Peoples Works Former Manufactured Gas Plant Site
Brooklyn, Kings County, New York

NYSDEC Site No. 224053

Index No. A2-0552-0606

Final
Site Characterization Report

April 2018

Prepared for:

National Grid
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CERTIFICATION STATEMENT

I, Robert Cantagallo, certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Site Characterization Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications.

Tetra Tech, Inc.

Robert Cantagallo
Name

Robert C. Cantagallo
Signature

April 5, 2018
Date

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LIST OF ACRONYMS

AKRF	AKRF, Inc.
AWQS	Ambient Water Quality Standards
bgs	Below Ground Surface
BTEX	Benzene, Toluene, Ethylbenzene, Xylene
BUG	The Brooklyn Union Gas Company
CAMP	Community Air Monitoring Plan
COPCs	Chemicals of Potential Concern
CWG	Carbureted Water Gas
DOT	Department of Transportation
DUSR	Data Usability Summary Report
EDR	Environmental Data Resources, Inc.
ELAP	Environmental Laboratory Approval Program
ESA	Environmental Site Assessment
GEI	GEI Consultants, Inc.
HASP	Health and Safety Plan
HCN	Hydrogen Cyanide
IDW	Investigation Derived Waste
MGP	Manufactured Gas Plant
mg/kg	Milligrams per Kilogram
MS/MSD	Matrix Spike/ Matrix Spike Duplicate
msl	Mean Sea Level
MLW	Mean Low Water
NAPL	Non-Aqueous Phase Liquid
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
OCAS	Order on Consent and Administrative Settlement
ORP	Oxidation/Reduction Potential
PAHs	Polycyclic Aromatic Hydrocarbons
PCB	Polychlorinated Biphenyl
PCE	Tetrachloroethene
PID	Photoionization Detector
PPE	Personal Protective Equipment
PVC	Polyvinyl Chloride
QAPP	Quality Assurance Project Plan
QA/QC	Quality Assurance/Quality Control
QHHEA	Qualitative Human Health Exposure Assessment
RCRA	Resource Conservation and Recovery Act
SC	Site Characterization
SCO	Soil Cleanup Objective
SCR	Site Characterization Report
SCWP	Site Characterization Work Plan
SVOC	Semi-Volatile Organic Compound
TAL	Target Analyte List

TCE	Trichloroethene
TCL	Target Compound List
TCLP	Toxicity Characteristic Leaching Procedure
Tetra Tech	Tetra Tech, Inc.
VOC	Volatile Organic Compound
µg/L	Micrograms per Liter
USACE	United States Army Corps of Engineers
USCS	Unified Soil Classification System
USGS	United States Geological Survey

EXECUTIVE SUMMARY

This report presents the results of a site characterization (SC) and supplemental site characterization (SSC) conducted at the Peoples Works Manufactured Gas Plant (MGP) Site (the Site) by Tetra Tech EC, Inc. (Tetra Tech) on behalf of National Grid. The objectives of the SC were to investigate and verify, to the extent possible, the locations of former MGP structures, collect soil and groundwater data to characterize the surface and subsurface characteristics of the Site, and determine the presence or absence or any residual wastes in soil and groundwater. Field activities were conducted in accordance with the following documents:

The SC was conducted in accordance with the following documents:

- The December 2009 Site Characterization Work Plan (SCWP), Quality Assurance Project Plan (QAPP), and Health and Safety Plan (HASP), which were approved by the NYSDEC in a letter dated March 28, 2010;
- The December 2012 letter from the NYSDEC which required a sediment investigation;
- The March 2013 Supplemental Site Characterization Work Plan,
- The March 2013 letter from the NYSDEC which approved the Supplemental Site Characterization Work Plan with modifications;
- The August 2014 Site Characterization Supplemental Scope of Work;
- The September 2014 letter from the NYSDEC which approved the Site Characterization Supplemental Scope of Work;
- The May 2015 Site Characterization Supplemental Scope of Work, and;
- The June 2015 letter from the NYSDEC which approved the additional Site Characterization Supplemental Scope of Work.

In addition, field activities were conducted in accordance with the NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation (NYSDEC, 2010).

The Site is located in the Williamsburg neighborhood, Borough of Brooklyn, Kings County, New York. This non-National Grid-owned Site is approximately two acres in size. The footprint of the former MGP facility comprises the Site, and this footprint was located between Kent Ave to the east, the former 11th Street to the south, the Wallabout Channel of the East River to the west, and the former 10th Street to the north. The Site is bordered by multi-unit residential housing (condominiums) to the north of the Site; Kent Avenue, multi-unit residential housing, and commercial properties are located to the east; commercial properties are located to the south; and the Wallabout Channel of the East River is located to the west of the Site. The Site is located on portions of two parcels: Block 2134 Lot 1 and Block 2134 Lot 150. Figure 1 illustrates the location of the property on a portion of the United States Geological Survey (USGS) 7.5-minute, Brooklyn, New York Quadrangle topographic map.

Historical land use maps indicate the Site and surrounding areas were developed prior to 1880. A coal gasification plant occupied the Site from at least 1868 until approximately 1893, at which time it was decommissioned during consolidation under The Brooklyn Union Gas Company, now doing business as National Grid.

Post-MGP site operations, including current site use, have potentially contributed to the limited soil and ground water impacts at the Site. The parcels on which the Site is located are currently developed with two warehouse style buildings used for lumber and building supply storage, as well as retail space. Between the two buildings is a one story covered roadway, open at both the northern and southern ends (the "breezeway"). The "breezeway" is used as a driveway and truck parking area and for storage of building supplies. Two small above ground tanks (500 gallons), which appear to contain fuel oil are located on the east wall of the breezeway. Heavy staining and petroleum odors at the north end of the breezeway, as well as in the vehicle maintenance area north of the western building, indicate the potential for impacts to soil and groundwater from current activities.

In addition, subsequent to the MGP operations, the Site and surrounding properties have a long history of industrial use, most significantly by the F.M. Schaefer Brewing Company. The potential for these operations to have contributed to impacts observed at the Site is highlighted by the properties around the Site that have undergone Phase II Investigations and are in the Brownfields Cleanup Program.

The SC and SSC activities included mobilization, air monitoring, test pit excavation, sample collection, sample analysis, and preparation of a qualitative human health exposure assessment (QHHEA). Subsurface soil and groundwater were sampled in accordance with the SCWP and the Supplemental SCWP. Samples were collected by Tetra Tech and analyzed by Chemtech of Mountainside, New Jersey. In 2011, soil and groundwater samples were analyzed for Target Compound List (TCL) volatile organic compounds (VOCs), TCL semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), Target Analyte List (TAL) metals, and total cyanide. In 2014-2015, soil and groundwater samples were analyzed for Benzene, Ethylbenzene, Toluene, and Xylene (BTEX), polycyclic aromatic hydrocarbons (PAHs) and free cyanide. No analytical samples were collected from the sediment borings. Samples were collected by Tetra Tech and analyzed by Accutest Laboratories of Marlborough, Massachusetts.

<u>Summary of the key findings:</u>

- The distribution of potential MGP-related visual and olfactory impacts indicates that no source area of MGP residuals has been located on the Site itself, despite the intrusive activities at nearly 50 locations. The impacts observed were primarily located north off-site and outside the footprint of the former MGP facility, in the area of a former embayment that was filled in between 1935 and 1947. The small, discrete pieces of solid NAPL in PWTP-A and PWTP-3 and odors at

other locations are likely from reworking or redistribution of Site fill materials and are not evidence of source materials in those areas.

- The limited distribution of the BTEX and PAH exceedances of SCOs in subsurface soil indicates that these concentrations are related to the former embayment area north of the former MGP facility and in the north end of the breezeway and are related to Site activities subsequent to the operation of the former MGP facility. The observations of petroleum-like odors at five locations in or around the north end of the breezeway further supports the conclusion that impacts associated with the Site are related to activities (e.g., vehicle maintenance) after MGP operations had ceased.
- MGP-related visual or olfactory impacts were not identified at any of the monitoring wells during this SC investigation. The presence of PCE and metals in the groundwater suggest migration of off-site impacts to the Site groundwater
- Direct and indirect contact with the exposure media onsite are only potentially likely for the future construction worker and future utility worker, who may perform intrusive excavation activities at the site, and for the future trespasser, who may access the Site during future construction.
- The long history of post-MGP industrial activities at the Site, as well on surrounding properties, suggests potential sources of impacts to soil and groundwater that are not MGP related.

Summary of Findings by Media:

Subsurface Soil: Limited potentially MGP-related visual or olfactory impacts were identified during this SC investigation. These impacts were noted primarily in the northwest corner of the Site at PWSB-27, PWSB-31, and to a lesser extent at PWSB-35. The impacts observed were primarily located north of the former MGP facility, in the area of a former embayment that was filled in between 1935 and 1947. A small piece of asphalt-like material and naphthalene-like odors were noted in Test Pit A. A small piece of solid NAPL was noted in test pit PWTP-3, but no odors were noted. Naphthalene-like odors were noted in PWSB-13, 14 and 16, along the bulkhead, and in PWSB-22 and PWSB-34.

Petroleum-like odors were noted in borings in and around the north end of the breezeway: PWSB-08, PWSB-25, PWSB28, PWSB-29, and PWSB-30. This area is used for truck parking and loading, as well as truck and forklift maintenance.

In 2011, BTEX was detected in one of the subsurface soil boring samples, PWMW-02-1-6 at 0.0036 mg/kg, which was collected from the interval below the concrete slab. Total BTEX in the asphalt-like material sample (PWTP-01A-2.5) was 30.4 mg/kg. None of the individual BTEX constituents were detected above applicable SCOs.

In 2014-2015, low concentrations of BTEX were detected in most of the samples. BTEX was detected at concentrations that were above their respective NYSDEC Restricted-Residential SCOs in PWSB-25, and Commercial SCOs in PWSB-31 and PWSB-35. PWSB-25 is located at the north end of the breezeway and exhibited a petroleum-like odor during sampling. PWSB-31 and PWSB-35 are located in the northwest area of the Site, and exhibited indications of NAPL and naphthalene-like odors. In 2011, total PAHs ranged from not detected in 23 samples to 122.95 mg/kg in sample PWSB-07-1-3, which was collected from the shallowest interval. In 2014-2015, total PAHs ranged from not detected in eight samples to 6,708.7 mg/kg in sample PWSB-31-13.5-14. The distribution of the BTEX and PAH exceedances of SCOs indicates that these concentrations are related to the former embayment area north of the former MGP facility, and in the north end of the breezeway are related to Site activities subsequent to the operation of the former MGP facility. The observations of petroleum odors at five locations in or around the north end of the breezeway further supports this conclusion

One PCB, Aroclor-1260, was detected at low concentrations (0.03 mg/kg and below) in three samples: PWSB-01-38-40, PWSB-02-1-2, and PWSB-06-1-2. Pesticides, herbicides, and PCBs were not detected at concentrations that were above their respective NYSDEC Restricted-Residential and Commercial SCOs.

Mercury was positively detected in 26 of the soil boring samples, and exceeded the Restricted-Residential SCO in the samples collected from the fill below the slab (1.42 mg/kg from 1 to 3 feet bgs) and exceeded the Commercial SCO in the sample from immediately above the groundwater table (2.99 mg/kg from 6 to 9 feet bgs) in boring PWMW-01 and in the test pit soil sample (1.44 mg/kg at 2.5 feet bgs). However, the occurrence of mercury is not typically associated with MGP operations, and is likely due to the placement on-site of fill of unknown origin.

In 2011, free cyanide was detected in nine of the subsurface soil samples but did not exceed the applicable SCO in any of the samples. In 2014-2015, the only inorganic constituent for which soils were analyzed was free cyanide, which was undetected in nine samples and did not exceed the applicable SCO in any of the samples.

Groundwater: A total of six groundwater samples and one duplicate sample were collected during the SC. One groundwater grab sample was collected from soil boring location PWSB-02. In addition, one round of groundwater samples were collected from three existing monitoring wells and two monitoring wells installed during the SC. The groundwater samples were analyzed for TCL VOCs, TCL SVOCs, pesticides, herbicides, PCBs, TAL metals, and total cyanide. The groundwater grab sample was also analyzed for free cyanide.

MGP-related visual or olfactory impacts were not identified at any of the monitoring wells during this SC investigation.

Two VOCs, benzene and tetrachloroethene (PCE), were detected at concentrations exceeding the applicable NYSDEC Ambient Water Quality Standards (AWQS) in the groundwater grab sample collected from soil boring location PWSB-02. PCE is not associated with the former MGP operations. One PAH, naphthalene, was detected in this sample at a concentration exceeding the AWQS. Herbicides, pesticides, and PCBs were not detected in the groundwater grab sample. Twelve metals, none of which are typically associated with MGP activities, were detected at concentrations above the applicable AWQS. Groundwater samples collected as grab samples (as opposed to samples collected from monitoring wells) typically have higher suspended solids content. Samples with high turbidity (due to high solids content) may result in biased high concentrations of total metals. Free cyanide was detected in the groundwater grab sample, but the concentration was below the AWQS.

Herbicides, pesticides, and PCBs were not detected in the monitoring well groundwater samples. PCE was detected in the primary and duplicate samples collected from monitoring well PWMW-01 above the AWQS. Seven VOCs were detected above the applicable AWQS in monitoring wells MW-11 and MW-12. SVOCs were only detected at concentrations exceeding the applicable AWQS in samples collected from monitoring wells SB/MW-11 and SB/MW-12. Iron, magnesium, manganese and sodium, detected above AWQS, are indicators of groundwater geochemistry. The elevated levels of inorganics are likely not related to former MGP operations at the Site.

Total BTEX, exceeding 1,000 ug/l, was detected in SB/MW-11 and SB/MW-12, and total PAHs in these wells was between 70 and 80 ug/l. In 2014-2015, benzene was detected at concentrations exceeding the applicable AWQS in the groundwater grab samples at all locations sampled except PWSB-21 and PWSB-34. Ethyl benzene, toluene and total xylenes exceeded applicable AWQS in PWSB-22, PWSB-25, PWSB-28, and PWSB-30. The highest concentrations of BTEX were detected in PWSB-25, at the north end of the breezeway, in which petroleum odors were noted. These samples were collected in a high-traffic area of the site, where trucks are loaded with lumber and construction materials and then driven out to deliver the loads. The BTEX found in the groundwater in the central portion of the Site may be from either these activities or from releases subsequent to the MGP operations, and is likely not from the MGP-related activities. BTEX and PAHs were not detected in the two downgradient wells. The lack of detection of any BTEX compounds in the groundwater beneath the western portion of the Site indicates that the BTEX constituents from the center of the Site are not migrating.

The trichloroethene (TCE) and PCE detected at PWSB-02 and PWMW-01, which were also detected in soil samples at this location in a separate Phase II Investigation by the property owner (AKRF, 2005), are not associated with MGP activities and are likely the result of a release from a subsequent site tenant or from off-site migration onto the Site.

Sediment: Potential MGP-related olfactory impacts were identified in sediment borings PWSED-01 through PWSED-05. Petroleum-like odors were also noted at borings PWSED-01 through PWSED-03. However, visual impacts, consisting of NAPL blebs, were only observed in PWSED-05. The blebs were observed within a two-foot interval of silt and gravel, at approximately 3 to 5 feet below the sediment surface. Step-out sediment borings PWSED-06 and PWSED-07 exhibited no visual or olfactory impacts, MGP or otherwise, suggesting the impacts at PWSED-05 are localized.

Qualitative Human Health Exposure Assessment: A QHHEA was performed to evaluate the potential exposure pathways for human receptors relative to the COPCs identified for each impacted exposure media given the current and potential future use of the Site.

Because of the physical barrier of the basement floor and the conservative nature of the screening criteria relative to the more intermittent use of the building spaces at the Site (as compared to continual residential occupation), VOCs are not considered to pose a concern to human health. Elevated levels of BTEX compounds in the central portion of the Site (i.e., SB/MW-11 and SB/MW-12) found during both the Phase II Investigation and the SC sampling indicate possible contamination from petroleum related products in that area. However, it is unlikely that the contamination observed at the Site was caused by the former MGP operations.

In consideration of the COPCs identified for each exposure medium in Table 5-1, the assessment in Table 5-2, and the receptor exposure profiles detailed in Section 5.2.3, direct and indirect contact with the exposure media onsite are only potentially likely for the future construction worker and future utility worker, who may perform intrusive excavation activities at the Site, and for the future trespasser, who may access the Site during future construction. The significance of these non-MGP exposures with respect to the level of associated risk would need to be evaluated in a more site-specific assessment of risk that reflects the actual exposure durations and frequencies associated with these activities.

1. INTRODUCTION

On behalf of National Grid, Tetra Tech, Inc. has prepared this Site Characterization (SC) Report for the People's Works Manufactured Gas Plant (MGP) Site (the Site). The Site is located in the Williamsburg neighborhood, Borough of Brooklyn, Kings County, New York (Figure 1). This SC Report was developed pursuant to the Order on Consent and Administrative Settlement (OCAS) [Index No. A2-0552-0606, (NYSDEC, 2007)] between The Brooklyn Union Gas Company (now d/b/a National Grid NY) and the New York State Department of Environmental Conservation (NYSDEC), and in accordance with applicable guidelines of the NYSDEC and the New York State Department of Health (NYSDOH).

Following the completion of the Site Characterization field program in 2011 and submittal of a draft Site Characterization Report, the NYSDEC required a sediment investigation to investigate potential MGP-related impacts to the adjacent surface water body. The sediment investigation was completed in 2013.

In June 2014, National Grid, the NYSDEC, and Tetra Tech met to discuss the potential redevelopment of the Site by a third party. Tetra Tech conducted a Supplemental Site Characterization (SSC) to address data gaps in the SC prior to redevelopment of the Site by the property owner, as requested by the NYSDEC at that meeting. The SSC field activities were conducted from November 2014 through January 2015. Based on the results of the SSC, the NYSDEC requested additional SSC activities. The field program was completed in January 2016.

The SC was conducted in accordance with the following documents:

- The December 2009 Site Characterization Work Plan (SCWP), Quality Assurance Project Plan (QAPP), and Health and Safety Plan (HASP), which were approved by the NYSDEC in a letter dated March 28, 2010;
- The December 2012 letter from the NYSDEC which required a sediment investigation;
- The March 2013 Supplemental Site Characterization Work Plan,
- The March 2013 letter from the NYSDEC which approved the Supplemental Site Characterization Work Plan with modifications;
- The August 2014 Site Characterization Supplemental Scope of Work;
- The September 2014 letter from the NYSDEC which approved the Site Characterization Supplemental Scope of Work;
- The May 2015 Site Characterization Supplemental Scope of Work, and;
- The June 2015 letter from the NYSDEC which approved the additional Site Characterization Supplemental Scope of Work.

In addition, field activities were conducted in accordance with the NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation (NYSDEC, 2010).

1.1 Overview of Report Organization

This Site Characterization Report (SCR) incorporates the data collected during the SC and SSC research and field activities. Section 1 provides an overview of the Site, including location, description, and history of the Site. Section 2 describes the field activities. Section 3 uses the data generated during the SC and SSC to describe the Site geology and hydrogeology. Section 4 describes the results of the field investigation. A Qualitative Human Health Exposure Assessment (QHHEA) was conducted as part of the SC, and is presented in Section 5. A summary of findings and conclusions are presented in Section 6. Section 7 provides a list of references used to prepare this SCR.

1.2 Field Program Objectives

The purpose of the SC and SSC conducted by Tetra Tech, Inc. (Tetra Tech) was to identify the presence or absence of soil, groundwater, and sediment impacts associated with the former MGP as well as to determine the presence or absence of any former MGP structures, and to use the data obtained to assess potential pathways for exposure of people, flora or fauna to contaminants.

1.3 Site Setting, Description, and History

The site setting, description and history is a compilation of information obtained from the following:

- GEI Consultants, Inc. (GEI) Records Search Letter Report (2007) and Report on History of the Peoples Gas Light Company, Brooklyn, NY (2012), presented in Appendix A, the sources for which include:
    - Brown's Directory (1887 – 1918)
    - Moody's Analyses of Public Utilities and Industrials (1914)
    - History Associates Presentation (Higginson's 1868 and Bromley 1880 maps)
    - Brooklyn Eagle Online (available years: 1841-1902)
    - Environmental Data Resources Package
        - Sanborn Fire Insurance Maps (1887-2007)
        - Historical Topographic Maps (1900-1995)
        - Aerial Photographs (1924-2006)
        - EDR Radius Map
- AKRF Phase I ESA performed in October of 2000;
- Middleton Environmental Inc. Phase I ESA performed in December of 2002;
- AKRF Phase I ESA performed in January of 204;
- AKRF Subsurface (Phase II) Investigation Report (2005);
- A site visit conducted on March 20, 2009;

- EBC Phase I ESA performed in September of 2011;
- Tenen Environmental Subsurface Investigation Letter Report completed in March 2014;
- The 2011 through 2015 field activities.

1.3.1 Site Setting

The Peoples Works Former Manufactured Gas Site is located in the Williamsburg neighborhood, Borough of Brooklyn, Kings County, New York. The footprint of the former MGP facility comprises the Site, and this footprint was located between Kent Ave to the east, the former 11th Street to the south, the Wallabout Channel of the East River to the west, and the former 10th Street to the north.

1.3.2 Site Description

The Site is located on the northern portions of two parcels between Kent Avenue and the east bank of the Wallabout Channel. The surrounding neighborhood is primarily residential and commercial. Figures 1 and 2 show the Site Location and Site Plan, respectively.

1.3.2.1 Site Ownership

The two parcels on which the Site is partially located, and the owners and operators thereof, are as follows:

Parcel	**Owner's Name and Address**	**Operator's Address**
Block 2134, Lot 1	Waterfront Realty Company II LLC 470 Kent Avenue Brooklyn, NY 11211-5922	470 Kent Avenue Brooklyn, NY 11211
Block 2134, Lot 150	CL SPE LLC 470 Kent Avenue Brooklyn, NY 11211-5922	470 Kent Avenue Brooklyn, NY 11211

1.3.2.2 Current Site Operations

The parcels on which the Site is located are currently developed with two warehouse style buildings: a three story brick building (the eastern building) located on Lot 1, and a two story masonry building (the western building) located on Lot 150. Between the two buildings, and on the eastern portion of Lot 150, is a one story covered roadway, open at both the northern and southern ends. The entire Site is paved or covered by buildings. The buildings and "breezeway" are used for operations of the Certified Lumber Corporation (Certified Lumber). Founded in 1974, Certified Lumber is a locally owned retailer of construction and building materials. The "breezeway" is used as a

driveway and truck parking area and for storage of building supplies. A small one story brick building and a metal trailer are also located on the southern end of Lot 1. The western building is currently used for lumber storage. The first (basement) and second floors of the eastern building are currently used for storage of building materials. In addition, a retail paint and home supply store is located on the second floor, facing onto Kent Ave.

The footprint of the former MGP lies beneath the northern half of Lot 2134 Blocks 1 and 150 and encompasses portions of two buildings and the breezeway. Operations conducted by the current owners in the area of the former MGP footprint consist of lumber and building supply storage, truck loading and staging, and building material storage (lumber, doors, ceiling tiles, etc.), in the basement of the eastern warehouse building on Lot 1. Two small above ground tanks (500 gallons), which appear to contain fuel oil are located on the east wall of the breezeway.

The buildings and operations on the two parcels continue south of the footprint of the former MGP. Entrances on Division Street and Kent Avenue, both located south of the Site footprint, provide access to loading docks on the southern end of the eastern building, as well as access to the western building and a lumber storage area and parking lot south of this building. An office entrance and loading dock are located on the northern side of the eastern building. A driveway runs along the northern side of the building, from Kent Avenue to Lot 150. The northern portion of this driveway is located on an easement granted by the owner of the property to the north. The western end of the driveway is used for lumber storage and vehicle maintenance.

A review of available aerial photographs and Sanborn Insurance maps (Appendix C) indicates that a building was present on the western parcel since at least 1904 and the eastern building was present since at least 1943. The 1947 Sanborn map indicates that the western building was rebuilt in 1938 or 1939. Between 1943 and 1954, the eastern building was expanded, effectively doubling its size. The area between the two buildings is not covered in either the 1943 or 1954 aerial photograph, but is covered in the 1966 photograph. The eastern and western buildings appear relatively unchanged between 1966 and 2016, when the SC field activities were conducted.

1.3.3 Site History

1.3.3.1 Pre-MGP Site History

Much of the shoreline along the Site has been filled over time. Figure 3, based on a Site area map created in 1925 shows the 1776-1777 historic shoreline prior to the creation of Wallabout Channel, and indicates that the Site area was created by filling, as much as a block inland from the current shoreline. This historic filling is also shown on OASIS Map, shown in Figure 3A (**http://www.oasisnyc.net/map.aspx, 2017).** The fill used for this process is of unknown origin.

1.3.3.2 MGP Operational History

The GEI Records Search Letter Report and Report on the History of the Peoples Gas Light Company, Brooklyn, New York (GEI, 2007 and 2012, Appendix A) contain historical Sanborn Fire Insurance maps from 1887 through 1986 and maps dated 1868 and 1880 by Higginson and Bromley, respectively. National Grid provided copies of additional Sanborn Fire Insurance maps from 1987 through 1996.

Historic information indicates that the gas works were present until 1895 or 1896. According to the historical maps, the former MGP, operated by The People's Gas Light Company, was present as early as 1868 and through at least 1887. The 1887 Sanborn map shows a MGP on the Site and contains the notation "Used for Storage Only" under the name of the facility. Site structures at this time include a former retort house with a ventilated roof and oil storage, a coal storage area, a governor, three "iron coal oil tanks," a barrel storage building, an iron tank, and a "condenser house."

According to research conducted by GEI, the People's Gas Light Company is listed in Brown's Directories from 1887 to 1899, with the 1899 entry listing it as part of BUG. There are no listings for the Site in 1888 and between 1893 and 1899, indicating that gas production may not have occurred during these periods. According to Brown's Directory, in 1887, The People's Gas Light Company used the coal gas process, and by 1889 it had converted to carbureted water gas (Tessie du Motay process). It appears that the MGP operated at least through 1893, the last year for which there is an individual entry for the Peoples Gas Light Co. in Brown's Directory.

However, in the early 1880s The Fulton Municipal Gas Company, manufacturing carbureted water gas with naphtha supplied by The Standard Oil Company, began a series of rate wars against other Brooklyn gas companies. Consistent with rate wars conducted by the Standard Oil Company as it gained domination of oil markets during the 1870s, the goal of the gas wars in Brooklyn would have been to eliminate competition and to create and control a market for Standard Oil products. Ultimately, a number of gas companies agreed to settlement terms with The Fulton Municipal Gas Company. In 1883, according to Progressive Age, The People's Gas Light Company agreed to cease making gas and "buy all it used from the Fulton Company", and in November 1883, American Gas Light Journal reported that "The 'public benefactors' [i.e., Standard Oil] over in Brooklyn" had "obtained control of the People's Company." The book History of Kings County, Including Brooklyn, N.Y., 1683-1883 reports that, following consolidation of gas companies in the spring 1883, Henry Huttleston (H. H.) Rogers and William Rockefeller (both of The Standard Oil Company) were on the boards of The Fulton Municipal Gas Company and The People's Gas Light Company. In 1893, The Brooklyn Daily Eagle reported that in 1885, "The Standard Oil interest now controlled the Fulton Municipal [Gas Company] and… held one-third of the stock in… the People's [Gas Light Company]." It is unclear exactly when the gas production operations ceased at The People's works between 1883 and 1893. In 1895, The Brooklyn Union Gas Company was incorporated and acquired the properties of The

Fulton Municipal Gas Company, The People's Gas Light Company, The Williamsburg Gas Light Company and four other Brooklyn gas companies. By the mid-1890s, The People's Gas Light Company had not been in operation for several years, and the property was to be sold. A Brooklyn Eagle article from 1896 states the Peoples Works "have been in disuse for several years" (GEI, 2012).

Based on a review of historical data, The People's Gas Light Company appears to have operated a coal carbonization process and then a carbureted water gas (CWG) process until production ceased. The volume of gas produced by the CWG process operated at the Peoples Gas Light Company ranged from 200,000,000 to 440,000,000 cubic feet/year, a relatively small to moderate volume.

1.3.3.3 Post-MGP Site History

National Sugar Refining Company of New Jersey

A 1904 Sanborn map shows a raw sugar house for the National Sugar Refining Company of New Jersey on the western portion of the Site, and the eastern portion of the Site is vacant. This appears to be a portion of the western building currently present on the Site. MGP structures are not present on the Site at this time. This configuration of structures is also shown on the 1918 Sanborn Map.

The raw sugar house is part of the adjoining sugar refinery, which is also labeled as the Mollenhauer Refinery (a Molasses refining company), located on lots 1 and 150 but south of the Site. Apparent tanks and "coal pockets" are noted immediately south of the Site, but much of the labeling is illegible.

South 11th Street Storage Warehouse Corporation

On the 1922, 1928, and 1935 Sanborn maps, the building configuration is unchanged, but the structures are labeled as the South 11th Street Storage Warehouse Corporation. The structural and component details are omitted on the Sanborn maps for 1922 and 1928. Based on these maps, no new buildings had been added since 1904.

Fueling Station

Environmental Business Consultants (EBC) noted that on July 21, 1945 a Certificate of Occupancy (CO) was issued for 474/490 Kent Avenue, Northwest Corner of South 11th Street (EBC, 2011). This CO describes a vacant lot with the permissible use of "parking space and gasoline oil selling station for use of employees only". This CO may refer to employees of F.M. Schaefer Brewing.

Brooklyn Edison

In 1919 Edison Electric Illuminating Company (originally Edison Electric Illuminating Company of Brooklyn, Founded in 1887), merged with Kings County Electric Light and Power Company to form Brooklyn Edison. Brooklyn Edison merged primarily with Consolidated Edison and other companies (unnamed) between 1936 and 1960. Brooklyn Edison owned a portion of the Site.

F.M. Schaefer Brewing Company

According to the 100-year title search for Lot 1, Schaefer acquired the property in pieces, from various parties, from July 21, 1933 through July 13, 1943. Brooklyn Edison was one of the owners from whom Schaeffer acquired property. A Temporary Certificate of Occupancy issued in December 18, 1940 for 458/472 Kent Avenue, west side, between South 12th and South 11th Streets, Block 2154, Lot 1. The temporary COC describes a new three-story building with a basement for use as a bottling house. The basement and third floor were listed for use as storage and the first and second floor were for industrial use. While this appears to refer to the southern portion of Lot 1, immediately south of the Site, it could indicate that the Site was occupied by the Schaefer Brewing Company as early as 1940.

The Site was occupied by two buildings, a garage (the current western building) and the bottling house (the current eastern building), of the F&M Schaefer Brewing Company from at least 1943 to 1977. These buildings are shown on the 1943 aerial photograph of the Site, and the 1947 Sanborn map. Excavation for the basement and for possible piles associated with the eastern building may have removed significant portions of former MGP structure foundations, including the gas holder tank. The 1965 Sanborn map shows the addition of the truck loading area (the “breezeway”). During this period, a parking area and additional unlabeled structures are present on Lots 1 and 150 immediately south of the Site.

Post-Schaefer Brewing Period

Sanborn maps from 1977 through 1984 show the brewing company still present on the Site but note that it is “not in operation.” On the 1986 Sanborn map, the notation “not in operation” has been removed from the eastern building and was replaced with “lofts.”

The two buildings present on the Sanborn maps from 1947 are still present on the maps from 1987 through 2006. On these maps, the eastern building is labeled “lofts” and the western building is labeled with an “M” indicating usage for manufacturing. The maps no longer contain the note “not in operation.”

The 100-year Title Search indicates that GFE Realty acquired Lot 1 and Shula Limited Partnership acquired Lot 150 in 1977. The United Talmudical Academy Torah V' Yirah Inc. acquired Lot 1 in 1981. As listed in the EBC Phase I Report (2011) numerous commercial wholesale and retail establishments occupied the eastern building at the Site, located on Lot 1, from the early 1980s onward. These consisted primarily of businesses selling clothing, fabric, and building materials.

Certified Lumber

A title search indicates that Certified Lumber acquired Lot 150 in 2003, and leased the property since at least 1981, likely operating on both lots since that time. Overall operations by Certified Lumber on the Site and immediately South of the Site are described in Section 1.3.2.2.

The western parcel of the Site (i.e. the northern portion of Lot 150) is used for lumber and building supply storage, vehicle and forklift maintenance, and truck loading and staging. During the SC and SSC, and as noted in the EBC Phase I Report (2011) extensive staining and accumulations of spilled antifreeze have been observed in the breezeway on the western parcel of the Site, in the forklift and vehicle maintenance area in the northwest corner of the Site, and south of the Site within Certified Lumber's operational area on Lot 150. Storage of drums and buckets of petroleum product in the forklift and vehicle maintenance area was also noted during the SC, SSC, and in the EBC Phase I Report.

The eastern parcel of the Site (i.e. the northern portion of Lot 1) is used for lumber and building supply storage, and truck loading and staging. During the SC and SSC, and as noted in the EBC Phase I Report (2011) extensive staining and accumulations of spilled antifreeze have been observed in the breezeway on the eastern parcel of the Site, along the driveway north of the building on Lot 1, and south of the Site within Certified Lumber's operational area on Lot 1. Storage of drums petroleum products and hydraulic fluid, many in poor condition, was noted along the west side of the building on Lot 1 during the SC, SSC, and in the EBC Phase I Report.

The EBC Phase I noted a 500 gallon AST along the west side of the eastern building, on Lot 1. Staining was noted around the base of the tank. During the SC and SSC, two smaller ASTs (<300 gallons) were observed in this same general area.

1.3.4 Wallabout Channel

The Site is located along the Wallabout Channel, which extends southeast from the East River. Figure 4 shows the highly industrialized nature of activities along the channel. According to personnel in the United States Army Corps of Engineers (USACE) maintenance dredging division, there have been two recorded dredging events in the Wallabout Channel. The first event took place in 1911, where the USACE dredged a total of 79,981 cubic yards of material from the channel. The second event

took place in 1939, where the USACE dredged a total of 39,239 cubic yards of material, to make the average depth of the channel 20 feet below mean sea level (msl).

In addition, other sources indicate that the Wallabout Channel may have been dredged multiple times during World War II. Information provided in the Supplemental Remedial Investigation work plans for the Con-Edison Kent Avenue Station and Wallabout/ Navy Yard Basin indicates that the channel was dredged during Navy Yard expansion in 1942 (GEI, 2007). A history of the Brooklyn Navy Yard available in the Navy Department Library indicates that the Wallabout Channel was dredged during construction in 1943 (USN, 2014). A lawsuit filed by F&M Schaefer Brewing Company, which was operating on the Site at the time, against the United States indicates that dredging in the Wallabout Channel adjacent to the Site occurred in 1945.

In 2004, the USACE approved dredging of the Wallabout Channel to a depth of 20 feet mean low water (MLW), which would result in the removal of over 17 feet of sediment at some locations (USACE, 2004). Though approved, the dredging has not yet been conducted.

1.3.3 Adjoining and Nearby Properties

The Site is located in an area of mixed commercial and residential land use. Multi-unit residential housing (condominiums) are present north of the Site; Kent Avenue, multi-unit residential housing, and commercial properties are located east; commercial properties are located south; and the Wallabout Channel of the East River is located west of the Site (Figure 1).

According to information on the Sanborn maps, several industrial and manufacturing facilities have operated on properties abutting the Site, including sugar refineries, clothing manufacturers, gas appliance manufacturing, a distillery, and an iron foundry. Figure 5 shows the distribution of these operations around the Site. These included the following:

North of the Site:
De Castro & Bronner Sugar Refining
Brooklyn Distilling Company
Operations of the F.M. Schaefer Brewing Company

Northeast of the Site:
King Paint Manufacturing
Improved Appliance Company
Glantz Iron and Metals
Operations of the F.M. Schaefer Brewing Company

East of the Site:
Guild & Garrison Pump Works
N.Y. Leather Belting Company
Merrill Brothers Machinists
Meskin Brothers Fur Dressing
Operations of the F.M. Schaefer Brewing Company

The area around the Site has undergone significant residential development over the past 10 years, leading to Phase I and Phase II investigations and remediation in the Brownfields Program. Figure 6 shows the recent residential development that has occurred adjacent to, and upgradient of, the Site. Figure 7 shows properties around the Site that have Phase I and Phase II investigations and/or remediation. Three of these nearby properties which are in the Brownfields Cleanup Program are hydraulically upgradient of the site – 416 Kent Avenue, 420 Kent Avenue, and 431 Kent Avenue. Information obtained regarding these three properties is summarized below.

416 Kent Avenue and 420 Kent Avenue:
These properties, also known as 418 Kent Avenue and 422 Kent Avenue, respectively, are located north of the Peoples Works Site. They are currently occupied by a commercial business and areas for parking. These properties were formerly the location of the Kedem Winery, and subsequently King Edwards Foods, and had been used for warehouse and storage for several decades. This site was entered into the Brownfield Cleanup Program in February 2015. An Environmental Easement for this property was signed in September 2015, stipulating that the site can be used for Restricted Residential development provided that the groundwater not be used without treatment and a Site Management Plan (SMP) is developed, and the requirements of the SMP are followed.

AKRF conducted a Phase I Environmental Site Assessment (ESA) in 2001 and a Phase II ESA in 2001/2002. The results of the Phase I ESA indicated the presence of several USTs at the property. In addition, a portion of the on-site structures were used as a garage for vehicle maintenance. The subsequent Phase II investigation revealed the presence of polycyclic aromatic hydrocarbons (PAHs) and Benzene, Toluene, Ethylbenzene and Xylene (BTEX) above criteria.

Langan completed a Remedial Investigation in 2014. Groundwater sampling conducted at the Site indicated the presence of VOCs, SVOCs, and dissolved and total metals concentrations above NYSDEC TOGS 1.1.1 Class GA Ambient Water Quality Standards or Guidance Value (AWQSGV).

431 Kent Avenue
This property, also known as the Former Domsey Fiber Corporation Site, is located northeast of the Peoples Works Site, across Kent Avenue. It is currently occupied by newly constructed residential housing. According to a Phase I ESA prepared by EEA, Inc. in 1999 and a second Phase I prepared in 2012 by Environmental Business

Consultants, after initial use as residential properties, it was purchased by F&M Schaeffer Brewing Company for warehousing and shipping of beer. The property was subsequently sold, and use and ownership changed hands several times to include manufacturing of leather goods, gas appliances, and paint and varnish. The property was acquired by Domsey International Trading Company in the 1970s. Glantz Iron and Metals purchased portions of this property, as well as 44 8th Street immediately to the north, in the 1980s, and both parcels were the subject of the 1999 Phase I. Domsey International Trading Company, also known as the Domsey Fiber Corporation, used the property for used cloth recycling, which included the cleaning of the cloth using PCE. Spent PCE was stored on the property before removal by a contractor.

According to the Phase I reports, several underground storage tanks (USTs) were present on these parcels. Six USTs up to 4,000 gallons in capacity were noted at the 44 8th Street parcel, and were used for diesel fuel and gasoline storage. Seven USTs up to 5,000 gallons were noted at the 431 Kent Avenue parcel, and were used for fuel oil, diesel fuel and gasoline storage. According to the Phase I, five of these 13 tanks were closed in place in 1991. According to the Phase I, no historic spills were listed on either parcel.

In 2000, a Phase II ESA was completed by Don Carlo Environmental Services, Inc. However, this Phase II Assessment consisted only of soil sampling, and no groundwater samples were collected. Sampling of subsurface soil was only conducted to a depth of 15 feet bgs, above the anticipated groundwater level noted in the 2012 Phase I report. Analytical results for the samples collected indicated exceedances of TAGM criteria for PAHs and some metals.

According to the Remedial Investigation interim data summary prepared in 2012 by Environmental Business Consultants, PAHs, PCE and TCE were detected in both soil and groundwater at the property.

A Fact Sheet released by the NYSDEC in July 2012 states that groundwater contaminants are migrating southwest from these properties towards Kent Avenue. This would indicate that these contaminants are migrating towards the Peoples Works Site. Off-site groundwater sampling was conducted for the 431 Kent Avenue, but only on the upgradient side of the property. No off-site groundwater investigation was conducted downgradient of the property, between 431 Kent Avenue and the Peoples Works Site.

During construction of the current residential units, a 1,000 gallon UST and a 500 gallon aboveground storage tank (AST) were discovered. Both appeared to contain a water/oil mixture. The UST was found to have leaked, and the impacted soil was excavated after the UST was removed. This leak was reported and assigned spill number 12-13023. In addition, a sub-slab depressurization system, (SSDS) and vapor barrier were required by the NYSDEC as set forth in the October 2012 Decision Document and were installed during redevelopment of the property.

In addition there were several other businesses located on and around the Wallabout Channel that may have impacted the sediments in this water body. The Nassau Gas Light Company located on the Wallabout Channel south of the Site, the Wallabout Oil Works, and historical operations of the US Navy in the Navy Yard and on Wallabout Channel.

tF***ederal, State and Local Regulatory Agency Database Reviews***

1.3.4 Federal, State and Local Regulatory Agency Database Reviews

According to the Environmental Data Resources, Inc. (EDR) report obtained by GEI, no environmental records or known discharges involving the Site were identified. Three spills or discharges were noted on abutting properties-

- An unknown petroleum spill on the once vacant lot at Schaefer landing to the north in 2002;
- A transmission fluid spill in a manhole east of the Site along Kent Ave. in 2003, and;
- A Con Edison petroleum spill at 14th and11th Streets in 2005.

The records search identified no petroleum storage or hazardous waste storage at the Site or abutting properties.

1.3.5 Past Owners/Occupants with Potential Impacts to the Site

Past owners and occupants of the Site, as well as owners and occupants of some surrounding properties, may have engaged in activities resulting in impacts to soil and groundwater at the Site. The list below is based on information obtained by GEI, the SC, SSC, and the EBC Phase I.

The past owners/occupants of the Site after The Peoples Gas Works on Lots 1 and 150 whose operations may have impacted the Site are listed below.

Operations	Date Range
National Sugar Refining Company of New Jersey – Raw Sugar House/Storage	1904-1918
South 11th Street Warehouse Corporation - Storage	1921-1935
F.M. Schaefer Brewing Company – Bottling House and South Garage	1947-1977
The Shula Limited Partnership – Truck loading, manufacturing, storage	1977
GFS Realty – Truck loading, manufacturing, storage	1977
Bulkhead Realty – Truck loading, manufacturing, storage	1977-1978
United Talmudical Academy Torah V' Yirah Inc. – Truck loading, manufacturing, storage	1978-1981
Waterfront Realty – Truck loading, manufacturing, storage	1981-2004
NYC Industrial Development Agency - Truck loading, manufacturing, storage	1981-2003
Waterfront Realty - Truck loading, manufacturing, storage	1981-2004
Waterfront Realty II - Truck loading, manufacturing, storage	2004-Present
Certified Lumber - Truck loading, vehicle maintenance, storage	1981-Present

- Tootsies Sportswear
- Hunt Lamp Inc.
- Icebreaker Sportswear LTD
- Godinger Silver Art Co. Inc.
- Firehouse Trucking
- Cortina Sportswear LTD
- Century Knitting Mills Inc.
- Ariq Textiles & Trimmings
- Drakes Fabrics Inc.
- Heads-Up Mfg Inc.
- Jacobs Hosiery Co.
- LTL Designs, Inc.
- DPrima Unisex Hair Design
- Street Beat Sportswear
- Finest Ceiling & Drywall Corp.
- Rachels Outlet Store

The past owners/occupants of surrounding properties adjacent to and nearby the Site, and/or upgradient of the Site, whose operations may have impacted the Site, are listed below.

Operations	Date Range
Moller Sierck and Company –Sugar Refining	1880-1887
Brooklyn Rapid Transit/Brooklyn City R.R. Company- Power House	1893-1922
Brooklyn and Manhattan Transit – Power Station	1923-1940
NYC Transit System BMT Division – Power Station	1947-1950
Consolidated Edison of New York, Inc. – Kent Avenue Generating Station	1959-1989
Oscar King – Distillery	1880
Unknown – Stave yard	1880
Mollenhauer and Sons – Molasses Storage Yard	1887
National Sugar Refining Company of N.J. – Sugar Refinery	1893-1921
American Sugar Refinery Company – Sugar Refinery	1893
DeCastro and Donner Sugar Refinery	1880-1887
South 11th Street Warehouse Corporation - Storage	1921-1935
Brooklyn Distilling Company - Distilling	1898-1916,1921
F.M. Schaefer Brewing Company – Brewing, Warehouse	1918-1977
W.T. Klots and Bros – Lime and Brick	1880
Hotchkiss Field and Co. - Unknown	1880
National Meter Company – Iron Foundry	1880-1893
NY Leather Belting Company - Manufacturing	1904-1921
Kent Iron and Steel - Unknown	1918
Davidson Pipe and Iron - Unknown	1918
Unknown – Pumice Stone Storage	1918
Brooklyn Ferry Company – Coal shed	1887
Unknown – Coal pocket	1904-1907
Guild and Garrison – Pump works	1880-1935

Merril Brothers - Machinists	1887-1899
Meskin Brothers – Fur dressing	1935
Unknown – Pen manufacturing	Unknown
Unknown - laboratories	Unknown
Improved Appliances Co – Gas appliance manufacturing	1918
King Paint Manufacture Co – Paint manufacturer	1916-1935
Unknown – Lumber yard	1904-1921
Unknown Auto repairing	1935
Unknown – Iron and steel storage yard	1935
Levine Bros Inc. - Confectioners	1918
Unknown – Factory	1904
Vogel Bros - Auto	1918
Unknown – Coffin manufacturing	1880
New York and Brooklyn Coffin – Coffin manufacturing	1887-1899
Unknown- Garage gas tank	1935
Unknown – Barrel shed	1918
WM Vogel and Bros – Tin Factory/sheet metal works	1887-1935
C E Ring – Iron and Steel	1904-1924
Unknown – machine shop	1935-1947
Unknown - Manufacturing	1977-2007
Unknown – Scrap metal	1965
Unknown – Cleaning fluid manufacturing	1965-1984
Mc Loughlin Bros – Bok publishers/toy manufacturing	1904-1918
L Mundet and Son – Cork products	1921-1947
Riverside – Chemical works	1887
Bell and Fyfe – Iron foundry	1887-1904
Central – Iron foundry	1898-1899
The H Bridgman Smith – Printing/paper box factory	1904-1921
V La Rosa and Sons Inc. – Macaroni manufacturers	1935-1965
World Warehouse Corporation – Warehouse garage/gas tanks	1977-2007
Unknown – Chlorozone manufacturing	1918
Unknown - Chemicals	1935
Unknown – Iron works, cranes and hoists	1935-1950
Unknown – Cooper shop/cooperage	1880-1893
W F Whitney – Chair finishing	1904
Chair Co - Unknown -	1907-1908
Knickerbocker Bag Co - Unknown	1918-1921
M Feigel and Bros – Shellac manufacturing	1929-1935
Unknown – Sheet metal works	1947
Brooklyn Navy Yard – Navy yard operations	1947-1965

1.4 Previous and Contemporaneous Investigations

A Phase I Environmental Site Assessment was conducted by AKRF, Inc., in October 2000. The study area for this assessment included Block 2134 Lot 1 – the eastern portion of the Site as well as the area immediately to the south - and also the north-adjacent parcels (the former Schaefer Brewery Site and the former Kedem Winery Site) and the south-adjacent parcel (currently occupied by Consolidated Edison). The assessment included a review of historical Sanborn Maps, a site reconnaissance, and a review of selected federal and state regulatory databases within one mile of the study

area. This study concluded that the study area has had more than a 100-year industrial and manufacturing history, including use as a manufactured gas plant, a brewery, and a winery. The assessment identified the following environmental conditions for the study area: aboveground storage tanks, potential underground storage tanks, suspect asbestos-containing building materials, potential lead-based paint, suspect PCB- and mercury-containing lighting fixtures, 55-gallon drums of chemicals and potentially contaminated soil and groundwater resulting from on- and off-site sources (including on-site and off-site manufactured gas plants). Additional studies, including testing of soil and groundwater, were recommended in the assessment.

A Phase I Environmental Site Assessment was conducted by Middleton Environmental, Inc., in December 2002. The study area for this assessment included a three-story building with a basement located at 458-490 Kent Avenue (the eastern building at the Site) and extending off Site to the south. The report noted the presence of a sealed fill port on the south side of the subject site building which may be indicate the presence of an underground storage tank. The Phase I ESA recommended "a ground penetrating radar survey be conducted within the vicinity of this port in order to determine the possible presence of an underground storage tank on the site".

A Phase I ESA was conducted in 2004 by AKRF. According to the ESA Report, the Hazardous Substance Waste Disposal Site database indicated a coal gasification plant was operational from 1871 until 1895, at which time it was decommissioned. According to the information in the database, all remaining coal NAPL was removed, and the facility was demolished (AKRF, 2004).

AKRF conducted a Subsurface (Phase II) Investigation in 2005. The purpose of the Phase II Investigation was to characterize the subsurface conditions at Block 2134 Lots 1 and 150 - the Site and the area immediately to the south. The 2005 field work included the collection of 25 subsurface soil samples, from 12 soil borings, installation of five monitoring wells, and collection of five groundwater samples at locations throughout the Site. Samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), total and dissolved target analyte list (TAL) metals, and cyanide (for the soil samples only). The Phase II Investigation Report concluded that there were elevated levels of VOCs, polycyclic aromatic hydrocarbons (PAHs), metals, and some pesticides in the investigation area but that most of the elevated levels were the result of the past placement of poor quality urban fill and not from the current or historical uses of the properties. However, the report did indicate the presence of elevated levels of BTEX compounds in the soil and groundwater samples from MW-11 and MW-12, “consistent with the presence of gasoline contamination.” The report concluded that “no evidence of MGP contamination was detected during this investigation” (AKRF, 2005).

A Phase I Environmental Site Assessment was conducted by EBC in September 2011. The study area for this assessment was Block 2134 Lot 1 – the eastern portion of the Site as well as the area immediately to the south. The assessment included a review of

historical Sanborn Maps, a site reconnaissance, and a review of selected federal and state regulatory databases within one mile of the study area. This study identified the following recognized Environmental Concerns (RECs) on the Site and the portions of this Lot immediately to the south:

- A sealed fill port was observed on the south side of the building. The sealed fill port may indicate the presence of an underground storage tank.
- A 500-gallon diesel aboveground storage tank (AST) is located near the west side of the building, within the truck loading area between the subject site building and the adjacent two-story building located on Lot 150. Heavily oil stained concrete was observed around the tank and the reach of the tank's dispenser hose.
- Approximately six 55-gallon drums of petroleum products were stored on the west side of the building. The petroleum based products (hydraulic oil, waste oil, lube oil, motor oil, etc.) were used for repair and maintenance of the fork lifts.
- A sump pit with a sump pump were observed at the base of the ramp into the subject site building's basement. A layer of black material was observed on the surface of the water contained within the sump pit.

The EBC Report recommended a geophysical survey around the sealed port, soil borings near the AST, and investigation of the source and composition of the material in the sump.

Tenen Environmental conducted a subsurface investigation of the portions of Block 2134 Lots 1 and 150 south of the Site in 2014. The investigation area consisted of the breezeway at the Site, and the portions of Lots 1 and 150 immediately south of the Site. Tenen performed a geophysical survey of the breezeway and the area south of the Site. Soil samples were collected from eight borings, soil vapor samples from four sample locations and groundwater samples from five temporary monitoring wells, all located south of the Site. Their findings are as follows:

- Two previously unidentified USTs are present at the Site, to the south of the Site in the breezeway. The capacity of each is estimated to be between 4,000 and 6,000 gallons;
- Evidence of a petroleum release was detected in borings SB4, SB5 and SB7, downgradient of the UST area. The distribution indicates that the highest concentrations are in the area of the USTs. Soil and groundwater concentrations are above applicable regulatory levels;
- Soil and groundwater sampling indicated the presence of fill-related impacts;
- Chlorinated solvents have been detected above regulatory levels in soil vapor and groundwater. Shallow soil impacts were also recorded, but below applicable regulatory levels

2. ORGANIZATION AND OVERVIEW OF FIELD PROGRAM ACTIVITIES

The Scope of Work for the 2011 site characterization investigation, conducted from April through September, consisted of:

- Advancement of 11 soil borings using Geoprobe® technology and the collection of 35 soil samples for laboratory analysis;
- Installation of two monitoring wells using Geoprobe® technology;
- Collection of 6 groundwater samples (two from newly installed wells, three from existing wells, and one via Hydropunch) for laboratory analysis;
- Implementation of a Community Air Monitoring Plan (CAMP), in accordance with NYSDEC and New York State Department of Health (NYSDOH) requirements, (recorded data provided in Appendix D);
- Implementation of a noise abatement plan, in accordance with City noise ordinances;
- Excavation of three test pits for visual inspection; and,
- Survey to document locations of field activities for presentation on the Site figures.

Sediment borings were collected in Wallabout Channel along the Site shoreline, in November 2013. The sediment borings were characterized visually, using a PID, and by describing olfactory observations. No sediment samples were collected for laboratory analysis.

The Scope of Work for the 2014-2015 SSC activities conducted from November 2014 through August 2015, consisted of:

- Advancement of eight soil borings using sonic technology;
- Advancement of 15 soil borings using Geoprobe® technology;
- Excavation of seven test pits for visual inspection and sampling;
- Collection of 49 soil samples for laboratory analysis;
- Installation of two monitoring wells using Geoprobe® technology;
- Collection of 9 groundwater samples via Hydropunch for laboratory analysis;
- Implementation of a Community Air Monitoring Plan (CAMP), in accordance with NYSDEC and New York State Department of Health (NYSDOH) requirements, (recorded data provided in Appendix D);
- Implementation of a noise abatement plan, in accordance with City noise ordinances;
- Completion of a tidal study; and
- Survey to document locations of field activities for presentation on the Site figures.

Each of the components of the site characterization field investigation is discussed in more detail below.

2.1 Field Methods/Procedures

The field tasks conducted to characterize the Site were carried out in several phases, as noted below.

2.1.1 Installation of Soil Borings

Prior to commencing each soil boring, a geophysical survey was performed at the location to screen for utilities, and the location was hand-cleared to a depth of 5 feet bgs.

During the 2011 site characterization, a total of 11 soil borings (PWSB-01 through PWSB-06, PWSB-06A, PWSB-07, PWSB-08, PWMW-01 and PWMW-02) were advanced at the locations depicted on Figure 8 using direct-push drilling methods (Geoprobe®), which utilized a track-mounted direct drive rig.

During the 2014-2015 supplemental site characterization, 25 soil borings (PWSB-13 through PWSB-35, PWMW-02, and PWMW-03) were advanced at the locations depicted on Figure 8 using direct-push drilling methods (Geoprobe®) and sonic drilling methods.

Sonic drilling methods were utilized at locations PWSB-13 through PWSB-20, along the bulkhead. This method imparts a high frequency vibration to a core barrel that is "pushed" through the subsurface, and allows for advancement of the core barrel through potential obstructions. All other borings were completed using a direct push method which utilized a track-mounted direct drive rig.

Soil cores were collected continuously from the ground surface to the boring completion depth. In the Geoprobe® borings, soil cores were collected in 5-foot long, 2-inch diameter macrocore samplers lined with acetate sleeves. In the sonic borings, samples were collected in 8 foot cores, using 3 inch diameter polyethylene sleeves. Each of the soil borings was properly abandoned with a bentonite-cement grout in accordance with the Site Specific QAPP and NYSDEC protocols.

A description of the soils retained in each sample core was logged by Tetra Tech's on-site environmental scientist using the Unified Soil Classification System (USCS), and the soils were screened in the field for visual and olfactory evidence of impacts, such as staining, (unnatural) discoloration, non-aqueous phase liquid (NAPL), ash, or other residuals. Soils were also screened with a photoionization detector (PID) for the presence of VOCs and a hydrogen cyanide (HCN) detector for the presence of cyanide. PID and HCN readings were recorded on the soil boring logs presented in Appendix E.

Table 2-1 provides a summary of the borings completed, boring depths, samples collected in each boring, and the rationale for the location and completion of the borings.

During the 2011 site characterization, three samples were collected from each boring with the exceptions of PWSB-05 and PWSB-06 (excluding duplicates): one from the fill material present across the Site beneath surficial concrete and asphalt, one immediately above the water table, and one sample from the bottom of each boring, at approximately 40 feet bgs. Because no visual or olfactory impacts were noted, samples were collected immediately above the water table to evaluate potential impacts of the fill to the water table. All of the borings were advanced after coring through surficial concrete slabs, so no surface samples were collected. Only two samples were collected from PWSB-06 due to refusal, and four samples were collected at PWSB-05 (one from an original attempt that was refused at four feet bgs and three from the two subsequent efforts, the latter of which reached the target depth of 40 feet bgs). A total of 35 soil samples, including duplicates, were collected from the 11 soil boring locations. These samples were analyzed for Target Compound List (TCL) VOCs, TCL SVOCs, TAL metals, pesticides, herbicides, PCBs, and free cyanide.

Soil samples and associated Quality Assurance/Quality Control (QA/QC) samples were submitted to Chemtech of Mountainside, New Jersey, a NYSDOH Environmental Laboratory Accreditation Program (ELAP)-certified laboratory, for analysis. QA/QC samples were collected and included two duplicates and two matrix spike/matrix spike duplicates (MS/MSD).

During the 2014-2015 SSC, up to two soil samples per boring were collected for chemical analysis. In borings where impacts were observed (visual, olfactory or PID readings), one soil sample was collected at the depth interval indicating the greatest degree of observed impacts and one sample was collected 10 feet below the deepest occurrence of observed impacts, or at the termination of the boring. If no impacts were observed within a particular boring, then a sample was collected immediately above the groundwater table. A total of 38 soil samples were collected during the SSC, and were analyzed for BTEX, PAHs and free cyanide. Soil samples were submitted to Accutest Laboratories of Marlborough, Massachusetts, a NYSDOH ELAP certified laboratory, for analysis.

2.1.2 Test Pit Excavation

Prior to commencing each test pit, a geophysical survey was performed at the location to screen for utilities.

Four test pits, PWTP-A, PWTP-B, PWTP-C and PWTP-8, were excavated in the driveway adjacent to the northern portion of the Site, as shown on Figure 8, to characterize potential impacts from Site processes Seven test pits, PWTP-1 through PWTP-7, were excavated to determine the presence or absence of former MGP

structures. The test pits were excavated primarily on evenings and weekends to avoid interference with operations of the property owner. The test pits were excavated to groundwater. Each test pit was examined for potential impacts both visually and by screening with a PID. The test pit logs are provided in Appendix F.

Two samples were collected from PWTP-A: one from an asphalt-like material and one from the soil around this material. The test pit soil sample was analyzed for TCL VOCs, TCL SVOCs, pesticides, herbicides, PCBs, TAL metals, and free cyanide. The asphalt-like material was analyzed for BTEX.

In test pits PWTP-1 through PWTP-8, one soil sample was collected from apparently impacted (as indicated by visual or olfactory observations or PID readings) material, as well as from the bottom of the test pit, below observed impacts and analyzed for BTEX, PAHs, and free cyanide. If no impacts were observed, then one sample was collected from a sidewall of the test pit. A total of 11 soil samples were collected from the test pits during the supplemental investigation, and were analyzed for BTEX, PAHs and free cyanide. These soil samples were submitted to Accutest Laboratories for analysis.

Soils excavated from the test pits area, upon completion, were then returned to the approximate depth from which they had been removed, and the asphalt or concrete repaired.

2.1.3 Groundwater Monitoring Well Installation

Four groundwater monitoring wells, PWMW-01 through PWMW-04, were installed as part of the field program (Figure 8). PWMW-01 and PWMW-02 were installed to characterize potential impacts from processes associated with the former MGP structures. PWMW-03 was installed to characterize groundwater hydraulically upgradient of the breezeway area. PWMW-04 was installed to replace MW-12, which had been damaged by operations of the property operator, Certified Lumber. The wells were installed as pre-packed 2-inch polyvinyl chloride (PVC) wells with a 10-foot 0.020-inch slotted screened interval. Monitoring well construction diagrams (Appendix G) contain construction information, including well depths and elevations, as well as casing, screen, and annular fill information.

2.1.4 Groundwater Sampling

A total of seven groundwater samples including one duplicate, were collected during the 2011 site characterization investigation to identify the presence or absence of impacts to groundwater. Six groundwater samples, including the duplicate, were collected from monitoring wells: two from monitoring wells installed as part of the SC (PWMW-1 and PWMW-02) and three (MW-9, MW-11, and MW-12) from monitoring wells previously installed during the AKRF Phase II. In addition, a groundwater grab sample was collected from PWSB-02.

A full round of synoptic groundwater level measurements was collected from all wells on site and on Lots 1 and 150 south of the Site prior to sampling. Measurements were taken at a notch in the inner casing or from a point on the northernmost side of the inner casing of each monitoring well. Groundwater level measurements were recorded using a water level indicator to an accuracy of 0.01 foot. NAPL was not observed in any of the monitoring wells. Each monitoring well was screened with a PID immediately upon opening the casing. VOCs were not detected in the headspace of any monitoring well.

Collection of groundwater samples from monitoring wells was performed following low-flow sampling techniques using a peristaltic pump, and the following parameters were recorded via field instrumentation until stabilization requirements, as outlined in the SCWP, were met: temperature, conductivity, oxidation reduction potential (ORP), dissolved oxygen, pH, and turbidity. The groundwater samples were properly labeled, packaged, and transported to Chemtech, a NYSDOH/ELAP certified laboratory. Purge water was collected in five-gallon buckets and transferred to Department of Transportation (DOT) approved 55-gallon steel drums for subsequent off-site disposal. Monitoring well purge data sheets are included in Appendix H. Groundwater samples collected from monitoring wells were analyzed for TCL VOCs, TCL SVOCs, TAL metals, pesticides, herbicides, PCBs, and total cyanide. The TCL VOC aliquot was collected using a dedicated bailer and the remaining parameters were collected via the peristaltic pump.

The groundwater grab sample, collected from PWSB-02, one of the two soil boring locations in the former gas holder footprint, was collected to determine the presence or absence of MGP-related impacts. The sample was collected as described in the SCWP, and was analyzed for TCL VOCs, TCL SVOCs, TAL metals, pesticides, herbicides, PCBs, and free cyanide.

During the 2014-2015 SSC, nine groundwater grab samples were collected from borings PWSB-21 through PWSB-25, PWSB-28, PWSB-30, PWSB-33, and PWSB-34 to further characterize the groundwater at these locations. A Hydropunch® tool was used to collect the groundwater grab samples. After the boring was advanced to the water table using direct push technology, the Hydropunch sampler was driven into the soil below the water table, then pulled back two feet to allow the ground water to enter the sampler. The sampler was then retrieved and ample volume decanted into appropriate glassware. These samples were then submitted to Accutest Laboratories to be analyzed for BTEX and PAHs.

2.1.5 Sediment Sampling

Five borings (PWSED-01 through PWSED-05) were completed to evaluate the presence or absence of MGP-related impacts in the Wallabout Channel adjacent to the Site (Figure 9). One boring was located up-channel from the Site (nearer the head of Wallabout Channel), one boring was located down channel from the Site (nearer the confluence of Wallabout Channel and the East River), and three borings were located in

the Wallabout Channel adjacent to the Site. The borings were located approximately 20 feet from the bulkhead. Prior to completion of the borings, a geophysical survey was conducted of the sediment surface and subsurface of the study area for the purpose of locating utilities. None were observed in this area.

Two step-out borings (PWSED-06 and PWSED-07) were completed after blebs were observed at PWSED-05. PWSED-06 was completed 50 feet north of PWSED-05, and PWSED-07 was completed approximately 50 feet west of PWSED-05.

Sediment borings were installed utilizing a resonant sonic drilling rig staged on a barge. Borings PWSED-01 through PWSED-05 were advanced approximately 35-40 feet below the top of sediment. Borings PWSED-06 and PWSED-07 were advanced approximately 18 and 15 feet, respectively, below the top of sediment. Each soil boring was continuously logged, and sediment and soils from each boring were visually characterized to evaluate the presence or absence of tar impacts. A PID was used to screen all cores, and measurements are recorded on the boring logs.

2.1.6 Tidal Study

A tidal study was conducted on March 3 and 4, 2015 to determine the tidal influence on groundwater at the Site. Water level data loggers were placed in MW-5, MW-9, MW-11, PWMW-01, PWMW-02 and PWMW-03, and recorded groundwater elevations across two tidal cycles. The surface water elevation in Wallabout Channel was measured from a fixed point on the bulkhead at the Site.

2.2 Surveying and Mapping

All of the monitoring well locations, soil borings, and test pit locations were surveyed by a surveyor licensed in the State of New York, and located on a base map. Top of inner casing measurements for monitoring wells were used in determining groundwater elevations. Sediment boring locations and elevations were determined using GPS.

Vertical datum is the National Geodetic Vertical Datum (NGVD) of 1988. Establishment of vertical control benchmarks was to third-order accuracy with a precision of 0.01 foot, utilizing existing benchmarks. Horizontal datum is the New York State Plane Coordinate System (North American Datum (NAD) of 1983). Establishment of horizontal control benchmarks was to third-order accuracy with a precision of 0.1 foot by utilizing existing benchmarks.

2.3 Site Restoration

Upon completion of the soil borings, those not converted to wells were grouted, and the concrete slab patched with concrete. The test pit locations were paved with asphalt or patched with concrete, as appropriate.

2.4 Investigation Derived Waste (IDW)

Purge and development water, soil, sediment and personal protective equipment (PPE) were placed in DOT approved 55-gallon drums elevated on pallets. Construction debris (*e.g.*, cobbles, brick and asphalt) was also generated during the test pit excavation. The drums were properly sealed and appropriately marked.

IDW samples were collected from the soil, sediment, and water, as appropriate after each phase of work. The samples were analyzed for waste characterization parameters (*e.g.*, Resource Conservation and Recovery Act (RCRA) characteristics, toxicity characteristic leaching procedure [TCLP], and PCBs), as well as parameters specific to the disposal facility. All IDW was characterized non-hazardous, and was transported from the Site to approved disposal facilities by WRS Environmental Services in 2011 and Clean Waters in 2013 and 2015.

2.5 Deviations

The methods and/or procedures used by Tetra Tech, on behalf of National Grid, were conducted in accordance with:

- The NYSDEC-approved SCWP dated June 2008.
- The March 2013 SSC Work Plan,
- The August 2014 SSC Scope of Work, and;
- The May 2015 SC Supplemental Scope of Work, and;

Deviations from this program were agreed to via conversations between Tetra Tech, NYSDEC, and National Grid.

As described in the SCWP, a single trench, approximately 50-75 feet in length, was to be excavated in the driveway on Lot 1 immediately north of the Site using a backhoe. However, the presence of numerous utilities in the area of the planned excavation required a change in methodology. After discussion with National Grid and NYSDEC, three smaller pits, PWTP-A, PWTP-B, PWTP-C, approximately three feet wide and five feet in length, were excavated using hand tools, a portable vacuum unit, and a mini-backhoe.

As described in the SCWP, monitoring well PWMW-01 was to be installed near the northeast corner of the eastern building at the top of the driveway. However, the presence of utilities and access considerations required moving this planned well location. Several attempts were made to install the well along the sidewalk on Kent Ave, approximately 50 feet south of the northeast corner of the building; however, refusal during drilling necessitated installation of PWMW-01 in the northeast corner of the basement of the warehouse. This change was completed after discussion with National Grid and NYSDEC.

Six soil borings were proposed in the SCWP. After discussion with National Grid and NYSDEC, two additional soil borings, PWSB-07 and PWSB-08, were completed in the covered roadway to characterize the soil in this area. The two borings were installed and sampled as described above in Section 2.1.1.

3. SITE GEOLOGY AND HYDROGEOLOGY

3.1 Geology

The geology of the New York City area is characterized by crystalline or metamorphic bedrock overlain by glacial deposits that, in turn, may be overlain by post-glacial alluvial deposits and/or fill materials. Bedrock beneath the Site is the Ravenswood Formation gneiss (Fisher, et al., 1970), which is approximately 100 feet bgs (USGS, 1953).

The Site is entirely covered by paved areas and buildings with concrete slab floors. Beneath the concrete slabs and paving, field observations made during sample collection activities reveal the Site is covered with up to at least 10 feet of fill, and historic information indicates that the fill is likely thicker in some areas of the Site (Figure 10). The fill is likely composed of typical urban fill, characterized by bricks and gravel in the upper layers, and reworked sand in the lower portion of the fill. Much of the shoreline along the Site has been filled over time. A Site area map created in 1925 shows the 1776-1777 historic shoreline prior to the creation of Wallabout Channel, and indicates that the Site area was created by filling, as much as a block inland from the current shoreline. During the SC and SSC, sands were noted beneath the urban fill along the bulkhead and over much of the Site. However, as this area was created by filling, as noted above, this sand is likely reworked local sands.

Below the fill materials are sands and silts. Near the river, a wedge of silts and clays was noted, underlain by a peat layer. This lithology reflects palustrine deposits along the East River channel, likely overlain by fill, including sand, during development of the East River waterfront. The sediment consisted of silts with organic material underlain by sands, with lenses of gravel observed at several locations (Figure 11).

3.2 Hydrogeology

The Site is located along the Wallabout Channel, near the East River. Groundwater was encountered in all of the boring locations during SC field activities. Groundwater levels were approximately 9 to 10 feet bgs across the Site. Due to proximity of the Site to the Wallabout Channel, the groundwater is suspected to be saline and/or brackish.

The monitoring wells were screened across the water table. Groundwater levels measured on July 21, 2011 ranged from -0.84 feet msl in SB/MW-9 to 3.13 feet msl in well SB/MW-12 (Figure 12). The measured groundwater elevation at MW-9 may be related to well construction or condition (e.g., shifted or sunken casing, damage, etc.), subsurface structures in the area of the well, or tidal influence. The groundwater flows in a southwest direction toward the Wallabout Channel.

The Borough of Brooklyn is supplied by the New York City water supply (i.e., a municipal supply system), which derives its drinking water from upstate reservoirs. There is little potential for current and/or future use of site groundwater as a source of drinking water.

Tidal influence was observed in MW-09 and PWMW-02, the two wells monitored which were closest to the bulkhead, as well as in PWMW-03. In addition, a tidal response was noted in PWMW-01, in the basement of the eastern building. The tidal response in these wells was less than one foot. This well showed variations of 2-3 inches across tidal cycles that correlated almost directly with tidal measurements in the Wallabout Channel.

4. RESULTS

The samples collected during the SC and SSC were collected in accordance with the SCWP and QAPP and were analyzed by a NYSDOH ELAP certified laboratory. Laboratory analyses and chemical data reporting in support of this project were performed by Chemtech and Accutest. The data were reviewed, and data usability summary reports (DUSRs) were prepared and are included in Appendix I.

The analytical data received from the certified laboratories were compared against applicable NYSDEC regulatory standards and guidelines. The Site is currently part of a commercial use property (i.e., Certified Lumber). However, at the time of the SC and SSC activities, the property owner planned to convert the second and third floors of the eastern building to lofts, and eventually remove the buildings and construct residential towers. Therefore, comparison criteria were selected based on the current use and potential future use of the Site. A summary of the standards and guidelines used to evaluate the specific data are described below.

- *Soil Data* – Analytical results for soil samples were compared to NYSDEC Remedial Program Soil Cleanup Objectives (SCO) for the Protection of Public Health - Commercial criteria, and for the Protection of Public Health - Restricted-Residential criteria.
- *Groundwater Data* – Analytical results for groundwater samples were compared to NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA Groundwater.

4.1 Soil

A total of 82 soil samples and 4 duplicate samples were collected from 36 soil borings and 11 test pits during the SC and SSC. In general, soil samples were collected from the most impacted interval (generally the fill material beneath the pavement and structure slabs) or immediately above the groundwater table, and at the termination of the boring. A total of two samples were collected from test pit PWTP-A: one from an asphalt-like material and one from the soil around this material.

Soil borings PWSB-27, PWSB-31, PWSB-32, and PWSB-35, and test pits PWTP-A, PWTP-B, PWTP-C, and PWTP-8 were completed off the Site in the driveway immediately to the north of the Site. PWSB-06 was completed in the basement of the eastern building, immediately south of the Site.

The results of these soil sample analyses are presented in Tables 4-1 through 4-7. Figures 13 and 14 depict soil sample locations, as well as the total BTEX and total PAH concentrations for each sample.

4.1.1 Visual and Olfactory Impacts

On-Site

Limited visual or olfactory impacts were identified on Site during this SC and SSC. Slight naphthalene-like odors were noted in PWSB-13, 14 and 16, along the bulkhead, and in PWSB-22 and PWSB-34. In PWSB-13 and PWSB-14, these odors were noted between 25 and 30 feet bgs. In PWSB-16, they were noted from 1 to 12 feet bgs, and in PWSB-22 and PWSB-34, they were noted from 10 to 11 feet bgs.

Petroleum-like odors were noted in borings in and around the north end of the breezeway: PWSB-08, PWSB-25, PWSB28, PWSB-29, and PWSB-30.

Off Site

Limited visual or olfactory impacts were identified off-site during this SC and SSC. These impacts were noted primarily northwest of the Site in a former embayment at boring locations PWSB-27, PWSB-31, and to a lesser extent at PWSB-35. Sand and gravel coated with NAPL was noted in PWSB-27 between 14 and 15 feet bgs and in PWSB-31 between 9 and 11 feet bgs. Solid NAPL was observed in PWSB-31 at 13 feet bgs. NAPL blebs and sheen were observed in PWSB-31 between14.5 and 18 feet bgs. Naphthalene-like odors were also noted in these two borings between 7 and 22 feet bgs.

In PWSB-35, east of the PWSB-27 and PWSB-31 area, NAPL blebs were observed at approximately 7 feet bgs. Naphthalene-like odors were noted in this boring at approximately 19 feet bgs, and petroleum-like odors were noted at several intervals between 7 and 30 feet bgs. In PWSB-32, west of the PWSB-27 and PWSB-31 area, naphthalene-like odors were noted at several intervals between 16 and 30 feet bgs.

A small piece of asphalt-like material and naphthalene-like odors were noted in Test Pit A. A small piece of solid NAPL was noted in test pit PWTP-3, but no odors were noted.

4.1.2 Volatile Organic Compounds

On-Site

In 2011, BTEX was detected in one of the subsurface soil boring samples completed on Site, PWMW-02-1-6 at 0.0036 mg/kg, which was collected from the interval below the concrete slab. None of the individual BTEX constituents were detected above applicable SCOs (see Table 4-1).

In 2014-2015, low concentrations of BTEX were detected in most of the samples (see Table 4-2). BTEX were detected at concentrations that were above their respective NYSDEC Restricted-Residential SCOs in PWSB-25, located at the north end of the breezeway near the eastern building and exhibited a petroleum-like odor during sampling.

Off Site

Total BTEX in the asphalt-like material sample (PWTP-A-2.5) was 30.4 mg/kg. None of the individual BTEX constituents were detected above applicable SCOs (see Table 4-1).

In 2014-2015, low concentrations of BTEX were detected in most of the samples (see Table 4-2). BTEX were detected at concentrations that were above their respective NYSDEC Commercial SCOs in PWSB-31 and PWSB-35. PWSB-31 and PWSB-35 are located in the northwest area of the Site, and exhibited NAPL and naphthalene-like odors.

4.1.3 Semi-Volatile Organic Compounds

Exceedances of only Restricted-Residential SCOs were detected in 2 of the 86 soil samples collected, and exceedances of both Restricted-Residential and Commercial SCOs were detected in 27 of the 86 samples (Tables 4-3 through 4-5).

On-Site

Detections of PAHs exceeding criteria on Site ranged from 0.348 mg/kg (dibenz(a,h)anthracene) in PWTP-2-7-7.5 to 266 mg/kg (phenanthrene) in PWSB-16-8.5-9.

Total PAHs ranged from not detected in 31 samples to 1,117.49 mg/kg in sample PWSB-16-8.5-9, which was collected from the interval exhibiting a naphthalene-like odor. Exceedances of both Restricted-Residential and Commercial SCOs were detected for several PAHs in 13 of the soil boring locations. Exceedances of both Restricted-Residential and Commercial SCOs were also detected in four test pits PWTP-1, PWTP-2, PWTP-3, and PWTP-7.

Off Site

Detections of PAHs exceeding criteria ranged from 0.448 mg/kg (dibenz(a,h)anthracene) in PWTP-8-6.5-7 to 1,350 mg/kg (naphthalene) in PWSB-31-13.5-14.

Total PAHs ranged from not detected in one sample to 6,708.7 mg/kg in sample PWSB-31-13.5-14, which was collected from the interval exhibiting NAPL coated sands and

gravel. Exceedances of both Restricted-Residential and Commercial SCOs were detected for several PAHs in four of the five of the soil boring locations. Exceedances of both Restricted-Residential and Commercial SCOs were also detected in test pit PWTP-8.

4.1.4 Pesticides, Herbicides and PCBs

Twenty-six of the 86 soil samples collected were analyzed for herbicides, pesticides and PCBs during the Site Characterization (see Table 4-6). Pesticides, herbicides, and PCBs were not detected above their respective NYSDEC Restricted-Residential and Commercial SCOs in any of the samples.

4.1.5 Metals/Inorganics

Thirty-six of the 86 soil samples collected were analyzed for mercury, which was detected in 26 of the soil boring samples collected (see Table 4-7). Mercury was detected at a concentration exceeding the Restricted-Residential SCO in PWMW-01 from the sample collected from the fill below the slab (1.42 mg/kg from 1 to 3 feet bgs) and exceeded the Commercial SCO from the sample from immediately above the groundwater table (2.99 mg/kg from 6 to 9 feet bgs). Mercury was also detected above the Restricted-Residential SCO in the test pit soil sample PWTP-A (1.44 mg/kg at 2.5 feet bgs).

One off-Site sample, PWSB-06-1-2, was analyzed for mercury. The detected mercury concentration did not exceed the applicable SCOs.

Sixty-one of the 86 soil samples collected were analyzed for free cyanide (see Table 4-7). There were no exceedances of the applicable SCOs in any of the samples.

4.2 Groundwater

In 2011, a total of six groundwater samples and one duplicate sample were collected during the SC investigation. One groundwater grab sample was collected from soil boring location PWSB-02 via Hydropunch methodology during completion of this boring. Five groundwater samples were collected from three existing monitoring wells and two monitoring wells installed during the SC. During the 2014-2015 SSC investigation, nine groundwater grab samples were collected from PWSB-21 through PWSB-25, PWSB-28, PWSB-30, PWSB-33, and PWSB-34, and were analyzed for BTEX and PAHs only.

The results of these analyses are presented in Tables 4-8 through 4-14. Figure 12 depicts groundwater sampling locations, as well as the total BTEX and total PAH concentrations for each groundwater sample. The groundwater analytical results were compared against the NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA Groundwater (AWQS).

4.2.1 Volatile Organic Compounds

In the seven groundwater samples collected in 2011, eight VOCs were detected exceeding AWQS in five of the seven samples, primarily in MW-11 and MW-12. Detected VOCs ranged from 2.1 µg/L (benzene) in PWSBGW-02 to 1,600 (xylene) in MW-12. At five of the seven samples analyzed for the full suite of VOCs, benzene and tetrachloroethene (PCE), were detected at concentrations exceeding the applicable AWQS. Detected concentration in the groundwater grab sample (PWSBGW-02-10-20) collected from soil boring location PWSB-02 at a depth of 10 to 20 feet bgs. The PCE detected at PWSB-02 and PWMW-01, are not associated with MGP activities and are likely the result of a release from a subsequent site tenant or from off-site migration onto the Site.

In 2014-2015, benzene was detected at concentrations exceeding the applicable AWQS in the groundwater grab samples at all locations sampled except PWSB-21 and PWSB-34. Ethyl benzene, toluene and total xylenes exceeded applicable AWQS in PWSB-22, PWSB-25, PWSB-28, and PWSB-30. The highest concentrations of BTEX were detected in PWSB-25, at the north end of the breezeway, in which petroleum-like odors were noted.

BTEX was not detected in the two downgradient wells (MW-09 and PWMW-02), and were detected at a total concentration of 0.62 µg/L in the duplicate sample collected from PWMW-01, at the northeastern corner of the Site, upgradient of most of the former MGP facilities.

4.2.2 Semi-Volatile Organic Compounds

In 2011, SVOCs were detected at concentrations exceeding the applicable AWQS in samples collected from monitoring wells SB/MW-11 (2-methylphenol, acenaphthene, and phenol) and SB/MW-12 (2,4-dimethylphenol, naphthalene, and phenol).

PAHs were not detected in the two downgradient wells (MW-09 and PWMW-02), and were detected at total concentrations of 10 µg/L in the sample collected from PWMW-01, at the northeastern corner of the Site, upgradient of most of the former MGP facilities.

Total PAHs in the groundwater grab samples ranged from 7.74 µg/L in PWSB-33 to 506.3 µg/L in PWSB-21. Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(j/k)fluoranthene, chrysene/triphenylene, fluoranthene, indeno(1,2,3-cd)pyrene, naphthalene, pyrene, all exceeded the applicable AWQS in at least one of the groundwater grab samples.

4.2.3 Pesticides, Herbicides and PCBs

Herbicides, pesticides, and PCBs were not detected in groundwater samples.

4.2.4 Metals/Inorganics

Sodium was detected above the AWQS in all five monitoring well groundwater samples. Manganese concentrations exceeded the AWQS in all of the sampled monitoring wells except for SB/MW-9; magnesium concentrations were above the AWQS in the samples collected from monitoring wells PWMW-02, SB/MW-09, and SB/MW-11; and iron was detected above the AWQS in the sample collected from PWMW-02.

Iron, magnesium, manganese and sodium are not typically groundwater contaminants, but rather are general indicators of groundwater geochemistry. The elevated levels of inorganics are likely not related to former MGP operations at the Site.

Twelve metals (aluminum, beryllium, cadmium, chromium, copper, iron, lead, magnesium, manganese, mercury, nickel, and sodium) were detected at concentrations above the applicable AWQS. Groundwater samples collected as grab samples (as opposed to samples collected from monitoring wells) typically have higher suspended solids content. Samples with high turbidity (due to high solids content) may result in biased high concentrations of total metals. Cyanide was detected in the groundwater grab sample, but the concentration was below the AWQS.

4.3 Sediment

Naphthalene-like odors were identified in sediment borings PWSED-01 through PWSED-05. Petroleum-like odors were also noted in borings PWSED-01 through PWSED-03. However, visual impacts, consisting of NAPL blebs, were only observed in PWSED-05. The blebs were observed within a two-foot interval of silt and gravel, at approximately 3 to 5 feet below the sediment surface. Step-out sediment borings PWSED-06 and PWSED-07 exhibited no visual or olfactory impacts, suggesting the impacts at PWSED-05 are localized.

5.0 QUALITATIVE HUMAN HEALTH EXPOSURE ASSESSMENT

5.1 Introduction

This QHHEA presents an evaluation of the complete and incomplete exposure pathways associated with potential human exposure to identified chemicals of potential concern (COPCs) at the Former Peoples Works Manufactured Gas Plant Site located in Brooklyn, New York City, Kings County, New York.

The QHHEA describes the potential for contact between the current and potential future site users (herein referred to as “receptors”) and the exposure media indicated to be impacted by past operations at the site, the placement of contaminated historic fill material, or subsequent releases on-site or at neighboring properties. This report is based on field activities conducted at the Site by Tetra Tech from April through September of 2011. Additional information relevant to site conditions and the potential for exposures was compiled from previously published reports.

A complete human exposure pathway is composed of the following five elements (NYSDEC, 2010):

- A source and mechanism of chemical release to the environment;
- An environmental transport medium for the released chemical or mechanisms of transfer of the chemical from one medium to another;
- A point of potential contact by humans with the contaminated medium;
- An effective route of exposure (i.e., ingestion, dermal absorption, or inhalation) for that chemical; and
- A receptor population.

This assessment outlines the interactions and linkages between the onsite areas contaminated with the identified COPCs, the potential current and future site users, and the environmental media to which these site users may be exposed now or in the foreseeable future. The assessment considers the primary sources and release mechanisms resulting in the presence of the COPCs in the onsite environmental media, as well as the transport and migration processes for these COPCs within and between the various identified exposure media. The potential exposure pathways reflected in the assessment are discussed below according to whether they were considered to be incomplete or potentially complete, respectively.

The QHHEA evaluated the complete and potentially complete exposure pathways for human receptors relative to the COPCs identified for each impacted exposure medium given the current and potential future use of the Site. Table 5-1 identifies the chemicals whose detected concentration in each exposure medium exceeded the applicable

NYSDEC criteria for that medium given the projected land use and associated onsite activities.

Table 5-1: Summary of COPCs Exceeding Applicable NYSDEC Criteria by Exposure Medium

COPCs Exceeding Criteria	Subsurface Soil (Restricted Residential SCO)	Subsurface Soil (Commercial SCO)	Groundwater (AWQS)
VOCs			
Benzene	-	-	X
Chloroform	-	-	-
Ethylbenzene	-	-	X
Isopropylbenzene	-	-	X
m/p-Xylenes	-	-	X
o-Xylene	-	-	X
Styrene	-	-	X
Tetrachloroethene	-	-	X
Toluene	-	-	X
Trichloroethene	-	-	-
SVOCs			
2,4-Dimethylphenol	-	-	X
2-Methylphenol	-	-	X
Acenaphthene	-	-	X
Benzo(a)anthracene	X	X	-
Benzo(a)pyrene	X	X	-
Benzo(b)fluoranthene	X	X	-
Benzo(k)fluoranthene	X	-	-
Chrysene	X	-	-
Dibenz(a,h)anthracene	X	X	-
Indeno(1,2,3-cd)pyrene	X	X	-
Naphthalene	-	-	X
Phenol	-	-	X
Total Metals			
Aluminum	-	-	X
Beryllium	-	-	X
Cadmium	-	-	X
Chromium	-	-	X
Copper	-	-	X
Iron	-	-	X
Lead	-	-	X
Magnesium	-	-	X
Manganese	-	-	X
Mercury	X	X	X
Nickel	-	-	X
Sodium	-	-	X

There were no detections of herbicides or pesticides within any of the sampled exposure media. No PCBs were detected in the test pits or groundwater, and the detections of PCBs (Aroclor 1260) in the subsurface soil did not exceed the applicable NYSDEC criterion. As indicated in Table 5-1, various VOCs, SVOCs, and metals were detected at elevated levels relative to the identified criteria within the subsurface soils

and the groundwater. The locations of samples exceeding criteria are in general located within the central and eastern portions of the Site. As discussed in Section 3.1, the lithology of the Site is primarily fill material underlain by sands and silts. The fill material may be the source of many of the soil COPCs listed in Table 5-1.

5.2 Human Exposure Assessment

The assessment for the potential human health exposure pathways for the former Peoples Works MGP site is presented in Table 5-1.

5.2.1 Incomplete Current/Future Exposure Pathways

Based on the SC sampling data and information from the field investigation, presented in Section 4.0, the following exposure pathways were judged to be incomplete and were not further considered in this QHHEA:

- The Site is an active commercial site with a retail building and a lumberyard. In the future, should this building be used for residential, the property owner may convert the second and third floors of the eastern building to lofts, and eventually remove the buildings and construct residential towers. The pavement provides a significant barrier to incidental ingestion, dermal absorption, or fugitive particulate inhalation of the subsurface soils. The future resident is not expected to do any excavation activities that would require breaking up the pavement and digging into the subsurface soil or coming into contact with the shallow groundwater. Any volatiles released from the subsurface soils or groundwater through the pavement would likely quickly dilute and disperse into the open air of the Site. Therefore, pathways associated with direct or indirect contact with the subsurface soil, groundwater, and vapor are not considered to be complete for the future resident.
- The brick building along Kent Avenue is the only structure on site with an enclosed, occupied space (a fully enclosed, concrete basement), which extends into the subsurface. The basement is used as a storage area, and no retail customers are permitted access. Commercial workers enter the basement at irregular intervals for short periods of time to either pick up or return stored materials. Retail customers are only allowed in the retail store on the first floor, and typically are not present for an extended period of time. Commercial workers may be exposed to volatile constituents present in the subsurface of the footprint of the building through the migration of impacted vapors to the indoor air of the basement building. Although less likely, volatile constituents may potentially migrate to the floor above the basement where they may be inhaled by retail customers. However, the floor of the basement, approximately 4-12 inches in thickness, is in good condition. As it has been well maintained, the floor and walls would act as a significant physical barrier to any upward vapor

migration and intrusion. The detected concentrations of volatiles in the groundwater directly below the building were low, and more elevated levels were detected outside and down-gradient of the footprint of the brick building and the basement/retail store. Furthermore, based on soil vapor intrusion studies from other National Grid former MGP Sites, BTEX compounds have not been found to be the cause of vapor intrusion issues at these sites. The relatively low levels of VOCs underneath the building, the short timeframe that either receptor would remain inside the building relative to a typical residential exposure, the physical barrier of the concrete basement, and the fact that BTEX compounds are the primary groundwater contaminants, indicate that the indoor air pathway is likely not complete for the commercial worker, the retail customer, or potential future loft residents.

- The surface of the Site is entirely paved or covered with concrete building slabs, with no sumps or other non-paved expanses or breaks that would allow receptors such as a commercial worker to be exposed to the subsurface soil or groundwater below the Site. The pavement provides a significant barrier to incidental ingestion, dermal absorption, or fugitive particulate inhalation of the subsurface soils. The commercial worker is not expected to do any excavation activities that would require breaking up the pavement and digging into the subsurface soil or coming into contact with the shallow groundwater. Any volatiles released from the subsurface soils or groundwater through the pavement would likely quickly dilute and disperse into the open air of the Site. Therefore, pathways associated with direct or indirect contact with the subsurface soil and groundwater are not considered to be complete for the commercial worker.
- Inhalation of volatiles in the outdoor air is not considered to be a complete pathway for construction or utility workers. Similar to the commercial worker described above, any limited amount of volatiles released into the ambient air during construction or utility installation or repair activities would likely disperse quickly in the open air, such that this pathway is considered to be incomplete.
- New York City relies on other sources other than groundwater for its potable water. There is, therefore, little potential for the current or future use of groundwater at the Site as a source of drinking water. As such, the potential pathways associated with the consumptive use of the groundwater as a drinking water source (i.e., ingestion and dermal absorption via drinking, bathing and washing) are not considered to be complete and are not considered further.

5.2.2 Potentially Complete Current/Future Exposure Pathways

The Site currently includes a lumberyard and retail paint store. In addition, routine maintenance or facility modifications could occur. Contingent upon such activities, construction and utility work may need to be performed. As such, exposure pathways associated with these receptors were considered.

As noted earlier, only those pathways that are considered complete (i.e., where all five elements are present) provide the potential for exposure and risk. Complete exposure pathways are identified in Table 5-2 for the current or potential future receptors and the identified COPCs in the various exposure media.

There is a potential for exposure to the subsurface fill material during trenching and excavation at the Site. Given the shallow depth to groundwater on site (i.e., approximately 10 feet bgs), groundwater may pool up in near surface trenches or excavations. The construction worker and utility worker are assumed to have potential exposures to the COPCs within the subsurface soil or groundwater. Direct exposure to contaminants in the soil or groundwater may be prevented by protective clothing. The complete exposure pathways identified for both of these receptors are incidental ingestion, dermal absorption, and the inhalation of volatile organic compounds and wind-borne soil particulates in the ambient air.

The Site is private property that is fenced and only accessible via locked gates at the facility entrances. The secured gates are part of a fence that runs along the perimeter. Additionally, there is a security guard on site at all times. The Site is only utilized by the employees and customers of the Certified Lumber Corporation as well as the retail space along Kent Ave. However, the extent of site security during proposed future construction activities is uncertain, therefore while there are no current potential exposure pathways associated with trespassers, a future exposure pathway cannot be ruled out.

The elevated levels of VOCs detected in groundwater west of the eastern building have the potential to result in exposure to impacted indoor air for future residents. However, the extensive re-working of the Site that is likely during construction, in addition to the placement of concrete slabs and paving as part of the development, likely would mitigate this risk. Furthermore, there are no indications that the contaminant concentrations in detected groundwater are related to the former MGP, and, based on soil vapor intrusion studies from other National Grid former MGP Sites, BTEX compounds have not been found to be the cause of vapor intrusion issues.

5.2.3 Exposure Profiles for the Target Receptors

The following receptors are associated with the complete or potentially complete exposure pathways described above relative to the current and potential future use of the Site as described above:

- Construction Worker
- Utility Worker
- Trespasser

Descriptions of each of these receptors relative to their potential for exposure to the various media at the Site and the complete exposure pathways are presented in the following subsections.

Construction Worker

A potential future construction worker is assumed to be an adult (aged 18+ years) working outdoors periodically onsite conducting future excavation/construction activities. As noted earlier, construction activities are likely to disturb the paved or otherwise covered surfaces, resulting in potential exposure to the soil and groundwater. Construction workers excavating in the saturated zone may be exposed to groundwater and continue to work, which could cause direct contact exposures (incidental ingestion and dermal absorption) with the groundwater to this receptor. Excavation activities may also create conditions that would release volatiles into the ambient air that will likely disperse quickly. The inhalation of released volatiles from beneath the site, while likely not a significant source of exposure, is a complete pathway. Both direct contact exposures and the indirect contact exposure due to inhalation of wind-borne soil particulates are assumed to be complete for the construction worker.

Utility Worker

A potential future utility worker is assumed to be an adult (aged 18+ years) working outdoors periodically onsite conducting utility-related activities, such as the repair or replacement of underground storage utilities. Due to the shallow depth to groundwater at the site, utility-related activities may disturb the saturated zone, allowing potential exposure to the groundwater. Utility workers excavating in the saturated zone may get wet and continue to work, which could cause direct contact exposures (incidental ingestion and dermal absorption) with the groundwater. Excavation activities may also create conditions that would release volatiles into the ambient air that will likely disperse quickly. The inhalation of released volatiles from beneath the site, while likely not a significant source of exposure, is a complete pathway. Both direct contact exposures and the indirect contact exposure due to inhalation of wind-borne soil particulates are assumed to be complete for the utility worker.

Trespasser

The potential future trespasser was defined as an adolescent (aged 12 to 18 years) who may reside near the Site. The trespasser was assumed to have potential exposure to the subsurface soil while walking through the Site during construction activities. Both direct (incidental soil ingestion and dermal absorption) and indirect (inhalation of soil particulates) subsurface soil exposures are potentially complete pathways for the trespasser. In addition, the inhalation of released volatiles from beneath the site, while likely not a significant source of exposure, is a complete pathway while the ground cover (e.g., asphalt) is removed and the subsurface soil is disturbed. The exposure frequency and duration for a trespasser would reflect infrequent access and infrequent durations.

5.3 Summary

This QHHEA was conducted as a component of the SC prepared for the Former Peoples Works MGP Site. The QHHEA evaluated the complete and potentially complete exposure pathways for human receptors relative to the COPCs identified for each impacted exposure medium given the current and potential future use of the Site (see Table 5-1).

As a result of the physical barrier of the basement floor and the conservative nature of screening criteria for indoor air, the VOCs detected in the groundwater are not considered to pose a concern to human health for current receptors or future residents. Furthermore based on soil vapor intrusion studies from other National Grid former MGP Sites, BTEX compounds have not been found to be the cause of vapor intrusion issues at these sites. Elevated levels of BTEX compounds in groundwater in the central portion of the Site (i.e., SB/MW-11 and SB/MW-12) found during both the Phase II and the SC indicate probable contamination from petroleum-related products in that area. However, it is unlikely that the contamination observed is related to the former MGP operations.

In consideration of the COPCs identified for each exposure medium in Table 5-1, the assessment in Table 5-2, and the receptor exposure profiles detailed in Section 5.2, direct and indirect contact with the exposure media onsite are likely for the future construction worker and future utility worker, who may perform intrusive excavation activities at the site. However, this exposure can be mitigated through the use of proper protective equipment and training. In addition, exposure is possible for a future trespasser during construction, although this exposure can be mitigated through proper fencing and Site security.

6.0 SUMMARY AND CONCLUSION

6.1 Site History

The Peoples Works Former Manufactured Gas Site is located in the Williamsburg neighborhood, Borough of Brooklyn, Kings County, New York. The footprint of the former MGP facility comprises the Site, and this footprint was located between Kent Ave to the east, the former 11th Street to the south, the Wallabout Channel of the East River to the west, and the former 10th Street to the north. The Site is located on the northern portions of two parcels between Kent Avenue and the east bank of the Wallabout Channel. The surrounding neighborhood is primarily residential and commercial.

The Site is currently developed with two warehouse style buildings: a three story brick building (the eastern building) located on Lot 1, and a two story masonry building (the western building) located on Lot 150.

The buildings and "breezeway" are used for operations of the Certified Lumber Corporation (Certified Lumber). Founded in 1974, Certified Lumber is a locally owned retailer of construction and building materials. The "breezeway" is used as a driveway and truck parking area and for storage of building supplies. A small one story brick building and a metal trailer are also located on the southern end of Lot 1. The western building is currently used for lumber storage. The first (basement) and second floors of the eastern building are currently used for storage of building materials. In addition, a retail paint and home supply store is located on the second floor, facing onto Kent Ave.

The footprint of the former MGP lies beneath the northern half of the two buildings and the breezeway. Operations conducted by the current owners in the area of the former MGP footprint consist of lumber and building supply storage, truck loading and staging, and material storage in the basement of the eastern warehouse building on Lot 1. Two small above ground tanks (500 gallons), which appear to contain fuel oil are located on the east wall of the breezeway

The buildings, and operations on the two parcels, continue south of the footprint of the former MGP. Entrances on Division Street and Kent Avenue, both located south of the Site footprint, provide access to loading docks on the southern end of the eastern building, as well as access to the western building and a lumber storage area and parking lot south of this building. An office entrance and loading dock are located on the northern side of the eastern building. A driveway runs along the northern side of the building, from Kent Avenue to Lot 150. The northern portion of this driveway is located on an easement granted by the owner of the property to the north. The western end of the driveway is used for lumber storage and vehicle maintenance.

The building on the western parcel was present since at least 1904 and the eastern building was present since at least 1943.

Much of the shoreline along the Site has been filled over time. The fill used for this process is of unknown origin. There have been two recorded dredging events in the Wallabout Channel. The first event took place in 1911, where the USACE dredged a total of 79,981 cubic yards of material from the channel. The second event took place in 1939, where the USACE dredged a total of 39,239 cubic yards of material, to make the average depth of the channel 20 feet below mean sea level (msl).

In addition, other sources indicate that the Wallabout Channel may have been dredged multiple times during World War II. Information provided in the Supplemental Remedial Investigation work plans for the Con-Edison Kent Avenue Station and Wallabout/ Navy Yard Basin indicates that the channel was dredged during Navy Yard expansion in 1942 (GEI, 2007). A history of the Brooklyn Navy Yard available in the Navy Department Library indicates that the Wallabout Channel was dredged during construction in 1943 (USN, 2014). A lawsuit filed by F&M Schaefer Brewing Company against the United States indicates that dredging in the Wallabout Channel adjacent to the Site occurred in 1945.

The former MGP, operated by the People's Gas Light Company, was present on the Site as early as 1868 and through at least 1887. In 1887, the Peoples Gas Light Company used the coal gas process, and by 1889 it had converted to carbureted water gas (Tessie du Motay process). It appears that the MGP may have operated at least through 1893, the last year for which there is an individual entry for the Peoples Gas Light Co. in Brown's Directory. The Peoples Gas Light Company appears to have operated a coal carbonization process until approximately 1887. According to Brown's Directory, in 1887, The People's Gas Light Company used the coal gas process, and by 1889 it had converted to carbureted water gas (Tessie du Motay process). However, there is no evidence that gas production using this process was ever carried out. The volume of gas produced by the Peoples Gas Light Company ranged from 200,000,000 to 440,000,000 cubic feet/year, a relatively small to moderate volume.

Post-MGP, a succession of owners and operators has been present at the site. A 1904 Sanborn map shows a raw sugar house for the National Sugar Refining Company of New Jersey on the western portion of the Site, and the eastern portion of the Site is vacant. This appears to be a portion of the western building currently present on the Site. MGP structures are not present on the Site at this time. This configuration of structures is also shown on the 1918 Sanborn Map. On the 1922, 1928, and 1935 Sanborn maps, the building configuration is unchanged, but the structures are labeled as the South 11th Street Storage Warehouse Corporation.

F.M. Schaefer Brewing acquired the property in pieces, from various parties, from July 21, 1933 through July 13, 1943. The Site was occupied by two buildings, a garage (the current western building) and the bottling house (the current eastern building), of the F&M Schaefer Brewing Company from at least 1943 to 1977.

Post-Schaefer Brewing Period

Sanborn maps from 1977 through 1984 show the brewing company still present on the Site but note that it is "not in operation." On the 1986 Sanborn map, the notation "not in operation" has been removed from the eastern building and was replaced with "lofts."

GFE Realty acquired Lot 1 and Shula Limited Partnership acquired Lot 150 in 1977. The United Talmudical Academy Torah V' Yirah Inc. acquired Lot 1 in 1981. Numerous commercial wholesale and retail establishments occupied the eastern building at the Site, located on Lot 1, from the early 1980s onward. These consisted primarily of businesses selling clothing, fabric, and building materials.

Certified Lumber acquired Lot 150 in 2003, and leased the property since at least 1981, likely operating on both lots since that time. Overall operations by Certified Lumber on the Site and immediately South of the Site are described above. Extensive staining and accumulations of spilled antifreeze have been observed in the breezeway on the western parcel of the Site, in the forklift and vehicle maintenance area in the northwest corner of the Site, and south of the Site within Certified Lumber's operational area on Lot 150. Storage of drums and buckets of petroleum product in the forklift and vehicle maintenance area was also noted. Extensive staining and accumulations of spilled antifreeze have been observed in the breezeway on the eastern parcel of the Site, along the driveway north of the building on Lot 1, and south of the Site within Certified Lumber's operational area on Lot 1. Storage of drums petroleum products and hydraulic fluid, many in poor condition, was noted along the west side of the building on Lot 1.

The EBC Phase I noted a 500 gallon AST along the west side of the eastern building, on Lot 1. Staining was noted around the base of the tank. During the SC and SSC, two smaller ASTs (<300 gallons) were observed in this same general area.

There are three nearby properties which are in the Brownfields Cleanup Program and are hydraulically upgradient of the site – 416 Kent Avenue, 420 Kent Avenue, and 431 Kent Avenue. All three of these properties are within ¼ mile of the Site, and have exhibited soil and groundwater contamination which could impact the Site.

The Site is currently in a residential/commercial setting. However, this area of Brooklyn was originally a highly industrialized area. As a result, past owners and occupants of the Site, as well as owners and occupants of some surrounding properties, may have engaged in activities resulting in impacts to soil and groundwater at the Site. Such activities would define those owners and occupants as PRPs. Several industrial and manufacturing facilities have operated on properties abutting the Site, including sugar refineries, clothing manufacturers, gas appliance manufacturing, a distillery, and an iron foundry.

6.2 Soil

A total of 82 soil samples and 4 duplicate samples were collected from 36 soil borings and 11 test pits during the SC. In general, soil samples were collected from the most impacted interval (generally the fill material beneath the pavement and structure slabs) or immediately above the groundwater table, and at the termination of the boring.

Limited potentially MGP-related visual or olfactory impacts were identified during this SC investigation. These impacts were noted primarily northwest of the Site at PWSB-27, PWSB-31, and to a lesser extent at PWSB-35, which are outside of the footprint of the historic MGP Site and within the area of a former embayment that was filled in between 1935 and 1947. Sand and gravel coated with NAPL was noted in PWSB-27 between 14 and 15 feet bgs and in PWSB-31 between 9 and 11 feet bgs. Solid NAPL was observed in PWSB-31 at 13 feet bgs. NAPL blebs and sheen were observed in PWSB-31 between14.5 and 18 feet bgs. Naphthalene-like odors were also noted in these two borings between seven and 22 feet bgs. In PWSB-35, east of the PWSB-27 and PWSB-31 area, NAPL blebs were observed at approximately 7 feet bgs. Naphthalene-like odors were noted in this boring at approximately 19 bgs, and petroleum-like odors were noted at several intervals between 7 and 30 feet bgs.

A small piece of asphalt-like material and naphthalene-like odors were noted in test pit PWTP-A. A small piece of solid NAPL was noted in test pit PWTP-3, but no odors were noted. Naphthalene-like odors were noted in PWSB-13, 14 and 16, along the bulkhead, and in PWSB-22 and PWSB-34.

The distribution of potential MGP-related visual and olfactory impacts indicates that no source area of MGP residuals has been located on the Site itself, despite the intrusive activities at nearly 50 locations. The impacts observed were primarily located north of the former MGP facility, in the area of a former embayment that was filled in between 1935 and 1947. The small, discreet pieces of solid NAPL in PWTP-A and PWTP-3 and odors at other locations are likely from reworking or redistribution of Site fill materials and are not evidence of source materials in those areas.

Petroleum-like odors were noted in borings in and around the north end of the breezeway: PWSB-08, PWSB-25, PWSB28, PWSB-29, and PWSB-30. .

In 2011, BTEX was detected in one of the subsurface soil boring samples, PWMW-02-1-6 at 0.0036 mg/kg, which was collected from the interval below the concrete slab. Total BTEX in the asphalt-like material sample (PWTP-01A-2.5) was 30.4 mg/kg. None of the individual BTEX constituents were detected above applicable SCOs.

In 2014-2015, low concentrations of BTEX were detected in most of the samples. BTEX was detected at concentrations that were above their respective NYSDEC Restricted-Residential SCOs in PWSB-25, and Commercial SCOs in PWSB-31 and PWSB-35. PWSB-25 is located at the north end of the breezeway and exhibited a petroleum-like odor during sampling.

PWSB-31 and PWSB-35 are located northwest of the Site, and exhibited indications of NAPL and odors.

In 2011, total PAHs ranged from not detected in 23 samples to 122.95 mg/kg in sample PWSB-07-1-3, which was collected from the shallowest interval. In 2014-2015, total PAHs ranged from not detected in eight samples to 6,708.7 mg/kg in sample PWSB-31-13.5-14, which was collected from the interval exhibited NAPL coated sands and gravel in a boring location north of the site in the location of a former embayment.

The distribution of the BTEX and PAH exceedances of SCOs indicates that these concentrations are related to the former embayment area north of the former MGP facility, and in the north end of the breezeway are related to Site activities subsequent to the operation of the former MGP facility. The observations of petroleum odors at five locations in or around the north end of the breezeway further supports this conclusion.

One PCB, Aroclor-1260, was detected at low concentrations (0.03 mg/kg and below) in three samples: PWSB-01-38-40, PWSB-02-1-2, and PWSB-06-1-2. Pesticides, herbicides, and PCBs were not detected at concentrations that were above their respective NYSDEC Restricted-Residential and Commercial SCOs. The presence of PCBs indicates that Site soils have been impacted by post-MGP activities.

Mercury was positively detected in 26 of the soil boring samples, and exceeded the Restricted-Residential SCO in the samples collected from the fill below the slab (1.42 mg/kg from 1 to 3 feet bgs) and exceeded the Commercial SCO in the sample from immediately above the groundwater table (2.99 mg/kg from 6 to 9 feet bgs) in boring PWMW-01 and in the test pit soil sample (1.44 mg/kg at 2.5 feet bgs). However, the occurrence of mercury is not typically associated with MGP operations, and is likely due to the placement on-site of fill of unknown origin.

In 2011, free cyanide was detected in nine of the subsurface soil samples but did not exceed the applicable SCO in any of the samples. In 2014-2015, the only inorganic constituent for which soils were analyzed was free cyanide, which was undetected in nine samples and did not exceed the applicable SCO in any of the samples.

6.3 Groundwater

One groundwater grab sample was collected from soil boring location PWSB-02. In addition, one round of groundwater samples were collected from three existing monitoring wells and two monitoring wells installed during the SC. A total of six groundwater samples and one duplicate sample were collected during the SC. The groundwater samples were analyzed for TCL VOCs, TCL SVOCs, pesticides, herbicides, PCBs, TAL metals, and total cyanide. Free cyanide was also analyzed for the grab sample from SB-02.

MGP-related visual or olfactory impacts were not identified at any of the monitoring wells during this SC and SSC. Two VOCs, benzene and PCE, were detected at concentrations exceeding the applicable AWQS in the groundwater grab sample. One

PAH, naphthalene, was detected in this sample at a concentration exceeding the AWQS. Herbicides, pesticides, and PCBs were not detected in the groundwater grab sample. Twelve metals were detected at concentrations above the applicable AWQS. Total cyanide was detected in several of the groundwater samples, but the concentrations were all below the AWQS.

Herbicides, pesticides, and PCBs were not detected in the groundwater samples. PCE was detected in the primary and duplicate samples collected from monitoring well PWMW-01 above the AWQS. Seven VOCs were detected above the applicable AWQS in monitoring wells SB/MW-11 and SB/MW-12. SVOCs were only detected at concentrations exceeding the applicable AWQS in samples collected from monitoring wells SB/MW-11 and SB/MW-12. Iron, magnesium, manganese and sodium, detected above AWQS, are indicators of groundwater geochemistry. The elevated levels of inorganics are likely not related to former MGP operations at the Site.

BTEX and PAHs were not detected in the two downgradient wells (MW-09 and PWMW-02). Total BTEX exceeding 1,000 µg/L was detected in SB/MW-11 and SB/MW-12, and total PAHs in these wells was between 70 and 80 µg/L. In 2014-2015, benzene was detected at concentrations exceeding the applicable AWQS in the groundwater grab samples at all locations sampled except PWSB-21 and PWSB-34. Ethyl benzene, toluene and total xylenes exceeded applicable AWQS in PWSB-22, PWSB-25, PWSB-28, and PWSB-30. The highest concentrations of BTEX were detected in PWSB-25, at the north end of the breezeway, in which petroleum odors were noted.

The lack of detection of any BTEX compounds in the groundwater beneath the western portion of the site indicates that the BTEX constituents from the center of the site are not migrating. These wells are located in a high-traffic area of the Site, where trucks are moved into the covered roadway, loaded with lumber and construction materials, and then driven out to deliver the loads. The BTEX found in the groundwater in the central portion of the Site may be from either these activities or from releases from subsequent uses of the Site, and are not likely from the MGP-related activities. Petroleum-like odors consistent with gasoline were noted in this area during soil boring installation. A Phase I by EBC noted a 500 gallon AST in this area, and two smaller ASTs were observed during the SSC activities. A subsurface investigation by Tenen, which included a geophysical survey, identified two previously unknown USTs in the breezeway, immediately south of the Site.

The trichloroethene (TCE) and PCE detected at PWSB-02 and PWMW-01, which were also detected in soil samples at this location in a separate Phase II Investigation by the property owner (AKRF, 2005), are not associated with MGP activities and are likely the result of a release from a subsequent site tenant or from off-site migration onto the Site.

6.4 Sediment

Potential MGP-related olfactory impacts were identified in sediment boring locations PWSED-01 through PWSED-05. Petroleum-like odors were also noted at locations PWSED-01 through PWSED-03. However, visual impacts, consisting of NAPL blebs, were only observed in PWSED-05. The blebs were observed within a two-foot interval of silt and gravel, at approximately 3 to 5 feet below the sediment surface. Step-out sediment borings PWSED-06 and PWSED-07 exhibited no visual or olfactory impacts, MGP-related or otherwise, suggesting the impacts at PWSED-05 are localized.

Naphthalene-like odors and NAPL blebs were observed in a 2-foot interval of silt and gravel in one of the sediment borings, PWSED-05. Naphthalene-like odors were also noted in several other sediment borings.

6.5 Qualitative Human Health Exposure Assessment

A QHHEA was performed to evaluate the potential exposure pathways for human receptors relative to the COCs identified for each impacted exposure media given the current and potential future use of the Site.

As a result of the physical barrier of the basement floor and the conservative nature of screening criteria for indoor air, the VOCs detected in the groundwater are not considered to pose a concern to human health for current receptors or future residents. Furthermore, based on soil vapor intrusion studies from other National Grid former MGP Sites, BTEX compounds have not been found to be the cause of vapor intrusion issues. Elevated levels of BTEX compounds in groundwater in the central portion of the Site (i.e., SB/MW-11 and SB/MW-12) found during both the Phase II and the SC indicate possible contamination from petroleum-related products in that area. However, there is no indication that the contamination observed is related to the former MGP operations.

In consideration of the COPCs identified for each exposure medium in Table 5-1, the assessment in Table 5-2, and the receptor exposure profiles detailed in Section 5.2, direct and indirect contact with the exposure media onsite are only likely for the future construction worker and future utility worker, who may perform intrusive excavation activities at the site. However, this exposure can be mitigated through the use of proper protective equipment.

7.0 REFERENCES

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Table 2-1 Soil Sample Summary

Location ID	Completion Depth	Number of samples	Soil Sample ID	Sample Depth	Analyses	Location Rationale	Comments
PWSB-01	40	4	PWSB-01-2.5-5	2.5-5	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide	Characterize the area of the former gas holder	
			PWSB-01-5-9	5-9	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide		
			PWSB-21-5-9	5-9	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide		Duplicate of PWSB-01-5-9
			PWSB-01-35-40	35-40	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide		
PWSB-02	40	4	PWSB-02-1-2	1-2	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide	Characterize the area of the former gas holder	
			PWSB-02-4-5	4-5	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide		
			PWSB-02-38-40	38-40	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide		
			PWSB-12-38-40	38-40	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide		Duplicate of PWSB-02-38-40
PWSB-03	40	3	PWSB-03-1-2	1-2	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide	Characterize the area within and downgradient of the iron coal oil storage tanks	
			PWSB-03-15-16	15-16	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide		
			PWSB-03-39-40	39-40	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide		
PWSB-04	40	3	PWSB-04-1-5	1-5	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide	Characterize the area within and downgradient of the iron coal oil storage tanks	
			PWSB-04-13-15	13-15	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide		
			PWSB-04-25-27	25-27	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide		
PWSB-05	40	4	PWSB-05-2.5	2.5	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide	Characterize the area near the former purifier house	
			PWSB-05-10-13	10-13	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide		
			PWSB-05-19-22	19-22	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide		
			PWSB-05-37-40	37-40	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide		
PWSB-06	9	2	PWSB-06-1-2	1-2	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide	Characterize the area near the former purifier house	
			PWSB-06-7-9	7-9	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide		Refusal encountered at approximately 9 feet bgs, moved PWSB-06A 25 feet to the north
PWSB-06A	40	3	PWSB-06-3-5	3-5	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide	Characterize the area near the former purifier house	
			PWSB-06A-8-10	8-10	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide		
			PWSB-06A-38-40	38-40	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide		
PWSB-07	40	3	PWSB-07-1-3	1-3	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide	Further investigate odors noted during completion of previously installed wells MW-11 and MW-12 during the Phase II investigation in 2005	
			PWSB-07-8-10	8-10	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide		
			PWSB-07-38-40	38-40	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide		
PWSB-08	40	3	PWSB-08-2-2.5	2-2.5	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide	Further investigate odors noted during completion of previously installed wells MW-11 and MW-12 during the Phase II investigation in 2005	
			PWSB-08-22-24	22-24	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide		
			PWSB-08-32-34	32-34	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide		
PWSB-13	40	2	PWSB-13-28-28.5	28-28.5	BTEX, PAHs, and free Cyanide	Completed along the bulkhead at the request of the NYSDEC to characterize potential subsurface impacts that may have accumulated behind the bulkhead structure as a result of former MGP processes	
			PWSB-13-38-38.5	38-38.5	BTEX, PAHs, and free Cyanide		
PWSB-14	40	2	PWSB-14-25.5-26	25.5-26	BTEX, PAHs, and free Cyanide	Completed along the bulkhead at the request of the NYSDEC to characterize potential subsurface impacts that may have accumulated behind the bulkhead structure as a result of former MGP processes	
			PWSB-14-36-36.5	36-36.5	BTEX, PAHs, and free Cyanide		
PWSB-15	40	1	PWSB-15-14-14.5	14-15.5	BTEX, PAHs, and free Cyanide	Completed along the bulkhead at the request of the NYSDEC to characterize potential subsurface impacts that may have accumulated behind the bulkhead structure as a result of former MGP processes	
PWSB-16	40	2	PWSB-16-8.5-9	8.5-9	BTEX, PAHs, and free Cyanide	Completed along the bulkhead at the request of the NYSDEC to characterize potential subsurface impacts that may have accumulated behind the bulkhead structure as a result of former MGP processes	
			PWSB-16-18.5-19	18.5-19	BTEX, PAHs, and free Cyanide		
PWSB-17	40	2	PWSB-17-6.5-7	6.5-7	BTEX, PAHs, and free Cyanide	Completed along the bulkhead at the request of the NYSDEC to characterize potential subsurface impacts that may have accumulated behind the bulkhead structure as a result of former MGP processes	
			PWSB-17-15-15.5	15-15.5	BTEX, PAHs, and free Cyanide		
PWSB-18	40	1	PWSB-18-7.0-7.5	7.0-7.5	BTEX, PAHs, and free Cyanide	Completed along the bulkhead at the request of the NYSDEC to characterize potential subsurface impacts that may have accumulated behind the bulkhead structure as a result of former MGP processes	
PWSB-19	40	1	PWSB-19-7.5-8.0	7.5-8.0	BTEX, PAHs, and free Cyanide	Completed along the bulkhead at the request of the NYSDEC to characterize potential subsurface impacts that may have accumulated behind the bulkhead structure as a result of former MGP processes	
PWSB-20	40	1	PWSB-20-6.5-7.0	6.5-7.0	BTEX, PAHs, and free Cyanide	Completed along the bulkhead at the request of the NYSDEC to characterize potential subsurface impacts that may have accumulated behind the bulkhead structure as a result of former MGP processes	

Table 2-1 Soil Sample Summary

Location ID	Completion Depth	Number of samples	Soil Sample ID	Sample Depth	Analyses	Location Rationale	Comments
PWSB-21	17	1	PWSB-21-9.5-10.0	9.5-10.0	BTEX, PAHs, and free Cyanide	Completed in the vicinity of wells MW-11 and MW-12 to determine the extent and source of BTEX in groundwater at this area of the Site	Refusal at 17 feet bgs
PWSB-22	25	3	PWSB-22-10.5-11.0	10.5-11.0	BTEX, PAHs, and free Cyanide	Completed in the vicinity of wells MW-11 and MW-12 to determine the extent and source of BTEX in groundwater at this area of the Site	No recovery below 25 feet bgs
			PWSB-22-14.5-15.0	14.5-15.0	BTEX, PAHs, and free Cyanide		
			PWSB-22-19.5-20.0	19.5-20.0	BTEX, PAHs, and free Cyanide		
PWSB-23	20	1	PWSB-23-9.0-9.5	9.0-9.5	BTEX, PAHs, and free Cyanide	Completed in the vicinity of wells MW-11 and MW-12 to determine the extent and source of BTEX in groundwater at this area of the Site	
PWSB-24	20	1	PWSB-24-5.5-6.0	5.5-6.0	BTEX, PAHs, and free Cyanide	Completed in the vicinity of wells MW-11 and MW-12 to determine the extent and source of BTEX in groundwater at this area of the Site	
PWSB-25	20	2	PWSB-25-9.5-10.0	9.5-10.0	BTEX, PAHs, and free Cyanide	Completed in the vicinity of wells MW-11 and MW-12 to determine the extent and source of BTEX in groundwater at this area of the Site	
			PWSB-25-19.5-20.0	19.5-20.0	BTEX, PAHs, and free Cyanide		
PWSB-26	40	1	PWSB-26-4.5-5.0	4.5-5.0	BTEX, PAHs, and free Cyanide	Characterize the area near the former purifier house	
PWSB-27	40	2	PWSB-27-14.5-15.0	14.5-15.0	BTEX, PAHs, and free Cyanide	Completed at the request of the NYSDEC to investigate the location of potential piping extending to the bulkhead for potential subsurface impacts	
			PWSB-27-25.5-26.0	25.5-26.0	BTEX, PAHs, and free Cyanide		
PWSB-28	20	2	PWSB-28-8.5-9.0	8.5-9	BTEX, extended PAHs, and free Cyanide	Completed in the vicinity of wells MW-11 and MW-12 to determine the extent and source of BTEX in groundwater at this area of the Site	
			PWSB-28-18.5-19.0	18.5-19.0	BTEX, extended PAHs, and free Cyanide		
PWSB-29	30	2	PWSB-29-17.0-17.5	17-17.5	BTEX, extended PAHs, and free Cyanide	Completed in the vicinity of wells MW-11 and MW-12 to determine the extent and source of BTEX in groundwater at this area of the Site	Advanced to 30 feet to characterize soil below the depth of replacement well PWMW-04
			PWSB-29-29.0-29.5	29-29.5	BTEX, extended PAHs, and free Cyanide		
PWSB-30	25	2	PWSB-30-8.0-8.5	8-8.5	BTEX, extended PAHs, and free Cyanide	Completed in the vicinity of wells MW-11 and MW-12 to determine the extent and source of BTEX in groundwater at this area of the Site	
			PWSB-30-19.5-20.0	19.5-20	BTEX, extended PAHs, and free Cyanide		
PWSB-31	40	2	PWSB-31-13.5-14.0	13.5-14	BTEX, extended PAHs, and free Cyanide	Completed to further investigate impacts observed in PWSB-27	
			PWSB-31-32.0-32.5	32-32.5	BTEX, extended PAHs, and free Cyanide		
PWSB-32	40	2	PWSB-32-11.0-11.5	11-11.5	BTEX, extended PAHs, and free Cyanide	Completed to further investigate impacts observed in PWSB-27	
			PWSB-32-36.0-36.5	36-36.5	BTEX, extended PAHs, and free Cyanide		
PWSB-33	20	1	PWSB-33-8.0-8.5	8-8.5	BTEX, extended PAHs, and free Cyanide	Completed in the vicinity of wells MW-11 and MW-12 to determine the extent and source of BTEX in groundwater at this area of the Site	
PWSB-34	20	2	PWSB-34-14.1-15	14.1-15	BTEX, extended PAHs, and free Cyanide	Completed in the vicinity of wells MW-11 and MW-12 to determine the extent and source of BTEX in groundwater at this area of the Site	
			PWSB-34-19-10	19-20	BTEX, extended PAHs, and free Cyanide		
PWSB-35	35	2	PWSB-35-8.5-9.0	8.5-9	BTEX, extended PAHs, and free Cyanide	Completed to further investigate impacts observed in PWSB-27	
			PWSB-35-32.5-33.0	32.5-33	BTEX, extended PAHs, and free Cyanide		
PWMW-01	40	3	PWMW-01-1-3	1-3	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide	Installed to characterize the former holder area	
			PWMW-01-6-9	6-9	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide		
			PWMW-01-38-40	38-40	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide		
PWMW-02	40	3	PWMW-02-1-6	1-6	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide	Installed to characterize the area of western end of the former retort house	
			PWMW-02-8-9	8-9	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide		
			PWMW-02-38-48	38-48	TCL VOCs, TCL SVOCs, TAL Metals, Pest/Herb, PCBs, and Free Cyanide		
PWMW-03	17	1	PWMW-03-9.5-10	9.5-10	BTEX, extended PAHs, and free Cyanide	Installed to characterize groundwater hydraulically upgradient of the breezeway area	Refusal at 17 feet bgs
PWMW-04	30		Not Sampled			Installed to replace MW-12, which was damaged by operations of the property owner	

TCL- Target Compound List
VOC - Volatile Organic Compounds
SVOC - Semi-Volatile Organic Compounds
TAL - Target Analyte List
Pest/Heb - Pesicides and Herbicides

PCB - Polychlorinated Biphenyl
BTEX - Benzene, Toluene, Ethylbenzene and Xylene
PAH - Polycyclic aromatic hydrocarbon
bgs - Below ground surface

Table 4-1
Soil Sample Analytical Results
Volatile Organic Compounds
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-01 PWSB-01-2.5-5 C1875-05 4/14/2011 2.5-5	PWSB-01 PWSB-01-5-9 C2089-03 5/2/2011 5-9	PWSB-01 PWSB-21-5-9 Duplicate of PWSB-01-5-9 5-9	PWSB-01 PWSB-01-35-40 C2099-01 5/3/2011 35-40	PWSB-02 PWSB-02-1-2 C1827-02 4/11/2011 1-2	PWSB-02 PWSB-02-4-5 C1827-03 4/11/2011 4-5	PWSB-02 PWSB-02-38-40 C1827-05 4/11/2011 38-48
Volatile Organic Compounds (mg/kg)										
1,1,1-Trichloroethane	71-55-6	100	500	0.0057 UJ	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
1,1,2,2-Tetrachloroethane	79-34-5	NC	NC	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
1,1,2-Trichloroethane	79-00-5	NC	NC	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
1,1,2-Trichlorotrifluoroethane	76-13-1	NC	NC	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
1,1-Dichloroethane	75-34-3	26	240	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
1,1-Dichloroethene	75-35-4	100	500	0.0057 U	R	0.0059 UJ	0.0057 U	R	0.0056 U	0.0058 U
1,2,4-Trichlorobenzene	120-82-1	NC	NC	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
1,2-Dibromo-3-Chloropropane	96-12-8	NC	NC	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
1,2-Dibromoethane	106-93-4	NC	NC	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
1,2-Dichlorobenzene	95-50-1	100	500	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
1,2-Dichloroethane	107-06-2	3	30	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
1,2-Dichloropropane	78-87-5	NC	NC	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
1,3-Dichlorobenzene	541-73-1	49	280	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
1,4-Dichlorobenzene	106-46-7	13	130	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
2-Butanone	78-93-3	100	500	0.029 U	R	0.029 U	0.029 U	R	0.028 U	0.029 U
2-Hexanone	591-78-6	NC	NC	0.029 U	R	0.029 U	0.029 U	R	0.028 UJ	0.029 UJ
4-Methyl-2-Pentanone	108-10-1	NC	NC	0.029 U	R	0.029 U	0.029 U	R	0.028 UJ	0.029 UJ
Acetone	67-64-1	100	500	0.029 U	R	0.029 U	0.029 U	R	0.028 U	0.029 U
Benzene	71-43-2	5	44	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
Bromodichloromethane	75-27-4	NC	NC	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
Bromoform	75-25-2	NC	NC	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
Bromomethane	74-83-9	NC	NC	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
Carbon Disulfide	75-15-0	NC	NC	0.0057 U	R	0.0059 U	0.0057 U	**0.0017 J**	0.0056 U	0.0058 U
Carbon Tetrachloride	56-23-5	2	22	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
Chlorobenzene	108-90-7	100	500	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
Chloroethane	75-00-3	NC	NC	0.0057 U	R	0.0059 UJ	0.0057 U	R	0.0056 U	0.0058 U
Chloroform	67-66-3	49	350	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
Chloromethane	74-87-3	NC	NC	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
cis-1,2-Dichloroethene	156-59-2	100	500	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
cis-1,3-Dichloropropene	10061-01-5	NC	NC	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
Cyclohexane	110-82-7	NC	NC	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
Dibromochloromethane	124-48-1	NC	NC	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
Dichlorodifluoromethane	75-71-8	NC	NC	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
Ethyl Benzene	100-41-4	41	390	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
Isopropylbenzene	98-82-8	NC	NC	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
m/p-Xylenes	179601-23-1	100	500	0.011 U	R	0.012 U	0.011 U	R	0.011 U	0.012 U
Methyl Acetate	79-20-9	NC	NC	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 UJ	0.0058 UJ
Methyl tert-butyl Ether	1634-04-4	100	500	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 UJ	0.0058 UJ
Methylcyclohexane	108-87-2	NC	NC	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
Methylene Chloride	75-09-2	100	500	0.0057 U	**0.01 J**	**0.01**	0.0057 U	**0.013 J**	**0.011**	**0.011**

Table 4-1
Soil Sample Analytical Results
Volatile Organic Compounds
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-01 PWSB-01-2.5-5 C1875-05 4/14/2011 2.5-5	PWSB-01 PWSB-01-5-9 C2089-03 5/2/2011 5-9	PWSB-01 PWSB-21-5-9 Duplicate of PWSB-01-5-9 5-9	PWSB-01 PWSB-01-35-40 C2099-01 5/3/2011 35-40	PWSB-02 PWSB-02-1-2 C1827-02 4/11/2011 1-2	PWSB-02 PWSB-02-4-5 C1827-03 4/11/2011 4-5	PWSB-02 PWSB-02-38-40 C1827-05 4/11/2011 38-48
o-Xylene	95-47-6	100	500	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
Styrene	100-42-5	NC	NC	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
t-1,3-Dichloropropene	10061-02-6	NC	NC	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
Tetrachloroethene	127-18-4	19	150	0.0057 U	R	0.0059 U	0.0057 U	**0.0016 J**	**0.0013 J**	**0.0012 J**
Toluene	108-88-3	100	500	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
trans-1,2-Dichloroethene	156-60-5	100	500	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
Trichloroethene	79-01-6	21	200	0.0057 U	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
Trichlorofluoromethane	75-69-4	NC	NC	0.0057 UJ	R	0.0059 U	0.0057 U	R	0.0056 U	0.0058 U
Vinyl Chloride	75-01-4	1	13	0.0057 U	R	0.0059 UJ	0.0057 U	R	0.0056 U	0.0058 U
Total BTEX	-	NC	NC	U	R	U	U	R	U	U

Notes:
B - Found in associated blank sample
bgs - below ground surface
BTEX - benzene, toluene, ethylbenzene, and xylenes
J - Estimated
mg/kg - milligrams per kilogram
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
R - Unusable
U - Not detected

Detected values are in **BOLD.**

Table 4-1
Soil Sample Analytical Results
Volatile Organic Compounds
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-02 PWSB-12-38-40 Duplicate of PWSB-02-38-40 38-48	PWSB-03 PWSB-03-1-2 C1861-01 4/13/2011 1-2	PWSB-03 PWSB-03-15-16 C1861-02 4/13/2011 15-16	PWSB-03 PWSB-03-39-40 C1861-03 4/13/2011 39-40	PWSB-04 PWSB-04-1-5 C1861-07 4/13/2011 1-5	PWSB-04 PWSB-04-13-15 C1861-08 4/13/2011 13-15	PWSB-04 PWSB-04-25-27 C1861-09 4/13/2011 25-27
Volatile Organic Compounds (mg/kg)										
1,1,1-Trichloroethane	71-55-6	100	500	0.0059 U	0.0057 UJ	0.0062 UJ	0.0057 UJ	0.0057 U	0.0061 U	0.0065 U
1,1,2,2-Tetrachloroethane	79-34-5	NC	NC	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
1,1,2-Trichloroethane	79-00-5	NC	NC	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
1,1,2-Trichlorotrifluoroethane	76-13-1	NC	NC	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
1,1-Dichloroethane	75-34-3	26	240	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
1,1-Dichloroethene	75-35-4	100	500	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
1,2,4-Trichlorobenzene	120-82-1	NC	NC	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
1,2-Dibromo-3-Chloropropane	96-12-8	NC	NC	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
1,2-Dibromoethane	106-93-4	NC	NC	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
1,2-Dichlorobenzene	95-50-1	100	500	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
1,2-Dichloroethane	107-06-2	3	30	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
1,2-Dichloropropane	78-87-5	NC	NC	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
1,3-Dichlorobenzene	541-73-1	49	280	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
1,4-Dichlorobenzene	106-46-7	13	130	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
2-Butanone	78-93-3	100	500	0.029 U	0.029 U	0.031 U	0.029 U	0.029 U	0.03 U	0.032 U
2-Hexanone	591-78-6	NC	NC	0.029 UJ	0.029 U	0.031 U	0.029 U	0.029 U	0.03 U	0.032 U
4-Methyl-2-Pentanone	108-10-1	NC	NC	0.029 UJ	0.029 U	0.031 U	0.029 U	0.029 U	0.03 U	0.032 U
Acetone	67-64-1	100	500	0.029 U	0.029 U	0.031 U	0.029 U	0.029 U	**0.011 J**	0.032 U
Benzene	71-43-2	5	44	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
Bromodichloromethane	75-27-4	NC	NC	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
Bromoform	75-25-2	NC	NC	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
Bromomethane	74-83-9	NC	NC	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
Carbon Disulfide	75-15-0	NC	NC	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
Carbon Tetrachloride	56-23-5	2	22	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
Chlorobenzene	108-90-7	100	500	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
Chloroethane	75-00-3	NC	NC	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
Chloroform	67-66-3	49	350	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
Chloromethane	74-87-3	NC	NC	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
cis-1,2-Dichloroethene	156-59-2	100	500	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
cis-1,3-Dichloropropene	10061-01-5	NC	NC	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
Cyclohexane	110-82-7	NC	NC	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
Dibromochloromethane	124-48-1	NC	NC	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
Dichlorodifluoromethane	75-71-8	NC	NC	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
Ethyl Benzene	100-41-4	41	390	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
Isopropylbenzene	98-82-8	NC	NC	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
m/p-Xylenes	179601-23-1	100	500	0.012 U	0.011 U	0.012 U	0.011 U	0.011 U	0.012 U	0.013 U
Methyl Acetate	79-20-9	NC	NC	0.0059 UJ	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
Methyl tert-butyl Ether	1634-04-4	100	500	0.0059 UJ	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
Methylcyclohexane	108-87-2	NC	NC	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
Methylene Chloride	75-09-2	100	500	**0.0098**	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U

Table 4-1
Soil Sample Analytical Results
Volatile Organic Compounds
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-02 PWSB-12-38-40 Duplicate of PWSB-02-38-40 38-48	PWSB-03 PWSB-03-1-2 C1861-01 4/13/2011 1-2	PWSB-03 PWSB-03-15-16 C1861-02 4/13/2011 15-16	PWSB-03 PWSB-03-39-40 C1861-03 4/13/2011 39-40	PWSB-04 PWSB-04-1-5 C1861-07 4/13/2011 1-5	PWSB-04 PWSB-04-13-15 C1861-08 4/13/2011 13-15	PWSB-04 PWSB-04-25-27 C1861-09 4/13/2011 25-27
o-Xylene	95-47-6	100	500	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
Styrene	100-42-5	NC	NC	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
t-1,3-Dichloropropene	10061-02-6	NC	NC	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
Tetrachloroethene	127-18-4	19	150	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
Toluene	108-88-3	100	500	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
trans-1,2-Dichloroethene	156-60-5	100	500	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
Trichloroethene	79-01-6	21	200	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
Trichlorofluoromethane	75-69-4	NC	NC	0.0059 U	0.0057 UJ	0.0062 UJ	0.0057 UJ	0.0057 U	0.0061 U	0.0065 U
Vinyl Chloride	75-01-4	1	13	0.0059 U	0.0057 U	0.0062 U	0.0057 U	0.0057 U	0.0061 U	0.0065 U
Total BTEX	-	NC	NC	U	U	U	U	U	U	U

Notes:
B - Found in associated blank sample
bgs - below ground surface
BTEX - benzene, toluene, ethylbenzene, and xylenes
J - Estimated
mg/kg - milligrams per kilogram
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
R - Unusable
U - Not detected

Detected values are in **BOLD.**

Table 4-1
Soil Sample Analytical Results
Volatile Organic Compounds
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-05 PWSB-05-2.5 C1875-02 4/14/2011 2.5	PWSB-05 PWSB-05-10-13 C2089-01 5/2/2011 10-13	PWSB-05 PWSB-05-19-22 C2089-02 5/2/2011 19-22	PWSB-05 PWSB-05-37-40 C2099-04 5/4/2011 37-40	PWSB-06 PWSB-06-1-2 C1739-01 4/4/2011 1-2	PWSB-06 PWSB-06-7-9 C1827-01 4/11/2011 7-9	PWSB-06A PWSB-06-3-5 C1875-06 4/14/2011 3-5
Volatile Organic Compounds (mg/kg)										
1,1,1-Trichloroethane	71-55-6	100	500	0.006 UJ	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 UJ
1,1,2,2-Tetrachloroethane	79-34-5	NC	NC	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
1,1,2-Trichloroethane	79-00-5	NC	NC	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
1,1,2-Trichlorotrifluoroethane	76-13-1	NC	NC	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
1,1-Dichloroethane	75-34-3	26	240	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
1,1-Dichloroethene	75-35-4	100	500	0.006 U	0.0059 UJ	0.006 UJ	0.0057 UJ	0.0055 U	0.0061 U	0.0062 U
1,2,4-Trichlorobenzene	120-82-1	NC	NC	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
1,2-Dibromo-3-Chloropropane	96-12-8	NC	NC	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
1,2-Dibromoethane	106-93-4	NC	NC	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
1,2-Dichlorobenzene	95-50-1	100	500	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
1,2-Dichloroethane	107-06-2	3	30	0.006 UJ	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
1,2-Dichloropropane	78-87-5	NC	NC	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
1,3-Dichlorobenzene	541-73-1	49	280	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
1,4-Dichlorobenzene	106-46-7	13	130	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
2-Butanone	78-93-3	100	500	0.03 U	0.029 U	0.03 U	0.029 U	0.027 U	0.031 U	0.031 U
2-Hexanone	591-78-6	NC	NC	0.03 U	0.029 U	0.03 U	0.029 U	0.027 U	0.031 UJ	0.031 U
4-Methyl-2-Pentanone	108-10-1	NC	NC	0.03 U	0.029 U	0.03 U	0.029 U	0.027 U	0.031 UJ	0.031 U
Acetone	67-64-1	100	500	0.03 U	**0.008 J**	0.03 U	0.029 U	**0.015 J**	0.031 U	0.031 U
Benzene	71-43-2	5	44	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
Bromodichloromethane	75-27-4	NC	NC	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
Bromoform	75-25-2	NC	NC	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
Bromomethane	74-83-9	NC	NC	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
Carbon Disulfide	75-15-0	NC	NC	0.006 U	**0.0013 J**	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
Carbon Tetrachloride	56-23-5	2	22	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
Chlorobenzene	108-90-7	100	500	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
Chloroethane	75-00-3	NC	NC	0.006 U	0.0059 UJ	0.006 UJ	0.0057 UJ	0.0055 U	0.0061 U	0.0062 U
Chloroform	67-66-3	49	350	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
Chloromethane	74-87-3	NC	NC	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
cis-1,2-Dichloroethene	156-59-2	100	500	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
cis-1,3-Dichloropropene	10061-01-5	NC	NC	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
Cyclohexane	110-82-7	NC	NC	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
Dibromochloromethane	124-48-1	NC	NC	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
Dichlorodifluoromethane	75-71-8	NC	NC	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
Ethyl Benzene	100-41-4	41	390	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
Isopropylbenzene	98-82-8	NC	NC	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
m/p-Xylenes	179601-23-1	100	500	0.012 U	0.012 U	0.012 U	0.011 U	0.011 U	0.012 U	0.012 U
Methyl Acetate	79-20-9	NC	NC	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 UJ	0.0062 U
Methyl tert-butyl Ether	1634-04-4	100	500	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 UJ	0.0062 U
Methylcyclohexane	108-87-2	NC	NC	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
Methylene Chloride	75-09-2	100	500	**0.0042 J**	**0.011**	**0.01**	**0.012**	**0.0027 J**	**0.011**	0.0062 U

Table 4-1
Soil Sample Analytical Results
Volatile Organic Compounds
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-05 PWSB-05-2.5 C1875-02 4/14/2011 2.5	PWSB-05 PWSB-05-10-13 C2089-01 5/2/2011 10-13	PWSB-05 PWSB-05-19-22 C2089-02 5/2/2011 19-22	PWSB-05 PWSB-05-37-40 C2099-04 5/4/2011 37-40	PWSB-06 PWSB-06-1-2 C1739-01 4/4/2011 1-2	PWSB-06 PWSB-06-7-9 C1827-01 4/11/2011 7-9	PWSB-06A PWSB-06-3-5 C1875-06 4/14/2011 3-5
o-Xylene	95-47-6	100	500	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
Styrene	100-42-5	NC	NC	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
t-1,3-Dichloropropene	10061-02-6	NC	NC	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
Tetrachloroethene	127-18-4	19	150	0.006 U	0.0059 U	0.006 U	**0.0026 J**	0.0055 U	0.0061 U	0.0062 U
Toluene	108-88-3	100	500	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
trans-1,2-Dichloroethene	156-60-5	100	500	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
Trichloroethene	79-01-6	21	200	0.006 U	0.0059 U	0.006 U	0.0057 U	0.0055 U	0.0061 U	0.0062 U
Trichlorofluoromethane	75-69-4	NC	NC	0.006 UJ	0.0059 U	0.006 U	0.0057 U	0.0055 UJ	0.0061 U	0.0062 UJ
Vinyl Chloride	75-01-4	1	13	0.006 U	0.0059 UJ	0.006 UJ	0.0057 UJ	0.0055 U	0.0061 U	0.0062 U
Total BTEX	-	NC	NC	U	U	U	U	U	U	U

Notes:
B - Found in associated blank sample
bgs - below ground surface
BTEX - benzene, toluene, ethylbenzene, and xylenes
J - Estimated
mg/kg - milligrams per kilogram
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
R - Unusable
U - Not detected

Detected values are in **BOLD.**

Table 4-1
Soil Sample Analytical Results
Volatile Organic Compounds
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-06A PWSB-06A-8-10 C2099-05 5/4/2011 8-10	PWSB-06A PWSB-06A-38-40 C2099-06 5/4/2011 38-40	PWSB-07 PWSB-07-1-3 C2834-01 6/26/2011 1-3	PWSB-07 PWSB-07-8-10 C2834-02 6/26/2011 8-10	PWSB-07 PWSB-07-38-40 C2834-03 6/26/2011 38-48	PWSB-08 PWSB-08-2-2.5 C2641-01 6/12/2011 2-2.5	PWSB-08 PWSB-08-22-24 C2641-02 6/12/2011 22-24
Volatile Organic Compounds (mg/kg)										
1,1,1-Trichloroethane	71-55-6	100	500	0.0063 U	0.0058 U	0.0055 UJ	0.0058 U	0.0058 U	0.0056 U	0.0058 U
1,1,2,2-Tetrachloroethane	79-34-5	NC	NC	0.0063 U	0.0058 U	R	0.0058 UJ	0.0058 UJ	0.0056 UJ	0.0058 U
1,1,2-Trichloroethane	79-00-5	NC	NC	0.0063 U	0.0058 U	0.0055 UJ	0.0058 U	0.0058 U	0.0056 U	0.0058 U
1,1,2-Trichlorotrifluoroethane	76-13-1	NC	NC	0.0063 U	0.0058 U	0.0055 UJ	0.0058 U	0.0058 U	0.0056 U	0.0058 U
1,1-Dichloroethane	75-34-3	26	240	0.0063 U	0.0058 U	0.0055 UJ	0.0058 U	0.0058 U	0.0056 U	0.0058 U
1,1-Dichloroethene	75-35-4	100	500	0.0063 UJ	0.0058 UJ	0.0055 UJ	0.0058 U	0.0058 U	0.0056 U	0.0058 U
1,2,4-Trichlorobenzene	120-82-1	NC	NC	0.0063 U	0.0058 U	R	0.0058 U	0.0058 UJ	0.0056 UJ	0.0058 U
1,2-Dibromo-3-Chloropropane	96-12-8	NC	NC	0.0063 U	0.0058 U	R	0.0058 UJ	0.0058 UJ	0.0056 UJ	0.0058 U
1,2-Dibromoethane	106-93-4	NC	NC	0.0063 U	0.0058 U	0.0055 UJ	0.0058 U	0.0058 U	0.0056 U	0.0058 U
1,2-Dichlorobenzene	95-50-1	100	500	0.0063 U	0.0058 U	R	0.0058 U	0.0058 UJ	0.0056 UJ	0.0058 U
1,2-Dichloroethane	107-06-2	3	30	0.0063 U	0.0058 U	0.0055 UJ	0.0058 UJ	0.0058 UJ	0.0056 U	0.0058 U
1,2-Dichloropropane	78-87-5	NC	NC	0.0063 U	0.0058 U	0.0055 UJ	0.0058 U	0.0058 U	0.0056 U	0.0058 U
1,3-Dichlorobenzene	541-73-1	49	280	0.0063 U	0.0058 U	R	0.0058 U	0.0058 UJ	0.0056 UJ	0.0058 U
1,4-Dichlorobenzene	106-46-7	13	130	0.0063 U	0.0058 U	R	0.0058 U	0.0058 UJ	0.0056 UJ	0.0058 U
2-Butanone	78-93-3	100	500	**0.0066 J**	0.029 U	0.028 UJ	0.029 U	0.029 U	0.028 U	0.029 U
2-Hexanone	591-78-6	NC	NC	0.032 U	0.029 U	0.028 UJ	0.029 UJ	0.029 UJ	0.028 U	0.029 U
4-Methyl-2-Pentanone	108-10-1	NC	NC	0.032 U	0.029 U	0.028 UJ	0.029 UJ	0.029 UJ	0.028 U	0.029 U
Acetone	67-64-1	100	500	**0.024 J**	0.029 U	0.028 UJ	0.029 UJ	0.029 UJ	0.028 U	0.029 U
Benzene	71-43-2	5	44	0.0063 U	0.0058 U	0.0055 UJ	0.0058 U	0.0058 U	0.0056 U	0.0058 U
Bromodichloromethane	75-27-4	NC	NC	0.0063 U	0.0058 U	0.0055 UJ	0.0058 U	0.0058 U	0.0056 U	0.0058 U
Bromoform	75-25-2	NC	NC	0.0063 U	0.0058 U	0.0055 UJ	0.0058 UJ	0.0058 UJ	0.0056 U	0.0058 U
Bromomethane	74-83-9	NC	NC	0.0063 U	0.0058 U	0.0055 UJ	0.0058 U	0.0058 U	0.0056 U	0.0058 U
Carbon Disulfide	75-15-0	NC	NC	0.0063 U	0.0058 U	0.0055 UJ	0.0058 U	0.0058 U	0.0056 U	0.0058 U
Carbon Tetrachloride	56-23-5	2	22	0.0063 U	0.0058 U	0.0055 UJ	0.0058 U	0.0058 U	0.0056 U	0.0058 U
Chlorobenzene	108-90-7	100	500	0.0063 U	0.0058 U	0.0055 UJ	0.0058 U	0.0058 U	0.0056 U	0.0058 U
Chloroethane	75-00-3	NC	NC	0.0063 UJ	0.0058 UJ	0.0055 UJ	0.0058 U	0.0058 U	0.0056 U	0.0058 U
Chloroform	67-66-3	49	350	0.0063 U	0.0058 U	0.0055 UJ	0.0058 U	0.0058 U	0.0056 U	0.0058 U
Chloromethane	74-87-3	NC	NC	0.0063 U	0.0058 U	0.0055 UJ	0.0058 U	0.0058 U	0.0056 UJ	0.0058 UJ
cis-1,2-Dichloroethene	156-59-2	100	500	0.0063 U	0.0058 U	0.0055 UJ	0.0058 U	0.0058 U	0.0056 U	0.0058 U
cis-1,3-Dichloropropene	10061-01-5	NC	NC	0.0063 U	0.0058 U	0.0055 UJ	0.0058 U	0.0058 U	0.0056 U	0.0058 U
Cyclohexane	110-82-7	NC	NC	0.0063 U	0.0058 U	0.0055 UJ	0.0058 U	0.0058 U	0.0056 U	0.0058 U
Dibromochloromethane	124-48-1	NC	NC	0.0063 U	0.0058 U	0.0055 UJ	0.0058 U	0.0058 U	0.0056 U	0.0058 U
Dichlorodifluoromethane	75-71-8	NC	NC	0.0063 U	0.0058 U	0.0055 UJ	0.0058 U	0.0058 U	0.0056 U	0.0058 U
Ethyl Benzene	100-41-4	41	390	0.0063 U	0.0058 U	0.0055 UJ	0.0058 U	0.0058 U	0.0056 U	0.0058 U
Isopropylbenzene	98-82-8	NC	NC	0.0063 U	0.0058 U	R	0.0058 U	0.0058 UJ	0.0056 UJ	0.0058 U
m/p-Xylenes	179601-23-1	100	500	0.013 U	0.012 U	0.011 UJ	0.012 U	0.012 U	0.011 U	0.012 U
Methyl Acetate	79-20-9	NC	NC	0.0063 U	0.0058 U	0.0055 UJ	0.0058 U	0.0058 U	0.0056 U	0.0058 U
Methyl tert-butyl Ether	1634-04-4	100	500	0.0063 U	0.0058 U	0.0055 UJ	0.0058 UJ	0.0058 UJ	0.0056 U	0.0058 U
Methylcyclohexane	108-87-2	NC	NC	0.0063 U	0.0058 U	0.0055 UJ	0.0058 U	0.0058 U	0.0056 U	0.0058 U
Methylene Chloride	75-09-2	100	500	**0.012**	**0.013**	0.0055 UJ	**0.0018 J**	**0.0035 J**	**0.018 JB**	**0.01 JB**

Table 4-1
Soil Sample Analytical Results
Volatile Organic Compounds
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-06A PWSB-06A-8-10 C2099-05 5/4/2011 8-10	PWSB-06A PWSB-06A-38-40 C2099-06 5/4/2011 38-40	PWSB-07 PWSB-07-1-3 C2834-01 6/26/2011 1-3	PWSB-07 PWSB-07-8-10 C2834-02 6/26/2011 8-10	PWSB-07 PWSB-07-38-40 C2834-03 6/26/2011 38-48	PWSB-08 PWSB-08-2-2.5 C2641-01 6/12/2011 2-2.5	PWSB-08 PWSB-08-22-24 C2641-02 6/12/2011 22-24
o-Xylene	95-47-6	100	500	0.0063 U	0.0058 U	0.0055 UJ	0.0058 U	0.0058 U	0.0056 U	0.0058 U
Styrene	100-42-5	NC	NC	0.0063 U	0.0058 U	0.0055 UJ	0.0058 U	0.0058 U	0.0056 U	0.0058 U
t-1,3-Dichloropropene	10061-02-6	NC	NC	0.0063 U	0.0058 U	0.0055 UJ	0.0058 U	0.0058 U	0.0056 U	0.0058 U
Tetrachloroethene	127-18-4	19	150	0.0063 U	0.0058 U	0.0065 J	0.0058 U	0.0058 U	0.0056 U	0.0058 U
Toluene	108-88-3	100	500	0.0063 U	0.0058 U	0.0055 UJ	0.0058 U	0.0058 U	0.0056 U	0.0058 U
trans-1,2-Dichloroethene	156-60-5	100	500	0.0063 U	0.0058 U	0.0055 UJ	0.0058 U	0.0058 U	0.0056 U	0.0058 U
Trichloroethene	79-01-6	21	200	0.0063 U	0.0058 U	0.0055 UJ	0.0058 U	0.0058 U	0.0056 U	0.0058 U
Trichlorofluoromethane	75-69-4	NC	NC	0.0063 U	0.0058 U	0.0055 UJ	0.0058 U	0.0058 U	0.0056 U	0.0058 U
Vinyl Chloride	75-01-4	1	13	0.0063 UJ	0.0058 UJ	0.0055 UJ	0.0058 U	0.0058 U	0.0056 U	0.0058 U
Total BTEX	-	NC	NC	U	U	U	U	U	U	U

Notes:
B - Found in associated blank sample
bgs - below ground surface
BTEX - benzene, toluene, ethylbenzene, and xylenes
J - Estimated
mg/kg - milligrams per kilogram
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
R - Unusable
U - Not detected

Detected values are in **BOLD.**

Table 4-1
Soil Sample Analytical Results
Volatile Organic Compounds
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-08 PWSB-08-32-34 C2641-03 6/12/2011 32-34	PWMW-01 PWMW-01-1-3 C2910-01 7/5/2011 1-3	PWMW-01 PWMW-01-6-9 C2910-02 7/5/2011 6-9	PWMW-01 PWMW-01-38-40 C2910-03 7/5/2011 38-48	PWMW-02 PWMW-02-1-6 C1861-04 4/13/2011 1-6
Volatile Organic Compounds (mg/kg)								
1,1,1-Trichloroethane	71-55-6	100	500	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 UJ
1,1,2,2-Tetrachloroethane	79-34-5	NC	NC	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
1,1,2-Trichloroethane	79-00-5	NC	NC	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
1,1,2-Trichlorotrifluoroethane	76-13-1	NC	NC	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
1,1-Dichloroethane	75-34-3	26	240	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
1,1-Dichloroethene	75-35-4	100	500	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
1,2,4-Trichlorobenzene	120-82-1	NC	NC	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
1,2-Dibromo-3-Chloropropane	96-12-8	NC	NC	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
1,2-Dibromoethane	106-93-4	NC	NC	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
1,2-Dichlorobenzene	95-50-1	100	500	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
1,2-Dichloroethane	107-06-2	3	30	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
1,2-Dichloropropane	78-87-5	NC	NC	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
1,3-Dichlorobenzene	541-73-1	49	280	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
1,4-Dichlorobenzene	106-46-7	13	130	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
2-Butanone	78-93-3	100	500	0.029 UJ	0.028 U	0.031 U	0.029 U	**0.0045 J**
2-Hexanone	591-78-6	NC	NC	0.029 UJ	0.028 U	0.031 U	0.029 U	0.028 U
4-Methyl-2-Pentanone	108-10-1	NC	NC	0.029 UJ	0.028 U	0.031 U	0.029 U	0.028 U
Acetone	67-64-1	100	500	0.029 UJ	0.028 U	0.031 U	0.029 U	**0.026 J**
Benzene	71-43-2	5	44	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	**0.0036 J**
Bromodichloromethane	75-27-4	NC	NC	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
Bromoform	75-25-2	NC	NC	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
Bromomethane	74-83-9	NC	NC	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
Carbon Disulfide	75-15-0	NC	NC	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
Carbon Tetrachloride	56-23-5	2	22	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
Chlorobenzene	108-90-7	100	500	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
Chloroethane	75-00-3	NC	NC	0.0058 UJ	0.0055 U	0.0061 UJ	0.0057 U	0.0056 U
Chloroform	67-66-3	49	350	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
Chloromethane	74-87-3	NC	NC	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
cis-1,2-Dichloroethene	156-59-2	100	500	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
cis-1,3-Dichloropropene	10061-01-5	NC	NC	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
Cyclohexane	110-82-7	NC	NC	0.0058 UJ	0.0055 U	0.0061 UJ	0.0057 U	0.0056 U
Dibromochloromethane	124-48-1	NC	NC	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
Dichlorodifluoromethane	75-71-8	NC	NC	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
Ethyl Benzene	100-41-4	41	390	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
Isopropylbenzene	98-82-8	NC	NC	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
m/p-Xylenes	179601-23-1	100	500	0.012 UJ	0.011 U	0.012 U	0.011 U	0.011 U
Methyl Acetate	79-20-9	NC	NC	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
Methyl tert-butyl Ether	1634-04-4	100	500	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
Methylcyclohexane	108-87-2	NC	NC	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
Methylene Chloride	75-09-2	100	500	0.01 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U

Table 4-1
Soil Sample Analytical Results
Volatile Organic Compounds
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-08 PWSB-08-32-34 C2641-03 6/12/2011 32-34	PWMW-01 PWMW-01-1-3 C2910-01 7/5/2011 1-3	PWMW-01 PWMW-01-6-9 C2910-02 7/5/2011 6-9	PWMW-01 PWMW-01-38-40 C2910-03 7/5/2011 38-48	PWMW-02 PWMW-02-1-6 C1861-04 4/13/2011 1-6
o-Xylene	95-47-6	100	500	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
Styrene	100-42-5	NC	NC	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
t-1,3-Dichloropropene	10061-02-6	NC	NC	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
Tetrachloroethene	127-18-4	19	150	0.0058 UJ	0.0055 U	0.0061 U	**0.0013 J**	0.0056 U
Toluene	108-88-3	100	500	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
trans-1,2-Dichloroethene	156-60-5	100	500	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
Trichloroethene	79-01-6	21	200	0.0058 UJ	0.0055 U	0.0061 U	0.0057 U	0.0056 U
Trichlorofluoromethane	75-69-4	NC	NC	0.0058 UJ	0.0055 U	0.0061 UJ	0.0057 U	0.0056 UJ
Vinyl Chloride	75-01-4	1	13	0.0058 UJ	0.0055 U	0.0061 UJ	0.0057 U	0.0056 U
Total BTEX	-	NC	NC	U	U	U	U	**0.0036**

Notes:
B - Found in associated blank sample
bgs - below ground surface
BTEX - benzene, toluene, ethylbenzene, and xylenes
J - Estimated
mg/kg - milligrams per kilogram
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
R - Unusable
U - Not detected

Detected values are in **BOLD.**

Table 4-1
Soil Sample Analytical Results
Volatile Organic Compounds
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWMW-02 PWMW-02-8-9 C1861-05 4/13/2011 8-9	PWMW-02 PWMW-02-38-40 C1861-06 4/13/2011 38-48	PWTP-A TP-01A-2.5-3 C2353-01 5/22/2011 2.5-3	PWTP-A TP-01A-2.5 C2353-02 5/22/2011 2.5
Volatile Organic Compounds (mg/kg)							
1,1,1-Trichloroethane	71-55-6	100	500	0.0059 UJ	0.0057 U	0.0057 U	NA
1,1,2,2-Tetrachloroethane	79-34-5	NC	NC	0.0059 U	0.0057 U	0.0057 U	NA
1,1,2-Trichloroethane	79-00-5	NC	NC	0.0059 U	0.0057 U	0.0057 U	NA
1,1,2-Trichlorotrifluoroethane	76-13-1	NC	NC	0.0059 U	0.0057 U	0.0057 U	NA
1,1-Dichloroethane	75-34-3	26	240	0.0059 U	0.0057 U	0.0057 U	NA
1,1-Dichloroethene	75-35-4	100	500	0.0059 U	0.0057 U	0.0057 U	NA
1,2,4-Trichlorobenzene	120-82-1	NC	NC	0.0059 U	0.0057 U	0.0057 U	NA
1,2-Dibromo-3-Chloropropane	96-12-8	NC	NC	0.0059 U	0.0057 U	0.0057 U	NA
1,2-Dibromoethane	106-93-4	NC	NC	0.0059 U	0.0057 U	0.0057 U	NA
1,2-Dichlorobenzene	95-50-1	100	500	0.0059 U	0.0057 U	0.0057 U	NA
1,2-Dichloroethane	107-06-2	3	30	0.0059 U	0.0057 U	0.0057 U	NA
1,2-Dichloropropane	78-87-5	NC	NC	0.0059 U	0.0057 U	0.0057 U	NA
1,3-Dichlorobenzene	541-73-1	49	280	0.0059 U	0.0057 U	0.0057 U	NA
1,4-Dichlorobenzene	106-46-7	13	130	0.0059 U	0.0057 U	0.0057 U	NA
2-Butanone	78-93-3	100	500	0.029 U	0.029 U	0.029 U	NA
2-Hexanone	591-78-6	NC	NC	0.029 U	0.029 U	0.029 U	NA
4-Methyl-2-Pentanone	108-10-1	NC	NC	0.029 U	0.029 U	0.029 U	NA
Acetone	67-64-1	100	500	0.029 U	0.029 U	0.029 U	NA
Benzene	71-43-2	5	44	0.0059 U	0.0057 U	0.0057 U	**4 J**
Bromodichloromethane	75-27-4	NC	NC	0.0059 U	0.0057 U	0.0057 U	NA
Bromoform	75-25-2	NC	NC	0.0059 U	0.0057 U	0.0057 U	NA
Bromomethane	74-83-9	NC	NC	0.0059 U	0.0057 U	0.0057 U	NA
Carbon Disulfide	75-15-0	NC	NC	0.0059 U	0.0057 U	0.0057 U	NA
Carbon Tetrachloride	56-23-5	2	22	0.0059 U	0.0057 U	0.0057 U	NA
Chlorobenzene	108-90-7	100	500	0.0059 U	0.0057 U	0.0057 U	NA
Chloroethane	75-00-3	NC	NC	0.0059 U	0.0057 U	0.0057 U	NA
Chloroform	67-66-3	49	350	0.0059 U	0.0057 U	0.0057 U	NA
Chloromethane	74-87-3	NC	NC	0.0059 U	0.0057 U	0.0057 U	NA
cis-1,2-Dichloroethene	156-59-2	100	500	0.0059 U	0.0057 U	0.0057 U	NA
cis-1,3-Dichloropropene	10061-01-5	NC	NC	0.0059 U	0.0057 U	0.0057 U	NA
Cyclohexane	110-82-7	NC	NC	0.0059 U	0.0057 U	0.0057 U	NA
Dibromochloromethane	124-48-1	NC	NC	0.0059 U	0.0057 U	0.0057 U	NA
Dichlorodifluoromethane	75-71-8	NC	NC	0.0059 U	0.0057 U	0.0057 U	NA
Ethyl Benzene	100-41-4	41	390	0.0059 U	0.0057 U	0.0057 U	**2.2 J**
Isopropylbenzene	98-82-8	NC	NC	0.0059 U	0.0057 U	0.0057 U	NA
m/p-Xylenes	179601-23-1	100	500	0.012 U	0.011 U	0.011 U	**9.5 J**
Methyl Acetate	79-20-9	NC	NC	0.0059 U	0.0057 U	0.0057 U	NA
Methyl tert-butyl Ether	1634-04-4	100	500	0.0059 U	0.0057 U	0.0057 U	NA
Methylcyclohexane	108-87-2	NC	NC	0.0059 U	0.0057 U	0.0057 U	NA
Methylene Chloride	75-09-2	100	500	0.0059 U	0.0057 U	**0.06 B**	NA

Table 4-1
Soil Sample Analytical Results
Volatile Organic Compounds
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWMW-02 PWMW-02-8-9 C1861-05 4/13/2011 8-9	PWMW-02 PWMW-02-38-40 C1861-06 4/13/2011 38-48	PWTP-A TP-01A-2.5-3 C2353-01 5/22/2011 2.5-3	PWTP-A TP-01A-2.5 C2353-02 5/22/2011 2.5
o-Xylene	95-47-6	100	500	0.0059 U	0.0057 U	0.0057 U	**5.8 J**
Styrene	100-42-5	NC	NC	0.0059 U	0.0057 U	0.0057 U	NA
t-1,3-Dichloropropene	10061-02-6	NC	NC	0.0059 U	0.0057 U	0.0057 U	NA
Tetrachloroethene	127-18-4	19	150	0.0059 U	0.0057 U	0.0057 U	NA
Toluene	108-88-3	100	500	0.0059 U	0.0057 U	0.0057 U	**8.9**
trans-1,2-Dichloroethene	156-60-5	100	500	0.0059 U	0.0057 U	0.0057 U	NA
Trichloroethene	79-01-6	21	200	0.0059 U	0.0057 U	0.0057 U	NA
Trichlorofluoromethane	75-69-4	NC	NC	0.0059 UJ	0.0057 U	0.0057 U	NA
Vinyl Chloride	75-01-4	1	13	0.0059 U	0.0057 U	0.0057 U	NA
Total BTEX	-	NC	NC	U	U	U	**30.4**

Notes:
B - Found in associated blank sample
bgs - below ground surface
BTEX - benzene, toluene, ethylbenzene, and xylenes
J - Estimated
mg/kg - milligrams per kilogram
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
R - Unusable
U - Not detected

Detected values are in **BOLD.**

Table 4-2
Soil Sample Analytical Results
Volatile Organic Compounds - BTEX
Peoples Works Former MGP Site

Location ID		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-13	PWSB-13	PWSB-14	PWSB-14	PWSB-15	PWSB-16	PWSB-16
Sample ID				PWSB-13-28-28.5	PWSB-13-38-38.5	PWSB-14-25.5-26	PWSB-14-36-36.5	PWSB-15-14-14.5	PWSB-16-8.5-9	PWSB-16-18.5-19
Lab Sample Number				MC35638-1	MC35638-2	MC35638-3	MC35638-4	MC35753-3	MC35638-5	MC35638-6
Sampling Date				12/3/2014	12/3/2014	12/4/2014	12/4/2014	12/9/2014	12/7/2014	12/7/2014
Sample Depth (feet bgs)				28-28.5	38-38.5	25.5-26	36-36.5	14-15.5	8.5-9	18.5-19
Volatile Organic Compounds (mg/kg)										
Benzene	71-43-2	5	44	**0.801**	**0.00056**	**0.433**	**0.00098**	**0.001**	**0.273**	**0.0033**
Ethyl Benzene	100-41-4	41	390	**0.629**	0.00067 U	**0.143 J**	0.0006 U	0.00058 U	0.069 U	0.00062 U
Toluene	108-88-3	100	500	0.039 U	0.0002 U	0.034 U	**0.00025 J**	0.00017 U	**0.214 J**	**0.00086 J**
Xylene (total)	1330-20-7	100	500	**0.299 J**	0.00021 U	0.036 U	0.00019 U	**0.00087 J**	0.022 U	**0.00058 J**
Total BTEX	**-**	NC	NC	**1.729**	**0.00056**	**0.576**	**0.00123**	**0.00187**	**0.487**	**0.00474**

Notes:
bgs - below ground surface
BTEX - benzene, toluene, ethylbenzene, and xylenes
J - Estimated
mg/kg - milligrams per kilogram
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
U - Not detected

Detected values are in **BOLD.**

Values shaded in GOLD were detected at a concentration exceeding restricted residential criteria.

Values shaded in PINK were detected at a concentration exceeding both restricted residential and commercial criteria.

Table 4-2
Soil Sample Analytical Results
Volatile Organic Compounds - BTEX
Peoples Works Former MGP Site

Location ID		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-17	PWSB-17	PWSB-18	PWSB-19	PWSB-20	PWSB-21	PWSB-22
Sample ID				PWSB-17-6.5-7	PWSB-17-15-15.5	PWSB-18-7.0-7.5	PWSB-19-7.5-8.0	PWSB-20-6.5-7.0	PWSB-21-9.5-10.0	PWSB-22-10.5-11.0
Lab Sample Number				MC35638-7	MC35638-8	MC35753-1	MC35753-2	MC35753-4	MC36227-6	MC36227-2
Sampling Date				12/7/2014	12/7/2014	12/8/2014	12/8/2014	12/9/2014	1/4/2015	1/4/2015
Sample Depth (feet bgs)				6.5-7	15-15.5	7.0-7.5	7.5-8.0	6.5-7.0	9.5-10.0	10.5-11.0
Volatile Organic Compounds (mg/kg)										
Benzene	71-43-2	5	44	**0.144**	**0.0003 J**	**0.0015**	**0.0034**	**0.0014**	**0.415**	**0.694**
Ethyl Benzene	100-41-4	41	390	0.088 U	0.00058 U	0.0006 U	0.00052 U	0.001 U	0.091 U	0.068 U
Toluene	108-88-3	100	500	**0.126 J**	0.00017 U	**0.00046 J**	**0.00059 J**	**0.00048 J**	**0.633 J**	**0.197 J**
Xylene (total)	1330-20-7	100	500	0.028 U	0.00018 U	**0.0034**	**0.0012 J**	**0.00074 J**	**1.97**	**0.491**
Total BTEX	**-**	NC	NC	**0.270**	**0.0003**	**0.00536**	**0.00519**	**0.00262**	**3.018**	**1.382**

Notes:
bgs - below ground surface
BTEX - benzene, toluene, ethylbenzene, and xylenes
J - Estimated
mg/kg - milligrams per kilogram
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
U - Not detected

Detected values are in **BOLD.**

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Values shaded in PINK were detected at a concentration exceeding both restricted residential and commercial criteria.

Table 4-2
Soil Sample Analytical Results
Volatile Organic Compounds - BTEX
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-22 PWSB-22-14.5-15.0 MC36227-3 1/4/2015 14.5-15.0	PWSB-22 PWSB-22-19.5-20.0 MC36227-4 1/4/2015 19.5-20.0	PWSB-23 PWSB-23-9.0-9.5 MC36227-11 1/4/2015 9.0-9.5	PWSB-24 PWSB-24-5.5-6.0 MC36297-2 1/8/2015 5.5-6.0	PWSB-25 PWSB-25-9.5-10.0 MC36227-8 1/4/2015 9.5-10.0	PWSB-25 PWSB-25-19.5-20.0 MC36227-9 1/4/2015 19.5-20.0	PWSB_26 PWSB_26-4.5-5.0 BGS MC35924-1 12/14/2014 4.5-5.0
Volatile Organic Compounds (mg/kg)										
Benzene	71-43-2	5	44	**1.08**	**0.466**	**0.0177**	**0.0124**	**14.1**	**0.0226**	**0.0138**
Ethyl Benzene	100-41-4	41	390	**0.451**	**0.219**	0.00064 U	0.00065 U	**48**	**0.00097 J**	0.00073 U
Toluene	108-88-3	100	500	**0.496 J**	**0.234 J**	**0.0043 J**	**0.00087 J**	**13.1**	**0.00075 J**	**0.0047 J**
Xylene (total)	1330-20-7	100	500	**1.71**	**0.838**	**0.0009 J**	**0.00033 J**	**224**	**0.0043**	**0.0027**
Total BTEX	**-**	NC	NC	**3.737**	**1.757**	**0.0229**	**0.0136**	**299.2**	**0.02862**	**0.0212**

Notes:
bgs - below ground surface
BTEX - benzene, toluene, ethylbenzene, and xylenes
J - Estimated
mg/kg - milligrams per kilogram
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
U - Not detected

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Table 4-2
Soil Sample Analytical Results
Volatile Organic Compounds - BTEX
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-27 PWSB-27-14.5-15.0 MC36341-1 1/11/2015 14.5-15.0	PWSB_27 PWSB-27-25.5-26.0 MC36341-2 1/11/2015 25.5-26.0	PWSB-28 PWSB-28-8.5-9.0 MC40530-1 8/4/2015 8.5-9	PWSB-28 PWSB-28-18.5-19.0 MC40530-2 8/4/2015 18.5-19.0	PWSB-29 PWSB-29-17.0-17.5 MC40635-4A 8/9/2015 17-17.5	PWSB-29 PWSB-29-29.0-29.5 MC40635-5A 8/9/2015 29-29.5	PWSB-30 PWSB-30-8.0-8.5 MC40635-1A 8/9/2015 8-8.5
Volatile Organic Compounds (mg/kg)										
Benzene	71-43-2	5	44	**3.42**	0.0004 U	0.420 U	0.000390 U	**1.17**	**0.112**	**0.494**
Ethyl Benzene	100-41-4	41	390	**25.6**	0.00082 U	**18.7**	0.000390 U	**4.70**	**0.486**	**2.84**
Toluene	108-88-3	100	500	**5.38 J**	0.00025 U	0.450 U	0.000410 U	**0.659**	**0.261 J**	**0.111 J**
Xylene (total)	1330-20-7	100	500	**35.7**	0.00026 U	**28.8**	0.000360 U	**16.8**	**2.25**	**11.1**
Total BTEX	**-**	NC	NC	**70.10**	U	**47.5**	U	**23.329**	**3.109**	**14.545**

Notes:
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BTEX - benzene, toluene, ethylbenzene, and xylenes
J - Estimated
mg/kg - milligrams per kilogram
NC - No criteria
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U - Not detected

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Table 4-2
Soil Sample Analytical Results
Volatile Organic Compounds - BTEX
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-30 PWSB-30-19.5-20.0 MC40635-2A 8/9/2015 19.5-20	PWSB-31 PWSB-31-13.5-14.0 MC40976-3 8/23/2015 13.5-14	PWSB-31 PWSB-31-32.0-32.5 MC40976-4 8/23/2015 32-32.5	PWSB-32 PWSB-32-11.0-11.5 MC40976-1 8/23/2015 11-11.5	PWSB-32 PWSB-32-36.0-36.5 MC40976-2 8/23/2015 36-36.5	PWSB-33 PWSB-33-8.0-8.5 MC40530-4 8/4/2015 8-8.5	PWSB-34 PWSB-34-14.1-15 MC40824-1A 8/16/2015 14.1-15
Volatile Organic Compounds (mg/kg)										
Benzene	71-43-2	5	44	**0.176**	**203**	0.00040 U	0.061 U	**0.00050**	**0.07860**	**0.420**
Ethyl Benzene	100-41-4	41	390	**0.0094**	**169**	0.00040 U	**0.130 J**	**0.00051 J**	0.00038 U	**0.179 J**
Toluene	108-88-3	100	500	**0.0039**	**238**	0.00043 U	0.065 U	0.00034 U	**0.00082 J**	**0.310 J**
Xylene (total)	1330-20-7	100	500	**0.0280**	**552**	0.00037 U	**0.241 J**	**0.00043 J**	0.00035 U	**0.527**
Total BTEX	**-**	NC	NC	**0.2173**	**1,162**	U	**0.371**	**0.00144**	**0.07942**	**1.436**

Notes:
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BTEX - benzene, toluene, ethylbenzene, and xylenes
J - Estimated
mg/kg - milligrams per kilogram
NC - No criteria
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Table 4-2
Soil Sample Analytical Results
Volatile Organic Compounds - BTEX
Peoples Works Former MGP Site

Location ID		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-34	PWSB-35	PWSB-35	PWTP_1	PWTP_2	PWTP_2	PWTP-3
Sample ID				PWSB-34-19-10	PWSB-35-8.5-9.0	PWSB-35-32.5-33.0	PWTP_1-7.0-7.5	PWTP_2-5.0-5.5	PWTP_2-7.0-7.5	PWTP-3-3.5-4.0
Lab Sample Number				MC40824-2A	MC40976-5	MC40976-6	MC35924-4	MC35924-2	MC35924-3	MC36058-3
Sampling Date				8/16/2015	8/23/2015	8/23/2015	12/15/2014	12/15/2014	12/15/2014	12/16/2014
Sample Depth (feet bgs)				19-20	8.5-9	32.5-33	7.0-7.5	5.0-5.5	7.0-7.5	3.5-4.0
Volatile Organic Compounds (mg/kg)										
Benzene	71-43-2	5	44	**0.0461 J**	**78.5**	**0.00079**	**0.0099**	**0.0047**	**0.0021**	**0.0042**
Ethyl Benzene	100-41-4	41	390	0.0470 U	**72.9**	**0.00039 J**	0.00067 U	0.00061 U	0.00063 U	0.00056 U
Toluene	108-88-3	100	500	**0.0530 J**	**9.34**	0.00040 U	**0.0015 J**	**0.000044 J**	**0.00037 J**	**0.00028 J**
Xylene (total)	1330-20-7	100	500	**0.211 J**	**167**	**0.00054 J**	**0.00069 J**	0.00019 U	**0.0009 J**	0.00018 U
Total BTEX	**-**	NC	NC	**0.310**	**327.74**	**0.00172**	**0.01209**	**0.004744**	**0.00337**	**0.00448**

Notes:
bgs - below ground surface
BTEX - benzene, toluene, ethylbenzene, and xylenes
J - Estimated
mg/kg - milligrams per kilogram
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
U - Not detected

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Table 4-2
Soil Sample Analytical Results
Volatile Organic Compounds - BTEX
Peoples Works Former MGP Site

Location ID		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWTP-3	PWTP-4	PWTP-5	PWTP-6	PWTP-7	PWTP-8	PWMW-03
Sample ID				PWTP-3-6.5-7.0	PWTP-4-5.5-6.0	PWTP-5-5.5-6.0	PWTP-6-5.0-5.5	PWTP-7-2.5-3.0	PWTP-8-6.5-7.0	PWMW-03-9.5-10.0
Lab Sample Number				MC36058-2	MC36058-4	MC36058-5	MC36058-6	MC36058-1	MC36924-1	MC36297-1
Sampling Date				12/16/2014	12/17/2014	12/17/2014	12/18/2014	12/16/2014	2/15/2015	1/8/2015
Sample Depth (feet bgs)				6.5-7.0	5.5-6.0	5.5-6.0	5.0-5.5	2.5-3.0	6.5-7.0	9.5-10.0
Volatile Organic Compounds (mg/kg)										
Benzene	71-43-2	5	44	**0.0045**	0.00032 U	**0.0468**	**0.0013**	**0.0023**	**0.00047 J**	**0.0023**
Ethyl Benzene	100-41-4	41	390	0.00068 U	0.00065 U	0.00067 U	0.00062 U	0.00067 U	0.00073 U	0.00059 U
Toluene	108-88-3	100	500	**0.00042 J**	0.00019 U	**0.0036 J**	**0.00033 J**	**0.00033 J**	0.00022 U	**0.00029 J**
Xylene (total)	1330-20-7	100	500	0.00022 U	0.00021 U	**0.00076 J**	0.0002 U	0.00021 U	0.00022 U	0.00019 U
Total BTEX	**-**	NC	NC	**0.00492**	U	**0.05116**	**0.00163**	**0.00263**	**0.00047**	**0.00259**

Notes:
bgs - below ground surface
BTEX - benzene, toluene, ethylbenzene, and xylenes
J - Estimated
mg/kg - milligrams per kilogram
NC - No criteria
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Table 4-3
Soil Sample Analytical Results
Semi-Volatile Organic Compounds
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-01 PWSB-01-2.5-5 C1875-05 4/14/2011 2.5-5	PWSB-01 PWSB-01-5-9 C2089-03 5/2/2011 5-9	PWSB-01 PWSB-21-5-9 Duplicate of PWSB-01-5-9 5-9	PWSB-01 PWSB-01-35-40 C2099-01 5/3/2011 35-40	PWSB-02 PWSB-02-1-2 C1827-02 4/11/2011 1-2	PWSB-02 PWSB-02-4-5 C1827-03 4/11/2011 4-5	PWSB-02 PWSB-02-38-40 C1827-05 4/11/2011 38-48
Semi-Volatile Organic Compounds (mg/kg)										
1,1-Biphenyl	92-52-4	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	2 U	2 U	0.38 U
2,2-oxybis(1-Chloropropane)	108-60-1	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	2 U	2 U	0.38 U
2,4,5-Trichlorophenol	95-95-4	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	R	2 U	0.38 U
2,4,6-Trichlorophenol	88-06-2	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	R	2 U	0.38 U
2,4-Dichlorophenol	120-83-2	NC	NC	0.38 U	0.38 UJ	0.39 UJ	0.38 U	R	2 U	0.38 U
2,4-Dimethylphenol	105-67-9	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	R	2 U	0.38 U
2,4-Dinitrophenol	51-28-5	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	R	2 U	0.38 U
2,4-Dinitrotoluene	121-14-2	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	2 U	2 U	0.38 U
2,6-Dinitrotoluene	606-20-2	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	2 U	2 U	0.38 U
2-Chloronaphthalene	91-58-7	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	2 U	2 U	0.38 U
2-Chlorophenol	95-57-8	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	R	2 U	0.38 U
2-Methylnaphthalene	91-57-6	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	2 U	2 U	0.38 U
2-Methylphenol	95-48-7	100	500	0.38 U	0.38 U	0.39 U	0.38 U	R	2 U	0.38 U
2-Nitroaniline	88-74-4	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	2 U	2 U	0.38 U
2-Nitrophenol	88-75-5	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	R	2 U	0.38 U
3,3-Dichlorobenzidine	91-94-1	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	2 U	2 U	0.38 U
3+4-Methylphenols	65794-96-9	100	500	0.38 U	0.38 U	0.39 U	0.38 U	R	2 U	0.38 U
3-Nitroaniline	99-09-2	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	2 U	2 U	0.38 U
4,6-Dinitro-2-methylphenol	534-52-1	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	R	2 U	0.38 U
4-Bromophenyl-phenylether	101-55-3	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	2 U	2 U	0.38 U
4-Chloro-3-methylphenol	59-50-7	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	R	2 U	0.38 U
4-Chloroaniline	106-47-8	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	2 U	2 U	0.38 U
4-Chlorophenyl-phenylether	7005-72-3	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	2 U	2 U	0.38 U
4-Nitroaniline	100-01-6	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	2 U	2 U	0.38 U
4-Nitrophenol	100-02-7	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	R	2 U	0.38 U
Acenaphthene	83-32-9	100	500	0.38 U	0.38 U	0.39 U	0.38 U	2 U	2 U	0.38 U
Acenaphthylene	208-96-8	100	500	0.38 U	0.38 U	0.39 U	0.38 U	**0.55 J**	**0.31 J**	0.38 U
Acetophenone	98-86-2	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	2 U	2 U	0.38 U
Anthracene	120-12-7	100	500	0.38 U	0.38 U	0.39 U	0.38 U	**0.84 J**	**0.47 J**	0.38 U
Atrazine	1912-24-9	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	2 U	2 U	0.38 U
Benzaldehyde	100-52-7	NC	NC	0.38 UJ	0.38 U	0.39 U	0.38 U	2 UJ	2 UJ	0.38 UJ
Benzo(a)anthracene	56-55-3	1	6	**0.11 J**	0.38 U	0.39 U	0.38 U	**6**	**4**	0.38 U
Benzo(a)pyrene	50-32-8	1	1	**0.16 J**	0.38 U	0.39 U	0.38 U	**5**	**3**	0.38 U
Benzo(b)fluoranthene	205-99-2	1	6	**0.19 J**	0.38 U	0.39 U	0.38 U	**10**	**6**	0.38 U
Benzo(g,h,i)perylene	191-24-2	100	500	**0.12 J**	0.38 U	0.39 U	0.38 U	**6**	**4**	0.38 U
Benzo(k)fluoranthene	207-08-9	4	56	**0.051 J**	0.38 U	0.39 U	0.38 U	**3**	**2**	0.38 U
bis(2-Chloroethoxy)methane	111-91-1	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	2 U	2 U	0.38 U
bis(2-Chloroethyl)ether	111-44-4	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	2 U	2 U	0.38 U
bis(2-Ethylhexyl)phthalate	117-81-7	NC	NC	**0.051 J**	0.38 U	0.39 U	0.38 U	**0.77 J**	2 U	0.38 U
Butylbenzylphthalate	85-68-7	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	2 U	2 U	0.38 U
Caprolactam	105-60-2	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	2 U	2 U	0.38 U

Table 4-3
Soil Sample Analytical Results
Semi-Volatile Organic Compounds
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-01 PWSB-01-2.5-5 C1875-05 4/14/2011 2.5-5	PWSB-01 PWSB-01-5-9 C2089-03 5/2/2011 5-9	PWSB-01 PWSB-21-5-9 Duplicate of PWSB-01-5-9 5-9	PWSB-01 PWSB-01-35-40 C2099-01 5/3/2011 35-40	PWSB-02 PWSB-02-1-2 C1827-02 4/11/2011 1-2	PWSB-02 PWSB-02-4-5 C1827-03 4/11/2011 4-5	PWSB-02 PWSB-02-38-40 C1827-05 4/11/2011 38-48
Carbazole	86-74-8	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	**0.28 J**	2 U	0.38 U
Chrysene	218-01-9	4	56	**0.12 J**	0.38 U	0.39 U	0.38 U	**6**	**4**	0.38 U
Dibenz(a,h)anthracene	53-70-3	0.33	0.56	0.38 U	0.38 U	0.39 U	0.38 U	**1 J**	**0.78 J**	0.38 U
Dibenzofuran	132-64-9	59	350	0.38 U	0.38 U	0.39 U	0.38 U	2 U	2 U	0.38 U
Diethylphthalate	84-66-2	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	2 U	2 U	0.38 U
Dimethylphthalate	131-11-3	NC	NC	0.38 U	**0.87 B**	0.39 U	0.38 U	2 U	2 U	0.38 U
Di-n-butylphthalate	84-74-2	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	2 U	2 U	0.38 U
Di-n-octyl phthalate	117-84-0	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	2 U	2 U	0.38 U
Fluoranthene	206-44-0	100	500	**0.14 J**	0.38 U	0.39 U	0.38 U	**8**	**6**	0.38 U
Fluorene	86-73-7	100	500	0.38 U	0.38 U	0.39 U	0.38 U	2 U	2 U	0.38 U
Hexachlorobenzene	118-74-1	1	6	0.38 U	0.38 U	0.39 U	0.38 U	2 U	2 U	0.38 U
Hexachlorobutadiene	87-68-3	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	2 U	2 U	0.38 U
Hexachlorocyclopentadiene	77-47-4	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	2 U	2 U	0.38 U
Hexachloroethane	67-72-1	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	2 U	2 U	0.38 U
Indeno(1,2,3-cd)pyrene	193-39-5	1	6	**0.089 J**	0.38 U	0.39 U	0.38 U	**5**	**3**	0.38 U
Isophorone	78-59-1	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	2 U	2 U	0.38 U
Naphthalene	91-20-3	100	500	0.38 U	0.38 U	0.39 U	0.38 U	**0.49 J**	**0.25 J**	0.38 U
Nitrobenzene	98-95-3	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	2 U	2 U	0.38 U
N-Nitroso-di-n-propylamine	621-64-7	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	2 U	2 U	0.38 U
N-Nitrosodiphenylamine	86-30-6	NC	NC	0.38 U	0.38 U	0.39 U	0.38 U	2 U	2 U	0.38 U
Pentachlorophenol	87-86-5	7	7	0.38 U	0.38 U	0.39 U	0.38 U	R	2 U	0.38 U
Phenanthrene	85-01-8	100	500	**0.077 J**	0.38 U	0.39 U	0.38 U	**3**	**2 J**	0.38 U
Phenol	108-95-2	100	500	0.38 U	0.38 U	0.39 U	0.38 U	R	2 U	0.38 U
Pyrene	129-00-0	100	500	**0.17 J**	0.38 U	0.39 U	0.38 U	**11**	**7**	0.38 U
Total Detected PAHs	-	NC	NC	**1.23**	U	U	U	**65.78**	**43.51**	U

Notes:
B - Found in associated blank sample
bgs - below ground surface
D - From a diluted sample
J - Estimated
mg/kg - milligrams per kilogram
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
PAHs - Polycyclic aromatic hydrocarbons
R - Unusable
U - Not detected

Detected values are in **BOLD.**

Values shaded in GOLD were detected at a concentration exceeding restricted residential criteria.
Values shaded in PINK were detected at a concentration exceeding both restricted residential and commercial criteria.

Table 4-3
Soil Sample Analytical Results
Semi-Volatile Organic Compounds
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-02 PWSB-12-38-40 Duplicate of PWSB-02-38-40 38-48	PWSB-03 PWSB-03-1-2 C1861-01 4/13/2011 1-2	PWSB-03 PWSB-03-15-16 C1861-02 4/13/2011 15-16	PWSB-03 PWSB-03-39-40 C1861-03 4/13/2011 39-40	PWSB-04 PWSB-04-1-5 C1861-07 4/13/2011 1-5	PWSB-04 PWSB-04-13-15 C1861-08 4/13/2011 13-15	PWSB-04 PWSB-04-25-27 C1861-09 4/13/2011 25-27
Semi-Volatile Organic Compounds (mg/kg)										
1,1-Biphenyl	92-52-4	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
2,2-oxybis(1-Chloropropane)	108-60-1	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
2,4,5-Trichlorophenol	95-95-4	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
2,4,6-Trichlorophenol	88-06-2	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
2,4-Dichlorophenol	120-83-2	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
2,4-Dimethylphenol	105-67-9	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
2,4-Dinitrophenol	51-28-5	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
2,4-Dinitrotoluene	121-14-2	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
2,6-Dinitrotoluene	606-20-2	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
2-Chloronaphthalene	91-58-7	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
2-Chlorophenol	95-57-8	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
2-Methylnaphthalene	91-57-6	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	**0.32 J**	0.43 U
2-Methylphenol	95-48-7	100	500	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
2-Nitroaniline	88-74-4	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
2-Nitrophenol	88-75-5	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
3,3-Dichlorobenzidine	91-94-1	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
3+4-Methylphenols	65794-96-9	100	500	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
3-Nitroaniline	99-09-2	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
4,6-Dinitro-2-methylphenol	534-52-1	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
4-Bromophenyl-phenylether	101-55-3	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
4-Chloro-3-methylphenol	59-50-7	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
4-Chloroaniline	106-47-8	NC	NC	0.38 U	0.38 UJ	0.41 UJ	0.38 UJ	2 UJ	2 UJ	0.43 UJ
4-Chlorophenyl-phenylether	7005-72-3	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
4-Nitroaniline	100-01-6	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
4-Nitrophenol	100-02-7	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
Acenaphthene	83-32-9	100	500	0.38 U	0.38 U	0.41 U	0.38 U	**0.29 J**	**0.58 J**	0.43 U
Acenaphthylene	208-96-8	100	500	0.38 U	0.38 U	0.41 U	0.38 U	**0.33 J**	**2**	0.43 U
Acetophenone	98-86-2	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
Anthracene	120-12-7	100	500	0.38 U	0.38 U	0.41 U	0.38 U	**0.56 J**	**10**	0.43 U
Atrazine	1912-24-9	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
Benzaldehyde	100-52-7	NC	NC	0.38 UJ	0.38 UJ	0.41 UJ	0.38 UJ	2 UJ	2 UJ	0.43 UJ
Benzo(a)anthracene	56-55-3	1	6	0.38 U	0.38 U	0.41 U	0.38 U	**2**	**11**	0.43 U
Benzo(a)pyrene	50-32-8	1	1	0.38 U	0.38 U	0.41 U	0.38 U	**2**	**10**	0.43 U
Benzo(b)fluoranthene	205-99-2	1	6	0.38 U	0.38 U	0.41 U	0.38 U	**3**	**12**	0.43 U
Benzo(g,h,i)perylene	191-24-2	100	500	0.38 U	0.38 U	0.41 U	0.38 U	**1 J**	**6**	0.43 U
Benzo(k)fluoranthene	207-08-9	4	56	0.38 U	0.38 U	0.41 U	0.38 U	**0.97 J**	**3**	0.43 U
bis(2-Chloroethoxy)methane	111-91-1	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
bis(2-Chloroethyl)ether	111-44-4	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
bis(2-Ethylhexyl)phthalate	117-81-7	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
Butylbenzylphthalate	85-68-7	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
Caprolactam	105-60-2	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U

Table 4-3
Soil Sample Analytical Results
Semi-Volatile Organic Compounds
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-02 PWSB-12-38-40 Duplicate of PWSB-02-38-40 38-48	PWSB-03 PWSB-03-1-2 C1861-01 4/13/2011 1-2	PWSB-03 PWSB-03-15-16 C1861-02 4/13/2011 15-16	PWSB-03 PWSB-03-39-40 C1861-03 4/13/2011 39-40	PWSB-04 PWSB-04-1-5 C1861-07 4/13/2011 1-5	PWSB-04 PWSB-04-13-15 C1861-08 4/13/2011 13-15	PWSB-04 PWSB-04-25-27 C1861-09 4/13/2011 25-27
Carbazole	86-74-8	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	**0.69 J**	0.43 U
Chrysene	218-01-9	4	56	0.38 U	0.38 U	0.41 U	0.38 U	**2**	**11**	0.43 U
Dibenz(a,h)anthracene	53-70-3	0.33	0.56	0.38 U	0.38 U	0.41 U	0.38 U	**0.31 J**	**1 J**	0.43 U
Dibenzofuran	132-64-9	59	350	0.38 U	0.38 U	0.41 U	0.38 U	2 U	**1 J**	0.43 U
Diethylphthalate	84-66-2	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
Dimethylphthalate	131-11-3	NC	NC	0.38 U	**0.6 B**	**0.62 B**	0.38 U	2 U	2 U	0.43 U
Di-n-butylphthalate	84-74-2	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
Di-n-octyl phthalate	117-84-0	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
Fluoranthene	206-44-0	100	500	0.38 U	**0.061 J**	0.41 U	0.38 U	**5**	**16 D**	0.43 U
Fluorene	86-73-7	100	500	0.38 U	0.38 U	0.41 U	0.38 U	**0.26 J**	**0.55 J**	0.43 U
Hexachlorobenzene	118-74-1	1	6	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
Hexachlorobutadiene	87-68-3	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
Hexachlorocyclopentadiene	77-47-4	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
Hexachloroethane	67-72-1	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
Indeno(1,2,3-cd)pyrene	193-39-5	1	6	0.38 U	0.38 U	0.41 U	0.38 U	**1 J**	**5**	0.43 U
Isophorone	78-59-1	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
Naphthalene	91-20-3	100	500	0.38 U	0.38 U	0.41 U	0.38 U	**0.35 J**	**1 J**	0.43 U
Nitrobenzene	98-95-3	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
N-Nitroso-di-n-propylamine	621-64-7	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
N-Nitrosodiphenylamine	86-30-6	NC	NC	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
Pentachlorophenol	87-86-5	7	7	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
Phenanthrene	85-01-8	100	500	0.38 U	0.38 U	0.41 U	0.38 U	**3**	**16 D**	0.43 U
Phenol	108-95-2	100	500	0.38 U	0.38 U	0.41 U	0.38 U	2 U	2 U	0.43 U
Pyrene	129-00-0	100	500	0.38 U	**0.059 J**	0.41 U	0.38 U	**4**	**13 D**	0.43 U
Total Detected PAHs	-	NC	NC	U	**0.12**	U	U	**26.87**	**119.05**	U

Notes:
B - Found in associated blank sample
bgs - below ground surface
D - From a diluted sample
J - Estimated
mg/kg - milligrams per kilogram
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
PAHs - Polycyclic aromatic hydrocarbons
R - Unusable
U - Not detected

Detected values are in **BOLD.**

Values shaded in GOLD were detected at a concentration exceeding restricted residential criteria.
Values shaded in PINK were detected at a concentration exceeding both restricted residential and commercial criteria.

Table 4-3
Soil Sample Analytical Results
Semi-Volatile Organic Compounds
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-05 PWSB-05-2.5 C1875-02 4/14/2011 2.5	PWSB-05 PWSB-05-10-13 C2089-01 5/2/2011 10-13	PWSB-05 PWSB-05-19-22 C2089-02 5/2/2011 19-22	PWSB-05 PWSB-05-37-40 C2099-04 5/4/2011 37-40	PWSB-06 PWSB-06-1-2 C1739-01 4/4/2011 1-2	PWSB-06 PWSB-06-7-9 C1827-01 4/11/2011 7-9	PWSB-06A PWSB-06-3-5 C1875-06 4/14/2011 3-5
Semi-Volatile Organic Compounds (mg/kg)										
1,1-Biphenyl	92-52-4	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	0.36 U	0.4 U	0.41 U
2,2-oxybis(1-Chloropropane)	108-60-1	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	0.36 UJ	0.4 U	0.41 U
2,4,5-Trichlorophenol	95-95-4	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	R	0.4 U	0.41 U
2,4,6-Trichlorophenol	88-06-2	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	R	0.4 U	0.41 U
2,4-Dichlorophenol	120-83-2	NC	NC	0.4 U	0.39 UJ	0.4 UJ	0.38 U	R	0.4 U	0.41 U
2,4-Dimethylphenol	105-67-9	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	R	0.4 U	0.41 U
2,4-Dinitrophenol	51-28-5	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	R	0.4 U	0.41 U
2,4-Dinitrotoluene	121-14-2	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	0.36 U	0.4 U	0.41 U
2,6-Dinitrotoluene	606-20-2	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	0.36 U	0.4 U	0.41 U
2-Chloronaphthalene	91-58-7	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	0.36 U	0.4 U	0.41 U
2-Chlorophenol	95-57-8	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	R	0.4 U	0.41 U
2-Methylnaphthalene	91-57-6	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	0.36 U	0.4 U	0.41 U
2-Methylphenol	95-48-7	100	500	0.4 U	0.39 U	0.4 U	0.38 U	R	0.4 U	0.41 U
2-Nitroaniline	88-74-4	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	0.36 U	0.4 U	0.41 U
2-Nitrophenol	88-75-5	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	R	0.4 U	0.41 U
3,3-Dichlorobenzidine	91-94-1	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	0.36 U	0.4 U	0.41 U
3+4-Methylphenols	65794-96-9	100	500	0.4 U	0.39 U	0.4 U	0.38 U	R	0.4 U	0.41 U
3-Nitroaniline	99-09-2	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	0.36 U	0.4 U	0.41 U
4,6-Dinitro-2-methylphenol	534-52-1	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	R	0.4 U	0.41 U
4-Bromophenyl-phenylether	101-55-3	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	0.36 U	0.4 U	0.41 U
4-Chloro-3-methylphenol	59-50-7	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	R	0.4 U	0.41 U
4-Chloroaniline	106-47-8	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	0.36 U	0.4 U	0.41 U
4-Chlorophenyl-phenylether	7005-72-3	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	0.36 U	0.4 U	0.41 U
4-Nitroaniline	100-01-6	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	0.36 U	0.4 U	0.41 U
4-Nitrophenol	100-02-7	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	R	0.4 U	0.41 U
Acenaphthene	83-32-9	100	500	0.4 U	0.39 U	0.4 U	0.38 U	**0.14 J**	0.4 U	0.41 U
Acenaphthylene	208-96-8	100	500	0.4 U	0.39 U	0.4 U	0.38 U	0.36 U	0.4 U	0.41 U
Acetophenone	98-86-2	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	0.36 U	0.4 U	0.41 U
Anthracene	120-12-7	100	500	0.4 U	0.39 U	0.4 U	0.38 U	**0.24 J**	0.4 U	0.41 U
Atrazine	1912-24-9	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	0.36 U	0.4 U	0.41 U
Benzaldehyde	100-52-7	NC	NC	0.4 UJ	0.39 U	0.4 U	0.38 U	0.36 UJ	0.4 UJ	0.41 UJ
Benzo(a)anthracene	56-55-3	1	6	0.4 U	0.39 U	0.4 U	0.38 U	**0.62**	0.4 U	0.41 U
Benzo(a)pyrene	50-32-8	1	1	0.4 U	0.39 U	0.4 U	0.38 U	**0.5**	0.4 U	0.41 U
Benzo(b)fluoranthene	205-99-2	1	6	0.4 U	0.39 U	0.4 U	0.38 U	**0.68**	0.4 U	0.41 U
Benzo(g,h,i)perylene	191-24-2	100	500	0.4 U	0.39 U	0.4 U	0.38 U	**0.32 J**	0.4 U	0.41 U
Benzo(k)fluoranthene	207-08-9	4	56	0.4 U	0.39 U	0.4 U	0.38 U	**0.24 J**	0.4 U	0.41 U
bis(2-Chloroethoxy)methane	111-91-1	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	0.36 U	0.4 U	0.41 U
bis(2-Chloroethyl)ether	111-44-4	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	0.36 U	0.4 U	0.41 U
bis(2-Ethylhexyl)phthalate	117-81-7	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	**0.18 J**	0.4 U	0.41 U
Butylbenzylphthalate	85-68-7	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	0.36 U	0.4 U	0.41 U
Caprolactam	105-60-2	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	0.36 U	0.4 U	0.41 U

Table 4-3
Soil Sample Analytical Results
Semi-Volatile Organic Compounds
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-05 PWSB-05-2.5 C1875-02 4/14/2011 2.5	PWSB-05 PWSB-05-10-13 C2089-01 5/2/2011 10-13	PWSB-05 PWSB-05-19-22 C2089-02 5/2/2011 19-22	PWSB-05 PWSB-05-37-40 C2099-04 5/4/2011 37-40	PWSB-06 PWSB-06-1-2 C1739-01 4/4/2011 1-2	PWSB-06 PWSB-06-7-9 C1827-01 4/11/2011 7-9	PWSB-06A PWSB-06-3-5 C1875-06 4/14/2011 3-5
Carbazole	86-74-8	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	**0.11 J**	0.4 U	0.41 U
Chrysene	218-01-9	4	56	0.4 U	0.39 U	0.4 U	0.38 U	**0.61**	0.4 U	0.41 U
Dibenz(a,h)anthracene	53-70-3	0.33	0.56	0.4 U	0.39 U	0.4 U	0.38 U	**0.085 J**	0.4 U	0.41 U
Dibenzofuran	132-64-9	59	350	0.4 U	0.39 U	0.4 U	0.38 U	**0.056 J**	0.4 U	0.41 U
Diethylphthalate	84-66-2	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	0.36 U	0.4 U	0.41 U
Dimethylphthalate	131-11-3	NC	NC	0.4 U	**0.94 B**	**0.97 B**	0.38 U	0.36 U	0.4 U	0.41 U
Di-n-butylphthalate	84-74-2	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	0.36 U	0.4 U	0.41 U
Di-n-octyl phthalate	117-84-0	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	0.36 U	0.4 U	0.41 U
Fluoranthene	206-44-0	100	500	0.4 U	0.39 U	0.4 U	0.38 U	**1**	0.4 U	0.41 U
Fluorene	86-73-7	100	500	0.4 U	0.39 U	0.4 U	0.38 U	**0.092 J**	0.4 U	0.41 U
Hexachlorobenzene	118-74-1	1	6	0.4 U	0.39 U	0.4 U	0.38 U	0.36 U	0.4 U	0.41 U
Hexachlorobutadiene	87-68-3	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	0.36 UJ	0.4 U	0.41 U
Hexachlorocyclopentadiene	77-47-4	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	0.36 U	0.4 U	0.41 U
Hexachloroethane	67-72-1	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	0.36 U	0.4 U	0.41 U
Indeno(1,2,3-cd)pyrene	193-39-5	1	6	0.4 U	0.39 U	0.4 U	0.38 U	**0.33 J**	0.4 U	0.41 U
Isophorone	78-59-1	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	0.36 U	0.4 U	0.41 U
Naphthalene	91-20-3	100	500	0.4 U	0.39 U	0.4 U	0.38 U	**0.065 J**	0.4 U	0.41 U
Nitrobenzene	98-95-3	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	0.36 U	0.4 U	0.41 U
N-Nitroso-di-n-propylamine	621-64-7	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	0.36 U	0.4 U	0.41 U
N-Nitrosodiphenylamine	86-30-6	NC	NC	0.4 U	0.39 U	0.4 U	0.38 U	0.36 U	0.4 U	0.41 U
Pentachlorophenol	87-86-5	7	7	0.4 U	0.39 U	0.4 U	0.38 U	R	0.4 U	0.41 U
Phenanthrene	85-01-8	100	500	0.4 U	0.39 U	0.4 U	0.38 U	**1**	0.4 U	0.41 U
Phenol	108-95-2	100	500	0.4 U	0.39 U	0.4 U	0.38 U	R	0.4 U	0.41 U
Pyrene	129-00-0	100	500	0.4 U	0.39 U	0.4 U	0.38 U	**1**	0.4 U	0.41 U
Total Detected PAHs	-	NC	NC	U	U	U	U	**7.32**	U	U

Notes:
B - Found in associated blank sample
bgs - below ground surface
D - From a diluted sample
J - Estimated
mg/kg - milligrams per kilogram
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
PAHs - Polycyclic aromatic hydrocarbons
R - Unusable
U - Not detected

Detected values are in **BOLD.**

Values shaded in GOLD were detected at a concentration exceeding restricted residential criteria.
Values shaded in PINK were detected at a concentration exceeding both restricted residential and commercial criteria.

Table 4-3
Soil Sample Analytical Results
Semi-Volatile Organic Compounds
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-06A PWSB-06A-8-10 C2099-05 5/4/2011 8-10	PWSB-06A PWSB-06A-38-40 C2099-06 5/4/2011 38-40	PWSB-07 PWSB-07-1-3 C2834-01 6/26/2011 1-3	PWSB-07 PWSB-07-8-10 C2834-02 6/26/2011 8-10	PWSB-07 PWSB-07-38-40 C2834-03 6/26/2011 38-48	PWSB-08 PWSB-08-2-2.5 C2641-01 6/12/2011 2-2.5
Semi-Volatile Organic Compounds (mg/kg)									
1,1-Biphenyl	92-52-4	NC	NC	0.042 U	0.38 U	2 U	0.38 U	0.38 U	2 U
2,2-oxybis(1-Chloropropane)	108-60-1	NC	NC	0.042 U	0.38 U	2 U	0.38 U	0.38 U	2 U
2,4,5-Trichlorophenol	95-95-4	NC	NC	0.042 U	0.38 U	2 UJ	0.38 U	0.38 U	2 U
2,4,6-Trichlorophenol	88-06-2	NC	NC	0.042 U	0.38 U	2 UJ	0.38 U	0.38 U	2 U
2,4-Dichlorophenol	120-83-2	NC	NC	0.042 U	0.38 U	2 UJ	0.38 U	0.38 U	2 U
2,4-Dimethylphenol	105-67-9	NC	NC	0.042 U	0.38 U	2 UJ	0.38 U	0.38 U	2 U
2,4-Dinitrophenol	51-28-5	NC	NC	0.042 U	0.38 U	2 UJ	0.38 U	0.38 U	2 U
2,4-Dinitrotoluene	121-14-2	NC	NC	0.042 U	0.38 U	2 U	0.38 U	0.38 U	2 U
2,6-Dinitrotoluene	606-20-2	NC	NC	0.042 U	0.38 U	2 U	0.38 U	0.38 U	2 U
2-Chloronaphthalene	91-58-7	NC	NC	0.042 U	0.38 U	2 U	0.38 U	0.38 U	2 U
2-Chlorophenol	95-57-8	NC	NC	0.042 U	0.38 U	2 UJ	0.38 U	0.38 U	2 U
2-Methylnaphthalene	91-57-6	NC	NC	0.042 U	0.38 U	2 U	0.38 U	0.38 U	**0.25 J**
2-Methylphenol	95-48-7	100	500	0.042 U	0.38 U	2 UJ	0.38 U	0.38 U	2 U
2-Nitroaniline	88-74-4	NC	NC	0.042 U	0.38 U	2 U	0.38 U	0.38 U	2 U
2-Nitrophenol	88-75-5	NC	NC	0.042 U	0.38 U	2 UJ	0.38 U	0.38 U	2 U
3,3-Dichlorobenzidine	91-94-1	NC	NC	0.042 U	0.38 U	2 U	0.38 U	0.38 U	2 U
3+4-Methylphenols	65794-96-9	100	500	0.042 U	0.38 U	2 UJ	0.38 U	0.38 U	2 U
3-Nitroaniline	99-09-2	NC	NC	0.042 U	0.38 U	2 U	0.38 U	0.38 U	2 U
4,6-Dinitro-2-methylphenol	534-52-1	NC	NC	0.042 U	0.38 U	2 UJ	0.38 UJ	0.38 UJ	2 U
4-Bromophenyl-phenylether	101-55-3	NC	NC	0.042 U	0.38 U	2 U	0.38 U	0.38 U	2 U
4-Chloro-3-methylphenol	59-50-7	NC	NC	0.042 U	0.38 U	2 UJ	0.38 U	0.38 U	2 U
4-Chloroaniline	106-47-8	NC	NC	0.042 U	0.38 U	2 U	0.38 U	0.38 U	2 U
4-Chlorophenyl-phenylether	7005-72-3	NC	NC	0.042 U	0.38 U	2 U	0.38 U	0.38 U	2 U
4-Nitroaniline	100-01-6	NC	NC	0.042 U	0.38 U	2 U	0.38 U	0.38 U	2 U
4-Nitrophenol	100-02-7	NC	NC	0.042 U	0.38 U	2 UJ	0.38 U	0.38 U	2 U
Acenaphthene	83-32-9	100	500	0.042 U	0.38 U	2 U	0.38 U	0.38 U	**0.45 J**
Acenaphthylene	208-96-8	100	500	0.042 U	0.38 U	**0.8 J**	0.38 U	0.38 U	**0.61 J**
Acetophenone	98-86-2	NC	NC	0.042 U	0.38 U	2 U	0.38 U	0.38 U	2 U
Anthracene	120-12-7	100	500	0.042 U	0.38 U	**2 J**	0.38 U	0.38 U	**2 J**
Atrazine	1912-24-9	NC	NC	0.042 U	0.38 U	2 U	0.38 U	0.38 U	2 U
Benzaldehyde	100-52-7	NC	NC	0.042 U	0.38 U	2 UJ	0.38 UJ	0.38 UJ	2 U
Benzo(a)anthracene	56-55-3	1	6	0.042 U	0.38 U	**11**	0.38 U	0.38 U	**6**
Benzo(a)pyrene	50-32-8	1	1	0.042 U	0.38 U	**13**	0.38 U	0.38 U	**7**
Benzo(b)fluoranthene	205-99-2	1	6	0.042 U	0.38 U	**16 D**	0.38 U	0.38 U	**8**
Benzo(g,h,i)perylene	191-24-2	100	500	0.042 U	0.38 U	**9**	0.38 U	0.38 U	**6**
Benzo(k)fluoranthene	207-08-9	4	56	0.042 U	0.38 U	**5**	0.38 U	0.38 U	**3**
bis(2-Chloroethoxy)methane	111-91-1	NC	NC	0.042 U	0.38 U	2 U	0.38 U	0.38 U	2 U
bis(2-Chloroethyl)ether	111-44-4	NC	NC	0.042 U	0.38 U	2 U	0.38 U	0.38 U	2 U
bis(2-Ethylhexyl)phthalate	117-81-7	NC	NC	0.042 U	0.38 U	2 U	0.38 U	0.38 U	**2 J**
Butylbenzylphthalate	85-68-7	NC	NC	0.042 U	0.38 U	2 U	0.38 U	0.38 U	2 U
Caprolactam	105-60-2	NC	NC	0.042 U	0.38 U	2 U	0.38 U	0.38 U	2 U

Table 4-3
Soil Sample Analytical Results
Semi-Volatile Organic Compounds
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-06A PWSB-06A-8-10 C2099-05 5/4/2011 8-10	PWSB-06A PWSB-06A-38-40 C2099-06 5/4/2011 38-40	PWSB-07 PWSB-07-1-3 C2834-01 6/26/2011 1-3	PWSB-07 PWSB-07-8-10 C2834-02 6/26/2011 8-10	PWSB-07 PWSB-07-38-40 C2834-03 6/26/2011 38-48	PWSB-08 PWSB-08-2-2.5 C2641-01 6/12/2011 2-2.5
Carbazole	86-74-8	NC	NC	0.042 U	0.38 U	**0.36 J**	0.38 U	0.38 U	**0.48 J**
Chrysene	218-01-9	4	56	0.042 U	0.38 U	**10**	0.38 U	0.38 U	**5**
Dibenz(a,h)anthracene	53-70-3	0.33	0.56	0.042 U	0.38 U	**2 J**	0.38 U	0.38 U	**1 J**
Dibenzofuran	132-64-9	59	350	0.042 U	0.38 U	2 U	0.38 U	0.38 U	**0.35 J**
Diethylphthalate	84-66-2	NC	NC	0.042 U	0.38 U	2 U	0.38 U	0.38 U	2 U
Dimethylphthalate	131-11-3	NC	NC	**0.051 B**	**0.44 B**	2 U	0.38 U	0.38 U	2 U
Di-n-butylphthalate	84-74-2	NC	NC	0.042 U	0.38 U	2 U	0.38 U	0.38 U	2 U
Di-n-octyl phthalate	117-84-0	NC	NC	0.042 U	0.38 U	2 U	0.38 U	0.38 U	2 U
Fluoranthene	206-44-0	100	500	0.042 U	0.38 U	**20 D**	0.38 U	0.38 U	**11**
Fluorene	86-73-7	100	500	0.042 U	0.38 U	2 U	0.38 U	0.38 U	**0.4 J**
Hexachlorobenzene	118-74-1	1	6	0.042 U	0.38 U	2 U	0.38 U	0.38 U	2 U
Hexachlorobutadiene	87-68-3	NC	NC	0.042 U	0.38 U	2 U	0.38 U	0.38 U	2 U
Hexachlorocyclopentadiene	77-47-4	NC	NC	0.042 U	0.38 U	2 UJ	0.38 UJ	0.38 UJ	2 U
Hexachloroethane	67-72-1	NC	NC	0.042 U	0.38 U	2 U	0.38 U	0.38 U	2 U
Indeno(1,2,3-cd)pyrene	193-39-5	1	6	0.042 U	0.38 U	**8**	0.38 U	0.38 U	**5**
Isophorone	78-59-1	NC	NC	0.042 U	0.38 U	2 U	0.38 U	0.38 U	2 U
Naphthalene	91-20-3	100	500	0.042 U	0.38 U	**0.25 J**	0.38 U	0.38 U	**0.5 J**
Nitrobenzene	98-95-3	NC	NC	0.042 U	0.38 U	2 U	0.38 U	0.38 U	2 U
N-Nitroso-di-n-propylamine	621-64-7	NC	NC	0.042 U	0.38 U	2 U	0.38 U	0.38 U	2 U
N-Nitrosodiphenylamine	86-30-6	NC	NC	0.042 U	0.38 U	2 U	0.38 U	0.38 U	2 U
Pentachlorophenol	87-86-5	7	7	0.042 U	0.38 U	0.32 UJ	0.38 U	0.38 U	2 U
Phenanthrene	85-01-8	100	500	0.042 U	0.38 U	**5**	0.38 U	0.38 U	**7**
Phenol	108-95-2	100	500	0.042 U	0.38 U	2 UJ	0.38 U	0.38 U	2 U
Pyrene	129-00-0	100	500	0.042 U	0.38 U	**22 D**	0.38 U	0.38 U	**10**
Total Detected PAHs	-	NC	NC	U	U	**122.95**	U	U	**73.21**

Notes:
B - Found in associated blank sample
bgs - below ground surface
D - From a diluted sample
J - Estimated
mg/kg - milligrams per kilogram
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
PAHs - Polycyclic aromatic hydrocarbons
R - Unusable
U - Not detected

Detected values are in **BOLD.**

Values shaded in GOLD were detected at a concentration exceeding restricted residential criteria.
Values shaded in PINK were detected at a concentration exceeding both restricted residential and commercial criteria.

Table 4-3
Soil Sample Analytical Results
Semi-Volatile Organic Compounds
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-08 PWSB-08-22-24 C2641-02 6/12/2011 22-24	PWSB-08 PWSB-08-32-34 C2641-03 6/12/2011 32-34	PWMW-01 PWMW-01-1-3 C2910-01 7/5/2011 1-3	PWMW-01 PWMW-01-6-9 C2910-02 7/5/2011 6-9	PWMW-01 PWMW-01-38-40 C2910-03 7/5/2011 38-48	PWMW-02 PWMW-02-1-6 C1861-04 4/13/2011 1-6
Semi-Volatile Organic Compounds (mg/kg)									
1,1-Biphenyl	92-52-4	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
2,2-oxybis(1-Chloropropane)	108-60-1	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
2,4,5-Trichlorophenol	95-95-4	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
2,4,6-Trichlorophenol	88-06-2	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
2,4-Dichlorophenol	120-83-2	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
2,4-Dimethylphenol	105-67-9	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
2,4-Dinitrophenol	51-28-5	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
2,4-Dinitrotoluene	121-14-2	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
2,6-Dinitrotoluene	606-20-2	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
2-Chloronaphthalene	91-58-7	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
2-Chlorophenol	95-57-8	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
2-Methylnaphthalene	91-57-6	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
2-Methylphenol	95-48-7	100	500	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
2-Nitroaniline	88-74-4	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
2-Nitrophenol	88-75-5	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
3,3-Dichlorobenzidine	91-94-1	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
3+4-Methylphenols	65794-96-9	100	500	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
3-Nitroaniline	99-09-2	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
4,6-Dinitro-2-methylphenol	534-52-1	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
4-Bromophenyl-phenylether	101-55-3	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
4-Chloro-3-methylphenol	59-50-7	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
4-Chloroaniline	106-47-8	NC	NC	0.39 U	0.38 U	0.37 UJ	0.4 UJ	0.38 UJ	0.37 UJ
4-Chlorophenyl-phenylether	7005-72-3	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
4-Nitroaniline	100-01-6	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
4-Nitrophenol	100-02-7	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
Acenaphthene	83-32-9	100	500	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
Acenaphthylene	208-96-8	100	500	0.39 U	0.38 U	**0.094 J**	0.4 U	0.38 U	0.37 U
Acetophenone	98-86-2	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
Anthracene	120-12-7	100	500	0.39 U	0.38 U	**0.11 J**	0.4 U	0.38 U	0.37 U
Atrazine	1912-24-9	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
Benzaldehyde	100-52-7	NC	NC	0.39 U	0.38 U	0.37 UJ	0.4 UJ	0.38 UJ	0.37 UJ
Benzo(a)anthracene	56-55-3	1	6	0.39 U	0.38 U	**0.83**	**0.13 J**	0.38 U	**0.15 J**
Benzo(a)pyrene	50-32-8	1	1	0.39 U	0.38 U	**0.85**	**0.11 J**	0.38 U	**0.14 J**
Benzo(b)fluoranthene	205-99-2	1	6	0.39 U	0.38 U	**1**	**0.13 J**	0.38 U	**0.17 J**
Benzo(g,h,i)perylene	191-24-2	100	500	0.39 U	0.38 U	**0.61**	0.4 U	0.38 U	**0.092 J**
Benzo(k)fluoranthene	207-08-9	4	56	0.39 U	0.38 U	**0.36 J**	**0.054 J**	0.38 U	**0.062 J**
bis(2-Chloroethoxy)methane	111-91-1	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
bis(2-Chloroethyl)ether	111-44-4	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
bis(2-Ethylhexyl)phthalate	117-81-7	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
Butylbenzylphthalate	85-68-7	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
Caprolactam	105-60-2	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U

Table 4-3
Soil Sample Analytical Results
Semi-Volatile Organic Compounds
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-08 PWSB-08-22-24 C2641-02 6/12/2011 22-24	PWSB-08 PWSB-08-32-34 C2641-03 6/12/2011 32-34	PWMW-01 PWMW-01-1-3 C2910-01 7/5/2011 1-3	PWMW-01 PWMW-01-6-9 C2910-02 7/5/2011 6-9	PWMW-01 PWMW-01-38-40 C2910-03 7/5/2011 38-48	PWMW-02 PWMW-02-1-6 C1861-04 4/13/2011 1-6
Carbazole	86-74-8	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
Chrysene	218-01-9	4	56	0.39 U	0.38 U	**0.7**	**0.11 J**	0.38 U	**0.14 J**
Dibenz(a,h)anthracene	53-70-3	0.33	0.56	0.39 U	0.38 U	**0.097 J**	0.4 U	0.38 U	0.37 U
Dibenzofuran	132-64-9	59	350	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
Diethylphthalate	84-66-2	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
Dimethylphthalate	131-11-3	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
Di-n-butylphthalate	84-74-2	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
Di-n-octyl phthalate	117-84-0	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
Fluoranthene	206-44-0	100	500	0.39 U	0.38 U	**1**	**0.18 J**	0.38 U	**0.26 J**
Fluorene	86-73-7	100	500	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
Hexachlorobenzene	118-74-1	1	6	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
Hexachlorobutadiene	87-68-3	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
Hexachlorocyclopentadiene	77-47-4	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
Hexachloroethane	67-72-1	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
Indeno(1,2,3-cd)pyrene	193-39-5	1	6	0.39 U	0.38 U	**0.53**	**0.054 J**	0.38 U	**0.066 J**
Isophorone	78-59-1	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
Naphthalene	91-20-3	100	500	0.39 U	0.38 U	**0.061 J**	0.4 U	0.38 U	0.37 U
Nitrobenzene	98-95-3	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
N-Nitroso-di-n-propylamine	621-64-7	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
N-Nitrosodiphenylamine	86-30-6	NC	NC	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
Pentachlorophenol	87-86-5	7	7	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
Phenanthrene	85-01-8	100	500	0.39 U	0.38 U	**0.23 J**	0.4 U	0.38 U	**0.12 J**
Phenol	108-95-2	100	500	0.39 U	0.38 U	0.37 U	0.4 U	0.38 U	0.37 U
Pyrene	129-00-0	100	500	0.39 U	0.38 U	**2**	**0.2 J**	0.38 U	**0.24 J**
Total Detected PAHs	-	NC	NC	U	U	**8.47**	**0.97**	U	**1.44**

Notes:
B - Found in associated blank sample
bgs - below ground surface
D - From a diluted sample
J - Estimated
mg/kg - milligrams per kilogram
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
PAHs - Polycyclic aromatic hydrocarbons
R - Unusable
U - Not detected

Detected values are in **BOLD.**

Values shaded in GOLD were detected at a concentration exceeding restricted residential criteria.
Values shaded in PINK were detected at a concentration exceeding both restricted residential and commercial criteria.

Table 4-3
Soil Sample Analytical Results
Semi-Volatile Organic Compounds
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWMW-02 PWMW-02-8-9 C1861-05 4/13/2011 8-9	PWMW-02 PWMW-02-38-40 C1861-06 4/13/2011 38-48	PWTP-01A TP-01A-2.5-3 C2353-01 5/22/2011 2.5-3
Semi-Volatile Organic Compounds (mg/kg)						
1,1-Biphenyl	92-52-4	NC	NC	0.39 U	0.38 U	0.76 U
2,2-oxybis(1-Chloropropane)	108-60-1	NC	NC	0.39 U	0.38 U	0.76 U
2,4,5-Trichlorophenol	95-95-4	NC	NC	0.39 U	0.38 U	0.76 U
2,4,6-Trichlorophenol	88-06-2	NC	NC	0.39 U	0.38 U	0.76 U
2,4-Dichlorophenol	120-83-2	NC	NC	0.39 U	0.38 U	0.76 U
2,4-Dimethylphenol	105-67-9	NC	NC	0.39 U	0.38 U	0.76 U
2,4-Dinitrophenol	51-28-5	NC	NC	0.39 U	0.38 U	0.76 U
2,4-Dinitrotoluene	121-14-2	NC	NC	0.39 U	0.38 U	0.76 U
2,6-Dinitrotoluene	606-20-2	NC	NC	0.39 U	0.38 U	0.76 U
2-Chloronaphthalene	91-58-7	NC	NC	0.39 U	0.38 U	0.76 U
2-Chlorophenol	95-57-8	NC	NC	0.39 U	0.38 U	0.76 U
2-Methylnaphthalene	91-57-6	NC	NC	0.39 U	0.38 U	**0.14 J**
2-Methylphenol	95-48-7	100	500	0.39 U	0.38 U	0.76 U
2-Nitroaniline	88-74-4	NC	NC	0.39 U	0.38 U	0.76 U
2-Nitrophenol	88-75-5	NC	NC	0.39 U	0.38 U	0.76 U
3,3-Dichlorobenzidine	91-94-1	NC	NC	0.39 U	0.38 U	0.76 U
3+4-Methylphenols	65794-96-9	100	500	0.39 U	0.38 U	0.76 U
3-Nitroaniline	99-09-2	NC	NC	0.39 U	0.38 U	0.76 U
4,6-Dinitro-2-methylphenol	534-52-1	NC	NC	0.39 U	0.38 U	0.76 U
4-Bromophenyl-phenylether	101-55-3	NC	NC	0.39 U	0.38 U	0.76 U
4-Chloro-3-methylphenol	59-50-7	NC	NC	0.39 U	0.38 U	0.76 U
4-Chloroaniline	106-47-8	NC	NC	0.39 UJ	0.38 UJ	0.76 U
4-Chlorophenyl-phenylether	7005-72-3	NC	NC	0.39 U	0.38 U	0.76 U
4-Nitroaniline	100-01-6	NC	NC	0.39 U	0.38 U	0.76 U
4-Nitrophenol	100-02-7	NC	NC	0.39 U	0.38 U	0.76 U
Acenaphthene	83-32-9	100	500	0.39 U	0.38 U	**0.16 J**
Acenaphthylene	208-96-8	100	500	0.39 U	0.38 U	**0.85**
Acetophenone	98-86-2	NC	NC	0.39 U	0.38 U	0.76 U
Anthracene	120-12-7	100	500	0.39 U	0.38 U	**1.1**
Atrazine	1912-24-9	NC	NC	0.39 U	0.38 U	0.76 U
Benzaldehyde	100-52-7	NC	NC	0.39 UJ	0.38 UJ	0.76 UJ
Benzo(a)anthracene	56-55-3	1	6	0.39 U	0.38 U	**5.9**
Benzo(a)pyrene	50-32-8	1	1	0.39 U	0.38 U	**7 D**
Benzo(b)fluoranthene	205-99-2	1	6	0.39 U	0.38 U	**8.2 D**
Benzo(g,h,i)perylene	191-24-2	100	500	0.39 U	0.38 U	**5**
Benzo(k)fluoranthene	207-08-9	4	56	0.39 U	0.38 U	**2.8**
bis(2-Chloroethoxy)methane	111-91-1	NC	NC	0.39 U	0.38 U	0.76 U
bis(2-Chloroethyl)ether	111-44-4	NC	NC	0.39 U	0.38 U	0.76 U
bis(2-Ethylhexyl)phthalate	117-81-7	NC	NC	0.39 U	0.38 U	**0.21 J**
Butylbenzylphthalate	85-68-7	NC	NC	0.39 U	0.38 U	0.76 U
Caprolactam	105-60-2	NC	NC	0.39 U	0.38 U	0.76 U

Table 4-3
Soil Sample Analytical Results
Semi-Volatile Organic Compounds
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWMW-02 PWMW-02-8-9 C1861-05 4/13/2011 8-9	PWMW-02 PWMW-02-38-40 C1861-06 4/13/2011 38-48	PWTP-01A TP-01A-2.5-3 C2353-01 5/22/2011 2.5-3
Carbazole	86-74-8	NC	NC	0.39 U	0.38 U	**0.21 J**
Chrysene	218-01-9	4	56	0.39 U	0.38 U	**5**
Dibenz(a,h)anthracene	53-70-3	0.33	0.56	0.39 U	0.38 U	**1.2**
Dibenzofuran	132-64-9	59	350	0.39 U	0.38 U	**0.21 J**
Diethylphthalate	84-66-2	NC	NC	0.39 U	0.38 U	0.76 U
Dimethylphthalate	131-11-3	NC	NC	**0.42 B**	0.38 U	0.76 U
Di-n-butylphthalate	84-74-2	NC	NC	0.39 U	0.38 U	0.76 U
Di-n-octyl phthalate	117-84-0	NC	NC	0.39 U	0.38 U	0.76 U
Fluoranthene	206-44-0	100	500	0.39 U	0.38 U	**11 D**
Fluorene	86-73-7	100	500	0.39 U	0.38 U	**0.26 J**
Hexachlorobenzene	118-74-1	1	6	0.39 U	0.38 U	0.76 U
Hexachlorobutadiene	87-68-3	NC	NC	0.39 U	0.38 U	0.76 U
Hexachlorocyclopentadiene	77-47-4	NC	NC	0.39 U	0.38 U	0.76 U
Hexachloroethane	67-72-1	NC	NC	0.39 U	0.38 U	0.76 U
Indeno(1,2,3-cd)pyrene	193-39-5	1	6	0.39 U	0.38 U	**3.8**
Isophorone	78-59-1	NC	NC	0.39 U	0.38 U	0.76 U
Naphthalene	91-20-3	100	500	0.39 U	0.38 U	**0.58 J**
Nitrobenzene	98-95-3	NC	NC	0.39 U	0.38 U	0.76 U
N-Nitroso-di-n-propylamine	621-64-7	NC	NC	0.39 U	0.38 U	0.76 U
N-Nitrosodiphenylamine	86-30-6	NC	NC	0.39 U	0.38 U	0.76 U
Pentachlorophenol	87-86-5	7	7	0.39 U	0.38 U	0.76 U
Phenanthrene	85-01-8	100	500	0.39 U	0.38 U	**4.1**
Phenol	108-95-2	100	500	0.39 U	0.38 U	0.76 U
Pyrene	129-00-0	100	500	0.39 U	0.38 U	**11 D**
Total Detected PAHs	-	NC	NC	U	U	**68.09**

Notes:
B - Found in associated blank sample
bgs - below ground surface
D - From a diluted sample
J - Estimated
mg/kg - milligrams per kilogram
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
PAHs - Polycyclic aromatic hydrocarbons
R - Unusable
U - Not detected

Detected values are in **BOLD.**

Values shaded in GOLD were detected at a concentration exceeding restricted residential criteria.
Values shaded in PINK were detected at a concentration exceeding both restricted residential and commercial criteria.

Table 4-4
Soil Sample Analytical Results
Semi-Volatile Organic Compounds - PAHs
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-13 PWSB-13-28-28.5 MC35638-1 12/3/2014 28-28.5	PWSB-13 PWSB-13-38-38.5 MC35638-2 12/3/2014 38-38.5	PWSB-14 PWSB-14-25.5-26 MC35638-3 12/4/2014 25.5-26	PWSB-14 PWSB-14-36-36.5 MC35638-4 12/4/2014 36-36.5	PWSB-15 PWSB-15-14-14.5 MC35753-3 12/9/2014 14-15.5	PWSB-16 PWSB-16-8.5-9 MC35638-5 12/7/2014 8.5-9	PWSB-16 PWSB-16-18.5-19 MC35638-6 12/7/2014 18.5-19
Semi-Volatile Organic Compounds (mg/kg)										
2-Methylnaphthalene	91-57-6	NC	NC	**0.0433 J**	0.014 U	**0.458**	0.015 U	0.015 U	**10.1**	**0.379**
Acenaphthene	83-32-9	100	500	**0.0336 J**	0.015 U	**0.459**	0.015 U	**0.0377 J**	**4.69**	**0.11 J**
Acenaphthylene	208-96-8	100	500	0.016 U	0.011 U	**0.395**	**0.0119 J**	0.012 U	**29.1**	**0.444**
Anthracene	120-12-7	100	500	**0.0519 J**	0.013 U	**0.289**	**0.0175 J**	**0.0186 J**	**56.8**	**0.831**
Benzo(a)anthracene	56-55-3	1	6	**0.732 J**	0.014 U	**0.201**	**0.0606 J**	**0.0178 J**	**76.9**	**1.24**
Benzo(a)pyrene	50-32-8	1	1	**0.057 J**	0.012 U	**0.167**	**0.0496 J**	0.013 U	**55.5**	**0.938**
Benzo(b)fluoranthene	205-99-2	1	6	**0.0483 J**	0.014 U	**0.111 J**	**0.038 J**	0.015 U	**71.7**	**0.825**
Benzo(g,h,i)perylene	191-24-2	100	500	**0.0241 J**	0.011 U	**0.0802 J**	**0.0299 J**	0.012 U	**34.7**	**0.492**
Benzo(k)fluoranthene	207-08-9	4	56	**0.0285 J**	0.017 U	**0.113 J**	**0.0429 J**	0.018 U	**27**	**0.767**
Chrysene	218-01-9	4	56	**0.0663 J**	0.014 U	**0.186**	**0.0495 J**	0.015 U	**63.1**	**1.09**
Dibenz(a,h)anthracene	53-70-3	0.33	0.56	0.019 U	0.013 U	**0.0458 J**	0.014 U	0.014 U	**17**	**0.205**
Fluoranthene	206-44-0	100	500	**0.123 J**	0.015 U	**0.475**	**0.113**	**0.0454 J**	**195**	**3.1**
Fluorene	86-73-7	100	500	**0.043 J**	0.015 U	**0.569**	0.015 U	**0.0185 J**	**12.4**	**0.235**
Indeno(1,2,3-cd)pyrene	193-39-5	1	6	**0.0246 J**	0.012 U	**0.0685 J**	**0.0335 J**	0.013 U	**41.2**	**0.674**
Naphthalene	91-20-3	100	500	**2.63**	0.018 U	**6.19**	0.018 U	**0.111 J**	**11.3**	**0.465**
Phenanthrene	85-01-8	100	500	**0.19**	0.015 U	**1.15**	**0.055 J**	**0.0893 J**	**266**	**3.72**
Pyrene	129-00-0	100	500	**0.129 J**	0.013 U	**0.44**	**0.0988 J**	**0.0366 J**	**145**	**2.51**
Total Detected PAHs	-	NC	NC	**4.2246**	U	**11.3975**	**0.6002**	**0.3749**	**1117.49**	**18.025**

Notes:
B - Found in associated blank sample
bgs - below ground surface
D - From a diluted sample
J - Estimated
mg/kg - milligrams per kilogram
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
PAHs - Polycyclic aromatic hydrocarbons
R - Unusable
U - Not detected

Detected values are in **BOLD.**

Values shaded in GOLD were detected at a concentration exceeding restricted residential criteria.

Values shaded in PINK were detected at a concentration exceeding both restricted residential and commercial criteria.

Table 4-4
Soil Sample Analytical Results
Semi-Volatile Organic Compounds - PAHs
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-17 PWSB-17-6.5-7 MC35638-7 12/7/2014 6.5-7	PWSB-17 PWSB-17-15-15.5 MC35638-8 12/7/2014 15-15.5	PWSB-18 PWSB-18-7.0-7.5 MC35753-1 12/8/2014 7.0-7.5	PWSB-19 PWSB-19-7.5-8.0 MC35753-2 12/8/2014 7.5-8.0	PWSB-20 PWSB-20-6.5-7.0 MC35753-4 12/9/2014 6.5-7.0	PWSB-21 PWSB-21-9.5-10.0 MC36227-6 1/4/2015 9.5-10.0	PWSB-22 PWSB-22-10.5-11.0 MC36227-2 1/4/2015 10.5-11.0
Semi-Volatile Organic Compounds (mg/kg)										
2-Methylnaphthalene	91-57-6	NC	NC	**9.24**	**0.761**	**0.0354 J**	**0.334 J**	**0.792**	**0.978 J**	**0.189**
Acenaphthene	83-32-9	100	500	**5.49**	**0.53 J**	**0.0319 J**	**0.308 J**	**0.758**	**2.53**	**0.0368 J**
Acenaphthylene	208-96-8	100	500	**16.6**	**1.54**	**0.142**	**1.44**	**3.39**	**6.74**	**0.108 J**
Anthracene	120-12-7	100	500	**26.3**	**2.75**	**0.392**	**2.62**	**5.37**	**20**	0.014 U
Benzo(a)anthracene	56-55-3	1	6	**39.5**	**4.89**	**0.927**	**10.8**	**17.4**	**47.7**	0.015 U
Benzo(a)pyrene	50-32-8	1	1	**29.6**	**3.56**	**0.902**	**8.96**	**17.9**	**43.5**	0.013 U
Benzo(b)fluoranthene	205-99-2	1	6	**31.7**	**3.09**	**0.89**	**9.46**	**18.2**	**40.3**	0.015 U
Benzo(g,h,i)perylene	191-24-2	100	500	**15.9**	**1.84**	**0.732**	**5.97**	**12.8**	**25.9**	0.012 U
Benzo(k)fluoranthene	207-08-9	4	56	**14.5**	**2.87**	**0.561**	**4.87**	**9.45**	**28.2**	0.018 U
Chrysene	218-01-9	4	56	**32.5**	**4.14**	**0.808**	**9.7**	**15**	**41.8**	0.015 U
Dibenz(a,h)anthracene	53-70-3	0.33	0.56	**8.64**	**0.412 J**	**0.254**	**2.26**	**5.4**	**9.87**	0.014 U
Fluoranthene	206-44-0	100	500	**79.5**	**10.3**	**1.78**	**20.4**	**33.3**	**111**	**0.025 J**
Fluorene	86-73-7	100	500	**17**	**1.5**	**0.0741 J**	**0.502 J**	**1.61**	**5.35**	**0.0298 J**
Indeno(1,2,3-cd)pyrene	193-39-5	1	6	**20.6**	**2.45**	**0.852**	**7.02**	**15.2**	**24.5**	0.013 U
Naphthalene	91-20-3	100	500	**18.6**	**1.2**	**0.0919 J**	**0.515 J**	**2.25**	**2.75**	**2.30**
Phenanthrene	85-01-8	100	500	**80.6**	**8.12**	**0.937**	**12.1**	**16.2**	**69**	**0.0436 J**
Pyrene	129-00-0	100	500	**58.8**	**7.58**	**1.46**	**14.3**	**29.3**	**81.3**	**0.0211 J**
Total Detected PAHs	-	NC	NC	**505.07**	**57.533**	**10.8703**	**111.559**	**204.32**	**561.418**	**2.7533**

Notes:
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D - From a diluted sample
J - Estimated
mg/kg - milligrams per kilogram
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
PAHs - Polycyclic aromatic hydrocarbons
R - Unusable
U - Not detected

Detected values are in **BOLD.**

Values shaded in GOLD were detected at a concentration exceeding restricted residential criteria.

Values shaded in PINK were detected at a concentration exceeding both restricted residential and commercial criteria.

Table 4-4
Soil Sample Analytical Results
Semi-Volatile Organic Compounds - PAHs
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-22 PWSB-22-14.5-15.0 MC36227-3 1/4/2015 14.5-15.0	PWSB-22 PWSB-22-19.5-20.0 MC36227-4 1/4/2015 19.5-20.0	PWSB-23 PWSB-23-9.0-9.5 MC36227-11 1/4/2015 9.0-9.5	PWSB-24 PWSB-24-5.5-6.0 MC36297-2 1/8/2015 5.5-6.0	PWSB-25 PWSB-25-9.5-10.0 MC36227-8 1/4/2015 9.5-10.0	PWSB-25 PWSB-25-19.5-20.0 MC36227-9 1/4/2015 19.5-20.0	PWSB_26 PWSB_26-4.5-5.0 BGS MC35924-1 12/14/2014 4.5-5.0
Semi-Volatile Organic Compounds (mg/kg)										
2-Methylnaphthalene	91-57-6	NC	NC	**0.099 J**	**0.173**	0.014 U	**0.093 J**	**2.98**	**0.0189 J**	**0.381 J**
Acenaphthene	83-32-9	100	500	**0.0269 J**	**0.0576 J**	0.015 U	**0.102 J**	**0.311**	0.015 U	**0.361 J**
Acenaphthylene	208-96-8	100	500	0.012 U	**0.0595 J**	0.011 U	**0.0524 J**	**0.0832 J**	0.011 U	**1.01**
Anthracene	120-12-7	100	500	0.014 U	**0.0909 J**	0.013 U	**0.246**	**0.407**	**0.0158 J**	**3.67**
Benzo(a)anthracene	56-55-3	1	6	0.015 U	**0.198**	0.014 U	**0.323**	**0.343**	**0.0247 J**	**8.73**
Benzo(a)pyrene	50-32-8	1	1	0.013 U	**0.176**	0.012 U	**0.242**	**0.226**	**0.0191 J**	**6.5**
Benzo(b)fluoranthene	205-99-2	1	6	0.015 U	**0.149**	0.014 U	**0.183**	**0.178**	**0.0153 J**	**7.36**
Benzo(g,h,i)perylene	191-24-2	100	500	0.012 U	**0.106**	0.011 U	**0.103 J**	**0.09 J**	**0.0128 J**	**5.88**
Benzo(k)fluoranthene	207-08-9	4	56	0.018 U	**0.135**	0.017 U	**0.177**	**0.192**	0.017 U	**6.93**
Chrysene	218-01-9	4	56	0.015 U	**0.179**	0.014 U	**0.331**	**0.236**	**0.0191 J**	**8.24**
Dibenz(a,h)anthracene	53-70-3	0.33	0.56	0.014 U	**0.0355 J**	0.013 U	**0.0463 J**	**0.0368 J**	0.013 U	**1.69**
Fluoranthene	206-44-0	100	500	0.016 U	**0.468**	0.015 U	**0.63**	**1.09**	**0.0483 J**	**21.7**
Fluorene	86-73-7	100	500	0.016 U	**0.0392 J**	0.015 U	**0.225**	**0.445**	0.015 U	**0.751**
Indeno(1,2,3-cd)pyrene	193-39-5	1	6	0.013 U	**0.0908 J**	0.012 U	**0.0911 J**	**0.0921 J**	0.012 U	**5.31**
Naphthalene	91-20-3	100	500	**5.32**	**4.25**	0.018 U	**0.152**	**4.24**	**0.0253 J**	**1.42**
Phenanthrene	85-01-8	100	500	0.016 U	**0.359**	0.015 U	**1.05**	**1.56**	**0.0294 J**	**13.1**
Pyrene	129-00-0	100	500	0.014 U	**0.395**	0.013 U	**0.618**	**0.861**	**0.0483 J**	**18.2**
Total Detected PAHs	-	NC	NC	**5.4459**	**6.9615**	U	**4.6648**	**13.3711**	**0.277**	**111.233**

Notes:
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J - Estimated
mg/kg - milligrams per kilogram
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
PAHs - Polycyclic aromatic hydrocarbons
R - Unusable
U - Not detected

Detected values are in **BOLD.**

Values shaded in GOLD were detected at a concentration exceeding restricted residential criteria.

Values shaded in PINK were detected at a concentration exceeding both restricted residential and commercial criteria.

Table 4-4
Soil Sample Analytical Results
Semi-Volatile Organic Compounds - PAHs
Peoples Works Former MGP Site

Location ID		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-27	PWSB-27	PWTP_1	PWTP_2	PWTP_2	PWTP-3	PWTP-3
Sample ID				PWSB-27-14.5-15.0	PWSB-27-25.5-26.0	PWTP_1-7.0-7.5	PWTP_2-5.0-5.5	PWTP_2-7.0-7.5	PWTP-3-6.5-7.0	PWTP-3-3.5-4.0
Lab Sample Number				MC36341-1	MC36341-2	MC35924-4	MC35924-2	MC35924-3	MC36058-2	MC36058-3
Sampling Date				1/11/2015	1/11/2015	12/15/2014	12/15/2014	12/15/2014	12/16/2014	12/16/2014
Sample Depth (feet bgs)				14.5-15.0	25.5-26.0	7.0-7.5	5.0-5.5	7.0-7.5	6.5-7.0	3.5-4.0
Semi-Volatile Organic Compounds (mg/kg)										
2-Methylnaphthalene	91-57-6	NC	NC	**58.7**	**0.0423 J**	**0.429 J**	**0.195 J**	**0.0328 J**	0.015 U	**0.151**
Acenaphthene	83-32-9	100	500	**282**	**0.0704 J**	**0.458 J**	**0.236 J**	**0.0631 J**	0.016 U	**0.106 J**
Acenaphthylene	208-96-8	100	500	**52.9**	0.012 U	**1.58**	**1.49**	**0.129**	**0.0303 J**	**0.471**
Anthracene	120-12-7	100	500	**328**	**0.0151 J**	**1.73**	**3.34**	**0.274**	**0.0279 J**	**0.799**
Benzo(a)anthracene	56-55-3	1	6	**274**	0.015 U	**8.37**	**11**	**1.13**	**0.139**	**2.5**
Benzo(a)pyrene	50-32-8	1	1	**238**	0.012 U	**7.35**	**8.6**	**1.05**	**0.105 J**	**2.31**
Benzo(b)fluoranthene	205-99-2	1	6	**159**	0.014 U	**6.52**	**10.1**	**1.07**	**0.148**	**2.69**
Benzo(g,h,i)perylene	191-24-2	100	500	**117**	0.012 U	**4.39**	**7.09**	**0.999**	**0.0674 J**	**1.43**
Benzo(k)fluoranthene	207-08-9	4	56	**199**	0.017 U	**5.85**	**7.25**	**0.973**	**0.066 J**	**0.931**
Chrysene	218-01-9	4	56	**219**	0.014 U	**7.43**	**10.9**	**1.12**	**0.145**	**2.12**
Dibenz(a,h)anthracene	53-70-3	0.33	0.56	**43.4**	0.014 U	**1.72**	**1.75**	**0.348**	**0.0257 J**	**0.63**
Fluoranthene	206-44-0	100	500	**728**	**0.0169 J**	**15.1**	**26.1**	**2.36**	**0.243**	**4.75**
Fluorene	86-73-7	100	500	**278**	**0.0367 J**	**0.459 J**	**1.22**	**0.0417 J**	0.016 U	**0.273**
Indeno(1,2,3-cd)pyrene	193-39-5	1	6	**117**	0.013 U	**4.25**	**6.39**	**0.844**	**0.0714 J**	**1.69**
Naphthalene	91-20-3	100	500	**138**	**1.64**	**1.42**	**1.6**	**0.196**	**0.0235 J**	**0.527**
Phenanthrene	85-01-8	100	500	**1,110**	**0.0616 J**	**6.59**	**9.82**	**1.47**	**0.105 J**	**3.46**
Pyrene	129-00-0	100	500	**593**	**0.0168 J**	**12.9**	**21.9**	**1.98**	**0.221**	**4.56**
Total Detected PAHs	-	NC	NC	**4935.0**	**1.8998**	**86.546**	**128.981**	**14.0806**	**1.4182**	**29.398**

Notes:
B - Found in associated blank sample
bgs - below ground surface
D - From a diluted sample
J - Estimated
mg/kg - milligrams per kilogram
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
PAHs - Polycyclic aromatic hydrocarbons
R - Unusable
U - Not detected

Detected values are in **BOLD.**

Values shaded in GOLD were detected at a concentration exceeding restricted residential criteria.

Values shaded in PINK were detected at a concentration exceeding both restricted residential and commercial criteria.

Table 4-4
Soil Sample Analytical Results
Semi-Volatile Organic Compounds - PAHs
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWTP-4 PWTP-4-5.5-6.0 MC36058-4 12/17/2014 5.5-6.0	PWTP-5 PWTP-5-5.5-6.0 MC36058-5 12/17/2014 5.5-6.0	PWTP-6 PWTP-6-5.0-5.5 MC36058-6 12/18/2014 5.0-5.5	PWTP-7 PWTP-7-2.5-3.0 MC36058-1 12/16/2014 2.5-3.0	PWTP-8 PWTP-8-6.5-7.0 MC36924-1 2/15/2015 6.5-7.0	PWMW-03 PWMW-03-9.5-10.0 MC36297-1 1/8/2015 9.5-10.0
Semi-Volatile Organic Compounds (mg/kg)									
2-Methylnaphthalene	91-57-6	NC	NC	0.015 U	**0.0163 J**	**0.0432 J**	**0.747**	**0.0286 J**	0.015 U
Acenaphthene	83-32-9	100	500	0.016 U	**0.0181 J**	**0.0495 J**	**1.42**	**0.156**	**0.113**
Acenaphthylene	208-96-8	100	500	0.012 U	**0.032 J**	**0.0463 J**	**1.00**	**0.275**	0.011 U
Anthracene	120-12-7	100	500	0.015 U	**0.046 J**	**0.132**	**2.32**	**0.611**	0.014 U
Benzo(a)anthracene	56-55-3	1	6	0.016 U	**0.218**	**0.415**	**6.74**	**2.58**	**0.0326 J**
Benzo(a)pyrene	50-32-8	1	1	0.013 U	**0.216**	**0.407**	**6.05**	**2.67**	**0.0282 J**
Benzo(b)fluoranthene	205-99-2	1	6	0.015 U	**0.208**	**0.344**	**6.32**	**2.26**	**0.0256 J**
Benzo(g,h,i)perylene	191-24-2	100	500	0.012 U	**0.13**	**0.303**	**3.21**	**1.29**	**0.0197 J**
Benzo(k)fluoranthene	207-08-9	4	56	0.018 U	**0.151**	**0.376**	**3.61**	**2.06**	**0.018 J**
Chrysene	218-01-9	4	56	0.015 U	**0.235**	**0.427**	**6.27**	**2.52**	**0.0261 J**
Dibenz(a,h)anthracene	53-70-3	0.33	0.56	0.014 U	**0.0362 J**	**0.0876 J**	**1.07**	**0.448**	0.014 U
Fluoranthene	206-44-0	100	500	0.017 U	**0.377**	**0.928**	**13.8**	**4.84**	**0.0474 J**
Fluorene	86-73-7	100	500	0.016 U	**0.0174 J**	**0.0599 J**	**1.18**	**0.141**	0.015 U
Indeno(1,2,3-cd)pyrene	193-39-5	1	6	0.013 U	**0.13**	**0.305**	**3.81**	**1.25**	**0.0141 J**
Naphthalene	91-20-3	100	500	0.019 U	**0.0835 J**	**0.0863 J**	**1.33**	**0.0529 J**	**0.0183 J**
Phenanthrene	85-01-8	100	500	0.016 U	**0.255**	**0.774**	**11.4**	**2.48**	**0.0294 J**
Pyrene	129-00-0	100	500	0.014 U	**0.41**	**0.816**	**11.7**	**4.81**	**0.0404 J**
Total Detected PAHs	-	NC	NC	U	**2.5795**	**5.5998**	**81.977**	**28.4725**	**0.4128**

Notes:
B - Found in associated blank sample
bgs - below ground surface
D - From a diluted sample
J - Estimated
mg/kg - milligrams per kilogram
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
PAHs - Polycyclic aromatic hydrocarbons
R - Unusable
U - Not detected

Detected values are in **BOLD.**

Values shaded in GOLD were detected at a concentration exceeding restricted residential criteria.

Values shaded in PINK were detected at a concentration exceeding both restricted residential and commercial criteria.

Table 4-5
Soil Sample Analytical Results
Semi-Volatile Organic Compounds - Extended PAHs
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-28 PWSB-28-8.5-9.0 MC40530-1R 8/4/2015 8.5-9	PWSB-28 PWSB-28-18.5-19.0 MC40530-2R 8/4/2015 18.5-19.0	PWSB-29 PWSB-29-17.0-17.5 MC40635-4A 8/9/2015 17-17.5	PWSB-29 PWSB-29-29.0-29.5 MC40635-5A 8/9/2015 29-29.5	PWSB-30 PWSB-30-8.0-8.5 MC40635-1A 8/9/2015 8-8.5	PWSB-30 PWSB-30-19.5-20.0 MC40635-2A 8/9/2015 19.5-20
Semi-Volatile Organic Compounds (mg/kg)									
2-Methylnaphthalene	91-57-6	NC	NC	**0.568**	**0.00605**	**40.5**	**0.277**	**18.3**	**0.00489**
1-Methylnaphthalene	90-12-0	NC	NC	**0.235**	**0.00402**	**15.8**	**0.120**	**7.11**	**0.00351 J**
Acenaphthene	83-32-9	100	500	**0.0351**	**0.00169**	**6.60**	**0.0529**	**1.17**	0.00230 U
Acenaphthylene	208-96-8	100	500	**0.0216**	**0.00118**	**3.57**	**0.0218**	**0.677**	0.00230 U
Anthracene	120-12-7	100	500	**0.0385**	**0.000882**	**6.93**	**0.0785**	**1.16**	0.00230 U
Benzo(a)anthracene	56-55-3	1	5.6	**0.0265**	**0.000732**	**7.10**	**0.0329**	**1.44**	0.00230 U
C1-Benzo(a)anthracenes/Chrysenes	-	1*	5.6*	**0.00601**	0.000270 U	**1.11**	**0.00731**	**0.341**	0.00230 U
C2-Benzo(a)anthracenes/Chrysenes	-	1*	5.6*	**0.00283**	0.000270 U	**0.390**	0.00230 U	**0.123**	0.00230 U
C3-Benzo(a)anthracenes/Chrysenes	-	1*	5.6*	**0.000843**	0.000270 U	**0.175**	0.00230 U	**0.0524**	0.00230 U
C4-Benzo(a)anthracenes/Chrysenes	-	1*	5.6*	0.000300 U	0.000270 U	**0.072**	0.00230 U	**0.0186**	0.00230 U
Benzo(a)pyrene	50-32-8	1	1	**0.0187**	**0.000637**	**3.85**	**0.0221**	**0.983**	0.00230 U
Benzo(b)fluoranthene	205-99-2	1	6	**0.0133**	**0.000593**	**2.48**	**0.0140**	**0.721**	0.00230 U
Benzo(e)pyrene	192-97-2	NC	NC	**0.00974**	**0.000415 J**	**1.83**	**0.0128**	**0.529**	0.00230 U
Benzo(g,h,i)perylene	191-24-2	100	500	**0.00596**	**0.000354 J**	**1.14**	**0.00863**	**0.329**	0.00230 U
Benzo(j/k)fluoranthene	207-08-9	3.9	56	**0.0141**	**0.000590**	**2.53**	**0.0208**	**0.773**	0.00230 U
Chrysene/triphenylene	218-01-9	3.9	56	**0.0183**	**0.000725**	**3.88**	**0.0307**	**0.989**	0.00230 U
Dibenzo(a,h)anthracene	53-70-3	0.33	0.56	**0.00184**	0.000270 U	**0.387**	0.00230 U	**0.102**	0.00230 U
Dibenzofuran	132-64-9	59	350	**0.0433**	**0.00152**	**7.21**	**0.0553**	**1.70**	**0.00284 J**
Dibenzothiophene	132-65-0	NC	NC	**0.0116**	0.000270 U	**2.33**	**0.0209**	**0.526**	0.00230 U
C1-Dibenzothiophenes	-	NC	NC	**0.00389**	0.000270 U	**0.629**	0.00230 U	**0.177**	0.00230 U
C2-Dibenzothiophenes	-	NC	NC	**0.00239**	**0.000295 J**	**0.324**	0.00230 U	**0.101**	0.00230 U
C3-Dibenzothiophenes	-	NC	NC	**0.000873**	0.000270 U	**0.137**	0.00230 U	**0.00357**	0.00230 U
C4-Dibenzothiophenes	-	NC	NC	0.000300 U	0.000270 U	**0.0396**	0.00230 U	**0.00160**	0.00230 U
Fluoranthene	206-44-0	100	500	**0.0917**	**0.00191**	**19.0**	**0.169**	**6.31**	0.00230 U
C1-Fluoranthenes/Pyrenes	-	100*	500*	**0.0266**	**0.000935**	**5.02**	**0.0365**	**1.38**	0.00230 U
C2-Fluoranthenes/Pyrenes	-	100*	500*	**0.00632**	0.000270 U	**1.06**	**0.00780**	**0.309**	0.00230 U
C3-Fluoranthenes/Pyrenes	-	100*	500*	**0.00227**	0.000270 U	**0.393**	**0.00382 J**	**0.108**	0.00230 U
Fluorene	86-73-7	100	500	**0.0465**	**0.00130**	**7.34**	**0.0604**	**1.92**	0.00230 U
C1-Fluorenes		100*	500*	**0.00835**	**0.000882**	**1.26**	**0.0117**	**0.344**	0.00230 U
C2-Fluorenes		100*	500*	**0.00512**	**0.000495 J**	**0.504**	0.00230 U	**0.153**	0.00230 U
C3-Fluorenes		100*	500*	**0.00394**	0.000270 U	**0.303**	0.00230 U	**0.096**	0.00230 U
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	5.6	**0.00655**	**0.000320 J**	**1.35**	**0.00758**	**0.350**	0.00230 U
Naphthalene	91-20-3	100	500	**0.509**	**0.0160**	**82.0**	**0.344**	**22.2**	**0.0216**
C1-Naphthalenes	-	100*	500*	**0.482**	**0.00614**	**33.8**	**0.249**	**15.4**	**0.00544**
C2-Naphthalenes	-	100*	500*	**0.0790**	**0.00169**	**11.7**	**0.0628**	**3.39**	0.00230 U
C3-Naphthalenes	-	100*	500*	**0.0239**	**0.000968**	**2.64**	**0.0228**	**0.998**	0.00230 U
C4-Naphthalenes	-	100*	500*	**0.00790**	**0.000672**	**0.672**	**0.0100**	**0.309**	0.00230 U

Table 4-5
Soil Sample Analytical Results
Semi-Volatile Organic Compounds - Extended PAHs
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-28 PWSB-28-8.5-9.0 MC40530-1R 8/4/2015 8.5-9	PWSB-28 PWSB-28-18.5-19.0 MC40530-2R 8/4/2015 18.5-19.0	PWSB-29 PWSB-29-17.0-17.5 MC40635-4A 8/9/2015 17-17.5	PWSB-29 PWSB-29-29.0-29.5 MC40635-5A 8/9/2015 29-29.5	PWSB-30 PWSB-30-8.0-8.5 MC40635-1A 8/9/2015 8-8.5	PWSB-30 PWSB-30-19.5-20.0 MC40635-2A 8/9/2015 19.5-20
Phenanthrene	85-01-8	100	500	**0.146**	**0.00297**	**29.4**	**0.265**	**6.03**	**0.0117**
C1-Phenanthrenes/Anthracene	-	100*	500*	**0.0316**	**0.000793**	**6.02**	**0.0652**	**1.54**	0.00230 U
C2-Phenanthrenes/Anthracene	-	100*	500*	**0.0124**	**0.000622**	**2.12**	**0.0318**	**0.663**	0.00230 U
C3-Phenanthrenes/Anthracene	-	100*	500*	**0.00457**	0.000270 U	**0.552**	**0.00568**	**0.160**	0.00230 U
C4-Phenanthrenes/Anthracene	-	100*	500*	**0.00134**	0.000270 U	**0.134**	0.00230 U	**0.0350**	0.00230 U
Perylene	198-55-0	NC	NC	**0.00555**	0.000270 U	**0.82**	**0.00831**	**0.207**	**0.00518**
Pyrene	129-00-0	100	500	**0.0731**	**0.00174**	**15.2**	**0.133**	**4.81**	0.00230 U
Total Detected PAHs	-	NC	NC	**1.61605**	**0.037036**	**229.407**	**1.5162**	**67.281**	**0.03819**
Total Petroluem Hydrocarbons (mg/kg)									
Total Petroluem Hydrocarbons	-	NC	NC	**31.6**	16 U	**2,530**	**88.6**	**692**	16 U

Notes:
bgs - below ground surface
J - Estimated
mg/kg - milligrams per kilogram
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
PAHs - Polycyclic aromatic hydrocarbons
U - Not detected
* - Soil cleanup objective based on parent compound

Detected values are in **BOLD.**

Values shaded in GOLD were detected at a concentration exceeding restricted residential criteria.

Values shaded in PINK were detected at a concentration exceeding both restricted residential and commercial criteria.

Table 4-5
Soil Sample Analytical Results
Semi-Volatile Organic Compounds - Extended PAHs
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-31 PWSB-31-13.5-14.0 MC40976-3A 8/23/2015 13.5-14	PWSB-31 PWSB-31-32.0-32.5 MC40976-4A 8/23/2015 32-32.5	PWSB-32 PWSB-32-11.0-11.5 MC40976-1A 8/23/2015 11-11.5	PWSB-32 PWSB-32-36.0-36.5 MC40976-2A 8/23/2015 36-36.5	PWSB-33 PWSB-33-8.0-8.5 MC40530-4R 8/4/2015 8-8.5	PWSB-34 PWSB-34-14.1-15 MC40824-1A 8/16/2015 14.1-15
Semi-Volatile Organic Compounds (mg/kg)									
2-Methylnaphthalene	91-57-6	NC	NC	225	0.0518	0.169	0.00990	0.0181	2.05
1-Methylnaphthalene	90-12-0	NC	NC	186	0.0509	0.191	0.00669	0.0168	7.19
Acenaphthene	83-32-9	100	500	188	0.0818	0.0795	0.00255 J	0.0156	9.45
Acenaphthylene	208-96-8	100	500	147	0.0946	0.711	0.00432	0.0400	11.4
Anthracene	120-12-7	100	500	468	0.297	0.833	0.0185	0.0807	25.1
Benzo(a)anthracene	56-55-3	1	5.6	317	0.197	1.50	0.00603	0.379	22.0
C1-Benzo(a)anthracenes/Chrysenes	-	1*	5.6*	72.4	0.0501	0.722	0.00210 U	0.158	10.1
C2-Benzo(a)anthracenes/Chrysenes	-	1*	5.6*	27.0	0.0181	0.377	0.00210 U	0.0728	4.60
C3-Benzo(a)anthracenes/Chrysenes	-	1*	5.6*	13.3	0.00725	0.224	0.00210 U	0.0339	2.48
C4-Benzo(a)anthracenes/Chrysenes	-	1*	5.6*	6.30	0.00220 U	0.108	0.00210 U	0.0217	1.19
Benzo(a)pyrene	50-32-8	1	1	323	0.214	1.86	0.00630	0.431	24.6
Benzo(b)fluoranthene	205-99-2	1	6	213	0.128	1.33	0.00460	0.344	16.9
Benzo(e)pyrene	192-97-2	NC	NC	163	0.121	1.19	0.00413 J	0.266	13.4
Benzo(g,h,i)perylene	191-24-2	100	500	135	0.0966	1.05	0.00372 J	0.211	13.8
Benzo(j/k)fluoranthene	207-08-9	3.9	56	187	0.141	1.33	0.00482	0.312	17.7
Chrysene/triphenylene	218-01-9	3.9	56	278	0.221	1.45	0.00910	0.375	20.6
Dibenzo(a,h)anthracene	53-70-3	0.33	0.56	40.7	0.0225	0.319	0.00210 U	0.0661	4.74
Dibenzofuran	132-64-9	59	350	212	0.0810	0.371	0.00390 J	0.0145	11.9
Dibenzothiophene	132-65-0	NC	NC	64.9	0.0338	0.233	0.00278 J	0.0134	6.60
C1-Dibenzothiophenes	-	NC	NC	25.1	0.0143	0.109	0.00210 U	0.0169	3.15
C2-Dibenzothiophenes	-	NC	NC	14.2	0.00728	0.113	0.00210 U	0.0199	1.74
C3-Dibenzothiophenes	-	NC	NC	7.49	0.00363 J	0.163	0.00210 U	0.0139	0.767
C4-Dibenzothiophenes	-	NC	NC	2.40	0.00220 U	0.109	0.00210 U	0.00488	0.253
Fluoranthene	206-44-0	100	500	917	0.586	3.33	0.0182	0.596	46.8
C1-Fluoranthenes/Pyrenes	-	100*	500*	265	0.164	1.17	0.0058	0.283	22.8
C2-Fluoranthenes/Pyrenes	-	100*	500*	61.3	0.0347	0.822	0.00210 U	0.162	8.06
C3-Fluoranthenes/Pyrenes	-	100*	500*	22.9	0.110	0.300	0.00210 U	0.0737	3.26
Fluorene	86-73-7	100	500	219	0.0853	0.154	0.00367 J	0.0147	8.98
C1-Fluorenes		100*	500*	55.2	0.0336	0.0854	0.00210 U	0.0114	4.63
C2-Fluorenes		100*	500*	24.5	0.0154	0.175	0.00210 U	0.0196	2.99
C3-Fluorenes		100*	500*	12.4	0.0125	0.369	0.00210 U	0.0281	1.42
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	5.6	141	0.0947	1.07	0.00395 J	0.217	14.1
Naphthalene	91-20-3	100	500	1,350	0.235	0.285	0.0127	0.200	11.6
C1-Naphthalenes	-	100*	500*	265	0.0634	0.215	0.010	0.0211	5.59
C2-Naphthalenes	-	100*	500*	127	0.0568	0.241	0.0155	0.0193	7.26
C3-Naphthalenes	-	100*	500*	57.6	0.0344	0.161	0.0104	0.0195	6.13
C4-Naphthalenes	-	100*	500*	17.2	0.0128	0.126	0.00479	0.0139	2.30

Table 4-5
Soil Sample Analytical Results
Semi-Volatile Organic Compounds - Extended PAHs
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-31 PWSB-31-13.5-14.0 MC40976-3A 8/23/2015 13.5-14	PWSB-31 PWSB-31-32.0-32.5 MC40976-4A 8/23/2015 32-32.5	PWSB-32 PWSB-32-11.0-11.5 MC40976-1A 8/23/2015 11-11.5	PWSB-32 PWSB-32-36.0-36.5 MC40976-2A 8/23/2015 36-36.5	PWSB-33 PWSB-33-8.0-8.5 MC40530-4R 8/4/2015 8-8.5	PWSB-34 PWSB-34-14.1-15 MC40824-1A 8/16/2015 14.1-15
Phenanthrene	85-01-8	100	500	**1,080**	**0.507**	**2.78**	**0.0148**	**0.241**	**52.7**
C1-Phenanthrenes/Anthracene	-	100*	500*	**248**	**0.149**	**0.780**	**0.00590**	**0.173**	**22.3**
C2-Phenanthrenes/Anthracene	-	100*	500*	**85.4**	**0.0540**	**0.440**	0.00210 U	**0.122**	**10.1**
C3-Phenanthrenes/Anthracene	-	100*	500*	**24.5**	**0.0158**	**0.220**	0.00210 U	**0.0513**	**3.58**
C4-Phenanthrenes/Anthracene	-	100*	500*	**6.34**	**0.00500**	**0.149**	0.00210 U	**0.0154**	**1.00**
Perylene	198-55-0	NC	NC	**84.2**	**0.0530**	**0.560**	**0.00257 J**	**0.113**	**6.89**
Pyrene	129-00-0	100	500	**803**	**0.562**	**3.37**	**0.0177**	**0.556**	**37.9**
Total Detected PAHs	-	NC	NC	**6708.7**	**3.4013**	**19.7605**	**0.13456**	**3.6662**	**315.82**
Total Petroluem Hydrocarbons (mg/kg)									
Total Petroluem Hydrocarbons	-	NC	NC	**25,300**	16 U	**3,010**	15 U	**21.5**	**960**

Notes:
bgs - below ground surface
J - Estimated
mg/kg - milligrams per kilogram
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
PAHs - Polycyclic aromatic hydrocarbons
U - Not detected
* - Soil cleanup objective based on parent compound

Detected values are in **BOLD.**

Values shaded in GOLD were detected at a concentration exceeding restricted residential criteria.

Values shaded in PINK were detected at a concentration exceeding both restricted residential and commercial criteria.

Table 4-5
Soil Sample Analytical Results
Semi-Volatile Organic Compounds - Extended PAHs
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-34 PWSB-34-19-10 MC40824-2A 8/16/2015 19-20	PWSB-35 PWSB-35-8.5-9.0 MC40976-5A 8/23/2015 8.5-9	PWSB-35 PWSB-35-32.5-33.0 MC40976-6A 8/23/2015 32.5-33
Semi-Volatile Organic Compounds (mg/kg)						
2-Methylnaphthalene	91-57-6	NC	NC	**0.511**	**135**	**0.00298 J**
1-Methylnaphthalene	90-12-0	NC	NC	**0.848**	**78.8**	**0.00343 J**
Acenaphthene	83-32-9	100	500	**1.03**	**117**	**0.00488**
Acenaphthylene	208-96-8	100	500	**1.05**	**50.8**	**0.00296 J**
Anthracene	120-12-7	100	500	**2.23**	**149**	**0.00526**
Benzo(a)anthracene	56-55-3	1	5.6	**2.82**	**193**	**0.00509**
C1-Benzo(a)anthracenes/Chrysenes	-	1*	5.6*	**1.35**	**37.5**	0.00220 U
C2-Benzo(a)anthracenes/Chrysenes	-	1*	5.6*	**0.647**	**27.5**	0.00220 U
C3-Benzo(a)anthracenes/Chrysenes	-	1*	5.6*	**0.339**	**14.4**	0.00220 U
C4-Benzo(a)anthracenes/Chrysenes	-	1*	5.6*	**0.186**	**7.33**	0.00220 U
Benzo(a)pyrene	50-32-8	1	1	**3.17**	**223**	**0.00550**
Benzo(b)fluoranthene	205-99-2	1	6	**2.35**	**153**	**0.00392 J**
Benzo(e)pyrene	192-97-2	NC	NC	**1.90**	**125**	**0.00346 J**
Benzo(g,h,i)perylene	191-24-2	100	500	**1.87**	**116**	**0.00291 J**
Benzo(j/k)fluoranthene	207-08-9	3.9	56	**2.37**	**153**	**0.00393 J**
Chrysene/triphenylene	218-01-9	3.9	56	**2.68**	**165**	**0.00537**
Dibenzo(a,h)anthracene	53-70-3	0.33	0.56	**0.604**	**40.7**	0.00220 U
Dibenzofuran	132-64-9	59	350	**1.15**	**109**	**0.00352 J**
Dibenzothiophene	132-65-0	NC	NC	**0.565**	**41.8**	0.00220 U
C1-Dibenzothiophenes	-	NC	NC	**0.306**	**25.3**	**0.00270 J**
C2-Dibenzothiophenes	-	NC	NC	**0.196**	**25.9**	**0.00324 J**
C3-Dibenzothiophenes	-	NC	NC	**0.0952**	**15.6**	**0.00267 J**
C4-Dibenzothiophenes	-	NC	NC	**0.0342**	**5.68**	0.00220 U
Fluoranthene	206-44-0	100	500	**5.31**	**395**	**0.00176**
C1-Fluoranthenes/Pyrenes	-	100*	500*	**2.50**	**151**	**0.00606**
C2-Fluoranthenes/Pyrenes	-	100*	500*	**1.23**	**45.6**	0.00220 U
C3-Fluoranthenes/Pyrenes	-	100*	500*	**0.516**	**17.3**	0.00220 U
Fluorene	86-73-7	100	500	**1.20**	**115**	**0.00384 J**
C1-Fluorenes		100*	500*	**0.417**	**42.3**	**0.00410 J**
C2-Fluorenes		100*	500*	**0.338**	**53.4**	**0.00736**
C3-Fluorenes		100*	500*	**0.222**	**38.0**	**0.00660**
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	5.6	**1.81**	**120**	**0.00310 J**
Naphthalene	91-20-3	100	500	**2.10**	**484**	**0.0197**
C1-Naphthalenes	-	100*	500*	**0.820**	**128**	**0.00417 J**
C2-Naphthalenes	-	100*	500*	**1.05**	**98.4**	**0.00830**
C3-Naphthalenes	-	100*	500*	**0.659**	**121**	**0.0165**
C4-Naphthalenes	-	100*	500*	**0.274**	**93.1**	**0.0129**

Table 4-5
Soil Sample Analytical Results
Semi-Volatile Organic Compounds - Extended PAHs
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-34 PWSB-34-19-10 MC40824-2A 8/16/2015 19-20	PWSB-35 PWSB-35-8.5-9.0 MC40976-5A 8/23/2015 8.5-9	PWSB-35 PWSB-35-32.5-33.0 MC40976-6A 8/23/2015 32.5-33
Phenanthrene	85-01-8	100	500	**5.14**	**439**	**0.0143**
C1-Phenanthrenes/Anthracene	-	100*	500*	**2.28**	**127**	**0.00677**
C2-Phenanthrenes/Anthracene	-	100*	500*	**1.19**	**86.7**	**0.00738**
C3-Phenanthrenes/Anthracene	-	100*	500*	**0.464**	**41.0**	**0.00395**
C4-Phenanthrenes/Anthracene	-	100*	500*	**0.205**	**11.6**	0.00220 U
Perylene	198-55-0	NC	NC	**0.921**	**64.4**	0.00220 U
Pyrene	129-00-0	100	500	**4.57**	**345**	**0.00161**
Total Detected PAHs	-	NC	NC	**37.645**	**3170.5**	**0.08161**
Total Petroluem Hydrocarbons (mg/kg)						
Total Petroluem Hydrocarbons	-	NC	NC	**876**	**37,700**	16 U

Notes:
bgs - below ground surface
J - Estimated
mg/kg - milligrams per kilogram
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
PAHs - Polycyclic aromatic hydrocarbons
U - Not detected
* - Soil cleanup objective based on parent compound

Detected values are in **BOLD.**

Values shaded in GOLD were detected at a concentration exceeding restricted residential criteria.

Values shaded in PINK were detected at a concentration exceeding both restricted residential and commercial criteria.

Table 4-6
Soil Sample Analytical Results
Herbicides, Pesticides, and PCBs
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-01 PWSB-01-2.5-5 C1875-05 4/14/2011 2.5-5	PWSB-01 PWSB-01-5-9 C2089-03 5/2/2011 5-9	PWSB-01 PWSB-21-5-9 Duplicate of PWSB-01-5-9 5-9	PWSB-01 PWSB-01-35-40 C2099-01 5/3/2011 35-40	PWSB-02 PWSB-02-1-2 C1827-02 4/11/2011 1-2	PWSB-02 PWSB-02-4-5 C1827-03 4/11/2011 4-5	PWSB-02 PWSB-02-38-40 C1827-05 4/11/2011 38-48	PWSB-02 PWSB-12-38-40 Duplicate of PWSB-02-38-40 38-48	PWSB-03 PWSB-03-1-2 C1861-01 4/13/2011 1-2	PWSB-03 PWSB-03-15-16 C1861-02 4/13/2011 15-16
Herbicides (mg/kg)													
2,4,5-T	93-76-5	NC	NC	0.077 U	0.078 U	0.078 U	0.077 U	R	0.075 U	0.077 U	R	0.077 U	0.084 U
2,4,5-TP (SILVEX)	93-72-1	100	500	0.077 U	0.078 U	0.078 U	0.077 U	R	0.075 U	0.077 U	R	0.077 U	0.084 U
2,4-D	94-75-7	NC	NC	0.077 U	0.078 U	0.078 U	0.077 U	R	0.075 U	0.077 U	R	0.077 U	0.084 U
2,4-DB	94-82-6	NC	NC	0.077 U	0.078 U	0.078 U	0.077 U	R	0.075 U	0.077 U	R	0.077 U	0.084 U
DICAMBA	1918-00-9	NC	NC	0.077 U	0.078 U	0.078 U	0.077 U	R	0.075 U	0.077 U	R	0.077 U	0.084 U
DICHLORPROP	120-36-5	NC	NC	0.077 U	0.078 U	0.078 U	0.077 U	R	0.075 U	0.077 U	R	0.077 U	0.084 U
DINOSEB	88-85-7	NC	NC	0.077 UJ	0.078 U	0.078 U	0.077 U	R	0.075 U	0.077 U	R	0.077 U	0.084 U
Pesticides (mg/kg)													
4,4-DDD	72-54-8	13	92	0.0019 U	0.002 U	0.002 U	0.002 U	0.0018 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.0021 U
4,4-DDE	72-55-9	8.9	62	0.0019 U	0.002 U	0.002 U	0.002 U	0.0018 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.0021 U
4,4-DDT	50-29-3	7.9	47	0.0019 UJ	0.002 UJ	0.002 UJ	0.002 UJ	0.0018 UJ	0.0019 UJ	0.002 UJ	0.002 UJ	0.0019 U	0.0021 U
Aldrin	309-00-2	0.097	0.68	0.0019 U	0.002 U	0.002 U	0.002 U	0.0018 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.0021 U
alpha-BHC	319-84-6	0.48	3.4	0.0019 U	0.002 U	0.002 U	0.002 U	0.0018 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.0021 U
alpha-Chlordane	5103-71-9	4.2	24	0.0019 U	0.002 U	0.002 U	0.002 U	0.0018 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.0021 U
beta-BHC	319-85-7	0.36	3	0.0019 UJ	0.002 UJ	0.002 UJ	0.002 UJ	0.0018 UJ	0.0019 UJ	0.002 UJ	0.002 UJ	0.0019 U	0.0021 U
delta-BHC	319-86-8	100	500	0.0019 U	0.002 U	0.002 U	0.002 U	0.0018 UJ	0.0019 UJ	0.002 UJ	0.002 UJ	0.0019 U	0.0021 U
Dieldrin	60-57-1	0.2	1.4	0.0019 U	0.002 U	0.002 U	0.002 U	0.0018 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.0021 U
Endosulfan I	959-98-8	24	200	0.0019 U	0.002 U	0.002 U	0.002 U	0.0018 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.0021 U
Endosulfan II	33213-65-9	24	200	0.0019 U	0.002 U	0.002 U	0.002 U	0.0018 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.0021 U
Endosulfan Sulfate	1031-07-8	24	200	0.0019 U	0.002 U	0.002 U	0.002 U	0.0018 UJ	0.0019 UJ	0.002 UJ	0.002 UJ	0.0019 U	0.0021 U
Endrin	72-20-8	11	89	0.0019 U	0.002 UJ	0.002 UJ	0.002 UJ	0.0018 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.0021 U
Endrin aldehyde	7421-93-4	NC	NC	0.0019 U	0.002 U	0.002 U	0.002 U	0.0018 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.0021 U
Endrin ketone	53494-70-5	NC	NC	0.0019 U	0.002 U	0.002 U	0.002 U	0.0018 UJ	0.0019 UJ	0.002 UJ	0.002 UJ	0.0019 U	0.0021 U
gamma-BHC	58-89-9	1.3	9.2	0.0019 U	0.002 U	0.002 U	0.002 U	0.0018 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.0021 U
gamma-Chlordane	5103-74-2	NC	NC	0.0019 U	0.002 U	0.002 U	0.002 U	0.0018 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.0021 U
Heptachlor	76-44-8	2.1	15	0.0019 U	0.002 U	0.002 U	0.002 U	0.0018 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.0021 U
Heptachlor epoxide	1024-57-3	NC	NC	0.0019 U	0.002 U	0.002 U	0.002 U	0.0018 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.0021 U
Methoxychlor	72-43-5	NC	NC	0.0019 UJ	0.002 UJ	0.002 UJ	0.002 UJ	0.0018 UJ	0.0019 UJ	0.002 UJ	0.002 UJ	0.0019 U	0.0021 U
Toxaphene	8001-35-2	NC	NC	0.019 U	0.02 U	0.02 U	0.02 U	0.018 U	0.019 U	0.02 U	0.02 U	0.019 U	0.021 U
PCBs (mg/kg)													
Aroclor-1016	12674-11-2	1	1	0.019 U	0.02 U	0.02 U	0.019 U	0.018 U	0.019 U	0.02 U	0.02 U	0.02 U	0.021 UJ
Aroclor-1221	11104-28-2	1	1	0.019 U	0.02 U	0.02 U	0.019 U	0.018 U	0.019 U	0.02 U	0.02 U	0.02 U	0.021 UJ
Aroclor-1232	11141-16-5	1	1	0.019 U	0.02 U	0.02 U	0.019 U	0.018 U	0.019 U	0.02 U	0.02 U	0.02 U	0.021 UJ
Aroclor-1242	53469-21-9	1	1	0.019 U	0.02 U	0.02 U	0.019 U	0.018 U	0.019 U	0.02 U	0.02 U	0.02 U	0.021 UJ
Aroclor-1248	12672-29-6	1	1	0.019 U	0.02 U	0.02 U	0.019 U	0.018 U	0.019 U	0.02 U	0.02 U	0.02 U	0.021 UJ
Aroclor-1254	11097-69-1	1	1	0.019 U	0.02 U	0.02 U	0.019 U	0.018 U	0.019 U	0.02 U	0.02 U	0.02 U	0.021 UJ
Aroclor-1260	11096-82-5	1	1	0.019 U	0.02 U	0.02 U	0.019 U	**0.03 J**	0.019 U	0.02 U	0.02 U	0.02 U	0.021 UJ

Notes:
bgs - below ground surface
J - Estimated
mg/kg - milligrams per kilogram
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
U - Not detected

Detected values are in **BOLD.**

Table 4-6
Soil Sample Analytical Results
Herbicides, Pesticides, and PCBs
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-03 PWSB-03-39-40 C1861-03 4/13/2011 39-40	PWSB-04 PWSB-04-1-5 C1861-07 4/13/2011 1-5	PWSB-04 PWSB-04-13-15 C1861-08 4/13/2011 13-15	PWSB-04 PWSB-04-25-27 C1861-09 4/13/2011 25-27	PWSB-05 PWSB-05-2.5 C1875-02 4/14/2011 2.5	PWSB-05 PWSB-05-10-13 C2089-01 5/2/2011 10-13	PWSB-05 PWSB-05-19-22 C2089-02 5/2/2011 19-22	PWSB-05 PWSB-05-37-40 C2099-04 5/4/2011 37-40	PWSB-06 PWSB-06-1-2 C1739-01 4/4/2011 1-2	PWSB-06 PWSB-06-7-9 C1827-01 4/11/2011 7-9
Herbicides (mg/kg)													
2,4,5-T	93-76-5	NC	NC	0.077 U	0.077 U	R	R	0.08 U	R	R	0.077 U	R	0.081 U
2,4,5-TP (SILVEX)	93-72-1	100	500	0.077 U	0.077 U	R	R	0.08 U	R	R	0.077 U	R	0.081 U
2,4-D	94-75-7	NC	NC	0.077 U	0.077 U	R	R	0.08 U	R	R	0.077 U	R	0.081 U
2,4-DB	94-82-6	NC	NC	0.077 U	0.077 U	R	R	0.08 U	R	R	0.077 U	R	0.081 U
DICAMBA	1918-00-9	NC	NC	0.077 U	0.077 U	R	R	0.08 U	R	R	0.077 U	R	0.081 U
DICHLORPROP	120-36-5	NC	NC	0.077 U	0.077 U	R	R	0.08 U	R	R	0.077 U	R	0.081 U
DINOSEB	88-85-7	NC	NC	0.077 U	0.077 U	R	R	0.08 UJ	R	R	0.077 U	R	0.081 U
Pesticides (mg/kg)													
4,4-DDD	72-54-8	13	92	0.002 U	0.002 U	0.0021 U	0.0022 U	0.002 U	0.002 U	0.0021 U	0.002 U	0.0018 U	0.0021 U
4,4-DDE	72-55-9	8.9	62	0.002 U	0.002 U	0.0021 U	0.0022 U	0.002 U	0.002 U	0.0021 U	0.002 U	0.0018 U	0.0021 U
4,4-DDT	50-29-3	7.9	47	0.002 U	0.002 U	0.0021 U	0.0022 U	0.002 UJ	0.002 UJ	0.0021 UJ	0.002 UJ	0.0018 UJ	0.0021 UJ
Aldrin	309-00-2	0.097	0.68	0.002 U	0.002 U	0.0021 U	0.0022 U	0.002 U	0.002 U	0.0021 U	0.002 U	0.0018 U	0.0021 U
alpha-BHC	319-84-6	0.48	3.4	0.002 U	0.002 U	0.0021 U	0.0022 U	0.002 U	0.002 U	0.0021 U	0.002 U	0.0018 U	0.0021 U
alpha-Chlordane	5103-71-9	4.2	24	0.002 U	0.002 U	0.0021 U	0.0022 U	0.002 U	0.002 U	0.0021 U	0.002 U	0.0018 U	0.0021 U
beta-BHC	319-85-7	0.36	3	0.002 U	0.002 U	0.0021 U	0.0022 U	0.002 UJ	0.002 UJ	0.0021 UJ	0.002 UJ	0.0018 UJ	0.0021 UJ
delta-BHC	319-86-8	100	500	0.002 U	0.002 U	0.0021 U	0.0022 U	0.002 U	0.002 U	0.0021 U	0.002 U	0.0018 U	0.0021 UJ
Dieldrin	60-57-1	0.2	1.4	0.002 U	0.002 U	0.0021 U	0.0022 U	0.002 U	0.002 U	0.0021 U	0.002 U	0.0018 U	0.0021 U
Endosulfan I	959-98-8	24	200	0.002 U	0.002 U	0.0021 U	0.0022 U	0.002 U	0.002 U	0.0021 U	0.002 U	0.0018 U	0.0021 U
Endosulfan II	33213-65-9	24	200	0.002 U	0.002 U	0.0021 U	0.0022 U	0.002 U	0.002 U	0.0021 U	0.002 U	0.0018 U	0.0021 U
Endosulfan Sulfate	1031-07-8	24	200	0.002 U	0.002 U	0.0021 U	0.0022 U	0.002 U	0.002 U	0.0021 U	0.002 U	0.0018 U	0.0021 UJ
Endrin	72-20-8	11	89	0.002 U	0.002 U	0.0021 U	0.0022 U	0.002 U	0.002 UJ	0.0021 UJ	0.002 UJ	0.0018 UJ	0.0021 U
Endrin aldehyde	7421-93-4	NC	NC	0.002 U	0.002 U	0.0021 U	0.0022 U	0.002 U	0.002 U	0.0021 U	0.002 U	0.0018 U	0.0021 U
Endrin ketone	53494-70-5	NC	NC	0.002 U	0.002 U	0.0021 U	0.0022 U	0.002 U	0.002 U	0.0021 U	0.002 U	0.0018 U	0.0021 UJ
gamma-BHC	58-89-9	1.3	9.2	0.002 U	0.002 U	0.0021 U	0.0022 U	0.002 U	0.002 U	0.0021 U	0.002 U	0.0018 U	0.0021 U
gamma-Chlordane	5103-74-2	NC	NC	0.002 U	0.002 U	0.0021 U	0.0022 U	0.002 U	0.002 U	0.0021 U	0.002 U	0.0018 U	0.0021 U
Heptachlor	76-44-8	2.1	15	0.002 U	0.002 U	0.0021 U	0.0022 U	0.002 U	0.002 U	0.0021 U	0.002 U	0.0018 U	0.0021 U
Heptachlor epoxide	1024-57-3	NC	NC	0.002 U	0.002 U	0.0021 U	0.0022 U	0.002 U	0.002 U	0.0021 U	0.002 U	0.0018 U	0.0021 U
Methoxychlor	72-43-5	NC	NC	0.002 U	0.002 U	0.0021 U	0.0022 U	0.002 UJ	0.002 UJ	0.0021 UJ	0.002 UJ	0.0018 UJ	0.0021 UJ
Toxaphene	8001-35-2	NC	NC	0.02 U	0.02 U	0.021 U	0.022 U	0.02 U	0.02 U	0.021 U	0.02 U	0.018 U	0.021 U
PCBs (mg/kg)													
Aroclor-1016	12674-11-2	1	1	0.02 U	0.019 U	0.021 U	0.022 UJ	0.02 U	0.02 U	0.021 U	0.02 U	0.018 U	0.021 UJ
Aroclor-1221	11104-28-2	1	1	0.02 U	0.019 U	0.021 U	0.022 UJ	0.02 U	0.02 U	0.021 U	0.02 U	0.018 U	0.021 UJ
Aroclor-1232	11141-16-5	1	1	0.02 U	0.019 U	0.021 U	0.022 UJ	0.02 U	0.02 U	0.021 U	0.02 U	0.018 U	0.021 UJ
Aroclor-1242	53469-21-9	1	1	0.02 U	0.019 U	0.021 U	0.022 UJ	0.02 U	0.02 U	0.021 U	0.02 U	0.018 U	0.021 UJ
Aroclor-1248	12672-29-6	1	1	0.02 U	0.019 U	0.021 U	0.022 UJ	0.02 U	0.02 U	0.021 U	0.02 U	0.018 U	0.021 UJ
Aroclor-1254	11097-69-1	1	1	0.02 U	0.019 U	0.021 U	0.022 UJ	0.02 U	0.02 U	0.021 U	0.02 U	0.018 U	0.021 UJ
Aroclor-1260	11096-82-5	1	1	0.02 U	0.019 U	0.021 U	0.022 UJ	0.02 U	0.02 U	0.021 U	0.02 U	**0.019**	0.021 UJ

Notes:
bgs - below ground surface
J - Estimated
mg/kg - milligrams per kilogram
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
U - Not detected

Detected values are in **BOLD.**

Table 4-6
Soil Sample Analytical Results
Herbicides, Pesticides, and PCBs
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-06A PWSB-06-3-5 C1875-06 4/14/2011 3-5	PWSB-06A PWSB-06A-8-10 C2099-05 5/4/2011 8-10	PWSB-06A PWSB-06A-38-40 C2099-06 5/4/2011 38-40	PWSB-07 PWSB-07-1-3 C2834-01 6/26/2011 1-3	PWSB-07 PWSB-07-8-10 C2834-02 6/26/2011 8-10	PWSB-07 PWSB-07-38-40 C2834-03 6/26/2011 38-48	PWSB-08 PWSB-08-2-2.5 C2641-01 6/12/2011 2-2.5	PWSB-08 PWSB-08-22-24 C2641-02 6/12/2011 22-24	PWSB-08 PWSB-08-32-34 C2641-03 6/12/2011 32-34	PWMW-01 PWMW-01-1-3 C2910-01 7/5/2011 1-3
Herbicides (mg/kg)													
2,4,5-T	93-76-5	NC	NC	0.082 U	0.085 U	0.078 U	0.075 U	0.078 U	0.078 U	0.074 U	0.079 U	0.078 U	0.074 U
2,4,5-TP (SILVEX)	93-72-1	100	500	0.082 U	0.085 U	0.078 U	0.075 U	0.078 U	0.078 U	0.074 U	0.079 U	0.078 U	0.074 U
2,4-D	94-75-7	NC	NC	0.082 U	0.085 U	0.078 U	0.075 U	0.078 U	0.078 U	0.074 U	0.079 U	0.078 U	0.074 U
2,4-DB	94-82-6	NC	NC	0.082 U	0.085 U	0.078 U	0.075 U	0.078 U	0.078 U	0.074 U	0.079 U	0.078 U	0.074 U
DICAMBA	1918-00-9	NC	NC	0.082 U	0.085 U	0.078 U	0.075 U	0.078 U	0.078 U	0.074 U	0.079 U	0.078 U	0.074 U
DICHLORPROP	120-36-5	NC	NC	0.082 U	0.085 U	0.078 U	0.075 U	0.078 U	0.078 U	0.074 U	0.079 U	0.078 U	0.074 U
DINOSEB	88-85-7	NC	NC	0.082 UJ	0.085 U	0.078 U	0.075 U	0.078 UJ	0.078 U	0.074 UJ	0.079 UJ	0.078 UJ	0.074 UJ
Pesticides (mg/kg)													
4,4-DDD	72-54-8	13	92	0.0021 U	0.0022 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0019 U
4,4-DDE	72-55-9	8.9	62	0.0021 U	0.0022 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0019 U
4,4-DDT	50-29-3	7.9	47	0.0021 UJ	0.0022 UJ	0.002 UJ	0.0019 UJ	0.002 UJ	0.002 UJ	0.0019 UJ	0.002 UJ	0.002 UJ	0.0019 U
Aldrin	309-00-2	0.097	0.68	0.0021 U	0.0022 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0019 U
alpha-BHC	319-84-6	0.48	3.4	0.0021 U	0.0022 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0019 U
alpha-Chlordane	5103-71-9	4.2	24	0.0021 U	0.0022 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0019 U
beta-BHC	319-85-7	0.36	3	0.0021 UJ	0.0022 UJ	0.002 UJ	0.0019 U	0.002 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0019 U
delta-BHC	319-86-8	100	500	0.0021 U	0.0022 U	0.002 U	0.0019 UJ	0.002 UJ	0.002 UJ	0.0019 U	0.002 U	0.002 U	0.0019 U
Dieldrin	60-57-1	0.2	1.4	0.0021 U	0.0022 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0019 U
Endosulfan I	959-98-8	24	200	0.0021 U	0.0022 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0019 U
Endosulfan II	33213-65-9	24	200	0.0021 U	0.0022 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0019 U
Endosulfan Sulfate	1031-07-8	24	200	0.0021 U	0.0022 U	0.002 U	0.0019 UJ	0.002 UJ	0.002 UJ	0.0019 U	0.002 U	0.002 U	0.0019 U
Endrin	72-20-8	11	89	0.0021 U	0.0022 UJ	0.002 UJ	0.0019 U	0.002 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0019 U
Endrin aldehyde	7421-93-4	NC	NC	0.0021 U	0.0022 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0019 U
Endrin ketone	53494-70-5	NC	NC	0.0021 U	0.0022 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0019 U
gamma-BHC	58-89-9	1.3	9.2	0.0021 U	0.0022 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0019 UJ
gamma-Chlordane	5103-74-2	NC	NC	0.0021 U	0.0022 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0019 U
Heptachlor	76-44-8	2.1	15	0.0021 U	0.0022 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0019 U
Heptachlor epoxide	1024-57-3	NC	NC	0.0021 U	0.0022 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0019 U
Methoxychlor	72-43-5	NC	NC	0.0021 UJ	0.0022 UJ	0.002 UJ	0.0019 U	0.002 U	0.002 U	0.0019 UJ	0.002 UJ	0.002 UJ	0.0019 U
Toxaphene	8001-35-2	NC	NC	0.021 U	0.022 U	0.02 U	0.019 U	0.02 U	0.02 U	0.019 U	0.02 U	0.02 U	0.019 U
PCBs (mg/kg)													
Aroclor-1016	12674-11-2	1	1	0.021 U	0.021 U	0.02 U	0.019 UJ	0.02 UJ	0.02 UJ	0.019 U	0.02 U	0.02 U	0.019 U
Aroclor-1221	11104-28-2	1	1	0.021 U	0.021 U	0.02 U	0.019 U	0.02 U	0.02 U	0.019 U	0.02 U	0.02 U	0.019 U
Aroclor-1232	11141-16-5	1	1	0.021 U	0.021 U	0.02 U	0.019 U	0.02 U	0.02 U	0.019 U	0.02 U	0.02 U	0.019 U
Aroclor-1242	53469-21-9	1	1	0.021 U	0.021 U	0.02 U	0.019 U	0.02 U	0.02 U	0.019 U	0.02 U	0.02 U	0.019 U
Aroclor-1248	12672-29-6	1	1	0.021 U	0.021 U	0.02 U	0.019 U	0.02 U	0.02 U	0.019 U	0.02 U	0.02 U	0.019 U
Aroclor-1254	11097-69-1	1	1	0.021 U	0.021 U	0.02 U	0.019 U	0.02 U	0.02 U	0.019 U	0.02 U	0.02 U	0.019 U
Aroclor-1260	11096-82-5	1	1	0.021 U	0.021 U	0.02 U	0.019 U	0.02 U	0.02 U	0.019 U	0.02 U	0.02 U	0.019 U

Notes:
bgs - below ground surface
J - Estimated
mg/kg - milligrams per kilogram
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
U - Not detected

Detected values are in **BOLD.**

Table 4-6
Soil Sample Analytical Results
Herbicides, Pesticides, and PCBs
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWMW-01 PWMW-01-6-9 C2910-02 7/5/2011 6-9	PWMW-01 PWMW-01-38-40 C2910-03 7/5/2011 38-48	PWMW-02 PWMW-02-1-6 C1861-04 4/13/2011 1-6	PWMW-02 PWMW-02-8-9 C1861-05 4/13/2011 8-9	PWMW-02 PWMW-02-38-40 C1861-06 4/13/2011 38-48	PWTP-01A TP-01A-2.5-3 C2353-01 5/22/2011 2.5-3
Herbicides (mg/kg)									
2,4,5-T	93-76-5	NC	NC	0.081 U	0.077 U	0.075 U	0.079 U	0.076 U	0.15 U
2,4,5-TP (SILVEX)	93-72-1	100	500	0.081 U	0.077 U	0.075 U	0.079 U	0.076 U	0.15 U
2,4-D	94-75-7	NC	NC	0.081 U	0.077 U	0.075 U	0.079 U	0.076 U	0.15 U
2,4-DB	94-82-6	NC	NC	0.081 U	0.077 U	0.075 U	0.079 U	0.076 U	0.15 U
DICAMBA	1918-00-9	NC	NC	0.081 U	0.077 U	0.075 U	0.079 U	0.076 U	0.15 U
DICHLORPROP	120-36-5	NC	NC	0.081 U	0.077 U	0.075 U	0.079 U	0.076 U	0.15 U
DINOSEB	88-85-7	NC	NC	0.081 UJ	0.077 UJ	0.075 U	0.079 U	0.076 U	0.15 U
Pesticides (mg/kg)									
4,4-DDD	72-54-8	13	92	0.0021 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0039 U
4,4-DDE	72-55-9	8.9	62	0.0021 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0039 U
4,4-DDT	50-29-3	7.9	47	0.0021 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0039 U
Aldrin	309-00-2	0.097	0.68	0.0021 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0039 U
alpha-BHC	319-84-6	0.48	3.4	0.0021 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0039 U
alpha-Chlordane	5103-71-9	4.2	24	0.0021 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0039 U
beta-BHC	319-85-7	0.36	3	0.0021 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0039 U
delta-BHC	319-86-8	100	500	0.0021 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0039 U
Dieldrin	60-57-1	0.2	1.4	0.0021 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0039 U
Endosulfan I	959-98-8	24	200	0.0021 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0039 U
Endosulfan II	33213-65-9	24	200	0.0021 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0039 U
Endosulfan Sulfate	1031-07-8	24	200	0.0021 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0039 U
Endrin	72-20-8	11	89	0.0021 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0039 U
Endrin aldehyde	7421-93-4	NC	NC	0.0021 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0039 U
Endrin ketone	53494-70-5	NC	NC	0.0021 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0039 U
gamma-BHC	58-89-9	1.3	9.2	0.0021 UJ	0.002 UJ	0.0019 U	0.002 U	0.002 U	0.0039 U
gamma-Chlordane	5103-74-2	NC	NC	0.0021 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0039 U
Heptachlor	76-44-8	2.1	15	0.0021 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0039 U
Heptachlor epoxide	1024-57-3	NC	NC	0.0021 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0039 U
Methoxychlor	72-43-5	NC	NC	0.0021 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0039 U
Toxaphene	8001-35-2	NC	NC	0.021 U	0.02 U	0.019 U	0.02 U	0.02 U	0.039 U
PCBs (mg/kg)									
Aroclor-1016	12674-11-2	1	1	0.021 U	0.02 U	0.019 U	0.02 U	0.02 U	0.039 U
Aroclor-1221	11104-28-2	1	1	0.021 U	0.02 U	0.019 U	0.02 U	0.02 U	0.039 U
Aroclor-1232	11141-16-5	1	1	0.021 U	0.02 U	0.019 U	0.02 U	0.02 U	0.039 U
Aroclor-1242	53469-21-9	1	1	0.021 U	0.02 U	0.019 U	0.02 U	0.02 U	0.039 U
Aroclor-1248	12672-29-6	1	1	0.021 U	0.02 U	0.019 U	0.02 U	0.02 U	0.039 U
Aroclor-1254	11097-69-1	1	1	0.021 U	0.02 U	0.019 U	0.02 U	0.02 U	0.039 U
Aroclor-1260	11096-82-5	1	1	0.021 U	**0.018 J**	0.019 U	0.02 U	0.02 U	0.039 U

Notes:
bgs - below ground surface
J - Estimated
mg/kg - milligrams per kilogram
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
U - Not detected

Detected values are in **BOLD.**

Table 4-7
Soil Sample Analytical Results
Metals and Free Cyanide
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-01 PWSB-01-2.5-5 C1875-05 4/14/2011 2.5-5	PWSB-01 PWSB-01-5-9 C2089-03 5/2/2011 5-9	PWSB-01 PWSB-21-5-9 Duplicate of PWSB-01-5-9 5/2/2011 5-9	PWSB-01 PWSB-01-35-40 C2099-01 5/3/2011 35-40	PWSB-02 PWSB-02-1-2 C1827-02 4/11/2011 1-2	PWSB-02 PWSB-02-4-5 C1827-03 4/11/2011 4-5	PWSB-02 PWSB-02-38-40 C1827-05 4/11/2011 38-48
Metals and Free Cyanide (mg/kg)										
Aluminum	7429-90-5	NC	NC	**4,770**	**5,480**	**6,680**	**2,730**	**6,470**	**6,720**	**3,130**
Antimony	7440-36-0	NC	NC	2.04 U	1.97 U	**0.584 J**	2.89 U	0.42 UJ	0.69 UJ	0.44 UJ
Arsenic	7440-38-2	16	16	**2.12**	**2.53**	**2.88**	1.15 U	2.53 UJ	5.36 UJ	0.59 UJ
Barium	7440-39-3	400	400	**30.2**	**35.8**	**35**	**25.3**	**46.1**	**43.6**	**21.1**
Beryllium	7440-41-7	72	590	**0.54**	**0.383**	**0.455**	**0.162 J**	0.53 UJ	0.59 UJ	0.24 UJ
Cadmium	7440-43-9	4.3	9.3	0.25 U	0.236 U	0.278 U	0.346 U	0.05 UJ	0.05 UJ	0.05 UJ
Calcium	7440-70-2	NC	NC	**1,650 J**	**4,350**	**3,390**	**1,330**	**28,700 J**	**8,430 J**	**1,750 J**
Chromium	7440-47-3	180	1,500	**11.7**	**17.7**	**15.2**	**7.64**	11.1 UJ	19 UJ	6.6 UJ
Cobalt	7440-48-4	NC	NC	**4.85**	**5.9**	**7.7**	**3.14**	4.29 UJ	5.64 UJ	3.11 UJ
Copper	7440-50-8	270	270	**16.5 J**	**15.7 J**	**19.3 J**	**6.58**	R	R	R
Iron	7439-89-6	NC	NC	**18,300 J**	**15,400**	**21,000**	**6,530**	**13,500**	**20,800**	**7,910**
Lead	7439-92-1	400	1,000	**57.4**	**31.7 J**	**50.2 J**	**5.49**	58.9 UJ	132 UJ	2.69 UJ
Magnesium	7439-95-4	NC	NC	**1,640**	**2,820**	**3,020**	**1,530**	**2,490 J**	**2,780 J**	**1,890 J**
Manganese	7439-96-5	2,000	10,000	**312**	**394**	**432**	**192**	**198 J**	**332 J**	**240 J**
Mercury	7439-97-6	0.81	2.8	**0.391**	**0.025**	**0.03**	0.012 U	**0.101 J**	**0.13 J**	R
Nickel	7440-02-0	310	310	**9.49**	**12.7 J**	**15.1 J**	**7.17**	12.8 UJ	14.6 UJ	6.86 UJ
Potassium	7440-09-7	NC	NC	**700**	**832**	**917**	**482**	**738**	**865**	**592**
Selenium	7782-49-2	180	1,500	**1.62**	**1.29**	**1.84**	1.15 U	0.8 UJ	1.87 UJ	0.58 UJ
Silver	7440-22-4	180	1,500	0.41 UJ	0.393 U	0.463 U	0.577 U	0.47 UJ	0.7 UJ	0.28 UJ
Sodium	7440-23-5	NC	NC	**219 J**	**233**	**276**	**147**	**344**	**267**	**180**
Thallium	7440-28-0	NC	NC	1.63 U	1.57 U	1.85 U	2.31 U	0.2 U	1.72 U	0.21 U
Vanadium	7440-62-2	NC	NC	**23**	**21.1**	**24.9**	**7.75**	17.4 UJ	24.1 UJ	10.5 UJ
Zinc	7440-66-6	10,000	10,000	38.4 UJ	**38.3 J**	**44.5 J**	**38.1**	**37.2 J**	**68.4 J**	**20.4 J**
Cyanide (Free)	57-12-5	27	27	0.288 U	0.291 U	0.294 U	0.289 U	**20**	**21**	0.578 U

Notes:
bgs - below ground surface
J - Estimated
mg/kg - milligrams per kilogram
NA - Not analyzed
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
U - Not detected

Detected values are in **BOLD.**

Values shaded in GOLD were detected at a concentration exceeding restricted residential criteria.

Values shaded in PINK were detected at a concentration exceeding both restricted residential and commercial criteria.

Table 4-7
Soil Sample Analytical Results
Metals and Free Cyanide
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-02 PWSB-12-38-40 Duplicate of PWSB-02-38-40 38-48	PWSB-03 PWSB-03-1-2 C1861-01 4/13/2011 1-2	PWSB-03 PWSB-03-15-16 C1861-02 4/13/2011 15-16	PWSB-03 PWSB-03-39-40 C1861-03 4/13/2011 39-40	PWSB-04 PWSB-04-1-5 C1861-07 4/13/2011 1-5	PWSB-04 PWSB-04-13-15 C1861-08 4/13/2011 13-15	PWSB-04 PWSB-04-25-27 C1861-09 4/13/2011 25-27
Metals and Free Cyanide (mg/kg)										
Aluminum	7429-90-5	NC	NC	**2,760**	**8,840 J**	**12,900 J**	**2,510 J**	**7,630 J**	**8,220 J**	**10,300 J**
Antimony	7440-36-0	NC	NC	0.46 UJ	0.64 UJ	0.58 UJ	0.5 UJ	0.51 UJ	0.46 UJ	0.55 UJ
Arsenic	7440-38-2	16	16	0.27 UJ	**2.21**	**4.52**	**0.54 J**	**3.72**	**2.13**	**2.71**
Barium	7440-39-3	400	400	**25.3**	**55.2 J**	**47.5 J**	**8.5 J**	**43.6 J**	**38 J**	**36.6 J**
Beryllium	7440-41-7	72	590	0.22 UJ	**0.75**	**0.65**	**0.21 J**	**0.74**	**0.61**	**0.71**
Cadmium	7440-43-9	4.3	9.3	0.05 UJ	0.34 U	0.31 U	0.27 U	0.27 U	0.25 U	0.29 U
Calcium	7440-70-2	NC	NC	**3,410 J**	**5,900 J**	**779 J**	**793 J**	**2,680 J**	**11,500 J**	**919 J**
Chromium	7440-47-3	180	1,500	5.68 UJ	**18.2 J**	**16.8 J**	**5.68 J**	**18.2 J**	**13.6 J**	**17.6 J**
Cobalt	7440-48-4	NC	NC	3.08 UJ	**7.74**	**5.9**	**3.05**	**9.63**	**6.33**	**7.48**
Copper	7440-50-8	270	270	R	**15.1 J**	**11.8 J**	**4.75 J**	**30 J**	**13.7 J**	**12.9 J**
Iron	7439-89-6	NC	NC	**7,040**	**26,100 J**	**24,000 J**	**8,200 J**	**25,800 J**	**17,300 J**	**21,500 J**
Lead	7439-92-1	400	1,000	2.48 UJ	**33.3**	**9.67**	**2.35**	**47**	**16.1**	**19.9**
Magnesium	7439-95-4	NC	NC	**2,110 J**	**2,160 J**	**2,670 J**	**1,380 J**	**2,950 J**	**4,420 J**	**2,810 J**
Manganese	7439-96-5	2,000	10,000	**361 J**	**477 J**	**353 J**	**78.7 J**	**303 J**	**226 J**	**513 J**
Mercury	7439-97-6	0.81	2.8	R	**0.029**	**0.026**	0.01 U	**0.13**	**0.05**	**0.059**
Nickel	7440-02-0	310	310	6.64 UJ	**13.8**	**12.2**	**6.53**	**18.5**	**12.8**	**15.5**
Potassium	7440-09-7	NC	NC	**492**	**1,010 J**	**718 J**	**410 J**	**1,380 J**	**975 J**	**1,080 J**
Selenium	7782-49-2	180	1,500	0.68 UJ	1.15 U	1.04 U	0.89 U	0.92 U	0.82 U	0.98 U
Silver	7440-22-4	180	1,500	0.23 UJ	0.57 UJ	0.52 UJ	0.44 UJ	0.46 UJ	0.41 UJ	0.49 UJ
Sodium	7440-23-5	NC	NC	**219**	**302 J**	**278 J**	**160 J**	**567 J**	**855 J**	**697 J**
Thallium	7440-28-0	NC	NC	0.22 U	2.3 U	2.07 U	1.77 U	1.83 U	1.65 U	1.95 U
Vanadium	7440-62-2	NC	NC	9.4 UJ	**31.6**	**27.8**	**9.68**	**28.6**	**22.8**	**27.5**
Zinc	7440-66-6	10,000	10,000	**17.5 J**	**49.3 J**	**46.4 J**	**18.9 J**	**91.4 J**	**39.3 J**	**38.3 J**
Cyanide (Free)	57-12-5	27	27	**0.127 J**	0.287 U	0.314 U	0.288 U	**0.381**	0.305 U	0.327 U

Notes:
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U - Not detected

Detected values are in **BOLD.**

Values shaded in GOLD were detected at a concentration exceeding restricted residential criteria.

Values shaded in PINK were detected at a concentration exceeding both restricted residential and commercial criteria.

Table 4-7
Soil Sample Analytical Results
Metals and Free Cyanide
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-05 PWSB-05-2.5 C1875-02 4/14/2011 2.5	PWSB-05 PWSB-05-10-13 C2089-01 5/2/2011 10-13	PWSB-05 PWSB-05-19-22 C2089-02 5/2/2011 19-22	PWSB-05 PWSB-05-37-40 C2099-04 5/4/2011 37-40	PWSB-06 PWSB-06-1-2 C1739-01 4/4/2011 1-2	PWSB-06 PWSB-06-7-9 C1827-01 4/11/2011 7-9	PWSB-06A PWSB-06-3-5 C1875-06 4/14/2011 3-5
Metals and Free Cyanide (mg/kg)										
Aluminum	7429-90-5	NC	NC	**7,140**	**3,940**	**5,260**	**2,670**	**4,170**	**12,900**	**7,230**
Antimony	7440-36-0	NC	NC	3.01 U	2.18 U	**0.733 J**	2.29 U	**0.73 J**	0.6 UJ	2.19 U
Arsenic	7440-38-2	16	16	**1.34**	**2.42**	**1.84**	0.92 U	**4.17**	**2.91 J**	**3.29**
Barium	7440-39-3	400	400	**25.8**	**25.1**	**57.3**	**19.4**	**47.9**	**32.8**	**24**
Beryllium	7440-41-7	72	590	**0.72**	**0.41**	**0.539**	**0.26 J**	**0.4**	0.92 UJ	**0.55**
Cadmium	7440-43-9	4.3	9.3	0.36 U	0.261 U	0.299 U	0.28 U	0.27 UJ	0.05 UJ	0.26 U
Calcium	7440-70-2	NC	NC	**1,130 J**	**2,100**	**1,480**	**923**	**22,200**	**963 J**	**796 J**
Chromium	7440-47-3	180	1,500	**22.7**	**13.4**	**22.1**	**6.35**	**11.5**	24.6 UJ	**10**
Cobalt	7440-48-4	NC	NC	**3.69**	**5.53**	**9.94**	**3.13**	**4.1**	6.56 UJ	**4.59**
Copper	7440-50-8	270	270	**11.8 J**	**10.1 J**	**19.8 J**	**10.7 J**	**29.9 J**	R	**8.63 J**
Iron	7439-89-6	NC	NC	**32,200 J**	**15,800**	**29,000**	**9,710**	**12,600**	**40,200**	**14,800 J**
Lead	7439-92-1	400	1,000	**15.1**	**11.8 J**	**8.06 J**	**2.99**	**40.1 J**	11 UJ	**9.3**
Magnesium	7439-95-4	NC	NC	**1,070**	**1,490**	**2,790**	**1,460**	**2,360**	**1,870**	**2,160**
Manganese	7439-96-5	2,000	10,000	**169**	**245**	**807**	**186**	**228**	**296 J**	**127**
Mercury	7439-97-6	0.81	2.8	**0.013**	**0.004 J**	0.011 U	0.011 U	**0.066**	R	**0.023**
Nickel	7440-02-0	310	310	**6.15**	**10.3 J**	**18.6 J**	**7.06 J**	**11.4**	12 UJ	**9.92**
Potassium	7440-09-7	NC	NC	**309**	**652**	**1,790**	**393**	**725**	**750**	**496**
Selenium	7782-49-2	180	1,500	**1.86**	**1.25**	**1.93**	**0.63 J**	**0.81 J**	2.79 UJ	**1.2**
Silver	7440-22-4	180	1,500	0.6 UJ	0.435 U	0.498 U	0.46 U	**0.53**	1.4 UJ	0.44 UJ
Sodium	7440-23-5	NC	NC	120 UJ	**232**	**263**	**100**	**516 J**	**173**	**115 J**
Thallium	7440-28-0	NC	NC	2.41 U	1.74 U	1.99 U	1.84 U	1.79 U	1.83 U	1.76 U
Vanadium	7440-62-2	NC	NC	**45.2**	**23.7**	**36.6**	**16.4**	**11.8**	43.5 UJ	**14.6**
Zinc	7440-66-6	10,000	10,000	23.4 UJ	**38.3 J**	**57.3 J**	**34.1 J**	**45.7 J**	**35.7 J**	35.3 UJ
Cyanide (Free)	57-12-5	27	27	0.301 U	0.296 U	0.306 U	0.289 U	**0.429**	**0.43 J**	0.307 U

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Detected values are in **BOLD.**

Values shaded in GOLD were detected at a concentration exceeding restricted residential criteria.

Values shaded in PINK were detected at a concentration exceeding both restricted residential and commercial criteria.

Table 4-7
Soil Sample Analytical Results
Metals and Free Cyanide
Peoples Works Former MGP Site

Location ID		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-06A	PWSB-06A	PWSB-07	PWSB-07	PWSB-07	PWSB-08	PWSB-08
Sample ID				PWSB-06A-8-10	PWSB-06A-38-40	PWSB-07-1-3	PWSB-07-8-10	PWSB-07-38-40	PWSB-08-2-2.5	PWSB-08-22-24
Lab Sample Number				C2099-05	C2099-06	C2834-01	C2834-02	C2834-03	C2641-01	C2641-02
Sampling Date				5/4/2011	5/4/2011	6/26/2011	6/26/2011	6/26/2011	6/12/2011	6/12/2011
Sample Depth (feet bgs)				8-10	38-40	1-3	8-10	38-48	2-2.5	22-24
Metals and Free Cyanide (mg/kg)										
Aluminum	7429-90-5	NC	NC	**9,450**	**3,110**	**5,770**	**4,820**	**1,710**	**4,950 J**	**1,760 J**
Antimony	7440-36-0	NC	NC	2.37 U	2.39 U	2.78 U	1.92 U	1.86 U	**1.89 J**	2.65 U
Arsenic	7440-38-2	16	16	**0.37 J**	0.96 U	**2.54**	**1.59**	**0.43 J**	**4.83**	**0.914 J**
Barium	7440-39-3	400	400	**34.2**	**31**	**57.9 J**	**27.2 J**	**11.9 J**	**58.7**	**18.6**
Beryllium	7440-41-7	72	590	**0.68**	**0.28 J**	**0.61**	**0.51**	**0.16 J**	**0.444**	**0.145 J**
Cadmium	7440-43-9	4.3	9.3	0.28 U	0.29 U	0.33 U	0.23 U	0.22 U	**0.863 J**	**0.266 J**
Calcium	7440-70-2	NC	NC	**654**	**1,500**	**19,500**	**669**	**484**	**10,900**	**875**
Chromium	7440-47-3	180	1,500	**13.7**	**6.93**	**13.6 J**	**15.4 J**	**3.75 J**	**24.4 J**	**5.4 J**
Cobalt	7440-48-4	NC	NC	**9.96**	**3.35**	**4.58**	**4.23**	**1.77**	**5**	**2.34**
Copper	7440-50-8	270	270	**18.4 J**	**11.8 J**	**27.9 J**	**38.1 J**	**6.46**	**25.7 J**	**6.13**
Iron	7439-89-6	NC	NC	**18,000**	**9,300**	**17,500**	**16,300**	**5,330**	**14,900**	**4,860**
Lead	7439-92-1	400	1,000	**28.4**	**3.69**	**39**	**21.8**	**2.24**	**327 J**	**2.72**
Magnesium	7439-95-4	NC	NC	**2,130**	**1,990**	**4,080**	**1,360**	**1,040**	**1,650**	**972**
Manganese	7439-96-5	2,000	10,000	**123**	**178**	**301**	**271**	**66.8**	**250 J**	**163 J**
Mercury	7439-97-6	0.81	2.8	**0.023**	0.012 U	**0.107 J**	**0.041 J**	**0.002 J**	**0.315**	0.012 U
Nickel	7440-02-0	310	310	**15.9 J**	**7.47 J**	**12.1 J**	**8.59 J**	**4.8**	**15.6 J**	**5.74**
Potassium	7440-09-7	NC	NC	**766**	**484**	**791**	**583**	**276**	**526**	**326**
Selenium	7782-49-2	180	1,500	**1.93**	**1.03**	1.11 U	0.77 U	0.74 U	**1.2**	1.06 U
Silver	7440-22-4	180	1,500	0.47 U	0.48 U	0.56 U	0.38 U	0.37 U	0.54 U	0.53 U
Sodium	7440-23-5	NC	NC	**110**	**111**	**402 J**	**141 J**	**221 J**	**286 J**	**203 J**
Thallium	7440-28-0	NC	NC	1.9 U	1.91 U	2.23 U	1.54 U	1.48 U	2.16 U	2.12 U
Vanadium	7440-62-2	NC	NC	**22**	**11.7**	**20.5**	**21.6**	**5.88**	**18.1**	**6.64**
Zinc	7440-66-6	10,000	10,000	**42 J**	**26 J**	**49.1 J**	**32.9 J**	**13.6 J**	**70.4 J**	**13 J**
Cyanide (Free)	57-12-5	27	27	0.318 U	0.291 U	**1.19**	**0.698**	**0.091 J**	**0.385**	**0.058 J**

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Detected values are in **BOLD.**

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Table 4-7
Soil Sample Analytical Results
Metals and Free Cyanide
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-08 PWSB-08-32-34 C2641-03 6/12/2011 32-34	PWMW-01 PWMW-01-1-3 C2910-01 7/5/2011 1-3	PWMW-01 PWMW-01-6-9 C2910-02 7/5/2011 6-9	PWMW-01 PWMW-01-38-40 C2910-03 7/5/2011 38-48	PWMW-02 PWMW-02-1-6 C1861-04 4/13/2011 1-6	PWMW-02 PWMW-02-8-9 C1861-05 4/13/2011 8-9	PWMW-02 PWMW-02-38-40 C1861-06 4/13/2011 38-48
Metals and Free Cyanide (mg/kg)										
Aluminum	7429-90-5	NC	NC	**2,100 J**	**6,590**	**6,280**	**2,590**	**6,600 J**	**8,000 J**	**2,280 J**
Antimony	7440-36-0	NC	NC	2.58 U	2.78 UJ	0.716 UJ	1.92 UJ	0.47 UJ	0.49 UJ	0.48 UJ
Arsenic	7440-38-2	16	16	**1 J**	3.3 UJ	3.23 UJ	1.25 UJ	**5.72**	**2.91**	**0.89**
Barium	7440-39-3	400	400	**15.1**	35.7 UJ	44.6 UJ	17.2 UJ	**45.3 J**	**42.5 J**	**18.8 J**
Beryllium	7440-41-7	72	590	**0.178 J**	0.432 UJ	0.416 UJ	0.205 UJ	**0.61**	**0.71**	**0.27**
Cadmium	7440-43-9	4.3	9.3	**0.267 J**	0.145 UJ	0.295 UJ	0.048 UJ	0.25 U	0.26 U	0.26 U
Calcium	7440-70-2	NC	NC	**691**	**1,890 J**	**4,540 J**	**743 J**	**2,500 J**	**16,900 J**	**1,030 J**
Chromium	7440-47-3	180	1,500	**6.09 J**	**12.5 J**	**13.8 J**	**7.8 J**	**31.9 J**	**19.3 J**	**6.12 J**
Cobalt	7440-48-4	NC	NC	**2.26**	6.12 UJ	5.56 UJ	3.16 UJ	**7.12**	**7.57**	**3.52**
Copper	7440-50-8	270	270	**6.82**	20.1 UJ	33.2 UJ	5.88 UJ	**25.4 J**	**14.8 J**	**12.9 J**
Iron	7439-89-6	NC	NC	**5,820**	**17,600**	**16,500**	**7,840**	**31,700 J**	**30,800 J**	**9,850 J**
Lead	7439-92-1	400	1,000	**1.68**	61.1 UJ	82.4 UJ	1.93 UJ	**47.8**	**20.2**	**2.91**
Magnesium	7439-95-4	NC	NC	**1,120**	**1,970 J**	**2,430 J**	**1,260 J**	**2,070 J**	**4,730 J**	**1,420 J**
Manganese	7439-96-5	2,000	10,000	**62.2 J**	**287 J**	**265 J**	**182 J**	**257 J**	**305 J**	**192 J**
Mercury	7439-97-6	0.81	2.8	0.011 U	**1.42 DJ**	**2.99 DJ**	0.011 U	**0.049**	**0.025**	**0.022**
Nickel	7440-02-0	310	310	**5.34**	11.4 UJ	10.6 UJ	6.34 UJ	**17.8**	**13.9**	**6.15**
Potassium	7440-09-7	NC	NC	**370**	**634**	**681**	**444**	**823 J**	**1,040 J**	**518 J**
Selenium	7782-49-2	180	1,500	**0.473 J**	3.16 UJ	2.08 UJ	1.09 UJ	0.84 U	0.88 U	0.85 U
Silver	7440-22-4	180	1,500	0.517 U	**0.361 J**	**0.406 J**	0.384 U	0.42 UJ	0.44 UJ	0.43 UJ
Sodium	7440-23-5	NC	NC	**251 J**	**308 J**	**398 J**	**323 J**	**289 J**	**500 J**	**162 J**
Thallium	7440-28-0	NC	NC	2.07 U	2.22 U	1.81 U	1.54 U	1.67 U	1.75 U	1.71 U
Vanadium	7440-62-2	NC	NC	**6.7**	20.3 UJ	18.4 UJ	10.9 UJ	**28.8**	**32.1**	**12.3**
Zinc	7440-66-6	10,000	10,000	**12.7 J**	R	R	R	**36.8 J**	**36.7 J**	**18.4 J**
Cyanide (Free)	57-12-5	27	27	0.292 U	**0.511**	0.303 U	0.288 U	0.28 U	0.294 U	0.288 U

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Detected values are in **BOLD.**

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Values shaded in PINK were detected at a concentration exceeding both restricted residential and commercial criteria.

Table 4-7
Soil Sample Analytical Results
Metals and Free Cyanide
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWTP-01A TP-01A-2.5-3 C2353-01 5/22/2011 2.5-3	PWSB-13 PWSB-13-28-28.5 MC35638-1 12/3/2014 28-28.5	PWSB-13 PWSB-13-38-38.5 MC35638-2 12/3/2014 38-38.5	PWSB-14 PWSB-14-25.5-26 MC35638-3 12/4/2014 25.5-26	PWSB-14 PWSB-14-36-36.5 MC35638-4 12/4/2014 36-36.5	PWSB-15 PWSB-15-14-14.5 MC35753-3 12/9/2014 14-15.5	PWSB-16 PWSB-16-8.5-9 MC35638-5 12/7/2014 8.5-9
Metals and Free Cyanide (mg/kg)										
Aluminum	7429-90-5	NC	NC	**2680 J**	NA	NA	NA	NA	NA	NA
Antimony	7440-36-0	NC	NC	**20.3**	NA	NA	NA	NA	NA	NA
Arsenic	7440-38-2	16	16	**5.33**	NA	NA	NA	NA	NA	NA
Barium	7440-39-3	400	400	**36.5**	NA	NA	NA	NA	NA	NA
Beryllium	7440-41-7	72	590	**0.36**	NA	NA	NA	NA	NA	NA
Cadmium	7440-43-9	4.3	9.3	**0.17 J**	NA	NA	NA	NA	NA	NA
Calcium	7440-70-2	NC	NC	**2130**	NA	NA	NA	NA	NA	NA
Chromium	7440-47-3	180	1,500	**6.48**	NA	NA	NA	NA	NA	NA
Cobalt	7440-48-4	NC	NC	**3.9**	NA	NA	NA	NA	NA	NA
Copper	7440-50-8	270	270	**83.6 J**	NA	NA	NA	NA	NA	NA
Iron	7439-89-6	NC	NC	**13800**	NA	NA	NA	NA	NA	NA
Lead	7439-92-1	400	1,000	**160**	NA	NA	NA	NA	NA	NA
Magnesium	7439-95-4	NC	NC	**670 J**	NA	NA	NA	NA	NA	NA
Manganese	7439-96-5	2,000	10,000	**120**	NA	NA	NA	NA	NA	NA
Mercury	7439-97-6	0.81	2.8	**1.44 DJ**	NA	NA	NA	NA	NA	NA
Nickel	7440-02-0	310	310	**9.19**	NA	NA	NA	NA	NA	NA
Potassium	7440-09-7	NC	NC	**409 J**	NA	NA	NA	NA	NA	NA
Selenium	7782-49-2	180	1,500	**2.12**	NA	NA	NA	NA	NA	NA
Silver	7440-22-4	180	1,500	0.4 U	NA	NA	NA	NA	NA	NA
Sodium	7440-23-5	NC	NC	**252 J**	NA	NA	NA	NA	NA	NA
Thallium	7440-28-0	NC	NC	1.62 U	NA	NA	NA	NA	NA	NA
Vanadium	7440-62-2	NC	NC	**11.9**	NA	NA	NA	NA	NA	NA
Zinc	7440-66-6	10,000	10,000	**87.1 J**	NA	NA	NA	NA	NA	NA
Cyanide (Free)	57-12-5	27	27	0.289 U	0.16 U	0.13 U	0.15 U	**0.17**	**0.14**	**0.24**

Notes:
bgs - below ground surface
J - Estimated
mg/kg - milligrams per kilogram
NA - Not analyzed
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
U - Not detected

Detected values are in **BOLD.**

Values shaded in GOLD were detected at a concentration exceeding restricted residential criteria.

Values shaded in PINK were detected at a concentration exceeding both restricted residential and commercial criteria.

Table 4-7
Soil Sample Analytical Results
Metals and Free Cyanide
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-16 PWSB-16-18.5-19 MC35638-6 12/7/2014 18.5-19	PWSB-17 PWSB-17-6.5-7 MC35638-7 12/7/2014 6.5-7	PWSB-17 PWSB-17-15-15.5 MC35638-8 12/7/2014 15-15.5	PWSB-18 PWSB-18-7.0-7.5 MC35753-1 12/8/2014 7.0-7.5	PWSB-19 PWSB-19-7.5-8.0 MC35753-2 12/8/2014 7.5-8.0	PWSB-20 PWSB-20-6.5-7.0 MC35753-4 12/9/2014 6.5-7.0	PWSB-21 PWSB-21-9.5-10.0 MC36227-6 1/4/2015 9.5-10.0
Metals and Free Cyanide (mg/kg)										
Aluminum	7429-90-5	NC	NC	NA	NA	NA	NA	NA	NA	NA
Antimony	7440-36-0	NC	NC	NA	NA	NA	NA	NA	NA	NA
Arsenic	7440-38-2	16	16	NA	NA	NA	NA	NA	NA	NA
Barium	7440-39-3	400	400	NA	NA	NA	NA	NA	NA	NA
Beryllium	7440-41-7	72	590	NA	NA	NA	NA	NA	NA	NA
Cadmium	7440-43-9	4.3	9.3	NA	NA	NA	NA	NA	NA	NA
Calcium	7440-70-2	NC	NC	NA	NA	NA	NA	NA	NA	NA
Chromium	7440-47-3	180	1,500	NA	NA	NA	NA	NA	NA	NA
Cobalt	7440-48-4	NC	NC	NA	NA	NA	NA	NA	NA	NA
Copper	7440-50-8	270	270	NA	NA	NA	NA	NA	NA	NA
Iron	7439-89-6	NC	NC	NA	NA	NA	NA	NA	NA	NA
Lead	7439-92-1	400	1,000	NA	NA	NA	NA	NA	NA	NA
Magnesium	7439-95-4	NC	NC	NA	NA	NA	NA	NA	NA	NA
Manganese	7439-96-5	2,000	10,000	NA	NA	NA	NA	NA	NA	NA
Mercury	7439-97-6	0.81	2.8	NA	NA	NA	NA	NA	NA	NA
Nickel	7440-02-0	310	310	NA	NA	NA	NA	NA	NA	NA
Potassium	7440-09-7	NC	NC	NA	NA	NA	NA	NA	NA	NA
Selenium	7782-49-2	180	1,500	NA	NA	NA	NA	NA	NA	NA
Silver	7440-22-4	180	1,500	NA	NA	NA	NA	NA	NA	NA
Sodium	7440-23-5	NC	NC	NA	NA	NA	NA	NA	NA	NA
Thallium	7440-28-0	NC	NC	NA	NA	NA	NA	NA	NA	NA
Vanadium	7440-62-2	NC	NC	NA	NA	NA	NA	NA	NA	NA
Zinc	7440-66-6	10,000	10,000	NA	NA	NA	NA	NA	NA	NA
Cyanide (Free)	57-12-5	27	27	0.14 U	**0.34**	0.13 U	**0.23**	**0.18**	**1.5**	NA

Notes:
bgs - below ground surface
J - Estimated
mg/kg - milligrams per kilogram
NA - Not analyzed
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
U - Not detected

Detected values are in **BOLD.**

Values shaded in GOLD were detected at a concentration exceeding restricted residential criteria.

Values shaded in PINK were detected at a concentration exceeding both restricted residential and commercial criteria.

Table 4-7
Soil Sample Analytical Results
Metals and Free Cyanide
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB-22 PWSB-22-10.5-11.0 MC36227-2 1/4/2015 10.5-11.0	PWSB-22 PWSB-22-14.5-15.0 MC36227-3 1/4/2015 14.5-15.0	PWSB-22 PWSB-22-19.5-20.0 MC36227-4 1/4/2015 19.5-20.0	PWSB-23 PWSB-23-9.0-9.5 MC36227-11 1/4/2015 9.0-9.5	PWSB-24 PWSB-24-5.5-6.0 MC36297-2 1/8/2015 5.5-6.0	PWSB-25 PWSB-25-9.5-10.0 MC36227-8 1/4/2015 9.5-10.0	PWSB-25 PWSB-25-19.5-20.0 MC36227-9 1/4/2015 19.5-20.0
Metals and Free Cyanide (mg/kg)										
Aluminum	7429-90-5	NC	NC	NA	NA	NA	NA	NA	NA	NA
Antimony	7440-36-0	NC	NC	NA	NA	NA	NA	NA	NA	NA
Arsenic	7440-38-2	16	16	NA	NA	NA	NA	NA	NA	NA
Barium	7440-39-3	400	400	NA	NA	NA	NA	NA	NA	NA
Beryllium	7440-41-7	72	590	NA	NA	NA	NA	NA	NA	NA
Cadmium	7440-43-9	4.3	9.3	NA	NA	NA	NA	NA	NA	NA
Calcium	7440-70-2	NC	NC	NA	NA	NA	NA	NA	NA	NA
Chromium	7440-47-3	180	1,500	NA	NA	NA	NA	NA	NA	NA
Cobalt	7440-48-4	NC	NC	NA	NA	NA	NA	NA	NA	NA
Copper	7440-50-8	270	270	NA	NA	NA	NA	NA	NA	NA
Iron	7439-89-6	NC	NC	NA	NA	NA	NA	NA	NA	NA
Lead	7439-92-1	400	1,000	NA	NA	NA	NA	NA	NA	NA
Magnesium	7439-95-4	NC	NC	NA	NA	NA	NA	NA	NA	NA
Manganese	7439-96-5	2,000	10,000	NA	NA	NA	NA	NA	NA	NA
Mercury	7439-97-6	0.81	2.8	NA	NA	NA	NA	NA	NA	NA
Nickel	7440-02-0	310	310	NA	NA	NA	NA	NA	NA	NA
Potassium	7440-09-7	NC	NC	NA	NA	NA	NA	NA	NA	NA
Selenium	7782-49-2	180	1,500	NA	NA	NA	NA	NA	NA	NA
Silver	7440-22-4	180	1,500	NA	NA	NA	NA	NA	NA	NA
Sodium	7440-23-5	NC	NC	NA	NA	NA	NA	NA	NA	NA
Thallium	7440-28-0	NC	NC	NA	NA	NA	NA	NA	NA	NA
Vanadium	7440-62-2	NC	NC	NA	NA	NA	NA	NA	NA	NA
Zinc	7440-66-6	10,000	10,000	NA	NA	NA	NA	NA	NA	NA
Cyanide (Free)	57-12-5	27	27	NA	NA	NA	NA	NA	NA	NA

Notes:
bgs - below ground surface
J - Estimated
mg/kg - milligrams per kilogram
NA - Not analyzed
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
U - Not detected

Detected values are in **BOLD.**

Values shaded in GOLD were detected at a concentration exceeding restricted residential criteria.

Values shaded in PINK were detected at a concentration exceeding both restricted residential and commercial criteria.

Table 4-7
Soil Sample Analytical Results
Metals and Free Cyanide
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWSB_26 PWSB_26-4.5-5.0 BGS MC35924-1 12/14/2014 4.5-5.0	PWSB-27 PWSB-27-14.5-15.0 MC36341-1 1/11/2015 14.5-15.0	PWSB_27 PWSB-27-25.5-26.0 MC36341-2 1/11/2015 25.5-26.0	PWTP_1 PWTP_1-7.0-7.5 MC35924-4 12/15/2014 7.0-7.5	PWTP_2 PWTP_2-5.0-5.5 MC35924-2 12/15/2014 5.0-5.5	PWTP_2 PWTP_2-7.0-7.5 MC35924-3 12/15/2014 7.0-7.5	PWTP-3 PWTP-3-3.5-4.0 MC36058-3 12/16/2014 3.5-4.0
Metals and Free Cyanide (mg/kg)										
Aluminum	7429-90-5	NC	NC	NA	NA	NA	NA	NA	NA	NA
Antimony	7440-36-0	NC	NC	NA	NA	NA	NA	NA	NA	NA
Arsenic	7440-38-2	16	16	NA	NA	NA	NA	NA	NA	NA
Barium	7440-39-3	400	400	NA	NA	NA	NA	NA	NA	NA
Beryllium	7440-41-7	72	590	NA	NA	NA	NA	NA	NA	NA
Cadmium	7440-43-9	4.3	9.3	NA	NA	NA	NA	NA	NA	NA
Calcium	7440-70-2	NC	NC	NA	NA	NA	NA	NA	NA	NA
Chromium	7440-47-3	180	1,500	NA	NA	NA	NA	NA	NA	NA
Cobalt	7440-48-4	NC	NC	NA	NA	NA	NA	NA	NA	NA
Copper	7440-50-8	270	270	NA	NA	NA	NA	NA	NA	NA
Iron	7439-89-6	NC	NC	NA	NA	NA	NA	NA	NA	NA
Lead	7439-92-1	400	1,000	NA	NA	NA	NA	NA	NA	NA
Magnesium	7439-95-4	NC	NC	NA	NA	NA	NA	NA	NA	NA
Manganese	7439-96-5	2,000	10,000	NA	NA	NA	NA	NA	NA	NA
Mercury	7439-97-6	0.81	2.8	NA	NA	NA	NA	NA	NA	NA
Nickel	7440-02-0	310	310	NA	NA	NA	NA	NA	NA	NA
Potassium	7440-09-7	NC	NC	NA	NA	NA	NA	NA	NA	NA
Selenium	7782-49-2	180	1,500	NA	NA	NA	NA	NA	NA	NA
Silver	7440-22-4	180	1,500	NA	NA	NA	NA	NA	NA	NA
Sodium	7440-23-5	NC	NC	NA	NA	NA	NA	NA	NA	NA
Thallium	7440-28-0	NC	NC	NA	NA	NA	NA	NA	NA	NA
Vanadium	7440-62-2	NC	NC	NA	NA	NA	NA	NA	NA	NA
Zinc	7440-66-6	10,000	10,000	NA	NA	NA	NA	NA	NA	NA
Cyanide (Free)	57-12-5	27	27	**1.5**	0.15 U	**0.92**	**0.25**	**0.19**	0.14 U	**0.19**

Notes:
bgs - below ground surface
J - Estimated
mg/kg - milligrams per kilogram
NA - Not analyzed
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
U - Not detected

Detected values are in **BOLD.**

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Values shaded in PINK were detected at a concentration exceeding both restricted residential and commercial criteria.

Table 4-7
Soil Sample Analytical Results
Metals and Free Cyanide
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date Sample Depth (feet bgs)		NYSDEC Protection of Public Health - Restricted Residential	NYSDEC Protection of Public Health - Commercial	PWTP-3 PWTP-3-6.5-7.0 MC36058-2 12/16/2014 6.5-7.0	PWTP-4 PWTP-4-5.5-6.0 MC36058-4 12/17/2014 5.5-6.0	PWTP-5 PWTP-5-5.5-6.0 MC36058-5 12/17/2014 5.5-6.0	PWTP-6 PWTP-6-5.0-5.5 MC36058-6 12/18/2014 5.0-5.5	PWTP-7 PWTP-7-2.5-3.0 MC36058-1 12/16/2014 2.5-3.0	PWTP-8 PWTP-8-6.5-7.0 MC36924-1 2/15/2015 6.5-7.0
Metals and Free Cyanide (mg/kg)									
Aluminum	7429-90-5	NC	NC	NA	NA	NA	NA	NA	NA
Antimony	7440-36-0	NC	NC	NA	NA	NA	NA	NA	NA
Arsenic	7440-38-2	16	16	NA	NA	NA	NA	NA	NA
Barium	7440-39-3	400	400	NA	NA	NA	NA	NA	NA
Beryllium	7440-41-7	72	590	NA	NA	NA	NA	NA	NA
Cadmium	7440-43-9	4.3	9.3	NA	NA	NA	NA	NA	NA
Calcium	7440-70-2	NC	NC	NA	NA	NA	NA	NA	NA
Chromium	7440-47-3	180	1,500	NA	NA	NA	NA	NA	NA
Cobalt	7440-48-4	NC	NC	NA	NA	NA	NA	NA	NA
Copper	7440-50-8	270	270	NA	NA	NA	NA	NA	NA
Iron	7439-89-6	NC	NC	NA	NA	NA	NA	NA	NA
Lead	7439-92-1	400	1,000	NA	NA	NA	NA	NA	NA
Magnesium	7439-95-4	NC	NC	NA	NA	NA	NA	NA	NA
Manganese	7439-96-5	2,000	10,000	NA	NA	NA	NA	NA	NA
Mercury	7439-97-6	0.81	2.8	NA	NA	NA	NA	NA	NA
Nickel	7440-02-0	310	310	NA	NA	NA	NA	NA	NA
Potassium	7440-09-7	NC	NC	NA	NA	NA	NA	NA	NA
Selenium	7782-49-2	180	1,500	NA	NA	NA	NA	NA	NA
Silver	7440-22-4	180	1,500	NA	NA	NA	NA	NA	NA
Sodium	7440-23-5	NC	NC	NA	NA	NA	NA	NA	NA
Thallium	7440-28-0	NC	NC	NA	NA	NA	NA	NA	NA
Vanadium	7440-62-2	NC	NC	NA	NA	NA	NA	NA	NA
Zinc	7440-66-6	10,000	10,000	NA	NA	NA	NA	NA	NA
Cyanide (Free)	57-12-5	27	27	0.14 U	**0.18**	**0.15**	0.13 U	**0.22**	**0.18**

Notes:
bgs - below ground surface
J - Estimated
mg/kg - milligrams per kilogram
NA - Not analyzed
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
U - Not detected

Detected values are in **BOLD.**

Values shaded in GOLD were detected at a concentration exceeding restricted residential criteria.

Values shaded in PINK were detected at a concentration exceeding both restricted residential and commercial criteria.

Table 4-8
Groundwater Analytical Results
Volatile Organic Compounds
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date		NYSDEC Groundwater Quality Standards	PWSB-02 PWSBGW-02-10-20 C1841-01 4/12/2011	PWMW-01 PWMW01-01 C3116-01 7/21/2011	PWMW-01 PWMW81-01 Duplicate of PWMW01-01	PWMW-02 PWMW02-01 C3116-04 7/21/2011	MW-09 PWMW09-01 C3116-05 7/21/2011	MW-11 PWMW11-01 C3116-06 7/21/2011	MW-12 PWMW12-01 C3116-07 7/21/2011
Volatile Organic Compounds (ug/L)									
1,1,1-Trichloroethane	71-55-6	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	79-34-5	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	79-00-5	1	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichlorotrifluoroethane	76-13-1	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	75-34-3	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	75-35-4	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	120-82-1	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromo-3-Chloropropane	96-12-8	0.04	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane	106-93-4	0.0006	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	95-50-1	3	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	107-06-2	0.6	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	78-87-5	1	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,3-Dichlorobenzene	541-73-1	3	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,4-Dichlorobenzene	106-46-7	3	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Butanone	78-93-3	50	25 U	25 U	25 U	25 U	25 U	25 U	25 U
2-Hexanone	591-78-6	50	25 U	25 U	25 U	25 U	25 U	25 U	25 U
4-Methyl-2-Pentanone	108-10-1	NC	25 UJ	25 U	25 U	25 U	25 U	25 U	25 U
Acetone	67-64-1	50	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzene	71-43-2	1	**2.1 J**	5 U	**0.62 J**	5 U	5 U	**710 DJ**	**1,000 DJ**
Bromodichloromethane	75-27-4	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	75-25-2	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromomethane	74-83-9	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Disulfide	75-15-0	60	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	56-23-5	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	108-90-7	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroethane	75-00-3	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroform	67-66-3	7	**3.3 J**	**2.2 J**	**1.9 J**	5 U	5 U	5 U	5 U
Chloromethane	74-87-3	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	156-59-2	5	**0.96 J**	**1.3 J**	**1.4 J**	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	10061-01-5	0.4	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Cyclohexane	110-82-7	NC	5 U	5 U	5 U	5 U	5 U	**0.81 J**	**420 DJ**
Dibromochloromethane	124-48-1	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dichlorodifluoromethane	75-71-8	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethyl Benzene	100-41-4	5	5 U	5 U	5 U	5 U	5 U	**97 J**	**480 DJ**
Isopropylbenzene	98-82-8	5	5 U	5 U	5 U	5 U	5 U	**6.4 J**	**41 J**
m/p-Xylenes	179601-23-1	5	10 U	10 U	10 U	10 U	10 U	**80 J**	**1,600 DJ**
Methyl Acetate	79-20-9	NC	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methyl tert-butyl Ether	1634-04-4	10	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylcyclohexane	108-87-2	NC	5 U	5 U	5 U	5 U	5 U	**4.6 J**	**430 DJ**
Methylene Chloride	75-09-2	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
o-Xylene	95-47-6	5	5 U	5 U	5 U	5 U	5 U	**91 J**	**510 DJ**
Styrene	100-42-5	5	5 U	5 U	5 U	5 U	5 U	**6.6 J**	**17 J**

Table 4-8
Groundwater Analytical Results
Volatile Organic Compounds
Peoples Works Former MGP Site

	Location ID Sample ID Lab Sample Number Sampling Date	NYSDEC Groundwater Quality Standards	PWSB-02 PWSBGW-02-10-20 C1841-01 4/12/2011	PWMW-01 PWMW01-01 C3116-01 7/21/2011	PWMW-01 PWMW81-01 Duplicate of PWMW01-01	PWMW-02 PWMW02-01 C3116-04 7/21/2011	MW-09 PWMW09-01 C3116-05 7/21/2011	MW-11 PWMW11-01 C3116-06 7/21/2011	MW-12 PWMW12-01 C3116-07 7/21/2011
t-1,3-Dichloropropene	10061-02-6	0.4	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	127-18-4	5	**27**	**13**	**17**	5 U	5 U	5 U	5 U
Toluene	108-88-3	5	**1.5 J**	5 U	5 U	5 U	5 U	**38 J**	**300 DJ**
trans-1,2-Dichloroethene	156-60-5	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	79-01-6	5	**3.7 J**	**3.4 J**	**3 J**	5 U	5 U	5 U	5 U
Trichlorofluoromethane	75-69-4	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Vinyl Chloride	75-01-4	2	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Total BTEX	-	NC	**3.6**	U	**0.62**	U	U	**1,016**	**3,890**

Notes:
BTEX - benzene, toluene, ethylbenzene, and xylenes
D - From a diluted sample
J - Estimated
NA - Not analyzed
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
U - Not detected
ug/L - micrograms per liter

Detected values are in **BOLD.**

Values shaded in PURPLE were detected at a concentration were detected at a concentration exceeding applicable comparison criteria.

Table 4-9
Groundwater Analytical Results
Volatile Organic Compounds - BTEX
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date		NYSDEC Groundwater Quality Standards	PWSB-21 PWSB-21GW MC36227-7 1/4/2015	PWSB-22 PWSB-22GW MC36227-5 1/4/2015	PWSB-23 PWSB-23GW MC36227-12 1/4/2015	PWSB-24 PWSB-24GW MC36297-3 1/8/2015	PWSB-25 PWSB-25GW MC36227-10 1/4/2015	PWSB-28 PWSB-28-GW MC40530-3 8/4/2015	PWSB-30 PWSB-30-GW MC40635-3A 8/9/2015
Volatile Organic Compounds (ug/L)									
Benzene	71-43-2	1	**0.38 J**	**2,470**	**3.3**	**3.3**	**11,000**	**36.2**	**60.8**
Ethyl Benzene	100-41-4	5	0.25 U	**318**	**0.49 J**	0.25 U	**2,800**	**214**	**127**
m/p-Xylenes	179601-23-1	5	NA	NA	NA	NA	NA	NA	NA
o-Xylene	95-47-6	5	NA	NA	NA	NA	NA	NA	NA
Toluene	108-88-3	5	**0.23 J**	**560**	**1.5**	**0.88 J**	**10,900**	**7.8**	**11.4**
Xylene (Total)	1330-20-7	5	0.25 U	**769**	**2.0**	**1.3**	**11,400**	**394**	**343**
Total BTEX			**0.61**	**4,117**	**7.29**	**5.48**	**36,100**	**652.0**	**542.2**

Notes:
BTEX - benzene, toluene, ethylbenzene, and xylenes
D - From a diluted sample
J - Estimated
NA - Not analyzed
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
U - Not detected
ug/L - micrograms per liter

Detected values are in **BOLD.**

Values shaded in PURPLE were detected at a concentration were detected at a concentration exceeding applicable comparison criteria.

Table 4-9
Groundwater Analytical Results
Volatile Organic Compounds - BTEX
Peoples Works Former MGP Site

	Location ID Sample ID Lab Sample Number Sampling Date	NYSDEC Groundwater Quality Standards	PWSB-33 PWSB-34-GW MC40530-5 8/4/2015	PWSB-34 PWSB-34-GW MC40824-3A 8/16/2015
Volatile Organic Compounds (ug/L)				
Benzene	71-43-2	1	**11.1**	**0.33 J**
Ethyl Benzene	100-41-4	5	**1.1**	0.24 U
m/p-Xylenes	179601-23-1	5	NA	NA
o-Xylene	95-47-6	5	NA	NA
Toluene	108-88-3	5	**0.94 J**	**0.66 J**
Xylene (Total)	1330-20-7	5	**1.1**	0.22 U
Total BTEX			**14.24**	**0.99**

Notes:
BTEX - benzene, toluene, ethylbenzene, and xylenes
D - From a diluted sample
J - Estimated
NA - Not analyzed
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
U - Not detected
ug/L - micrograms per liter

Detected values are in **BOLD.**

Values shaded in PURPLE were detected at a concentration were detected at a concentration exceeding applicable comparison criteria.

Table 4-10
Groundwater Analytical Results
Semi-Volatile Organic Compounds
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date		NYSDEC Groundwater Quality Standards	PWSB-02 PWSBGW-02-10-20 C1841-01 4/12/2011	PWMW-01 PWMW01-01 C3116-01 7/21/2011	PWMW-01 PWMW81-01 Duplicate of PWMW01-01	PWMW-02 PWMW02-01 C3116-04 7/21/2011	MW-09 PWMW09-01 C3116-05 7/21/2011	MW-11 PWMW11-01 C3116-06 7/21/2011	MW-12 PWMW12-01 C3116-07 7/21/2011
Semi-Volatile Organic Compounds (ug/L)									
1,1-Biphenyl	92-52-4	NC	10 U	10 U	10 U	10 U	11 U	**1.8 J**	10 U
2,2-oxybis(1-Chloropropane)	108-60-1	5	10 U	10 U	10 U	10 U	11 U	10 U	10 U
2,4,5-Trichlorophenol	95-95-4	1	10 U	10 U	10 U	10 U	11 U	10 U	10 U
2,4,6-Trichlorophenol	88-06-2	1	10 U	10 U	10 U	10 U	11 U	10 U	10 U
2,4-Dichlorophenol	120-83-2	1	10 U	10 U	10 U	10 U	11 U	10 U	10 U
2,4-Dimethylphenol	105-67-9	1	10 U	10 U	10 U	10 U	11 U	10 U	**5.9 J**
2,4-Dinitrophenol	51-28-5	1	10 U	10 UJ	10 UJ	10 UJ	11 UJ	10 UJ	10 UJ
2,4-Dinitrotoluene	121-14-2	5	10 U	10 U	10 U	10 U	11 U	10 U	10 U
2,6-Dinitrotoluene	606-20-2	5	10 U	10 U	10 U	10 U	11 U	10 U	10 U
2-Chloronaphthalene	91-58-7	10	10 U	10 U	10 U	10 U	11 U	10 U	10 U
2-Chlorophenol	95-57-8	1	10 U	10 U	10 U	10 U	11 U	10 U	10 U
2-Methylnaphthalene	91-57-6	NC	**3.4 J**	10 U	10 U	10 U	11 U	10 U	**9.3 J**
2-Methylphenol	95-48-7	1	10 U	10 U	10 U	10 U	11 U	**1.5 J**	10 U
2-Nitroaniline	88-74-4	5	10 U	10 U	10 U	10 U	11 U	10 U	10 U
2-Nitrophenol	88-75-5	1	10 U	10 U	10 U	10 U	11 U	10 U	10 U
3,3-Dichlorobenzidine	91-94-1	5	10 U	10 U	10 U	10 U	11 U	10 U	10 U
3+4-Methylphenols	65794-96-9	1	10 U	10 U	10 U	10 U	11 U	10 U	10 U
3-Nitroaniline	99-09-2	5	10 U	10 U	10 U	10 U	11 U	10 U	10 U
4,6-Dinitro-2-methylphenol	534-52-1	1	10 U	10 U	10 U	10 U	11 U	10 U	10 U
4-Bromophenyl-phenylether	101-55-3	NC	10 U	10 U	10 U	10 U	11 U	10 U	10 U
4-Chloro-3-methylphenol	59-50-7	1	10 U	10 U	10 U	10 U	11 U	10 U	10 U
4-Chloroaniline	106-47-8	5	10 U	10 U	10 U	10 U	11 U	10 U	10 U
4-Chlorophenyl-phenylether	7005-72-3	NC	10 U	10 U	10 U	10 U	11 U	10 U	10 U
4-Nitroaniline	100-01-6	5	10 U	10 U	10 U	10 U	11 U	10 U	10 U
4-Nitrophenol	100-02-7	1	10 U	10 U	10 U	10 U	11 U	10 U	10 U
Acenaphthene	83-32-9	20	**3.3 J**	10 U	**10**	10 U	11 U	**33 J**	**4.6 J**
Acenaphthylene	208-96-8	NC	10 U	10 U	10 U	10 U	11 U	**21 J**	10 U
Acetophenone	98-86-2	NC	10 U	10 U	10 U	10 U	11 U	**4.5 J**	10 U
Anthracene	120-12-7	50	10 U	10 U	10 U	10 U	11 U	**1.4 J**	10 U
Atrazine	1912-24-9	7.5	10 U	10 U	10 U	10 U	11 U	10 U	10 U
Benzaldehyde	100-52-7	NC	10 UJ	10 U	10 U	10 U	11 U	10 U	10 U
Benzo(a)anthracene	56-55-3	0.002	10 U	10 U	10 U	10 U	11 U	10 U	10 U
Benzo(a)pyrene	50-32-8	0.001	10 U	10 U	10 U	10 U	11 U	10 U	10 U
Benzo(b)fluoranthene	205-99-2	0.002	10 U	10 U	10 U	10 U	11 U	10 U	10 U
Benzo(g,h,i)perylene	191-24-2	NC	10 U	10 U	10 U	10 U	11 U	10 U	10 U
Benzo(k)fluoranthene	207-08-9	0.002	10 U	10 U	10 U	10 U	11 U	10 U	10 U
bis(2-Chloroethoxy)methane	111-91-1	5	10 U	10 U	10 U	10 U	11 U	10 U	10 U
bis(2-Chloroethyl)ether	111-44-4	1	10 U	10 U	10 U	10 U	11 U	10 U	10 U
bis(2-Ethylhexyl)phthalate	117-81-7	5	10 U	10 U	10 U	10 U	11 U	10 U	10 U
Butylbenzylphthalate	85-68-7	50	10 U	10 U	10 U	10 U	11 U	10 U	10 U
Caprolactam	105-60-2	NC	10 U	10 U	10 U	10 U	11 U	10 U	10 U
Carbazole	86-74-8	NC	**1.6 J**	10 U	10 U	10 U	11 U	**46 J**	**1.7 J**
Chrysene	218-01-9	0.002	10 U	10 U	10 U	10 U	11 U	10 U	10 U

Table 4-10
Groundwater Analytical Results
Semi-Volatile Organic Compounds
Peoples Works Former MGP Site

	Location ID Sample ID Lab Sample Number Sampling Date	NYSDEC Groundwater Quality Standards	PWSB-02 PWSBGW-02-10-20 C1841-01 4/12/2011	PWMW-01 PWMW01-01 C3116-01 7/21/2011	PWMW-01 PWMW81-01 Duplicate of PWMW01-01 7/21/2011	PWMW-02 PWMW02-01 C3116-04 7/21/2011	MW-09 PWMW09-01 C3116-05 7/21/2011	MW-11 PWMW11-01 C3116-06 7/21/2011	MW-12 PWMW12-01 C3116-07 7/21/2011
Dibenz(a,h)anthracene	53-70-3	NC	10 U	10 U	10 U	10 U	11 U	10 U	10 U
Dibenzofuran	132-64-9	NC	**1.9 J**	10 U	10 U	10 U	11 U	**13 J**	**2 J**
Diethylphthalate	84-66-2	50	10 U	10 U	10 U	10 U	11 U	10 U	10 U
Dimethylphthalate	131-11-3	50	10 U	10 U	10 U	10 U	11 U	10 U	10 U
Di-n-butylphthalate	84-74-2	50	10 U	10 U	10 U	10 U	11 U	10 U	10 U
Di-n-octyl phthalate	117-84-0	50	10 U	10 U	10 U	10 U	11 U	10 U	10 U
Fluoranthene	206-44-0	50	10 U	10 U	10 U	10 U	11 U	**3.2 J**	**3.1 J**
Fluorene	86-73-7	50	**2.6 J**	10 U	10 U	10 U	11 U	**14 J**	**2.4 J**
Hexachlorobenzene	118-74-1	0.04	10 U	10 U	10 U	10 U	11 U	10 U	10 U
Hexachlorobutadiene	87-68-3	0.5	10 U	10 U	10 U	10 U	11 U	10 U	10 U
Hexachlorocyclopentadiene	77-47-4	5	10 U	10 U	10 U	10 U	11 U	10 U	10 U
Hexachloroethane	67-72-1	5	10 U	10 U	10 U	10 U	11 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	193-39-5	0.002	10 U	10 U	10 U	10 U	11 U	10 U	10 U
Isophorone	78-59-1	50	10 U	10 U	10 U	10 U	11 U	10 U	10 U
Naphthalene	91-20-3	10	**22**	10 U	10 U	10 U	11 U	10 U	**47 J**
Nitrobenzene	98-95-3	0.4	10 U	10 U	10 U	10 U	11 U	10 U	10 U
N-Nitroso-di-n-propylamine	621-64-7	NC	10 U	10 U	10 U	10 U	11 U	10 U	10 U
N-Nitrosodiphenylamine	86-30-6	50	10 U	10 U	10 U	10 U	11 U	10 U	10 U
Pentachlorophenol	87-86-5	1	10 U	10 U	10 U	10 U	11 U	10 U	10 U
Phenanthrene	85-01-8	50	**5.6 J**	10 U	10 U	10 U	11 U	**1.6 J**	**2.2 J**
Phenol	108-95-2	1	10 U	10 U	10 U	10 U	11 U	**7.9 J**	**15**
Pyrene	129-00-0	50	10 U	10 U	10 U	10 U	11 U	**2 J**	**2.7 J**
Total PAHs	-	NC	**36.9**	U	**10**	U	U	**76.2**	**71.3**

Notes:
D - From a diluted sample
J - Estimated
NA - Not analyzed
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
PAHs - Polycyclic aromatic hydrocarbons
U - Not detected
ug/L - micrograms per liter

Detected values are in **BOLD.**

Values shaded in PURPLE were detected at a concentration were detected at a concentration exceeding applicable comparison criteria.

Table 4-11
Groundwater Sample Analytical Results
Semi-Volatile Organic Compounds - PAHs
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date		NYSDEC Groundwater Quality Standards	PWSB-21 PWSB-21GW MC36341-5 1/11/2015	PWSB-22 PWSB-22GW MC36341-4 1/11/2015	PWSB-23 PWSB-23GW MC36341-6 1/11/2015	PWSB-24 PWSB-24GW MC36297-3 1/8/2015	PWSB-25 PWSB-25GW MC36341-3 1/11/2015
Semi-Volatile Organic Compounds (ug/L)							
2-Methylnaphthalene	91-57-6	NC	**1.1 J**	**3.0**	**0.45 J**	**1.0 J**	**7.7**
Acenaphthene	83-32-9	20	**3.7**	**1.5 J**	0.33 U	**1.3 J**	**1.3 J**
Acenaphthylene	208-96-8	NC	**8.5**	**0.73 J**	0.26 U	0.23 U	**1.1 J**
Anthracene	120-12-7	50	**31.3**	0.2 U	**0.34 J**	**1.2 J**	**0.53 J**
Benzo(a)anthracene	56-55-3	0.002	**40.9**	0.51 U	0.51 U	**1.6 J**	0.51 U
Benzo(a)pyrene	50-32-8	Not detected	**39.1**	0.16 U	**0.31 J**	**1.3 J**	0.16 U
Benzo(b)fluoranthene	205-99-2	0.002	**33.3**	0.26 U	**0.30 J**	**1.1 J**	0.26 U
Benzo(g,h,i)perylene	191-24-2	NC	**24.7**	0.86 U	0.85 U	0.78 U	0.86 U
Benzo(j/k)fluoranthene	207-08-9	0.002*	**29.5**	0.91 U	0.90 U	**0.84 J**	0.91 U
Chrysene/triphenylene	218-01-9	0.002	**36.9**	0.17 U	**0.33 J**	**1.6 J**	0.17 U
Dibenz(a,h)anthracene	53-70-3	NC	**9.4**	0.66 U	0.66 U	0.6 U	0.66 U
Fluoranthene	206-44-0	50	**92.5**	0.47 U	**0.96 J**	**3.2**	**0.6 J**
Fluorene	86-73-7	50	**4.8**	**0.26 J**	0.26 U	**1.3 J**	**1.1 J**
Indeno(1,2,3-cd)pyrene	193-39-5	0.002	**24.0**	0.86 U	0.85 U	**2.0**	0.86 U
Naphthalene	91-20-3	10	**14.8**	**449**	**13.8**	**3.5**	**132**
Phenanthrene	85-01-8	50	**33.5**	**0.35 J**	**0.71 J**	**3.9**	**1.8 J**
Pyrene	129-00-0	50	**78.3**	0.18 U	**0.76 J**	**3.1**	**0.4 J**
Total Detected PAHs	-	NC	**506.3**	**454.84**	**17.96**	**26.94**	**146.53**

Notes:
J - Estimated
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
PAHs - Polycyclic aromatic hydrocarbons
U - Not detected
ug/L - micrograms per liter

Detected values are in **BOLD.**

Values shaded in PURPLE were detected at a concentration were detected at a concentration exceeding applicable comparison criteria.

Table 4-12
Groundwater Sample Analytical Results
Semi-Volatile Organic Compounds - Extended PAHs
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date		NYSDEC Groundwater Quality Standards	PWSB-28 PWSB-28-GW MC40530-3R 8/4/2015	PWSB-30 PWSB-30-GW MC40635-3A 8/9/2015	PWSB-33 PWSB-33-GW MC40530-5R 8/4/2015	PWSB-34 PWSB-34-GW MC40824-3A 8/16/2015
Semi-Volatile Organic Compounds (ug/L)						
2-Methylnaphthalene	91-57-6	NC	**90.2**	**6.05**	**3.28**	**0.578**
1-Methylnaphthalene	90-12-0	NC	**44.2**	**2.85**	**1.70**	**0.815**
Acenaphthene	83-32-9	20	**6.32**	**4.25**	**0.370**	**0.758**
Acenaphthylene	208-96-8	NC	**0.707**	**0.287 J**	**0.0379**	**1.13**
Anthracene	120-12-7	50	**2.96**	**0.349 J**	**0.103**	**1.96**
Benzo(a)anthracene	56-55-3	0.002	**0.279**	0.270 U	**0.00945 J**	**1.78**
C1-Benzo(a)anthracenes/Chrysenes	-	0.002*	**0.0491**	0.270 U	0.0051 U	**0.656**
C2-Benzo(a)anthracenes/Chrysenes	-	0.002*	**0.0213**	0.270 U	0.0051 U	**0.369 J**
C3-Benzo(a)anthracenes/Chrysenes	-	0.002*	0.0051 U	0.270 U	0.0051 U	0.260 U
C4-Benzo(a)anthracenes/Chrysenes	-	0.002*	0.0051 U	0.270 U	0.0051 U	0.260 U
Benzo(a)pyrene	50-32-8	Not detected	**0.115**	0.270 U	**0.00732 J**	**1.67**
Benzo(b)fluoranthene	205-99-2	0.002	**0.0814**	0.270 U	**0.00587 J**	**1.15**
Benzo(e)pyrene	192-97-2	NC	**0.0626**	0.270 U	0.0051 U	**1.03**
Benzo(g,h,i)perylene	191-24-2	NC	**0.0333**	0.270 U	0.0051 U	**0.995**
Benzo(j/k)fluoranthene	207-08-9	0.002*	**0.0886**	0.270 U	**0.00555 J**	**1.30**
Chrysene/triphenylene	218-01-9	0.002	**0.201**	0.270 U	**0.00903 J**	**1.77**
Dibenz(a,h)anthracene	53-70-3	NC	**0.00966 J**	0.270 U	0.0051 U	**0.369 J**
Dibenzofuran	132-64-9	NC	**7.29**	**0.461 J**	**0.302**	**1.23**
Dibenzothiophene	132-65-0	NC	**1.32**	0.270 U	**0.0817**	**0.837**
C1-Dibenzothiophenes	-	NC	**0.303**	0.270 U	**0.0824**	**0.546**
C2-Dibenzothiophenes	-	NC	**0.165**	0.270 U	**0.0662**	**0.413 J**
C3-Dibenzothiophenes	-	NC	**0.0733**	0.270 U	**0.0235**	0.260 U
C4-Dibenzothiophenes	-	NC	0.0051 U	0.270 U	0.0051 U	0.260 U
Fluoranthene	206-44-0	50	**3.42**	**0.945**	**0.0961**	**4.91**
C1-Fluoranthenes/Pyrenes	-	50*	**0.470**	0.270 U	**0.0233**	**1.66**
C2-Fluoranthenes/Pyrenes	-	50*	**0.0929**	0.270 U	**0.00750 J**	**0.687**
C3-Fluoranthenes/Pyrenes	-	50*	**0.0291**	0.270 U	0.0051 U	**0.330 J**
Fluorene	86-73-7	50	**6.78**	**0.543**	**0.328**	**1.07**
C1-Fluorenes		50*	**0.586**	0.270 U	**0.103**	**0.460**
C2-Fluorenes		50*	**0.262**	0.270 U	**0.128**	**0.422**
C3-Fluorenes		50*	**0.213**	0.270 U	**0.0922**	0.260 U
Indeno(1,2,3-cd)pyrene	193-39-5	0.002	**0.0380**	0.270 U	0.0051 U	**0.918**
Naphthalene	91-20-3	10	**142**	**20.8**	**2.80**	**4.24**
C1-Naphthalenes	-	10*	**80.5**	**5.62**	**2.99**	**0.862**
C2-Naphthalenes	-	10*	**6.27**	**0.983**	**0.342**	**1.08**
C3-Naphthalenes	-	10*	**1.09**	0.270 U	**0.138**	**0.677**
C4-Naphthalenes	-	10*	**0.258**	0.270 U	**0.152**	**0.663**

Table 4-12
Groundwater Sample Analytical Results
Semi-Volatile Organic Compounds - Extended PAHs
Peoples Works Former MGP Site

	Location ID Sample ID Lab Sample Number Sampling Date	NYSDEC Groundwater Quality Standards	PWSB-28 PWSB-28-GW MC40530-3R 8/4/2015	PWSB-30 PWSB-30-GW MC40635-3A 8/9/2015	PWSB-33 PWSB-33-GW MC40530-5R 8/4/2015	PWSB-34 PWSB-34-GW MC40824-3A 8/16/2015
Phenanthrene	85-01-8	50	**13.0**	**1.66**	**0.602**	**5.12**
C1-Phenanthrenes/Anthracene	-	50*	**1.30**	0.270 U	**0.219**	**1.86**
C2-Phenanthrenes/Anthracene	-	50*	**0.263**	0.270 U	**0.0800**	**0.778**
C3-Phenanthrenes/Anthracene	-	50*	**0.0742**	0.270 U	0.0051 U	**0.650**
C4-Phenanthrenes/Anthracene	-	50*	**0.0149**	0.270 U	0.0051 U	0.260 U
Perylene	198-55-0	NC	**0.0221**	0.270 U	0.0051 U	**0.571**
Pyrene	129-00-0	50	**2.38**	**0.698**	**0.0823**	**4.15**
Total Detected PAHs	-	NC	**268.61**	**35.58**	**7.74**	**33.87**

Notes:
bgs - below ground surface
J - Estimated
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
PAHs - Polycyclic aromatic hydrocarbons
U - Not detected
ug/L - micrograms per liter
* - Soil cleanup objective based on parent compound

Detected values are in **BOLD.**

Values shaded in PURPLE were detected at a concentration were detected at a concentration exceeding applicable comparison criteria.

Table 4-13
Groundwater Analytical Results
Herbicides, Pesticides, and PCBs
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date		NYSDEC Groundwater Quality Standards	PWSB-02 PWSBGW-02-10-20 C1841-01 4/12/2011	PWMW-01 PWMW01-01 C3116-01 7/21/2011	PWMW-01 PWMW81-01 Duplicate of PWMW01-01	PWMW-02 PWMW02-01 C3116-04 7/21/2011	MW-09 PWMW09-01 C3116-05 7/21/2011	MW-11 PWMW11-01 C3116-06 7/21/2011	MW-12 PWMW12-01 C3116-07 7/21/2011
Herbicides (ug/L)									
2,4,5-T	93-76-5	35	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U
2,4,5-TP (Silvex)	93-72-1	0.26	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U
2,4-D	94-75-7	50	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U
2,4-DB	94-82-6	NC	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U
Dicamba	1918-00-9	0.44	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U
Dichloroprop	120-36-5	NC	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U
Dinoseb	88-85-7	NC	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U
Pesticides (ug/L)									
4,4-DDD	72-54-8	0.3	0.052 U	0.05 U	0.05 U	0.052 U	0.051 U	0.051 U	0.052 U
4,4-DDE	72-55-9	0.2	0.052 U	0.05 U	0.05 U	0.052 U	0.051 U	0.051 U	0.052 U
4,4-DDT	50-29-3	0.2	0.052 UJ	0.05 UJ	0.05 UJ	0.052 UJ	0.051 UJ	0.051 UJ	0.052 UJ
Aldrin	309-00-2	ND	0.052 U	0.05 U	0.05 U	0.052 U	0.051 U	0.051 U	0.052 U
alpha-BHC	319-84-6	0.01	0.052 U	0.05 U	0.05 U	0.052 U	0.051 U	0.051 U	0.052 U
alpha-Chlordane	5103-71-9	0.05	0.052 U	0.05 U	0.05 U	0.052 U	0.051 U	0.051 U	0.052 U
beta-BHC	319-85-7	0.04	0.052 UJ	0.05 U	0.05 U	0.052 U	0.051 U	0.051 U	0.052 U
delta-BHC	319-86-8	0.04	0.052 U	0.05 U	0.05 U	0.052 U	0.051 U	0.051 U	0.052 U
Dieldrin	60-57-1	0.004	0.052 U	0.05 U	0.05 U	0.052 U	0.051 U	0.051 U	0.052 U
Endosulfan I	959-98-8	NC	0.052 U	0.05 U	0.05 U	0.052 U	0.051 U	0.051 U	0.052 U
Endosulfan II	33213-65-9	NC	0.052 U	0.05 U	0.05 U	0.052 U	0.051 U	0.051 U	0.052 U
Endosulfan Sulfate	1031-07-8	NC	0.052 U	0.05 U	0.05 U	0.052 U	0.051 U	0.051 U	0.052 U
Endrin	72-20-8	ND	0.052 U	0.05 U	0.05 U	0.052 U	0.051 U	0.051 U	0.052 U
Endrin aldehyde	7421-93-4	5	0.052 U	0.05 U	0.05 U	0.052 U	0.051 U	0.051 U	0.052 U
Endrin ketone	53494-70-5	5	0.052 U	0.05 U	0.05 U	0.052 U	0.051 U	0.051 U	0.052 U
gamma-BHC	58-89-9	0.05	0.052 U	0.05 U	0.05 U	0.052 U	0.051 U	0.051 U	0.052 U
gamma-Chlordane	5103-74-2	0.05	0.052 U	0.05 U	0.05 U	0.052 U	0.051 U	0.051 U	0.052 U
Heptachlor	76-44-8	0.04	0.052 U	0.05 U	0.05 U	0.052 U	0.051 U	0.051 U	0.052 U
Heptachlor epoxide	1024-57-3	0.03	0.052 U	0.05 U	0.05 U	0.052 U	0.051 U	0.051 U	0.052 U
Methoxychlor	72-43-5	35	0.052 UJ	0.05 U	0.05 U	0.052 U	0.051 U	0.051 U	0.052 U
Toxaphene	8001-35-2	0.06	0.52 U	0.5 U	0.5 U	0.52 U	0.51 U	0.51 U	0.52 U
Polychlorinated Biphenyls (PCBs) (ug/L)									
Aroclor-1016	12674-11-2	0.09	0.52 U	0.5 U	0.51 U	0.5 U	0.5 U	0.51 U	0.52 U
Aroclor-1221	11104-28-2	0.09	0.52 U	0.5 U	0.51 U	0.5 U	0.5 U	0.51 U	0.52 U
Aroclor-1232	11141-16-5	0.09	0.52 U	0.5 U	0.51 U	0.5 U	0.5 U	0.51 U	0.52 U
Aroclor-1242	53469-21-9	0.09	0.52 U	0.5 U	0.51 U	0.5 U	0.5 U	0.51 U	0.52 U
Aroclor-1248	12672-29-6	0.09	0.52 U	0.5 U	0.51 U	0.5 U	0.5 U	0.51 U	0.52 U
Aroclor-1254	11097-69-1	0.09	0.52 U	0.5 U	0.51 U	0.5 U	0.5 U	0.51 U	0.52 U
Aroclor-1260	11096-82-5	0.09	0.52 U	0.5 U	0.51 U	0.5 U	0.5 U	0.51 U	0.52 U

Notes:
J - Estimated
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
U - Not detected
ug/L - micrograms per liter

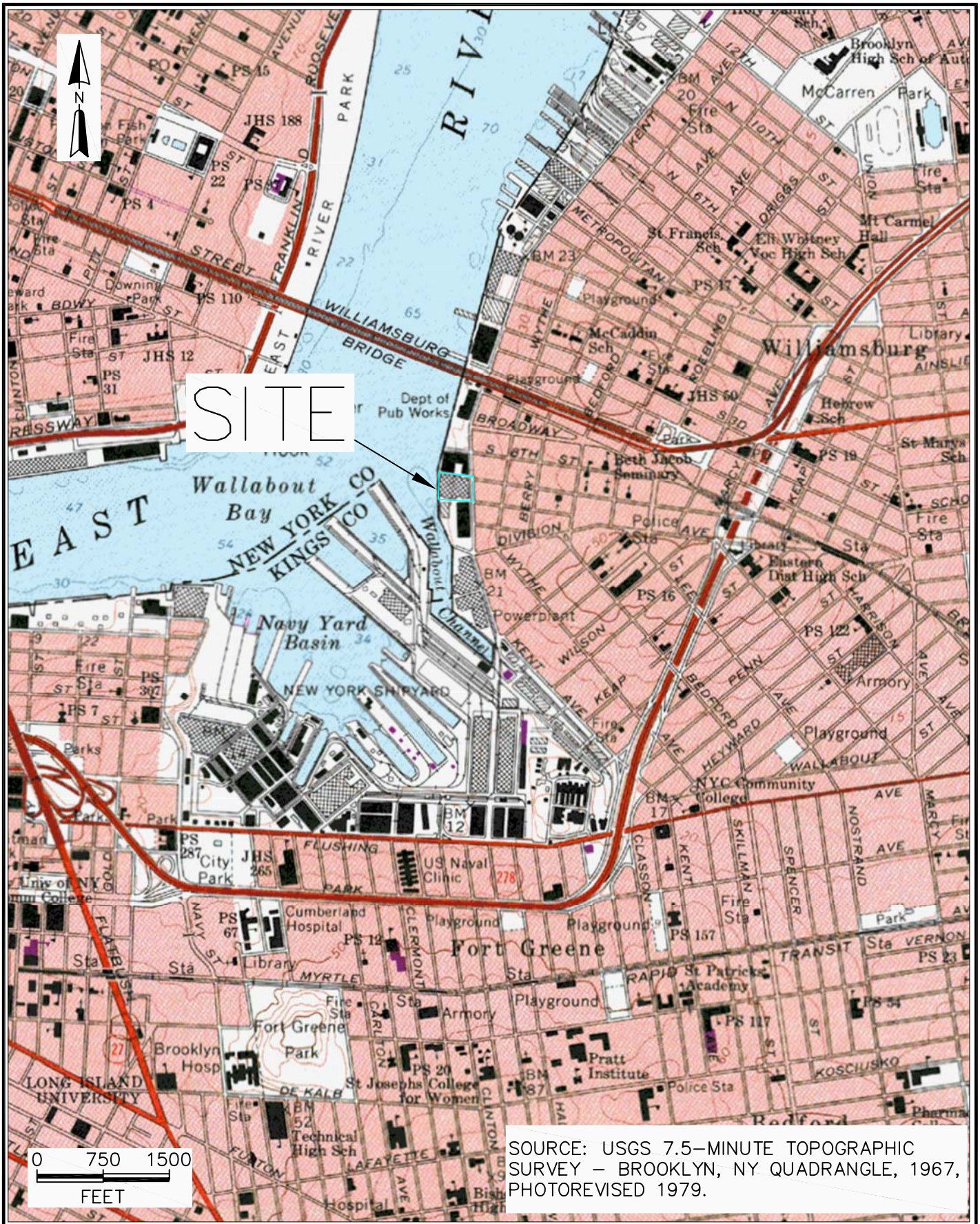
Table 4-14
Groundwater Analytical Results
Metals and Free Cyanide
Peoples Works Former MGP Site

Location ID Sample ID Lab Sample Number Sampling Date		NYSDEC Groundwater Quality Standards	PWSB-02 PWSBGW-02-10-20 C1841-01 4/12/2011	PWMW-01 PWMW01-01 C3116-01 7/21/2011	PWMW-01 PWMW81-01 Duplicate of PWMW01-01	PWMW-02 PWMW02-01 C3116-04 7/21/2011	MW-09 PWMW09-01 C3116-05 7/21/2011	MW-11 PWMW11-01 C3116-06 7/21/2011	MW-12 PWMW12-01 C3116-07 7/21/2011
Metals (ug/L)									
Aluminum	7429-90-5	2,000	**34,100**	R	R	R	R	R	R
Antimony	7440-36-0	3	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Arsenic	7440-38-2	25	10 U	**6.51 J**	**13.5**	10 U	10 U	**5.31 J**	10 U
Barium	7440-39-3	1,000	**971**	**103 J**	**195 J**	**189**	**42.6 J**	**591**	**408**
Beryllium	7440-41-7	3	**6.08**	3 U	**0.827 J**	3 U	3 U	3 U	3 U
Cadmium	7440-43-9	5	**5.91**	3 U	3 U	3 U	3 U	3 U	3 U
Calcium	7440-70-2	NC	**97,100 J**	**55,500**	**59,700**	**159,000**	**249,000**	**44,300**	**67,600**
Chromium	7440-47-3	50	**82.6**	R	**36.8**	**9.05**	**1.3 J**	5 U	**8.44**
Cobalt	7440-48-4	NC	**167**	R	**15.5**	15 U	15 U	15 U	15 U
Copper	7440-50-8	200	**475**	**18.9**	**61.5**	**12.9**	10 U	10 U	10 U
Iron	7439-89-6	300	**26,400 J**	R	R	**8,860**	271 U	1,840 U	15,500 U
Lead	7439-92-1	25	**2,630**	R	R	**9.68**	6 U	6 U	**23.6**
Magnesium	7439-95-4	35,000	**36,100**	**11,600 J**	**15,900 J**	**66,700**	**782,000**	**38,000**	**26,200**
Manganese	7439-96-5	300	**10,400 J**	**619 J**	**1,130 J**	**352**	**67.2**	**523**	**567**
Mercury	7439-97-6	0.7	**1.9 J**	R	R	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	7440-02-0	100	**271**	**9.86 J**	**32.5 J**	**8.87 J**	20 U	20 U	**6.15 J**
Potassium	7440-09-7	NC	**10,600**	**10,600**	**12,800**	**110,000**	**258,000**	**24,000**	**14,000**
Selenium	7782-49-2	10	10 U	**6.1 J**	10 U	10 U	10 U	10 U	10 U
Silver	7440-22-4	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Sodium	7440-23-5	20,000	**78,600 J**	**309,000**	**310,000**	**916,000**	**5,510,000 D**	**61,900**	**165,000**
Thallium	7440-28-0	0.5	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Vanadium	7440-62-2	NC	**52.2**	**15.7 J**	**48.7 J**	**10.7 J**	20 U	20 U	**10.8 J**
Zinc	7440-66-6	2,000	**953**	R	**136**	**28.9**	**7.62 J**	**7.82 J**	**37.7**
Cyanide (free)	57-12-5	200	**0.044**	NA	NA	NA	NA	NA	NA
Cyanide (total)	57-12-5	200	**0.21**	**27**	**20**	**63**	5 U	**52**	**21**

Notes:
D - From a diluted sample
J - Estimated
mg/L - milligrams per liter
NA - Not analyzed
NC - No criteria
NYSDEC - New York State Department of Environmental Conservation
R - Unusable
U - Not detected
ug/L - micrograms per liter

Detected values are in **BOLD.**

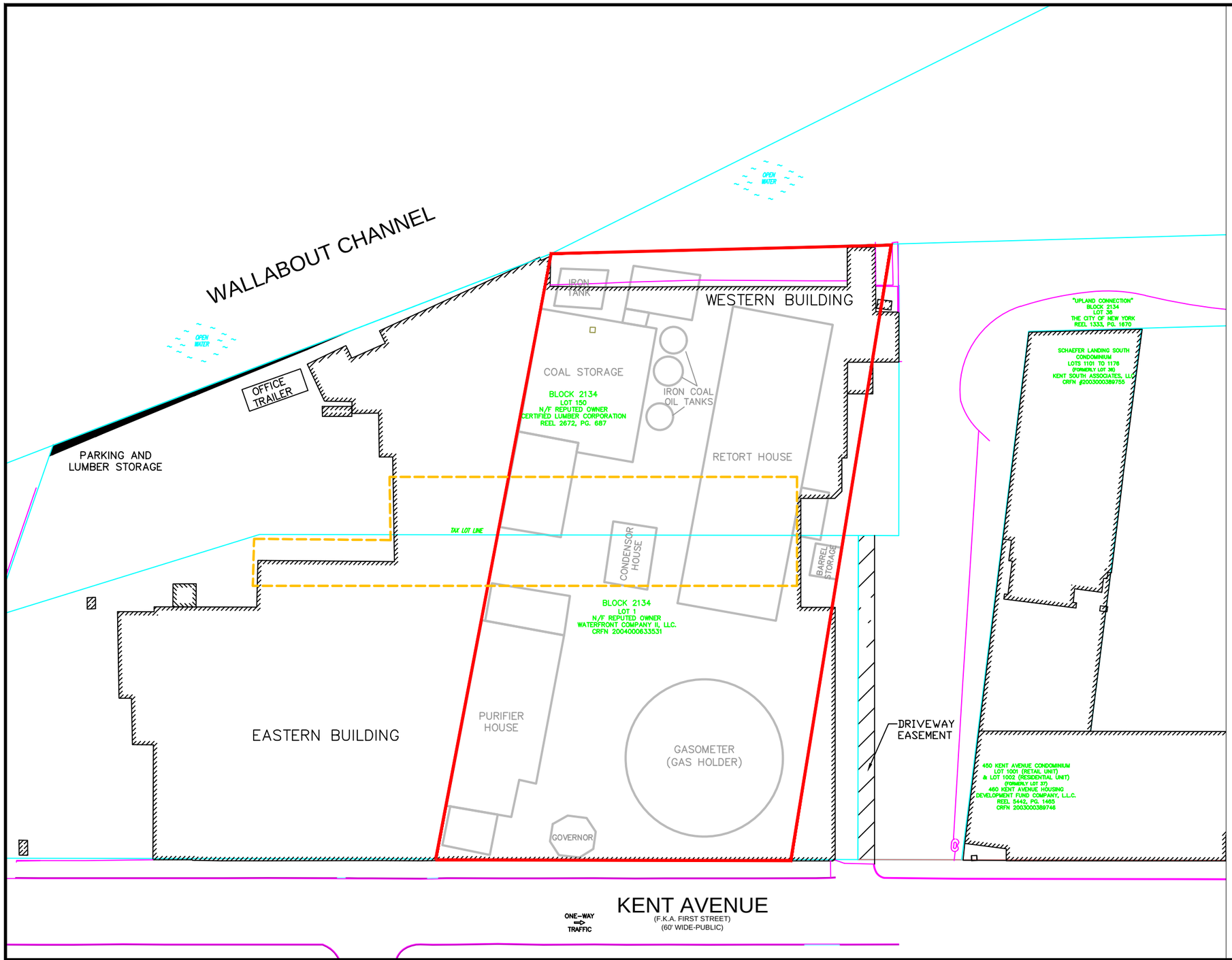
Values shaded in PURPLE were detected at a concentration were detected at a concentration exceeding applicable comparison criteria.



SOURCE: USGS 7.5–MINUTE TOPOGRAPHIC SURVEY – BROOKLYN, NY QUADRANGLE, 1967, PHOTOREVISED 1979.

TETRA TECH EC, INC.	TITLE: Site Location Map Former Peoples Works Manufactuered Gas Plant Brooklyn, Kings County, New York	DWN: LMC	DES.: LMC	PROJECT NO.: 106–3599.0005	
		CHKD: RCC	APPD: RCC	FIGURE NO.: 1	
		DATE: 11/24/08	REV.: 0		

P:\KEYSPAN\PEOPLES WORKS\PLANS\FIGURES\FIGURE 1 – SITE LOCATION 112408.DWG



LEGEND

- APPROXIMATE FORMER MGP BOUNDARY
- CURRENT BUILDING
- PAVEMENT
- LOT BOUNDARY
- FORMER MGP-RELATED STRUCTURES
- COVERED AREA

SOURCES:
BOUNDARY AND SURVEY, NATIONAL GRID – FORMER PEOPLES WORKSITE, BROOKLYN, NEW YORK, PREPARED BY BORBAS SURVEYING & MAPPING, LLC, CONTROL POINT ASSOCIATES, INC, DRAWING NO. 110905_2011-10-24, NOVEMBER 1, 2011, ORIGINAL ISSUE.

SANBORN FIRE INSURANCE MAP, DATED 1887.

0 30 60
FEET

TETRA TECH, INC.

TITLE:
Site Plan
Former Peoples Works Manufactured Gas Plant Site
Brooklyn, Kings County, New York

DWN.: EO	DATE: 4/27/17	PROJECT NO.: 194-4727	
CHKD: RCC	REV.: 1	FIGURE NO.: 2	
DES.: RCC	APPD: RCC		

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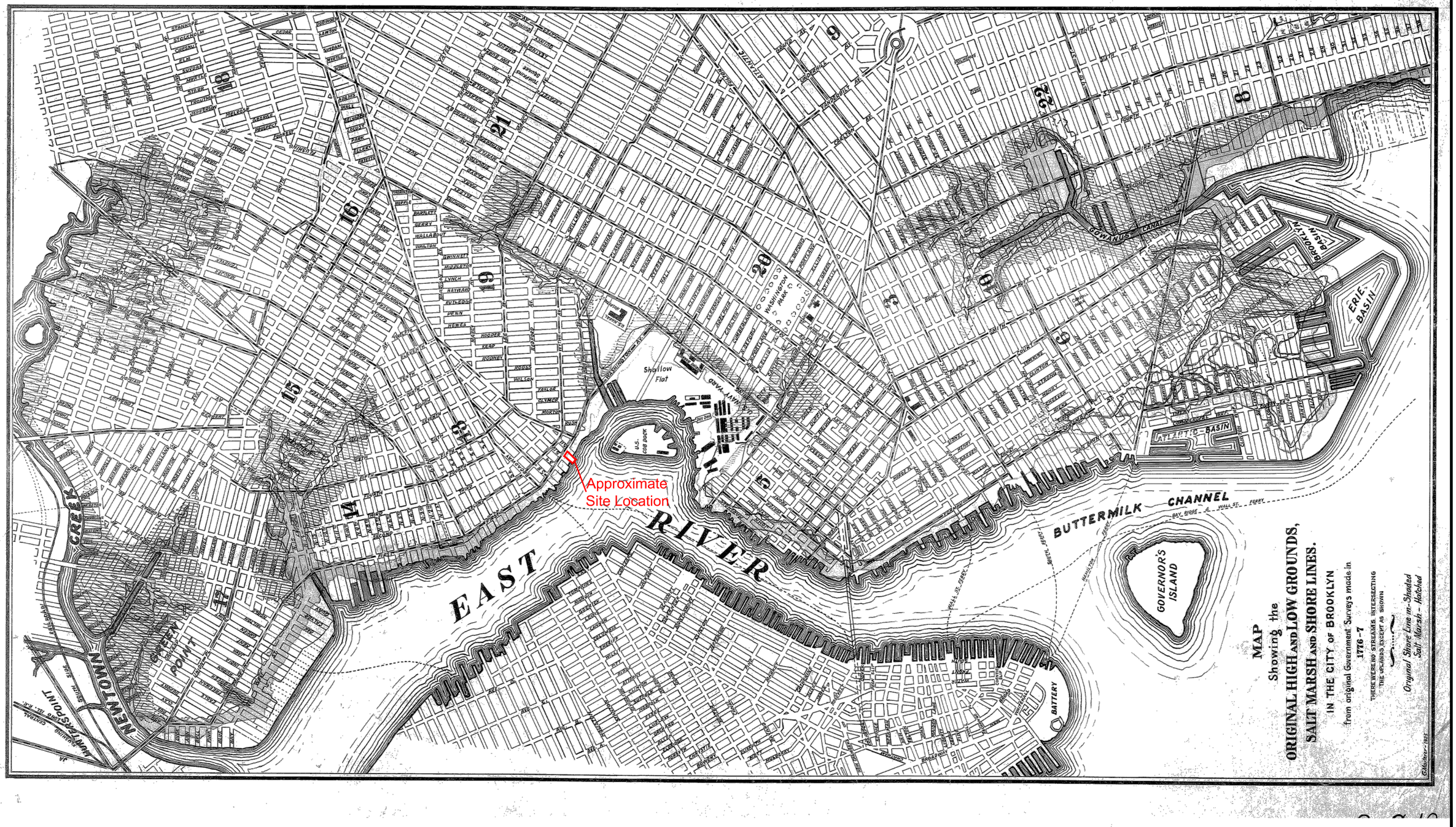

TETRA TECH, INC.	TITLE: Historic Shoreline Map Former Peoples Works Manufactured Gas Plant Site Brooklyn, Kings County, New York	DWN.: EO	DATE: 05/20/14	PROJECT NO.: 194-4727
		CHKD: RCC	REV.: 1	FIGURE NO.: 3
		DES.: RCC	APPD: RCC	

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Source: NYC Oasis, CUNY Mapping Service

Legend

- Former Site Boundary
- Parcel Boundaries

Former Peoples Works MGP
Brooklyn, New York

nationalgrid

TETRA TECH

Figure 3A
Historical Area
Of Fill

September 2017

0 0.03 0.06 0.12 0.18 Miles

Legend

Waterfront Properties

Former Site Boundary

Former People's Work MGP
Brooklyn, New York

nationalgrid

TETRA TECH

Project 1507970

Figure 4
Wallabout Channel
Development

July 2017

0 0.0175 0.035 0.07 0.105 Miles

Legend

Past Surrounding Industries

Former Site Boundary

Former People's Works MGP
Brooklyn, New York

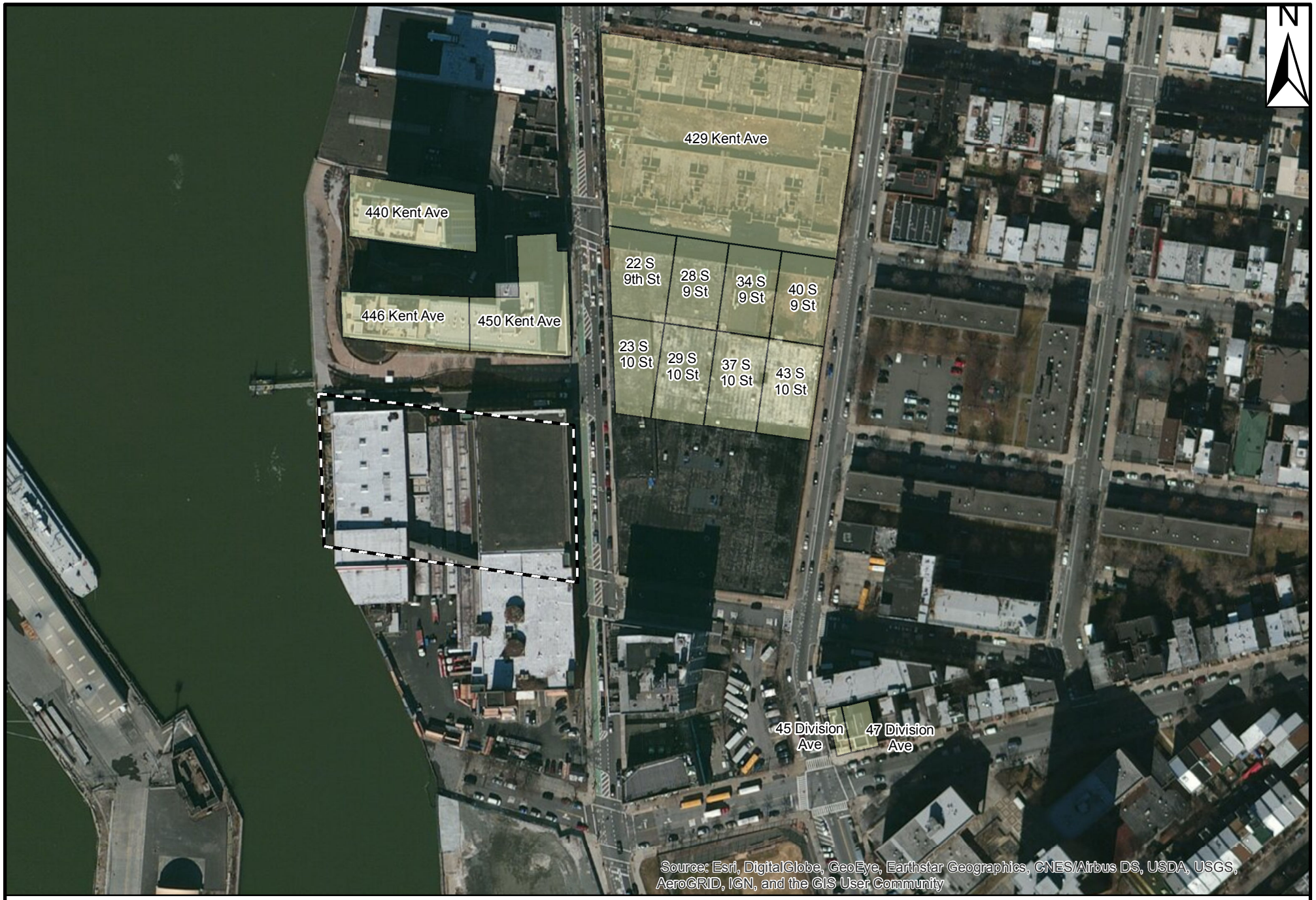
nationalgrid

TETRA TECH

Project 1507970

Figure 5
Historical Industrial Properties

July 2017



0 0.015 0.03 0.06 0.09 Miles

Legend

Residential Properties

Former Site Boundary

People's Work MGP
Brooklyn, New York

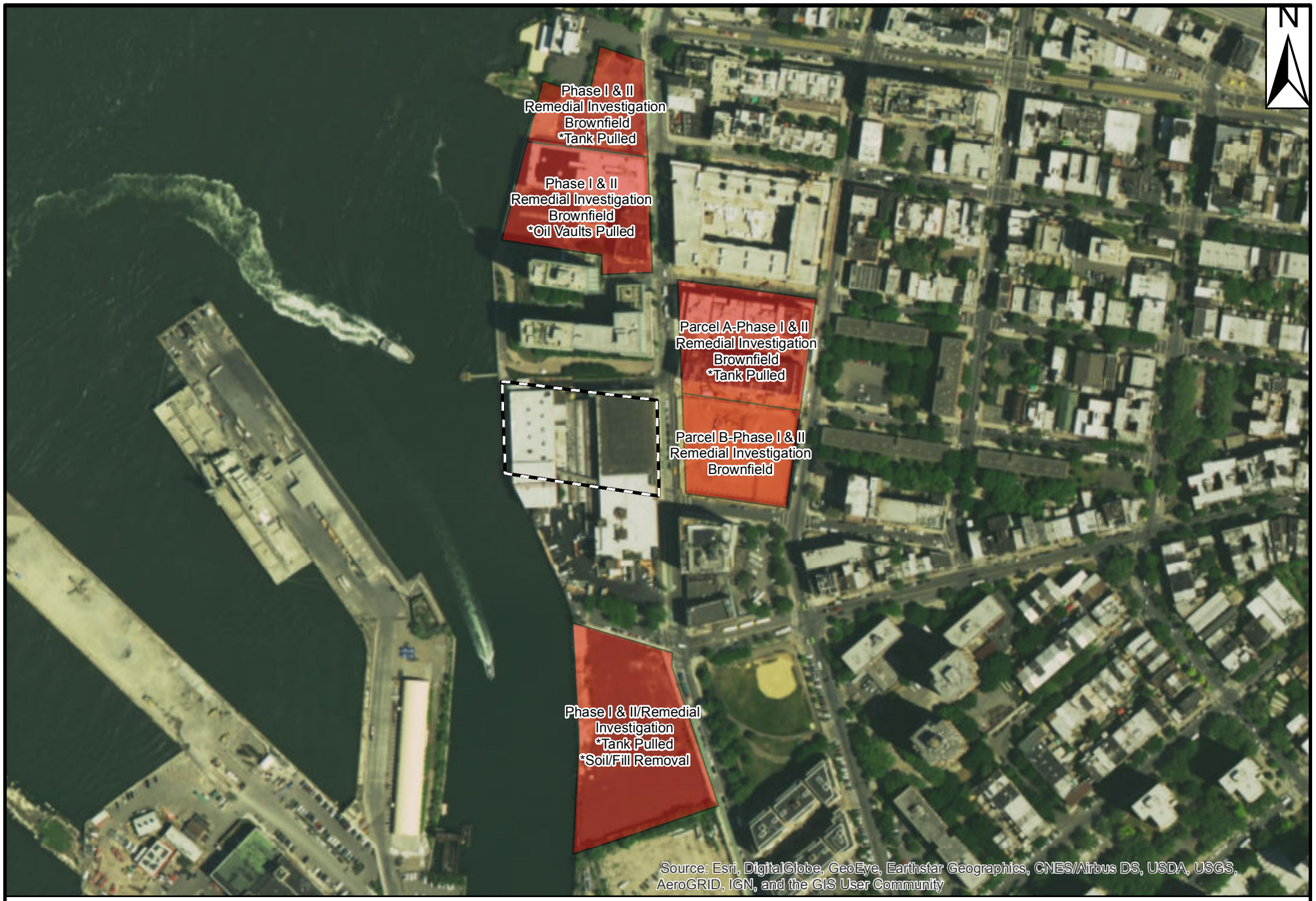
nationalgrid

TETRA TECH

Project 1507970

Figure 6
Residential Development

July 2017



0 0.025 0.05 0.1 0.15 Miles

Legend

Site Investigation Properties

Former Site Boundary

People's Work MGP
Brooklyn, New York

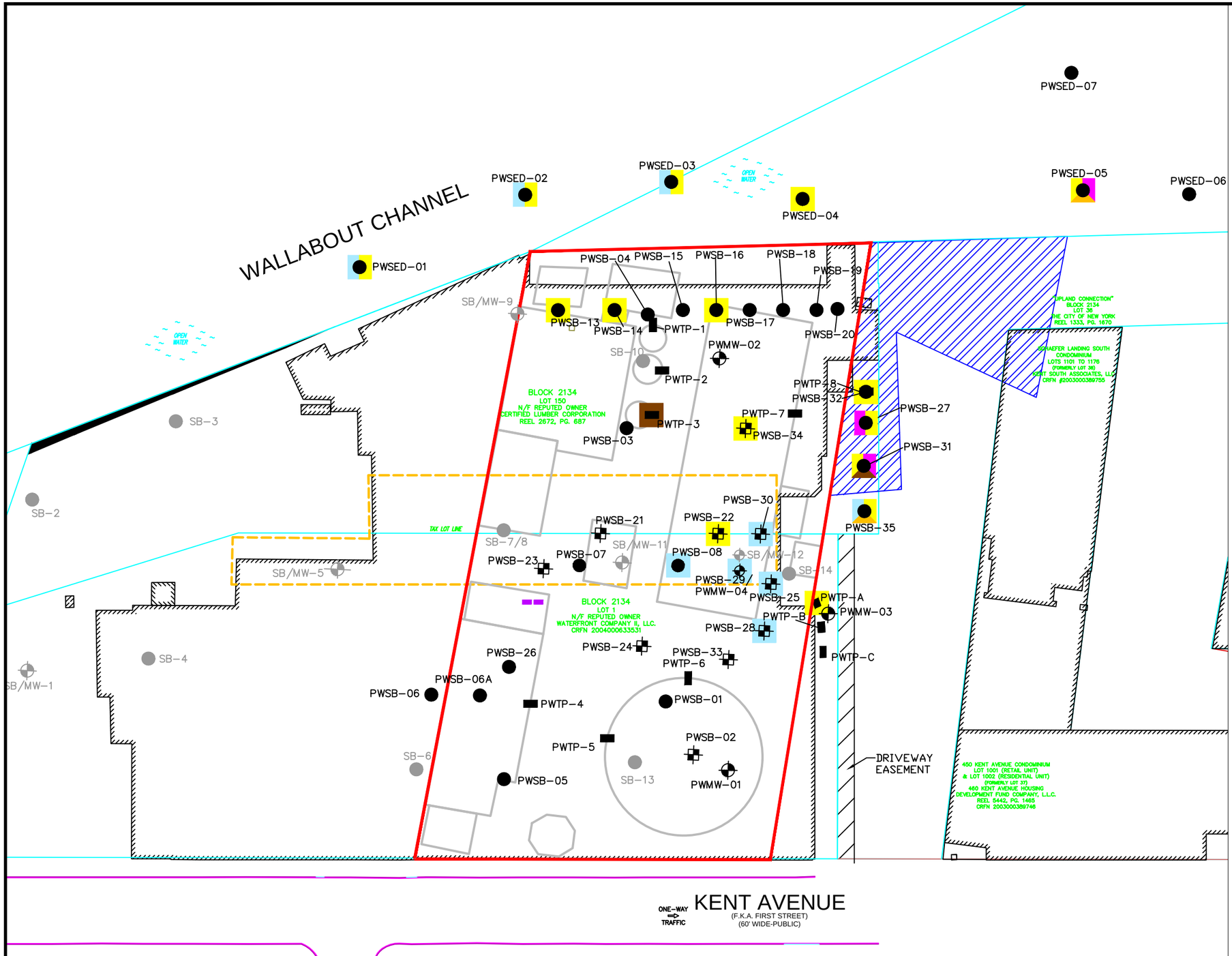
nationalgrid

TETRA TECH

Project 1507970

Figure 7
Site Investigations on Surrounding Properties

July 2017



LEGEND

- APPROXIMATE FORMER MGP BOUNDARY
- CURRENT BUILDING
- PAVEMENT
- LOT BOUNDARY
- FORMER MGP-RELATED STRUCTURES
- COVERED AREA

- PWSB-02 — APPROXIMATE SOIL BORING AND GROUNDWATER GRAB LOCATION
- PWSB/PWMW-04 — APPROXIMATE MONITORING WELL LOCATION
- PWSB-01 — APPROXIMATE SOIL BORING LOCATION
- PWTP-A / PWTP-1 — APPROXIMATE TEST PIT LOCATION
- PWSED-01 — SEDIMENT SAMPLE LOCATION
- SB/MW-09 — APPROXIMATE MONITORING WELL LOCATION FROM PREVIOUS INVESTIGATIONS
- SB-3 — APPROXIMATE SOIL BORING LOCATION FROM PREVIOUS INVESTIGATIONS
- APPROXIMATE MAXIMUM EXTENT OF EMBAYMENT (BROMLEY, 1880)
- APPROXIMATE LOCATION OF ABOVE GROUND TANKS
- PETROLEUM ODORS
- MOTH BALL-LIKE ODORS
- NAPL COATED MATERIAL
- NAPL BLEBS AND SHEEN
- SOLID NAPL

SOURCES:
BOUNDARY AND SURVEY, NATIONAL GRID – FORMER PEOPLES WORKSITE, BROOKLYN, NEW YORK, PREPARED BY BORBAS SURVEYING & MAPPING, LLC, CONTROL POINT ASSOCIATES, INC, DRAWING NO. 110905_2011-10-24, NOVEMBER 1, 2011, ORIGINAL ISSUE.

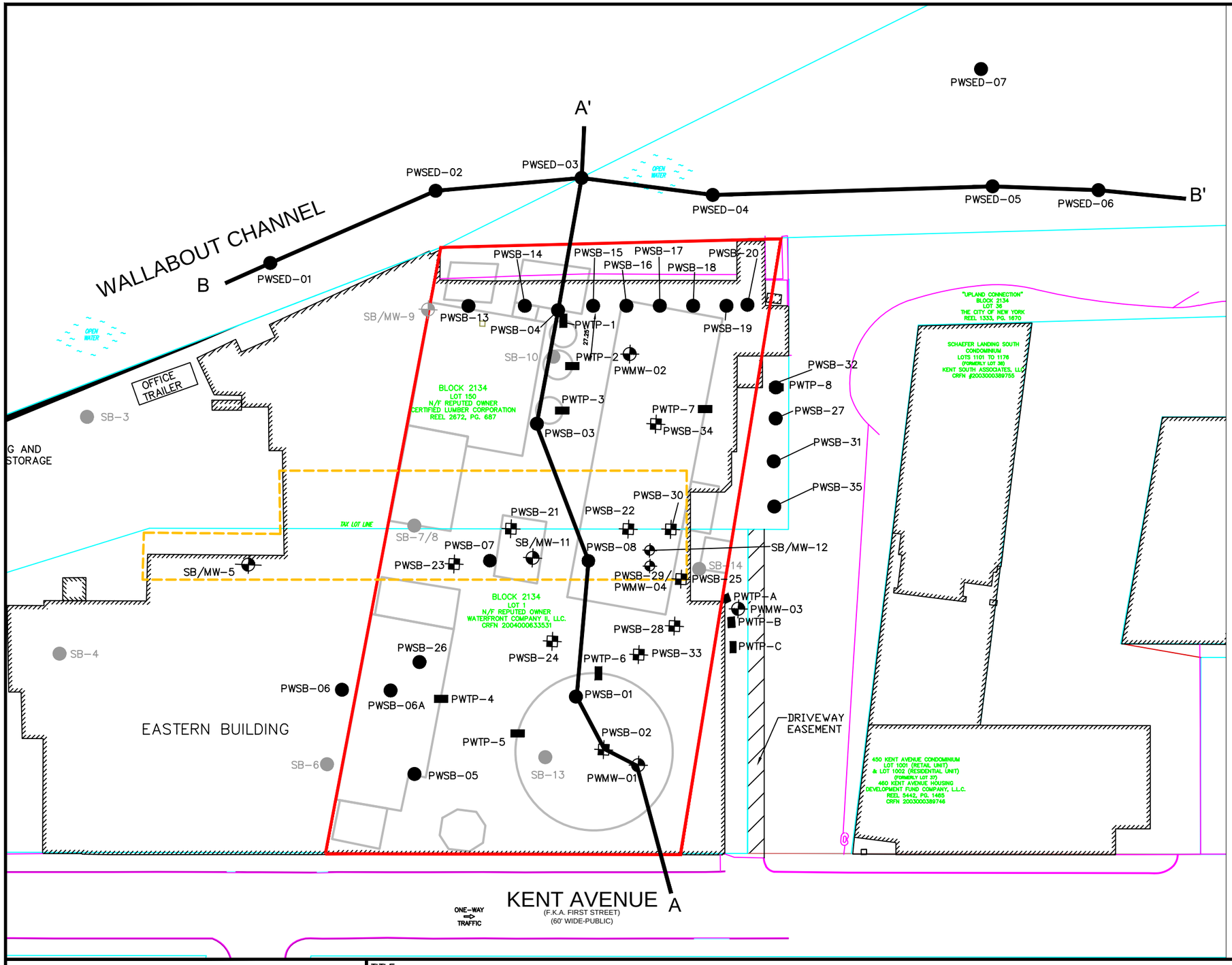
SANBORN FIRE INSURANCE MAP, DATED 1887.

0 30 60
FEET

TETRA TECH INC.

TITLE:
SOIL BORING, TEST PIT AND MONITORING WELL LOCATIONS
FORMER PEOPLES WORKS MANUFACTURED GAS PLANT SITE
BROOKLYN, KINGS COUNTY, NEW YORK

DWN.: EO	DATE: 8/3/17	PROJECT NO.: 194-4727	
CHKD: AV	REV.: 1		
DES.: EO	APPD: RCC	FIGURE NO.: 8	



LEGEND

- APPROXIMATE FORMER MGP BOUNDARY
- CURRENT BUILDING
- PAVEMENT
- LOT BOUNDARY
- FORMER MGP-RELATED STRUCTURES
- COVERED AREA

PWSB-02	APPROXIMATE SOIL BORING AND GROUNDWATER GRAB LOCATION
PWSB/PWMW-04	APPROXIMATE MONITORING WELL LOCATION
PWSB-01	APPROXIMATE SOIL BORING LOCATION
PWTP-A PWTP-1	APPROXIMATE TEST PIT LOCATION
PWSED-01	SEDIMENT SAMPLE LOCATION
SB/MW-09	APPROXIMATE MONITORING WELL LOCATION FROM PREVIOUS INVESTIGATIONS

SOURCES:
BOUNDARY AND SURVEY, NATIONAL GRID – FORMER PEOPLES WORKSITE, BROOKLYN, NEW YORK, PREPARED BY BORBAS SURVEYING & MAPPING, LLC, CONTROL POINT ASSOCIATES, INC, DRAWING NO. 110905_2011-10-24, NOVEMBER 1, 2011, ORIGINAL ISSUE.

SANBORN FIRE INSURANCE MAP, DATED 1887.

0 30 60
FEET

TETRA TECH, INC.

TITLE:
Sediment Boring and Cross Section Locations
Former Peoples Works Manufactured Gas Plant Site
Brooklyn, Kings County, New York

DWN.: EO	DATE: 8/3/17	PROJECT NO.: 194-4727	
CHKD: RCC	REV.: 2	FIGURE NO.: 9	
DES.: RCC	APPD: RCC		

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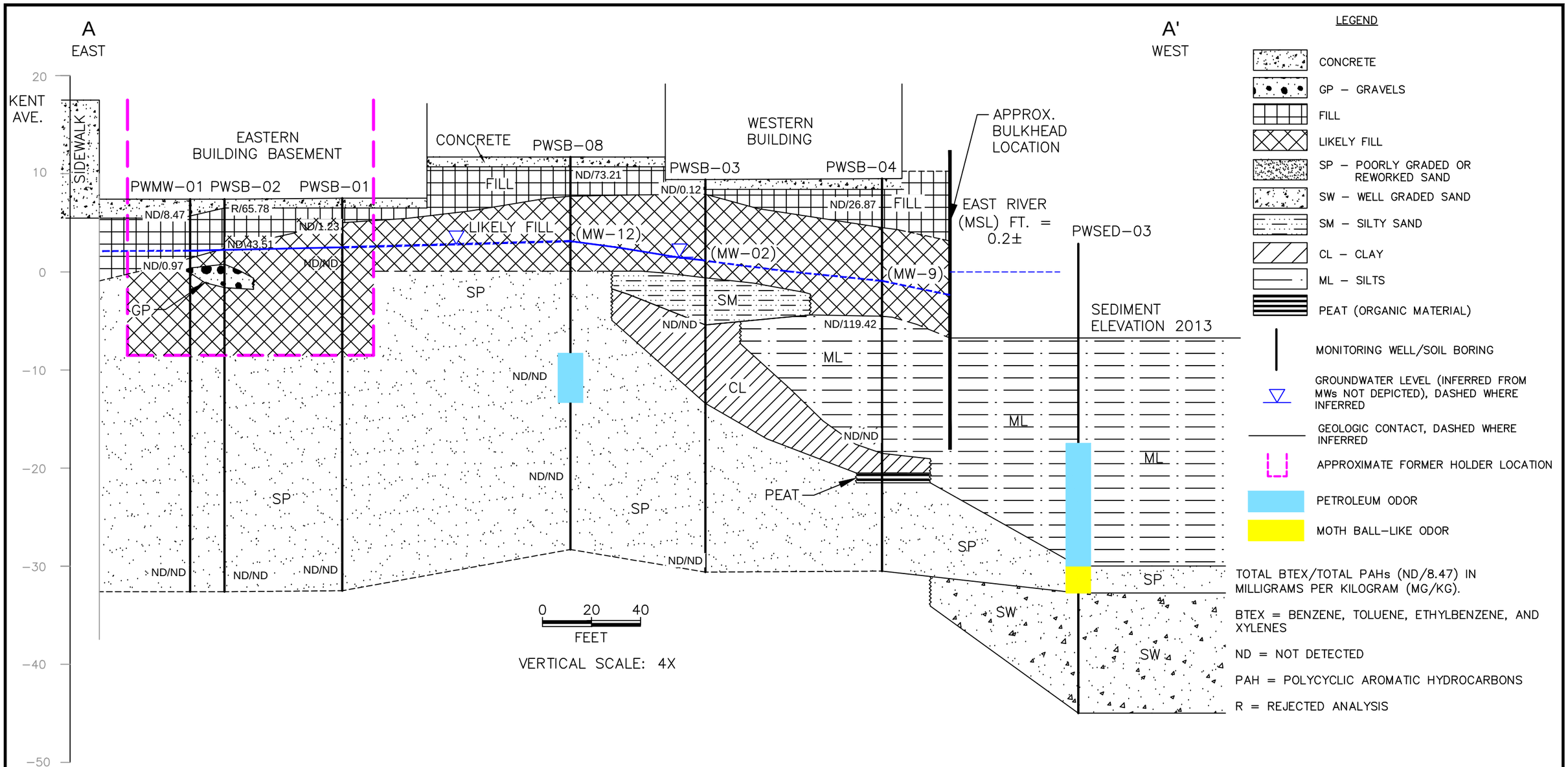
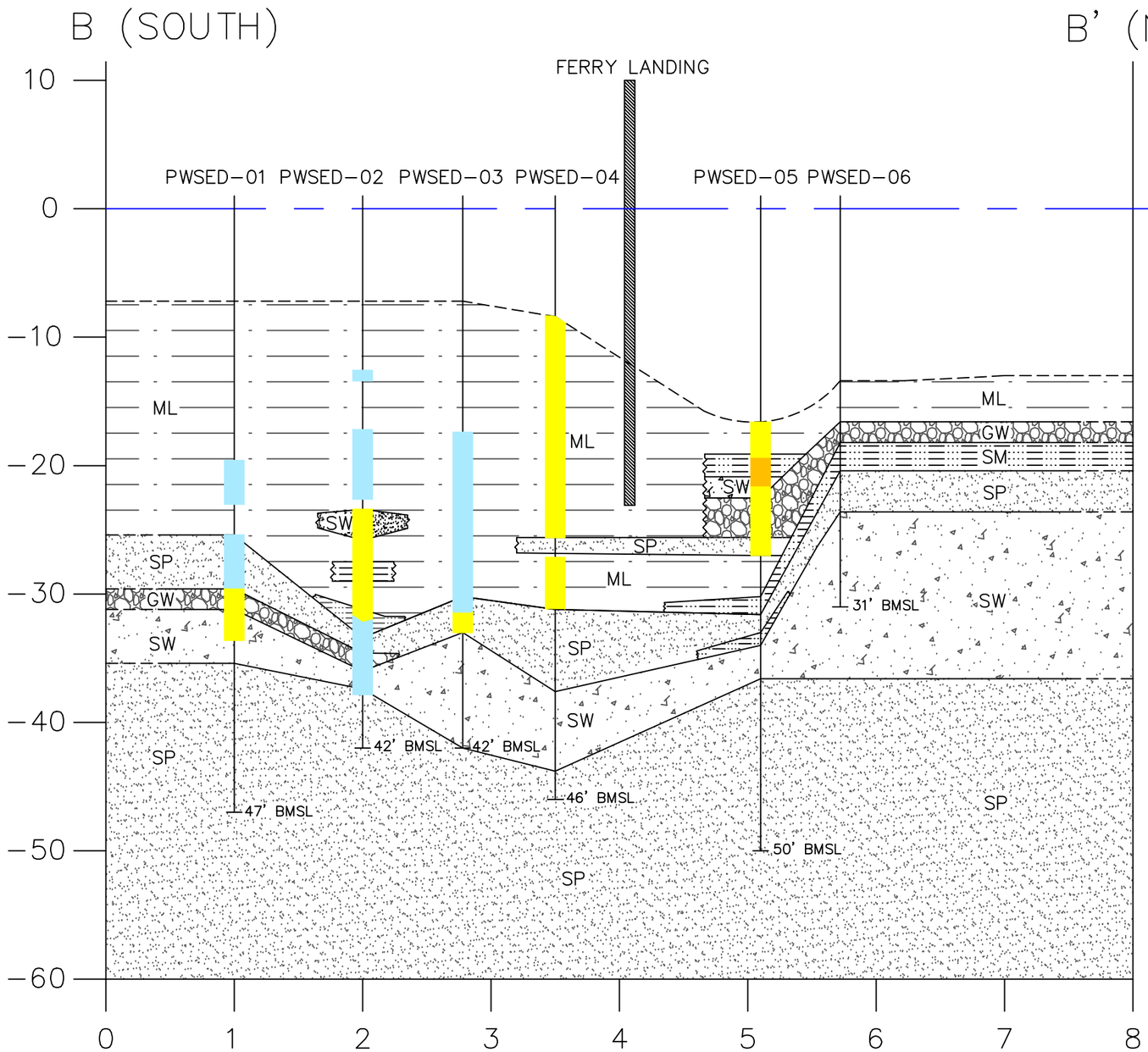


NOTES:

1. DEPICTED SB/MW BOTTOM DEPTH BASED ON BORING LOG COMPLETION DEPTH (40' BELOW GROUND SURFACE).
2. PWMW–01, PWSB–02, PWSB–01 IN BASEMENT FLOOR (GRADE ELEVATION).
3. FORMER HOLDER LOCATION APPROXIMATED FROM FIGURE 6.

TETRA TECH INC.	TITLE: Cross–Section A–A' Former Peoples Works Manufactured Gas Plant Site Brooklyn, Kings County, New York	DWN.: EO	DATE: 8/3/17	PROJECT NO.: 194–4727
		CHKD: RCC	REV.: 4	FIGURE NO.: 10
		DES.: AV	APPD: RCC	



1" = 10 ft.

1" = 100 ft.

LEGEND

- ML – SILTS
- SM – SILTY-SAND
- SW – WELL GRADED SAND
- SP – POORLY GRADED SAND
- GW – GRAVELS
- PETROLEUM ODOR
- MOTH BALL-LIKE ODOR
- LNAPL BLEBS
- MEAN SEA LEVEL FEET
- BOTTOM PROFILE
- FERRY LANDING
- SEDIMENT BORING

SCALE: HORIZONTAL 1" = 100'
VERTICAL 1" = 100'

TETRA TECH, INC.

TITLE:
Cross-Section B-B'
Former Peoples Works Manufactured Gas Plant Site
Brooklyn, Kings County, New York

DWN.: EO	DATE: 8/3/17	PROJECT NO.: 194-4727	
CHKD: AV	REV.: 2	FIGURE NO.: 11	
DES.: AV	APPD: RCC		

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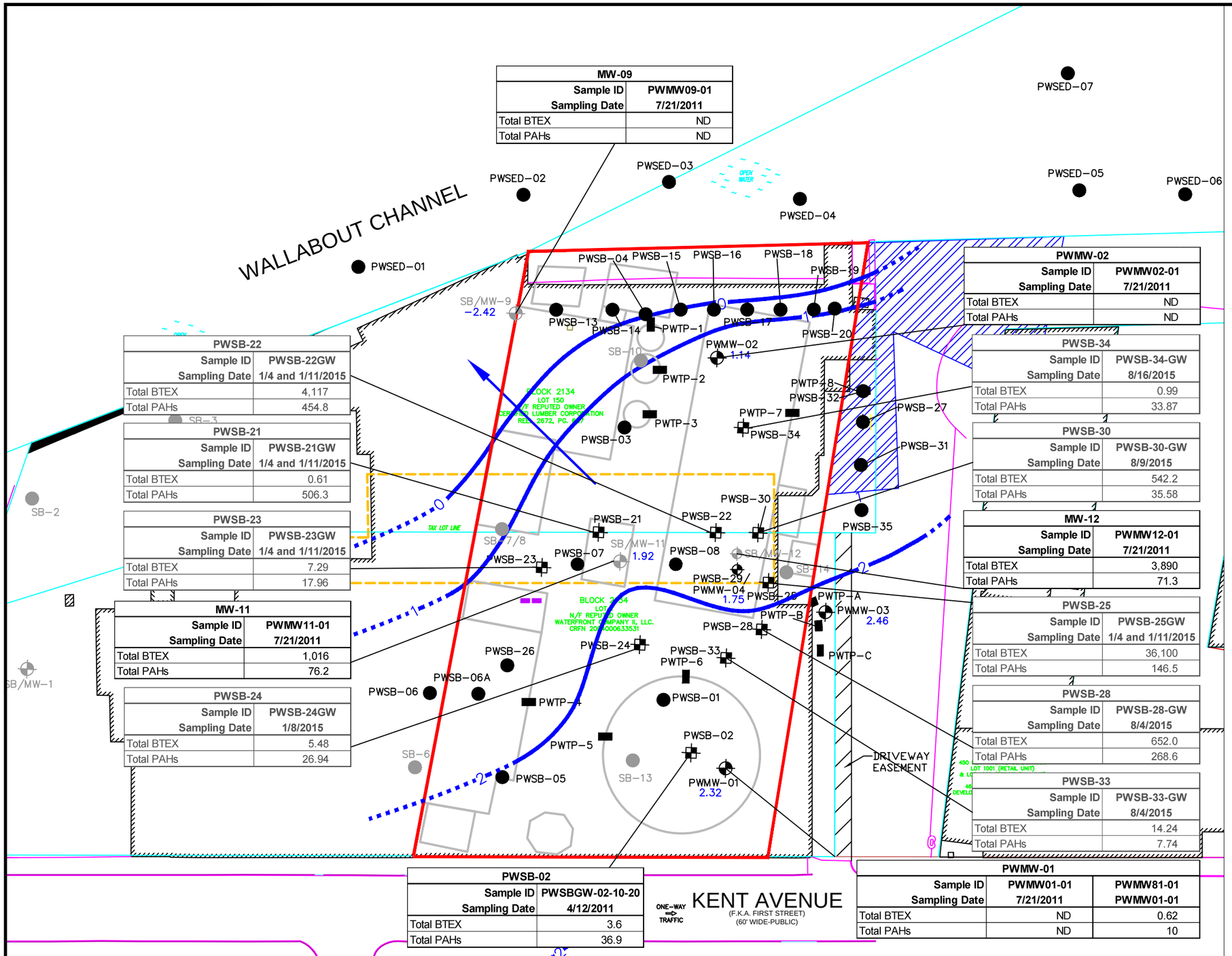

MW-09	
Sample ID	PWMW09-01
Sampling Date	7/21/2011
Total BTEX	ND
Total PAHs	ND

PWMW-02	
Sample ID	PWMW02-01
Sampling Date	7/21/2011
Total BTEX	ND
Total PAHs	ND

PWSB-22	
Sample ID	PWSB-22GW
Sampling Date	1/4 and 1/11/2015
Total BTEX	4,117
Total PAHs	454.8

PWSB-34	
Sample ID	PWSB-34-GW
Sampling Date	8/16/2015
Total BTEX	0.99
Total PAHs	33.87

PWSB-21	
Sample ID	PWSB-21GW
Sampling Date	1/4 and 1/11/2015
Total BTEX	0.61
Total PAHs	506.3

PWSB-30	
Sample ID	PWSB-30-GW
Sampling Date	8/9/2015
Total BTEX	542.2
Total PAHs	35.58

PWSB-23	
Sample ID	PWSB-23GW
Sampling Date	1/4 and 1/11/2015
Total BTEX	7.29
Total PAHs	17.96

MW-12	
Sample ID	PWMW12-01
Sampling Date	7/21/2011
Total BTEX	3,890
Total PAHs	71.3

MW-11	
Sample ID	PWMW11-01
Sampling Date	7/21/2011
Total BTEX	1,016
Total PAHs	76.2

PWSB-25	
Sample ID	PWSB-25GW
Sampling Date	1/4 and 1/11/2015
Total BTEX	36,100
Total PAHs	146.5

PWSB-24	
Sample ID	PWSB-24GW
Sampling Date	1/8/2015
Total BTEX	5.48
Total PAHs	26.94

PWSB-28	
Sample ID	PWSB-28-GW
Sampling Date	8/4/2015
Total BTEX	652.0
Total PAHs	268.6

PWSB-33	
Sample ID	PWSB-33-GW
Sampling Date	8/4/2015
Total BTEX	14.24
Total PAHs	7.74

PWSB-02	
Sample ID	PWSBGW-02-10-20
Sampling Date	4/12/2011
Total BTEX	3.6
Total PAHs	36.9

PWMW-01		
Sample ID	PWMW01-01	PWMW81-01
Sampling Date	7/21/2011	PWMW01-01
Total BTEX	ND	0.62
Total PAHs	ND	10

LEGEND

- APPROXIMATE FORMER MGP BOUNDARY
- CURRENT BUILDING
- PAVEMENT
- LOT BOUNDARY
- FORMER MGP-RELATED STRUCTURES
- COVERED AREA
- PWSB-02 — APPROXIMATE SOIL BORING AND GROUNDWATER GRAB LOCATION
- PWSB/PWMW-04 1.75 — APPROXIMATE MONITORING WELL LOCATION; APPROXIMATE GROUNDWATER ELEVATION
- APPROXIMATE GROUNDWATER ELEVATION CONTOUR, DASHED WHERE INFERRED
- PWSB-01 — APPROXIMATE SOIL BORING LOCATION
- PWTP-A / PWTP-1 — APPROXIMATE TEST PIT LOCATION
- PWSED-01 — SEDIMENT SAMPLE LOCATION
- SB/MW-09 — APPROXIMATE MONITORING WELL LOCATION FROM PREVIOUS INVESTIGATIONS
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- APPROXIMATE MAXIMUM EXTENT OF EMBAYMENT (BROMLEY, 1880)
- APPROXIMATE LOCATION OF ABOVE GROUND TANKS

ALL UNITS ARE IN MICROGRAMS PER LITER (UG/L).

BTEX = BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES
ND = NOT DETECTED
PAH = POLYCYCLIC AROMATIC HYDROCARBONS

TOTAL PAHS IS THE SUM OF THE DETECTED CONCENTRATIONS OF THE FOLLOWING COMPOUNDS:

2-METHYLNAPHTHALENE, ACENAPHTHENE, ACENAPHTHYLENE, ANTHRACENE, BENZO(A)ANTHRACENE, BENZO(A)PYRENE, BENZO(B)FLUORANTHENE, BENZO(G,H,I)PERYLENE, BENZO(K)FLUORANTHENE, CHRYSENE, DIBENZ(A,H)ANTHRACENE, FLUORANTHENE, FLUORENE, INDENO(1,2,3-CD)PYRENE, NAPHTHALENE, PHENANTHRENE, PYRENE

SOURCES:
BOUNDARY AND SURVEY, NATIONAL GRID – FORMER PEOPLES WORKSITE, BROOKLYN, NEW YORK, PREPARED BY BORBAS SURVEYING & MAPPING, LLC, CONTROL POINT ASSOCIATES, INC, DRAWING NO. 110905_2011-10-24, NOVEMBER 1, 2011, ORIGINAL ISSUE.

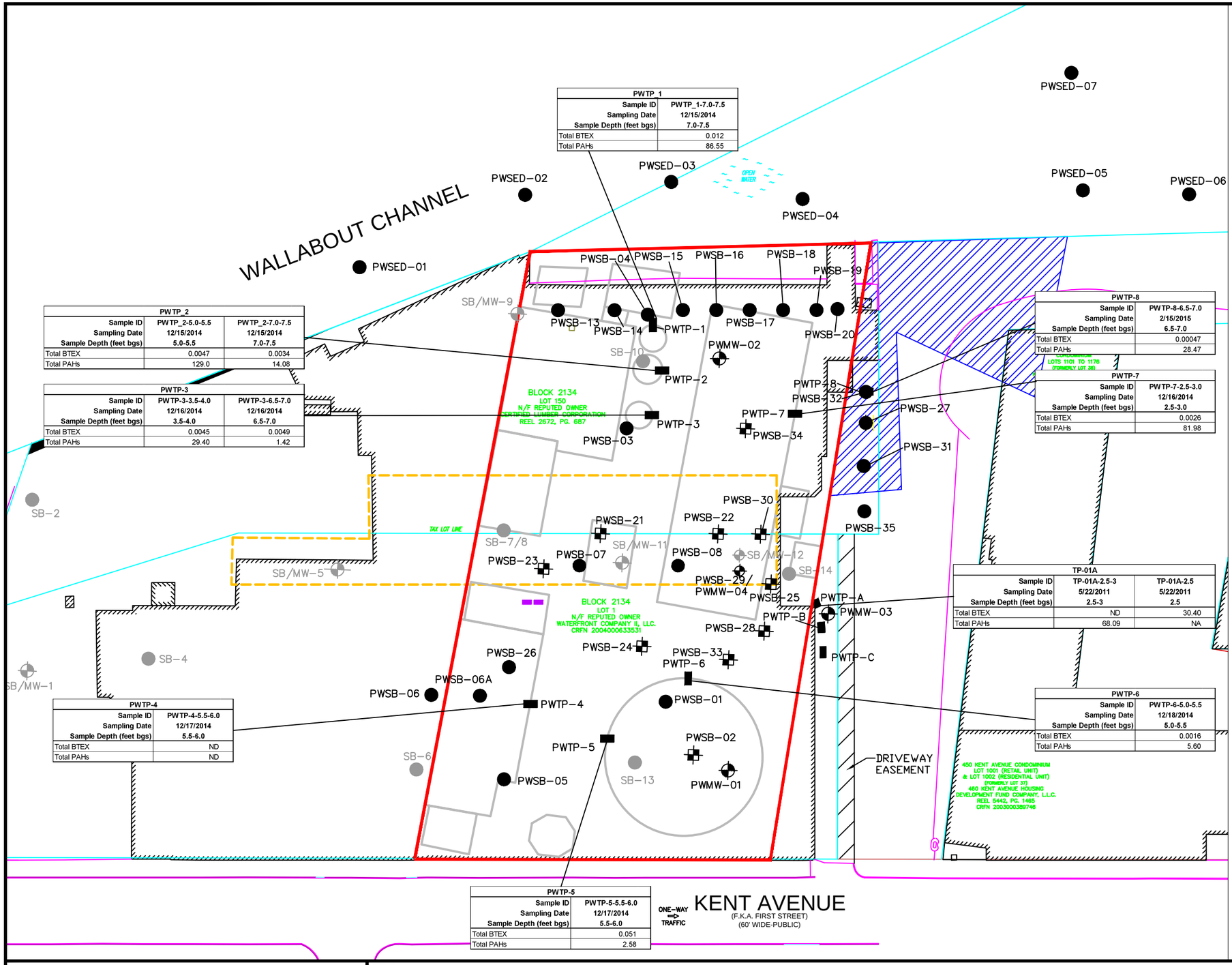
SANBORN FIRE INSURANCE MAP, DATED 1887.

0 30 60
FEET

TETRA TECH INC.

TITLE:
MONITORING WELL LOCATIONS, GROUNDWATER ELEVATIONS AND ANALYTICAL RESULTS
FORMER PEOPLES WORKS MANUFACTURED GAS PLANT SITE
BROOKLYN, KINGS COUNTY, NEW YORK

DWN.: EO	DATE: 8/3/17	PROJECT NO.: 194-4727	
CHKD: RCC	REV.: 2	FIGURE NO.: 12	
DES.: EO	APPD: RCC		



LEGEND

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- PAVEMENT
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- FORMER MGP-RELATED STRUCTURES
- COVERED AREA

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PWSB-01 — APPROXIMATE SOIL BORING LOCATION

PWTP-A PWTP-1 — APPROXIMATE TEST PIT LOCATION

PWSED-01 — SEDIMENT SAMPLE LOCATION

SB/MW-09 — APPROXIMATE MONITORING WELL LOCATION FROM PREVIOUS INVESTIGATIONS

SB-3 — APPROXIMATE SOIL BORING LOCATION FROM PREVIOUS INVESTIGATIONS

APPROXIMATE MAXIMUM EXTENT OF EMBAYMENT (BROMLEY, 1880)

APPROXIMATE LOCATION OF ABOVE GROUND TANKS

ALL UNITS ARE IN MILLIGRAMS PER KILOGRAM (MG/KG).

BTEX = BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES
NA = NOT ANALYZED
ND = NOT DETECTED
PAH = POLYCYCLIC AROMATIC HYDROCARBONS

TOTAL PAHS IS THE SUM OF THE DETECTED CONCENTRATIONS OF THE FOLLOWING COMPOUNDS:

2-METHYLNAPHTHALENE, ACENAPHTHENE, ACENAPHTHYLENE, ANTHRACENE, BENZO(A)ANTHRACENE, BENZO(A)PYRENE, BENZO(B)FLUORANTHENE, BENZO(G,H,I)PERYLENE, BENZO(K)FLUORANTHENE, CHRYSENE, DIBENZ(A,H)ANTHRACENE, FLUORANTHENE, FLUORENE, INDENO(1,2,3-CD)PYRENE, NAPHTHALENE, PHENANTHRENE, PYRENE

SOURCES:
BOUNDARY AND SURVEY, NATIONAL GRID – FORMER PEOPLES WORKSITE, BROOKLYN, NEW YORK, PREPARED BY BORBAS SURVEYING & MAPPING, LLC, CONTROL POINT ASSOCIATES, INC, DRAWING NO. 110905_2011-10-24, NOVEMBER 1, 2011, ORIGINAL ISSUE.

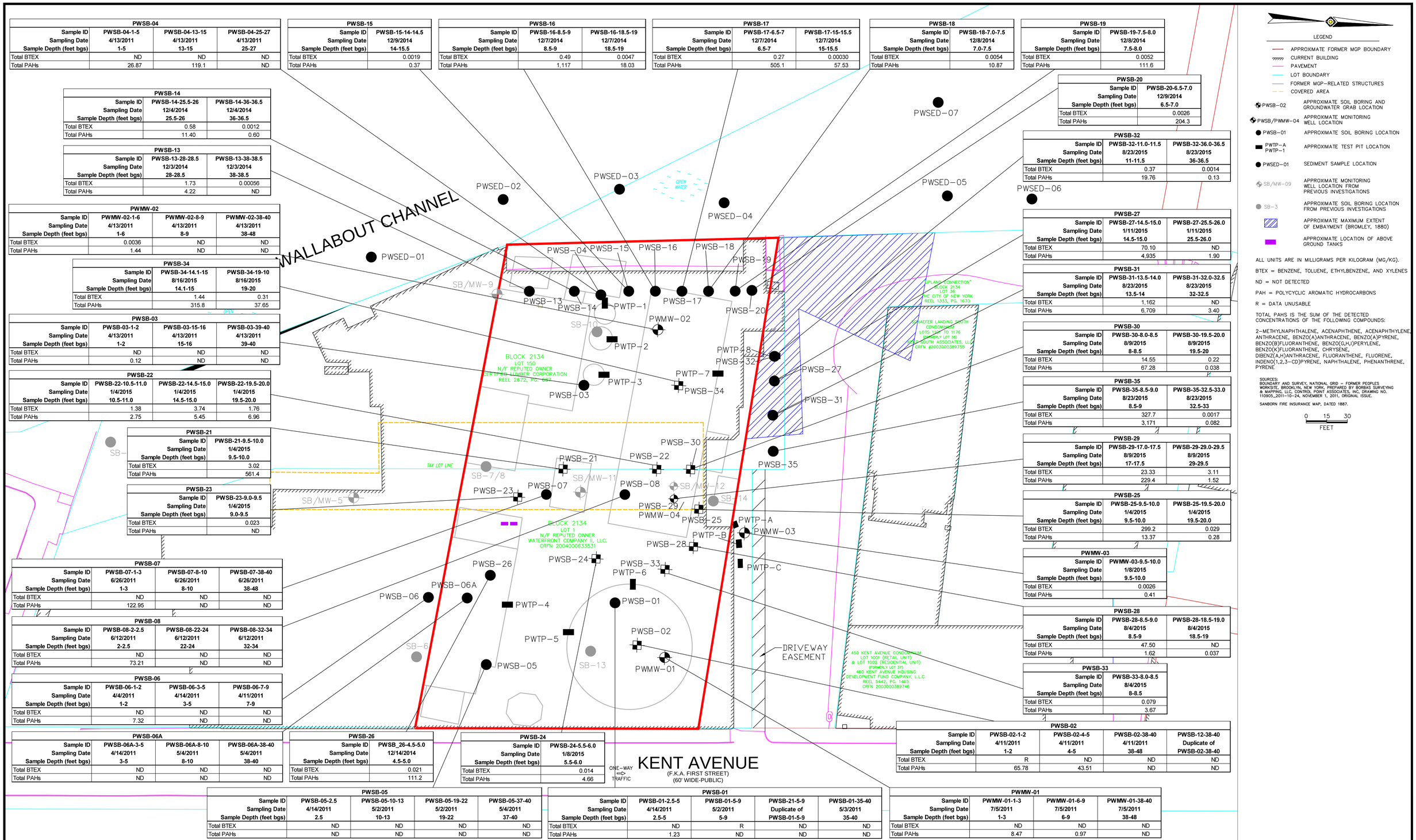
SANBORN FIRE INSURANCE MAP, DATED 1887.

0 30 60
FEET

TETRA TECH INC.

TITLE:
SAMPLE LOCATIONS AND TEST PIT ANALYTICAL RESULTS
FORMER PEOPLES WORKS MANUFACTURED GAS PLANT SITE
BROOKLYN, KINGS COUNTY, NEW YORK

DWN.: EO	DATE: 5/17/17	PROJECT NO.: 194-4727	
CHKD: AV	REV.: 0	FIGURE NO.: 13	
DES.: EO	APPD: RCC		



PWSB-04

Sample ID	PWSB-04-1-5	PWSB-04-13-15	PWSB-04-25-27
Sampling Date	4/13/2011	4/13/2011	4/13/2011
Sample Depth (feet bgs)	1-5	13-15	25-27
Total BTEX	ND	ND	ND
Total PAHs	26.87	119.1	ND

PWSB-15

Sample ID	PWSB-15-14-14.5
Sampling Date	12/9/2014
Sample Depth (feet bgs)	14-15.5
Total BTEX	0.0019
Total PAHs	0.37

PWSB-16

Sample ID	PWSB-16-8.5-9	PWSB-16-18.5-19
Sampling Date	12/7/2014	12/7/2014
Sample Depth (feet bgs)	8.5-9	18.5-19
Total BTEX	0.49	0.0047
Total PAHs	1,117	18.03

PWSB-17

Sample ID	PWSB-17-6.5-7	PWSB-17-15-15.5
Sampling Date	12/7/2014	12/7/2014
Sample Depth (feet bgs)	6.5-7	15-15.5
Total BTEX	0.27	0.00030
Total PAHs	505.1	57.53

PWSB-18

Sample ID	PWSB-18-7.0-7.5
Sampling Date	12/8/2014
Sample Depth (feet bgs)	7.0-7.5
Total BTEX	0.0054
Total PAHs	10.87

PWSB-19

Sample ID	PWSB-19-7.5-8.0
Sampling Date	12/8/2014
Sample Depth (feet bgs)	7.5-8.0
Total BTEX	0.0052
Total PAHs	111.6

PWSB-20

Sample ID	PWSB-20-6.5-7.0
Sampling Date	12/9/2014
Sample Depth (feet bgs)	6.5-7.0
Total BTEX	0.0026
Total PAHs	204.3

PWSB-14

Sample ID	PWSB-14-25.5-26	PWSB-14-36-36.5
Sampling Date	12/4/2014	12/4/2014
Sample Depth (feet bgs)	25.5-26	36-36.5
Total BTEX	0.58	0.0012
Total PAHs	11.40	0.60

PWSB-13

Sample ID	PWSB-13-28-28.5	PWSB-13-38-38.5
Sampling Date	12/3/2014	12/3/2014
Sample Depth (feet bgs)	28-28.5	38-38.5
Total BTEX	1.73	0.00056
Total PAHs	4.22	ND

PWMW-02

Sample ID	PWMW-02-1-6	PWMW-02-8-9	PWMW-02-38-40
Sampling Date	4/13/2011	4/13/2011	4/13/2011
Sample Depth (feet bgs)	1-6	8-9	38-48
Total BTEX	0.0036	ND	ND
Total PAHs	1.44	ND	ND

PWSB-34

Sample ID	PWSB-34-14.1-15	PWSB-34-19-10
Sampling Date	8/16/2015	8/16/2015
Sample Depth (feet bgs)	14.1-15	19-20
Total BTEX	1.44	0.31
Total PAHs	315.8	37.65

PWSB-03

Sample ID	PWSB-03-1-2	PWSB-03-15-16	PWSB-03-39-40
Sampling Date	4/13/2011	4/13/2011	4/13/2011
Sample Depth (feet bgs)	1-2	15-16	39-40
Total BTEX	ND	ND	ND
Total PAHs	0.12	ND	ND

PWSB-22

Sample ID	PWSB-22-10.5-11.0	PWSB-22-14.5-15.0	PWSB-22-19.5-20.0
Sampling Date	1/4/2015	1/4/2015	1/4/2015
Sample Depth (feet bgs)	10.5-11.0	14.5-15.0	19.5-20.0
Total BTEX	1.38	3.74	1.76
Total PAHs	2.75	5.45	6.96

PWSB-21

Sample ID	PWSB-21-9.5-10.0
Sampling Date	1/4/2015
Sample Depth (feet bgs)	9.5-10.0
Total BTEX	3.02
Total PAHs	561.4

PWSB-23

Sample ID	PWSB-23-9.0-9.5
Sampling Date	1/4/2015
Sample Depth (feet bgs)	9.0-9.5
Total BTEX	0.023
Total PAHs	ND

PWSB-07

Sample ID	PWSB-07-1-3	PWSB-07-8-10	PWSB-07-38-40
Sampling Date	6/26/2011	6/26/2011	6/26/2011
Sample Depth (feet bgs)	1-3	8-10	38-48
Total BTEX	ND	ND	ND
Total PAHs	122.95	ND	ND

PWSB-08

Sample ID	PWSB-08-2-2.5	PWSB-08-22-24	PWSB-08-32-34
Sampling Date	6/12/2011	6/12/2011	6/12/2011
Sample Depth (feet bgs)	2-2.5	22-24	32-34
Total BTEX	ND	ND	ND
Total PAHs	73.21	ND	ND

PWSB-06

Sample ID	PWSB-06-1-2	PWSB-06-3-5	PWSB-06-7-9
Sampling Date	4/4/2011	4/14/2011	4/11/2011
Sample Depth (feet bgs)	1-2	3-5	7-9
Total BTEX	ND	ND	ND
Total PAHs	7.32	ND	ND

PWSB-06A

Sample ID	PWSB-06A-3-5	PWSB-06A-8-10	PWSB-06A-38-40
Sampling Date	4/14/2011	5/4/2011	5/4/2011
Sample Depth (feet bgs)	3-5	8-10	38-40
Total BTEX	ND	ND	ND
Total PAHs	ND	ND	ND

PWSB-26

Sample ID	PWSB_26-4.5-5.0
Sampling Date	12/14/2014
Sample Depth (feet bgs)	4.5-5.0
Total BTEX	0.021
Total PAHs	111.2

PWSB-24

Sample ID	PWSB-24-5.5-6.0
Sampling Date	1/8/2015
Sample Depth (feet bgs)	5.5-6.0
Total BTEX	0.014
Total PAHs	4.66

PWSB-05

Sample ID	PWSB-05-2.5	PWSB-05-10-13	PWSB-05-19-22	PWSB-05-37-40
Sampling Date	4/14/2011	5/2/2011	5/2/2011	5/4/2011
Sample Depth (feet bgs)	2.5	10-13	19-22	37-40
Total BTEX	ND	ND	ND	ND
Total PAHs	ND	ND	ND	ND

PWSB-01

Sample ID	PWSB-01-2.5-5	PWSB-01-5-9	PWSB-21-5-9	PWSB-01-35-40
Sampling Date	4/14/2011	5/2/2011	Duplicate of	5/3/2011
Sample Depth (feet bgs)	2.5-5	5-9	PWSB-01-5-9	35-40
Total BTEX	ND	R	ND	ND
Total PAHs	1.23	ND	ND	ND

PWMW-01

Sample ID	PWMW-01-1-3	PWMW-01-6-9	PWMW-01-38-40
Sampling Date	7/5/2011	7/5/2011	7/5/2011
Sample Depth (feet bgs)	1-3	6-9	38-48
Total BTEX	ND	ND	ND
Total PAHs	8.47	0.97	ND

PWSB-32

Sample ID	PWSB-32-11.0-11.5	PWSB-32-36.0-36.5
Sampling Date	8/23/2015	8/23/2015
Sample Depth (feet bgs)	11-11.5	36-36.5
Total BTEX	0.37	0.0014
Total PAHs	19.76	0.13

PWSB-27

Sample ID	PWSB-27-14.5-15.0	PWSB-27-25.5-26.0
Sampling Date	1/11/2015	1/11/2015
Sample Depth (feet bgs)	14.5-15.0	25.5-26.0
Total BTEX	70.10	ND
Total PAHs	4,935	1.90

PWSB-31

Sample ID	PWSB-31-13.5-14.0	PWSB-31-32.0-32.5
Sampling Date	8/23/2015	8/23/2015
Sample Depth (feet bgs)	13.5-14	32-32.5
Total BTEX	1,162	ND
Total PAHs	6,709	3.40

PWSB-30

Sample ID	PWSB-30-8.0-8.5	PWSB-30-19.5-20.0
Sampling Date	8/9/2015	8/9/2015
Sample Depth (feet bgs)	8-8.5	19.5-20
Total BTEX	14.55	0.22
Total PAHs	67.28	0.038

PWSB-35

Sample ID	PWSB-35-8.5-9.0	PWSB-35-32.5-33.0
Sampling Date	8/23/2015	8/23/2015
Sample Depth (feet bgs)	8.5-9	32.5-33
Total BTEX	327.7	0.0017
Total PAHs	3,171	0.082

PWSB-29

Sample ID	PWSB-29-17.0-17.5	PWSB-29-29.0-29.5
Sampling Date	8/9/2015	8/9/2015
Sample Depth (feet bgs)	17-17.5	29-29.5
Total BTEX	23.33	3.11
Total PAHs	229.4	1.52

PWSB-25

Sample ID	PWSB-25-9.5-10.0	PWSB-25-19.5-20.0
Sampling Date	1/4/2015	1/4/2015
Sample Depth (feet bgs)	9.5-10.0	19.5-20.0
Total BTEX	299.2	0.029
Total PAHs	13.37	0.28

PWMW-03

Sample ID	PWMW-03-9.5-10.0
Sampling Date	1/8/2015
Sample Depth (feet bgs)	9.5-10.0
Total BTEX	0.0026
Total PAHs	0.41

PWSB-28

Sample ID	PWSB-28-8.5-9.0	PWSB-28-18.5-19.0
Sampling Date	8/4/2015	8/4/2015
Sample Depth (feet bgs)	8.5-9	18.5-19
Total BTEX	47.50	ND
Total PAHs	1.62	0.037

PWSB-33

Sample ID	PWSB-33-8.0-8.5
Sampling Date	8/4/2015
Sample Depth (feet bgs)	8-8.5
Total BTEX	0.079
Total PAHs	3.67

PWSB-02

Sample ID	PWSB-02-1-2	PWSB-02-4-5	PWSB-02-38-40	PWSB-12-38-40
Sampling Date	4/11/2011	4/11/2011	4/11/2011	Duplicate of
Sample Depth (feet bgs)	1-2	4-5	38-48	PWSB-02-38-40
Total BTEX	R	ND	ND	ND
Total PAHs	65.78	43.51	ND	ND

LEGEND

- APPROXIMATE FORMER MGP BOUNDARY
- CURRENT BUILDING
- PAVEMENT
- LOT BOUNDARY
- FORMER MGP-RELATED STRUCTURES
- COVERED AREA
- PWSB-02 — APPROXIMATE SOIL BORING AND GROUNDWATER GRAB LOCATION
- PWSB/PWMW-04 — APPROXIMATE MONITORING WELL LOCATION
- PWSB-01 — APPROXIMATE SOIL BORING LOCATION
- PWTP-A / PWTP-1 — APPROXIMATE TEST PIT LOCATION
- PWSED-01 — SEDIMENT SAMPLE LOCATION
- SB/MW-09 — APPROXIMATE MONITORING WELL LOCATION FROM PREVIOUS INVESTIGATIONS
- SB-3 — APPROXIMATE SOIL BORING LOCATION FROM PREVIOUS INVESTIGATIONS
- APPROXIMATE MAXIMUM EXTENT OF EMBAYMENT (BROMLEY, 1880)
- APPROXIMATE LOCATION OF ABOVE GROUND TANKS

ALL UNITS ARE IN MILLIGRAMS PER KILOGRAM (MG/KG).

BTEX = BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES

ND = NOT DETECTED

PAH = POLYCYCLIC AROMATIC HYDROCARBONS

R = DATA UNUSABLE

TOTAL PAHS IS THE SUM OF THE DETECTED CONCENTRATIONS OF THE FOLLOWING COMPOUNDS:

2-METHYLNAPHTHALENE, ACENAPHTHENE, ACENAPHTHYLENE, ANTHRACENE, BENZO(A)ANTHRACENE, BENZO(A)PYRENE, BENZO(B)FLUORANTHENE, BENZO(G,H,I)PERYLENE, BENZO(K)FLUORANTHENE, CHRYSENE, DIBENZ(A,H)ANTHRACENE, FLUORANTHENE, FLUORENE, INDENO(1,2,3-CD)PYRENE, NAPHTHALENE, PHENANTHRENE, PYRENE

SOURCES:
BOUNDARY AND SURVEY, NATIONAL GRID – FORMER PEOPLES WORKSITE, BROOKLYN, NEW YORK, PREPARED BY BORBAS SURVEYING & MAPPING, LLC. CONTROL POINT ASSOCIATES, INC. DRAWING NO. 110909_2011-10-24, NOVEMBER 1, 2011, ORIGINAL ISSUE.

SANBORN FIRE INSURANCE MAP, DATED 1887.

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FEET

TETRA TECH, INC.

TITLE:
SAMPLE LOCATIONS AND SOIL BORING ANALYTICAL RESULTS
FORMER PEOPLES WORKS MANUFACTURED GAS PLANT SITE
BROOKLYN, KINGS COUNTY, NEW YORK

DWN.: EO	DATE: 5/17/17
CHKD: AV	REV.: 0
DES.: EO	APPD: RCC

PROJECT NO.: 194-4727

FIGURE NO.: 14