYRENE	50000	6.1E+07	42 J	<187	<183	<180	<329

Notes:

J = Estimated value.

R = Rejected value.

TABLE 5
 Results of SWMU-23 Soil Sampling
 GE Global Research Center, Niskayuna, New York
 (units in ug/kg)

Parameter	TAGM 4046 SCO	EPA Region III Industrial RBC	Sample Name							
			S23-S01		S23-S02			S23-S03		S23-S4-9.0
			S23-S1-4.0	S23-S1-9.0	S23-S2-10.8	S23-S2-4.0	S23-S2-9.3	S23-S3-10.6	S23-S3-4.0	(DP of S23-S1-9.0)
			6/8/2000	6/8/2000	6/8/2000	6/8/2000	6/8/2000	6/8/2000	6/8/2000	6/9/2000
BENZO(A)ANTHRACENE	224	7,840	<201	<197	<185	<193	<187	<192	<210	<193
BENZO(A)PYRENE	61	784	<80.6	<78.6	<73.9	<77.3	<75	<76.8	<84.1	<77.2
DIBENZ(A,H)ANTHRACENE	14	784	<201	<197	<185	<193	<187	<192	<210	<193
FLUORANTHENE	50,000	82,000,000	<201	109 J	<185	<193	<187	<192	<210	72.6 J
PHENOL (AS TIC)	30 or MDL	120,000,000	ND	398 J	ND	ND	ND	ND	ND	458 J
PYRENE	50,000	61,000,000	<201	69.2 J	<185	<193	<187	<192	<210	50.1 J

Notes:

J = Estimated value.

ND = Not detected.

MDL = Method detection limit.

Shaded cells indicate exceedance of screening criteria.

TABLE 6
Analytical Results of AOC-2 Soil Sampling
GE Global Research Center, Niskayuna, New York
(units in ug/kg)

Parameter	TAGM 4046 RSCO	EPA Region III Industrial RBC	Sample Name								
			A02-S01	A02-S02	A02-S03	A02-S04	A02-S05	A02-S06	A02-S14	A02-S15	A02-S16
			A2-S1-8.0	A2-S2-2.0	A2-S3-8.0	A2-S4-4.0	A2-S5-4.0	A02-S06-6.0	A25-S14-0	A26-S15-0	A27-S16-0
			6/7/2000	6/7/2000	6/7/2000	6/7/2000	6/7/2000	6/7/2000	10/31/1996	10/31/1996	10/31/1996
PCB-1016 (AROCLOR)	*1000/10000	41,000	<58.8	<54.5	<52.8	<53.9	<53.4	<50.4	ND	ND	<19
PCB-1221 (AROCLOR)	*1000/10000	1400	<58.8	<54.5	<52.8	<53.9	<53.4	<50.4	ND	ND	<6.9
PCB-1232 (AROCLOR)	*1000/10000	1400	<58.8	<54.5	<52.8	<53.9	<53.4	<50.4	ND	ND	<15
PCB-1242 (AROCLOR)	*1000/10000	1400	<58.8	275 i, ii	<52.8	<53.9	<53.4	<50.4	ND	ND	<10
PCB-1248 (AROCLOR)	*1000/10000	1400	<58.8	<54.5	<52.8	<53.9	<53.4	<50.4	41,500	30,800	492
PCB-1254 (AROCLOR)	*1000/10000	1400	<58.8	<54.5	<52.8	<53.9	<53.4	<50.4	ND	ND	<12
PCB-1260 (AROCLOR)	*1000/10000	1400	<58.8	66.8	<52.8	<53.9	<53.4	<50.4	1640	3180	52

Notes:

TAGM 4046 RSCO = Technical and Administrative Guidance

Memorandum Recommended Soil Cleanup Objective.

EPA Region III RBC = Risk-Based Concentrations under Industrial Exposure.

Shading indicates exceedance of screening criteria.

* = Surface/subsurface total PCB criteria.

i = Aroclor 1242 was reported by lab as the best Aroclor match. The sample exhibited an altered PCB pattern.

ii = The AROCLOR pattern exhibited by this sample had a diminished front end pattern compared to an ARCLOR standard.

ND = Not detected.

TABLE 7
Results of AOC-5 Soil Sampling
GE Global Research Center, Niskayuna, New York
(units in ug/kg)

Parameter	TAGM 4046 SCO	EPA Region III Industrial RBC	Upper Tolerance Interval Based on Background (SB)*	Sample Name								
				A05-S01		A05-S02		A05-S03		A05-S04		
				A5-S1-6.0	A5-S1-9.0	A5-S2-6.0	A5-S2-8.7	A5-S3-6.0	A5-S3-10.1	A5-S4-11.7	A5-S4-3.0	A5-S4-8.0
				6/6/2000	6/6/2000	6/8/2000	6/8/2000	6/8/2000	6/8/2000	6/8/2000	6/8/2000	6/8/2000
TETRACHLOROETHENE	1,400	1.1E+05	-	269	8.89 J	898	847	51.2 J	35.6 J	<10	NA	66.2
TRICHLOROETHENE	700	5.2E+05	-	5.5 J	<55.1	11.1 J	<49.0 UJ	<54.3	<54.6	<54.2	<55.6	<53.6
CIS-1,2-DICHLOROETHENE	NA	2.0E+07	-	<52.6	<55.1	<51.7	11.3 J	<54.3	<54.6	<54.2	<55.6	<53.6
ANTIMONY	SB	8.2E+05	ND	<1500 UJ	<1500 UJ	<1400 UJ	<1500 UJ	<1500 UJ	<1400 UJ	<1300 UJ	<1500 UJ	<1500 UJ
ARSENIC	7500 OR SB	3.8E+03	11,300	8900 J	7100 J	5200	6200	5600	7000	7600	4300	7600
BERYLLIUM	160 OR SB	4.1E+06	1,500	1100 J	1100 J	550	690	650	1100	970	780	960
CADMIUM	1,000	1.0E+06	-	280 J	250 J	210	260	<220	240	270	<220	280
CHROMIUM	50,000	6.1E+07	25,600	24500	23900	11500	14600	13600	23900	25500	15900	21600
COPPER	25000 OR SB	8.2E+07	44,500	34700	35900	28300	30300	28100	35600	37900	24600	34000
LEAD	400,000	4.0E+05	37,500	9800 J	10300 J	6700 J	7800 J	6700 J	9700 J	8400 J	5700 J	7400 J
MERCURY	100	6.1E+05	140	46	47 J	33	32	29	39	39 J	37 J	39 J
NICKEL	13000 OR SB	4.1E+07	37,300	31600 J	30700 J	20000 J	28200 J	20200 J	31700 J	30100 J	19000 J	28100 J
SELENIUM	2000 OR SB	1.0E+07	-	<1600 UJ	<1600 UJ	<1500 UJ	<1600 UJ	<1600 UJ	<1500 UJ	<1400 UJ	<1600 UJ	<1600 UJ
SILVER	SB	1.0E+07	ND	<250	<250	<230	<250	<250	<240	<220	<250	<250
THALLIUM	SB	1.4E+05	ND	<800	<790	<740	<790	<790	<760	<710	<790	<790
ZINC	20000 OR SB	6.1E+08	86,600	69400 J	70800 J	62300 J	57500 J	57600 J	69200 J	76000 J	55000 J	64700 J

Notes:

J = Estimated value.

UJ = The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

Shaded values exceed screening criteria(either RSCO or SB).

* Calculations included in Appendix F.

TABLE 8-1
Metals Analytical Results for Confirmatory Soil Samples
GE Global Research Center, Niskayuna, New York

				Location ID	S06-S03	S06-S04	S06-S05	S06-S06	S06-S07
				Sample Date	11/10/2004	11/10/2004	11/10/2004	11/10/2004	11/10/2004
Chemical Name	Unit	Site Background	TAGM RSCO	EPA RBC					
ALUMINUM	ug/kg	na	SB or 33,000,000	1,000,000,000	8,960,000 J	13,000,000 J	13,100,000 J	13,400,000 J	12,600,000 J
ANTIMONY	ug/kg	ND	SB	410,000	< 1300 UJ	< 1300 UJ	< 1300 UJ	< 1300 UJ	< 1400 UJ
ARSENIC	ug/kg	11300	7,500 or SB	1,900	< 870	< 870	< 860	< 870	< 880
BARIUM	ug/kg	na	300,000	72,000,000	60,200 J	46,900 J	52,100 J	72,200 J	71,400 J
BERYLLIUM	ug/kg	1500	160 or SB	2,000,000	410 J	540 J	430 J	530 J	420 J
CADMIUM	ug/kg	ND	1000 or SB	510,000	< 120	< 120	460 J	< 120	410 J
CALCIUM	ug/kg	na	SB or 35,000,000	ns	19,100,000 J	1,820,000 J	3,980,000 J	6,030,000 J	4,260,000 J
CHROMIUM	ug/kg	25600	10,000 or SB	ns	14,200 J	15,000 J	17,500 J	15,900 J	18,200 J
COBALT	ug/kg	na	SB or 30,000	20,000,000	5600 J	8500 J	5800 J	5800 J	7300 J
COPPER	ug/kg	44500	25,000 or SB	41,000,000	25,600 J	7300 J	7200 J	10,300 J	14,900 J
IRON	ug/kg	na	2,000,000	310,000,000	15,500,000	17,700,000	17,000,000	18,400,000	18,200,000
LEAD	ug/kg	37500	SB	ns	8900 J	< 640 UJ	< 1160 UJ	< 640 UJ	131000 J
MAGNESIUM	ug/kg	na	SB or 5,000,000	ns	8,580,000 J	2,300,000 J	3,630,000 J	3,090,000 J	3,960,000 J
MANGANESE	ug/kg	na	SB or 5,000,000	20,000,000	325,000 J	428,000 J	363,000 J	579,000 J	436,000 J
NICKEL	ug/kg	37300	13,000 or SB	20,000,000	< 640	< 640	< 630	< 640	< 640
POTASSIUM	ug/kg	na	SB or 43,000,000	ns	592,000 J	434,000 J	619,000 J	638,000 J	966,000 J
SELENIUM	ug/kg	na	2,000 or SB	5,100,000	R	R	R	R	R
SILVER	ug/kg	ND	SB	5,100,000	< 660 UJ	< 660 UJ	< 650 UJ	< 660 UJ	< 670 UJ
SODIUM	ug/kg	na	SB or 8,000,000	ns	93,000 J	73,900 J	20,9000 J	13,5000 J	96,100 J
THALLIUM	ug/kg	ND	SB	72,000	< 1500 UJ	< 1500 UJ	< 1400 UJ	< 1500 UJ	< 1500 UJ
VANADIUM	ug/kg	na	150,000 or SB	1,000,000	13,800 J	12,000 J	16,600 J	19,200 J	15,400 J
ZINC	ug/kg	86600	20,000 or SB	310,000,000	461,000 J	132,000 J	848,000 J	327,000 J	254,000 J
MERCURY	ug/kg	140	100	ns	92 J	79 J	80 J	140 J	100 J
PH	pH Units	na	ns	ns	8.2	6.8	7.6	7.1	7.6
PERCENT MOISTURE	%	na	ns	ns	15	15	14	15	16

Notes:

ns = no standard; na = not analyzed

Shaded cells indicate exceedance of TAGM RSCO.

J = estimated value, UJ = non-detection, but reporting limit is estimated

R = rejected value, presence or absence cannot be determined

TABLE 8-1
Metals Analytical Results for Confirmatory Soil Samples
GE Global Research Center, Niskayuna, New York

				Location ID	S06-S08 (DUP)	S06-S08	S06-S09	S06-S10	S06-S11
				Sample Date	11/10/2004	11/10/2004	11/10/2004	11/10/2004	11/10/2004
Chemical Name	Unit	Site Background	TAGM RSCO	EPA RBC					
ALUMINUM	ug/kg	na	SB or 33,000,000	1,000,000,000	9,180,000 J	6,850,000 J	12,400,000 J	8,670,000 J	9,730,000 J
ANTIMONY	ug/kg	ND	SB	410,000	< 1300 UJ	< 1300 UJ	< 1300 UJ	< 1300 UJ	< 1400 UJ
ARSENIC	ug/kg	11300	7,500 or SB	1,900	< 870	< 870	< 850	< 860	< 910
BARIUM	ug/kg	na	300,000	72,000,000	38,400 J	31,400 J	37,100 J	29,400 J	36,500 J
BERYLLIUM	ug/kg	1500	160 or SB	2,000,000	320 J	240 J	420 J	250 J	360 J
CADMIUM	ug/kg	ND	1000 or SB	510,000	< 120	< 120	< 1150	< 120	< 120
CALCIUM	ug/kg	na	SB or 35,000,000	ns	4,850,000 J	15,000,00 J	1,150,000 J	933,000 J	2,490,000 J
CHROMIUM	ug/kg	25600	10,000 or SB	ns	13,900 J	9200 J	16,600 J	10,500 J	10,100 J
COBALT	ug/kg	na	SB or 30,000	20,000,000	4700 J	3200 J	9700 J	4100 J	4200 J
COPPER	ug/kg	44500	25,000 or SB	41,000,000	8900 J	5300 J	5100 J	2500 J	8000 J
IRON	ug/kg	na	2,000,000	310,000,000	15,400,000	12,500,000	20,500,000	13,200,000	13,100,000
LEAD	ug/kg	37500	SB	ns	< 640 UJ	< 640 UJ	< 620 UJ	< 630 UJ	< 670 UJ
MAGNESIUM	ug/kg	na	SB or 5,000,000	ns	4,060,000 J	1,760,000 J	3,660,000 J	1,940,000 J	1,950,000 J
MANGANESE	ug/kg	na	SB or 5,000,000	20,000,000	161,000 J	118,000 J	431,000 J	110,000 J	312,000 J
NICKEL	ug/kg	37300	13,000 or SB	20,000,000	< 11800	< 11800	< 620	< 630	< 670
POTASSIUM	ug/kg	na	SB or 43,000,000	ns	504,000 J	344,000 J	547,000 J	343,000 J	370,000 J
SELENIUM	ug/kg	na	2,000 or SB	5,100,000	R	R	R	R	R
SILVER	ug/kg	ND	SB	5,100,000	< 660 UJ	< 660 UJ	< 640 UJ	< 650 UJ	< 690 UJ
SODIUM	ug/kg	na	SB or 8,000,000	ns	60,700 J	49,300 J	51,300 J	99,300 J	61,700 J
THALLIUM	ug/kg	ND	SB	72,000	< 1500 UJ	< 1500 UJ	< 1400 UJ	< 1400 UJ	< 1500 UJ
VANADIUM	ug/kg	na	150,000 or SB	1,000,000	9800 J	5500 J	11,900 J	6300 J	8200 J
ZINC	ug/kg	86600	20,000 or SB	310,000,000	39,300 J	23,000 J	48,500 J	27,800 J	77,200 J
MERCURY	ug/kg	140	100	ns	74 J	< 59 UJ	< 57 UJ	< 58 UJ	74 J
PH	pH Units	na	ns	ns	7.7	7.8	7.1	7.7	7.6
PERCENT MOISTURE	%	na	ns	ns	15	15	13	14	19

Notes:

ns = no standard; na = not analyzed

Shaded cells indicate exceedance of TAGM RSCO.

J = estimated value, UJ = non-detection, but reporting limit is estimated

R = rejected value, presence or absence cannot be determined

TABLE 8-2
VOC Analytical Results for Confirmatory Soil Samples
GE Global Research Center, Niskayuna, New York

Chemical Name	Unit	TAGM RSCO	Location ID	S06-S03	S06-S04	S06-S05	S06-S06	S06-S07
			Sample Date	11/10/2004	11/10/2004	11/10/2004	11/10/2004	11/10/2004
			EPA RBC					
1,1,1-TRICHLOROETHANE	ug/kg	800	290,000,000	< 12	< 12	< 12	< 12	< 12
1,1,2,2-TETRACHLOROETHANE	ug/kg	600	14,000	< 12 UJ	< 12 UJ	< 12 UJ	< 12 UJ	< 12 UJ
1,1,2-TRICHLOROETHANE	ug/kg	6,000	50,000	< 12	< 12	< 12	< 12	< 12
1,1-DICHLOROETHANE	ug/kg	200	100,000,000	< 12	< 12	< 12	< 12	< 12
1,1-DICHLOROETHYLENE	ug/kg	400	51,000,000	< 12	< 12	< 12	< 12	< 12
1,2-DICHLOROETHANE	ug/kg	100	31,000	< 12	< 12	< 12	< 12	< 12
1,2-DICHLOROPROPANE	ug/kg	ns	42,000	< 12 UJ	< 12 UJ	< 12 UJ	< 12 UJ	< 12 UJ
2-BUTANONE	ug/kg	300	610,000,000	< 12	< 12	< 12	< 12	< 12
4-METHYL-2-PENTANONE	ug/kg	1,000	ns	< 12 UJ	< 12 UJ	< 12 UJ	< 12 UJ	< 12 UJ
ACETONE	ug/kg	200	920,000,000	15	< 12	< 12	< 12	31 UJ
BENZENE	ug/kg	60	52,000	< 12	< 12	< 12	< 12	< 12
BROMODICHLOROMETHANE	ug/kg	ns	46,000	< 12	< 12	< 12	< 12	< 12
BROMOMETHANE	ug/kg	ns	1,400,000	< 12	< 12	< 12	< 12	< 12
CARBON DISULFIDE	ug/kg	2,700	100,000,000	< 12 UJ	< 12 UJ	< 12 UJ	< 12 UJ	< 12
CARBON TETRACHLORIDE	ug/kg	600	22,000	< 12	< 12	< 12	< 12	< 12
CHLOROBENZENE	ug/kg	1,700	20,000,000	< 12	< 12	< 12	< 12 UJ	< 12
CHLORODIBROMOMETHANE	ug/kg	ns	34,000	< 12	< 12	< 12	< 12	< 12
CHLOROETHANE	ug/kg	1,900	990,000	< 12	< 12	< 12	< 12	< 12
CHLOROFORM	ug/kg	300	10,000,000	< 12	< 12	< 12	< 12	< 12
CHLOROMETHANE	ug/kg	ns	ns	< 12 UJ	< 12 UJ	< 12 UJ	< 12 UJ	< 12 UJ
CIS-1,2-DICHLOROETHENE	ug/kg	250	10,000,000	< 12	< 12	< 12	< 12	< 12
CIS-1,3-DICHLOROPROPENE	ug/kg	ns	ns	< 12	< 12	< 12	< 12	< 12
DICHLOROMETHANE	ug/kg	100	380,000	< 12	< 12	< 12	< 12	< 12 U
ETHYLBENZENE	ug/kg	5,500	100,000,000	< 12	< 12	< 12	< 12 UJ	< 12
M,P-XYLENE	ug/kg	ns	ns	< 12	< 12	< 12	< 12 UJ	< 12
METHYL N-BUTYL KETONE	ug/kg	ns	ns	< 12 UJ	< 12 UJ	< 12 UJ	< 12 UJ	< 12 UJ
O-XYLENE	ug/kg	ns	ns	< 12	< 12	< 12	< 12 UJ	< 12
STYRENE (MONOMER)	ug/kg	ns	200,000,000	< 12	< 12	< 12	< 12 UJ	< 12
TETRACHLOROETHENE	ug/kg	1,400	5,300	< 12	< 12	< 12	< 12 UJ	< 12
TOLUENE	ug/kg	1,500	200,000,000	< 12	< 12	< 12	< 12 UJ	< 12
TRANS-1,2-DICHLOROETHENE	ug/kg	300	20,000,000	< 12	< 12	< 12	< 12	< 12
TRANS-1,3-DICHLOROPROPENE	ug/kg	ns	ns	< 12	< 12	< 12	< 12	< 12
TRIBROMOMETHANE	ug/kg	ns	360,000	< 12	< 12	< 12	< 12	< 12
TRICHLOROETHYLENE	ug/kg	700	7,200	< 12	< 12	< 12	< 12	< 12
VINYL CHLORIDE	ug/kg	200	4,000	< 12 UJ	< 12 UJ	< 12 UJ	< 12 UJ	< 12 UJ

Notes:

ns = no standard

J = estimated value, UJ = non-detection, but reporting limit is estimated

TABLE 8-2
VOC Analytical Results for Confirmatory Soil Samples
GE Global Research Center, Niskayuna, New York

Chemical Name	Unit	TAGM RSCO	Location ID	S06-S08 (DUP)	S06-S08	S06-S09	S06-S10	S06-S11
			Sample Date	11/10/2004	11/10/2004	11/10/2004	11/10/2004	11/10/2004
Chemical Name	Unit	TAGM RSCO	EPA RBC					
1,1,1-TRICHLOROETHANE	ug/kg	800	290,000,000	< 12	< 12	< 11	< 12	< 12
1,1,2,2-TETRACHLOROETHANE	ug/kg	600	14,000	< 12 UJ	< 12 UJ	< 11 UJ	< 12 UJ	< 12 UJ
1,1,2-TRICHLOROETHANE	ug/kg	6,000	50,000	< 12	< 12	< 11	< 12	< 12
1,1-DICHLOROETHANE	ug/kg	200	100,000,000	< 12	< 12	< 11	< 12	< 12
1,1-DICHLOROETHYLENE	ug/kg	400	51,000,000	< 12	< 12	< 11	< 12	< 12
1,2-DICHLOROETHANE	ug/kg	100	31,000	< 12	< 12	< 11	< 12	< 12
1,2-DICHLOROPROPANE	ug/kg	ns	42,000	< 12	< 12 UJ	< 11	< 12	< 12
2-BUTANONE	ug/kg	300	610,000,000	< 12	< 12	< 11	< 12	< 12
4-METHYL-2-PENTANONE	ug/kg	1,000	ns	< 12	< 12 UJ	< 11	< 12	< 12
ACETONE	ug/kg	200	920,000,000	< 12	< 12	< 11	< 12	< 12
BENZENE	ug/kg	60	52,000	< 12	< 12	< 11	< 12	< 12
BROMODICHLOROMETHANE	ug/kg	ns	46,000	< 12	< 12	< 11	< 12	< 12
BROMOMETHANE	ug/kg	ns	1,400,000	< 12	< 12	< 11	< 12	< 12
CARBON DISULFIDE	ug/kg	2,700	100,000,000	< 12	< 12 UJ	< 11	< 12	< 12
CARBON TETRACHLORIDE	ug/kg	600	22,000	< 12	< 12	< 11	< 12	< 12
CHLOROBENZENE	ug/kg	1,700	20,000,000	< 12	< 12	< 11	< 12	< 12
CHLORODIBROMOMETHANE	ug/kg	ns	34,000	< 12	< 12	< 11	< 12	< 12
CHLOROETHANE	ug/kg	1,900	990,000	< 12	< 12	< 11	< 12	< 12
CHLOROFORM	ug/kg	300	10,000,000	< 12	< 12	< 11	< 12	< 12
CHLOROMETHANE	ug/kg	ns	ns	< 12	< 12 UJ	< 11	< 12	< 12
CIS-1,2-DICHLOROETHENE	ug/kg	250	10,000,000	< 12	< 12	< 11	< 12	< 12
CIS-1,3-DICHLOROPROPENE	ug/kg	ns	ns	< 12	< 12	< 11	< 12	< 12
DICHLOROMETHANE	ug/kg	100	380,000	< 12	< 12	< 11	< 12	6 J
ETHYLBENZENE	ug/kg	5,500	100,000,000	< 12	< 12	< 11	< 12	< 12
M,P-XYLENE	ug/kg	ns	ns	< 12	< 12	< 11	< 12	< 12
METHYL N-BUTYL KETONE	ug/kg	ns	ns	< 12	< 12 UJ	< 11	< 12	< 12
O-XYLENE	ug/kg	ns	ns	< 12	< 12	< 11	< 12	< 12
STYRENE (MONOMER)	ug/kg	ns	200,000,000	< 12	< 12	< 11	< 12	< 12
TETRACHLOROETHENE	ug/kg	1,400	5,300	< 12	< 12	< 11	< 12	< 12
TOLUENE	ug/kg	1,500	200,000,000	< 12	< 12	< 11	< 12	< 12
TRANS-1,2-DICHLOROETHENE	ug/kg	300	20,000,000	< 12	< 12	< 11	< 12	< 12
TRANS-1,3-DICHLOROPROPENE	ug/kg	ns	ns	< 12	< 12	< 11	< 12	< 12
TRIBROMOMETHANE	ug/kg	ns	360,000	< 12	< 12	< 11	< 12	< 12
TRICHLOROETHYLENE	ug/kg	700	7,200	< 12	< 12	< 11	< 12	< 12
VINYL CHLORIDE	ug/kg	200	4,000	< 12	< 12 UJ	< 11	< 12	< 12

Notes:

ns = no standard

J = estimated value, UJ = non-detection, but reporting limit is estimated

TABLE 8-3
SVOC Analytical Results for Confirmatory Soil Samples
GE Global Research Center, Niskayuna, New York

Chemical Name	Unit	TAGM RSCO	Location ID	S06-S03	S06-S04	S06-S05	S06-S06	S06-S07
			Sample Date	11/10/2004	11/10/2004	11/10/2004	11/10/2004	11/10/2004
			EPA RBC					
1,2,4-TRICHLOROBENZENE	ug/kg	3,400	10,000,000	< 390	< 390	< 390	< 390	< 390
1,2-BENZPHENANTHRACENE	ug/kg	400	390,000	90 J	< 390	170 J	< 390	85 J
1,2-DICHLOROBENZENE	ug/kg	7,900	92,000,000	< 390	< 390	< 390	< 390	< 390
1,4-DICHLOROBENZENE	ug/kg	8,500	120,000	< 390	< 390	< 390	< 390	< 390
2,4,5-TRICHLOROPHENOL	ug/kg	100	100,000,000	< 390	< 390	< 390	< 390	< 390
2,4,6-TRICHLOROPHENOL	ug/kg	ns	260,000	< 390	< 390	< 390	< 390	< 390
2,4-DICHLOROPHENOL	ug/kg	400	3,100,000	< 390	< 390	< 390	< 390	< 390
2,4-DIMETHYLPHENOL	ug/kg	ns	20,000,000	< 390	< 390	< 390	< 390	< 390
2,4-DINITROPHENOL	ug/kg	200	2,000,000	< 2000 UJ	< 2000 UJ	< 1900 UJ	< 2000	< 1900
2,4-DINITROTOLUENE	ug/kg	ns	2,000,000	< 390	< 390	< 390	< 390	< 390
2,6-DINITROTOLUENE	ug/kg	1,000	1,000,000	< 390	< 390	< 390	< 390	< 390
2-CHLORONAPHTHALENE	ug/kg	ns	82,000,000	< 390	< 390	< 390	< 390	< 390
2-CHLOROPHENOL	ug/kg	800	5,100,000	< 390	< 390	< 390	< 390	< 390
2-METHYL-4,6-DINITROPHENOL	ug/kg	ns	100,000	< 2000 UJ	< 2000 UJ	< 1900 UJ	< 2000 UJ	< 1900 UJ
2-METHYLNAPHTHALENE	ug/kg	36,400	4,100,000	< 390	< 390	< 390	< 390	< 390
2-METHYLPHENOL	ug/kg	100	51,000,000	< 390	< 390	< 390	< 390	< 390
2-NITROANILINE	ug/kg	430	3,100,000	< 2000	< 2000	< 1900	< 2000	< 1900
2-NITROPHENOL	ug/kg	330	ns	< 390	< 390	< 390	< 390	< 390
3,3-DICHLOROBENZIDINE	ug/kg	ns	6,400	< 780	< 780	< 780	< 780	< 780
3,5,5-TRIMETHYL-2-CYCLOHEXENE-1-ONE	ug/kg	4,400	3,000,000	< 390	< 390	< 390	< 390	< 390
3-NITROANILINE	ug/kg	500	140,000	< 2000	< 2000	< 1900	< 2000	< 1900
4-BROMOPHENYL PHENYL ETHER	ug/kg	ns	ns	< 390	< 390	< 390	< 390	< 390
4-CHLORO-3-METHYLPHENOL	ug/kg	240	ns	< 390	< 390	< 390	< 390	< 390
4-CHLOROPHENYL PHENYL ETHER	ug/kg	ns	ns	< 390	< 390	< 390	< 390	< 390
4-METHYLPHENOL	ug/kg	900	5,100,000	< 390	< 390	< 390	< 390	< 390
4-NITROPHENOL	ug/kg	100	ns	< 2000	< 2000	< 1900	< 2000	< 1900
ACENAPHTHENE	ug/kg	50,000	61,000,000	< 390	< 390	< 390	< 390	< 390
ACENAPHTHYLENE	ug/kg	41,000	ns	< 390	< 390	< 390	< 390	< 390
ANTHRACENE	ug/kg	50,000	310,000,000	< 390	< 390	57 J	< 390	< 390
BENZO(A)ANTHRACENE	ug/kg	224	3,900	54 J	< 390	150 J	< 390	77 J
BENZO(A)PYRENE	ug/kg	61 or MDL (306)	390	74 J	< 390	140 J	< 390	69 J
BENZO(B)FLUORANTHENE	ug/kg	1,100	3,900	71 J	< 390	130 J	< 390	58 J
BENZO(G,H,I)PERYLENE	ug/kg	50,000	ns	46 J	< 390	77 J	< 390	< 390
BENZO(K)FLUORANTHENE	ug/kg	1,100	39,000	79 J	< 390	130 J	< 390	70 J
BENZYL BUTYL PHTHALATE	ug/kg	50,000	200,000,000	< 390	< 390	< 390	< 390	< 390
BIS(2-CHLOROETHOXY)METHANE	ug/kg	ns	ns	< 390	< 390	< 390	< 390	< 390
BIS(2-CHLOROETHYL)ETHER	ug/kg	ns	2,600	< 390	< 390	< 390	< 390	< 390
BIS(2-CHLOROISOPROPYL)ETHER	ug/kg	ns	41,000	< 390	< 390	< 390	< 390	< 390

TABLE 8-3
SVOC Analytical Results for Confirmatory Soil Samples
GE Global Research Center, Niskayuna, New York

Chemical Name	Unit	TAGM RSCO	Location ID	S06-S03	S06-S04	S06-S05	S06-S06	S06-S07
			Sample Date	11/10/2004	11/10/2004	11/10/2004	11/10/2004	11/10/2004
			EPA RBC					
BIS(2-ETHYLHEXYL)PHthalate	ug/kg	50,000	200,000	63 J	< 390	85 J	< 390	< 390
CARBAZOLE	ug/kg	ns	140,000	< 390	< 390	< 390	< 390	< 390
DIBENZ(A,H)ANTHRACENE	ug/kg	14	390	< 390	< 390	< 390	< 390	< 390
DIBENZOFURAN	ug/kg	6,200	2,000,000	< 390	< 390	< 390	< 390	< 390
DIETHYL PHTHALATE	ug/kg	7,100	820,000,000	< 390	< 390	< 390	< 390	< 390
DIMETHYL PHTHALATE	ug/kg	2,000	10,000,000,000	< 390	< 390	< 390	< 390	< 390
DI-N-BUTYL PHTHALATE	ug/kg	8,100	100,000,000	< 390	< 390	< 390	< 390	< 390
DI-N-OCTYL PHTHALATE	ug/kg	50,000	41,000,000	< 390	< 390	< 390	< 390	< 390
FLUORANTHENE	ug/kg	50,000	41,000,000	89 J	< 390	290 J	48 J	140 J
FLUORENE	ug/kg	50,000	41,000,000	< 390	< 390	< 390	< 390	< 390
HEXACHLORO-1,3-BUTADIENE	ug/kg	ns	37,000	< 390	< 390	< 390	< 390	< 390
HEXACHLOROBENZENE	ug/kg	410	1,800	< 390	< 390	< 390	< 390	< 390
HEXACHLOROCYCLOPENTADIENE	ug/kg	ns	6,100,000	< 390 UJ	< 390 UJ	< 390 UJ	< 390	< 390
HEXACHLOROETHANE	ug/kg	ns	200,000	< 390	< 390	< 390	< 390	< 390
INDENO(1,2,3-CD)PYRENE	ug/kg	3,200	3,900	54 J	< 390	100 J	< 390	< 390
M-DICHLOROBENZENE	ug/kg	1,600	3,100,000	< 390	< 390	< 390	< 390	< 390
NAPHTHALENE	ug/kg	13,000	20,000,000	< 390	< 390	< 390	< 390	< 390
NITROBENZENE	ug/kg	200	510,000	< 390	< 390	< 390	< 390	< 390
N-NITROSO-DI-N-PROPYLAMINE	ug/kg	ns	410	< 390	< 390	< 390	< 390	< 390
N-NITROSODIPHENYLAMINE	ug/kg	ns	580,000	< 390	< 390	< 390	< 390	< 390
P-CHLOROANILINE	ug/kg	ns	4,100,000	< 390	< 390	< 390	< 390	< 390
PENTACHLOROPHENOL	ug/kg	1,000	24,000	< 2000	< 2000	< 1900	< 2000 UJ	< 1900 UJ
PHENANTHRENE	ug/kg	50,000	ns	65 J	< 390	140 J	< 390	42 J
PHENOL	ug/kg	30	310,000,000	< 390	< 390	< 390	< 390	< 390
P-NITROANILINE	ug/kg	ns	140,000	< 2000	< 2000	< 1900	< 2000	< 1900
PYRENE	ug/kg	50,000	31,000,000	89 J	< 390	240 J	50 J	110 J

Notes:

ns = no standard

J = estimated value, UJ = non-detection, but reporting limit is estimated

TABLE 8-3
SVOC Analytical Results for Confirmatory Soil Samples
GE Global Research Center, Niskayuna, New York

Chemical Name	Unit	TAGM RSCO	Location ID	S06-S08 (DUP)	S06-S08	S06-S09	S06-S10	S06-S11
			Sample Date	11/10/2004	11/10/2004	11/10/2004	11/10/2004	11/10/2004
			EPA RBC					
1,2,4-TRICHLOROBENZENE	ug/kg	3,400	10,000,000	< 390	< 390	< 380	< 390	< 410
1,2-BENZPHENANTHRACENE	ug/kg	400	390,000	< 390	< 390	< 380	< 390	< 410
1,2-DICHLOROBENZENE	ug/kg	7,900	92,000,000	< 390	< 390	< 380	< 390	< 410
1,4-DICHLOROBENZENE	ug/kg	8,500	120,000	< 390	< 390	< 380	< 390	< 410
2,4,5-TRICHLOROPHENOL	ug/kg	100	100,000,000	< 390	< 390	< 380	< 390	< 410
2,4,6-TRICHLOROPHENOL	ug/kg	ns	260,000	< 390	< 390	< 380	< 390	< 410
2,4-DICHLOROPHENOL	ug/kg	400	3,100,000	< 390	< 390	< 380	< 390	< 410
2,4-DIMETHYLPHENOL	ug/kg	ns	20,000,000	< 390	< 390	< 380	< 390	< 410
2,4-DINITROPHENOL	ug/kg	200	2,000,000	< 2000	< 2000	< 1900	< 1900	< 2100
2,4-DINITROTOLUENE	ug/kg	ns	2,000,000	< 390	< 390	< 380	< 390	< 410
2,6-DINITROTOLUENE	ug/kg	1,000	1,000,000	< 390	< 390	< 380	< 390	< 410
2-CHLORONAPHTHALENE	ug/kg	ns	82,000,000	< 390	< 390	< 380	< 390	< 410
2-CHLOROPHENOL	ug/kg	800	5,100,000	< 390	< 390	< 380	< 390	< 410
2-METHYL-4,6-DINITROPHENOL	ug/kg	ns	100,000	< 2000 UJ	< 2000 UJ	< 1900 UJ	< 1900 UJ	< 2100 UJ
2-METHYLNAPHTHALENE	ug/kg	36,400	4,100,000	< 390	< 390	< 380	< 390	< 410
2-METHYLPHENOL	ug/kg	100	51,000,000	< 390	< 390	< 380	< 390	< 410
2-NITROANILINE	ug/kg	430	3,100,000	< 2000	< 2000	< 1900	< 1900	< 2100
2-NITROPHENOL	ug/kg	330	ns	< 390	< 390	< 380	< 390	< 410
3,3-DICHLOROBENZIDINE	ug/kg	ns	6,400	< 780	< 780	< 770	< 780	< 820
3,5,5-TRIMETHYL-2-CYCLOHEXENE-1-ONE	ug/kg	4,400	3,000,000	< 390	< 390	< 380	< 390	< 410
3-NITROANILINE	ug/kg	500	140,000	< 2000	< 2000	< 1900	< 1900	< 2100
4-BROMOPHENYL PHENYL ETHER	ug/kg	ns	ns	< 390	< 390	< 380	< 390	< 410
4-CHLORO-3-METHYLPHENOL	ug/kg	240	ns	< 390	< 390	< 380	< 390	< 410
4-CHLOROPHENYL PHENYL ETHER	ug/kg	ns	ns	< 390	< 390	< 380	< 390	< 410
4-METHYLPHENOL	ug/kg	900	5,100,000	< 390	< 390	< 380	< 390	< 410
4-NITROPHENOL	ug/kg	100	ns	< 2000	< 2000	< 1900	< 1900	< 2100
ACENAPHTHENE	ug/kg	50,000	61,000,000	< 390	< 390	< 380	< 390	< 410
ACENAPHTHYLENE	ug/kg	41,000	ns	< 390	< 390	< 380	< 390	< 410
ANTHRACENE	ug/kg	50,000	310,000,000	< 390	< 390	< 380	< 390	< 410
BENZO(A)ANTHRACENE	ug/kg	224	3,900	< 390	< 390	< 380	< 390	< 410
BENZO(A)PYRENE	ug/kg	61 or MDL (306)	390	< 390	< 390	< 380	< 390	< 410
BENZO(B)FLUORANTHENE	ug/kg	1,100	3,900	< 390	< 390	< 380	< 390	< 410
BENZO(G,H,I)PERYLENE	ug/kg	50,000	ns	< 390	< 390	< 380	< 390	< 410
BENZO(K)FLUORANTHENE	ug/kg	1,100	39,000	< 390	< 390	< 380	< 390	< 410
BENZYL BUTYL PHTHALATE	ug/kg	50,000	200,000,000	< 390	< 390	< 380	< 390	< 410
BIS(2-CHLOROETHOXY)METHANE	ug/kg	ns	ns	< 390	< 390	< 380	< 390	< 410
BIS(2-CHLOROETHYL)ETHER	ug/kg	ns	2,600	< 390	< 390	< 380	< 390	< 410
BIS(2-CHLOROISOPROPYL)ETHER	ug/kg	ns	41,000	< 390	< 390	< 380	< 390	< 410

TABLE 8-3
SVOC Analytical Results for Confirmatory Soil Samples
GE Global Research Center, Niskayuna, New York

Chemical Name	Unit	TAGM RSCO	Location ID	S06-S08 (DUP)	S06-S08	S06-S09	S06-S10	S06-S11
			Sample Date	11/10/2004	11/10/2004	11/10/2004	11/10/2004	11/10/2004
			EPA RBC					
BIS(2-ETHYLHEXYL)PHTHALATE	ug/kg	50,000	200,000	< 390	< 390	< 380	< 390	< 410
CARBAZOLE	ug/kg	ns	140,000	< 390	< 390	< 380	< 390	< 410
DIBENZ(A,H)ANTHRACENE	ug/kg	14	390	< 390	< 390	< 380	< 390	< 410
DIBENZOFURAN	ug/kg	6,200	2,000,000	< 390	< 390	< 380	< 390	< 410
DIETHYL PHTHALATE	ug/kg	7,100	820,000,000	< 390	< 390	< 380	< 390	< 410
DIMETHYL PHTHALATE	ug/kg	2,000	10,000,000,000	< 390	< 390	< 380	< 390	< 410
DI-N-BUTYL PHTHALATE	ug/kg	8,100	100,000,000	< 390	< 390	< 380	< 390	< 410
DI-N-OCTYL PHTHALATE	ug/kg	50,000	41,000,000	< 390	< 390	< 380	< 390	< 410
FLUORANTHENE	ug/kg	50,000	41,000,000	< 390	< 390	< 380	< 390	< 410
FLUORENE	ug/kg	50,000	41,000,000	< 390	< 390	< 380	< 390	< 410
HEXACHLORO-1,3-BUTADIENE	ug/kg	ns	37,000	< 390	< 390	< 380	< 390	< 410
HEXACHLOROBENZENE	ug/kg	410	1,800	< 390	< 390	< 380	< 390	< 410
HEXACHLOROCYCLOPENTADIENE	ug/kg	ns	6,100,000	< 390	< 390	< 380	< 390	< 410
HEXACHLOROETHANE	ug/kg	ns	200,000	< 390	< 390	< 380	< 390	< 410
INDENO(1,2,3-CD)PYRENE	ug/kg	3,200	3,900	< 390	< 390	< 380	< 390	< 410
M-DICHLOROBENZENE	ug/kg	1,600	3,100,000	< 390	< 390	< 380	< 390	< 410
NAPHTHALENE	ug/kg	13,000	20,000,000	< 390	< 390	< 380	< 390	< 410
NITROBENZENE	ug/kg	200	510,000	< 390	< 390	< 380	< 390	< 410
N-NITROSO-DI-N-PROPYLAMINE	ug/kg	ns	410	< 390	< 390	< 380	< 390	< 410
N-NITROSODIPHENYLAMINE	ug/kg	ns	580,000	< 390	< 390	< 380	< 390	< 410
P-CHLOROANILINE	ug/kg	ns	4,100,000	< 390	< 390	< 380	< 390	< 410
PENTACHLOROPHENOL	ug/kg	1,000	24,000	< 2000 UJ	< 2000 UJ	< 1900 UJ	< 1900 UJ	< 2100 UJ
PHENANTHRENE	ug/kg	50,000	ns	< 390	< 390	< 380	< 390	< 410
PHENOL	ug/kg	30	310,000,000	< 390	< 390	< 380	< 390	< 410
P-NITROANILINE	ug/kg	ns	140,000	< 2000	< 2000	< 1900	< 1900	< 2100
PYRENE	ug/kg	50,000	31,000,000	< 390	< 390	< 380	< 390	< 410

Notes:

ns = no standard

J = estimated value, UJ = non-detection, but reporting limit is estimated

TABLE 8-4
PCB, Pesticide, and Herbicide Analytical Results for Confirmatory Soil Samples
GE Global Research Center, Niskayuna, New York

			Location ID	S06-S03	S06-S04	S06-S05	S06-S06	S06-S07
			Sample Date	11/10/2004	11/10/2004	11/10/2004	11/10/2004	11/10/2004
Chemical Name	Unit	TAGM RSCO	EPA RBC					
ALDRIN	ug/kg	41	170	< 2	< 2	< 9.7	< 2	< 2
ALPHA CHLORDANE	ug/kg	ns	ns	< 2	< 2	< 9.7	< 2	< 2
BHC, ALPHA-	ug/kg	110	450	< 2	< 2	< 9.7	< 2	< 2
BHC, BETA-	ug/kg	200	1,600	< 2	< 2	< 9.7	< 2	< 2
BHC, DELTA-	ug/kg	300	ns	< 2	< 2	< 9.7	< 2	< 2
CAMPHECHLOR	ug/kg	ns	2,600	< 200	< 200	< 970	< 200	< 200
DDD, 4,4-	ug/kg	2,900	12,000	< 3.9	< 3.9	< 19	2.6 J	1.2 J
DDE, 4,4-	ug/kg	2,100	8,400	28	6.9	190	32	1.8 J
DDT, 4,4-	ug/kg	2,100	8,400	29	4.2	250	29	1.4 J
DIELDRIN	ug/kg	44	180	< 3.9	< 3.9	< 19	< 3.9	< 4
ENDOSULFAN I (ALPHA)	ug/kg	900	ns	< 2	< 2	< 9.7	< 2	< 2
ENDOSULFAN II (BETA)	ug/kg	900	ns	< 3.9	< 3.9	< 19	< 3.9	< 4
ENDOSULFAN SULFATE	ug/kg	1,000	ns	< 3.9	< 3.9	< 19	< 3.9	< 4
ENDRIN	ug/kg	100	310,000	< 3.9	< 3.9	< 19	< 3.9	< 4
ENDRIN ALDEHYDE	ug/kg	ns	ns	< 3.9	< 3.9	< 19	< 3.9	< 4
ENDRIN KETONE	ug/kg	ns	ns	< 3.9	< 3.9	< 19	< 3.9	< 4
GAMMA CHLORDANE	ug/kg	540	ns	< 2	< 2	< 9.7	< 2	< 2
GAMMA-BHC	ug/kg	60	2,200	< 2	< 2	< 9.7	< 2	< 2
HEPTACHLOR	ug/kg	100	640	< 2	< 2	< 9.7	< 2	< 2
HEPTACHLOR EPOXIDE	ug/kg	20	310	< 2	< 2	< 9.7	< 2	< 2
METHOXYCHLOR	ug/kg	9,990	5,100,000	< 20	< 20	< 97	< 20	< 20
PCB-1016 (AROCLOR)	ug/kg	ns	41,000	< 39	< 39	< 190	< 39	< 40
PCB-1221 (AROCLOR)	ug/kg	ns	1,400	< 39	< 39	< 190	< 39	< 40
PCB-1232 (AROCLOR)	ug/kg	ns	1,400	< 39	< 39	< 190	< 39	< 40
PCB-1242 (AROCLOR)	ug/kg	ns	1,400	< 39	< 39	< 190	< 39	< 40
PCB-1248 (AROCLOR)	ug/kg	ns	1,400	< 39	< 39	< 190	< 39	< 40
PCB-1254 (AROCLOR)	ug/kg	ns	1,400	< 39	< 39	< 190	< 39	< 40
PCB-1260 (AROCLOR)	ug/kg	ns	1,400	< 39	< 39	< 190	< 39	< 40
2,4-D	ug/kg	500	10,000,000	< 59 UJ	< 59 UJ	< 58 UJ	< 59 UJ	< 60 UJ
DICAMBA	ug/kg	ns	31,000,000	< 59 UJ	< 59 UJ	< 58 UJ	< 59 UJ	< 60 UJ
DINITROBUTYL PHENOL	ug/kg	ns	1,000,000	< 59 UJ	< 59 UJ	< 58 UJ	< 59 UJ	< 60 UJ
SILVEX	ug/kg	700	8,200,000	< 59 UJ	< 59 UJ	< 58 UJ	< 59 UJ	< 60 UJ
2,4,5-T	ug/kg	1,900	10,000,000	< 59	< 59 UJ	< 58	< 59	< 60

Notes:

ns = no standard

J = estimated value, UJ = non-detection, but reporting limit is estimated

TABLE 8-4
PCB, Pesticide, and Herbicide Analytical Results for Confirmatory Soil Samples
GE Global Research Center, Niskayuna, New York

			Location ID	S06-S08 (DUP)	S06-S08	S06-S09	S06-S10	S06-S11
			Sample Date	11/10/2004	11/10/2004	11/10/2004	11/10/2004	11/10/2004
Chemical Name	Unit	TAGM RSCO	EPA RBC					
ALDRIN	ug/kg	41	170	< 2	< 2	< 1.9	< 1.9	< 2.1
ALPHA CHLORDANE	ug/kg	ns	ns	< 2	< 2	< 1.9	< 1.9	< 2.1
BHC, ALPHA-	ug/kg	110	450	< 2	< 2	< 1.9	< 1.9	< 2.1
BHC, BETA-	ug/kg	200	1,600	< 2	< 2	< 1.9	< 1.9	< 2.1
BHC, DELTA-	ug/kg	300	ns	< 2	< 2	< 1.9	< 1.9	< 2.1
CAMPHECHLOR	ug/kg	ns	2,600	< 200	< 200	< 190	< 190	< 210
DDD, 4,4-	ug/kg	2,900	12,000	< 3.9	< 3.9	0.3 J	< 3.9	< 4.1
DDE, 4,4-	ug/kg	2,100	8,400	3 J	4.7	3.2 J	< 3.9	< 4.1
DDT, 4,4-	ug/kg	2,100	8,400	0.7 J	0.8 J	< 3.8	< 3.9	< 4.1
DIELDRIN	ug/kg	44	180	< 3.9	< 3.9	< 3.8	< 3.9	< 4.1
ENDOSULFAN I (ALPHA)	ug/kg	900	ns	< 2	< 2	< 1.9	< 1.9	< 2.1
ENDOSULFAN II (BETA)	ug/kg	900	ns	< 3.9	< 3.9	< 3.8	< 3.9	< 4.1
ENDOSULFAN SULFATE	ug/kg	1,000	ns	< 3.9	< 3.9	< 3.8	< 3.9	< 4.1
ENDRIN	ug/kg	100	310,000	< 3.9	< 3.9	< 3.8	< 3.9	< 4.1
ENDRIN ALDEHYDE	ug/kg	ns	ns	< 3.9	< 3.9	< 3.8	< 3.9	< 4.1
ENDRIN KETONE	ug/kg	ns	ns	< 3.9	< 3.9	< 3.8	< 3.9	< 4.1
GAMMA CHLORDANE	ug/kg	540	ns	< 2	< 2	< 1.9	< 1.9	< 2.1
GAMMA-BHC	ug/kg	60	2,200	< 2	< 2	< 1.9	< 1.9	< 2.1
HEPTACHLOR	ug/kg	100	640	< 2	< 2	< 1.9	< 1.9	< 2.1
HEPTACHLOR EPOXIDE	ug/kg	20	310	< 2	< 2	< 1.9	< 1.9	< 2.1
METHOXYCHLOR	ug/kg	9,990	5,100,000	< 20	< 20	< 19	< 19	< 21
PCB-1016 (AROCLOR)	ug/kg	ns	41,000	< 39	< 39	< 38	< 39	< 41
PCB-1221 (AROCLOR)	ug/kg	ns	1,400	< 39	< 39	< 38	< 39	< 41
PCB-1232 (AROCLOR)	ug/kg	ns	1,400	< 39	< 39	< 38	< 39	< 41
PCB-1242 (AROCLOR)	ug/kg	ns	1,400	< 39	< 39	< 38	< 39	< 41
PCB-1248 (AROCLOR)	ug/kg	ns	1,400	< 39	< 39	< 38	< 39	< 41
PCB-1254 (AROCLOR)	ug/kg	ns	1,400	< 39	< 39	< 38	< 39	< 41
PCB-1260 (AROCLOR)	ug/kg	ns	1,400	< 39	< 39	< 38	< 39	< 41
2,4-D	ug/kg	500	10,000,000	< 59 UJ	< 59 UJ	< 57 UJ	< 58 UJ	< 62 UJ
DICAMBA	ug/kg	ns	31,000,000	< 59 UJ	< 59 UJ	< 57 UJ	< 58 UJ	< 62 UJ
DINITROBUTYL PHENOL	ug/kg	ns	1,000,000	< 59 UJ	< 59 UJ	< 57 UJ	< 58 UJ	< 62 UJ
SILVEX	ug/kg	700	8,200,000	< 59 UJ	< 59 UJ	< 57 UJ	< 58 UJ	< 62 UJ
2,4,5-T	ug/kg	1,900	10,000,000	< 59	< 59	< 57	< 58	< 62

Notes:

ns = no standard

J = estimated value, UJ = non-detection, but reporting limit is estimated

TABLE 9
AOC-6 Validated TCLP Results for Excavated Soil Piles Sampled
November 2004 GE Global Research Center, Niskayuna, New York

Chemical Name	Compound Type	Unit	Location ID	Fire Main	Pile A	Pile B	Pile C	Pile D NW	Pile D SE
			Sample Date	11/3/2004	11/4/2004	11/4/2004	11/4/2004	11/4/2004	11/4/2004
			Action Level						
ARSENIC	METAL	mg/l	5	0.0086 J	0.0038 J	< 0.0037	0.0053 J	0.0047 J	< 0.0037
BARIUM	METAL	mg/l	100	0.36 J	0.35 J	0.36 J	0.34 J	0.34 J	0.34 J
CADMIUM	METAL	mg/l	1	0.0044 J	0.0018 J	0.0017 J	0.003 J	0.0031 J	0.0043 J
CHROMIUM	METAL	mg/l	5	< 0.0023	< 0.0023	< 0.0023	< 0.0023	< 0.0023	< 0.0023
LEAD	METAL	mg/l	5	0.0042 J	0.0032 J	0.0044 J	0.0029 J	< 0.0027	< 0.0027
SELENIUM	METAL	mg/l	1	0.037 J	0.01 J	0.0082 J	0.0042 J	0.0059 J	< 0.0038
SILVER	METAL	mg/l	5	< 0.0028 UJ	< 0.0028 UJ	< 0.0028 UJ	< 0.0028 UJ	< 0.0028 UJ	< 0.0028 UJ
MERCURY	METAL	mg/l	0.2	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
CAMPHECHLOR	PEST	mg/l	0.5	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
CHLORDANE	PEST	mg/l	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
ENDRIN	PEST	mg/l	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
GAMMA-BHC	PEST	mg/l	0.4	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
HEPTACHLOR	PEST	mg/l	0.008	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
HEPTACHLOR EPOXIDE	PEST	mg/l	0.008	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
METHOXYCHLOR	PEST	mg/l	10	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4-D	HERB	mg/l	10	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
SILVEX	HERB	mg/l	1	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,1-DICHLOROETHYLENE	VOC	mg/l	0.7	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-DICHLOROETHANE	VOC	mg/l	0.5	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,4-DICHLOROBENZENE	VOC	mg/l	7.5	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2-BUTANONE	VOC	mg/l	200	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
BENZENE	VOC	mg/l	0.5	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
CARBON TETRACHLORIDE	VOC	mg/l	0.5	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
CHLOROBENZENE	VOC	mg/l	100	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
CHLOROFORM	VOC	mg/l	6	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
TETRACHLOROETHENE	VOC	mg/l	0.7	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
TRICHLOROETHYLENE	VOC	mg/l	0.5	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
VINYL CHLORIDE	VOC	mg/l	0.2	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,4-DICHLOROBENZENE	SVOC	mg/l	7.5	< 0.05	< 0.05	< 0.05	.009 J	.009 J	.006 J
2,4,5-TRICHLOROPHENOL	SVOC	mg/l	400	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-TRICHLOROPHENOL	SVOC	mg/l	2	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4-DINITROTOLUENE	SVOC	mg/l	0.13	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
HEXACHLORO-1,3-BUTADIENE	SVOC	mg/l	0.5	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
HEXACHLOROBENZENE	SVOC	mg/l	0.13	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
HEXACHLOROETHANE	SVOC	mg/l	3	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
NITROBENZENE	SVOC	mg/l	2	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PENTACHLOROPHENOL	SVOC	mg/l	100	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
PYRIDINE	SVOC	mg/l	5	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

Qualifiers: J = compound was positively identified, but numerical value is approximate, UJ = compound was not detected above the reporting limit (RL), but the numerical value for the RL is approximate. Action level shown in table comes from RCRA 40 CFR §261.24.

TABLE 9
AOC-6 Validated TCLP Results for Excavated Soil Piles Sampled
November 2004 GE Global Research Center, Niskayuna, New York

				Location ID	Fire Main	Pile A	Pile B	Pile C	Pile D NW	Pile D SE
				Sample Date	11/3/2004	11/4/2004	11/4/2004	11/4/2004	11/4/2004	11/4/2004
Chemical Name	Unit	Site Background	TAGM RSCO	EPA RBC						
REACTIVE CYANIDE	ug/kg	na	ns	ns	< 1000	< 1000	< 1000	< 1000	< 1000	< 1000
REACTIVE SULFIDE	ug/kg	na	ns	ns	< 10,000	< 10,000	< 10,000	< 10,000	< 10,000	< 10,000
REACTIVITY	bool	na	ns	ns	nd	nd	nd	nd	nd	nd
CORROSIVITY	bool	na	ns	ns	nd	nd	nd	nd	nd	nd
IGNITABILITY	bool	na	ns	ns	nd	nd	nd	nd	nd	nd
PH	pH Units	na	ns	ns	7.8	8.3	8	8.1	7.7	7.1
PERCENT MOISTURE	%	na	ns	ns	15	12	12	13	19	24
ALUMINIUM	ug/kg	na	SB or 33,000,000	1,000,000,000	3,810,000	3,480,000	4,220,000	7,870,000	11,100,000	12,400,000
ANTIMONY	ug/kg	ND	SB	410,000	< 1300	< 1300	< 1300	2400 J	< 1400	< 1500
ARSENIC	ug/kg	11300	7,500 or SB	1,900	5100 **	< 840	< 840	< 850	< 910	< 970
BARIUM	ug/kg	na	300,000	72,000,000	37,500	35,400	37,100	43,900	50,000	89,600
BERYLLIUM	ug/kg	1500	160 or SB	2,000,000	290 J	300 J	350 J	390 J	480 J	530 J
CADMIUM	ug/kg	ND	1000 or SB	510,000	< 120	< 110	< 110	< 110	< 120	< 130
CALCIUM	ug/kg	na	SB or 35,000,000	ns	36,500,000	31,000,000	36,700,000	27,500,000	10,500,000	11,700,000
CHROMIUM	ug/kg	25600	10,000 or SB	ns	10,200 J	10,100 J	10,900 J	14,400 J	18,600 J	25,600 J
COBALT	ug/kg	na	SB or 30,000	20,000,000	5900 J	4900 J	6500 J	5900 J	9600 J	7500 J
COPPER	ug/kg	44500	25,000 or SB	41,000,000	9100 J	11,700 J	14,200 J	19,100 J	17,600 J	15,300 J
IRON	ug/kg	na	2,000,000	310,000,000	13,100,000 *	12,000,000 *	14,400,000 *	154,000,00 *	20,900,000 *	20,800,000 *
LEAD	ug/kg	37500	SB	ns	< 640	1,300	< 610	< 620	< 670	18,300
MAGNESIUM	ug/kg	na	SB or 5,000,000	ns	8,040,000	9,570,000	15400000 J	10,900,000	7,110,000	5,560,000
MANGANESE	ug/kg	na	SB or 5,000,000	20,000,000	378,000 J	312,000 J	394,000	339,000 J	447,000 J	443,000 J
NICKEL	ug/kg	37300	13,000 or SB	20,000,000	< 640 J	< 610	< 610	< 620	< 670	< 710
POTASSIUM	ug/kg	na	SB or 43,000,000	ns	348,000 J	418,000 J	435,000 J	499,000 J	475,000 J	644,000 J
SELENIUM	ug/kg	na	2,000 or SB	5,100,000	R	R	R	R	R	R
SILVER	ug/kg	ND	SB	5,100,000	< 660 UJ	< 640 UJ	< 640 UJ	< 640 UJ	< 690 UJ	< 740 UJ
SODIUM	ug/kg	na	SB or 8,000,000	ns	180,000 J	255,000 J	279,000 J	389,000 J	346,000 J	145,000 J
THALLIUM	ug/kg	ND	SB	72,000	< 1500	< 1400	< 1400	< 1400	< 1500	< 1600
VANADIUM	ug/kg	na	150,000 or SB	1,000,000	8400 J	8200 J	10,700 J	13,300	13,700	17,600
ZINC	ug/kg	86600	20,000 or SB	310,000,000	38,000 J	54,500 J	56,800 J	77,000 J	74,700 J	216,000 J *
MERCURY	ug/kg	140	100	ns	< 59	170 *	150 *	< 57	< 62	< 66

Notes:

ND = non detection; na = not analyzed; ns = no standard available

J = compound was detected at below the reporting detection limit

R = Sample results did not meet quality control criteria. Presence or absence of analyte cannot be verified.

Shaded cells indicate an exceedance of a standard. * = TAGM Residential Soil Cleanup Objective, **=EPA Region III Industrial Risk Based concentration

TABLE 10-1

AOC-6 Validated VOC Results for Excavated Soil Piles Sampled
November 2004 GE Global Research Center, Niskayuna, New York

Chemical Name	Unit	TAGM RSCO	Location ID	Fire Main	Pile A	Pile B	Pile C	Pile D NW	Pile D SE
			Sample Date	11/3/2004	11/4/2004	11/4/2004	11/4/2004	11/4/2004	11/4/2004
			EPA RBC						
1,1,1-TRICHLOROETHANE	ug/kg	800	290,000,000	< 12	< 11	< 11	< 11	< 12	< 13
1,1,2,2-TETRACHLOROETHANE	ug/kg	600	14,000	< 12	< 11	< 11 UJ	< 11 UJ	< 12 UJ	< 13
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/kg	6,000	31,000,000,000	< 12	< 11	< 11	< 11	< 12	< 13
1,1,2-TRICHLOROETHANE	ug/kg	6,000	50,000	< 12	< 11	< 11	< 11	< 12	< 13
1,1-DICHLOROETHANE	ug/kg	200	100,000,000	< 12	< 11	< 11	< 11	< 12	< 13
1,1-DICHLOROETHYLENE	ug/kg	400	51,000,000	< 12	< 11	< 11	< 11	< 12	< 13
1,2-DICHLOROETHANE	ug/kg	100	31,000	< 12	< 11	< 11	< 11	< 12	< 13
1,2-DICHLOROPROPANE	ug/kg	ns	42,000	< 12	< 11	< 11 UJ	< 11 UJ	< 12 UJ	< 13 UJ
2-BUTANONE	ug/kg	300	610,000,000	< 12 UJ	< 11 UJ	< 11	< 11	< 12	< 13
4-METHYL-2-PENTANONE	ug/kg	1,000	ns	< 12 UJ	< 11 UJ	< 11 UJ	< 11 UJ	< 12 UJ	< 13 UJ
ACETONE	ug/kg	200	920,000,000	< 12	< 11	< 11	< 11	< 12	< 13
BENZENE	ug/kg	60	52,000	< 12	< 11	< 11	< 11	< 12	< 13
BROMODICHLOROMETHANE	ug/kg	ns	46,000	< 12	< 11	< 11	< 11	< 12	< 13
BROMOMETHANE	ug/kg	ns	1,400,000	< 12	< 11	< 11	< 11	< 12	< 13
CARBON DISULFIDE	ug/kg	2,700	100,000,000	< 12	< 11	< 11 UJ	< 11 UJ	< 12 UJ	< 13
CARBON TETRACHLORIDE	ug/kg	600	22,000	< 12	< 11	< 11	< 11	< 12	< 13
CHLOROBENZENE	ug/kg	1,700	20,000,000	< 12	< 11	< 11	< 11	1 J	9 J
CHLORODIBROMOMETHANE	ug/kg	ns	34,000	< 12	< 11	< 11	< 11	< 12	< 13
CHLOROETHANE	ug/kg	1,900	990,000	< 12	< 11	< 11	< 11	< 12	< 13
CHLOROFORM	ug/kg	300	10,000,000	< 12	< 11	< 11	< 11	< 12	< 13
CHLOROMETHANE	ug/kg	ns	ns	< 12 UJ	< 11 UJ	< 11 UJ	< 11 UJ	< 12 UJ	< 13 UJ
CIS-1,2-DICHLOROETHENE	ug/kg	250	10,000,000	< 12	< 11	< 11	< 11	< 12	< 13
CIS-1,3-DICHLOROPROPENE	ug/kg	ns	ns	< 12	< 11	< 11	< 11	< 12	< 13
DICHLOROMETHANE	ug/kg	100	380,000	8 J	< 11	< 11	< 11	6 J	< 13
ETHYLBENZENE	ug/kg	5,500	100,000,000	< 12	< 11	< 11	< 11	< 12	< 13
M,P-XYLENE	ug/kg	ns	ns	< 12	< 11	< 11	< 11	< 12	< 13
METHYL N-BUTYL KETONE	ug/kg	ns	ns	< 12 UJ	< 11 UJ	< 11 UJ	< 11 UJ	< 12 UJ	< 13
O-XYLENE	ug/kg	ns	ns	< 12	< 11	< 11	< 11	< 12	< 13
STYRENE (MONOMER)	ug/kg	ns	200,000,000	< 12	< 11	< 11	< 11	< 12	< 13
TETRACHLOROETHENE	ug/kg	1,400	5,300	< 12	2 J	< 11	< 11	< 12	< 13
TOLUENE	ug/kg	1,500	200,000,000	< 12	< 11	< 11	< 11	< 12	4 J
TRANS-1,2-DICHLOROETHENE	ug/kg	300	20,000,000	< 12	< 11	< 11	< 11	< 12	< 13
TRANS-1,3-DICHLOROPROPENE	ug/kg	ns	ns	< 12	< 11	< 11	< 11	< 12	< 13 UJ
TRIBROMOMETHANE	ug/kg	ns	360,000	< 12 UJ	< 11 UJ	< 11	< 11	< 12	< 13 UJ
TRICHLOROETHYLENE	ug/kg	700	7,200	< 12	< 11	< 11	< 11	< 12	< 13
TRICHLOROFLUOROMETHANE	ug/kg	ns	310,000,000	< 12	< 11	< 11	< 11	< 12	< 13
VINYL CHLORIDE	ug/kg	200	4,000	< 12 UJ	< 11 UJ	< 11 UJ	< 11 UJ	< 12 UJ	< 13 UJ

Notes:

ns = no standard; na = not analyzed

J = estimated value, UJ = non-detection, but reporting limit is estimated

TABLE 10-2

AOC-6 Validated SVOC Results for Excavated Soil Piles Sampled
November 2004 GE Global Research Center, Niskayuna, New York

			Location ID	Fire Main	Pile A	Pile B	Pile C	Pile D NW	Pile D SE
			Sample Date	11/3/2004	11/4/2004	11/4/2004	11/4/2004	11/4/2004	11/4/2004
Chemical Name	Unit	TAGM RSCO	EPA RBC						
1,2,4-TRICHLOROBENZENE	ug/kg	3,400	10,000,000	< 390	< 380	< 380	330 J	650 J	630 J
1,2-BENZPHENANTHRACENE	ug/kg	400	390,000	53 J	72 J	180 J	120 J	< 820	< 1300
1,2-DICHLOROBENZENE	ug/kg	7,900	92,000,000	99 J	130 J	240 J	2900	10000	14000
1,4-DICHLOROBENZENE	ug/kg	8,500	120,000	47 J	63 J	120 J	1100	2400	3700
2,4,5-TRICHLOROPHENOL	ug/kg	100	100,000,000	< 390	< 380	< 380	< 380	< 820	< 1300
2,4,6-TRICHLOROPHENOL	ug/kg	ns	260,000	< 390	< 380	< 380	< 380	< 820	< 1300
2,4-DICHLOROPHENOL	ug/kg	400	3,100,000	< 390	< 380	< 380	< 380	< 820	< 1300
2,4-DIMETHYLPHENOL	ug/kg	ns	20,000,000	< 390	< 380	< 380	< 380	< 820	< 1300
2,4-DINITROPHENOL	ug/kg	200	2,000,000	< 2000	< 1900	< 1900	< 1900	R	R
2,4-DINITROTOLUENE	ug/kg	ns	2,000,000	< 390	< 380	< 380	< 380	< 820	< 1300
2,6-DINITROTOLUENE	ug/kg	1,000	1,000,000	< 390	< 380	< 380	< 380	< 820	< 1300
2-CHLORONAPHTHALENE	ug/kg	ns	82,000,000	< 390	< 380	< 380	< 380	< 820	< 1300
2-CHLOROPHENOL	ug/kg	800	5,100,000	< 390	< 380	< 380	< 380	< 820	< 1300
2-METHYL-4,6-DINITROPHENOL	ug/kg	ns	100,000	< 2000 UJ	< 1900 UJ	< 1900 UJ	< 1900 UJ	R	R
2-METHYLNAPHTHALENE	ug/kg	36,400	4,100,000	< 390	< 380	< 380	< 380	< 820	< 1300
2-METHYLPHENOL	ug/kg	100	51,000,000	< 390	< 380	< 380	< 380	< 820	< 1300
2-NITROANILINE	ug/kg	430	3,100,000	< 2000	< 1900	< 1900	< 1900	< 4100	< 6600
2-NITROPHENOL	ug/kg	330	ns	< 390	< 380	< 380	< 380	< 820	< 1300
3,3-DICHLOROBENZIDINE	ug/kg	ns	6,400	< 780	< 750	< 750	< 760	< 1600	< 2600
3,5,5-TRIMETHYL-2-CYCLOHEXENE-1-ONE	ug/kg	4,400	3,000,000	< 390	< 380	< 380	< 380	< 820	< 1300
3-NITROANILINE	ug/kg	500	140,000	< 2000	< 1900	< 1900	< 1900	< 4100	< 6600
4-BROMOPHENYL PHENYL ETHER	ug/kg	ns	ns	< 390	< 380	< 380	< 380	< 820	< 1300
4-CHLORO-3-METHYLPHENOL	ug/kg	240	ns	< 390	< 380	< 380	< 380	< 820	< 1300
4-CHLOROPHENYL PHENYL ETHER	ug/kg	ns	ns	< 390	< 380	< 380	< 380	< 820	< 1300
4-METHYLPHENOL	ug/kg	900	5,100,000	< 390	< 380	< 380	< 380	< 820	< 1300
4-NITROPHENOL	ug/kg	100	ns	< 2000	< 1900	< 1900	< 1900	< 4100	< 6600
ACENAPHTHENE	ug/kg	50,000	61,000,000	< 390	< 380	39 J	< 380	< 820	< 1300
ACENAPHTHYLENE	ug/kg	41,000	ns	< 390	< 380	< 380	< 380	< 820	< 1300
ANTHRACENE	ug/kg	50,000	310,000,000	< 390	< 380	90 J	< 380	< 820	< 1300
BENZO(A)ANTHRACENE	ug/kg	224	3,900	47 J	65 J	150 J	110 J	< 820	< 1300
BENZO(A)PYRENE	ug/kg	61	390	< 390	46 J	140 J	87 J	< 820	< 1300
BENZO(B)FLUORANTHENE	ug/kg	1,100	3,900	45 J	52 J	130 J	93 J	< 820	< 1300
BENZO(G,H,I)PERYLENE	ug/kg	50,000	ns	< 390	< 380	75 J	62 J	< 820	< 1300
BENZO(K)FLUORANTHENE	ug/kg	1,100	39,000	43 J	45 J	130 J	92 J	< 820	< 1300
BENZYL BUTYL PHTHALATE	ug/kg	50,000	200,000,000	< 390	< 380	< 380	< 380	< 820	< 1300
BIS(2-CHLOROETHOXY)METHANE	ug/kg	ns	ns	< 390	< 380	< 380	< 380	< 820	< 1300

TABLE 10-2

AOC-6 Validated SVOC Results for Excavated Soil Piles Sampled
November 2004 GE Global Research Center, Niskayuna, New York

Chemical Name	Unit	TAGM RSCO	Location ID	Fire Main	Pile A	Pile B	Pile C	Pile D NW	Pile D SE
			Sample Date	11/3/2004	11/4/2004	11/4/2004	11/4/2004	11/4/2004	11/4/2004
			EPA RBC						
BIS(2-CHLOROETHYL)ETHER	ug/kg	ns	2,600	< 390	< 380	< 380	< 380	< 820	< 1300
BIS(2-CHLOROISOPROPYL)ETHER	ug/kg	ns	41,000	< 390	< 380	< 380	< 380	< 820	< 1300
BIS(2-ETHYLHEXYL)PHTHALATE	ug/kg	50,000	200,000	< 390	< 380	< 380	56 J	< 820	< 1300
CARBAZOLE	ug/kg	ns	140,000	< 390	< 380	< 380	< 380	< 820	< 1300
DIBENZ(A,H)ANTHRACENE	ug/kg	14	390	< 390	< 380	< 380	< 380	< 820	< 1300
DIBENZOFURAN	ug/kg	6,200	2,000,000	< 390	< 380	< 380	< 380	< 820	< 1300
DIETHYL PHTHALATE	ug/kg	7,100	820,000,000	< 390	< 380	< 380	< 380	< 820	< 1300
DIMETHYL PHTHALATE	ug/kg	2,000	10,000,000,000	< 390	< 380	< 380	< 380	< 820	< 1300
DI-N-BUTYL PHTHALATE	ug/kg	8,100	100,000,000	< 390	< 380	< 380	< 380	< 820	< 1300
DI-N-OCTYL PHTHALATE	ug/kg	50,000	41,000,000	< 390	< 380	< 380	< 380	< 820	< 1300
FLUORANTHENE	ug/kg	50,000	41,000,000	85 J	110 J	340 J	190 J	120 J	< 1300
FLUORENE	ug/kg	50,000	41,000,000	< 390	< 380	< 380	< 380	< 820	< 1300
HEXACHLORO-1,3-BUTADIENE	ug/kg	ns	37,000	< 390	< 380	< 380	< 380	< 820	< 1300
HEXACHLOROBENZENE	ug/kg	410	1,800	< 390	< 380	< 380	< 380	< 820	< 1300
HEXACHLOROCYCLOPENTADIENE	ug/kg	ns	6,100,000	< 390	< 380	< 380	< 380	< 820 UJ	< 1300 UJ
HEXACHLOROETHANE	ug/kg	ns	200,000	< 390	< 380	< 380	< 380	< 820	< 1300
INDENO(1,2,3-CD)PYRENE	ug/kg	3,200	3,900	< 390	40 J	98 J	57 J	< 820	< 1300
M-DICHLOROBENZENE	ug/kg	1,600	3,100,000	< 390	< 380	< 380	110 J	270 J	340 J
NAPHTHALENE	ug/kg	13,000	20,000,000	< 390	< 380	< 380	< 380	< 820	< 1300
NITROBENZENE	ug/kg	200	510,000	< 390	< 380	< 380	< 380	< 820	< 1300
N-NITROSO-DI-N-PROPYLAMINE	ug/kg	ns	410	< 390	< 380	< 380	< 380	< 820	< 1300
N-NITROSODIPHENYLAMINE	ug/kg	ns	580,000	< 390	< 380	< 380	< 380	< 820	< 1300
P-CHLOROANILINE	ug/kg	ns	4,100,000	< 390	< 380	< 380	< 380	< 820	< 1300
PENTACHLOROPHENOL	ug/kg	1,000	24,000	< 2000	< 1900	< 1900	< 1900	< 4100	R
PHENANTHRENE	ug/kg	50,000	ns	< 390	51 J	230 J	88 J	95 J	< 1300
PHENOL	ug/kg	30	310,000,000	< 390	< 380	< 380	< 380	< 820	< 1300
P-NITROANILINE	ug/kg	ns	140,000	< 2000	< 1900	< 1900	< 1900	< 4100	< 6600
PYRENE	ug/kg	50,000	31,000,000	62 J	87 J	240 J	140 J	95 J	< 1300

Notes:

ND = non detection; na = not analyzed; ns = no standard available

J = compound was detected at below the reporting detection limit

R = Sample results did not meet quality control criteria. Presence or absence of analyte cannot be verified.

TABLE 10-3
AOC-6 Validated PCB, Pesticide, and Herbicide Results for Excavated Soil Piles Sampled
November 2004 GE Global Research Center, Niskayuna, New York

			Location ID	Fire Main	Pile A	Pile B	Pile C	Pile D NW	Pile D SE
			Sample Date	11/3/2004	11/4/2004	11/4/2004	11/4/2004	11/4/2004	11/4/2004
Chemical Name	Unit	TAGM RSCO	EPA RBC						
ALDRIN	ug/kg	41	170	< 2	< 3.8	< 1.9	< 1.9	< 2.1	< 2.2
ALPHA CHLORDANE	ug/kg	ns	ns	18	47	15	6.0	7.9	9.2
BHC, ALPHA-	ug/kg	110	450	< 2	< 3.8	< 1.9	< 1.9	< 2.1	< 2.2
BHC, BETA-	ug/kg	200	1,600	< 2	< 3.8	< 1.9	< 1.9	< 2.1	< 2.2
BHC, DELTA-	ug/kg	300	ns	< 2	< 3.8	< 1.9	< 1.9	< 2.1	< 2.2
CAMPHECHLOR	ug/kg	ns	2,600	< 200	< 380	< 190	< 190	< 210	< 220
DDD, 4,4-	ug/kg	2,900	12,000	< 3.9	< 7.6	< 3.8	2.7 J	< 4.1	5.3 J
DDE, 4,4-	ug/kg	2,100	8,400	5	13 J	9	11	6.8 J	13
DDT, 4,4-	ug/kg	2,100	8,400	2.1 J	14 J	6.5	8.1	4.8	16
DIELDRIN	ug/kg	44	180	< 3.9	5.8 J	1.7 J	6.2	4.4 J	6.5 J
ENDOSULFAN I (ALPHA)	ug/kg	900	ns	< 2	< 3.8	< 1.9	< 1.9	< 2.1	< 2.2
ENDOSULFAN II (BETA)	ug/kg	900	ns	< 3.9	< 7.6	< 3.8	< 3.8	< 4.1	< 4.3
ENDOSULFAN SULFATE	ug/kg	1,000	ns	< 3.9	< 7.6	< 3.8	< 3.8	< 4.1	< 4.3
ENDRIN	ug/kg	100	310,000	< 3.9	< 7.6	< 3.8	< 3.8	< 4.1	< 4.3
ENDRIN ALDEHYDE	ug/kg	ns	ns	< 3.9	< 7.6	< 3.8	< 3.8	< 4.1	< 4.3
ENDRIN KETONE	ug/kg	ns	ns	< 3.9	< 7.6	< 3.8	< 3.8	< 4.1	< 4.3
GAMMA CHLORDANE	ug/kg	540	ns	10	23	< 1.9	3.2	6.8	6.9
GAMMA-BHC	ug/kg	60	2,200	< 2	< 3.8	7.7	< 1.9	< 2.1	< 2.2
HEPTACHLOR	ug/kg	100	640	< 2	< 3.8	< 1.9	< 1.9	< 2.1	< 2.2
HEPTACHLOR EPOXIDE	ug/kg	20	310	2 J	8.2	2.2	0.9 J	1 J	1.3 J
METHOXYCHLOR	ug/kg	9,990	5,100,000	< 20	< 38	< 19	< 19	< 21	< 22
PCB-1016 (AROCLOR)	ug/kg	ns	41,000	< 39	< 76	< 38	< 38	< 41	< 44
PCB-1221 (AROCLOR)	ug/kg	ns	1,400	< 39	< 76	< 38	< 38	< 41	< 44
PCB-1232 (AROCLOR)	ug/kg	ns	1,400	< 39	< 76	< 38	< 38	< 41	< 44
PCB-1242 (AROCLOR)	ug/kg	ns	1,400	< 39	< 76	< 38	< 38	< 41	< 44
PCB-1248 (AROCLOR)	ug/kg	ns	1,400	< 39	< 76	< 38	< 38	< 41	< 44
PCB-1254 (AROCLOR)	ug/kg	ns	1,400	< 39	< 76	< 38	< 38	< 41	< 44
PCB-1260 (AROCLOR)	ug/kg	ns	1,400	< 39	< 76	< 38	< 38	< 41	< 44
2,4-D	ug/kg	500	10,000,000	< 59 UJ	< 57 UJ	< 57 UJ	< 57 UJ	< 62 UJ	< 66 UJ
DICAMBA	ug/kg	ns	31,000,000	< 59 UJ	< 57 UJ	< 57 UJ	< 57 UJ	< 62 UJ	< 66 UJ
DINITROBUTYL PHENOL	ug/kg	ns	1,000,000	< 59	< 57	< 57	< 57	< 62	< 66
SILVEX	ug/kg	700	8,200,000	< 59	< 57	< 57	< 57	< 62	< 66
2,4,5-T	ug/kg	1,900	10,000,000	< 59	< 57	< 57	< 57	< 62	< 66

Notes:

ND = non detection; na = not analyzed; ns = no standard available

J = compound was detected at below the reporting detection limit

APPENDIX A

Responsiveness Summary

RESPONSIVENESS SUMMARY

**General Electric – Global Research Center
Niskayuna, Schenectady County, New York
Site No. 447013A**

The Statement of Basis for the General Electric Global Research Center (GE-GRC) site was prepared by the New York State Department of Environmental Conservation (the Department) and was issued to the document repositories on February 27, 2015. The Statement of Basis outlined the remedial measure proposed for the contaminated soil at the GE-GRC site.

The release of the Statement of Basis was announced by sending a notice to the public contact list, informing the public of the opportunity to comment on the proposed remedy. The public comment period for the Statement of Basis ended on March 30, 2015.

This responsiveness summary responds to all questions and comments raised during the public comment period. The following are the comments received, with the Department's responses:

COMMENT 1: This database gives a different time period for when the landfill was in use: <http://www.dec.ny.gov/cfm/externalapps/derexternal/haz/details.cfm?pageid=3> . Any idea which is right?

RESPONSE 1: Wastes were buried in the landfill from 1948 to 1966. In 1981 the landfill was covered with a bentonite clay cap.

COMMENT 2: So where will the contaminated soil and concrete be recycled? I do remember a few years ago dirt and misc. stuff was spread over the land at the Alco. Trying to make the site a little higher than the Mohawk River. Is that were other top-soil/cleanup dirt will go too? Also where will the stuff go that is going to be dug up from the Freemans's Bridge chemical site?

RESPONSE 2: The location for disposal of contaminated soils and debris from the GE-GRC will be selected based on testing conducted when soils are excavated. The levels of contamination in the excavated soils will determine an appropriately permitted facility for disposal.

The 34 Freeman's Bridge Road site has been remediated, no further removal of contamination is required. Remedial construction was completed in October 2007.

COMMENT 3: I am providing the following comments in response to the public noticing of the RCRA Corrective action plans for the above noted GE-GRC facility in Niskayuna, NY.

I read with some interest the article in the March 1, 2015 Sunday Gazette regarding the proposed plan for remediation of solid waste and hazardous waste management areas on the GE Global Research - Niskayuna site.

I visited the Schenectady County Library's Niskayuna Office last week and read through the Remediation plan for the GE-GRC facility noted above and the attached appendices on DVD.

I am very familiar with the waste management areas referenced as I was the site environmental Specialist for GE-CRD from 1988 to 1993 and was heavily involved in the preparation of the initial spill, leak and solid waste management area listings that this RCRA corrective action plan was based on.

I managed the solid waste (non-hazardous) disposal from the site and was also involved in most of the tank removal projects there while I was the Site services manager from 1981 to 1988. I was heavily involved in the PCB Transformer retro fill project and the Coal Gasifier waste tank removals.

Most of the proposed remediation activities cited in this proposal make perfect sense.

There was however one historic waste management area that was never properly remediated and which doesn't appear to show up on this list.

There was a reported hazardous waste drum burial site over on the west side of the site that was the subject of an incomplete investigation in 1992.

That investigation was undertaken as the result of GE's decision to donate a large parcel of its property on the west side of the site to the Town of Niskayuna. The GE facilities manager at the time, Richard Walters, initially began the process of transferring approximately 100 acres of the GE property without having done a Phase 1 Environmental Transfer Assessment.

When the Facilities and EHS managers were made aware of the GE Corporate policy regarding property transfers, I was assigned to personally get that ETA done on an expedited schedule. They didn't want to take the time to get a consultant hired as it would have delayed their promised date for transfer of the land to the Town.

During the initial investigation phase, I was informed by a retired grounds maintenance team leader of a drum burial activity over on the west side of the site that he had personally been involved with in the mid 1960's.

GE CRD was hosting an international conference during the summer of 1965 and facilities management wanted the facility to be spotless. That individual who described the incident remembered having been instructed by the grounds manager to load 8-10 drums of waste from the lower level Farm area and transport them to the west side of the site and bury them.

The retired employee very clearly remembered his crew having buried the drums along a hedge row next to an Elm tree, in one of the hay fields toward the North end of the property. The drums were buried in several shallow trenches dug with a front end loader.

When this reported historic drum burial activity was brought to the attention of GE management they instructed me to follow up and do a preliminary survey to try to confirm or deny the existence

of the buried drums. The retired employee agreed to come out and walk the fields with me to try to identify the exact burial location. We found an elm tree stump in the middle of a hedge row half way up the hillside very closely matching his recollection.

An environmental consulting firm, McLaren Hart Environmental Engineering was hired to perform a field survey using Magnetometry. The heavy clay soil on the site didn't lend itself to other techniques like ground penetrating radar. The Magnetometry indicated presence of metal objects in the general area where the retired employee indicated the drums had been buried.

After interviewing researchers who worked at the site during the 1960's a list of likely waste materials was developed. That list included various metal alloy powders, chlorinated solvents and possibly a drum of 99% pure Iodine that went missing around that time.

From that chemical list, a site safety plan was prepared to address the worst case anticipated reaction from exposing the materials that might have been buried in that location at that time. PPE needed for the activity was selected based on that plan.

The Town of Niskayuna and NYSDEC Region 4 were notified of the planned investigation. The Town of Niskayuna was notified because it required the relocation of the Bike path the Town installed on a right-of-way through the hayfields on the GE property. Gary Johnston, who had been the DEC Region 4 HW engineer responsible for monitoring our RCRA compliance for several years, came to the site to observe the excavation activity.

Upon excavating the area, metal fence posts, wheel hubs, posted signs, and a single old rusted drum were located, but no HW drums. There was no significant soil discoloration, sheens or odor to suggest the other drums had rusted away.

I went back to the K-1, 1A 69 EHS office and reported the status of the excavation to the EHS manager. I then reviewed some aerial photos that had been collected of the site from the 1960's and 1970s, for some hint as to how the employee's recollection could have been wrong and where else the drums might have been buried.

I found one very clear aerial photo of the western portion of the site from the mid 1960's. That photo clearly showed an area of disturbed soil, three rows of soil piles, adjacent to the hedgerow in the next hayfield downhill to the East. That hedgerow also had a large Elm tree in approximately the middle of the field.

That photographic information was immediately conveyed to the site EHS manager and permission requested to continue the excavation in that lower field, before sending the remediation contractors off site.

The EHS manager, in consultation with a GE RECO remediation specialist, and GE Corporate EHS office decided to halt the investigation at that point and write it off to an employee's "bad memory".

I objected strongly to that decision, but was ordered to send the contractors off site and close out

the investigation. I refused to send a closeout report to NYSDEC under my signature, so I am not sure if NYSDEC got a closeout report on that situation or not.

I am not sure if NYSDEC Region 4 has some documentation in the RCRA remediation file for the GE CRD/GRC site regarding that investigation, but there should have been.

The employee who brought this to my attention, Harold Harlow died last year. Harold had worked with me for over 7 years as the Grounds Crew Leader during the years I was the Grounds manager at CRD and I knew him to be a very intelligent, honest and trustworthy individual.

It has always bothered me that this was not properly resolved, and instead blamed on Harold's "poor memory". That couldn't have been further from the truth.

For the record, the reason that the incident had been so clearly impressed on Harold's memory was that his family had lived on and farmed the land that was sold to GE around 1945 and subsequently developed into the current GE GRC. It upset him that GE management in the 1960's had such a cavalier attitude toward the land he had grown up on.

I believe the RCRA waste management area list for the GE GRC facility (Site 447013A) should be expanded to include this incomplete historic drum disposal site.

I know for a fact that this site was investigated in an accelerated an incomplete fashion that would not meet current ASTM standards for a Phase 1 property transfer assessment. It is my personal belief that solid and potentially hazardous waste is still buried there.

An additional subsurface investigation of the GE-GRC site should be carried out and if presence of waste is verified, it should be properly remediated.

RESPONSE 3: The Department will review the information provided and as necessary investigate and/or take appropriate actions to protect human health and the environment.

APPENDIX B

Administrative Record

Administrative Record

General Electric Global Research Center Niskayuna, Schenectady County, New York Site No. 447013A

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5. Nittany Geoscience, Inc., April 11, 1996a, Applied Research Building AOC Sampling and Analysis Report, GE Corporate Research and Development, Niskayuna, Schenectady County, New York.
6. Nittany Geoscience, Inc., March 20, 1996b, Letter to Edwin Dassatti (NYSDEC), Additional SWMUs/AOCs, GE Corporate Research and Development Facility, Niskayuna, New York.
7. Nittany Geoscience, Inc., August 1996c, RCRA Facility Assessment Sampling Visit Work Plan for General Electric Corporate Research and Development, Niskayuna, New York.
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9. Nittany Geoscience, Inc., November 25, 1997, Letter to Margaret O'Brien (NYSDEC), Additional RFA-SV Activities at GE Corporate Research and Development (Addendum to RCRA Facility Assessment [RFA] Sampling Visit Report).
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12. USFilter Operating Services, December, 1998, RCRA Facility Investigation, Task I Report, Description of Current Conditions. GE Corporate Research and Development,

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16. USFilter Engineering and Construction, January 2003, Corrective Measures Study Plan and Identification and Development of the Corrective Action Alternatives or Alternatives, GE Global Research Center, Niskayuna, New York.
17. Duff, Bob; letter to NYSDEC received March 29, 2015.