

Prepared for:
Consolidated Edison of New York
New York

Remedial Investigation Report Former Pemart Avenue Works Manufactured Gas Plant (MGP) and Electric Generating Plant (EGP) NYSDEC VCA Site No. V00566

ENSR Corporation
February 2007
Document No.: 01869-116-400



Consolidated Edison Company
of New York, Inc.
31-01 20th Avenue
Long Island City NY 11105-2048
www.conEd.com

February 28, 2007

BY FEDERAL EXPRESS OVERNIGHT

Mr. John Miller
Environmental Engineer
Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway, 11th Floor
Albany, New York 12233-7017


**Subject: Remedial Investigation Report
Pemart Avenue former MGP Site (NYSDEC Site No. V00566)
Peekskill, New York
Voluntary Clean-up Agreement – Index No. D2-0003-02-08**

Dear Mr. Miller:

Enclosed for the Department's review and approval are two paper copies and one electronic copy on CD of the Remedial Investigation Report for the Pemart Avenue Works former MGP and the associated former Electric Generating Plant, which collectively comprise the subject Site.

Please call me at (718) 204-4145 should you have any questions regarding this submittal.

Very truly yours,

Neil O'Halloran
Project Manager, 
MGP Remediation Group
Environment, Health and Safety Department

Enc.

cc: G. Cross, NYSDEC (w/o Enc.)
M. Ryan, NYSDEC (w/o Enc.)
M. Rivara, NYSDOH, (w/o Enc.)
R. Dixon, NYSDOH
M. Wilcken, Esq. Con Edison (w/o Enc.)
E. Louie, Con Edison (w/o Enc.)
Project Files

Prepared for:
Consolidated Edison of New York
New York

Remedial Investigation Report Former Pemart Avenue Works Manufactured Gas Plant (MGP) and Electric Generating Plant (EGP) NYSDEC VCA Site No. V00566

Prepared By

Reviewed By

ENSR Corporation
February 2007
Document No.: 01869-116-400

Contents

1.0 Introduction.....	1-1
1.1 Project Background	1-1
1.2 Objectives of Field Investigation	1-1
1.3 Report Outline	1-1
1.4 Site Description and Current Property Use	1-2
1.5 Adjoining Property Description.....	1-3
1.6 Site History	1-3
1.6.1 Site Ownership.....	1-3
1.6.2 Site Operations	1-3
1.7 Previous Investigations	1-4
1.8 Environmental Setting	1-4
1.8.1 Topography/Geology/Hydrogeology	1-4
2.0 Field Investigation Scope of Work.....	2-1
2.1 Utility Clearance	2-1
2.2 Community Air Monitoring.....	2-2
2.3 Surface Soil Sampling	2-2
2.4 Test Pit Excavations and Soil Sampling	2-2
2.5 Soil Boring Advancement and Subsurface Soil Sampling	2-3
2.6 Monitoring Well Installation	2-4
2.7 Groundwater Sampling	2-6
2.8 Fluid Level Monitoring	2-6
2.9 Tidal Survey	2-6
2.10 Site Survey	2-7
2.11 Waste Management	2-7
2.12 Sample Analysis	2-7
3.0 Field Investigation Results	3-1
3.1 Site Geology	3-1
3.1.1 Fill Unit	3-1
3.1.2 Upper Sand Unit	3-1
3.1.3 Upper Silt/Clay Unit	3-1
3.1.4 Lower Sand Unit	3-2
3.1.5 Lower Silt/Clay Unit	3-2

3.1.6	Bedrock	3-2
3.2	Site Hydrogeology	3-2
3.2.1	Upper Aquifer	3-3
3.2.2	Semi-Confining Unit (Upper Silt/Clay Unit)	3-3
3.2.3	Intermediate Sand Aquifer	3-3
3.2.4	Lower Sand Aquifer	3-3
3.2.5	Lower Silt/Clay Unit	3-4
3.2.6	Bedrock/Weathered Bedrock Unit	3-4
3.2.7	Tidal Survey	3-4
3.3	Investigation Results for Potential Source Areas	3-5
3.3.1	Former MGP Features	3-5
3.3.2	Former Electric Generating Plant (EGP) Features	3-6
3.4	Off-Site Areas	3-8
3.5	Groundwater Quality Parameters	3-8
3.6	Limits of Observed Impacts	3-8
3.7	Summary of Field Observations	3-9
4.0	Analytical Results	4-1
4.1	Surface Soil Results	4-1
4.1.1	Semi-Volatile Organic Compounds	4-1
4.1.2	Inorganics	4-2
4.1.3	Polychlorinated Biphenyls	4-2
4.2	Subsurface Soil Results	4-2
4.2.1	Volatile Organic Compounds	4-3
4.2.2	Semi-Volatile Organic Compounds	4-3
4.2.3	Inorganics	4-4
4.2.4	Polychlorinated Biphenyls	4-4
4.3	Groundwater Analytical Results	4-4
4.3.1	Volatile Organic Compounds	4-4
4.3.2	Semi-Volatile Organic Compounds	4-5
4.3.3	Inorganics	4-5
4.3.4	Polychlorinated Biphenyls	4-6
4.4	NAPL Results (Fingerprint and TPH Analysis)	4-6
4.5	Analytical Results Summary	4-7
5.0	Exposure Assessment	5-1
5.1	Potentially Exposed Populations	5-1
5.2	Exposure Pathways	5-1
5.3	Contaminant Fate and Transport	5-2

6.0 Summary of Findings	6-1
7.0 Conclusions and Recommendations	7-1
8.0 References	8-1

APPENDICES (Located on the attached CD)

A. Field Records

- Soil Boring Logs
- Test Pit Logs
- Monitoring Well Construction Logs
- Groundwater Sample Collection Records

B. Air Monitoring Data

C. Analytical Data Summary Tables

D. Tidal Survey Data

E. META Environmental Fingerprint Analytical Results

F. Data Usability Summary Reports

List of Tables

Table 2–1 Summary of Soil Samples Collected

Table 2–2 Summary of Groundwater Samples Collected

Table 2–3 Summary of Tidal Survey Well Information

Table 2–4 Soil and Groundwater Sample Analysis Summary

Table 3–1 Summary of Monitoring Well Survey Data and Groundwater Elevations

Table 3–2 Summary of Groundwater Quality Field Parameters

Table 4–1 Summary of Detected Semivolatile Organic Constituents in Surface Soil

Table 4–2 Summary of Detected Inorganic Constituents in Surface Soil

Table 4–3 Summary of Detected Polychlorinated Biphenyl Constituents in Surface Soil

Table 4–4 Summary of Detected Volatile Organic Constituents in Subsurface Soil

Table 4–5 Summary of Detected Semivolatile Organic Constituents in Subsurface Soil

Table 4–6 Summary of Detected Inorganic Constituents in Subsurface Soil

Table 4–7 Summary of Detected Polychlorinated Biphenyl Constituents in Subsurface Soil

Table 4–8 Summary of Detected Volatile Organic Constituents in Groundwater

Table 4–9 Summary of Detected Semivolatile Organic Constituents in Groundwater

Table 4–10 Summary of Detected Inorganic Constituents in Groundwater

Table 4–11 Summary of Detected Alkalinity Constituents in Groundwater

Table 4–12 Summary of Detected TPH Fingerprint Constituents in Subsurface Soil

List of Figures

Figure 1-1 Site Location Map

Figure 1-2 Site Map

Figure 2-1 Cross Section and Sample Locations

Figure 3-1 Cross Section A-A'

Figure 3-2 Cross Section B-B'

Figure 3-3 Cross Section C-C'

Figure 3-4 Cross Section D-D'

Figure 3-5 Groundwater Elevation Contour Map

Figure 3-6 Tidal Survey Summary Chart

Figure 3-7 Extent of NAPL

Figure 4-1 SVOCs in Surface Soils

Figure 4-2 RCRA Metals Detected in surface Soils Above RSCOs

Figure 4-3 VOCs Detected in Subsurface Soils

Figure 4-4 SVOCs Detected in Subsurface Soils

Figure 4-5 RCRA Metals Detected in Subsurface Soils Above RSCOs and Cyanide

Figure 4-6 VOCs Detected in Groundwater

Figure 4-7 SVOCs Detected in Groundwater

Figure 4-8 RCRA Metals and Cyanide Detected in Groundwater

1.0 Introduction

This Remedial Investigation (RI) report presents data and observations that were obtained during field investigations conducted at the former Pemart Avenue Works manufactured gas plant (MGP) and electric generation plant (EGP), collectively referred to as the Site, located in Peekskill, New York. The former Pemart Avenue properties were historically operated by predecessor companies to the Consolidated Edison Company of New York, Inc. (Con Edison). The investigation was conducted in accordance with Voluntary Cleanup Agreement (VCA) Index No. D2-0003-02-08 between Con Edison and the New York State Department of Environmental Conservation (NYSDEC).

1.1 Project Background

In 2002, Con Edison entered into a multi-site VCA with NYSDEC. Under this agreement, Con Edison is evaluating its former MGP sites, which included the Pemart Avenue Site, and, if necessary, remediate them. As an initial step of the site evaluation process, Con Edison conducted a site history investigation and prepared a Historical Investigation Report. The site history investigation was conducted to determine historical operations, ownership, uses, and conditions at the Site.

In July 2005 Con Edison prepared and submitted to NYSDEC a Site Characterization Study (SCS) Work Plan (Work Plan) (July 2005 – ENSR). The intent of the scope of work outlined in the Work Plan was to determine if residues from operations of the former plants and or any remnant structures of the former MGP and or EGP were present in the subsurface. The Work Plan was approved by NYSDEC and the New York State Department of Health (NYSDOH) in a letter dated August 24, 2005 and this initial phase of field investigation work commenced on August 16, 2005. Based on preliminary findings of MGP residues in subsurface soil during the SCS, Con Edison decided to expand the scope of work into a more extensive remedial investigation (RI), which required that the observed residues be delineated. A second phase of investigation was initiated in March 2006 and completed in June 2006. The results of the RI and the initial SCS activities are summarized herein.

1.2 Objectives of Field Investigation

The objectives of the SCS and RI were to

- determine the presence or absence of residues from the historical operations of the former MGP and EGP,
- delineate the horizontal and vertical extent of residues from the former MGP and EGP operations, if present, and
- determine if any structures related to the former Site operations were present in the subsurface.

1.3 Report Outline

Section 2 of this report outlines the field activities that were performed during the RI. Field observations, including the presence of former MGP structures and a description of the site hydrogeology, are discussed in Section 3. Analytical results of the soil and groundwater samples are presented in Section 4. Section 5 presents an exposure assessment including contaminant fate and transport. Section 6 provides a summary of findings and Section 7 presents conclusions based on the results of the investigation. References are provided in Section 8.

1.4 Site Description and Current Property Use

The former Pemart Avenue Site included an MGP and EGP and is located at approximately N 41° 17' 25.4" latitude and W 73° 55' 50.2" longitude between the Briarcliff-Peekskill Parkway (to the east) and the former New York Central Railroad Hudson Division (presently Metro-North) railroad tracks (to the west), see Figure 1-1. The former MGP and EGP that comprise the Site occupied properties on both sides of former Pemart Avenue, which is now North Water Street, north of the intersection of Main Street and Water Street. The Site covered approximately four acres, with approximately two acres on each side of former Pemart Avenue. In general, the Site is relatively level with the eastern portion of the Site sloping steeply from Pemart Avenue up to the Briarcliff-Peekskill Parkway to the east. This eastern area of the Site is characterized by heavily wooded steep-sloping bedrock outcrops. The western portion of the Site is relatively flat with a minor slope toward Peekskill Bay and the Hudson River to the west. Figure 1-2 provides a plan of the Site, which depicts the former and current features and Site boundaries, as described below.

Based on reviews of historical records, which included Sanborn Fire Insurance (Sanborn) Maps and other historical maps, the eastern portion of the Site contained four gas holders, two fuel oil tanks, and a battery house. The western portion of the Site contained the gas works building, the electrical generating plant building and transformers, two coal storage areas, a coal shed, and a coal conveyor. No other structures related to the former MGP or EGP were identified during the historical records review. It is noted that sometime after 1942, after operation of the MGP ceased in the 1930's, the gas plant area was used as a regulator station for distribution of natural gas. During these post-MGP operations, four high pressure gas storage tanks and a 575,000 cf Hortonsphere were constructed to provide additional storage capacity and to support management of pressure in the natural gas system.

The former MGP property is comprised of Tax Map 32.08, Tax Block 5, Lots 7 and 8 and Tax Block 8, Lots 1, 2, 3 (Figure 1-2), and the former EGP property is comprised of Tax Map 32.08, Tax Block 5, Lots 9 and 10, and Tax Block 8, Lot 4 (Figure 1-2). The historical Site information does not indicate any past Site operations on Tax Block 5, Lots 8 and 10. These two lots are characterized by steep bedrock topography and lack any evidence of past or current use or structures. These observations confirm that past operations were not conducted on these lots. No investigation activities were conducted on these two lots.

The Site is currently used for commercial and industrial purposes. The eastern portion of the Site contains an open gravel-covered area level with the street, the former battery house, the concrete foundation slab of the former 200,000 cubic foot (cf) above-ground gas holder, the retaining wall associated with the former 100,000 cf gas holder, and the concrete foundations of the former high pressure storage tanks. With the exception of the gravel-covered lot, the eastern portion of the Site is not used for any formal commercial or industrial operations. The gravel lot is used by a local landscaper for parking and for storage of materials.

At the time the field investigation was being implemented, the former gas production building and the former electric generating plant building were still present in the western portion of the Site. These buildings are currently occupied by various businesses (i.e., umbrella factory, millwork cabinetry making, and laboratory) and a homeless shelter. The southernmost parcel of the western portion of the Site is a City of Peekskill municipal parking lot. The only parcel of the Site currently owned by Con Edison is a small fenced vegetated yard between the former gas works building and the municipal parking lot. This parcel contains a small brick building that is attached to the former gas works building and a fenced vegetated yard and is not currently used.

The areas covered by the Site are contained within the City of Peekskill's Waterfront Redevelopment Area.

1.5 Adjoining Property Description

The Site is bound to the north and east by steep bedrock outcrops and vegetation. At the north end of North Water Street there is a small parking area with a single lane gravel access road that continues to the north. This gravel road provides limited access along the Hudson River. To the south are commercial businesses, including an automobile detailing facility, an office cleaning business, a restaurant, and a landscaping contractor facility. A municipal parking lot borders and overlaps the property to the south. The MTA Metro-North Railroad right-of-way (ROW) borders the property to the west and runs the length of the Site. The parcel of land west of the MTA ROW, west of the former MGP, is vacant and currently referred to as the Peekskill Landing Site. The Hudson River forms the western border of the MTA ROW and or Peekskill Landing properties.

Historic Sanborn Maps show that properties adjoining the Site have been used for a variety of industrial and commercial activities including: coal yards (W. H. Chase Coal and Lumber Yard), lumber yards (W. H. Chase Coal and Lumber Yard, N. Dain's Sons Co., and Chapman Brothers), stove manufacturers (Ely Ramsey Stove Manufacturer and Wm. M. Crane Co. Stove Works, which included an electroplating operation) and an unnamed Boat Builder.

1.6 Site History

A historical investigation was conducted for Con Edison by The RETEC Group, Inc. and summarized in a Historical Investigation Report (RETEC, 2002). The results of the historical investigation are summarized below.

1.6.1 Site Ownership

Prior to MGP and EGP operations at the Site, the property was used for a variety of industrial purposes including the Jones and Mead Enameled Holloware Works and Enameling Iron Works, a lime kiln, and the New York Emery Company. Immediately prior to the MGP and EGP use, the property was vacant.

The property on which the MGP was constructed was acquired by the Peekskill Gas Company in 1899 and the MGP began operations shortly thereafter. The MGP was operated by the Peekskill Gas Light Company (also under the name of Peekskill Lighting and Railroad Company, and Westchester Lighting Company) from 1899 to approximately 1931 when it was placed on standby service. The former EGP was operated from 1905 to around 1950 by Westchester Lighting Company.

The portion of the property formerly used for the MGP was sold in 1978, with the exception of a small parcel to the south that was retained by Con Edison for use as a gas regulator station. The former gas regulator facility has since been removed and a new regulator has been installed in a subsurface vault beneath the sidewalk along the west side of North Water Street.

1.6.2 Site Operations

The former MGP reportedly produced approximately 116 million cubic feet of gas during its approximately 32 years of operation. Gas was produced at the Site using the water gas or the Lowe process. After the plant operations ceased, a portion of the former MGP property was used for distribution of natural gas.

The 1900 Sanborn Map depicts the presence of the gas production building (including generator house, boiler house, storage, and purifying house) and a coal shed west of Pemart Avenue. Two iron gas holders, an oil tank, and a small building were located on the eastern side of Pemart Avenue. The gas holders included a

2-lift, 100,000 cf holder in the southeastern-most corner of the property and a 1-lift, 30,000 cf holder directly north of the 2-lift holder. The oil tank was a 25,000-gallon iron tank.

By 1905, a coal conveyor was constructed north of the MGP building. The conveyor was used to transfer coal from barges in the river to a storage pile between the former EGP and MGP. The vacant building on the east side of Pemart Avenue was used as a battery room. By 1923, a fuel oil tank had been constructed east of the electric plant on the east side of Pemart Avenue and transformers were located directly north of the electric plant. In 1924, another above-ground gas holder was constructed east of Pemart Avenue directly north of the battery house. A portion of the hillside was cleared to bedrock and leveled for the construction of the foundation for this 200,000 cf gas holder. This holder had an approximate diameter of 75 feet.

After MGP operations ceased in the 1930's, the gas plant area was used as a regulator station for distribution of natural gas. Sometime between 1942 and 1947, the 100,000 cf gas holder was dismantled. In 1947, a 60-foot diameter Hortonsphere spherical gas holder with a capacity of 575,000 cubic feet was constructed at the location of the former 100,000 cf gas holder. It is likely that the 30,000 cf holder was removed from the Site within the same timeframe, as it was no longer shown on the 1950 Sanborn Map. By 1950, four cylindrical high pressure gas storage tanks were installed on the hillside to the east of the Hortonsphere holder.

The 200,000 cubic foot gas holder was demolished in 1958 and the Hortonsphere, high-pressure storage tanks, and related equipment were removed in 1966. Additionally, the 1958 Sanborn Map shows that by 1958 the electric light and power house was not in use as an electric plant and that the building had been expanded to the north to its current footprint.

1.7 Previous Investigations

No sampling, prior to the SCS and RI, has been conducted at the Site.

However, environmental investigations have been performed on behalf of the City of Peekskill on the parcel of land west of the railroad tracks, referred to here as the Peekskill Landing Site. These investigations extended from the southern end of the RI investigation area further to the south. The results of the investigations are summarized in an RI prepared for that Site. Select results from the investigations have been reviewed in preparing this RI Report for the former Pemart Avenue MGP and EGP. The results generally show that subsurface soil and groundwater contain elevated concentrations of metals, semi-volatile organic compounds (SVOCs) and volatile organic compounds (VOCs) at similar concentrations, within an order of magnitude, as those detected at the Site. It is noted that in addition to compounds such as ethylbenzene, xylenes, naphthalene, polycyclic aromatic hydrocarbons (PAHs), arsenic, lead, and mercury, which typically may be associated with MGP residues, chlorinated solvents 1,1,1-trichloroethane and tetrachloroethene were also detected in soil at concentrations similar to those detected at the Site. These chlorinated solvent detections appear unrelated to the former MGP or EGP operations.

1.8 Environmental Setting

The following environmental setting information is summarized from the Historical Investigation Report (RETEC, 2002) and from published resources. The geologic, hydrogeologic, and hydrologic data obtained during the Site investigation activities is presented in Section 3 of this report.

1.8.1 Topography/Geology/Hydrogeology

Based on the 1969 United States Geological Survey (USGS) topographic map for the Peekskill, New York Quadrangle, the eastern portion of the Site slopes steeply to the west towards the Hudson River. The elevation decreases by approximately 50 feet from the Briarcliff Peekskill Roadway, which is at an elevation of

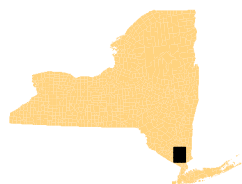
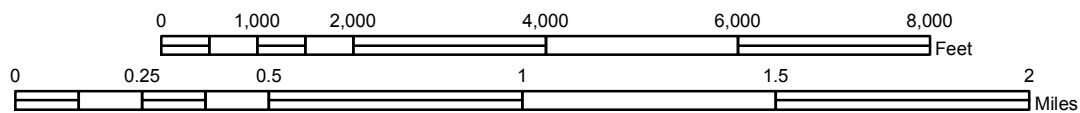
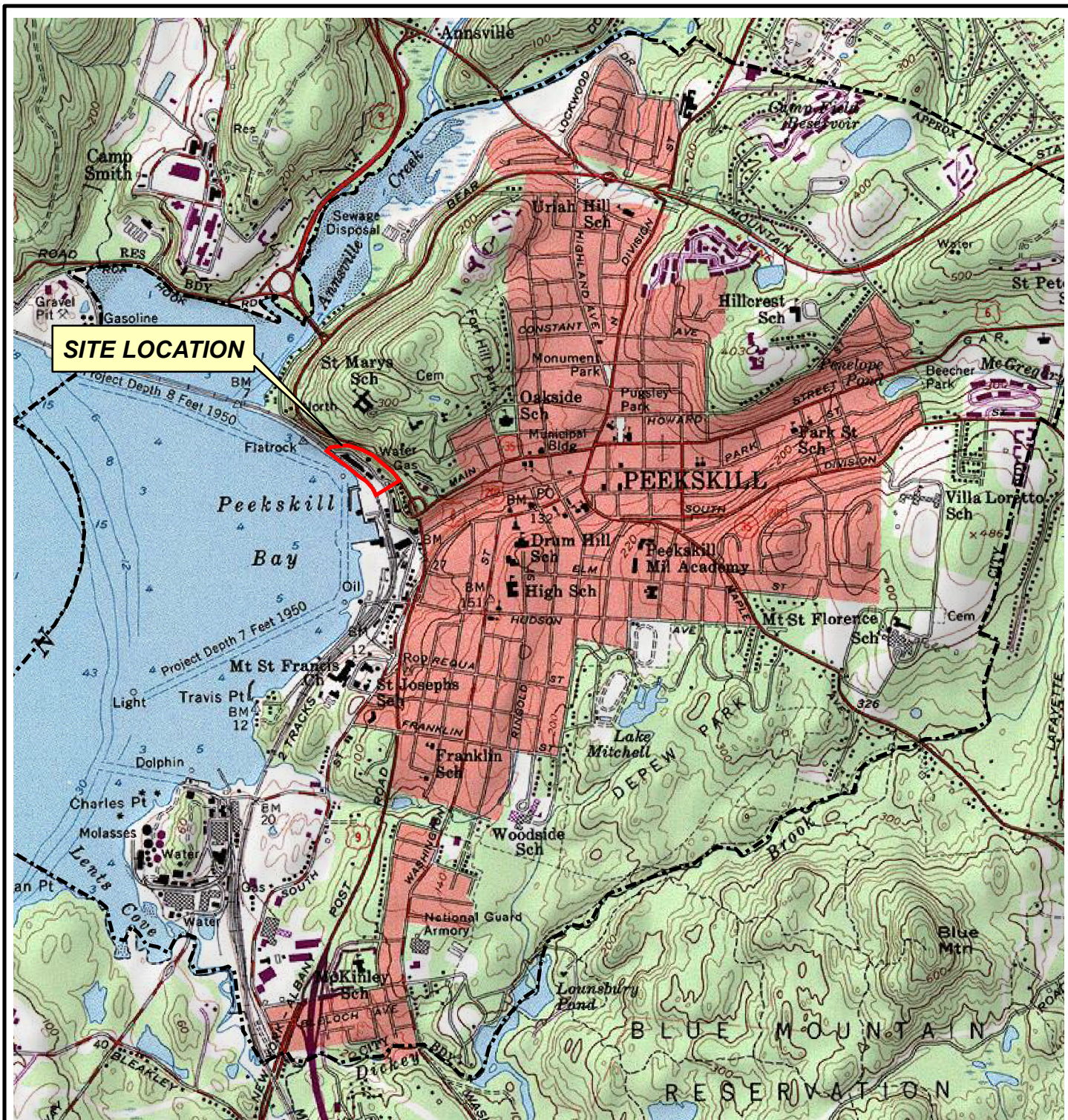
approximately 100 feet above mean sea level, to an elevation ranging from 45 to 65 feet above mean sea level at the eastern-most Site boundary (i.e., in the steep wooded area with bedrock outcrops). Land surface elevation decreases further by approximately 50 feet from the eastern-most Site boundary to the MTA ROW track bed, which is the western Site boundary. The track bed is approximately 6 to 8 feet above mean sea level.

Consistent with the westward-sloping topography, surface water, which is not captured by the storm drain system along North Water Street or which does not infiltrate the ground, flows to the southwest and may eventually enter Peekskill Bay of the Hudson River. The shoreline of the Hudson River is located approximately 70 feet west of the western boundary of the former EGP and approximately 180 feet west of the western boundary of the former MGP.

The Surficial Geology Map of New York (Caldwell, 1989) indicates that surficial deposits are not present on Site. The ground surface is either bedrock or bedrock overlain by a thin (less than 3-feet thick) veneer of soil. However, as described in Section 3 of this report, this mapping does not properly reflect the Hudson River channel sediments that were deposited along its shores and on-lap the bedrock outcrops that comprised the paleo shoreline. These shoreline sediments comprise the area of the Site between the present-day shoreline and the bedrock outcrops and range up to 47.5 feet thick as were encountered at the Site during the investigation.

The Geologic Map of New York (Fisher, 1970, revised 1995) shows that the bedrock at the Site is metamorphic biotitic granitic gneiss of uncertain origin and Cambrian in age. The Site is located in the Manhattan Prong (RETEC, 2002). The Manhattan Prong, part of the Highlands Province, is a belt of ancient rock in southern New York, parts of Westchester County, and upland portions of southwestern Connecticut. The geology of the Highlands Province is characterized by complex patterns of folds, faults, and intrusions. The rocks have been subjected to several episodes of tectonic deformation, including stages of intense folding and metamorphism associated with the collision of ancient landmasses driven by plate tectonic forces. Following mountain building episodes during the Paleozoic, this region experienced extensive periods of gradual uplift and erosion lasting throughout Mesozoic and Cenozoic time (USGS website, <http://3dparks.wr.usgs.gov/nyc/highlands/highlands.html>, last accessed in September 2006).

Based on the local topography and proximity to the Hudson River, it was assumed in the Historical Investigation Report that the depth of shallow groundwater at the Site ranged from approximately 4 to 10 feet below ground surface and flows to the southwest towards the Hudson River. As discussed in Section 3, this RI generally confirms this assumption.



UNITED STATES GEOLOGIC SURVEY
PEEKSKILL QUADRANGLE
NEW YORK
7.5 MINUTE SERIES (TOPOGRAPHY)

PEEKSKILL, NY
1957
PHOTOREVISED 1981

SITE LOCATION MAP REMEDIAL INVESTIGATION

Site Characterization Study
Pemart Avenue Former MGP
Peekskill, New York

SCALE	DATE	PROJECT NO.
1:2400	06/05	01869-094

ENSR | AECOM

Figure Number

1.1

DESIGNED BY:		REVISIONS	
NO.:	DESCRIPTION:	DATE:	BY:
DRAWN BY:			
J.E.B.			
CHECKED BY:			
D.S.			
APPROVED BY:			
D.S.			

ENSR CORPORATION
2 TECHNOLOGY PARK DRIVE
WESTFORD, MASSACHUSETTS 01886
PHONE: (978) 589-3000
FAX: (978) 589-3100
WEB: [HTTP://WWW.ENSR.AECOM.COM](http://www.ensr.aecom.com)

1" = 60'	DATE: 12/06	PROJECT NUMBER: 01869-116
----------	-------------	---------------------------

FIGURE NUMBER:
1-2
SHEET NUMBER:
1

2.0 Field Investigation Scope of Work

This section describes the field activities that were performed during the RI. The field investigation was conducted in two phases from August to September 2005 and from March to June 2006, and included, exploratory test pit excavation, soil boring advancement, monitoring well installation in overburden and bedrock, and the collection of surface soil, subsurface soil, and groundwater for laboratory analysis. The two separate phases of field work were necessitated by delays in being granted access to the private properties that comprise the Site. All field activities were conducted in accordance with the Site Characterization Study Work Plan, Pemart Avenue Works Former MGP (Work Plan) (ENSR, 2005), Field Sampling Plan (FSP) (ENSR, 2005), Quality Assurance Project Plan (QAPP) (ENSR, 2005), and Health and Safety Plan (HASP) (ENSR, 2005).

Test pit, soil boring, monitoring well and surface soil sample locations are shown on Figure 2-1. Field records are presented in Appendix A and air monitoring data is presented in Appendix B. Table 2-1 provides a summary of the soil samples collected and Table 2-2 provides a summary of the groundwater samples collected. Analytical results for surface and subsurface soil samples are summarized in Tables 4-1 through 4-7, the groundwater analytical results are summarized in Tables 4-8 through 4-11, and total petroleum hydrocarbon (TPH) fingerprint analyses are summarized in Table 4-12. The soil and groundwater results are discussed in Section 4. A complete summary of analytical results is presented in Appendix C.

2.1 Utility Clearance

Prior to each phase of intrusive field activities, utility clearance was conducted to ensure the safety of field personnel and to confirm that planned investigation locations would not interfere with any existing overhead or subsurface utility lines. Utility clearance was conducted using Con Edison's Utility Clearance Process for Intrusive Activities and in accordance with Section 3.1 of the Work Plan. The underground utility clearance process included a New York State Department of Transportation (NYSDOT) Code 753 mark-out, review of available as-built utility maps, visual site inspection for the presence, or indications of the presence, of subsurface utilities, a utility mark-out using electromagnetic and geophysical techniques, and hand clearing and or vacuum extraction to approximately 5 feet below ground surface (bgs).

Geophysical prospecting surveys, including ground penetrating radar (GPR), were conducted at and within approximately 30 feet of planned investigation locations. These planned locations were reevaluated and/or offset if a subsurface anomaly was identified during these surveys. GPR was also used to assess the presence of the former MGP structures.

Once investigation locations were determined to be clear of subsurface utilities and or obstructions, the pavement and or concrete, when present, was broken up using a jackhammer and hand tools. The upper five feet of soil was then removed by vacuum excavation and or hand tools to confirm the absence of utilities. A similar procedure was followed inside buildings where utilities were cleared first by coring through the floor and then clearing with a hand auger and/or vacuum excavation to approximately 5 feet bgs.

Additional steps were taken within the MTA ROW because of the known presence of direct-buried train signal lines and three large (i.e., 12 to 24 inch-diameter) sanitary force mains. MTA personnel assisted in the location of its utilities within the MTA ROW. In addition, vacuum excavation was conducted in the vicinity of the sanitary force mains to visually confirm their depths and locations.

2.2 Community Air Monitoring

Community air monitoring was conducted during RI activities to provide a measure of protection for the downwind community (i.e., off-site receptors and on-site workers not directly involved with the RI work activities) from potential airborne constituent releases as a direct result of investigation activities. Air monitoring was conducted in general accordance with the community air monitoring plan (CAMP) developed by Con Edison, NYSDEC and New York State Department of Health (NYSDOH). The CAMP was designed as a proactive series of steps to monitor, prevent and, if necessary, mitigate potential fugitive emissions of VOCs and airborne particulates (dust) during intrusive activities that were planned during the RI. The specific procedures followed at the Site, including action levels, are summarized below and outlined in Section 3.2 of the Site Characterization Study Work Plan, Pemart Avenue Works Former MGP (ENSR, 2005).

During ground-intrusive activities (e.g., excavation of test pits, advancement of soil borings, and installation of monitoring wells), ambient total VOC and particulate concentrations (PM-10) were monitored continuously. Air quality was also monitored periodically during non-intrusive activities (e.g., surface soil and groundwater sampling). All monitoring data are provided on a compact disc in Appendix B.

VOCs in air were measured using a photoionization detector (PID) and dust was measured using a PM-10 particulate meter. One upwind and one downwind location adjacent to each work area were selected daily to monitor work onsite. Continuous measurements of total VOCs and PM-10 were reported as 15-minute averages. Air measurements were obtained over a period of 30 minutes prior to field activities each day to establish background levels of analytes in ambient air.

The action levels established for community air monitoring were not exceeded as a result of intrusive activities. Occasional exceedances of short duration were detected during the field investigation. In all such cases, the exceedances were directly attributed to nearby vehicular traffic (cars, trucks, and railroad cars) and routine operations at local commercial operations, such as spray application of varnish and paints related to furniture manufacturing. When exceedances were detected, the PID and PM-10 meters were closely monitored while the VOC and or particulate levels returned to below action levels and or to background levels.

2.3 Surface Soil Sampling

Surface soil samples were collected from locations across the Site to evaluate the potential influence of former Site operations on surface soil quality. Samples were spatially distributed in unpaved areas with sample locations biased toward areas which contained former MGP or EGP structures. Twelve surface soil samples (SS-1 through SS-12) were collected. Five of these locations (SS-8 through SS-12) are background locations (locations outside the former MGP and EGP operational areas).

Surface soil samples were collected using pre-cleaned stainless steel trowels and bowls. At each sample location, surface vegetation was removed and the sample was collected from within a square meter from a depth of 0- to 2-inches. Each sample was collected as a composite of five discrete samples, four from the corners and one from the center of the square-meter area. Soil at each location was visually classified for soil type, grain size, texture, moisture content, and visible evidence of staining or impacts using United Soil Classification System (USCS). The soil at each location consisted of dry, dark brown, sandy topsoil (loam). At seven of the twelve surface soil sample locations, debris, including glass fragments, plastic, gravel, clinker, brick fragments, or bottle caps, was encountered in the surface soil but not incorporated into the samples submitted to the laboratory. Debris was not present at locations SS-13 or SS-9 through SS-12.

2.4 Test Pit Excavations and Soil Sampling

Although not included in the Work Plan, five test pits (TP-1 through TP-5) were excavated in areas of the former MGP gas holders and fuel oil tank to determine the presence of historic MGP structures in the

subsurface and to determine the presence or absence of MGP-related wastes contained within these structures. Test pits were excavated by backhoe and were advanced to refusal (e.g., bedrock, structure, etc.) or to the water table at depths ranging from 0.5 feet to 5.5 feet. During test pit excavation, soil was visually classified for soil type, grain size, texture, moisture content, and visible evidence of impacts. In addition, soil was screened for VOCs by headspace analysis with a PID. The PID readings were recorded on the test pit logs, which are included in Appendix A.

Subsurface soil samples were collected from three of the five test pit locations (TP-2, TP-3, and TP-4). Soil samples were selected for collection based on PID screening and/or visible evidence of impact. Soil samples were not collected from TP-1 due to shallow refusal and TP-5 due to the presence of clean sand and gravel backfill.

Upon completion, the test pits were backfilled with the excavated soil. All soil excavated from the test pits was returned to the ground. No soil investigation derived waste (IDW) was generated during this activity.

2.5 Soil Boring Advancement and Subsurface Soil Sampling

Soil borings were advanced at 46 locations (SB-1 to SB-41 and MW-1A to MW-27) to characterize the nature of subsurface soil, evaluate the presence of MGP residuals and other constituents in soil, and for the installation of monitoring wells. In general, soil borings were advanced to the first semi-confining unit in the northern area of the Site where the former EGP was located. As no field evidence of impacts, such as odors, staining, elevated PID readings, non-aqueous phase liquid (NAPL), etc., were detected in this area of the Site, soil borings were not advanced below the upper semi-confining unit. In the southern area of the Site, where the former MGP was located, evidence of subsurface impacts was detected, and included elevated PID readings, odors and NAPL. Accordingly, many of the borings in the vicinity of the MGP were advanced to the lower semi-confining unit or bedrock. Soil borings SB-21, SB-25, and SB-26, which were located at or in the immediate vicinity of former gas holders, were advanced into bedrock and completed as bedrock monitoring wells, MW-1B, MW-13, and MW-9, respectively.

Soil borings were advanced using a variety of drilling techniques including hollow stem auger (HSA), direct push, drive and wash, wash rotary, hand augering, and rock coring. A majority of the soil borings were advanced via HSA drilling methods. At one location (SB-10), the drive and wash drilling technique was used to see if it would improve drilling efficiency and sample recovery. Significant improvements were not observed, so the HSA drilling method was used for subsequent borings. Soil borings with access difficulties for drilling equipment were advanced via direct push drilling techniques.

At nine locations (MW-5, MW-7, MW-8, SB-5/MW-2, SB-6/MW-3, SB-12/MW-25, SB-13/MW-24, SB-16/MW-26, and SB-38/MW-20), the borings were advanced deeper than the final monitoring well depth. At these locations, the borings were backfilled to the well depth prior to installation of the monitoring well.

Soil samples were collected at two soil boring and three manhole locations within the former EGP building. Boring SB-23 was cleared via hand auger to the water table in the southwestern corner of the building after a hole was cored through the concrete floor to allow access to the crawl space and soil beneath. A subfloor was not confirmed at the SB-23 location. Due to the unknown structural integrity of the floor above the crawl space, and the inherent safety concerns, a direct push rig was not mobilized to this location.

Boring SB-28 was advanced by direct push drilling techniques in the adjoining building north of the former EGP building. A hole was cored through the concrete floor to expose the underlying soil. No crawl space or subfloor were observed.

At three locations (MH-1 MH-2, and MH-3), the crawl space was accessed through manholes in the floor that were historically used during operation of the generating plant. Samples of accumulated soil above the

concrete subfloor were collected via hand auger or handheld direct push tools. Borings were not advanced through the subfloor at these locations.

One indoor soil boring (SB-41) was advanced within the former MGP building using handheld direct push tools.

Soil samples were collected during boring advancement and from the three manhole locations. During HSA and drive and wash drilling, soil samples were collected using a 2-inch diameter split spoon sampler. Soil samples were collected using a 3-inch diameter 4-foot or 5-foot long macro core sampler lined with a clean disposable acetate sleeve during direct push drilling. A closed-piston sampler was used beneath the water table in order to obtain discrete (intact) soil samples from each sample interval.

At each location, a soil sample was collected from within the upper five feet of the soil borings and from the base of the soil boring. If visual impacts or elevated PID readings were observed, two additional samples were collected. One sample was collected from a 6 to 12-inch interval from the zone with the highest PID reading or that exhibited the strongest physical evidence of impact (e.g., NAPL, staining, sheen, odor) and one soil sample was collected from below this zone to define the vertical extent of impacts at that location. If no impacts were detected a sample was collected from directly above the water table. Select soil samples containing heavy impacts were analyzed for fingerprint. Table 2-1 provides a summary of collected samples, sample depths, sample identifications, and analytical parameters.

Soil samples were visually classified for soil type, grain size, texture, moisture content, following the USCS and for visible evidence of impacts. In addition, the soil samples were screened for total VOCs in soil headspace using a PID. PID readings are recorded on the boring logs, which are included in Appendix A.

Upon completion, borings not completed as monitoring wells were backfilled with grout dispensed through a tremie pipe. Hydrated bentonite pellets were used at three borings (SB-15, SB-35, and SB-30) in the MTA ROW and in one boring (SB-20) between the MTA ROW and the Hudson River because of limited access and availability of water.

All soil cuttings and other IDW were placed in clean Department of Transportation (DOT)-approved 55-gallon drums, sealed, and labeled for temporary storage on site, prior to disposal off site (see Section 2.11).

2.6 Monitoring Well Installation

Groundwater monitoring wells were installed primarily to assess groundwater quality, but in some instances were installed to solely gauge the nature and extent of NAPL. Gauging of the fluid levels in the wells was also conducted to evaluate tidal influences and evaluate groundwater flow direction and gradient. Monitoring wells were installed in each of three primary aquifer zones present at the site, which were shallow (water table), intermediate, and bedrock. Throughout this section, all sampling locations are referenced by the monitoring well designation only. For example, SB-5/MW-2 is discussed as MW-2. Construction details are provided on the monitoring well construction logs located in Appendix A. Monitoring well locations are shown on Figure 2-1.

Twenty-three monitoring wells were installed in the shallow zone, or first water-bearing unit encountered (i.e., water table aquifer). As described in Section 3.2, this zone is comprised of the fill unit and the upper sand unit. All but one of the shallow wells (MW-5) were screened across the water table with approximately 2 feet of screen above the water table. In general, the bottoms of these screens were installed to the top of the first semi-confining unit and the lengths of the well screens vary based on the depth to the first semi-confining unit. Seventeen of the shallow zone wells were located in areas where NAPL was observed or suspected and included the installation of a 1- to 2-foot sump to collect dense non-aqueous phase liquid (DNAPL), if present, and to collect any fine suspended sediments that settle out of the water column.

One shallow zone well, MW-5, was screened from 8 to 13 feet bgs at the bottom of the shallow zone, but not across the water table. This well was paired with shallow zone well MW-12, which was screened across the water table to a depth of 8 feet bgs. These paired wells were installed to independently monitor for the presence of light non-aqueous phase liquid (LNAPL) at MW-12 and DNAPL at MW-5.

Two monitoring wells (MW-17 and MW-18) were installed as intermediate zone wells. As described in Section 3.2, these wells were screened in a sand lens that was encountered within the upper silt/clay unit (first semi-confining unit) in the southern half of the site. At the intermediate depth wells, the augers were advanced approximately three feet into the first semi-confining unit, a 4-inch diameter permanent outer steel casing was installed to one foot below the bottom of the auger and grouted in place as the augers were removed. After the grout was allowed to set, the boring was advanced through the upper semi-confining unit to the target depth using the drive and wash drilling method. The 4-inch diameter steel casing was installed to prevent the potential migration of impacted materials and or DNAPL from the shallow zone into intermediate sand. The intermediate depth wells were constructed using a 10 foot-long screen, with the top of the screen at a depth of approximately 1.5 to 2 feet below the bottom of the steel casing or approximately 20 to 30 feet bgs.

Three bedrock monitoring wells (MW-1B, MW-9, and MW-13) were installed at the Site immediately downgradient of the subsurface remnant gas holder foundations. The bedrock monitoring wells were installed through 4-inch steel casings grouted into bedrock to prevent the migration of DNAPL and or impacted materials from the shallow zone, if any, into bedrock monitoring wells. These wells were constructed by advancing a boring to the top of bedrock using HSA drilling methods and then advancing one foot into bedrock using wash rotary drilling methods. After this initial drilling, a steel casing was set into the bedrock 'socket' and tremie grouted into place. After the grout had set for at least 24 hours, the borings were advanced into bedrock using a 2.875-inch diameter rock core barrel. The bedrock wells were constructed with 10 feet of well screen that was generally positioned below the bottom of the steel casing to bottom of screen depths ranging between 14.5 and 29.5 feet bgs.

The monitoring wells were constructed of 1-inch or 2-inch internal diameter flush-jointed Schedule 40 poly vinyl chloride (PVC) riser pipe with a 0.10-inch slot well screen and a locking well cap. All of the wells were constructed as 2-inch diameter PVC casing and screen, except wells MW-9, MW-20, MW-21, and MW-22, which were installed in the City of Peekskill parcels located west of the MTA ROW and the Hudson River. These wells were constructed as 1-inch diameter wells. At all wells, a sand pack was placed in the borehole annulus to a level of approximately two feet above the top of the well screen followed by a two-foot thick bentonite seal. The remainder of the borehole annulus was backfilled to one foot bgs with cement-bentonite grout via a tremie pipe or by hydrated bentonite pellets. All but five of the wells were completed with a one-foot square concrete pad at grade and a flush-mounted road box. The five wells installed west of the train tracks (MW-15, MW-19, MW-20, MW-21, and MW-22) were completed above grade with locking protective steel casings.

Monitoring wells were left undisturbed for a minimum of 24 hours after installation to ensure that the cement/bentonite grout had set. Prior to development, the static water level and well depth was measured using an electronic oil/water interface probe. Wells where DNAPL was detected were developed in a manner to minimize the potential of smearing NAPL over the well screen. Development was performed by surging and pumping using a Waterra™ hand pump and/or a submersible Whale pump and was considered complete when the discharging water looked relatively clear and/or after a minimum of three, and a maximum of ten, well volumes had been removed from the well.

Water removed during development and other IDW was contained in clean DOT-approved 55-gallon drums, sealed, and labeled for temporary storage on site, prior to disposal off site (see Section 2.11).

2.7 Groundwater Sampling

Groundwater samples were collected from monitoring wells using low-flow purging and sampling procedures according to the NYSDEC Draft DER-10 Technical Guidance for Site Investigation and Remediation (December 2002) and the USEPA Region I Standard Operating Procedure (SOP) titled “Low Stress Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells,” Revision 2, July 1996. Groundwater was not sampled from wells that exhibited evidence of NAPL.

Each well was purged prior to sampling. Groundwater was pumped through a multi-parameter water quality meter equipped with a flow-through cell. The following parameters were measured along with water level drawdown, flow rate, and purge volume: pH, conductivity, temperature, dissolved oxygen (DO), and oxidation reduction potential (ORP). Water quality parameter measurements were recorded approximately every 5 minutes for the first 20 minutes of sampling, and every 15 minutes thereafter, until a minimum of three system volumes (capacity of the pump, tubing and flow-through cell) were purged and parameters stabilized.

Immediately following purging, groundwater samples were collected and placed into the appropriately preserved sample containers. All groundwater samples were submitted for chemical analyses as discussed in Section 2.12. Results are provided and discussed in Section 4 and a summary of groundwater samples is provided in Table 2-2. Low-flow groundwater sample collection record are provided in Appendix A and a full summary of analytical results is included in Appendix C.

In addition to collecting groundwater samples from monitoring wells, grab groundwater samples were collected during the advancement of two soil borings (SB-16 and SB-30). The grab groundwater samples were collected during direct push drilling by extending a temporary 5-foot long, 1-inch diameter PVC well screen through a temporary direct push casing. The sample at SB-16 was collected across the 31 to 36-foot interval using a peristaltic pump. The sample at SB-30 was collected across the 30 to 35-foot interval using a Waterra™ inertial lift pump as the peristaltic pump was unable to lift the turbid water from this depth. These grab groundwater samples were very turbid and were collected without a sand pack and without a good seal with overlying formations despite having installed a temporary casing into the upper silt/clay unit prior to advancing the boring with a closed-piston (i.e. discrete) sampler. Therefore, these samples are likely not representative of groundwater in the deep zones sampled. The analytical results of these grab samples are not included in Section 4 tables, but are included in the full analytical results in Appendix C.

Water removed during groundwater sampling and other IDW was contained in clean DOT-approved 55-gallon drums, sealed, and labeled for temporary storage on site, prior to disposal off site (see Section 2.11).

2.8 Fluid Level Monitoring

Fluid level monitoring (LNAPL, DNAPL, and water level) was conducted to evaluate groundwater flow and the presence or absence of NAPL. Fluid levels were measured using an electronic oil/water interface probe accurate to within 0.01 feet. These measurements were recorded from the surveyed measuring point of the well (i.e., the highest point of the top of the PVC riser). In addition, water level and total well depth measurements in each of the monitoring wells were recorded immediately prior to purging the wells for groundwater sampling. The results of the fluid level monitoring are discussed in Section 3.

2.9 Tidal Survey

A tidal survey was conducted over a 48-hour period from May 3 to 5, 2006. The objective of the tidal survey was to evaluate the influence of tidal fluctuations in the Hudson River on groundwater levels at the Site. The tidal survey entailed measuring water levels in four monitoring wells (MW-13, MW-14, MW-16, and MW-18) and in the Hudson River piezometer (see Figure 2-1) continuously over a 48-hour period using pressure

transducers. The tidal survey locations (one bedrock well, two shallow wells, and one intermediate well) were selected to monitor the tidal influence on groundwater at the Site; both vertically and horizontally. Each transducer was set at a predetermined depth below the top of casing, which was surveyed at each location, so that the water level measurements could be converted into elevation measurements.

In-Situ™ Mini Troll Pro pressure transducers were used to measure and log the water levels. These transducers measure water levels by recording the pressure of the water column above the transducer. The transducers have an internal program that stores the data and converts the pressure readings into depth-to-water measurements. Following completion of the tidal survey, the data was downloaded and evaluated.

A summary of the well depths and distance from the Hudson River is presented in Table 2-3. The tidal survey results are presented in Appendix D and discussed in Section 3.2.7.

2.10 Site Survey

The RI sampling locations (i.e., test pits, surface soil locations, soil borings, and monitoring wells) were surveyed by GEOD, a licensed, New York State surveyor. The horizontal coordinates and vertical elevations were measured for each sampling point. At each well, the top of PVC well casing and ground surface (i.e., road box rim) elevations were also surveyed. All vertical measurements were recorded relative to the 1988 USGS National Geodetic Vertical Datum (NGVD), and all horizontal measurements were surveyed in New York State Plane coordinates using the 1983 North American Datum (NAD83).

Sampling locations MH-1, MH-2, MH-3, SB-28, SB-41, SS-10, SS-11, and SS-12 were not surveyed during the site-wide survey due to their inaccessibility at that time. These sampling locations are approximated on figures in this report.

2.11 Waste Management

IDW generated during the RI field investigation included soil cuttings, debris from borings (e.g., concrete and bricks), concrete cores from the interior soil borings, drive and wash drilling water, decontamination water, monitoring well development and purge water, used personal protective equipment (PPE), used polyethylene sheeting, and used disposable sampling equipment. All IDW was containerized in clean 55-gallon DOT-approved drums, characterized, transported by Clean Venture – Cycle Chem, and disposed as non-hazardous waste at GROWS Landfill in Falls Township, PA, a licensed waste management facility.

2.12 Sample Analysis

All samples, except the samples analyzed for gas chromatograph/flame ionization detector (GC/FID) fingerprint analyses, were submitted to Columbia Analytical Services (CAS) in Rochester, NY, for chemical analysis. The GC/FID fingerprint samples were submitted to META Environmental (META) in Watertown, MA. CAS provided the analytical results in paper and electronic format. The paper format was provided as NYSDEC Analytical Services Protocol (ASP) Category B deliverables. META provided the results of their analysis in paper report format. The electronically formatted data was loaded into the Site database. The analyses performed, by media, are presented in Table 2-4.

A Data Usability Summary assessment was performed to determine the usability of the data collected during the RI for the purpose of assessing soil and groundwater quality, delineating impacted media, and evaluating potential risks associated with the chemicals detected. The results of the data assessment are summarized in the Data Usability Summary Report (DUSR), which was prepared in accordance with the NYSDEC Guidance for Development of Data Usability Summary Reports (NYSDEC 2001). Usability was evaluated by reviewing the data following USEPA Region 2 Data Validation Standard Operating Procedures (SOPs) as guidance.

Where necessary, the Region 2 SOPs were modified to incorporate project-specific or method-specific criteria. Data qualifiers were applied consistent with the Region 2 guidance. All elements reviewed in preparing the DUSR were consistent with those specified in the NYSDEC guidance (NYSDEC, 2001). The DUSR is provided on a compact disc as Appendix F.

Based on the results of the data usability assessment, as described in detail in the DUSR (Appendix F), it is concluded that the majority of the dataset are valid as reported and may be used for assessment and decision-making purposes. Selected data points (e.g., lead in surface soil) were rejected (R) or qualified as non-detect (U), estimated (J), or estimated non-detect results (UJ) based on certain quality control nonconformances, all of which are described in the DUSR.

Table 2-1
Summary of Soil Borings and Surface and Subsurface Soil Sampling and Analysis
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Location	Sample ID	Date	Interval Sampled (ft bgs)	Analyses Performed
Surface Soil				
SS-1	SS1	3/9/06	0-0.2	TCL SVOCs, TAL metals, CN
SS-2	SS2	3/9/06	0-0.2	TCL SVOCs, TAL metals, CN
SS-3	SS3	3/9/06	0-0.2	TCL SVOCs, TAL metals, CN
SS-4	SS4	3/9/06	0-0.2	TCL SVOCs, TAL metals, CN
SS-5	SS5	3/9/06	0-0.2	TCL SVOCs, TAL metals, CN
SS-6	SS6	3/9/06	0-0.2	TCL SVOCs, TAL metals, CN, PCBs
SS-7	SS7	3/9/06	0-0.2	TCL SVOCs, TAL metals, CN, PCBs
SS-8	SS8	3/9/06	0-0.2	TCL SVOCs, TAL metals, CN
SS-9	SS9	3/9/06	0-0.2	TCL SVOCs, TAL metals, CN
SS-10	SS10	3/8/06	0-0.2	TCL SVOCs, TAL metals, CN
SS-11	SS11	3/8/06	0-0.2	TCL SVOCs, TAL metals, CN
SS-12	SS12	3/9/06	0-0.2	TCL SVOCs, TAL metals, CN
Subsurface Soil - Near Former MGP Station				
August - September 2005				
MW-2 (1)	MW2(3-3.5)	9/1/05	3-3.5	TCL VOCs, TCL SVOCs, TAL metals, CN
	MW2(4.5-5)	9/1/05	4.5-5	TCL VOCs, TCL SVOCs, TAL metals, CN
	MW2(4.5-5)	9/2/05	4.5-5	Fingerprint of NAPL in soil
MW-3 (2)	MW3(4.5-5)	9/1/05	4.5-5	TCL VOCs, TCL SVOCs, TAL metals, CN
	MW3(4.5-5)	9/2/05	4.5-5	Fingerprint of NAPL in soil
MW-4	MW4(5-5.5)	8/31/05	5-5.5	TCL VOCs, TCL SVOCs, TAL metals, CN
	MW4(7-9)	3/21/06	7-9	TCL VOCs, TCL SVOCs, TAL metals, CN
	MW4(9-11)	3/21/06	9-11	TCL VOCs, TCL SVOCs, TAL metals, CN
MW-8	MW8(3.5-4)	8/31/05	3.5-4	TCL VOCs, TCL SVOCs, TAL metals, CN
	MW8(15-17)	9/7/05	15-17	TCL VOCs, TCL SVOCs, TAL metals, CN
	MW8(21-23)	9/7/05	21-23	TCL VOCs, TCL SVOCs, TAL metals, CN
	MW8(40-42)	9/7/05	40-42	TCL VOCs, TCL SVOCs, TAL metals, CN
SB-5	SB5(5-6)	9/8/05	5-6	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB5(5.5)	9/8/05	5.5	Fingerprint of NAPL on water
	SB5(16-18)	9/13/05	16-18	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB5(20-22)	9/13/05	20-22	TCL VOCs, TCL SVOCs, TAL metals, CN
SB-6	SB6(3.5-4)	9/12/05	3.5-4	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB6(5-6)	9/12/05	5-6	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB6(5-6)	9/12/05	5-6	Fingerprint of NAPL in soil
	SB6(12-14)	9/13/05	12-14	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB6(20-22)	9/13/05	20-22	TCL VOCs, TCL SVOCs, TAL metals, CN

Table 2-1
Summary of Soil Borings and Surface and Subsurface Soil Sampling and Analysis
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Location	Sample ID	Date	Interval Sampled (ft bgs)	Analyses Performed
March - May 2006				
SB-1	SB1(3-4)	3/6/06	3-4	TCL VOCs, TCL SVOCs, TAL metals, CN
SB-2	SB2	3/9/06	5-7	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB2(5-7)	3/9/06	5-7	TCL VOCs, TCL SVOCs, TAL metals, CN
SB-3	SB3(1-2)	3/6/06	1-2	TCL VOCs, TCL SVOCs, TAL metals, CN
SB-6	SB6(9-11)	3/20/06	9-11	TCL VOCs, TCL SVOCs, TAL metals, CN
SB-7	SB7(4-5)	3/15/06	4-5	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB7(11-13)	3/20/06	11-13	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB7(13-15)	3/20/06	13-15	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB7(29.5-30)	3/30/06	29.5-30	TCL VOCs, TCL SVOCs, TAL metals, CN
SB-8/MW-18	SB7(38-39)	3/30/06	38-39	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB8(1-2)	3/16/06	1-2	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB8(4-4.5)	3/16/06	4-4.5	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB8(13-15)	3/22/06	13-15	TCL VOCs, TCL SVOCs, TAL metals, CN
SB-9/MW-17	SB8(28-30)	4/10/06	28-30	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB9(3.5-4)	3/14/06	3.5-4	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB9(8-10)	3/30/06	8-10	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB9(19-20)	3/30/06	19-20	TCL VOCs, TCL SVOCs, TAL metals, CN
SB-10/MW-1B	SB9(30-31)	4/10/06	30-31	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB10(3-4)	3/10/06	3-4	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB10(9-11)	3/14/06	9-11	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB10(11-13)	3/14/06	11-13	TCL VOCs, TCL SVOCs, TAL metals, CN
SB-21	SB10(41-43)	3/15/06	41-43	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB21(5-5.5)	3/10/06	5-5.5	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB21(0-5)	3/21/06	0-5	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB210(0-5)	3/21/06	0-5	TCL VOCs, TCL SVOCs, TAL metals, CN
SB-24 (1st attempt)	---	9/9/06	---	No sample collected - mostly rock present in top 5 feet.
SB-24 (2nd attempt)	SB24(7-8)	3/22/06	7-8	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
SB-25/MW-13	SB25(2-3)	3/6/06	2-3	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB25(7-8)	3/10/06	7-8	TCL VOCs, TCL SVOCs, TAL metals, CN
SB-26/MW-9	SB25(7.0)	4/10/06	7	Fingerprint of NAPL in soil
	SB26(4-5)	3/6/06	4-5	TCL VOCs, TCL SVOCs, TAL metals, CN
SB-29	SB26(7-8)	3/9/06	7-8	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB29(4-4.5)	3/16/06	4-4.5	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB29(7-9)	3/24/06	7-9	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB29(17-19)	3/24/06	17-19	TCL VOCs, TCL SVOCs, TAL metals, CN

Table 2-1
Summary of Soil Borings and Surface and Subsurface Soil Sampling and Analysis
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Location	Sample ID	Date	Interval Sampled (ft bgs)	Analyses Performed
SB-30	SB30(4-5)	3/28/06	4-5	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB30(8.5-10)	3/28/06	8.5-10	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB30(23-24)	3/28/06	23-24	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB30(30-35)	3/28/06	30-35	TCL VOCs, TCL SVOCs, TAL metals, CN
SB-31	SB31(4-4.5)	3/23/06	4-4.5	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB31(7-9)	3/23/06	7-9	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB31(21-23)	3/23/06	21-23	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB31(35-37)	3/23/06	35-37	TCL VOCs, TCL SVOCs, TAL metals, CN
SB-34/MW-14	SB34(4-4.5)	3/24/06	4-4.5	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB34(9-11)	3/29/06	9-11	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB34(17-19)	3/29/06	17-19	TCL VOCs, TCL SVOCs, TAL metals, CN
SB-35	SB35(3-4)	3/27/06	3-4	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB35(13-15)	3/27/06	13-15	TCL VOCs, TCL SVOCs, TAL metals, CN
SB-36	SB36(15-17)	3/29/06	15-17	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB36(25-27)	3/29/06	25-27	TCL VOCs, TCL SVOCs, TAL metals, CN
SB-41	SB41(3-4)	5/18/06	3-4	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB41(4-8)	5/18/06	4-8	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB41(8-11)	5/18/06	8-11	TCL VOCs, TCL SVOCs, TAL metals, CN
MW-6	MW6(4-4.5)	3/14/06	4-4.5	TCL VOCs, TCL SVOCs, TAL metals, CN
	MW60(4-4.5)	3/14/06	4-4.5	TCL VOCs, TCL SVOCs, TAL metals, CN
	MW6(9-11)	3/20/06	9-11	TCL VOCs, TCL SVOCs, TAL metals, CN
MW-7	MW7(4-5)	3/10/06	4-5	TCL VOCs, TCL SVOCs, TAL metals, CN
	MW7(4-5)	3/13/06	4-5	TCL VOCs, TCL SVOCs, TAL metals, CN
	MW7(9-11)	3/13/06	9-11	TCL VOCs, TCL SVOCs, TAL metals, CN
	MW7(13-15)	3/13/06	13-15	TCL VOCs, TCL SVOCs, TAL metals, CN
	MW7(27-29)	3/13/06	27-29	TCL VOCs, TCL SVOCs, TAL metals, CN
TP-2	TP2(4-5)	3/22/06	4-5	TCL VOCs, TCL SVOCs, TAL metals, CN
TP-3	TP3(5-5.5)	3/22/06	5-5.5	TCL VOCs, TCL SVOCs, TAL metals, CN
TP-4	TP4(4.25)	3/22/06	4.25	TCL VOCs, TCL SVOCs, TAL metals, CN
Subsurface Soil - Near Former Electric Generating Station				
August - September 2005				
SB-23	SB23(3.3-3.5)	8/17/05	3.3-3.5	TCL SVOCs, TAL metals, CN, PCBs
	SB23(4-4.5)	8/17/05	4-4.5	TCL SVOCs, TAL metals, CN, PCBs
	SB23(3.3-3.5)	8/18/05	3.3-3.5	TCL VOCs
	SB23(4-4.5)	8/18/05	4-4.5	TCL VOCs

Table 2-1
Summary of Soil Borings and Surface and Subsurface Soil Sampling and Analysis
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Location	Sample ID	Date	Interval Sampled (ft bgs)	Analyses Performed
MW-5	MW5(2-2.5)	8/18/05	2-2.5	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
	MW5(5)	8/18/05	5	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
	MW5(5)	8/18/05	5	Fingerprint of NAPL on water from soil boring
	MW5(9-11)	9/9/05	9-11	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
	MW5(9-11)	9/9/05	9-11	Fingerprint of NAPL in soil
	MW5(13-15)	9/9/05	13-15	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
	MW5(21-23)	9/9/05	21-23	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
	DUP-1	9/9/05	21-23	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
SB-17	SB17(3-3.5)	9/2/05	3-3.5	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
SB-18	SB18(2-2.5)	9/7/05	2-2.5	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
SB-19/MW-11	SB19(5-5.5)	9/8/05	5-5.5	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
	SB19/MW11	9/8/05	5-9	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
MW-10	MW10(4.5-5)	8/31/05	4.5-5	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
	MW10(11-13)	9/8/05	11-13	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
SB-4	SB4(3-3.5)	9/12/05	3-3.5	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
	SB4(4-4.5)	9/12/05	4-4.5	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
	SB4(7-9)	9/12/05	7-9	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
March - April 2006				
SB-11	SB11(1-2)	3/9/06	1-2	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
	SB11(4-5)	3/9/06	4-5	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
	SB11(9-11)	3/16/06	9-11	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
	SB11(18-20)	3/16/06	18-20	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
	SB11(32-34)	3/29/06	32-34	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB11(41-43)	3/29/06	41-43	TCL VOCs, TCL SVOCs, TAL metals, CN
SB-12	SB12(4-5)	3/9/06	4-5	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
	SB12(10-15)	3/27/06	10-15	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
	SB12(25-30)	3/27/06	25-30	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
SB-13	SB13(3-4)	3/9/06	3-4	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
	SB13(5-7)	3/16/06	5-7	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
	SB13(15-17)	3/16/06	15-17	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
SB-14	SB14(3-4)	3/8/06	3-4	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
	SB14(5-7)	3/16/06	5-7	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
	SB14(13-15)	3/16/06	13-15	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
SB-15	---	3/9/06	---	No sample collected - boring not advanced past pipe at 3 feet.

Table 2-1
Summary of Soil Borings and Surface and Subsurface Soil Sampling and Analysis
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Location	Sample ID	Date	Interval Sampled (ft bgs)	Analyses Performed
SB-16	SB16(4-5)	3/9/06	4-5	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
	SB16(17-19)	3/17/06	17-19	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
	SB16(22.5-23)	3/17/06	22.5-23	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
	SB16(32-35)	3/29/06	32-35	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB16(38-39)	3/29/06	38-39	TCL VOCs, TCL SVOCs, TAL metals, CN
SB-27 (see MH-1) (3)	---	---	---	---
SB-28	SB28(5-10)	5/2/06	5-10	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
	SB28(18-20)	5/2/06	18-20	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
SB-35	SB35(3-4)	3/27/06	3-4	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB35(13-15)	3/27/06	13-15	TCL VOCs, TCL SVOCs, TAL metals, CN
MH-1	SB27(5-6)	5/2/06	5-6	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
	SB27(5-6)	5/2/06	5-6	TPH Fingerprint of NAPL in soil
MH-2	MH2(5-6)	5/5/06	5-6	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
MH-3	MH3(5-6)	5/5/06	5-6	TCL VOCs, TCL SVOCs, TAL metals, CN, PCBs
Scenic Hudson Parcel				
SB-20	SB20(4.5-5)	3/24/06	4.5-5	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB20(20-22)	3/30/06	20-22	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB20(22-23)	3/30/06	22-23	TCL VOCs, TCL SVOCs, TAL metals, CN
SB-32/MW-15	SB32(4.5-5)	3/31/06	4.5-5	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB32(9-13)	3/31/06	9-13	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB32(17-19)	3/31/06	17-19	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB32(17-19)	3/31/06	17-19	Fingerprint of NAPL collected from soil boring
	SB32(20-23)	3/31/06	20-23	TCL VOCs, TCL SVOCs, TAL metals, CN
SB-33/MW-16	SB33(3-3.5)	4/3/06	3-3.5	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB33(5-9)	3/31/06	5-9	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB33(13-15)	3/31/06	13-15	TCL VOCs, TCL SVOCs, TAL metals, CN
SB-37/MW-19	SB37(4-5)	5/1/06	4-5	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB37(14-15)	5/1/06	14-15	TCL VOCs, TCL SVOCs, TAL metals, CN
SB-38/MW-20	SB38(4-5)	5/1/06	4-5	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB38(10-15)	5/1/06	10-15	TCL VOCs, TCL SVOCs, TAL metals, CN
SB-39/MW-21	SB39(0-5)	5/1/06	0-5	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB39(10-15)	5/1/06	10-15	TCL VOCs, TCL SVOCs, TAL metals, CN
SB-40/MW-22	SB40(4-5)	5/1/06	4-5	TCL VOCs, TCL SVOCs, TAL metals, CN
	SB40(14-15)	5/1/06	14-15	TCL VOCs, TCL SVOCs, TAL metals, CN
Notes:				
ACN - Amenable Cyanide				
TCN - Total Cyanide				
(1) Soil samples from the top 5 feet at MW-2 on 9/1-2/05 were collected at the original MW-2 location (across N. Water Street to the east).				
(2) Soil samples from the top 5 feet at MW-3 on 9/1-2/05 were collected at the original MW-3 location (across N. Water Street to the east).				
(3) SB-27 was reassigned the ID of MH-1.				

Table 2-2
Summary of Groundwater Sampling and Analysis
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Well Location	Sample ID	Date	Analyses Performed
MW-1A	MW1A	5/3/06	TCL VOCs, TCL SVOCs, TAL metals, TCN, ACN, PCBs
SB-21/MW-1B	MW1B	5/3/06	TCL VOCs, TCL SVOCs, TAL metals, TCN, ACN, PCBs, Alkalinity, Anions
MW-5	MW5	5/4/06	TCL VOCs, TCL SVOCs, TAL metals, TCN, ACN, PCBs, Alkalinity, Anions
MW-6	MW6	5/5/06	TCL VOCs, TCL SVOCs, TAL metals, TCN, ACN, PCBs
MW-8	MW8	5/4/06	TCL VOCs, TCL SVOCs, TAL metals, TCN, ACN, PCBs
SB-26/MW-9	MW9	5/4/06	TCL VOCs, TCL SVOCs, TAL metals, TCN, ACN, PCBs
SB-26/MW-9	MWDUP	5/4/06	TCL VOCs, TCL SVOCs, TAL metals, TCN, ACN, PCBs
MW-10	MW10	5/2/06	TCL VOCs, TCL SVOCs, TAL metals, TCN, ACN, PCBs
SB-19/MW-11	MW11	5/5/06	TCL VOCs, TCL SVOCs, TAL metals, TCN, ACN, PCBs
MW-12	MW12	5/4/06	TCL VOCs, TCL SVOCs, TAL metals, TCN, ACN, PCBs
SB-25/MW-13	MW18	5/2/06	TCL VOCs, TCL SVOCs, TAL metals, TCN, ACN, PCBs
SB-34/MW-14	MW14	5/1/06	TCL VOCs, TCL SVOCs, TAL metals, TCN, ACN, PCBs
MW16	MW16	5/2/06	TCL VOCs, TCL SVOCs, TAL metals, TCN, ACN, PCBs
SB-9/MW-17	MW17	5/5/06	TCL VOCs, TCL SVOCs, TAL metals, TCN, ACN, PCBs
SB-8/MW-18	MW18	5/1/06	TCL VOCs, TCL SVOCs, TAL metals, TCN, ACN, PCBs
MW19	MW19	5/18/06	TCL VOCs, TCL SVOCs, TAL metals, TCN, ACN, PCBs
MW19	MWDUP	5/18/06	TCL VOCs, TCL SVOCs, TAL metals, TCN, ACN, PCBs
MW20	MW20	5/18/06	TCL VOCs, TCL SVOCs, TAL metals, TCN, ACN, PCBs
MW21	MW21	5/18/06	TCL VOCs, TCL SVOCs, TAL metals, TCN, ACN, PCBs
MW22	MW22	5/18/06	TCL VOCs, TCL SVOCs, TAL metals, TCN, ACN, PCBs
SB-14/MW-23	TMW3	5/3/06	TCL VOCs, TCL SVOCs, TAL metals, TCN, ACN, PCBs
SB-13/MW-24	TMW4	5/3/06	TCL VOCs, TCL SVOCs, TAL metals, TCN, ACN, PCBs
SB-12/MW-25	TMW2	5/3/06	TCL VOCs, TCL SVOCs, TAL metals, TCN, ACN, PCBs
Grab Groundwater Samples			
SB-16/MW-26	SB16GW	3/29/06	TCL VOCs
SB-30	SB30GW	3/28/06	TCL VOCs, TCL SVOCs, TAL metals, TCN
Notes: ACN - Amenable Cyanide TCN - Total Cyanide			

Table 2-3
Summary of Tidal Survey Well Information
Pemart Avenue Works Former MGP and EGP – Remedial Investigation
Consolidated Edison, Peekskill, New York

Well ID	Well Type	Approximate Distance from Hudson River (feet)
MW-13	Bedrock	282
MW-14	Shallow Overburden	216
MW-16	Shallow Overburden	72
MW-18	Intermediate Overburden	210
Hudson River	Stilling Well	15 feet into Hudson River from mean low water line

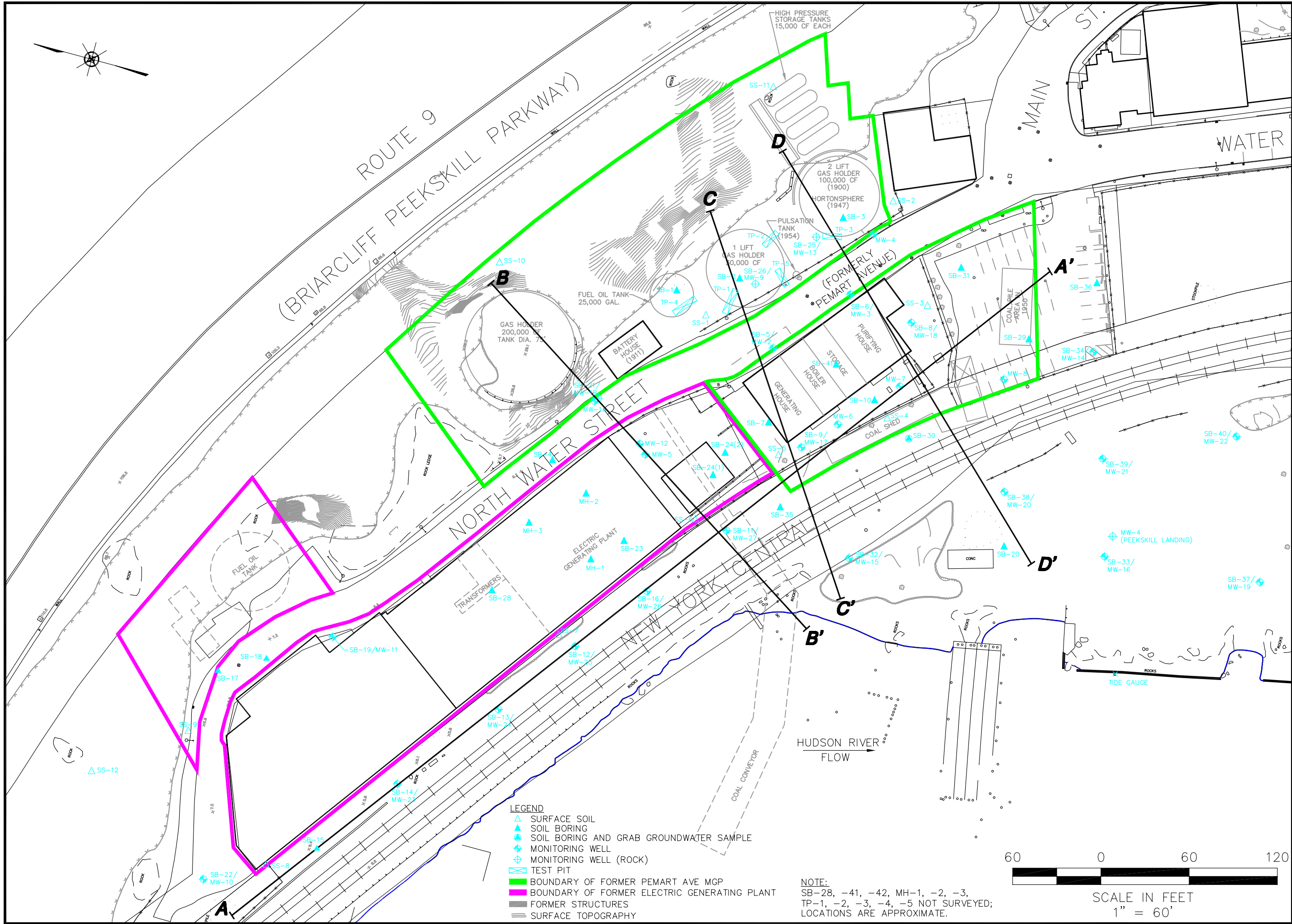
Notes:

Shallow Overburden – 0 - 20 feet bgs
Intermediate Overburden – 17 - 24 feet bgs
Bedrock – 12 - 35 feet bgs
Stilling Well – Hudson River
bgs – below ground surface

Table 2-4
Soil and Groundwater Sample Analysis Summary
Pemart Avenue Works Former MGP and EGP – Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Analysis		Sample Type					
		Surface Soil	Test Pit Soil	Subsurface Soil	Groundwater	Waste Characterization	
						Soil	Groundwater
Standard Chemical Analyses	TCL VOCs		X	X	X		X
	TCL SVOCs	X	X	X	X		X
	TAL Metals	X	X	X	X		X
	TCN	X	X	X	X		
	ACN				X		
Additional Chemical Analyses	PCBs (Aroclors Only)	X		X		X	
	GC/FID Fingerprint			X			
	TPH Fingerprint			X		X	
	Anions				X		
	Alkalinity				X		
Additional Field Parameters	Temp				X		
	pH				X		
	Specific Conductivity				X		
	Oxidation Reduction Potential				X		
	Dissolved Oxygen				X		
	Salinity				X		
	Total Dissolved Solids				X		
	Turbidity						
Additional Waste Characterization Analyses	TCLP VOCs					X	
	TCLP SVOCs					X	
	TCLP Metals					X	
	Reactivity					X	
	Corrosivity					X	
	Ignitability					X	

FILENAME: 01869-116-01B.DWG



CROSS SECTION AND SAMPLE LOCATION MAP REMEDIAL INVESTIGATION PEMART AVENUE FORMER MGP PEEKSKILL, NEW YORK		PROJECT NUMBER: 01869-116
SCALE: 1" = 60'	DATE: 8/06	

FIGURE NUMBER: 2-1		SHEET NUMBER: 1	
---------------------------	--	------------------------	--

ENSUR		AECOM							
ENSUR CORPORATION 2 TECHNOLOGY PARK DRIVE WESTFORD, MASSACHUSETTS 01886 PHONE: (978) 589-3000 FAX: (978) 589-3100 WEB: HTTP://WWW.ENSUR.AECOM.COM									
DESIGNED BY:		NO.:		DESCRIPTION:		DATE:		BY:	
DRAWN BY:		J.E.B.		CHECKED BY:		B.M.		APPROVED BY:	
D.S.									

3.0 Field Investigation Results

This section summarizes the field observations made during the RI, including the Site geology and hydrogeology and field evidence of potential soil and groundwater impacts. Based on these observations, the apparently impacted soil is delineated and a summary of the apparent source areas are identified.

3.1 Site Geology

Five test pits and 51 soil borings, including 17 soil borings (primarily in the southern portion of the site) to bedrock, were excavated to evaluate environmental conditions and characterize the geology beneath the Site (see Figure 2-1). The Site is located in a narrow (110 to 250 feet wide) isolated piece of land situated between Peekskill Bay on the Hudson River to the west and steeply sloping bedrock cliffs to the east. The Site is underlain by glaciofluvial sediments deposited in the Hudson River Valley along Peekskill Bay. These sediments range in thickness from 4.5 feet and 43.5 feet and consist primarily of silt with interbedded layers of sand, clay, and peat. Due to the nature of the environments in which sediments were deposited, the sediment layers vary in thickness and are not continuous across the Site. The geology is depicted in four cross sections, Figures 3-1 through 3-4, and described in detail below.

3.1.1 Fill Unit

The fill is the uppermost unit and is present across the Site to varying depths of approximately 3 to 20 bgs. The fill is generally organically rich and in various areas of the Site, included silt, sand, gravel and various debris (e.g., glass, wire, bottle caps, plastic, clinker, coal fragments, wood fragments, concrete, steel plates, brick fragments, etc.). The water table was generally observed within the fill unit.

3.1.2 Upper Sand Unit

The upper sand unit was encountered beneath the fill unit in southern portions of the Site (see Figure 3-1 and Figure 3-3). This unit extends to the upper silt/clay unit and ranges in thickness between 2 and 18 feet, with the top of the unit encountered from 4 to 13 feet bgs and the bottom of the unit encountered between 15 and 30 feet bgs. The upper sand unit is absent in the eastern portion of the site and the fill unit extends to the next underlying unit. This upper sand unit is primarily composed of fine to medium-grained sand. Some silt, coarse sand and/or fine gravel were also observed, although they were less prevalent.

3.1.3 Upper Silt/Clay Unit

The upper silt/clay unit is present beneath most of the Site; however, it was not observed in a small area in the eastern portion of the Site where the overburden pinches out against the adjacent bedrock outcrops. This unit ranges in thickness between 1 foot and 20 feet, with the top of the unit observed from 7 to 22 feet bgs. The bottom of the upper silt/clay unit was observed between 15 and 43 feet bgs. This unit is variable both horizontally across the Site and vertically within specific borings and ranged from a sandy silt unit to a silty clay unit to alternating clay and silt, and contains gravel in some locations.

Within this silt/clay unit are lenses of peat and sand. The sand lenses form a somewhat continuous unit referred to in this report as the intermediate sand unit. Two peat lenses were observed at three soil boring locations. SB-11 and SB-16 appear to extend into one peat area and MW-8 appears to pass through a second peat area (see Figure 3-1). The peat lenses range in thickness from 4 to 8.5 feet, with the top of the lenses observed between 22.5 and 25 feet bgs. A sand lens and a gravel lens also appear within this unit (see

Figure 3-4); the sand lens is approximately 7 feet thick and occurred at 17 feet bgs at MW-7 and the gravel lens is approximately 1 foot thick and appeared at 24 feet bgs at SB-8.

3.1.4 Lower Sand Unit

The lower sand unit was observed throughout the Site. This sand unit appears to begin between approximately 10 feet bgs (see Figure 3-3) and 31 feet bgs (see Figure 3-4). It varies in thickness from 1 foot (see Figures 3-1 and 3-2) to 7 feet (see Figure 3-1). This sand unit is generally composed of fine to coarse-grained sand. It is not known if this unit is continuous through the northern portion of the Site, since drilling in this area extended only to the upper silt/clay unit. However, this unit was observed in most borings completed in the rest of the Site, with the exception of one location (SB-8), where it was absent (see Figure 3-4).

3.1.5 Lower Silt/Clay Unit

The lower silt/clay unit was encountered beneath the lower sand unit, except in the eastern portion of the Site near the 200,000 cf gas holder (see Figure 3-2), where the lower sand unit was underlain by weathered bedrock and the northern portion of the Site where drilling extended only to the upper silt/clay unit. The lower silt/clay unit ranged in thickness from 2 to 10 feet (see Figures 3-1, 3-3, and 3-4), with the top of the unit observed between 24 and 40 feet bgs and the bottom between 30 and 43.5 feet bgs. This unit ranges from a silty sand with clay, to a clayey silt, to a clay.

3.1.6 Bedrock

Bedrock is present in outcrops in the eastern portion of the Site and was encountered beneath the Site at depths ranging between 5 and 47.5 feet bgs. A weathered bedrock zone was observed above solid bedrock across most of the Site. Where present, the weathered bedrock ranged in thickness between 2.5 and 10 feet, but it may not have been fully penetrated at all locations. In the eastern portion of the Site, a thick weathered bedrock and or talus zone (larger rock fragments along the bedrock slope below ground) was observed above competent bedrock. This area of thick weathered bedrock is the only area of the Site where the upper silt/clay unit was not observed.

Three soil borings in the eastern portion of the Site were advanced into bedrock and rock cores were collected. The thickness of the weathered bedrock unit at these locations ranged from 6 to 10 feet. The top of a competent bedrock unit was observed from 12 to 25 feet bgs.

Based on the rock cores, bedrock at the Site is micaceous dark grey gneiss, with light grey felsic bands. Consistent with the tectonic history (summarized in Section 1.8.1), fractures were common in all three cores. Some of the fracture planes were mineralized with pyrite/pyrothite.

3.2 Site Hydrogeology

The Site is located along the eastern margin of a steep-sided bedrock valley that contains the Hudson River. The bedrock valley wall that makes up the eastern side of the Site isolates the glaciofluvial sediments that underlie the Site. To the west of the Site is Peekskill Bay on the Hudson River.

Recharge to the groundwater system at the Site is from three sources. The first source is run off from the elevated areas to the east running along the bedrock surface. Some of this runoff is channeled into storm drains that drain the Site. A second source of recharge to the groundwater system is infiltration of precipitation on the Site. A third potential source of recharge, and a likely lesser source, is groundwater seeping from bedrock fractures either as springs above the land surface or as direct flow to the aquifer system.

The Site is relatively flat, so significant overland surface runoff is not likely. However, the areas of former MGP and EGP operations are generally paved or covered by buildings and precipitation in these areas may be drained from the Site through storm drains.

As described below (Section 3.2.1), groundwater at the Site flows from the east towards the Hudson River. A tidal survey performed at the Site (see Section 3.2.7) during the RI shows that groundwater levels in all hydraulic units monitored (shallow, intermediate, and bedrock) are influenced by tidal fluctuations in the river.

The aquifer system beneath the site consists of an upper (water table) aquifer separated by an intermediate low permeability aquitard (i.e., upper silt/clay unit), and a lower aquifer, which is generally separated from the bedrock aquifer by a deeper low permeability unit (i.e., the lower silt/clay unit). These hydraulic units are described below.

3.2.1 Upper Aquifer

The first hydraulic unit beneath the Site is the upper aquifer and includes the fill and upper sand units. This unit ranges in thickness between 0 feet (where bedrock outcrops) and 30 feet (SB-12). The water table was encountered in this unit at depths ranging between approximately 3 and 8 feet bgs. A round of water level measurements in wells completed in the upper aquifer, referred to in this report as shallow wells, was completed on May 2 and 3, 2006. No significant precipitation event occurred during water level measurements. These measurements were used to construct a groundwater flow map for the water table (Figure 3-5). This water table map shows that groundwater flow in the upper aquifer is west towards the Hudson River.

3.2.2 Semi-Confining Unit (Upper Silt/Clay Unit)

The second hydraulic unit observed at the Site is the semi-confining unit and includes the upper silt/clay unit. This semi-confining unit was observed in borings across the Site, except in the eastern portion of the Site, and ranged in thickness between 0 feet (where bedrock outcrops) and 20 feet (SB-10).

3.2.3 Intermediate Sand Aquifer

Within the upper silt/clay unit there are lenses of sand that form what is referred to in this report as the intermediate sand aquifer. This aquifer was observed in the southern portion of the Site. Where present, the intermediate sand aquifer was about 7 feet thick and occurred at 17 feet bgs. Two monitoring wells (MW-17 and MW-18) were screened in this aquifer and are referred to as intermediate depth wells.

Water level measurements from MW-17 and MW-18 show significantly different piezometric elevations, at one location the piezometric surface in this unit is above (piezometric elevation of 3.27 feet relative to mean sea level [ft rmsl]) the water table observed in the shallow aquifer and at one location it is below (piezometric elevation of -0.11 ft rmsl) the water table. Piezometric fluctuations produced by tidal fluctuations (as observed during the tidal survey) are not likely to account for these relatively large differences in water level elevations.

3.2.4 Lower Sand Aquifer

The semi-confined lower sand aquifer is separated from the upper aquifer and intermediate sand aquifer by the upper silt/clay unit and is either directly in contact with weathered bedrock below (see Figure 3-2) or is underlain by a silt/clay unit. Although the upper silt/clay unit is somewhat heterogeneous and contains sand and gravel in some locations, analytical results (see Section 4) generally indicate that communication between the upper sand aquifer and the intermediate and lower sand aquifers is not occurring through the upper silt/clay unit. However, at the northeast portion of the site, bedrock is overlain by weathered bedrock which may provide a path for groundwater migration between the aquifers in that area.

Groundwater monitoring wells were not completed in the lower sand aquifer, so there is no information on the potentiometric surface or direction of groundwater flow in this lower aquifer unit.

3.2.5 Lower Silt/Clay Unit

A lower silt/clay semi-confining unit was observed below the lower sand aquifer and above bedrock over most, but not all of the Site where borings were advanced to bedrock. Where present, this unit ranged up to 5 feet in thickness.

3.2.6 Bedrock/Weathered Bedrock Unit

Bedrock is observed at the Site in outcrops along the eastern portion of the Site (i.e., the parcels east of North Water Street.) It was also encountered in borings at depths ranging between 5 (SB-21) and 47.5 feet bgs (SB-(MW-8). When encountered in the subsurface, the bedrock was overlain by a weathered bedrock zone. When penetrated, the weathered zone ranged in thickness between 2.5 and 10 feet.

Three monitoring wells (MW-1B, MW-9, and MW-13) were completed in competent bedrock in the eastern portion of the Site. The bedrock is micaceous dark gray gneiss and groundwater flow is through fractures. The groundwater levels in these three monitoring wells ranged between approximately 6.5 and 7.5 feet bgs. The groundwater elevations in two of these wells are above the elevations in the shallow aquifer wells and below in one of the bedrock wells. The one bedrock monitoring well (MW-1B) with a groundwater elevation below the shallow aquifer wells is the shallowest of the three bedrock monitoring wells.

3.2.7 Tidal Survey

As described in Section 2, a tidal survey was performed to evaluate the potential influence of tidal fluctuations on groundwater beneath the Site. This survey included a piezometer installed approximately 15 feet into the Hudson River beyond the low tide line, two shallow monitoring wells (MW-14 and MW-16), one intermediate depth monitoring well (MW-18), and one bedrock monitoring well (MW-13). Graphs of the water levels observed during the tidal survey over time are included as Figure 3-6 and the tidal survey water level data is provided in Appendix D.

During the 48-hour period of the tidal survey, the Hudson River water level transitioned through four tidal cycles with a tidal range of approximately 3.75 feet. Water levels in shallow monitoring wells MW-14 and MW-16, which are located 216 and 72 feet, respectively, from the Hudson River, were both influenced by tidal fluctuations. The tidal effect was greatest closest to the river in MW-16 where fluctuations in water level were approximately 80% of that in the river and least in MW-14 (furthest from the River) where only approximately 12% of the tidal changes of the river were detected. This decline in tidal related water level fluctuation with distance from the River is typical of hydraulic units in contact with tidal surface water bodies and shows the declining influence of the tidal fluctuations with distance from the tidal water body.

The tidal survey included one intermediate depth well, MW-18, located 210 feet from the Hudson River. This well also shows fluctuation in piezometric surface in response to River level fluctuations with 16 percent of the fluctuation observed in the River and approximately the same level of fluctuation as observed in the shallow monitoring well (MW-14) located approximately the same distance from the River.

One bedrock monitoring well, MW-13, was included in the tidal survey. This well also shows water level fluctuations in response to river level fluctuations. MW-13 is located 282 feet from the Hudson River. This well shows 8 percent of the fluctuation observed in the River.

The tidal survey shows that the three hydraulic units surveyed, shallow, intermediate, and bedrock, all experience fluctuation in water levels in response to tidal fluctuations in the Hudson River. The survey shows that the magnitude of water level changes decline with distance from the river and that wells in different

hydraulic units at about the same distance from the river have approximately the same magnitude of tidal influence. These results indicate that all the hydraulic units monitored are hydraulically connected to the Hudson River.

3.3 Investigation Results for Potential Source Areas

Site field activities included the investigation of all known potential historic source areas (e.g., gas holders, fuel oil storage tanks, coal storage areas, and operations buildings) associated with the former MGP and EGP operations to evaluate if these structures were still present and if they were potential past or current sources of constituents to the environment. Based on field observations, it was determined that remnants of former MGP and EGP structures are present above grade or in the subsurface and that subsurface soil associated with several of these structures exhibited evidence of contamination.

3.3.1 Former MGP Features

According to the Historical Investigation Report (RETEC, 2002), the following features were associated with the MGP operations at the Site.

- Former MGP Building (generating house, boiler house, storage, and purifying house)
- 200,000 cf Gas Holder
- 100,000 cf Gas Holder
- 30,000 cf Gas Holder
- 25,000 gallon Fuel Oil Tank
- Coal Shed and Coal Pile Area

Aside from the former MGP building and the remnant foundation of the gas holders and fuel oil tank, all of the features listed above have been removed from the Site. The MGP building appeared to be structurally sound and its internal partition walls are consistent with the original partitions when the gas plant was operating. No equipment and/or structures associated with MGP operations were observed inside the former MGP building during the field investigation. The former MGP building is currently used as a wood working shop, a laboratory, and as office space.

The foundation of the 200,000 cf gas holder is still present aboveground to the north of the battery house. The foundation is a massive concrete and brick structure that is 75 feet in diameter and approximately 20 feet tall on its western perimeter. No evidence of coal tar was detected on the remnant foundation, the bedrock, or in soil surrounding the holder foundation.

The foundations of the former 30,000 cf and 100,000 cf gas holders, 25,000 gallon fuel oil tank, and of a former pulsation tank were determined to be present in the subsurface between 0.5 and 5.5 feet bgs on the former MGP parcel east of North Water Street.

Results of the site investigation activities indicate that subsurface soil beneath and downgradient of the former MGP operations is impacted with MGP residue, including sheen, coal tar, and MGP odor. Site cross sections shown in Figures 3-1 through 3-4 show the vertical extent and Figure 3-7 shows the horizontal extent of MGP and non-MGP impacts in the subsurface. The MGP-related impacts are primarily present in the fill unit and extend into the top of the upper silt/clay semi-confining unit, the top of which was encountered between 7 and 22 feet bgs. There was no visual or olfactory indication of impact (sheen, odor, or NAPL) or elevated PID readings, below the upper semi-confining unit.

Localized occurrences of MGP-related impacts were detected in overburden above the bedrock in the eastern-most portion of the former gas plant in the vicinity of the former gas holders. The upper silt/clay unit is absent from this area as this is where the sediments lap onto the bedrock valley walls. A weathered bedrock zone was noted in this location. No evidence of NAPL was detected in bedrock at these locations.

Based on these observations, it appears that the likely historical sources of MGP residue in the environment were the 100,000 cf and 30,000 cf gas holders. There is no direct evidence that the former MGP building or the 200,000 cf gas holder were also historical sources of MGP residue to the environment; however, more NAPL was observed downgradient than upgradient of the former MGP building. This apparent increase in coal tar NAPL downgradient from the former MGP building is potentially due to the fact that top of the upper silt/clay semi-confining layer dips downward in the direction of the Hudson River and the overlying fill layer is thicker in this direction. This geologic configuration would allow a thicker accumulation of NAPL above the silt/clay semi-confining layer downgradient of the former MGP building. The building appears to be structurally sound and it does not appear that either the building or the remnant bases of the gas holders are ongoing sources of NAPL or MGP constituents to the environment.

Evidence of petroleum-related impacts to subsurface soil was observed co-mingled with the MGP-related impacts to the environment in the vicinity of the former MGP operations. Field evidence was limited to a petroleum-like odor; however, fingerprint results from META, as discussed in Section 4.2, indicate the presence of weathered fuel oil and an unidentified light oil-like material mixed with, but unrelated to the coal tar. Based on the location, it appears that the 25,000 gallon fuel oil tank was the likely historical source of the petroleum impacts. The distribution of petroleum-related impacts along the axis of the former Pemart Avenue indicates the potential of migration along utilities located in the street.

Test pit excavation activities identified the horizontal limits of the fuel oil tank including the base and the remains of the steel tank bottom. Field observations indicated that there appears to be a void below the metal tank remains, but the tank bottom was not disturbed during investigation activities.

The coal shed and coal pile areas are no longer present at the Site. No evidence of coal or ash material was observed at SB-29 which was advanced within the former coal pile area. Ash was observed in the upper 5 feet of boring SB-30 which was advanced in the vicinity of the former coal shed. A significant volume of ash was observed in nearly all of the borings advanced along, or within close proximity to the MTA ROW. A significant layer of ash material was also observed in SB-11 which was advanced within the vicinity of the former coal conveyor; however, this location is also along the MTA ROW. The exact source, or source(s), of this ash material is not known; however the potential sources include the coal conveyor from the former EGP operations and the coal shed.

3.3.2 Former Electric Generating Plant (EGP) Features

According to the Historical Investigation Report (RETEC, 2002), the following features were associated with EGP operations at the Site.

- Former EGP Building
- Battery House
- Fuel Oil Tank and Building
- Transformer Area
- Coal Conveyor

Aside from the former EGP building and the battery house, all of the features listed above have been removed from the Site. The EGP building appeared to be structurally sound and was determined to have been

constructed with a sub-slab crawl space under the original portion of the building. Observations at SB-28 did not reveal the presence of a crawl space beneath the adjoining building to the north. Four manholes that allow direct access to the crawl space were observed in the ground floor of the EGP. In addition, numerous cables and/or pipes extend beneath the slab floor of the EGP building and appear to extend through the concrete floor of the EGP. These cables and/or pipes were covered by metal caps on the top-side of the floor surface. Based on these observations, the crawl space appears to have been designed to allow access to the utilities that extended from the electric generators and transmission components (e.g., transformers, etc.) for maintenance, etc. No equipment and/or structures associated with EGP operations were observed inside the former EGP building during the field investigation. The former EGP building and the adjoining building to the north are currently used as wood working shops, an umbrella factory, and a homeless shelter.

In general, no visual impact (odor, sheen, or NAPL) or elevated PID readings were observed upgradient, adjacent to the north, underneath, or downgradient of the former EGP building. Co-mingled MGP-like and petroleum-like odor and NAPL were observed in subsurface soil adjacent to, south, and downgradient of the former EGP building. These impacts appear to be attributable to the former MGP and not the former EGP operations. Non-MGP related NAPL was observed in the soils in the crawl space. No MGP-like odor was observed in the soils of the crawl space. A soil sample from the crawl space was submitted for fingerprinting analysis. The results of these analyses are presented in Section 4.

No evidence of the former fuel oil tank, which had been located at the north end of the former Pemart Avenue, or the nearby building were found on site. Similarly, no physical evidence of petroleum-related impact (e.g., NAPL, sheen, odor, or elevated PID readings) was observed in borings and monitoring wells located downgradient of the historical locations of these structures.

The former transformer area, abutting the original footprint of the EGP building, is currently enclosed by the adjoining building north of the former EGP. No equipment and/or associated structures associated with the transformers were observed in the former transformer area. Additionally, no evidence of a sub-floor or physical evidence of petroleum-related impact (NAPL, sheen, odor, or elevated PID readings) were observed in the former transformer area during drilling activities.

Other than the petroleum-related NAPL in the crawl space soils, these observations indicate that the former EGP building, fuel oil tank, and transformers, are not historical or current sources of constituents to the environment. The source of the petroleum-related NAPL in the crawl space soils is not known. The former transformer area is currently used by the wood working shop for automobile and commodities storage.

The former Battery House is still present at the Site. It is currently boarded-up and locked. This building was not identified as a structure that would typically release constituents to the environment, so no detailed investigation specific to this area of the Site was performed. It is anticipated that the battery house was used for the storage of lead acid batteries and accordingly it is likely that the only constituents stored and or used in this facility would have included lead and acids. Lead batteries also may have included small amounts (4 percent or less) of other inorganic constituents including calcium, copper, silver, antimony, arsenic, or tin. Lead concentrations above the NYSDEC RSCO of 37 mg/kg were detected ranging from 58 to 135 mg/kg in borings SB-7, SB-24, and MW-5, located downgradient and within 90 feet of the battery house. Lead at 460 mg/kg was also detected in SB-21 located 18 feet north of the battery house. These lead concentrations cannot be directly attributed to the battery house as these borings are also located in close proximity to the former coal conveyor where coal, coal ash have been observed. Additionally, groundwater samples in the area did not exhibit sub-neutral pH.

The coal conveyor was located south of the former EGP building and was oriented east to west between the former EGP and MGP buildings, across the railroad tracks, and into the Hudson River. This structure is no longer present at the Site, but borings SB-24(1) and SB-24(2) (two unsuccessful boring attempts) encountered shallow obstructions that might be the footer of this conveyor, or bedrock highs. A layer of ash material was observed in the upper 5 to 7 feet of nearly all borings advanced along the MTA ROW. The exact source(s), of

this ash material is not known; however potential sources related to the former MGP and EGP include the former coal shed, coal conveyor, and coal pile areas.

3.4 Off-Site Areas

Adjacent off-site areas south and west (downgradient) of the former MGP were investigated in order to complete delineation of impacts that appear to originate at the Site.

The area to the south is currently used as a paved City of Peekskill municipal parking lot. Soil borings SB-34 and SB-36 and monitoring well MW-14 were installed in this area (Figure 2-1). No physical evidence of MGP or petroleum-related impacts (e.g., odor, sheen, NAPL or elevated PID readings) was detected in subsurface soil and or groundwater at these locations, so the RI was not expanded further south.

A total of seven soil borings (SB-20, SB-32, SB-33, SB-37, SB-38, SB-39, and SB-40) and six monitoring wells (MW-15, MW-16, MW-19, MW-20, MW-21, and MW-22) were completed in the parcels west (downgradient) of the former MGP between the MTA ROW and the Hudson River. Physical evidence of MGP residue (e.g., odor, sheen, NAPL or elevated PID readings) and/or petroleum-related NAPL was detected in subsurface soil and or groundwater at these locations, with the exception of the southern-most soil borings/monitoring wells SB-37/MW-19 and SB-40/MW-22 (Figure 3-7).

3.5 Groundwater Quality Parameters

Water quality parameters (pH, conductivity, temperature, dissolved oxygen (DO), oxidation reduction potential (ORP), salinity, total dissolved solids (TDS), and turbidity) were measured in the field during well purging prior to collection of groundwater samples. The water quality parameter measurements are summarized in Table 3-2.

Based on the water quality parameter measurements, groundwater at the Site is generally characterized as having a circum-neutral pH, mildly reducing (low ORP), and slightly high salinity and conductivity (especially in the vicinity of the river). The range of ORP is typical for groundwater containing abundant organic matter, such as peat, and organic contamination (e.g., coal tar). The mildly elevated salinity and conductivity may reflect mixing of the groundwater with the brackish surface water of the Hudson River. Notable exceptions to these overall characteristics is the relatively high pH measured in groundwater samples MW-1B (11.2 standard units [S.U.]) and MW-5 (9.87 S.U.). No obvious source for these elevated pH measurements was observed in the subsurface soil encountered during drilling.

3.6 Limits of Observed Impacts

No staining or odors were observed in any of the surface soil samples or within the upper 1-foot of Site soil boring or monitoring well locations.

Coal tar residue, which included sheen, staining and NAPL was limited to the upper aquifer in areas at and downgradient from the former MGP structures. These MGP-related impacts were generally detected in discrete intervals that typically corresponded to higher-permeability lithologies (i.e., sand lenses) or accumulated in the material above the low permeability upper clay semi-confining unit. Figure 3-7 shows the approximate limits of residual impacts in subsurface soil of the upper aquifer. The locations of the transects for cross sections A-A', B-B', C-C', and D-D' are depicted on Figure 2-1 and the corresponding cross sections are shown on Figures 3-1 through 3-4. NAPL partially penetrates the upper-most portions of the upper silt/clay semi-confining unit including the peat lenses to depths of 20 feet bgs. NAPL and impacted material was not observed below the upper-most portions of the upper silt/clay unit or in the lower sand unit, lower silt/clay unit, weathered bedrock, or in bedrock.

3.7 Summary of Field Observations

This section provides a summary of the RI field observations.

- The Site covers approximately four acres, with approximately two acres on each side of the former Pemart Avenue. With the exception of the steep eastern-most portions of the site, it is generally flat with a gentle slope towards the Hudson River located to the west of the Site.
- The geology at the Site consists of silt with interbedded layers of sand, clay, and peat deposited along the eastern edge of the Hudson River Valley and overlying weathered bedrock and bedrock. The valley wall that occupies the eastern portion of the MGP and EGP Sites is steep and the bedrock is composed of micaceous dark grey gneiss, with light grey felsic bands.
- Groundwater flows from east to west across the Site and ultimately discharges to the Hudson River. Steep bedrock outcrops to the north and east hydrogeologically isolate the unconsolidated aquifer system at the Site. Based on the steep bedrock topography, observed groundwater seeps indicating an upward hydraulic gradient, and variations in water elevations in deep groundwater monitoring wells installed during the RI, which also generally indicate an upward hydraulic gradient, it appears that groundwater may discharge from bedrock fractures into the unconsolidated aquifer system present beneath the Site. Other than this discharge, the bedrock appears to be isolated from the unconsolidated aquifer system by weather bedrock and the upper silt/clay unit.
- Structures associated with the former MGP are present at the Site. Above-grade former MGP structures include the gas works building, the concrete foundation for the 200,000 cf gas holder, and the retaining wall associated with the 100,000 cf gas holder. Subsurface structures present are the foundations of the 100,000 cf and 30,000 cf gas holders, and the 25,000 gallon fuel oil tank.
- Structures associated with the EGP, including the electric generation building, the battery house, and the former transformer area are present at the site.
- Field evidence of MGP residues, which included odors, elevated total VOCs in soil headspace, staining, sheen and coal tar NAPL, were detected in the subsurface soil and groundwater associated with the 100,000 cf and 30,000 cf gas holders and were present above and into the top of the low permeability upper silt/clay unit. NAPL partially penetrates the upper-most portions of the upper silt/clay unit, which forms a semi-confining unit at the Site. Collectively, these impacts encompass an area that includes most of the former MGP, the southern portion of the EGP, and extend offsite to the west beneath the adjacent MTA ROW and onto the undeveloped former industrial properties between MTA ROW and the River.
- No field evidence of contamination related to operations of the former EGP was detected. However, evidence of a non-descript petroleum-like oil was detected in soils collected from the crawl space beneath the EGP.
- The scope of the RI was expanded to include off-Site areas to the west towards the Hudson River and to the south until the visual limits of contamination had been delineated.

Table 3-1
Summary of Monitoring Well Survey Data and Groundwater Elevations
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Location Well/ID	Northing	Easting	Location Type	Ground Elevation	PVC Casing Elevation	Depth to Water (feet)	Groundwater Elevation
SB-21/MW-1A	895771.24	648355.83	shallow well	6.50	6.23	2.27	3.96
SB-21/MW-1B	895769.31	648358.31	bedrock well	6.49	6.04	2.5	3.54
SB-5/MW-2	895662.96	648422.31	shallow well	6.66	6.23	4.21	2.02
SB-6/MW-3	895621.54	648471.45	shallow well	7.01	6.59	4.71	1.88
MW-4	895616.92	648515.01	shallow well	7.98	7.67	4.64	3.03
MW-5	895728.38	648329.66	shallow well	6.06	5.58	4.02	1.56
MW-6	895606.82	648383.51	shallow well	7.39	7.03	5.19	1.84
MW-7	895572.75	648419.47	shallow well	7.40	6.83	4.5	2.33
MW-8	895505.36	648442.44	shallow well	8.18	7.74	6.18	1.56
SB-26/MW-9	895685.97	648461.43	bedrock well	7.40	7.01	2.99	4.02
SB-22/MW-10	895943.50	647965.60	shallow well	6.86	6.51	3.8	2.71
SB-19/MW-11	895901.96	648154.40	shallow well	7.22	6.77	3.02	3.75
MW-12	895733.83	648335.78	shallow well	5.92	5.28	3.68	1.60
SB-25/MW-13	895654.09	648503.10	bedrock well	7.65	7.40	2.8	4.60
SB-34/MW-14	895451.34	648476.30	shallow well	8.50	8.24	6.6	1.64
SB-32/MW-15	895575.86	648297.34	shallow well	3.70	5.74	NA	NA
SB-33/MW-16	895407.82	648343.45	shallow well	3.32	4.47	3.28	1.19
SB-9/MW-17	895626.87	648361.95	intermediate well	7.36	6.84	6.95	-0.11
SB-8/MW-18	895576.40	648463.45	intermediate well	6.99	6.72	3.45	3.27
SB-37/MW-19	895300.97	648354.00	shallow well	2.37	6.03	5.51	0.52
SB-38/MW-20	895485.24	648368.38	shallow well	4.93	7.60	7.68	-0.08
SB-39/MW-21	895426.28	648407.61	shallow well	5.13	7.53	7.9	-0.37
SB-40/MW-22	895342.21	648445.86	shallow well	5.50	8.03	8.19	-0.16
SB-14/MW-23	895833.54	648068.83	shallow well	6.48	6.31	4.81	1.50
SB-13/MW-24	895780.25	648135.85	shallow well	6.23	6.26	4.65	1.61
SB-12/MW-25	895740.68	648190.98	shallow well	6.04	6.08	4.7	1.38
SB-16/MW-26	895703.01	648239.81	shallow well	6.32	6.56	5.2	1.36
SB-11/MW-27	895661.42	648293.92	shallow well	6.51	6.43	5.18	1.25

Notes:

(1) All survey elevation data is relative to the NAVD 88 datum.

(2) Depth to Water measured from 5/2/06 to 5/3/06

Table 3-2
Summary of Groundwater Quality Field Parameters
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Field Parameter	Location ID Sample Date Sample ID Aquifer		SB-21/MW-1A 5/3/2006 MW-1A WT	SB-21/MW-1B 5/3/2006 MW-1B Bedrock	MW-5 5/4/2006 MW-5 WT	MW-6 5/5/2006 MW-6 WT	MW-8 5/4/2006 MW-8 WT	SB-26/MW-9 5/4/2006 MW-9 Bedrock	SB-22/MW-10 5/2/2006 MW-10 WT	SB-19/MW-11 5/5/2006 MW-11 WT
	Unit	Acceptance Criteria								
Time	24 hr	--	1700	1640	1635	920	940	1200	1655	1125
Temperature	°C	± 3%	14.23	12.91	13.93	13.39	15.13	15.37	13.89	14.17
Specific Conductivity	uS/cm	± 3%	635	812	7058	710	216648	141565	731	949
Dissolved Oxygen	mg/l	10% or ± 0.5mg/l if < 1mg/l	0.14	1.8	2.25	-0.31	0	0	0.01	0.73
pH	--	± 0.1 Standard Unit	7.39	11.22	9.87	6.82	6.88	7.71	6.84	6.84
ORP	mV	± 10 mV	-77.7	94	-170.2	-90.6	-101.6	-135.5	-76.1	6
Salinity	ppt	--	0.38	NA	5.05	0.45	262.65	143.42	0.46	0.6
TDS	g/l	--	0.507	NA	5.83	0.592	173.4	111	0.607	0.778
Turbidity	NTU	10% for values >1 NTU	1.23	32	1.33	116	1.2	61	10.3	51
Volume Removed	liters	3 system volumes	7	4.5	5	10	7.5	3.25	10.5	8
Flow Rate	ml/min	--	200	150	200	200	150	100	300	150
Drawdown	feet	< 0.3 feet	0.05	4.5	0.5	0.1	0.05	4.42	0.02	1
Color	--	--	clear	clear	NA	milky	clear	milky	clear	clear
Odor	--	--	none	none	NA	slight	none	none	none	none

Notes

NA - Not Available

°C - degrees centigrade

24 hr - Military Time

uS/cm - microsiemens per centimeter

mg/l - milligrams per liter

mV - millivolts

ppt - parts per thousand

g/l - grams per liter

NTU - Nephelometric Turbidity Units

ml/min - milliliters per minute

Table 3-2
Summary of Groundwater Quality Field Parameters
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Field Parameter	Location ID Sample Date Sample ID Aquifer		MW-12 5/4/2006 MW-12 WT	SB-25/MW-13 5/2/2006 MW-13 Bedrock	SB-34/MW-14 5/1/2006 MW-14 WT	SB-33/MW-16 5/2/2006 MW-16 WT	SB-9/MW-17 5/5/2006 MW-17 Intermediate	SB-8/MW-18 5/1/2006 MW-18 Intermediate	SB-37/MW-19 5/18/2006 MW-19 WT	SB-38/MW-20 5/18/2006 MW-20 WT
	Unit	Acceptance Criteria								
Time	24 hr	--	1635	935	1220	1435	910	1540	915	1115
Temperature	°C	± 3%	14.35	11.59	14.26	11.19	14.06	15.68	14.39	15.36
Specific Conductivity	uS/cm	± 3%	162438	565	1053	1036	553	551	1675	611
Dissolved Oxygen	mg/l	10% or ± 0.5mg/l if < 1mg/l	0	0.62	0.14	0.01	0.51	3.27	7.11	1.22
pH	--	± 0.1 Standard Unit	7.1	7.23	6.92	7.26	8.74	6.28	7.45	7.3
ORP	mV	± 10 mV	-103.3	28	-110.8	-116.1	167	98.4	85	-61.4
Salinity	ppt	--	177.71	0.37	0.67	0.71	0.34	0.33	1.08	0.37
TDS	g/l	--	132.3	0.493	0.86	0.915	0.454	0.435	1.365	0.486
Turbidity	NTU	10% for values >1 NTU	15	16.2	12.4	4.13	300	--	0.87	4.28
Volume Removed	liters	3 system volumes	9	7.5	14.75	10.5	3	7.5	7	7
Flow Rate	ml/min	--	300	150	150	300	150	150	200	200
Drawdown	feet	< 0.3 feet	0.05	0.8	0.1	0	5.1	0.29	0.1	0.05
Color	--	--	clear	clear	clear	clear	NA	milky	clear	clear
Odor	--	--	strong MGP	none	none	none	NA	none	none	none

Notes

NA - Not Available

°C - degrees centigrade

24 hr - Military Time

uS/cm - microsiemens per centimeter

mg/l - milligrams per liter

mV - millivolts

ppt - parts per thousand

g/l - grams per liter

NTU - Nephelometric Turbidity Units

ml/min - millileters per minute

Table 3-2
Summary of Groundwater Quality Field Parameters
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Field Parameter	Location ID Sample Date Sample ID Aquifer		SB-39/MW-21 5/18/2006 MW-21 WT	SB-40/MW-22 5/18/2006 MW-22 WT	SB-14/MW-23 5/3/2006 TMW-3 WT	SB-13/MW-24 5/3/2006 TMW-4 WT	SB-12/MW-25 5/3/2006 TMW-2 WT
	Unit	Acceptance Criteria					
Time	24 hr	--	1240	1400	1135	1420	1445
Temperature	°C	± 3%	15.14	12.78	16.94	16.28	15.72
Specific Conductivity	uS/cm	± 3%	1051	852	576	381	614
Dissolved Oxygen	mg/l	10% or ± 0.5mg/l if < 1mg/l	0.93	2.98	0.15	0.26	0
pH	--	± 0.1 Standard Unit	7.06	7.37	7.09	6.92	7.18
ORP	mV	± 10 mV	-37.1	88.5	-69.9	-109.1	-127.1
Salinity	ppt	--	0.65	0.56	0.33	NA	0.37
TDS	g/l	--	0.841	0.722	0.443	NA	0.485
Turbidity	NTU	10% for values >1 NTU	4.51	4.31	0	0	2.33
Volume Removed	liters	3 system volumes	7	10.5	7	6	7
Flow Rate	ml/min	--	200	300	200	200	200
Drawdown	feet	< 0.3 feet	0.03	0	0.09	0.08	0.05
Color	--	--	clear	clear	clear	clear	clear
Odor	--	--	none	none	none	none	none

Notes

NA - Not Available

°C - degrees centigrade

24 hr - Military Time

uS/cm - microsiemens per centimeter

mg/l - milligrams per liter

mV - millivolts

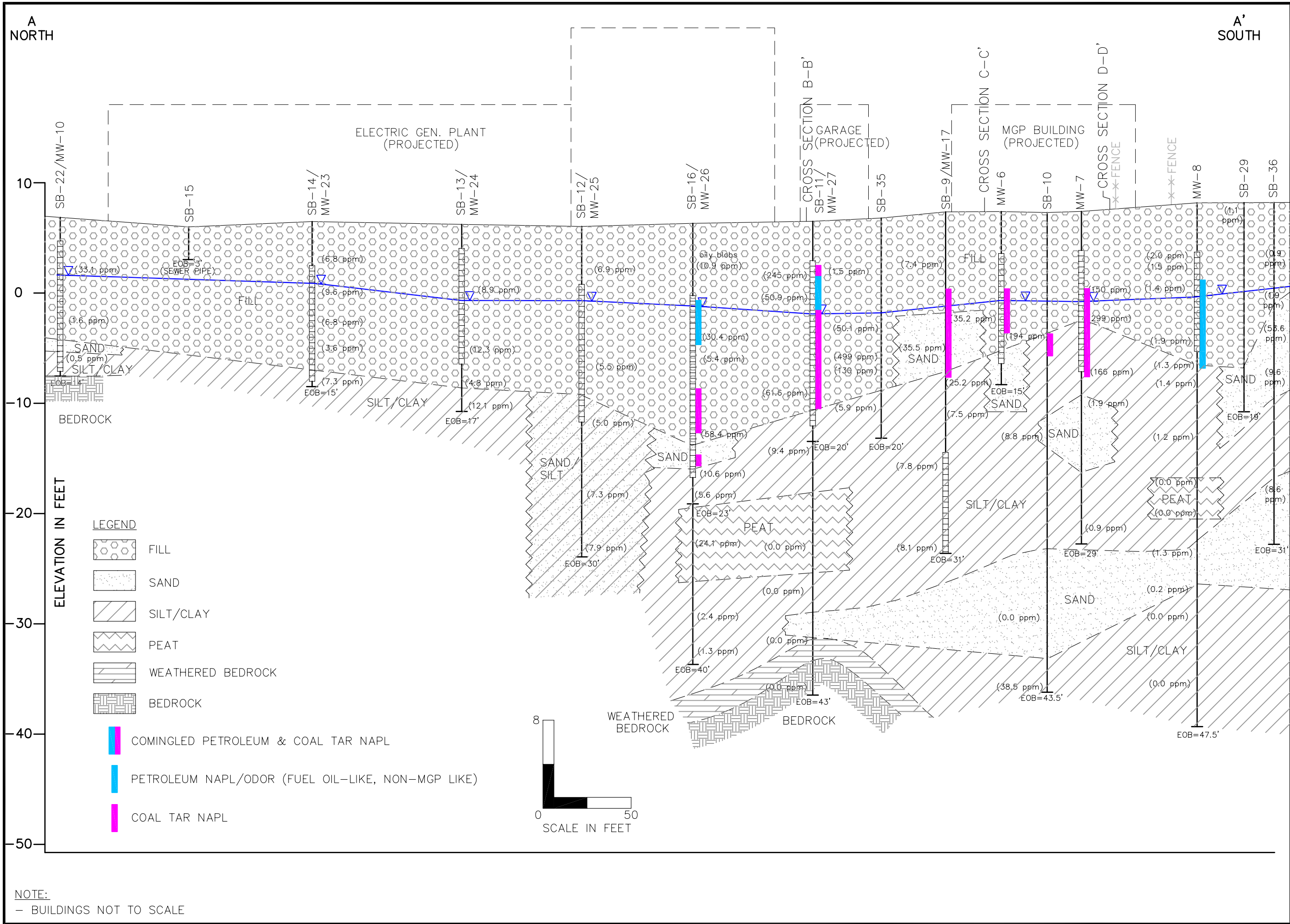
ppt - parts per thousand

g/l - grams per liter

NTU - Nephelometric Turbidity Units

ml/min - millileters per minute

FILENAME: 01869-116-11B.DWG



DESIGNED BY:		DRAWN BY:		CHECKED BY:		APPROVED BY:	
K.P.B.		K.P.B.		D.S.		D.S.	

REVISIONS	
NO.	DESCRIPTION

ENSR CORPORATION
2 TECHNOLOGY PARK DRIVE
WESTFORD, MASSACHUSETTS 01886
PHONE: (978) 589-3000
FAX: (978) 589-3100
WEB: HTTP://WWW.ENSR.AECOM.COM

PROJECT NUMBER: 01869-116-0400

DATE: 2/07

SCALE: AS SHOWN

FIGURE NUMBER: 3-1

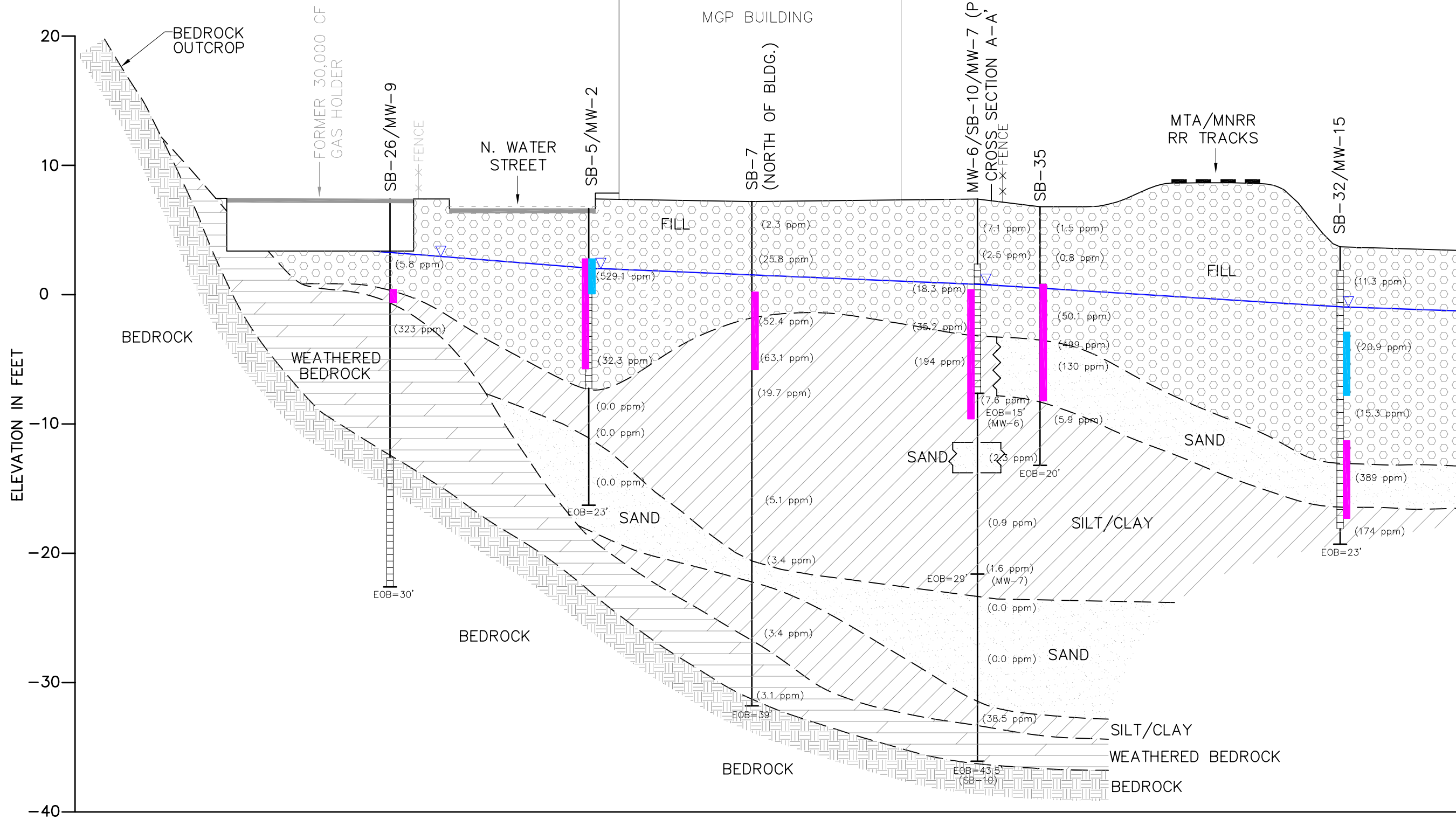
SHEET NUMBER: 1

FILENAME: 01869-116-05Brev.DWG

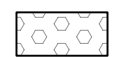
ELEVATION IN FEET

C
NORTHEAST

C'
SOUTHWEST



LEGEND



FILL



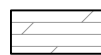
SAND



SILT/CLAY



PEAT



WEATHERED BEDROCK



BEDROCK



COMINGLED PETROLEUM & COAL TAR NAPL



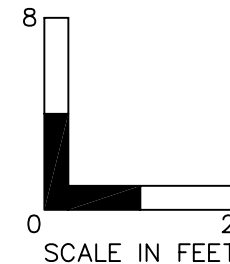
PETROLEUM NAPL/ODOR (FUEL OIL-LIKE, NON-MGP LIKE)



COAL TAR NAPL

NOTE:

- BUILDINGS NOT TO SCALE



DESIGNED BY:	NO.:	DESCRIPTION:	DATE:	BY:
DRAWN BY:				
J.E.B.				
CHECKED BY:				
D.S.				
APPROVED BY:				
D.S.				

ENSR CORPORATION
2 TECHNOLOGY PARK DRIVE
WESTFORD, MASSACHUSETTS 01886
PHONE: (978) 589-3000
FAX: (978) 589-3100
WEB: HTTP://WWW.ENSUR.AECOM.COM

ENSR AECOM

CROSS-SECTION C-C'
REMEDIATION INVESTIGATION
PEMART AVENUE FORMER MGP
PEEKSKILL, NEW YORK

AS SHOWN

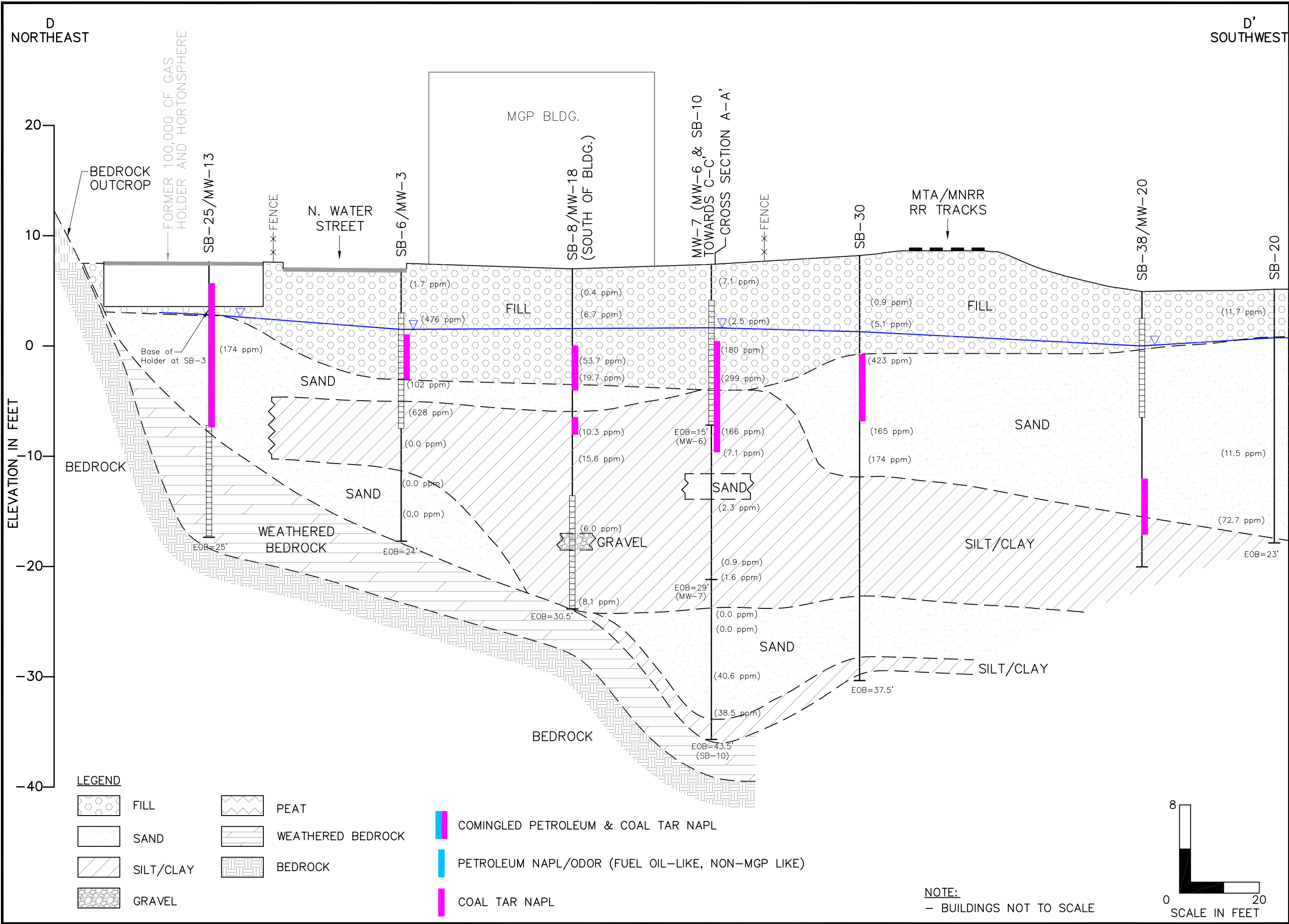
DATE: 12/06

PROJECT NUMBER: 01869-116-0400

FIGURE NUMBER:
3-3

SHEET NUMBER:
1

FILENAME: 01869-116-02Brev.DWG



DESIGNED BY:	NO.:	DESCRIPTION:	DATE:	BY:
DRAWN BY:	J.E.B.			
CHECKED BY:	D.S.			
APPROVED BY:	D.S.			

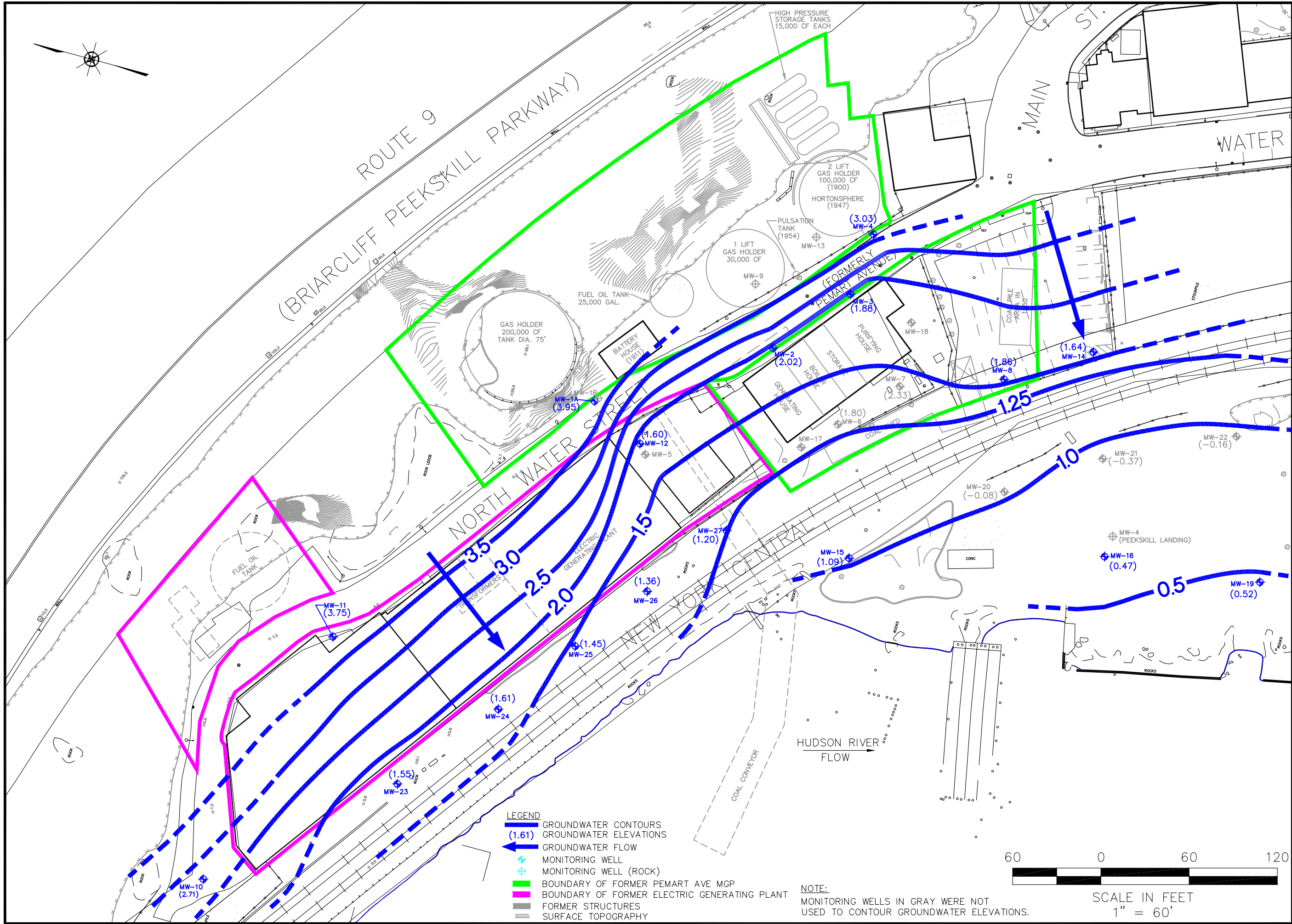
REVISIONS	NO.	DESCRIPTION	DATE	BY

ENSR CORPORATION	PROJECT NUMBER:
2 TECHNOLOGY PARK DRIVE	01869-116-0400
WESTFORD, MASSACHUSETTS 01886	
PHONE: (978) 589-3000	
FAX: (978) 589-3100	
WEB: HTTP://WWW.ENSUR.AECOM.COM	

CROSS-SECTION D-D'	DATE:
REMEDIATION INVESTIGATION	12/06
PEMART AVENUE FORMER MGP	
PEEKSKILL, NEW YORK	

SCALE:	AS SHOWN
FIGURE NUMBER:	3-4
SHEET NUMBER:	1

FILENAME: 01869-116-06B.DWG



DESIGNED BY:		DRAWN BY:		CHECKED BY:		APPROVED BY:	
		J.E.B.		D.S.		D.S.	

REVISIONS	
NO.	DESCRIPTION

ENSR CORPORATION
2 TECHNOLOGY PARK DRIVE
WESTFORD, MASSACHUSETTS 01886
PHONE: (978) 589-3000
FAX: (978) 589-3100
WEB: HTTP://WWW.ENSUR.AECOM.COM

ENSR | AECOM

PROJECT NUMBER:	
01869-116	

DATE:	
12/06	

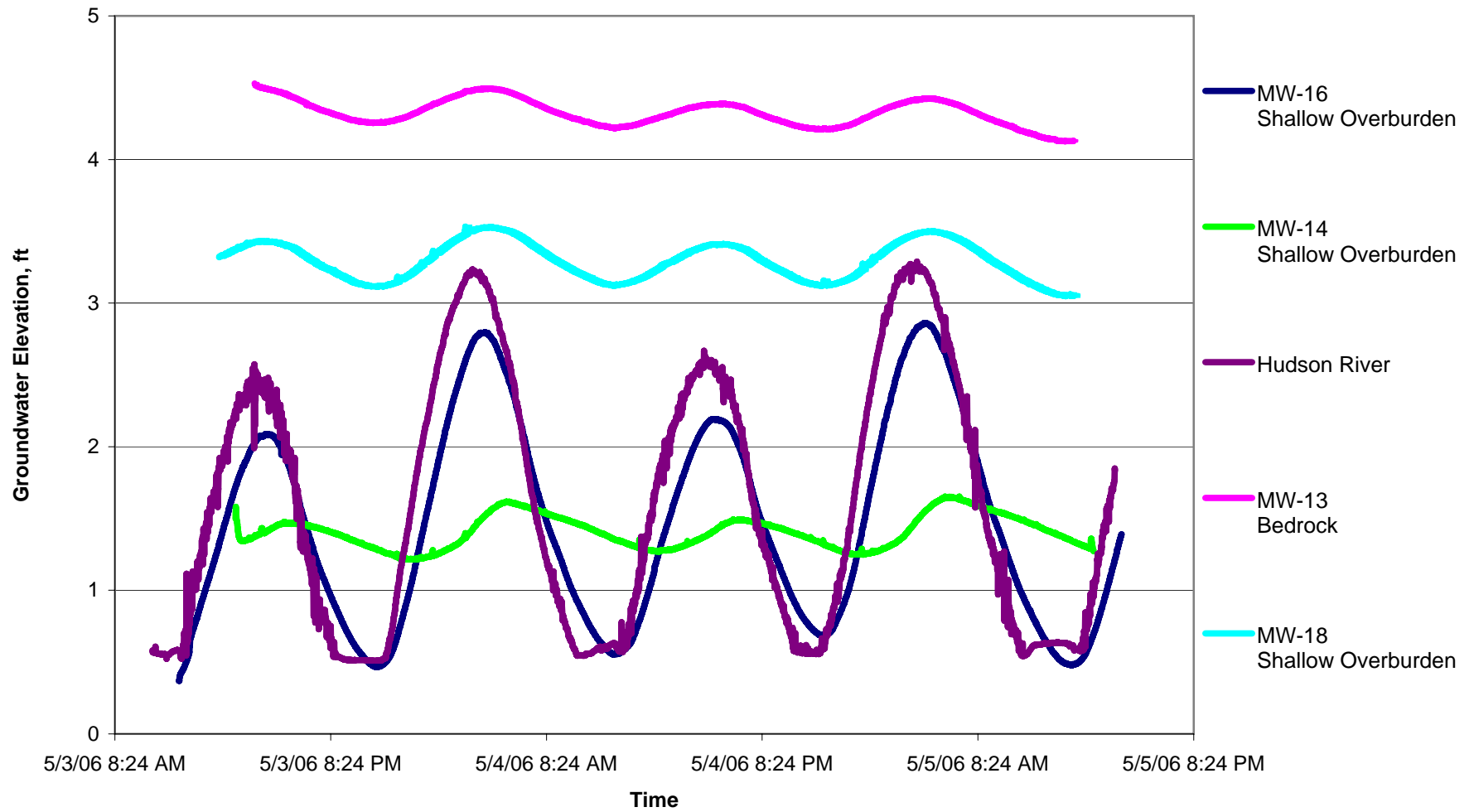
SCALE:	
1" = 60'	

GROUNDWATER CONTOUR MAP
MAY 2-5, 2006
REMEDIAL INVESTIGATION
PEMART AVENUE FORMER MGP
PEEKSKILL, NEW YORK

FIGURE NUMBER:	
3-5	

SHEET NUMBER:	
1	

Figure 3-6
Site-Wide Tidal Survey Summary Chart
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, NY



4.0 Analytical Results

This section summarizes the laboratory analytical results of surface soil, subsurface soil, groundwater, and NAPL (including Fingerprint and TPH) samples collected as part of the RI. Summaries of detected constituents by media are presented in Tables 4-1 through 4-3 (surface soil), Tables 4-4 through 4-7 (subsurface soil), Tables 4-8 through 4-11 (groundwater), and Table 4-12 (TPH fingerprint in soil) with complete analytical summary tables included in Appendix C (on CD). Fingerprint analytical data packages are included in Appendix E (on CD). The results of the data usability assessment are presented in the Data Usability Summary Report (DUSR) in Appendix F (on CD).

Soil sample analytical results were compared to NYSDEC Recommended Soil Cleanup Objectives (RSCOs), which are either presented in, or were determined following procedures presented in, Technical and Administrative Memorandum (TAGM) #4046 (NYSDEC, 1994). Groundwater samples were compared to NYSDEC Water Quality Standards. Water Quality Criteria (WQC) were obtained from the Division of Water Technical and Operational Guidance Series (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (NYSDEC, 1998), an errata data sheet dated January 1999 (NYSDEC, 1999), and an April 2000 Addendum (NYSDEC, 2000).

4.1 Surface Soil Results

A total of 12 soil samples and associated Quality Assurance/Quality Control (QA/QC) samples were collected from surface soil locations during the Site investigation activities. Five of these locations (SS-8 through SS-12) are background locations (locations outside the former MGP and EGP operational areas). The surface soil analytical results are summarized in Tables 4-1 through 4-3 and are shown on Figures 4-1 and 4-2. As per the Work Plan, surface soil samples were not analyzed for VOCs.

4.1.1 Semi-Volatile Organic Compounds

SVOCs were detected in all twelve surface soil samples (see Table 4-1). A total of 20 SVOCs were detected in at least one sample. The SVOCs detected were primarily PAHs. Out of the 20 SVOCs detected, 17 were PAHs and 3 were non-PAH SVOCs: dibenzofuran, carbazole, and bis(2-ethylhexyl) phthalate. Of the SVOCs detected, only 1 non-PAH, dibenzofuran, and 12 PAHs were detected at concentrations above their respective RSCOs. Dibenzofuran was detected at a concentration above its RSCO at only one location, SS-7. Dibenzofuran was not detected in any of the other surface soil samples. SS-7 is also the only location where the PAHs anthracene, fluoranthene, naphthalene, phenanthrene, and pyrene were detected. This location, therefore, has a significantly different SVOC signature than the other sample locations.

Comparison of the analytical data for SVOCs detected in surface soil from the five background samples (SS-8 through SS-12) to the data for the remaining seven surface soil samples (i.e., non-background samples) SS-1 through SS-7 shows that except for samples SS-5, SS-6, and SS-7, the non-background samples contained similar compounds and concentrations of PAHs to those in the background locations. Samples SS-6 and SS-7 were collected along the western boundary of the EGP in the MTA ROW and SS-5 was collected from near the northwest corner of the gas works building (see Figure 4-1). Potential sources of PAHs for these samples may be from operations of trains along the MTA ROW, operation of the aboveground fuel oil storage tank adjacent to these respective sample locations, or car and truck exhaust from traffic on North Water Street. The sources of SVOCs in surface soils, therefore, are likely not attributable to MGP or EGP operations.

4.1.2 Inorganics

As shown in Table 4-2, each of the 23 inorganic constituents was detected in one or more of the 12 surface soil samples. The concentrations of inorganic constituents were compared to the RSCOs. TAGM 4046 allows the use of background concentrations for inorganic constituents. Five surface soil samples were collected at background locations, so the RSCOs for inorganic constituents were selected using the following procedure:

- For constituents listed in TAGM 4046 as site background (SB), the highest detected concentration in the background samples was selected as the RSCO. The background data set was reviewed for outliers and if the concentration in one sample greatly exceeded the concentrations in the other samples, the highest concentration of the other samples (i.e., the non-outliers) was selected as the RSCO.
- For constituents with a default values (D) listed in TAGM 4046, the higher of the background value or the default value listed in TAGM 4046 was selected as the RSCO.
- For mercury, TAGM 4046 lists a value of 0.1 mg/kg and does not allow the use of a background value. The background value for mercury at the Pemart Site is 0.31 mg/kg.

One or more of the detected constituents were detected above RSCOs in 10 of the 12 surface soil samples. Concentrations of antimony, arsenic, barium, cadmium, calcium, chromium (total), copper, iron, mercury, nickel, selenium, silver, and zinc were detected above the RSCOs in at least one surface soil sample.

Based on the random distribution and concentrations of inorganics in surface soil in the vicinity of the former MGP and EGP sites, as shown on Figure 4-2, it is concluded that they were deposited from airborne sources (e.g., from the foundry, EGP, car and truck exhaust, and/or other historical industrial operations), runoff from the roadway (e.g., Briarcliff Peekskill Roadway), and/or from operation of the trains along the MTA ROW that form the western boundary of both the MGP and EGP. It is further noted that all of the metals detected are naturally occurring and are significant components of both the soil and bedrock.

Cyanide was detected at low concentrations in two of the twelve surface soil samples (SS-1 and SS-5) near the former MGP area at concentrations of 5.40 mg/kg and 1.77 mg/kg, respectively.

Based on the data validation, it was determined that the analytical results for lead in the surface soil samples were unusable. This conclusion was based on the finding that the laboratory QA analysis for the percent recovery of lead from the matrix spike (MS) sample for the batch of surface soil samples was outside the acceptable range (i.e., greater than 200%). This means that the lead data, as reported by the analytical laboratory, may be artificially biased high, and are unreliable. These data were rejected and are not included in Table 4-2.

4.1.3 Polychlorinated Biphenyls

One PCB, Aroclor 1260, was detected in surface soil sample SS-6 at a concentration of 240 µg/kg, which is well below the RSCO for PCBs of 1,000 µg/kg. No PCBs were detected in the other surface soil sample (SS-7) that was analyzed for PCBs. The detected PCB results are presented in Table 4-3.

4.2 Subsurface Soil Results

A total of 136 subsurface soil samples and associated QA/QC samples were collected from 50 sampling locations during the RI. The results of these analyses are provided in Tables 4-4 through 4-7 and are shown on Figures 4-3 through 4-5.

4.2.1 Volatile Organic Compounds

A total of 30 VOCs were detected in at least one subsurface soil sample (see Table 4-4). Of the VOCs detected, 16 were chlorinated VOCs, which are not related to MGP or EGP operations. The concentrations of 5 of the 16 chlorinated VOCs, 1,1,1-trichloroethane, 1,1-dichloroethane, tetrachloroethene, trichloroethene, and vinyl chloride, exceeded their respective RSCOs in one or more samples. A majority of the chlorinated VOCs detected at elevated concentrations were present in the soils collected from the floor of the crawl space beneath the EGP and downgradient of the EGP.

The concentrations of 5 of the 14 non-chlorinated VOCs detected, namely benzene, toluene, ethylbenzene, and the xylenes (collectively referred to as BTEX) and acetone exceeded their respective RSCOs in at least one sample. BTEX compounds were detected in 81 of the 136 soil samples. Total BTEX concentrations ranged from 0.3 µg/kg to 4,260,000 µg/kg. One or more BTEX compounds were detected above their respective RSCOs in fourteen subsurface soil samples. These elevated BTEX concentrations in subsurface soil were only detected in the vicinity of the former MGP, which exhibited physical evidence of MGP-residues or petroleum-residues, such as odor, staining, NAPL, and/or elevated PID readings. No BTEX compounds were detected above RSCOs in borings associated with the former EGP. Most elevated BTEX concentrations were detected at or below 9 ft bgs and above the upper silt/clay unit. The highest BTEX concentration was detected at 2 to 3 feet bgs between the former 30,000 cf and 100,000 cf gas holders. It is noted that the presence of methyl tert-butyl ether (MTBE), a gasoline additive, and isopropylbenzene, a component of refined fuels, such as diesel fuel, fuel oils, gasoline, etc., confirms that petroleum is an additional source of BTEX and other VOCs at the Site.

Total VOC concentrations in subsurface soil exceeded the RSCO for total VOCs of 10 µg/kg in 112 samples collected from 48 locations. Concentrations of total VOCs ranged from 12 µg/kg to 4,483,000 µg/kg. In approximately half of these samples, the elevated concentrations of total VOCs were constituted almost exclusively of chlorinated VOCs. The remaining samples with elevated total VOCs contained primarily BTEX and isopropylbenzene and some chlorinated VOCs.

4.2.2 Semi-Volatile Organic Compounds

A total of 30 SVOCs were detected at least once in 108 of the 135 subsurface soil samples collected during the RI. The SVOCs detected most frequently were PAHs. In addition to PAHs, the SVOCs 1,1-biphenyl; 2,4-dimethylphenol; 2-methylphenol; 4-methylphenol (p-cresol); acetophenone; benzaldehyde; bis(2-ethylhexyl) phthalate; carbazole; dibenzofuran; di-n-butyl phthalate; di-n-octyl phthalate; and phenol were also detected.

The concentrations of one or more of the PAHs detected exceeded their respective RSCOs in 98 subsurface soil samples. The samples that contained elevated PAHs concentrations typically also exhibited physical evidence of MGP-residues or petroleum, such as odor, staining, NAPL, and/or elevated PID readings. In addition to PAHs, four other SVOCs, dibenzofuran, 2-methylphenol, 4-methylphenol, and phenol, were detected in subsurface soil samples at concentrations that exceeded their respective RSCOs. Elevated dibenzofuran concentrations were detected in five subsurface soil samples collected in the vicinity of the former MGP generating house. The other three non-PAHs (2-methylphenol, 4-methylphenol, and phenol) were detected above their respective RSCOs in only one sample from soil boring SB-22/MW-10, which is the northern-most sample location and furthest from both the former EGP and MGP operating areas. The source for the phenol and substituted phenols is not known.

Total detected SVOC concentrations ranged from 45 µg/kg to 52,630,000 µg/kg. The highest concentration was detected at 2 to 3 feet bgs at soil boring SB-25 at a location between the former 30,000 cf and 100,000 cf gas holders. In general, the SVOC concentrations above the RSCO for total SVOCs of 500,000 µg/kg, were detected in subsurface soils collected from soil borings located in the vicinity of the former gas holders, gas house and downgradient from the former gas works. Additionally, at most, but not all locations, the higher

concentrations of total PAHs were detected in shallow samples between approximately 5 and 11 feet bgs and above the upper silt/clay unit. Subsurface soil samples collected within the upper portions (approximately the top seven feet or less) of this upper silt/clay unit had significantly lower concentrations of SVOCs than the shallower samples.

4.2.3 Inorganics

All inorganics (a total of 23 inorganics were included in the inorganic analyte list) and total cyanide were detected in at least one of the 134 subsurface soil samples collected. The RSCOs established for surface soils were used for subsurface soils with the addition of 400 mg/kg as the RSCO for lead, based on the US EPA Residential standard. Twenty of these inorganics, specifically aluminum, antimony, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, mercury, nickel, selenium, silver, thallium, vanadium, and zinc, were detected at concentrations above their respective RSCOs. All but 25 of the samples had at least one constituent detected above a RSCO. The concentrations of metals that exceeded their respective RSCOs were detected in shallow subsurface soil samples comprised of fill materials (a variety of materials including coal, coal ash, and debris) and in deeper native subsurface soils. Inorganic RSCO exceedances were also observed in subsurface soils below the fill material that did not exhibit any evidence of contamination (e.g., odor or staining, NAPL, elevated VOCs or SVOCs concentrations, etc.). Although the inorganics detected may be related to MGP residues, they also are naturally-occurring common components of soil and bedrock, therefore, their presence is attributed to both natural and anthropogenic sources.

Cyanide was detected in 17 subsurface soil samples generally in the upper 5 feet bgs. The maximum detection, 38.2 mg/kg, was detected in soil sample SB-18 (2-2.5 ft bgs), which was located to the north of the site in the former EGP. There is no RSCO for cyanide.

4.2.4 Polychlorinated Biphenyls

A total of 32 subsurface soil samples were analyzed for PCBs. These samples were collected in the vicinity of the EGP. The analytical results show that Aroclor 1260 was detected in three samples, MH-3, MW-5, and SB-23. Concentrations of Aroclor 1260 in these samples ranged from 58 µg/kg (MH-3 at 5-6 feet bgs) to 140 µg/kg (SB-23 at 3.3-3.5 ft bgs). These concentrations are all well below the RSCO for PCBs of 1,000 µg/kg. Sample MH-3 (5-6 ft bgs) was collected from the crawl space beneath the EGP and sample SB-23 (3.3-3.5 ft bgs) was collected beneath the EGP. Aroclor 1260 was detected at MW-5, located immediately downgradient (south) of the EGP, at 21 to 23 ft bgs at 110 µg/kg, but was non detect at 39 µg/kg in the duplicate sample collected at this location and depth. PCBs were not detected in any other samples. The source of PCBs is not known.

4.3 Groundwater Analytical Results

A total of 23 groundwater samples including QA/QC samples were collected from 21 monitoring wells installed during the RI. These 21 monitoring wells include 16 shallow monitoring wells, 2 intermediate depth monitoring wells, and 3 bedrock monitoring wells. Groundwater samples were not collected from six monitoring wells (MW-2, MW-3, MW-4, MW-7, SB-32/MW-5, and SB-11/MW-27) where evidence of NAPL was detected. The groundwater analytical results are provided in Tables 4-8 through 4-11 and are shown on Figures 4-6 through 4-8.

4.3.1 Volatile Organic Compounds

A total of 23 VOCs, including 11 chlorinated VOCs, were detected in at least one of the 21 groundwater samples. The concentrations of 9 VOCs exceeded their respective WQC in at least one sample. The non-

chlorinated VOCs detected at elevated concentrations were BTEX, which are the potentially MGP-related VOCs. At least one BTEX compound was detected in groundwater at six of the monitoring wells; three shallow monitoring wells (MW-5, MW-6, and MW-12), one intermediate monitoring well (MW-17), and two bedrock monitoring wells (MW-1B and MW-9). These detections were all in the vicinity of and downgradient from the 30,000 cf and 200,000 cf gas holders and the 25,000 gallon fuel oil tank. Total BTEX concentrations ranged from 0.8 µg/l to 747.4 µg/l. One or more BTEX compounds were detected at concentrations above the WQC in three shallow monitoring wells (MW-5, MW-6, and MW-12) and one bedrock monitoring well (MW-9).

Seven non-chlorinated VOCs (2-butanone, carbon disulfide, cyclohexane, isopropylbenzene, MTBE, methylcyclohexane, and styrene), not including BTEX discussed above, were detected in groundwater samples and only one of these non-chlorinated VOCs (MTBE) was detected above the WQC. MTBE, a gasoline additive, was detected in a total of five monitoring wells, three located along the MTA ROW (SB-14/MW-23, SB-12/MW-25, and SB-13/MW-24), one at the north end of North Water Street (SB-22/MW-10), and one in the municipal parking lot in the southern portion of the site (MW-8). None of the MTBE detections coincided with the BTEX detections. MTBE was detected above the WQC in shallow monitoring well SB-14/MW-23.

Concentrations of 5 of the 10 detected chlorinated VOCs exceeded their respective NYSDEC WQC. Elevated concentrations of chlorinated VOCs were only detected in groundwater samples collected from shallow wells. Chlorinated VOCs were not detected above WQC in the intermediate or bedrock monitoring wells. As previously noted, chlorinated VOCs are not related to MGP or EGP operations. The 10 chlorinated VOCs detected are: 1,1,1-trichloroethane; 1,1-dichloroethane; 1,1-dichloroethene; chloroethane; chloroform; chloromethane; cis-1,2-dichloroethane; trans-1,2-dichloroethene; trichloroethene, and vinyl chloride.

4.3.2 Semi-Volatile Organic Compounds

A total of 15 SVOCs were detected at least once in 9 of the 21 monitoring wells sampled including 6 shallow wells, 1 intermediate well, and 2 bedrock wells. The SVOCs detected included 1,1-biphenyl; 4-methylphenol (p-cresol); acetophenone; bis(2-ethylhexyl)phthalate; dibenzofuran; phenol; and PAHs. The PAHs were detected most frequently.

The concentrations of phenol and two PAHs (acenaphthene and naphthalene) exceeded the WQC in one or more wells. WQC were exceeded in five monitoring wells including four shallow wells (MW-5, MW-6, MW-8, and MW-12) and one bedrock well (MW-9). Total PAH concentrations ranged from 2.3 µg/l to 2,736 µg/l.

4.3.3 Inorganics

A total of 20 of the 24 inorganic constituents analyzed for in groundwater samples (aluminum, arsenic, barium, cadmium, calcium, chromium, cobalt, copper, cyanide, iron, lead, magnesium, manganese, mercury, nickel, potassium, sodium, thallium, vanadium, zinc) were detected in at least one of the 21 monitoring wells sampled. The constituents antimony, beryllium, selenium, and silver were not detected in any of the groundwater samples. Only six inorganic constituents were detected above their respective WQC in one or more of the groundwater samples: iron, lead, magnesium, manganese, sodium, and thallium. The exceedances of WQC were observed in shallow, intermediate, and bedrock wells, and similar to subsurface soils, the occurrence of these exceedances may be attributed to both natural and anthropogenic sources. Most wells had elevated turbidity when sampled and, therefore, the groundwater samples contained naturally occurring inorganics associated with this turbidity. The presence of sodium above the WQC in all the shallow wells and in some of the intermediate and bedrock monitoring wells may reflect the brackish nature of the Hudson River influencing the groundwater quality at the Site.

Cyanide, a potential MGP-related constituent, was detected in 3 of the 21 monitoring wells, MW-1A (0.0185 mg/l), MW-23 (0.0189 mg/l), and MW-24 (0.0155 mg/l). However, at each of these locations, the

cyanide concentration was below the WQC. Groundwater samples from 17 monitoring wells were also analyzed for amenable cyanide (ACN), which was not detected in any of the samples.

Groundwater samples were collected from two monitoring wells (MW-5 and SB-21/MW-1B) with slightly elevated to elevated pH (9.87 and 11.2) and were analyzed for alkalinity as well as chloride and sulfate anions. The results are included in Table 4-11. The locations with elevated to slightly elevated pH are not locations where relatively elevated concentrations of calcium were observed. The typical source of elevated pH at MGP sites is the use of calcium hydroxide (lime). The absence of a correlation between calcium and pH at the Site indicates that calcium hydroxide may not be the source of the elevated pH.

4.3.4 Polychlorinated Biphenyls

Groundwater samples from 21 monitoring wells were submitted for PCB analysis. PCBs were not detected in any of these samples.

4.4 NAPL Results (Fingerprint and TPH Analysis)

Coal tar and/or petroleum-related NAPL was detected in 22 soil borings (SB-7, SB-8, SB-9, SB-10, SB-11, SB-16, SB-20, SB-25, SB-29, SB-32, SB-33, SB-41, SB-5/MW-2, SB-6/MW-3, MW-4, MW-5, MW-6, MW-7, MW-12, MH-1, MH-2, and MH-3). Eleven of the locations contained evidence of coal tar NAPL (i.e., SB-7, SB-8, SB-9, SB-10, SB-20, SB-25, SB-29, SB-41, SB-6/MW-3, MW-6, and MW-7); four of the locations contained evidence of petroleum-related NAPL (i.e., SB-16, MH-1, MH-2, and MH-3); and seven of the locations contained evidence of both coal tar NAPL and petroleum-related NAPL (i.e., SB-11, SB-32, SB-33, SB-5/MW-2, MW-4, MW-5, and MW-12).

Nine samples containing NAPL were submitted to META for extended PAH scan and GC/FID fingerprint analyses. The laboratory analytical reports from META are included in Appendix E. One sample that contained evidence of petroleum-related NAPL, MH-1(5-6), was also submitted to CAS for Total Petroleum Hydrocarbon (TPH) fingerprint (product identification) analysis. The results of the CAS analyses are summarized in Table 4-12. The fingerprint results for the various NAPL types detected are summarized below.

In general, the META analytical results indicated that both petrogenic materials (a material produced from unburned petroleum products such as fuel oil, diesel, fuel, gasoline, lubricating oils, etc.) and/or pyrogenic materials (a material produced under intense heat during burning) were detected. Both petrogenic and pyrogenic materials may be produced by the coal gasification process. Petrogenic materials include coal, crude oil, and derivatives such as gasoline, fuel oils, and asphalt.

Coal Tar NAPL - Coal tar NAPL was detected in samples from 11 soil boring locations (i.e., SB-7, SB-8, SB-9, SB-10, SB-20, SB-25, SB-29, SB-41, SB-6/MW-3, MW-6, and MW-7). Three samples from these locations, SB-25 (7), SB-6/MW-3 (4.5-5), and SB-6/MW-3 (5-6) were submitted to META for analysis. The META results indicate that the SB-25 and SB-6/MW-3 (4.5-5) soil samples contained pyrogenic materials from a relatively low temperature process and are similar to some carbureted water gas tars such as a gas plant in META's library. The META results for the SB-6/MW-3 (5-6) sample indicate that it is a petrogenic material consistent with severely weathered heavy fuel oil.

Petroleum-Related NAPL - Petroleum-related NAPL was detected in subsurface soil samples from five locations (i.e., SB-6/MW-3, SB-16, MH-1, MH-2, and MH-3). Two samples, MH-1 (5-6) and SB-6 (5-6), were submitted to META for analysis. The MH-1 (5-6) sample was also submitted to CAS for TPH fingerprint analysis. Sample MH-1 was collected from soils in the crawl space under the former EGP building. The META results indicate that the sample is a petrogenic material and it appears to be a mixture of two or more high molecular weight lubricating oils, such as motor oil, cutting oil, or gear oil. The CAS TPH fingerprint

results show that diesel range organics (DRO) were detected at a concentration of 20,000,000 µg/kg. The META results for the SB-6 sample (collected in the same boring as MW-3) indicate that it is a petrogenic material consistent with severely weathered heavy fuel oil. Based on the extent of petroleum-related NAPL, as shown on Figure 3-7, it appears that the former fuel oil tank located on the former MGP property is the likely source of this petroleum-related NAPL. The distribution of this NAPL north and south along the former Pemart Avenue also indicates that the migration of the petroleum-related NAPL was likely along utility trenches.

Mixed NAPL - Coal tar NAPL and petroleum-related NAPL were detected in subsurface soil samples from seven locations (i.e., SB-11, SB-32, SB-33, SB-5/MW-2, MW-4, MW-5, and MW-12). Five samples from these locations, SB-5/MW-2 (5.5), SB-5/MW-2 (4.5-5), MW-5 (5), MW-5 (9-11), and SB-32 (17-19), were submitted to META for analysis. The META results indicate that the sample from MW-5 (5) is a petrogenic material, the samples from SB-5/MW-2 (4.5-5), MW-5 (9-11), and SB-32 (17-19) are pyrogenic materials, and the sample SB-5/MW-2 (5.5) is a mixture of petrogenic and pyrogenic materials. Four of these samples (SB-5/MW-2 (4.5-5), SB-5/MW-2 (5.5), MW-5 (9-11), and SB-32 (17-19)) have the characteristics of tars from a low temperature process such as the water gas process. Two of these four samples, MW-2 (4.5-5) and SB-5 (5.5), also may have the characteristics of weathered heavy fuel oil or residual oil. In addition, the characteristics of the NAPL in subsurface soil sample MW-2 (4.4-5) is consistent with those for weathered fuel oil. This sample also has an unidentified light oil-like material which appears to be mixed with, but unrelated to the tar-like material. These samples were taken downgradient of the former 25,000-gallon fuel oil tank and the 30,000 cf gas holder, respectively, and support the conclusion that the impacts detected in these samples represent a mixture of residues from these two potential sources.

4.5 Analytical Results Summary

This section provides a summary of the analytical results.

- SVOCs and inorganics were detected in surface soils collected from across the Site at concentrations above RSCOs. It is noted that similar levels of these analytes were also detected in background surface soil samples. The occurrence of these analytes at the concentrations detected appears to be attributable primarily to the input from airborne deposition from various historical industrial operations in this area of Peekskill and runoff of surface water from the Briarcliff-Peekskill Parkway.
- VOCs and SVOCs were detected in subsurface soils and groundwater at concentrations above RSCOs and WQC in areas of the Site where field evidence of MGP impacts was also detected. Inorganics were also detected in subsurface soils and groundwater at concentrations above RSCOs and WQC. The inorganic exceedances of RSCOs and WQC are not consistent with the VOC and SVOC exceedances and, therefore, indicate that the inorganics may be attributed to both natural and anthropogenic sources.
- Sodium was present above the WQC in all the shallow wells and some of the intermediate and bedrock monitoring wells and may reflect the brackish nature of the Hudson River impacting the water quality of the groundwater at the Site.
- NAPL was found primarily at shallow depths. It penetrates only the upper-most portions of the upper silt/clay unit. It was not observed below the upper-most portions of the upper silt/clay unit or in the lower sand unit, lower silt/clay unit, weathered bedrock, or in bedrock.
- The NAPL fingerprint analytical results indicate that both petrogenic materials and/or pyrogenic materials were detected. In general, the NAPL samples have the characteristics of tars from a low temperature process such as the water gas process and/or of weathered heavy fuel oil or residual oil.
- Evidence of an unknown petroleum product was detected in the soils found in the EGP crawl space. Based on fingerprint analysis, this material appeared to be a light oil and is not attributable to former operations of either the EGP or MGP.
- PCBs were not detected in any soil or groundwater sample above the applicable standards.

Table 4-1
Summary of Detected Semivolatile Organic Constituents in Surface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup	Location ID Sample Date Sample ID	SS-1 3/9/2006 SS1	SS-2 3/9/2006 SS2	SS-3 3/9/2006 SS3	SS-4 3/9/2006 SS4	SS-5 3/9/2006 SS5	SS-6 3/9/2006 SS6	SS-7 3/9/2006 SS7	SS-8 3/9/2006 SS8
Polycyclic Aromatic Hydrocarbons (PAHs) - ug/kg										
BENZO(A)ANTHRACENE	224		2300 J	780 J	2400 J	2500 J	17000	5900	110000	2900 J
BENZO(A)PYRENE	61		2500 J	860 J	3200 J	2500 J	19000	7500	100000	2900 J
BENZO(B)FLUORANTHENE	1100		2200 J	610 J	3000 J	2500 J	13000	5500	83000	2700 J
BENZO(K)FLUORANTHENE	1100		2300 J	740 J	2600 J	2000 J	15000	5900	85000	2700 J
CHRYSENE	400		3200 J	1100 J	3400 J	2900	19000	6800	110000	3500 J
DIBENZ(A,H)ANTHRACENE	14		19000 U	4900 U	860 J	470 J	3500 J	1200 J	16000 J	9900 U
INDENO(1,2,3-CD)PYRENE	3200		19000 U	530 J	2100 J	1400 J	11000	3800 J	43000	1700 J
2-METHYLNAPHTHALENE	36400		19000 U	4900 U	560 J	480 J	3100 J	1400 J	7800 J	9900 U
ACENAPHTHENE	50000		19000 U	4900 U	4400 U	2900 U	8500 U	470 J	27000	9900 U
ACENAPHTHYLENE	41000		19000 U	780 J	4600	1200 J	20000	4400 J	3100 J	1500 J
ANTHRACENE	50000		19000 U	4900 U	1600 J	700 J	9300	2200 J	57000	1100 J
BENZO(G,H,I)PERYLENE	50000		2600 J	750 J	2700 J	1600 J	14000	4700	41000	1700 J
FLUORANTHENE	50000		3300 J	1000 J	3200 J	4800	20000	9600	280000	5900 J
FLUORENE	50000		19000 U	4900 U	4400 U	2900 U	8500 U	4500 U	26000 J	9900 U
NAPHTHALENE	13000		19000 U	4900 U	710 J	580 J	5100 J	1900 J	21000 J	9900 U
PHENANTHRENE	50000		19000 U	4900 U	1500 J	2200 J	7700 J	4800	220000	3300 J
PYRENE	50000		4200 J	1400 J	4200 J	4200	28000	9600	190000	4800 J
BAP-TE	NA		13426.2	3510.5	4839.4	3632.9	26769	10285.8	140560	8610.5
Total PAHs	NA		22600	8550	36630	30030	204700	75670	1419900	34700
Semi-Volatile Organic Compounds (SVOCs) - ug/kg										
BIS(2-ETHYLHEXYL) PHTHALATE	50000		19000 U	4900 U	500 J	550 J	20000	820 J	26000 U	9900 U
CARBAZOLE	NA		19000 U	4900 U	4400 U	340 J	8500 U	4500 U	35000	9900 U
DIBENZOFURAN	6200		19000 U	4900 U	4400 U	2900 U	8500 U	4500 U	18000 J	9900 U
Total SVOCs (including PAHs)	NA		22600	8550	37130	30920	224700	76490	1472900	34700
Notes ug/kg - micrograms per kilogram RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. NA - Not Available Bolded values are detections. Shaded are detections above the NYSDEC Recommended Soil Cleanup objective										

Table 4-1
Summary of Detected Semivolatile Organic Constituents in Surface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup	Location ID Sample Date Sample ID	SS-9 3/9/2006 SS9	SS-10 3/8/2006 SS10	SS-11 3/8/2006 SS11	SS-12 3/9/2006 SS12	Number Detected	Number Samples Collected	Minimum Detect	Maximum Detect	Number of Samples Exceeding Standard
Polycyclic Aromatic Hydrocarbons (PAHs) - ug/kg											
BENZO(A)ANTHRACENE	224		2900 J	200 J	340 J	620 J	12	12	200	110000	11
BENZO(A)PYRENE	61		3300 J	230 J	360 J	730 J	12	12	230	100000	12
BENZO(B)FLUORANTHENE	1100		2500 J	230 J	340 J	710 J	12	12	230	83000	8
BENZO(K)FLUORANTHENE	1100		2600 J	200 J	350 J	620 J	12	12	200	85000	8
CHRYSENE	400		4200 J	320 J	480	930 J	12	12	320	110000	11
DIBENZ(A,H)ANTHRACENE	14		540 J	440 U	59 J	1700 U	7	12	59	16000	7
INDENO(1,2,3-CD)PYRENE	3200		1500 J	110 J	160 J	310 J	11	12	110	43000	3
2-METHYLNAPHTHALENE	36400		4600 U	91 J	130 J	360 J	8	12	91	7800	0
ACENAPHTHENE	50000		4600 U	440 U	440 U	1700 U	2	12	470	27000	0
ACENAPHTHYLENE	41000		1800 J	110 J	210 J	360 J	11	12	110	20000	0
ANTHRACENE	50000		1200 J	68 J	130 J	210 J	10	12	68	57000	1
BENZO(G,H,I)PERYLENE	50000		1800 J	110 J	170 J	330 J	12	12	110	41000	0
FLUORANTHENE	50000		5300	450	720	1400 J	12	12	450	280000	1
FLUORENE	50000		4600 U	440 U	440 U	1700 U	1	12	26000	26000	0
NAPHTHALENE	13000		470 J	93 J	130 J	400 J	9	12	93	21000	1
PHENANTHRENE	50000		3100 J	270 J	430 J	810 J	10	12	270	220000	1
PYRENE	50000		5700	430 J	680	1300 J	12	12	430	190000	1
BAP-TE	NA		4560.2	506.32	506.98	1751.13					
Total PAHs	NA		36910	2912	4689	9090					
Semi-Volatile Organic Compounds (SVOCs) - ug/kg											
BIS(2-ETHYLHEXYL) PHTHALATE	50000		650 J	440 U	100 J	1700 U	6	12	100	20000	0
CARBAZOLE	NA		4600 U	440 U	440 U	1700 U	2	12	340	35000	
DIBENZOFURAN	6200		4600 U	440 U	440 U	1700 U	1	12	18000	18000	1
Total SVOCs (including PAHs)	NA		37560	2912	4789	9090					
Notes ug/kg - micrograms per kilogram RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. NA - Not Available Bolded values are detections. Shaded are detections above the NYSDEC Recommended Soil Cleanup objective											

Table 4-2
Summary of Detected Inorganic Constituents in Surface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC TAGM 4046 Criteria	Site Background	Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID	SS-1 3/9/2006 SS1	SS-2 3/9/2006 SS2	SS-3 3/9/2006 SS3	SS-4 3/9/2006 SS4	SS-5 3/9/2006 SS5	SS-6 3/9/2006 SS6	SS-7 3/9/2006 SS7
Inorganics - mg/kg											
ALUMINUM (FUME OR DUST)	SB	17200	17200 (SB)		5900	8360	8160	6750	10600	9580	8420
ANTIMONY	SB	1.9	1.9 (SB)		0.85 U	1.1 U	0.97 U	1.1 U	9.4	2	2.7
ARSENIC	7.5 or SB	34.2	34.2 (SB)		17.5	36.3	12.0	12.5	95.1	19.0	79.3
BARIIUM	300 or SB	136	300 (D)		85.8	87.6	133	152	413	252	316
BERYLLIUM	0.16 or SB	0.27	0.27 (SB)		0.02 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
CADMIUM	1 or SB	1.2	1.2 (SB)		1.8	0.57	2.7	1.6	3	2.8	1.1
CALCIUM METAL	SB	12600	12600 (SB)		44700	18200	6840	7000	6360	15900	5740
CHROMIUM (TOTAL)	10 or SB	21.7	21.7 (SB)		15.9	18.5	30	18.6	47.4	25.1	20.1
COBALT	30 or SB	21.2	30 (D)		8.9	7.1	8.8	8.3	11.7	9.5	8.5
COPPER	25 or SB	144	144 (SB)		83.3 J	46.3 J	66.0 J	80.6 J	190 J	153 J	110 J
CYANIDE	NA	NA	NA		5.40	1.48 U	1.34 U	1.46 U	1.77	1.37 U	1.29 U
IRON	2000 or SB	30200	30200 (SB)		33300	18800	27000	24600	49700	24400	35000
LEAD	NA	NA	400 (EPA)		R	R	R	R	R	R	R
MAGNESIUM	SB	7190	7190 (SB)		27200	10600	4200	2480	3410	5110	2570
MANGANESE	SB	676	676 (SB)		277	351	299	352	283	334	487
MERCURY	0.1	0.31	0.31 (SB)		0.14	0.22	18	1.5	23.9	0.38	0.41
NICKEL	13 or SB	22.5	22.5 (SB)		16.4	16.2	19.0	17.8	30.3	24.9	18.4
POTASSIUM	SB	2080	2080 (SB)		1490	1450	1560	1160	1620	1400	1310
SELENIUM	2 or SB	2.5	2.5 (SB)		0.90 J	0.89 U	0.77 U	2.9	4.1	2.0 J	2.7
SILVER	SB	0.15	0.15 (SB)		0.09 U	0.12 U	0.10 U	0.11 U	0.10 U	0.11 U	0.21 U
SODIUM	SB	646	646 (SB)		276	120	143	130	288	152	125
THALLIUM	SB	0.37	0.37 (SB)		0.17	0.17	0.13 U	0.26	0.31	0.23	0.29
VANADIUM	150 or SB	54	150 (D)		50.9	28.0	29.5	26.6	53.0	26.1	26.8
ZINC	20 or SB	260	260 (SB)		188 J	219 J	497 J	374 J	826 J	554 J	502 J
Notes mg/kg - milligrams per kilogram RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. NA - Not Available Bolded values are detections. Shaded are detections above the Recommended Soil Cleanup Objective (D) - Based on NYSDEC TAGM 4046 Criteria. (SB) - Based on Site Background. EPA - Indicates EPA residential lead standard											

Table 4-2
Summary of Detected Inorganic Constituents in Surface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC TAGM 4046 Criteria	Site Background	Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID	SS-8 3/9/2006 SS8	SS-9 3/9/2006 SS9	SS-10 3/8/2006 SS10	SS-11 3/8/2006 SS11	SS-12 3/9/2006 SS12	Number Detected	Number Samples Collected	Minimum Detect	Maximum Detect	Number of Samples Exceeding Recommended Soil Cleanup Objective
Inorganics - mg/kg														
ALUMINUM (FUME OR DUST)	SB	17200	17200 (SB)		12600	9160	17200	13100	14500	12	12	5900	17200	0
ANTIMONY	SB	1.9	1.9 (SB)		4.6	1.9	0.96 U	0.97 U	1.3 U	5	12	1.9	9.4	4
ARSENIC	7.5 or SB	34.2	34.2 (SB)		34.2	8.1	8.8	7.6	14.7	12	12	7.6	95.1	3
BARIIUM	300 or SB	136	300 (D)		2210	136	79.5	99.0	111	12	12	79.5	2210	3
BERYLLIUM	0.16 or SB	0.27	0.27 (SB)		0.03 U	0.03 U	0.03 U	0.22	0.27	2	12	0	0.27	0
CADMIUM	1 or SB	1.2	1.2 (SB)		115	1.1	0.23	1.2	0.39	12	12	0.23	115	6
CALCIUM METAL	SB	12600	12600 (SB)		12600	27300	1210	3240	5310	12	12	1210	44700	4
CHROMIUM (TOTAL)	10 or SB	21.7	21.7 (SB)		80.4	15.4	21.7	14.3	16.3	12	12	14.3	80.4	4
COBALT	30 or SB	21.2	30 (D)		21.2	9.4	7.9	6.4	6.7	12	12	6.4	21.2	0
COPPER	25 or SB	144	144 (SB)		144 J	65.0 J	31.5 J	6030 J	47.1 J	12	12	31.5	6030	3
CYANIDE	NA	NA	NA		1.50 U	1.39 U	1.33 U	1.34 U	1.73 U	2	12	1.77	5.4	
IRON	2000 or SB	30200	30200 (SB)		30200	22800	21100	17100	20200	12	12	17100	49700	3
LEAD	NA	NA	400 (EPA)		R	R	R	R	R		12			
MAGNESIUM	SB	7190	7190 (SB)		7190	16000	4080	2650	2080	12	12	2080	27200	3
MANGANESE	SB	676	676 (SB)		676	459	240	526	580	12	12	240	676	0
MERCURY	0.1	0.31	0.31 (SB)		2.8	0.18	0.17	0.26	0.31	12	12	0.14	23.9	6
NICKEL	13 or SB	22.5	22.5 (SB)		22.5	15.8	14.5	13.6	14.5	12	12	13.6	30.3	2
POTASSIUM	SB	2080	2080 (SB)		2080	1770	1110	965	775	12	12	775	2080	0
SELENIUM	2 or SB	2.5	2.5 (SB)		0.87 U	1.1 J	2.1 J	2.3 J	2.5 J	9	12	0.9	4.1	3
SILVER	SB	0.15	0.15 (SB)		0.12 U	0.11 U	0.10 U	0.43	0.15	2	12	0.15	0.43	1
SODIUM	SB	646	646 (SB)		315	450	62.5	134	646	12	12	62.5	646	0
THALLIUM	SB	0.37	0.37 (SB)		0.19	0.33	0.37	0.18	0.26	11	12	0.17	0.37	0
VANADIUM	150 or SB	54	150 (D)		34.6	54	35.8	26.3	38.8	12	12	26.1	54	0
ZINC	20 or SB	260	260 (SB)		3510 J	260 J	100 J	1010 J	104 J	12	12	100	3510	7
Notes mg/kg - milligrams per kilogram RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. NA - Not Available Bolded values are detections. Shaded are detections above the Recommended Soil Cleanup Objective (D) - Based on NYSDEC TAGM 4046 Criteria. (SB) - Based on Site Background. EPA - Indicates EPA residential lead standard														

Table 4-3
Summary of Detected Polychlorinated Biphenyl Constituents in Surface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID	SS-6 3/9/2006 SS6	SS-7 3/9/2006 SS7	Number Detected	Number Samples Collected	Minimum Detect	Maximum Detect	Number of Samples Exceeding Standard
PCBs - ug/kg									
AROCLOR 1260	1000		240	43 U	1	2	240	240	0
Total PCBs			240						
Notes ug/kg - micrograms per kilogram RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. Bolded values are detections.									

Table 4-4
Summary of Detected Volatile Organic Constituents in Subsurface Soil
Pemat Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	MH-1 5/2/2006 SB27(5-6) 5 - 6 ft	MH-2 5/5/2006 MH-2 (5-6) 5 - 6 ft	MH-3 5/5/2006 MH-3 (5-6) 5 - 6 ft	MW-4 8/31/2005 MW-4 (5-5.5) 5 - 5.5 ft	MW-4 3/21/2006 MW-4(7-9) 7 - 9 ft	MW-4 3/21/2006 MW-4(9-11) 9 - 11 ft	MW-5 8/18/2005 MW-5 (2-2.5) 2 - 2.5 ft	MW-5 8/18/2005 MW-5 (5) 5 - 5 ft	MW-5 9/9/2005 MW-5 (9-11) 9 - 11 ft
BTEX Compounds - ug/kg											
BENZENE	60		3.7 J	4500 U	1.6 J	11	9.5	110 J	530 U	580 U	890 U
ETHYLBENZENE	5500		3.5 J	4500 U	10 UJ	5.9 J	29	1100	530 U	580 U	5100
m,p-Xylenes	1200		11 J	4500 U	10 UJ	15	13	540 J	530 U	580 U	750 J
TOLUENE	1500		17 UJ	4500 U	10 UJ	7.9	6.8	240 J	55 J	580 U	890 U
XYLENE, O-	1200		18 J	4500 U	10 UJ	6.6	14	470 J	530 U	580 U	1900
Total BTEX			36.2		1.6	46.4	72.3	2460	55		7750
Volatile Organic Compounds (VOCs) - ug/kg											
1,1,1-TRICHLOROETHANE	800		17 UJ	4500 U	10 UJ	5.7 U	4.9 U	870 U	530 U	580 U	890 U
1,1,2-TRICHLOROETHANE			17 UJ	4500 U	10 UJ	5.7 U	4.9 U	870 U	530 U	580 U	890 U
1,1-DICHLOROETHANE	200		17 UJ	4500 U	10 UJ	8.2	4.9 U	870 U	530 U	580 U	890 U
1,1-DICHLOROETHENE	400		1.8 J	4500 U	10 UJ	0.91 J	4.9 U	870 U	530 U	580 U	890 U
2-BUTANONE	300		68 J	9100 U	11 J	11 J	4.6 J	1700 U	1100 U	1200 U	1800 U
ACETONE	200		300 J	18000 UJ	64 J	44	22 J	200 J	2100 UJ	2300 UJ	3500 U
CARBON DISULFIDE	2700		3.4 J	9100 U	1.9 J	1.1 J	1.1 J	83 J	1100 U	1200 U	1800 U
CARBON TETRACHLORIDE	600		17 UJ	4500 U	10 UJ	5.7 U	4.9 U	870 U	530 U	580 U	890 U
CHLOROBENZENE	1700		17 UJ	4500 U	10 UJ	5.7 U	4.9 U	870 U	530 U	580 U	890 U
CHLORODIBROMOMETHANE			17 UJ	4500 U	10 UJ	5.7 U	4.9 U	870 U	530 U	580 U	890 U
CHLOROETHANE	1900		34 UJ	9100 U	20 UJ	2.9 J	0.39 J	1700 U	1100 U	1200 U	1800 U
CHLOROFORM	300		17 UJ	4500 U	10 UJ	5.7 U	4.9 U	870 U	270 J	580 U	890 U
CIS-1,2-DICHLOROETHENE			390 J	130000	59 J	5.7 U	4.9 U	870 U	140 J	130 J	160 J
CYCLOHEXANE			3.5 J	4500 U	0.89 J	5.7 U	4.9 UJ	870 UJ	530 U	580 U	890 U
DICHLOROMETHANE	100		34 UJ	4500 U	10 UJ	0.56 J	4.9 U	870 U	530 U	580 U	890 U
ISOPROPYLBENZENE			10 J	4500 U	10 UJ	1.8 J	8.4	460 J	530 U	73 J	2500
METHYL ACETATE			34 UJ	9100 U	20 UJ	11 U	9.7 U	170 J	1100 U	1200 U	1800 U
METHYL TERT-BUTYL ETHER			17 UJ	4500 U	10 UJ	5.7 U	4.9 U	870 U	530 U	580 U	890 U
METHYLCYCLOHEXANE			17 UJ	4500 U	0.69 J	5.7 U	0.90 J	870 UJ	530 U	180 J	890 U
STYRENE			17 UJ	4500 U	10 UJ	2.0 J	4.9 U	66 J	530 U	580 U	890 U
TETRACHLOROETHENE	1400		1.8 J	4500 U	10 UJ	5.7 U	4.9 U	870 U	380 J	580 U	890 U
TRANS-1,2-DICHLOROETHENE			27 J	1500 J	4.1 J	5.7 U	4.9 U	870 U	530 U	580 U	890 U
TRICHLOROETHENE	700		110 J	440 J	21 J	0.49 J	4.9 U	870 U	7800	300 J	400 J
TRICHLOROFLUOROMETHANE			17 UJ	4500 U	10 UJ	5.7 U	4.9 U	870 U	530 U	580 U	890 U
VINYL CHLORIDE	200		300 J	11000	12 J	5.7 U	4.9 U	870 U	530 U	580 U	890 U
Total VOCs (including BTEX)	10000		1251.7	142940	176.18	119.36	109.69	3439	8645	683	10810
Notes ug/kg - micrograms per kilogram RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. Bolded values are detections. Shaded are detections above the NYSDEC Recommended Soil Cleanup objective											

Table 4-4
Summary of Detected Volatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	MW-5 9/9/2005 MW-5 (13-15) 13 - 15 ft	MW-5 9/9/2005 MW-5 (21-23) 21 - 23 ft	MW-5 (DUP) 9/9/2005 DUP-1 21 - 23 ft	MW-6 3/14/2006 MW6(4-4.5) 4 - 4.5 ft	MW-6 (DUP) 3/14/2006 MW60(4-4.5) 4 - 4.5 ft	MW-7 3/13/2006 MW7(4-5) 4 - 5 ft	MW-7 3/13/2006 MW7(9-11) 9 - 11 ft	MW-7 3/13/2006 MW7(13-15) 13 - 15 ft	MW-7 3/13/2006 MW7(27-29) 27 - 29 ft
BTEX Compounds - ug/kg											
BENZENE	60		0.96 J	5.0 U	4.5 U	6.3	11	4.7 J	1500	7.9 U	6.4 U
ETHYLBENZENE	5500		46	5.0 U	4.5 U	4.7 U	4.9 U	0.38 J	6600	1.4 J	6.4 U
m,p-Xylenes	1200		6.5 J	5.0 U	4.5 U	0.68 J	1.4 J	1.0 J	1800	7.9 U	6.4 U
TOLUENE	1500		0.63 J	5.0 U	4.5 U	5.2 J	9.8	2.6 J	1400	7.9 U	6.4 U
XYLENE, O-	1200		16	5.0 U	4.5 U	4.7 U	0.50 J	0.48 J	1100	7.9 U	6.4 U
Total BTEX			70.09			12.18	22.7	9.16	12400	1.4	
Volatile Organic Compounds (VOCs) - ug/kg											
1,1,1-TRICHLOROETHANE	800		6.2 U	5.0 U	4.5 U	4.7 U	4.9 U	4.5 UJ	560 U	7.9 U	6.4 U
1,1,2-TRICHLOROETHANE			6.2 U	5.0 U	4.5 U	4.7 U	4.9 U	4.5 UJ	560 U	7.9 U	6.4 U
1,1-DICHLOROETHANE	200		6.2 U	5.0 U	4.5 U	4.7 U	4.9 U	4.5 UJ	560 U	7.9 U	6.4 U
1,1-DICHLOROETHENE	400		6.2 U	5.0 U	4.5 U	4.7 U	4.9 U	4.5 UJ	560 U	7.9 U	0.58 J
2-BUTANONE	300		8.8 J	10 U	9.0 U	1.8 J	2.2 J	9.0 UJ	1100 U	9.7 J	13 U
ACETONE	200		42	2.3 J	18 U	27	33	11 J	2200 U	56	3.5 J
CARBON DISULFIDE	2700		1.3 J	10 U	0.34 J	9.4 U	9.8 U	0.30 J	1100 U	0.81 J	13 U
CARBON TETRACHLORIDE	600		0.67 J	5.0 U	4.5 U	4.7 U	4.9 U	4.5 UJ	560 U	7.9 U	6.4 U
CHLOROBENZENE	1700		6.2 U	5.0 U	4.5 U	4.7 U	4.9 U	4.5 UJ	560 U	7.9 U	6.4 U
CHLORODIBROMOMETHANE			6.2 U	5.0 U	4.5 U	4.7 U	4.9 U	4.5 UJ	560 U	7.9 U	6.4 U
CHLOROETHANE	1900		12 U	10 U	9.0 U	9.4 U	9.8 U	9.0 UJ	1100 U	16 U	13 U
CHLOROFORM	300		6.2 U	5.0 U	4.5 U	4.7 U	4.9 U	4.5 UJ	560 U	7.9 U	6.4 U
CIS-1,2-DICHLOROETHENE			1.4 J	5.0 U	4.5 U	4.7 U	4.9 U	4.5 UJ	560 U	7.9 U	6.4 U
CYCLOHEXANE			6.2 U	5.0 U	4.5 U	4.7 U	4.9 U	4.5 UJ	560 U	7.9 U	6.4 U
DICHLOROMETHANE	100		6.2 U	5.0 U	4.5 U	4.7 U	4.9 U	4.5 UJ	560 U	7.9 U	6.4 U
ISOPROPYLBENZENE			20	5.0 U	4.5 U	4.7 U	4.9 U	4.5 UJ	2100	0.88 J	6.4 U
METHYL ACETATE			12 U	10 U	9.0 U	9.4 U	9.8 U	9.0 UJ	1100 U	16 U	13 U
METHYL TERT-BUTYL ETHER			6.2 U	5.0 U	4.5 U	4.7 U	4.9 U	4.5 UJ	560 U	7.9 U	6.4 U
METHYLCYCLOHEXANE			2.2 J	5.0 U	4.5 U	4.7 U	4.9 U	4.5 UJ	560 UJ	7.9 U	6.4 U
STYRENE			6.2 U	5.0 U	4.5 U	4.7 U	4.9 U	4.5 UJ	210 J	7.9 U	6.4 U
TETRACHLOROETHENE	1400		6.2 U	5.0 U	4.5 U	0.60 J	1.3 J	24 J	560 U	7.9 U	6.4 U
TRANS-1,2-DICHLOROETHENE			6.2 U	5.0 U	4.5 U	4.7 U	4.9 U	4.5 UJ	560 U	7.9 U	6.4 U
TRICHLOROETHENE	700		3.0 J	5.0 U	4.5 U	4.7 U	4.9 U	1.5 J	560 U	7.9 U	6.4 U
TRICHLOROFLUOROMETHANE			6.2 U	5.0 U	4.5 U	4.7 U	4.9 U	4.5 UJ	560 U	7.9 U	6.4 U
VINYL CHLORIDE	200		0.98 J	5.0 U	4.5 U	4.7 U	4.9 U	4.5 UJ	560 U	7.9 U	6.4 U
Total VOCs (including BTEX)	10000		150.44	2.3	0.34	41.58	59.2	45.96	14710	68.79	4.08
Notes											
ug/kg - micrograms per kilogram											
RQL - Reported Quantitation Limit											
J - Reported analytical value is estimated											
U - Constituent not detected above RQL.											
UJ - Constituent not detected above estimated RQL.											
Bolded values are detections.											
Shaded are detections above the NYSDEC Recommended Soil Cleanup objective											

Table 4-4
Summary of Detected Volatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	MW-8 8/31/2005 MW-8 (3.5-4) 3.5 - 4 ft	MW-8 9/7/2005 MW-8 (15-17) 15 - 17 ft	MW-8 9/7/2005 MW-8 (21-23) 21 - 23 ft	MW-8 9/7/2005 MW-8 (40-42) 40 - 42 ft	SB-1 3/6/2006 SB1 (3-4) 3 - 4 ft	SB-2 3/9/2006 SB2 (5-7) 5 - 7 ft	SB-3 3/6/2006 SB3 (1-2) 1 - 2 ft	SB-4 9/12/2005 SB4 (3-3.5) 3 - 3.5 ft	SB-4 9/12/2005 SB4 (4.5-5.5) 4.5 - 5.5 ft
BTEX Compounds - ug/kg											
BENZENE	60		5.4 U	5.8 U	6.6 U	6.2 U	21	16	1.3 J	0.83 J	5.2 U
ETHYLBENZENE	5500		5.4 U	5.8 U	6.6 U	6.2 U	8.1	9.3	1.5 J	6.1 U	5.2 U
m,p-Xylenes	1200		5.4 U	5.8 U	6.6 U	6.2 U	39	9.5	1.8 J	6.1 U	5.2 U
TOLUENE	1500		5.4 U	0.41 J	6.6 U	6.2 U	41	9.2	2.2 J	6.1 U	5.2 U
XYLENE, O-	1200		5.4 U	5.8 U	6.6 U	6.2 U	27	5.1 J	0.87 J	6.1 U	5.2 U
Total BTEX				0.41			136.1	49.1	7.67	0.83	
Volatile Organic Compounds (VOCs) - ug/kg											
1,1,1-TRICHLOROETHANE	800		5.4 U	5.8 U	6.6 U	6.2 U	30	7.4	5.3	6.1 UJ	5.2 UJ
1,1,2-TRICHLOROETHANE			5.4 U	5.8 U	6.6 U	6.2 U	5.4 U	6.0 U	4.5 U	6.1 U	5.2 U
1,1-DICHLOROETHANE	200		5.4 U	5.8 U	6.6 U	6.2 U	9.7	2.1 J	4.5 U	6.1 U	5.2 U
1,1-DICHLOROETHENE	400		5.4 U	5.8 UJ	6.6 U	6.2 U	0.65 J	6.0 U	4.5 U	6.1 U	5.2 U
2-BUTANONE	300		11 U	2.3 J	2.9 J	12 U	9.2 J	6.2 J	9.0 U	6.9 J	2.8 J
ACETONE	200		3.8 J	15 J	13 J	25 U	39	31	3.2 J	39 J	18 J
CARBON DISULFIDE	2700		11 U	12 U	0.81 J	12 U	1.8 J	1.2 J	9.0 U	12 U	10 U
CARBON TETRACHLORIDE	600		5.4 U	5.8 UJ	6.6 U	6.2 U	5.4 U	6.0 U	4.5 U	6.1 U	0.59 J
CHLOROBENZENE	1700		5.4 U	5.8 U	6.6 U	6.2 U	5.4 U	6.0 U	4.5 U	6.1 U	5.2 U
CHLORODIBROMOMETHANE			5.4 U	5.8 U	6.6 U	6.2 U	5.4 U	6.0 U	4.5 U	6.1 U	5.2 U
CHLOROETHANE	1900		11 U	12 UJ	13 U	12 U	11 U	12 U	9.0 U	12 U	10 U
CHLOROFORM	300		5.4 U	5.8 U	6.6 U	6.2 U	5.4 U	6.0 U	4.5 U	6.1 U	5.2 U
CIS-1,2-DICHLOROETHENE			5.4 U	5.8 U	6.6 U	6.2 U	5.4 U	6.0 U	4.5 U	6.1 U	5.2 U
CYCLOHEXANE			5.4 U	5.8 U	6.6 U	6.2 U	5.4 U	6.0 U	4.5 U	6.1 U	5.2 U
DICHLOROMETHANE	100		0.53 J	5.8 U	6.6 U	6.2 U	5.4 U	6.0 U	4.5 U	6.1 U	5.2 UJ
ISOPROPYLBENZENE			5.4 U	5.8 U	6.6 U	6.2 U	0.95 J	1.5 J	4.5 U	6.1 U	5.2 U
METHYL ACETATE			11 U	12 U	13 U	12 U	11 U	12 U	9.0 U	12 UJ	10 UJ
METHYL TERT-BUTYL ETHER			5.4 U	5.8 U	6.6 U	6.2 U	5.4 U	6.0 U	4.5 U	6.1 UJ	5.2 UJ
METHYLCYCLOHEXANE			5.4 U	5.8 U	6.6 U	6.2 U	5.4 U	6.0 U	4.5 U	6.1 U	5.2 U
STYRENE			5.4 U	5.8 U	6.6 U	6.2 U	3.1 J	6.0 U	0.38 J	6.1 U	5.2 U
TETRACHLOROETHENE	1400		5.4 U	5.8 U	6.6 U	6.2 U	5.4 U	6.0 U	4.5 U	6.1 U	5.2 U
TRANS-1,2-DICHLOROETHENE			5.4 U	5.8 U	6.6 U	6.2 U	5.4 U	6.0 U	4.5 U	6.1 U	5.2 U
TRICHLOROETHENE	700		0.33 J	5.8 U	6.6 U	6.2 U	0.54 J	0.74 J	4.5 U	1.7 J	5.2 U
TRICHLOROFLUOROMETHANE			5.4 U	5.8 U	6.6 U	6.2 U	5.4 U	6.0 U	4.5 U	6.1 UJ	5.2 UJ
VINYL CHLORIDE	200		5.4 U	5.8 U	6.6 U	6.2 U	5.4 U	6.0 U	4.5 U	6.1 U	5.2 U
Total VOCs (including BTEX)	10000		4.66	17.71	16.71		231.04	99.24	16.55	48.43	21.39
Notes											
ug/kg - micrograms per kilogram											
RQL - Reported Quantitation Limit											
J - Reported analytical value is estimated											
U - Constituent not detected above RQL.											
UJ - Constituent not detected above estimated RQL.											
Bolded values are detections.											
Shaded are detections above the NYSDEC Recommended Soil Cleanup objective											

Table 4-4
Summary of Detected Volatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-4 9/12/2005 SB4 (7-9) 7 - 9 ft	SB-5/MW-2 9/1/2005 MW-2 (3-3.5) 3 - 3.5 ft	SB-5/MW-2 9/1/2005 MW-2 (4.5-5) 4.5 - 5 ft	SB-5/MW-2 9/8/2005 SB5 (5-6) 5 - 6 ft	SB-5/MW-2 9/13/2005 SB5 (16-18) 16 - 18 ft	SB-5/MW-2 9/13/2005 SB5 (20-22) 20 - 22 ft	SB-6/MW-3 9/12/2005 SB6 (3.5-4) 3.5 - 4 ft	SB-6/MW-3 9/1/2005 MW-3 (4.5-5) 4.5 - 5 ft	SB-6/MW-3 9/12/2005 SB6 (5-6) 5 - 6 ft
BTEX Compounds - ug/kg											
BENZENE	60		0.43 J	10	5.8 J	860	5.8 U	4.8 U	5.9 U	6.0	20 J
ETHYLBENZENE	5500		4.9 U	5.5 U	24	2500	1.2 J	1.6 J	5.9 U	47	1.8 J
m,p-Xylenes	1200		4.9 U	1.0 J	19	590	5.8 U	4.8 U	5.9 U	60	1.9 J
TOLUENE	1500		4.9 U	3.7 J	5.4 J	400 J	5.8 U	4.8 U	5.9 U	8.0	5.5 UJ
XYLENE, O-	1200		4.9 U	0.42 J	28	1400	0.72 J	0.85 J	5.9 U	50	2.8 J
Total BTEX			0.43	15.12	82.2	5750	1.92	2.45		171	26.5
Volatile Organic Compounds (VOCs) - ug/kg											
1,1,1-TRICHLOROETHANE	800		4.9 UJ	100	210	510 U	5.8 UJ	4.8 UJ	5.9 U	5.2 U	5.5 UJ
1,1,2-TRICHLOROETHANE			4.9 U	5.5 U	7.0 U	510 U	5.8 U	4.8 U	5.9 U	5.2 U	5.5 UJ
1,1-DICHLOROETHANE	200		4.9 U	3.8 J	5.5 J	510 U	5.8 U	4.8 U	5.9 U	5.2 U	5.5 UJ
1,1-DICHLOROETHENE	400		4.9 U	5.5 U	0.72 J	510 U	5.8 U	4.8 U	5.9 U	5.2 U	5.5 U
2-BUTANONE	300		9.7 UJ	2.2 J	3.9 J	1000 U	12 UJ	9.6 UJ	2.7 J	3.6 J	13 J
ACETONE	200		7.7 J	17 J	26 J	2000 U	23 UJ	3.0 J	20 J	18 J	61 J
CARBON DISULFIDE	2700		9.7 U	11 U	0.93 J	1000 U	12 U	0.36 J	4.6 J	0.55 J	0.96 J
CARBON TETRACHLORIDE	600		4.9 U	5.5 U	7.0 U	510 U	5.8 U	4.8 U	1.7 J	5.2 U	5.5 UJ
CHLOROBENZENE	1700		4.9 U	5.5 U	7.0 U	510 U	5.8 U	4.8 U	5.9 U	5.2 U	5.5 UJ
CHLORODIBROMOMETHANE			4.9 U	5.5 U	7.0 U	510 U	5.8 U	4.8 U	5.9 U	5.2 U	5.5 U
CHLOROETHANE	1900		9.7 U	11 U	1.9 J	1000 U	12 U	9.6 U	12 U	10 U	11 UJ
CHLOROFORM	300		4.9 U	0.35 J	7.0 U	510 U	5.8 U	4.8 U	5.9 U	5.2 U	5.5 UJ
CIS-1,2-DICHLOROETHENE			4.9 U	5.5 U	7.0 U	510 U	5.8 U	4.8 U	5.9 U	5.2 U	0.66 J
CYCLOHEXANE			4.9 U	5.5 U	7.0 U	510 U	5.8 U	4.8 U	5.9 U	5.2 U	2.1 J
DICHLOROMETHANE	100		4.9 U	5.5 U	0.66 J	510 U	5.8 U	4.8 U	5.9 U	0.50 J	5.5 UJ
ISOPROPYLBENZENE			4.9 U	5.5 U	7.5	2600	1.2 J	1.6 J	5.9 U	12	10 J
METHYL ACETATE			9.7 UJ	11 U	14 U	1000 U	12 UJ	9.6 UJ	12 UJ	10 U	11 UJ
METHYL TERT-BUTYL ETHER			4.9 UJ	5.5 U	7.0 U	510 U	5.8 UJ	4.8 UJ	5.9 U	5.2 U	5.5 UJ
METHYLCYCLOHEXANE			4.9 U	5.5 U	7.0 U	1100	5.8 U	4.8 U	5.9 U	5.2 U	4.5 J
STYRENE			4.9 U	5.5 U	7.0 U	510 U	5.8 U	4.8 U	5.9 U	5.2 U	5.5 UJ
TETRACHLOROETHENE	1400		4.9 U	5.5 U	7.0 U	510 U	5.8 U	4.8 U	22	5.2 U	0.80 J
TRANS-1,2-DICHLOROETHENE			4.9 U	5.5 U	7.0 U	510 U	5.8 U	4.8 U	5.9 U	5.2 U	5.5 UJ
TRICHLOROETHENE	700		4.9 U	2.8 J	0.99 J	510 U	5.8 U	4.8 U	5.9 U	5.2 U	5.5 UJ
TRICHLOROFLUOROMETHANE			4.9 UJ	5.5 U	7.0 U	510 U	5.8 UJ	4.8 UJ	5.9 U	5.2 U	5.5 UJ
VINYL CHLORIDE	200		4.9 U	5.5 U	7.0 U	510 U	5.8 U	4.8 U	5.9 U	5.2 U	5.5 UJ
Total VOCs (including BTEX)	10000		8.13	141.27	340.3	9450	3.12	7.41	51	205.65	119.52
Notes											
ug/kg - micrograms per kilogram											
RQL - Reported Quantitation Limit											
J - Reported analytical value is estimated											
U - Constituent not detected above RQL.											
UJ - Constituent not detected above estimated RQL.											
Bolded values are detections.											
Shaded are detections above the NYSDEC Recommended Soil Cleanup objective											

Table 4-4
Summary of Detected Volatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-6/MW-3 9/13/2005 SB6 (12-14) 12 - 14 ft	SB-6/MW-3 9/13/2005 SB6 (20-22) 20 - 22 ft	SB-7 3/15/2006 SB7(4-5) 4 - 5 ft	SB-7 3/20/2006 SB7 (9-11) 9 - 11 ft	SB-7 3/20/2006 SB7 (11-13) 11 - 13 ft	SB-7 3/20/2006 SB7 (13-15) 13 - 15 ft	SB-7 3/30/2006 SB7 (29.5-30) 29.5 - 30 ft	SB-7 3/30/2006 SB7 (38-39) 38 - 39 ft	SB-8/MW-18 3/16/2006 SB8(1-2) 1 - 2 ft
BTEX Compounds - ug/kg											
BENZENE	60		7.9 U	2.8 J	13	6.8	610 U	45 J	5.5 U	4.7 U	33 J
ETHYLBENZENE	5500		53	3.6 J	0.36 J	170	1000	5000	5.5 U	4.7 U	5.1 UJ
m,p-Xylenes	1200		8.6 J	0.75 J	0.61 J	11	610 U	130	5.5 U	4.7 U	5.1 J
TOLUENE	1500		7.9 U	5.1 U	2.6 J	2.3 J	610 U	3.4 J	5.5 U	4.7 U	20 J
XYLENE, O-	1200		22	1.9 J	4.6 U	52	170 J	250	5.5 U	4.7 U	1.6 J
Total BTEX			83.6	9.05	16.57	242.1	1170	5428.4			59.7
Volatile Organic Compounds (VOCs) - ug/kg											
1,1,1-TRICHLOROETHANE	800		7.9 UJ	5.1 UJ	4.6 U	5.4 U	610 U	8.4 U	5.5 U	4.7 U	5.1 UJ
1,1,2-TRICHLOROETHANE			7.9 U	5.1 U	4.6 U	5.4 U	610 U	8.4 U	5.5 U	4.7 U	5.1 UJ
1,1-DICHLOROETHANE	200		1.7 J	5.1 U	4.6 U	5.4 U	610 U	8.4 U	5.5 U	4.7 U	5.1 UJ
1,1-DICHLOROETHENE	400		7.9 U	5.1 U	4.6 U	5.4 U	610 U	8.4 U	5.5 U	4.7 U	5.1 UJ
2-BUTANONE	300		7.4 J	10 UJ	1.3 J	11 U	1200 U	9.6 J	11 U	9.4 U	2.4 J
ACETONE	200		46 J	21 UJ	31	27	2500 U	54	5.0 J	2.9 J	38 J
CARBON DISULFIDE	2700		2.2 J	1.5 J	0.42 J	5.1 J	54 J	2.2 J	11 U	9.4 U	0.63 J
CARBON TETRACHLORIDE	600		7.9 U	5.1 U	4.6 U	5.4 U	610 U	8.4 U	5.5 U	4.7 U	5.1 UJ
CHLOROBENZENE	1700		7.9 U	5.1 U	4.6 U	5.4 U	610 U	8.4 U	5.5 U	4.7 U	5.1 UJ
CHLORODIBROMOMETHANE			7.9 U	5.1 U	4.6 U	5.4 U	610 U	8.4 U	5.5 U	4.7 U	5.1 UJ
CHLOROETHANE	1900		16 UJ	10 U	9.2 U	11 U	1200 U	17 UJ	11 U	9.4 U	10 UJ
CHLOROFORM	300		7.9 U	5.1 U	4.6 U	5.4 U	610 U	8.4 U	5.5 U	4.7 U	5.1 UJ
CIS-1,2-DICHLOROETHENE			7.9 U	5.1 U	4.6 U	5.4 U	610 U	8.4 U	5.5 U	4.7 U	1.1 J
CYCLOHEXANE			7.9 U	5.1 U	4.6 U	1.5 J	610 UJ	0.92 J	5.5 UJ	4.7 U	5.1 UJ
DICHLOROMETHANE	100		7.9 U	5.1 U	0.29 J	5.4 U	610 U	8.4 U	5.5 U	0.36 J	5.1 UJ
ISOPROPYLBENZENE			14	3.6 J	4.6 U	190	490 J	140	5.5 U	4.7 U	5.1 UJ
METHYL ACETATE			16 UJ	10 UJ	9.2 U	11 U	93 J	17 U	11 U	9.4 UJ	10 UJ
METHYL TERT-BUTYL ETHER			7.9 UJ	5.1 UJ	4.6 U	5.4 U	610 U	8.4 U	5.5 U	4.7 U	5.1 UJ
METHYLCYCLOHEXANE			7.9 U	5.1 U	4.6 U	19	610 UJ	5.0 J	5.5 U	4.7 U	5.1 UJ
STYRENE			7.9 U	5.1 U	4.6 U	5.4 U	610 U	8.4 U	5.5 U	4.7 U	0.48 J
TETRACHLOROETHENE	1400		7.9 U	5.1 U	0.34 J	5.4 U	610 U	8.4 U	5.5 U	4.7 U	33 J
TRANS-1,2-DICHLOROETHENE			7.9 U	5.1 U	4.6 U	5.4 U	610 U	8.4 UJ	5.5 U	4.7 U	5.1 UJ
TRICHLOROETHENE	700		7.9 U	5.1 U	3.2 J	0.73 J	610 U	8.4 U	0.34 J	0.29 J	0.60 J
TRICHLOROFLUOROMETHANE			7.9 UJ	5.1 UJ	0.36 J	5.4 U	610 U	8.4 UJ	5.5 U	0.49 J	5.1 UJ
VINYL CHLORIDE	200		7.9 U	5.1 U	4.6 U	5.4 U	610 U	8.4 U	5.5 U	4.7 U	5.1 UJ
Total VOCs (including BTEX)	10000		154.9	14.15	53.48	485.43	1807	5640.12	5.34	4.04	135.91
Notes											
ug/kg - micrograms per kilogram											
RQL - Reported Quantitation Limit											
J - Reported analytical value is estimated											
U - Constituent not detected above RQL.											
UJ - Constituent not detected above estimated RQL.											
Bolded values are detections.											
Shaded are detections above the NYSDEC Recommended Soil Cleanup objective											

Table 4-4
Summary of Detected Volatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-8/MW-18 3/16/2006 SB8(4-4.5) 4 - 4.5 ft	SB-8/MW-18 3/22/2006 SB8 (13-15) 13 - 15 ft	SB-8/MW-18 4/10/2006 SB8 (28-30) 28 - 30 ft	SB-9/MW-17 3/14/2006 SB9(3.5-4) 3.5 - 4 ft	SB-9/MW-17 3/30/2006 SB9 (8-10) 8 - 10 ft	SB-9/MW-17 3/30/2006 SB9 (19-20) 19 - 20 ft	SB-9/MW-17 4/11/2006 SB9 (30-31) 30 - 31 ft	SB-10 3/14/2006 SB10(9-11) 9 - 11 ft	SB-10 3/14/2006 SB10(11-13) 11 - 13 ft
BTEX Compounds - ug/kg											
BENZENE	60		47	1.3 J	5.7 U	17	440 U	5.3 U	5.7 U	300 J	2.7 J
ETHYLBENZENE	5500		0.42 J	9.8	5.7 U	0.57 J	350 J	5.3 U	5.7 U	7100	210
m,p-Xylenes	1200		3.7 J	3.4 J	5.7 U	0.72 J	41 J	5.3 U	5.7 U	340 J	7.6 U
TOLUENE	1500		25	0.45 J	5.7 U	3.6 J	440 U	5.3 U	5.7 U	140 J	1.3 J
XYLENE, O-	1200		1.4 J	3.7 J	5.7 U	0.39 J	210 J	5.3 U	5.7 U	900 J	36
Total BTEX			77.52	18.65		22.28	601			8780	250
Volatile Organic Compounds (VOCs) - ug/kg											
1,1,1-TRICHLOROETHANE	800		5.2 U	6.8 U	5.7 U	4.8 U	440 U	5.3 U	5.7 U	1100 U	7.6 U
1,1,2-TRICHLOROETHANE			5.2 U	6.8 U	5.7 U	4.8 U	440 U	5.3 U	5.7 U	1100 U	7.6 U
1,1-DICHLOROETHANE	200		5.2 U	6.8 U	5.7 U	4.8 U	440 U	5.3 U	5.7 U	1100 U	7.6 U
1,1-DICHLOROETHENE	400		5.2 U	6.8 U	0.35 J	4.8 U	440 U	5.3 U	5.7 U	1100 U	7.6 U
2-BUTANONE	300		10 U	7.4 J	11 U	9.7 U	890 U	11 U	11 U	2100 U	7.3 J
ACETONE	200		35	26 J	3.9 J	16 J	1800 U	6.2 J	6.0 J	270 J	36
CARBON DISULFIDE	2700		0.47 J	0.91 J	11 U	9.7 U	890 U	0.33 J	11 U	2100 U	2.0 J
CARBON TETRACHLORIDE	600		5.2 U	6.8 U	5.7 U	4.8 U	440 U	5.3 U	5.7 U	1100 U	7.6 U
CHLOROBENZENE	1700		5.2 U	6.8 U	5.7 U	4.8 U	440 U	5.3 U	5.7 U	1100 U	7.6 U
CHLORODIBROMOMETHANE			5.2 U	6.8 U	5.7 U	4.8 U	440 U	5.3 U	5.7 U	1100 U	7.6 U
CHLOROETHANE	1900		10 U	14 U	11 U	9.7 U	890 U	11 U	11 U	2100 U	15 U
CHLOROFORM	300		0.73 J	0.79 J	5.7 U	1.1 J	440 U	5.3 U	5.7 U	1100 U	0.58 J
CIS-1,2-DICHLOROETHENE			1.3 J	6.8 U	5.7 U	4.8 U	440 U	5.3 U	5.7 U	1100 U	7.6 U
CYCLOHEXANE			5.2 U	6.8 UJ	5.7 U	4.8 U	440 U	5.3 U	5.7 U	1100 U	7.6 U
DICHLOROMETHANE	100		5.2 U	6.8 U	0.47 J	4.8 U	440 U	5.3 U	5.7 U	1100 U	7.6 U
ISOPROPYLBENZENE			5.2 U	8.8	5.7 U	4.8 U	1300	5.3 U	5.7 U	2800	82
METHYL ACETATE			10 U	14 U	11 UJ	9.7 U	890 U	11 UJ	11 UJ	2100 U	15 U
METHYL TERT-BUTYL ETHER			5.2 U	6.8 U	5.7 U	4.8 U	440 U	5.3 U	5.7 U	1100 U	4.1 J
METHYLCYCLOHEXANE			5.2 U	0.48 J	5.7 U	4.8 U	210 J	5.3 U	5.7 U	1100 UJ	2.0 J
STYRENE			0.60 J	6.8 U	5.7 U	4.8 U	440 U	5.3 U	5.7 U	1100 U	7.6 U
TETRACHLOROETHENE	1400		11	6.8 U	5.7 U	3.7 J	440 U	5.3 U	5.7 U	1100 U	7.6 U
TRANS-1,2-DICHLOROETHENE			5.2 U	6.8 U	5.7 U	4.8 U	440 U	5.3 U	5.7 U	1100 U	7.6 U
TRICHLOROETHENE	700		1.9 J	6.8 U	5.7 U	20	440 U	5.3 U	5.7 U	1100 U	7.6 U
TRICHLOROFLUOROMETHANE			5.2 U	6.8 U	5.7 U	4.8 U	440 U	5.3 U	5.7 U	1100 U	7.6 U
VINYL CHLORIDE	200		5.2 U	6.8 U	5.7 U	4.8 U	440 U	5.3 U	5.7 U	1100 U	7.6 U
Total VOCs (including BTEX)	10000		128.52	63.03	4.72	63.08	2111	6.53	6	11850	383.98
Notes ug/kg - micrograms per kilogram RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. Bolded values are detections. Shaded are detections above the NYSDEC Recommended Soil Cleanup objective											

Table 4-4
Summary of Detected Volatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-10 3/15/2006 SB10(41-43) 41 - 43 ft	SB-11/MW-27 3/9/2006 SB11 (1-2) 1 - 2 ft	SB-11/MW-27 3/9/2006 SB11 (4-5) 4 - 5 ft	SB-11/MW-27 3/16/2006 SB11(9-11) 9 - 11 ft	SB-11/MW-27 3/16/2006 SB11(18-20) 18 - 20 ft	SB-11/MW-27 3/29/2006 SB11 (32-34) 32 - 34 ft	SB-11/MW-27 3/29/2006 SB11 (41-43) 41 - 43 ft	SB-12/MW-25 3/9/2006 SB12 (4-5) 4 - 5 ft	SB-12/MW-25 3/27/2006 SB12 (10-15) 10 - 15 ft
BTEX Compounds - ug/kg											
BENZENE	60		4.6 U	34 J	360 J	57 J	92	6.4 U	4.3 U	11 U	4.7 U
ETHYLBENZENE	5500		4.6 U	1.8 J	140 J	33 J	85	6.4 U	4.3 U	11 UJ	4.7 U
m,p-Xylenes	1200		4.6 U	6.3 J	610	31 J	48	6.4 U	4.3 U	11 UJ	4.7 U
TOLUENE	1500		0.36 J	31 J	830	88 J	4.2 J	6.4 U	4.3 U	1.3 J	0.37 J
XYLENE, O-	1200		4.6 U	1.9 J	380 J	21 J	85	6.4 U	4.3 U	11 UJ	4.7 U
Total BTEX			0.36	75	2320	230	314.2			1.3	0.37
Volatile Organic Compounds (VOCs) - ug/kg											
1,1,1-TRICHLOROETHANE	800		4.6 U	3.3 J	540 U	6.2 UJ	8.9 U	6.4 U	4.3 U	11 U	4.7 U
1,1,2-TRICHLOROETHANE			4.6 U	8.2 U	540 U	6.2 UJ	8.9 U	6.4 U	4.3 U	11 U	4.7 U
1,1-DICHLOROETHANE	200		4.6 U	8.2 U	540 U	0.74 J	8.9 U	6.4 U	4.3 U	3.4 J	4.7 U
1,1-DICHLOROETHENE	400		4.6 U	8.2 U	540 U	6.2 UJ	8.9 U	6.4 U	4.3 U	11 U	4.7 U
2-BUTANONE	300		9.3 U	6.4 J	1100 U	14 J	11 J	11 J	8.5 U	21 U	9.4 U
ACETONE	200		5.7 J	60 J	230 J	110 J	63	54	3.4 J	42 U	8.2 J
CARBON DISULFIDE	2700		1.1 J	2.8 J	1100 U	5.4 J	2.3 J	0.51 J	0.43 J	3.2 J	0.44 J
CARBON TETRACHLORIDE	600		4.6 U	8.2 U	540 U	6.2 UJ	8.9 U	6.4 U	4.3 U	11 U	4.7 U
CHLOROBENZENE	1700		4.6 U	8.2 U	540 U	6.2 UJ	8.9 U	6.4 U	4.3 U	11 UJ	4.7 U
CHLORODIBROMOMETHANE			4.6 U	8.2 U	540 U	6.2 UJ	8.9 U	6.4 U	4.3 U	11 U	4.7 U
CHLOROETHANE	1900		9.3 U	16 U	1100 U	12 UJ	18 U	13 U	8.5 U	21 U	9.4 U
CHLOROFORM	300		0.40 J	7.5 J	540 U	1.3 J	8.9 U	6.4 U	4.3 U	3.4 J	4.7 U
CIS-1,2-DICHLOROETHENE			4.6 U	7.8 J	89 J	8.3 J	8.9 U	0.61 J	0.38 J	290	1.4 J
CYCLOHEXANE			4.6 U	0.89 J	49 J	1.8 J	8.9 U	6.4 U	4.3 U	11 U	4.7 U
DICHLOROMETHANE	100		4.6 U	8.2 UJ	540 U	6.2 UJ	8.9 U	6.4 U	4.3 U	11 U	0.32 J
ISOPROPYLBENZENE			4.6 U	8.2 U	540 U	23 J	19	6.4 U	4.3 U	11 UJ	4.7 U
METHYL ACETATE			9.3 U	16 U	130 J	12 UJ	18 U	13 UJ	8.5 UJ	21 U	9.4 UJ
METHYL TERT-BUTYL ETHER			4.6 U	8.2 U	540 U	6.2 UJ	1.2 J	6.4 U	4.3 U	11 U	4.7 U
METHYLCYCLOHEXANE			4.6 U	1.1 J	140 J	24 J	0.71 J	6.4 U	4.3 U	11 U	4.7 U
STYRENE			4.6 U	2.2 J	130 J	6.2 UJ	8.9 U	6.4 U	4.3 U	11 UJ	4.7 U
TETRACHLOROETHENE	1400		4.6 U	45 J	120 J	5.4 J	8.9 U	6.4 U	4.3 U	3.4 J	4.7 U
TRANS-1,2-DICHLOROETHENE			4.6 U	8.2 U	540 U	0.92 J	8.9 U	6.4 U	4.3 U	2.3 J	4.7 U
TRICHLOROETHENE	700		4.6 U	28000	1600	35 J	8.9 U	0.47 J	1.8 J	39000	1.6 J
TRICHLOROFLUOROMETHANE			4.6 U	8.2 U	540 U	6.2 UJ	8.9 U	6.4 U	4.3 U	11 U	4.7 U
VINYL CHLORIDE	200		4.6 U	8.2 U	540 U	13 J	8.9 U	6.4 U	4.3 U	11 U	4.7 U
Total VOCs (including BTEX)	10000		7.56	28211.99	4808	472.86	411.41	66.59	6.01	39307	12.33
Notes											
ug/kg - micrograms per kilogram											
RQL - Reported Quantitation Limit											
J - Reported analytical value is estimated											
U - Constituent not detected above RQL.											
UJ - Constituent not detected above estimated RQL.											
Bolded values are detections.											
Shaded are detections above the NYSDEC Recommended Soil Cleanup objective											

Table 4-4
Summary of Detected Volatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-12/MW-25 3/27/2006 SB12 (25-30) 25 - 30 ft	SB-13/MW-24 3/9/2006 SB13 (3-4) 3 - 4 ft	SB-13/MW-24 3/16/2006 SB13(5-7) 5 - 7 ft	SB-13/MW-24 3/16/2006 SB13(15-17) 15 - 17 ft	SB-14/MW-23 3/8/2006 SB14 (3-4) 3 - 4 ft	SB-14/MW-23 3/16/2006 SB14(5-9) 5 - 7 ft	SB-14/MW-23 3/16/2006 SB14(13-15) 13 - 15 ft	SB-16/MW-26 3/9/2006 SB16 (4-5) 4 - 5 ft	SB-16/MW-26 3/17/2006 SB16(17-19) 17 - 19 ft
BTEX Compounds - ug/kg											
BENZENE	60		4.5 U	9.5 U	4.2 J	7.5 U	5.5 J	0.98 J	9.6 U	11 U	480 U
ETHYLBENZENE	5500		4.5 U	9.5 U	55 J	7.5 U	9.2 U	0.60 J	9.6 U	11 U	560
m,p-Xylenes	1200		4.5 U	9.5 U	140 J	7.5 U	9.2 U	0.77 J	9.6 U	11 U	110 J
TOLUENE	1500		4.5 U	9.5 U	260 J	0.67 J	3.1 J	2.9 J	9.6 U	11 U	31 J
XYLENE, O-	1200		4.5 U	9.5 U	75 J	7.5 U	9.2 U	0.47 J	9.6 U	11 U	240 J
Total BTEX					534.2	0.67	8.6	5.72			941
Volatile Organic Compounds (VOCs) - ug/kg											
1,1,1-TRICHLOROETHANE	800		4.5 U	9.5 U	7.1 UJ	7.5 U	1.0 J	5.2 U	9.6 U	11 U	480 U
1,1,2-TRICHLOROETHANE			4.5 U	9.5 U	7.1 UJ	7.5 U	9.2 U	5.2 U	9.6 U	1.5 J	480 U
1,1-DICHLOROETHANE	200		4.5 U	9.5 U	7.1 UJ	7.5 U	9.2 U	5.2 U	9.6 U	11 U	480 U
1,1-DICHLOROETHENE	400		4.5 U	9.5 U	7.1 UJ	9.8	9.2 U	5.2 U	9.6 U	11 U	480 U
2-BUTANONE	300		8.9 U	19 U	110 J	15 U	4.2 J	10 U	7.7 J	2.4 J	970 U
ACETONE	200		18 U	9.1 J	2500 J	95	39 J	40	47	27 J	1900 U
CARBON DISULFIDE	2700		8.9 U	3.9 J	6.1 J	9.7 J	1.6 J	7.7 J	2.9 J	1.3 J	970 U
CARBON TETRACHLORIDE	600		4.5 U	9.5 U	7.1 UJ	7.5 U	9.2 U	5.2 U	9.6 U	11 U	480 U
CHLOROBENZENE	1700		4.5 U	9.5 U	7.1 UJ	7.5 U	9.2 U	5.2 U	9.6 U	11 U	480 U
CHLORODIBROMOMETHANE			4.5 U	9.5 U	7.1 UJ	7.5 U	9.2 U	5.2 U	9.6 U	11 U	480 U
CHLOROETHANE	1900		8.9 U	19 U	14 UJ	15 U	18 U	10 U	19 U	21 U	970 U
CHLOROFORM	300		4.5 U	1.4 J	1.6 J	7.5 U	2.9 J	5.2 U	9.6 U	1.4 J	480 U
CIS-1,2-DICHLOROETHENE			11	30	64 J	3800	9.2 U	5.2 U	9.6 U	27	480 U
CYCLOHEXANE			4.5 U	9.5 U	1.4 J	7.5 U	9.2 U	5.2 U	9.6 U	11 U	480 UJ
DICHLOROMETHANE	100		4.5 U	9.5 U	0.50 J	7.5 U	9.2 U	5.2 U	9.6 U	11 U	480 U
ISOPROPYLBENZENE			4.5 U	9.5 U	1.4 J	7.5 U	9.2 U	5.2 U	9.6 U	11 U	1000
METHYL ACETATE			8.9 UJ	19 U	14 UJ	15 U	18 U	10 U	19 U	21 U	970 U
METHYL TERT-BUTYL ETHER			0.29 J	9.5 U	1.0 J	3.0 J	9.2 U	5.2 U	0.66 J	11 U	480 U
METHYLCYCLOHEXANE			4.5 U	9.5 U	1.8 J	7.5 U	9.2 U	5.2 U	9.6 U	11 U	480 UJ
STYRENE			4.5 U	9.5 U	7.1 UJ	7.5 U	9.2 U	5.2 U	9.6 U	11 U	480 U
TETRACHLOROETHENE	1400		0.27 J	9.5 U	1.4 J	7.5 U	9.2 U	5.2 U	9.6 U	1.0 J	480 U
TRANS-1,2-DICHLOROETHENE			4.5 U	9.5 U	1.8 J	130	9.2 U	5.2 U	9.6 U	11 U	480 U
TRICHLOROETHENE	700		110	56000	21000	7100	0.81 J	0.54 J	9.6 U	220	85 J
TRICHLOROFLUOROMETHANE			4.5 U	9.5 U	7.1 UJ	7.5 U	9.2 U	5.2 U	9.6 U	11 U	480 U
VINYL CHLORIDE	200		4.5 U	9.5 U	7.1 UJ	26	9.2 U	5.2 U	9.6 U	11 U	480 U
Total VOCs (including BTEX)	10000		121.56	56044.4	24225.2	11174.17	58.11	53.96	58.26	281.6	2026
Notes											
ug/kg - micrograms per kilogram											
RQL - Reported Quantitation Limit											
J - Reported analytical value is estimated											
U - Constituent not detected above RQL.											
UJ - Constituent not detected above estimated RQL.											
Bolded values are detections.											
Shaded are detections above the NYSDEC Recommended Soil Cleanup objective											

Table 4-4
Summary of Detected Volatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-16/MW-26 3/17/2006 SB16(22.5-23) 22.5 - 23 ft	SB-16/MW-26 3/29/2006 SB16 (32-35) 32 - 35 ft	SB-16/MW-26 3/29/2006 SB16 (38-39) 38 - 39 ft	SB-17 9/2/2005 SB17 (3-3.5) 3 - 3.5 ft	SB-18 9/7/2005 SB18 (2-2.5) 2 - 2.5 ft	SB-19/MW-11 9/8/2005 SB19 (5-5.5) 5 - 5.5 ft	SB-19/MW-11 9/8/2005 SB19/MW11 5 - 9 ft	SB-20 3/24/2006 SB20 (4.5-5) 4.5 - 5 ft	SB-20 3/30/2006 SB20 (20-22) 20 - 22 ft
BTEX Compounds - ug/kg											
BENZENE	60		2.4 J	13	0.55 J	4.7 U	6.3 U	5.1 U	1.7 J	0.55 J	5700
ETHYLBENZENE	5500		4.8 J	19	1.0 J	4.7 U	6.3 U	5.1 U	8.2	1.7 J	68000
m,p-Xylenes	1200		5.8 J	16	0.68 J	4.7 U	6.3 U	5.1 U	48 J	5.3 UJ	39000
TOLUENE	1500		7.7 J	13	0.73 J	4.7 U	6.3 U	5.1 U	6.1	0.40 J	310 J
XYLENE, O-	1200		2.6 J	23	2.0 J	4.7 U	6.3 U	5.1 U	36	5.3 UJ	24000
Total BTEX			23.3	84	4.96				100	2.65	137010
Volatile Organic Compounds (VOCs) - ug/kg											
1,1,1-TRICHLOROETHANE	800		37 UJ	4.9 U	4.4 U	4.7 U	6.3 U	5.1 U	8.1 J	5.3 UJ	4600 U
1,1,2-TRICHLOROETHANE			37 UJ	4.9 U	4.4 U	4.7 U	6.3 U	5.1 U	4.6 U	5.3 UJ	4600 U
1,1-DICHLOROETHANE	200		37 UJ	4.9 U	4.4 U	4.7 U	6.3 U	0.46 J	0.52 J	5.3 UJ	4600 U
1,1-DICHLOROETHENE	400		37 UJ	24	0.27 J	4.7 U	6.3 U	5.1 U	4.6 U	5.3 UJ	4600 U
2-BUTANONE	300		250 J	9.8 U	8.7 U	5.3 J	13 U	3.8 J	5.4 J	11 UJ	9200 U
ACETONE	200		1200 J	10 J	1.6 J	36	25 U	23 J	28 J	28 J	18000 U
CARBON DISULFIDE	2700		25 J	0.70 J	8.7 U	0.34 J	13 U	1.2 J	0.49 J	1.6 J	9200 U
CARBON TETRACHLORIDE	600		37 UJ	4.9 U	4.4 U	4.7 U	6.3 U	5.1 U	4.6 U	5.3 UJ	4600 U
CHLOROBENZENE	1700		4.4 J	4.9 U	4.4 U	4.7 U	6.3 U	5.1 U	4.6 U	5.3 UJ	4600 U
CHLORODIBROMOMETHANE			37 UJ	4.9 U	4.4 U	4.7 U	6.3 U	5.1 U	4.6 U	5.3 UJ	4600 U
CHLOROETHANE	1900		75 UJ	9.8 U	8.7 U	9.3 U	13 U	10 U	9.2 U	11 UJ	9200 U
CHLOROFORM	300		37 UJ	4.9 U	4.4 U	4.7 U	6.3 U	5.1 U	4.6 U	5.3 UJ	4600 U
CIS-1,2-DICHLOROETHENE			170 J	1900	93	4.7 U	6.3 U	16	22	5.3 UJ	4600 U
CYCLOHEXANE			37 UJ	4.9 U	4.4 U	4.7 U	6.3 U	5.1 U	4.6 U	5.3 UJ	4600 U
DICHLOROMETHANE	100		37 UJ	4.9 U	4.4 U	4.7 U	6.3 U	5.1 U	4.6 U	5.3 UJ	4600 U
ISOPROPYLBENZENE			5.8 J	8.5	0.37 J	4.7 U	6.3 U	5.1 U	4.0 J	5.3 UJ	6200
METHYL ACETATE			75 UJ	9.8 UJ	8.7 UJ	9.3 U	13 U	10 U	9.2 UJ	11 UJ	9200 U
METHYL TERT-BUTYL ETHER			37 UJ	4.9 U	4.4 U	4.7 U	6.3 U	5.1 U	4.6 UJ	5.3 UJ	4600 U
METHYLCYCLOHEXANE			37 UJ	4.9 U	4.4 U	4.7 U	6.3 U	5.1 U	2.2 J	5.3 UJ	4600 U
STYRENE			37 UJ	4.9 U	4.4 U	4.7 U	6.3 U	5.1 U	4.6 U	5.3 UJ	4600 U
TETRACHLOROETHENE	1400		37 UJ	1.2 J	4.4 U	4.7 U	6.3 U	5.1 U	4.6 U	5.3 UJ	4600 U
TRANS-1,2-DICHLOROETHENE			5.3 J	12	0.35 J	4.7 U	6.3 U	2.1 J	2.4 J	5.3 UJ	4600 U
TRICHLOROETHENE	700		3.3 J	1700	23	4.7 U	6.3 U	5.7 J	19	0.59 J	4600 U
TRICHLOROFLUOROMETHANE			37 UJ	4.9 U	4.4 U	4.7 U	6.3 U	5.1 U	4.6 UJ	5.3 UJ	4600 U
VINYL CHLORIDE	200		42 J	79 J	1.8 J	4.7 U	6.3 U	7.3	2.0 J	5.3 UJ	4600 U
Total VOCs (including BTEX)	10000		1729.1	3819.4	125.35	41.64		59.56	194.11	32.84	143210
Notes ug/kg - micrograms per kilogram RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. Bolded values are detections. Shaded are detections above the NYSDEC Recommended Soil Cleanup objective											

Table 4-4
Summary of Detected Volatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-20 3/30/2006 SB20 (22-23) 22- 23 ft	SB-21/MW-1B 3/21/2006 SB21(0-5) 0 - 5 FT	B-21/MW-1B (DUF) 3/21/2006 SB210(0-5) 0 - 5 ft	SB-21/MW-1B 3/10/2006 SB21 (5-5.5) 5 - 5.5 ft	SB-22/MW-10 8/31/2005 MW-10 (4.5-5) 4.5 - 5 ft	SB-22/MW-10 9/8/2005 MW-10 (11-13) 11 - 13 ft	SB-23 8/17/2005 SB23 (3.3-3.5) 3.3 - 3.5 ft	SB-23 8/17/2005 SB23 (4-4.5) 4 - 4.5 ft	SB-24(2) 3/22/2006 SB24 (7-8) 7 - 8 ft
BTEX Compounds - ug/kg											
BENZENE	60		82	2.7 J	2.9 J	6.4 J	3.2 J	7.4 U	620 U	800 U	2.9 J
ETHYLBENZENE	5500		300 J	21	17	30 J	7.1 UJ	7.4 U	620 U	250 J	8.7 J
m,p-Xylenes	1200		420	110	93	36 J	7.1 UJ	7.4 U	620 U	400 J	5.5 J
TOLUENE	1500		4.1 J	6.9	6.4	20 J	1.6 J	7.4 U	79 J	800 U	2.7 J
XYLENE, O-	1200		280	75	59	23 J	7.1 UJ	7.4 U	56 J	610 J	7.8 J
Total BTEX			1086.1	215.6	178.3	115.4	4.8		135	1260	27.6
Volatile Organic Compounds (VOCs) - ug/kg											
1,1,1-TRICHLOROETHANE	800		8.1 U	4.6 U	4.4 U	4.7 UJ	7.1 UJ	7.4 U	10000	330 J	5.2 U
1,1,2-TRICHLOROETHANE			8.1 U	4.6 U	4.4 U	4.7 UJ	7.1 UJ	7.4 U	620 U	800 U	5.2 U
1,1-DICHLOROETHANE	200		8.1 U	4.6 U	4.4 U	4.7 UJ	7.1 UJ	7.4 U	120 J	780 J	5.2 U
1,1-DICHLOROETHENE	400		8.1 U	4.6 U	4.4 U	4.7 UJ	7.1 UJ	7.4 U	620 U	800 U	5.2 U
2-BUTANONE	300		7.4 J	2.1 J	1.7 J	2.9 J	26 J	8.6 J	1200 U	1600 U	10 U
ACETONE	200		42	27	26	17 J	180 J	66	290 J	3200 UJ	18 J
CARBON DISULFIDE	2700		1.6 J	9.2 U	8.9 U	9.5 UJ	3.1 J	4.8 J	1200 U	99 J	1.7 J
CARBON TETRACHLORIDE	600		8.1 U	4.6 U	4.4 U	4.7 UJ	7.1 UJ	7.4 U	620 U	800 U	5.2 U
CHLOROBENZENE	1700		8.1 U	4.6 U	4.4 U	4.7 UJ	7.1 UJ	7.4 U	620 U	800 U	5.2 U
CHLORODIBROMOMETHANE			8.1 U	4.6 U	4.4 U	4.7 UJ	7.1 UJ	7.4 U	620 U	800 U	5.2 U
CHLOROETHANE	1900		16 U	9.2 U	8.9 UJ	9.5 UJ	14 UJ	15 U	1200 U	160 J	10 U
CHLOROFORM	300		8.1 U	4.6 U	4.4 U	4.7 UJ	7.1 UJ	7.4 U	120 J	800 U	0.96 J
CIS-1,2-DICHLOROETHENE			8.1 U	4.6 U	4.4 U	4.7 UJ	7.1 UJ	7.4 U	1500	800 U	6.9 J
CYCLOHEXANE			8.1 U	4.6 U	4.4 U	0.36 J	7.1 UJ	7.4 U	64 J	800 U	6.6 J
DICHLOROMETHANE	100		8.1 U	4.6 U	4.4 U	4.7 UJ	7.1 UJ	7.4 U	620 U	800 U	5.2 U
ISOPROPYLBENZENE			82	13	11	5.6 J	7.1 UJ	7.4 U	620 U	460 J	56 J
METHYL ACETATE			16 UJ	9.2 U	8.9 U	9.5 UJ	14 UJ	1.5 J	170 J	160 J	10 U
METHYL TERT-BUTYL ETHER			8.1 U	4.6 U	4.4 U	4.7 UJ	7.1 UJ	7.4 U	620 U	800 U	5.2 U
METHYLCYCLOHEXANE			0.74 J	2.2 J	2.0 J	0.34 J	7.1 UJ	7.5 U	190 J	800 U	93 J
STYRENE			8.1 U	4.6 U	4.4 U	2.8 J	7.1 UJ	7.4 U	620 U	800 U	5.2 U
TETRACHLOROETHENE	1400		8.1 U	4.6 U	4.4 U	4.7 UJ	7.1 UJ	7.4 U	71 J	800 U	3.4 J
TRANS-1,2-DICHLOROETHENE			8.1 U	4.6 U	4.4 U	4.7 UJ	7.1 UJ	7.4 U	620 U	800 U	1.7 J
TRICHLOROETHENE	700		8.1 U	0.60 J	0.62 J	0.89 J	7.1 UJ	7.4 U	3700	800 U	19000
TRICHLOROFLUOROMETHANE			8.1 U	4.6 U	4.4 UJ	4.7 UJ	7.1 UJ	7.4 U	620 U	800 U	5.2 U
VINYL CHLORIDE	200		8.1 U	4.6 U	4.4 U	4.7 UJ	7.1 UJ	7.4 U	620 U	800 U	5.2 U
Total VOCs (including BTEX)	10000		1219.84	260.5	219.62	145.29	213.9	80.9	16360	3249	19215.86
Notes ug/kg - micrograms per kilogram RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. Bolded values are detections. Shaded are detections above the NYSDEC Recommended Soil Cleanup objective											

Table 4-4
Summary of Detected Volatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-25/MW-13 3/6/2006 SB25 (2-3) 2 - 3 ft	SB-25/MW-13 3/10/2006 SB25 (7-8) 7 - 8 ft	SB-26/MW-9 3/6/2006 SB26 (4-5) 4 - 5 ft	SB-26/MW-9 3/9/2006 SB26 (7-8) 7 - 8 ft	SB-28 5/2/2006 SB28(5-10) 5 - 10 ft	SB-28 5/2/2006 SB28(18-20) 18 - 20 ft	SB-29 3/23/2006 SB29 (4-4.5) 4 - 4.5 ft	SB-29 3/24/2006 SB29 (7-9) 7 - 9 ft	SB-29 3/24/2006 SB29 (17-19) 17 - 19 ft
BTEX Compounds - ug/kg											
BENZENE	60		350000	550 J	4.8	1000 U	8.1 U	5.6 UJ	5.1 U	0.37 J	1.3 J
ETHYLBENZENE	5500		1000000	4000 J	0.91 J	2600	8.1 U	5.6 U	5.1 U	0.96 J	1.6 J
m,p-Xylenes	1200		1200000	4000 J	1.7 J	740 J	8.1 U	5.6 U	5.1 U	4.0 J	1.6 J
TOLUENE	1500		1100000	2700 J	6.0	170 J	8.1 U	5.6 U	5.1 U	0.68 J	0.71 J
XYLENE, O-	1200		610000	2000 J	0.41 J	1800	8.1 U	5.6 U	5.1 U	2.8 J	1.4 J
Total BTEX			4260000	13250	13.82	5310				8.81	6.61
Volatile Organic Compounds (VOCs) - ug/kg											
1,1,1-TRICHLOROETHANE	800		170000 U	100 J	12	70 J	8.1 U	5.6 UJ	5.1 U	4.5 U	5.7 U
1,1,2-TRICHLOROETHANE			170000 U	1300 UJ	4.1 U	1000 U	8.1 U	5.6 UJ	5.1 U	4.5 U	5.7 U
1,1-DICHLOROETHANE	200		170000 U	1300 UJ	4.1 U	1000 U	8.1 U	5.6 UJ	5.1 U	4.5 U	5.7 U
1,1-DICHLOROETHENE	400		170000 U	1300 UJ	4.1 U	1000 U	8.1 U	5.6 UJ	5.1 U	4.5 U	5.7 U
2-BUTANONE	300		340000 U	2600 UJ	1.2 J	2100 U	19	11 UJ	10 U	9.0 U	11 U
ACETONE	200		680000 U	400 J	7.4 J	4200 U	97	3.6 J	7.3 J	24	16 J
CARBON DISULFIDE	2700		340000 U	2600 UJ	0.26 J	2100 U	3.1 J	11 UJ	10 U	1.1 J	1.6 J
CARBON TETRACHLORIDE	600		170000 U	1300 UJ	4.1 U	1000 U	8.1 U	5.6 UJ	5.1 U	4.5 U	5.7 U
CHLOROBENZENE	1700		170000 U	1300 UJ	4.1 U	1000 U	8.1 U	5.6 U	5.1 U	4.5 U	5.7 U
CHLORODIBROMOMETHANE			170000 U	1300 UJ	4.1 U	1000 U	8.1 U	5.6	5.1 U	4.5 U	5.7 U
CHLOROETHANE	1900		340000 U	2600 UJ	8.2 U	2100 U	16 U	11 UJ	10 U	9.0 U	11 U
CHLOROFORM	300		170000 U	1300 UJ	4.1 U	1000 U	8.1 U	5.6 UJ	5.1 U	4.5 U	5.7 U
CIS-1,2-DICHLOROETHENE			170000 U	1300 UJ	4.1 U	1000 U	7.0 J	5.6 UJ	5.1 U	4.5 U	5.7 U
CYCLOHEXANE			170000 U	1300 UJ	4.1 U	1000 U	8.1 U	5.6 UJ	5.1 U	0.48 J	5.7 U
DICHLOROMETHANE	100		170000 U	1300 UJ	4.1 U	1000 U	0.55 J	5.6 U	5.1 U	4.5 U	5.7 U
ISOPROPYLBENZENE			43000 J	1100 J	4.1 U	2000	8.1 U	5.6 U	5.1 U	0.68 J	4.8 J
METHYL ACETATE			340000 U	2600 UJ	8.2 U	2100 U	16 U	11 UJ	10 UJ	9.0 UJ	11 UJ
METHYL TERT-BUTYL ETHER			170000 U	1300 UJ	4.1 U	1000 U	8.1 U	5.6 UJ	5.1 U	4.5 U	5.7 U
METHYLCYCLOHEXANE			170000 U	87 J	0.33 J	1000 U	8.1 U	5.6 UJ	5.1 U	0.85 J	0.47 J
STYRENE			180000	350 J	0.57 J	220 J	8.1 U	5.6 U	5.1 UJ	4.5 U	5.7 U
TETRACHLOROETHENE	1400		170000 U	1300 UJ	2.8 J	1000 U	8.1 U	5.6 U	5.1 U	4.5 U	5.7 U
TRANS-1,2-DICHLOROETHENE			170000 U	1300 UJ	4.1 U	1000 U	8.1 U	5.6 UJ	5.1 U	4.5 U	5.7 U
TRICHLOROETHENE	700		170000 U	1300 UJ	0.42 J	1000 U	1.1 J	5.6 U	5.1 U	4.5 U	5.7 U
TRICHLOROFLUOROMETHANE			170000 U	1300 UJ	4.1 U	1000 U	8.1 U	5.6 UJ	5.1 U	4.5 U	5.7 U
VINYL CHLORIDE	200		170000 U	1300 UJ	4.1 U	1000 U	0.86 J	5.6 U	5.1 U	4.5 U	5.7 U
Total VOCs (including BTEX)	10000		4483000	15287	38.8	7600	128.61	9.2	7.3	35.92	29.48
Notes ug/kg - micrograms per kilogram RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. Bolded values are detections. Shaded are detections above the NYSDEC Recommended Soil Cleanup objective											

Table 4-4
Summary of Detected Volatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-30 3/28/2006 SB30(4-5) 4 - 5 ft	SB-30 3/28/2006 SB30(8.5-10) 8.5 - 10 ft	SB-30 3/28/2006 SB30(23-24) 23 - 24 ft	SB-30 3/28/2006 SB30(30-35) 30 - 35 ft	SB-31 3/23/2006 SB31 (4-4.5) 4 - 4.5 ft	SB-31 3/23/2006 SB31 (7-9) 7 - 9 ft	SB-31 3/23/2006 SB31 (21-23) 21 - 23 ft	SB-31 3/23/2006 SB31 (35-37) 35 - 37 ft	SB-32/MW-15 3/31/2006 SB32 (4.5-5) 4.5 - 5 ft
BTEX Compounds - ug/kg											
BENZENE	60		470 J	5.3 U	1.2 J	820 U	0.65 J	0.41 J	4.9 U	4.8 U	14 J
ETHYLBENZENE	5500		20000	5.3 U	2.3 J	850	4.9 U	4.6 UJ	4.9 U	4.8 U	7.1 J
m,p-Xylenes	1200		1200 J	5.3 U	5.6 UJ	120 J	4.9 U	1.5 J	4.9 U	4.8 U	7.3 J
TOLUENE	1500		70 J	5.3 U	0.58 J	820 U	4.9 U	0.38 J	4.9 U	4.8 U	30 J
XYLENE, O-	1200		1400 J	5.3 U	0.39 J	820 U	4.9 U	1.1 J	4.9 U	4.8 U	2.1 J
Total BTEX			23140		4.47	970	0.65	3.39			60.5
Volatile Organic Compounds (VOCs) - ug/kg											
1,1,1-TRICHLOROETHANE	800		4.8 UJ	5.3 U	5.6 UJ	820 U	4.9 U	4.6 UJ	4.9 U	4.8 U	9.0 UJ
1,1,2-TRICHLOROETHANE			4.8 UJ	5.3 U	5.6 UJ	820 U	4.9 U	4.6 UJ	4.9 U	4.8 U	9.0 UJ
1,1-DICHLOROETHANE	200		4.8 UJ	5.3 U	5.6 UJ	820 U	4.9 U	0.30 J	4.9 U	4.8 U	9.0 UJ
1,1-DICHLOROETHENE	400		4.8 UJ	5.3 U	5.6 UJ	820 U	4.9 U	4.6 UJ	4.9 U	4.8 U	9.0 UJ
2-BUTANONE	300		21 J	11 U	11 UJ	1600 U	1.6 J	7.1 J	9.8 U	9.6 U	18 UJ
ACETONE	200		97 J	12 J	50 J	3300 U	27	50 J	6.6 J	3.9 J	270 J
CARBON DISULFIDE	2700		7.6 J	11 U	3.6 J	1600 U	0.38 J	0.83 J	1.1 J	1.2 J	1.9 J
CARBON TETRACHLORIDE	600		4.8 UJ	5.3 U	5.6 UJ	820 UJ	4.9 U	4.6 UJ	4.9 U	4.8 U	9.0 UJ
CHLOROBENZENE	1700		4.8 UJ	5.3 U	5.6 UJ	820 U	4.9 U	4.6 UJ	4.9 U	4.8 U	9.0 UJ
CHLORODIBROMOMETHANE			4.8 UJ	5.3 U	5.6 UJ	820 U	4.9 U	4.6 UJ	4.9 U	4.8 U	9.0 UJ
CHLOROETHANE	1900		9.6 UJ	11 U	11 UJ	1600 U	9.9 U	7.1 J	9.8 U	9.6 U	18 UJ
CHLOROFORM	300		4.8 UJ	5.3 U	5.6 UJ	820 U	4.9 U	4.6 UJ	4.9 U	4.8 U	0.68 J
CIS-1,2-DICHLOROETHENE			0.53 J	5.3 U	5.6 UJ	820 U	4.9 U	4.6 UJ	4.9 U	4.8 U	2.2 J
CYCLOHEXANE			10 J	5.3 U	5.6 UJ	820 UJ	4.9 U	4.6 UJ	4.9 U	4.8 U	9.0 UJ
DICHLOROMETHANE	100		4.8 UJ	5.3 U	5.6 UJ	820 U	4.9 U	4.6 UJ	4.9 U	0.49 J	9.0 UJ
ISOPROPYLBENZENE			7600	5.3 U	0.36 J	820 U	4.9 U	0.47 J	4.9 U	4.8 U	9.0 UJ
METHYL ACETATE			9.6 UJ	11 UJ	11 UJ	380 J	9.9 UJ	9.1 UJ	9.8 UJ	9.6 UJ	18 UJ
METHYL TERT-BUTYL ETHER			4.8 UJ	5.3 U	5.6 UJ	820 U	4.9 U	4.6 UJ	4.9 U	4.8 U	9.0 UJ
METHYLCYCLOHEXANE			31 J	5.3 U	0.73 J	820 UJ	4.9 U	0.54 J	4.9 U	4.8 U	0.68 J
STYRENE			4.8 UJ	5.3 U	5.6 UJ	820 U	4.9 U	4.6 UJ	4.9 U	4.8 U	0.55 J
TETRACHLOROETHENE	1400		4.8 UJ	5.3 U	4500	820 U	0.50 J	4.6 UJ	4.9 U	4.8 U	1.4 J
TRANS-1,2-DICHLOROETHENE			4.8 UJ	5.3 U	5.6 UJ	820 U	4.9 U	4.6 UJ	4.9 U	4.8 U	9.0 UJ
TRICHLOROETHENE	700		4.8 UJ	5.3 U	5.6 UJ	820 U	4.9 U	7.8 J	0.31 J	4.8 U	2.7 J
TRICHLOROFLUOROMETHANE			4.8 UJ	5.3 U	5.6 UJ	820 U	4.9 U	4.6 UJ	4.9 U	4.8 U	0.70 J
VINYL CHLORIDE	200		4.8 UJ	5.3 U	5.6 UJ	820 U	4.9 U	4.6 UJ	4.9 U	4.8 U	0.63 J
Total VOCs (including BTEX)	10000		30907.13	12	4559.16	1350	30.13	77.53	8.01	5.59	341.94
Notes											
ug/kg - micrograms per kilogram											
RQL - Reported Quantitation Limit											
J - Reported analytical value is estimated											
U - Constituent not detected above RQL.											
UJ - Constituent not detected above estimated RQL.											
Bolded values are detections.											
Shaded are detections above the NYSDEC Recommended Soil Cleanup objective											

Table 4-4
Summary of Detected Volatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-32/MW-15 3/31/2006 SB32 (9-13) 9 - 13 ft	SB-32/MW-15 3/31/2006 SB32 (17-19) 17 - 19 ft	SB-32/MW-15 3/31/2006 SB32 (20-23) 20 - 23 ft	SB-33/MW-16 4/3/2006 SB33 (3-3.5) 3 - 3.5 ft	SB-33/MW-16 (DUF) 4/3/2006 SB330 (3-3.5) 3 - 3.5 ft	SB-33/MW-16 3/31/2006 SB33 (5-9) 5 - 9 ft	SB-33/MW-16 3/31/2006 SB33 (13-15) 13 - 15 ft	SB-34/MW-14 3/24/2006 SB34 (4-4.5) 4 - 4.5 ft	SB-34/MW-14 3/29/2006 SB34 (9-11) 9 - 11 ft
BTEX Compounds - ug/kg											
BENZENE	60		3.7 J	8800	3200	1.5 J	0.30 J	0.85 J	8.8 U	5.9 U	0.40 J
ETHYLBENZENE	5500		2.3 J	140000	12000	4.6 UJ	4.9 U	14	0.56 J	5.9 U	73
m,p-Xylenes	1200		1.2 J	81000	6900	4.6 UJ	4.9 U	9.4	8.8 U	5.9 U	420
TOLUENE	1500		2.5 J	790 J	110 J	0.35 J	4.9 U	0.46 J	8.8 U	5.9 U	23
XYLENE, O-	1200		1.2 J	45000	3900	4.6 UJ	4.9 U	7.5	8.8 U	5.9 U	600
Total BTEX			10.9	275590	26110	1.85	0.3	32.21	0.56		1116.4
Volatile Organic Compounds (VOCs) - ug/kg											
1,1,1-TRICHLOROETHANE	800		5.3 U	7400 U	830 U	4.6 UJ	4.9 U	6.0 U	8.8 U	5.9 U	5.4 U
1,1,2-TRICHLOROETHANE			5.3 U	7400 U	830 U	4.6 UJ	4.9 U	6.0 U	8.8 U	5.9 U	5.4 U
1,1-DICHLOROETHANE	200		5.3 U	7400 U	830 U	4.6 UJ	4.9 U	6.0 U	8.8 U	5.9 U	5.4 U
1,1-DICHLOROETHENE	400		5.3 U	7400 U	830 U	4.6 UJ	4.9 U	6.0 U	8.8 U	5.9 U	5.4 U
2-BUTANONE	300		3.9 J	15000 U	1700 U	9.1 UJ	9.7 U	3.0 J	6.9 J	12 U	3.8 J
ACETONE	200		22 J	30000 U	3300 U	18 UJ	20 U	21 J	47	6.6 J	47
CARBON DISULFIDE	2700		0.67 J	15000 U	110 J	0.47 J	9.7 U	1.3 J	0.94 J	1.1 J	0.87 J
CARBON TETRACHLORIDE	600		5.3 U	7400 U	830 U	4.6 UJ	4.9 U	6.0 U	8.8 U	5.9 U	5.4 U
CHLOROBENZENE	1700		5.3 U	7400 U	830 U	4.6 UJ	4.9 U	6.0 U	8.8 U	5.9 U	5.4 U
CHLORODIBROMOMETHANE			5.3 U	7400 U	830 U	4.6 UJ	4.9 U	6.0 U	8.8 U	5.9 U	5.4 U
CHLOROETHANE	1900		11 U	15000 U	1700 U	9.1 UJ	9.7 U	12 U	18 U	12 U	11 U
CHLOROFORM	300		5.3 U	7400 U	830 U	4.6 UJ	4.9 U	6.0 U	8.8 U	5.9 U	5.4 U
CIS-1,2-DICHLOROETHENE			2.4 J	7400 U	830 U	4.6 UJ	4.9 U	6.0 U	8.8 U	5.9 U	5.4 U
CYCLOHEXANE			5.3 UJ	7400 U	830 U	4.6 UJ	4.9 U	6.0 UJ	8.8 UJ	5.9 U	5.4 U
DICHLOROMETHANE	100		5.3 U	7400 U	830 U	4.6 UJ	4.9 U	6.0 U	8.8 U	5.9 U	5.4 U
ISOPROPYLBENZENE			2.0 J	13000	950	4.6 UJ	4.9 U	3.2 J	8.8 U	5.9 U	42
METHYL ACETATE			11 U	15000 U	320 J	9.1 UJ	9.7 U	12 U	18 U	12 UJ	11 UJ
METHYL TERT-BUTYL ETHER			5.3 U	7400 U	830 U	4.6 UJ	4.9 U	6.0 U	8.8 U	5.9 U	5.4 U
METHYLCYCLOHEXANE			5.3 U	7400 U	830 U	4.6 UJ	4.9 U	6.0 U	8.8 U	5.9 U	6.0 J
STYRENE			5.3 U	7400 U	830 U	4.6 UJ	4.9 U	6.0 U	8.8 U	5.9 U	5.4 U
TETRACHLOROETHENE	1400		5.3 U	7400 U	830 U	4.6 UJ	4.9 U	1.1 J	8.8 U	5.9 U	5.4 U
TRANS-1,2-DICHLOROETHENE			5.3 U	7400 U	830 U	4.6 UJ	4.9 U	6.0 U	8.8 U	5.9 U	5.4 U
TRICHLOROETHENE	700		0.94 J	7400 U	830 U	0.30 J	4.9 U	0.46 J	8.8 U	5.9 U	0.35 J
TRICHLOROFLUOROMETHANE			5.3 U	7400 U	830 U	4.6 UJ	4.9 U	6.0 U	8.8 U	5.9 U	5.4 U
VINYL CHLORIDE	200		0.62 J	7400 U	830 U	4.6 UJ	4.9 U	6.0 U	8.8 U	5.9 U	5.4 U
Total VOCs (including BTEX)	10000		43.43	288590	27490	2.62	0.3	62.27	55.4	7.7	1216.42
Notes ug/kg - micrograms per kilogram RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. Bolded values are detections. Shaded are detections above the NYSDEC Recommended Soil Cleanup objective											

Table 4-4
Summary of Detected Volatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-34/MW-14 3/29/2006 SB34 (17-19) 17 - 19 ft	SB-35 3/27/2006 SB35 (3-4) 3 - 4 ft	SB-35 3/27/2006 SB35 (13-15) 13 - 15 ft	SB-36 3/29/2006 SB36 (15-17) 15 - 17 ft	SB-36 3/29/2006 SB36 (25-27) 25 - 27 ft	SB-37/MW-19 5/1/2006 SB37(4-5) 4 - 5 ft	SB-37/MW-19 5/1/2006 SB37(14-15) 14 - 15 ft	SB-38/MW-20 5/1/2006 SB38(4-5) 4 - 5 ft	SB-38/MW-20 5/1/2006 SB38(10-15) 10 - 15 ft
BTEX Compounds - ug/kg											
BENZENE	60		7.7 U	4.9 J	2500 U	4.7 U	5.6 U	6.4 U	8.9 U	4.9 UJ	0.34 J
ETHYLBENZENE	5500		7.7 U	0.81 J	83000	1.8 J	5.6 U	6.4 U	8.9 U	4.9 UJ	4.9 U
m,p-Xylenes	1200		7.7 U	3.5 J	2500 U	11	5.6 U	6.4 U	8.9 U	4.9 UJ	4.9 U
TOLUENE	1500		7.7 U	6.1 J	2500 U	0.86 J	5.6 U	0.57 J	1.2 J	4.9 UJ	0.34 J
XYLENE, O-	1200		7.7 U	2.0 J	4900	7.5	5.6 U	6.4 U	8.9 U	4.9 UJ	4.9 U
Total BTEX				17.31	87900	21.16		0.57	1.2		0.68
Volatile Organic Compounds (VOCs) - ug/kg											
1,1,1-TRICHLOROETHANE	800		7.7 U	9.5 UJ	2500 U	4.7 U	5.6 U	6.4 U	8.9 U	4.9 UJ	4.9 U
1,1,2-TRICHLOROETHANE			7.7 U	9.5 UJ	2500 U	4.7 U	5.6 U	6.4 U	8.9 U	4.9 UJ	4.9 U
1,1-DICHLOROETHANE	200		7.7 U	9.5 UJ	2500 U	4.7 U	5.6 U	6.4 U	8.9 U	4.9 UJ	4.9 U
1,1-DICHLOROETHENE	400		7.7 U	9.5 UJ	2500 U	4.7 U	5.6 U	6.4 U	8.9 U	4.9 UJ	4.9 U
2-BUTANONE	300		15 U	19 UJ	5100 U	9.4 U	11 U	18 J	9.4 J	9.8 UJ	9.9 UJ
ACETONE	200		23 J	57 J	10000 U	7.3 J	4.6 J	95 J	58 J	13 J	9.3 J
CARBON DISULFIDE	2700		1.3 J	2.5 J	5100 U	9.4 U	0.46 J	3.9 J	1.3 J	0.34 J	0.55 J
CARBON TETRACHLORIDE	600		7.7 U	9.5 UJ	2500 UJ	4.7 U	5.6 U	6.4 U	8.9 U	4.9 UJ	4.9 U
CHLOROBENZENE	1700		7.7 U	9.5 UJ	2500 U	4.7 U	5.6 U	6.4 U	8.9 U	4.9 UJ	4.9 U
CHLORODIBROMOMETHANE			7.7 U	9.5 UJ	2500 U	4.7 U	5.6 U	6.4 U	8.9 U	4.9 UJ	4.9 U
CHLOROETHANE	1900		15 U	19 UJ	5100 U	9.4 U	11 U	13 U	18 U	9.8 UJ	9.9 U
CHLOROFORM	300		7.7 U	9.5 UJ	2500 U	4.7 U	5.6 U	6.4 U	8.9 U	4.9 UJ	4.9 U
CIS-1,2-DICHLOROETHENE			7.7 U	9.5 UJ	2500 U	4.7 U	5.6 U	6.4 U	8.9 U	4.9 UJ	4.9 U
CYCLOHEXANE			7.7 U	0.94 J	2500 UJ	4.7 U	5.6 U	6.4 UJ	8.9 UJ	4.9 UJ	4.9 UJ
DICHLOROMETHANE	100		7.7 U	9.5 UJ	2500 U	4.7 U	5.6 U	6.4 U	8.9 U	4.9 UJ	4.9 U
ISOPROPYLBENZENE			7.7 U	9.5 UJ	9900	1.2 J	5.6 U	6.4 U	8.9 U	4.9 UJ	4.9 U
METHYL ACETATE			15 UJ	19 UJ	5100 U	9.4 UJ	11 UJ	13 UJ	18 UJ	9.8 UJ	9.9 UJ
METHYL TERT-BUTYL ETHER			7.7 U	9.5 UJ	2500 U	4.7 U	5.6 U	6.4 U	8.9 U	4.9 UJ	4.9 U
METHYLCYCLOHEXANE			7.7 U	1.2 J	2500 UJ	0.34 J	5.6 U	6.4 UJ	8.9 UJ	4.9 UJ	4.9 UJ
STYRENE			7.7 U	0.61 J	2500 U	4.7 U	5.6 U	6.4 U	8.9 U	4.9 UJ	4.9 U
TETRACHLOROETHENE	1400		7.7 U	9.5 UJ	2500 U	4.7 U	5.6 U	6.4 U	8.9 U	4.9 UJ	4.9 U
TRANS-1,2-DICHLOROETHENE			7.7 U	9.5 UJ	2500 U	4.7 U	5.6 U	6.4 U	8.9 U	4.9 UJ	4.9 U
TRICHLOROETHENE	700		7.7 U	6.7 J	2500 U	4.7 U	5.6 U	6.4 U	8.9 U	4.9 UJ	4.9 U
TRICHLOROFLUOROMETHANE			7.7 U	0.61 J	2500 U	4.7 U	5.6 U	6.4 U	8.9 U	4.9 UJ	4.9 U
VINYL CHLORIDE	200		7.7 U	9.5 UJ	2500 U	4.7 U	5.6 U	6.4 U	8.9 U	4.9 UJ	4.9 U
Total VOCs (including BTEX)	10000		24.3	86.87	97800	30	5.06	117.47	69.9	13.34	10.53
Notes ug/kg - micrograms per kilogram RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. Bolded values are detections. Shaded are detections above the NYSDEC Recommended Soil Cleanup objective											

Table 4-4
Summary of Detected Volatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-39/MW-21 5/1/2006 SB39(0-5) 0 - 5 ft	SB-39/MW-21 5/1/2006 SB39(10-15) 10 - 15 ft	SB-40/MW-22 5/1/2006 SB40(4-5) 4 - 5 ft	SB-40/MW-22 5/1/2006 SB40(14-15) 14 - 15 ft	SB-41 5/18/2006 SB41(3-4) 3- 4 ft	SB-41 5/18/2006 SB41(4-8) 4- 8 ft
BTEX Compounds - ug/kg								
BENZENE	60		0.63 J	6.1 U	0.56 J	7.7 U	41	230 J
ETHYLBENZENE	5500		4.9 UJ	6.1 U	5.1 UJ	7.7 U	60 J	1400
m,p-Xylenes	1200		4.9 UJ	6.1 U	0.84 J	7.7 U	28	140 J
TOLUENE	1500		3.1 J	0.43 J	1.4 J	7.7 U	49	90 J
XYLENE, O-	1200		4.9 UJ	6.1 U	5.1 UJ	7.7 U	52	230 J
Total BTEX			3.73	0.43	2.8		230	2090
Volatile Organic Compounds (VOCs) - ug/kg								
1,1,1-TRICHLOROETHANE	800		4.9 UJ	6.1 U	5.1 UJ	7.7 U	5.0 U	470 U
1,1,2-TRICHLOROETHANE			4.9 UJ	6.1 U	5.1 UJ	7.7 U	5.0 U	470 U
1,1-DICHLOROETHANE	200		4.9 UJ	6.1 U	5.1 UJ	7.7 U	5.0 U	470 U
1,1-DICHLOROETHENE	400		4.9 UJ	6.1 U	5.1 UJ	7.7 U	5.0 U	470 U
2-BUTANONE	300		9.8 UJ	11 J	4.6 J	10 J	6.9 J	940 U
ACETONE	200		12 J	56 J	6.0 J	52 J	33	1900 U
CARBON DISULFIDE	2700		0.90 J	1.3 J	0.41 J	1.3 J	5.4 J	940 U
CARBON TETRACHLORIDE	600		4.9 UJ	6.1 U	5.1 UJ	7.7 U	5.0 U	470 U
CHLOROBENZENE	1700		4.9 UJ	6.1 U	5.1 UJ	7.7 U	5.0 U	470 U
CHLORODIBROMOMETHANE			4.9 UJ	6.1 U	5.1 UJ	7.7 U	5.0 U	470 U
CHLOROETHANE	1900		9.8 UJ	12 U	10 UJ	15 U	10 U	940 U
CHLOROFORM	300		4.9 UJ	6.1 U	5.1 UJ	7.7 U	5.0 U	470 U
CIS-1,2-DICHLOROETHENE			4.9 UJ	6.1 U	5.1 UJ	7.7 U	5.0 U	470 U
CYCLOHEXANE			4.9 UJ	6.1 UJ	5.1 UJ	7.7 UJ	1.6 J	470 U
DICHLOROMETHANE	100		4.9 UJ	6.1 U	5.1 UJ	7.7 U	5.0 U	470 U
ISOPROPYLBENZENE			4.9 UJ	6.1 U	5.1 UJ	7.7 U	81	1600
METHYL ACETATE			9.8 UJ	12 UJ	10 UJ	15 UJ	10 U	110 J
METHYL TERT-BUTYL ETHER			4.9 UJ	6.1 U	5.1 UJ	7.7 U	5.0 U	470 U
METHYLCYCLOHEXANE			0.78 J	6.1 UJ	5.1 UJ	7.7 UJ	4.5 J	69 J
STYRENE			4.9 UJ	6.1 U	5.1 UJ	7.7 U	5.0 U	470 U
TETRACHLOROETHENE	1400		0.37 J	6.1 U	5.1 UJ	7.7 U	5.0 U	470 U
TRANS-1,2-DICHLOROETHENE			4.9 UJ	6.1 U	5.1 UJ	7.7 U	5.0 U	470 U
TRICHLOROETHENE	700		4.9 UJ	6.1 U	5.1 UJ	7.7 U	5.0 U	470 U
TRICHLOROFLUOROMETHANE			4.9 UJ	6.1 U	5.1 UJ	7.7 U	5.0 U	470 U
VINYL CHLORIDE	200		4.9 UJ	6.1 U	5.1 UJ	7.7 U	5.0 U	470 U
Total VOCs (including BTEX)	10000		17.78	68.73	13.81	63.3	362.4	3869
Notes ug/kg - micrograms per kilogram RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. Bolded values are detections. Shaded are detections above the NYSDEC Recommended Soil Cleanup objective								

Table 4-4
Summary of Detected Volatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-41 5/18/2006 SB41(8-11) 8- 11 ft	TP2 3/22/2006 TP2 (4-5) 4 - 5 ft	TP3 3/22/2006 TP3 (5-5.5) 5- 5.5 ft	TP4 3/22/2006 TP4 (4.25) 4.25 - 4.25 ft	Number Detected	Number Samples Collected	Minimum Detect	Maximum Detect	Number of Samples Exceeding Standard
BTEX Compounds - ug/kg											
BENZENE	60		48	11	6.2 J	1.7 J	76	136	0.3	350000	14
ETHYLBENZENE	5500		4000	5.9 U	5.5 UJ	4.9 UJ	71	136	0.36	1000000	8
m,p-Xylenes	1200		53	1.0 J	1.1 J	4.9 UJ	70	136	0.61	1200000	6
TOLUENE	1500		17	4.7 J	2.4 J	1.1 J	81	136	0.34	1100000	2
XYLENE, O-	1200		200	5.9 U	5.5 UJ	4.9 UJ	71	136	0.39	610000	10
Total BTEX			4318	16.7	9.7	2.8					
Volatile Organic Compounds (VOCs) - ug/kg											
1,1,1-TRICHLOROETHANE	800		13 U	5.9 U	5.5 UJ	26 J	14	136	1	10000	1
1,1,2-TRICHLOROETHANE			13 U	5.9 U	5.5 UJ	4.9 UJ	1	136	1.5	1.5	0
1,1-DICHLOROETHANE	200		13 U	5.9 U	0.50 J	0.35 J	15	136	0.3	780	1
1,1-DICHLOROETHENE	400		13 U	5.9 U	5.5 UJ	4.9 UJ	9	136	0.27	24	0
2-BUTANONE	300		47 J	12 U	1.9 J	9.8 UJ	60	136	1.2	250	0
ACETONE	200		230	7.4 J	14 J	5.6 J	109	136	1.6	2500	9
CARBON DISULFIDE	2700		91	12 U	0.84 J	9.8 UJ	86	136	0.26	110	0
CARBON TETRACHLORIDE	600		13 U	5.9 U	5.5 UJ	4.9 UJ	3	136	0.59	1.7	0
CHLOROBENZENE	1700		13 U	5.9 U	5.5 UJ	4.9 UJ	1	136	4.4	4.4	0
CHLORODIBROMOMETHANE			13 U	5.9 U	5.5 UJ	4.9 UJ	1	136	5.6	5.6	0
CHLOROETHANE	1900		0.85 J	12 U	11 UJ	9.8 UJ	6	136	0.39	160	0
CHLOROFORM	300		13 U	5.9 U	5.5 UJ	4.9 UJ	17	136	0.35	270	0
CIS-1,2-DICHLOROETHENE			13 U	5.9 U	5.5 UJ	4.9 UJ	33	136	0.38	130000	0
CYCLOHEXANE			5.7 J	5.9 UJ	5.5 UJ	4.9 UJ	17	136	0.36	64	0
DICHLOROMETHANE	100		13 U	5.9 U	5.5 UJ	4.9 UJ	11	136	0.29	0.66	0
ISOPROPYLBENZENE			410	5.9 U	5.5 UJ	4.9 UJ	59	136	0.36	43000	0
METHYL ACETATE			25 UJ	12 U	11 UJ	9.8 UJ	9	136	1.5	380	0
METHYL TERT-BUTYL ETHER			13 U	5.9 U	5.5 UJ	4.9 UJ	6	136	0.29	4.1	0
METHYLCYCLOHEXANE			20 J	5.9 U	5.5 UJ	4.9 UJ	38	136	0.33	1100	0
STYRENE			13 U	5.9 U	5.5 UJ	4.9 UJ	16	136	0.38	180000	0
TETRACHLOROETHENE	1400		13 U	5.9 U	5.5 UJ	4.9 UJ	27	136	0.27	4500	1
TRANS-1,2-DICHLOROETHENE			13 U	5.9 U	5.5 UJ	4.9 UJ	13	136	0.35	1500	0
TRICHLOROETHENE	700		13 U	0.88 J	0.40 J	0.64 J	61	136	0.29	56000	10
TRICHLOROFLUOROMETHANE			13 U	5.9 U	5.5 UJ	4.9 UJ	4	136	0.36	0.7	0
VINYL CHLORIDE	200		13 U	5.9 U	5.5 UJ	4.9 UJ	14	136	0.62	11000	2
Total VOCs (including BTEX)	10000		5122.55	24.98	27.34	35.39					
Notes ug/kg - micrograms per kilogram RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. Bolded values are detections. Shaded are detections above the NYSDEC Recommended Soil Cleanup objective											

Table 4-5
Summary of Detected Semivolatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	MH-1 5/2/2006 SB27(5-6) 5 - 6 ft	MH-2 5/5/2006 MH-2 (5-6) 5 - 6 ft	MH-3 5/5/2006 MH-3 (5-6) 5 - 6 ft	MW-4 8/31/2005 MW-4 (5-5.5) 5 - 5.5 ft	MW-4 3/21/2006 MW-4(7-9) 7 - 9 ft	MW-4 3/21/2006 MW-4(9-11) 9 - 11 ft	MW-5 8/18/2005 MW-5 (2-2.5) 2 - 2.5 ft
Polycyclic Aromatic Hydrocarbons (PAHs) - ug/kg									
BENZO(A)ANTHRACENE	224		45000 U	1100 J	11000 U	9900	16000	23000	1500
BENZO(A)PYRENE	61		45000 U	1300 J	11000 U	9600	13000	16000	2700
BENZO(B)FLUORANTHENE	1100		45000 U	9400 U	11000 U	9400	6400	7600 J	2900
BENZO(K)FLUORANTHENE	1100		45000 U	1000 J	11000 U	2900	7400	7700 J	900
CHRYSENE	400		45000 U	1800 J	11000 U	11000	17000	24000	1800
DIBENZ(A,H)ANTHRACENE	14		45000 U	9400 U	11000 U	1500 J	1700 J	1600 J	350 J
INDENO(1,2,3-CD)PYRENE	3200		45000 U	990 J	11000 U	4700	4500 J	4600 J	1100
2-METHYLNAPHTHALENE	36400		45000 U	9400 U	11000 U	660 J	3300 J	5400 J	200 J
ACENAPHTHENE	50000		45000 U	9400 U	11000 U	4300	35000	57000	57 J
ACENAPHTHYLENE	41000		45000 U	1100 J	11000 U	4700	6700	5700 J	1200
ANTHRACENE	50000		45000 U	9400 U	11000 U	6700	22000	31000	500
BENZO(G,H,I)PERYLENE	50000		45000 U	1500 J	11000 U	4700	5800	6000 J	1100
FLUORANTHENE	50000		45000 U	1900 J	11000 U	17000	26000	39000	2100
FLUORENE	50000		45000 U	9400 U	11000 U	5600	18000	31000	61 J
NAPHTHALENE	13000		45000 U	9400 U	11000 U	1800 J	4300 J	7100 J	350 J
PHENANTHRENE	50000		45000 U	9400 U	11000 U	8300	66000	110000	940
PYRENE	50000		5300 J	2300 J	11000 U	20000	37000	56000	2000
BAP-TE	NA		29.4975	6.6908		13.54	17.481	21.221	3.6108
Total PAHs	NA		5300	12990		122760	290100	432700	19758
Semi-Volatile Organic Compounds (SVOCs) - ug/kg									
1,1-BIPHENYL			45000 U	9400 U	11000 U	230 J	4800 J	7700 J	51 J
2,4-DIMETHYLPHENOL			45000 U	9400 U	11000 U	2000 U	5700 U	9400 U	370 U
2-METHYLPHENOL	100		45000 U	9400 U	11000 U	2000 U	5700 U	9400 U	370 U
4-METHYLPHENOL (P-CRESOL)	900		45000 U	9400 U	11000 U	2000 U	5700 U	9400 U	370 U
ACETOPHENONE			45000 U	9400 U	11000 U	210 J	5700 U	9400 U	370 U
BENZALDEHYDE			45000 UJ	9400 UJ	11000 UJ	2000 U	R	R	370 U
BIS(2-ETHYLHEXYL) PHTHALATE	50000		45000 U	2100 J	11000 U	2000 U	5700 U	9400 U	370 U
CARBAZOLE			45000 U	9400 U	11000 U	420 J	5700 U	9400 U	120 J
DIBENZOFURAN	6200		45000 U	9400 U	11000 U	700 J	1800 J	3000 J	45 J
DI-N-BUTYL PHTHALATE	8100		45000 U	9400 U	11000 U	2000 U	5700 U	9400 U	370 U
DI-N-OCTYL PHTHALATE	50000		45000 U	9400 U	11000 U	2000 U	5700 U	9400 U	370 U
PHENOL	30		45000 U	9400 U	11000 U	2000 U	5700 U	9400 U	370 U
Total SVOCs (including PAHs)			5300	15090		124320	296700	443400	19974
Notes ug/kg - micrograms per kilogram RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. R - Rejected Bolded values are detections. Shaded are detections above the NYSDEC Recommended Soil Cleanup objective ¹ Sample collected at original MW-2 location. MW-2 was moved and completed across the street at the SB-5 location. ² Sample collected at original MW-3 location. MW-3 was moved and completed directly across the street at the SB-6 location.									

Table 4-5
Summary of Detected Semivolatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	MW-5 8/18/2005 MW-5 (5) 5 - 5 ft	MW-5 9/9/2005 MW-5 (9-11) 9 - 11 ft	MW-5 9/9/2005 MW-5 (13-15) 13 - 15 ft	MW-5 9/9/2005 MW-5 (21-23) 21 - 23 ft	MW-5 (DUP) 9/9/2005 DUP-1 21 - 23 ft	MW-6 3/14/2006 MW6(4-4.5) 4 - 4.5 ft	MW-6 (DUP) 3/14/2006 MW60(4-4.5) 4 - 4.5 ft
Polycyclic Aromatic Hydrocarbons (PAHs) - ug/kg									
BENZO(A)ANTHRACENE	224		1400	53000	340 J	390 U	380 U	4100	1700
BENZO(A)PYRENE	61		1200	37000	240 J	390 U	380 U	4400	1800
BENZO(B)FLUORANTHENE	1100		910	26000	180 J	390 U	380 U	3800	1700
BENZO(K)FLUORANTHENE	1100		310 J	9300 J	71 J	390 U	380 U	3900	1600
CHRYSENE	400		1400	48000	310 J	390 U	380 U	5000	2200
DIBENZ(A,H)ANTHRACENE	14		120 J	4800 J	450 U	390 U	380 U	720 J	310 J
INDENO(1,2,3-CD)PYRENE	3200		270 J	13000 J	91 J	390 U	380 U	2500	1300
2-METHYLNAPHTHALENE	36400		860 U	190000	940	390 U	380 U	310 J	110 J
ACENAPHTHENE	50000		8000	190000	1000	390 U	380 U	160 J	1100 U
ACENAPHTHYLENE	41000		860 U	12000 J	72 J	390 U	380 U	1300	530 J
ANTHRACENE	50000		2300	93000	500	390 U	380 U	1000 J	400 J
BENZO(G,H,I)PERYLENE	50000		300 J	15000 J	100 J	390 U	380 U	2900	1400
FLUORANTHENE	50000		3100	92000	570	390 U	48 J	14000	5600
FLUORENE	50000		3100	81000	460	390 U	380 U	460 J	190 J
NAPHTHALENE	13000		860 U	250000	1500	390 U	380 U	560 J	320 J
PHENANTHRENE	50000		4600	300000	1600	74 J	110 J	13000	4300
PYRENE	50000		3700	120000	910	49 J	84 J	10000	4300
BAP-TE	NA		1.5825	51.141	0.52712	0.450645	0.43909	6.204	2.5982
Total PAHs	NA		30710	1534100	8884	123	242	68110	27760
Semi-Volatile Organic Compounds (SVOCs) - ug/kg									
1,1-BIPHENYL			860 U	30000	140 J	390 U	380 U	1100 U	1100 U
2,4-DIMETHYLPHENOL			860 U	26000 U	450 U	390 U	380 U	1100 U	1100 U
2-METHYLPHENOL	100		860 U	26000 U	450 U	390 U	380 U	1100 U	1100 U
4-METHYLPHENOL (P-CRESOL)	900		860 U	26000 U	450 U	390 U	380 U	1100 U	1100 U
ACETOPHENONE			860 U	26000 U	450 U	390 U	380 U	1100 U	1100 U
BENZALDEHYDE			860 U	26000 U	450 U	390 U	380 U	R	R
BIS(2-ETHYLHEXYL) PHTHALATE	50000		860 U	26000 U	150 J	390 U	380 U	1100 U	1100 U
CARBAZOLE			860 U	26000 U	450 U	390 U	380 U	1600	710 J
DIBENZOFURAN	6200		860 U	7900 J	450 U	390 U	380 U	790 J	240 J
DI-N-BUTYL PHTHALATE	8100		860 U	26000 U	450 U	43 J	380 U	1100 U	1100 U
DI-N-OCTYL PHTHALATE	50000		860 U	26000 U	450 U	390 U	380 U	1100 U	1100 U
PHENOL	30		860 U	26000 U	450 U	390 U	380 U	1100 U	1100 U
Total SVOCs (including PAHs)			30710	1572000	9174	166	242	70500	28710
Notes									
ug/kg - micrograms per kilogram									
RQL - Reported Quantitation Limit									
J - Reported analytical value is estimated									
U - Constituent not detected above RQL.									
UJ - Constituent not detected above estimated RQL.									
R - Rejected									
Bolded values are detections.									
Shaded are detections above the NYSDEC Recommended Soil Cleanup objective									
¹ Sample collected at original MW-2 location. MW-2 was moved and completed across the street at the SB-5 location.									
² Sample collected at original MW-3 location. MW-3 was moved and completed directly across the street at the SB-6 location.									

Table 4-5
Summary of Detected Semivolatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	MW-7 3/10/2006 MW7 (4-5) 4 - 5 ft	MW-7 3/13/2006 MW7(4-5) 4 - 5 ft	MW-7 3/13/2006 MW7(9-11) 9 - 11 ft	MW-7 3/13/2006 MW7(13-15) 13 - 15 ft	MW-7 3/13/2006 MW7(27-29) 27 - 29 ft	MW-8 8/31/2005 MW-8 (3.5-4) 3.5 - 4 ft	MW-8 9/7/2005 MW-8 (15-17) 15 - 17 ft
Polycyclic Aromatic Hydrocarbons (PAHs) - ug/kg									
BENZO(A)ANTHRACENE	224		810	3000	9500 J	190 J	460 U	360 J	390 U
BENZO(A)PYRENE	61		760	2800	5900 J	120 J	460 U	350 J	390 U
BENZO(B)FLUORANTHENE	1100		580	2100	2400 J	59 J	460 U	450	390 U
BENZO(K)FLUORANTHENE	1100		610	2400	3200 J	75 J	460 U	150 J	390 U
CHRYSENE	400		820	3200	9500 J	190 J	460 U	390	390 U
DIBENZ(A,H)ANTHRACENE	14		120 J	470 J	12000 U	520 U	460 U	74 J	390 U
INDENO(1,2,3-CD)PYRENE	3200		510	1600	1800 J	520 U	460 U	260 J	390 U
2-METHYLNAPHTHALENE	36400		370 U	200 J	62000	560	460 U	360 U	390 U
ACENAPHTHENE	50000		370 U	1500 U	53000	530	460 U	360 U	110 J
ACENAPHTHYLENE	41000		190 J	860 J	3800 J	77 J	460 U	86 J	390 U
ANTHRACENE	50000		160 J	1200 J	23000	300 J	460 U	95 J	390 U
BENZO(G,H,I)PERYLENE	50000		560	1800	2100 J	520 U	460 U	240 J	390 U
FLUORANTHENE	50000		1600	7400	18000	300 J	460 U	740	390 U
FLUORENE	50000		370 U	460 J	26000	280 J	460 U	360 U	390 U
NAPHTHALENE	13000		48 J	330 J	100000	830	460 U	360 U	46 J
PHENANTHRENE	50000		540	6800	76000	1000	110 J	360 J	42 J
PYRENE	50000		1600	6400	28000	490 J	74 J	620	390 U
BAP-TE	NA		1.07692	3.9672	13.3115	0.43184	0.53153	0.53289	0.450645
Total PAHs	NA		8908	41020	424200	5001	184	4175	198
Semi-Volatile Organic Compounds (SVOCs) - ug/kg									
1,1-BIPHENYL			370 U	1500 U	5800 J	69 J	460 U	360 U	390 U
2,4-DIMETHYLPHENOL			370 U	1500 U	12000 U	520 U	460 U	360 U	390 U
2-METHYLPHENOL	100		370 U	1500 U	12000 U	520 U	460 U	360 U	390 U
4-METHYLPHENOL (P-CRESOL)	900		370 U	1500 U	12000 U	520 U	460 U	360 U	390 U
ACETOPHENONE			370 U	1500 U	12000 U	520 U	460 U	360 U	390 U
BENZALDEHYDE			R	R	R	R	460 U	360 U	390 U
BIS(2-ETHYLHEXYL) PHTHALATE	50000		370 U	1500 U	12000 U	75 J	460 U	360 U	390 U
CARBAZOLE			53 J	540 J	12000 U	520 U	460 U	46 J	390 U
DIBENZOFURAN	6200		370 U	410 J	2800 J	520 U	460 U	360 U	390 U
DI-N-BUTYL PHTHALATE	8100		370 U	1500 U	12000 U	520 U	460 U	360 U	41 J
DI-N-OCTYL PHTHALATE	50000		370 U	1500 U	12000 U	520 U	460 U	360 U	390 U
PHENOL	30		370 U	1500 U	12000 U	520 U	460 U	360 U	390 U
Total SVOCs (including PAHs)			8961	41970	432800	5145	184	4221	239
Notes									
ug/kg - micrograms per kilogram									
RQL - Reported Quantitation Limit									
J - Reported analytical value is estimated									
U - Constituent not detected above RQL.									
UJ - Constituent not detected above estimated RQL.									
R - Rejected									
Bolded values are detections.									
Shaded are detections above the NYSDEC Recommended Soil Cleanup objective									
¹ Sample collected at original MW-2 location. MW-2 was moved and completed across the street at the SB-5 location.									
² Sample collected at original MW-3 location. MW-3 was moved and completed directly across the street at the SB-6 location.									

Table 4-5
Summary of Detected Semivolatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	MW-8 9/7/2005 MW-8 (21-23) 21 - 23 ft	MW-8 9/7/2005 MW-8 (40-42) 40 - 42 ft	SB-1 3/6/2006 SB1 (3-4) 3 - 4 ft	SB-2 3/9/2006 SB2 (5-7) 5 - 7 ft	SB-4 9/12/2005 SB4 (3-3.5) 3 - 3.5 ft	SB-4 9/12/2005 SB4 (4.5-5.5) 4.5 - 5.5 ft	SB-4 9/12/2005 SB4 (7-9) 7 - 9 ft
Polycyclic Aromatic Hydrocarbons (PAHs) - ug/kg									
BENZO(A)ANTHRACENE	224		440 U	410 U	140 J	120 J	930	5400	1400
BENZO(A)PYRENE	61		440 U	410 U	1100	110 J	900	4500	1400
BENZO(B)FLUORANTHENE	1100		440 U	410 U	580 J	82 J	1200	3200	1400
BENZO(K)FLUORANTHENE	1100		440 U	410 U	390 J	110 J	460	930	450 J
CHRYSENE	400		440 U	410 U	250 J	140 J	900	5200	1400
DIBENZ(A,H)ANTHRACENE	14		440 U	410 U	300 J	410 U	170 J	610 J	190 J
INDENO(1,2,3-CD)PYRENE	3200		440 U	410 U	1100	43 J	430	1800	510 J
2-METHYLNAPHTHALENE	36400		440 U	410 U	220 J	220 J	420 U	850 U	130 J
ACENAPHTHENE	50000		78 J	410 U	110 J	120 J	420 U	220 J	780 U
ACENAPHTHYLENE	41000		440 U	410 U	830	120 J	180 J	1200	560 J
ANTHRACENE	50000		440 U	410 U	190 J	100 J	140 J	400 J	270 J
BENZO(G,H,I)PERYLENE	50000		440 U	410 U	1600	43 J	330 J	2100	520 J
FLUORANTHENE	50000		440 U	410 U	130 J	200 J	1400	5700	1700
FLUORENE	50000		440 U	410 U	800 U	87 J	420 U	300 J	150 J
NAPHTHALENE	13000		440 U	410 U	590 J	310 J	110 J	850 U	210 J
PHENANTHRENE	50000		44 J	410 U	310 J	300 J	290 J	850 U	420 J
PYRENE	50000		440 U	410 U	220 J	200 J	1000	8500	2100
BAP-TE	NA		0.50842		1.58615	0.34074	1.3315	6.1645	1.9269
Total PAHs	NA		122		8060	2305	8440	40060	12810
Semi-Volatile Organic Compounds (SVOCs) - ug/kg									
1,1-BIPHENYL			440 U	410 U	800 U	410 U	420 U	850 U	780 U
2,4-DIMETHYLPHENOL			440 U	410 U	800 U	410 U	420 U	850 U	780 U
2-METHYLPHENOL	100		440 U	410 U	800 U	410 U	420 U	850 U	780 U
4-METHYLPHENOL (P-CRESOL)	900		440 U	410 U	800 U	410 U	420 U	850 U	780 U
ACETOPHENONE			440 U	410 U	800 U	410 U	420 U	850 U	780 U
BENZALDEHYDE			440 U	410 U	R	R	420 U	850 U	780 U
BIS(2-ETHYLHEXYL) PHTHALATE	50000		150 J	410 U	800 U	110 J	420 U	850 U	150 J
CARBAZOLE			440 U	410 U	800 U	410 U	68 J	850 U	780 U
DIBENZOFURAN	6200		440 U	410 U	800 U	410 U	420 U	850 U	780 U
DI-N-BUTYL PHTHALATE	8100		72 J	71 J	800 U	410 U	71 J	97 J	780 U
DI-N-OCTYL PHTHALATE	50000		440 U	410 U	800 U	410 U	420 U	850 U	780 U
PHENOL	30		440 U	410 U	800 U	410 U	420 U	850 U	780 U
Total SVOCs (including PAHs)			344	71	8060	2415	8579	40157	12960
Notes									
ug/kg - micrograms per kilogram									
RQL - Reported Quantitation Limit									
J - Reported analytical value is estimated									
U - Constituent not detected above RQL.									
UJ - Constituent not detected above estimated RQL.									
R - Rejected									
Bolded values are detections.									
Shaded are detections above the NYSDEC Recommended Soil Cleanup objective									
¹ Sample collected at original MW-2 location. MW-2 was moved and completed across the street at the SB-5 location.									
² Sample collected at original MW-3 location. MW-3 was moved and completed directly across the street at the SB-6 location.									

Table 4-5
Summary of Detected Semivolatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

ENSR

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	MW-2 ¹ 9/1/2005 MW-2 (3-3.5) 3 - 3.5 ft	MW-2 ¹ 9/1/2005 MW-2 (4.5-5) 4.5 - 5 ft	SB-5/MW-2 9/8/2005 SB5 (5-6) 5 - 6 ft	SB-5/MW-2 9/13/2005 SB5 (16-18) 16 - 18 ft	SB-5/MW-2 9/13/2005 SB5 (20-22) 20 - 22 ft	SB-6/MW-3 9/12/2005 SB6 (3.5-4) 3.5 - 4 ft	MW-3 ² 9/1/2005 MW-3 (4.5-5) 4.5 - 5 ft
Polycyclic Aromatic Hydrocarbons (PAHs) - ug/kg									
BENZO(A)ANTHRACENE	224		12000	9100	34000	400 J	160 J	5000	19000
BENZO(A)PYRENE	61		17000	9300	24000 J	280 J	100 J	5700	19000
BENZO(B)FLUORANTHENE	1100		17000	9900	20000 J	230 J	91 J	7600	14000
BENZO(K)FLUORANTHENE	1100		4800	3300	7300 J	89 J	400 U	2500	4700
CHRYSENE	400		14000	9500	34000	380 J	160 J	5600	19000
DIBENZ(A,H)ANTHRACENE	14		4100 J	1700 J	3100 J	440 U	400 U	1000	2600 J
INDENO(1,2,3-CD)PYRENE	3200		14000	5800	8300 J	72 J	400 U	3400	7000
2-METHYLNAPHTHALENE	36400		1100 J	6700	260000	850	380 J	270 J	24000
ACENAPHTHENE	50000		780 J	6700	190000	1300	490	120 J	32000
ACENAPHTHYLENE	41000		15000	5300	25000 U	160 J	64 J	3500	17000
ANTHRACENE	50000		5100	7200	68000	740	280 J	1400	22000
BENZO(G,H,I)PERYLENE	50000		16000	6300	8900 J	68 J	400 U	3200	7000
FLUORANTHENE	50000		11000	18000	60000	780	300 J	6700	25000
FLUORENE	50000		2100 J	6200	76000	700	250 J	460 J	20000
NAPHTHALENE	13000		1400 J	10000	150000	440 J	250 J	500 J	17000
PHENANTHRENE	50000		4800	26000	210000	2400	910	2600	59000
PYRENE	50000		15000	15000	94000	970	380 J	6400	34000
BAP-TE	NA		25.462	13.5225	33.437	0.57147	0.34726	8.3306	25.666
Total PAHs	NA		155180	156000	1247600	9859	3815	55950	342300
Semi-Volatile Organic Compounds (SVOCs) - ug/kg									
1,1-BIPHENYL			4100 U	1300 J	24000 J	150 J	59 J	820 U	4300
2,4-DIMETHYLPHENOL			4100 U	2500 U	25000 U	440 U	400 U	820 U	4000 U
2-METHYLPHENOL	100		4100 U	2500 U	25000 U	440 U	400 U	820 U	4000 U
4-METHYLPHENOL (P-CRESOL)	900		4100 U	2500 U	25000 U	440 U	400 U	820 U	4000 U
ACETOPHENONE			4100 U	2500 U	25000 U	440 U	400 U	86 J	4000 U
BENZALDEHYDE			4100 U	2500 U	25000 U	440 U	400 U	820 U	4000 U
BIS(2-ETHYLHEXYL) PHTHALATE	50000		4100 U	2500 U	25000 U	58 J	85 J	820 U	4000 U
CARBAZOLE			450 J	1200 J	25000 U	440 U	400 U	260 J	4000 U
DIBENZOFURAN	6200		4100 U	1500 J	11000 J	69 J	400 U	90 J	1800 J
DI-N-BUTYL PHTHALATE	8100		4100 U	2500 U	25000 U	440 U	53 J	820 U	4000 U
DI-N-OCTYL PHTHALATE	50000		4100 U	2500 U	25000 U	440 U	400 U	820 U	4000 U
PHENOL	30		4100 U	2500 U	25000 U	440 U	400 U	820 U	4000 U
Total SVOCs (including PAHs)			155630	160000	1282600	10136	4012	56386	348400
Notes									
ug/kg - micrograms per kilogram									
RQL - Reported Quantitation Limit									
J - Reported analytical value is estimated									
U - Constituent not detected above RQL.									
UJ - Constituent not detected above estimated RQL.									
R - Rejected									
Bolded values are detections.									
Shaded are detections above the NYSDEC Recommended Soil Cleanup objective									
¹ Sample collected at original MW-2 location. MW-2 was moved and completed across the street at the SB-5 location.									
² Sample collected at original MW-3 location. MW-3 was moved and completed directly across the street at the SB-6 location.									

Table 4-5
Summary of Detected Semivolatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-6/MW-3 9/12/2005 SB6 (5-6) 5 - 6 ft	SB-6/MW-3 9/13/2005 SB6 (12-14) 12 - 14 ft	SB-6/MW-3 9/13/2005 SB6 (20-22) 20 - 22 ft	SB-7 3/15/2006 SB7(4-5) 4 - 5 ft	SB-7 3/20/2006 SB7 (9-11) 9 - 11 ft	SB-7 3/20/2006 SB7 (11-13) 11 - 13 ft	SB-7 3/20/2006 SB7 (13-15) 13 - 15 ft
Polycyclic Aromatic Hydrocarbons (PAHs) - ug/kg									
BENZO(A)ANTHRACENE	224		790	2000	120 J	2600	3800	14000	540 J
BENZO(A)PYRENE	61		730	1400	81 J	3500	2200 J	11000	390 J
BENZO(B)FLUORANTHENE	1100		630	990 J	62 J	2900	1100 J	4700 J	170 J
BENZO(K)FLUORANTHENE	1100		190 J	330 J	400 U	2300	1200 J	6300	190 J
CHRYSENE	400		910	1900	120 J	2800	4000	14000	560 J
DIBENZ(A,H)ANTHRACENE	14		98 J	190 J	400 U	680 J	2300 U	1300 J	1000 U
INDENO(1,2,3-CD)PYRENE	3200		280 J	490 J	400 U	2300	650 J	3600 J	110 J
2-METHYLNAPHTHALENE	36400		300 J	7900	270 J	1900 U	2400	50000	2200 J
ACENAPHTHENE	50000		3500	8200	380 J	1900 U	21000	39000	1600 J
ACENAPHTHYLENE	41000		630	570 J	400 U	940 J	1400 J	4900 J	190 J
ANTHRACENE	50000		1200	3500	190 J	440 J	7700	19000	790 J
BENZO(G,H,I)PERYLENE	50000		300 J	520 J	400 U	2800	840 J	4700 J	140 J
FLUORANTHENE	50000		1900	3100	190 J	3500	6300	24000	920 J
FLUORENE	50000		1400	3500	180 J	1900 U	9100	21000	860 J
NAPHTHALENE	13000		880	9400	260 J	310 J	5900	73000	8100 J
PHENANTHRENE	50000		1600	11000	720	1100 J	27000	67000	3000 J
PYRENE	50000		2900	4700	320 J	3400	11000	36000	1500
BAP-TE	NA		1.00081	1.9432	0.32132	4.9858	3.921	14.607	0.97446
Total PAHs	NA		18238	59690	2893	29570	105590	393500	21260
Semi-Volatile Organic Compounds (SVOCs) - ug/kg									
1,1-BIPHENYL			410 U	1300	57 J	1900 U	2600	6700	250 J
2,4-DIMETHYLPHENOL			410 U	1000 U	400 U	1900 U	2300 U	5700 U	1000 U
2-METHYLPHENOL	100		410 U	1000 U	400 U	1900 U	2300 U	5700 U	1000 U
4-METHYLPHENOL (P-CRESOL)	900		410 U	1000 U	400 U	1900 U	2300 U	5700 U	1000 U
ACETOPHENONE			410 U	1000 U	400 U	1900 U	2300 U	5700 U	1000 U
BENZALDEHYDE			410 U	1000 U	400 U	R	R	R	R
BIS(2-ETHYLHEXYL) PHTHALATE	50000		410 U	1000 U	41 J	1900 U	2300 U	5700 U	1000 U
CARBAZOLE			410 U	1000 U	400 U	1900 U	2300 U	5700 U	1000 U
DIBENZOFURAN	6200		410 U	380 J	400 U	1900 U	2300 U	2100 J	1000 U
DI-N-BUTYL PHTHALATE	8100		410 U	1000 U	49 J	1900 U	2300 U	5700 U	1000 U
DI-N-OCTYL PHTHALATE	50000		410 U	1000 U	400 U	1900 U	2300 U	5700 U	1000 U
PHENOL	30		410 U	1000 U	400 U	1900 U	2300 U	5700 U	1000 U
Total SVOCs (including PAHs)			18238	61370	3040	29570	108190	402300	21510
Notes									
ug/kg - micrograms per kilogram									
RQL - Reported Quantitation Limit									
J - Reported analytical value is estimated									
U - Constituent not detected above RQL.									
UJ - Constituent not detected above estimated RQL.									
R - Rejected									
Bolded values are detections.									
Shaded are detections above the NYSDEC Recommended Soil Cleanup objective									
¹ Sample collected at original MW-2 location. MW-2 was moved and completed across the street at the SB-5 location.									
² Sample collected at original MW-3 location. MW-3 was moved and completed directly across the street at the SB-6 location.									

Table 4-5
Summary of Detected Semivolatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-7 3/30/2006 SB7 (29.5-30) 29.5 - 30 ft	SB-7 3/30/2006 SB7 (38-39) 38 - 39 ft	SB-8/MW-18 3/16/2006 SB8(1-2) 1 - 2 ft	SB-8/MW-18 3/16/2006 SB8(4-4.5) 4 - 4.5 ft	SB-8/MW-18 3/22/2006 SB8 (13-15) 13 - 15 ft	SB-8/MW-18 4/10/2006 SB8 (28-30) 28 - 30 ft	SB-9/MW-17 3/14/2006 SB9(3.5-4) 3.5 - 4 ft
Polycyclic Aromatic Hydrocarbons (PAHs) - ug/kg									
BENZO(A)ANTHRACENE	224		400 U	370 U	26000	24000	230 J	71 J	1700 J
BENZO(A)PYRENE	61		400 U	370 U	27000	18000	200 J	47 J	2200
BENZO(B)FLUORANTHENE	1100		400 U	370 U	14000	9400	99 J	430 U	1600 J
BENZO(K)FLUORANTHENE	1100		400 U	370 U	15000	12000	120 J	430 U	1600 J
CHRYSENE	400		400 U	370 U	27000	24000	240 J	76 J	2000
DIBENZ(A,H)ANTHRACENE	14		400 U	370 U	3900 J	2900 J	470 U	430 U	380 J
INDENO(1,2,3-CD)PYRENE	3200		400 U	370 U	9800	7100 J	72 J	430 U	1300 J
2-METHYLNAPHTHALENE	36400		400 U	370 U	920 J	8000 U	100 J	430 U	1900 U
ACENAPHTHENE	50000		400 U	370 U	7400 U	8000 U	400 J	430 U	1900 U
ACENAPHTHYLENE	41000		400 U	370 U	8100	6400 J	89 J	430 U	1600 J
ANTHRACENE	50000		400 U	370 U	3700 J	3100 J	200 J	45 J	560 J
BENZO(G,H,I)PERYLENE	50000		400 U	370 U	11000	8200	91 J	430 U	1800 J
FLUORANTHENE	50000		400 U	370 U	24000	29000	350 J	110 J	3000
FLUORENE	50000		400 U	370 U	7400 U	8000 U	210 J	430 U	1900 U
NAPHTHALENE	13000		400 U	370 U	7400 U	8000 U	310 J	430 U	310 J
PHENANTHRENE	50000		400 U	370 U	3600 J	1900 J	810	230 J	1500 J
PYRENE	50000		400 U	370 U	46000	57000	540	190 J	3100
BAP-TE	NA				36.057	25.094	0.47654	0.314326	3.058
Total PAHs	NA				220020	203000	4061	769	22650
Semi-Volatile Organic Compounds (SVOCs) - ug/kg									
1,1-BIPHENYL			400 U	370 U	7400 U	8000 U	470 U	430 U	1900 U
2,4-DIMETHYLPHENOL			400 U	370 U	7400 U	8000 U	470 U	430 U	1900 U
2-METHYLPHENOL	100		400 U	370 U	7400 U	8000 U	470 U	430 U	1900 U
4-METHYLPHENOL (P-CRESOL)	900		400 U	370 U	7400 U	8000 U	470 U	430 U	1900 U
ACETOPHENONE			400 U	370 U	7400 U	8000 U	470 U	430 U	1900 U
BENZALDEHYDE			400 UJ	370 UJ	R	R	R	R	R
BIS(2-ETHYLHEXYL) PHTHALATE	50000		400 U	370 U	7400 U	8000 U	380 J	80 J	1900 U
CARBAZOLE			400 U	370 U	7400 U	8000 U	470 U	430 U	200 J
DIBENZOFURAN	6200		400 U	370 U	7400 U	8000 U	470 U	430 U	1900 U
DI-N-BUTYL PHTHALATE	8100		400 U	370 U	7400 U	8000 U	470 U	430 U	1900 U
DI-N-OCTYL PHTHALATE	50000		400 U	370 U	7400 U	8000 U	470 U	430 U	1900 U
PHENOL	30		400 U	370 U	7400 U	8000 U	470 U	430 U	1900 U
Total SVOCs (including PAHs)					220020	203000	4441	849	22850
Notes									
ug/kg - micrograms per kilogram									
RQL - Reported Quantitation Limit									
J - Reported analytical value is estimated									
U - Constituent not detected above RQL.									
UJ - Constituent not detected above estimated RQL.									
R - Rejected									
Bolded values are detections.									
Shaded are detections above the NYSDEC Recommended Soil Cleanup objective									
¹ Sample collected at original MW-2 location. MW-2 was moved and completed across the street at the SB-5 location.									
² Sample collected at original MW-3 location. MW-3 was moved and completed directly across the street at the SB-6 location.									

Table 4-5
Summary of Detected Semivolatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-9/MW-17 3/30/2006 SB9 (8-10) 8 - 10 ft	SB-9/MW-17 3/30/2006 SB9 (19-20) 19 - 20 ft	SB-9/MW-17 4/11/2006 SB9 (30-31) 30 - 31 ft	SB-10 3/10/2006 SB10 (3-4) 3 - 4 ft	SB-10 3/14/2006 SB10(9-11) 9 - 11 ft	SB-10 3/14/2006 SB10(11-13) 11 - 13 ft	SB-10 3/15/2006 SB10(41-43) 41 - 43 ft
Polycyclic Aromatic Hydrocarbons (PAHs) - ug/kg									
BENZO(A)ANTHRACENE	224		14000	410 U	430 U	1100	12000	500	390 U
BENZO(A)PYRENE	61		9600 J	410 U	430 U	1100	8900	380 J	390 U
BENZO(B)FLUORANTHENE	1100		4400 J	410 U	430 U	950	3700 J	140 J	390 U
BENZO(K)FLUORANTHENE	1100		4800 J	410 U	430 U	1100	4500 J	170 J	390 U
CHRYSENE	400		14000	410 U	430 U	1400	12000	490 J	390 U
DIBENZ(A,H)ANTHRACENE	14		11000 U	410 U	430 U	230 J	950 J	55 J	390 U
INDENO(1,2,3-CD)PYRENE	3200		2700 J	410 U	430 U	840	2600 J	110 J	390 U
2-METHYLNAPHTHALENE	36400		1400 J	410 U	430 U	750 U	33000	2700	390 U
ACENAPHTHENE	50000		71000	410 U	430 U	750 U	30000	1700	390 U
ACENAPHTHYLENE	41000		4600 J	410 U	430 U	350 J	5000 J	210 J	390 U
ANTHRACENE	50000		23000	410 U	430 U	340 J	17000	780	390 U
BENZO(G,H,I)PERYLENE	50000		3600 J	410 U	430 U	970	3300 J	130 J	390 U
FLUORANTHENE	50000		21000	410 U	430 U	2900	19000	810	390 U
FLUORENE	50000		34000	410 U	430 U	750 U	14000	810	390 U
NAPHTHALENE	13000		22000	410 U	430 U	750 U	52000	3300	390 U
PHENANTHRENE	50000		85000	410 U	45 J	1900	57000	2700	390 U
PYRENE	50000		44000	410 U	430 U	2700	32000	1300	390 U
BAP-TE	NA		17.272		0.496865	1.6314	11.737	0.51219	
Total PAHs	NA		359100		45	15880	306950	16285	
Semi-Volatile Organic Compounds (SVOCs) - ug/kg									
1,1-BIPHENYL			9600 J	410 U	430 U	750 U	4200 J	260 J	390 U
2,4-DIMETHYLPHENOL			11000 U	410 U	430 U	750 U	7800 U	500 U	390 U
2-METHYLPHENOL	100		11000 U	410 U	430 U	750 U	7800 U	500 U	390 U
4-METHYLPHENOL (P-CRESOL)	900		11000 U	410 U	430 U	750 U	7800 U	500 U	390 U
ACETOPHENONE			11000 U	410 U	430 U	750 U	7800 U	500 U	390 U
BENZALDEHYDE			11000 UJ	410 UJ	R	R	R	56 J	R
BIS(2-ETHYLHEXYL) PHTHALATE	50000		11000 U	410 U	430 U	750 U	7800 U	52 J	59 J
CARBAZOLE			11000 U	410 U	430 U	250 J	7800 U	500 U	390 U
DIBENZOFURAN	6200		3300 J	410 U	430 U	750 U	1400 J	74 J	390 U
DI-N-BUTYL PHTHALATE	8100		11000 U	410 U	430 U	750 U	7800 U	500 U	390 U
DI-N-OCTYL PHTHALATE	50000		11000 U	410 U	430 U	750 U	7800 U	500 U	390 U
PHENOL	30		11000 U	410 U	430 U	750 U	7800 U	500 U	390 U
Total SVOCs (including PAHs)			372000		45	16130	312550	16727	59
Notes									
ug/kg - micrograms per kilogram									
RQL - Reported Quantitation Limit									
J - Reported analytical value is estimated									
U - Constituent not detected above RQL.									
UJ - Constituent not detected above estimated RQL.									
R - Rejected									
Bolded values are detections.									
Shaded are detections above the NYSDEC Recommended Soil Cleanup objective									
¹ Sample collected at original MW-2 location. MW-2 was moved and completed across the street at the SB-5 location.									
² Sample collected at original MW-3 location. MW-3 was moved and completed directly across the street at the SB-6 location.									

Table 4-5
Summary of Detected Semivolatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-11/MW-27 3/9/2006 SB11 (1-2) 1 - 2 ft	SB-11/MW-27 3/9/2006 SB11 (4-5) 4 - 5 ft	SB-11/MW-27 3/16/2006 SB11(9-11) 9 - 11 ft	SB-11/MW-27 3/16/2006 SB11(18-20) 18 - 20 ft	SB-11/MW-27 3/29/2006 SB11 (32-34) 32 - 34 ft	SB-11/MW-27 3/29/2006 SB11 (41-43) 41 - 43 ft	SB-12/MW-25 3/9/2006 SB12 (4-5) 4 - 5 ft
Polycyclic Aromatic Hydrocarbons (PAHs) - ug/kg									
BENZO(A)ANTHRACENE	224		15000 J	68000	15000	1100	470 U	380 U	1800 J
BENZO(A)PYRENE	61		19000	42000	11000	800 J	470 U	380 U	2100 J
BENZO(B)FLUORANTHENE	1100		15000 J	21000	5500 J	340 J	470 U	380 U	1900 J
BENZO(K)FLUORANTHENE	1100		17000 J	23000	5500 J	430 J	470 U	380 U	2100 J
CHRYSENE	400		22000	70000	15000	1100 J	470 U	380 U	2400
DIBENZ(A,H)ANTHRACENE	14		5200 J	5200 J	1500 J	1100 U	470 U	380 U	500 J
INDENO(1,2,3-CD)PYRENE	3200		14000 J	13000 J	4200 J	240 J	470 U	380 U	1600 J
2-METHYLNAPHTHALENE	36400		10000 J	17000 U	920 J	3500	140 J	380 U	2100 U
ACENAPHTHENE	50000		17000 U	110000	19000	3200	470 U	380 U	2100 U
ACENAPHTHYLENE	41000		36000	48000	15000	450 J	470 U	380 U	1300 J
ANTHRACENE	50000		15000 J	110000	20000	1600	470 U	380 U	630 J
BENZO(G,H,I)PERYLENE	50000		18000	17000 J	5500 J	310 J	470 U	380 U	2100 J
FLUORANTHENE	50000		18000	130000	26000	1900	470 U	380 U	2600
FLUORENE	50000		17000 U	100000	4400 J	1600	470 U	380 U	2100 U
NAPHTHALENE	13000		14000 J	7800 J	1300 J	4700	510	380 U	2100 U
PHENANTHRENE	50000		14000 J	270000	17000	5600	470 U	41 J	1100 J
PYRENE	50000		28000	180000	37000	2600	470 U	380 U	3400
BAP-TE	NA		28.792	57.7	15.04	1.5234	0.543085	0.43909	3.1534
Total PAHs	NA		260200	1215000	203820	29470	650	41	23530
Semi-Volatile Organic Compounds (SVOCs) - ug/kg									
1,1-BIPHENYL			17000 U	5100 J	2000 J	480 J	470 U	380 U	2100 U
2,4-DIMETHYLPHENOL			17000 U	17000 U	7900 U	1100 U	470 U	380 U	2100 U
2-METHYLPHENOL	100		17000 U	17000 U	7900 U	1100 U	470 U	380 U	2100 U
4-METHYLPHENOL (P-CRESOL)	900		17000 U	17000 U	7900 U	1100 U	470 U	380 U	2100 U
ACETOPHENONE			17000 U	17000 U	7900 U	1100 U	470 U	380 U	2100 U
BENZALDEHYDE			R	R	R	R	69 J	R	R
BIS(2-ETHYLHEXYL) PHTHALATE	50000		17000 U	17000 U	7900 U	150 J	470 U	140 J	2100 U
CARBAZOLE			17000 U	17000 U	7900 U	1100 U	470 U	380 U	2100 U
DIBENZOFURAN	6200		17000 U	17000 U	1400 J	140 J	470 U	380 U	2100 U
DI-N-BUTYL PHTHALATE	8100		17000 U	17000 U	7900 U	1100 U	470 U	380 U	2100 U
DI-N-OCTYL PHTHALATE	50000		17000 U	17000 U	7900 U	1100 U	470 U	380 U	2100 U
PHENOL	30		17000 U	17000 U	7900 U	1100 U	470 U	380 U	2100 U
Total SVOCs (including PAHs)			260200	1220100	207220	30240	719	181	23530
Notes									
ug/kg - micrograms per kilogram									
RQL - Reported Quantitation Limit									
J - Reported analytical value is estimated									
U - Constituent not detected above RQL.									
UJ - Constituent not detected above estimated RQL.									
R - Rejected									
Bolded values are detections.									
Shaded are detections above the NYSDEC Recommended Soil Cleanup objective									
¹ Sample collected at original MW-2 location. MW-2 was moved and completed across the street at the SB-5 location.									
² Sample collected at original MW-3 location. MW-3 was moved and completed directly across the street at the SB-6 location.									

Table 4-5
Summary of Detected Semivolatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-12/MW-25 3/27/2006 SB12 (10-15) 10 - 15 ft	SB-12/MW-25 3/27/2006 SB12 (25-30) 25 - 30 ft	SB-13/MW-24 3/9/2006 SB13 (3-4) 3 - 4 ft	SB-13/MW-24 3/16/2006 SB13(5-7) 5 - 7 ft	SB-13/MW-24 3/16/2006 SB13(15-17) 15 - 17 ft	SB-14/MW-23 3/8/2006 SB14 (3-4) 3 - 4 ft	SB-14/MW-23 3/16/2006 SB14(5-9) 5 - 9 ft
Polycyclic Aromatic Hydrocarbons (PAHs) - ug/kg									
BENZO(A)ANTHRACENE	224		380 U	390 U	1100	5900	500 U	5200 J	1200
BENZO(A)PYRENE	61		380 U	390 U	1100	5100	500 U	5400 J	1500
BENZO(B)FLUORANTHENE	1100		380 U	390 U	1300	5100	500 U	6800 J	1500
BENZO(K)FLUORANTHENE	1100		380 U	390 U	1100	5200	500 U	6500 J	1200 J
CHRYSENE	400		380 U	390 U	1400	6900	500 U	7100 J	1600
DIBENZ(A,H)ANTHRACENE	14		380 U	390 U	280 J	1100 J	500 U	2100 J	450 J
INDENO(1,2,3-CD)PYRENE	3200		380 U	390 U	800 J	3500	500 U	5500 J	1300
2-METHYLNAPHTHALENE	36400		380 U	57 J	440 J	760 J	500 U	1000 J	430 J
ACENAPHTHENE	50000		380 U	390 U	930 U	2200 U	500 U	5400 UJ	1200 U
ACENAPHTHYLENE	41000		380 U	390 U	730 J	3000	500 U	9700 J	1600
ANTHRACENE	50000		380 U	390 U	310 J	1800 J	500 U	2300 J	700 J
BENZO(G,H,I)PERYLENE	50000		380 U	390 U	1000	4300	500 U	7100 J	1700
FLUORANTHENE	50000		380 U	390 U	1500	9500	500 U	6000 J	2200
FLUORENE	50000		380 U	390 U	930 U	2200 U	500 U	1200 J	1200 U
NAPHTHALENE	13000		380 U	270 J	380 J	880 J	500 U	1400 J	500 J
PHENANTHRENE	50000		380 U	390 U	630 J	3300	500 U	3100 J	1200 J
PYRENE	50000		380 U	390 U	2000	13000	500 U	8600 J	2100
BAP-TE	NA			0.450645	1.7124	7.7089		9.3221	2.3636
Total PAHs	NA			327	14070	69340		79000	19180
Semi-Volatile Organic Compounds (SVOCs) - ug/kg									
1,1-BIPHENYL			380 U	390 U	930 U	2200 U	500 U	5400 UJ	1200 U
2,4-DIMETHYLPHENOL			380 U	390 U	930 UJ	2200 U	500 U	5400 UJ	1200 U
2-METHYLPHENOL	100		380 U	390 U	930 U	2200 U	500 U	5400 UJ	1200 U
4-METHYLPHENOL (P-CRESOL)	900		380 U	390 U	930 U	2200 U	500 U	5400 UJ	1200 U
ACETOPHENONE			380 U	390 U	930 U	2200 U	500 U	1300 J	130 J
BENZALDEHYDE			R	R	R	R	R	R	R
BIS(2-ETHYLHEXYL) PHTHALATE	50000		380 U	390 U	930 U	270 J	150 J	5400 UJ	270 J
CARBAZOLE			380 U	390 U	930 U	310 J	500 U	5400 UJ	1200 U
DIBENZOFURAN	6200		380 U	390 U	100 J	220 J	500 U	5400 UJ	120 J
DI-N-BUTYL PHTHALATE	8100		380 U	390 U	930 U	2200 U	500 U	5400 UJ	1200 U
DI-N-OCTYL PHTHALATE	50000		380 U	390 U	930 U	2200 U	500 U	5400 UJ	1200 U
PHENOL	30		380 U	390 U	930 U	2200 U	500 U	5400 UJ	1200 U
Total SVOCs (including PAHs)				327	14170	70140	150	80300	19700
Notes									
ug/kg - micrograms per kilogram									
RQL - Reported Quantitation Limit									
J - Reported analytical value is estimated									
U - Constituent not detected above RQL.									
UJ - Constituent not detected above estimated RQL.									
R - Rejected									
Bolded values are detections.									
Shaded are detections above the NYSDEC Recommended Soil Cleanup objective									
¹ Sample collected at original MW-2 location. MW-2 was moved and completed across the street at the SB-5 location.									
² Sample collected at original MW-3 location. MW-3 was moved and completed directly across the street at the SB-6 location.									

Table 4-5
Summary of Detected Semivolatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-14/MW-23 3/16/2006 SB14(13-15) 13 - 15 ft	SB-16/MW-26 3/9/2006 SB16 (4-5) 4 - 5 ft	SB-16/MW-26 3/17/2006 SB16(17-19) 17 - 19 ft	SB-16/MW-26 3/17/2006 SB16(22.5-23) 22.5 - 23 ft	SB-16/MW-26 3/29/2006 SB16 (32-35) 32 - 35 ft	SB-16/MW-26 3/29/2006 SB16 (38-39) 38 - 39 ft	SB-17 9/2/2005 SB17 (3-3.5) 3 - 3.5 ft
Polycyclic Aromatic Hydrocarbons (PAHs) - ug/kg									
BENZO(A)ANTHRACENE	224		530 U	510 J	8500	920 J	400 U	360 U	150 J
BENZO(A)PYRENE	61		530 U	530	5700	720 J	400 U	360 U	180 J
BENZO(B)FLUORANTHENE	1100		530 U	450 J	2400 J	340 J	400 U	360 U	200 J
BENZO(K)FLUORANTHENE	1100		530 U	480 J	3200 J	410 J	400 U	360 U	70 J
CHRYSENE	400		530 U	810	8000	820 J	400 U	360 U	160 J
DIBENZ(A,H)ANTHRACENE	14		530 U	130 J	610 J	1600 UJ	400 U	360 U	400 U
INDENO(1,2,3-CD)PYRENE	3200		530 U	370 J	1700 J	280 J	400 U	360 U	97 J
2-METHYLNAPHTHALENE	36400		530 U	77 J	11000	230 J	45 J	360 U	400 U
ACENAPHTHENE	50000		530 U	530 U	39000	2600 J	47 J	360 U	400 U
ACENAPHTHYLENE	41000		530 U	410 J	3400 J	480 J	53 J	360 U	400 U
ANTHRACENE	50000		530 U	180 J	16000	1400 J	400 U	360 U	400 U
BENZO(G,H,I)PERYLENE	50000		530 U	460 J	2200 J	340 J	400 U	360 U	100 J
FLUORANTHENE	50000		530 U	780	15000	1900 J	400 U	360 U	230 J
FLUORENE	50000		530 U	530 U	21000	1500 J	400 U	360 U	400 U
NAPHTHALENE	13000		530 U	89 J	5800	390 J	440	360 U	400 U
PHENANTHRENE	50000		530 U	510 J	58000	5300 J	400 U	360 U	120 J
PYRENE	50000		530 U	1200	26000	2400 J	400 U	360 U	230 J
BAP-TE	NA			0.79861	7.61	1.67892	0.4622		0.42556
Total PAHs	NA			6986	227510	20030	585		1537
Semi-Volatile Organic Compounds (SVOCs) - ug/kg									
1,1-BIPHENYL			530 U	530 U	7000	370 J	400 U	360 U	400 U
2,4-DIMETHYLPHENOL			530 U	530 U	4500 U	1600 UJ	400 U	360 U	400 U
2-METHYLPHENOL	100		530 U	530 U	4500 U	1600 UJ	400 U	360 U	400 U
4-METHYLPHENOL (P-CRESOL)	900		530 U	530 U	4500 U	1600 UJ	400 U	360 U	400 U
ACETOPHENONE			530 U	530 U	4500 U	1600 UJ	400 U	360 U	400 U
BENZALDEHYDE			R	R	R	R	R	R	400 U
BIS(2-ETHYLHEXYL) PHTHALATE	50000		530 U	530 U	4500 U	200 J	400 U	360 U	400 U
CARBAZOLE			530 U	530 U	4500 U	1600 UJ	400 U	360 U	400 U
DIBENZOFURAN	6200		530 U	530 U	1700 J	1600 UJ	400 U	360 U	400 U
DI-N-BUTYL PHTHALATE	8100		530 U	530 U	4500 U	1600 UJ	400 U	360 U	400 U
DI-N-OCTYL PHTHALATE	50000		530 U	530 U	4500 U	1600 UJ	400 U	360 U	400 U
PHENOL	30		530 U	530 U	4500 U	1600 UJ	400 U	360 U	400 U
Total SVOCs (including PAHs)				6986	236210	20600	585		1537
Notes									
ug/kg - micrograms per kilogram									
RQL - Reported Quantitation Limit									
J - Reported analytical value is estimated									
U - Constituent not detected above RQL.									
UJ - Constituent not detected above estimated RQL.									
R - Rejected									
Bolded values are detections.									
Shaded are detections above the NYSDEC Recommended Soil Cleanup objective									
¹ Sample collected at original MW-2 location. MW-2 was moved and completed across the street at the SB-5 location.									
² Sample collected at original MW-3 location. MW-3 was moved and completed directly across the street at the SB-6 location.									

Table 4-5
Summary of Detected Semivolatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

ENSR

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-18 9/7/2005 SB18 (2-2.5) 2 - 2.5 ft	SB-19/MW-11 9/8/2005 SB19 (5-5.5) 5 - 5.5 ft	SB-19/MW-11 9/8/2005 SB19/MW11 5 - 9 ft	SB-20 3/24/2006 SB20 (4.5-5) 4.5 - 5 ft	SB-20 3/30/2006 SB20 (20-22) 20 - 22 ft	SB-20 3/30/2006 SB20 (22-23) 22 - 23 ft	SB-21/MW-1B 3/21/2006 SB21(0-5) 0 - 5 ft
Polycyclic Aromatic Hydrocarbons (PAHs) - ug/kg									
BENZO(A)ANTHRACENE	224		29000	400 U	23000	400 U	12000 J	160 J	9500
BENZO(A)PYRENE	61		23000	400 U	18000	400 U	9400 J	120 J	13000
BENZO(B)FLUORANTHENE	1100		44000	400 U	15000	400 U	3300 J	520 U	7900
BENZO(K)FLUORANTHENE	1100		14000 J	400 U	4800 J	400 U	5100 J	63 J	8100
CHRYSENE	400		36000	400 U	25000	42 J	12000 J	160 J	11000
DIBENZ(A,H)ANTHRACENE	14		9400 J	400 U	2400 J	400 U	15000 U	520 U	2000 J
INDENO(1,2,3-CD)PYRENE	3200		29000	400 U	6400 J	400 U	2600 J	520 U	5900 J
2-METHYLNAPHTHALENE	36400		3600 J	61 J	63000	400 U	110000	1100	8000
ACENAPHTHENE	50000		17000 U	400 U	8400	400 U	61000	550	910 J
ACENAPHTHYLENE	41000		33000	400 U	11000	400 U	3900 J	520 U	8800
ANTHRACENE	50000		15000 J	400 U	15000	400 U	21000	250 J	3600 J
BENZO(G,H,I)PERYLENE	50000		31000	400 U	7600	400 U	3300 J	520 U	8000
FLUORANTHENE	50000		39000	50 J	41000	61 J	19000	250 J	8100
FLUORENE	50000		4600 J	400 U	27000	400 U	25000	250 J	7300 U
NAPHTHALENE	13000		6800 J	57 J	53000	400 U	170000	2200	2900 J
PHENANTHRENE	50000		23000	97 J	100000	400 U	74000	860	4800 J
PYRENE	50000		50000	60 J	51000	60 J	40000	470 J	14000
BAP-TE	NA		42.776	0.4622	24.913	0.462042	18.753	0.44879	17.422
Total PAHs	NA		390400	325	471600	163	571600	6433	116510
Semi-Volatile Organic Compounds (SVOCs) - ug/kg									
1,1-BIPHENYL			17000 U	400 U	7300 U	400 U	10000 J	100 J	7300 U
2,4-DIMETHYLPHENOL			17000 U	400 U	7300 U	400 U	15000 U	520 U	7300 U
2-METHYLPHENOL	100		17000 U	400 U	7300 U	400 U	15000 U	520 U	7300 U
4-METHYLPHENOL (P-CRESOL)	900		17000 U	400 U	7300 U	400 U	15000 U	520 U	7300 U
ACETOPHENONE			6000 J	400 U	7300 U	400 U	15000 U	520 U	7300 U
BENZALDEHYDE			17000 U	400 U	7300 U	R	15000 UJ	520 UJ	R
BIS(2-ETHYLHEXYL) PHTHALATE	50000		17000 U	400 U	7300 U	400 U	15000 U	97 J	7300 U
CARBAZOLE			1900 J	400 U	1300 J	400 U	15000 U	520 U	7300 U
DIBENZOFURAN	6200		17000 U	400 U	4000 J	400 U	2700 J	520 U	7300 U
DI-N-BUTYL PHTHALATE	8100		17000 U	51 J	7300 U	400 U	15000 U	520 U	7300 U
DI-N-OCTYL PHTHALATE	50000		17000 U	400 U	7300 U	400 U	15000 U	520 U	7300 U
PHENOL	30		17000 U	400 U	7300 U	400 U	15000 U	520 U	7300 U
Total SVOCs (including PAHs)			398300	376	476900	163	584300	6630	116510
Notes									
ug/kg - micrograms per kilogram									
RQL - Reported Quantitation Limit									
J - Reported analytical value is estimated									
U - Constituent not detected above RQL.									
UJ - Constituent not detected above estimated RQL.									
R - Rejected									
Bolded values are detections.									
Shaded are detections above the NYSDEC Recommended Soil Cleanup objective									
¹ Sample collected at original MW-2 location. MW-2 was moved and completed across the street at the SB-5 location.									
² Sample collected at original MW-3 location. MW-3 was moved and completed directly across the street at the SB-6 location.									

Table 4-5
Summary of Detected Semivolatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	3-21/MW-1B (DU 3/21/2006 SB210(0-5) 0 - 5 ft	SB-22/MW-10 8/31/2005 MW-10 (4.5-5) 4.5 - 5 ft	SB-22/MW-10 9/8/2005 MW-10 (11-13) 11 - 13 ft	SB-23 8/17/2005 SB23 (3.3-3.5) 3.3 - 3.5 ft	SB-23 8/17/2005 SB23 (4-4.5) 4 - 4.5 ft	SB-24(2) 3/22/2006 SB24 (7-8) 7 - 8 ft	SB-25/MW-13 3/6/2006 SB25 (2-3) 2 - 3 ft
Polycyclic Aromatic Hydrocarbons (PAHs) - ug/kg									
BENZO(A)ANTHRACENE	224		7400	16000	140 J	470	9400	14000	1200000
BENZO(A)PYRENE	61		11000	16000	120 J	480	9600	13000	810000 J
BENZO(B)FLUORANTHENE	1100		6300 J	19000	130 J	660	7300	6600	320000 J
BENZO(K)FLUORANTHENE	1100		6200 J	6600	53 J	220 J	2500 J	7300	490000 J
CHRYSENE	400		9100	15000	130 J	580	9100	14000	1300000
DIBENZ(A,H)ANTHRACENE	14		1600 J	2700	500 U	80 J	840 J	1500 J	890000 U
INDENO(1,2,3-CD)PYRENE	3200		4600 J	8100	65 J	250 J	2500 J	4100	230000 J
2-METHYLNAPHTHALENE	36400		8900	240 J	500 U	200 J	5400 U	380 J	8900000
ACENAPHTHENE	50000		880 J	2200 U	500 U	81 J	11000	20000	540000 J
ACENAPHTHYLENE	41000		7200 J	3500	500 U	380 J	5300 J	11000	3900000
ANTHRACENE	50000		3000 J	1900 J	72 J	200 J	4800 J	8700	4200000
BENZO(G,H,I)PERYLENE	50000		6100 J	6500	60 J	250 J	2300 J	5100	270000 J
FLUORANTHENE	50000		6700 J	27000	300 J	890	17000	24000	2300000
FLUORENE	50000		1200 J	450 J	500 U	48 J	5400 J	3400	2300000
NAPHTHALENE	13000		2300 J	920 J	500 U	200 J	7300	600 J	14000000
PHENANTHRENE	50000		4400 J	1600 J	260 J	550	8600	6100	7400000
PYRENE	50000		12000	22000	240 J	850	35000	32000	3200000
BAP-TE	NA		14.5011	23.091	0.40416	0.70078	12.3941	17.057	991.2
Total PAHs	NA		98880	147510	1570	6389	137940	171780	51360000
Semi-Volatile Organic Compounds (SVOCs) - ug/kg									
1,1-BIPHENYL			820 J	2200 U	500 U	42 J	1700 J	1900 J	850000 J
2,4-DIMETHYLPHENOL			7300 U	350 J	500 U	420 U	5400 U	2100 U	890000 U
2-METHYLPHENOL	100		7300 U	270 J	500 U	420 U	5400 U	2100 U	890000 U
4-METHYLPHENOL (P-CRESOL)	900		7300 U	1100 J	500 U	420 U	5400 U	2100 U	890000 U
ACETOPHENONE			7300 U	2200 U	500 U	420 U	5400 U	2100 U	890000 U
BENZALDEHYDE			R	2200 U	500 U	46 J	5400 U	R	R
BIS(2-ETHYLHEXYL) PHTHALATE	50000		7300 U	2200 U	500 U	2800	5400 U	2100 U	890000 U
CARBAZOLE			7300 U	430 J	500 U	58 J	5400 U	2100 U	110000 J
DIBENZOFURAN	6200		7300 U	2200 U	500 U	57 J	1000 J	1400 J	310000 J
DI-N-BUTYL PHTHALATE	8100		7300 U	2200 U	500 U	320 J	5400 U	2100 U	890000 U
DI-N-OCTYL PHTHALATE	50000		7300 U	2200 U	500 U	420 U	5400 U	2100 U	890000 U
PHENOL	30		7300 U	890 J	500 U	420 U	5400 U	2100 U	890000 U
Total SVOCs (including PAHs)			99700	150550	1570	9822	140640	175080	52630000
Notes									
ug/kg - micrograms per kilogram									
RQL - Reported Quantitation Limit									
J - Reported analytical value is estimated									
U - Constituent not detected above RQL.									
UJ - Constituent not detected above estimated RQL.									
R - Rejected									
Bolded values are detections.									
Shaded are detections above the NYSDEC Recommended Soil Cleanup objective									
¹ Sample collected at original MW-2 location. MW-2 was moved and completed across the street at the SB-5 location.									
² Sample collected at original MW-3 location. MW-3 was moved and completed directly across the street at the SB-6 location.									

Table 4-5
Summary of Detected Semivolatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

ENSR

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-25/MW-13 3/10/2006 SB25 (7-8) 7 - 8 ft	SB-26/MW-9 3/9/2006 SB26 (7-8) 7 - 8 ft	SB-28 5/2/2006 SB28(5-10) 5 - 10 ft	SB-28 5/2/2006 SB28(18-20) 18 - 20 ft	SB-29 3/23/2006 SB29 (4-4.5) 4 - 4.5 ft	SB-29 3/24/2006 SB29 (7-9) 7 - 9 ft	SB-29 3/24/2006 SB29 (17-19) 17 - 19 ft
Polycyclic Aromatic Hydrocarbons (PAHs) - ug/kg									
BENZO(A)ANTHRACENE	224		55000	26000	470 J	370 U	160 J	760 J	140 J
BENZO(A)PYRENE	61		36000 J	20000	500 J	370 U	170 J	650 J	96 J
BENZO(B)FLUORANTHENE	1100		16000 J	8400 J	390 J	370 U	200 J	540 J	49 J
BENZO(K)FLUORANTHENE	1100		20000 J	12000	400 J	370 U	160 J	550 J	57 J
CHRYSENE	400		58000	23000	490 J	370 U	230 J	750 J	140 J
DIBENZ(A,H)ANTHRACENE	14		44000 U	2200 J	110 J	370 U	46 J	130 J	430 U
INDENO(1,2,3-CD)PYRENE	3200		11000 J	6300 J	230 J	370 U	140 J	330 J	430 U
2-METHYLNAPHTHALENE	36400		310000	40000	530 U	370 U	380 U	400 J	96 J
ACENAPHTHENE	50000		130000	69000	530 U	370 U	380 U	160 J	440
ACENAPHTHYLENE	41000		47000	8400 J	70 J	370 U	130 J	1200 U	45 J
ANTHRACENE	50000		120000	43000	63 J	370 U	60 J	450 J	210 J
BENZO(G,H,I)PERYLENE	50000		15000 J	7900 J	240 J	370 U	160 J	370 J	52 J
FLUORANTHENE	50000		100000	45000	580	370 U	280 J	1900	220 J
FLUORENE	50000		100000	40000	530 U	370 U	380 U	240 J	220 J
NAPHTHALENE	13000		240000	89000	530 U	370 U	380 U	1200 U	80 J
PHENANTHRENE	50000		360000	130000	190 J	370 U	130 J	2100	920
PYRENE	50000		160000	70000	550	370 U	290 J	1600	380 J
BAP-TE	NA		44.458	26.413	0.72349		0.26783	0.94925	0.35211
Total PAHs	NA		1778000	640200	4283		2156	10930	3145
Semi-Volatile Organic Compounds (SVOCs) - ug/kg									
1,1-BIPHENYL			35000 J	15000	530 U	370 U	380 U	1200 U	430 U
2,4-DIMETHYLPHENOL			44000 U	10000 U	530 U	370 U	380 U	1200 U	430 U
2-METHYLPHENOL	100		44000 U	10000 U	530 U	370 U	380 U	1200 U	430 U
4-METHYLPHENOL (P-CRESOL)	900		44000 U	10000 U	530 U	370 U	380 U	1200 U	430 U
ACETOPHENONE			44000 U	10000 U	530 U	370 U	380 U	1200 U	430 U
BENZALDEHYDE			R	R	76 J	370 UJ	R	R	R
BIS(2-ETHYLHEXYL) PHTHALATE	50000		44000 U	10000 U	530 U	370 U	380 U	1200 U	78 J
CARBAZOLE			44000 U	10000 U	530 U	370 U	380 U	210 J	430 U
DIBENZOFURAN	6200		11000 J	3300 J	530 U	370 U	380 U	140 J	430 U
DI-N-BUTYL PHTHALATE	8100		44000 U	10000 U	530 U	370 U	380 U	1200 U	430 U
DI-N-OCTYL PHTHALATE	50000		44000 U	10000 UJ	530 U	370 U	380 U	1200 U	430 U
PHENOL	30		44000 U	10000 U	530 U	370 U	380 U	1200 U	430 U
Total SVOCs (including PAHs)			1824000	658500	4359		2156	11280	3223
Notes									
ug/kg - micrograms per kilogram									
RQL - Reported Quantitation Limit									
J - Reported analytical value is estimated									
U - Constituent not detected above RQL.									
UJ - Constituent not detected above estimated RQL.									
R - Rejected									
Bolded values are detections.									
Shaded are detections above the NYSDEC Recommended Soil Cleanup objective									
¹ Sample collected at original MW-2 location. MW-2 was moved and completed across the street at the SB-5 location.									
² Sample collected at original MW-3 location. MW-3 was moved and completed directly across the street at the SB-6 location.									

Table 4-5
Summary of Detected Semivolatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-30 3/28/2006 SB30(4-5) 4 - 5 ft	SB-30 3/28/2006 SB30(8.5-10) 8.5 - 10 ft	SB-30 3/28/2006 SB30(23-24) 23 - 24 ft	SB-30 3/28/2006 SB30(30-35) 30 - 35 ft	SB-31 3/23/2006 SB31 (4-4.5) 4 - 4.5 ft	SB-31 3/23/2006 SB31 (7-9) 7 - 9 ft	SB-31 3/23/2006 SB31 (21-23) 21 - 23 ft
Polycyclic Aromatic Hydrocarbons (PAHs) - ug/kg									
BENZO(A)ANTHRACENE	224		14000 J	410 U	710	68 J	350 J	370 J	400 U
BENZO(A)PYRENE	61		9200 J	410 U	590	520 U	410 J	310 J	400 U
BENZO(B)FLUORANTHENE	1100		4000 J	410 U	490	520 U	340 J	180 J	400 U
BENZO(K)FLUORANTHENE	1100		4300 J	410 U	480	520 U	320 J	190 J	400 U
CHRYSENE	400		14000 J	410 U	710	61 J	460 J	400	400 U
DIBENZ(A,H)ANTHRACENE	14		39000 U	410 U	110 J	520 U	1100 U	44 J	400 U
INDENO(1,2,3-CD)PYRENE	3200		39000 U	410 U	300 J	520 U	240 J	120 J	400 U
2-METHYLNAPHTHALENE	36400		120000	410 U	98 J	350 J	1100 U	79 J	400 U
ACENAPHTHENE	50000		59000	410 U	410 U	160 J	1100 U	500	400 U
ACENAPHTHYLENE	41000		39000 U	410 U	120 J	520 U	160 J	240 J	400 U
ANTHRACENE	50000		24000 J	410 U	150 J	79 J	1100 U	340 J	400 U
BENZO(G,H,I)PERYLENE	50000		39000 U	410 U	330 J	520 U	300 J	150 J	400 U
FLUORANTHENE	50000		22000 J	410 U	1100	93 J	650 J	660	400 U
FLUORENE	50000		26000 J	410 U	410 U	85 J	1100 U	210 J	400 U
NAPHTHALENE	13000		260000	410 U	100 J	570	1100 U	43 J	400 U
PHENANTHRENE	50000		86000	410 U	500	330 J	320 J	780	400 U
PYRENE	50000		37000 J	410 U	960	150 J	660 J	950	400 U
BAP-TE	NA		13.007		0.85551	0.581461	1.05666	0.4233	
Total PAHs	NA		679500		6748	1946	4210	5566	
Semi-Volatile Organic Compounds (SVOCs) - ug/kg									
1,1-BIPHENYL			12000 J	410 U	410 U	520 U	1100 U	390 U	400 U
2,4-DIMETHYLPHENOL			39000 U	410 U	410 U	520 U	1100 U	390 U	400 U
2-METHYLPHENOL	100		39000 U	410 U	410 U	520 U	1100 U	390 U	400 U
4-METHYLPHENOL (P-CRESOL)	900		39000 U	410 U	410 U	520 U	1100 U	390 U	400 U
ACETOPHENONE			39000 U	410 U	410 U	520 U	1100 U	390 U	400 U
BENZALDEHYDE			R	R	R	R	R	43 J	R
BIS(2-ETHYLHEXYL) PHTHALATE	50000		39000 U	47 J	61 J	520 U	1100 U	120 J	400 U
CARBAZOLE			39000 U	410 U	56 J	520 U	1100 U	390 U	400 U
DIBENZOFURAN	6200		39000 U	410 U	410 U	520 U	1100 U	390 U	400 U
DI-N-BUTYL PHTHALATE	8100		39000 U	60 J	410 U	520 U	1100 U	390 U	400 U
DI-N-OCTYL PHTHALATE	50000		39000 U	410 U	410 U	520 U	1100 U	390 U	400 U
PHENOL	30		39000 U	410 U	410 U	520 U	1100 U	390 U	400 U
Total SVOCs (including PAHs)			691500	107	6865	1946	4210	5729	
Notes									
ug/kg - micrograms per kilogram									
RQL - Reported Quantitation Limit									
J - Reported analytical value is estimated									
U - Constituent not detected above RQL.									
UJ - Constituent not detected above estimated RQL.									
R - Rejected									
Bolded values are detections.									
Shaded are detections above the NYSDEC Recommended Soil Cleanup objective									
¹ Sample collected at original MW-2 location. MW-2 was moved and completed across the street at the SB-5 location.									
² Sample collected at original MW-3 location. MW-3 was moved and completed directly across the street at the SB-6 location.									

Table 4-5
Summary of Detected Semivolatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-31 3/23/2006 SB31 (35-37) 35 - 37 ft	SB-32/MW-15 3/31/2006 SB32 (4.5-5) 4.5 - 5 ft	SB-32/MW-15 3/31/2006 SB32 (9-13) 9 - 13 ft	SB-32/MW-15 3/31/2006 SB32 (17-19) 17 - 19 ft	SB-32/MW-15 3/31/2006 SB32 (20-23) 20 - 23 ft	SB-33/MW-16 4/3/2006 SB33 (3-3.5) 3 - 3.5 ft	B-33/MW-16 (DU) 4/3/2006 SB330 (3-3.5) 3 - 3.5 ft
Polycyclic Aromatic Hydrocarbons (PAHs) - ug/kg									
BENZO(A)ANTHRACENE	224		330 J	5700	1900	42000 J	1900	1000	1500
BENZO(A)PYRENE	61		230 J	5500	2000	34000 J	1400 J	1300	1600
BENZO(B)FLUORANTHENE	1100		98 J	4900	1100	12000 J	550 J	1000	1500
BENZO(K)FLUORANTHENE	1100		120 J	4600	1300	15000 J	770 J	980	1300
CHRYSENE	400		320 J	6200	2000	42000 J	1800	1100	1500
DIBENZ(A,H)ANTHRACENE	14		400 U	900 J	300 J	74000 U	1600 U	220 J	320 J
INDENO(1,2,3-CD)PYRENE	3200		73 J	3500 J	1000	9000 J	370 J	800	970
2-METHYLNAPHTHALENE	36400		120 J	600 J	280 J	390000	13000	88 J	130 J
ACENAPHTHENE	50000		460	470 J	890	210000	7900	75 J	200 J
ACENAPHTHYLENE	41000		150 J	2700 J	1000	14000 J	740 J	270 J	290 J
ANTHRACENE	50000		440	1700 J	670 J	73000 J	3200	290 J	640
BENZO(G,H,I)PERYLENE	50000		94 J	3800 J	1300	10000 J	480 J	920	1100
FLUORANTHENE	50000		600	10000	3000	66000 J	3100	1600	3200
FLUORENE	50000		340 J	430 J	200 J	82000	3100	71 J	320 J
NAPHTHALENE	13000		80 J	780 J	430 J	610000	19000	210 J	280 J
PHENANTHRENE	50000		1700	4300	1200	240000	10000	940	2300
PYRENE	50000		850	10000	4400	140000	5300	1600	65 J
BAP-TE	NA		0.48162	7.8622	2.715	40.492	2.4915	1.8109	2.3315
Total PAHs	NA		6005	66080	22970	1989000	72610	12464	17215
Semi-Volatile Organic Compounds (SVOCs) - ug/kg									
1,1-BIPHENYL			46 J	4200 U	94 J	36000 J	1400 J	390 U	43 J
2,4-DIMETHYLPHENOL			400 U	4200 U	840 U	74000 U	1600 U	390 U	390 U
2-METHYLPHENOL	100		400 U	4200 U	840 U	74000 U	1600 U	390 U	390 U
4-METHYLPHENOL (P-CRESOL)	900		400 U	4200 U	840 U	74000 U	1600 U	390 U	390 U
ACETOPHENONE			400 U	4200 U	840 U	74000 U	1600 U	390 U	390 U
BENZALDEHYDE			R	4200 UJ	840 UJ	74000 UJ	1600 UJ	390 UJ	390 UJ
BIS(2-ETHYLHEXYL) PHTHALATE	50000		160 J	4200 U	370 J	74000 U	340 J	390 U	390 U
CARBAZOLE			400 U	4200 U	840 U	74000 U	1600 U	110 J	270 J
DIBENZOFURAN	6200		400 U	4200 U	94 J	9100 J	370 J	80 J	220 J
DI-N-BUTYL PHTHALATE	8100		400 U	4200 U	840 U	74000 U	1600 U	390 U	390 U
DI-N-OCTYL PHTHALATE	50000		400 U	4200 U	840 U	74000 U	1600 U	390 U	390 U
PHENOL	30		400 U	4200 U	840 U	74000 U	1600 U	390 U	390 U
Total SVOCs (including PAHs)			6211	66080	23528	2034100	74720	12654	17748
Notes									
ug/kg - micrograms per kilogram									
RQL - Reported Quantitation Limit									
J - Reported analytical value is estimated									
U - Constituent not detected above RQL.									
UJ - Constituent not detected above estimated RQL.									
R - Rejected									
Bolded values are detections.									
Shaded are detections above the NYSDEC Recommended Soil Cleanup objective									
¹ Sample collected at original MW-2 location. MW-2 was moved and completed across the street at the SB-5 location.									
² Sample collected at original MW-3 location. MW-3 was moved and completed directly across the street at the SB-6 location.									

Table 4-5
Summary of Detected Semivolatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-33/MW-16 3/31/2006 SB33 (5-9) 5 - 9 ft	SB-33/MW-16 3/31/2006 SB33 (13-15) 13 - 15 ft	SB-34/MW-14 3/24/2006 SB34 (4-4.5) 4 - 4.5 ft	SB-34/MW-14 3/29/2006 SB34 (9-11) 9 - 11 ft	SB-34/MW-14 3/29/2006 SB34 (17-19) 17 - 19 ft	SB-35 3/27/2006 SB35 (3-4) 3 - 4 ft	SB-35 3/27/2006 SB35 (13-15) 13 - 15 ft
Polycyclic Aromatic Hydrocarbons (PAHs) - ug/kg									
BENZO(A)ANTHRACENE	224		1800	76 J	1700	390 J	500 U	22000	24000 J
BENZO(A)PYRENE	61		1400	530 U	1800	400 J	500 U	22000	17000 J
BENZO(B)FLUORANTHENE	1100		670 J	530 U	1700	350 J	500 U	16000	6600 J
BENZO(K)FLUORANTHENE	1100		910	530 U	1700	310 J	500 U	16000	8500 J
CHRYSENE	400		1700	76 J	1900	430 J	500 U	25000	25000 J
DIBENZ(A,H)ANTHRACENE	14		140 J	530 U	370 J	1300 U	500 U	4400 J	39000 U
INDENO(1,2,3-CD)PYRENE	3200		480 J	530 U	1200 J	260 J	500 U	14000	39000 U
2-METHYLNAPHTHALENE	36400		4400	190 J	150 J	2700	500 U	5100 J	200000
ACENAPHTHENE	50000		4400	130 J	1300 U	490 J	500 U	8400 U	100000
ACENAPHTHYLENE	41000		500 J	530 U	480 J	1300 U	500 U	24000	9500 J
ANTHRACENE	50000		2100	68 J	440 J	270 J	500 U	11000	43000
BENZO(G,H,I)PERYLENE	50000		620 J	530 U	1400	290 J	500 U	19000	5200 J
FLUORANTHENE	50000		2700	110 J	3000	640 J	500 U	25000	37000 J
FLUORENE	50000		2200	71 J	1300 U	510 J	500 U	8400 U	51000
NAPHTHALENE	13000		3600	390 J	180 J	130 J	500 U	7100 J	430000
PHENANTHRENE	50000		7200	260 J	1400	1200 J	500 U	8900	150000
PYRENE	50000		4600	180 J	3000	620 J	500 U	43000	66000
BAP-TE	NA		1.8458	0.593326	2.6489	1.15353		31.785	22.12
Total PAHs	NA		39420	1551	20420	8990		262500	1172800
Semi-Volatile Organic Compounds (SVOCs) - ug/kg									
1,1-BIPHENYL			630 J	530 U	1300 U	250 J	500 U	8400 U	17000 J
2,4-DIMETHYLPHENOL			850 U	530 U	1300 U	1300 U	500 U	8400 U	39000 U
2-METHYLPHENOL	100		850 U	530 U	1300 U	1300 U	500 U	8400 U	39000 U
4-METHYLPHENOL (P-CRESOL)	900		850 U	530 U	1300 U	1300 U	500 U	8400 U	39000 U
ACETOPHENONE			850 U	530 U	1300 U	1300 U	500 U	8400 U	39000 U
BENZALDEHYDE			850 UJ	530 UJ	R	R	R	R	R
BIS(2-ETHYLHEXYL) PHTHALATE	50000		230 J	110 J	1300 U	620 J	71 J	8400 U	39000 U
CARBAZOLE			850 U	530 U	150 J	1300 U	500 U	8400 U	39000 U
DIBENZOFURAN	6200		230 J	530 U	1300 U	1300 U	500 U	870 J	5900 J
DI-N-BUTYL PHTHALATE	8100		850 U	530 U	1300 U	1300 U	500 U	8400 U	39000 U
DI-N-OCTYL PHTHALATE	50000		850 U	530 U	1300 U	1300 U	500 U	8400 U	39000 U
PHENOL	30		850 U	530 U	1300 U	1300 U	500 U	8400 U	39000 U
Total SVOCs (including PAHs)			40510	1661	20570	9860	71	263370	1195700
Notes									
ug/kg - micrograms per kilogram									
RQL - Reported Quantitation Limit									
J - Reported analytical value is estimated									
U - Constituent not detected above RQL.									
UJ - Constituent not detected above estimated RQL.									
R - Rejected									
Bolded values are detections.									
Shaded are detections above the NYSDEC Recommended Soil Cleanup objective									
¹ Sample collected at original MW-2 location. MW-2 was moved and completed across the street at the SB-5 location.									
² Sample collected at original MW-3 location. MW-3 was moved and completed directly across the street at the SB-6 location.									

Table 4-5
Summary of Detected Semivolatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-36 3/29/2006 SB36 (15-17) 15 - 17 ft	SB-36 3/29/2006 SB36 (25-27) 25 - 27 ft	SB-37/MW-19 5/1/2006 SB37(4-5) 4 - 5 ft	SB-37/MW-19 5/1/2006 SB37(14-15) 14 - 15 ft	SB-38/MW-20 5/1/2006 SB38(4-5) 4 - 5 ft	SB-38/MW-20 5/1/2006 SB38(10-15) 10 - 15 ft	SB-39/MW-21 5/1/2006 SB39(0-5) 0 - 5 ft
Polycyclic Aromatic Hydrocarbons (PAHs) - ug/kg									
BENZO(A)ANTHRACENE	224		92 J	400 U	1000	530 U	400 U	380 U	1500
BENZO(A)PYRENE	61		120 J	400 U	930	530 U	400 U	380 U	1200
BENZO(B)FLUORANTHENE	1100		77 J	400 U	750	530 U	400 U	380 U	980
BENZO(K)FLUORANTHENE	1100		76 J	400 U	740	530 U	400 U	380 U	1000
CHRYSENE	400		110 J	400 U	1100	530 U	400 U	380 U	1300
DIBENZ(A,H)ANTHRACENE	14		370 U	400 U	160 J	530 U	400 U	380 U	220 J
INDENO(1,2,3-CD)PYRENE	3200		61 J	400 U	520	530 U	400 U	380 U	660
2-METHYLNAPHTHALENE	36400		70 J	400 U	88 J	530 U	400 U	380 U	280 J
ACENAPHTHENE	50000		370 U	400 U	190 J	530 U	400 U	380 U	380
ACENAPHTHYLENE	41000		58 J	400 U	64 J	530 U	400 U	380 U	43 J
ANTHRACENE	50000		370 U	400 U	430	530 U	400 U	380 U	1200
BENZO(G,H,I)PERYLENE	50000		81 J	400 U	640	530 U	400 U	380 U	700
FLUORANTHENE	50000		86 J	400 U	2500	65 J	400 U	380 U	3800
FLUORENE	50000		370 U	400 U	220 J	530 U	400 U	380 U	830
NAPHTHALENE	13000		370 U	400 U	140 J	530 U	400 U	380 U	870
PHENANTHRENE	50000		100 J	400 U	2300	530 U	400 U	380 U	4200
PYRENE	50000		150 J	400 U	2500	530 U	400 U	380 U	2900
BAP-TE	NA		0.32887		1.3255	0.612415			1.7453
Total PAHs	NA		1081		14272	65			22063
Semi-Volatile Organic Compounds (SVOCs) - ug/kg									
1,1-BIPHENYL			370 U	400 U	430 U	530 U	400 U	380 U	93 J
2,4-DIMETHYLPHENOL			370 U	400 U	430 U	530 U	400 U	380 U	370 U
2-METHYLPHENOL	100		370 U	400 U	430 U	530 U	400 U	380 U	370 U
4-METHYLPHENOL (P-CRESOL)	900		370 U	400 U	430 U	530 U	400 U	380 U	370 U
ACETOPHENONE			370 U	400 U	430 U	530 U	400 U	380 U	370 U
BENZALDEHYDE			R	R	R	R	R	R	R
BIS(2-ETHYLHEXYL) PHTHALATE	50000		640	400 U	430 U	530 U	400 U	380 U	370 U
CARBAZOLE			370 U	400 U	160 J	530 U	400 U	380 U	420
DIBENZOFURAN	6200		370 U	400 U	110 J	530 U	400 U	380 U	520
DI-N-BUTYL PHTHALATE	8100		370 U	400 U	53 J	530 U	400 U	380 U	370 U
DI-N-OCTYL PHTHALATE	50000		370 U	400 U	430 U	530 U	400 U	380 U	370 U
PHENOL	30		370 U	400 U	430 U	530 U	400 U	380 U	370 U
Total SVOCs (including PAHs)			1721		14595	65			23096
Notes									
ug/kg - micrograms per kilogram									
RQL - Reported Quantitation Limit									
J - Reported analytical value is estimated									
U - Constituent not detected above RQL.									
UJ - Constituent not detected above estimated RQL.									
R - Rejected									
Bolded values are detections.									
Shaded are detections above the NYSDEC Recommended Soil Cleanup objective									
¹ Sample collected at original MW-2 location. MW-2 was moved and completed across the street at the SB-5 location.									
² Sample collected at original MW-3 location. MW-3 was moved and completed directly across the street at the SB-6 location.									

Table 4-5
Summary of Detected Semivolatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-39/MW-21 5/1/2006 SB39(10-15) 10 - 15 ft	SB-40/MW-22 5/1/2006 SB40(4-5) 4 - 5 ft	SB-40/MW-22 5/1/2006 SB40(14-15) 14 - 15 ft	SB-41 5/18/2006 SB41(3-4) 3 - 4 ft	SB-41 5/18/2006 SB41(4-8) 4 - 8 ft	SB-41 5/18/2006 SB41(8-11) 8 - 11 ft	TP2 3/22/2006 TP2 (4-5) 4 - 5 ft
Polycyclic Aromatic Hydrocarbons (PAHs) - ug/kg									
BENZO(A)ANTHRACENE	224		470 U	48 J	510 U	340 J	10000	4100 J	29000
BENZO(A)PYRENE	61		470 U	40 J	510 U	2500	7500	2800 J	22000
BENZO(B)FLUORANTHENE	1100		470 U	39 J	510 U	1100	4000 J	1300 J	17000
BENZO(K)FLUORANTHENE	1100		470 U	39 J	510 U	970 J	4100 J	1700 J	22000
CHRYSENE	400		470 U	59 J	510 U	1000 J	10000	4000 J	29000
DIBENZ(A,H)ANTHRACENE	14		470 U	360 U	510 U	390 J	1300 J	4700 U	3800 J
INDENO(1,2,3-CD)PYRENE	3200		470 U	360 U	510 U	960 J	2500 J	800 J	9200
2-METHYLNAPHTHALENE	36400		470 U	360 U	510 U	180 J	30000	14000	960 J
ACENAPHTHENE	50000		470 U	360 U	510 U	1100 U	50000	21000	1300 J
ACENAPHTHYLENE	41000		470 U	360 U	510 U	2700	3200 J	1200 J	5100
ANTHRACENE	50000		470 U	360 U	510 U	620 J	20000	10000	11000
BENZO(G,H,I)PERYLENE	50000		470 U	360 U	510 U	1600	3000 J	940 J	8300
FLUORANTHENE	50000		470 U	90 J	510 U	360 J	16000	8100	61000
FLUORENE	50000		470 U	360 U	510 U	1100 U	21000	8300	2600 J
NAPHTHALENE	13000		470 U	360 U	510 U	270 J	2300 J	18000	1700 J
PHENANTHRENE	50000		470 U	59 J	510 U	340 J	64000	30000	43000
PYRENE	50000		470 U	83 J	510 U	2900	28000	14000	41000
BAP-TE	NA			0.247149		3.1407	10.501	5.791	31.569
Total PAHs	NA			457		16230	276900	140240	307960
Semi-Volatile Organic Compounds (SVOCs) - ug/kg									
1,1-BIPHENYL			470 U	360 U	510 U	1100 U	1800 J	2400 J	4300 U
2,4-DIMETHYLPHENOL			470 U	360 U	510 U	1100 U	7000 U	4700 U	4300 U
2-METHYLPHENOL	100		470 U	360 U	510 U	1100 U	7000 U	4700 U	4300 U
4-METHYLPHENOL (P-CRESOL)	900		470 U	360 U	510 U	1100 U	7000 U	4700 U	460 J
ACETOPHENONE			470 U	360 U	510 U	1100 U	7000 U	4700 U	4300 U
BENZALDEHYDE			R	R	R	1100 UJ	7000 UJ	4700 UJ	R
BIS(2-ETHYLHEXYL) PHTHALATE	50000		470 U	360 U	510 U	1100 U	1300 J	4700 U	4300 U
CARBAZOLE			470 U	360 U	510 U	1100 U	7000 U	4700 U	5400
DIBENZOFURAN	6200		470 U	360 U	510 U	1100 U	2300 J	880 J	2400 J
DI-N-BUTYL PHTHALATE	8100		470 U	360 U	510 U	1100 U	7000 U	4700 U	4300 U
DI-N-OCTYL PHTHALATE	50000		470 U	360 U	510 U	1100 U	950 J	4700 U	4300 U
PHENOL	30		470 U	360 U	510 U	1100 U	7000 U	4700 U	4300 U
Total SVOCs (including PAHs)				457		16230	283250	143520	316220
Notes									
ug/kg - micrograms per kilogram									
RQL - Reported Quantitation Limit									
J - Reported analytical value is estimated									
U - Constituent not detected above RQL.									
UJ - Constituent not detected above estimated RQL.									
R - Rejected									
Bolded values are detections.									
Shaded are detections above the NYSDEC Recommended Soil Cleanup objective									
¹ Sample collected at original MW-2 location. MW-2 was moved and completed across the street at the SB-5 location.									
² Sample collected at original MW-3 location. MW-3 was moved and completed directly across the street at the SB-6 location.									

Table 4-5
Summary of Detected Semivolatile Organic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	TP3 3/22/2006 TP3 (5-5.5) 5 - 5.5 ft	TP4 3/22/2006 TP4 (4.25) 4.25 - 4.25 ft	Number Detected	Number Samples Collected	Minimum Detect	Maximum Detect	Number of Samples Exceeding Standard
Polycyclic Aromatic Hydrocarbons (PAHs) - ug/kg									
BENZO(A)ANTHRACENE	224		5500 J	21000	102	135	48	1200000	87
BENZO(A)PYRENE	61		5400 J	83000	100	135	40	810000	98
BENZO(B)FLUORANTHENE	1100		5200 J	49000	97	135	39	320000	56
BENZO(K)FLUORANTHENE	1100		5500 J	41000	97	135	39	490000	53
CHRYSENE	400		7300 J	32000	103	135	42	1300000	81
DIBENZ(A,H)ANTHRACENE	14		1400 J	12000	68	135	44	12000	68
INDENO(1,2,3-CD)PYRENE	3200		3700 J	41000	91	135	43	230000	32
2-METHYLNAPHTHALENE	36400		8300 U	8500 U	84	135	45	8900000	12
ACENAPHTHENE	50000		8300 U	8500 U	70	135	47	540000	13
ACENAPHTHYLENE	41000		4200 J	40000	90	135	43	3900000	3
ANTHRACENE	50000		1500 J	10000	97	135	45	4200000	6
BENZO(G,H,I)PERYLENE	50000		4300 J	53000	93	135	43	270000	2
FLUORANTHENE	50000		7100 J	13000 J	106	135	48	2300000	7
FLUORENE	50000		8300 U	2600 J	72	135	48	2300000	7
NAPHTHALENE	13000		8300 U	1100 J	89	135	43	14000000	18
PHENANTHRENE	50000		2100 J	6200 J	108	135	41	7400000	20
PYRENE	50000		8600	27000 J	108	135	49	3200000	11
BAP-TE	NA		8.3023	106.542					
Total PAHs	NA		61800	431900					
Semi-Volatile Organic Compounds (SVOCs) - ug/kg									
1,1-BIPHENYL			8300 U	8500 U	47	135	42	850000	
2,4-DIMETHYLPHENOL			8300 U	8500 U	1	135	350	350	
2-METHYLPHENOL	100		8300 U	8500 U	1	135	270	270	1
4-METHYLPHENOL (P-CRESOL)	900		8300 U	8500 U	2	135	460	1100	1
ACETOPHENONE			8300 U	8500 U	5	135	86	6000	
BENZALDEHYDE			R	R	5	135	43	76	
BIS(2-ETHYLHEXYL) PHTHALATE	50000		8300 U	8500 U	34	135	41	2800	0
CARBAZOLE			8300 U	8500 U	27	135	46	110000	
DIBENZOFURAN	6200		8300 U	8500 U	47	135	45	310000	5
DI-N-BUTYL PHTHALATE	8100		8300 U	8500 U	12	135	41	320	0
DI-N-OCTYL PHTHALATE	50000		8300 U	8500 U	1	135	950	950	0
PHENOL	30		8300 U	8500 U	1	135	890	890	1
Total SVOCs (including PAHs)			61800	431900					
Notes									
ug/kg - micrograms per kilogram									
RQL - Reported Quantitation Limit									
J - Reported analytical value is estimated									
U - Constituent not detected above RQL.									
UU - Constituent not detected above estimated RQL.									
R - Rejected									
Bolded values are detections.									
Shaded are detections above the NYSDEC Recommended Soil Cleanup objective									
¹ Sample collected at original MW-2 location. MW-2 was moved and completed across the street at the SB-5 location.									
² Sample collected at original MW-3 location. MW-3 was moved and completed directly across the street at the SB-6 location.									

Table 4-6
Summary of Detected Inorganic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC TAGM 4046 Criteria	Site Background	Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	MH-1 5/2/2006 SB27(5-6) 5- 6 ft	MH-2 5/5/2006 MH-2 (5-6) 5- 6 ft	MH-3 5/5/2006 MH-3 (5-6) 5- 6 ft	MW-4 8/31/2005 MW-4 (5-5.5) 5- 5.5 ft	MW-4 3/21/2006 MW-4(7-9) 7- 9 ft	MW-4 3/21/2006 MW-4(9-11) 9- 11 FT	MW-5 8/18/2005 MW-5 (2-2.5) 2- 2.5 ft
Inorganics - mg/kg											
ALUMINUM (FUME OR DUST)	SB	17200	17200 (SB)		15500	3030	44600	8310	7390	10000	9330
ANTIMONY	SB	1.9	1.9 (SB)		8.8	2.9	56.6	R	12.8 J	1.3 UJ	1.5 J
ARSENIC	7.5 or SB	34.2	34.2 (SB)		25.3 J	3.3	307	11.0	7.2 J	6.0 J	11.9
BARIIUM	300 or SB	136	300 (D)		584	1660	5020	125	192	92.4	130
BERYLLIUM	0.16 or SB	0.27	0.27 (SB)		0.03 U	0.04 U	0.11	R	0.43	0.49	0.05 U
CADMIUM	1 or SB	1.2	1.2 (SB)		2.1	2.4	2.5	0.83	0.43	0.04 U	0.05
CALCIUM METAL	SB	12600	12600 (SB)		8220	2310	10200	4880	8070	2690	7550
CHROMIUM (TOTAL)	10 or SB	21.7	21.7 (SB)		22.6	6.1	23.1	18.6	15.7 J	15.7 J	16.0
COBALT	30 or SB	21.2	30 (D)		8.8	1.1	0.41 U	9.7	10.3	8.9	9.7
COPPER	25 or SB	144	144 (SB)		768 J	80.7	2770	61.4	58.6	38.4	40.4
CYANIDE	NA	NA	NA		1.36 U	1.90 U	1.33 U	1.85	1.14 U	1.43 U	1.13 U
IRON	2000 or SB	30200	30200 (SB)		29500	8010	10400	26500	32800	19700	29000
LEAD	NA	NA	400 (EPA)		452	252	2670	371	296 J	145 J	127
MAGNESIUM	SB	7190	7190 (SB)		4600	714	5450	4000	5480	3580	5730
MANGANESE	SB	676	676 (SB)		193	47.4	253	312	303	219	328
MERCURY	0.1	0.31	0.31 (SB)		1.2	0.33	0.14	0.6	0.48	0.25	0.31
NICKEL	13 or SB	22.5	22.5 (SB)		18.0	9.5	15.2	16.4	16.8	14.4	16.4
POTASSIUM	SB	2080	2080 (SB)		1190	515	990	1140	1210 J	1730 J	1630
SELENIUM	2 or SB	2.5	2.5 (SB)		0.62 UJ	0.85 UJ	0.60 J	1.1	2.2 J	1.9 J	0.54 UJ
SILVER	SB	0.15	0.15 (SB)		0.49	0.09 U	0.64 U	0.10 U	0.06 U	0.07 U	0.10 U
SODIUM	SB	646	646 (SB)		289	257	2090	170	215	202	156
THALLIUM	SB	0.37	0.37 (SB)		0.27	0.24	0.13 U	0.17	0.11 U	0.14 U	0.32 U
VANADIUM	150 or SB	54	150 (D)		29.2	11.5	18.9	27.1	26.8	23.2	26.4
ZINC	20 or SB	260	260 (SB)		418	983	804	287	400	100	90.0
Notes mg/kg - milligrams per kilogram RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. Bolded values are detections. Shaded are detections above the Recommended Soil Cleanup objective (D) Based on NYSDEC TAGM 4046 Criteria. (SB) Based on Site Background. (EPA) EPA residential lead standard.											

Table 4-6
Summary of Detected Inorganic Constituents in Subsurface Soil
Pemat Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC TAGM 4046 Criteria	Site Background	Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	MW-5 8/18/2005 MW-5 (5) 5- 5 ft	MW-5 9/9/2005 MW-5 (13-15) 13- 15 ft	MW-5 9/9/2005 MW-5 (21-23) 21- 23 ft	MW-5 9/9/2005 DUP-1 21- 23	MW-5 9/9/2005 MW-5 (9-11) 9- 11 ft	MW-6 3/14/2006 MW6(4-4.5) 4- 4.5 ft	MW-6 3/14/2006 MW60(4-4.5) 4- 4.5 ft
Inorganics - mg/kg											
ALUMINUM (FUME OR DUST)	SB	17200	17200 (SB)		14000	13600	18700	15100	18400	12800	11100
ANTIMONY	SB	1.9	1.9 (SB)		0.47 U	0.71 J	0.42 UJ	0.40 UJ	0.55 UJ	0.83 UJ	0.83 UJ
ARSENIC	7.5 or SB	34.2	34.2 (SB)		4.0	4.0	3.2	3.0	6.5	3.6 J	3.8 J
BARIUM	300 or SB	136	300 (D)		146	76.2	281	229	222	59.5	52.4
BERYLLIUM	0.16 or SB	0.27	0.27 (SB)		0.10 U	0.06 U	0.18 U	0.18 U	0.12 U	0.02 U	0.02 U
CADMIUM	1 or SB	1.2	1.2 (SB)		0.42	0.53	1.0	0.73	0.98	0.30	0.27
CALCIUM METAL	SB	12600	12600 (SB)		2240	2130	3310	2440	3160	2600	2810
CHROMIUM (TOTAL)	10 or SB	21.7	21.7 (SB)		21.2	16.2	23.4	19.7	22.5	14.8	13.6
COBALT	30 or SB	21.2	30 (D)		12.0 E	8.9	15.5	12.3	18.2	8.7	8.2
COPPER	25 or SB	144	144 (SB)		64.0	27.5	41.2	25.7	74.7	19.9 J	17.9 J
CYANIDE	NA	NA	NA		1.31 U	1.36 U	1.17 U	1.17 U	1.56 U	1.15 U	1.14 U
IRON	2000 or SB	30200	30200 (SB)		20200	16400	28900	24000	27900	25900	23100
LEAD	NA	NA	400 (EPA)		135	18.3	4.3	4.8	61.5	40.4	38.9
MAGNESIUM	SB	7190	7190 (SB)		5400	3860	8890	6690	7050	4280	3590
MANGANESE	SB	676	676 (SB)		332	194 J	528 J	578 J	381 J	638	526
MERCURY	0.1	0.31	0.31 (SB)		0.13	0.04	0.01	0.01	0.17	0.07	0.07
NICKEL	13 or SB	22.5	22.5 (SB)		17.6	12.3	12.5	11.9	21.9	16.0	14.5
POTASSIUM	SB	2080	2080 (SB)		2830	1600	6920	4990	5290	1140	1130
SELENIUM	2 or SB	2.5	2.5 (SB)		1.8 J	1.2 J	0.56 UJ	0.60 J	1.5 J	0.66 UJ	0.66 UJ
SILVER	SB	0.15	0.15 (SB)		0.11 U	0.31	0.49	0.26	0.46	0.09 U	0.09 U
SODIUM	SB	646	646 (SB)		292	157	154	136	423	119	112
THALLIUM	SB	0.37	0.37 (SB)		0.38 U	0.14 U	0.47	0.33	0.20	0.17	0.21
VANADIUM	150 or SB	54	150 (D)		30.0	26.5	48.6	36.4	38.9	32.0	25.3
ZINC	20 or SB	260	260 (SB)		143	59.5	69.4	60.7	132	270	213
Notes mg/kg - milligrams per kilogram RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. Bolded values are detections. Shaded are detections above the Recommended Soil Cleanup objective (D) Based on NYSDEC TAGM 4046 Criteria. (SB) Based on Site Background. (EPA) EPA residential lead standard.											

Table 4-6
Summary of Detected Inorganic Constituents in Subsurface Soil
Pemat Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC TAGM 4046 Criteria	Site Background	Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	MW-7 3/13/2006 MW7(13-15) 13- 15 ft	MW-7 3/13/2006 MW7(27-29) 27- 29 ft	MW-7 3/13/2006 MW7(4-5) 4- 5 ft	MW-7 3/13/2006 MW7(9-11) 9- 11 ft	MW-8 8/31/2005 MW-8 (3.5-4) 3.5- 4 ft	MW-8 9/7/2005 MW-8 (15-17) 15- 17 ft	MW-8 9/7/2005 MW-8 (21-23) 21- 23 ft
Inorganics - mg/kg											
ALUMINUM (FUME OR DUST)	SB	17200	17200 (SB)		14100	16700	7420	10600	17600	9360	8500
ANTIMONY	SB	1.9	1.9 (SB)		1.2 UJ	1.0 UJ	0.83 UJ	0.95 UJ	R	0.81 J	0.46 UJ
ARSENIC	7.5 or SB	34.2	34.2 (SB)		6.6	8.3	3.8 J	2.7 J	4.7	3.5	2.9
BARIUM	300 or SB	136	300 (D)		63.6	140	72.0	59.9	272	46.4	44.4
BERYLLIUM	0.16 or SB	0.27	0.27 (SB)		0.03 U	0.13	0.02 U	0.03 U	R	0.04 U	0.02 U
CADMIUM	1 or SB	1.2	1.2 (SB)		0.34	0.29	0.15	0.10	0.57	0.43	0.39
CALCIUM METAL	SB	12600	12600 (SB)		3120	4480	5680	1660	11800	1590	1330
CHROMIUM (TOTAL)	10 or SB	21.7	21.7 (SB)		20.6	23.5	12.0	12.4	27.7	11.8	10.1
COBALT	30 or SB	21.2	30 (D)		11.3	13.3	8.7	7.7	32.4	7.8	6.6
COPPER	25 or SB	144	144 (SB)		22.5 J	34.8 J	36.1 J	17.3 J	40.4	19.2	17.5
CYANIDE	NA	NA	NA		1.56 U	1.40 U	1.13 U	1.26 U	1.10 U	1.17 U	1.33 U
IRON	2000 or SB	30200	30200 (SB)		29300	34900	21700	38400	41000	16600	13600
LEAD	NA	NA	400 (EPA)		122	14.4	71.2	28.9	29.5	6.3	28.8
MAGNESIUM	SB	7190	7190 (SB)		5060	7280	4020	2060	16200	3200	2710
MANGANESE	SB	676	676 (SB)		300	628	487	421	487	189 J	175 J
MERCURY	0.1	0.31	0.31 (SB)		0.03	0.01	0.12	0.01	0.06	0.01	0.02
NICKEL	13 or SB	22.5	22.5 (SB)		20.9	28.4	12.3	11.8	22.0	12.9	10.3
POTASSIUM	SB	2080	2080 (SB)		2210	2980	1350	1340	5880	1300	1350
SELENIUM	2 or SB	2.5	2.5 (SB)		0.94 UJ	0.80 UJ	0.66 UJ	0.75 UJ	1.7	0.56 UJ	0.61 UJ
SILVER	SB	0.15	0.15 (SB)		0.13 U	0.11 U	0.09 U	0.10 U	0.6	0.22	0.23
SODIUM	SB	646	646 (SB)		176	140	158	179	503	168	189
THALLIUM	SB	0.37	0.37 (SB)		0.15 U	0.24	0.17	0.12 U	0.45	0.13 U	0.14 U
VANADIUM	150 or SB	54	150 (D)		27.1	31.0	25.0	25.2	93.8	18.7	16.8
ZINC	20 or SB	260	260 (SB)		68.5	79.2	69.5	55.4	100	37.8	37.1
Notes mg/kg - milligrams per kilogram RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. Bolded values are detections. Shaded are detections above the Recommended Soil Cleanup objective (D) Based on NYSDEC TAGM 4046 Criteria. (SB) Based on Site Background. (EPA) EPA residential lead standard.											

Table 4-6
Summary of Detected Inorganic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC TAGM 4046 Criteria	Site Background	Recommended Soil Cleanup Objective	Location ID	MW-8	SB-1	SB-2	SB-4	SB-4	SB-4	SB-5/MW-2
				Sample Date	9/7/2005	3/6/2006	3/9/2006	9/12/2005	9/12/2005	9/1/2005	
				Sample ID	MW-8 (40-42)	SB1 (3-4)	SB2 (5-7)	SB4 (3-3.5)	SB4 (4.5-5.5)	SB4 (7-9)	MW-2 (3-3.5)
				Depth Interval	40- 42	3- 4	5- 7	3- 3.5	4.5- 5.5	7- 9	3- 3.5
				Depth Interval Unit	ft	ft	ft	ft	ft	ft	ft
Inorganics - mg/kg											
ALUMINUM (FUME OR DUST)	SB	17200	17200 (SB)		8410	7520	12300	10900	19600	15600	9500
ANTIMONY	SB	1.9	1.9 (SB)		0.58 J	0.91 U	2	0.46 U	0.45 U	0.42 U	R
ARSENIC	7.5 or SB	34.2	34.2 (SB)		4.2	9.5	4.0	6.1	4.7	4.2	14.9
BARIIUM	300 or SB	136	300 (D)		53.1	57.7	123	187	164	116	200
BERYLLIUM	0.16 or SB	0.27	0.27 (SB)		0.04 U	0.03 U	0.03 U	0.10 U	0.10 U	0.19 U	R
CADMIUM	1 or SB	1.2	1.2 (SB)		0.57	0.31	0.05 U	1.2	0.82	0.80	0.57
CALCIUM METAL	SB	12600	12600 (SB)		21800	699	1950	3650	1820	2250	3100
CHROMIUM (TOTAL)	10 or SB	21.7	21.7 (SB)		13.4	23.7	22.9	18.5	16.6	14.2	21.6
COBALT	30 or SB	21.2	30 (D)		9.0	16.8	10.9	12.7	14.5	11.6	10.8
COPPER	25 or SB	144	144 (SB)		24.6	54.2 J	58.9 J	57.3	32.5	67.1	87.8
CYANIDE	NA	NA	NA		1.25 U	1.21 U	1.24 U	1.27 U	1.29 U	1.19 U	1.97
IRON	2000 or SB	30200	30200 (SB)		18800	94800	26700	34300	24400	26700	42500
LEAD	NA	NA	400 (EPA)		7.4	R	R	482	89.9	6.0	449
MAGNESIUM	SB	7190	7190 (SB)		8260	1340	4430	3030	5390	6470	4090
MANGANESE	SB	676	676 (SB)		435 J	1340	331	441	279	467	344
MERCURY	0.1	0.31	0.31 (SB)		0.01	0.09	0.34	1.5	0.12	0.007	0.44
NICKEL	13 or SB	22.5	22.5 (SB)		15.3	24.9	17.2	17.0	12.2	11.1	22.1
POTASSIUM	SB	2080	2080 (SB)		1400	863	1600	1570	1670	2670	1740
SELENIUM	2 or SB	2.5	2.5 (SB)		0.57 UJ	0.73 U	1.3 J	1.8	0.69	0.65	2.0
SILVER	SB	0.15	0.15 (SB)		0.2	0.10 U	0.10 U	0.71	0.3	0.24	0.10 U
SODIUM	SB	646	646 (SB)		152	159	199	926	309	210	354
THALLIUM	SB	0.37	0.37 (SB)		0.14 U	0.12 U	0.28	0.14 U	0.26	0.27	0.38
VANADIUM	150 or SB	54	150 (D)		18.3	54.6	31.0	29.5	36.2	35.6	38.4
ZINC	20 or SB	260	260 (SB)		51.9	91.3 J	141 J	145	99.1	52.9	282
Notes											
mg/kg - milligrams per kilogram											
RQL - Reported Quantitation Limit											
J - Reported analytical value is estimated											
U - Constituent not detected above RQL.											
UJ - Constituent not detected above estimated RQL.											
Bolded values are detections.											
Shaded are detections above the Recommended Soil Cleanup objective											
(D) Based on NYSDEC TAGM 4046 Criteria.											
(SB) Based on Site Background.											
(EPA) EPA residential lead standard.											

Table 4-6
Summary of Detected Inorganic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC TAGM 4046 Criteria	Site Background	Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-5/MW-2 9/1/2005 MW-2 (4.5-5) 4.5- 5 ft	SB-5/MW-2 9/8/2005 SB5 (5-6) 5- 6 ft	SB-5/MW-2 9/13/2005 SB5 (16-18) 16- 18 ft	SB-5/MW-2 9/13/2005 SB5 (20-22) 20- 22 ft	SB-6/MW-3 9/12/2005 SB6 (3.5-4) 3.5- 4 ft	SB-6/MW-3 9/12/2005 SB6 (5-6) 5- 6 ft	SB-6/MW-3 9/13/2005 SB6 (12-14) 12- 14 ft
Inorganics - mg/kg											
ALUMINUM (FUME OR DUST)	SB	17200	17200 (SB)		6580	7330	12800	10800	7340	6730	11300
ANTIMONY	SB	1.9	1.9 (SB)		R	0.61 J	0.47 U	0.48 J	0.82	0.52 J	0.73 J
ARSENIC	7.5 or SB	34.2	34.2 (SB)		17.5	6.8	10.9	4.1	8.2	6.0	7.4
BARIUM	300 or SB	136	300 (D)		128	68.0	91.3	186	73.7	177	34.4
BERYLLIUM	0.16 or SB	0.27	0.27 (SB)		R	0.04 U	0.02 U	0.09 U	0.02 U	0.02 U	0.02 U
CADMIUM	1 or SB	1.2	1.2 (SB)		0.48	1.2	0.97	0.61	1.0	0.88	0.78
CALCIUM METAL	SB	12600	12600 (SB)		8290	3770	2910	2930	1660	5670	2340
CHROMIUM (TOTAL)	10 or SB	21.7	21.7 (SB)		21.0	12.7	19.7	14.1	11.8	16.6	18.5
COBALT	30 or SB	21.2	30 (D)		8.4	8.9	14.1	9.9	9.5	9.8	11.5
COPPER	25 or SB	144	144 (SB)		60.6	44.0	35.6	24.4	50.6	67.1	14.6
CYANIDE	NA	NA	NA		1.47	1.25 U	1.32 U	1.21 U	4.02	1.25 U	1.57 U
IRON	2000 or SB	30200	30200 (SB)		32700	35300	31200	21000	37500	25000	25700
LEAD	NA	NA	400 (EPA)		272	166	12.9	4.9	294	665	9.4
MAGNESIUM	SB	7190	7190 (SB)		2470	2950	5330	5520	1280	2290	4540
MANGANESE	SB	676	676 (SB)		395	470 J	829	498	222	399	216
MERCURY	0.1	0.31	0.31 (SB)		0.42	0.12	0.03	0.01	0.31	1.4	0.04
NICKEL	13 or SB	22.5	22.5 (SB)		18.9	14.1	29.6	11.8	18.3	15.7	19.4
POTASSIUM	SB	2080	2080 (SB)		777	1290	2190	3930	653	977	1870
SELENIUM	2 or SB	2.5	2.5 (SB)		1.5	1.1 J	R	0.55 U	1.5 J	0.75 J	R
SILVER	SB	0.15	0.15 (SB)		0.11 U	0.67	0.45	0.18	0.6	0.96	0.57
SODIUM	SB	646	646 (SB)		237	226	130	126	302	281	175
THALLIUM	SB	0.37	0.37 (SB)		0.14 U	0.14 U	0.25	0.35	0.24	0.14 U	0.24
VANADIUM	150 or SB	54	150 (D)		31.3	21.4	21.7	28.7	24.5	18.9	21.4
ZINC	20 or SB	260	260 (SB)		213	292	82.2	54.2	116	209	61.4
Notes mg/kg - milligrams per kilogram RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. Bolded values are detections. Shaded are detections above the Recommended Soil Cleanup objective (D) Based on NYSDEC TAGM 4046 Criteria. (SB) Based on Site Background. (EPA) EPA residential lead standard.											

Table 4-6
Summary of Detected Inorganic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC TAGM 4046 Criteria	Site Background	Recommended Soil Cleanup Objective	Location ID	SB-6/MW-3	SB-7	SB-7	SB-7	SB-7	SB-7	SB-7
				Sample Date Sample ID Depth Interval Depth Interval Unit	9/13/2005 SB6 (20-22) 20- 22 ft	3/10/2006 SB7 (4-5) 4- 5 FT	3/15/2006 SB7(4-5) 4- 5 ft	3/20/2006 SB7 (11-13) 11- 13 ft	3/20/2006 SB7 (13-15) 13- 15 ft	3/20/2006 SB7 (9-11) 9- 11 ft	3/30/2006 SB7 (29.5-30) 29.5- 30 FT
Inorganics - mg/kg											
ALUMINUM (FUME OR DUST)	SB	17200	17200 (SB)		6730	6410	10300	16100	14200	6450	4700
ANTIMONY	SB	1.9	1.9 (SB)		0.72 J	1.0 U	0.84 UJ	1.3 UJ	1.4 UJ	1.1 UJ	1.1 UJ
ARSENIC	7.5 or SB	34.2	34.2 (SB)		2.2	4.3	5.6	8.0 J	5.9 J	0.91 J	4.2
BARIIUM	300 or SB	136	300 (D)		79.3	53.4	62.6	140	50.2	75.1	32.4
BERYLLIUM	0.16 or SB	0.27	0.27 (SB)		0.05 U	0.28	0.02 U	0.67	0.67	0.43	0.03 U
CADMIUM	1 or SB	1.2	1.2 (SB)		0.36	0.03 U	0.48	0.04 U	0.05 U	0.03 U	0.03 U
CALCIUM METAL	SB	12600	12600 (SB)		1920	1920	2030	5410	2460	2860	2670
CHROMIUM (TOTAL)	10 or SB	21.7	21.7 (SB)		19.5	11.4	17.9	51.0 J	21.4 J	15.8 J	8.1
COBALT	30 or SB	21.2	30 (D)		6.4	11.3	14.0	15.5	12.2	8.2	8.1
COPPER	25 or SB	144	144 (SB)		26.5	26.6	46.8 J	45.0	16.2	17.5	7.8
CYANIDE	NA	NA	NA		1.22 U	1.12 UJ	1.16 U	1.43 U	1.56 U	1.16 U	1.22 U
IRON	2000 or SB	30200	30200 (SB)		13800	24600	44000	31200	27900	16400	14500
LEAD	NA	NA	400 (EPA)		3.8	32.3	58.0	61.6 J	11.5 J	8.7 J	2.6
MAGNESIUM	SB	7190	7190 (SB)		3630	1880	2910	6930	5350	3560	2220
MANGANESE	SB	676	676 (SB)		265	872	402	508	348	129	558
MERCURY	0.1	0.31	0.31 (SB)		0.007	0.04	0.09	0.05	0.04	0.01	0.005 J
NICKEL	13 or SB	22.5	22.5 (SB)		9.3	14.2	19.5	26.4	23.2	10.0	7.9
POTASSIUM	SB	2080	2080 (SB)		1880	774	1200	4180 J	2620 J	2220 J	860
SELENIUM	2 or SB	2.5	2.5 (SB)		0.56 U	0.91	0.67 UJ	1.6 J	1.7 J	0.85 J	1.4 J
SILVER	SB	0.15	0.15 (SB)		0.22	0.08	0.09 U	0.07 U	0.08 U	0.06 U	0.40 U
SODIUM	SB	646	646 (SB)		113	57.7	118	178	206	135	109
THALLIUM	SB	0.37	0.37 (SB)		0.19	0.12	0.26	0.14 U	0.15 U	0.11 U	0.12 U
VANADIUM	150 or SB	54	150 (D)		20.4	23.6	31.7	44.6	29.1	38.5	15.6
ZINC	20 or SB	260	260 (SB)		34.6	43.9	92.2	106	66.9	28.0	19.5
Notes											
mg/kg - milligrams per kilogram											
RQL - Reported Quantitation Limit											
J - Reported analytical value is estimated											
U - Constituent not detected above RQL.											
UJ - Constituent not detected above estimated RQL.											
Bolded values are detections.											
Shaded are detections above the Recommended Soil Cleanup objective											
(D) Based on NYSDEC TAGM 4046 Criteria.											
(SB) Based on Site Background.											
(EPA) EPA residential lead standard.											

Table 4-6
Summary of Detected Inorganic Constituents in Subsurface Soil
Pemat Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC TAGM 4046 Criteria	Site Background	Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-7 3/30/2006 SB7 (38-39) 38- 39 ft	SB-8/MW-18 3/16/2006 SB8(1-2) 1- 2 ft	SB-8/MW-18 3/16/2006 SB8(4-4.5) 4- 4.5 ft	SB-8/MW-18 3/22/2006 SB8 (13-15) 13- 15 ft	SB-8/MW-18 4/10/2006 SB8 (28-30) 28- 30 ft	SB-9/MW-17 3/14/2006 SB9(3.5-4) 3.5- 4 ft	SB-9/MW-17 3/30/2006 SB9 (19-20) 19- 20 ft
Inorganics - mg/kg											
ALUMINUM (FUME OR DUST)	SB	17200	17200 (SB)		8080	7960	9800	10200	12200	11000	13000
ANTIMONY	SB	1.9	1.9 (SB)		1.1 UJ	5.2 J	0.89 UJ	1.3 UJ	1.1 U	1.3 J	1.1 UJ
ARSENIC	7.5 or SB	34.2	34.2 (SB)		1.4	14.3	6.5	11.3 J	5.5	5.7	6.6
BARIIUM	300 or SB	136	300 (D)		144	69.6	75.5	42.6	98.1	77.2	66.2
BERYLLIUM	0.16 or SB	0.27	0.27 (SB)		0.03 U	0.02 U	0.02 U	0.52	0.03 U	0.02 U	0.13
CADMIUM	1 or SB	1.2	1.2 (SB)		0.03 U	0.71	0.20	0.04 U	0.04 U	0.46	0.04 U
CALCIUM METAL	SB	12600	12600 (SB)		2980	2190	2070	2510	2890	13500	1020
CHROMIUM (TOTAL)	10 or SB	21.7	21.7 (SB)		13.3	24.3	13.0	15.0 J	17.0	15.4	16.6
COBALT	30 or SB	21.2	30 (D)		8.5	12.7	7.4	10.1	12.0	9.9	13.1
COPPER	25 or SB	144	144 (SB)		36.2	73.5 J	61.4 J	17.2	27.3	48.3 J	36.6
CYANIDE	NA	NA	NA		1.13 U	1.13 U	5.33	1.42 U	1.29 U	1.39	1.24 U
IRON	2000 or SB	30200	30200 (SB)		16200	55000	20900	25300	25800	31200	26500
LEAD	NA	NA	400 (EPA)		2.8	143	91.9	27.8 J	9.6	68.5	17.9
MAGNESIUM	SB	7190	7190 (SB)		5120	1850	2330	4050	5250	8920	4690
MANGANESE	SB	676	676 (SB)		264	989	339	273	580	891	294
MERCURY	0.1	0.31	0.31 (SB)		0.006 J	0.41	0.17	0.04	0.02	0.18	0.04 J
NICKEL	13 or SB	22.5	22.5 (SB)		9.1	22.7	14.1	17.4	21.9	18.8	23
POTASSIUM	SB	2080	2080 (SB)		3160	840	1120	1770 J	2130	1060	1310
SELENIUM	2 or SB	2.5	2.5 (SB)		0.94 J	0.66 UJ	0.80 J	1.2 J	3.2	0.64 UJ	2.0 J
SILVER	SB	0.15	0.15 (SB)		0.39 U	0.09 U	0.09 U	0.07 U	0.31 U	0.09 U	0.41 U
SODIUM	SB	646	646 (SB)		134	85.4	178	113	107	117	65.6
THALLIUM	SB	0.37	0.37 (SB)		0.23	0.17	0.28	0.14 U	0.12 U	0.24	0.17
VANADIUM	150 or SB	54	150 (D)		23.4	48.8	23.6	22.5	24.7	26.4	20.2
ZINC	20 or SB	260	260 (SB)		41.6	85.2	82.5	54.1	66.7	151	70.4
Notes mg/kg - milligrams per kilogram RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. Bolded values are detections. Shaded are detections above the Recommended Soil Cleanup objective (D) Based on NYSDEC TAGM 4046 Criteria. (SB) Based on Site Background. (EPA) EPA residential lead standard.											

Table 4-6
Summary of Detected Inorganic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

ENSR

Chemical Name	NYSDEC TAGM 4046 Criteria	Site Background	Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-9/MW-17 3/30/2006 SB9 (8-10) 8- 10 ft	SB-9/MW-17 4/11/2006 SB9 (30-31) 30- 31 ft	SB-10 3/10/2006 SB10 (3-4) 3- 4 ft	SB-10 3/14/2006 SB10(11-13) 11- 13 ft	SB-10 3/14/2006 SB10(9-11) 9- 11 ft	SB-10 3/15/2006 SB10(41-43) 41- 43 ft	SB-11/MW-27 3/9/2006 SB11 (1-2) 1- 2 ft
Inorganics - mg/kg											
ALUMINUM (FUME OR DUST)	SB	17200	17200 (SB)		8230	16000	7640	23500	9630	7180	5530
ANTIMONY	SB	1.9	1.9 (SB)		1.1 UJ	1.2 U	1.0 U	1.1 UJ	0.88 UJ	0.87 UJ	3.6
ARSENIC	7.5 or SB	34.2	34.2 (SB)		1.6	5.9	6.7	7.1	5.4	1.1 J	31.7
BARIIUM	300 or SB	136	300 (D)		38.4	95.6	78.5	121	48.5	106	102
BERYLLIUM	0.16 or SB	0.27	0.27 (SB)		0.03 U	0.42	0.32	0.03 U	0.02 U	0.02 U	0.03 U
CADMIUM	1 or SB	1.2	1.2 (SB)		0.03 U	0.04 U	0.27	1.6	1.2	0.11	0.20
CALCIUM METAL	SB	12600	12600 (SB)		1400	22600	8080	3970	1990	2840	2350
CHROMIUM (TOTAL)	10 or SB	21.7	21.7 (SB)		9.3	21.5	10.9	26.4	17.8	10.7	25.2
COBALT	30 or SB	21.2	30 (D)		6.6	12.7	7.7	13.9	14.3	6.1	7.0
COPPER	25 or SB	144	144 (SB)		16.6	33.4	32.5	39.3 J	126 J	22.7 J	108 J
CYANIDE	NA	NA	NA		1.14 U	1.29 U	1.64 J	1.52 U	1.19 U	1.19 U	2.68
IRON	2000 or SB	30200	30200 (SB)		13800	30900	18900	38500	64700	15100	27700
LEAD	NA	NA	400 (EPA)		4.8	10.3	70.9	166	120	2.5	R
MAGNESIUM	SB	7190	7190 (SB)		2830	10800	3530	7770	1800	4020	1250
MANGANESE	SB	676	676 (SB)		106	620	386	443	689	261	133
MERCURY	0.1	0.31	0.31 (SB)		0.01 J	0.03	0.13	0.14	0.03	0.002 U	0.33
NICKEL	13 or SB	22.5	22.5 (SB)		9.9	27.5	12.3	24	22.5	6.1	18.7
POTASSIUM	SB	2080	2080 (SB)		1010	2560	1190	2760	961	2000	512
SELENIUM	2 or SB	2.5	2.5 (SB)		2.5	3.9	0.97	0.90 UJ	0.70 UJ	0.69 UJ	5.6
SILVER	SB	0.15	0.15 (SB)		0.40 U	0.32 U	0.06 U	0.12 U	0.09 U	0.09 U	0.10 U
SODIUM	SB	646	646 (SB)		67.2	86.7	55.7	210	142	158	132
THALLIUM	SB	0.37	0.37 (SB)		0.16	0.13 U	0.15	0.23	0.12	0.31	0.82
VANADIUM	150 or SB	54	150 (D)		16.9	25.7	19.9	40.7	40.7	21.2	48.4
ZINC	20 or SB	260	260 (SB)		30.6	77.0	161	2770	202	41.3	109 J
Notes											
mg/kg - milligrams per kilogram											
RQL - Reported Quantitation Limit											
J - Reported analytical value is estimated											
U - Constituent not detected above RQL.											
UJ - Constituent not detected above estimated RQL.											
Bolded values are detections.											
Shaded are detections above the Recommended Soil Cleanup objective											
(D) Based on NYSDEC TAGM 4046 Criteria.											
(SB) Based on Site Background.											
(EPA) EPA residential lead standard.											

Table 4-6
Summary of Detected Inorganic Constituents in Subsurface Soil
Pemat Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC TAGM 4046 Criteria	Site Background	Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-11/MW-27 3/9/2006 SB11 (4-5) 4- 5 ft	SB-11/MW-27 3/16/2006 SB11(18-20) 18- 20 ft	SB-11/MW-27 3/16/2006 SB11(9-11) 9- 11 ft	SB-11/MW-27 3/29/2006 SB11 (32-34) 32- 34 ft	SB-11/MW-27 3/29/2006 SB11 (41-43) 41- 43 ft	SB-12/MW-25 3/9/2006 SB12 (4-5) 4- 5 ft	SB-12/MW-25 3/27/2006 SB12 (10-15) 10- 15 ft
Inorganics - mg/kg											
ALUMINUM (FUME OR DUST)	SB	17200	17200 (SB)		11600	15600	7850	15400	17700	10200	7170
ANTIMONY	SB	1.9	1.9 (SB)		4.3	1.2 UJ	0.86 UJ	1.3 UJ	1.2 J	4.4	1.1 UJ
ARSENIC	7.5 or SB	34.2	34.2 (SB)		20.4	7.8	8.7	6.2	3.0 J	25.1	2.0 J
BARIIUM	300 or SB	136	300 (D)		39.1	46.2	64.9	114	326	165	49.8
BERYLLIUM	0.16 or SB	0.27	0.27 (SB)		0.03 U	0.12	0.02 U	0.03 U	0.27 U	0.32	0.03 U
CADMIUM	1 or SB	1.2	1.2 (SB)		0.57	0.34	0.30	0.04 U	0.33 U	1.6	0.03 U
CALCIUM METAL	SB	12600	12600 (SB)		915	2330	1780	2120	4910	5330	1500
CHROMIUM (TOTAL)	10 or SB	21.7	21.7 (SB)		115	23.9	17.3	19.1	19.5	16.3	11.9
COBALT	30 or SB	21.2	30 (D)		18.7	11.7	8.2	14.6	15.1	14.7	5.9
COPPER	25 or SB	144	144 (SB)		56.3 J	16.0 J	39.8 J	25.8	40.5	183 J	14.8
CYANIDE	NA	NA	NA		1.30 U	1.61 U	1.19 U	1.42 U	1.14 U	1.61 U	1.16 U
IRON	2000 or SB	30200	30200 (SB)		113000	33200	33000	23100	34300	28700	14800
LEAD	NA	NA	400 (EPA)		R	15.3	240	8.6	2.8	R	3.8
MAGNESIUM	SB	7190	7190 (SB)		4560	6130	3500	4350	11200	3010	3090
MANGANESE	SB	676	676 (SB)		222	341	175	265	549	1080	125
MERCURY	0.1	0.31	0.31 (SB)		0.07	0.04	0.22	0.02	0.008	0.68	0.01
NICKEL	13 or SB	22.5	22.5 (SB)		70.1	24.4	16.4	18.4	12.9	27.7	10.0
POTASSIUM	SB	2080	2080 (SB)		731	2590	1270	1600	7560	1010	1480
SELENIUM	2 or SB	2.5	2.5 (SB)		0.77 U	0.96 UJ	0.68 UJ	2.2 J	0.80 J	1.8 J	2.1 J
SILVER	SB	0.15	0.15 (SB)		0.10 U	0.13 U	0.09 U	0.07 U	0.06 U	0.13 U	0.06 U
SODIUM	SB	646	646 (SB)		281	367	168	R	103	243	R
THALLIUM	SB	0.37	0.37 (SB)		0.13 U	0.16 U	0.12 U	0.17	0.43	0.36	0.11 U
VANADIUM	150 or SB	54	150 (D)		192	29.9	27.9	30.7	54.3	27.2	18.3
ZINC	20 or SB	260	260 (SB)		162 J	79.2	65.6	68.5	75.4	730 J	30.4
Notes mg/kg - milligrams per kilogram RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. Bolded values are detections. Shaded are detections above the Recommended Soil Cleanup objective (D) Based on NYSDEC TAGM 4046 Criteria. (SB) Based on Site Background. (EPA) EPA residential lead standard.											

Table 4-6
Summary of Detected Inorganic Constituents in Subsurface Soil
Pemat Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC TAGM 4046 Criteria	Site Background	Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-12/MW-25 3/27/2006 SB12 (25-30) 25- 30 ft	SB-13/MW-24 3/9/2006 SB13 (3-4) 3- 4 ft	SB-13/MW-24 3/16/2006 SB13(15-17) 15- 17 ft	SB-13/MW-24 3/16/2006 SB13(5-7) 5- 7 ft	SB-14/MW-23 3/8/2006 SB14 (3-4) 3- 4 ft	SB-14/MW-23 3/16/2006 SB14(13-15) 13- 15 ft	SB-14/MW-23 3/16/2006 SB14(5-9) 5- 9 ft
Inorganics - mg/kg											
ALUMINUM (FUME OR DUST)	SB	17200	17200 (SB)		10600	4920	14800	6130	15700	15600	9630
ANTIMONY	SB	1.9	1.9 (SB)		1.1 UJ	1.2	1.1 UJ	2.1 J	2.6	1.2 UJ	0.90 UJ
ARSENIC	7.5 or SB	34.2	34.2 (SB)		4.7	15.0	7.3	48.6	26.1	7.9	9.4
BARIIUM	300 or SB	136	300 (D)		53.8	118	66.0	223	343	50.0	170
BERYLLIUM	0.16 or SB	0.27	0.27 (SB)		0.03 U	0.19	0.03 U	0.03 U	0.03 U	0.10	0.03 U
CADMIUM	1 or SB	1.2	1.2 (SB)		0.03 U	0.82	0.31	1.4	0.18	0.33	0.39
CALCIUM METAL	SB	12600	12600 (SB)		2060	3660	2480	3700	3130	2620	2060
CHROMIUM (TOTAL)	10 or SB	21.7	21.7 (SB)		14.4	7.7	23.1	12.7	34.3	23.6	19.8
COBALT	30 or SB	21.2	30 (D)		10.9	9.9	11.2	7.9	12.8	11.8	8.6
COPPER	25 or SB	144	144 (SB)		22.7	137 J	14.6 J	137 J	96.6 J	16.8 J	38.1 J
CYANIDE	NA	NA	NA		1.19 U	1.41 U	1.51 U	3.83	2.74	1.61 U	1.99
IRON	2000 or SB	30200	30200 (SB)		25300	16400	33300	27500	55100	33900	35900
LEAD	NA	NA	400 (EPA)		8.6	R	11.7	251	R	12.6	132
MAGNESIUM	SB	7190	7190 (SB)		4440	1190	5590	1580	4320	5890	5080
MANGANESE	SB	676	676 (SB)		443	668	343	701	629	336	258
MERCURY	0.1	0.31	0.31 (SB)		0.01	0.34	0.02	0.7	1.8	0.12	0.78
NICKEL	13 or SB	22.5	22.5 (SB)		17.0	17.4	22.9	16.3	22.9	24.1	12.1
POTASSIUM	SB	2080	2080 (SB)		2040	454	2430	648	2270	2620	3950
SELENIUM	2 or SB	2.5	2.5 (SB)		3	1.1 J	0.90 UJ	0.89 J	4.4	0.96 UJ	0.72 UJ
SILVER	SB	0.15	0.15 (SB)		0.06 U	0.11 U	0.12 U	0.21 U	0.13 U	0.13 U	0.10 U
SODIUM	SB	646	646 (SB)		R	97.6	178	144	222	340	136
THALLIUM	SB	0.37	0.37 (SB)		0.25	0.35	0.17	0.47	0.71	0.16 U	0.22
VANADIUM	150 or SB	54	150 (D)		22.3	13.5	28.6	19.6	50.7	29.7	24.3
ZINC	20 or SB	260	260 (SB)		46.3	256 J	74.4	277	244 J	79.1	144
Notes mg/kg - milligrams per kilogram RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. Bolded values are detections. Shaded are detections above the Recommended Soil Cleanup objective (D) Based on NYSDEC TAGM 4046 Criteria. (SB) Based on Site Background. (EPA) EPA residential lead standard.											

Table 4-6
Summary of Detected Inorganic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

ENSR

Chemical Name	NYSDEC TAGM 4046 Criteria	Site Background	Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-16/MW-26 3/9/2006 SB16 (4-5) 4- 5 ft	SB-16/MW-26 3/17/2006 SB16(17-19) 17- 19 ft	SB-16/MW-26 3/17/2006 SB16(22.5-23) 22.5- 23 ft	SB-16/MW-26 3/29/2006 SB16 (32-35) 32- 35 ft	SB-16/MW-26 3/29/2006 SB16 (38-39) 38- 39 ft	SB-17 9/2/2005 SB17 (3-3.5) 3- 3.5 ft	SB-18 9/7/2005 SB18 (2-2.5) 2- 2.5 ft
Inorganics - mg/kg											
ALUMINUM (FUME OR DUST)	SB	17200	17200 (SB)		8220	6290	7430 J	11500	22600	13900	3580
ANTIMONY	SB	1.9	1.9 (SB)		3.4	1.0 UJ	4.4 UJ	1.1 UJ	1.0 UJ	0.43 UJ	6.4 J
ARSENIC	7.5 or SB	34.2	34.2 (SB)		311	2.8 J	2.6 UJ	5.4	1.3 J	4.4	42.2
BARIUM	300 or SB	136	300 (D)		128	31.1	63.1 J	68.4	617	76.0	379
BERYLLIUM	0.16 or SB	0.27	0.27 (SB)		1.3	0.25	0.74 J	0.03 U	0.26 U	R	0.10 U
CADMIUM	1 or SB	1.2	1.2 (SB)		0.6	0.03 U	1.5 J	0.04 U	0.32 U	0.44	2.3
CALCIUM METAL	SB	12600	12600 (SB)		3780	3320	10000 J	1100	4250	2030	1730
CHROMIUM (TOTAL)	10 or SB	21.7	21.7 (SB)		27	7.9 J	7.0 J	14.9	19.9	11.4	15.7
COBALT	30 or SB	21.2	30 (D)		13.7	6.3	6.5 J	10.2	17.1	9.6	8.0
COPPER	25 or SB	144	144 (SB)		61.8 J	32.9	20.5 J	24.3	87.0	37.2	175
CYANIDE	NA	NA	NA		1.59 U	1.14 U	4.83 UJ	1.21 U	1.08 U	1.23 U	38.2
IRON	2000 or SB	30200	30200 (SB)		17500	14200	8610 J	19400	43100	17400	79100
LEAD	NA	NA	400 (EPA)		R	3.6 J	5.2 J	7.4	1.3	103	1030
MAGNESIUM	SB	7190	7190 (SB)		615	3710	4970 J	4230	13500	3860	911
MANGANESE	SB	676	676 (SB)		99.0	168	242 J	156	551	211	258 J
MERCURY	0.1	0.31	0.31 (SB)		0.05	0.006	0.02 J	0.02	0.005	0.16	0.99
NICKEL	13 or SB	22.5	22.5 (SB)		36.2	8.5	9.7 J	18.8	11.3	10.7	18.5
POTASSIUM	SB	2080	2080 (SB)		551	1340 J	900 J	1330	12300	1700	1010
SELENIUM	2 or SB	2.5	2.5 (SB)		1.4 J	0.85 J	2.2 UJ	1.8 J	1.7 J	0.58 U	2.6
SILVER	SB	0.15	0.15 (SB)		0.12	0.06 U	0.24 UJ	0.06 U	0.05 U	0.10 U	1.6
SODIUM	SB	646	646 (SB)		279	129	984 J	R	131	173	1270
THALLIUM	SB	0.37	0.37 (SB)		0.16 U	0.11 U	0.48 UJ	0.12 U	0.44	0.34	0.17
VANADIUM	150 or SB	54	150 (D)		45.4	16.6	16.3 J	22.1	61.6	23.2	32.7
ZINC	20 or SB	260	260 (SB)		220 J	25.9	54.4 J	57.5	95.6	146	147
Notes											
mg/kg - milligrams per kilogram											
RQL - Reported Quantitation Limit											
J - Reported analytical value is estimated											
U - Constituent not detected above RQL.											
UJ - Constituent not detected above estimated RQL.											
Bolded values are detections.											
Shaded are detections above the Recommended Soil Cleanup objective											
(D) Based on NYSDEC TAGM 4046 Criteria.											
(SB) Based on Site Background.											
(EPA) EPA residential lead standard.											

Table 4-6
Summary of Detected Inorganic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

ENSR

Chemical Name	NYSDEC TAGM 4046 Criteria	Site Background	Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-19/MW-11 9/8/2005 SB19 (5-5.5) 5- 5.5 ft	SB-19/MW-11 9/8/2005 SB19/MW11 5- 9 ft	SB-20 3/24/2006 SB20 (4.5-5) 4.5- 5 ft	SB-20 3/30/2006 SB20 (20-22) 20- 22 ft	SB-20 3/30/2006 SB20 (22-23) 22- 23 ft	SB-21/MW-1B 3/21/2006 SB21(0-5) 0- 5 FT	SB-21/MW-1B 3/21/2006 SB210(0-5) 0- 5 ft
Inorganics - mg/kg											
ALUMINUM (FUME OR DUST)	SB	17200	17200 (SB)		18900	10700	9310	6090	14600	7090	8880
ANTIMONY	SB	1.9	1.9 (SB)		0.42 UJ	0.80 J	2.5 J	1.3 J	1.4 UJ	7.4 J	8.1 J
ARSENIC	7.5 or SB	34.2	34.2 (SB)		3.9	12.8	5.4	3.3	6.5	2.1 J	1.4 J
BARIIUM	300 or SB	136	300 (D)		75.0	115	58.1	33.9	38.6	113	171
BERYLLIUM	0.16 or SB	0.27	0.27 (SB)		0.09 U	0.05 U	0.03 U	0.03 U	0.14	0.27	0.29
CADMIUM	1 or SB	1.2	1.2 (SB)		0.60	1.3	0.04 U	0.04 U	0.05 U	0.35	0.43
CALCIUM METAL	SB	12600	12600 (SB)		1990	15100	1830	2250	2230	8160	9290
CHROMIUM (TOTAL)	10 or SB	21.7	21.7 (SB)		15.8	26.8	13.1	9.3	23.1	18.3 J	30.3 J
COBALT	30 or SB	21.2	30 (D)		9.8	10.7	7.6	9.2	14.1	7.4	9.1
COPPER	25 or SB	144	144 (SB)		28.9	63.1	21.8	37.0	13.7	35.5	33.4
CYANIDE	NA	NA	NA		1.22 U	1.10 U	1.20 U	1.19 U	1.57 U	1.11 U	1.11 U
IRON	2000 or SB	30200	30200 (SB)		20200	41600	20700	16000	29600	13100	16100
LEAD	NA	NA	400 (EPA)		12.0	155	48.8	25.0	11.7	460 J	489 J
MAGNESIUM	SB	7190	7190 (SB)		4520	6730	3440	3280	6310	4930	6450
MANGANESE	SB	676	676 (SB)		189 J	328 J	491	224	341	202	274
MERCURY	0.1	0.31	0.31 (SB)		0.03	0.20	0.11	0.04 J	0.04 J	0.13	0.13
NICKEL	13 or SB	22.5	22.5 (SB)		12.9	15.4	12.6	10.9	25.3	9.5	12.8
POTASSIUM	SB	2080	2080 (SB)		1220	1540	1170	928	2440	1990 J	3620 J
SELENIUM	2 or SB	2.5	2.5 (SB)		0.56 UJ	1.0 J	2.8	1.8 J	2.0 J	0.51 U	1.5 J
SILVER	SB	0.15	0.15 (SB)		0.19	0.55	0.06 U	0.41 U	0.53 U	0.06 U	0.05 U
SODIUM	SB	646	646 (SB)		266	263	R	122	641	646	436
THALLIUM	SB	0.37	0.37 (SB)		0.13 U	0.28	0.12	0.11 U	0.16	0.21 J	0.13 J
VANADIUM	150 or SB	54	150 (D)		30.3	29.8	25.2	14.1	25.4	32.4	33.9
ZINC	20 or SB	260	260 (SB)		50.3	96.8	50.3	42.5	75.5	328	357
Notes											
mg/kg - milligrams per kilogram											
RQL - Reported Quantitation Limit											
J - Reported analytical value is estimated											
U - Constituent not detected above RQL.											
UJ - Constituent not detected above estimated RQL.											
Bolded values are detections.											
Shaded are detections above the Recommended Soil Cleanup objective											
(D) Based on NYSDEC TAGM 4046 Criteria.											
(SB) Based on Site Background.											
(EPA) EPA residential lead standard.											

Table 4-6
Summary of Detected Inorganic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

ENSR

Chemical Name	NYSDEC TAGM 4046 Criteria	Site Background	Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-22/MW-10 8/31/2005 MW-10 (4.5-5) 4.5- 5 ft	SB-22/MW-10 9/8/2005 MW-10 (11-13) 11- 13 ft	SB-23 8/17/2005 SB23 (3.3-3.5) 3.3- 3.5 ft	SB-23 8/17/2005 SB23 (4-4.5) 4- 4.5 ft	SB-24(2) 3/22/2006 SB24 (7-8) 7- 8 ft	SB-25/MW-13 3/6/2006 SB25 (2-3) 2- 3 ft	SB-25/MW-13 3/10/2006 SB25 (7-8) 7- 8 ft
Inorganics - mg/kg											
ALUMINUM (FUME OR DUST)	SB	17200	17200 (SB)		8570	12000	82000	8620	7060	10100	12700
ANTIMONY	SB	1.9	1.9 (SB)		R	0.66 J	1.2 J	8.5	6.1 J	3.3	1.9
ARSENIC	7.5 or SB	34.2	34.2 (SB)		19.8	5.6	147	187	105 J	22.4	5.5
BARIIUM	300 or SB	136	300 (D)		249	40.6	867	703	122	198	180
BERYLLIUM	0.16 or SB	0.27	0.27 (SB)		R	0.05 U	0.02 U	0.98	0.36	0.03 U	0.61
CADMIUM	1 or SB	1.2	1.2 (SB)		0.42	0.71	2.6	1.1	0.04 U	2	0.39
CALCIUM METAL	SB	12600	12600 (SB)		29700	1990	23700	8350	11200	2400	7010
CHROMIUM (TOTAL)	10 or SB	21.7	21.7 (SB)		19.8	15.0	39.3	26	50.5 J	33.1	24.6
COBALT	30 or SB	21.2	30 (D)		8.1	10.4	30.1	8.9	15.3	8.0	8.6
COPPER	25 or SB	144	144 (SB)		55.4	17.4	276	108	43.9	147 J	151
CYANIDE	NA	NA	NA		1.35 U	1.51 U	1.27 U	1.65 U	1.28 U	21.1	15.5 J
IRON	2000 or SB	30200	30200 (SB)		30400	22000	21200	47900	79600	45200	19900
LEAD	NA	NA	400 (EPA)		428	32.7	723	346	69.2 J	R	502
MAGNESIUM	SB	7190	7190 (SB)		3820	4590	4110	1430	1840	3400	6560
MANGANESE	SB	676	676 (SB)		444	253 J	244	81.6	123	214	183
MERCURY	0.1	0.31	0.31 (SB)		1.3	0.04	0.20	0.16	0.10	0.82	0.5
NICKEL	13 or SB	22.5	22.5 (SB)		17.0	16.1	69.8	23.7	26.3	20.5	21.4
POTASSIUM	SB	2080	2080 (SB)		1010	2040	1280	529	1730 J	1370	1690
SELENIUM	2 or SB	2.5	2.5 (SB)		1.5	0.80 J	1.8 UJ	0.80 UJ	10.1	6.1	2.3
SILVER	SB	0.15	0.15 (SB)		0.23	0.52	0.31 U	0.14 U	0.06 U	0.58	0.11
SODIUM	SB	646	646 (SB)		567	220	413	465	592	361	263
THALLIUM	SB	0.37	0.37 (SB)		0.21	0.16 U	0.36 U	2	0.12 U	0.94	0.17 J
VANADIUM	150 or SB	54	150 (D)		26.2	23.9	47.1	54.9	60.3	36.2	24.7
ZINC	20 or SB	260	260 (SB)		502	73.8	527	193	51.7	518 J	296
Notes mg/kg - milligrams per kilogram RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. Bolded values are detections. Shaded are detections above the Recommended Soil Cleanup objective (D) Based on NYSDEC TAGM 4046 Criteria. (SB) Based on Site Background. (EPA) EPA residential lead standard.											

Table 4-6
Summary of Detected Inorganic Constituents in Subsurface Soil
Pemat Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC TAGM 4046 Criteria	Site Background	Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-26/MW-9 3/9/2006 SB26 (7-8) 7- 8 ft	SB-28 5/2/2006 SB28(18-20) 18- 20 ft	SB-28 5/2/2006 SB28(5-10) 5- 10 ft	SB-29 3/23/2006 SB29 (4-4.5) 4- 4.5 ft	SB-29 3/24/2006 SB29 (17-19) 17- 19 ft	SB-29 3/24/2006 SB29 (7-9) 7- 9 ft	SB-30 3/28/2006 SB30(23-24) 23- 24 ft
Inorganics - mg/kg											
ALUMINUM (FUME OR DUST)	SB	17200	17200 (SB)		13800	9780	16300	10600	7780	9810	11100
ANTIMONY	SB	1.9	1.9 (SB)		0.97 U	1.0 U	4.3	1.0 J	1.1 UJ	1.0 UJ	1.3 J
ARSENIC	7.5 or SB	34.2	34.2 (SB)		10.6	2.4 J	6.0 J	8.8 J	3.6 J	4.7	14.9
BARIUM	300 or SB	136	300 (D)		218	106	148	129	57.8	73.7	101
BERYLLIUM	0.16 or SB	0.27	0.27 (SB)		0.03 U	0.03 U	0.04 U	0.53	0.03 U	0.03 U	0.03 U
CADMIUM	1 or SB	1.2	1.2 (SB)		0.21	0.62	1.6	0.03 U	0.04 U	0.03 U	0.04 U
CALCIUM METAL	SB	12600	12600 (SB)		5770	1870	2590	3520	3220	2450	3620
CHROMIUM (TOTAL)	10 or SB	21.7	21.7 (SB)		21.5	9.1	18.0	13.1 J	9.6	12.2	17.6
COBALT	30 or SB	21.2	30 (D)		12.6	7.8	14.1	16.5	7.2	7.3	9.8
COPPER	25 or SB	144	144 (SB)		42.3 J	21.8 J	44.2 J	46.8	16.1	21.7	60.9
CYANIDE	NA	NA	NA		1.28 U	1.12 U	1.62 U	1.16 U	1.29 U	1.17 U	1.25 U
IRON	2000 or SB	30200	30200 (SB)		28000	17400	40400	28600	17700	20500	32800
LEAD	NA	NA	400 (EPA)		R	5.7	105	111 J	67.0	42.1	196
MAGNESIUM	SB	7190	7190 (SB)		7710	3230	5720	6600	3270	3060	4020
MANGANESE	SB	676	676 (SB)		411	471	390	339	216	230	519
MERCURY	0.1	0.31	0.31 (SB)		0.11	0.02	0.09	0.36	0.11	0.12	0.52
NICKEL	13 or SB	22.5	22.5 (SB)		16.4	9.3	16.6	15.4	11.1	13.3	19.8
POTASSIUM	SB	2080	2080 (SB)		3880	2010	4210	2610 J	1370	1100	1240
SELENIUM	2 or SB	2.5	2.5 (SB)		1.2 J	0.49 UJ	0.72 UJ	1.7 J	2.2 J	2.3	3.4
SILVER	SB	0.15	0.15 (SB)		0.10 U	0.73	1.8	0.06 U	0.06 U	0.06 U	0.06 U
SODIUM	SB	646	646 (SB)		198	81.9	221	274	163	171	106
THALLIUM	SB	0.37	0.37 (SB)		0.33	0.18	0.19	0.11 U	0.12 U	0.11 U	0.13 U
VANADIUM	150 or SB	54	150 (D)		37.5	18.4	39.8	57.0	20.3	19.8	27.3
ZINC	20 or SB	260	260 (SB)		161 J	44.6	192	77.0	42.9	45.2	153
Notes mg/kg - milligrams per kilogram RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. Bolded values are detections. Shaded are detections above the Recommended Soil Cleanup objective (D) Based on NYSDEC TAGM 4046 Criteria. (SB) Based on Site Background. (EPA) EPA residential lead standard.											

Table 4-6
Summary of Detected Inorganic Constituents in Subsurface Soil
Pemat Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC TAGM 4046 Criteria	Site Background	Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-30 3/28/2006 SB30(30-35) 30- 35 ft	SB-30 3/28/2006 SB30(4-5) 4- 5 ft	SB-30 3/28/2006 SB30(8.5-10) 8.5- 10 ft	SB-31 3/23/2006 SB31 (21-23) 21- 23 ft	SB-31 3/23/2006 SB31 (35-37) 35- 37 ft	SB-31 3/23/2006 SB31 (4-4.5) 4- 4.5 ft	SB-31 3/23/2006 SB31 (7-9) 7- 9 ft
Inorganics - mg/kg											
ALUMINUM (FUME OR DUST)	SB	17200	17200 (SB)		14300	11600	10300	11800	4690	9720	8290
ANTIMONY	SB	1.9	1.9 (SB)		1.5 UJ	1.0 UJ	1.2 UJ	1.1 UJ	1.1 UJ	1.1 UJ	1.1 UJ
ARSENIC	7.5 or SB	34.2	34.2 (SB)		7.4	6.0	2.3 J	5.0 J	0.86 J	3.8 J	4.8 J
BARIIUM	300 or SB	136	300 (D)		38.5	50.6	32.3	67.1	49.4	154	64.5
BERYLLIUM	0.16 or SB	0.27	0.27 (SB)		0.04 U	0.03 U	0.10	0.59	0.20	0.57	0.34
CADMIUM	1 or SB	1.2	1.2 (SB)		0.05 U	0.07 U	0.04 U	0.04 U	0.04 U	0.19	0.03 U
CALCIUM METAL	SB	12600	12600 (SB)		2540	1790	697	996	1910	3050	12500
CHROMIUM (TOTAL)	10 or SB	21.7	21.7 (SB)		24.5	16.6	14.5	13.8 J	8.2 J	12.4 J	10.8 J
COBALT	30 or SB	21.2	30 (D)		12.3	11.5	7.1	10.0	5.2	40.2	7.0
COPPER	25 or SB	144	144 (SB)		13.9	26.6	20.5	19.2	17.4	50.8	20.9
CYANIDE	NA	NA	NA		1.57 U	1.18 U	1.24 U	1.22 U	1.22 U	1.14 U	1.18 U
IRON	2000 or SB	30200	30200 (SB)		29300	43100	19000	24500	10200	21300	16600
LEAD	NA	NA	400 (EPA)		10.8	21.4	6.7	7.6 J	2.7 J	361 J	80.8 J
MAGNESIUM	SB	7190	7190 (SB)		5990	5170	4100	3750	1970	2680	6090
MANGANESE	SB	676	676 (SB)		414	263	141	585	218	755	254
MERCURY	0.1	0.31	0.31 (SB)		0.04	0.05	0.02	0.02	0.007	0.53	0.10
NICKEL	13 or SB	22.5	22.5 (SB)		24.6	22.1	19.6	17.2	6.4	32.2	11.2
POTASSIUM	SB	2080	2080 (SB)		2350	1270	1220	1130 J	1040 J	1070 J	1440 J
SELENIUM	2 or SB	2.5	2.5 (SB)		1.8 J	3.6	2.0 J	2.1 J	0.53 U	1.9 J	1.4 J
SILVER	SB	0.15	0.15 (SB)		0.08 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U
SODIUM	SB	646	646 (SB)		447	R	R	70.0	91.5	245	302
THALLIUM	SB	0.37	0.37 (SB)		0.16 U	0.11 U	0.12 U	0.12 U	0.12 U	0.11 U	0.11 U
VANADIUM	150 or SB	54	150 (D)		28.8	22.6	19.9	24.2	14.4	27.6	19.5
ZINC	20 or SB	260	260 (SB)		73.5	62.6	54.2	56.9	23.7	298	52.1
Notes mg/kg - milligrams per kilogram RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. Bolded values are detections. Shaded are detections above the Recommended Soil Cleanup objective (D) Based on NYSDEC TAGM 4046 Criteria. (SB) Based on Site Background. (EPA) EPA residential lead standard.											

Table 4-6
Summary of Detected Inorganic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

ENSR

Chemical Name	NYSDEC TAGM 4046 Criteria	Site Background	Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-32/MW-15 3/31/2006 SB32 (17-19) 17- 19 ft	SB-32/MW-15 3/31/2006 SB32 (20-23) 20- 23 ft	SB-32/MW-15 3/31/2006 SB32 (4.5-5) 4.5- 5 ft	SB-32/MW-15 3/31/2006 SB32 (9-13) 9- 13 ft	SB-33/MW-16 3/31/2006 SB33 (13-15) 13- 15 ft	SB-33/MW-16 3/31/2006 SB33 (5-9) 5- 9 ft	SB-33/MW-16 4/3/2006 SB33 (3-3.5) 3- 3.5 ft
Inorganics - mg/kg											
ALUMINUM (FUME OR DUST)	SB	17200	17200 (SB)		6270	13200	4950	6330	14300	6850	9790
ANTIMONY	SB	1.9	1.9 (SB)		1.4 UJ	1.5 UJ	2.1 J	1.2 UJ	1.5 UJ	1.2 UJ	3.0 J
ARSENIC	7.5 or SB	34.2	34.2 (SB)		2.9	6.4	12.0	2.3	6.7	13.8	4.7
BARIUM	300 or SB	136	300 (D)		52.6	36.7	128	49.7	39.8	92.8	79.2
BERYLLIUM	0.16 or SB	0.27	0.27 (SB)		0.04 U	0.15	0.04 U	0.03 U	0.18	0.03 U	0.03 U
CADMIUM	1 or SB	1.2	1.2 (SB)		0.04 U	0.05 U	0.34	0.04 U	0.05 U	0.04 U	0.03 U
CALCIUM METAL	SB	12600	12600 (SB)		2710	2120	5210	3570	2410	3610	8540
CHROMIUM (TOTAL)	10 or SB	21.7	21.7 (SB)		6.8	19.9	12.6	8.2	22	11.8	17.0
COBALT	30 or SB	21.2	30 (D)		5.4	12.1	6.1	6.5	13.7	9.0	8.2
COPPER	25 or SB	144	144 (SB)		34.3	13.5	75.9	20.6	14.6	47.2	38.4
CYANIDE	NA	NA	NA (SB)		1.50 U	1.61 U	1.58 U	1.27 U	1.61 U	1.29 U	1.17 U
IRON	2000 or SB	30200	30200 (SB)		10800	25900	14100	13800	29300	35300	17800
LEAD	NA	NA	400 (EPA)		157	11.6	393	124	23.8	592	151
MAGNESIUM	SB	7190	7190 (SB)		2930	5480	2600	4100	5820	2790	6210
MANGANESE	SB	676	676 (SB)		118	301	200	199	385	266	357
MERCURY	0.1	0.31	0.31 (SB)		0.09 J	0.04 J	1.5 J	0.30 J	0.11 J	0.19 J	0.37 J
NICKEL	13 or SB	22.5	22.5 (SB)		9.6	22.6	12.2	8.4	24.9	14.0	15.3
POTASSIUM	SB	2080	2080 (SB)		1300	2190	770	1700	2380	1300	1110
SELENIUM	2 or SB	2.5	2.5 (SB)		2.1 J	1.6 J	2.1 J	1.1 J	1.7 J	2.3 J	1.9 J
SILVER	SB	0.15	0.15 (SB)		0.51 U	0.55 U	0.55 U	0.44 U	0.55 U	0.44 U	0.39 U
SODIUM	SB	646	646 (SB)		221	535	269	179	369	203	409
THALLIUM	SB	0.37	0.37 (SB)		0.22	0.19	0.26	0.42	0.30	0.18	0.12 U
VANADIUM	150 or SB	54	150 (D)		11.7	22.4	13.4	16.4	22.8	17.4	19.9
ZINC	20 or SB	260	260 (SB)		59.8	70.6	242	94.1	76.4	134	74.8
Notes											
mg/kg - milligrams per kilogram											
RQL - Reported Quantitation Limit											
J - Reported analytical value is estimated											
U - Constituent not detected above RQL.											
UJ - Constituent not detected above estimated RQL.											
Bolded values are detections.											
Shaded are detections above the Recommended Soil Cleanup objective											
(D) Based on NYSDEC TAGM 4046 Criteria.											
(SB) Based on Site Background.											
(EPA) EPA residential lead standard.											

Table 4-6
Summary of Detected Inorganic Constituents in Subsurface Soil
Pemat Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC TAGM 4046 Criteria	Site Background	Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-33/MW-16 4/3/2006 SB330 (3-3.5) 3- 3.5 ft	SB-34/MW-14 3/24/2006 SB34 (4-4.5) 4- 4.5 ft	SB-34/MW-14 3/29/2006 SB34 (17-19) 17- 19 ft	SB-34/MW-14 3/29/2006 SB34 (9-11) 9- 11 ft	SB-35 3/27/2006 SB35 (13-15) 13- 15 ft	SB-35 3/27/2006 SB35 (3-4) 3- 4 ft	SB-36 3/29/2006 SB36 (15-17) 15- 17 ft
Inorganics - mg/kg											
ALUMINUM (FUME OR DUST)	SB	17200	17200 (SB)		9830	19000	12600	10800	8780	5710	5570
ANTIMONY	SB	1.9	1.9 (SB)		3.0 J	1.2 UJ	1.4 UJ	1.2 UJ	1.2 J	4.5 J	1.0 UJ
ARSENIC	7.5 or SB	34.2	34.2 (SB)		7.5	12.0	8.0	4.2 J	3.7 J	26.9	2.7 J
BARIUM	300 or SB	136	300 (D)		69.3	225	34.2	74.3	44.1	93.4	27.4
BERYLLIUM	0.16 or SB	0.27	0.27 (SB)		0.03 U	1.1	0.04 U	0.03 U	0.03 U	0.13	0.03 U
CADMIUM	1 or SB	1.2	1.2 (SB)		0.03 U	0.04 U	0.04 U	0.04 U	0.04 U	0.07 U	0.03 U
CALCIUM METAL	SB	12600	12600 (SB)		10100	72800	2390	4420	1980	3060	1480
CHROMIUM (TOTAL)	10 or SB	21.7	21.7 (SB)		14.2	13.2	20.3	13.9	12.1	19	9.5
COBALT	30 or SB	21.2	30 (D)		8.9	8.2	11.1	8.2	6.9	8.1	5.6
COPPER	25 or SB	144	144 (SB)		56.4	55.6	16.1	27.5	15.4	131	R
CYANIDE	NA	NA	NA		1.17 U	1.29 U	1.50 U	1.30 U	1.18 U	1.49	1.14 U
IRON	2000 or SB	30200	30200 (SB)		27800	28000	28000	17900	14000	34800	13300
LEAD	NA	NA	400 (EPA)		135	220	15.5	67.0	3.8	391	11.9
MAGNESIUM	SB	7190	7190 (SB)		6870	18200	5280	5110	3160	1110	2870
MANGANESE	SB	676	676 (SB)		334	493	324	245	162	223	90.8
MERCURY	0.1	0.31	0.31 (SB)		0.27 J	2	0.09	0.26	0.01	0.57	0.01
NICKEL	13 or SB	22.5	22.5 (SB)		17.6	13.2	21.8	13.6	11.2	17.2	10.1
POTASSIUM	SB	2080	2080 (SB)		1100	1470	2070	1830	1170	535	958
SELENIUM	2 or SB	2.5	2.5 (SB)		1.3 J	2.3 J	3.0 J	2.2 J	2.0 J	6.2	1.4 J
SILVER	SB	0.15	0.15 (SB)		0.40 U	0.06 U	0.08 U	0.07 U	0.06 U	0.06 U	0.05 U
SODIUM	SB	646	646 (SB)		476	370	175	209	179	R	141
THALLIUM	SB	0.37	0.37 (SB)		0.11 U	0.59	0.15 U	0.13 U	0.12 U	0.41	0.11 U
VANADIUM	150 or SB	54	150 (D)		21.3	22.4	24.3	25.0	17.9	28.2	14.5
ZINC	20 or SB	260	260 (SB)		91.1	157	67.0	69.1	27.7	122	32.1
Notes mg/kg - milligrams per kilogram RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. Bolded values are detections. Shaded are detections above the Recommended Soil Cleanup objective (D) Based on NYSDEC TAGM 4046 Criteria. (SB) Based on Site Background. (EPA) EPA residential lead standard.											

Table 4-6
Summary of Detected Inorganic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC TAGM 4046 Criteria	Site Background	Recommended Soil Cleanup Objective	Location ID	SB-36	SB-37/MW-19	SB-37/MW-19	SB-38/MW-20	SB-38/MW-20	SB-39/MW-21	SB-39/MW-21
				Sample Date	3/29/2006	5/1/2006	5/1/2006	5/1/2006	5/1/2006	5/1/2006	
				Sample ID	SB36 (25-27)	SB37(14-15)	SB37(4-5)	SB38(10-15)	SB38(4-5)	SB39(0-5)	SB39(10-15)
				Depth Interval	25- 27	14- 15	4- 5	10- 15	4- 5	0- 5	10- 15
				Depth Interval Unit	ft	ft	ft	ft	ft	ft	ft
Inorganics - mg/kg											
ALUMINUM (FUME OR DUST)	SB	17200	17200 (SB)		12600	15500	6350	5900	10100	7350	11500
ANTIMONY	SB	1.9	1.9 (SB)		1.1 U	1.5 U	1.5	1.0 U	1.1 U	2.1	1.3 U
ARSENIC	7.5 or SB	34.2	34.2 (SB)		8.5	6.2 J	14.2 J	1.2 J	2.6 J	3.4 J	4.6 J
BARIIUM	300 or SB	136	300 (D)		86.9	41.3	54.5	34.1	64.5	61.9	40.0
BERYLLIUM	0.16 or SB	0.27	0.27 (SB)		0.03	0.08	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
CADMIUM	1 or SB	1.2	1.2 (SB)		0.03 U	1.3	3.5	0.57	1.1	0.66	0.92
CALCIUM METAL	SB	12600	12600 (SB)		1740	2410	2630	2210	1990	4610	2900
CHROMIUM (TOTAL)	10 or SB	21.7	21.7 (SB)		17.6	24.4	22.4	7.2	14.5	10.8	18.3
COBALT	30 or SB	21.2	30 (D)		11.4	12.9	10.2	5.4	9.1	7.2	9.8
COPPER	25 or SB	144	144 (SB)		25.2	18.2 J	74.2 J	20.8 J	59.2 J	32.5 J	15.4 J
CYANIDE	NA	NA	NA		1.21 U	1.62 U	1.30 U	1.16 U	1.21 U	1.12 U	1.43 U
IRON	2000 or SB	30200	30200 (SB)		29200	31800	87500	16200	33300	18700	23500
LEAD	NA	NA	400 (EPA)		9.1	14.7	81.9	10.9	71.4	72.3	16.0
MAGNESIUM	SB	7190	7190 (SB)		4720	6410	1860	2380	2920	3770	4610
MANGANESE	SB	676	676 (SB)		477	432	1770	161	320	348	253
MERCURY	0.1	0.31	0.31 (SB)		0.02	0.05	0.07	0.03	0.4	0.36	0.04
NICKEL	13 or SB	22.5	22.5 (SB)		21.8	27.1	39.2	7.9	15.9	11.0	19.4
POTASSIUM	SB	2080	2080 (SB)		2040	2510	364	993	1020	1220	1830
SELENIUM	2 or SB	2.5	2.5 (SB)		1.5 J	0.74 UJ	0.59 UJ	0.51 UJ	0.55 UJ	0.51 UJ	0.65 UJ
SILVER	SB	0.15	0.15 (SB)		0.06 U	1.5	3.1	0.77	1.6	0.95	1.1
SODIUM	SB	646	646 (SB)		R	465	276	120	111	115	201
THALLIUM	SB	0.37	0.37 (SB)		0.13	0.16 U	0.13 U	0.11 U	0.12 U	0.11 U	0.14 U
VANADIUM	150 or SB	54	150 (D)		22.4	29.3	52.3	13.6	25.2	20.9	23.0
ZINC	20 or SB	260	260 (SB)		59.0	110	831	36.5	42.9	54.4	59.2
Notes											
mg/kg - milligrams per kilogram											
RQL - Reported Quantitation Limit											
J - Reported analytical value is estimated											
U - Constituent not detected above RQL.											
UJ - Constituent not detected above estimated RQL.											
Bolded values are detections.											
Shaded are detections above the Recommended Soil Cleanup objective											
(D) Based on NYSDEC TAGM 4046 Criteria.											
(SB) Based on Site Background.											
(EPA) EPA residential lead standard.											

Table 4-6
Summary of Detected Inorganic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC TAGM 4046 Criteria	Site Background	Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-40/MW-22 5/1/2006 SB40(14-15) 14- 15 ft	SB-40/MW-22 5/1/2006 SB40(4-5) 4- 5 ft	SB-41 5/18/2006 SB41(3-4) 3- 4 ft	SB-41 5/18/2006 SB41(4-8) 4- 8 ft	SB-41 5/18/2006 SB41(8-11) 8- 11 ft	TP2 3/22/2006 TP2 (4-5) 4- 5 ft
Inorganics - mg/kg										
ALUMINUM (FUME OR DUST)	SB	17200	17200 (SB)		15400	6040	9590	9500	11000	16500
ANTIMONY	SB	1.9	1.9 (SB)		1.4 U	1.5	0.95 U	1.1 U	1.3 U	1.2 UJ
ARSENIC	7.5 or SB	34.2	34.2 (SB)		7.5 J	2.3 J	2.4	1.7	1.5	9.2 J
BARIUM	300 or SB	136	300 (D)		40.1	38.8	47.5	78.3	61.4	185
BERYLLIUM	0.16 or SB	0.27	0.27 (SB)		0.06	0.03 U	0.02 U	0.03 U	0.03 U	0.93
CADMIUM	1 or SB	1.2	1.2 (SB)		1.3	0.88	0.31	0.33	0.36	0.04 U
CALCIUM METAL	SB	12600	12600 (SB)		2440	3350	9680	3150	3690	2100
CHROMIUM (TOTAL)	10 or SB	21.7	21.7 (SB)		23.3	15.1	R	R	R	37.8 J
COBALT	30 or SB	21.2	30 (D)		12.2	7.5	7.4	7.6	8.4	12.9
COPPER	25 or SB	144	144 (SB)		17.5 J	15.2 J	16.2 J	18.7 J	21.0 J	130
CYANIDE	NA	NA	NA		1.54 U	1.09 U	1.07 U	1.17 U	1.42 U	6.64
IRON	2000 or SB	30200	30200 (SB)		32300	27500	14800	15400	19000	38100
LEAD	NA	NA	400 (EPA)		11.1	20.2	19.5	81.5	37.6	546 J
MAGNESIUM	SB	7190	7190 (SB)		6010	3000	3240	3400	2980	5170
MANGANESE	SB	676	676 (SB)		393	404	275 J	223 J	218 J	269
MERCURY	0.1	0.31	0.31 (SB)		0.04	0.03	1.3	0.09	0.11	1.7
NICKEL	13 or SB	22.5	22.5 (SB)		25.6	15.7	10.6	10.9	13.3	23.6
POTASSIUM	SB	2080	2080 (SB)		2570	1190	1230	1420	2040	1900 J
SELENIUM	2 or SB	2.5	2.5 (SB)		0.71 UJ	0.50 UJ	1.0 J	0.54 U	2.0 J	0.92 J
SILVER	SB	0.15	0.15 (SB)		1.5	1.3	0.66	0.72	0.92	0.06 U
SODIUM	SB	646	646 (SB)		318	92.6	155	136	237	269
THALLIUM	SB	0.37	0.37 (SB)		0.16	0.13	0.20 U	0.29	0.34	0.13 U
VANADIUM	150 or SB	54	150 (D)		28.5	17.9	21.2	20.4	19.3	48.4
ZINC	20 or SB	260	260 (SB)		77.8	25.7	28.1	33.7	47.0	110
Notes mg/kg - milligrams per kilogram RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. Bolded values are detections. Shaded are detections above the Recommended Soil Cleanup objective (D) Based on NYSDEC TAGM 4046 Criteria. (SB) Based on Site Background. (EPA) EPA residential lead standard.										

Table 4-6
Summary of Detected Inorganic Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC TAGM 4046 Criteria	Site Background	Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	TP3 3/22/2006 TP3 (5-5.5) 5- 5.5 ft	TP4 3/22/2006 TP4 (4.25) 4.25- 4.25 ft	Number Detected	Number Samples Collected	Minimum Detect	Maximum Detect	Number of Samples Exceeding Recommended Soil Cleanup Objective
Inorganics - mg/kg											
ALUMINUM (FUME OR DUST)	SB	17200	17200 (SB)		13700	7950	134	134	3030	82000	11
ANTIMONY	SB	1.9	1.9 (SB)		1.3 J	4.2 J	50	134	0.48	56.6	26
ARSENIC	7.5 or SB	34.2	34.2 (SB)		21.3 J	9.7 J	133	134	0.86	311	7
BARIIUM	300 or SB	136	300 (D)		222	60.9	134	134	27.4	5020	9
BERYLLIUM	0.16 or SB	0.27	0.27 (SB)		0.64	0.46	41	134	0.03	1.3	24
CADMIUM	1 or SB	1.2	1.2 (SB)		0.22	0.04 U	84	134	0.05	3.5	15
CALCIUM METAL	SB	12600	12600 (SB)		12100	3050	134	134	697	72800	6
CHROMIUM (TOTAL)	10 or SB	21.7	21.7 (SB)		26.9 J	70.8 J	131	134	6.1	115	34
COBALT	30 or SB	21.2	30 (D)		15.2	13.0	133	134	1.1	40.2	3
COPPER	25 or SB	144	144 (SB)		81.2	48.5	133	134	7.8	2770	7
CYANIDE	NA	NA	NA (SB)		7.03	1.28 U	17	134	1.39	38.2	
IRON	2000 or SB	30200	30200 (SB)		46000	81100	134	134	8010	113000	45
LEAD	NA	NA	400 (EPA)		670 J	436 J	124	134	1.3	2670	15
MAGNESIUM	SB	7190	7190 (SB)		10300	2950	134	134	615	18200	12
MANGANESE	SB	676	676 (SB)		397	169	134	134	47.4	1770	10
MERCURY	0.1	0.31	0.31 (SB)		0.34	0.13	133	134	0.005	2	32
NICKEL	13 or SB	22.5	22.5 (SB)		22.8	40.2	134	134	6.1	70.1	30
POTASSIUM	SB	2080	2080 (SB)		2820 J	544	134	134	364	12300	34
SELENIUM	2 or SB	2.5	2.5 (SB)		1.4 J	2.6 J	86	134	0.6	10.1	14
SILVER	SB	0.15	0.15 (SB)		0.06 U	0.06 U	41	134	0.08	3.1	38
SODIUM	SB	646	646 (SB)		281	304	125	134	55.7	2090	4
THALLIUM	SB	0.37	0.37 (SB)		0.13 U	0.13 U	70	134	0.12	2	13
VANADIUM	150 or SB	54	150 (D)		45.9	121	134	134	11.5	192	1
ZINC	20 or SB	260	260 (SB)		197	140	134	134	19.5	2770	19
Notes mg/kg - milligrams per kilogram RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UU - Constituent not detected above estimated RQL. Bolded values are detections. Shaded are detections above the Recommended Soil Cleanup objective (D) Based on NYSDEC TAGM 4046 Criteria. (SB) Based on Site Background. (EPA) EPA residential lead standard.											

Table 4-7
Summary of Detected Polychlorinated Biphenyl Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	MH-1 5/2/2006 SB27(5-6) 5 - 6 ft	MH-2 5/5/2006 MH-2 (5-6) 5 - 6 ft	MH-3 5/5/2006 MH-3 (5-6) 5 - 6 ft	MW-5 8/18/2005 MW-5 (2-2.5) 2 - 2.5 ft	MW-5 8/18/2005 MW-5 (5) 5 - 5 ft	MW-5 9/9/2005 MW-5 (9-11) 9 - 1 ft	MW-5 9/9/2005 MW-5 (13-15) 13 - 15 ft
PCBs - ug/kg									
AROCOR 1260	1000		45 U	63 U	58	37 U	43 U	51 U	45 U
Total PCBs					58				
Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	MW-5 9/9/2005 MW-5 (21-23) 21 - 23 ft	MW-5 (DUP) 9/9/2005 DUP-1 21 - 23 ft	SB-4 9/12/2005 SB4 (3-3.5) 3 - 3.5 ft	SB-4 9/12/2005 SB4 (4.5-5.5) 4.5 - 5.5 ft	SB-4 9/12/2005 SB4 (7-9) 7 - 9 ft	SB-11/MW-27 3/9/2006 SB11 (1-2) 1 - 2 ft	SB-13/MW-24 3/16/2006 SB13(5-7) 5 - 7 ft
PCBs -ug/kg									
AROCOR 1260	1000		39 U	110	42 U	43 U	39 U	42 UJ	43 U
Total PCBs				110					
Notes ug/kg - micrograms per kilogram RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. Bolded values are detections.									

Table 4-7
Summary of Detected Polychlorinated Biphenyl Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-13/MW-24 3/16/2006 SB13(15-17) 15 - 17 ft	SB-14/MW-23 3/16/2006 SB14(5-9) 5 - 7 ft	SB-14/MW-23 3/16/2006 SB14(13-15) 13 - 15 ft	SB-16/MW-26 3/17/2006 SB16(17-19) 17 - 19 ft	SB-16/MW-26 3/17/2006 SB16(22.5-23) 22.5 - 23 ft	SB-17 9/2/2005 SB17 (3-3.5) 3 - 3.5 ft
PCBs - ug/kg								
AROCLOR 1260	1000		50 U	40 U	53 U	38 U	160 UJ	40 U
Total PCBs								
Chemical Name	NYSDEC Recommended Soil Cleanup Objective	Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-18 9/7/2005 SB18 (2-2.5) 2 - 2.5 ft	SB-19/MW-11 9/8/2005 SB19 (5-5.5) 5 - 5.5 ft	SB-19/MW-11 9/8/2005 SB19/MW11 5 - 9 ft	SB-21/MW-1B 3/21/2006 SB21(0-5) 0 - 5 ft	SB-21/MW-1B (DUP) 3/21/2006 SB210(0-5) 0 - 5 ft	SB-22/MW-10 8/31/2005 MW-10 (4.5-5) 4.5 - 5 ft
PCBs -ug/kg								
AROCLOR 1260	1000		210 UJ	40 U	36 U	37 U	37 U	220 U
Total PCBs								
Notes ug/kg - micrograms per kilogram RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. Bolded values are detections.								

Table 4-7
Summary of Detected Polychlorinated Biphenyl Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

		Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	SB-22/MW-10 9/8/2005 MW-10 (11-13) 11 - 13 ft	SB-23 8/17/2005 SB23 (3.3-3.5) 3.3 - 3.5 ft	SB-23 8/17/2005 SB23 (4-4.5) 4 - 4.5 ft	SB-24(2) 3/22/2006 SB24 (7-8) 7 - 8 ft	SB-28 5/2/2006 SB28(5-10) 5 - 10 ft	SB-28 5/2/2006 SB28(18-20) 18 - 20 ft
Chemical Name	NYSDEC Recommended Soil Cleanup Objective							
PCBs - ug/kg								
AROCLOR 1260	1000		50 U	140	110 U	42 U	53 U	37 U
Total PCBs				140				
		Location ID Sample Date Sample ID Depth Interval Depth Interval Unit	Number Detected	Number Samples Collected	Minimum Detect	Maximum Detect	Number of Samples Exceeding Standard	
Chemical Name	NYSDEC Recommended Soil Cleanup Objective							
PCBs -ug/kg								
AROCLOR 1260	1000		3	32	58	140	0	
Total PCBs								
<u>Notes</u> ug/kg - micrograms per kilogram RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. Bolded values are detections.								

Table 4-8
Summary of Detected Volatile Organic Constituents in Groundwater
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Water Quality Standard	Location ID Sample Date Sample ID Unit	MW-1A 5/3/2006 MW-1A Shallow	SB-21/MW-1B 5/3/2006 MW-1B Bedrock	MW-5 5/4/2006 MW-5 Shallow	MW-6 5/5/2006 MW-6 Shallow	MW-8 5/4/2006 MW-8 Shallow	SB-26/MW-9 5/4/2006 MW-9 Bedrock	SB-26/MW-9 5/4/2006 MW-DUP Bedrock	SB-22/MW-10 5/2/2006 MW-10 Shallow	SB-19/MW-11 5/5/2006 MW-11 Shallow	MW-12 5/4/2006 MW-12 Shallow
BTEX Compounds - ug/l												
BENZENE	1		1.0 U	1.0 U	3.8	51	1.0 U	2.2	2.1	1.0 U	1.0 U	4.5
ETHYLBENZENE	5		1.0 U	1.0 U	7.4	560	1.0 U	13	12	1.0 U	1.0 U	3.3
TOLUENE	5		1.0 U	1.0 U	0.72 J	6.4	1.0 U	5.8	5.6	1.0 U	1.0 U	0.85 J
XYLENE, O-	5		1.0 U	0.35 J	4.6	100	1.0 U	10	9.6	1.0 U	1.0 U	2.4
M-, P-XYLENES	5		1.0 U	0.45 J	1.3	30	1.0 U	11	9.6	1.0 U	1.0 U	1.5
Total BTEX			--	0.8	17.82	747.4	--	42	38.9	--	--	12.55
Volatile Organic Compounds (VOCs) - ug/l												
1,1,1-TRICHLOROETHANE	1		1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-DICHLOROETHANE	5		1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.4	1.0 U
1,1-DICHLOROETHENE	5		1.0 U	1.0 U	0.33 J	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-BUTANONE	50		5.0 U	2.8 J	1.2 J	25 U	5.0 U	4.4 J	3.4 J	5.0 U	1.9 J	5.0 U
ACETONE	50		3.1 J	4.0 J	4.5 J	50 U	1.2 J	4.8 J	5.9 J	10 U	3.8 J	10 U
CARBON DISULFIDE	60		1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.1 U	1.0 U	1.0 U	1.0 U
CHLOROETHANE	5		2.0 U	2.0 U	2.0 U	2.8 J	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
CHLOROFORM	7		1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	2.0	2.0	1.0 U	1.0 U	1.0 U
CHLOROMETHANE (METHYL CHLORIDE)	5		2.0 U	2.0 U	2.0 U	10 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
CIS-1,2-DICHLOROETHENE	5		1.0 U	1.0 U	110	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	46	16
CYCLOHEXANE	NA		1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.53 J
ISOPROPYLBENZENE	NA		1.0 U	1.0 U	4.2	54	0.74 J	4.6	4.2	1.0 U	1.0 U	4.4
METHYL TERT-BUTYL ETHER	10		1.0 U	1.0 U	1.0 U	5.0 U	0.63 J	1.0 U	1.0 U	1.1	1.0 U	1.0 U
METHYLCYCLOHEXANE	NA		1.0 U	1.0 U	1.2	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0
STYRENE	5		1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	2.8	2.8	1.0 U	1.0 U	1.0 U
TRANS-1,2-DICHLOROETHENE	5		1.0 U	1.0 U	0.62 J	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.8	1.0 U
TRICHLOROETHENE	5		0.42 J	1.0 U	0.59 J	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	31	0.30 J
VINYL CHLORIDE	2		1.0 U	1.0 U	120 J	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.7	56
Total VOCs (including BTEX)			3.52	7.6	260.46	804.2	2.57	60.6	57.2	1.1	90.6	92.78
Notes ug/l- micrograms per liter RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL UJ - Constituent not detected above estimated RQL NA - Not Available Bolded values are detections. Shaded are detections above the NYSDEC Water Quality Standard † Grab groundwater sample collected during boring advancement.												

Table 4-8
Summary of Detected Volatile Organic Constituents in Groundwater
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Water Quality Standard	Location ID Sample Date Sample ID Unit	SB-25/MW-13 5/2/2006 MW-13 Bedrock	SB-34/MW-14 5/1/2006 MW-14 Shallow	SB-33/MW-16 5/2/2006 MW-16 Shallow	SB-9/MW-17 5/5/2006 MW-17 Intermediate	SB-8/MW-18 5/1/2006 MW-18 Intermediate	SB-37/MW-19 5/18/2006 MW-19 Shallow	SB-37/MW-19 5/18/2006 MW-DUP-05182006 Shallow	SB-38/MW-20 5/18/2006 MW-20 Shallow
BTEX Compounds - ug/l										
BENZENE	1		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U
ETHYLBENZENE	5		1.0 U	1.0 U	1.0 U	0.43 J	1.0 U	1 U	1 U	1 U
TOLUENE	5		1.0 U	1.0 U	1.0 U	0.46 J	1.0 U	1 U	1 U	1 U
XYLENE, O-	5		1.0 U	1.0 U	1.0 U	0.30 J	1.0 U	1 U	1 U	1 U
M-, P-XYLENES	5		1.0 U	1.0 U	1.0 U	0.37 J	1.0 U	1 U	1 U	1 U
Total BTEX			--	--	--	1.56	--	--	--	--
Volatile Organic Compounds (VOCs) - ug/l										
1,1,1-TRICHLOROETHANE	1		1.0 U	1.0 U	1.0 U	1.0 U	0.57 J	1 U	1 U	1 U
1,1-DICHLOROETHANE	5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U
1,1-DICHLOROETHENE	5		1.0 U	1.0 U	1.0 U	0.30 J	1.0 U	1 U	1 U	1 U
2-BUTANONE	50		5.0 U	5.0 U	5.0 U	5.8	5.0 U	5 U	5 U	5 U
ACETONE	50		10 U	1.5 J	10 U	4.0 J	10 U	10 U	10 U	10 U
CARBON DISULFIDE	60		1 J	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U
CHLOROETHANE	5		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2 U	2 U	2 U
CHLOROFORM	7		0.39 J	1.0 U	1.0 U	1.7	1.0 U	1 U	1 U	1 U
CHLOROMETHANE (METHYL CHLORIDE)	5		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2 U	2 U	2 U
CIS-1,2-DICHLOROETHENE	5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U
CYCLOHEXANE	NA		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U
ISOPROPYLBENZENE	NA		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U
METHYL TERT-BUTYL ETHER	10		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U
METHYLCYCLOHEXANE	NA		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U
STYRENE	5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U
TRANS-1,2-DICHLOROETHENE	5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U
TRICHLOROETHENE	5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U
VINYL CHLORIDE	2		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U
Total VOCs (including BTEX)			1.39	1.5	--	13.36	0.57	--	--	--
Notes ug/l- micrograms per liter RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. NA - Not Available Bolded values are detections. Shaded are detections above the NYSDEC Water Quality Standard † Grab groundwater sample collected during boring advancement.										

Table 4-8
Summary of Detected Volatile Organic Constituents in Groundwater
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Water Quality Standard	Location ID Sample Date Sample ID Unit	SB-39/MW-21 5/18/2006 MW-21 Shallow	SB-40/MW-22 5/18/2006 MW-22 Shallow	SB-14/MW-23 5/3/2006 TMW-3 Shallow	SB-13/MW-24 5/3/2006 TMW-4 Shallow	SB-12/MW-25 5/3/2006 TMW-2 Shallow	Number Detected	Number Samples Collected	Minimum Detect	Maximum Detect	Number of Samples Exceeding Standard
BTEX Compounds - ug/l												
BENZENE	1		1 U	1 U	1.0 U	1.0 U	1.0 U	5	25	2.1	51	6
ETHYLBENZENE	5		1 U	1 U	1.0 U	1.0 U	1.0 U	6	25	0.43	560	4
TOLUENE	5		1 U	1 U	1.0 U	1.0 U	1.0 U	6	25	0.46	6.4	3
XYLENE, O-	5		1 U	1 U	1.0 U	1.0 U	1.0 U	7	25	0.3	100	3
M-, P-XYLENES	5		1 U	1 U	1.0 U	1.0 U	1.0 U	7	25	0.37	30	3
Total BTEX			--	--	--	--	--					
Volatile Organic Compounds (VOCs) - ug/l												
1,1,1-TRICHLOROETHANE	1		1 U	1 U	1.0 U	1.0 U	1.0 U	1	25	0.57	0.57	0
1,1-DICHLOROETHANE	5		1 U	1 U	1.0 U	1.0 U	0.98 J	2	25	0.98	1.4	0
1,1-DICHLOROETHENE	5		1 U	1 U	1.0 U	1.0 U	1.0 U	2	25	0.3	0.33	0
2-BUTANONE	50		5 U	5 U	5.0 U	5.0 U	5.0 U	6	25	1.2	5.8	0
ACETONE	50		10 U	3 J	10 U	10 U	1.8 J	11	25	1.2	5.9	0
CARBON DISULFIDE	60		1 U	1 U	1.0 U	1.0 U	1.0 U	1	25	1	1	0
CHLOROETHANE	5		2 U	2 U	2.0 U	2.0 U	2.0 U	1	25	2.8	2.8	0
CHLOROFORM	7		1 U	1 U	1.0 U	1.0 U	1.0 U	4	25	0.39	2	0
CHLOROMETHANE (METHYL CHLORIDE)	5		2 U	0.55 J	2.0 U	2.0 U	2.0 U	1	25	0.55	0.55	0
CIS-1,2-DICHLOROETHENE	5		1 U	1 U	1.0 U	9.3	13	5	25	9.3	110	5
CYCLOHEXANE	NA		1 U	1 U	1.0 U	1.0 U	1.0 U	1	25	0.53	0.53	
ISOPROPYLBENZENE	NA		1 U	1 U	1.0 U	1.0 U	1.0 U	6	25	0.74	54	
METHYL TERT-BUTYL ETHER	10		1 U	1 U	46	0.34 J	1.1	5	25	0.34	46	1
METHYLCYCLOHEXANE	NA		1 U	1 U	1.0 U	1.0 U	1.0 U	2	25	1.2	3	
STYRENE	5		1 U	1 U	1.0 U	1.0 U	1.0 U	2	25	2.8	2.8	0
TRANS-1,2-DICHLOROETHENE	5		1 U	1 U	1.0 U	1.0 U	0.37 J	3	25	0.37	2.8	0
TRICHLOROETHENE	5		1 U	1 U	0.30 J	46	1.8	7	25	0.3	46	2
VINYL CHLORIDE	2		1 U	1 U	1.0 U	0.30 J	16	5	25	0.3	120	4
Total VOCs (including BTEX)			--	3.55	46.3	55.94	35.05					
Notes												
ug/l- micrograms per liter												
RQL - Reported Quantitation Limit												
J - Reported analytical value is estimated												
U - Constituent not detected above RQL												
UJ - Constituent not detected above estimated RQL												
NA - Not Available												
Bolded values are detections.												
Shaded are detections above the NYSDEC Water Quality Standard												
i Grab groundwater sample collected during boring advancement.												

Table 4-9
Summary of Detected Semivolatile Organic Constituents in Groundwater
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

ENSR

Chemical Name	NYSDEC Water Quality Standard	Location ID Sample Date Sample ID Unit	MW-1A 5/3/2006 MW-1A Shallow	SB-21/MW-1B 5/3/2006 MW-1B Bedrock	MW-5 5/4/2006 MW-5 Shallow	MW-6 5/5/2006 MW-6 Shallow	MW-8 5/4/2006 MW-8 Shallow	SB-26/MW-9 5/4/2006 MW-9 Bedrock	SB-26/MW-9 5/4/2006 MW-DUP Bedrock	SB-22/MW-10 5/2/2006 MW-10 Shallow	SB-19/MW-11 5/5/2006 MW-11 Shallow
Polycyclic Aromatic Hydrocarbons (PAHs) - ug/l											
2-METHYLNAPHTHALENE	NA		9.3 U	9.3 U	24	350	9.3 U	14	14	9.6 U	1.5 J
ACENAPHTHENE	20		9.3 U	9.3 U	58	190 J	29	34	36	9.6 U	10 U
ACENAPHTHYLENE	NA		9.3 U	9.3 U	9.3 U	200 U	9.3 U	9.1 J	9.4 J	9.6 U	10 U
ANTHRACENE	50		9.3 U	9.3 U	5.6 J	200 U	9.3 U	2.8 J	2.6 J	9.6 U	10 U
FLUORANTHENE	50		9.3 U	9.3 U	3.4 J	200 U	9.3 U	1.5 J	1.7 J	9.6 U	10 U
FLUORENE	50		9.3 U	9.3 U	14	46 J	3.3 J	6.4 J	6.2 J	9.6 U	1.4 J
NAPHTHALENE	10		9.3 U	9.3 U	71	2100	9.3 U	100	110	9.6 U	1.6 J
PHENANTHRENE	50		9.3 U	9.3 U	23	50 J	2.1 J	26	25	9.6 U	1.3 J
PYRENE	50		9.3 U	9.3 U	5.2 J	200 U	9.3 U	2.0 J	2.3 J	9.6 U	1.7 J
Total PAHs			--	--	204.2	2736	34.4	195.8	207.2	--	7.5
Semi-Volatile Organic Compounds (SVOCs) - ug/l											
1,1-BIPHENYL	NA		9.3 U	9.3 U	6.0 J	31 J	9.3 U	10	9.8 J	9.6 U	10 U
4-METHYLPHENOL (P-CRESOL)	1		9.3 U	9.3 U	9.3 U	200 U	1.0 J	9.6 U	9.8 U	9.6 U	10 U
ACETOPHENONE	NA		9.3 U	9.3 U	9.3 U	200 U	9.3 U	1.2 J	9.8 U	9.6 U	10 U
BIS(2-ETHYLHEXYL) PHTHALATE	5		9.3 U	2.2 J	9.3 U	200 U	9.3 U	9.6 U	9.8 U	9.6 U	10 U
DIBENZOFURAN	NA		9.3 U	9.3 U	2.0 J	200 U	9.3 U	2.0 J	2.0 J	9.6 U	10 U
PHENOL	1		9.3 U	9.3 U	3.3 J	200 U	9.3 U	9.6 U	9.8 U	9.6 U	10 U
Total SVOCs (including PAHs)			--	2.2	215.5	2767	35.4	209	219	--	7.5
Notes ug/l- micrograms per liter RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UU - Constituent not detected above estimated RQL. NA - Not Available Bolded values are detections. Shaded are detections above the NYSDEC Water Quality Standard † Grab groundwater sample collected during boring advancement.											

Table 4-9
Summary of Detected Semivolatile Organic Constituents in Groundwater
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

ENSR

Chemical Name	NYSDEC Water Quality Standard	Location ID Sample Date Sample ID Unit	MW-12 5/4/2006 MW-12 Shallow	SB-25/MW-13 5/2/2006 MW-13 Bedrock	SB-34/MW-14 5/1/2006 MW-14 Shallow	SB-33/MW-16 5/2/2006 MW-16 Shallow	SB-9/MW-17 5/5/2006 MW-17 Intermediate	SB-8/MW-18 5/1/2006 MW-18 Intermediate	SB-37/MW-19 5/18/2006 MW-19 Shallow	SB-37/MW-19 5/18/2006 MW-DUP-05182006 Shallow	SB-38/MW-20 5/18/2006 MW-20 Shallow
Polycyclic Aromatic Hydrocarbons (PAHs) - ug/l											
2-METHYLNAPHTHALENE	NA		9.3 U	10 U	10 U	9.7 U	11 U	10 U	9.8 U	9.6 U	10 U
ACENAPHTHENE	20		51	10 U	10 U	9.7 U	1.2 J	10 U	9.8 U	9.6 U	10 U
ACENAPHTHYLENE	NA		9.3 U	10 U	10 U	9.7 U	11 U	10 U	9.8 U	9.6 U	10 U
ANTHRACENE	50		3.5 J	10 U	10 U	9.7 U	11 U	10 U	9.8 U	9.6 U	10 U
FLUORANTHENE	50		1.6 J	10 U	10 U	9.7 U	11 U	10 U	9.8 U	9.6 U	10 U
FLUORENE	50		12	10 U	10 U	9.7 U	11 U	10 U	9.8 U	9.6 U	10 U
NAPHTHALENE	10		8.0 J	10 U	10 U	9.7 U	11 U	10 U	9.8 U	9.6 U	10 U
PHENANTHRENE	50		10	10 U	10 U	9.7 U	1.1 J	10 U	9.8 U	9.6 U	10 U
PYRENE	50		2.4 J	10 U	10 U	9.7 U	11 U	10 U	9.8 U	9.6 U	10 U
Total PAHs			88.5	--	--	--	2.3	--	--	--	--
Semi-Volatile Organic Compounds (SVOCs) - ug/l											
1,1-BIPHENYL	NA		1.6 J	10 U	10 U	9.7 U	11 U	10 U	9.8 U	9.6 U	10 U
4-METHYLPHENOL (P-CRESOL)	1		9.3 U	10 U	10 U	9.7 U	11 U	10 U	9.8 U	9.6 U	10 U
ACETOPHENONE	NA		9.3 U	10 U	10 U	9.7 U	11 U	10 U	9.8 U	9.6 U	10 U
BIS(2-ETHYLHEXYL) PHTHALATE	5		9.3 U	10 U	10 U	9.7 U	11 U	10 U	9.8 U	9.6 U	10 U
DIBENZOFURAN	NA		2.5 J	10 U	10 U	9.7 U	11 U	10 U	9.8 U	9.6 U	10 U
PHENOL	1		9.3 U	10 U	10 U	9.7 U	11 U	10 U	9.8 U	9.6 U	10 U
Total SVOCs (including PAHs)			92.6	--	--	--	2.3	--	--	--	--
Notes ug/l- micrograms per liter RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. NA - Not Available Bolded values are detections. Shaded are detections above the NYSDEC Water Quality Standard † Grab groundwater sample collected during boring advancement.											

Table 4-9
Summary of Detected Semivolatile Organic Constituents in Groundwater
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Water Quality Standard	Location ID Sample Date Sample ID Unit	SB-39/MW-21 5/18/2006 MW-21 Shallow	SB-40/MW-22 5/18/2006 MW-22 Shallow	SB-14/MW-23 5/3/2006 TMW-3 Shallow	SB-13/MW-24 5/3/2006 TMW-4 Shallow	SB-12/MW-25 5/3/2006 TMW-2 Shallow
Polycyclic Aromatic Hydrocarbons (PAHs) - ug/l							
2-METHYLNAPHTHALENE	NA		9.5 U	9.8 U	9.7 U	10 U	9.6 U
ACENAPHTHENE	20		3.3 J	9.8 U	9.7 U	10 U	9.6 U
ACENAPHTHYLENE	NA		9.5 U	9.8 U	9.7 U	10 U	9.6 U
ANTHRACENE	50		9.5 U	9.8 U	9.7 U	10 U	9.6 U
FLUORANTHENE	50		9.5 U	9.8 U	9.7 U	10 U	9.6 U
FLUORENE	50		9.5 U	9.8 U	9.7 U	10 U	9.6 U
NAPHTHALENE	10		9.5 U	9.8 U	9.7 U	10 U	9.6 U
PHENANTHRENE	50		9.5 U	9.8 U	9.7 U	10 U	9.6 U
PYRENE	50		9.5 U	9.8 U	9.7 U	10 U	9.6 U
Total PAHs			3.3	--	--	--	--
Semi-Volatile Organic Compounds (SVOCs) - ug/l							
1,1-BIPHENYL	NA		9.5 U	9.8 U	9.7 U	10 U	9.6 U
4-METHYLPHENOL (P-CRESOL)	1		9.5 U	9.8 U	9.7 U	10 U	9.6 U
ACETOPHENONE	NA		9.5 U	9.8 U	9.7 U	10 U	9.6 U
BIS(2-ETHYLHEXYL) PHTHALATE	5		9.5 U	9.8 U	9.7 U	10 U	9.6 U
DIBENZOFURAN	NA		9.5 U	9.8 U	9.7 U	10 U	9.6 U
PHENOL	1		9.5 U	9.8 U	9.7 U	10 U	9.6 U
Total SVOCs (including PAHs)			3.3	--	--	--	--
Notes ug/l- micrograms per liter RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. NA - Not Available Bolded values are detections. Shaded are detections above the NYSDEC Water Quality Standard ¹ Grab groundwater sample collected during boring advancement.							

Table 4-9
Summary of Detected Semivolatile Organic Constituents in Groundwater
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Water Quality Standard	Location ID Sample Date Sample ID Unit	Number Detected	Number Samples Collected	Minimum Detect	Maximum Detect	Number of Samples Exceeding Standard
Polycyclic Aromatic Hydrocarbons (PAHs) - ug/l							
2-METHYLNAPHTHALENE	NA		5	23	1.5	350	
ACENAPHTHENE	20		8	23	1.2	190	6
ACENAPHTHYLENE	NA		2	24	9.1	9.4	
ANTHRACENE	50		4	24	2.6	5.6	0
FLUORANTHENE	50		4	24	1.5	3.4	0
FLUORENE	50		7	23	1.4	46	0
NAPHTHALENE	10		6	23	1.6	2100	4
PHENANTHRENE	50		8	23	1.1	50	0
PYRENE	50		5	24	1.7	5.2	0
Total PAHs							
Semi-Volatile Organic Compounds (SVOCs) - ug/l							
1,1-BIPHENYL	NA		5	24	1.6	31	
4-METHYLPHENOL (P-CRESOL)	1		1	24	1	1	0
ACETOPHENONE	NA		1	24	1.2	1.2	
BIS(2-ETHYLHEXYL) PHTHALATE	5		1	24	2.2	2.2	0
DIBENZOFURAN	NA		4	24	2	2.5	
PHENOL	1		1	24	3.3	3.3	1
Total SVOCs (including PAHs)							
Notes ug/l- micrograms per liter RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. NA - Not Available Bolded values are detections. Shaded are detections above the NYSDEC Water Quality Standard ¹ Grab groundwater sample collected during boring advancement.							

Table 4-10
Summary of Detected Inorganic Constituents in Groundwater
Pemat Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Water Quality Standard	Location ID Sample Date Sample ID Unit	MW-1A 5/3/2006 MW-1A Shallow	SB-21/MW-1B 5/3/2006 MW-1B Bedrock	MW-5 5/4/2006 MW-5 Shallow	MW-6 5/5/2006 MW-6 Shallow	MW-8 5/4/2006 MW-8 Shallow	SB-26/MW-9 5/4/2006 MW-9 Bedrock	SB-26/MW-9 5/4/2006 MW-DUP Bedrock	SB-22/MW-10 5/2/2006 MW-10 Shallow	SB-19/MW-11 5/5/2006 MW-11 Shallow
Inorganics ug/l											
ALUMINUM (FUME OR DUST)	NA		88	3860	59.6	897	47.7 U	636 J	1230 J	115	2340
ARSENIC	25		5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U
BARIUM	1000		159	266	345	74.2	94.8	155 J	408 J	114	153
BERYLLIUM	3		0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
CADMIUM	5		0.62	0.61	0.30 U	0.48	1.7	0.30 U	0.31 J	0.75	0.30 U
CALCIUM METAL	NA		64100	72200	85900	79700	113000	46900 J	122000 J	43500	71700
CHROMIUM (TOTAL)	50		0.50	4.3	0.48 U	1.1	0.48 U	1.8	2.4	0.93	2.7
COBALT	NA		3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U
COPPER	200		8.2 J	11.5 J	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U
CYANIDE	0.2		0.0185	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U
IRON	300		2260	3300	185	8160	26900	1690 J	2870 J	13100	3330
LEAD	25		28.3	9.3	3.4 U	4.8	4.0	3.4 U	3.4 U	6.2	9.4
MAGNESIUM	35000		7240	8660	13100	14100	26100	4820 J	11700 J	8570	13900
MANGANESE	300		1140	59.6	270	2390	2890	207 J	520 J	407	599
MERCURY	0.7		0.03 J	0.03 J	0.02 J	0.03 J	0.01 J	0.02 J	0.02 J	0.02 J	0.02 J
NICKEL	100		2.0 U	2.4	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
POTASSIUM	NA		6710	8100	9750	5420	7630	4700 J	11200 J	3400	13000
SELENIUM	10		4.6 UJ	4.6 UJ	4.6 UJ	4.6 UJ	4.6 UJ	4.6 UJ	4.6 UJ	4.6 UJ	4.6 UJ
SODIUM	20000		105000	121000	108000	95500	151000	19200 J	48600 J	136000	189000
THALLIUM	0.5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
VANADIUM	NA		1.8 U	7.6	1.8 U	1.8	1.8 U	1.8 U	3.6	1.8 U	5.6
ZINC	2000		36.8	66.6	3.7 U	11.5	3.7 U	3.7 U	6.5	6.9	11.3
Notes ug/l- micrograms per liter RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. R - Rejected NA - Not Available Bolded values are detections. Shaded are detections above the NYSDEC Water Quality Standard † Grab groundwater sample collected during boring advancement.											

Table 4-10
Summary of Detected Inorganic Constituents in Groundwater
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

ENSR

Chemical Name	NYSDEC Water Quality Standard	Location ID Sample Date Sample ID Unit	MW-12 5/4/2006 MW-12 Shallow	SB-25/MW-13 5/2/2006 MW-13 Bedrock	SB-34/MW-14 5/1/2006 MW-14 Shallow	SB-33/MW-16 5/2/2006 MW-16 Shallow	SB-9/MW-17 5/5/2006 MW-17 Intermediate	SB-8/MW-18 5/1/2006 MW-18 Intermediate	SB-37/MW-19 5/18/2006 MW-19 Shallow	SB-37/MW-19 5/18/2006 MW-DUP-05182006 Shallow	SB-38/MW-20 5/18/2006 MW-20 Shallow
Inorganics ug/l											
ALUMINUM (FUME OR DUST)	NA		47.7 U	1110	68.7	75.1	23700	5510	47.7 U	47.7 U	48.8
ARSENIC	25		5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U
BARIUM	1000		120	130	86.4	110	166	231	105	107	81.3
BERYLLIUM	3		0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
CADMIUM	5		0.35	0.36	0.30 U	0.30 U	2.2	0.71	0.4	0.42	0.48
CALCIUM METAL	NA		85300	96800	103000	70400	63800	55800	73100	74800	94100
CHROMIUM (TOTAL)	50		0.62	6.4	1.1	0.86	27.3	6.8	1.3	1.6	0.62
COBALT	NA		3.2 U	3.2 U	3.2 U	3.2 U	13.9	3.2 U	3.2 U	3.2 U	3.3
COPPER	200		4.3 U	4.3 U	4.3 U	4.3 U	45.5 J	11.4 J	R	R	4.3 UJ
CYANIDE	0.2		0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.01 U	0.01 U	0.01 U
IRON	300		3270	1670	417	2820	31200	8060	46.6	36.9 U	4020
LEAD	25		3.4 U	3.4 U	3.4 U	5.8	20.6	4.6	3.4 U	3.4 U	3.4 U
MAGNESIUM	35000		12400	11900	28400	37500	16300	16600	55800	57300	21000
MANGANESE	300		537	156	398	866	634	182	7.9	7	1120
MERCURY	0.7		0.02 J	0.02 J	0.02 J	0.02 J	0.09 J	0.03 J	0.03	0.03	0.01 U
NICKEL	100		2.0 U	2.3	2.0 U	2.0 U	25.0	6.5	7.7	7.6	2 U
POTASSIUM	NA		6810	2890	4060	10000	8030	4740	13300	14200	4740
SELENIUM	10		4.6 UJ	4.6 UJ	4.6 UJ	4.6 UJ	4.6 UJ	4.6 UJ	4.6 UJ	4.6 UJ	4.6 UJ
SODIUM	20000		133000	41300	142000	191000	16200	56200	351000	376000	63200
THALLIUM	0.5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.1 J	3 J	1.9 UJ
VANADIUM	NA		1.8 U	3.7	2.1	1.8 U	40.8	9.5	1.8 U	1.8 U	1.8 U
ZINC	2000		3.7 U	7.0	6.9	5.4	348	24.4	68.5	68.7	3.7 UJ
Notes											
ug/l- micrograms per liter											
RQL - Reported Quantitation Limit											
J - Reported analytical value is estimated											
U - Constituent not detected above RQL.											
UJ - Constituent not detected above estimated RQL.											
R - Rejected											
NA - Not Available											
Bolded values are detections.											
Shaded are detections above the NYSDEC Water Quality Standard											
† Grab groundwater sample collected during boring advancement.											

Table 4-10
Summary of Detected Inorganic Constituents in Groundwater
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

Chemical Name	NYSDEC Water Quality Standard	Location ID Sample Date Sample ID Unit	SB-39/MW-21 5/18/2006 MW-21 Shallow	SB-40/MW-22 5/18/2006 MW-22 Shallow	SB-14/MW-23 5/3/2006 TMW-3 Shallow	SB-13/MW-24 5/3/2006 TMW-4 Shallow	SB-12/MW-25 5/3/2006 TMW-2 Shallow
Inorganics ug/l							
ALUMINUM (FUME OR DUST)	NA		60.1	47.7 U	47.7 U	47.7 U	47.7 U
ARSENIC	25		5.4 U	5.4 U	6.8 J	5.4 U	5.4 U
BARIUM	1000		89.6	67.1	144	90.3	183
BERYLLIUM	3		0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
CADMIUM	5		0.5	0.3 U	0.30 U	0.30 U	0.75
CALCIUM METAL	NA		101000	76600	62400	39500	44600
CHROMIUM (TOTAL)	50		0.76	3.2	0.48 U	0.48 U	0.48 U
COBALT	NA		3.2 U	3.2 U	3.2 U	3.2 U	3.2 U
COPPER	200		4.3 UJ	4.3 UJ	4.3 U	4.3 U	4.3 U
CYANIDE	0.2		0.01 U	0.01 U	0.0189	0.0155	0.0100 U
IRON	300		6830	69.3	3770	846	13400
LEAD	25		3.4 U	3.4 U	3.4 U	3.4 U	3.4 U
MAGNESIUM	35000		27500	31100	18700	12200	8470
MANGANESE	300		1860	115	129	39.5	478
MERCURY	0.7		0.01 U	0.02	0.02 J	0.01 J	0.02 J
NICKEL	100		2 U	2 U	2.0 U	2.0 U	2.0 U
POTASSIUM	NA		6620	9500	4610	2570	5410
SELENIUM	10		4.6 UJ	4.6 UJ	4.6 UJ	4.6 UJ	4.6 UJ
SODIUM	20000		186000	159000	68100	26000	111000
THALLIUM	0.5		2 J	1.9 UJ	1.0 U	1.0 U	1.0 U
VANADIUM	NA		1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
ZINC	2000		3.7 UJ	3.7 UJ	27.3	6.6	7.0
Notes ug/l- micrograms per liter RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. R - Rejected NA - Not Available Bolded values are detections. Shaded are detections above the NYSDEC Water Quality Standard † Grab groundwater sample collected during boring advancement.							

Table 4-10
Summary of Detected Inorganic Constituents in Groundwater
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

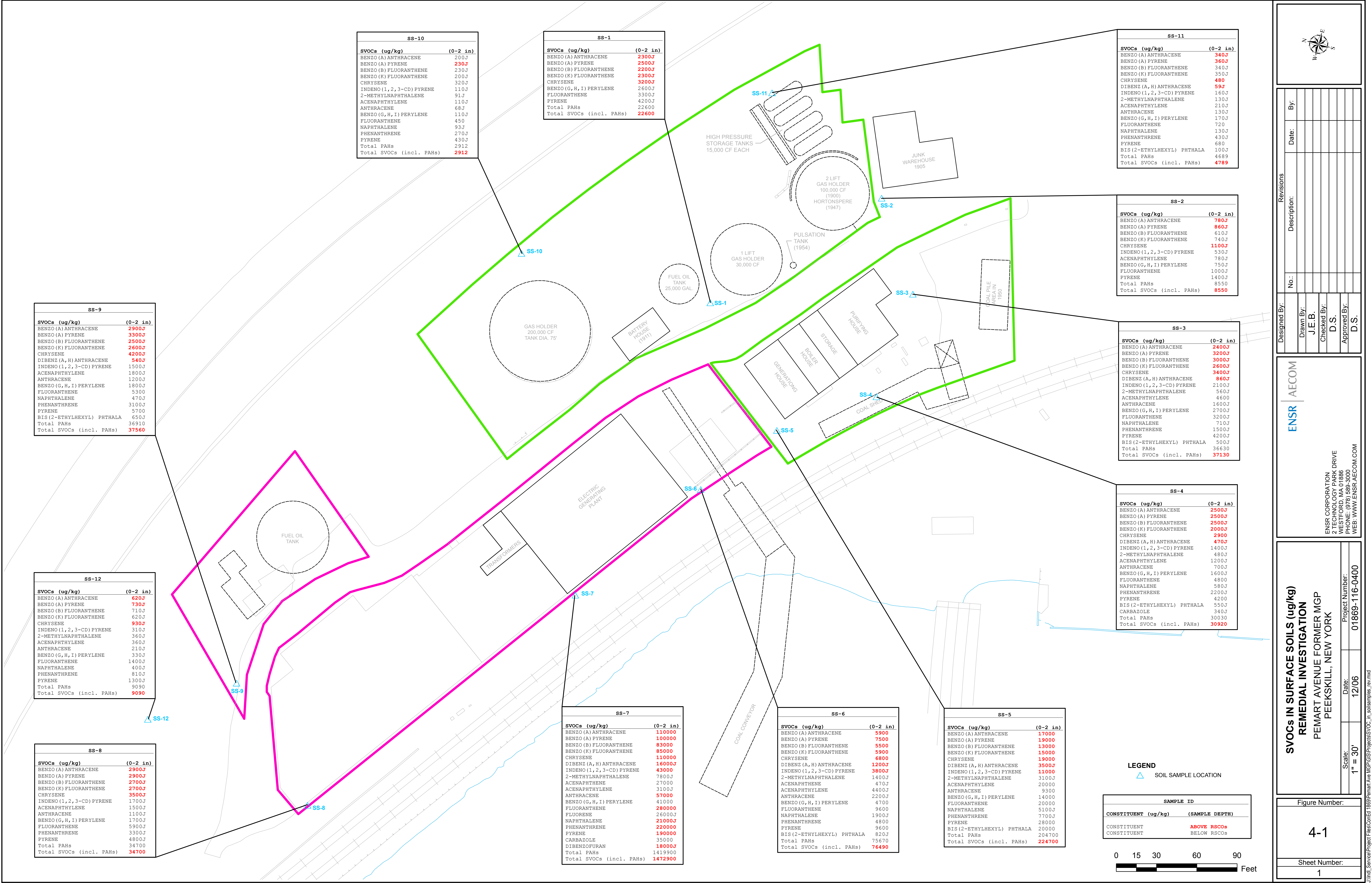
Chemical Name	NYSDEC Water Quality Standard	Location ID Sample Date Sample ID Unit	Number Detected	Number Samples Collected	Minimum Detect	Maximum Detect	Number of Samples Exceeding Standard
Inorganics ug/l							
ALUMINUM (FUME OR DUST)	NA		15	23	48.8	23700	0
ARSENIC	25		1	23	6.8	195	1
BARIUM	1000		23	23	67.1	6030	1
BERYLLIUM	3		0	23	---	---	1
CADMIUM	5		15	23	0.31	2.2	0
CALCIUM METAL	NA		23	23	39500	122000	0
CHROMIUM (TOTAL)	50		18	23	0.5	27.3	0
COBALT	NA		2	23	3.3	13.9	0
COPPER	200		4	23	8.2	45.5	0
CYANIDE	0.2		3	23	0.0155	0.0189	0
IRON	300		22	23	46.6	31200	19
LEAD	25		9	23	4.0	28.3	1
MAGNESIUM	35000		23	23	4820	57300	3
MANGANESE	300		23	23	7.0	2890	13
MERCURY	0.7		21	23	0.01	0.09	0
NICKEL	100		6	23	2.3	25	0
POTASSIUM	NA		23	23	2570	14200	0
SELENIUM	10		0	23	---	---	0
SODIUM	20000		23	23	16200	376000	21
THALLIUM	0.5		3	23	2.1	3	3
VANADIUM	NA		8	23	1.8	40.8	0
ZINC	2000		16	23	5.4	348	0
Notes ug/l- micrograms per liter RQL - Reported Quantitation Limit J - Reported analytical value is estimated U - Constituent not detected above RQL. UJ - Constituent not detected above estimated RQL. R - Rejected NA - Not Available Bolded values are detections. Shaded are detections above the NYSDEC Water Quality Standard † Grab groundwater sample collected during boring advancement.							

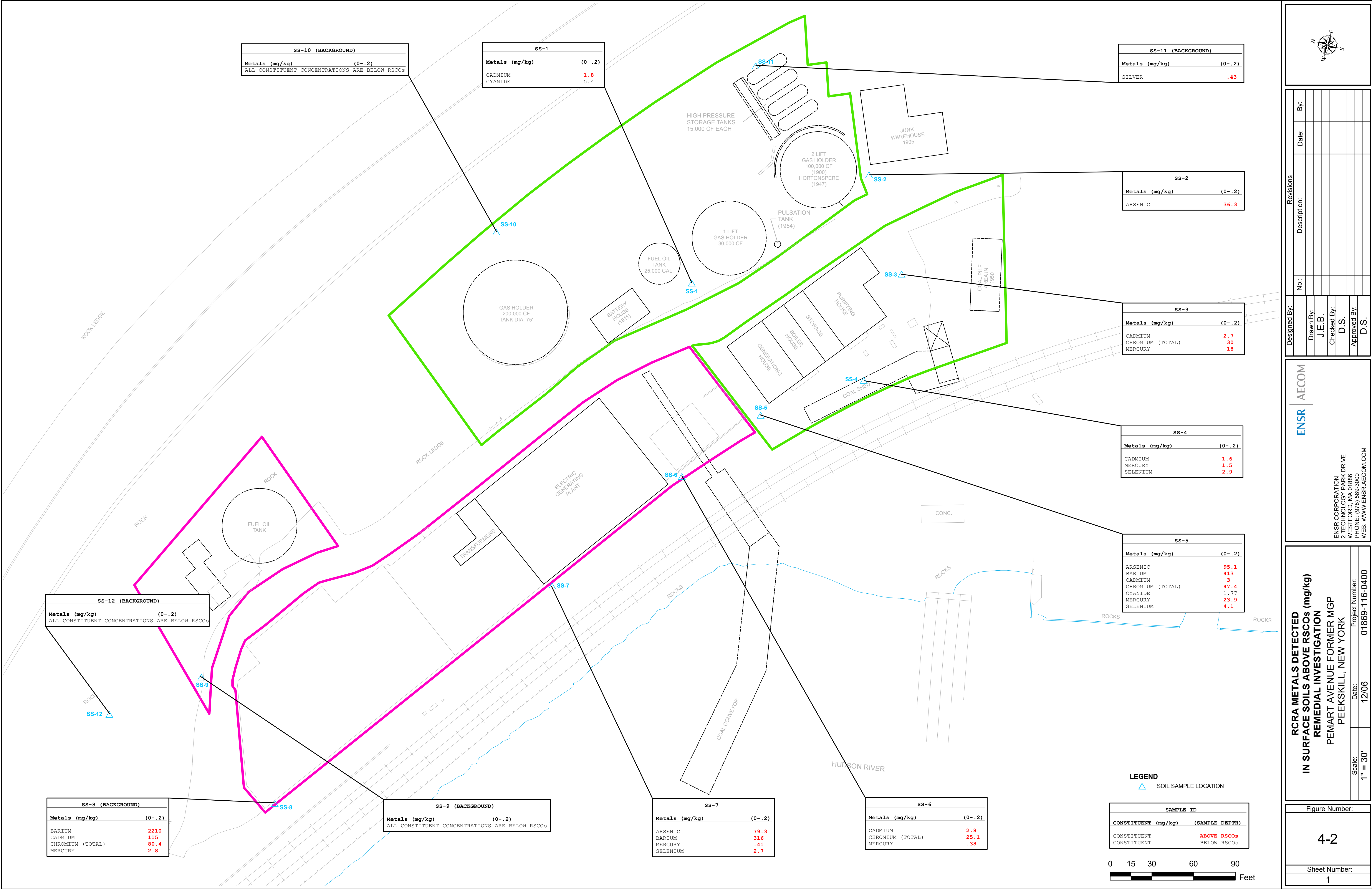
Table 4-11
Summary of Detected Alkalinity Constituents in Groundwater
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

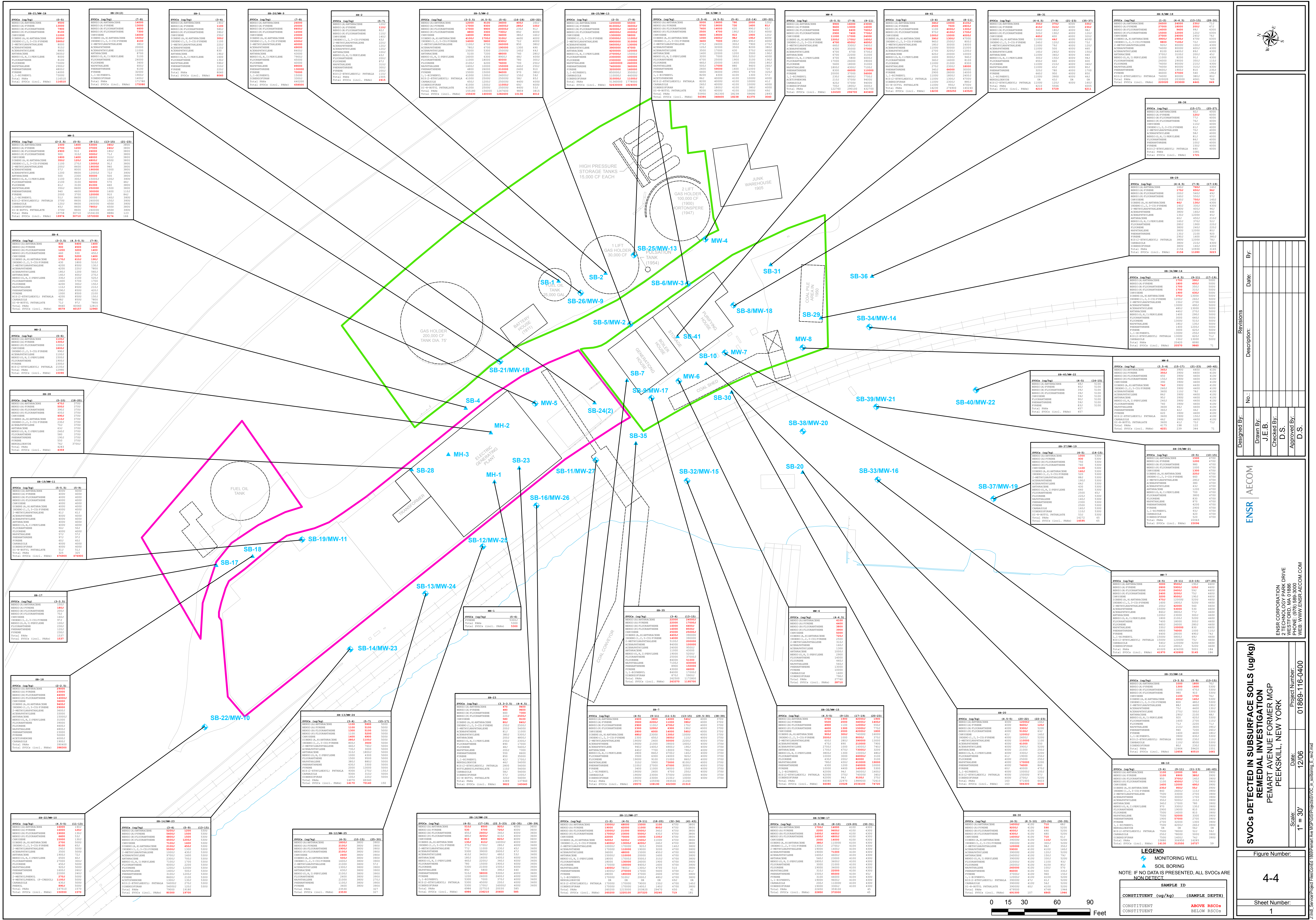
Chemical Name - mg/l	Location ID Sample Date Sample ID Unit	MW-5 5/4/2006 MW-5 Shallow	SB-21/MW-1B 5/3/2006 MW-1B Bedrock
Alkalinity, Total as CaCO ₃		148	46.7
Bicarbonate Alkalinity as CaCO ₃		119	2.00 U
Carbonate Alkalinity as CaCO ₃		29.0	36.7
Hydroxide Alkalinity as CaCO ₃		2.00 U	10.0
Phenolphthlein Alkalinity		15.0	28.3
Anions			
Chloride		240	209
Sulfate as SO ₄		3.58	22.5
Notes mg/l - milligrams per liter RQL - Reported Quantitation Limit U - Constituent not detected above RQL. Bolded values are detections.			

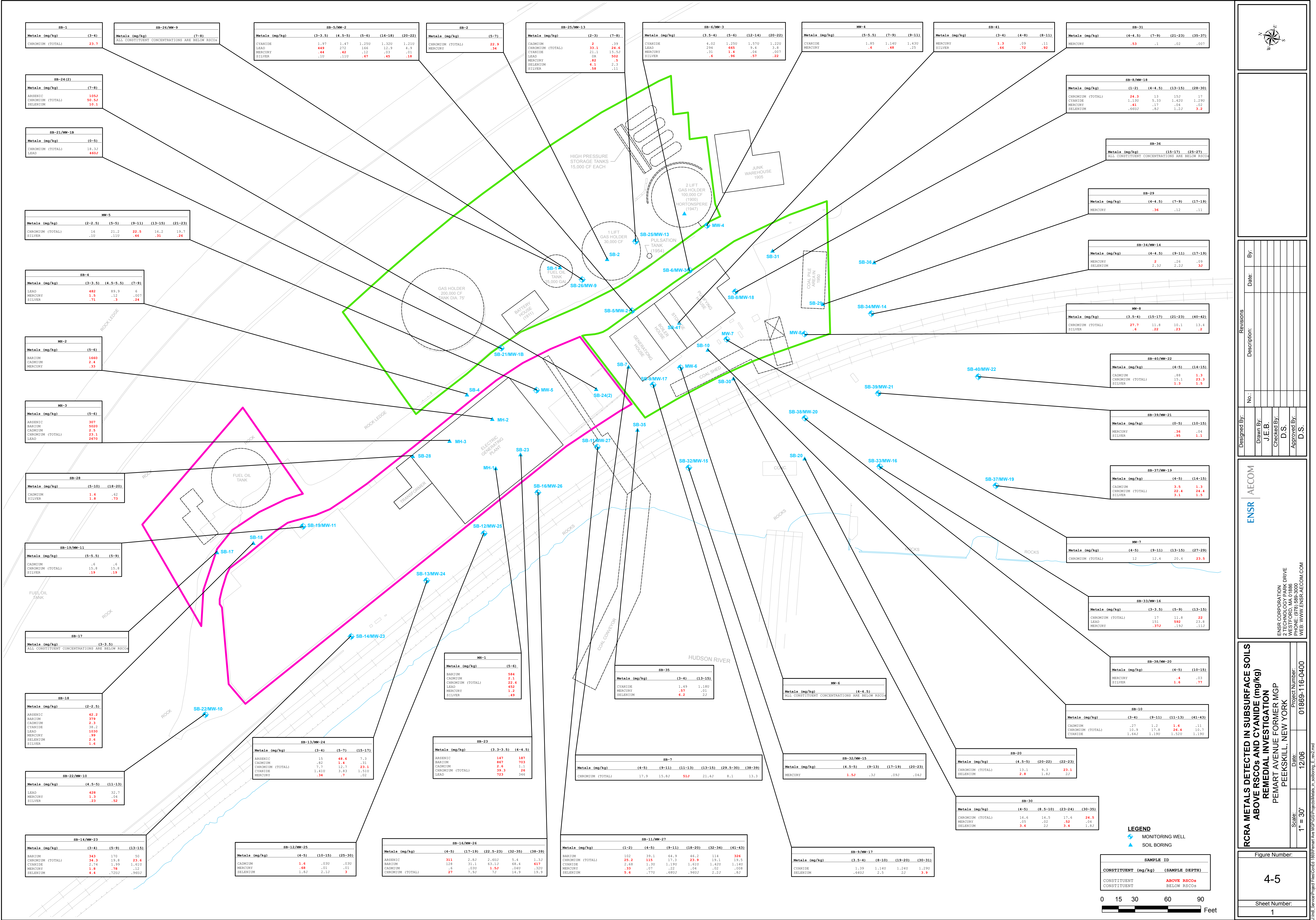
Table 4-12
Summary of Detected TPH Fingerprint Constituents in Subsurface Soil
Pemart Avenue Works Former MGP and EGP - Remedial Investigation
Consolidated Edison, Peekskill, New York

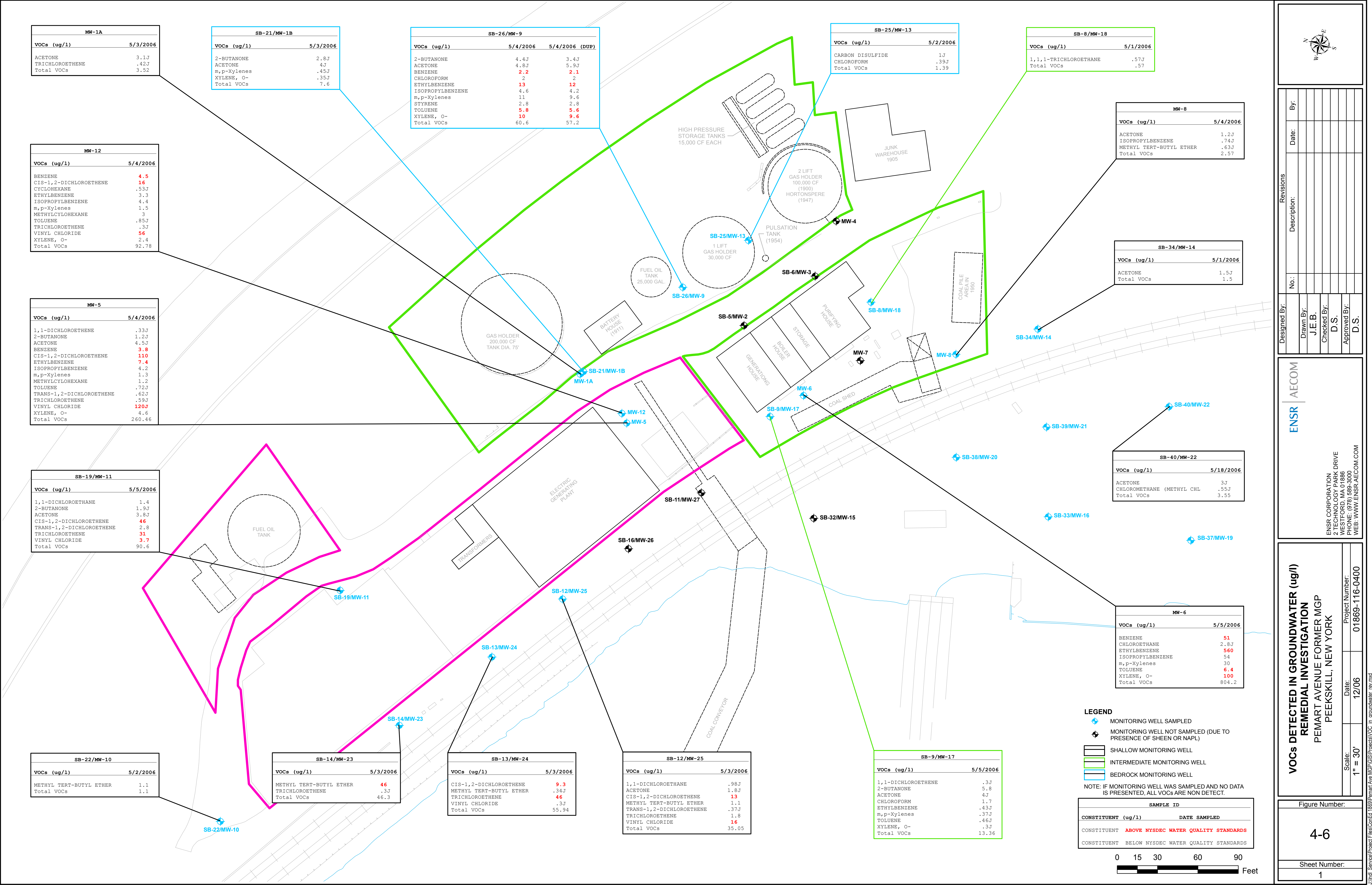
Location ID:	MH-1
Sample Date:	5/2/06
Sample ID:	SB27(5-6)
Depth Interval:	5 - 6
Chemical Name - mg/kg	
KEROSENE	2,700,000 U
Fuel Oil No. 6	2,700,000 U
Fuel Oil No. 4	2,700,000 U
Fuel Oil No. 2	2,700,000 U
Diesel Range Organics (DRO)	20,000,000
Notes mg/kg - micrograms per kilogram RQL - Reported Quantitation Limit U - Constituent not detected above RQL. Bolded values are detections.	

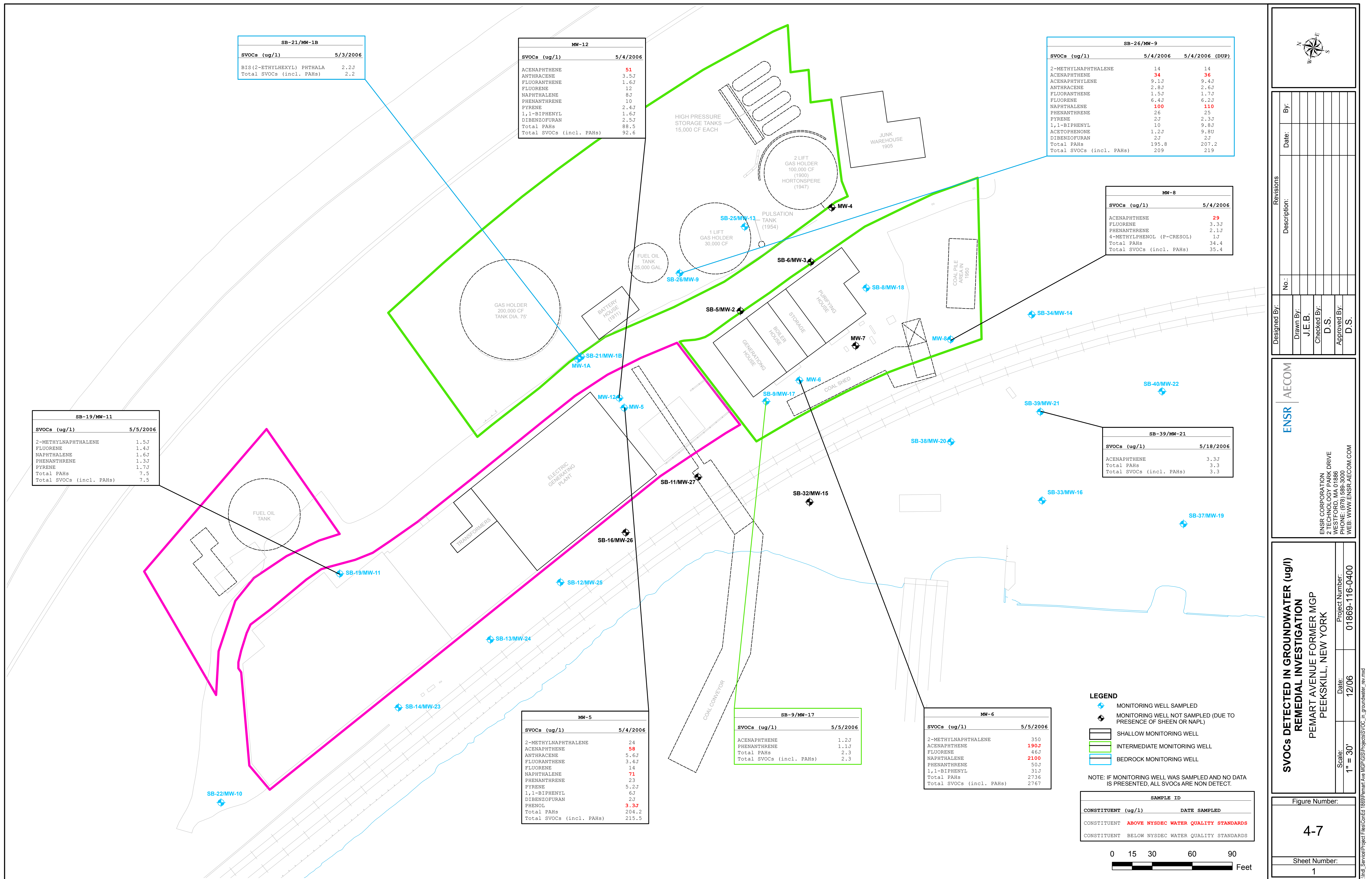


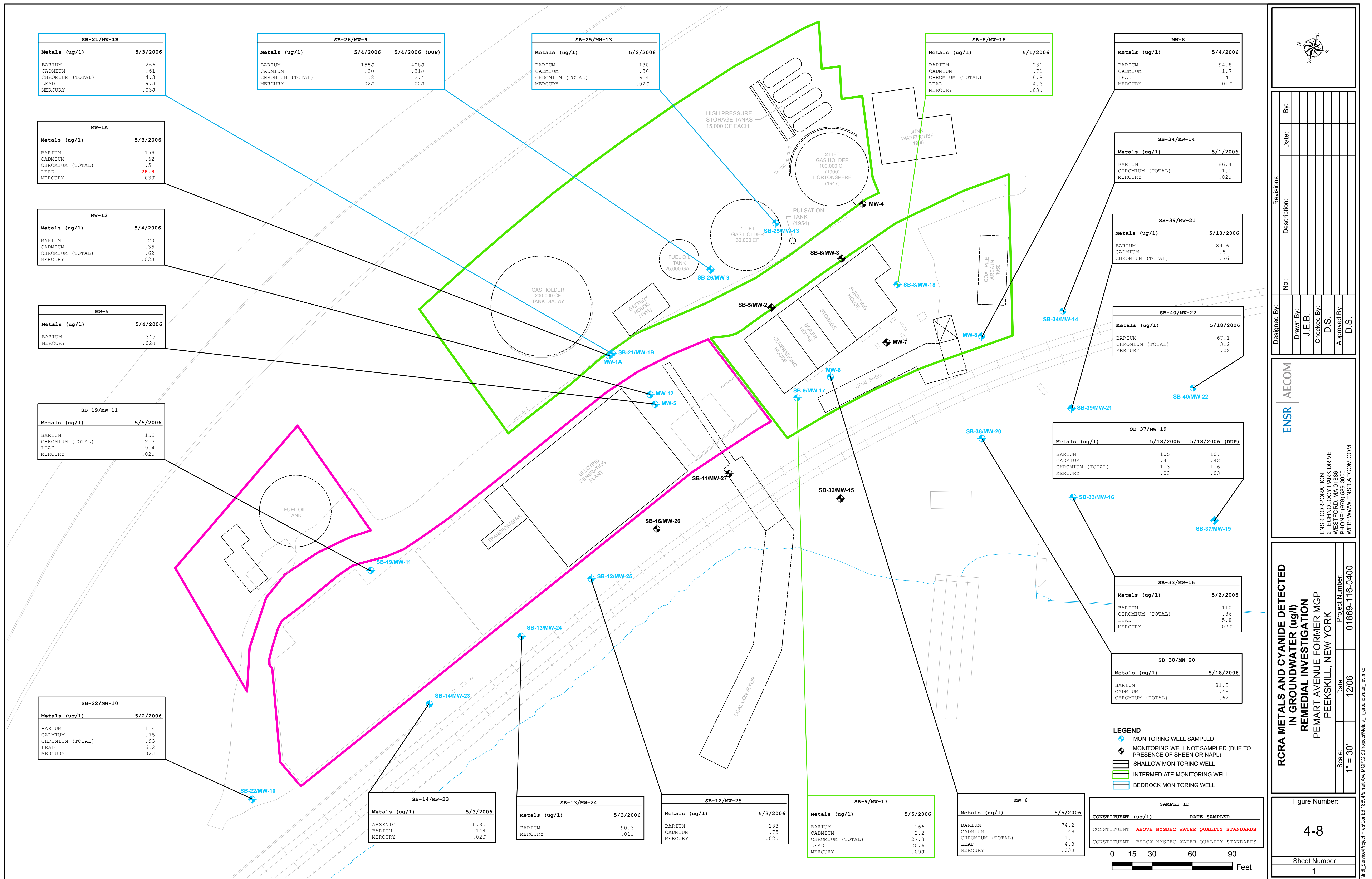












5.0 Exposure Assessment

This section presents the results of an assessment of potential existing and future exposure risks relative to current site conditions that may have resulted from operations of the former Pemart Avenue MGP and EGP. The qualitative exposure assessment was performed in accordance with the steps outlined in the NYSDEC Draft Technical Guidance for Site Investigation and Remediation (DER-10).

5.1 Potentially Exposed Populations

As described in other sections of this RI, the former Pemart Avenue Site is currently used for commercial purposes. Surrounding the Site to the north and east are steep bedrock outcrops and vegetation, to the southeast are commercial businesses and a parking lot, to the northwest is a small parking area, and to the southwest is the MTA ROW, beyond which is the undeveloped property that was formerly used for heavy industry including a foundry. The property is currently either covered by buildings, pavement, vegetated areas, or ballast associated with the MTA ROW.

It is Con Edison's understanding that the City of Peekskill's future redevelopment plans for the Peekskill waterfront, which includes the former Site, will entail demolition of the existing structures and construction of new buildings for residential and commercial purposes.

Currently, human populations that may potentially be exposed to impacted soil and groundwater at the Site include on-site workers, recreational users, part-time residents (homeless shelter), and construction and utility workers. In the future, construction and/or municipal workers may also be potentially exposed during routine maintenance, service utility lines, and/or future redevelopment activities at the Site. In addition, future recreational users and on-site residents may be potentially exposed.

5.2 Exposure Pathways

The potential exposure pathways described below were identified based on the current and future uses of the Site uses summarized above:

Surface Soils – Access to surface soil at the Site by on-site workers, recreational users, and residents is generally unrestricted. However, with the exception of the unpaved parking lot, the majority of surface soil on the parcels along the east-side of North Water Street (former Pemart Avenue) is located on the steep and heavily vegetated hillside. The surface soils present on the unpaved lot on this side of the North Water Street are primarily imported and do not represent a potential risk. The majority of the parcels that comprise the Site west of North Water Street are covered by buildings and other structures, with minimal exposed or accessible surface soil. PAHs and inorganics were detected in the surface soils at concentrations above RSCOs. The PAHs are below background at all but three locations located adjacent to the MTA ROW. The inorganics may be due to urban background, emissions from the former EGP, and/or from historical non-MGP or EGP activities (e.g., historic foundry) in the area.

Subsurface Soils – Construction and utility workers may potentially contact subsurface soils. Other receptors are unlikely to directly contact subsurface soils that locally contain elevated concentrations of VOCs, SVOCs and/or inorganics, as well as coal tar and petroleum-related NAPL.

Groundwater – Groundwater in the area of the Site is not used for drinking water due to the low volumes of water produced by the water table aquifer and its generally brackish character. Based on the low recharge rates during groundwater sampling and the relatively small overall volume of the water table aquifer, it would not likely produce a significant quantity of water for drinking water purposes. Classification of the groundwater as brackish, and therefore not potable, is based on the relatively high concentrations of dissolved anions and

cations, as reflected by moderate to high specific conductivity of the water measured in the field during groundwater sampling and the elevated sodium concentrations measured during laboratory analysis of groundwater samples. In keeping with the limited groundwater use, direct contact would likely only occur during activities that require excavation that extend below the top of the water table, such as utility upgrade and/or maintenance and construction-related activities.

Indoor Air – In accordance with the Work Plan, indoor air sampling was not performed. It is noted, however, that the City of Peekskill's future redevelopment plans include demolishing all existing buildings and related structures on the Site and surrounding properties. It is noted that all existing structures are constructed as slab-on-grade and that this construction typically entails installation of a coarse aggregate layer prior to installing the slab. It is anticipated that any VOCs that migrate from soil and/or groundwater would likely travel along the coarse layer and be significantly diluted with ambient outdoor air. Additionally, several of the commercial operations currently in the Site buildings (e.g., furniture finishing) use materials that contain significant volumes of volatile compounds (e.g., paints, solvents, varnishes, etc.) that will impact indoor air quality. The potential for indoor air impacts will be considered when evaluating potential remedies for the Site.

5.3 Contaminant Fate and Transport

MGP related constituents, including NAPL, are present at the former Pemart Avenue Site. Chlorinated VOCs were detected in the soils in the crawl space of the EGP and other samples associated with the EGP. Inorganics were detected in soil and groundwater samples associated with both the former MGP and EGP. PCBs were not detected in any media above RSCOs or WQC.

NAPL was observed in the shallow aquifer at the former gas holders and downgradient areas to the west. NAPL and dissolved phase migration in the shallow aquifer is a potential transport mechanism at the Site. Groundwater at the Site discharges to the Hudson River, which is located downgradient of the Site.

Dissolved phase constituents were not detected in intermediate depth groundwater samples at concentrations above WQC (except iron, manganese, and sodium). Migration of constituents in this intermediate depth zone is not considered a significant pathway.

Exceedances of WQC were observed in one of the bedrock monitoring wells. Bedrock groundwater is not used in this area and is brackish, so it is not likely to be used for drinking water in the future. Bedrock groundwater flow to the overburden aquifer is a potential migration pathway, but based on the bedrock groundwater concentrations and likely small quantity of bedrock groundwater flow, it is anticipated to be significantly less of a migration pathway than the overburden aquifer. Bedrock groundwater flows to the west and provides recharge to the overburden aquifer system and to the Hudson River. Other than this discharge, the bedrock appears to be isolated from the unconsolidated aquifer system by weather bedrock and the upper silt/clay unit.

6.0 Summary of Findings

This section provides a summary of the RI findings.

- The site covers approximately four acres, with approximately two acres on each side of North Water Street (formerly Pemart Avenue).
- The geology at the Site consists of sand, silt, peat and clay layers overlying weathered bedrock and a micaceous dark grey gneiss competent bedrock.
- Groundwater flows from east to west across the Site and ultimately discharges to the Hudson River. Steep bedrock outcrops to the north and east hydrogeologically isolate the unconsolidated aquifer system at the Site. Based on the steep bedrock topography, observed groundwater seeps indicating an upward hydraulic gradient, and variations in water elevations in deep groundwater monitoring wells installed during the RI, which also generally indicate an upward hydraulic gradient, it appears that groundwater may discharge from bedrock fractures into the unconsolidated aquifer system present beneath the Site. Other than this discharge, the bedrock appears to be isolated from the unconsolidated aquifer system by weathed bedrock and the upper silt/clay unit.
- Structures associated with the former MGP and EGP are present at the Site.
- Field evidence of MGP residues, which included odors, staining, sheen and coal tar DNAPL, were detected in the subsurface soil and groundwater associated with the former 100,000 cf and 30,000 cf gas holders and gas generating building. These residuals partially penetrate the upper-most portions of the upper silt/clay semi-confining unit including the peat lenses to depths of 20 feet bgs. NAPL and impacted material was not observed below the upper-most portions of the upper silt/clay unit or in the lower sand unit, lower silt/clay unit, weathered bedrock, or in bedrock. Collectively, impacts at the Site encompass an area that includes most of the former MGP, the southern portion of the EGP, and extends offsite to the west beneath the adjacent MTA ROW and onto the undeveloped former industrial properties between the tracks and the river.
- No field evidence of contamination related to operations of the former EGP was detected. However, a non-descript petroleum-like oil was locally detected in soils collected from the crawl space beneath the EGP. Based on fingerprint analysis, this material appeared to be a light oil and is not attributable to former operations of either the EGP or MGP.
- SVOCs and inorganics were detected in surface soils collected from across the Site at concentrations above RSCOs. The occurrence of these analytes at the concentrations detected appears to be attributable primarily to the input from airborne deposition from various historical industrial operations in this area of Peekskill and runoff of surface water from the Briarcliff-Peekskill Parkway.
- VOCs and SVOCs were detected in subsurface soils and groundwater at concentrations above RSCOs and WQC in areas of the Site where field evidence of MGP impacts was also detected. Inorganics were also detected in subsurface soils and groundwater at concentrations above RSCOs and WQC. The inorganic exceedances of RSCOs and WQC may be attributed to both natural and anthropogenic sources.
- Sodium was present above the WQC in all the shallow wells and some of the intermediate and bedrock monitoring wells and may reflect influence of the brackish Hudson River water on groundwater quality at the Site.
- The NAPL fingerprint analytical results indicate that both petrogenic materials and/or pyrogenic materials were detected. In general, the DNAPL samples have the characteristics of tars from a low temperature process such as the water gas process and/or of weathered heavy fuel oil or residual oil. Conversely, LNAPL appears to be primarily related to diesel range organics (DRO), which would include fuel oil and diesel fuel.
- PCBs were not detected in any soil or groundwater above the applicable standards.

7.0 Conclusions and Recommendations

This section provides the RI conclusions:

- An extensive RI has been completed that characterizes the nature and extent of constituents related to the former MGP and EGP operations at the Site. No further land-based characterization is recommended at this time. However, as part of the remedial selection and planning process, additional remedy-specific data and information may be necessary (e.g., soil gas sampling, geotechnical data, etc.).
- Characterization of the Site was expanded until the upland limits of impacts were delineated. Based on the results of the upland investigation, it is recommended that soils and sediments that comprise the Hudson River channel be investigated in order to evaluate the presence or absence of MGP residues downgradient from the Site.
- In accordance with the Work Plan, indoor air sampling was not performed. It is noted however, that the City of Peekskill's future redevelopment plans include demolishing all existing buildings and related structures on the Site. The potential for indoor air impacts will be considered when evaluating potential remedies for the Site. Since the existing buildings will be demolished, no indoor air or soil gas sampling is recommended at this time.

8.0 References

Caldwell, 1989. Surficial Geology Map of NY.

Fisher, 1970, reissued 1995. The Geologic Map of NY.

NYSDEC, 2001. Guidance for the Development of Data Usability Summary Reports, New York State Department of Environmental Conservation Division of Environmental Remediation, dated August 2001. New York State Department of Environmental Conservation.

RETEC, 2002. The RETEC Group, Inc., MGP Historical Investigation Report–Peekskill, New York–Pemat Avenue. Project Number: CECN1-15957-400, June 27, 2002.