FORMER
CONSOLIDATED FREIGHTWAYS TRUCK TERMINAL
BCP No. C224191

11 WEST STREET, BROOKLYN, NEW YORK
Block 2570 Lot 1

REMEDIAL ACTION WORK PLAN

NOVEMBER 2015

Prepared for:
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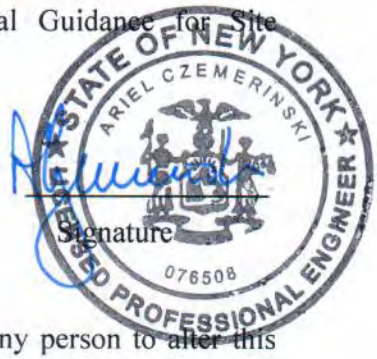
CERTIFICATIONS

I Ariel Czemerinski, certify that I am currently a NYS registered professional engineer and that this Remedial Action Work Plan 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).



076508	11/6/2015	
NYS Professional Engineer #	Date	Signature

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LIST OF ACRONYMS

Acronym	Definition
AMC	AMC Engineering
AWQS	Ambient Water Quality Standards
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
BTEX	Benzene, Toluene, Ethylbenzene and Xylene
CQMP	Construction Quality Management Plan
DUSR	Data Usability Statement Report
EBC	Environmental Business Consultants
FER	Final Engineering Report
HDPE	High Density Polyethylene
IRM	Interim Remedial Measure
NYC	New York City
NYCDEP	New York City Department of Environmental Protection
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PS	Public School
PVC	Polyvinyl Chloride
RAO	Remedial Action Objectives
RAWP	Remedial Action Work Plan
RI	Remedial Investigation
RSCOs	Recommended Site Cleanup Objectives
SCG	Standards, Criteria, and Guidelines
SMMP	Soil/Materials Management Plan
SMP	Site Management Plan
SSDS	Sub-slab Depressurization System
SWPPP	Stormwater Pollution Prevention Plan
SVOCs	Semi-Volatile Organic Compounds
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VOCs	Volatile Organic Compounds

EXECUTIVE SUMMARY

Site Description/Physical Setting/Site History

This Remedial Action Work Plan has been prepared on behalf of M&H Realty LLC to remediate a 4.88-acre property located at 11 West Street, in Brooklyn, Kings County, New York (**Figure 1**). The Site was formally accepted into the New York State Department of Environmental Conservation (NYSDEC) Brownfields Cleanup Program (BCP) through a Brownfield Cleanup Agreement (BCA) executed in August 20, 2014. The applicant was accepted into this program as a Volunteer.

The Site is located at 11 West Street in the Borough of Brooklyn, Kings County, New York City, New York and is identified as Block 2570 Lot 1 on the New York City Tax Map. A United States Geological Survey (USGS) topographical quadrangle map (**Figure 1**) shows the Site location.

The lot is located on the west side of West Street between Quay and Oak Streets. The lot consists of 480 feet of street frontage on West Street, 400 feet of frontage on the East River and is approximately 750 feet deep for a total area of 213,000 square feet (4.88 acres).The property is currently developed with three buildings: a 90 ft x 530 ft single story raised platform, two-sided loading dock and storage building, a 50 ft x 70 ft two story building formerly used for truck maintenance which includes a cellar utilized for the boiler and electrical rooms and a 25 ft x 50 ft building formerly used for truck repair/maintenance. The remainder of the property is an open lot.

Summary of the Remedial Investigation

A Remedial Investigation was completed at the Site by EBC from March through November 2014. The goals of the Remedial Investigation were to define the nature and extent of contamination in soil, groundwater and any other impacted media; to identify the source(s) of the contamination; to assess the impact of the contamination on public health and/or the environment; and to provide information to support the development of a Remedial Work Plan to address the contamination.

Activities completed under the RI:

- Sampling for non-petroleum contaminants such as pesticides, PCBs and metals in soil and groundwater including the analysis of soil and groundwater samples
- Soil sampling and analysis for petroleum compounds in soil samples from soil boring locations;
- The installation of groundwater monitoring wells
- The collection and analysis of groundwater samples for petroleum compounds;
- The collection of analysis of soil gas and indoor air samples for VOCs from soil gas sampling locations.

The results of sampling performed during the RI identified petroleum impacted soil to a depth of 8 ft in the vicinity of B21 and B22 within the former UST and dispensers area. In addition fill materials containing elevated levels of metals were documented throughout the Site to depths as great as 7 feet below grade.

Groundwater was not found to be impacted at the Site with petroleum or metals related to the historic use of the Site. SVOC's reported in groundwater were limited to those parameters with part per trillion standards and are a function of background conditions throughout the area and the extremely low detection resolution which the laboratory was able to achieve. Metals including sodium, manganese and iron are related to brackish conditions due to the proximity to the East River.

Total petroleum related volatile organic compounds (BTEX) were generally low around the perimeter of and beneath the Site with no apparent correlation with the on-site source.

Chlorinated VOCs (CVOCs) were reported in all soil gas samples with PCE the most frequently detected compound followed by TCE and TCA with three detections each. PCE and TCE concentrations were generally low, are not related to an on-site source and do not represent a potential vapor intrusion concern. TCA was detected in a subslab soil vapor at one location at a level which may require future monitoring.

Qualitative Human Health Exposure Assessment

The qualitative exposure assessment identified potential completed routes of exposure to construction workers and remediation workers through inhalation, ingestion and dermal contact during excavation activities. The Health and Safety Plan prepared for the site identifies such exposures and provides instructions for on-site workers to minimize potential exposure. Occupants in the proposed on-site residential buildings may be exposed to CVOCs originating from an off-site source through the vapor intrusion pathway if preventive measures are not incorporated into the design of the new building.

Summary of the Remedy

The remedy selected for the site is a Track 4 alternative (Alternative 2) which consists of the excavation of petroleum impacted soil to a depth of 10 feet within a 25 ft diameter portion of the former fueling area and in to a depth of 3 ft below surface grade within a 10 ft diameter area around each of the six hotspot SVOC areas, backfilling the excavations and basement area using soil from beneath the raised terminal platform building and capping the entire Site with the building foundations, concrete walkways, asphalt driveways or 2 ft of soil meeting Restricted Residential SCOs.

The remedy will include the following items:

1. Excavation of soil/fill exceeding groundwater protection SCOs for those parameters in groundwater above standards as listed in **Table 1** to depths as great as 10 feet below grade;
2. Screening for indications of contamination (by visual means, odor, and monitoring with PID) of all excavated soil during any intrusive Site work;
3. Collection and analysis of end-point samples to evaluate the performance of the remedy with respect to attainment of groundwater protection SCOs for SVOCs present in groundwater above standards;
4. Appropriate off-Site disposal of all material removed from the Site in accordance with all Federal, State and local rules and regulations for handling, transport, and disposal;

5. Capping the entire Site with the building foundations, concrete walkways, asphalt driveways or 2 ft of soil meeting Restricted Residential SCOs.
6. Import of materials to be used for backfill and cover in compliance with: (1) chemical limits and other specifications included in **Table 2**, (2) all Federal, State and local rules and regulations for handling and transport of material.
7. Implementation of a Site Management Plan (SMP) for long term maintenance of the Engineering Controls.
8. An Environmental Easement will be filed against the Site to ensure implementation of the SMP.

REMEDIAL ACTION WORK PLAN

1.0 INTRODUCTION

M&H Realty LLC entered into a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) on August 20, 2014, to remediate a 4.88-acre property located at 11 West Street, Brooklyn, Kings County, New York. M&H Realty LLC was accepted as Volunteer in the Brownfield Cleanup Program. A restricted residential use is proposed for the property. When completed, the Site will be redeveloped with a four new mixed-use (residential, commercial-retail) tower-base buildings.

This Remedial Action Work Plan (RAWP) summarizes the nature and extent of contamination as determined from data gathered during the Remedial Investigation (RI), performed between November 21 and December 31 2014. It provides an evaluation of a Track 1 cleanup and other applicable Remedial Action alternatives, their associated costs, and the recommended and preferred remedy. The remedy described in this document is consistent with the procedures defined in DER-10 and complies with all applicable standards, criteria and guidance. The remedy described in this document also complies with all applicable Federal, State and local laws, regulations and requirements. The NYSDEC and New York State Department of Health (NYSDOH) have determined that this Site does not pose a significant threat to human health and the environment. The RI for this Site did not identify fish and wildlife resources.

A formal Remedial Design document will not be prepared.

1.1 SITE LOCATION AND DESCRIPTION

The Site is located at 11 West Street in the Borough of Brooklyn, Kings County, New York City, New York and is identified as Block 2570 Lot 1 on the New York City Tax Map. A United States Geological Survey (USGS) topographical quadrangle map (**Figure 1**) shows the Site location.

The lot is located on the west side of West Street between Quay and Oak Streets. The lot consists of 480 feet of street frontage on West Street, 400 feet of frontage on the East River and is

approximately 750 feet deep for a total area of 213,000 square feet (4.88 acres).The property is currently developed with three buildings: a 90 ft x 530 ft single story raised platform, two-sided loading dock and storage building, a 50 ft x 70 ft two story building formerly used for truck maintenance which includes a cellar utilized for the boiler and electrical rooms and a 25 ft x 50 ft building formerly used for truck repair/maintenance. The remainder of the property is an open lot (**Figure 2**).

The elevation of the Site is from 9 feet to 1 foot above the National Geodetic Vertical Datum (NGVD). The area topography gradually slopes to the east. Groundwater at the Site is present under water table conditions at a depth of approximately 5-15 feet below grade. Based on Site specific references, the predominant groundwater flow direction is expected to be west toward the East River, though flow will likely reverse up to 400 feet inland during periods of high tide.

A boundary map is attached to the BCA as required by Environmental Conservation Law (ECL) Title 14 Section 27-1419. The 4.88-acre property is fully described in **Attachment A – Metes and Bounds.**

1.2 CONTEMPLATED REDEVELOPMENT PLAN

The Remedial Action to be performed under the RAWP is intended to make the Site protective of human health and the environment consistent with the contemplated end use. The proposed redevelopment plan and end use is described here to provide the basis for this assessment. The Remedial Action contemplated under this RAWP will be implemented as part of the proposed redevelopment plan.

The site is to be redeveloped through the new construction of 4 new mixed-use tower-base buildings. The towers will range from 10 to 40-stories while the base structures will range from 4 to 6 stories. The project includes 50,000 square feet (sf) of commercial (retail) space, 330,000 sf of affordable housing and 1.28 million sf of market-rate apartments. The project will feature a water-front park with public access through walkways extending to West Street.

The buildings will cover approximately 50% of the lot, leaving the remainder of the space for the water-front park, recreation areas, walkways and building grounds. Excavation will be required

for the building foundations and to remove contaminated soil. Soil will also need to be imported to the site to raise the grade approximately two-feet across the Site.

1.3 DESCRIPTION OF SURROUNDING PROPERTY

The surrounding land use (**Figure 3**) in the immediate vicinity of the Site includes The land use in the immediate vicinity of the Site includes heavy commercial / industrial properties to the north, mixed-use light commercial / residential uses to the east with residential homes beyond, a large warehouse building used by the MTA to the south, followed by a major oil storage facility (MOSF).

The area surrounding the property is highly urbanized and predominantly consists of heavy commercial / industrial properties along the water front with lighter commercial uses and residential homes to the east. The property is currently zoned R6-R7 residential with a C2-4 commercial overlay. The proposed project is compatible with the surrounding land use, and will be in compliance with the current zoning.

2.0 DESCRIPTION OF REMEDIAL INVESTIGATION FINDINGS

The field work portion of the Remedial Investigation was conducted by EBC in two parts with an initial investigation performed on March 5th and 6th, 2014 under the New York City E-designation Program with a supplemental investigation performed from November 21st through December 31st, 2014 under the NYSDEC-approved Remedial Investigation Work Plan. The investigation is summarized in the sections below. Further details are provided in the Remedial Investigation Report (EBC, February 2015).

2.1 SUMMARY OF REMEDIAL INVESTIGATIONS PERFORMED

2.1.1 Borings

A total of 36 soil borings (B1-B36) were advanced during the RI to identify source areas and to obtain general soil quality information present at the Site (**Figure 4**). Soil borings B1-B22 were advanced on March 5-6th 2014 during the initial mobilization to the Site as part of a Remedial Investigation performed in accordance with a NYCOER investigation work plan. Borings B23-B36 were advanced on November 21st and December 9th 10th, 12th and 22nd, 2014 as part of the supplemental investigation performed under the approved RIWP.

At each soil boring location soil samples were collected continuously in 5-foot intervals from grade to a depth of 15 feet below grade or to the extent of contamination, whichever came last. Borings were advanced with Geoprobe™ models 54LT, 6620DT and 6712DT, probe drilling machines. The Geoprobe™ system uses a direct push hydraulic percussion system to drive and retrieve core samplers. Soil samples were retrieved using 1.5-inch diameter, 4 and 5-foot long dual-tube samplers with disposable acetate liners. PID readings were non-detect in all intervals from all of the borings though evidence of petroleum contamination was noted within several borings within the former underground storage tank area.

2.1.2 Monitoring Wells

Nineteen groundwater monitoring wells, MW1 through MW19, were installed at the Site from March 5, through November 21, 2014. Wells MW1-MW9 were installed on March 5th and 6th under the NYCOER approved investigation work plan. Wells MW10-MW19 were installed on

November 21st as part of the approved RIWP. The wells were installed with a track mounted probe drilling machine to a depth of 15 feet below grade with 10 feet of 0.010 PVC well screen and 35 feet of PVC riser.

A No.00 morie filter sand was placed in the borehole to within 2 feet above the top of the screen. A 1-foot hydrated bentonite seal was then placed on top of the filter sand and the remainder of the borehole was backfilled to grade. Following installation, each of the wells were surveyed to determine relative casing elevation to the nearest 0.01 ft and horizontal position to the nearest 0.1 ft.

The initial round of groundwater sampling was performed on March 11th and included samples from monitoring wells MW1-MW8 and a sample from boring B21 using a probe sampling tool. A second round was performed on December 5th and 23rd during the RI and included wells MW1-MW6 and MW10-MW19. At DEC's request, wells MW2, MW13 and MW18 were re-sampled om June 4th 2015 and analyzed for SVOCs with filtered and non-filtered samples.

Prior to sampling, a synoptic round of depth-to-groundwater (DTW) measurements were obtained from the wells on December 5 and December 23, 2014 to calculate the volume of standing water in the well. The depth to groundwater ranged from approximately 4.83 to 10.19 feet below surface grade on these days. A separate round of water level readings were made on March 19, 2015. The readings on this date ranged from 5.66 to 11.49 feet. The casing elevation of the wells were surveyed on March 19, 2015 by Geoland, a NYS Licensed surveyor. The casing elevation / depth water for wells 7-9, 16 and 18-19 could not be obtained due to parked trucks and equipment over the wells. Monitoring well locations are shown in **Figure 5**.

2.1.3 Samples Collected

2.1.3.1 Soil Samples

Samples from borings B1-B22 were retained from one or more intervals including the 0-2 ft, 5-7 ft, 6-8 ft and 8-10 ft intervals depending on location and evidence / extent of contamination. Samples from borings B23-B36 were retained from the following intervals in accordance with the approved RI Work Plan:

B23-B27: FUELING AREA DELINEATION BORINGS

All borings (WT Interface, 13-15 ft) - VOCs / SVOCs

B23, B25 (0-2ft, 5-7 ft) pesticides / PCBs, metals

B28-B31: FOUNDRY AREA BORINGS

All borings (0-2 ft, 5-7 ft) - metals

B28, B30 (0-2 ft, 5-7 ft) - VOCs, SVOCs, pesticides/PCBs

B32-B34: LOADING DOCK BORINGS

All borings (5-7 ft below loading dock grade, WT) - VOCs, SVOCs

All borings (5-7 ft below loading dock grade), pesticides/PCBs, metals

B35-B36: SOUTH LOADING DOCK BORINGS

All borings (0-2 ft, WT) - VOCs, SVOCs, pesticides/PCBs, metals

Retained samples were submitted for analysis of one or more of the following parameters depending on location and depth interval:

- Volatile organic Compounds (VOCs) by EPA Method 8260;
- Semi-volatile organic compounds (SVOCs) by EPA Method 8270;
- Target Analyte List (TAL) metals by EPA Methods 6010B/7471A, and
- Pesticides/PCBs by Method 8081/8082.

2.1.3.2 Groundwater Samples

Groundwater samples were collected from sixteen of the monitoring wells (MW1-MW6, MW10-MW19) on December 5 and December 23, 2014, using low-flow sampling techniques and were monitored continuously until parameters stabilized. Wells MW2, MW13 and MW18 were re-sampled on June 4th 2015 and analyzed for SVOCs with filtered and non-filtered samples.

A peristaltic pump and polyethylene sampling tube were used to purge and collect samples from each well location. Sample tubing and the silicone pump tubing were replaced between each sample location. Samples were collected directly into pre-cleaned laboratory supplied glassware,

stored in a cooler with ice and submitted to Phoenix Environmental Laboratories of Manchester, CT, a New York State ELAP certified environmental laboratory (ELAP Certification No. 11301).

All groundwater samples collected in December 2014 from the monitoring wells were analyzed for VOCs / SVOCs by EPA method 8260 / 8270, target analyte list (TAL) metals and pesticides/PCBs by Method 8081/8082. Samples collected from wells MW2, MW13 and MW18 in June 2015 were analyzed for SVOCs only (filtered and non-filtered).

2.1.3.3 Soil Gas Samples

To assess the presence of VOCs in soil gas both beneath the Site, ten soil gas samples (SG1 through SG10) and four subslab samples (SS1-SS4) were collected across the Site on December 23 and December 31 2014 (**Figure 6**). All soil gas samples were collected over a 2-hr sampling period.

Soil vapor and the outdoor ambient air samples were collected in accordance with the procedures as described in the Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH 10/06).

The soil vapor samples were collected into laboratory-provided Summa canisters equipped with flow controllers in accordance with NYSDOH guidance. The flow controllers were set for an approximate two-hour period and were filled at less than 0.2 liters per minute. The filled canisters were managed under chain-of-custody procedures, transmitted to a NYSDOH-certified lab, and analyzed for VOCs using the TO-15 Method.

2.1.4 Chemical Analytical Work Performed

A total of 58 soil samples were collected from 33 soil borings for laboratory analysis of one or more of the following parameters depending on location of the boring and the sampling interval: VOCs (EPA Method 8260), SVOCs (EPA Method 8270), TAL metals and pesticides/PCBs (EPA Method 8081/8082). All groundwater samples from the monitoring wells were analyzed for VOCs / SVOCs by EPA method 8260 / 8270, target analyte list (TAL) metals (EPA Methods

6010B/7471A) and pesticides/PCBs by Method 8081/8082. Soil gas samples analyzed for VOCs by EPA method TO-15.

2.1.5 Documentation

Maps showing the locations of the soil borings, monitoring wells, and soil gas sample collection points are provided in **Figures 4-6**. The results of soil, groundwater and soil gas samples collected during the RI are summarized in **Tables 3** through **12**. Below is a summary of RI findings.

The results of sampling performed during the RI, identified petroleum impacted soil to a depth of 8 ft in the vicinity of the former UST and dispensers area. Historic fill material has also been identified across the Site to depths as great as 7 feet below grade. The historic fill material contains metals including arsenic, barium, copper, chromium, lead, mercury, nickel and zinc above unrestricted and / or restricted residential use SCOs.

Metals and / or SVOCs were reported at levels significantly above restricted residential SCOs at several locations including SVOCs, barium and mercury at B4 (0-2 ft), arsenic at B6 (5-7 ft below building slab, 1-3 ft below grade), arsenic, barium and lead at B9 (5-7 ft), arsenic and mercury at B10 (5-7 ft), arsenic at B17 (0-2 ft), lead and mercury at B19 (0-2 ft), arsenic at B25 (0-2 ft) and arsenic at B34 (5-7 ft below building slab, 1-3 ft below grade).

Groundwater is not impacted at the Site with petroleum or metals related to the historic use of the Site. The SVOC's reported in groundwater were limited to those parameters with part per trillion standards and are a function of background conditions throughout the area and the extremely low detection resolution which the laboratory was able to achieve. SVOCs at very low but elevated (above standards) concentrations in wells MW2, MW13 and MW18 may be related to the SVOCs in fill materials at these locations. Metals including sodium, manganese and iron are related to the proximity to the East River.

Chlorinated VOCs (CVOCs) were reported in all soil gas samples with PCE the most frequently detected followed by TCE and TCA with three detections each. PCE and TCE concentrations were generally low, are not related an on-site source and do not represent a potential vapor

intrusion concern. TCA was detected in a subslab soil vapor at one location at a level which may require future monitoring.

2.2 SIGNIFICANT THREAT

The RI report has been submitted for review by NYSDEC and the New York State Department of Health (NYSDOH). The NYSDEC and NYSDOH have determined that the Site does not pose a significant threat to human health and the environment. Notice of that determination will be provided in the Decision Document.

2.3 SITE HISTORY

2.3.1 Past Uses and Ownership

Previous owners of the property are shown in the tables below.

Previous Owners

Dates	Name	Comments	Contact Info
Prior to 1/2/1974	All states Terminal Corp.	Deed	11 West Street, Brooklyn, NY 11222
From 1/2/1974 to 12/31/1974	Fifth Terminal Corp.	Deed	725 Church Avenue, Brooklyn, NY 11218
From 12/31/1974 to 1/14/1977	Arbern Realty Co.	Deed	600 Old Country Road, Garden City, NY 11530
From 1/14/1977 to 4/16/2001	NYC Industrial Development Agency	Deed	225 Broadway, New York, NY 10007
From 4/16/2001 4/16/2001	P. Chimento Company, Inc.	Deed	11 West Street, Brooklyn, NY 11222
From 4/16/2001 to 5/14/2002	Consolidated Freightways Corporation of Delaware	Deed	16400 SE CF Way, Vancouver, WA 98683
From 5/14/2002 to 12/23/2002	CFCD 2002 LLC	Deed	16400 SE CF Way, Vancouver, WA 98683
From 12/23/2002 to Present	M&H Realty LLC	Deed	420 9th Avenue, New York, NY 10001

Previous Operators

Dates	Name	Comments	Contact Info
Prior to 1961	Samuel Sneden & Company	Maritime Historic Accounts	Unknown 11 West Street, Brooklyn, NY 11211
From 1861 to sometime between 1916 and 1922	Continental Iron Works	Sanborn Maps Maritime Historic Accounts	Unknown 11 West Street, Brooklyn, NY 11211
From sometime between 1942 and 1951	Lumber Yard	Sanborn Maps	Unknown 11 West Street, Brooklyn, NY 11211
From sometime between 1942 and 1965	Machine Shop and Welding operation	Sanborn Maps	Unknown 11 West Street, Brooklyn, NY 11211

From sometime between 1951 and 1978	Associated Trucking Co.	Sanborn Maps	44 Yale Street Inwood, New York, 11096
1978 to 2002	Consolidated Freightways	Sanborns	16400 SE CF Way, Vancouver, WA 98683
From 2009 to Present	South Portion: Tri-State Lumber & Building Supply North Portion: One Stop L.I.C.	Owners Knowledge	South Portion: 11 West Street, Brooklyn, NY 11211 North Portion: 37-30 Review Avenue, Long Island City, NY

The following resources were employed in obtaining historical information with respect to ownership:

- NYC ACRIS Database
- NYC Department of Finance records, Brooklyn Borough office
- NYS Department of State Business Search

The following resources were employed in obtaining historical information with respect to operators:

- Interviews with current Operators / Owners
- Sanborn Fire Insurance Maps
- Certificate of Occupancy Records as Maintained by the NYC Department of Buildings
- Internet Address Search
- NYS Department of State Business Search

2.3.2 Summary of Previous Reports

Environmental investigations performed at the Site include the following:

- Phase I Environmental Site Assessment Screening- EBC (February 2014)
- NYCOER Remedial Investigation Preliminary Data Summary - EBC (March 2014)

A summary of the investigations performed is provided in the following sections.

2.3.2.1 February 2014 – Phase I Environmental Site Assessment Screening (EBC)

According to NYSDEC petroleum bulk storage (PBS) records 21 tanks (17 underground storage tanks and 4 above-ground storage tanks) were registered to the property. With one exception, all of the tanks were closed and removed by 1992. The remaining tank, a 2,000 gallon underground fuel oil tank, was closed in place in 1999. The location of this tank is unknown but expected to be in close proximity to the building.

At the time of the Phase I inspection the northern half of the building and grounds was occupied by One Stop L.I.C. a property management company which leases parking space and indoor commercial storage space to multiple tenants. The southern half of the building and ground was occupied by a Tri-State Lumber and Building supply for storage and sale of building materials.

Based upon reconnaissance of the Site and surrounding properties, interviews and review of historical records and regulatory agency databases, EBC noted the following recognized environmental conditions for the Site.

- The use of the Site as a freight terminal and trucking facility for more than 37 years.
- The historic presence of 17 underground storage tanks for gasoline, diesel and fuel oil and the absence of documentation regarding the tank removals.
- The historic presence of a fueling station as shown in Sanborn maps from 1965 on.
- The use of the Site by a machine shop and welding facility.
- The historic use of the Site as an iron works.
- The historic presence of a foundry at the Site.

2.3.2.2 March 2014 - Preliminary RI Data Summary (EBC)

The remedial investigation was performed from March 5-11, 2014 in accordance with the Remedial Investigation Work Plan approved by the New York City Office of Environmental Remediation (NYCOER) as part of the E-designation review process. The investigation included the installation of 22 soil borings and 9 temporary monitoring wells.

Soil samples were analyzed for one or more of the following:

- VOCs
- SVOCs
- Metals
- Pesticides
- PCBs

Groundwater samples were analyzed for VOCs and SVOCs only.

The results of the preliminary RI identified elevated levels of SVOCs in soil at concentrations above restricted residential soil cleanup objectives (SCOs). In many cases the detection limit for VOCs was above the SCO due to interference from the SVOCs and other unknown parameters.

Metals including arsenic, barium, cadmium, copper, chromium, lead, mercury, nickel and zinc were reported above unrestricted or restricted residential SCOs in many of the borings. PCB 1260 was reported above restricted residential SCOs in one boring at a depth of 5-7 feet. It was not reported in the shallow sample.

Groundwater was encountered at a depth of approximately 5-10 feet below grade. Petroleum VOCs including n-propylbenzene and isopropylbenzene were reported at concentrations slightly above groundwater standards in one sample.

The elevated levels of SVOCs found within the former fueling station area are related to a release of diesel fuel from the UST system. The extent of the contamination has not been determined. The distribution, type and concentration of metals contamination is inconsistent with historic fill and is likely related to shipbuilding and foundry operations in which foundry castings sand, shavings, ash and slag were likely deposited on the site. Metals including arsenic, cadmium, chromium, lead, mercury and zinc are known to be associated with iron works.

2.4 GEOLOGICAL CONDITIONS

The geologic setting of Long Island is well documented and consists of crystalline bedrock overlain by layers of unconsolidated deposits. According to geologic maps of the area created by the United States Geologic Survey (USGS), the bedrock in this area of Brooklyn is an igneous intrusive classified as the Ravenswood grano-diorite of middle Ordovician to middle Cambrian age. Unconsolidated sediments overlie the bedrock and consist of Pleistocene aged sand, gravel and silty clays, deposited by glacial-fluvial activity. Non-native fill materials consisting of dredge spoils, rubble and / or other materials have historically been used to reinforce and extend shoreline areas and to raise and improve the drainage of low lying areas.

Subsurface soils at the Site include a mixture of fill materials consisting of bricks and other rubble in a silty-soil matrix. The thickness of the fill ranges from 5 to more than 10 feet. Below

the fill material is a silty-sand. Groundwater is present under water table conditions at a depth of approximately 5-8 feet below the surface and is expected to flow generally west to south though the flow direction will likely be affected location on-site and by tidal influence. On-site measurements indicated a southerly flow (**Figure 7**) toward Bushwick inlet.

2.5 CONTAMINATION CONDITIONS

2.5.1 Conceptual Model of Site Contamination

Contaminants of concern at the Site include petroleum SVOCs and metals in soil and TCA contamination in a single soil gas sample.

The source of the SVOC contamination at the Site is the former fuel dispensing area located in the north-central area of the Site. According to the PBS database 21 tanks are listed at the property under the name P. Chimento Trucking Inc. (PBS No. 2-032816). The database lists 17 underground storage tanks and 4 aboveground storage tanks including (10) 550 gallon underground diesel tanks, (4) 550 gallon underground gasoline tanks, (2) 2,000 gallon underground fuel oil tanks, (4) 275 gallon aboveground tanks (unspecified) and (1) 5,000 gallon underground fuel oil tank. All of the tanks, with the exception of one 2,000 gallon fuel oil tank, are listed as closed - removed. The remaining 2,000 gallon tank is listed as administratively closed. The majority of the tanks were closed in 1992.

Leaks at the tanks and / or dispensers have occurred in this area and migrated to the shallow water table approximately 8 feet below the surface. Free phase fuel could then rise and fall with daily, monthly and seasonal water table fluctuations potentially resulting in a vertical "smear zone" of contaminated soil.

It is unclear if the metals contamination is related to shipbuilding and foundry operations at the Site or if it is simply related to fill materials brought into the Site. Metals including arsenic, cadmium, chromium, lead, mercury and zinc are known to be associated with iron works, though they are also found at elevated levels in fill materials throughout the area. The release scenario in this case would include dumping and spreading of foundry materials and / or fill materials at the Site. Whether this would have been done in specific areas or evenly across the entire site is

unknown but it is likely it would have been deposited in low areas with poor drainage and to generally raise the elevation of the site. Heavy metals are limited to shallow soils in some areas and in others to depths of 7 feet suggesting that both deposition scenarios occurred.

No significant off-gassing is occurring on site from the source area(s). This is evident by the general lack of petroleum vapors across the Site and the low concentrations of BTEX and other key parameters such as trimethylbenzene, ethylbenzene and xylene. With the exception of a single TCA detection beneath the main building's basement slab, CVOCs in soil gas are consistent with general background conditions observed throughout the area.

2.5.2 Description of Areas of Concern

The historic use of the Site as a trucking terminal has resulted in discharges of diesel fuel contaminating the site with elevated levels of SVOCs. The source of petroleum SVOCs reported in soil at the Site is the UST system located in north-central area of the Site. Elevated levels (above unrestricted SCOs) of metals and / or SVOCs are also present in fill materials to depths ranging from 2 to 7 feet below grade throughout the Site.

2.5.3 Soil/Fill Contamination

Petroleum impacted soil has been documented to a depth of 8 ft in the vicinity of B21 and B22 within the former UST and dispensers area. Releases have likely occurred from the tanks and piping which was formerly located in this area. Although high levels of SVOCs were reported in the 0.2 ft sample from B4, there was no physical evidence of petroleum impact in this area. No other source areas were identified during this investigation.

Six "hotspot" areas of elevated SVOCs related to fill materials are present in the vicinity of B4, B6, B17, B19, B32 and B34. Although the SVOCs in these areas are not related to a petroleum release, the presence of low but elevated (above standards) SVOCs in groundwater suggest that these areas may be affecting groundwater quality.

Historic fill material has been identified across the Site to depths as great as 7 feet below grade. The historic fill material contains metals including arsenic, barium, copper, chromium, lead, mercury, nickel and zinc above unrestricted and / or restricted residential use SCOs.

2.5.3.1 Summary of Soil/Fill Data

Soil sample results from the RI are summarized in **Tables 3-6**. Further information on soil sample collection, handling and analysis can be found in the RI Report (EBC 2/15).

2.5.3.2 Comparison of Soil/Fill with SCGs

Table 7 shows sample results above Track 1 Unrestricted SCOs and Site Specific SCOs for all overburden soil at the Site. **Figures 8A** and **8B** are spider maps which show soil boring locations and summarize sample results above Track 1 Unrestricted SCOs for all overburden soil. **Figure 9** is a Spider map showing all soil sample results above Site Specific SCOs.

2.5.4 On-Site and Off-Site Groundwater Contamination

Groundwater is not impacted at the Site with petroleum or metals related to the historic use of the Site. The SVOC's reported in groundwater were limited to those parameters with part per trillion standards and are a function the extremely low detection resolution which the laboratory was able to achieve. However, since several areas of the Site had SVOCs in fill materials at concentrations above the protection of groundwater SCOs, it is possible that the SVOCs in groundwater may be related to the SVOCs in the fill. Metals including sodium, manganese and iron are related to brackish conditions due to the proximity to the East River.

2.5.4.1 Summary of Groundwater Data

The results of groundwater samples collected during the RI are summarized in **Tables 8-11**. Further information on groundwater sample collection, handling and analysis can be found in the RI Report (EBC 2/15).

2.5.4.2 Comparison of Groundwater with SCGs

Sample results above GA groundwater standards in monitor wells prior to the remedy are shown in **Table 12**. Spider maps which show groundwater sampling locations and summarize results above GA groundwater standards prior to the remedy are shown in **Figure 10**.

2.5.5 On-Site and Off-Site Soil Vapor Contamination

Total petroleum related volatile organic compounds (BTEX) were generally low around the perimeter of and beneath the Site and there does not appear to be any correlation with the on-site source.

Chlorinated VOCs (CVOCs) were reported in all soil gas samples with PCE the most frequently detected followed by TCE and TCA with three detections each. PCE and TCE concentrations were generally low, are not related an on-site source and do not represent a potential vapor intrusion concern. TCA was detected in a subslab soil vapor at one location at a level which may require future monitoring.

2.5.5.1 Summary of Soil Vapor Data

A table of soil vapor data collected prior to the remedy is shown in **Table 13**. Posted soil gas results from the RI are shown on **Figure 11.** Further information on soil gas sample collection, handling and analysis can be found in the RI Report (EBC 2/15).

2.6 ENVIRONMENTAL AND PUBLIC HEALTH ASSESSMENTS

2.6.1 Qualitative Human Health Exposure Assessment

The objective of the qualitative exposure assessment under the BCP is to identify potential receptors to the contaminants of concern (COC) that are present at, or migrating from, the site. The identification of exposure pathways describes the route that the COC takes to travel from the source to the receptor. An identified pathway indicates that the potential for exposure exists; it does not imply that exposures actually occur. An exposure pathway has five elements; a contaminant source, release and transport mechanisms, point of exposure, route of exposure and a receptor population.

The potential exposure pathways identified below, represent both current and future exposure scenarios.

Contaminant Source

The source of petroleum SVOCs reported in soil at the Site is the UST system located in north-central area of the Site. Elevated levels (above unrestricted SCOs) of metals and / or SVOCs are also present in fill materials to depths ranging from 2 to 7 feet below grade throughout the Site. With the exception of a single detection of TCA, CVOCs reported in soil gas were generally low are not related to an on-site source.

Contaminant Release and Transport Mechanism

Petroleum contamination is present in subsurface soil in the vicinity of the fuel area in the north-central portion of the Site. The contamination does not extend vertically beyond a depth of 7 ft and has not impacted groundwater either directly or through transport water from the surface.

Impacted groundwater is not present on Site and is neither migrating from the Site or on to the Site. Low levels of SVOCs reported in several wells may be related to SVOCs in fill materials however. There does not appear to be any significant off gassing of petroleum VOCs from impacted soil on the Site. Chlorinated VOCs in soil vapor are low and do not represent a potential vapor intrusion concern with the exception of a single basement subslab location in which elevated levels of TCA were reported.

Point of Exposure, Route of Exposure and Potentially Exposed Populations

Potential On-Site Exposures: Remediation workers and construction workers engaged in the excavation of impacted and non-impacted soil at the site may be exposed to petroleum SVOCs, CVOCs and heavy metals through several routes. Workers excavating impacted soil may be exposed to SVOCs and heavy metals through inhalation, ingestion and dermal contact. Workers excavating non-impacted soil may be exposed to CVOCs in soil gas through inhalation. A site specific Health and Safety Plan has been developed to identify and minimize the potential hazards to on-site workers.

Under a future scenario, commercial - retail workers within a very limited area of the proposed south block building may be exposed to vapor intrusion if elevated levels of TCA remain following the existing building demolition. However, since the proposed building will not have a basement level, this potential would be reduced.

Potential Off-Site Exposures: No potential offsite exposures were identified from onsite contaminants.

2.6.2 Fish & Wildlife Remedial Impact Analysis

Since there are no VOCs or other contaminants in groundwater beyond those representative of background water quality, there are no potential off-site environmental impacts.

2.7 REMEDIAL ACTION OBJECTIVES

Based on the results of the Remedial Investigation, the following Remedial Action Objectives (RAOs) have been identified for this Site.

2.7.1 Groundwater

RAOs for Public Health Protection

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

RAOs for Environmental Protection

- Remove the source of ground or surface water contamination.

2.7.2 Soil

RAOs for Public Health Protection

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

RAOs for Environmental Protection

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

2.7.3 Soil Vapor

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

3.0 DESCRIPTION OF REMEDIAL ACTION PLAN

3.1 EVALUATION OF REMEDIAL ALTERNATIVES

The goal of the remedy selection process under the BCP is to select a remedy that is protective of human health and the environment taking into consideration the current, intended and reasonably anticipated future use of the property. The remedy selection process begins by establishing RAOs for media in which chemical constituents were found in exceedance of NYSDEC standards, criteria and guidance values (SCGs). A remedy is then developed based on the following nine criteria:

- Protection of human health and the environment;
- Compliance with SCGs;
- Short-term effectiveness and impacts;
- Long-term effectiveness and permanence;
- Reduction of toxicity, mobility, or volume of contaminated material;
- Implementability;
- Cost effectiveness;
- Community Acceptance; and
- Land use.

The first two criteria are threshold criteria and must be satisfied in order for an alternative to be considered for selection. The remaining seven criteria are balancing criteria which are used to compare the positive and negative aspects of each of the remedial alternatives, provided the alternative satisfies the threshold criteria.

3.2 STANDARDS, CRITERIA AND GUIDANCE (SCG)

A criterion for remedy selection is evaluation for conformance with SCGs that are applicable, relevant and appropriate. Principal SCGs that are applicable, relevant and appropriate for evaluating the alternatives for remediation of this BCP site include the following:

- 29 CFR Part 1910.120 - Hazardous Waste Operations and Emergency Response

- 10 NYCRR Part 67 – Lead
- 6 NYCRR Part 371 - Identification and Listing of Hazardous Wastes (November 1998)
- 6 NYCRR Part 372 - Hazardous Waste Manifest System and Related Standards for Generators, Transporters and Facilities (November 1998)
- 6 NYCRR Subpart 374-1 - Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities (November 1998)
- 6 NYCRR Part 375 - 6 NYCRR Part 375 Environmental Remediation Programs Subparts 375-1, 375-3 and 375-6 (December 2006)
- 6 NYCRR Part 376 - Land Disposal Restrictions
- 6 NYCRR Part 608 - Use and Protection of Waters
- 6 NYCRR Parts 700-706 - Water Quality Standards (June 1998)
- 6 NYCRR Part 750 through 758 - Implementation of NPDES Program in NYS ("SPDES Regulations")
- 6 NYCRR Part 375-6 Soil Cleanup Objectives
- New York State Groundwater Quality Standards – 6 NYCRR Part 703;
- NYSDEC Ambient Water Quality Standards and Guidance Values – TOGS 1.1.1;
- NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation - May 2010;
- NYSDEC Draft Brownfield Cleanup Program Guide – May 2004;
- New York State Department of Health (NYSDOH) Generic Community Air Monitoring Plan
- NYS Waste Transporter Permits – 6 NYCRR Part 364;
- NYS Solid Waste Management Requirements – 6 NYCRR Part 360 and Part 364.
- TAGM 4059 - Making Changes To Selected Remedies (May 1998)
- STARS #1 - Petroleum-Contaminated Soil Guidance Policy
- TAGM 3028 - "Contained In" Criteria for Environmental Media: Soil Action Levels (August 1997)
- DER-10, Technical Guidance for Site Investigation and Remediation, May 2010
- DER-23 / Citizen Participation Handbook for Remedial Programs, January 2010
- OSWER Directive 9200.4-17 - Use of Monitored Natural Attenuation at Superfund, RCRA Corrective Action, and Underground Storage Tank Sites (November 1997)

Additional regulations and guidance are applicable, relevant, and appropriate to the remedial alternatives and will be complied in connection with implementation of the remedial program; however, the list above is intended to represent the principal SCGs which should be considered in evaluating the remedial alternatives for the BCP site.

Conformance with the appropriate standards for remediation of contaminated soil is an important criterion in evaluating the remedial alternatives for the BCP site. Presently, in New York State 6 NYCRR Part 375 establishes the primary SCGs associated with remediation of contaminated soil at sites which are in the BCP. If proposing remediation pursuant to a Track other than Track 1 (Unrestricted Use), 6 NYCRR Part 375 requires evaluation of at least one remedial alternative pursuant to Track I (Unrestricted Use) and one other alternative developed by the applicant for the proposed use of the BCP site. The remedial alternatives presented in Section 3.3 of this work plan have been prepared in conformance with this requirement.

3.3 ALTERNATIVES ANALYSIS

The goal of the remedy selection process under the BCP is to select a remedy that is protective of human health and the environment taking into consideration the current, intended and reasonably anticipated future use of the property. The remedy selection process begins by establishing RAOs for media in which chemical constituents were found in exceedance of NYSDEC standards, criteria and guidance values (SCGs). A remedy is then developed based on the following nine criteria:

- Protection of human health and the environment;
- Compliance with SCGs;
- Short-term effectiveness and impacts;
- Long-term effectiveness and permanence;
- Reduction of toxicity, mobility, or volume of contaminated material;
- Implementability;
- Cost effectiveness;
- Community Acceptance; and
- Land use.

The following is a detailed description of the alternatives analysis and remedy selection to address impacted media at the Site. This analysis was prepared in accordance with 6 NYCRR Part 375-1.8(f) and Part 375-3.8(f) and Section 4.3(c) of NYSDEC DER-10. As required, a minimum of two remedial alternatives (including a Track 1 scenario) are evaluated, as follows:

- Alternative 1 - Track 1, remediation of all soils above bedrock to unrestricted use criteria. Excavation to a minimum depth of 8 feet across the Site. This alternative does not allow the use of long-term institutional /engineering controls to address impacted media or prevent exposures which may be required beneath the new building.

- Alternative 2 - Track 4, remediation of all soils to Restricted Residential use SCOs for the top 2 feet of soil to prevent direct exposure and excavation / removal of those soils with SVOC parameters above groundwater protection SCOs which are also present above groundwater standards. This alternative would require a lesser degree of excavation than Alternative 1 consisting of the excavation of petroleum impacted soil in the vicinity of the former fueling area and excavation of hotspot areas for SVOCs above groundwater protection SCOs in the top 3 feet of soil in the vicinity of B4, B6, B17, B19, B32 and B34. Approximately 2 feet of clean fill meeting Restricted Residential use SCOs would then be brought in to raise the Site, capping all planned exposed soil areas and planned building areas. Long-term institutional /engineering controls are allowed to address or prevent exposures from soil vapor, if required.

3.4 REMEDIAL ALTERNATIVE 1

The following sections provide an evaluation of Alternative 1 based on the nine evaluation criteria as previously discussed.

3.4.1 Overall Protection of Human Health and the Environment

Alternative 1 will be protective of human health and the environment by eliminating constituents in soil related to historic fill. The potential for human and environmental exposure to these constituents on-site will be eliminated by excavation of all historic fill soils and hotspot areas with parameters in excess of unrestricted criteria, disposing of excavated materials off-site and

backfilling as needed with certified clean fill, virgin mined materials or recycled concrete materials from a NYSDEC permitted recycling facility.

Potential post-remediation exposures to on-site residents from soil vapors are not expected to require the long term (>5 yrs) operation of SSD systems. However, if long term operation of an SSD systems were required it would eliminate attainment of this cleanup Track. Groundwater use will also be restricted at the Site even though such a restriction is unnecessary due to brackish conditions and NYC prohibitions on groundwater usage.

During remedial and construction activity workers and area residents may be exposed to impacted soil and vapors. Worker exposure to soil and vapors will be minimized through implementation of a Health and Safety Plan. Exposures to area residents from dust and/or vapors will be minimized through the use of engineering controls and through implementation of a Community Air Monitoring Plan (CAMP).

3.4.2 Compliance with Remedial Goals, SCGs and RAOs

Alternative 1 will achieve compliance with the remedial goals, SCGs and RAOs for soil through source removal to Track 1 unrestricted cleanup levels. SCGs for groundwater may not be achieved as the groundwater is of poor quality affected by brackish conditions from the adjacent river. Compliance with SCGs for soil vapor is expected following completion of the remedial action.

3.4.3 Long-Term Effectiveness and Permanence

Alternative 1 achieves long term effectiveness and permanence by permanently removing and/or remediating all soils affected by Site contaminants or historic fill materials. Under this Alternative, risk from soil impacts is eliminated though risk from groundwater will remain unless the off-site source is identified and remedied. Alternative 1 will continue to meet RAOs for soil in the future, providing a permanent long-term solution for the Site.

3.4.4 Reduction in Toxicity, Mobility or Volume Through Treatment

Alternative 1 will permanently eliminate the toxicity, mobility, and volume of contaminants from on-site soil by meeting unrestricted objectives.

3.4.5 Short-Term Effectiveness

The potential for short-term adverse impacts and risks to the workers, the community, and the environment during the implementation of Alternative 1 is minimal.

Short-term exposure to on-site workers during excavation and loading activities will be addressed with a HASP and mitigated through the use of personal protective equipment, monitoring and engineering controls. Potential short-term exposure to the surrounding community will be addressed through the use of odor and dust-suppression techniques and through the implementation of a CAMP which will require air monitoring activities during all excavation and soil disturbance activities.

Other potential impacts to the community such as construction-related noise, vibrations and traffic, will be controlled and regulated under the terms of the NYS Department of Buildings issued building permit which can place a Stop Work Order on the property for unsafe conditions, community impacts or violation of the terms and conditions of the permit. Decontamination procedures of equipment, including trucks transporting soil to off-site disposal facilities, will minimize the potential for impacted soil to be dispersed beyond the Site boundary. A truck traffic plan has also been prepared to minimize disturbance to the local roads and community.

3.4.6 Implementability

The techniques, materials and equipment to implement Alternative 1 are readily available and have been proven effective in remediating the contaminants associated with the Site. Excavation for the remediation of soils is both a "low tech" and reliable method which has a long and proven track record on the remediation of hazardous waste and petroleum spill sites.

However, excavation to a depth of 8 ft or more over a 4.88 acre site located adjacent to a river represents considerable technical challenges which in this case limit its feasibility. Sloping and shoring requirements and dewatering would present significant construction challenges and would impede and interfere with the construction of the new buildings.

3.4.7 Cost

Costs associated with Alternative 1 are estimated at approximately $10,528,208. This cost estimate includes the following elements and assumptions:

- Excavate a minimum of 8 feet across entire Site. Over-excavate as necessary to remediate hotspot areas and remove all historic fill at the Site;
- Excavate petroleum impacted soil area to a depth of 10 ft in 7,000 sf former fueling area;
- Shoring to allow excavation to 8 ft depth at property lines;
- Dewatering in western third of the Site to allow excavation to 8 ft depth;
- Disposal of approximately 3,982 tons of petroleum impacted non-hazardous soil from the former fueling area;
- Disposal of approximately 1,555 tons of high lead non-hazardous soil from elevated lead (>1,500 mg/kg) areas;
- Disposal of approximately 88,926 tons of historic fill soil as non-hazardous;
- Backfilling excavations and then raise Site 2 ft with certified clean fill meeting unrestricted SCOs (approximately 78,674 cy);
- HASP and CAMP monitoring for the duration of the remedial activities.

3.4.8 Compatibility with Land Use

The proposed redevelopment of the Site is compatible with its current R6-R7 residential / C2-4 commercial overlay zoning. Following remediation, the Site will meet unrestricted use objectives which will exceed the objectives for its planned multi-tenant residential and commercial / retail use. A groundwater use restriction will be required to prevent future exposure to affected groundwater.

3.4.9 Community Acceptance

No questions regarding the Site have been raised regarding remedial options to date. This RAWP will be subject to a 45-day public comment period to determine if the community had comments on the presented remedial alternatives and selected remedy. If no comments were received regarding Alternative 1, it is considered to be acceptable to the community.

3.5 REMEDIAL ALTERNATIVE 2

The following sections provide an evaluation of Alternative 2 based on the nine evaluation criteria as previously discussed.

3.5.1 Overall Protection of Human Health and the Environment

Alternative 2 will be protective of human health and the environment by eliminating constituents related to petroleum and by the removal of the top 3 feet of soil with SVOCs above groundwater protection SCOs. The potential for human and environmental exposure to these constituents on-site will be eliminated by excavation of the petroleum impacted and SVOC hotspot areas and then capping exposed soil areas with 2 feet of soil which meets restricted residential SCOs. Groundwater use will be restricted at the Site until groundwater quality recovers.

During remedial and construction activity, workers and area residents may be exposed to impacted soil and vapors. Worker exposure to soil and vapors will be minimized through implementation of a HASP. Exposures to area residents from dust and or vapors will be minimized through the use of engineering controls and through implementation of a CAMP.

3.5.2 Compliance with Remedial Goals, SCGs and RAOs

Alternative 2 will achieve compliance with the remedial goals, SCGs and RAOs for soil through petroleum source and hotspot removal and then raising the site 2 feet with soil meeting restricted residential SCOs. SCGs for groundwater may not be achieved as the groundwater is affected by brackish conditions from the adjacent river. Compliance with SCGs for soil vapor is expected following completion of the remedial action.

3.5.3 Long-term Effectiveness and Permanence

Alternative 2 achieves long term effectiveness and permanence by permanently removing and/or remediating soils affected by Site contaminants above site specific objectives. Under this Alternative risk from soil impacts is eliminated for on-site residents. Alternative 2 will continue to meet RAOs for soil in the future, providing a permanent long-term solution for the Site.

3.5.4 Reduction in Toxicity, Mobility or Volume through Treatment

Alternative 2 will permanently eliminate the toxicity, mobility, and volume of contaminants from on-site soil by removing petroleum impacted soil and by meeting groundwater protection SCOs for SVOCs present above standards in groundwater and restricted residential objectives in the upper 2 feet of soil.

3.5.5 Short-term Effectiveness

The potential for short-term adverse impacts and risks to the workers, the community, and the environment during the implementation of Alternative 2 is minimal. Short-term exposure to on-site workers during excavation and loading activities will be addressed with a HASP and mitigated through the use of personal protective equipment, monitoring and engineering controls. Potential short-term exposure to the surrounding community will be addressed through the use of odor and dust-suppression techniques and through the implementation of a CAMP which will require air monitoring activities during all excavation and soil disturbance activities.

Other potential impacts to the community such as construction-related noise, vibrations and traffic will be controlled and regulated under the terms of the NYS Department of Buildings issued building permit which can place a Stop Work Order on the property for unsafe conditions, community impacts or violation of the terms and conditions of the permit. Decontamination procedures of equipment, including trucks transporting soil to off-site disposal facilities will minimize the potential for impacted soil to be dispersed beyond the Site boundary. A truck traffic plan will also be prepared to minimize disturbance to the local roads and community.

3.5.6 Implementability

The techniques, materials and equipment to implement Alternative 2 are readily available and have been proven effective in remediating the contaminants associated with the Site. Excavation for the remediation of soils is both a "low tech" and reliable method which has a long and proven track record on the remediation of hazardous waste and petroleum spill sites.

3.5.7 Cost

Costs associated with Alternative 2 are estimated at $ 1,077,076. This cost estimate includes the following elements and assumptions:

- Excavate petroleum impacted soil area to a depth of 10 ft within a 25 diameter (1,963 sf) portion of the former fueling area;
- Excavate to a depth of 3 feet within a 10 ft diameter SVOC hotspot area around B4, B6,B17, B19, B32 and B34 (471 sf combined);
- Disposal of approximately 1,090 tons of petroleum impacted non-hazardous soil from the former fueling area;
- Disposal of approximately 78.5 tons of non-hazardous soil from the SVOC hotspot areas;
- Backfilling excavations (779 cy) and basement (3,660 cy) using soil from beneath terminal building (47,801 sf x 4 ft = 7,100 cy).
- Disposing of approximately 3,991 tons (2,661 cy) of excess soil beneath building terminal as non hazardous;
- Capping the entire Site with the building foundations, concrete walkways, asphalt driveways or 2 ft of soil meeting Restricted Residential Use and Groundwater Protection SCOs.
- Import of certified clean fill meeting Restricted Residential Use and Groundwater Protection SCOs (approximately 12,483 cy);
- HASP and CAMP monitoring for the duration of the remedial activities;
- Implementation of a Site Management Plan (SMP) for long term maintenance of the Engineering Controls;
- Filing an Environmental Easement to ensure implementation of the SMP.

3.5.8 Compatibility with Land Use

The proposed redevelopment of the Site is compatible with its current current R6-R7 residential / C2-4 commercial overlay zoning. Following remediation the Site will meet restricted residential use objectives which is appropriate for its planned multi-tenant residential use. A groundwater use restriction will be required to prevent future exposure to affected groundwater.

3.5.9 Community Acceptance

No questions regarding the Site have been raised regarding remedial options to date. This RAWP will be subject to a 45-day public comment period to determine if the community had any

comments on the presented remedial alternatives and selected remedy. If no comments are received, it is considered to be acceptable to the community.

3.6 SELECTION OF THE PREFERRED REMEDY

The remedy recommended for the site is a Track 4 alternative (Alternative 2) which consists of the excavation of petroleum impacted soil to a depth of 10 feet within a 25 ft diameter portion of the former fueling area and in to a depth of 3 ft below surface grade within a 10 ft diameter area around each of the six hot spot SVOC areas, backfilling the excavations and basement area using soil from beneath the raised terminal platform building and capping the entire Site with the building foundations, concrete walkways, asphalt driveways or 2 ft of soil meeting Restricted Residential SCOs.

All materials used cap the Site to a depth of two feet will either consist of clean virgin mined materials or certified fill which meets Restricted Residential use SCOs.

3.6.1 Preferred Remedy Land Use Factor Evaluation

As required by Article 27, Title 14 of the Environmental Conservation Law 27-1415, the following land use factor evaluation examines whether the preferred alternative is acceptable based on the 14 criteria presented in the following subsections.

Zoning

The proposed redevelopment project, which includes the construction of 4 new mixed-use tower-base buildings is in compliance with the R6-R7 residential / C2-4 commercial overlay zoning. Therefore the project will be constructed as-of-right regardless of the remedy implemented. The preferred remedy will comply with current zoning.

Applicable Comprehensive Community Master Plans or Land Use Plans

The proposed redevelopment project and selected remedy are consistent with comprehensive master and land use plans, specifically the Greenpoint - Willamsburg Land Use and Waterfront Plan (CEQR No. 04DCP003K). This area-wide comprehensive re-zoning was completed by the New York City Department of City Planning and adopted by the City Council in May 11, 2005. The preferred remedy will be in full compliance with this applicable land use plan.

Surrounding Property Uses

The land use in the immediate vicinity of the Site includes heavy commercial / industrial properties to the north, light commercial uses to the east with residential homes beyond, a large warehouse building used by the MTA to the south followed by a major oil storage facility (MOSF).

The proposed remedy will not interfere with surrounding property uses and considers the short term affects to neighboring residences.

Citizen Participation

Citizen participation for implementation of the preferred alternative will be performed in accordance with DER 23 and NYCRR Part 375-1.10 and Part 375-3.10. A Citizen Participation Plan has been prepared and is available for public review at the identified document repositories (NYSDEC Region 2 Office, Greenpoint Branch of the Brooklyn Public Library).

Environmental Justice Concerns

The Site is not located within a potential environmental justice area. The NYSDEC defines a potential environmental justice area as a "minority or low-income community that may bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies".

Environmental justice means the fair treatment and meaningful involvement of all people regardless of race, color, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people, including a racial, ethnic, or socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies.

Since the project is not within a potential Environmental Justice area, the remedy poses no environmental justice concerns.

Land use designations

The proposed remedy is consistent with land-use designations.

Population growth patterns

Population growth patterns support the proposed use for the Site. The preferred remedy will not negatively affect on population growth patterns.

Accessibility to existing infrastructure

The Site is accessible to existing infrastructure. The close proximity of the Site to the Greenpoint Avenue, McGuiness Boulevard, The Long Island Expressway and the Brooklyn - Queens Expressway (I-287) will assist soil transportation and contractor access to the Site. The Site is also accessible to mass transit and is within walking distance to the G-line subway which has subway stops on Greenpoint Avenue and Nassau street both about 7-8 blocks from the Site. The preferred remedy will not alter accessibility to existing infrastructure.

Proximity to cultural resources

The proposed remedy will not negatively impact cultural resources

Proximity to natural resources

The proposed remedy will improve the local environment and will not negatively impact affect natural resources.

Off-Site groundwater impacts

The proposed remedy will not affect groundwater and will not affect natural resources.

Proximity to floodplains

The Site is located within a high risk flood zone. Raising the Site 2 feet as part of the remedy will reduce the risk of flooding at the Site.

Geography and geology of the Site

The selected remedy will raise the Site approximately 2 feet above current grade level. The selected alternative and development of the site have considered the geography and geology of the Site.

Current Institutional Controls

The Site was assigned an E-designation for hazardous materials as part of the rezoning action completed by the City. The compliance with the E-designation for hazardous materials will require the approval of the NYC Office of Environmental Remediation (NYCOER) of this RAWP. NYCOER must approve this RAWP in the form of a Notice to Proceed (NTP) letter before building permits will be released by the NYC Department of Buildings (DOB). Documentation in the form of a Final Engineering Report (FER) for site remediation must be approved by NYCOER in the form of a Notice of Satisfaction (NOS) before the NYCDOB will issue permanent Certificates of Occupancy for the new buildings.

3.7 SUMMARY OF SELECTED REMEDIAL ACTIONS

The remedy recommended for the site is a Track 4 alternative (Alternative 2) which consists of the excavation of petroleum impacted soil to a depth of 10 feet within a 25 ft diameter portion of the former fueling area and in to a depth of 3 ft below surface grade within a 10 ft diameter area around each of the six hot spot SVOC areas, backfilling the excavations and basement area using soil from beneath the raised terminal platform building and capping the entire Site with the building foundations, concrete walkways, asphalt driveways or 2 ft of soil meeting Restricted Residential SCOs.

All soil excavated from the petroleum impact hotspot areas will be removed from the Site and properly disposed of at an off-site facility. The remedy will include the following items:

1. Excavation of soil/fill exceeding groundwater protection SCOs for those parameters in groundwater above standards as listed in **Table 1** to depths as great as 10 feet below grade;
2. Screening for indications of contamination (by visual means, odor, and monitoring with PID) of all excavated soil during any intrusive Site work;

3. Collection and analysis of end-point samples to evaluate the performance of the remedy with respect to attainment of groundwater protection SCOs for SVOCs present in groundwater above standards;
4. Appropriate off-Site disposal of all material removed from the Site in accordance with all Federal, State and local rules and regulations for handling, transport, and disposal;
5. Capping the entire Site with the building foundations, concrete walkways, asphalt driveways or 2 ft of soil meeting Restricted Residential SCOs.
6. Import of materials to be used for backfill and cover in compliance with: (1) chemical limits and other specifications included in **Table 2**, (2) all Federal, State and local rules and regulations for handling and transport of material.
7. Implementation of a Site Management Plan (SMP) for long term maintenance of the Engineering Controls.
8. An Environmental Easement will be filed against the Site to ensure implementation of the SMP.

All responsibilities associated with the Remedial Action, including permitting requirements and pretreatment requirements, will be addressed in accordance with all applicable Federal, State and local rules and regulations.

Remedial activities will be performed at the Site in accordance with this NYSDEC-approved RAWP. All deviations from the RAWP will be promptly reported to NYSDEC for approval and fully explained in the FER.

4.0 REMEDIAL ACTION PROGRAM

The objective of this section of the Remedial Action Work Plan, is to present a scope of work which will be approved by NYSDEC and when completely implemented will ready the BCP site for development under the Contemplated Use consistent with the requirements of the Brownfield Cleanup Program.

4.1 GOVERNING DOCUMENTS

Governing documents and procedures included in the Remedial Work Plan include a Site-specific Health and Safety Plan (HASP), a Community Air Monitoring Plan (CAMP), a Citizen Participation Plan, a Soil Management Plan (SoMP), a Quality Assurance Project Plan (QAPP), fluid management procedures, and contractors' site operations and quality control procedures. Highlights of these documents and procedures are provided in the following sections.

4.1.1 Health & Safety Plan (HASP)

Contractors and subcontractors will have the option of adopting this HASP or developing their own site-specific document. If a contractor or subcontractor chooses to prepare their own HASP, the Remedial Engineer will insure that it meets the minimum requirements as detailed in the site-specific HASP prepared for the Site.

Activities performed under the HASP will comply with applicable parts of OSHA Regulations, primarily 29 CFR Parts 1910 and 1926. Modifications to the HASP may be made with the approval of the Remedial Engineer (RE), Site Safety Manager (SSM) and/or Project Manager (PM).

All remedial work performed under this plan will be in full compliance with governmental requirements, including Site and worker safety requirements mandated by Federal OSHA.

The Volunteer and associated parties preparing the remedial documents submitted to the State and those performing the construction work, are completely responsible for the preparation of an

appropriate Health and Safety Plan and for the appropriate performance of work according to that plan and applicable laws.

The Health and Safety Plan (HASP) and requirements defined in this Remedial Action Work Plan pertain to all remedial and invasive work performed at the Site until the issuance of a Certificate of Completion.

The Site Safety Coordinator will be Ms. Chawinie Miller. Her resume is provided in **Attachment F**. Confined space entry will comply with all OSHA requirements to address the potential risk posed by combustible and toxic gasses. A copy of the Site Specific Health and Safety Plan is provided in **Attachment B.**

4.1.2 Quality Assurance Project Plan (QAPP)

The fundamental QA objective with respect to accuracy, precision, and sensitivity of analysis for laboratory analytical data is to achieve the QC acceptance of the analytical protocol. The accuracy, precision and completeness requirements will be addressed by the laboratory for all data generated.

Collected samples will be appropriately packaged, placed in coolers and shipped via overnight courier or delivered directly to the analytical laboratory by field personnel. Samples will be containerized in appropriate laboratory provided glassware and shipped in plastic coolers. Samples will be preserved through the use of ice or a cold-pak(s) to maintain a temperature of 4^{o}C.

Dedicated disposable sampling materials will be used for both soil and groundwater samples (if collected), eliminating the need to prepare field equipment (rinsate) blanks. However, if non-disposable equipment is used, (stainless steel scoop, etc.) field rinsate blanks will be prepared at the rate of 1 for every eight samples collected.

Decontamination of non-dedicated sampling equipment will consist of the following:

- Gently tap or scrape to remove adhered soil

- Rinse with tap water
- Wash with alconox® detergent solution and scrub
- Rinse with tap water
- Rinse with distilled or deionized water

Prepare field blanks by poring distilled or deionized water over decontaminated equipment and collecting the water in laboratory provided containers. Trip blanks will accompany samples each time they are transported to the laboratory. Matrix spike and matrix spike duplicates (MS/MSD) will be collected at the rate of one per 20 samples submitted to the laboratory. Laboratory reports will be upgradeable to ASP category B deliverables for use in the preparation of a data usability report (DUSR). The QAPP for the Site is provided in **Attachment C**.

4.1.3 Construction Quality Assurance Plan (CQAP)

All construction work related to the remedy (i.e. soil excavation) will be monitored by EBC field personnel under the direct supervision of the Remedial Engineer. Monitoring during soil excavation will be performed to protect the health of site workers and the surrounding community. A Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP) have been specifically developed for this project. These plans specify the monitoring procedures, action levels, and contingency measures that are required to protect public health.

All intrusive and soil disturbance activities will be monitored by an environmental professional (EP) under the direct supervision of the Remedial Engineer who will record observations in the site field book and complete a photographic log of the daily activities. The EP will provide daily updates to the Project Manager and Remedial Engineer who will both make periodic visits to the site as needed to assure construction quality.

4.1.4 Soil/Materials Management Plan (SoMP)

A SoMP has been prepared for excavation, handling, storage, transport and disposal of all soils/materials that are disturbed / excavated at the Site. The SoMP includes all of the controls that will be applied to these efforts to assure effective, nuisance-free performance in compliance

with all applicable Federal, State and local laws and regulations. The SoMP is presented in Section 5.4.

4.1.5 Erosion and Sediment Control Plan (ESCP)

Erosion and sediment controls will be performed in conformance with requirements presented in the New York State Guidelines for Urban Erosion and Sediment Control. Typical measures that will be utilized at various stages of the project to limit the potential for erosion and migration of soil include the use of hay bales, temporary stabilized construction entrances/exits, placement of silt fencing and/or hay bales around soil stockpiles, and dust control measures.

4.1.6 Community Air Monitoring Plan (CAMP)

The CAMP provides measures for protection for on-site workers and the downwind community (i.e., off-site receptors including residences, businesses, and on-site workers not directly involved in the remedial work) from potential airborne contaminant releases resulting from remedial activities. When the excavation area is within 20 feet of potentially exposed populations or occupied structures, the perimeter monitoring points will be located to represent the nearest potentially exposed individuals and locations of ventilation system intakes for nearby structures (i.e apartment buildings) at the downwind location.

The action levels specified require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that the remedial work did not spread contamination off-site through the air.

The primary concerns for this site are vapors, nuisance odors and dust particulates. The CAMP prepared for implementation of the RAWP is provided in **Attachment D**.

4.1.7 Contractors Site Operations Plan (SOP)

The Remedial Engineer has reviewed all plans and submittals for this remedial project (including those listed above and contractor and sub-contractor document submittals) and confirms that they are in compliance with this RAWP. The Remedial Engineer is responsible to ensure that all later document submittals for this remedial project, including contractor and sub-contractor document

submittals, are in compliance with this RAWP. All remedial documents will be submitted to NYSDEC and NYSDOH in a timely manner and prior to the start of work.

4.1.8 Citizen Participation Plan (CPP)

A certification of mailing will be sent by the Volunteer to the NYSDEC project manager following the distribution of all Fact Sheets and notices that includes: (1) certification that the Fact Sheets were mailed, (2) the date they were mailed; (3) a copy of the Fact Sheet, (4) a list of recipients (contact list); and (5) a statement that the repository was inspected on (specific date) and that it contained all of applicable project documents.

No changes will be made to approved Fact Sheets authorized for release by NYSDEC without written consent of the NYSDEC. No other information, such as brochures and flyers, will be included with the Fact Sheet mailing. The approved Citizen Participation Plan for this project is provided in **Attachment E**.

Document repositories have been established at the following locations and contain all applicable project documents:

Brooklyn Public Library - Greenpoint Branch
107 Norman Ave
Brooklyn, NY 11222

Hours:
Sunday: Closed
Monday: 10am- 6pm
Tuesday: 1pm- 6pm
Wednesday & Thursday: 1pm- 8pm
Friday: 10am - 6pm
Saturday 10am - 5pm

4.2 GENERAL REMEDIAL ACTION INFORMATION

4.2.1 Project Organization

The Project Manager for the Remedial Activity will be Mr. Robert Bennett. Overall responsibility for the BCP project will be Mr. Charles B. Sosik, P.G., P.HG. The Remedial Engineer for this project is Mr. Ariel Czemerinski, P.E. Resumes of key personnel involved in the Remedial Action are included in **Attachment F**.

4.2.2 Remedial Engineer

The Remedial Engineer for this project will be Mr. Ariel Czemerinski, P.E. The Remedial Engineer is a registered professional engineer licensed by the State of New York. The Remedial Engineer will have primary direct responsibility for implementation of the remedial program for the Site. The Remedial Engineer will certify in the Final Engineering Report that the remedial activities were observed by qualified environmental professionals under his supervision and that the remediation requirements set forth in the Remedial Action Work Plan and any other relevant provisions of ECL 27-1419 have been achieved in full conformance with that Plan. Other Remedial Engineer certification requirements are listed later in this RAWP.

The Remedial Engineer will coordinate the work of other contractors and subcontractors involved in all aspects of remedial construction, including soil excavation, stockpiling, characterization, removal and disposal, air monitoring, emergency spill response services, import of back fill material, and management of waste transport and disposal. The Remedial Engineer will be responsible for all appropriate communication with NYSDEC and NYSDOH.

The Remedial Engineer will review all pre-remedial plans submitted by contractors and subcontractors involved in all aspects of remedial construction, including soil excavation, stockpiling, characterization, removal and disposal, air monitoring, emergency spill response services, import of back fill material, and management of waste transport and disposal, and will certify compliance in the Final Remediation Report. The Remedial Engineer will provide the certifications listed in Section 10.1 in the Final Engineering Report.

4.2.3 Remedial Action Schedule

The remedial action will begin with mobilization of equipment and material to the Site, which will begin approximately 2 weeks following RAWP approval and issuance of the building permit, and within 10 days of the distribution of the remedial construction Fact Sheet. A pre-construction meeting will be held among NYSDEC, the Remedial Engineer, and the selected remedial contractor prior to site mobilization. Mobilization will be followed by soil removal and disposal and confirmation sampling. The work is expected to take 16-20 weeks as part of the site preparation.

4.2.4 Work Hours

The hours for operation of remedial construction will conform to the New York City Department of Buildings construction code requirements or according to specific variances issued by that agency. DEC will be notified by the Applicant of any variances issued by the Department of Buildings. NYSDEC reserves the right to deny alternate remedial construction hours.

4.2.5 Site Security

A construction fence will be erected around the entire property as required by the NYC Department of Buildings. The fence will be maintained as required and secured at the end of each work day.

4.2.6 Traffic Control

The Volunteer's construction management personnel will direct the arrival or departure of construction vehicles, and provide flag services as needed to maintain safe travel exiting and entering the Site from West Street. Traffic related to on-going remedial activity will require the staging of 10-wheel dump trucks along West Street on a daily basis during soil excavation activity. The soil disposal transport route will be as follows:

- ENTERING SITE - from the Long Island Expressway (I-495) heading west; take the Greenpoint Avenue exit to Greenpoint Avenue heading southwest. Continue southwest on Greenpoint Avenue to its terminus at West Street. Turn left heading south on West Street to the Site Entrance on the right.

- EXITING SITE – Turn left onto West Street heading north to Greenpoing Avenue. Turn right onto Greenpoint Avenue heading northeast to the Long Island Expressway (I-495).

A map showing the truck routes is included as **Figure 12**.

4.2.7 Worker Training and Monitoring

An excavation contractor will remove historic fill and petroleum-contaminated soil. The excavation contractor's on-site personnel will have a minimum of 24 hour Hazardous Waste Operations and Emergency Response Operations training.

All field personnel involved in remedial activities will participate in training, if required, under 29 CFR 1910.120, including 24 and 40-hour hazardous waste operator training and annual 8-hour refresher training. The Site Safety Officer will be responsible for maintaining workers training records.

Personnel entering any exclusion zone will be trained in the provisions of the HASP and be required to sign an HASP acknowledgment.

All on-site personnel engaged in remedial or sampling activities must receive adequate site-specific training in the form of an on-site Health and Safety briefing prior to participating in field work with emphasis on the following:

- Protection of the adjacent community from hazardous vapors and / or dust which may be released during intrusive activities.
- Identification of chemicals known or suspected to be present on-site and the health effects and hazards of those substances.
- The need for vigilance in personnel protection, and the importance of attention to proper use, fit and care of personnel protective equipment.
- Decontamination procedures.
- Site control including work zones, access and security.
- Hazards and protection against heat or cold.

- The proper observance of daily health and safety practices, such as entry and exit of work zones and site. Proper hygiene during lunch, break, etc.
- Emergency procedures to be followed in case of fire, explosion and sudden release of hazardous gases.

4.2.8 Agency Approvals

The Applicant has addressed all SEQRA requirements for this Site. All permits or government approvals required for remedial construction have been, obtained prior to the start of remedial construction.

The planned end use for the Site is in conformance with the current zoning for the property as determined by New York City Department of Planning. A Certificate of Completion will not be issued for the project unless conformance with zoning designation is demonstrated.

A complete list of all local, regional and national governmental permits, certificates or other approvals or authorizations required to perform the remedial and development work is attached in **Table 14**. This list includes a citation of the law, statute or code to be complied with, the originating agency, and a contact name and phone number in that agency. This list will be updated in the Final Remediation Report.

4.2.9 NYSDEC BCP Signage

A project sign will be erected at the main entrance to the Site prior to the start of any remedial activities. The sign will indicate that the project is being performed under the New York State Brownfield Cleanup Program. The sign will meet the detailed specifications provided by the NYSDEC Project Manager and contained in **Attachment G**.

4.2.10 Pre-Construction Meeting with NYSDEC

A pre-construction meeting with the Project Manager, Remedial Engineer, Construction Manager, Owner's Representative and the NYSDEC will take place prior to the start of major construction activities.

4.2.11 Emergency Contact Information

An emergency contact sheet with names and phone numbers is included in **Table 15**. That document will define the specific project contacts for use by NYSDEC and NYSDOH in the case of a day or night emergency.

4.2.12 Remedial Action Costs

The total estimated cost of the Remedial Action is $ 1,077,076. An itemized and detailed summary of estimated costs for all remedial activity is attached as **Attachment H**. This will be revised based on actual costs and submitted as an Appendix to the Final Remediation Report.

4.3 SITE PREPARATION

4.3.1 Mobilization

Mobilization will include the delivery of construction equipment and materials to the site. All construction personnel will receive site orientation and training in accordance with the site specific HASP, CAMP and established policies and procedures to be followed during the implementation of the RAWP. The remediation contractor, construction manager and all associated subcontractors will each receive a copy of the RAWP and the site specific HASP and will be briefed on their contents.

4.3.2 Erosion and Sedimentation Controls

Soil erosion and sediment control measures for management of storm water will be installed in accordance with the New York Guidelines for Urban Erosion and Sediment Control. Haybales and/or silt fence will be placed by the remedial contractor at locations surrounding excavation areas and within the perimeter fencing as needed, to control stormwater runoff and surface water from exiting the excavation. These control measures will be installed prior to initiating the soil excavation.

4.3.3 Stabilized Construction Entrance(s)

Stabilized construction entrances will be installed at all points of vehicle ingress and egress to the Site. The stabilized entrances will be constructed of a 4 to 6-inch bed of crushed stone or crushed concrete which will be sloped back toward the interior of the Site. The stabilized

entrances will be inspected on a daily basis during soil loading activities and reinforced as needed with additional stone/concrete material to prevent the accumulation of ruts, mud or soil.

4.3.4 Utility Marker and Easements Layout

The Applicant and its contractors are solely responsible for the identification of utilities that might be affected by work under the RAWP and implementation of all required, appropriate, or necessary health and safety measures during performance of work under this RAWP. The Applicant and its contractors are solely responsible for safe execution of all invasive and other work performed under this RAWP. The Applicant and its contractors must obtain any local, State or Federal permits or approvals pertinent to such work that may be required to perform work under this RAWP. Approval of this RAWP by NYSDEC does not constitute satisfaction of these requirements.

The presence of utilities and easements on the Site has been investigated by the Remedial Engineer. It has been determined that no risk or impediment to the planned work under this Remedial Action Work Plan is posed by utilities or easements on the Site.

4.3.5 Sheeting and Shoring

Appropriate management of structural stability of on-Site or off-Site structures during on-Site activities including excavation is the sole responsibility of the Applicant and its contractors. The Applicant and its contractors are solely responsible for safe execution of all invasive and other work performed under this Plan. The Applicant and its contractors must obtain any local, State or Federal permits or approvals that may be required to perform work under this Plan. Further, the Applicant and its contractors are solely responsible for the implementation of all required, appropriate, or necessary health and safety measures during performance of work under the approved Plan.

4.3.6 Equipment and Material Staging

All equipment and work materials will be staged on-Site in areas as designated by the General Contractor, and / or Construction Site Superintendant.

4.3.7 Decontamination Area

A temporary truck decontamination pad will be constructed to decontaminate trucks and other vehicles/equipment leaving the Site. The pad will be constructed by placing a stone aggregate such as crushed rock or RCA. The pad will be bermed at the sides and sloped back to the interior of the Site. The truck pad will be sized to accommodate the largest construction vehicle used and located in line with the stabilized construction entrance.

4.3.8 Site Fencing

A chain link fence currently surrounds the property with entrance / exit gates located on West Street. This fence will be properly secured at the end of the day and supplemented, as needed, by installing orange safety fencing around open excavations to ensure on-site worker safety.

4.3.9 Demobilization

Demobilization will consist of the restoration of material staging areas and the disposal of materials and/or general refuse in accordance with acceptable rules and regulations. Materials used in remedial activities will be removed and disposed properly. All equipment will be decontaminated prior to leaving the Site.

4.4 REPORTING

All daily and monthly Reports will be included in the Final Engineering Report.

4.4.1 Daily Reports

Daily reports will be submitted to NYSDEC and NYSDOH Project Managers by the end of each day in which remedial activity takes place. Daily reports will include:

- An update of progress made during the reporting day;
- Quantities of oxidant material applied at specific injection locations of the Site;
- A summary of any and all complaints with relevant details (names, phone numbers);
- A summary of CAMP finding, including excursions;
- An explanation of notable Site conditions.

Daily reports are not intended to be the mode of communication for notification to the NYSDEC of emergencies (accident, spill), requests for changes to the RAWP or other sensitive or time critical information. However, such conditions must also be included in the daily reports. Emergency conditions and changes to the RAWP will be addressed directly to NYSDEC Project Manager via personal communication.

These reports will include a summary of air sampling results, odor and dust problems and corrective actions, and all complaints received from the public.

4.4.2 Monthly Reports

Monthly reports will be submitted to NYSDEC and NYSDOH Project Managers within one week following the end of the month of the reporting period and will include:

- Activities relative to the Site during the previous reporting period and those anticipated for the next reporting period, including a quantitative presentation of work performed (i.e. tons of material exported and imported, etc.);
- Description of approved activity modifications, including changes of work scope and/or schedule;
- Sampling results received following internal data review and validation, as applicable; and,
- An update of the remedial schedule including the percentage of project completion, unresolved delays encountered or anticipated that may affect the future schedule, and efforts made to mitigate such delays.

4.4.3 Other Reporting

Photographs will be taken of all remedial activities and submitted to NYSDEC in digital (JPEG) format. Photos will illustrate all remedial program elements and will be of acceptable quality. Representative photos of the Site prior to any Remedial Actions will be provided. Representative photos will be provided of each contaminant source, source area and Site structures before, during and after remediation. Photos will be included in the daily reports as needed, and a comprehensive collection of photos will be included in the Final Engineering Report.

Job-site record keeping for all remedial work will be appropriately documented. These records will be maintained on-Site at all times during the project and be available for inspection by NYSDEC and NYSDOH staff.

4.4.4 Complaint Management Plan

Complaints from the public regarding nuisance or other Site conditions including noise, odor, truck traffic etc., will be recorded in the Site field book and reported to the NYSDEC via email on the same day as the complaint is received.

4.4.5 Deviations from the Remedial Action Work Plan

Minor deviations from the RAWP will be identified in the daily update report and will be noted in the Final Engineering Report. When deviations are reported a brief discussion will be provided which will state the following:

- Reasons for deviating from the approved RAWP;
- Effect of the deviations on overall remedy.

Major changes to the scope of work must be discussed with the NYSDEC and the NYSDOH prior to implementation. If the changes are considered to be significant enough, an addendum to the RAWP Work Plan will be prepared and submitted to NYSDEC / NYSDOH for review.

5.0 REMEDIAL ACTION: MATERIAL REMOVAL FROM SITE

Excavation work includes the following; the removal and off-Site disposal of petroleum impacted soil to a depth of 10 feet within a 1,963 sf area (726 cy) and to a depth of 3 feet within six 78 sf areas (52 cy combined) with high levels of SVOCs. Soil removed from the beneath the raised terminal platform building will be used to backfill the excavations and the basement area of the main building. This will result in an additional 3,991 cy (approx.) for disposal. Soil excavation and loading will be performed using conventional equipment such as track-mounted excavators, backhoes and loaders.

All excavation work will be performed in accordance with the Site-specific HASP and CAMP. Removal of the petroleum impacted soil and SVOC hotspots will be performed by a qualified contractor and trained personnel (Minimum 24HR OSHA HAZWOPER). If an underground storage tank (UST) is discovered during excavation the NYSDEC Project Manager will be immediately notified and the UST removed and closed in accordance with DER-10, NYSDEC PBS regulations and NYC Fire Department regulations. It is anticipated that the excavation of petroleum impacted and historic fill materials will be performed by the excavation contractor for the construction project.

An excavation plan showing the excavation depths to achieve the Track 4 remedy is provided in **Figure 13**. Dewatering may be needed for the excavation of contaminated areas but will not be needed for foundation construction.

5.1 CONTINGENCY - UST REMOVAL METHODS

USTs, if encountered during excavation activities at the Site, will be removed in accordance with the procedures described under the NYSDEC Memorandum for the Permanent Abandonment of Petroleum Storage Tanks and Section 5.5 of Draft DER-10 as follows:

- Remove all product to its lowest draw-off point
- Drain and flush piping into the tank
- Vacuum out the tank bottom consisting of water product and sludge

- Dig down to the top of the tank and expose the upper half of the tank
- Remove the fill tube and disconnect the fill, gauge, product and vent lines and pumps. Cap and plug open ends of lines
- Temporarily plug all tank openings, complete the excavation, remove the tank and place it in a secure location
- Render the tank safe and check the tank atmosphere to ensure that petroleum vapors have been satisfactorily purged from the tank
- Clean tank or remove to a storage yard for cleaning
- If the tank is to be moved it must be transported by licensed waste transported. Plug and cap all holes prior to transport leaving a 1/8 inch vent hole located at the top of the tank during transport
- After cleaning the tank must be made acceptable for disposal at a scrap yard cleaning the tank interior with a high pressure rinse and cutting the tank in several pieces.

During the tank and pipe line removal the following field observations should be made and recorded:

- A description and photographic documentation of the tank and pipe line condition (pitting, holes, staining, leak points, evidence of repairs, etc.)
- Examination of the excavation floor and sidewalls for physical evidence of contamination (odor, staining, sheen, etc.)
- Periodic field screening (through bucket return) of the floor and sidewalls of the excavation with a calibrated photoionization detector (PID).

5.2 SOIL CLEANUP OBJECTIVES

The Soil Cleanup Objectives for this Site are listed in **Table 1**. **Table 7** summarizes all soil samples that exceed unrestricted SCOs and Site Specific SCOs at the Site. Spider maps showing all soil samples that exceed unrestricted SCOs is provided in **Figures 8A** and **8B** while a spider map showing soil samples that exceed the SCOs proposed for this Remedial Action is provided as **Figure 9**.

5.3 REMEDIAL PERFORMANCE EVALUATION (POST EXCAVATION END-POINT SAMPLING)

Post excavation (endpoint) soil samples will be collected from across the Site following the soil removal to verify that remedial goals have been achieved. Endpoint soil samples will be collected from the Site as follows:

(1) Endpoint soil samples will be collected following the removal of soil from the petroleum and SVOC hotspot areas to verify that remedial goals have been achieved (**Figure 14**). The endpoint soil samples from the petroleum area hotspot will be analyzed for VOCs and SVOCs while samples from the SVOC hotspot areas will be analyzed for SVOCs only. Sidewall endpoint soil samples will also be collected from each of the petroleum impacted and SVOC hotspot excavation areas.

5.3.1 End-Point Sampling Frequency

Endpoint sampling frequency will be in accordance with DER-10 section 5.4 which recommends the collection of one bottom sample per 900 sf of bottom area and one sidewall sample per 30 liner feet.

5.3.2 Methodology

Collected samples be placed in glass jars supplied by the analytical laboratory and stored in a cooler with ice to maintain a temperature of 4 degrees C. Samples will either be picked up at the Site by a laboratory dispatched courier at the end of the day or transported back to the AMC or EBC office where they will be picked up the following day by the laboratory courier. All samples will be analyzed by a NYSDOH ELAP certified environmental laboratory. All post excavation (endpoint) soil samples from the petroleum hotspot area will be analyzed for VOCs by EPA method 8260 and SVOCs by EPA method 8270 (PAHs). Endpoint samples from the SVOC hotspot areas will be analyzed for SVOCs only.

5.3.3 Reporting of Results

Sample analysis will be provided by a New York State certified environmental laboratory. Laboratory reports will include ASP category B deliverables for use in the preparation of a data usability summary report (DUSR). All results will be provided in accordance with the NYSDEC

Environmental Information Management System (EIMS) electronic data deliverable (EDD) format.

5.3.4 QA/QC

The fundamental QA objective with respect to accuracy, precision, and sensitivity of analysis for laboratory analytical data is to achieve the QC acceptance of the analytical protocol. The accuracy, precision and completeness requirements will be addressed by the laboratory for all data generated.

Collected samples will be appropriately packaged, placed in coolers and shipped via overnight courier or delivered directly to the analytical laboratory by field personnel. Samples will be containerized in appropriate laboratory provided glassware and shipped in plastic coolers. Samples will be preserved through the use of ice or cold-pak(s) to maintain a temperature of 4^{o}C.

Dedicated disposable sampling materials will be used for soil samples, eliminating the need to prepare field equipment (rinsate) blanks. However, if non-disposable equipment is used, (stainless steel scoop, etc.) field rinsate blanks will be prepared at the rate of 1 for every eight samples collected. Field blanks will be prepared by pouring distilled or deionized water over decontaminated equipment and collecting the water in laboratory provided containers.

Trip blanks will accompany samples each time they are transported to the laboratory. Matrix spike and matrix spike duplicates (MS/MSD) will be collected at the rate of one per 20 samples submitted to the laboratory.

5.3.5 DUSR

The DUSR provides a thorough evaluation of analytical data without third party data validation. The primary objective of a DUSR is to determine whether or not the data, as presented, meets the site/project specific criteria for data quality and data use. Verification and/or performance monitoring samples collected under this RAWP will be reviewed and evaluated in accordance with the Guidance for the Development of Data Usability Summary Reports as presented in Appendix 2B of DER-10. The completed DUSR for verification/performance samples collected during implementation of this RAWP will be included in the final Engineering Report.

5.3.6 Reporting of End-Point Data in FER

Chemical labs used for all end-point sample results and contingency sampling will be NYSDOH ELAP certified.

End point sampling, including bottom and side-wall sampling, will be performed in accordance with DER-10 sample frequency requirements.

All endpoint data collected as part of this remedial action will be summarized and presented in the Final Engineering Report. The summary tables will include comparison of results to Site Specific SCOs to verify attainment of Track 4. Laboratory reports and the DUSR will be included as an appendix in the FER.

5.4 ESTIMATED MATERIAL REMOVAL QUANTITIES

An estimated 726 cubic yards (1,089 tons) of petroleum impacted soil, an estimated 52 cubic yards (78 tons) of soil from the SVOC hotspots and 3,991 cubic yards of excess historic fill generated from beneath the elevated terminal platform.

5.5 SOIL/MATERIALS MANAGEMENT PLAN

5.5.1 Excavation Petroleum Impacted Soil

Petroleum impacted soil has been documented within a 1,963 sf portion of the former fueling area to a depth of 8 ft. Petroleum impacted soil will be excavated and disposed of off-Site at a permitted disposal facility. Petroleum impacted soils will be secured and temporarily stored on-Site until arrangements can be made for off-Site disposal. As an alternative, pre-characterization samples may be collected to allow the soil to be loaded directly on to trucks for transport to the disposal facility. It is anticipated that the petroleum impacted soil will be classified and disposed of as non-hazardous. It is anticipated that the excavation of the SVOC hotspot areas will be performed by the excavation contractor for the construction project using appropriately trained personnel.

5.5.2 Excavation of SVOC Hotspots

Elevated levels (above groundwater protection SCOs) of SVOCs have been identified at six locations across the Site to depths as great as 3 feet below grade. Soil from the hotspot areas will

be segregated from other soils and disposed of off-Site at a permitted disposal facility. Excavated hotspot soils will be secured and temporarily stored on-Site until arrangements can be made for off-Site disposal. As an alternative, pre-characterization samples may be collected to allow the soil to be loaded directly on to trucks for transport to the disposal facility. It is anticipated that the hotspot soils will be classified as a non-hazardous material, however with the lead levels present it is possible that some of this material may fail TCLP analysis which would classify the soil as hazardous. It is anticipated that the excavation of the SVOC hotspot areas will be performed by the excavation contractor for the construction project using appropriately trained personnel.

The final determination on classification will be based on the results of waste characterization analysis and the NYSDEC.

5.5.3 Excavation of Historic Fill (beneath raised terminal platform)

The terminal building and loading dock is raised approximately 4 ft above surface grade to facilitate loading and unloading of trucks when in use as a truck terminal. When the building, with dimensions of 90 ft x 525 ft, is demolished approximately 7,000 cubic yards of fill from beneath the raised slab will remain. This material, if confirmed through testing to meet re-use requirements (restricted residential SCOs for all parameters and groundwater protection SCOs for SVOCs), may be used to backfill the petroleum and SVOC hotspot excavations and the basement level of the 2-story building in the southeast corner of the Site

Following the backfilling of these areas approximately 3,991 cubic yards of material will remain for off-site disposal. If this material is found through testing to meet re-use requirements, it may also be used as part of the material needed to cap exposed soil areas of the Site. Reuse of this material for anywhere on-Site (i.e. backfilling excavations and / or raising the Site) will be dependant upon the results of testing as specified in sections 5.5.9 and 5.5.10 below.

It is anticipated that the removal of the terminal building fill materials will be performed by the excavation contractor for the construction project using appropriately trained personnel.

5.5.4 Soil Excavation Methods

Soil excavation will be performed in accordance with the procedures described under Section 5.5 of DER-10 as follows:

- A description and photographic documentation of the excavation.
- Examination of the excavation floor and sidewalls for physical evidence of contamination (odor, staining, sheen, etc.).
- Periodic field screening (through bucket return) of the floor and sidewalls of the excavation with a calibrated photoionization detector (PID).

Final excavation depth, length, and width will be determined by the Remedial Engineer or his designee, and will depend on the horizontal and vertical extent of contaminated soils as identified through physical examination (PID response, odor, staining, etc.). The following procedure will be used for the excavation of impacted soil (as necessary and appropriate):

- Wear appropriate health and safety equipment as outlined in the HASP;

- Prior to excavation, ensure that the area is clear of utility lines or other obstructions. Lay plastic sheeting on the ground next to the area to be excavated;

- Using a rubber-tired backhoe or track mounted excavator, remove overburden soils and stockpile or dispose of separate from the impacted soil;

- If USTs are discovered, the NYSDEC will be notified and the best course of action to remove the structure should be determined in the field. This may involve the continued removal of overburden to access the top of the structure or continued trenching around the perimeter to minimize its disturbance;

- If physically contaminated soil is present (e.g., staining, odors, sheen, PID response, etc), an attempt will be made to remove it to the extent not limited by the site boundaries. If possible, physically impacted soil will be removed using the backhoe or excavator,

segregated from clean soils and overburden, and staged on separate dedicated plastic sheeting or live loaded into trucks from the disposal facility. Removal of the impacted soils will continue until visibly clean material is encountered and monitoring instruments indicate that no contaminants are present;

- Excavated soils which are temporarily stockpiled on-site will be covered with 6-mil polyethylene sheeting while disposal options are determined. Sheeting will be checked on a daily basis and replaced, repaired or adjusted as needed to provide full coverage. The sheeting will be shaped and secured in such a manner as to drain runoff and direct it toward the interior of the property;

- Once the Remedial Engineer is satisfied with the removal effort, verification or confirmatory samples will be collected from the excavation as described in **Section 6.2** of this document.

5.5.5 Soil Screening Methods

Visual, olfactory and PID soil screening and assessment will be performed by a qualified environmental professional during all remedial and development excavations into known or potentially contaminated material (Residual Contamination Zone). Soil screening will be performed regardless of when the invasive work is done and will include all excavation and invasive work performed during the remedy and during development phase, such as excavations for foundations and utility work, prior to issuance of the COC.

All primary contaminant sources (including but not limited to tanks and hotspots) identified during Site Characterization, Remedial Investigation, and Remedial Action will be surveyed by a surveyor licensed to practice in the State of New York. This information will be provided on maps in the Final Engineering Report.

Screening will be performed by environmental professionals. Resumes will be provided for all personnel responsible for field screening (i.e. those representing the Remedial Engineer) of invasive work for unknown contaminant sources during remediation and development work.

5.5.6 Stockpile Methods

Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by NYSDEC.

Stockpiles will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced. Hay bales will be used as needed near catch basins, surface waters and other discharge points. Water will be available on-site at suitable supply and pressure for use in dust control.

5.5.7 Materials Excavation and Load Out

The Remedial Engineer or an EP under his/her supervision will oversee all invasive work and the excavation and load-out of all excavated material. The Volunteer and its contractors are solely responsible for safe execution of all invasive and other work performed under this Plan. The presence of utilities and easements on the Site has been investigated by the Remedial Engineer. It has been determined that no risk or impediment to the planned work under this Remedial Action Work Plan is posed by utilities or easements on the Site.

Loaded vehicles leaving the Site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State, local, and NYSDOT requirements (and all other applicable transportation requirements).

Where effective, the equipment will be “dry” decontaminated using a broom and/or brushes. If significant amounts of soil or other contaminants remain after the dry decontamination, the equipment will also be pressure washed before leaving the Site. The EP will be responsible for ensuring that all outbound trucks are dry-brushed or washed on the truck wash/equipment pad before leaving the Site until the remedial construction is complete. Locations where vehicles enter or exit the Site shall be inspected daily for evidence of off-Site sediment tracking. The EP will be responsible for ensuring that all egress points for truck and equipment transport from the Site will be clean of dirt and other materials derived from the Site during Site remediation and development. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to Site derived materials.

The Volunteer and associated parties preparing the remedial documents submitted to the State, and parties performing this work, are completely responsible for the safe performance of all invasive work, the structural integrity of excavations, and for structures that may be affected by excavations (such as building foundations and bridge footings).

The Remedial Engineer will ensure that Site development activities will not interfere with, or otherwise impair or compromise, remedial activities proposed in this Remedial Action Work Plan.

Each hotspot and structure to be remediated (USTs, vaults and associated piping, transformers, etc.) will be removed and end-point remedial performance sampling completed before excavations related to Site development commence proximal to the hotspot or structure.

Development-related grading cuts and fills will not be performed without NYSDEC approval and will not interfere with, or otherwise impair or compromise, the performance of remediation required by this plan.

Mechanical processing of historical fill material and contaminated soil on-Site, without NYSDEC approval, is prohibited. All primary contaminant sources (including but not limited to tanks and hotspots) identified during Site Characterization, Remedial Investigation, and Remedial Action will be located and shown on maps to be reported in the Final Engineering Report.

5.5.8 Materials Transport Off-Site

All transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 NYCRR Part 364. Haulers will be appropriately licensed and trucks properly placarded.

Truck transport routes are as follows:

- ENTERING SITE - from the Long Island Expressway (I-495) heading west; take the Greenpoint Avenue exit to Greenpoint Avenue heading southwest. Continue southwest

on Greenpoint Avenue to its terminus at West Street. Turn left heading south on West Street to the Site Entrance on the right.

- EXITING SITE – Turn left onto West Street heading north to Greenpoing Avenue. Turn right onto Greenpoint Avenue heading northeast to the Long Island Expressway (I-495).

All trucks loaded with Site materials will exit the vicinity of the Site using only these approved truck routes.

Proposed in-bound and out-bound truck routes to the Site are shown in **Figure 12**. These are the most appropriate route and takes into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city mapped truck routes; (c) prohibiting off- Site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport; [(g) community input [where necessary]] Trucks will be prohibited from stopping and idling in the neighborhood outside the project Site.

Egress points for truck and equipment transport from the Site will be kept clean of dirt and other materials during Site remediation and development. Queuing of trucks will be performed on-Site in order to minimize off-Site disturbance. Off-Site queuing will be prohibited. Material transported by trucks exiting the Site will be secured with tight-fitting covers. Loose-fitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used. All trucks will be inspected, dry-brushed and / or washed, as needed, before leaving the site.

5.5.9 Materials Disposal Off-Site

Waste characterization will be performed for off-Site disposal in a manner suitable to the receiving facility and in conformance with applicable permits. Sampling and analytical methods, sampling frequency, analytical results and QA/QC will be reported in the FER. All data available for soil/material to be disposed at a given facility must be submitted to the disposal facility with suitable explanation prior to shipment and receipt.

Material that does not meet Track 1 unrestricted SCOs is prohibited from being taken to a New York State recycling facility (6NYCRR Part 360-16 Registration Facility). Non-hazardous historic fill and contaminated soils taken off-Site will be handled, at minimum, as a Municipal Solid Waste per 6NYCRR Part 360-1.2. Historical fill and contaminated soils from the Site are prohibited from being disposed at Part 360-16 Registration Facilities (also known as Soil Recycling Facilities).

Multiple disposal facility designations may be employed for the materials removed from the Site. Once final arrangements have been made, the disposal location(s) will be reported to the NYSDEC Project Manager. It is anticipated that the soil will be disposed of at up to 2 different facilities, based on the following classification:

- Non Hazardous - Contaminated Low Lead (petroleum and/or historic fill with lead < 1,500 mg/kg and meeting TCLP non-hazardous criteria);

- Non Hazardous - Contaminated high Lead (petroleum and/or historic fill with lead > 1,500 mg/kg > 3,000 mg/kg and meeting TCLP non-hazardous criteria);

The total quantity of material expected to be disposed off-Site is 4,769 cubic yards including 726 cy of petroleum impacted soil, 52 cy of soil from the SVOC hotspot areas and 3,991 cy of excess fill removed from beneath the raised terminal building platform.

Hazardous Soil Disposal and Transport

None of the soil at the Site is expected to be classified as hazardous, however, if there were hazardous soil present it would be disposed / transported as follows: Soil classified as hazardous will be shipped under a hazardous waste manifest system. All hazardous waste transported and disposed of must have a USEPA ID Number and waste code and must be distributed in accordance with the regulatory requirements.

The multi-part manifest will be filled out for each load of soil shipped off of the Site. At a minimum, the following information will be recorded on each manifest:

1) Generator’s Name, Address, and Phone Number

2) Destination Facility Name, Address and Phone Number
3) EPA ID Number
4) Waste classification code
5) Transporter Name, Address, Phone Number, License Plate Number, Driver Name, and SW Haulers Permit #
6) Signatures – Generator or an authorized agent for the generator shall print, sign, and date each non-hazardous material manifest after each truck is loaded. The transporter shall then sign and date noting time material was picked up at the site. Both the transporter and a representative of the disposal facility will sign the non-hazardous material manifest when the material has been delivered to disposal facility.

Non-Hazardous Soil Disposal and Transport

Non-hazardous historic fill material and petroleum contaminated soil taken off-Site will be handled, at minimum, as a Municipal Solid Waste per 6NYCRR Part 360-1.2. Historical fill material and contaminated soils from the Site are prohibited from being disposed at Part 360-16 Registration Facilities (also known as Soil Recycling Facilities).

Soils that are contaminated but non-hazardous and are being removed from the Site are considered by the Division of Materials Management (DMM) in NYSDEC to be Construction and Demolition (C/D) materials with contamination not typical of virgin soils. These soils may be sent to a permitted Part 360 landfill. They may be sent to a permitted C/D processing facility without permit modifications only upon prior notification of NYSDEC Region 2 DSHM. This material is prohibited from being sent or redirected to a Part 360-16 Registration Facility. In this case, as dictated by DMM, special procedures will include, at a minimum, a letter to the C/D facility that provides a detailed explanation that the material is derived from a DER remediation Site, that the soil material is contaminated and that it must not be redirected to on-Site or off-Site Soil Recycling Facilities. The letter will provide the project identity and the name and phone number of the Remedial Engineer. The letter will include as an attachment a summary of all chemical data for the material being transported.

Soil classified as non-hazardous fill will be transported under a non-hazardous waste manifest obtained from the selected disposal facility. The multi-part manifest will be filled out for each

load of soil shipped off of the Site. At a minimum, the following information will be recorded on each manifest:

1) Generator's Name, Address, and Phone Number
2) Destination Facility Name, Address and Phone Number
3) Transporter Name, Address, Phone Number, License Plate Number, Driver Name, and SW Haulers Permit #
4 Signatures – Generator or an authorized agent for the generator shall print, sign, and date each non-hazardous material manifest after each truck is loaded. The transporter shall then sign and date noting time material was picked up at the site. Both the transporter and a representative of the disposal facility will sign the non-hazardous material manifest when the material has been delivered to disposal facility.

A copy of the manifest will be retained by on-Site personnel for each shipment. Final signed manifests will be forwarded by the disposal facility to the generator. Copies of the final manifests will be presented in the FER.

Clean Soil Disposal

Clean native soil removed from the Site for development purposes (i.e. basement levels) will be reused on-site or disposed of as beneficial use material at a C&D permitted facility or through the NY City Clean Soil Bank Program. This soil will undergo a testing program to confirm that it meets Unrestricted Use SCOs for off-Site disposal at a NYS permitted C&D facility or Residential Use SCOs for all parameters and the lower of Restricted Residential Use or Groundwater Protection SCOs (SVOCs only) for reuse on-Site. Confirmation testing of clean soils will be in accordance with DER-10 Section 5.4(e)(10) as follows:

Contaminant	**VOCs**	**SVOCs, Inorganics & PCBs/Pesticides**	
Soil Quantity (cubic yards)	**Discrete Samples**	**Composite**	**Discrete Samples/Composite**
0-50	1	1	Each composite sample for analysis is created from 3-5 discrete samples from representative locations in the fill.
50-100	2	1	
100-200	3	1	
200-300	4	1	
300-400	4	2	
400-500	5	2	

500-800	6	2	
800-1000	7	2	
1000	Add an additional 2 VOC and 1 composite for each additional 1000 Cubic yards or consult with DER		

Uncontaminated native soil confirmed by the above testing program and removed from the site, will be disposed of as C&D material or sent to a beneficial re-use facility. The final destination of soils whether classified as contaminated or uncontaminated must be approved by the Remedial Engineer.

C&D and Scrap Metal Disposal

Concrete demolition material generated on the Site from building slabs, parking areas and other structures will be segregated, sized and shipped to a concrete recycling facility. Concrete crushing or processing on-Site is prohibited. Asphalt removed from the parking areas will be sent to a separate recycling facility.

Additionally, it is common to encounter scrap metals and large boulders (greater than one foot in diameter) during excavation which may not be accepted by either the licensed disposal facility or the C&D facility. These materials will be segregated and subsequently recycled at local facilities. Uncontaminated metal objects will be taken to a local scrap metal facility.

Bricks and other C&D material are also not accepted by most soil disposal facilities if present at greater then 5% by volume. This material, if encountered, will be sent to a C&D landfill or other C&D processing facility if approved by the DEC. C&D material of this type is most often encountered on sites in which former basement structures have been filled in with material from demolishing a former building. There was no evidence of filled in former basement areas identified during previous investigations performed at the Site.

Note that only uncontaminated material as defined in the part 360 regulations may be sent to a permitted C&D recycling facility. The environmental professional overseeing the excavation work must ensure that materials send to a C&D facility are not contaminated.

Scale Tickets

All trucks to be utilized for transport of hazardous or non-hazardous contaminated soil shall be weighed before and after unloading at the disposal facility. Disposal facilities must provide truck scales capable of generating load tickets measured in tons. The tonnage transported and disposed will be determined by the disposal facility and reported on a certified scale ticket which will be attached to each returned manifest. Weights will be reported on the certified scale ticket as Tare and Gross weights.

C&D Transport Tickets / Bills of Lading

Bill of Lading system or equivalent will be used for the disposal of C&D and related materials. Documentation for materials disposed of at recycling facilities (such as metal, concrete, asphalt) and as non-regulated C&D will include transport tickets for each load stating the origin of the material, the destination of the material and the quantity transported. This information will be reported in the Final Engineering Report.

Disposal Facility Documentation

The following documentation will be obtained and reported by the Remedial Engineer for each disposal location used in this project to fully demonstrate and document that the disposal of material derived from the Site conforms with all applicable laws: (1) a letter from the Remedial Engineer or BCP Applicant to the receiving facility describing the material to be disposed and requesting formal written acceptance of the material. This letter will state that material to be disposed is contaminated material generated at an environmental remediation Site in New York State. The letter will provide the project identity and the name and phone number of the Remedial Engineer. The letter will include as an attachment a summary of all chemical data for the material being transported (including Site Characterization data); and (2) a letter from all receiving facilities stating it is in receipt of the correspondence (above) and is approved to accept the material. These documents will be included in the FER.

The Final Engineering Report will include an accounting of the destination of all material removed from the Site during this Remedial Action, including excavated soil, contaminated soil, historic fill, solid waste, and hazardous waste, non-regulated material, and fluids. Documentation

associated with disposal of all material must also include records and approvals for receipt of the material. This information will also be presented in a tabular form in the FER.

5.5.10 Materials Reuse On-Site

Re-use of on-Site soil will only be allowed if the material is found to meet the lower of groundwater protection SCOs or Restricted Residential SCOs for SVOCs and Restricted Residential Use SCOs for all other parameters through the verification testing program detailed above. The Remedial Engineer will ensure that procedures defined for materials reuse in this RAWP are followed and that unacceptable material will not remain on-Site.

Acceptable demolition material proposed for reuse on-Site, if any, will be sampled for asbestos. Concrete crushing or processing on-Site is prohibited without NYSDEC approval. Contaminated on-Site material, including historic fill material and contaminated soil, removed for grading or other purposes will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines. This will be expressed in the final Site Management Plan.

Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the Site is prohibited for reuse on-Site.

5.5.11 Fluids Management

As the depth to groundwater at the site is approximately 8 feet below the grade, dewatering operations may be employed during excavation of the petroleum impacted soil area. If dewatering becomes necessary, dewatering fluids will be handled, transported and disposed in accordance with applicable local, State, and Federal regulations. Liquids discharged into the New York City sewer system will be addressed through approval by NYCDEP.

Dewatered fluids will not be recharged back to the land surface or subsurface of the Site. Dewatering fluids will be managed off-Site. Discharge of water generated during remedial construction to surface waters (i.e. a local pond, stream or river) is prohibited without a SPDES permit.

5.5.12 Demarcation

After the completion of soil removal and any other invasive remedial activities and prior to backfilling, a land survey will be performed by a New York State licensed surveyor. The survey will define the top elevation of residual contaminated soils. A physical demarcation layer, consisting of orange snow fencing material or equivalent material will be placed on this surface to provide a visual reference. This demarcation layer will constitute the top of the 'Residuals Management Zone', the zone that requires adherence to special conditions for disturbance of contaminated residual soils defined in the Site Management Plan. The survey will measure the grade covered by the demarcation layer before the placement of cover soils, pavement and sub-soils, structures, or other materials. This survey and the demarcation layer placed on this grade surface will constitute the physical and written record of the upper surface of the 'Residuals Management Zone' in the Site Management Plan. A map showing the survey results will be included in the Final Engineering Report and the Site Management Plan.

5.5.13 Backfill from Off-Site Sources

Off-site fill material may be needed to stabilize the entrance - exit areas of the Site, for temporary driveways for loading trucks, as an underlayment to structural components of the new buildings including slabs and footings and to cap the exposed soil areas of the Site.

All materials proposed for import onto the Site will be approved by the Remedial Engineer and will be in compliance with provisions in this RAWP prior to receipt at the Site. Material from industrial sites, spill sites, other environmental remediation sites or other potentially contaminated sites will not be imported to the Site.

The Final Engineering Report will include the following certification by the Remedial Engineer: "I certify that all import of soils from off-Site, including source evaluation, approval and sampling, has been performed in a manner that is consistent with the methodology defined in the Remedial Action Work Plan".

All imported soils will meet NYSDEC approved backfill or cover soil quality objectives for this Site. These NYSDEC approved backfill or cover soil quality objectives are the lower of the protection of groundwater or the protection of public health soil cleanup objectives for [site

specific use] as set forth in Table 375-6.8(b) of 6 NYCRR Part 375 and listed in **Table 1**. Non-compliant soils will not be imported onto the Site without prior approval by NYSDEC. Nothing in the approved Remedial Action Work Plan or its approval by NYSDEC should be construed as an approval for this purpose.

Soils that meet 'exempt' fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil objectives for this Site, will not be imported onto the Site without prior approval by NYSDEC. Nothing in this Remedial Action Work Plan should be construed as an approval for this purpose.

Recycled Concrete Aggregate (RCA) derived from recognizable and uncontaminated concrete and supplied by facilities permitted by, and in full compliance with Part 360-16 and DSNY regulations, is an acceptable form of backfill material. The Remedial Engineer is responsible for ensuring that the facility is compliant with the registration and permitting requirements of 6 NYCRR Part 360 and DSNY regulations at the time the RCA is acquired. RCA imported from compliant facilities does not require additional testing unless required by NYS DEC and DSNY under its terms of operations for the facility. Documentation of part 360-16 and DSNY compliance must be provided to the Remedial Engineer before the RCA is transported to the Site.

In accordance with DER10, fill materials consisting of virgin mined sand, gravel or stone products may be imported to the Site provided that a minimum of 1 sample is obtained to demonstrate that the material meets the specifications of the geotechnical engineer, Remedial Engineer, and Redevelopment Construction Documents and that the source of the material is approved by the Remediation Engineer.

The source approval process will require a review of the following information:

- The origin of the material;
- The address of the facility which mines/processes the material;

- A letter from the facility stating that the material to be delivered to the site is a virgin mined material and that it has not been co-mingled with other materials during processing or stockpiling.

Under no circumstances will fill materials be imported to the site without prior approval from the Remedial Engineer. If sufficient documentation is not obtained, fill materials will be tested at a frequency consistent with that as specified in Table 4 of NYSDEC CP-51 Soil Cleanup Guidance Policy. Soils that meet 'exempt' fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil objectives for this Site, will not be imported onto the Site without prior approval by NYSDEC. Solid waste will not be imported onto the Site.

5.5.14 Stormwater Pollution Prevention

Barriers such as silt fencing or hay bales will be installed around the entire perimeter of the remedial construction area to prevent the surface runoff of sediments off-site. All on-site drainage structures such as surface drains, catch basins etc. connected to the municipal sewer system will be similarly protected with barriers to prevent sediments from entering the structure.

Erosion and sediment control measures identified in the RAWP shall be observed to ensure that they are operating correctly. Barriers will be inspected once a week and after every storm event. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by NYSDEC. All necessary repairs shall be made immediately. Accumulated sediments will be removed as required to keep the barrier and hay bale check functional. All undercutting or erosion of the silt fence toe anchor shall be repaired immediately with appropriate backfill materials. Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.

5.5.15 Contingency Plan

If underground tanks or other previously unidentified contaminant sources are found during on-Site remedial excavation or development related construction, sampling will be performed on product, sediment and surrounding soils, etc. Chemical analytical work will be for full scan

parameters (TAL metals; TCL volatiles and semi-volatiles, TCL pesticides and PCBs). These analyses will not be limited to STARS parameters where tanks are identified without prior approval by NYSDEC. Analyses will not be otherwise limited without NYSDEC approval.
Identification of unknown or unexpected contaminated media identified by screening during invasive Site work will be promptly communicated by phone to NYSDEC's Project Manager. These findings will be also included in daily and periodic electronic media reports.

5.5.16 Community Air Monitoring Plan

The Community Air Monitoring Plan (CAMP) provides measures for protection for on-site workers and the downwind community (i.e., off-site receptors including residences, businesses, and on-site workers not directly involved in the remedial work) from potential airborne contaminant releases resulting from remedial activities at construction sites.

The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that the remedial work did not spread contamination off-site through the air. The primary concerns for this site are odors associated with groundwater purging and sampling.

Exceedances observed in the CAMP will be reported to NYSDEC and NYSDOH Project Managers and included in the Daily Report. The complete CAMP developed for this site is included in **Attachment F** or this Work Plan.

5.5.17 Odor, Dust and Nuisance Control Plan

The Final Engineering Report will include the following certification by the Remedial Engineer: "I certify that all invasive work during the remediation and all invasive development work were conducted in accordance with dust and odor suppression methodology defined in the Remedial Action Work Plan."

5.5.17.1 Odor Control Plan

This odor control plan is capable of controlling emissions of nuisance odors off-Site and on-Site. If nuisance odors are identified, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and

NYSDOH will be notified of all odor events and of all other complaints about the project. Implementation of all odor controls, including the halt of work, will be the responsibility of the Applicant's Remediation Engineer, who is responsible for certifying the Final Engineering Report.

All necessary means will be employed to prevent on- and off-Site nuisances. At a minimum, procedures will include: (a) limiting the area of open excavations; (b) shrouding open excavations with tarps and other covers; and (c) using foams to cover exposed odorous soils. If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for off-Site disposal; (e) use of chemical odorants in spray or misting systems; and, (f) use of staff to monitor odors in surrounding neighborhoods.

Where odor nuisances have developed during remedial work and cannot be corrected, or where the release of nuisance odors cannot otherwise be avoided due to on-Site conditions or close proximity to sensitive receptors, odor control will be achieved by sheltering excavation and handling areas under tented containment structures equipped with appropriate air venting/filtering systems.

5.5.17.2 Dust Control Plan

A dust suppression plan that addresses dust management during invasive on-Site work, will include, at a minimum, the items listed below:

- Dust suppression will be achieved through spraying water directly onto off-road areas including excavations and stockpiles.
- Gravel will be used on roadways to provide a clean and dust-free road surface.
- On-Site roads will be limited in total area to minimize the area required for water application.

5.5.17.3 Nuisance Control Plan

A plan for rodent control will be developed and utilized by the contractor prior to and during Site clearing and Site grubbing, and during all remedial work. A plan has been developed and utilized by the contractor for all remedial work and conforms, to NYCDEP noise control standards.

6.0 RESIDUAL CONTAMINATION TO REMAIN ON-SITE

Since soil with parameters above restricted residential SCOs will remain at depth after the remedy is complete, an Institutional Control (IC) is required to protect human health and the environment. The IC is described hereafter. Long-term management of the IC will be executed under a deed restriction recorded with the NYC Department of Finance, Office of the City Register.

ECs will be implemented to protect public health and the environment by appropriately managing residual contamination. The Controlled Property (the Site) will have the following EC systems:

1. Site Cover will be required to allow for residential use of the Site. The cover will consist of the new building foundation, concrete capped rear parking area, and a demarcation barrier and 2 feet of certified clean soil/top soil in landscaped areas.

The FER will report residual contamination on the Site in tabular and map form.

7.0 ENGINEERING CONTROLS

7.1 SITE COVER SYSTEM

A site cover will be required to allow for restricted residential use of the site. The cover will consist of the structures such as buildings, pavement, sidewalks comprising the site development and / or a soil cover in areas where the upper one foot (for commercial use) or two feet (for restricted residential use) of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of one foot (for commercial use) or two feet (for restricted residential use) of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d). The soil cover will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d).

A Soil Management Plan will be included in the Site Management Plan and will outline the procedures to be followed in the event that the soil cover system and underlying residual contamination are disturbed after the Remedial Action is complete. Maintenance of the soil cover system will be described in the Site Management Plan in the FER.

8.0 INSTITUTIONAL CONTROLS

Institutional Controls (ICs) will be incorporated into the remedy to render the overall Site remedy protective of public health and the environmental. Two elements have been designed to ensure continual and proper management of residual contamination in perpetuity: an Environmental Easement and a Site Management Plan (SMP).

All as-build drawings, diagram, calculation and manufacturer documentation for treatment will be presented in the FER. A Site-Specific Environmental Easement will be recorded with the City of New York to provide an enforceable means of ensuring the continual and proper management of residual contamination and protection of public health and the environment in perpetuity or until released in writing by NYSDEC. It requires that the grantor of the Environmental Easement and the grantor's successors and assigns adhere to all Engineering and Institutional Controls (ECs/ICs) placed on the Site by this NYSDEC-approved remedy. ICs provide restrictions on Site usage and mandate operation, maintenance, monitoring and reporting measures for all ECs and ICs.

The SMP describes appropriate methods and procedures to ensure compliance with all ECs and ICs that are required by the Environmental Easement. Once the SMP has been approved by the NYSDEC, compliance with the SMP is required by the grantor of the Environmental Easement and grantor's successors and assigns.

8.1 ENVIRONMENTAL EASEMENT

An Environmental Easement, as defined in Article 71 Title 36 of the Environmental Conservation Law, is required when residual contamination is left on-Site after the Remedial Action is complete. If the Site will have residual contamination after completion of all Remedial Actions than an Environmental Easement is required. If an Environmental Easement is needed following completion of the remedy an Environmental Easement approved by NYSDEC will be filed and recorded with the City of New York. The Environmental Easement (if needed) will be submitted as part of the Final Remediation Report.

The Environmental Easement renders the Site a Controlled Property. The Environmental Easement must be recorded with the City of New York before the Certificate of Completion can be issued by NYSDEC. These Institutional Controls are requirements or restrictions placed on the Site that are listed in, and required by, the Environmental Easement. Institutional Controls can, generally, be subdivided between controls that support Engineering Controls, and those that place general restrictions on Site usage or other requirements. Institutional Controls in both of these groups are closely integrated with the Site Management Plan (SMP), which provides all of the methods and procedures to be followed to comply with this remedy.

The Institutional Controls which will be needed to support Engineering Controls are:

- Use of groundwater underlying the Controlled Property is prohibited without treatment rendering it safe for intended purpose;
- Compliance with the Environmental Easement by the Grantee and the Grantee's successor's is required;
- Grantor agrees to submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the Controls;
- NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow. This annual statement must be certified by an expert that the NYSDEC finds acceptable;

8.2 SITE MANAGEMENT PLAN

Site Management is the last phase of remediation and begins with the approval of the Final Engineering Report and issuance of the Certificate of Completion (COC) for the Remedial

Action. The Site Management Plan is submitted as part of the FER but will be written in a manner that allows its removal and use as a complete and independent document. Site Management continues in perpetuity or until released in writing by NYSDEC. The property owner is responsible to ensure that all Site Management responsibilities defined in the Environmental Easement and the Site Management Plan are performed.

The SMP is intended to provide a detailed description of the procedures required to manage residual contamination left in place at the Site following completion of the Remedial Action in accordance with the BCA with the NYSDEC. This includes: (1) development, implementation, and management of all Engineering and Institutional Controls; (2) development and implementation of monitoring systems and a Monitoring Plan; (3) development of a plan to operate and maintain any treatment, collection, containment, or recovery systems (including, where appropriate, preparation of an Operation and Maintenance Manual); (4) submittal of Site Management Reports, performance of inspections and certification of results, and demonstration of proper communication of Site information to NYSDEC; and (5) defining criteria for termination of treatment system operation.

To address these needs, this SMP will include four plans: (1) an Engineering and Institutional Control Plan for implementation and management of EC/ICs; (2) a Monitoring Plan for implementation of Site Monitoring; (3) an Operation and Maintenance Plan for implementation of remedial collection, containment, treatment, and recovery systems; and (4) a Site Management Reporting Plan for submittal of data, information, recommendations, and certifications to NYSDEC. The SMP will be prepared in accordance with the requirements in NYSDEC Draft DER-10 Technical Guidance for Site Investigation and Remediation, dated [month, year], and the guidelines provided by NYSDEC.

Site management activities, reporting, and EC/IC certification will be scheduled on a certification period basis. The certification period will be annually. The Site Management Plan will be based on a calendar year and will be due for submission to NYSDEC by March 1 of the year following the reporting period.

The Site Management Plan in the Final Engineering Report will include a monitoring plan for groundwater at the down-gradient Site perimeter to evaluate Site-wide performance of the remedy. Appropriately placed groundwater monitor wells will also be installed immediately down-gradient of all volatile organic carbon remediation areas for the purpose of evaluation of the effectiveness of the remedy that is implemented.

No exclusions for handling of residual contaminated soils will be provided in the Site Management Plan (SMP). All handling of residual contaminated material will be subject to provisions contained in the SMP.

9.0 FINAL ENGINEERING REPORT

A Final Engineering Report (FER) and Certificate Of Completion (COC) will be submitted to NYSDEC following implementation of the Remedial Action defined in this RAWP. The FER provides the documentation that the remedial work required under this RAWP has been completed and has been performed in compliance with this plan. The FER will provide a comprehensive account of the locations and characteristics of all material removed from the Site including the surveyed map(s) of all sources. The Final Engineering Report will include as-built drawings for all constructed elements, certifications, manifests, bills of lading as well as the complete Site Management Plan (formerly the Operation and Maintenance Plan). The FER will provide a description of the changes in the Remedial Action from the elements provided in the RAWP and associated design documents. The FER will provide a tabular summary of all performance evaluation sampling results and all material characterization results and other sampling and chemical analysis performed as part of the Remedial Action. The FER will provide test results demonstrating that all mitigation and remedial systems are functioning properly. The FER will be prepared in conformance with DER-10.

Where determined to be necessary by NYSDEC, a Financial Assurance Plan will be required to ensure the sufficiency of revenue to perform long-term operations, maintenance and monitoring tasks defined in the Site Management Plan and Environmental Easement. This determination will be made by NYSDEC in the context of the Final Engineering Report review.

The Final Engineering Report will include written and photographic documentation of all remedial work performed under this remedy. The FER will include an itemized tabular description of actual costs incurred during all aspects of the Remedial Action.

The FER will provide a thorough summary of all residual contamination left on the Site after the remedy is complete. Residual contamination includes all contamination that exceeds the Track 1 Unrestricted Use SCO in 6NYCRR Part 375-6. A table that shows exceedances from Track 1 Unrestricted SCOs for all soil/fill remaining at the Site after the Remedial Action and a map that

shows the location and summarizes exceedances from Track 1 Unrestricted SCOs for all soil/fill remaining at the Site after the Remedial Action will be included in the FER.

The FER will provide a thorough summary of all residual contamination that exceeds the SCOs defined for the Site in the RAWP and must provide an explanation for why the material was not removed as part of the Remedial Action. A table that shows residual contamination in excess of Site SCOs and a map that shows residual contamination in excess of Site SCOs will be included in the FER.

The Final Engineering Report will include an accounting of the destination of all material removed from the Site, including excavated contaminated soil, historic fill, solid waste, hazardous waste, non-regulated material, and fluids. Documentation associated with disposal of all material must also include records and approvals for receipt of the material. It will provide an accounting of the origin and chemical quality of all material imported onto the Site.

Before approval of a FER and issuance of a Certificate of Completion, all project reports must be submitted in digital form on electronic media (PDF).

9.1 CERTIFICATIONS

The following certification will appear in front of the Executive Summary of the Final Engineering Report. The certification will be signed by the Remedial Engineer [name] who is a Professional Engineer registered in New York State. This certification will be appropriately signed and stamped. The certification will include the following statements:

I _____certify that I am currently a NYS registered professional engineer and that this Final Engineering 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.

_____ _____

NYS Professional Engineer # Date Signature

10.0 SCHEDULE

The remedial action will begin with mobilization of equipment and material to the Site which will begin approximately 1 week following RAWP approval and within 10 days of the distribution of the Construction Fact Sheet. Mobilization will be followed by removal and disposal of the petroleum impacted and metals hotspot areas followed by confirmation sampling. These areas will be backfilled as confirmatory sampling is received. Importing of fill / soil to raise the Site will begin following the confirmation sampling of the excavated areas. The work is expected to take approximately 3 months as part of the Site preparation. The schedule of tasks completed under this RAWP is as follows:

Activity	**Date**
Conduct pre-construction meeting with NYSDEC	Within 3 weeks of RAWP approval
Mobilize equipment to the site and construct truck pad and other designated areas	Within 2 week following the pre-construction meeting and issuance of Pre-Construction Fact Sheet
Mobilize Excavation Contractor and equipment to the Site and begin excavation	Immediately following the installation of the truck pad and other preparatory requirements, Duration - 2 to 3 weeks
Complete excavation and disposal of historic fill material.	Within 1 month of mobilization
Perform endpoint verification of excavated areas	Performed in sequence as final depth of each excavated area is complete.
Begin building construction and Import soil cover for exposed soil areas	Immediately following the excavation of petroleum impacted and hotspot areas, To be performed sequentially, Duration - 2 years
Submit SMP	Approximately 90 days after completion of site work

TABLES

TABLE 1
Soil Cleanup Objectives

Contaminant	CAS Number	Top 2 ft Across Site Restricted-Residential
METALS		
Arsenic	7440-38 -2	16f
Barium	7440-39 -3	400
Beryllium	7440-41 -7	72
Cadmium	7440-43 -9	4.3
Chromium, hexavalent h	18540-29-9	110
Chromium, trivalenth	16065-83-1	180
Copper	7440-50 -8	270
Total Cyanide h		27
Lead	7439-92 -1	400
Manganese	7439-96 -5	2,000f
Total Mercury		0.81j
Nickel	7440-02 -0	310
Selenium	7782-49 -2	180
Silver	7440-22 -4	180
Zinc	7440-66 -6	10,000 d
PESTICIDES / PCBs		
2,4,5-TP Acid (Silvex)	93-72-1	100a
4,4'-DDE	72-55-9	8.9
4,4'-DDT	50-29-3	7.9
4,4'-DDD	72-54-8	13
Aldrin	309-00-2	0.097
alpha-BHC	319-84-6	0.48
beta-BHC	319-85-7	0.36
Chlordane (alpha)	5103-71 -9	4.2
delta-BHC	319-86-8	100a
Dibenzofuran	132-64-9	59
Dieldrin	60-57-1	0.2
Endosulfan I	959-98-8	24i
Endosulfan II	33213-65-9	24i
Endosulfan sulfate	1031-07 -8	24i
Endrin	72-20-8	11
Heptachlor	76-44-8	2.1
Lindane	58-89-9	1.3
Polychlorinated biphenyls	1336-36 -3	1

Contaminant	CAS Number	Top 2 ft Across Site Restricted-Residential
VOLATILES		
1,1,1-Trichloroethane	71-55-6	100a
1,1-Dichloroethane	75-34-3	26
1,1-Dichloroethene	75-35-4	100a
1,2-Dichlorobenzene	95-50-1	100a
1,2-Dichloroethane	107-06-2	3.1
cis-1,2-Dichloroethene	156-59-2	100a
trans-1,2-Dichloroethene	156-60-5	100a
1,3-Dichlorobenzene	541-73-1	49
1,4-Dichlorobenzene	106-46-7	13
1,4-Dioxane	123-91-1	13
Acetone	67-64-1	100b
Benzene	71-43-2	4.8
Butylbenzene	104-51-8	100a
Carbon tetrachloride	56-23-5	2.4
Chlorobenzene	108-90-7	100a
Chloroform	67-66-3	49
Ethylbenzene	100-41-4	41
Hexachlorobenzene	118-74-1	1.2
Methyl ethyl ketone	78-93-3	100a
Methyl tert-butyl ether	1634-04 -4	100a
Methylene chloride	75-09-2	100a
n-Propylbenzene	103-65-1	100a
sec-Butylbenzene	135-98-8	100a
tert-Butylbenzene	98-06-6	100a
Tetrachloroethene	127-18-4	19
Toluene	108-88-3	100a
Trichloroethene	79-01-6	21
1,2,4-Trimethylbenzene	95-63-6	52
1,3,5-Trimethylbenzene	108-67-8	52
Vinyl chloride	75-01-4	0.9
Xylene (mixed)	1330-20 -7	100a

Contaminant	CAS Number	Top 2 ft Across Site Restricted-Residential	SVOC Hotspots Groundwater Protection
SEMI-VOLATILES			
Acenaphthene	83-32-9	100a	98
Acenapthylene	208-96-8	100a	107
Anthracene	120-12-7	100a	1,000
Benz(a)anthracene	56-55-3	1f	1
Benzo(a)pyrene	50-32-8	1f	22
Benzo(b) fluoranthene	205-99-2	1f	1.7
Benzo(g,h,i) perylene	191-24-2	100a	1,000
Benzo(k) fluoranthene	207-08-9	3.9	2
Chrysene	218-01-9	3.9	1
Dibenz(a,h) anthracene	53-70-3	0.33e	1,000
Fluoranthene	206-44-0	100a	1,000
Fluorene	86-73-7	100a	386
Indeno(1,2,3-cd) pyrene	193-39-5	0.5f	8.2
m-Cresol	108-39-4	100a	0.33
Naphthalene	91-20-3	100a	12
o-Cresol	95-48-7	100a	0.33
p-Cresol	106-44-5	100a	0.33
Pentachlorophenol	87-86-5	6.7	0.8
Phenanthrene	85-01-8	100a	1,000
Phenol	108-95-2	100a	0.33
Pyrene	129-00-0	100a	1,000

All soil cleanup objectives (SCOs) are in parts per million (ppm).

TABLE 2
Soil Import Criteria

Contaminant	CAS Number	Restricted-Residential	Protection of Ground-water
METALS			
Arsenic	7440-38 -2	16f	16f
Barium	7440-39 -3	400	820
Beryllium	7440-41 -7	72	47
Cadmium	7440-43 -9	4.3	7.5
Chromium, hexavalent h	18540-29-9	110	19
Chromium, trivalenth	16065-83-1	180	NS
Copper	7440-50 -8	270	1,720
Total Cyanide h		27	40
Lead	7439-92 -1	400	450
Manganese	7439-96 -5	2,000f	2,000f
Total Mercury		0.81j	0.73
Nickel	7440-02 -0	310	130
Selenium	7782-49 -2	180	4f
Silver	7440-22 -4	180	8.3
Zinc	7440-66 -6	10,000 d	2,480
PESTICIDES / PCBs			
2,4,5-TP Acid (Silvex)	93-72-1	100a	3.8
4,4'-DDE	72-55-9	8.9	17
4,4'-DDT	50-29-3	7.9	136
4,4'-DDD	72-54-8	13	14
Aldrin	309-00-2	0.097	0.19
alpha-BHC	319-84-6	0.48	0.02
beta-BHC	319-85-7	0.36	0.09
Chlordane (alpha)	5103-71 -9	4.2	2.9
delta-BHC	319-86-8	100a	0.25
Dibenzofuran	132-64-9	59	210
Dieldrin	60-57-1	0.2	0.1
Endosulfan I	959-98-8	24i	102
Endosulfan II	33213-65-9	24i	102
Endosulfan sulfate	1031-07 -8	24i	1,000c
Endrin	72-20-8	11	0.06
Heptachlor	76-44-8	2.1	0.38
Lindane	58-89-9	1.3	0.1
Polychlorinated biphenyls	1336-36 -3	1	3.2
SEMI-VOLATILES			
Acenaphthene	83-32-9	100a	98
Acenapthylene	208-96-8	100a	107
Anthracene	120-12-7	100a	1,000c
Benz(a)anthracene	56-55-3	1f	1f
Benzo(a)pyrene	50-32-8	1f	22
Benzo(b) fluoranthene	205-99-2	1f	1.7
Benzo(g,h,i) perylene	191-24-2	100a	1,000c
Benzo(k) fluoranthene	207-08-9	3.9	1.7
Chrysene	218-01-9	3.9	1f
Dibenz(a,h) anthracene	53-70-3	0.33e	1,000c
Fluoranthene	206-44-0	100a	1,000c
Fluorene	86-73-7	100a	386
Indeno(1,2,3-cd) pyrene	193-39-5	0.5f	8.2
m-Cresol	108-39-4	100a	0.33e
Naphthalene	91-20-3	100a	12
o-Cresol	95-48-7	100a	0.33e
p-Cresol	106-44-5	100a	0.33e
Pentachlorophenol	87-86-5	6.7	0.8e
Phenanthrene	85-01-8	100a	1,000c
Phenol	108-95-2	100a	0.33e
Pyrene	129-00-0	100a	1,000c

TABLE 2
Soil Import Criteria

Contaminant	CAS Number	Restricted-Residential	Protection of Ground-water
VOLATILES			
1,1,1-Trichloroethane	71-55-6	100a	0.68
1,1-Dichloroethane	75-34-3	26	0.27
1,1-Dichloroethene	75-35-4	100a	0.33
1,2-Dichlorobenzene	95-50-1	100a	1.1
1,2-Dichloroethane	107-06-2	3.1	0.02f
cis-1,2-Dichloroethene	156-59-2	100a	0.25
trans-1,2-Dichloroethene	156-60-5	100a	0.19
1,3-Dichlorobenzene	541-73-1	49	2.4
1,4-Dichlorobenzene	106-46-7	13	1.8
1,4-Dioxane	123-91-1	13	0.1e
Acetone	67-64-1	100b	0.05
Benzene	71-43-2	4.8	0.06
Butylbenzene	104-51-8	100a	12
Carbon tetrachloride	56-23-5	2.4	0.76
Chlorobenzene	108-90-7	100a	1.1
Chloroform	67-66-3	49	0.37
Ethylbenzene	100-41-4	41	1
Hexachlorobenzene	118-74-1	1.2	3.2
Methyl ethyl ketone	78-93-3	100a	0.12
Methyl tert-butyl ether	1634-04 -4	100a	0.93
Methylene chloride	75-09-2	100a	0.05
n-Propylbenzene	103-65-1	100a	3.9
sec-Butylbenzene	135-98-8	100a	11
tert-Butylbenzene	98-06-6	100a	5.9
Tetrachloroethene	127-18-4	19	1.3
Toluene	108-88-3	100a	0.7
Trichloroethene	79-01-6	21	0.47
1,2,4-Trimethylbenzene	95-63-6	52	3.6
1,3,5-Trimethylbenzene	108-67-8	52	8.4
Vinyl chloride	75-01-4	0.9	0.02
Xylene (mixed)	1330-20 -7	100a	1.6

All soil cleanup objectives (SCOs) are in parts per million (ppm). NS=Not specified.
Support Document (TSD). Footnotes
a The SCOs for residential, restricted-residential and ecological resources use were
maximum value of 100 ppm. See TSD section 9.3.
b The SCOs for commercial use were capped at a maximum value of 500 ppm. See
9.3.
c The SCOs for industrial use and the protection of groundwater were capped at a r
of 1000 ppm. See TSD section 9.3.
d The SCOs for metals were capped at a maximum value of 10,000 ppm. See TSD
e For constituents where the calculated SCO was lower than the contract required d
(CRQL), the CRQL is used as the SCO value.

TABLE 3
11 West Street,
Brooklyn, New York
Soil Analytical Results
Volatile Organic Compounds

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives*	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	B1		B2		B3				B4				B6				B7		B8		B9				B10				B11				B12		B13				B14	
			(6-7') 3/6/2014 µg/Kg		(6-7') 3/6/2014 µg/Kg		(0-2) 3/6/2014 µg/Kg		(5-7') 3/6/2014 µg/Kg		(0-2) 3/6/2014 µg/Kg		(5-7') 3/6/2014 µg/Kg		(0-2) 3/5/2014 µg/Kg		(5-7') 3/5/2014 µg/Kg		(6-7') 3/6/2014 µg/Kg		(6-7') 3/6/2014 µg/Kg		(0-2) 3/6/2014 µg/Kg		(5-7') 3/6/2014 µg/Kg		(0-2') 3/6/2014 µg/Kg		(5-7') 3/6/2014 µg/Kg		(0-2') 3/5/2014 µg/Kg		(5-7') 3/5/2014 µg/Kg		(8-10') 3/6/2014 µg/Kg		(0-2') 3/5/2014 µg/Kg		(5-7') 3/5/2014 µg/Kg		(5-7') 3/6/2014 µg/Kg	
			Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
1,1,1,2-Tetrachlorothane			< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
1,1,1-Trichloroethane	680	100,000	< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
1,1,2,2-Tetrachloroethane			< 3.2	3.2	< 3.7	3.7	< 160	160	< 3.1	3.1	< 4.7	4.7	< 4.1	4.1	< 5.3	5.3	< 290	290	< 5.0	5	< 4.1	4.1	< 4.1	4.1	< 8.2	8.2	< 4.6	4.6	< 7.7	7.7	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
1,1,2-Trichloroethane			< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
1,1-Dichloroethane	270	26,000	< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
1,1-Dichloroethene	330	100,000	< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
1,1-Dichloropropene			< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
1,2,3-Trichlorobenzene			< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 250	250	< 230	230	< 6.8	6.8	< 470	470	< 280	280	< 320	320	< 280	280	< 290	290	< 5.8	5.8	< 280	280	< 6.1	6.1	< 6.1	6.1
1,2,3-Trichloropropane			< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 250	250	< 230	230	< 6.8	6.8	< 470	470	< 280	280	< 320	320	< 280	280	< 290	290	< 5.8	5.8	< 280	280	< 6.1	6.1	< 6.1	6.1
1,2,4-Trichlorobenzene			< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 250	250	< 230	230	< 6.8	6.8	< 470	470	< 280	280	< 320	320	< 280	280	< 290	290	< 5.8	5.8	< 280	280	< 6.1	6.1	< 6.1	6.1
1,2,4-Trimethylbenzene	3,600	52,000	< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 250	250	< 230	230	< 6.8	6.8	< 470	470	< 280	280	< 320	320	< 280	280	< 290	290	< 5.8	5.8	**180**	280	**77**	300	< 6.1	6.1
1,2-Dibromo-3-chloropropane			< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 250	250	< 230	230	< 6.8	6.8	< 470	470	< 280	280	< 320	320	< 280	280	< 290	290	< 5.8	5.8	< 280	280	< 6.1	6.1	< 6.1	6.1
1,2-Dibromomethane			< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
1,2-Dichlorobenzene	1,100	100,000	< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 250	250	< 230	230	< 6.8	6.8	< 470	470	< 280	280	< 320	320	< 280	280	< 290	290	< 5.8	5.8	< 280	280	< 6.1	6.1	< 6.1	6.1
1,2-Dichloroethane	20	3,100	< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
1,2-Dichloropropane			< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
1,3,5-Trimethylbenzene	8,400	52,000	< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 250	250	< 230	230	< 6.8	6.8	< 470	470	< 280	280	< 320	320	< 280	280	< 290	290	< 5.8	5.8	**39**	280	**4**	6.1	< 6.1	6.1
1,3-Dichlorobenzene	2,400	4,900	< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 250	250	< 230	230	< 6.8	6.8	< 470	470	< 280	280	< 320	320	< 280	280	< 290	290	< 5.8	5.8	< 280	280	< 6.1	6.1	< 6.1	6.1
1,3-Dichloropropane			< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
1,4-Dichlorobenzene	1,800	13,000	< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 250	250	< 230	230	< 6.8	6.8	< 470	470	< 280	280	< 320	320	< 280	280	< 290	290	< 5.8	5.8	< 280	280	< 6.1	6.1	< 6.1	6.1
2,2-Dichloropropane			< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
2-Chlorotoluene			< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 250	250	< 230	230	< 6.8	6.8	< 470	470	< 280	280	< 320	320	< 280	280	< 290	290	< 5.8	5.8	< 280	280	< 6.1	6.1	< 6.1	6.1
2-Hexanone (Methyl Butyl Ketone)			< 27	27	< 31	31	< 1300	1,300	< 26	26	< 39	39	< 34	34	< 27	27	< 1400	1,400	< 42	42	< 34	34	< 34	34	< 68	68	< 38	38	< 64	64	< 28	28	< 1500	1,500	< 29	29	< 28	28	< 30	30	< 31	31
2-Isopropyltoluene			< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 250	250	< 230	230	< 6.8	6.8	< 470	470	< 280	280	< 320	320	< 280	280	< 290	290	< 5.8	5.8	< 280	280	< 6.1	6.1	< 6.1	6.1
4-Chlorotoluene			< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 250	250	< 230	230	< 6.8	6.8	< 470	470	< 280	280	< 320	320	< 280	280	< 290	290	< 5.8	5.8	< 280	280	**0.76**	6.1	< 6.1	6.1
4-Methyl-2-Pentanone			< 27	27	< 31	31	< 1300	1,300	< 26	26	< 39	39	< 34	34	< 27	27	< 1400	1,400	< 42	42	< 34	34	< 34	34	< 68	68	< 38	38	< 64	64	< 28	28	< 1500	1,500	< 29	29	< 28	28	< 30	30	< 31	31
Acetone	50	100,000	< 32	32	< 37	37	< 1600	1,600	< 31	31	< 47	47	< 41	41	< 50	50	< 2900	2,900	< 50	50	< 41	41	< 41	41	< 82	82	< 46	46	< 77	77	< 50	50	< 2900	2,900	< 50	50	< 50	50	**7.2**	50	< 50	50
Acrylonitrile			< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 11	11	< 570	570	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 11	11	< 580	580	< 12	12	< 11	11	< 12	12	< 12	12
Benzene	60	4,800	< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 60	60	< 5.8	5.8	< 5.6	5.6	**2.9**	6.1	< 6.1	6.1
Bromobenzene			< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 250	250	< 230	230	< 6.8	6.8	< 470	470	< 280	280	< 320	320	< 280	280	< 290	290	< 5.8	5.8	< 280	280	< 6.1	6.1	< 6.1	6.1
Bromochloromethane			< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
Bromodichloromethane			< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
Bromoform			< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
Bromomethane			< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
Carbon Disulfide			< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
Carbon tetrachloride	760	2,400	< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
Chlorobenzene	1,100	100,000	< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
Chloroethane			< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
Chloroform	370	49,000	< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
Chloromethane			< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
cis-1,2-Dichloroethene	250	100,000	< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
cis-1,3-Dichloropropene			< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
Dibromochloromethane			< 3.2	3.2	< 3.7	3.7	< 160	160	< 3.1	3.1	< 4.7	4.7	< 4.1	4.1	< 5.3	5.3	< 290	290	< 5.0	5	< 4.1	4.1	< 4.1	4.1	< 8.2	8.2	< 4.6	4.6	< 7.7	7.7	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
Dibromomethane			< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
Dichlorodifluoromethane			< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
Ethylbenzene	1,000	41,000	< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	**2.3**	5.6	**2**	6.1	< 6.1	6.1
Hexachlorobutadiene			< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 250	250	< 230	230	< 6.8	6.8	< 470	470	< 280	280	< 320	320	< 280	280	< 290	290	< 5.8	5.8	< 280	280	< 6.1	6.1	< 6.1	6.1
Isopropylbenzene			< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 250	250	< 230	230	< 6.8	6.8	< 470	470	< 280	280	< 320	320	< 280	280	< 290	290	< 5.8	5.8	< 280	280	**1.4**	6.1	< 6.1	6.1
m&p-Xylenes	260	100,000	< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	**9.3**	5.6	**9**	6.1	< 6.1	6.1
Methyl Ethyl Ketone (2-Butanone)	120	100,000	< 32	32	< 37	37	< 1600	1,600	< 31	31	< 47	47	< 41	41	< 32	32	< 1700	1,700	< 50	50	< 41	41	< 41	41	< 82	82	< 46	46	< 77	77	< 34	34	< 1700	1,700	< 35	35	< 34	34	< 37	37	< 37	37
Methyl t-butyl ether (MTBE)	930	100,000	< 11	11	< 12	12	< 520	520	< 10	10	< 16	16	< 14	14	< 11	11	< 570	570	< 17	17	< 14	14	< 14	14	< 27	27	< 15	15	< 26	26	< 11	11	< 580	580	< 12	12	< 11	11	< 12	12	< 12	12
Methylene chloride	50	100,000	< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	**0.9**	5.3	**90**	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	**1.4**	5.6	**86**	290	**2.9**	5.8	**1.3**	5.6	**1.7**	6.1	**1.4**	6.1
Naphthalene	12,000	100,000	< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	**2,900**	290	< 250	250	< 230	230	< 6.8	6.8	< 470	470	< 280	280	< 320	320	< 280	280	< 290	290	< 5.8	5.8	< 280	280	< 300	300	< 6.1	6.1
n-Butylbenzene	12,000	100,000	< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 250	250	< 230	230	< 6.8	6.8	< 470	470	< 280	280	< 320	320	< 280	280	< 290	290	< 5.8	5.8	< 280	280	**5.3**	6.1	< 6.1	6.1
n-Propylbenzene	3,900	100,000	< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 250	250	< 230	230	< 6.8	6.8	< 470	470	< 280	280	< 320	320	< 280	280	< 290	290	< 5.8	5.8	< 280	280	**3.5**	6.1	< 6.1	6.1
o-Xylene	260	100,000	< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	**9.2**	5.6	**3.6**	6.1	< 6.1	6.1
p-Isopropyltoluene			< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 250	250	< 230	230	< 6.8	6.8	< 470	470	< 280	280	< 320	320	< 280	280	< 290	290	< 5.8	5.8	< 280	280	< 6.1	6.1	< 6.1	6.1
sec-Butylbenzene	11,000	100,000	< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 250	250	< 230	230	< 6.8	6.8	< 470	470	< 280	280	< 320	320	< 280	280	< 290	290	< 5.8	5.8	< 280	280	**2.9**	6.1	< 6.1	6.1
Styrene			< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
tert-Butylbenzene	5,900	100,000	< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 250	250	< 230	230	< 6.8	6.8	< 470	470	< 280	280	< 320	320	< 280	280	< 290	290	< 5.8	5.8	< 280	280	< 6.1	6.1	< 6.1	6.1
Tetrachloroethene	1,300	19,000	< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
Tetrahydrofuran (THF)			< 11	11	< 12	12	< 520	520	< 10	10	< 16	16	< 14	14	< 11	11	< 570	570	< 17	17	< 14	14	< 14	14	< 27	27	< 15	15	< 26	26	< 11	11	< 580	580	< 12	12	< 11	11	< 12	12	< 12	12
Toluene	700	100,000	< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	**730**	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	**160**	290	**51**	290	**1.6**	5.6	**4.7**	6.1	< 6.1	6.1
Total Xylenes			< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	-	-	-	-	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	190	100,000	< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
trans-1,3-Dichloropropene			< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
trabs-1,4-dichloro-2-butene			< 11	11	< 12	12	< 520	520	< 10	10	< 16	16	< 14	14	< 11	11	< 570	570	< 500	500	< 460	460	< 14	14	< 940	940	< 560	560	< 630	630	< 560	560	< 580	580	< 12	12	< 560	560	< 12	12	< 12	12
Trichloroethene	470	21,000	< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
Trichlorofluoromethane			< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
Trichlorotrifluoroethane			< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
Vinyl Chloride	20	900	< 5.3	5.3	< 6.1	6.1	< 260	260	< 5.1	5.1	< 7.8	7.8	< 6.8	6.8	< 5.3	5.3	< 290	290	< 8.3	8.3	< 6.8	6.8	< 6.8	6.8	< 14	14	< 7.7	7.7	< 13	13	< 5.6	5.6	< 290	290	< 5.8	5.8	< 5.6	5.6	< 6.1	6.1	< 6.1	6.1
Total BTEX Concentration			**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**	
Total VOCs Concentration			**0**		**0**		**0**		**0**		**0**		**0**		**0.9**		**3,720**		**0**		**0**		**0**		**0**		**0**		**0**		**1.4**		**246**		**53.9**		**242.7**		**125.96**		**1.4**	

TABLE 3
11 West Street,
Brooklyn, New York
Soil Analytical Results
Volatile Organic Compounds

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives*	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	B15				B16				B17				B18				B19				B20				B21		B22		Duplicate		Trip Blank HL		Trip Blank LL		Trip Blank Hi		Trip Blank Lo	
			(0-2')		(5-7')		(0-2')		(5-7')		(0-2')		(5-7')		(0-2')		(5-7')		(0-2')		(5-7')		(0-2')		(5-7')		(6-8')		(6-8')											
			3/5/2014		3/5/2014		3/5/2014		3/5/2014		3/5/2014		3/5/2014		3/5/2014		3/5/2014		3/5/2014		3/5/2014		3/6/2014		3/6/2014		3/6/2014		3/6/2014		3/6/2014		3/6/2014		3/6/2014		3/5/2014		3/5/2014	
			µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg	
			Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
1,1,1,2-Tetrachlorothane			< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
1,1,1-Trichloroethane	680	100,000	< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
1,1,2,2-Tetrachloroethane			< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 2.4	2.4	< 5.9	5.9	< 5.0	5	< 180	180	< 180	180	< 250	250	< 3.0	3	< 250	250	< 3.0	3
1,1,2-Trichloroethane			< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
1,1-Dichloroethane	270	26,000	< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
1,1-Dichloroethene	330	100,000	< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
1,1-Dichloropropene			< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
1,2,3-Trichlorobenzene			< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 300	300	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 280	280	< 6.0	6	< 270	270	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
1,2,3-Trichloropropane			< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 300	300	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 280	280	< 6.0	6	< 270	270	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
1,2,4-Trichlorobenzene			< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 300	300	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 280	280	< 6.0	6	< 270	270	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
1,2,4-Trimethylbenzene	3,600	52,000	< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 300	300	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 280	280	< 6.0	6	< 270	270	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
1,2-Dibromo-3-chloropropane			< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 300	300	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 280	280	< 6.0	6	< 270	270	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
1,2-Dibromomethane			< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
1,2-Dichlorobenzene	1,100	100,000	< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 300	300	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 280	280	< 6.0	6	< 270	270	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
1,2-Dichloroethane	20	3,100	< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
1,2-Dichloropropane			< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
1,3,5-Trimethylbenzene	8,400	52,000	< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 300	300	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 280	280	< 6.0	6	< 270	270	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
1,3-Dichlorobenzene	2,400	4,900	< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 300	300	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 280	280	< 6.0	6	< 270	270	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
1,3-Dichloropropane			< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
1,4-Dichlorobenzene	1,800	13,000	< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 300	300	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 280	280	< 6.0	6	< 270	270	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
2,2-Dichloropropane			< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
2-Chlorotoluene			< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 300	300	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 280	280	< 6.0	6	< 270	270	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
2-Hexanone (Methyl Butyl Ketone)			< 28	28	< 28	28	< 28	28	< 30	30	< 31	31	< 29	29	< 28	28	< 30	30	< 27	27	< 30	30	< 20	20	< 49	49	< 42	42	< 1500	1,500	< 1500	1,500	< 1300	1,300	< 25	25	< 1300	1,300	< 25	25
2-Isopropyltoluene			< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 300	300	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 280	280	< 6.0	6	< 270	270	< 9.9	9.9	< 8.4	8.4	**640**	310	**560**	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
4-Chlorotoluene			< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 300	300	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 280	280	< 6.0	6	< 270	270	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
4-Methyl-2-Pentanone			< 28	28	< 28	28	< 28	28	< 30	30	< 31	31	< 29	29	< 28	28	< 30	30	< 27	27	< 30	30	< 20	20	< 49	49	< 42	42	< 1500	1,500	< 1500	1,500	< 1300	1,300	< 25	25	< 1300	1,300	< 25	25
Acetone	50	100,000	< 50	50	< 50	50	< 50	50	**36**	50	< 50	50	< 50	50	< 50	50	< 50	50	< 50	50	< 50	50	< 24	24	< 59	59	< 50	50	< 1800	1,800	< 1800	1,800	< 5000	5,000	< 30	30	< 2500	2,500	< 30	30
Acrylonitrile			< 11	11	< 11	11	< 11	11	< 12	12	< 12	12	< 12	12	< 11	11	< 12	12	< 11	11	< 12	12	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 500	500	< 5.0	5	< 500	500	< 5.0	5
Benzene	60	4,800	< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
Bromobenzene			< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 300	300	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 280	280	< 6.0	6	< 270	270	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
Bromochloromethane			< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
Bromodichloromethane			< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
Bromoform			< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
Bromomethane			< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
Carbon Disulfide			< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
Carbon tetrachloride	760	2,400	< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
Chlorobenzene	1,100	100,000	< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
Chloroethane			< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
Chloroform	370	49,000	< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
Chloromethane			< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
cis-1,2-Dichloroethene	250	100,000	< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
cis-1,3-Dichloropropene			< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
Dibromochloromethane			< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 2.4	2.4	< 5.9	5.9	< 5.0	5	< 180	180	< 180	180	< 250	250	< 3.0	3	< 250	250	< 3.0	3
Dibromomethane			< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
Dichlorodifluoromethane			< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
Ethylbenzene	1,000	41,000	< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
Hexachlorobutadiene			< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 300	300	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 280	280	< 6.0	6	< 270	270	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
Isopropylbenzene			< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 300	300	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 280	280	< 6.0	6	< 270	270	< 9.9	9.9	< 8.4	8.4	**850**	310	**570**	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
m&p-Xylenes	260	100,000	< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
Methyl Ethyl Ketone (2-Butanone)	120	100,000	< 34	34	< 34	34	< 34	34	**9.3**	36	< 37	37	< 35	35	< 34	34	< 36	36	< 33	33	< 36	36	< 24	24	< 59	59	< 50	50	< 1800	1,800	< 1800	1,800	< 3000	3,000	< 30	30	< 1500	1,500	< 30	30
Methyl t-butyl ether (MTBE)	930	100,000	< 11	11	< 11	11	< 11	11	< 12	12	< 12	12	< 12	12	< 11	11	< 12	12	< 11	11	< 12	12	< 8.0	8	< 20	20	< 17	17	< 610	610	< 600	600	< 250	250	< 10	10	< 500	500	< 10	10
Methylene chloride	50	100,000	**1.1**	5.6	**1.3**	5.7	**1.9**	5.7	**1.2**	6	**1.7**	6.2	**1.3**	5.9	**1.3**	5.6	**1.5**	6	**1.7**	5.4	**1.5**	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 500	500	< 5.0	5	**55**	250	**1**	5
Naphthalene	12,000	100,000	< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 300	300	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 280	280	< 6.0	6	< 270	270	< 9.9	9.9	< 8.4	8.4	**380**	310	**650**	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
n-Butylbenzene	12,000	100,000	< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 300	300	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 280	280	< 6.0	6	< 270	270	< 9.9	9.9	< 8.4	8.4	**2,400**	310	**1,900**	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
n-Propylbenzene	3,900	100,000	< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 300	300	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 280	280	< 6.0	6	< 270	270	< 9.9	9.9	< 8.4	8.4	**2,600**	310	**1,500**	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
o-Xylene	260	100,000	< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
p-Isopropyltoluene			< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 300	300	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 280	280	< 6.0	6	< 270	270	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
sec-Butylbenzene	11,000	100,000	< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 300	300	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 280	280	< 6.0	6	< 270	270	< 9.9	9.9	< 8.4	8.4	**1,600**	310	**1,100**	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
Styrene			< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
tert-Butylbenzene	5,900	100,000	< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 300	300	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 280	280	< 6.0	6	< 270	270	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
Tetrachloroethene	1,300	19,000	< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
Tetrahydrofuran (THF)			< 11	11	< 11	11	< 11	11	< 12	12	< 12	12	< 12	12	< 11	11	< 12	12	< 11	11	< 12	12	< 8.0	8	< 20	20	< 17	17	< 610	610	< 600	600	< 500	500	< 10	10	< 500	500	< 10	10
Toluene	700	100,000	< 5.6	5.6	< 5.7	5.7	**1.1**	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	**1**	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
Total Xylenes			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	-	-	< 5.0	5
trans-1,2-Dichloroethene	190	100,000	< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
trans-1,3-Dichloropropene			< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
trabs-1,4-dichloro-2-butene			< 11	11	< 11	11	< 11	11	< 12	12	< 610	610	< 12	12	< 11	11	< 12	12	< 560	560	< 12	12	< 540	540	< 20	20	< 17	17	< 610	610	< 600	600	< 500	500	< 10	10	< 500	500	< 10	10
Trichloroethene	470	21,000	< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
Trichlorofluoromethane			< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
Trichlorotrifluoroethane			< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
Vinyl Chloride	20	900	< 5.6	5.6	< 5.7	5.7	< 5.7	5.7	< 6.0	6	< 6.2	6.2	< 5.9	5.9	< 5.6	5.6	< 6.0	6	< 5.4	5.4	< 6.0	6	< 4.0	4	< 9.9	9.9	< 8.4	8.4	< 310	310	< 300	300	< 250	250	< 5.0	5	< 250	250	< 5.0	5
Total BTEX Concentration			0		0		0		9.3		0		0		0		0		0		0		0		0		0		0		0		0		0		0		0	
Total VOCs Concentration			1.1		1.3		3		46.5		1.7		1.3		1.3		1.5		2.7		1.5		0		0		0		8470		6280		0		0		55		1	

TABLE 3
11 West Street,
Brooklyn, New York
Soil Analytical Results
Volatile Organic Compounds

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives*	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	B23				B24				B25				B26				B27				B28				Duplicate 1		Duplicate 2		Trip Blank LL	
			(0-2') 11/21/2014 µg/Kg		(5-7') 11/21/2014 µg/Kg		(5-7') 11/21/2014 µg/Kg		(13-15') 11/21/2014 µg/Kg		(5-7') 11/21/2014 µg/Kg		(13-15') 11/21/2014 µg/Kg		(5-7') 11/21/2014 µg/Kg		(13-15') 11/21/2014 µg/Kg		(5-7') 11/21/2014 µg/Kg		(13-15') 11/21/2014 µg/Kg		(0-2') 11/21/2014 µg/Kg		(5-7') 11/21/2014 µg/Kg		11/21/2014 µg/Kg		11/21/2014 µg/Kg		11/21/2014 µg/Kg	
			Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
1,1,1,2-Tetrachlorothane			< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
1,1,1-Trichloroethane	680	100,000	< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
1,1,2,2-Tetrachloroethane			< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
1,1,2-Trichloroethane			< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
1,1-Dichloroethane	270	26,000	< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
1,1-Dichloroethene	330	100,000	< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
1,1-Dichloropropene			< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
1,2,3-Trichlorobenzene			< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
1,2,3-Trichloropropane			< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
1,2,4-Trichlorobenzene			< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
1,2,4-Trimethylbenzene	3,600	52,000	< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
1,2-Dibromo-3-chloropropane			< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
1,2-Dibromomethane			< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
1,2-Dichlorobenzene	1,100	100,000	< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
1,2-Dichloroethane	20	3,100	< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
1,2-Dichloropropane			< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
1,3,5-Trimethylbenzene	8,400	52,000	< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
1,3-Dichlorobenzene	2,400	4,900	< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
1,3-Dichloropropane			< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
1,4-Dichlorobenzene	1,800	13,000	< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
2,2-Dichloropropane			< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
2-Chlorotoluene			< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
2-Hexanone (Methyl Butyl Ketone)			< 42	42	< 40	40	< 28	28	< 58	58	< 36	36	< 59	59	< 44	44	< 42	42	< 47	47	< 53	53	< 41	41	< 68	68	< 69	69	< 61	61	< 25	25
2-Isopropyltoluene			< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
4-Chlorotoluene			< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
4-Methyl-2-Pentanone			< 42	42	< 40	40	< 28	28	< 58	58	< 36	36	< 59	59	< 44	44	< 42	42	< 47	47	< 53	53	< 41	41	< 68	68	< 69	69	< 61	61	< 25	25
Acetone	50	100,000	**72**	83	**38**	50	**82**	57	**120**	120	**20**	50	< 50	50	**160**	87	**140**	85	**74**	94	**43**	50	**64**	81	**73**	140	**280**	140	**66**	120	< 50	50
Acrylonitrile			< 17	17	< 16	16	< 11	11	< 23	23	< 15	15	< 23	23	< 17	17	< 17	17	< 19	19	< 21	21	< 16	16	< 27	27	< 28	28	< 25	25	< 10	10
Benzene	60	4,800	< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
Bromobenzene			< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
Bromochloromethane			< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
Bromodichloromethane			< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
Bromoform			< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
Bromomethane			< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
Carbon Disulfide			< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	**4**	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
Carbon tetrachloride	760	2,400	< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
Chlorobenzene	1,100	100,000	< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
Chloroethane			< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
Chloroform	370	49,000	< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
Chloromethane			< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
cis-1,2-Dichloroethene	250	100,000	< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
cis-1,3-Dichloropropene			< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
Dibromochloromethane			< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
Dibromomethane			< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
Dichlorodifluoromethane			< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
Ethylbenzene	1,000	41,000	< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
Hexachlorobutadiene			< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
Isopropylbenzene			< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
m&p-Xylenes	260	100,000	< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
Methyl Ethyl Ketone (2-Butanone)	120	100,000	< 50	50	< 48	48	< 34	34	< 69	69	< 44	44	< 70	70	< 52	52	< 51	51	< 56	56	< 64	64	< 49	49	< 81	81	**18**	83	**12**	74	< 30	30
Methyl t-butyl ether (MTBE)	930	100,000	< 17	17	< 16	16	< 11	11	< 23	23	< 15	15	< 23	23	< 17	17	< 17	17	< 19	19	< 21	21	< 16	16	< 27	27	< 28	28	< 25	25	< 10	10
Methylene chloride	50	100,000	**1.9**	8.3	**1.5**	8.1	**1.2**	5.7	**2.3**	12	**1.2**	7.3	**5.1**	12	**1.6**	8.7	**1.9**	8.5	**1.8**	9.4	**2.2**	11	**1.6**	8.1	**2.4**	14	< 14	14	< 12	12	**2.4**	5
Naphthalene	12,000	100,000	< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	**690**	280	< 14	14	< 14	14	**510**	300	< 5.0	5
n-Butylbenzene	12,000	100,000	< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
n-Propylbenzene	3,900	100,000	< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
o-Xylene	260	100,000	< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
p-Isopropyltoluene			< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
sec-Butylbenzene	11,000	100,000	< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
Styrene			< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
tert-Butylbenzene	5,900	100,000	< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
Tetrachloroethene	1,300	19,000	< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
Tetrahydrofuran (THF)			< 17	17	< 16	16	< 11	11	< 23	23	< 15	15	< 23	23	< 17	17	< 17	17	< 19	19	< 21	21	< 16	16	< 27	27	< 28	28	< 25	25	< 10	10
Toluene	700	100,000	**3.4**	8.3	< 8.1	8.1	< 5.7	5.7	**11**	12	< 7.3	7.3	< 12	12	**2.6**	8.7	**2**	8.5	**1.8**	9.4	**6**	11	**71**	280	**4.1**	14	**110**	310	**81**	300	< 5.0	5
trans-1,2-Dichloroethene	190	100,000	< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
trans-1,3-Dichloropropene			< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
trabs-1,4-dichloro-2-butene			< 17	17	< 16	16	< 11	11	< 23	23	< 15	15	< 23	23	< 17	17	< 17	17	< 19	19	< 21	21	< 16	16	< 27	27	< 28	28	< 25	25	< 10	10
Trichloroethene	470	21,000	< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
Trichlorofluoromethane			< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
Trichlorotrifluoroethane			< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
Vinyl Chloride	20	900	< 8.3	8.3	< 8.1	8.1	< 5.7	5.7	< 12	12	< 7.3	7.3	< 12	12	< 8.7	8.7	< 8.5	8.5	< 9.4	9.4	< 11	11	< 8.1	8.1	< 14	14	< 14	14	< 12	12	< 5.0	5
Total BTEX Concentration			**3.4**		**0**		**0**		**11**		**0**		**0**		**2.6**		**2**		**1.8**		**6**		**71**		**4.1**		**110**		**81**		**0**	
Total VOCs Concentration			**77.3**		**39.5**		**83.2**		**133.3**		**21.2**		**5.1**		**164.2**		**147.9**		**77.6**		**51.2**		**826.6**		**79.5**		**408**		**669**		**2.4**	

Notes:

* - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives

RL - Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC UUSCO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC RRSCO Guidance Value

TABLE 3
11 West Street,
Brooklyn, New York
Soil Analytical Results
Volatile Organic Compounds

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives*	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	B30				B32				B33				B34				B35				B36			
			(0-2') 11/21/2014 µg/Kg		(5-7') 11/21/2014 µg/Kg		(5-7') 12/9/2014 µg/Kg		(6-8') 12/9/2014 µg/Kg		(5-7') 12/12/2014 µg/Kg		(10-12') 12/12/2014 µg/Kg		(5-7') 12/8/2014 µg/Kg		(10-12') 12/8/2014 µg/Kg		(0-2') 11/21/2014 µg/Kg		(5-7') 11/21/2014 µg/Kg		(0-2') 11/21/2014 µg/Kg		(5-7') 11/21/2014 µg/Kg	
			Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
1,1,1,2-Tetrachlorothane			< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
1,1,1-Trichloroethane	680	100,000	< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	**3.4**	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
1,1,2,2-Tetrachloroethane			< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
1,1,2-Trichloroethane			< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
1,1-Dichloroethane	270	26,000	< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
1,1-Dichloroethene	330	100,000	< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
1,1-Dichloropropene			< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
1,2,3-Trichlorobenzene			< 270	270	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 290	290	< 9.4	9.4	< 4.9	4.9	< 10	10
1,2,3-Trichloropropane			< 270	270	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 290	290	< 9.4	9.4	< 4.9	4.9	< 10	10
1,2,4-Trichlorobenzene			< 270	270	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 290	290	< 9.4	9.4	< 4.9	4.9	< 10	10
1,2,4-Trimethylbenzene	3,600	52,000	< 270	270	< 12	12	< 10	10	< 5.8	5.8	**0.61**	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 290	290	< 9.4	9.4	< 4.9	4.9	< 10	10
1,2-Dibromo-3-chloropropane			< 270	270	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 290	290	< 9.4	9.4	< 4.9	4.9	< 10	10
1,2-Dibromomethane			< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
1,2-Dichlorobenzene	1,100	100,000	< 270	270	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 290	290	< 9.4	9.4	< 4.9	4.9	< 10	10
1,2-Dichloroethane	20	3,100	< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
1,2-Dichloropropane			< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
1,3,5-Trimethylbenzene	8,400	52,000	< 270	270	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 290	290	< 9.4	9.4	< 4.9	4.9	< 10	10
1,3-Dichlorobenzene	2,400	4,900	< 270	270	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 290	290	< 9.4	9.4	< 4.9	4.9	< 10	10
1,3-Dichloropropane			< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
1,4-Dichlorobenzene	1,800	13,000	< 270	270	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 290	290	< 9.4	9.4	< 4.9	4.9	< 10	10
2,2-Dichloropropane			< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
2-Chlorotoluene			< 270	270	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 290	290	< 9.4	9.4	< 4.9	4.9	< 10	10
2-Hexanone (Methyl Butyl Ketone)			< 29	29	< 61	61	< 51	51	< 29	29	< 19	19	< 27	27	< 28	28	< 31	31	< 36	36	< 47	47	< 25	25	< 51	51
2-Isopropyltoluene			< 270	270	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 290	290	< 9.4	9.4	< 4.9	4.9	< 10	10
4-Chlorotoluene			< 270	270	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 290	290	< 9.4	9.4	< 4.9	4.9	< 10	10
4-Methyl-2-Pentanone			< 29	29	< 61	61	< 51	51	< 29	29	< 19	19	< 27	27	< 28	28	< 31	31	< 36	36	< 47	47	< 25	25	< 51	51
Acetone	50	100,000	**140**	58	**270**	120	**14**	50	< 50	50	< 38	38	< 50	50	**18**	50	**13**	50	**48**	50	< 50	50	**42**	49	**170**	100
Acrylonitrile			< 12	12	< 24	24	< 20	20	< 12	12	< 7.5	7.5	< 11	11	< 11	11	< 13	13	< 15	15	< 19	19	< 9.9	9.9	< 20	20
Benzene	60	4,800	< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
Bromobenzene			< 270	270	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 290	290	< 9.4	9.4	< 4.9	4.9	< 10	10
Bromochloromethane			< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
Bromodichloromethane			< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
Bromoform			< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
Bromomethane			< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
Carbon Disulfide			< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
Carbon tetrachloride	760	2,400	< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
Chlorobenzene	1,100	100,000	< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
Chloroethane			< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
Chloroform	370	49,000	< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	**3.7**	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
Chloromethane			< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
cis-1,2-Dichloroethene	250	100,000	< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
cis-1,3-Dichloropropene			< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
Dibromochloromethane			< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
Dibromomethane			< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
Dichlorodifluoromethane			< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
Ethylbenzene	1,000	41,000	< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	**2**	4.9	< 10	10
Hexachlorobutadiene			< 270	270	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 290	290	< 9.4	9.4	< 4.9	4.9	< 10	10
Isopropylbenzene			< 270	270	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 290	290	< 9.4	9.4	< 4.9	4.9	< 10	10
m&p-Xylenes	260	100,000	< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	**2.2**	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	**3.5**	7.3	< 9.4	9.4	**9.9**	4.9	< 10	10
Methyl Ethyl Ketone (2-Butanone)	120	100,000	< 35	35	**19**	73	< 61	61	< 35	35	< 23	23	< 32	32	< 33	33	< 38	38	< 44	44	< 56	56	**4.7**	30	< 61	61
Methyl t-butyl ether (MTBE)	930	100,000	< 12	12	< 24	24	< 20	20	< 12	12	< 7.5	7.5	< 11	11	< 11	11	< 13	13	< 15	15	< 19	19	< 9.9	9.9	< 20	20
Methylene chloride	50	100,000	< 5.8	5.8	< 12	12	**1.7**	10	**2.9**	5.8	**0.65**	3.8	**2.7**	5.4	**1.8**	5.6	**3.9**	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
Naphthalene	12,000	100,000	< 270	270	< 12	12	**77**	280	< 5.8	5.8	**3.3**	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	**120**	290	< 9.4	9.4	< 4.9	4.9	< 10	10
n-Butylbenzene	12,000	100,000	< 270	270	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 290	290	< 9.4	9.4	< 4.9	4.9	< 10	10
n-Propylbenzene	3,900	100,000	< 270	270	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 290	290	< 9.4	9.4	< 4.9	4.9	< 10	10
o-Xylene	260	100,000	< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	**3.7**	7.3	< 9.4	9.4	**13**	4.9	< 10	10
p-Isopropyltoluene			< 270	270	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 290	290	< 9.4	9.4	< 4.9	4.9	< 10	10
sec-Butylbenzene	11,000	100,000	< 270	270	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 290	290	< 9.4	9.4	< 4.9	4.9	< 10	10
Styrene			< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
tert-Butylbenzene	5,900	100,000	< 270	270	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 290	290	< 9.4	9.4	< 4.9	4.9	< 10	10
Tetrachloroethene	1,300	19,000	< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
Tetrahydrofuran (THF)			< 12	12	< 24	24	< 20	20	< 12	12	< 7.5	7.5	< 11	11	< 11	11	< 13	13	< 15	15	< 19	19	< 9.9	9.9	< 20	20
Toluene	700	100,000	**71**	270	**2**	12	**51**	280	< 5.8	5.8	**1.4**	3.8	**77**	300	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	**6.2**	10
trans-1,2-Dichloroethene	190	100,000	< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
trans-1,3-Dichloropropene			< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
trabs-1,4-dichloro-2-butene			< 530	530	< 24	24	< 20	20	< 12	12	< 7.5	7.5	< 11	11	< 11	11	< 13	13	< 580	580	< 19	19	< 9.9	9.9	< 20	20
Trichloroethene	470	21,000	< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
Trichlorofluoromethane			< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
Trichlorotrifluoroethane			< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
Vinyl Chloride	20	900	< 5.8	5.8	< 12	12	< 10	10	< 5.8	5.8	< 3.8	3.8	< 5.4	5.4	< 5.6	5.6	< 6.3	6.3	< 7.3	7.3	< 9.4	9.4	< 4.9	4.9	< 10	10
Total BTEX Concentration			**71**		**2**		**51**		**3.4**		**3.6**		**77**		**0**		**0**		**7.2**		**0**		**24.9**		**6.2**	
Total VOCs Concentration			**211**		**291**		**143.7**		**77.3**		**15.26**		**79.7**		**19.8**		**16.9**		**175.2**		**0**		**71.6**		**176.2**	

Notes:

* - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives

RL - Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC UUSCO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC RRSCO Guidance Value

TABLE 3
11 West Street,
Brooklyn, New York
Soil Analytical Results
Volatile Organic Compounds

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives*	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	Duplicate 3		Duplicate 4		Trip Blank High		Trip Blank Low		Trip Blank LL		Trip Blank HL	
			12/9/2014 µg/Kg		12/12/2014 µg/Kg		12/12/2014 µg/Kg		12/12/2014 µg/Kg		12/9/2014 µg/Kg		12/9/2014 µg/Kg	
			Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
1,1,1,2-Tetrachlorothane			< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
1,1,1-Trichloroethane	680	100,000	< 7.3	7.3	**2.9**	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
1,1,2,2-Tetrachloroethane			< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
1,1,2-Trichloroethane			< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
1,1-Dichloroethane	270	26,000	< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
1,1-Dichloroethene	330	100,000	< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
1,1-Dichloropropene			< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
1,2,3-Trichlorobenzene			< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
1,2,3-Trichloropropane			< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
1,2,4-Trichlorobenzene			< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
1,2,4-Trimethylbenzene	3,600	52,000	< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
1,2-Dibromo-3-chloropropane			< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
1,2-Dibromomethane			< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
1,2-Dichlorobenzene	1,100	100,000	< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
1,2-Dichloroethane	20	3,100	< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
1,2-Dichloropropane			< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
1,3,5-Trimethylbenzene	8,400	52,000	< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
1,3-Dichlorobenzene	2,400	4,900	< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
1,3-Dichloropropane			< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
1,4-Dichlorobenzene	1,800	13,000	< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
2,2-Dichloropropane			< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
2-Chlorotoluene			< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
2-Hexanone (Methyl Butyl Ketone)			< 37	37	< 23	23	< 1300	1,300	< 25	25	< 25	25	< 1300	1,300
2-Isopropyltoluene			< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
4-Chlorotoluene			< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
4-Methyl-2-Pentanone			< 37	37	< 23	23	< 1300	1,300	< 25	25	< 25	25	< 1300	1,300
Acetone	50	100,000	**23**	50	< 46	46	< 2500	2,500	< 50	50	< 50	50	< 2500	2,500
Acrylonitrile			< 15	15	< 9.2	9.2	< 500	500	< 10	10	< 10	10	< 500	500
Benzene	60	4,800	< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
Bromobenzene			< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
Bromochloromethane			< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
Bromodichloromethane			< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
Bromoform			< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
Bromomethane			< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
Carbon Disulfide			< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
Carbon tetrachloride	760	2,400	< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
Chlorobenzene	1,100	100,000	< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
Chloroethane			< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
Chloroform	370	49,000	< 7.3	7.3	**3.3**	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
Chloromethane			< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
cis-1,2-Dichloroethene	250	100,000	< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
cis-1,3-Dichloropropene			< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
Dibromochloromethane			< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
Dibromomethane			< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
Dichlorodifluoromethane			< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
Ethylbenzene	1,000	41,000	< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
Hexachlorobutadiene			< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
Isopropylbenzene			< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
m&p-Xylenes	260	100,000	< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
Methyl Ethyl Ketone (2-Butanone)	120	100,000	< 44	44	< 28	28	< 1500	1,500	< 30	30	< 30	30	< 1500	1,500
Methyl t-butyl ether (MTBE)	930	100,000	< 15	15	< 9.2	9.2	< 500	500	< 10	10	< 10	10	< 500	500
Methylene chloride	50	100,000	**2.5**	7.3	**1.1**	4.6	**170**	250	**3.2**	5	**2.4**	5	**60**	250
Naphthalene	12,000	100,000	< 7.3	7.3	**1.8**	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
n-Butylbenzene	12,000	100,000	< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
n-Propylbenzene	3,900	100,000	< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
o-Xylene	260	100,000	< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
p-Isopropyltoluene			< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
sec-Butylbenzene	11,000	100,000	< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
Styrene			< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
tert-Butylbenzene	5,900	100,000	< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
Tetrachloroethene	1,300	19,000	**1.8**	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
Tetrahydrofuran (THF)			< 15	15	< 9.2	9.2	< 500	500	< 10	10	< 10	10	< 500	500
Toluene	700	100,000	< 7.3	7.3	**1.2**	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
trans-1,2-Dichloroethene	190	100,000	< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
trans-1,3-Dichloropropene			< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
trabs-1,4-dichloro-2-butene			< 15	15	< 9.2	9.2	< 500	500	< 10	10	< 10	10	< 500	500
Trichloroethene	470	21,000	< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
Trichlorofluoromethane			< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
Trichlorotrifluoroethane			< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
Vinyl Chloride	20	900	< 7.3	7.3	< 4.6	4.6	< 250	250	< 5.0	5	< 5.0	5	< 250	250
Total BTEX Concentration			**0**		**1.2**		**0**		**0**		**0**		**0**	
Total VOCs Concentration			**27.3**		**10.3**		**170**		**3.2**		**2.4**		**60**	

Notes:

* - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives

RL - Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC UUSCO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC RRSCO Guidance Value

TABLE 4
11 West Street,
Brooklyn, New York
Soil Analytical Results
Semi-Volatile Organic Compounds

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives*	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	B3				B4				B6				B9				B10				B11				B12		B13			
			(0-2') 3/6/2014 mg/Kg		(5-7') 3/6/2014 mg/Kg		(0-2') 3/6/2014 mg/Kg		(5-7' WT) 3/6/2014 mg/Kg		(0-2') 3/6/2014 mg/Kg		(5-7') 3/6/2014 mg/Kg		(0-2') 3/6/2014 mg/Kg		(5-7') 3/6/2014 mg/Kg		(0-2') 3/6/2014 mg/Kg		(5-7') 3/6/2014 mg/Kg		(0-2') 3/6/2014 mg/Kg		(5-7') 3/6/2014 mg/Kg		(5-7') 3/6/2014 mg/Kg		(0-2') 3/6/2014 mg/Kg		(5-7') 3/6/2014 mg/Kg	
			Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
1,2,4,5-Tetrachlorobenzene			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
1,2,4-Trichlorobenzene			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
1,2-Dichlorobenzene			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
1,2-Diphenylhydrazine			< 360	360	< 380	380	< 9500	9,500	< 410	410	< 240	240	< 270	270	< 380	380	< 530	530	< 1800	1,800	< 420	420	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
1,3-Dichlorobenzene			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
1,4-Dichlorobenzene			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
2,4,5-Trichlorophenol			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
2,4,6-Trichlorophenol			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
2,4-Dichlorophenol			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
2,4-Dimethylphenol			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	**670**	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
2,4-Dinitrophenol			< 570	570	< 610	610	< 15000	15,000	< 650	650	< 1700	1,700	< 1900	1,900	< 600	600	< 840	840	< 2900	2,900	< 670	670	< 1900	1,900	< 1900	1,900	< 1900	1,900	< 1800	1,800	< 2000	2,000
2,4-Dinitrotoluene			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
2,6-Dinitrotoluene			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
2-Chloronaphthalene			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
2-Chlorophenol			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
2-Methylnaphthalene			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	**140**	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	**4,500**	280
2-Methylphenol (o-cresol)	330	100,000	< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
2-Nitroaniline			< 570	570	< 610	610	< 15000	15,000	< 650	650	< 1700	1,700	< 1900	1,900	< 600	600	< 840	840	< 2900	2,900	< 670	670	< 1900	1,900	< 1900	1,900	< 1900	1,900	< 1800	1,800	< 2000	2,000
2-Nitrophenol			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
3&4-Methylphenol (m&p-cresol)	330	100,000	< 360	360	< 380	380	< 9500	9,500	< 410	410	< 240	240	< 270	270	< 380	380	**2,400**	530	< 1800	1,800	< 420	420	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
3,3'-Dichlorobenzidine			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 700	700	< 760	760	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 750	750	< 750	750	< 780	780	< 740	740	< 810	810
3-Nitroaniline			< 570	570	< 610	610	< 15000	15,000	< 650	650	< 1700	1,700	< 1900	1,900	< 600	600	< 840	840	< 2900	2,900	< 670	670	< 1900	1,900	< 1900	1,900	< 1900	1,900	< 1800	1,800	< 2000	2,000
4,6-Dinitro-2-methylphenol			< 1000	1,000	< 1100	1,100	< 28000	28,000	< 1200	1,200	< 1700	1,700	< 1900	1,900	< 1100	1,100	< 1500	1,500	< 5300	5,300	< 1200	1,200	< 1900	1,900	< 1900	1,900	< 1900	1,900	< 1800	1,800	< 2000	2,000
4-Bromophenyl phenyl ether			< 360	360	< 380	380	< 9500	9,500	< 410	410	< 240	240	< 270	270	< 380	380	< 530	530	< 1800	1,800	< 420	420	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
4-Chloro-3-methylphenol			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
4-Chloroaniline			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 700	700	< 760	760	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 750	750	< 750	750	< 780	780	< 740	740	< 810	810
4-Chlorophenyl phenyl ether			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
4-Nitroaniline			< 570	570	< 610	610	< 15000	15,000	< 650	650	< 1700	1,700	< 1900	1,900	< 600	600	< 840	840	< 2900	2,900	< 670	670	< 1900	1,900	< 1900	1,900	< 1900	1,900	< 1800	1,800	< 2000	2,000
4-Nitrophenol			< 1000	1,000	< 1100	1,100	< 28000	28,000	< 1200	1,200	< 1700	1,700	< 1900	1,900	< 1100	1,100	< 1500	1,500	< 5300	5,300	< 1200	1,200	< 1900	1,900	< 1900	1,900	< 1900	1,900	< 1800	1,800	< 2000	2,000
Acenaphthene	20,000	100,000	< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
Acenaphthylene	100,000	100,000	< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	**410**	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
Acetophenone			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
Aniline			< 1000	1,000	< 1100	1,100	< 28000	28,000	< 1200	1,200	< 1700	1,700	< 1900	1,900	< 1100	1,100	< 1500	1,500	< 5300	5,300	< 1200	1,200	< 1900	1,900	< 1900	1,900	< 1900	1,900	< 1800	1,800	< 2000	2,000
Anthracene	100,000	100,000	**610**	250	< 270	270	**18,000**	6,700	< 280	280	**240**	240	**250**	270	< 260	260	**990**	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
Benz(a)anthracene	1,000	1,000	**2,200**	250	< 270	270	**63,000**	6,700	< 280	280	**570**	240	**1,300**	270	**810**	260	**2,900**	370	< 1300	1,300	< 290	290	**360**	260	**360**	260	< 270	270	**160**	260	**150**	280
Benzidine			< 430	430	< 460	460	< 11000	11,000	< 490	490	< 700	700	< 760	760	< 450	450	< 630	630	< 2200	2,200	< 510	510	< 750	750	< 750	750	< 780	780	< 740	740	< 810	810
Benzo(a)pyrene	1,000	1,000	**2,000**	250	< 270	270	**54,000**	6,700	< 280	280	**570**	240	**1,200**	270	**1,600**	260	**2,900**	370	< 1300	1,300	**330**	290	**420**	260	**420**	260	< 270	270	**170**	260	**220**	280
Benzo(b)fluoranthene	1,000	1,000	**2,800**	250	< 270	270	**77,000**	6,700	< 280	280	**700**	240	**1,600**	270	**1,900**	260	**4,900**	370	< 1300	1,300	**400**	290	**680**	260	**640**	260	< 270	270	**270**	260	**340**	280
Benzo(ghi)perylene	100,000	100,000	**970**	250	< 270	270	**21,000**	6,700	< 280	280	**330**	240	**570**	270	**870**	260	**1,600**	370	< 1300	1,300	< 290	290	**200**	260	**200**	260	< 270	270	< 260	260	**140**	280
Benzo(k)fluoranthene	800	3,900	**710**	250	< 270	270	**25,000**	6,700	< 280	280	**260**	240	**500**	270	**580**	260	**1,600**	370	< 1300	1,300	< 290	290	**190**	260	**190**	260	< 270	270	< 260	260	< 280	280
Benzoic acid			< 1000	1,000	< 1100	1,100	< 28000	28,000	< 1200	1,200	< 1700	1,700	< 1900	1,900	< 1100	1,100	< 1500	1,500	< 5300	5,300	< 1200	1,200	< 1900	1,900	< 1900	1,900	< 1900	1,900	< 1800	1,800	< 2000	2,000
Benzyl butyl phthalate			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
Bis(2-chloroethoxy)methane			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
Bis(2-chloroethyl)ether			< 360	360	< 380	380	< 9500	9,500	< 410	410	< 240	240	< 270	270	< 380	380	< 530	530	< 1800	1,800	< 420	420	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
Bis(2-chloroisopropyl)ether			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
Bis(2-ethylhexyl)phthalate			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	**2,000**	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	**110**	260	< 280	280
Carbazole			< 540	540	< 580	580	< 14000	14,000	< 610	610	< 1700	1,700	< 1900	1,900	< 560	560	< 790	790	< 2700	2,700	< 630	630	< 1900	1,900	< 1900	1,900	< 1900	1,900	< 1800	1,800	< 2000	2,000
Chrysene	1,000	3,900	**2,400**	250	< 270	270	**59,000**	6,700	< 280	280	**630**	240	**1,400**	270	**840**	260	**3,500**	370	< 1300	1,300	**300**	290	**370**	260	**440**	260	< 270	270	**190**	260	**220**	280
Dibenz(a,h)anthracene	330	330	**290**	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	**410**	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
Dibenzofuran	7,000	59,000	< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
Diethyl phthalate			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
Dimethylphthalate			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
Di-n-butylphthalate			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
Di-n-octylphthalate			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
Fluoranthene	100,000	100,000	**3,200**	250	< 270	270	**120,000**	6,700	< 280	280	**1,200**	240	**2,200**	270	**1,200**	260	**5,000**	370	< 1300	1,300	**350**	290	**480**	260	**610**	260	< 270	270	**280**	260	**280**	280
Fluorene	30,000	100,000	< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	**480**	280
Hexachlorobenzene			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
Hexachlorobutadiene			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
Hexachlorocyclopentadiene			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
Hexachloroethane			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
Indeno(1,2,3-cd)pyrene	500	500	**930**	250	< 270	270	**21,000**	6,700	< 280	280	**280**	240	**550**	270	**760**	260	**1,400**	370	< 1300	1,300	< 290	290	**160**	260	**190**	260	< 270	270	< 260	260	< 280	280
Isophorone			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
Naphthalene	12,000	100,000	< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	**140**	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	**2,100**	280
Nitrobenzene			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
N-Nitrosodimethylamine			< 360	360	< 380	380	< 9500	9,500	< 410	410	< 240	240	< 270	270	< 380	380	< 530	530	< 1800	1,800	< 420	420	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
N-Nitrosodi-n-propylamine			< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
N-Nitrosodiphenylamine			< 360	360	< 380	380	< 9500	9,500	< 410	410	< 240	240	< 270	270	< 380	380	< 530	530	< 1800	1,800	< 420	420	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
Pentachloronitrobenzene			< 360	360	< 380	380	< 9500	9,500	< 410	410	< 240	240	< 270	270	< 380	380	< 530	530	< 1800	1,800	< 420	420	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
Pentachlorophenol	800	6,700	< 360	360	< 380	380	< 9500	9,500	< 410	410	< 240	240	< 270	270	< 380	380	< 530	530	< 1800	1,800	< 420	420	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
Phenanthrene	100,000	100,000	**3,200**	250	< 270	270	**78,000**	6,700	< 280	280	**1,000**	240	**1,000**	270	**640**	260	**2,500**	370	< 1300	1,300	< 290	290	**210**	260	**430**	260	< 270	270	**160**	260	**590**	280
Phenol	330	100,000	< 250	250	< 270	270	< 6700	6,700	< 280	280	< 240	240	< 270	270	< 260	260	< 370	370	< 1300	1,300	< 290	290	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280
Pyrene	100,000	100,000	**2,800**	250	< 270	270	**98,000**	6,700	< 280	280	**1,200**	240	**2,000**	270	**1,400**	260	**5,200**	370	< 1300	1,300	**320**	290	**480**	260	**570**	260	< 270	270	**270**	260	**320**	280
Pyridine			< 360	360	< 380	380	< 9500	9,500	< 410	410	< 240	240	< 270	270	< 380	380	< 530	530	< 1800	1,800	< 420	420	< 260	260	< 260	260	< 270	270	< 260	260	< 280	280

TABLE 4
11 West Street,
Brooklyn, New York
Soil Analytical Results
Semi-Volatile Organic Compounds

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives*	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	B15				B16				B17				B18				B19				B20				B21		B22		Duplicate	
			(0-2')		(5-7')		(0-2')		(5-7')		(0-2')		(5-7')		(0-2')		(5-7')		(0-2')		(5-7')		(0-2')		(5-7')		(6-8')		(6-8')			
			3/6/2014		3/6/2014		3/6/2014		3/6/2014		3/6/2014		3/6/2014		3/6/2014		3/6/2014		3/6/2014		3/6/2014		3/6/2014		3/6/2014		3/6/2014		3/6/2014		3/6/2014	
			mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		µg/Kg		µg/Kg		µg/Kg	
			Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
1,2,4,5-Tetrachlorobenzene			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
1,2,4-Trichlorobenzene			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
1,2-Dichlorobenzene			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
1,2-Diphenylhydrazine			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 360	360	< 400	400	< 380	380	< 20000	20,000	< 20000	20,000
1,3-Dichlorobenzene			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
1,4-Dichlorobenzene			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
2,4,5-Trichlorophenol			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
2,4,6-Trichlorophenol			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
2,4-Dichlorophenol			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
2,4-Dimethylphenol			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
2,4-Dinitrophenol			< 1900	1,900	< 1900	1,900	< 1900	1,900	< 2000	2,000	< 2000	2,000	< 1900	1,900	< 1800	1,800	< 2000	2,000	< 1800	1,800	< 2000	2,000	< 580	580	< 630	630	< 600	600	< 32000	32,000	< 32000	32,000
2,4-Dinitrotoluene			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
2,6-Dinitrotoluene			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
2-Chloronaphthalene			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
2-Chlorophenol			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
2-Methylnaphthalene			**190**	260	< 270	270	**140**	260	< 280	280	**340**	280	< 260	260	< 260	260	< 280	280	**240**	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
2-Methylphenol (o-cresol)	330	100,000	< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
2-Nitroaniline			< 1900	1,900	< 1900	1,900	< 1900	1,900	< 2000	2,000	< 2000	2,000	< 1900	1,900	< 1800	1,800	< 2000	2,000	< 1800	1,800	< 2000	2,000	< 580	580	< 630	630	< 600	600	< 32000	32,000	< 32000	32,000
2-Nitrophenol			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
3&4-Methylphenol (m&p-cresol)	330	100,000	< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 360	360	< 400	400	< 380	380	< 20000	20,000	< 20000	20,000
3,3'-Dichlorobenzidine			< 760	760	< 760	760	< 750	750	< 800	800	< 790	790	< 750	750	< 740	740	< 790	790	< 730	730	< 780	780	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
3-Nitroaniline			< 1900	1,900	< 1900	1,900	< 1900	1,900	< 2000	2,000	< 2000	2,000	< 1900	1,900	< 1800	1,800	< 2000	2,000	< 1800	1,800	< 2000	2,000	< 580	580	< 630	630	< 600	600	< 32000	32,000	< 32000	32,000
4,6-Dinitro-2-methylphenol			< 1900	1,900	< 1900	1,900	< 1900	1,900	< 2000	2,000	< 2000	2,000	< 1900	1,900	< 1800	1,800	< 2000	2,000	< 1800	1,800	< 2000	2,000	< 1100	1,100	< 1100	1,100	< 1100	1,100	< 58000	58,000	< 57000	57,000
4-Bromophenyl phenyl ether			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 360	360	< 400	400	< 380	380	< 20000	20,000	< 20000	20,000
4-Chloro-3-methylphenol			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
4-Chloroaniline			< 760	760	< 760	760	< 750	750	< 800	800	< 790	790	< 750	750	< 740	740	< 790	790	< 730	730	< 780	780	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
4-Chlorophenyl phenyl ether			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
4-Nitroaniline			< 1900	1,900	< 1900	1,900	< 1900	1,900	< 2000	2,000	< 2000	2,000	< 1900	1,900	< 1800	1,800	< 2000	2,000	< 1800	1,800	< 2000	2,000	< 580	580	< 630	630	< 600	600	< 32000	32,000	< 32000	32,000
4-Nitrophenol			< 1900	1,900	< 1900	1,900	< 1900	1,900	< 2000	2,000	< 2000	2,000	< 1900	1,900	< 1800	1,800	< 2000	2,000	< 1800	1,800	< 2000	2,000	< 1100	1,100	< 1100	1,100	< 1100	1,100	< 58000	58,000	< 57000	57,000
Acenaphthene	20,000	100,000	**140**	260	< 270	270	< 260	260	< 280	280	**360**	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
Acenaphthylene	100,000	100,000	< 260	260	< 270	270	< 260	260	< 280	280	**200**	280	< 260	260	< 260	260	< 280	280	**180**	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
Acetophenone			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
Aniline			< 1900	1,900	< 1900	1,900	< 1900	1,900	< 2000	2,000	< 2000	2,000	< 1900	1,900	< 1800	1,800	< 2000	2,000	< 1800	1,800	< 2000	2,000	< 1100	1,100	< 1100	1,100	< 1100	1,100	< 58000	58,000	< 57000	57,000
Anthracene	100,000	100,000	**640**	260	< 270	270	**290**	260	< 280	280	**860**	280	< 260	260	< 260	260	< 280	280	**460**	260	< 270	270	**310**	260	**660**	280	< 260	260	< 14000	14,000	< 14000	14,000
Benz(a)anthracene	1,000	1,000	**1,900**	260	< 270	270	**890**	260	< 280	280	**3,000**	280	< 260	260	< 260	260	< 280	280	**2,200**	260	< 270	270	**1,400**	260	**1,900**	280	< 260	260	< 14000	14,000	< 14000	14,000
Benzidine			< 760	760	< 760	760	< 750	750	< 800	800	< 790	790	< 750	750	< 740	740	< 790	790	< 730	730	< 780	780	< 440	440	< 480	480	< 450	450	< 24000	24,000	< 24000	24,000
Benzo(a)pyrene	1,000	1,000	**2,100**	260	< 270	270	**970**	260	< 280	280	**2,800**	280	< 260	260	< 260	260	< 280	280	**2,400**	260	< 270	270	**1,400**	260	**1,600**	280	< 260	260	< 14000	14,000	< 14000	14,000
Benzo(b)fluoranthene	1,000	1,000	**3,100**	260	< 270	270	**1,600**	260	< 280	280	**4,200**	280	**140**	260	< 260	260	< 280	280	**3,300**	260	< 270	270	**2,100**	260	**2,200**	280	< 260	260	< 14000	14,000	< 14000	14,000
Benzo(ghi)perylene	100,000	100,000	**960**	260	< 270	270	**330**	260	< 280	280	**1,800**	280	< 260	260	< 260	260	< 280	280	**1,200**	260	< 270	270	**990**	260	**740**	280	< 260	260	< 14000	14,000	< 14000	14,000
Benzo(k)fluoranthene	800	3,900	**920**	260	< 270	270	**470**	260	< 280	280	**960**	280	< 260	260	< 260	260	< 280	280	**940**	260	< 270	270	**790**	260	**630**	280	< 260	260	< 14000	14,000	< 14000	14,000
Benzoic acid			< 1900	1,900	< 1900	1,900	< 1900	1,900	< 2000	2,000	< 2000	2,000	< 1900	1,900	< 1800	1,800	< 2000	2,000	< 1800	1,800	< 2000	2,000	< 1100	1,100	< 1100	1,100	< 1100	1,100	< 58000	58,000	< 57000	57,000
Benzyl butyl phthalate			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
Bis(2-chloroethoxy)methane			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
Bis(2-chloroethyl)ether			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 360	360	< 400	400	< 380	380	< 20000	20,000	< 20000	20,000
Bis(2-chloroisopropyl)ether			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
Bis(2-ethylhexyl)phthalate			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
Carbazole			< 1900	1,900	< 1900	1,900	< 1900	1,900	< 2000	2,000	**430**	2,000	< 1900	1,900	< 1800	1,800	< 2000	2,000	< 1800	1,800	< 2000	2,000	< 550	550	< 590	590	< 570	570	< 30000	30,000	< 30000	30,000
Chrysene	1,000	3,900	**2,000**	260	< 270	270	**1,000**	260	< 280	280	**3,300**	280	< 260	260	< 260	260	< 280	280	**2,400**	260	< 270	270	**1,200**	260	**2,000**	280	< 260	260	< 14000	14,000	< 14000	14,000
Dibenz(a,h)anthracene	330	330	< 260	260	< 270	270	**120**	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
Dibenzofuran	7,000	59,000	**130**	260	< 270	270	**120**	260	< 280	280	**310**	280	< 260	260	< 260	260	< 280	280	**150**	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
Diethyl phthalate			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
Dimethylphthalate			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
Di-n-butylphthalate			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
Di-n-octylphthalate			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
Fluoranthene	100,000	100,000	**3,300**	260	< 270	270	**1,600**	260	< 280	280	**5,600**	280	**190**	260	< 260	260	< 280	280	**3,500**	260	< 270	270	**2,200**	260	**3,100**	280	< 260	260	< 14000	14,000	< 14000	14,000
Fluorene	30,000	100,000	< 260	260	< 270	270	< 260	260	< 280	280	**360**	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
Hexachlorobenzene			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
Hexachlorobutadiene			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
Hexachlorocyclopentadiene			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
Hexachloroethane			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
Indeno(1,2,3-cd)pyrene	500	500	**900**	260	< 270	270	**330**	260	< 280	280	**1,700**	280	< 260	260	< 260	260	< 280	280	**1,100**	260	< 270	270	**810**	260	**700**	280	< 260	260	< 14000	14,000	< 14000	14,000
Isophorone			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
Naphthalene	12,000	100,000	**210**	260	< 270	270	**160**	260	< 280	280	**400**	280	< 260	260	< 260	260	< 280	280	**230**	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
Nitrobenzene			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
N-Nitrosodimethylamine			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 360	360	< 400	400	< 380	380	< 20000	20,000	< 20000	20,000
N-Nitrosodi-n-propylamine			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
N-Nitrosodiphenylamine			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 360	360	< 400	400	< 380	380	< 20000	20,000	< 20000	20,000
Pentachloronitrobenzene			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 360	360	< 400	400	< 380	380	< 20000	20,000	< 20000	20,000
Pentachlorophenol	800	6,700	< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 360	360	< 400	400	< 380	380	< 20000	20,000	< 20000	20,000
Phenanthrene	100,000	100,000	**2,000**	260	< 270	270	**1,000**	260	< 280	280	**3,800**	280	< 260	260	< 260	260	< 280	280	**1,700**	260	< 270	270	**1,200**	260	**3,500**	280	< 260	260	< 14000	14,000	< 14000	14,000
Phenol	330	100,000	< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 260	260	< 280	280	< 260	260	< 14000	14,000	< 14000	14,000
Pyrene	100,000	100,000	**3,000**	260	< 270	270	**1,500**	260	< 280	280	**4,800**	280	**180**	260	< 260	260	< 280	280	**3,200**	260	< 270	270	**2,000**	260	**2,700**	280	< 260	260	< 14000	14,000	< 14000	14,000
Pyridine			< 260	260	< 270	270	< 260	260	< 280	280	< 280	280	< 260	260	< 260	260	< 280	280	< 260	260	< 270	270	< 360	360	< 400	400	< 380	380	< 20000	20,000	< 20000	20,000

Notes:
* - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives
RL - Reporting Limit
Bold/highlighted- Indicated exceedance of the NYSDEC UUSCO Guidance Value
Bold/highlighted- Indicated exceedance of the NYSDEC RRSCO Guidance Value

TABLE 4
11 West Street,
Brooklyn, New York
Soil Analytical Results
Semi-Volatile Organic Compounds

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives*	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	B23						B24				B25						B26				B27				B28			
			(0-2') 11/21/2014 µg/Kg		(5-7') 11/21/2014 µg/Kg		(13-15') 11/21/2014 µg/Kg		(5-7') 11/21/2014 µg/Kg		(13-15') 11/21/2014 µg/Kg		(0-2') 11/21/2014 µg/Kg		(5-7') 11/21/2014 µg/Kg		(13-15') 11/21/2014 µg/Kg		(5-7') 11/21/2014 µg/Kg		(13-15') 11/21/2014 µg/Kg		(5-7') 11/21/2014 µg/Kg		(13-15') 11/21/2014 µg/Kg		(0-2') 11/21/2014 µg/Kg		(5-7') 11/21/2014 µg/Kg	
			Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
1,2,4,5-Tetrachlorobenzene			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
1,2,4-Trichlorobenzene			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
1,2-Dichlorobenzene			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
1,2-Diphenylhydrazine			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
1,3-Dichlorobenzene			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
1,4-Dichlorobenzene			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
2,4,5-Trichlorophenol			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
2,4,6-Trichlorophenol			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
2,4-Dichlorophenol			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
2,4-Dimethylphenol			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
2,4-Dinitrophenol			< 1800	1,800	< 1900	1,900	< 2100	2,100	< 1900	1,900	< 2000	2,000	< 1800	1,800	< 1900	1,900	< 2000	2,000	< 2000	2,000	< 2000	2,000	< 2000	2,000	< 2000	2,000	< 18000	18,000	< 2100	2,100
2,4-Dinitrotoluene			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
2,6-Dinitrotoluene			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
2-Chloronaphthalene			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
2-Chlorophenol			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
2-Methylnaphthalene			**430**	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
2-Methylphenol (o-cresol)	330	100,000	< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
2-Nitroaniline			< 1800	1,800	< 1900	1,900	< 2100	2,100	< 1900	1,900	< 2000	2,000	< 1800	1,800	< 1900	1,900	< 2000	2,000	< 2000	2,000	< 2000	2,000	< 2000	2,000	< 2000	2,000	< 18000	18,000	< 2100	2,100
2-Nitrophenol			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
3&4-Methylphenol (m&p-cresol)	330	100,000	< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
3,3'-Dichlorobenzidine			< 740	740	< 760	760	< 830	830	< 740	740	< 790	790	< 710	710	< 770	770	< 790	790	< 790	790	< 800	800	< 810	810	< 800	800	< 7100	7,100	< 850	850
3-Nitroaniline			< 1800	1,800	< 1900	1,900	< 2100	2,100	< 1900	1,900	< 2000	2,000	< 1800	1,800	< 1900	1,900	< 2000	2,000	< 2000	2,000	< 2000	2,000	< 2000	2,000	< 2000	2,000	< 18000	18,000	< 2100	2,100
4,6-Dinitro-2-methylphenol			< 1800	1,800	< 1900	1,900	< 2100	2,100	< 1900	1,900	< 2000	2,000	< 1800	1,800	< 1900	1,900	< 2000	2,000	< 2000	2,000	< 2000	2,000	< 2000	2,000	< 2000	2,000	< 18000	18,000	< 2100	2,100
4-Bromophenyl phenyl ether			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
4-Chloro-3-methylphenol			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
4-Chloroaniline			< 740	740	< 760	760	< 830	830	< 740	740	< 790	790	< 710	710	< 770	770	< 790	790	< 790	790	< 800	800	< 810	810	< 800	800	< 7100	7,100	< 850	850
4-Chlorophenyl phenyl ether			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
4-Nitroaniline			< 1800	1,800	< 1900	1,900	< 2100	2,100	< 1900	1,900	< 2000	2,000	< 1800	1,800	< 1900	1,900	< 2000	2,000	< 2000	2,000	< 2000	2,000	< 2000	2,000	< 2000	2,000	< 18000	18,000	< 2100	2,100
4-Nitrophenol			< 1800	1,800	< 1900	1,900	< 2100	2,100	< 1900	1,900	< 2000	2,000	< 1800	1,800	< 1900	1,900	< 2000	2,000	< 2000	2,000	< 2000	2,000	< 2000	2,000	< 2000	2,000	< 18000	18,000	< 2100	2,100
Acenaphthene	20,000	100,000	**280**	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	**1,200**	2,500	< 300	300
Acenaphthylene	100,000	100,000	< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
Acetophenone			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
Aniline			< 1800	1,800	< 1900	1,900	< 2100	2,100	< 1900	1,900	< 2000	2,000	< 1800	1,800	< 1900	1,900	< 2000	2,000	< 2000	2,000	< 2000	2,000	< 2000	2,000	< 2000	2,000	< 18000	18,000	< 2100	2,100
Anthracene	100,000	100,000	**580**	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	**3,600**	2,500	< 300	300
Benz(a)anthracene	1,000	1,000	**1,300**	260	< 270	270	< 290	290	**870**	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	**5,300**	2,500	< 300	300
Benzidine			< 740	740	< 760	760	< 830	830	< 740	740	< 790	790	< 710	710	< 770	770	< 790	790	< 790	790	< 800	800	< 810	810	< 800	800	< 7100	7,100	< 850	850
Benzo(a)pyrene	1,000	1,000	**1,100**	260	< 270	270	< 290	290	**780**	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	**4,900**	2,500	< 300	300
Benzo(b)fluoranthene	1,000	1,000	**1,600**	260	< 270	270	< 290	290	**1,000**	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	**5,800**	2,500	< 300	300
Benzo(ghi)perylene	100,000	100,000	**390**	260	< 270	270	< 290	290	**220**	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	**2,600**	2,500	< 300	300
Benzo(k)fluoranthene	800	3,900	**400**	260	< 270	270	< 290	290	**370**	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	**2,100**	2,500	< 300	300
Benzoic acid			< 1800	1,800	< 1900	1,900	< 2100	2,100	< 1900	1,900	< 2000	2,000	< 1800	1,800	< 1900	1,900	< 2000	2,000	< 2000	2,000	< 2000	2,000	< 2000	2,000	< 2000	2,000	< 18000	18,000	< 2100	2,100
Benzyl butyl phthalate			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
Bis(2-chloroethoxy)methane			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
Bis(2-chloroethyl)ether			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
Bis(2-chloroisopropyl)ether			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
Bis(2-ethylhexyl)phthalate			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
Carbazole			< 1800	1,800	< 1900	1,900	< 2100	2,100	< 1900	1,900	< 2000	2,000	< 1800	1,800	< 1900	1,900	< 2000	2,000	< 2000	2,000	< 2000	2,000	< 2000	2,000	< 2000	2,000	< 18000	18,000	< 2100	2,100
Chrysene	1,000	3,900	**1,500**	260	< 270	270	< 290	290	**940**	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	**5,300**	2,500	< 300	300
Dibenz(a,h)anthracene	330	330	< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
Dibenzofuran	7,000	59,000	**280**	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	**1,000**	2,500	< 300	300
Diethyl phthalate			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
Dimethylphthalate			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
Di-n-butylphthalate			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
Di-n-octylphthalate			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
Fluoranthene	100,000	100,000	**2,400**	260	< 270	270	< 290	290	**1,100**	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	**14,000**	2,500	< 300	300
Fluorene	30,000	100,000	**310**	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	**1,600**	2,500	< 300	300
Hexachlorobenzene			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
Hexachlorobutadiene			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
Hexachlorocyclopentadiene			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
Hexachloroethane			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
Indeno(1,2,3-cd)pyrene	500	500	**390**	260	< 270	270	< 290	290	**270**	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	**3,000**	2,500	< 300	300
Isophorone			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
Naphthalene	12,000	100,000	< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	**1,200**	2,500	< 300	300
Nitrobenzene			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
N-Nitrosodimethylamine			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
N-Nitrosodi-n-propylamine			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
N-Nitrosodiphenylamine			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
Pentachloronitrobenzene			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
Pentachlorophenol	800	6,700	< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
Phenanthrene	100,000	100,000	**2,300**	260	< 270	270	< 290	290	**440**	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	**11,000**	2,500	< 300	300
Phenol	330	100,000	< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300
Pyrene	100,000	100,000	**2,100**	260	< 270	270	< 290	290	**1,000**	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	**12,000**	2,500	< 300	300
Pyridine			< 260	260	< 270	270	< 290	290	< 260	260	< 280	280	< 250	250	< 270	270	< 280	280	< 280	280	< 280	280	< 280	280	< 280	280	< 2500	2,500	< 300	300

Notes:
* - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives
RL - Reporting Limit
Bold/highlighted- Indicated exceedance of the NYSDEC UUSCO Guidance Value
Bold/highlighted- Indicated exceedance of the NYSDEC RRSCO Guidance Value

TABLE 4
11 West Street,
Brooklyn, New York
Soil Analytical Results
Semi-Volatile Organic Compounds

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives*	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	B30				B32				B33				B34				B35				B36				Duplicate 1		Duplicate 2		Duplicate 3		Duplicate 4	
			(0-2') 11/21/2014 µg/Kg		(5-7') 11/21/2014 µg/Kg		(5-7') 12/9/2014 µg/Kg		(6-8') 12/9/2014 µg/Kg		(5-7') 12/12/2014 µg/Kg		(10-12') 12/12/2014 µg/Kg		(5-7') 12/8/2014 µg/Kg		(10-12') 12/8/2014 µg/Kg		(0-2') 11/21/2014 µg/Kg		(5-7') 11/21/2014 µg/Kg		(0-2') 11/21/2014 µg/Kg		(5-7') 11/21/2014 µg/Kg		11/21/2014 µg/Kg		11/21/2014 µg/Kg		12/9/2014 µg/Kg		12/12/2014 µg/Kg	
			Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
1,2,4,5-Tetrachlorobenzene			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
1,2,4-Trichlorobenzene			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
1,2-Dichlorobenzene			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
1,2-Diphenylhydrazine			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
1,3-Dichlorobenzene			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
1,4-Dichlorobenzene			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
2,4,5-Trichlorophenol			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
2,4,6-Trichlorophenol			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
2,4-Dichlorophenol			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
2,4-Dimethylphenol			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
2,4-Dinitrophenol			< 1800	1,800	< 2000	2,000	< 3700	3,700	< 2000	2,000	< 1800	1,800	< 1900	1,900	< 3700	3,700	< 1900	1,900	< 3600	3,600	< 1900	1,900	< 3600	3,600	< 1900	1,900	< 2000	2,000	< 9000	9,000	< 3700	3,700	< 1800	1,800
2,4-Dinitrotoluene			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
2,6-Dinitrotoluene			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
2-Chloronaphthalene			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
2-Chlorophenol			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
2-Methylnaphthalene			< 250	250	< 290	290	**230**	520	< 280	280	**740**	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	**550**	1,300	< 520	520	**300**	260
2-Methylphenol (o-cresol)	330	100,000	< 250	250	< 290	290	< 330	330	< 280	280	< 260	260	< 270	270	< 330	330	< 260	260	< 500	500	< 270	270	< 330	330	< 270	270	< 280	280	< 1300	1,300	< 330	330	< 260	260
2-Nitroaniline			< 1800	1,800	< 2000	2,000	< 3700	3,700	< 2000	2,000	< 1800	1,800	< 1900	1,900	< 3700	3,700	< 1900	1,900	< 3600	3,600	< 1900	1,900	< 3600	3,600	< 1900	1,900	< 2000	2,000	< 9000	9,000	< 3700	3,700	< 1800	1,800
2-Nitrophenol			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
3&4-Methylphenol (m&p-cresol)	330	100,000	< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
3,3'-Dichlorobenzidine			< 710	710	< 810	810	< 1500	1,500	< 800	800	< 740	740	< 760	760	< 1500	1,500	< 740	740	< 1400	1,400	< 770	770	< 1400	1,400	< 760	760	< 810	810	< 3600	3,600	< 1500	1,500	< 730	730
3-Nitroaniline			< 1800	1,800	< 2000	2,000	< 3700	3,700	< 2000	2,000	< 1800	1,800	< 1900	1,900	< 3700	3,700	< 1900	1,900	< 3600	3,600	< 1900	1,900	< 3600	3,600	< 1900	1,900	< 2000	2,000	< 9000	9,000	< 3700	3,700	< 1800	1,800
4,6-Dinitro-2-methylphenol			< 1800	1,800	< 2000	2,000	< 3700	3,700	< 2000	2,000	< 1800	1,800	< 1900	1,900	< 3700	3,700	< 1900	1,900	< 3600	3,600	< 1900	1,900	< 3600	3,600	< 1900	1,900	< 2000	2,000	< 9000	9,000	< 3700	3,700	< 1800	1,800
4-Bromophenyl phenyl ether			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
4-Chloro-3-methylphenol			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
4-Chloroaniline			< 710	710	< 810	810	< 1500	1,500	< 800	800	< 740	740	< 760	760	< 1500	1,500	< 740	740	< 1400	1,400	< 770	770	< 1400	1,400	< 760	760	< 810	810	< 3600	3,600	< 1500	1,500	< 730	730
4-Chlorophenyl phenyl ether			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
4-Nitroaniline			< 1800	1,800	< 2000	2,000	< 3700	3,700	< 2000	2,000	< 1800	1,800	< 1900	1,900	< 3700	3,700	< 1900	1,900	< 3600	3,600	< 1900	1,900	< 3600	3,600	< 1900	1,900	< 2000	2,000	< 9000	9,000	< 3700	3,700	< 1800	1,800
4-Nitrophenol			< 1800	1,800	< 2000	2,000	< 3700	3,700	< 2000	2,000	< 1800	1,800	< 1900	1,900	< 3700	3,700	< 1900	1,900	< 3600	3,600	< 1900	1,900	< 3600	3,600	< 1900	1,900	< 2000	2,000	< 9000	9,000	< 3700	3,700	< 1800	1,800
Acenaphthene	20,000	100,000	< 250	250	< 290	290	**290**	520	< 280	280	**1,800**	260	< 270	270	< 520	520	< 260	260	**330**	500	< 270	270	< 500	500	< 270	270	< 280	280	**1,300**	1,300	< 520	520	**380**	260
Acenaphthylene	100,000	100,000	< 250	250	< 290	290	< 520	520	< 280	280	**350**	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	**310**	260
Acetophenone			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
Aniline			< 1800	1,800	< 2000	2,000	< 3700	3,700	< 2000	2,000	< 1800	1,800	< 1900	1,900	< 3700	3,700	< 1900	1,900	< 3600	3,600	< 1900	1,900	< 3600	3,600	< 1900	1,900	< 2000	2,000	< 9000	9,000	< 3700	3,700	< 1800	1,800
Anthracene	100,000	100,000	**220**	250	< 290	290	**1,000**	520	< 280	280	**4,100**	260	< 270	270	**500**	520	< 260	260	**840**	500	< 270	270	< 500	500	< 270	270	< 280	280	**3,400**	1,300	**430**	520	**1,200**	260
Benz(a)anthracene	1,000	1,000	**780**	250	< 290	290	**3,500**	520	< 280	280	**7,400**	1,300	< 270	270	**2,300**	520	< 260	260	**1,700**	500	< 270	270	**350**	500	< 270	270	< 280	280	**4,400**	1,300	**1,900**	520	**4,200**	260
Benzidine			< 710	710	< 810	810	< 1500	1,500	< 800	800	< 740	740	< 760	760	< 1500	1,500	< 740	740	< 1400	1,400	< 770	770	< 1400	1,400	< 760	760	< 810	810	< 3600	3,600	< 1500	1,500	< 730	730
Benzo(a)pyrene	1,000	1,000	**770**	250	< 290	290	**3,300**	520	< 280	280	**6,200**	1,300	< 270	270	**2,000**	520	< 260	260	**1,500**	500	< 270	270	**320**	500	< 270	270	< 280	280	**4,000**	1,300	**1,300**	520	**3,800**	260
Benzo(b)fluoranthene	1,000	1,000	**1,000**	250	< 290	290	**4,900**	520	< 280	280	**8,300**	1,300	< 270	270	**3,800**	520	< 260	260	**2,000**	500	< 270	270	**390**	500	< 270	270	< 280	280	**5,300**	1,300	**3,000**	520	**4,700**	260
Benzo(ghi)perylene	100,000	100,000	**420**	250	< 290	290	**990**	520	< 280	280	**4,300**	260	< 270	270	**830**	520	< 260	260	**1,000**	500	< 270	270	< 500	500	< 270	270	< 280	280	**1,000**	1,300	**510**	520	**2,300**	260
Benzo(k)fluoranthene	800	3,900	**350**	250	< 290	290	**1,600**	520	< 280	280	**2,800**	260	< 270	270	**1,100**	520	< 260	260	**600**	500	< 270	270	< 500	500	< 270	270	< 280	280	**2,300**	1,300	**930**	520	**1,500**	260
Benzoic acid			< 1800	1,800	< 2000	2,000	< 3700	3,700	< 2000	2,000	< 1800	1,800	< 1900	1,900	< 3700	3,700	< 1900	1,900	< 3600	3,600	< 1900	1,900	< 3600	3,600	< 1900	1,900	< 2000	2,000	< 9000	9,000	< 3700	3,700	< 1800	1,800
Benzyl butyl phthalate			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
Bis(2-chloroethoxy)methane			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
Bis(2-chloroethyl)ether			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
Bis(2-chloroisopropyl)ether			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
Bis(2-ethylhexyl)phthalate			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	**280**	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
Carbazole			< 1800	1,800	< 2000	2,000	< 3700	3,700	< 2000	2,000	**1,500**	1,800	< 1900	1,900	< 3700	3,700	< 1900	1,900	< 3600	3,600	< 1900	1,900	< 3600	3,600	< 1900	1,900	< 2000	2,000	**1,600**	9,000	< 3700	3,700	**450**	1,800
Chrysene	1,000	3,900	**840**	250	< 290	290	**3,500**	520	< 280	280	**7,100**	1,300	< 270	270	**2,800**	520	< 260	260	**1,800**	500	< 270	270	**390**	500	< 270	270	< 280	280	**4,600**	1,300	**2,600**	520	**4,200**	260
Dibenz(a,h)anthracene	330	330	< 250	250	< 290	290	< 330	330	< 280	280	**1,100**	260	< 270	270	**280**	330	< 260	260	**290**	500	< 270	270	< 330	330	< 270	270	< 280	280	< 1300	1,300	< 330	330	**590**	260
Dibenzofuran	7,000	59,000	< 250	250	< 290	290	**260**	520	< 280	280	**1,500**	260	< 270	270	< 520	520	< 260	260	**290**	500	< 270	270	< 500	500	< 270	270	< 280	280	**1,100**	1,300	< 520	520	**380**	260
Diethyl phthalate			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
Dimethylphthalate			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
Di-n-butylphthalate			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
Di-n-octylphthalate			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
Fluoranthene	100,000	100,000	**1,500**	250	< 290	290	**6,900**	520	< 280	280	**18,000**	1,300	**140**	270	**4,900**	520	< 260	260	**3,600**	500	< 270	270	**570**	500	< 270	270	< 280	280	**8,100**	1,300	**4,600**	520	**7,700**	1,300
Fluorene	30,000	100,000	< 250	250	< 290	290	**310**	520	< 280	280	**2,200**	260	< 270	270	< 520	520	< 260	260	**340**	500	< 270	270	< 500	500	< 270	270	< 280	280	**1,700**	1,300	< 520	520	**540**	260
Hexachlorobenzene			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
Hexachlorobutadiene			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
Hexachlorocyclopentadiene			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
Hexachloroethane			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
Indeno(1,2,3-cd)pyrene	500	500	**450**	250	< 290	290	**1,000**	520	< 280	280	**4,000**	260	< 270	270	**880**	520	< 260	260	**1,000**	500	< 270	270	< 500	500	< 270	270	< 280	280	**1,300**	1,300	**570**	520	**2,200**	260
Isophorone			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
Naphthalene	12,000	100,000	< 250	250	< 290	290	< 520	520	< 280	280	**1,400**	260	< 270	270	**270**	520	< 260	260	**290**	500	< 270	270	< 500	500	< 270	270	< 280	280	**1,000**	1,300	**230**	520	**710**	260
Nitrobenzene			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
N-Nitrosodimethylamine			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
N-Nitrosodi-n-propylamine			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
N-Nitrosodiphenylamine			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
Pentachloronitrobenzene			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
Pentachlorophenol	800	6,700	< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260
Phenanthrene	100,000	100,000	**1,100**	250	< 290	290	**4,500**	520	< 280	280	**17,000**	1,300	**190**	270	**3,400**	520	< 260	260	**3,500**	500	< 270	270	**510**	500	< 270	270	< 280	280	**9,300**	1,300	**3,600**	520	**5,500**	1,300
Phenol	330	100,000	< 250	250	< 290	290	< 330	330	< 280	280	< 260	260	< 270	270	< 330	330	< 260	260	< 500	500	< 270	270	< 330	330	< 270	270	< 280	280	< 1300	1,300	< 330	330	< 260	260
Pyrene	100,000	100,000	**1,300**	250	< 290	290	**6,000**	520	< 280	280	**16,000**	1,300	< 270	270	**2,600**	520	< 260	260	**2,900**	500	< 270	270	**490**	500	< 270	270	< 280	280	**6,000**	1,300	**2,300**	520	**4,800**	260
Pyridine			< 250	250	< 290	290	< 520	520	< 280	280	< 260	260	< 270	270	< 520	520	< 260	260	< 500	500	< 270	270	< 500	500	< 270	270	< 280	280	< 1300	1,300	< 520	520	< 260	260

Notes:

* - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives

RL - Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC UUSCO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC RRSCO Guidance Value

TABLE 5
11 West Street,
Brooklyn, New York
Soil Analytical Results
Pesticides PCBs

	COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives*	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	B3 (0-2') 3/6/2014 mg/Kg		B3 (5-7') 3/6/2014 mg/Kg		B4 (0-2') 3/6/2014 mg/Kg		B4 (5-7' WT) 3/6/2014 mg/Kg		B6 (0-2') 3/6/2014 mg/Kg		B9 (0-2') 3/6/2014 mg/Kg		B9 (5-7') 3/6/2014 mg/Kg		B10 (0-2') 3/6/2014 mg/Kg		B10 (5-7') 3/6/2014 mg/Kg		B11 (0-2') 3/1/2014 mg/Kg		B13 (0-2') 3/2/2014 mg/Kg		B15 (0-2') 3/3/2014 mg/Kg		B16 (0-2') 3/4/2014 mg/Kg		B17 (0-2') 3/5/2014 mg/Kg		B18 (0-2') 3/6/2014 mg/Kg		B19 (0-2') 3/6/2014 mg/Kg		B20 (0-2') 3/6/2014 mg/Kg		B20 (5-7') 3/6/2014 mg/Kg		Duplicate 3/6/2014 mg/Kg	
				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Pesticides	4,4' -DDD	3.3	13,000	< 4.3	4.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 2.2	2.2
	4,4' -DDE	3.3	8,900	< 2.2	2.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 2.2	2.2
	4,4' -DDT	3.3	7,900	< 2.9	2.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 2.2	2.2
	a-BHC	20	480	< 3.4	3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 3.6	3.6
	a-Chlordane	94	4,200	< 3.4	3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 3.6	3.6
	Aldrin	5	97	< 1.1	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 1.1	1.1
	b-BHC	36	360	< 3.4	3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 3.6	3.6
	Chlordane	94	4,200	< 11	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 11	11
	d-BHC	40	100,000	< 3.4	3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 3.6	3.6
	Dieldrin	5	200	< 1.1	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 1.1	1.1
	Endosulfan I	2,400	24,000	< 3.4	3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 3.6	3.6
	Endosulfan II	2,400	24,000	< 6.9	6.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 7.2	7.2
	Endosulfan sulfate	2,400	24,000	< 6.9	6.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 7.2	7.2
	Endrin	14	11,000	< 6.9	6.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 7.2	7.2
	Endrin aldehyde			< 6.9	6.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 7.2	7.2
	Endrin ketone			< 6.9	6.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 7.2	7.2
	g-BHC			< 1.1	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 1.1	1.1
	Heptachlor	42	2,100	< 2.2	2.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 2.2	2.2
	Heptachlor epoxide			< 3.4	3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 3.6	3.6
	Methoxychlor			< 34	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 36	36
	Toxaphene			< 180	180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 190	190
PCBs	PCB-1016	100	1,000	< 72	72	< 76	76	< 76	76	< 79	79	< 36	36	< 75	75	< 1000	1,000	< 72	72	< 84	84	< 37	37	< 36	36	< 37	37	< 38	38	< 40	40	< 36	36	< 37	37	< 73	73	< 79	79	< 75	75
	PCB-1221	100	1,000	< 72	72	< 76	76	< 76	76	< 79	79	< 36	36	< 75	75	< 1000	1,000	< 72	72	< 84	84	< 37	37	< 36	36	< 37	37	< 38	38	< 40	40	< 36	36	< 37	37	< 73	73	< 79	79	< 75	75
	PCB-1232	100	1,000	< 72	72	< 76	76	< 76	76	< 79	79	< 36	36	< 75	75	< 1000	1,000	< 72	72	< 84	84	< 37	37	< 36	36	< 37	37	< 38	38	< 40	40	< 36	36	< 37	37	< 73	73	< 79	79	< 75	75
	PCB-1242	100	1,000	< 72	72	< 76	76	< 76	76	< 79	79	< 36	36	< 75	75	< 1000	1,000	< 72	72	< 84	84	< 37	37	< 36	36	< 37	37	< 38	38	< 40	40	< 36	36	< 37	37	< 73	73	< 79	79	< 75	75
	PCB-1248	100	1,000	< 72	72	< 76	76	< 76	76	< 79	79	< 36	36	< 75	75	< 1000	1,000	< 72	72	< 84	84	< 37	37	< 36	36	< 37	37	< 38	38	< 40	40	< 36	36	< 37	37	< 73	73	< 79	79	< 75	75
	PCB-1254	100	1,000	< 72	72	< 76	76	< 76	76	< 79	79	< 36	36	< 75	75	< 1000	1,000	< 72	72	< 84	84	< 37	37	< 36	36	< 37	37	< 38	38	< 40	40	< 36	36	< 37	37	< 73	73	< 79	79	< 75	75
	PCB-1260	100	1,000	< 72	72	< 76	76	< 76	76	< 79	79	< 36	36	< 75	75	**6,300**	1,000	< 72	72	< 84	84	< 37	37	< 36	36	< 37	37	< 38	38	**60**	40	< 36	36	< 37	37	< 73	73	< 79	79	< 75	75
	PCB-1262	100	1,000	< 72	72	< 76	76	< 76	76	< 79	79	< 36	36	< 75	75	< 1000	1,000	< 72	72	< 84	84	< 37	37	< 36	36	< 37	37	< 38	38	< 40	40	< 36	36	< 37	37	< 73	73	< 79	79	< 75	75
	PCB-1268	100	1,000	< 72	72	< 76	76	< 76	76	< 79	79	< 36	36	< 75	75	< 1000	1,000	< 72	72	< 84	84	< 37	37	< 36	36	< 37	37	< 38	38	< 40	40	< 36	36	< 37	37	< 73	73	< 79	79	< 75	75

Notes:

* - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives

RL- Reporting Limit

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Bold/highlighted- Indicated exceedance of the NYSDEC RRSCO Guidance Value

TABLE 5
11 West Street,
Brooklyn, New York
Soil Analytical Results
Pesticides PCBs

	COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives*	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	B23 (0-2') 11/21/2014 µg/Kg		B23 (5-7') 11/21/2014 µg/Kg		B25 (0-2') 11/21/2014 µg/Kg		B25 (5-7') 11/21/2014 µg/Kg		B28 (0-2') 11/21/2014 µg/Kg		B28 (5-7') 11/21/2014 µg/Kg		B30 (0-2') 11/21/2014 µg/Kg		B30 (5-7') 11/21/2014 µg/Kg		Duplicate 1 11/21/2014 µg/Kg		Duplicate 2 11/21/2014 µg/Kg	
				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Pesticides	4,4' -DDD	3.3	13,000	< 3.2	3.2	< 2.3	2.3	< 2.1	2.1	< 2.3	2.3	< 5.0	5	< 2.6	2.6	< 2.1	2.1	< 2.4	2.4	< 2.4	2.4	< 4.0	4
	4,4' -DDE	3.3	8,900	**3.3**	2.3	< 2.3	2.3	< 2.1	2.1	< 2.3	2.3	< 2.1	2.1	< 2.6	2.6	< 2.1	2.1	< 2.4	2.4	< 2.4	2.4	< 2.2	2.2
	4,4' -DDT	3.3	7,900	< 2.3	2.3	< 2.3	2.3	< 2.1	2.1	< 2.3	2.3	< 6.0	6	< 2.6	2.6	< 2.1	2.1	< 2.4	2.4	< 2.4	2.4	< 4.5	4.5
	a-BHC	20	480	< 7.5	7.5	< 7.5	7.5	< 7.1	7.1	< 7.8	7.8	< 7.1	7.1	< 8.5	8.5	< 7.2	7.2	< 8.1	8.1	< 8.0	8	< 7.2	7.2
	a-Chlordane	94	4,200	< 3.8	3.8	< 3.8	3.8	< 3.6	3.6	< 3.9	3.9	< 3.6	3.6	< 4.3	4.3	< 3.6	3.6	< 4.1	4.1	< 4.0	4	< 3.6	3.6
	Aldrin	5	97	< 3.8	3.8	< 3.8	3.8	< 3.6	3.6	< 3.9	3.9	< 3.6	3.6	< 4.3	4.3	< 3.6	3.6	< 4.1	4.1	< 4.0	4	< 3.6	3.6
	b-BHC	36	360	< 7.5	7.5	< 7.5	7.5	< 7.1	7.1	< 7.8	7.8	< 7.1	7.1	< 8.5	8.5	< 7.2	7.2	< 8.1	8.1	< 8.0	8	< 7.2	7.2
	Chlordane	94	4,200	< 38	38	< 38	38	< 36	36	< 39	39	< 36	36	< 43	43	< 36	36	< 41	41	< 40	40	< 36	36
	d-BHC	40	100,000	< 7.5	7.5	< 7.5	7.5	< 7.1	7.1	< 7.8	7.8	< 7.1	7.1	< 8.5	8.5	< 7.2	7.2	< 8.1	8.1	< 8.0	8	< 7.2	7.2
	Dieldrin	5	200	< 3.8	3.8	< 3.8	3.8	< 3.6	3.6	< 3.9	3.9	< 3.6	3.6	< 4.3	4.3	< 3.6	3.6	< 4.1	4.1	< 4.0	4	< 3.6	3.6
	Endosulfan I	2,400	24,000	< 7.5	7.5	< 7.5	7.5	< 7.1	7.1	< 7.8	7.8	< 7.1	7.1	< 8.5	8.5	< 7.2	7.2	< 8.1	8.1	< 8.0	8	< 7.2	7.2
	Endosulfan II	2,400	24,000	< 7.5	7.5	< 7.5	7.5	< 7.1	7.1	< 7.8	7.8	< 7.1	7.1	< 8.5	8.5	< 7.2	7.2	< 8.1	8.1	< 8.0	8	< 7.2	7.2
	Endosulfan sulfate	2,400	24,000	< 7.5	7.5	< 7.5	7.5	< 7.1	7.1	< 7.8	7.8	< 7.1	7.1	< 8.5	8.5	< 7.2	7.2	< 8.1	8.1	< 8.0	8	< 7.2	7.2
	Endrin	14	11,000	< 7.5	7.5	< 7.5	7.5	< 7.1	7.1	< 7.8	7.8	< 7.1	7.1	< 8.5	8.5	< 7.2	7.2	< 8.1	8.1	< 8.0	8	< 7.2	7.2
	Endrin aldehyde			< 7.5	7.5	< 7.5	7.5	< 7.1	7.1	< 7.8	7.8	< 7.1	7.1	< 8.5	8.5	< 7.2	7.2	< 8.1	8.1	< 8.0	8	< 7.2	7.2
	Endrin ketone			< 7.5	7.5	< 7.5	7.5	< 7.1	7.1	< 7.8	7.8	< 7.1	7.1	< 8.5	8.5	< 7.2	7.2	< 8.1	8.1	< 8.0	8	< 7.2	7.2
	g-BHC			< 1.5	1.5	< 1.5	1.5	< 1.4	1.4	< 1.6	1.6	< 1.4	1.4	< 1.7	1.7	< 1.4	1.4	< 1.6	1.6	< 1.6	1.6	< 1.4	1.4
	g-Chlordane			< 3.8	3.8	< 3.8	3.8	< 3.6	3.6	< 3.9	3.9	< 3.6	3.6	< 4.3	4.3	< 3.6	3.6	< 4.1	4.1	< 4.0	4	< 3.6	3.6
	Heptachlor	42	2,100	< 7.5	7.5	< 7.5	7.5	< 7.1	7.1	< 7.8	7.8	< 7.1	7.1	< 8.5	8.5	< 7.2	7.2	< 8.1	8.1	< 8.0	8	< 7.2	7.2
	Heptachlor epoxide			< 7.5	7.5	< 7.5	7.5	< 7.1	7.1	< 7.8	7.8	< 7.1	7.1	< 8.5	8.5	< 7.2	7.2	< 8.1	8.1	< 8.0	8	< 7.2	7.2
	Methoxychlor			< 38	38	< 38	38	< 36	36	< 39	39	< 36	36	< 43	43	< 36	36	< 41	41	< 40	40	< 36	36
	Toxaphene			< 150	150	< 150	150	< 140	140	< 160	160	< 140	140	< 170	170	< 140	140	< 160	160	< 160	160	< 140	140
PCBs	PCB-1016	100	1,000	< 38	38	< 38	38	< 36	36	< 39	39	< 36	36	< 43	43	< 50	50	< 41	41	< 40	40	< 36	36
	PCB-1221	100	1,000	< 38	38	< 38	38	< 36	36	< 39	39	< 36	36	< 43	43	< 50	50	< 41	41	< 40	40	< 36	36
	PCB-1232	100	1,000	< 38	38	< 38	38	< 36	36	< 39	39	< 36	36	< 43	43	< 50	50	< 41	41	< 40	40	< 36	36
	PCB-1242	100	1,000	< 38	38	< 38	38	< 36	36	< 39	39	< 36	36	< 43	43	< 50	50	< 41	41	< 40	40	< 36	36
	PCB-1248	100	1,000	< 38	38	< 38	38	< 36	36	< 39	39	< 36	36	< 43	43	< 50	50	< 41	41	< 40	40	< 36	36
	PCB-1254	100	1,000	< 38	38	< 38	38	< 36	36	< 39	39	< 36	36	< 43	43	< 50	50	< 41	41	< 40	40	< 36	36
	PCB-1260	100	1,000	**38**	38	< 38	38	< 36	36	< 39	39	**45**	36	< 43	43	< 50	50	< 41	41	< 40	40	**56**	36
	PCB-1262	100	1,000	< 38	38	< 38	38	< 36	36	< 39	39	< 36	36	< 43	43	< 50	50	< 41	41	< 40	40	< 36	36
	PCB-1268	100	1,000	< 38	38	< 38	38	< 36	36	< 39	39	< 36	36	< 43	43	< 50	50	< 41	41	< 40	40	< 36	36

Notes:

* - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives

RL- Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC UUSCO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC RRSCO Guidance Value

TABLE 5
11 West Street,
Brooklyn, New York
Soil Analytical Results
Pesticides PCBs

	COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives*	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	B32 (5-7') 12/9/2014 µg/Kg		B33 (5-7') 12/12/2014 µg/Kg		B34 (5-7') 12/8/2014 µg/Kg		B35 (0-2') 11/21/2014 µg/Kg		B35 (5-7') 11/21/2014 µg/Kg		B36 (0-2') 11/21/2014 µg/Kg		B36 (5-7') 11/21/2014 µg/Kg		Duplicate 3 12/9/2014 µg/Kg		Duplicate 4 12/12/2014 µg/Kg	
				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Pesticides	4,4' -DDD	3.3	13,000	< 3.3	3.3	< 11	11	< 2.3	2.3	< 2.1	2.1	< 2.3	2.3	< 2.1	2.1	< 3.0	3	< 3.3	3.3	< 2.2	2.2
	4,4' -DDE	3.3	8,900	< 2.3	2.3	< 11	11	< 2.3	2.3	< 2.1	2.1	< 2.3	2.3	< 2.1	2.1	< 2.3	2.3	**3.4**	3.3	< 5.0	5
	4,4' -DDT	3.3	7,900	**11**	2.3	< 25	25	**9.7**	2.3	< 2.1	2.1	< 2.3	2.3	< 2.1	2.1	< 2.3	2.3	**16**	2.2	< 30	30
	a-BHC	20	480	< 7.5	7.5	< 19	19	< 7.5	7.5	< 7.1	7.1	< 7.7	7.7	< 7.0	7	< 7.6	7.6	< 7.4	7.4	< 7.4	7.4
	a-Chlordane	94	4,200	< 3.8	3.8	< 19	19	**6.5**	3.8	< 3.5	3.5	< 3.9	3.9	< 3.5	3.5	< 3.8	3.8	**9.6**	3.7	< 3.7	3.7
	Aldrin	5	97	< 3.8	3.8	< 5.6	5.6	< 3.8	3.8	< 3.5	3.5	< 3.9	3.9	< 3.5	3.5	< 3.8	3.8	< 3.7	3.7	< 3.7	3.7
	b-BHC	36	360	< 7.5	7.5	< 19	19	< 7.5	7.5	< 7.1	7.1	< 7.7	7.7	< 7.0	7	< 7.6	7.6	< 7.4	7.4	< 7.4	7.4
	Chlordane	94	4,200	< 38	38	< 190	190	**78**	38	< 35	35	< 39	39	< 35	35	< 38	38	**110**	37	< 37	37
	d-BHC	40	100,000	< 7.5	7.5	< 37	37	< 7.5	7.5	< 7.1	7.1	< 7.7	7.7	< 7.0	7	< 7.6	7.6	< 7.4	7.4	< 10	10
	Dieldrin	5	200	< 3.8	3.8	< 6.0	6	< 3.8	3.8	< 3.5	3.5	< 3.9	3.9	< 3.5	3.5	< 3.8	3.8	< 3.7	3.7	< 3.7	3.7
	Endosulfan I	2,400	24,000	< 7.5	7.5	< 37	37	< 7.5	7.5	< 7.1	7.1	< 7.7	7.7	< 7.0	7	< 7.6	7.6	< 7.4	7.4	< 7.4	7.4
	Endosulfan II	2,400	24,000	< 7.5	7.5	< 37	37	< 7.5	7.5	< 7.1	7.1	< 7.7	7.7	< 7.0	7	< 7.6	7.6	< 7.4	7.4	< 7.4	7.4
	Endosulfan sulfate	2,400	24,000	< 7.5	7.5	< 37	37	< 7.5	7.5	< 7.1	7.1	< 7.7	7.7	< 7.0	7	< 7.6	7.6	< 7.4	7.4	< 7.4	7.4
	Endrin	14	11,000	< 7.5	7.5	< 19	19	< 7.5	7.5	< 7.1	7.1	< 7.7	7.7	< 7.0	7	< 7.6	7.6	< 7.4	7.4	< 10	10
	Endrin aldehyde			< 7.5	7.5	< 37	37	< 7.5	7.5	< 7.1	7.1	< 7.7	7.7	< 7.0	7	< 7.6	7.6	< 7.4	7.4	< 7.4	7.4
	Endrin ketone			< 7.5	7.5	< 37	37	< 7.5	7.5	< 7.1	7.1	< 7.7	7.7	< 7.0	7	< 7.6	7.6	< 7.4	7.4	< 7.4	7.4
	g-BHC			< 1.5	1.5	< 7.5	7.5	< 1.5	1.5	< 1.4	1.4	< 1.5	1.5	< 1.4	1.4	< 1.5	1.5	< 1.5	1.5	< 1.5	1.5
	g-Chlordane			< 3.8	3.8	< 19	19	**6.8**	3.8	< 3.5	3.5	< 3.9	3.9	< 3.5	3.5	< 3.8	3.8	**12**	3.7	< 3.7	3.7
	Heptachlor	42	2,100	< 7.5	7.5	< 37	37	< 7.5	7.5	< 7.1	7.1	< 7.7	7.7	< 7.0	7	< 7.6	7.6	< 7.4	7.4	< 7.4	7.4
	Heptachlor epoxide			< 7.5	7.5	< 37	37	< 7.5	7.5	< 7.1	7.1	< 7.7	7.7	< 7.0	7	< 7.6	7.6	< 7.4	7.4	< 7.4	7.4
	Methoxychlor			< 38	38	< 190	190	< 38	38	< 35	35	< 39	39	< 35	35	< 38	38	< 37	37	< 37	37
	Toxaphene			< 150	150	< 750	750	< 150	150	< 140	140	< 150	150	< 140	140	< 150	150	< 150	150	< 150	150
PCBs	PCB-1016	100	1,000	< 38	38	< 37	37	< 38	38	< 35	35	< 39	39	< 35	35	< 38	38	< 37	37	< 37	37
	PCB-1221	100	1,000	< 38	38	< 37	37	< 38	38	< 35	35	< 39	39	< 35	35	< 38	38	< 37	37	< 37	37
	PCB-1232	100	1,000	< 38	38	< 37	37	< 38	38	< 35	35	< 39	39	< 35	35	< 38	38	< 37	37	< 37	37
	PCB-1242	100	1,000	< 38	38	< 37	37	< 38	38	< 35	35	< 39	39	< 35	35	< 38	38	< 37	37	< 37	37
	PCB-1248	100	1,000	< 38	38	< 37	37	< 38	38	< 35	35	< 39	39	< 35	35	< 38	38	< 37	37	< 37	37
	PCB-1254	100	1,000	< 38	38	< 37	37	< 38	38	< 35	35	< 39	39	< 35	35	< 38	38	< 37	37	< 37	37
	PCB-1260	100	1,000	< 38	38	< 37	37	< 38	38	< 35	35	< 39	39	< 35	35	< 38	38	< 37	37	< 37	37
	PCB-1262	100	1,000	< 38	38	< 37	37	< 38	38	< 35	35	< 39	39	< 35	35	< 38	38	< 37	37	< 37	37
	PCB-1268	100	1,000	< 38	38	< 37	37	< 38	38	< 35	35	< 39	39	< 35	35	< 38	38	< 37	37	< 37	37

Notes:

* - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives

RL- Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC UUSCO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC RRSCO Guidance Value

TABLE 6
11 West Street,
Brooklyn, New York
Soil Analytical Results
Metals

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives*	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	B3 (0-2') 3/6/2014 mg/Kg		B3 (5-7') 3/6/2014 mg/Kg		B4 (0-2') 3/6/2014 mg/Kg		B4 (5-7') 3/6/2014 mg/Kg		B6 (0-2') 3/5/2014 mg/Kg		B6 (5-7') 3/5/2014 mg/Kg		B9 (0-2') 3/6/2014 mg/Kg		B9 (5-7') 3/6/2014 mg/Kg		B10 (0-2') 3/6/2014 mg/Kg		B10 (5-7') 3/6/2014 mg/Kg		B11 (0-2') 3/5/2014 mg/Kg		B11 (5-7') 3/5/2014 mg/Kg		B13 (0-2') 3/5/2014 mg/Kg		B13 (5-7') 3/5/2014 mg/Kg	
			Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Aluminum			5,990	54	7,530	60	6,220	60	7,810	64	7,650	36	2,870	39	6,910	51	3,310	74	5,480	54	4,950	62	8,780	36	5,280	37	7,630	38	7,110	44		
Antimony			< 3.6	3.6	< 4.0	4	11.6	4	< 4.3	4.3	< 2.0	2	6.6	2	< 3.4	3.4	18.2	5	< 3.6	3.6	< 4.1	4.1	2	1.8	< 1.8	1.8	< 1.9	1.9	< 2.2	2.2		
Arsenic	13	16	6.2	0.7	1.9	0.8	10.5	0.8	1.5	0.9	3.9	0.7	28.4	0.8	2.1	0.7	10.1	1	1.5	0.7	30.8	0.8	2.7	0.7	6	0.7	3.8	0.8	8.2	0.9		
Barium	350	350	114	0.36	38.9	0.4	452	0.4	63.1	0.43	146	0.7	86.4	0.8	69.7	0.34	1,220	0.5	54.8	0.36	72.3	0.41	60.6	0.7	63.1	0.7	81.2	0.8	224	0.9		
Beryllium	7.2	14	0.35	0.29	0.34	0.32	0.43	0.32	0.37	0.34	0.38	0.29	0.26	0.31	0.36	0.27	< 0.40	0.4	< 0.29	0.29	< 0.33	0.33	0.44	0.29	0.49	0.29	0.34	0.31	0.33	0.35		
Cadmium	2.5	2.5	0.7	0.36	< 0.40	0.4	1.7	0.4	< 0.43	0.43	0.4	0.36	1.12	0.39	0.42	0.34	3.11	0.5	< 0.36	0.36	0.9	0.41	< 0.36	0.36	0.37	0.37	< 0.38	0.38	1.03	0.44		
Calcium			6,030	5.4	711	6	7,520	6	1,490	6.4	6,320	36	1,810	39	54,500	51	4,110	7.4	85,800	54	1,490	6.2	17,500	36	1,320	37	56,200	38	4,780	44		
Chromium	30	180	16.5	0.36	10.4	0.4	21	0.4	12.5	0.43	19.9	0.36	18.4	0.39	17.1	0.34	42.4	0.5	5.87	0.36	33.4	0.41	16.1	0.36	14.3	0.37	17.3	0.38	16.4	0.44		
Cobalt			7.38	0.36	5.94	0.4	9.92	0.4	6.57	0.43	5.51	0.36	14.1	0.39	4.05	0.34	11.6	0.5	5.81	0.36	16.8	0.41	5.57	0.36	14.5	0.37	3.37	0.38	8.73	0.44		
Copper	50	270	88.5	0.36	11.1	0.4	156	4	12.9	0.43	63.4	0.36	92	0.39	24.7	0.34	572	5	93.6	0.36	105	0.41	43.3	0.36	131	0.37	24.8	0.38	81.3	0.44		
Iron			31,500	54	14,300	60	56,800	60	15,700	64	18,100	36	72,800	39	17,100	51	165,000	740	17,400	54	53,800	62	14,900	36	30,300	37	11,300	38	47,300	44		
Lead	63	400	479	3.6	6.76	0.4	901	4	6.2	0.43	129	0.7	1,010	7.9	63.6	0.34	2,320	50	50.8	0.36	1,170	4.1	63.7	0.7	546	7.4	35.9	0.8	498	8.7		
Magnesium			1,940	5.4	2,480	6	2,170	6	3,160	6.4	2,840	3.6	961	3.9	18,600	51	2,290	7.4	48,300	54	2,290	6.2	8,600	36	1,650	3.7	6,850	38	3,100	4.4		
Manganese	1,600	2,000	333	3.6	352	4	323	4	884	4.3	301	3.6	676	3.9	295	3.4	779	5	184	3.6	1,110	4.1	315	3.6	457	3.7	179	3.8	322	4.4		
Mercury	0.18	0.81	0.59	0.08	< 0.09	0.09	1.01	0.08	< 0.08	0.08	0.21	0.08	0.11	0.08	0.09	0.08	0.63	0.12	0.12	0.07	1.4	0.09	0.07	0.08	4.29	0.08	< 0.09	0.09	0.2	0.08		
Nickel	30	140	15.2	0.36	12.3	0.4	21.7	0.4	17.4	0.43	15.1	0.36	27.6	0.39	13.5	0.34	53.6	0.5	8.8	0.36	34.3	0.41	19.4	0.36	13.6	0.37	12	0.38	18.7	0.44		
Potassium			1,230	5.4	1,010	6	1,220	6	1,660	6.4	1,600	7	747	8	1,530	5.1	2,490	7.4	1,000	5.4	1,380	6.2	1,140	7	1,190	7	1,840	8	1,150	9		
Selenium	3.9	36	< 1.4	1.4	< 1.6	1.6	< 1.6	1.6	< 1.7	1.7	< 1.4	1.4	< 1.6	1.6	< 1.4	1.4	< 2.0	2	< 1.4	1.4	< 1.6	1.6	< 1.6	1.6	< 1.5	1.5	< 1.5	1.5	< 1.7	1.7		
Silver	2	36	< 0.36	0.36	< 0.40	0.4	< 0.40	0.4	< 0.43	0.43	< 0.36	0.36	< 0.39	0.39	< 0.34	0.34	< 0.50	0.5	< 0.36	0.36	< 0.41	0.41	< 0.36	0.36	< 0.37	0.37	< 0.38	0.38	< 0.44	0.44		
Sodium			481	5.4	179	6	712	6	131	6.4	336	7	200	8	404	5.1	5,320	7.4	687	5.4	3,100	6.2	361	7	522	7	484	8	253	9		
Thallium			< 0.6	0.6	< 0.6	0.6	< 0.6	0.6	< 0.7	0.7	< 1.4	1.4	< 1.6	1.6	< 0.5	0.5	< 0.8	0.8	< 0.6	0.6	< 0.7	0.7	< 1.4	1.4	< 1.5	1.5	< 1.5	1.5	< 1.7	1.7		
Vanadium			22.6	0.36	15.6	0.4	26.3	0.4	16.3	0.43	23.7	0.4	25.7	0.4	27.4	0.34	62.5	0.5	44.6	0.36	34.9	0.41	29.4	0.4	19.5	0.4	24.3	0.4	20.5	0.4		
Zinc	109	2,200	220	3.6	32.6	0.4	600	4	36.8	0.43	199	7.2	47	0.8	83.4	0.34	1,180	5	91.8	0.36	351	4.1	41	0.7	91	0.7	56.3	0.8	241	8.7		

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives*	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	B15 (0-2') 3/5/2014 mg/Kg		B15 (5-7') 3/5/2014 mg/Kg		B16 (0-2') 3/5/2014 mg/Kg		B16 (5-7') 3/5/2014 mg/Kg		B17 (0-2') 3/5/2014 mg/Kg		B17 (5-7') 3/5/2014 mg/Kg		B18 (0-2') 3/5/2014 mg/Kg		B18 (5-7') 3/5/2014 mg/Kg		B19 (0-2') 3/5/2014 mg/Kg		B19 (5-7') 3/5/2014 mg/Kg		B20 (0-2') 3/6/2014 mg/Kg		B20 (5-7' WT) 3/6/2014 mg/Kg		Duplicate 3/6/2014 mg/Kg	
			Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Aluminum			6,570	36	6,530	36	9,290	37	9,950	36	4,430	41	6,460	38	7,240	33	6,610	39	5,870	37	9,200	43	5,240	57	6,060	60	6,350	55		
Antimony			2.2	1.8	< 1.8	1.8	< 1.9	1.9	< 1.8	1.8	13.4	2.1	4.5	1.9	2	1.6	< 1.9	1.9	7.4	1.9	< 2.1	2.1	< 3.8	3.8	< 4.0	4	< 3.7	3.7		
Arsenic	13	16	7.2	0.7	1.9	0.7	4	0.7	2.1	0.7	32.6	0.8	2.5	0.8	5.2	0.7	2.5	0.8	17	0.7	1.6	0.9	3.6	0.8	6.8	0.8	1.4	0.7		
Barium	350	350	133	0.7	30.2	0.7	82.1	0.7	49.6	0.7	260	0.8	50	0.8	37.2	0.7	37.5	0.8	132	0.7	55.6	0.9	62.4	0.38	243	0.4	34.4	0.37		
Beryllium	7.2	14	0.42	0.29	0.35	0.29	0.51	0.3	0.5	0.29	0.44	0.33	0.32	0.3	0.28	0.26	0.3	0.31	0.35	0.3	0.46	0.34	< 0.31	0.31	< 0.32	0.32	0.48	0.29		
Cadmium	2.5	2.5	0.83	0.36	< 0.36	0.36	3.01	0.37	< 0.36	0.36	6.42	0.41	0.35	0.38	0.14	0.33	< 0.39	0.39	0.69	0.37	< 0.43	0.43	< 0.38	0.38	0.8	0.4	< 0.37	0.37		
Calcium			2,670	36	857	36	1,990	37	774	36	1,640	41	1,520	38	870	33	1,310	39	2,100	37	1,070	4.3	95,700	57	16,700	60	731	5.5		
Chromium	30	180	16.8	0.36	10.3	0.36	19.3	0.37	14.1	0.36	43.8	0.41	26.3	0.38	12.8	0.33	12.7	0.39	17.2	0.37	14.3	0.43	7.98	0.38	15.3	0.4	10.3	0.37		
Cobalt			7.97	0.36	6.56	0.36	8.53	0.37	6.25	0.36	15.4	0.41	7.07	0.38	5.02	0.33	10.2	0.39	6.89	0.37	5.66	0.43	3.94	0.38	5.71	0.4	5.87	0.37		
Copper	50	270	96.4	0.36	11.8	0.36	71.8	0.37	12.7	0.36	243	4.1	33.8	0.38	18	0.33	19.9	0.39	115	0.37	11	0.43	30.7	0.38	80.6	0.4	16.3	0.37		
Iron			34,700	36	14,000	36	25,200	37	17,600	36	162,000	410	25,100	38	20,900	33	15,900	39	32,800	37	15,100	43	10,900	57	31,800	60	22,900	55		
Lead	63	400	273	7.3	5.7	0.7	105	0.7	10	0.7	1,070	8.2	99.2	0.8	17.9	0.7	6.2	0.8	2,070	74	10.5	0.9	69.6	0.38	777	4	6.78	0.37		
Magnesium			2,210	3.6	2,410	3.6	2,920	3.7	2,860	3.6	1,070	4.1	4,900	3.8	2,540	3.3	2,970	3.9	1,920	3.7	2,510	4.3	30,700	57	13,400	60	2,110	5.5		
Manganese	1,600	2,000	414	3.6	342	3.6	363	3.7	206	3.6	695	4.1	335	3.8	327	3.3	521	3.9	300	3.7	375	4.3	282	3.8	245	4	486	3.7		
Mercury	0.18	0.81	0.29	0.07	< 0.07	0.07	0.22	0.07	< 0.07	0.07	0.53	0.09	< 0.07	0.07	< 0.06	0.06	< 0.08	0.08	1.9	0.07	< 0.07	0.07	0.39	0.07	0.32	0.08	< 0.07	0.07		
Nickel	30	140	18.7	0.36	11.9	0.36	16.3	0.37	17.2	0.36	45.4	0.41	17.9	0.38	12.3	0.33	14.2	0.39	17.8	0.37	13.9	0.43	11.1	0.38	17.2	0.4	12.6	0.37		
Potassium			974	7	910	7	1,520	7	905	7	764	8	2,050	8	1,180	7	1,340	8	1,030	7	871	9	1,550	5.7	1,180	6	1,150	5.5		
Selenium	3.9	36	< 1.5	1.5	< 1.4	1.4	< 1.5	1.5	< 1.5	1.5	< 1.6	1.6	< 1.5	1.5	< 1.3	1.3	< 1.5	1.5	< 1.5	1.5	< 1.7	1.7	< 1.5	1.5	< 1.6	1.6	< 1.5	1.5		
Silver	2	36	< 0.36	0.36	< 0.36	0.36	< 0.37	0.37	< 0.36	0.36	< 0.41	0.41	< 0.38	0.38	< 0.33	0.33	< 0.39	0.39	< 0.37	0.37	< 0.43	0.43	< 0.38	0.38	< 0.40	0.4	< 0.37	0.37		
Sodium			359	7	182	7	731	7	144	7	151	8	146	8	167	7	104	8	208	7	69	9	530	5.7	3,050	6	316	5.5		
Thallium			< 1.5	1.5	< 1.4	1.4	< 1.5	1.5	< 1.5	1.5	< 1.6	1.6	< 1.5	1.5	< 1.3	1.3	< 1.5	1.5	< 1.5	1.5	< 1.7	1.7	< 0.6	0.6	< 0.6	0.6	< 0.6	0.6		
Vanadium			22.9	0.4	13.9	0.4	26.4	0.4	18.1	0.4	35.7	0.4	30.5	0.4	16.7	0.3	14.7	0.4	27.2	0.4	17.9	0.4	21.1	0.38	36.5	0.4	19.4	0.37		
Zinc	109	2,200	180	7.3	34.5	0.7	127	0.7	52.3	0.7	946	8.2	74.9	0.8	30	0.7	35.2	0.8	191	7.4	64.2	0.9	48.8	0.38	572	4	30.3	0.37		

Notes:

* - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives

RL- Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC UUSCO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC RRSCO Guidance Value

TABLE 6
11 West Street,
Brooklyn, New York
Soil Analytical Results
Metals

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives*	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	B23 (0-2') 11/21/2014 mg/Kg		B23 (5-7') 11/21/2014 mg/Kg		B25 (0-2') 11/21/2014 mg/Kg		B25 (5-7') 11/21/2014 mg/Kg		B28 (0-2') 11/21/2014 mg/Kg		B28 (5-7') 11/21/2014 mg/Kg		B29 (0-2') 11/21/2014 mg/Kg		B29 (5-7') 11/21/2014 mg/Kg		B30 (0-2') 11/21/2014 mg/Kg		B30 (5-7') 11/21/2014 mg/Kg	
			Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Aluminum			6,450	34	6,430	34	4,770	39	4,510	42	7,050	37	7,490	41	6,630	32	10,200	40	8,820	34	10,600	37
Antimony			< 1.7	1.7	< 1.7	1.7	< 1.9	1.9	< 2.1	2.1	< 1.8	1.8	< 2.1	2.1	< 1.6	1.6	< 2.0	2	< 1.7	1.7	< 1.8	1.8
Arsenic	13	16	5	0.7	1.3	0.7	55	0.8	20.3	0.8	4.7	0.7	2.7	0.8	5.8	0.6	2.8	0.8	6.2	0.7	2.2	0.7
Barium	350	350	70.6	0.7	51.5	0.7	46.5	0.8	45.4	0.8	110	0.7	34.1	0.8	73.8	0.6	44.4	0.8	109	0.7	52.1	0.7
Beryllium	7.2	14	0.36	0.27	0.39	0.27	< 0.31	0.31	< 0.34	0.34	0.42	0.29	0.36	0.33	0.26	0.26	0.47	0.32	0.46	0.27	0.48	0.29
Cadmium	2.5	2.5	0.7	0.34	0.31	0.34	0.51	0.39	0.25	0.42	1.66	0.37	< 0.41	0.41	0.55	0.32	< 0.40	0.4	0.56	0.34	< 0.37	0.37
Calcium			44,400	34	703	3.4	5,510	3.9	855	4.2	19,300	37	1,010	4.1	15,800	32	608	4	27,900	34	1,080	3.7
Chromium	30	180	10.6	0.34	16.3	0.34	11	0.39	10.4	0.42	22.4	0.37	15.5	0.41	15.2	0.32	14	0.4	17.3	0.34	14.8	0.37
Cobalt			9.85	0.34	7.77	0.34	4.17	0.39	3.86	0.42	10.8	0.37	6.57	0.41	9.95	0.32	6.58	0.4	6.22	0.34	6.61	0.37
Copper	50	270	133	3.4	21.7	0.34	29.9	0.39	16.5	0.42	561	3.7	16.2	0.41	108	0.32	12.1	0.4	48.3	0.34	10.8	0.37
Iron			22,300	34	18,200	34	27,500	39	24,400	42	35,400	37	16,500	41	33,300	32	17,500	40	33,200	34	18,100	37
Lead	63	400	150	6.8	7.1	0.7	14.4	0.8	6.2	0.8	302	7.3	6.7	0.8	305	6.4	8.5	0.8	273	6.8	11.6	0.7
Magnesium			19,900	34	2,610	3.4	4,160	3.9	2,050	4.2	5,050	3.7	2,920	4.1	8,990	32	2,900	4	2,740	3.4	2,650	3.7
Manganese	1,600	2,000	234	3.4	295	3.4	80.2	0.39	169	4.2	448	3.7	336	4.1	296	3.2	343	4	377	3.4	373	3.7
Mercury	0.18	0.81	0.44	0.07	0.11	0.07	< 0.07	0.07	< 0.08	0.08	0.16	0.09	< 0.09	0.09	0.14	0.06	< 0.08	0.08	0.14	0.07	< 0.08	0.08
Nickel	30	140	13.2	0.34	12.6	0.34	7.96	0.39	8.11	0.42	19	0.37	13	0.41	13.3	0.32	14.1	0.4	13	0.34	12.8	0.37
Potassium			1,170	7	1,950	7	1,430	8	1,140	8	1,820	7	900	8	1,600	6	924	8	1,400	7	958	7
Selenium	3.9	36	< 1.4	1.4	< 1.4	1.4	1.5	1.6	< 1.7	1.7	< 1.5	1.5	< 1.6	1.6	< 1.3	1.3	< 1.6	1.6	< 1.4	1.4	< 1.5	1.5
Silver	2	36	< 0.34	0.34	< 0.34	0.34	< 0.39	0.39	< 0.42	0.42	< 0.37	0.37	< 0.41	0.41	< 0.32	0.32	< 0.40	0.4	< 0.34	0.34	< 0.37	0.37
Sodium			537	7	367	7	629	8	222	8	452	7	224	8	367	6	72	8	385	7	66	7
Thallium			< 1.4	1.4	< 1.4	1.4	< 1.6	1.6	< 1.7	1.7	< 1.5	1.5	< 1.6	1.6	< 1.3	1.3	< 1.6	1.6	< 1.4	1.4	< 1.5	1.5
Vanadium			46.5	0.3	23	0.3	25.8	0.4	14.5	0.4	27.9	0.4	16.4	0.4	37.1	0.3	17.5	0.4	21.1	0.3	18.3	0.4
Zinc	109	2,200	88.1	0.7	80.6	0.7	29	0.8	26.4	0.8	245	7.3	34.7	0.8	160	6.4	47.3	0.8	86.8	0.7	40.1	0.7

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives*	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	B32 (5-7') 12/9/2014 mg/Kg		B33 (5-7') 12/12/2014 mg/Kg		B34 (5-7') 12/8/2014 mg/Kg		B35 (0-2') 11/21/2014 mg/Kg		B35 (5-7') 11/21/2014 mg/Kg		B36 (0-2') 11/21/2014 mg/Kg		B36 (5-7') 11/21/2014 mg/Kg		Duplicate 1 11/21/2014 mg/Kg		Duplicate 2 11/21/2014 mg/Kg		Duplicate 3 12/9/2014 mg/Kg	
			Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Aluminum			5,050	35	6,760	37	6,910	36	4,110	32	7,680	37	6,350	35	7,510	37	10,700	44	6,400	33	12,500	34
Antimony			< 1.8	1.8	9.4	1.8	< 1.8	1.8	< 1.6	1.6	< 1.9	1.9	< 1.7	1.7	< 1.9	1.9	< 2.2	2.2	< 1.6	1.6	< 1.7	1.7
Arsenic	13	16	16	0.7	12.6	0.7	47.6	0.7	8.7	0.6	2.6	0.7	2.5	0.7	0.7	0.7	2.5	0.9	5.5	0.7	38.7	0.7
Barium	350	350	219	0.7	246	0.7	172	0.7	80.5	0.6	40.1	0.7	37.6	0.7	61.4	0.7	56.9	0.9	123	0.7	267	0.7
Beryllium	7.2	14	0.4	0.28	0.43	0.3	0.25	0.29	0.22	0.26	0.37	0.3	0.24	0.28	0.38	0.3	0.47	0.35	0.41	0.26	0.39	0.27
Cadmium	2.5	2.5	1.63	0.35	1.33	0.37	1.78	0.36	3.2	0.32	< 0.37	0.37	0.31	0.35	< 0.37	0.37	< 0.44	0.44	1.85	0.33	3.26	0.34
Calcium			10,800	35	12,600	37	11,900	36	8,550	3.2	1,170	3.7	36,100	35	1,620	3.7	1,130	4.4	17,300	33	22,600	34
Chromium	30	180	25.6	0.35	25.7	0.37	16.4	0.36	25.2	0.32	14.4	0.37	12.5	0.35	21.8	0.37	15.3	0.44	24.9	0.33	21.7	0.34
Cobalt			10.4	0.35	11	0.37	48.5	0.36	24.1	0.32	6.48	0.37	7.19	0.35	7.88	0.37	7.05	0.44	9.76	0.33	10.4	0.34
Copper	50	270	135	3.5	137	0.37	380	3.6	133	3.2	16	0.37	58.2	0.35	17.9	0.37	11.7	0.44	452	3.3	86.4	0.34
Iron			55,400	35	72,000	37	116,000	360	234,000	320	19,400	37	23,900	35	19,000	37	19,100	44	29,700	33	55,900	34
Lead	63	400	963	7	722	7.4	309	7.2	488	6.5	22.2	0.7	74.4	0.7	5.8	0.7	11.6	0.9	304	6.5	985	6.8
Magnesium			1,960	3.5	3,750	3.7	1,600	3.6	3,820	3.2	2,440	3.7	9,210	35	3,340	3.7	2,800	4.4	4,290	3.3	2,520	3.4
Manganese	1,600	2,000	396	3.5	457	3.7	183	3.6	1,030	3.2	479	3.7	282	3.5	382	3.7	507	4.4	416	3.3	273	3.4
Mercury	0.18	0.81	0.76	0.07	0.28	0.08	0.1	0.08	0.13	0.06	< 0.07	0.07	< 0.06	0.06	< 0.07	0.07	< 0.09	0.09	0.18	0.08	0.15	0.07
Nickel	30	140	28.5	0.35	39.2	0.37	55.8	0.36	25	0.32	13.1	0.37	10.2	0.35	13.2	0.37	13.2	0.44	18.6	0.33	21.2	0.34
Potassium			971	7	1,520	7	1,450	7	878	6	1,140	7	949	7	2,460	7	1,060	9	1,750	7	2,080	7
Selenium	3.9	36	< 1.4	1.4	< 1.5	1.5	< 1.4	1.4	< 1.3	1.3	< 1.5	1.5	< 1.4	1.4	< 1.5	1.5	< 1.8	1.8	< 1.3	1.3	< 1.4	1.4
Silver	2	36	< 0.35	0.35	< 0.37	0.37	< 0.36	0.36	< 0.32	0.32	< 0.37	0.37	< 0.35	0.35	< 0.37	0.37	< 0.44	0.44	< 0.33	0.33	< 0.34	0.34
Sodium			222	7	505	7	641	7	401	6	217	7	554	7	237	7	65	9	403	7	796	7
Thallium			< 1.4	1.4	< 1.5	1.5	< 1.4	1.4	< 1.3	1.3	< 1.5	1.5	< 1.4	1.4	< 1.5	1.5	< 1.8	1.8	< 1.3	1.3	< 1.4	1.4
Vanadium			31.5	0.4	239	3.7	20	0.4	26.5	0.3	19.4	0.4	27	0.3	28.2	0.4	19.4	0.4	27.9	0.3	27.6	0.3
Zinc	109	2,200	325	7	331	7.4	219	7.2	147	6.5	38	0.7	68.8	0.7	35.9	0.7	38	0.9	243	6.5	1,170	6.8

Notes:

* - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives

RL- Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC UUSCO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC RRSCO Guidance Value

TABLE 7
832 Lexington Avenue
Brooklyn, NY
Parameters Detected Above Track 1 Soil Cleanup Objectives
Soil Borings B1-B22

COMPOUND	Range in Exceedances	Frequency of Detection	B3 3/6/2014	B4 3/6/2014	B6 3/5/2014		B9 3/6/2014		B10 3/6/2014	B11 3/5/2014	
			(0-2')	(0-2')	(0-2')	(5-7')	(0-2')	(5-7)	(0-2')	(0-2')	(5-7')
Sample Results in ug/kg											
Acetone	64-270	11	-	-	-	-	-	-	-	-	-
Methyl chloride	86-90	2	-	-	-	90	-	-	-	-	86
Toluene	730	1	-	-	-	730	-	-	-	-	-
Sample Results in ug/kg											
Benzo(a)anthracene	1,300-63,000	15	2,200	63,000	-	1,300	-	2,900	-	-	-
Benzo(a)pyrene	1,100-54,000	16	2,000	54,000	-	1,200	1,600	2,900	-	-	-
Benzo(b)fluoranthene	1,600-77,000	17	2,800	77,000	-	1,600	1,900	4,900	-	-	-
Benzo(k)fluoranthene	920-25,000	9	-	25,000	-	-	-	1,600	-	-	-
Chrysene	1,200-59,000	15	2,400	59,000	-	1,400	-	3,500	-	-	-
Dibenzo(a,h)anthracene	410-1,100	2	-	-	-	-	-	410	-	-	-
Fluoranthene	120,000	1	-	120,000	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	550-21,000	14	930	21,000	-	550	-	1,400	-	-	-
Sample Results in ug/kg											
4,4-DDT	11-97	2	-	-	-	-	-	-	-	-	-
Sample Results in mg/kg											
PCB-1260	6,300	1	-	-	-	-	-	6,300	-	-	-
Sample Results in mg/kg											
Arsenic	16-55	8	-	-	-	28.4	-	-	30.8	-	-
Barium	452-1220	2	-	452	-	-	-	1220	-	-	-
Cadmium	1.66-6.42	5	-	-	-	-	-	3.11	-	-	-
Chromium	33.4-43.8	3	-	-	-	-	-	42.4	33.4	-	-
Copper	58.2-572	21	88.5	156	63.4	92	-	572	105	-	131
Lead	63.6-2,320	27	479	901	129	1010	63.6	2320	1170	63.7	546
Mercury	0.2-4.29	16	0.59	1.01	0.21	-	-	0.63	1.4	-	4.29
Nickel	34.3-55.8	5	-	-	-	-	-	53.6	34.3	-	-
Zinc	119-1,180	19	220	600	199	-	-	1180	351	-	-

COMPOUND	Range in Exceedances	Frequency of Detection	B13 3/5/2014	B15 3/5/2014	B16 3/5/2014	B17 3/5/2014		B19 3/5/2014	B20 3/6/2014	
			(0-2')	(0-2')	(0-2')	(0-2')	(5-7')	(0-2')	(0-2')	(5-7')
Sample Results in ug/kg										
Acetone	64-270	11	-	-	-	-	-	-	-	-
Methyl chloride	86-90	2	-	-	-	-	-	-	-	-
Toluene	730	1	-	-	-	-	-	-	-	-
Sample Results in ug/kg										
Benzo(a)anthracene	1,300-63,000	15	-	1,900	-	3,000	-	2,200	1,400	1,900
Benzo(a)pyrene	1,100-54,000	16	-	2,100	-	2,800	-	2,400	1,400	1,600
Benzo(b)fluoranthene	1,600-77,000	17	-	3,100	1,600	4,200	-	3,300	2,100	2,200
Benzo(k)fluoranthene	920-25,000	9	-	920	-	960	-	940	-	-
Chrysene	1,200-59,000	15	-	2,000	-	3,300	-	2,400	1,200	2,000
Dibenzo(a,h)anthracene	410-1,100	2	-	-	-	-	-	-	-	-
Fluoranthene	120,000	1	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	550-21,000	14	-	900	-	1,700	-	1,100	810	700
Sample Results in ug/kg										
4,4-DDT	11-97	2	-	-	-	-	-	-	-	-
Sample Results in mg/kg										
PCB-1260	6,300	1	-	-	-	-	-	-	-	-
Sample Results in mg/kg										
Arsenic	16-55	8	-	-	-	32.6	-	17	-	-
Barium	452-1220	2	-	-	-	-	-	-	-	-
Cadmium	1.66-6.42	5	-	-	3.01	6.42	-	-	-	-
Chromium	33.4-43.8	3	-	-	-	43.8	-	-	-	-
Copper	58.2-572	21	81.3	96.4	71.8	243	-	115	-	80.6
Lead	63.6-2,320	27	498	273	105	1070	99.2	2070	69.6	777
Mercury	0.2-4.29	16	0.2	0.29	0.22	0.53	-	1.9	0.39	0.32
Nickel	34.3-55.8	5	-	-	-	45.4	-	-	-	-
Zinc	119-1,180	19	241	180	127	946	-	191	-	572

- Above Unrestricted SCO
- Above Restricted Residential SCO

TABLE 7
832 Lexington Avenue
Brooklyn, NY
Parameters Detected Above Track 1 Soil Cleanup Objectives
Soil Borings B23-B36

COMPOUND	Range in Exceedances	Frequency of Detection	B23 11/21/2014		B24 11/21/2014		B25 11/21/2014		B26 11/21/2014		B27 11/21/2014	B28 11/21/2014		B29 11/21/2014
			(0-2')	(5-7')	(5-7')	(13-15')	(5-7')	(13-15')	(5-7')	(13-15')	(5-7')	(0-2')	(5-7')	(3-5')
Sample Results in ug/kg														
Acetone	64-270	11	-	72	82	120	-	-	160	140	74	64	73	-
Methyl chloride	86-90	2	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	730	1	-	-	-	-	-	-	-	-	-	-	-	-
Sample Results in ug/kg														
Benzo(a)anthracene	1,300-63,000	15	1,300	-	-	-	-	-	-	-	-	5,300	-	-
Benzo(a)pyrene	1,100-54,000	16	1,100	-	-	-	-	-	-	-	-	4,900	-	-
Benzo(b)fluoranthene	1,600-77,000	17	1,600	-	-	-	-	-	-	-	-	5,800	-	-
Benzo(k)fluoranthene	920-25,000	9	-	-	-	-	-	-	-	-	-	2,100	-	-
Chrysene	1,200-59,000	15	1,500	-	-	-	-	-	-	-	-	5,300	-	-
Dibenzo(a,h)anthracene	410-1,100	2	-	-	-	-	-	-	-	-	-	-	-	-
Fluoranthene	120,000	1	-	-	-	-	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	550-21,000	14	-	-	-	-	-	-	-	-	-	3,000	-	-
Sample Results in ug/kg														
4,4-DDT	11-97	3	-	-	-	-	-	-	-	-	-	-	-	-
Sample Results in mg/kg														
PCB-1260	6,300	1	-	-	-	-	-	-	-	-	-	-	-	-
Sample Results in mg/kg														
Arsenic	16-55	8	-	-	-	-	55	20.3	-	-	-	-	-	-
Barium	452-1220	2	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	1.66-6.42	5	-	-	-	-	-	-	-	-	-	1.66	-	-
Chromium	33.4-43.8	3	-	-	-	-	-	-	-	-	-	-	-	-
Copper	58.2-572	21	133	-	-	-	-	-	-	-	-	561	-	108
Lead	63.6-2,320	27	150	-	-	-	-	-	-	-	-	302	-	305
Mercury	0.2-4.29	16	0.44	-	-	-	-	-	-	-	-	-	-	-
Nickel	34.3-55.8	5	-	-	-	-	-	-	-	-	-	-	-	-
Zinc	119-1,180	19	-	-	-	-	-	-	-	-	-	245	-	160

COMPOUND	Range in Exceedances	Frequency of Detection	B30 12/22/2014		B31 11/21/2014		B32 12/9/2014		B33 12/12/2014		B34 12/8/2014		B35 11/21/2014	B36 11/21/2014	
			(0-2')	(5-7')	(0-2')	(5-7')	(5-7')	(6-8')	(5-7')	(10-12')	(5-7')	(10-12')	(0-2')	(0-2')	(5-7')
Sample Results in ug/kg															
Acetone	64-270	11	140	270	-	-	-	-	-	-	-	-	-	-	170
Methyl chloride	86-90	2	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	730	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Sample Results in ug/kg															
Benzo(a)anthracene	1,300-63,000	15	-	-	-	-	3,500	-	7,400 -	-	2,300	-	1,700	-	-
Benzo(a)pyrene	1,100-54,000	16	-	-	-	-	3,300	-	6,200 -	-	2,000	-	1,500	-	-
Benzo(b)fluoranthene	1,600-77,000	17	-	-	-	-	4,900	-	8,300 -	-	3,800	-	2,000	-	-
Benzo(k)fluoranthene	920-25,000	9	-	-	-	-	1,600	-	2,800 -	-	1,100	-	-	-	-
Chrysene	1,200-59,000	15	-	-	-	-	3,500	-	7,100 -	-	2,800	-	1,800	-	-
Dibenzo(a,h)anthracene	410-1,100	2	-	-	-	-	-	-	1,100 -	-	-	-	-	-	-
Fluoranthene	120,000	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	550-21,000	14	-	-		-	1,000	-	4,000 -	-	880	-	1,000	-	-
Sample Results in ug/kg															
4,4-DDT	11-97	2	-	-	-	-	11	-	-	-	97	-	-	-	-
Sample Results in mg/kg															
PCB-1260	6,300	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Sample Results in mg/kg															
Arsenic	16-55	8	-	-	-	-	-	16	-	-	-	47.6	-	-	-
Barium	452-1220	2	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	1.66-6.42	5	-	-	-	-	-	-	-	-	-	-	3.2	-	-
Chromium	33.4-43.8	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Copper	58.2-572	21	-	-	-	-	-	135	-	137	-	380	133	58.2	-
Lead	63.6-2,320	27	273	-	326	-	-	963	-	722	-	309	488	74.4	-
Mercury	0.2-4.29	16	-	-	-	-	-	0.76	-	0.28	-	-	-	-	-
Nickel	34.3-55.8	5	-	-	-	-	-	-	-	39.2	-	55.8	-	-	-
Zinc	119-1,180	19	-	-	131	119	-	325	-	331	-	219	147	-	-

- Above Unrestricted SCO
- Above Restricted Residential SCO

Table 8
11 West Street,
Brooklyn, New York
Ground Water Analytical Results
Volatile Organic Compounds

Compound	NYSDEC Groundwater Quality Standards	MW1 3/11/2014 µg/L		MW2 3/11/2014 µg/L		MW3 3/11/2014 µg/L		MW4 3/11/2014 µg/L		MW5 3/11/2014 µg/L		MW6 3/11/2014 µg/L		MW7 3/11/2014 µg/L		MW8 3/11/2014 µg/L		B21 3/11/2014 µg/L		Existing Well 3/11/2014 µg/L		Duplicate 3 3/11/2014 µg/L	
	µg/L	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL
1,1,1,2-Tetrachlorothane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,1,1-Trichloroethane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,1,2,2-Tetrachloroethane	5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5
1,1,2-Trichloroethane	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,1-Dichloroethane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,1-Dichloroethene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,1-Dichloropropene		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,2,3-Trichlorobenzene		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,2,3-Trichloropropane	0.04	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,2,4-Trichlorobenzene		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,2,4-Trimethylbenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,2-Dibromo-3-chloropropane	0.04	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,2-Dibromoethane		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,2-Dichlorobenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,2-Dichloroethane	0.6	< 0.60	0.6	< 0.60	0.6	< 0.60	0.6	< 0.60	0.6	< 0.60	0.6	< 0.60	0.6	< 0.60	0.6	< 0.60	0.6	< 0.60	0.6	< 0.60	0.6	< 0.60	0.6
1,2-Dichloropropane	0.94	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,3,5-Trimethylbenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,3-Dichlorobenzene		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,3-Dichloropropane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,4-Dichlorobenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
2,2-Dichloropropane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
2-Chlorotoluene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
2-Hexanone (Methyl Butyl Ketone)		< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
2-Isopropyltoluene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	**2.7**	1	< 1.0	1	< 1.0	1
4-Chlorotoluene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
4-Methyl-2-Pentanone		< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Acetone		< 25	25	< 25	25	< 25	25	< 25	25	< 25	25	< 25	25	< 25	25	< 25	25	< 25	25	< 25	25	< 25	25
Acrolein		< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Acrylonitrile	5	< 0.70	0.7	< 0.70	0.7	< 0.70	0.7	< 0.70	0.7	< 0.70	0.7	< 0.70	0.7	< 0.70	0.7	< 0.70	0.7	< 0.70	0.7	< 0.70	0.7	< 0.70	0.7
Benzene	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Bromobenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Bromochloromethane	5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5
Bromodichloromethane		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Bromoform		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Bromomethane	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Carbon Disulfide	60	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Carbon tetrachloride	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Chlorobenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Chloroethane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Chloroform	7	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Chloromethane	60	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
cis-1,2-Dichloroethene	5	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4
cis-1,3-Dichloropropene		< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5
Dibromochloromethane		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Dibromomethane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Dichlorodifluoromethane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Ethylbenzene	5	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4
Hexachlorobutadiene	0.5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	**1.8**	1	< 1.0	1	< 1.0	1	**14**	1	< 1.0	1	< 1.0	1
Isopropylbenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
m&p-Xylenes	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Methyl Ethyl Ketone (2-Butanone)		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Methyl t-butyl ether (MTBE)	10	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Methylene chloride	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	**1.5**	1	< 1.0	1	< 1.0	1
Naphthalene	10	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	**1.9**	1	< 1.0	1	< 1.0	1	**3.7**	1	< 1.0	1	< 1.0	1
n-Butylbenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	**4.7**	1	< 1.0	1	< 1.0	1	**21**	1	< 1.0	1	< 1.0	1
n-Propylbenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
o-Xylene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
p-Isopropyltoluene		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	**1.1**	1	< 1.0	1	< 1.0	1	**4.1**	1	< 1.0	1	< 1.0	1
sec-Butylbenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Styrene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	**1.1**	1	< 1.0	1	< 1.0	1
tert-Butylbenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Tetrachloroethene	5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	**7.3**	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5
Tetrahydrofuran (THF)		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Toluene	5	< 2.0	2	< 2.0	2	< 2.0	2	< 2.0	2	< 2.0	2	< 2.0	2	< 2.0	2	< 2.0	2	< 2.0	2	< 2.0	2	< 2.0	2
trans-1,2-Dichloroethene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
trans-1,3-Dichloropropene	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4
trans-1,4-dichloro-2-butene	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Trichloroethene	5	< 1.0	1	**3.1**	1	< 1.0	1	**1.2**	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Trichlorofluoromethane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Trichlorotrifluoroethane		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Vinyl Chloride	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1

Notes:
RL- Reporting Limit
Bold/highlighted- Indicated exceedance of the NYSDEC Groundwater Standard

Table 8
11 West Street,
Brooklyn, New York
Ground Water Analytical Results
Volatile Organic Compounds

Compound	NYSDEC Groundwater Quality Standards	MW1 12/23/2014 µg/L		MW2 12/23/2014 µg/L		MW3 12/23/2014 µg/L		MW4 12/5/2014 µg/L		MW5 12/5/2014 µg/L		MW6 12/5/2014 µg/L		MW10 12/5/2014 µg/L		MW11 12/5/2014 µg/L		MW12 12/5/2014 µg/L	
	µg/L	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL
1,1,1,2-Tetrachlorothane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,1,1-Trichloroethane	5	< 5.0	5	< 5.0	5	< 5.0	5	**0.44**	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
1,1,2,2-Tetrachloroethane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,1,2-Trichloroethane	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,1-Dichloroethane	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
1,1-Dichloroethene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,1-Dichloropropene		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,2,3-Trichlorobenzene		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,2,3-Trichloropropane	0.04	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,2,4-Trichlorobenzene		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,2,4-Trimethylbenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,2-Dibromo-3-chloropropane	0.04	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,2-Dibromoethane		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,2-Dichlorobenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,2-Dichloroethane	0.6	< 0.60	0.6	< 0.60	0.6	< 0.60	0.6	< 0.60	0.6	< 0.60	0.6	< 0.60	0.6	< 0.60	0.6	< 0.60	0.6	< 0.60	0.6
1,2-Dichloropropane	0.94	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,3,5-Trimethylbenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,3-Dichlorobenzene		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,3-Dichloropropane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,4-Dichlorobenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
2,2-Dichloropropane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
2-Chlorotoluene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
2-Hexanone (Methyl Butyl Ketone)		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
2-Isopropyltoluene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
4-Chlorotoluene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
4-Methyl-2-Pentanone		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Acetone		**1.7**	5	**2**	5	**1.4**	5	**2**	5	< 5.0	5	**1.2**	5	**3.1**	5	**2.7**	5	**3.6**	5
Acrolein		< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Acrylonitrile	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Benzene	1	< 0.70	0.7	< 0.70	0.7	< 0.70	0.7	< 0.70	0.7	< 0.70	0.7	< 0.70	0.7	< 0.70	0.7	< 0.70	0.7	< 0.70	0.7
Bromobenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Bromochloromethane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Bromodichloromethane		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Bromoform		< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Bromomethane	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Carbon Disulfide	60	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Carbon tetrachloride	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Chlorobenzene	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Chloroethane	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Chloroform	7	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Chloromethane	60	**0.45**	5	**0.36**	5	**0.29**	5	**0.57**	5	**0.44**	5	**0.41**	5	**0.81**	5	**0.43**	5	**0.75**	5
cis-1,2-Dichloroethene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
cis-1,3-Dichloropropene		< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4
Dibromochloromethane		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Dibromomethane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Dichlorodifluoromethane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Ethylbenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Hexachlorobutadiene	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.5	0.5	< 0.5	0.5	< 0.5	0.5	< 0.5	0.5	< 0.5	0.5	< 0.5	0.5
Isopropylbenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
m&p-Xylenes	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Methyl Ethyl Ketone (2-Butanone)		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Methyl t-butyl ether (MTBE)	10	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Methylene chloride	5	< 3.0	3	< 3.0	3	< 3.0	3	< 3.0	3	< 3.0	3	< 3.0	3	< 3.0	3	< 3.0	3	< 3.0	3
Naphthalene	10	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
n-Butylbenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
n-Propylbenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	**0.24**	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
o-Xylene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
p-Isopropyltoluene		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
sec-Butylbenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Styrene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
tert-Butylbenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Tetrachloroethene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Tetrahydrofuran (THF)		< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Toluene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
trans-1,2-Dichloroethene	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
trans-1,3-Dichloropropene	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4
trans-1,4-dichloro-2-butene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Trichloroethene	5	< 1.0	1	**0.31**	1	< 1.0	1	**0.29**	1	< 1.0	1	< 1.0	1	< 1.0	1	**0.33**	1	< 1.0	1
Trichlorofluoromethane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Trichlorotrifluoroethane		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Vinyl Chloride	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1

Notes:
RL- Reporting Limit
Bold/highlighted- Indicated exceedance of the NYSDEC Groundwater Standard

Table 8
11 West Street,
Brooklyn, New York
Ground Water Analytical Results
Volatile Organic Compounds

Compound	NYSDEC Groundwater Quality Standards	MW13 12/23/2014 µg/L		MW14 12/23/2014 µg/L		MW15 12/5/2014 µg/L		MW16 12/5/2014 µg/L		MW17 12/5/2014 µg/L		MW18 12/5/2014 µg/L		MW19 12/5/2014 µg/L		Duplicate 1 12/5/2014 µg/L		Duplicate 2 12/5/2014 µg/L		Trip Blank µg/L	
	µg/L	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL
1,1,1,2-Tetrachlorothane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,1,1-Trichloroethane	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
1,1,2,2-Tetrachloroethane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,1,2-Trichloroethane	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,1-Dichloroethane	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5	5	**0.6**	5	< 5.0	5	**0.6**	5	< 5.0	5
1,1-Dichloroethene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,1-Dichloropropene		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,2,3-Trichlorobenzene		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,2,3-Trichloropropane	0.04	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,2,4-Trichlorobenzene		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,2,4-Trimethylbenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,2-Dibromo-3-chloropropane	0.04	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,2-Dibromoethane		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,2-Dichlorobenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,2-Dichloroethane	0.6	< 0.60	0.6	< 0.60	0.6	< 0.60	0.6	< 0.60	0.6	< 0.6	0.6	< 0.6	0.6	< 0.60	0.6	< 0.60	0.6	< 0.60	0.6	< 0.60	0.6
1,2-Dichloropropane	0.94	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,3,5-Trimethylbenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,3-Dichlorobenzene		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,3-Dichloropropane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,4-Dichlorobenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
2,2-Dichloropropane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
2-Chlorotoluene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
2-Hexanone (Methyl Butyl Ketone)		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
2-Isopropyltoluene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
4-Chlorotoluene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
4-Methyl-2-Pentanone		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Acetone		**2.9**	5	**9.1**	5	**1.4**	5	**3.6**	5	**2.2**	10	**2.6**	10	**5.8**	5	**2**	5	**4.8**	5	**2.7**	5
Acrolein		< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Acrylonitrile	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Benzene	1	< 0.70	0.7	< 0.70	0.7	< 0.70	0.7	< 0.70	0.7	< 0.7	0.7	< 0.7	0.7	< 0.70	0.7	< 0.70	0.7	< 0.70	0.7	< 0.70	0.7
Bromobenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Bromochloromethane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Bromodichloromethane		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Bromoform		< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 10	10	< 10	10	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Bromomethane	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Carbon Disulfide	60	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Carbon tetrachloride	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Chlorobenzene	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Chloroethane	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Chloroform	7	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 7.0	7	< 5	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Chloromethane	60	**0.42**	5	**1.2**	5	**0.27**	5	**0.66**	5	< 5.0	5	**0.42**	5	**0.62**	5	**0.32**	5	**1.6**	5	< 5.0	5
cis-1,2-Dichloroethene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	**0.41**	1	< 1.0	1	**0.42**	1	< 1.0	1
cis-1,3-Dichloropropene		< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.4	0.4	< 0.4	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4
Dibromochloromethane		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Dibromomethane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Dichlorodifluoromethane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Ethylbenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Hexachlorobutadiene	0.5	< 0.50	0.5	< 0.50	0.5	< 0.5	0.5	< 0.5	0.5	< 0.5	0.5	< 0.5	0.5	< 0.5	0.5	< 0.5	0.5	< 0.5	0.5	< 0.5	0.5
Isopropylbenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
m&p-Xylenes	5	< 1.0	1	< 1.0	1	**0.48**	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	**0.42**	1	< 1.0	1	< 1.0	1
Methyl Ethyl Ketone (2-Butanone)		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Methyl t-butyl ether (MTBE)	10	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	**0.33**	1	< 1.0	1	**0.33**	1	< 1.0	1
Methylene chloride	5	< 3.0	3	< 3.0	3	< 3.0	3	< 3.0	3	< 5.0	5	< 5	5	< 3.0	3	< 3.0	3	< 3.0	3	< 3.0	3
Naphthalene	10	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
n-Butylbenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
n-Propylbenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
o-Xylene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
p-Isopropyltoluene		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
sec-Butylbenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Styrene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
tert-Butylbenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Tetrachloroethene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Tetrahydrofuran (THF)		< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 10	10	< 10	10	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Toluene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
trans-1,2-Dichloroethene	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
trans-1,3-Dichloropropene	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.4	0.4	< 0.4	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4
trans-1,4-dichloro-2-butene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Trichloroethene	5	< 1.0	1	< 1.0	1	**0.58**	1	< 1.0	1	< 2.0	2	< 2.0	2	**1**	1	**0.55**	1	**1.1**	1	< 1.0	1
Trichlorofluoromethane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Trichlorotrifluoroethane		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Vinyl Chloride	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 2.0	2	< 2.0	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1

Notes:
RL- Reporting Limit
Bold/highlighted- Indicated exceedance of the NYSDEC Groundwater Standard

TABLE 9
11 West Street,
Brooklyn, New York
Groundwater Analytical Results
Semi-Volatile Organic Compounds

Compound	NYSDEC Groundwater Quality Standards µg/L	MW1 3/11/2014 µg/L		MW2 3/11/2014 µg/L		MW3 3/11/2014 µg/L		MW4 3/11/2014 µg/L		MW5 3/11/2014 µg/L		MW6 3/11/2014 µg/L		MW7 3/11/2014 µg/L		MW8 3/11/2014 µg/L		B21 3/11/2014 µg/L		Existing Well 3/11/2014 µg/L		Duplicate 3 3/11/2014 µg/L	
		Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL
1,2,4-Trichlorobenzene		< 1.6	1.6	< 1.6	1.6	< 1.6	1.6	< 1.6	1.6	< 1.6	1.6	< 1.6	1.6	< 1.6	1.6	< 1.6	1.6	< 1.6	1.6	< 1.6	1.6	< 1.6	1.6
1,2-Dichlorobenzene		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,2-Diphenylhydrazine		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,3-Dichlorobenzene	3	**0.43**	0.05	< 0.05	0.05	< 0.05	0.05	< 0.05	0.05	< 0.05	0.05	**0.41**	0.05	< 0.05	0.05	**0.06**	0.05	**4**	0.05	**0.06**	0.05	< 0.05	0.05
1,4-Dichlorobenzene		< 0.05	0.05	< 0.05	0.05	**0.14**	0.05	< 0.05	0.05	< 0.05	0.05	**0.19**	0.05	< 0.05	0.05	< 0.05	0.05	**1.8**	0.05	< 0.05	0.05	**0.07**	0.05
2,4,5-Trichlorophenol	1	**0.04**	0.02	**0.08**	0.02	**0.27**	0.02	< 0.02	0.02	< 0.02	0.02	**0.09**	0.02	**0.03**	0.02	**0.22**	0.02	**0.24**	0.02	**0.45**	0.02	**0.14**	0.02
2,4,6-Trichlorophenol	1	< 0.02	0.02	**0.05**	0.02	**0.32**	0.02	< 0.02	0.02	< 0.02	0.02	**0.06**	0.02	< 0.02	0.02	**0.17**	0.02	**0.2**	0.02	**0.5**	0.02	**0.17**	0.02
2,4-Dichlorophenol		< 0.02	0.02	**0.07**	0.02	**0.56**	0.02	< 0.02	0.02	< 0.02	0.02	**0.09**	0.02	< 0.02	0.02	**0.27**	0.02	**0.28**	0.02	**0.83**	0.02	**0.28**	0.02
2,4-Dimethylphenol		< 3.0	3	< 3.0	3	< 3.0	3	< 3.0	3	< 3.0	3	< 3.0	3	< 3.0	3	< 3.0	3	< 3.0	3	< 3.0	3	< 3.0	3
2,4-Dinitrophenol	5	< 50	50	< 50	50	< 50	50	< 50	50	< 50	50	< 50	50	< 50	50	< 50	50	< 50	50	< 50	50	< 50	50
2,4-Dinitrotoluene	5	< 0.02	0.02	**0.03**	0.02	**0.18**	0.02	< 0.02	0.02	< 0.02	0.02	**0.04**	0.02	< 0.02	0.02	**0.08**	0.02	**0.09**	0.02	**0.25**	0.02	**0.11**	0.02
2,6-Dinitrotoluene	5	< 1.6	1.6	< 1.6	1.6	< 1.6	1.6	< 1.6	1.6	< 1.6	1.6	< 1.6	1.6	< 1.6	1.6	< 1.6	1.6	< 1.6	1.6	**3.2**	1.6	< 1.6	1.6
2-Chloronaphthalene	10	**0.03**	0.02	**0.07**	0.02	**0.32**	0.02	< 0.02	0.02	< 0.02	0.02	**0.09**	0.02	< 0.02	0.02	**0.21**	0.02	**0.32**	0.02	**0.6**	0.02	**0.15**	0.02
2-Chlorophenol	1	< 0.01	0.01	< 0.01	0.01	< 0.01	0.01	< 0.01	0.01	< 0.01	0.01	< 0.01	0.01	< 0.01	0.01	< 0.01	0.01	**0.04**	0.01	< 0.01	0.01	< 0.01	0.01
2-Methylnaphthalene		< 0.04	0.04	< 0.04	0.04	< 0.04	0.04	< 0.04	0.04	< 0.04	0.04	< 0.04	0.04	< 0.04	0.04	< 0.04	0.04	< 0.04	0.04	< 0.04	0.04	< 0.04	0.04
2-Methylphenol (o-cresol)	1	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5
2-Nitroaniline	5	< 2.4	2.4	< 2.4	2.4	< 2.4	2.4	< 2.4	2.4	< 2.4	2.4	< 2.4	2.4	< 2.4	2.4	< 2.4	2.4	< 2.4	2.4	< 2.4	2.4	< 2.4	2.4
2-Nitrophenol	1	< 0.02	0.02	**0.03**	0.02	**0.25**	0.02	< 0.02	0.02	< 0.02	0.02	**0.04**	0.02	< 0.02	0.02	**0.11**	0.02	**0.11**	0.02	**0.31**	0.02	**0.14**	0.02
3&4-Methylphenol (m&p-cresol)		< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4
3,3'-Dichlorobenzidine	5	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1
3-Nitroaniline	5	< 0.80	0.8	< 0.80	0.8	< 0.80	0.8	< 0.80	0.8	< 0.80	0.8	< 0.80	0.8	< 0.80	0.8	< 0.80	0.8	< 0.80	0.8	< 0.80	0.8	< 0.80	0.8
4,6-Dinitro-2-methylphenol	1	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
4-Bromophenyl phenyl ether		< 0.05	0.05	**0.12**	0.05	**0.2**	0.05	< 0.05	0.05	< 0.05	0.05	**0.41**	0.05	< 0.05	0.05	**0.64**	0.05	**8**	0.05	**0.52**	0.05	**0.11**	0.05
4-Chloro-3-methylphenol	1	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5
4-Chloroaniline	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
4-Chlorophenyl phenyl ether		< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5
4-Nitroaniline	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
4-Nitrophenol		< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5
Acetophenone		< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5
Aniline	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Anthracene	50	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Benzidine	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Benzoic acid		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Benzyl butyl phthalate	50	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Bis(2-chloroethoxy)methane	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Bis(2-chloroethyl)ether	1	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Bis(2-chloroisopropyl)ether		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Carbazole		< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Dibenzofuran		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Diethyl phthalate	50	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Dimethylphthalate	50	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Di-n-butylphthalate	50	< 10	10	< 10	10	< 10	10	< 10	10	< 10	10	< 10	10	< 10	10	< 10	10	< 10	10	< 10	10	< 10	10
Di-n-octylphthalate	50	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Fluoranthene	50	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Fluorene	50	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Hexachlorobutadiene	0.5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Hexachlorocyclopentadiene	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Isophorone	50	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Naphthalene	10	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Nitrobenzene	0.4	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
N-Nitrosodimethylamine		< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
N-Nitrosodi-n-propylamine		< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
N-Nitrosodiphenylamine	50	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Phenol	50	< 50	50	< 50	50	< 50	50	< 50	50	< 50	50	< 50	50	< 50	50	< 50	50	< 50	50	< 50	50	< 50	50
Pyrene	50	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
1,2,4,5-Tetrachlorobenzene		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Acenaphthene	20	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Acenaphthylene		< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Benz(a)anthracene	0.002	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Benzo(a)pyrene	ND	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Benzo(b)fluoranthene	0.002	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Benzo(ghi)perylene		< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Benzo(k)fluoranthene	0.002	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Bis(2-ethylhexyl)phthalate	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Chrysene	0.002	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Dibenz(a,h)anthracene		< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Hexachlorobenzene	0.04	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Hexachloroethane	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Indeno(1,2,3-cd)pyrene	0.002	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Pentachloronitrobenzene		< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Pentachlorophenol	1	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Phenanthrene	50	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Pyridine	50	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5

Notes:

RL- Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC Groundwater Standard

TABLE 9
11 West Street,
Brooklyn, New York
Groundwater Analytical Results
Semi-Volatile Organic Compounds

Compound	NYSDEC Groundwater Quality Standards µg/L	MW1 12/23/2014 µg/L		MW2 12/23/2014 µg/L		MW3 12/23/2014 µg/L		MW4 12/5/2014 µg/L		MW5 12/5/2014 µg/L		MW6 12/5/2014 µg/L		MW10 12/5/2014 µg/L		MW11 12/5/2014 µg/L		MW12 12/5/2014 µg/L		MW15 12/5/2014 µg/L		MW16 12/5/2014 µg/L		MW17 12/5/2014 µg/L		MW18 12/5/2014 µg/L		MW19 12/5/2014 µg/L		Duplicate 1 12/5/2014 µg/L		Duplicate 2 12/5/2014 µg/L	
		Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL
1,2,4-Trichlorobenzene		< 5.0	5	< 5.2	5.2	< 5.0	5	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
1,2-Dichlorobenzene		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.1	1.1	< 1.1	1.1	< 1.1	1.1	< 1.0	1	< 1.0	1	< 1.0	1
1,2-Diphenylhydrazine		< 5.0	5	< 5.2	5.2	< 5.0	5	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
1,3-Dichlorobenzene	3	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.1	1.1	< 1.1	1.1	< 1.1	1.1	< 1.0	1	< 1.0	1	< 1.0	1
1,4-Dichlorobenzene		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.1	1.1	< 1.1	1.1	< 1.1	1.1	< 1.0	1	< 1.0	1	< 1.0	1
2,4,5-Trichlorophenol	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.1	1.1	< 1.1	1.1	< 1.0	1	< 1.0	1	< 1.0	1
2,4,6-Trichlorophenol	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1	1	< 1	1	< 1.0	1	< 1.0	1
2,4-Dichlorophenol		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1	1	< 1	1	< 1.0	1	< 1.0	1
2,4-Dimethylphenol		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1	1	< 1	1	< 1.0	1	< 1.0	1
2,4-Dinitrophenol	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1	1	< 1	1	< 1.0	1	< 1.0	1
2,4-Dinitrotoluene	5	< 5.0	5	< 5	5	< 5.0	5	< 5.0	5	< 5	5	< 5.0	5	< 5	5	< 5.0	5	< 5	5	< 5	5	< 5.0	5	< 5	5	< 5	5	< 5.0	5	< 5.0	5	< 5	5
2,6-Dinitrotoluene	5	< 5.0	5	< 5	5	< 5.0	5	< 5.0	5	< 5	5	< 5.0	5	< 5	5	< 5.0	5	< 5	5	< 5	5	< 5.0	5	< 5	5	< 5	5	< 5.0	5	< 5.0	5	< 5	5
2-Chloronaphthalene	10	< 5.0	5	< 5.2	5.2	< 5.0	5	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
2-Chlorophenol	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1	1	< 1	1	< 1	1	< 1.0	1	< 1.0	1
2-Methylnaphthalene		< 5.0	5	< 5.2	5.2	< 5.0	5	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
2-Methylphenol (o-cresol)	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1	1	< 1	1	< 1.0	1	< 1.0	1	< 1.0	1
2-Nitroaniline	5	< 5.0	5	< 5	5	< 5.0	5	< 5.0	5	< 5	5	< 5.0	5	< 5	5	< 5.0	5	< 5	5	< 5	5	< 5.0	5	< 5	5	< 5	5	< 5.0	5	< 5.0	5	< 5	5
2-Nitrophenol	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1	1	< 1	1	< 1.0	1	< 1.0	1	< 1.0	1
3&4-Methylphenol (m&p-cresol)		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.1	1.1	< 1.1	1.1	< 1.1	1.1	< 1.0	1	< 1.0	1	< 1.0	1
3,3'-Dichlorobenzidine	5	< 5.0	5	< 5	5	< 5.0	5	< 5.0	5	< 5	5	< 5.0	5	< 5	5	< 5.0	5	< 5	5	< 5	5	< 5.0	5	< 5	5	< 5	5	< 5.0	5	< 5.0	5	< 5	5
3-Nitroaniline	5	< 5.0	5	< 5	5	< 5.0	5	< 5.0	5	< 5	5	< 5.0	5	< 5	5	< 5.0	5	< 5	5	< 5	5	< 5.0	5	< 5	5	< 5	5	< 5.0	5	< 5.0	5	< 5	5
4,6-Dinitro-2-methylphenol	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1	1	< 1	1	< 1.0	1	< 1.0	1	< 1.0	1
4-Bromophenyl phenyl ether		< 5.0	5	< 5.2	5.2	< 5.0	5	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
4-Chloro-3-methylphenol	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1	1	< 1	1	< 1.0	1	< 1.0	1	< 1.0	1
4-Chloroaniline	5	< 3.5	3.5	< 3.6	3.6	< 3.5	3.5	< 3.5	3.5	< 3.6	3.6	< 3.5	3.5	< 3.6	3.6	< 3.5	3.5	< 3.6	3.6	< 3.6	3.6	< 3.8	3.8	< 3.9	3.9	< 3.7	3.7	< 3.5	3.5	< 3.5	3.5	< 3.6	3.6
4-Chlorophenyl phenyl ether		< 5.0	5	< 5.2	5.2	< 5.0	5	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
4-Nitroaniline	5	< 5.0	5	< 5	5	< 5.0	5	< 5.0	5	< 5	5	< 5.0	5	< 5	5	< 5.0	5	< 5	5	< 5	5	< 5.0	5	< 5	5	< 5	5	< 5.0	5	< 5.0	5	< 5	5
4-Nitrophenol		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1	1	< 1	1	< 1.0	1	< 1.0	1	< 1.0	1
Acetophenone		< 5.0	5	< 5.2	5.2	< 5.0	5	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
Aniline	5	< 3.5	3.5	< 3.6	3.6	< 3.5	3.5	< 3.5	3.5	< 3.6	3.6	< 3.5	3.5	< 3.6	3.6	< 3.5	3.5	< 3.6	3.6	< 3.6	3.6	< 3.8	3.8	< 3.9	3.9	< 3.7	3.7	< 3.5	3.5	< 3.5	3.5	< 3.6	3.6
Anthracene	50	< 5.0	5	< 5.2	5.2	< 5.0	5	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
Benzidine	5	< 4.5	4.5	< 4.7	4.7	< 4.5	4.5	< 4.5	4.5	< 4.6	4.6	< 4.5	4.5	< 4.6	4.6	< 4.5	4.5	< 4.6	4.6	< 4.6	4.6	< 4.9	4.9	< 5.0	5	< 4.7	4.7	< 4.5	4.5	< 4.5	4.5	< 4.6	4.6
Benzoic acid		< 25	25	< 26	26	< 25	25	< 25	25	< 26	26	< 25	25	< 26	26	< 25	25	< 26	26	< 26	26	< 27	27	< 28	28	< 26	26	< 25	25	< 25	25	< 26	26
Benzyl butyl phthalate	50	< 5.0	5	< 5.2	5.2	< 5.0	5	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
Bis(2-chloroethoxy)methane	5	< 5.0	5	< 5	5	< 5.0	5	< 5.0	5	< 5	5	< 5.0	5	< 5	5	< 5.0	5	< 5	5	< 5	5	< 5.0	5	< 5	5	< 5	5	< 5.0	5	< 5.0	5	< 5	5
Bis(2-chloroethyl)ether	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1	1	< 1	1	< 1.0	1	< 1.0	1	< 1.0	1
Bis(2-chloroisopropyl)ether		< 5.0	5	< 5.2	5.2	< 5.0	5	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
Carbazole		< 25	25	< 26	26	< 25	25	< 25	25	< 26	26	< 25	25	< 26	26	< 25	25	< 26	26	< 26	26	< 27	27	< 28	28	< 26	26	< 25	25	< 25	25	< 26	26
Dibenzofuran		< 5.0	5	< 5	5	< 5.0	5	< 5.0	5	< 5	5	< 5.0	5	< 5	5	< 5.0	5	< 5	5	< 5	5	< 5.0	5	< 5	5	< 5	5	< 5.0	5	< 5.0	5	< 5	5
Diethyl phthalate	50	< 5.0	5	< 5.2	5.2	< 5.0	5	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
Dimethylphthalate	50	< 5.0	5	< 5.2	5.2	< 5.0	5	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
Di-n-butylphthalate	50	< 5.0	5	< 5.2	5.2	< 5.0	5	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
Di-n-octylphthalate	50	< 5.0	5	< 5.2	5.2	< 5.0	5	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
Fluoranthene	50	< 5.0	5	< 5.2	5.2	< 5.0	5	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
Fluorene	50	< 5.0	5	< 5.2	5.2	< 5.0	5	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
Hexachlorobutadiene	0.5	< 0.40	0.4	< 0.42	0.42	< 0.40	0.4	< 0.40	0.4	< 0.41	0.41	< 0.40	0.4	< 0.41	0.41	< 0.40	0.4	< 0.41	0.41	< 0.41	0.41	< 0.43	0.43	< 0.44	0.44	< 0.42	0.42	< 0.40	0.4	< 0.40	0.4	< 0.41	0.41
Hexachlorocyclopentadiene	5	< 5.0	5	< 5	5	< 5.0	5	< 5.0	5	< 5	5	< 5.0	5	< 5	5	< 5.0	5	< 5	5	< 5	5	< 5.0	5	< 5	5	< 5	5	< 5.0	5	< 5.0	5	< 5	5
Isophorone	50	< 5.0	5	< 5.2	5.2	< 5.0	5	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
Naphthalene	10	< 5.0	5	< 5	5	< 5.0	5	< 5.0	5	< 5	5	< 5.0	5	< 5	5	< 5.0	5	< 5	5	< 5	5	< 5.0	5	< 5	5	< 5	5	< 5.0	5	< 5.0	5	< 5	5
Nitrobenzene	0.4	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.11	0.11	< 0.11	0.11	< 0.11	0.11	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1
N-Nitrosodimethylamine		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.1	1.1	< 1.1	1.1	< 1.1	1.1	< 1.0	1	< 1.0	1	< 1.0	1
N-Nitrosodi-n-propylamine		< 5.0	5	< 5.2	5.2	< 5.0	5	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
N-Nitrosodiphenylamine	50	< 5.0	5	< 5.2	5.2	< 5.0	5	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
Phenol	50	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1	1	< 1	1	< 1.0	1	< 1.0	1	< 1.0	1
Pyrene	50	< 5.0	5	< 5.2	5.2	< 5.0	5	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
1,2,4,5-Tetrachlorobenzene		< 0.50	0.5	< 0.52	0.52	< 0.50	0.5	< 0.50	0.5	< 0.51	0.51	< 0.50	0.5	< 0.51	0.51	< 0.50	0.5	< 0.51	0.51	< 0.51	0.51	< 0.54	0.54	< 0.56	0.56	< 0.53	0.53	< 0.50	0.5	< 0.50	0.5	< 0.51	0.51
Acenaphthene	20	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.0	5	< 5.1	5.1	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
Acenaphthylene		< 5.0	5	< 5.2	5.2	< 5.0	5	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.11	0.11	< 0.11	0.11	< 0.11	0.11	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1
Benz(a)anthracene	0.002	**0.02**	0.02	**0.24**	0.02	**0.05**	0.02	**0.04**	0.02	**0.06**	0.02	**0.04**	0.02	**0.02**	0.02	**0.09**	0.02	**0.03**	0.02	**0.02**	0.02	**0.02**	0.02	**0.04**	0.02	**0.18**	0.02	**0.03**	0.02	< 0.02	0.02	**0.02**	0.02
Benzo(a)pyrene	ND	< 0.02	0.02	**0.24**	0.02	**0.04**	0.02	**0.02**	0.02	**0.05**	0.02	**0.02**	0.02	< 0.02	0.02	**0.07**	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	**0.03**	0.02	**0.16**	0.02	**0.02**	0.02	< 0.02	0.02	< 0.02	0.02
Benzo(b)fluoranthene	0.002	< 0.02	0.02	**0.47**	0.02	**0.06**	0.02	**0.03**	0.02	**0.07**	0.02	**0.04**	0.02	< 0.02	0.02	**0.09**	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	**0.04**	0.02	**0.18**	0.02	**0.02**	0.02	< 0.02	0.02	< 0.02	0.02
Benzo(ghi)perylene		< 0.02	0.02	**0.2**	0.02	**0.04**	0.02	< 0.02	0.02	**0.04**	0.02	< 0.02	0.02	< 0.02	0.02	**0.04**	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	**0.08**	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02
Benzo(k)fluoranthene	0.002	< 0.02	0.02	**0.17**	0.02	**0.03**	0.02	< 0.02	0.02	**0.03**	0.02	< 0.02	0.02	< 0.02	0.02	**0.05**	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	**0.07**	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02
Bis(2-ethylhexyl)phthalate	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.1	1.1	< 1.1	1.1	< 1.1	1.1	< 1.0	1	< 1.0	1	< 1.0	1
Chrysene	0.002	< 0.02	0.02	**0.25**	0.02	**0.04**	0.02	**0.02**	0.02	**0.05**	0.02	**0.02**	0.02	< 0.02	0.02	**0.08**	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	**0.02**	0.02	**0.16**	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02
Dibenz(a,h)anthracene		< 0.02	0.02	**0.05**	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02
Hexachlorobenzene	0.04	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02
Hexachloroethane	5	< 0.50	0.5	< 0.52	0.52	< 0.50	0.5	< 0.50	0.5	< 0.51	0.51	< 0.50	0.5	< 0.51	0.51	< 0.50	0.5	< 0.51	0.51	< 0.51	0.51	< 0.54	0.54	< 0.56	0.56	< 0.53	0.53	< 0.50	0.5	< 0.50	0.5	< 0.51	0.51
Indeno(1,2,3-cd)pyrene	0.002	< 0.02	0.02	**0.19**	0.02	**0.03**	0.02	< 0.02	0.02	**0.03**	0.02	< 0.02	0.02	< 0.02	0.02	**0.03**	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	**0.07**	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02
Pentachloronitrobenzene		< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.11	0.11	< 0.11	0.11	< 0.11	0.11	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1
Pentachlorophenol	1	< 0.80	0.8	< 0.83	0.83	< 0.80	0.8	< 0.80	0.8	< 0.82	0.82	< 0.80	0.8	< 0.82	0.82	< 0.80	0.8	< 0.82	0.82	< 0.82	0.82	< 0.86	0.86	< 0.89	0.89	< 0.84	0.84	< 0.80	0.8	< 0.80	0.8	< 0.82	0.82
Phenanthrene	50	< 0.10	0.1	**0.51**	0.1	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	**0.21**	0.1	< 0.10	0.1	< 0.10	0.1	< 0.11	0.11	< 0.11	0.11	**0.36**	0.11	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1
Pyridine	50	< 10	10	< 10	10	< 10	10	< 10	10	< 10	10	< 10	10	< 10	10	< 10	10	< 10	10	< 10	10	< 11	11	< 11	11	< 11	11	< 10	10	< 10	10	< 10	10

Notes:

RL- Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC Groundwater Standard

TABLE 9
11 West Street,
Brooklyn, New York
Groundwater Analytical Results
Semi-Volatile Organic Compounds

Compound	NYSDEC Groundwater Quality Standards µg/L	MW13 12/23/2014 µg/L		MW14 12/23/2014 µg/L		MW15 12/5/2014 µg/L		MW16 12/5/2014 µg/L		MW17 12/5/2014 µg/L		MW18 12/5/2014 µg/L		MW19 12/5/2014 µg/L		Duplicate 1 12/5/2014 µg/L		Duplicate 2 12/5/2014 µg/L	
		Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL
1,2,4-Trichlorobenzene		< 5.5	5.5	< 5.0	5	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
1,2-Dichlorobenzene		< 1.1	1.1	< 1.0	1	< 1.0	1	< 1.1	1.1	< 1.1	1.1	< 1.1	1.1	< 1.0	1	< 1.0	1	< 1.0	1
1,2-Diphenylhydrazine		< 5.5	5.5	< 5.0	5	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
1,3-Dichlorobenzene	3	< 1.1	1.1	< 1.0	1	< 1.0	1	< 1.1	1.1	< 1.1	1.1	< 1.1	1.1	< 1.0	1	< 1.0	1	< 1.0	1
1,4-Dichlorobenzene		< 1.1	1.1	< 1.0	1	< 1.0	1	< 1.1	1.1	< 1.1	1.1	< 1.1	1.1	< 1.0	1	< 1.0	1	< 1.0	1
2,4,5-Trichlorophenol	1	< 1	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1	1	< 1	1	< 1.0	1	< 1.0	1	< 1.0	1
2,4,6-Trichlorophenol	1	< 1	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1	1	< 1	1	< 1.0	1	< 1.0	1	< 1.0	1
2,4-Dichlorophenol		< 1	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1	1	< 1	1	< 1.0	1	< 1.0	1	< 1.0	1
2,4-Dimethylphenol		< 1	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1	1	< 1	1	< 1.0	1	< 1.0	1	< 1.0	1
2,4-Dinitrophenol	5	< 1	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1	1	< 1	1	< 1.0	1	< 1.0	1	< 1.0	1
2,4-Dinitrotoluene	5	< 5	5	< 5.0	5	< 5	5	< 5.0	5	< 5	5	< 5	5	< 5.0	5	< 5.0	5	< 5	5
2,6-Dinitrotoluene	5	< 5	5	< 5.0	5	< 5	5	< 5.0	5	< 5	5	< 5	5	< 5.0	5	< 5.0	5	< 5	5
2-Chloronaphthalene	10	< 5.5	5.5	< 5.0	5	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
2-Chlorophenol	1	< 1	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1	1	< 1	1	< 1.0	1	< 1.0	1	< 1.0	1
2-Methylnaphthalene		< 5.5	5.5	< 5.0	5	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
2-Methylphenol (o-cresol)	1	< 1	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1	1	< 1	1	< 1.0	1	< 1.0	1	< 1.0	1
2-Nitroaniline	5	< 5	5	< 5.0	5	< 5	5	< 5.0	5	< 5	5	< 5	5	< 5.0	5	< 5.0	5	< 5	5
2-Nitrophenol	1	< 1	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1	1	< 1	1	< 1.0	1	< 1.0	1	< 1.0	1
3&4-Methylphenol (m&p-cresol)		< 1.1	1.1	< 1.0	1	< 1.0	1	< 1.1	1.1	< 1.1	1.1	< 1.1	1.1	< 1.0	1	< 1.0	1	< 1.0	1
3,3'-Dichlorobenzidine	5	< 5	5	< 5.0	5	< 5	5	< 5.0	5	< 5	5	< 5	5	< 5.0	5	< 5.0	5	< 5	5
3-Nitroaniline	5	< 5	5	< 5.0	5	< 5	5	< 5.0	5	< 5	5	< 5	5	< 5.0	5	< 5.0	5	< 5	5
4,6-Dinitro-2-methylphenol	1	< 1	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1	1	< 1	1	< 1.0	1	< 1.0	1	< 1.0	1
4-Bromophenyl phenyl ether		< 5.5	5.5	< 5.0	5	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
4-Chloro-3-methylphenol	1	< 1	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1	1	< 1	1	< 1.0	1	< 1.0	1	< 1.0	1
4-Chloroaniline	5	< 3.8	3.8	< 3.5	3.5	< 3.6	3.6	< 3.8	3.8	< 3.9	3.9	< 3.7	3.7	< 3.5	3.5	< 3.5	3.5	< 3.6	3.6
4-Chlorophenyl phenyl ether		< 5.5	5.5	< 5.0	5	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
4-Nitroaniline	5	< 5	5	< 5.0	5	< 5	5	< 5.0	5	< 5	5	< 5	5	< 5.0	5	< 5.0	5	< 5	5
4-Nitrophenol		< 1	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1	1	< 1	1	< 1.0	1	< 1.0	1	< 1.0	1
Acetophenone		< 5.5	5.5	< 5.0	5	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
Aniline	5	< 3.8	3.8	< 3.5	3.5	< 3.6	3.6	< 3.8	3.8	< 3.9	3.9	< 3.7	3.7	< 3.5	3.5	< 3.5	3.5	< 3.6	3.6
Anthracene	50	< 5.5	5.5	< 5.0	5	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
Benzidine	5	< 4.9	4.9	< 4.5	4.5	< 4.6	4.6	< 4.9	4.9	< 5.0	5	< 4.7	4.7	< 4.5	4.5	< 4.5	4.5	< 4.6	4.6
Benzoic acid		< 27	27	< 25	25	< 26	26	< 27	27	< 28	28	< 26	26	< 25	25	< 25	25	< 26	26
Benzyl butyl phthalate	50	< 5.5	5.5	< 5.0	5	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
Bis(2-chloroethoxy)methane	5	< 5	5	< 5.0	5	< 5	5	< 5.0	5	< 5	5	< 5	5	< 5.0	5	< 5.0	5	< 5	5
Bis(2-chloroethyl)ether	1	< 1	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1	1	< 1	1	< 1.0	1	< 1.0	1	< 1.0	1
Bis(2-chloroisopropyl)ether		< 5.5	5.5	< 5.0	5	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
Carbazole		< 27	27	< 25	25	< 26	26	< 27	27	< 28	28	< 26	26	< 25	25	< 25	25	< 26	26
Dibenzofuran		< 5	5	< 5.0	5	< 5	5	< 5.0	5	< 5	5	< 5	5	< 5.0	5	< 5.0	5	< 5	5
Diethyl phthalate	50	< 5.5	5.5	< 5.0	5	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
Dimethylphthalate	50	< 5.5	5.5	< 5.0	5	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
Di-n-butylphthalate	50	< 5.5	5.5	< 5.0	5	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
Di-n-octylphthalate	50	< 5.5	5.5	< 5.0	5	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
Fluoranthene	50	< 5.5	5.5	< 5.0	5	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
Fluorene	50	< 5.5	5.5	< 5.0	5	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
Hexachlorobutadiene	0.5	< 0.44	0.44	< 0.40	0.4	< 0.41	0.41	< 0.43	0.43	< 0.44	0.44	< 0.42	0.42	< 0.40	0.4	< 0.40	0.4	< 0.41	0.41
Hexachlorocyclopentadiene	5	< 5	5	< 5.0	5	< 5	5	< 5.0	5	< 5	5	< 5	5	< 5.0	5	< 5.0	5	< 5	5
Isophorone	50	< 5.5	5.5	< 5.0	5	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
Naphthalene	10	< 5	5	< 5.0	5	< 5	5	< 5.0	5	< 5	5	< 5	5	< 5.0	5	< 5.0	5	< 5	5
Nitrobenzene	0.4	< 0.11	0.11	< 0.10	0.1	< 0.10	0.1	< 0.11	0.11	< 0.11	0.11	< 0.11	0.11	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1
N-Nitrosodimethylamine		< 1.1	1.1	< 1.0	1	< 1.0	1	< 1.1	1.1	< 1.1	1.1	< 1.1	1.1	< 1.0	1	< 1.0	1	< 1.0	1
N-Nitrosodi-n-propylamine		< 5.5	5.5	< 5.0	5	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
N-Nitrosodiphenylamine	50	< 5.5	5.5	< 5.0	5	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
Phenol	50	< 1	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1	1	< 1	1	< 1.0	1	< 1.0	1	< 1.0	1
Pyrene	50	< 5.5	5.5	< 5.0	5	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
1,2,4,5-Tetrachlorobenzene		< 0.55	0.55	< 0.50	0.5	< 0.51	0.51	< 0.54	0.54	< 0.56	0.56	< 0.53	0.53	< 0.50	0.5	< 0.50	0.5	< 0.51	0.51
Acenaphthene	20	< 0.11	0.11	< 0.10	0.1	< 5.1	5.1	< 5.4	5.4	< 5.6	5.6	< 5.3	5.3	< 5.0	5	< 5.0	5	< 5.1	5.1
Acenaphthylene		< 5.5	5.5	< 5.0	5	< 0.10	0.1	< 0.11	0.11	< 0.11	0.11	< 0.11	0.11	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1
Benz(a)anthracene	0.002	**0.32**	0.02	**0.08**	0.02	**0.02**	0.02	**0.02**	0.02	**0.04**	0.02	**0.18**	0.02	**0.03**	0.02	< 0.02	0.02	**0.02**	0.02
Benzo(a)pyrene	ND	**0.29**	0.02	**0.05**	0.02	< 0.02	0.02	< 0.02	0.02	**0.03**	0.02	**0.16**	0.02	**0.02**	0.02	< 0.02	0.02	< 0.02	0.02
Benzo(b)fluoranthene	0.002	**0.44**	0.02	**0.09**	0.02	< 0.02	0.02	< 0.02	0.02	**0.04**	0.02	**0.18**	0.02	**0.02**	0.02	< 0.02	0.02	< 0.02	0.02
Benzo(ghi)perylene		**0.2**	0.02	**0.04**	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	**0.08**	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02
Benzo(k)fluoranthene	0.002	**0.18**	0.02	**0.04**	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	**0.07**	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02
Bis(2-ethylhexyl)phthalate	5	< 1.1	1.1	< 1.0	1	< 1.0	1	< 1.1	1.1	< 1.1	1.1	< 1.1	1.1	< 1.0	1	< 1.0	1	< 1.0	1
Chrysene	0.002	**0.29**	0.02	**0.06**	0.02	< 0.02	0.02	< 0.02	0.02	**0.02**	0.02	**0.16**	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02
Dibenz(a,h)anthracene		**0.06**	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02
Hexachlorobenzene	0.04	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02
Hexachloroethane	5	< 0.55	0.55	< 0.50	0.5	< 0.51	0.51	< 0.54	0.54	< 0.56	0.56	< 0.53	0.53	< 0.50	0.5	< 0.50	0.5	< 0.51	0.51
Indeno(1,2,3-cd)pyrene	0.002	**0.18**	0.02	**0.03**	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	**0.07**	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02
Pentachloronitrobenzene		< 0.11	0.11	< 0.10	0.1	< 0.10	0.1	< 0.11	0.11	< 0.11	0.11	< 0.11	0.11	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1
Pentachlorophenol	1	< 0.88	0.88	< 0.80	0.8	< 0.82	0.82	< 0.86	0.86	< 0.89	0.89	< 0.84	0.84	< 0.80	0.8	< 0.80	0.8	< 0.82	0.82
Phenanthrene	50	**0.92**	0.11	**0.12**	0.1	< 0.10	0.1	< 0.11	0.11	< 0.11	0.11	**0.36**	0.11	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1
Pyridine	50	< 11	11	< 10	10	< 10	10	< 11	11	< 11	11	< 11	11	< 10	10	< 10	10	< 10	10

Notes:

RL- Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC Groundwater Standard

TABLE 9
11 West Street,
Brooklyn, New York
Groundwater Analytical Results
Semi-Volatile Organic Compounds

Compound	NYSDEC Groundwater Quality Standards µg/L	MW2 6/4/2015 Unfiltered µg/L		MW2 6/4/2015 filtered µg/L		MW13 6/4/2015 Unfiltered µg/L		MW13 6/4/2015 filtered µg/L		MW18 6/4/2015 Unfiltered µg/L		MW18 6/4/2015 filtered µg/L	
		Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL
1,2,4-Trichlorobenzene		< 10	10	< 5.0	5.0	< 5.1	5.1	< 5.0	5.0	< 5.0	5.0	< 5.4	5.4
1,2-Dichlorobenzene		< 2.0	2.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.1	1.1
1,2-Diphenylhydrazine		< 10	10	< 5.0	5.0	< 5.1	5.1	< 5.0	5.0	< 5.0	5.0	< 5.4	5.4
1,3-Dichlorobenzene	3	< 2.0	2.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.1	1.1
1,4-Dichlorobenzene		< 2.0	2.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.1	1.1
2,4,5-Trichlorophenol	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1	1
2,4,6-Trichlorophenol	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1	1
2,4-Dichlorophenol	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1	1
2,4-Dimethylphenol	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1	1
2,4-Dinitrophenol	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1	1
2,4-Dinitrotoluene	5	< 5.0	5.0	< 5.0	5.0	< 5	5	< 5.0	5.0	< 5.0	5.0	< 5	5
2,6-Dinitrotoluene	5	< 5.0	5.0	< 5.0	5.0	< 5	5	< 5.0	5.0	< 5.0	5.0	< 5	5
2-Chloronaphthalene	10	< 10	10	< 5.0	5.0	< 5.1	5.1	< 5.0	5.0	< 5.0	5.0	< 5.4	5.4
2-Chlorophenol	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1	1
2-Methylnaphthalene		< 10	10	< 5.0	5.0	< 5.1	5.1	< 5.0	5.0	< 5.0	5.0	< 5.4	5.4
2-Methylphenol (o-cresol)	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1	1
2-Nitroaniline	5	< 5.0	5.0	< 5.0	5.0	< 5	5	< 5.0	5.0	< 5.0	5.0	< 5	5
2-Nitrophenol	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1	1
3&4-Methylphenol (m&p-cresol)		< 2.0	2.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.1	1.1
3,3'-Dichlorobenzidine	5	< 5.0	5.0	< 5.0	5.0	< 5	5	< 5.0	5.0	< 5.0	5.0	< 5	5
3-Nitroaniline	5	< 5.0	5.0	< 5.0	5.0	< 5	5	< 5.0	5.0	< 5.0	5.0	< 5	5
4,6-Dinitro-2-methylphenol	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1	1
4-Bromophenyl phenyl ether		< 10	10	< 5.0	5.0	< 5.1	5.1	< 5.0	5.0	< 5.0	5.0	< 5.4	5.4
4-Chloro-3-methylphenol	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1	1
4-Chloroaniline	5	< 5.0	5.0	< 3.5	3.5	< 3.6	3.6	< 3.5	3.5	< 3.5	3.5	< 3.8	3.8
4-Chlorophenyl phenyl ether		< 10	10	< 5.0	5.0	< 5.1	5.1	< 5.0	5.0	< 5.0	5.0	< 5.4	5.4
4-Nitroaniline	5	< 5.0	5.0	< 5.0	5.0	< 5	5	< 5.0	5.0	< 5.0	5.0	< 5	5
4-Nitrophenol	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1	1
Acenaphthene	20	< 10	10	< 5.0	5.0	< 5.1	5.1	< 5.0	5.0	< 5.0	5.0	< 5.4	5.4
Acetophenone		< 10	10	< 5.0	5.0	< 5.1	5.1	< 5.0	5.0	< 5.0	5.0	< 5.4	5.4
Aniline	5	< 5.0	5.0	< 3.5	3.5	< 3.6	3.6	< 3.5	3.5	< 3.5	3.5	< 3.8	3.8
Anthracene	50	< 10	10	< 5.0	5.0	< 5.1	5.1	< 5.0	5.0	< 5.0	5.0	< 5.4	5.4
Benzidine	5	< 5.0	5.0	< 4.5	4.5	< 4.6	4.6	< 4.5	4.5	< 4.5	4.5	< 4.9	4.9
Benzoic acid		< 50	50	< 25	25	< 26	26	< 25	25	< 25	25	< 27	27
Benzyl butyl phthalate	50	< 10	10	< 5.0	5.0	< 5.1	5.1	< 5.0	5.0	< 5.0	5.0	< 5.4	5.4
Bis(2-chloroethoxy)methane	5	< 5.0	5.0	< 5.0	5.0	< 5	5	< 5.0	5.0	< 5.0	5.0	< 5	5
Bis(2-chloroethyl)ether	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1	1
Bis(2-chloroisopropyl)ether		< 10	10	< 5.0	5.0	< 5.1	5.1	< 5.0	5.0	< 5.0	5.0	< 5.4	5.4
Bis(2-ethylhexyl)phthalate	5	**47**	10										
Carbazole		< 50	50	< 25	25	< 26	26	< 25	25	< 25	25	< 27	27
Dibenzofuran		< 5.0	5.0	< 5.0	5.0	< 5	5	< 5.0	5.0	< 5.0	5.0	< 5	5
Diethyl phthalate	50	< 10	10	< 5.0	5.0	< 5.1	5.1	< 5.0	5.0	< 5.0	5.0	< 5.4	5.4
Dimethylphthalate	50	< 10	10	< 5.0	5.0	< 5.1	5.1	< 5.0	5.0	< 5.0	5.0	< 5.4	5.4
Di-n-butylphthalate	50	< 10	10	< 5.0	5.0	< 5.1	5.1	< 5.0	5.0	< 5.0	5.0	< 5.4	5.4
Di-n-octylphthalate	50	< 10	10	< 5.0	5.0	< 5.1	5.1	< 5.0	5.0	< 5.0	5.0	< 5.4	5.4
Fluoranthene	50	< 10	10	< 5.0	5.0	< 5.1	5.1	< 5.0	5.0	< 5.0	5.0	< 5.4	5.4
Fluorene	50	< 10	10	< 5.0	5.0	< 5.1	5.1	< 5.0	5.0	< 5.0	5.0	< 5.4	5.4
Hexachlorocyclopentadiene	5	< 5.0	5.0	< 5.0	5.0	< 5	5	< 5.0	5.0	< 5.0	5.0	< 5	5
Isophorone	50	< 10	10	< 5.0	5.0	< 5.1	5.1	< 5.0	5.0	< 5.0	5.0	< 5.4	5.4
Naphthalene	10	< 5.0	5.0	< 5.0	5.0	< 5	5	< 5.0	5.0	< 5.0	5.0	< 5	5
N-Nitrosodimethylamine		< 2.0	2.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.1	1.1
N-Nitrosodi-n-propylamine		< 10	10	< 5.0	5.0	< 5.1	5.1	< 5.0	5.0	< 5.0	5.0	< 5.4	5.4
N-Nitrosodiphenylamine	50	< 10	10	< 5.0	5.0	< 5.1	5.1	< 5.0	5.0	< 5.0	5.0	< 5.4	5.4
Phenol	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1	1
Pyrene	50	< 10	10	< 5.0	5.0	< 5.1	5.1	< 5.0	5.0	< 5.0	5.0	< 5.4	5.4
Pyridine	50	< 20	20	< 10	10	< 10	10	< 10	10	< 10	10	< 11	11
1,2,4,5-Tetrachlorobenzene		< 0.50	0.50	< 0.50	0.50	< 0.51	0.51	< 0.50	0.50	< 0.50	0.50	< 0.54	0.54
Acenaphthylene		< 0.10	0.10	< 0.10	0.10	< 0.10	0.10	< 0.10	0.10	< 0.10	0.10	< 0.11	0.11
Benz(a)anthracene	0.002	**0.31**	0.02	**0.24**	0.02	**0.35**	0.02	**0.04**	0.02	**0.13**	0.02	**0.54**	0.02
Benzo(a)pyrene		**0.35**	0.02	**0.29**	0.02	**0.31**	0.02	**0.03**	0.02	**0.11**	0.02	**0.47**	0.02
Benzo(b)fluoranthene	0.002	**0.49**	0.02	**0.37**	0.02	**0.46**	0.02	**0.05**	0.02	**0.13**	0.02	**0.61**	0.02
Benzo(ghi)perylene		**0.27**	0.02	**0.22**	0.02	**0.21**	0.02	**0.03**	0.02	**0.06**	0.02	**0.27**	0.02
Benzo(k)fluoranthene	0.002	**0.23**	0.02	**0.17**	0.02	**0.14**	0.02	**0.02**	0.02	**0.06**	0.02	**0.19**	0.02
Bis(2-ethylhexyl)phthalate	5			1.7	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.1	1.1
Chrysene	0.002	**0.27**	0.02	**0.22**	0.02	**0.3**	0.02	**0.03**	0.02	**0.11**	0.02	**0.5**	0.02
Dibenz(a,h)anthracene		**0.06**	0.02	**0.05**	0.02	**0.05**	0.02	**< 0.02**	0.02	**< 0.02**	0.02	**0.07**	0.02
Hexachlorobenzene	0.04	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02
Hexachlorobutadiene	0.5	< 0.40	0.40	< 0.40	0.40	< 0.41	0.41	< 0.40	0.40	< 0.40	0.40	< 0.43	0.43
Hexachloroethane	5	< 0.50	0.50	< 0.50	0.50	< 0.51	0.51	< 0.50	0.50	< 0.50	0.50	< 0.54	0.54
Indeno(1,2,3-cd)pyrene	0.002	**0.26**	0.02	**0.19**	0.02	**0.19**	0.02	**0.02**	0.02	**< 0.02**	0.02	**0.24**	0.02
Nitrobenzene	0.4	< 0.10	0.10	< 0.10	0.10	< 0.10	0.10	< 0.10	0.10	< 0.10	0.10	< 0.11	0.11
Pentachloronitrobenzene		< 0.10	0.10	< 0.10	0.10	< 0.10	0.10	< 0.10	0.10	< 0.10	0.10	< 0.11	0.11
Pentachlorophenol	1	< 0.80	0.80	< 0.80	0.80	< 0.82	0.82	< 0.80	0.80	< 0.80	0.80	< 0.86	0.86
Phenanthrene	50	**0.28**	0.10	**0.22**	0.10	**0.6**	0.10	< 0.10	0.10	**0.18**	0.10	**0.84**	0.11

Notes:

RL- Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC Groundwater Standard

TABLE 10
11 West Street,
Brooklyn, New York
Groundwater Analytical Results
Pesticides/PCBs

	Compound	NYSDEC Groundwater Quality Standards µg/L	MW13 12/23/2014 µg/L		MW14 12/23/2014 µg/L		MW15 12/5/2014 µg/L		MW16 12/5/2014 µg/L		MW17 12/5/2014 µg/L		MW19 12/5/2014 µg/L		Duplicate 1 12/5/2014 µg/L		Duplicate 2 12/5/2014 µg/L	
			Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL
PCBs	**PCB-1016**	**0.09**	< 0.053	0.053	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05	< 0.051	0.051	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05
	PCB-1221	**0.09**	< 0.053	0.053	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05	< 0.051	0.051	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05
	PCB-1232	**0.09**	< 0.053	0.053	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05	< 0.051	0.051	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05
	PCB-1242	**0.09**	< 0.053	0.053	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05	< 0.051	0.051	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05
	PCB-1248	**0.09**	< 0.053	0.053	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05	< 0.051	0.051	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05
	PCB-1254	**0.09**	< 0.053	0.053	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05	< 0.051	0.051	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05
	PCB-1260	**0.09**	< 0.053	0.053	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05	< 0.051	0.051	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05
	PCB-1262	**0.09**	< 0.053	0.053	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05	< 0.051	0.051	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05
	PCB-1268	**0.09**	< 0.053	0.053	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05	< 0.051	0.051	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05
Pesticides	**4,4-DDD**	**0.3**	< 0.005	0.005	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.005	0.005	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01
	4,4-DDE	**0.2**	< 0.005	0.005	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.005	0.005	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01
	4,4-DDT	**0.11**	< 0.011	0.011	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.005	0.005	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01
	a-BHC	**0.94**	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005
	a-Chlordane		< 0.011	0.011	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.050	0.05
	Alachlor		< 0.079	0.079	< 0.075	0.075	< 0.075	0.075	< 0.075	0.075	< 0.077	0.077	< 0.075	0.075	< 0.075	0.075	< 0.38	0.38
	Aldrin		< 0.004	0.004	< 0.002	0.002	< 0.002	0.002	< 0.002	0.002	< 0.002	0.002	< 0.002	0.002	< 0.003	0.003	< 0.008	0.008
	b-BHC	**0.04**	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.025	0.025
	Chlordane	**0.05**	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05
	d-BHC	**0.04**	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.025	0.025
	Dieldrin	**0.004**	< 0.005	0.005	< 0.010	0.01	< 0.010	0.01	< 0.002	0.002	< 0.002	0.002	< 0.003	0.003	< 0.003	0.003	< 0.006	0.006
	Endosulfan I		< 0.011	0.011	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.050	0.05
	Endosulfan II		< 0.011	0.011	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.050	0.05
	Endosulfan Sulfate		< 0.011	0.011	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.050	0.05
	Endrin		< 0.005	0.005	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.008	0.008	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01
	Endrin aldehyde	**5**	< 0.011	0.011	< 0.010	0.01	< 0.015	0.015	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.050	0.05
	Endrin ketone		< 0.011	0.011	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.050	0.05
	gamma-BHC	**0.05**	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.025	0.025
	g-Chlordane		< 0.011	0.011	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.050	0.05
	Heptachlor	**0.04**	< 0.005	0.005	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.005	0.005	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01
	Heptachlor epoxide	**0.03**	< 0.005	0.005	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.005	0.005	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01
	Methoxychlor	**35**	< 0.11	0.11	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.50	0.5
	Toxaphene		< 0.26	0.26	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25	< 0.26	0.26	< 0.25	0.25	< 0.25	0.25	< 1.3	1.3

Notes:
RL- Reporting limit
ND - Non-detect
ND* - Due to matrix interference from non target compounds in the
Bold/highlighted- Indicated exceedance of the NYSDEC Groundwater Standard

TABLE 10
11 West Street,
Brooklyn, New York
Groundwater Analytical Results
Pesticides/PCBs

	Compound	NYSDEC Groundwater Quality Standards µg/L	MW1 12/23/2014 µg/L		MW2 12/23/2014 µg/L		MW3 12/23/2014 µg/L		MW10 12/5/2014 µg/L		MW11 12/5/2014 µg/L		MW12 12/5/2014 µg/L	
			Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL
PCBs	PCB-1016	0.09	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05	< 0.053	0.053	< 0.050	0.05
	PCB-1221	0.09	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05	< 0.053	0.053	< 0.050	0.05
	PCB-1232	0.09	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05	< 0.053	0.053	< 0.050	0.05
	PCB-1242	0.09	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05	< 0.053	0.053	< 0.050	0.05
	PCB-1248	0.09	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05	< 0.053	0.053	< 0.050	0.05
	PCB-1254	0.09	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05	< 0.053	0.053	< 0.050	0.05
	PCB-1260	0.09	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05	< 0.053	0.053	< 0.050	0.05
	PCB-1262	0.09	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05	< 0.053	0.053	< 0.050	0.05
	PCB-1268	0.09	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05	< 0.053	0.053	< 0.050	0.05
Pesticides	4,4-DDD	0.3	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.026	0.026	< 0.010	0.01
	4,4-DDE	0.2	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.026	0.026	< 0.010	0.01
	4,4-DDT	0.11	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.026	0.026	< 0.010	0.01
	a-BHC	0.94	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.026	0.026	< 0.005	0.005
	a-Chlordane		< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.053	0.053	< 0.010	0.01
	Alachlor		< 0.075	0.075	< 0.075	0.075	< 0.075	0.075	< 0.075	0.075	< 0.39	0.39	< 0.075	0.075
	Aldrin		< 0.002	0.002	< 0.005	0.005	< 0.002	0.002	< 0.002	0.002	< 0.008	0.008	< 0.008	0.008
	b-BHC	0.04	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.026	0.026	< 0.005	0.005
	Chlordane	0.05	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05	< 0.050	0.05	< 0.26	0.26	< 0.050	0.05
	d-BHC	0.04	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.026	0.026	< 0.005	0.005
	Dieldrin	0.004	< 0.003	0.003	< 0.006	0.006	< 0.002	0.002	< 0.004	0.004	< 0.008	0.008	< 0.010	0.01
	Endosulfan I		< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.053	0.053	< 0.010	0.01
	Endosulfan II		< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.053	0.053	< 0.010	0.01
	Endosulfan Sulfate		< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.053	0.053	< 0.010	0.01
	Endrin		< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.040	0.04	< 0.010	0.01
	Endrin aldehyde	5	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.053	0.053	< 0.010	0.01
	Endrin ketone		< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.053	0.053	< 0.010	0.01
	gamma-BHC	0.05	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.026	0.026	< 0.005	0.005
	g-Chlordane		< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.053	0.053	< 0.010	0.01
	Heptachlor	0.04	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.026	0.026	< 0.010	0.01
	Heptachlor epoxide	0.03	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.010	0.01	< 0.026	0.026	< 0.010	0.01
	Methoxychlor	35	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.10	0.1	< 0.53	0.53	< 0.10	0.1
	Toxaphene		< 0.25	0.25	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25	< 1.3	1.3	< 0.25	0.25

Notes:
RL- Reporting limit
ND - Non-detect
ND* - Due to matrix interference from non target compounds in the
Bold/highlighted- Indicated exceedance of the NYSDEC Groundwater Standard

Table 11
11 West Street,
Brooklyn, New York
Groundwater Analytical Results
TAL Filtered Metals

Compound	NYSDEC Groundwater Quality Standards mg/L	MW13 12/23/2014 mg/L		MW14 12/23/2014 mg/L		MW15 12/5/2014 mg/L		MW16 12/5/2014 mg/L		MW17 12/5/2014 mg/L		MW19 12/5/2014 mg/L		Duplicate 1 12/5/2014 mg/L		Duplicate 2 12/5/2014 mg/L	
		Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL
Aluminum	**NS**	**0.04**	0.01	**0.03**	0.01	**0.34**	0.01	**0.52**	0.01	**0.78**	0.11	**0.21**	0.01	**0.23**	0.01	< 0.01	0.01
Antimony	**0.003**	< 0.003	0.003	< 0.003	0.003	< 0.003	0.003	< 0.003	0.003	< 0.003	0.003	< 0.003	0.003	< 0.003	0.003	< 0.003	0.003
Arsenic	**0.025**	< 0.003	0.003	< 0.003	0.003	< 0.003	0.003	< 0.003	0.003	< 0.003	0.003	< 0.003	0.003	< 0.003	0.003	< 0.003	0.003
Barium	**1**	**0.101**	0.011	**0.381**	0.011	**0.036**	0.011	**0.045**	0.011	**0.047**	0.011	**0.062**	0.011	**0.035**	0.011	**0.061**	0.011
Beryllium	**0.003**	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001
Cadmium	**0.005**	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004
Calcium	**NS**	**180**	0.11	**391**	0.11	**30.9**	0.01	**79.2**	0.01	**298**	0.11	**127**	0.01	**30.9**	0.01	**128**	0.01
Chromium	**0.05**	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001	**0.002**	0.001	< 0.001	0.001	< 0.001	0.001
Cobalt	**NS**	**0.006**	0.005	< 0.005	0.005	< 0.005	0.005	**0.004**	0.005	**0.002**	0.005	**0.002**	0.005	< 0.005	0.005	**0.002**	0.005
Copper	**0.2**	< 0.005	0.005	< 0.005	0.005	**0.004**	0.005	**0.004**	0.005	**0.005**	0.005	**0.005**	0.005	**0.001**	0.005	**0.004**	0.005
Iron	**0.5**	**3.45**	0.11	**6.87**	0.11	**0.32**	0.01	**0.51**	0.01	**0.01**	0.01	**0.34**	0.01	**0.14**	0.01	**0.03**	0.01
Lead	**0.025**	**0.002**	0.002	< 0.002	0.002	**0.002**	0.002	**0.003**	0.002	**0.002**	0.002	< 0.002	0.002	< 0.002	0.002	< 0.002	0.002
Magnesium	**35**	**32.3**	0.11	**70.3**	0.11	**10.6**	0.01	**64.4**	0.01	**694**	0.11	**22.7**	0.01	**10.6**	0.01	**22.8**	0.01
Manganese	**0.3**	**7.84**	0.053	**11.2**	0.053	**0.074**	0.005	**0.402**	0.005	**1.05**	0.005	**4.17**	0.053	**0.062**	0.005	**4.11**	0.053
Mercury	**0.0007**	< 0.0002	0.0002	< 0.0002	0.0002	< 0.0002	0.0002	< 0.0002	0.0002	< 0.0002	0.0002	< 0.0002	0.0002	< 0.0002	0.0002	< 0.0002	0.0002
Nickel	**0.1**	**0.004**	0.004	< 0.004	0.004	**0.002**	0.004	**0.003**	0.004	**0.007**	0.004	**0.014**	0.004	**0.001**	0.004	**0.014**	0.004
Potassium	**NS**	**19.3**	1.1	**36.6**	1.1	**5.8**	0.1	**36.7**	0.1	**252**	1.1	**32.5**	0.1	**5.7**	0.1	**31.6**	0.1
Selenium	**0.01**	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004
Silver	**0.05**	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005
Sodium	**2**	**115**	1.1	**218**	1.1	**57.6**	0.11	**672**	11	**5,430**	110	**259**	1.1	**57.1**	1.1	**261**	1.1
Thallium	**0.0005**	< 0.0005	0.0005	< 0.0005	0.0005	< 0.0005	0.0005	< 0.0005	0.0005	< 0.0005	0.0005	< 0.0005	0.0005	< 0.0005	0.0005	< 0.0005	0.0005
Vanadium	**NS**	< 0.011	0.011	< 0.011	0.011	< 0.011	0.011	**0.002**	0.011	< 0.011	0.011	< 0.011	0.011	**0.001**	0.011	< 0.011	0.011
Zinc	**2**	**0.009**	0.011	**0.003**	0.011	**0.018**	0.011	**0.008**	0.011	**0.057**	0.011	**0.034**	0.011	**0.016**	0.011	**0.031**	0.011

Notes:
RL- Reporting limit
NS - No Standard
Bold/highlighted- Indicated exceedance of the NYSDEC Groundwater Standard

Table 11
11 West Street,
Brooklyn, New York
Groundwater Analytical Results
TAL Filtered Metals

Compound	NYSDEC Groundwater Quality Standards mg/L	MW1 12/23/2014 mg/L		MW2 12/23/2014 mg/L		MW3 12/23/2014 mg/L		MW10 12/5/2014 mg/L		MW11 12/5/2014 mg/L		MW12 12/5/2014 mg/L	
		Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL
Aluminum	**NS**	**0.21**	0.01	**0.04**	0.01	**0.26**	0.01	**0.08**	0.01	**0.15**	0.01	**0.82**	0.01
Antimony	**0.003**	< 0.003	0.003	< 0.003	0.003	< 0.003	0.003	< 0.003	0.003	< 0.003	0.003	< 0.003	0.003
Arsenic	**0.025**	< 0.003	0.003	< 0.003	0.003	< 0.003	0.003	< 0.003	0.003	< 0.003	0.003	**0.002**	0.003
Barium	**1**	**0.06**	0.011	**0.058**	0.011	**0.072**	0.011	**0.093**	0.011	**0.104**	0.011	**0.129**	0.011
Beryllium	**0.003**	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001
Cadmium	**0.005**	< 0.004	0.004	< 0.004	0.004	**0.001**	0.004	**0.001**	0.004	< 0.004	0.004	**0.001**	0.004
Calcium	**NS**	**141**	0.11	**138**	0.11	**192**	0.11	**86.4**	0.01	**115**	0.01	**93.3**	0.01
Chromium	**0.05**	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001	**0.001**	0.001
Cobalt	**NS**	**0.002**	0.005	**0.002**	0.005	**0.005**	0.005	**0.006**	0.005	**0.003**	0.005	**0.011**	0.005
Copper	**0.2**	**0.001**	0.005	**0.001**	0.005	**0.001**	0.005	**0.003**	0.005	**0.003**	0.005	**0.003**	0.005
Iron	**0.5**	**0.19**	0.01	**0.04**	0.01	**0.4**	0.01	**0.09**	0.01	**0.31**	0.01	**1.08**	0.01
Lead	**0.025**	**0.003**	0.002	< 0.002	0.002	**0.003**	0.002	< 0.002	0.002	< 0.002	0.002	< 0.002	0.002
Magnesium	**35**	**20.4**	0.11	**20.2**	0.11	**313**	0.11	**17.1**	0.01	**26.2**	0.01	**15**	0.01
Manganese	**0.3**	**3.62**	0.053	**3.57**	0.053	**0.3**	0.005	**3.8**	0.053	**1.5**	0.005	**2.64**	0.053
Mercury	**0.0007**	< 0.0002	0.0002	< 0.0002	0.0002	< 0.0002	0.0002	< 0.0002	0.0002	< 0.0002	0.0002	< 0.0002	0.0002
Nickel	**0.1**	**0.007**	0.004	**0.007**	0.004	**0.006**	0.004	**0.004**	0.004	**0.002**	0.004	**0.024**	0.004
Potassium	**NS**	**16.3**	1.1	**16**	1.1	**130**	1.1	**13.5**	0.1	**13.1**	0.1	**7.9**	0.1
Selenium	**0.01**	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004
Silver	**0.05**	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005
Sodium	**2**	**317**	1.1	**315**	1.1	**2,590**	11	**78.7**	1.1	**68.7**	1.1	**71.3**	1.1
Thallium	**0.0005**	< 0.0005	0.0005	< 0.0005	0.0005	< 0.0005	0.0005	< 0.0005	0.0005	< 0.0005	0.0005	< 0.0005	0.0005
Vanadium	**NS**	< 0.011	0.011	< 0.011	0.011	**0.001**	0.011	< 0.011	0.011	< 0.011	0.011	< 0.011	0.011
Zinc	**2**	**0.016**	0.011	**0.014**	0.011	**0.01**	0.011	**0.012**	0.011	**0.004**	0.011	**0.02**	0.011

Notes:
RL- Reporting limit
NS - No Standard
Bold/highlighted- Indicated exceedance of the NYSDEC Groundwater Standard

TABLE 12
11 West Street,
Brooklyn, NY
Parameters Detected Above Ambient Water Quality Standards

VOCs

COMPOUND	Range in Detections	MW1 3/11/2014	MW2 3/11/2014	MW3 3/11/2014	MW4 3/11/2014	MW5 3/11/2014	MW6 3/11/2014	MW7 3/11/2014	MW8 3/11/2014	B21 3/11/2014	Existing Well 3/11/2014	Duplicate 3 3/11/2014
Sample Results in (µg/L)												
Isopropylbenzene	**14**	-	-	-	-	-		-	-	14	-	-
n-Propylbenzene	**21**	-	-	-	-	-	-	-	-	21	-	-

SVOCs

COMPOUND	Range in Detections	MW1 3/11/2014	MW2 3/11/2014	MW3 3/11/2014	MW4 3/11/2014	MW5 3/11/2014	MW6 3/11/2014	MW7 3/11/2014	MW8 3/11/2014	B21 3/11/2014	Existing Well 3/11/2014	Duplicate 3 3/11/2014
Sample Results in (µg/L)												
Benz(a)anthracene	**0.02-0.45**	0.04	0.08	0.27	-	-	0.09	0.03	0.22	0.24	0.45	0.14
Benzo(a)pyrene	**0.02-0.32**	-	0.05	0.32	-	-	0.06	-	0.17	0.2	0.5	0.17
Benzo(b)fluoranthene	**0.02-0.83**	-	0.07	0.56	-	-	0.09	-	0.27	0.28	0.83	0.28
Benzo(k)fluoranthene	**0.03-0.25**	-	0.03	0.18	-	-	0.04	-	0.08	0.09	0.25	0.11
Chrysene	**0.02-0.32**	0.03	0.07	0.32	-	-	0.09	-	0.21	0.32	0.6	0.15
Indeno(1,2,3-cd)pyrene	**0.03-0.31**	-	0.03	0.25	-	-	0.04	-	0.11	0.11	0.31	0.14

SVOCs

COMPOUND	Range in Detections	MW1 12/23/2014	MW2 12/23/2014	MW3 12/23/2014	MW4 12/5/2014	MW5 12/5/2014	MW6 12/5/2014	MW10 12/5/2014	MW11 12/5/2014	MW12 12/5/2014	MW13 12/23/2014	MW14 12/23/2014
Sample Results in (µg/L)												
Benz(a)anthracene	**0.02-0.45**	0.02	0.24	0.05	0.04	0.06	0.04	0.02	0.09	0.03	0.32	0.08
Benzo(a)pyrene	**0.02-0.32**	-	0.24	0.04	0.02	0.05	0.02	-	0.07	-	0.29	0.05
Benzo(b)fluoranthene	**0.02-0.83**	-	0.47	0.06	0.03	0.07	0.04	-	0.09	-	0.44	0.09
Benzo(k)fluoranthene	**0.03-0.25**	-	0.17	0.03	-	0.03	-	-	0.05	-	0.18	0.04
Chrysene	**0.02-0.32**	-	0.25	0.04	0.02	0.05	0.02	-	0.08	-	0.29	0.06
Indeno(1,2,3-cd)pyrene	**0.03-0.31**	-	0.19	0.03	-	0.03	-	-	0.03	-	0.18	0.03

SVOCs (continued)

COMPOUND	Range in Detections	MW15 12/5/2014	MW16 12/5/2014	MW17 12/5/2014	MW18 12/5/2014	MW19 12/5/2014	Duplicate 1 12/4/2014	Duplicate 2 12/5/2014
Sample Results in (µg/L)								
Benz(a)anthracene	**0.02-0.45**	0.02	0.02	0.04	0.18	0.03	-	0.02
Benzo(a)pyrene	**0.02-0.32**	-	-	0.03	0.16	0.02	-	-
Benzo(b)fluoranthene	**0.02-0.83**	-	-	0.04	0.18	0.02	-	-
Benzo(k)fluoranthene	**0.03-0.25**	-	-	-	0.07	-	-	-
Chrysene	**0.02-0.32**	-	-	0.02	0.16	-	-	-
Indeno(1,2,3-cd)pyrene	**0.03-0.31**	-	-	-	0.07	-	-	-

TABLE 12
11 West Street,
Brooklyn, NY
Parameters Detected Above Ambient Water Quality Standards

Metals (Dissolved)

COMPOUND	Range in Detections	MW1 12/23/2014		MW2 12/23/2014		MW3 12/23/2014		MW10 12/5/2014		MW11 12/5/2014		MW13 12/23/2014		MW14 12/23/2014	
Sample Results in (mg/L)															
Iron	**0.4-6.87**	**-**		**-**		**0.4**		**-**		**-**		**3.45**		**6.87**	
Magnesium	**64.4-694**	**-**		**-**		**313**		**-**		**-**		**-**		**70.3**	
Manganese	**0.402-11.2**	**3.62**		**3.57**		**-**		**3.8**		**1.5**		**7.84**		**11.2**	
Sodium	**57.1-5430**	**317**		**315**		**2590**		**78.7**		**68.7**		**115**		**218**	

Metals (Dissolved) (continued)

COMPOUND	Range in Detections	MW12 12/5/2014		MW15 12/5/2014		MW16 12/5/2014		MW17 12/5/2014		MW19 12/5/2014		Duplicate 12/5/2014		Duplicate2 12/5/2014	
Sample Results in (mg/L)															
Iron	**0.4-6.87**	**1.08**		**-**		**0.51**		**-**		**-**		**-**		**-**	
Magnesium	**64.4-694**	**-**		**-**		**64.4**		**694**		**-**		**-**		**-**	
Manganese	**0.402-11.2**	**2.64**		**-**		**0.402**		**1.05**		**4.17**		**-**		**4.11**	
Sodium	**57.1-5430**	**71.3**		**57.6**		**672**		**5430**		**259**		**57.1**		**261**	

TABLE 13
11 West Street,
Brooklyn, New York
Soil Gas - Volatile Organic Compounds

COMPOUNDS	NYSDOH Maximum Sub-Slab Value ($\mu g/m^3$) [a]	NYSDOH Soil Outdoor Background Levels ($\mu g/m^3$) [b]	SG-1 3/11/2014 ($\mu g/m3$)		SG-2 3/11/2014 ($\mu g/m3$)		SG-3 3/11/2014 ($\mu g/m3$)		SG-5 3/11/2014 ($\mu g/m3$)		SG-7 3/11/2014 ($\mu g/m3$)	
			Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
1,1,1,2-Tetrachloroethane			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1,1-Trichloroethane	100	<2.0 - 2.8	**7.31**	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1,2,2-Tetrachloroethane		<1.5	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1,2-Trichloroethane		<1.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1-Dichloroethane		<1.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1-Dichloroethene		<1.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2,4-Trichlorobenzene		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2,4-Trimethylbenzene		<1.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-Dibromoethane		<1.5	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-Dichlorobenzene		<2.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-Dichloroethane		<1.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-Dichloropropane			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-Dichlorotetrafluoroethane			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,3,5-Trimethylbenzene		<1.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,3-Butadiene		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,3-Dichlorobenzene		<2.0	< 1.00	1	< 1.00	1	< 1.00	1	**4.57**	1	**5.05**	1
1,4-Dichlorobenzene		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,4-Dioxane			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
2-Hexanone			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
4-Ethyltoluene		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
4-Isopropyltoluene			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
4-Methyl-2-pentanone			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Acetone		NA	**68.8**	1	**21**	1	**430**	8	**166**	4	**85.2**	1
Acrylonitrile			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Benzene		<1.6 - 4.7	**1.85**	1	**1.31**	1	**17.8**	1	**1.79**	1	**1.79**	1
Benzyl Chloride		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Bromodichloromethane		<5.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Bromoform		<1.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Bromomethane		<1.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Carbon Disulfide		NA	**6.32**	1	**2.99**	1	**6.41**	1	< 1.00	1	< 1.00	1
Carbon Tetrachloride	5	<3.1	**0.44**	0.25	**0.377**	0.25	**0.503**	0.25	**0.566**	0.25	**0.566**	0.25
Chlorobenzene		<2.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Chloroethane		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Chloroform		<2.4	**1.51**	1	**52.7**	1	< 1.00	1	< 1.00	1	< 1.00	1
Chloromethane		<1.0 - 1.4	**1.4**	1	< 1.00	1	< 1.00	1	< 1.00	1	**1.53**	1
cis-1,2-Dichloroethene		<1.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
cis-1,3-Dichloropropene		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Cyclohexane		NA	**2.41**	1	< 1.00	1	**16.5**	1	< 1.00	1	**1.58**	1
Dibromochloromethane		<5.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Dichlorodifluromethane		NA	**2.27**	1	**2.57**	1	**2.82**	1	**2.22**	1	**2.27**	1
Ethanol			**102**	1	**102**	1	**148**	8	**192**	4	**180**	1
Ethyl Acetate		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Ethylbenzene		<4.3	< 1.00	1	< 1.00	1	< 1.00	1	**1.17**	1	< 1.00	1
Heptane		NA	< 1.00	1	< 1.00	1	**3.81**	1	**1.02**	1	**1.06**	1
Hexachlorobutadiene		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Hexane		<1.5	**8**	1	**2.22**	1	**8.31**	1	**1.44**	1	**2.99**	1
Isopropylalcohol		NA	**4.84**	1	**2.85**	1	**10.6**	1	**6.12**	1	**5.72**	1
Isopropylbenzene			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Xylene (m&p)		<4.3	**1.6**	1	**1.3**	1	**2.17**	1	**3.34**	1	**2.91**	1
Methyl Ethyl Ketone			**4.42**	1	**3.62**	1	**13.8**	1	**12.6**	1	**14.1**	1
MTBE		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Methylene Chloride		<3.4	**3.12**	1	**1.87**	1	**1.32**	1	**1.46**	1	< 1.00	1
n-Butylbenzene			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Xylene (o)		<4.3	< 1.00	1	< 1.00	1	< 1.00	1	**1.17**	1	**1.04**	1
Propylene		NA	**69.8**	1	**6.96**	1	**31.3**	1	**11**	1	**7.88**	1
sec-Butylbenzene			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Styrene		<1.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Tetrachloroethene	100		**0.542**	0.25	**0.339**	0.25	**0.678**	0.25	**0.881**	0.25	**0.746**	0.25
Tetrahydrofuran		NA	**20.3**	1	**16.9**	1	**34.5**	1	**33.3**	1	**37.7**	1
Toluene		1.0 - 6.1	**2.71**	1	**2.45**	1	**4.74**	1	**5.35**	1	**4.59**	1
trans-1,2-Dichloroethene		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
trans-1,3-Dichloropropene		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Trichloroethene	5	<1.7	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25
Trichlorofluoromethane		NA	**1.29**	1	**1.24**	1	**1.52**	1	**1.57**	1	**2.47**	1
Trichlorotrifluoroethane			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Vinyl Chloride		<1.0	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25
BTEX			**6.16**		**5.06**		**24.71**		**12.82**		**10.33**	
Total VOCs			**281.90**		**202.81**		**683.278**		**413.701**		**317.816**	

Notes:
NA No guidance value or standard available
(a) Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York. October 2006. New York State Department of Health.
(b) NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, February 2005, Summary of Background Levels for Selected Compounds (NYSDOH Database, Outdoor values)

TABLE 13
11 West Street,
Brooklyn, New York
Soil Gas - Volatile Organic Compounds

COMPOUNDS	NYSDOH Maximum Sub-Slab Value ($\mu g/m^3$) [a]	NYSDOH Soil Outdoor Background Levels ($\mu g/m^3$) [b]	SG-1 12/23/2014 ($\mu g/m3$)		SG-2 12/23/2014 ($\mu g/m3$)		SG-3 12/23/2014 ($\mu g/m3$)		SG-4 12/23/2014 ($\mu g/m3$)		SG-5 12/23/2014 ($\mu g/m3$)		SG-6 12/23/2014 ($\mu g/m3$)		SG-7 12/23/2014 ($\mu g/m3$)		SG-8 12/23/2014 ($\mu g/m3$)		SG-9 12/23/2014 ($\mu g/m3$)		SG-10 12/23/2014 ($\mu g/m3$)	
			Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
1,1,1,2-Tetrachloroethane			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1,1-Trichloroethane	100	<2.0 - 2.8	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	**15.3**	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1,2,2-Tetrachloroethane		<1.5	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1,2-Trichloroethane		<1.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1-Dichloroethane		<1.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1-Dichloroethene		<1.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2,4-Trichlorobenzene		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2,4-Trimethylbenzene		<1.0	**1.62**	1	**1.52**	1	**2.01**	1	**1.96**	1	**1.47**	1	**1.82**	1	**1.96**	1	**2.31**	1	**50.1**	1	**37.2**	1
1,2-Dibromoethane		<1.5	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-Dichlorobenzene		<2.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-Dichloroethane		<1.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-Dichloropropane			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-Dichlorotetrafluoroethane			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,3,5-Trimethylbenzene		<1.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	**14.5**	1	**10.6**	1
1,3-Butadiene		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,3-Dichlorobenzene		<2.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,4-Dichlorobenzene		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,4-Dioxane			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
2-Hexanone			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	**2.86**	1	< 1.00	1
4-Ethyltoluene		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	**6.63**	1	**6.93**	1
4-Isopropyltoluene			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	**1.86**	1	**1.54**	1
4-Methyl-2-pentanone			< 1.00	1	< 1.00	1	**1.02**	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Acetone		NA	**24**	1	**16.9**	1	**22**	1	< 1.00	1	**11.3**	1	**14.2**	1	**70**	1	**13.1**	1	**16.7**	1	**36.3**	1
Acrylonitrile			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Benzene		<1.6 - 4.7	< 1.00	1	< 1.00	1	< 1.00	1	**3.48**	1	< 1.00	1	< 1.00	1	< 1.00	1	**1.05**	1	**4.63**	1	**1.12**	1
Benzyl Chloride		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Bromodichloromethane		<5.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Bromoform		<1.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Bromomethane		<1.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Carbon Disulfide		NA	**14.1**	1	**1.03**	1	**1.34**	1	**20.1**	1	**1.49**	1	**2.86**	1	**3.64**	1	**3.36**	1	< 1.00	1	**2.46**	1
Carbon Tetrachloride	5	<3.1	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25	**0.377**	0.25	**0.566**	0.25	< 0.25	0.25
Chlorobenzene		<2.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Chloroethane		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Chloroform		<2.4	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Chloromethane		<1.0 - 1.4	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
cis-1,2-Dichloroethene		<1.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
cis-1,3-Dichloropropene		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Cyclohexane		NA	< 1.00	1	< 1.00	1	< 1.00	1	**33.9**	1	**1.1**	1	< 1.00	1	**1.1**	1	< 1.00	1	**2.03**	1	**2.34**	1
Dibromochloromethane		<5.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Dichlorodifluromethane		NA	**1.14**	1	**1.28**	1	**3.8**	1	< 1.00	1	**1.63**	1	< 1.00	1	**1.09**	1	**1.98**	1	**1.93**	1	**1.53**	1
Ethanol			**24.1**	1	**25.4**	1	**26**	1	**14.1**	1	**16**	1	**13.8**	1	**15.8**	1	**28**	1	**81**	1	**22**	1
Ethyl Acetate		NA	**4.14**	1	**3.89**	1	**4.68**	1	**2.95**	1	**3.53**	1	**3.78**	1	**5.47**	1	**4.82**	1	< 1.00	1	< 1.00	1
Ethylbenzene		<4.3	**10.6**	1	**12.7**	1	**13.4**	1	**15.9**	1	**11.4**	1	**7.98**	1	**21.2**	1	**20.7**	1	**6.51**	1	**4.9**	1
Heptane		NA	**1.52**	1	< 1.00	1	**1.1**	1	**5.41**	1	**2.38**	1	**1.06**	1	**1.56**	1	< 1.00	1	**4.3**	1	**1.68**	1
Hexachlorobutadiene		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Hexane		<1.5	**2.82**	1	**1.34**	1	**1.66**	1	**16.7**	1	**3.63**	1	< 1.00	1	< 1.00	1	< 1.00	1	**5.04**	1	< 1.00	1
Isopropylalcohol		NA	**2.97**	1	**2.8**	1	**3.59**	1	< 1.00	1	**17.9**	1	**14**	1	**18.8**	1	**2.53**	1	**7.22**	1	**2.53**	1
Isopropylbenzene			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	**1.72**	1	**1.18**	1
Xylene (m&p)		<4.3	**38.6**	1	**47.3**	1	**50.3**	1	**61.6**	1	**42.7**	1	**29.9**	1	**74.6**	1	**74.2**	1	**41.1**	1	**30**	1
Methyl Ethyl Ketone			**1.86**	1	**2.06**	1	**2.65**	1	**2.36**	1	**1.09**	1	**1.27**	1	**2**	1	**1.65**	1	**1.18**	1	**2.21**	1
MTBE		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	**1.51**	1	< 1.00	1
Methylene Chloride		<3.4	**1.32**	1	**1.63**	1	**1.98**	1	**2.22**	1	**1.32**	1	< 1.00	1	**1.28**	1	**5.69**	1	< 1.00	1	< 1.00	1
n-Butylbenzene			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	**5.16**	1	**4.66**	1
Xylene (o)		<4.3	**14.6**	1	**17.4**	1	**18.3**	1	**21.8**	1	**14.7**	1	**9.94**	1	**24.9**	1	**26.2**	1	**21.2**	1	**15.8**	1
Propylene		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
sec-Butylbenzene			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	**1.04**	1	< 1.00	1
Styrene		<1.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Tetrachloroethene	100		**0.949**	0.25	**3.86**	0.25	**0.881**	0.25	**0.813**	0.25	**0.881**	0.25	**1.02**	0.25	**0.949**	0.25	**1.15**	0.25	**1.76**	0.25	**1.36**	0.25
Tetrahydrofuran		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Toluene		1.0 - 6.1	**4.97**	1	**5.2**	1	**7.68**	1	**3.95**	1	**4.14**	1	**5.16**	1	**6.93**	1	**5.42**	1	**16.6**	1	**7.91**	1
trans-1,2-Dichloroethene		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
trans-1,3-Dichloropropene		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Trichloroethene	5	<1.7	**1.24**	0.25	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25
Trichlorofluoromethane		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	**1.01**	1	< 1.00	1	< 1.00	1	**1.24**	1	**1.29**	1	**5.5**	1
Trichlorotrifluoroethane			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Vinyl Chloride		<1.0	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25
BTEX			**68.77**		**82.6**		**89.68**		**106.73**		**72.94**		**52.98**		**127.63**		**127.57**		**90.04**		**59.73**	
Total VOCs			**143.65**		**139.39**		**157.711**		**170.393**		**133.041**		**103.01**		**244.709**		**188.58**		**261.13**		**177.16**	

Notes:
NA No guidance value or standard available
(a) Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York. October 2006. New York State Department of Health.
(b) NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, February 2005, Summary of Background Levels for Selected Compounds (NYSDOH Database, Outdoor values)

TABLE 13
11 West Street,
Brooklyn, New York
Soil Gas - Volatile Organic Compounds

COMPOUNDS	NYSDOH Maximum Sub-Slab Value (µg/m³) [a]	NYSDOH Soil Outdoor Background Levels (µg/m³) [b]	SS-1 (µg/m3)		SS-2 (µg/m3)		SS-3 (µg/m3)		SS-4 (µg/m3)	
			Result	RL	Result	RL	Result	RL	Result	RL
1,1,1,2-Tetrachloroethane			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1,1-Trichloroethane	100	<2.0 - 2.8	**187**	1	**3.05**	1	< 1.00	1	< 1.00	1
1,1,2,2-Tetrachloroethane		<1.5	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1,2-Trichloroethane		<1.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1-Dichloroethane		<1.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,1-Dichloroethene		<1.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2,4-Trichlorobenzene		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2,4-Trimethylbenzene		<1.0	**133**	1	**112**	1	**99.7**	1	**49.1**	1
1,2-Dibromoethane		<1.5	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-Dichlorobenzene		<2.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-Dichloroethane		<1.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-Dichloropropane			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,2-Dichlorotetrafluoroethane			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,3,5-Trimethylbenzene		<1.0	**42**	1	**35.4**	1	**30.6**	1	**14.8**	1
1,3-Butadiene		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,3-Dichlorobenzene		<2.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,4-Dichlorobenzene		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
1,4-Dioxane			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
2-Hexanone			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
4-Ethyltoluene		NA	**17.9**	1	**17.5**	1	**14.1**	1	**9.28**	1
4-Isopropyltoluene			**5.6**	1	**4.94**	1	**4.06**	1	**1.81**	1
4-Methyl-2-pentanone			**2.58**	1	**2.78**	1	**4.05**	1	< 1.00	1
Acetone		NA	**394**	1	**418**	1	**795**	1	**198**	1
Acrylonitrile			< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Benzene		<1.6 - 4.7	**6.35**	1	**7.5**	1	**3.74**	1	**3.16**	1
Benzyl Chloride		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Bromodichloromethane		<5.0	< 1.00	1	< 1.00	1	**7.37**	1	< 1.00	1
Bromoform		<1.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Bromomethane		<1.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Carbon Disulfide		NA	**4.29**	1	**3.11**	1	**11.2**	1	**2.77**	1
Carbon Tetrachloride	5	<3.1	**0.817**	0.25	**1.19**	0.25	**0.754**	0.25	**0.377**	0.25
Chlorobenzene		<2.0	< 1.00	1	**1.1**	1	< 1.00	1	< 1.00	1
Chloroethane		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Chloroform		<2.4	< 1.00	1	< 1.00	1	**104**	1	**1.37**	1
Chloromethane		<1.0 - 1.4	< 1.00	1	< 1.00	1	**1.03**	1	< 1.00	1
cis-1,2-Dichloroethene		<1.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
cis-1,3-Dichloropropene		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Cyclohexane		NA	**3.3**	1	**3.82**	1	**1.62**	1	**1.58**	1
Dibromochloromethane		<5.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Dichlorodifluromethane		NA	**1.98**	1	**2.37**	1	**1.98**	1	**3.06**	1
Ethanol			**113**	1	**220**	1	**57.8**	1	**43.9**	1
Ethyl Acetate		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Ethylbenzene		<4.3	**12.9**	1	**14.1**	1	**9.37**	1	**6.47**	1
Heptane		NA	**6.64**	1	**7.33**	1	**5.04**	1	**2.95**	1
Hexachlorobutadiene		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Hexane		<1.5	**6.16**	1	**6.52**	1	**3.38**	1	**2.43**	1
Isopropylalcohol		NA	**13**	1	**22**	1	**12.5**	1	**4.96**	1
Isopropylbenzene			**4.27**	1	**4.08**	1	**3.24**	1	**1.72**	1
Xylene (m&p)		<4.3	**80.3**	1	**84.2**	1	**59.9**	1	**43.4**	1
Methyl Ethyl Ketone			**13.7**	1	**8.81**	1	**34.5**	1	**4.6**	1
MTBE		NA	**2.12**	1	**3.71**	1	< 1.00	1	**1.04**	1
Methylene Chloride		<3.4	**1.18**	1	**1.32**	1	**1.18**	1	< 1.00	1
n-Butylbenzene			**17.4**	1	**14.2**	1	**12**	1	**5.27**	1
Xylene (o)		<4.3	**45.1**	1	**46**	1	**34.4**	1	**22.7**	1
Propylene		NA	**17.5**	1	**8.86**	1	**16.4**	1	**8.12**	1
sec-Butylbenzene			**3.29**	1	**2.96**	1	**2.47**	1	**1.04**	1
Styrene		<1.0	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Tetrachloroethene	100		**3.32**	0.25	**4**	0.25	**2.64**	0.25	**1.69**	0.25
Tetrahydrofuran		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Toluene		1.0 - 6.1	**27.5**	1	**31.2**	1	**20.2**	1	**13.1**	1
trans-1,2-Dichloroethene		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
trans-1,3-Dichloropropene		NA	< 1.00	1	< 1.00	1	< 1.00	1	< 1.00	1
Trichloroethene	5	<1.7	**2.2**	0.25	< 0.25	0.25	**0.268**	0.25	< 0.25	0.25
Trichlorofluoromethane			**1.29**	1	**1.35**	1	< 1.00	1	**1.35**	1
Trichlorotrifluoroethane			< 1.00	1	**1.22**	1	< 1.00	1	< 1.00	1
Vinyl Chloride		<1.0	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25
BTEX			**172.15**		**183**		**127.61**		**88.83**	
Total VOCs			**883.79**		**1002.58**		**1288.98**		**411.76**	

Notes:
NA No guidance value or standard available
(a) Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York. October 2006. New York State Department of Health.
(b) NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, February 2005, Summary of Background Levels for Selected Compounds (NYSDOH Database, Outdoor values)

TABLE 14

Project Permit Listing

To Be Updated as Project Progresses

Permit	*Permit Number*	*Originating Agency*	*Pursuant to*	*Issued*	*Expires*	*Contact Phone*
NO PERMITS ISSUED AT THIS TIME - TO BE ADDED						

Table 15
Emergency Contact List

General Contacts

General Emergencies	911
NYC Police	911
NYC Fire Department	911
NYC Department of Health	212-676-2400
Woodhull Medical Center	718-963-6010
Brooklyn Hospital Center	718-250-6010
Poison Control	800-222-1222
National Response Center	800-424-8802
NYSDEC Spills Hotline	800-457-7362

Project Contacts

NYSDEC Project Manager	Manfred Magliore	718-482-4078
NYSDOH Project Manager	Jacquelyn Nealon	518-402-7860
EBC Project Manager	Rob Bennett	631-504-6000
EBC BCP Program Manager	Charles Sosik	631-504-6000
EBC Site Safety Officer	Chawinie Miller	631-504-6000
Remedial Engineer	Ariel Czemerinski	516-987-1662
Construction Manager	Yoel Sabel	917-213-6815

FIGURES

USGS Brooklyn Quadrangle 1995, Contour Interval = 10 feet

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Fax 631. 924 .2870

FORMER CONSOLIDATED FREIGHTWAYS

11 WEST STREET, BROOKLYN, NY

FIGURE 1 SITE LOCATION MAP

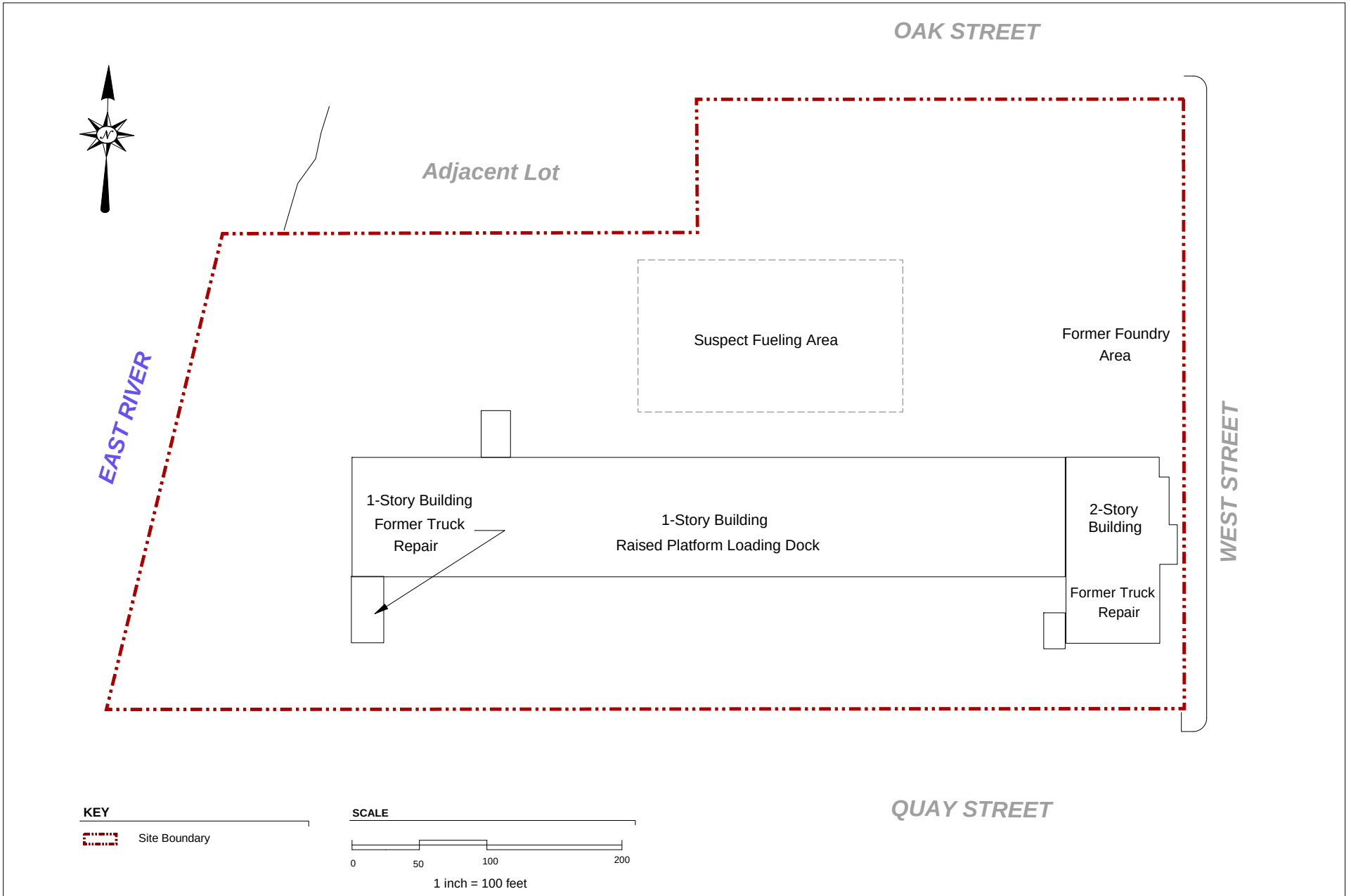

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Figure No. 2

Site Name: FORMER CONSOLIDATED FREIGHTWAYS TERMINAL
Site Address: 11 WEST STREET, BROOKLYN, NY
Drawing Title: SITE PLAN

EBC
Environmental Business Consultants
1808 Middle Country Road, Ridge, NY 11961
Phone: 631.504.6000
Fax: 631.924.2780

Former Consolidated Freightways
11 West Street, Brooklyn NY

FIGURE 3 Project Site and Adjacent Properties

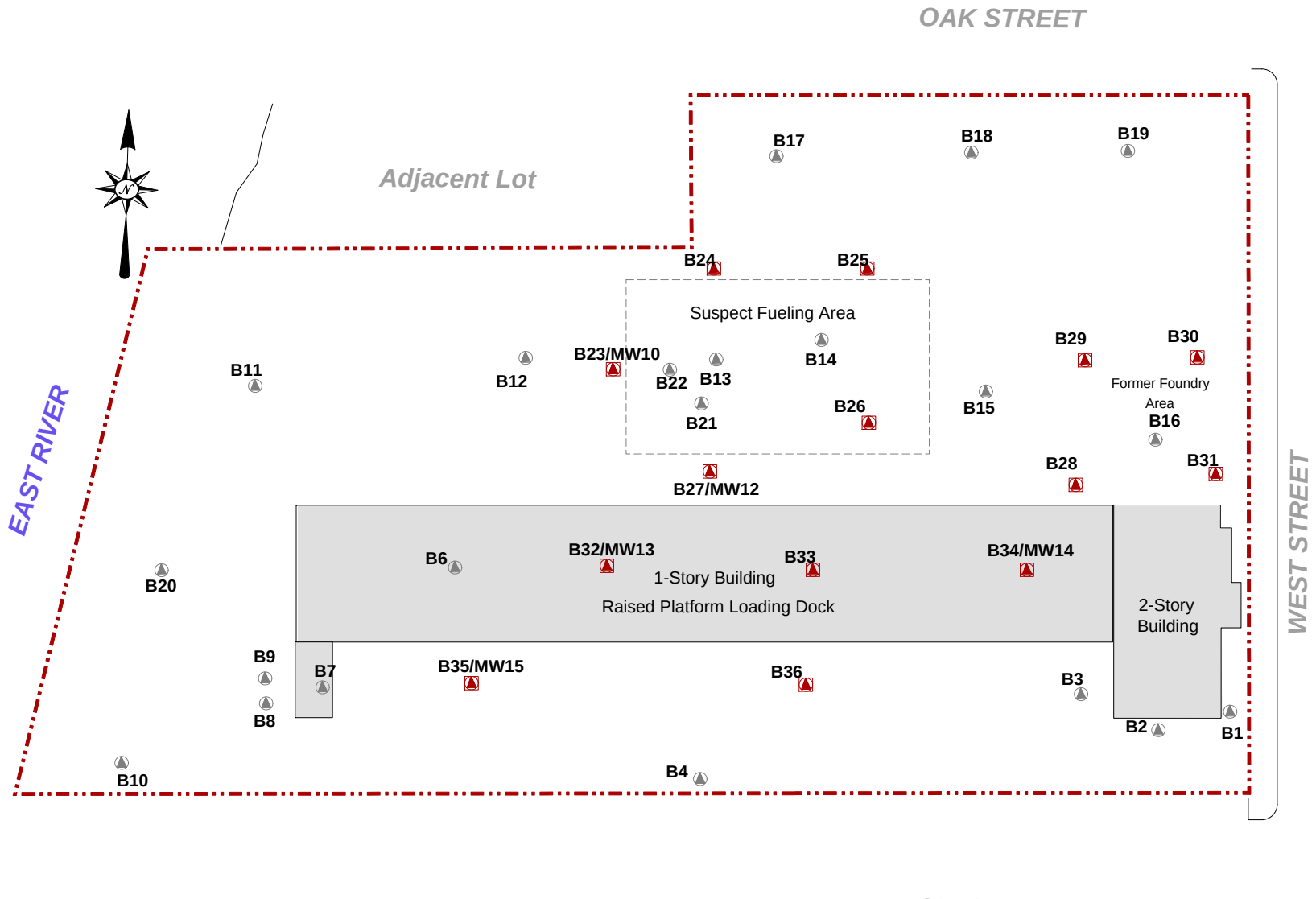

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Figure No. 4

Site Name: FORMER CONOLIDATED FREIGHTWAYS TERMINAL

Site Address: 11 WEST STREET, BROOKLYN, NY

Drawing Title: SOIL BORING LOCATIONS

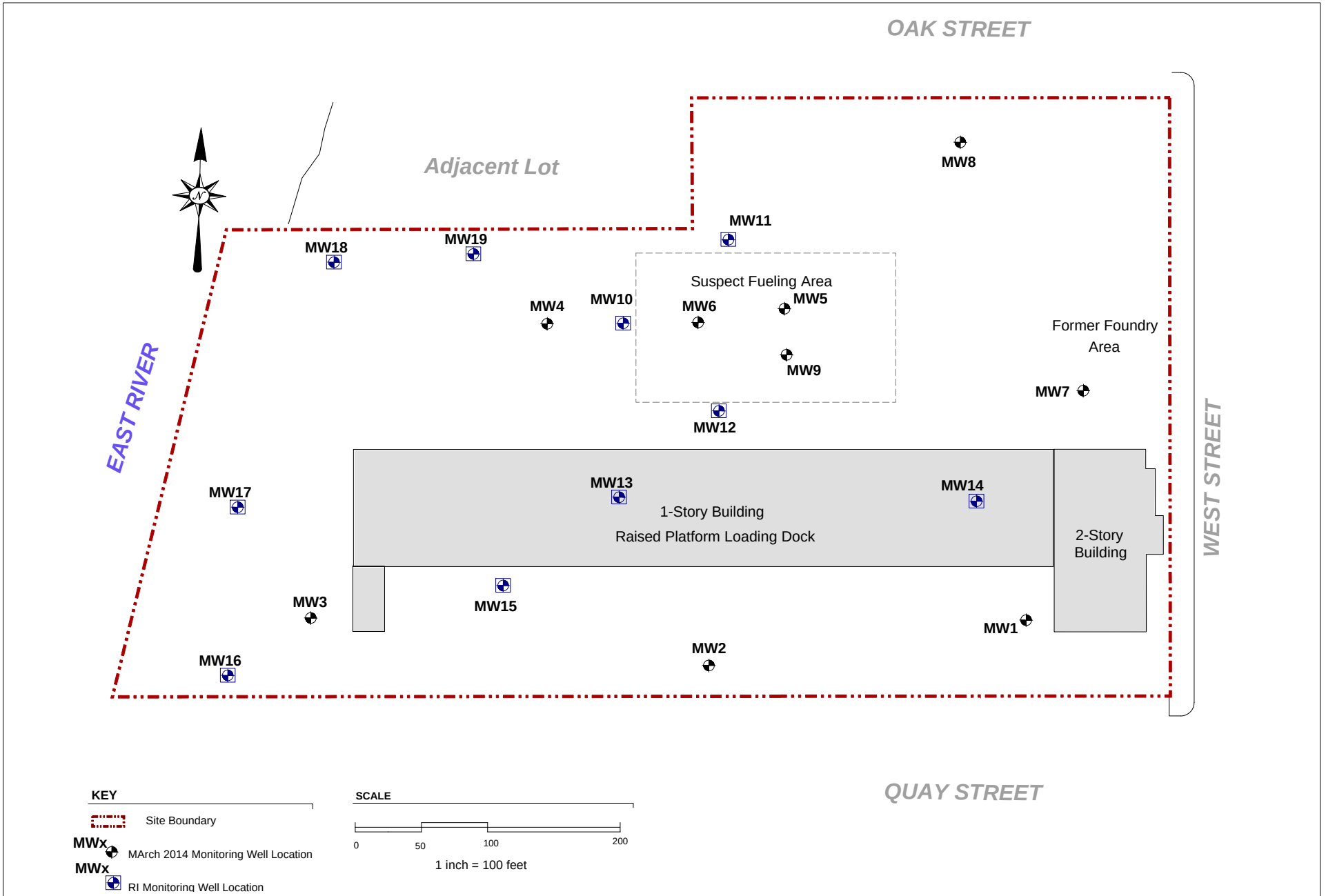

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Figure No. 5

Site Name: FORMER CONSOLIDATED FREIGHTWAYS TERMINAL

Site Address: 11 WEST STREET, BROOKLYN, NY

Drawing Title: MONITORING WELL LOCATIONS

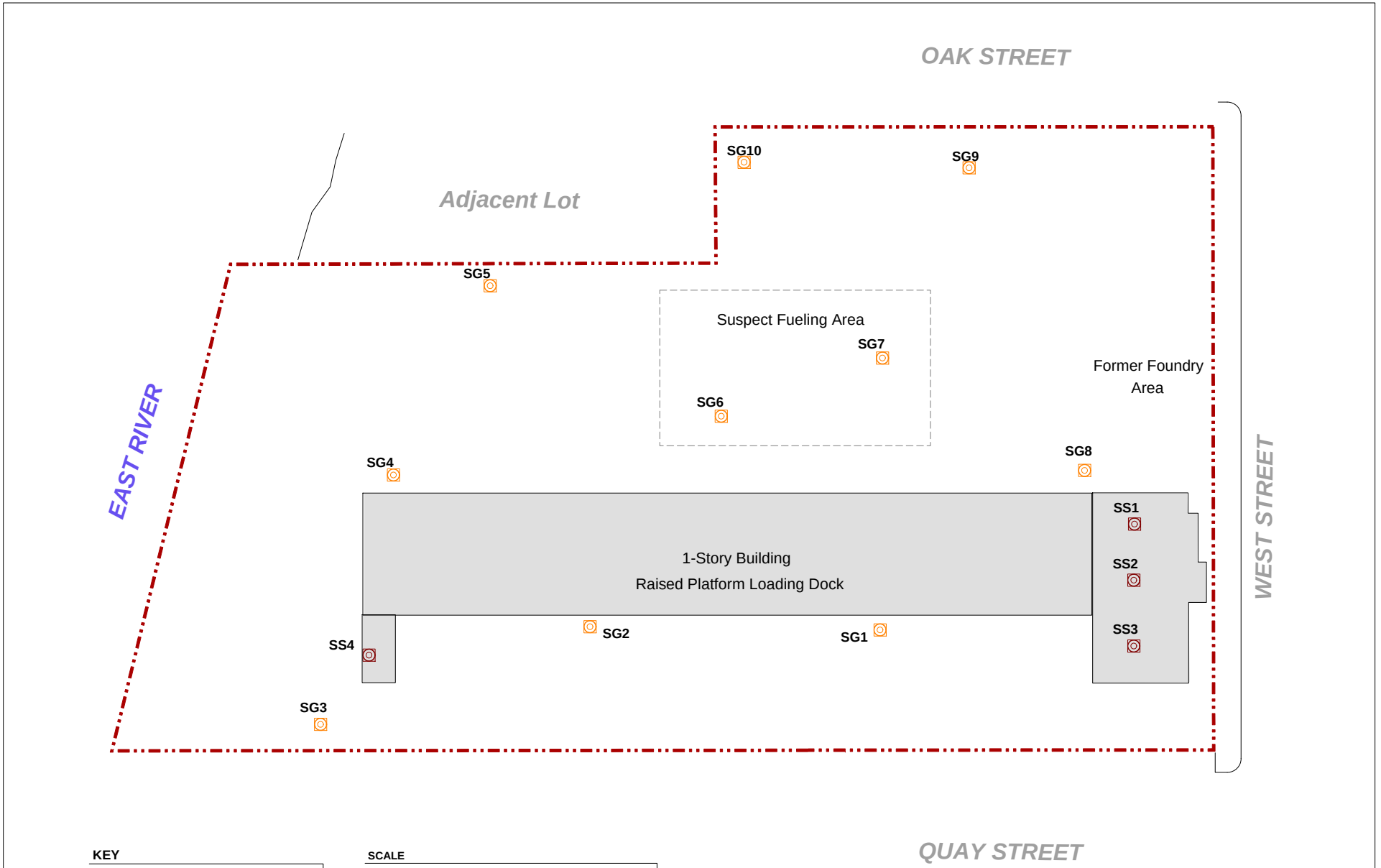

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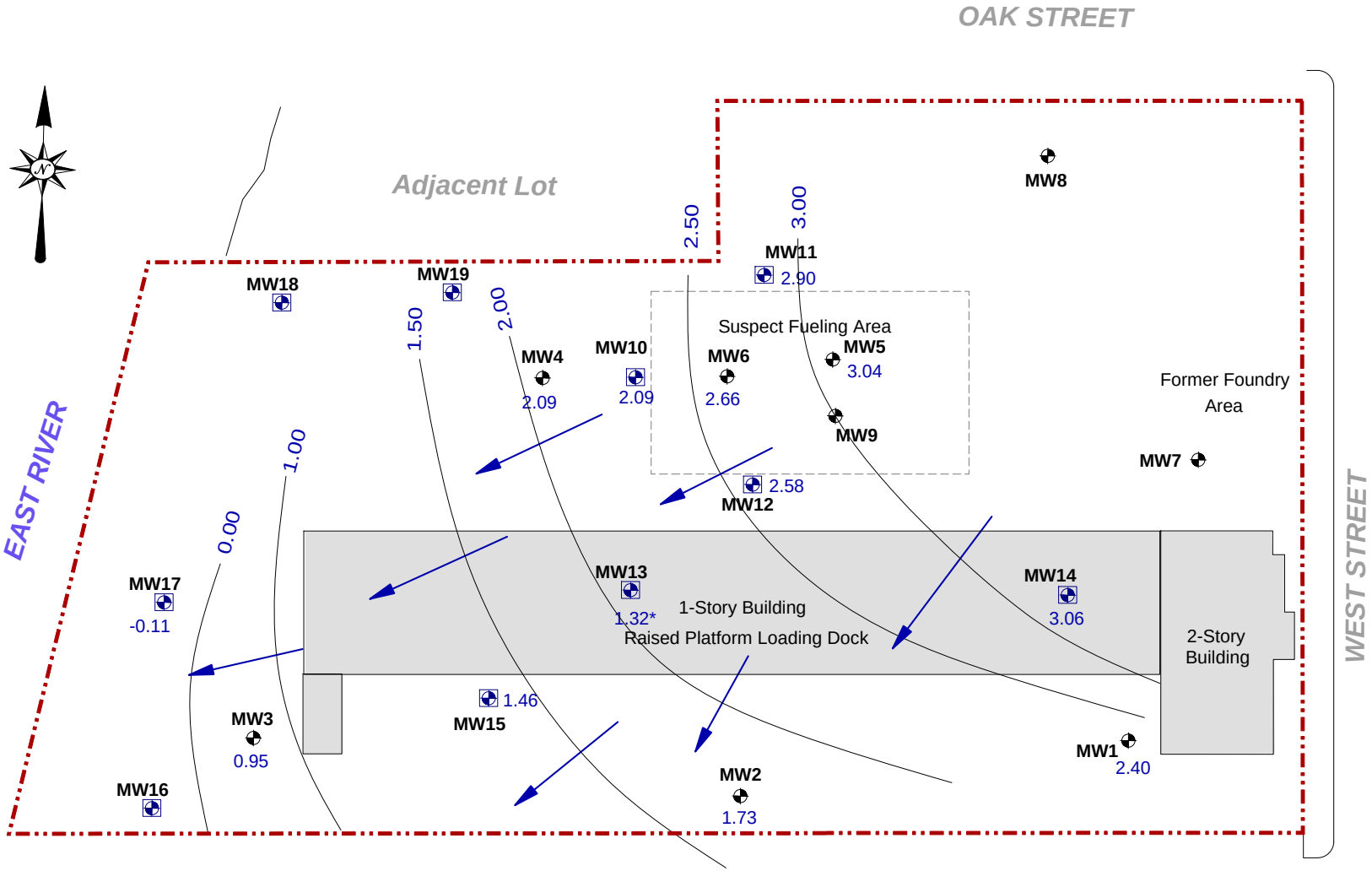
Figure No. 6

Site Name: FORMER CONSOLIDATED FREIGHTWAYS TERMINAL

Site Address: 11 WEST STREET, BROOKLYN, NY

Drawing Title: SOIL VAPOR SAMPLINGL LOCATIONS



KEY

- Property Boundary
- MWx — Existing Monitoring Well
- MWx — Monitoring Well Location
- 1.32* Not Used In Contouring

SCALE

0 50 100 200

1 inch = 100 feet

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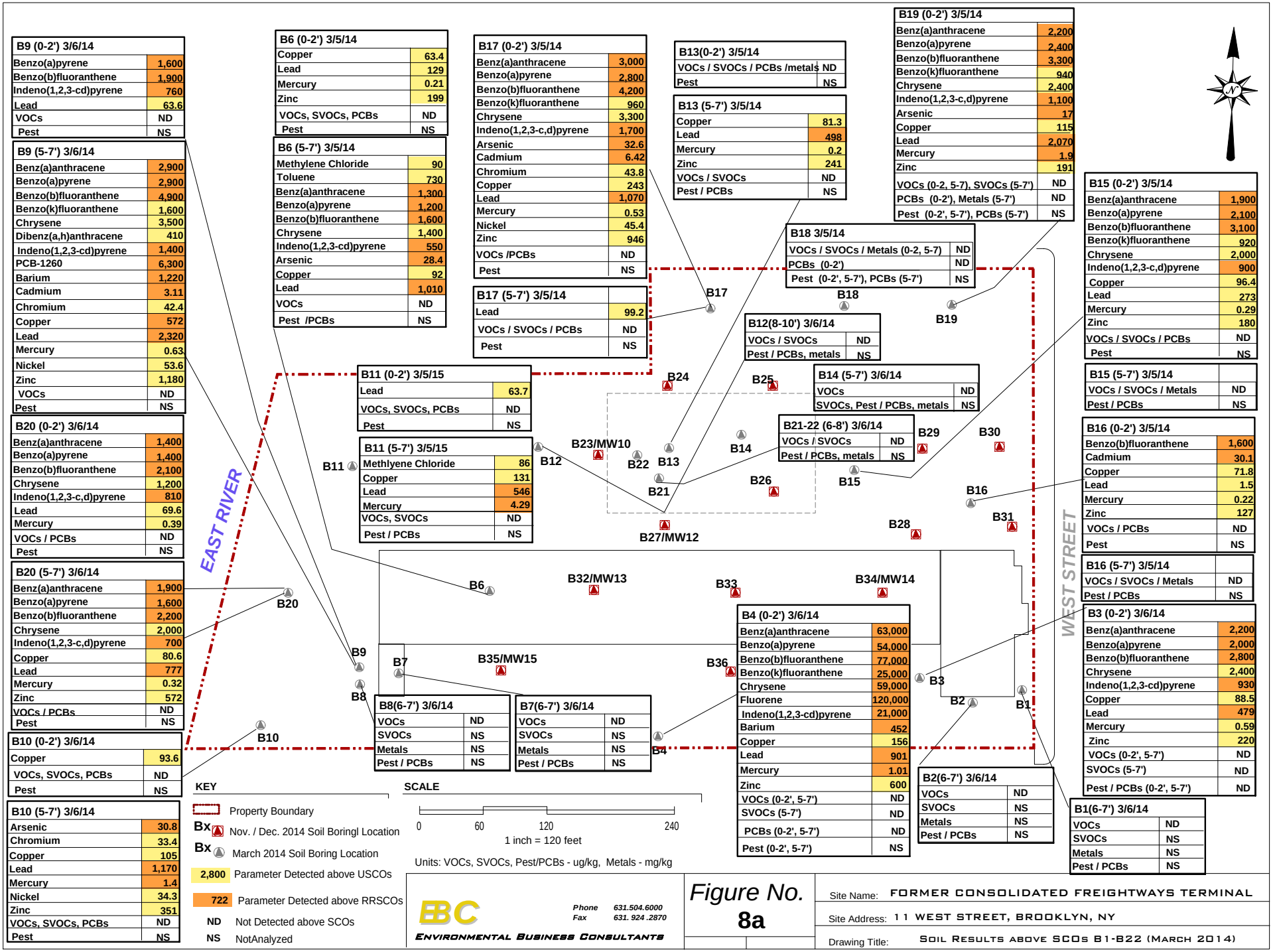
Figure No. 7

Site Name: FORMER CONSOLIDATED FREIGHTWAYS TERMINAL

Site Address: 11 WEST STREET, BROOKLYN, NY

Drawing Title: GROUND ELEVATION 3-19-15


B9 (0-2') 3/6/14
Benzo(a)pyrene 1,600
Benzo(b)fluoranthene 1,900
Indeno(1,2,3-cd)pyrene 760
Lead 63.6
VOCs ND
Pest NS
B9 (5-7') 3/6/14
Benz(a)anthracene 2,900
Benzo(a)pyrene 2,900
Benzo(b)fluoranthene 4,900
Benzo(k)fluoranthene 1,600
Chrysene 3,500
Dibenz(a,h)anthracene 410
Indeno(1,2,3-cd)pyrene 1,400
PCB-1260 6,300
Barium 1,220
Cadmium 3.11
Chromium 42.4
Copper 572
Lead 2,320
Mercury 0.63
Nickel 53.6
Zinc 1,180
VOCs ND
Pest NS
B20 (0-2') 3/6/14
Benz(a)anthracene 1,400
Benzo(a)pyrene 1,400
Benzo(b)fluoranthene 2,100
Chrysene 1,200
Indeno(1,2,3-c,d)pyrene 810
Lead 69.6
Mercury 0.39
VOCs / PCBs ND
Pest NS
B20 (5-7') 3/6/14
Benz(a)anthracene 1,900
Benzo(a)pyrene 1,600
Benzo(b)fluoranthene 2,200
Chrysene 2,000
Indeno(1,2,3-c,d)pyrene 700
Copper 80.6
Lead 777
Mercury 0.32
Zinc 572
VOCs / PCBs ND
Pest NS
B10 (0-2') 3/6/14
Copper 93.6
VOCs, SVOCs, PCBs ND
Pest NS
B10 (5-7') 3/6/14
Arsenic 30.8
Chromium 33.4
Copper 105
Lead 1,170
Mercury 1.4
Nickel 34.3
Zinc 351
VOCs, SVOCs, PCBs ND
Pest NS
B6 (0-2') 3/5/14
Copper 63.4
Lead 129
Mercury 0.21
Zinc 199
VOCs, SVOCs, PCBs ND
Pest NS
B6 (5-7') 3/5/14
Methylene Chloride 90
Toluene 730
Benz(a)anthracene 1,300
Benzo(a)pyrene 1,200
Benzo(b)fluoranthene 1,600
Chrysene 1,400
Indeno(1,2,3-cd)pyrene 550
Arsenic 28.4
Copper 92
Lead 1,010
VOCs ND
Pest /PCBs NS
B17 (0-2') 3/5/14
Benz(a)anthracene 3,000
Benzo(a)pyrene 2,800
Benzo(b)fluoranthene 4,200
Benzo(k)fluoranthene 960
Chrysene 3,300
Indeno(1,2,3-c,d)pyrene 1,700
Arsenic 32.6
Cadmium 6.42
Chromium 43.8
Copper 243
Lead 1,070
Mercury 0.53
Nickel 45.4
Zinc 946
VOCs /PCBs ND
Pest NS
B17 (5-7') 3/5/14
Lead 99.2
VOCs / SVOCs / PCBs ND
Pest NS
B13(0-2') 3/5/14
VOCs / SVOCs / PCBs /metals ND
Pest NS
B13 (5-7') 3/5/14
Copper 81.3
Lead 498
Mercury 0.2
Zinc 241
VOCs / SVOCs ND
Pest / PCBs NS
B19 (0-2') 3/5/14
Benz(a)anthracene 2,200
Benzo(a)pyrene 2,400
Benzo(b)fluoranthene 3,300
Benzo(k)fluoranthene 940
Chrysene 2,400
Indeno(1,2,3-c,d)pyrene 1,100
Arsenic 17
Copper 115
Lead 2,070
Mercury 1.9
Zinc 191
VOCs (0-2, 5-7), SVOCs (5-7') ND
PCBs (0-2'), Metals (5-7') ND
Pest (0-2', 5-7'), PCBs (5-7') NS
B18 3/5/14
VOCs / SVOCs / Metals (0-2, 5-7) ND
PCBs (0-2') ND
Pest (0-2', 5-7'), PCBs (5-7') NS
B12(8-10') 3/6/14
VOCs / SVOCs ND
Pest / PCBs, metals NS
B14 (5-7') 3/6/14
VOCs ND
SVOCs, Pest / PCBs, metals NS
B21-22 (6-8') 3/6/14
VOCs / SVOCs ND
Pest / PCBs, metals NS
B15 (0-2') 3/5/14
Benz(a)anthracene 1,900
Benzo(a)pyrene 2,100
Benzo(b)fluoranthene 3,100
Benzo(k)fluoranthene 920
Chrysene 2,000
Indeno(1,2,3-c,d)pyrene 900
Copper 96.4
Lead 273
Mercury 0.29
Zinc 180
VOCs / SVOCs / PCBs ND
Pest NS
B15 (5-7') 3/5/14
VOCs / SVOCs / Metals ND
Pest / PCBs NS
B16 (0-2') 3/5/14
Benzo(b)fluoranthene 1,600
Cadmium 30.1
Copper 71.8
Lead 1.5
Mercury 0.22
Zinc 127
VOCs / PCBs ND
Pest NS
B16 (5-7') 3/5/14
VOCs / SVOCs / Metals ND
Pest / PCBs NS
B3 (0-2') 3/6/14
Benz(a)anthracene 2,200
Benzo(a)pyrene 2,000
Benzo(b)fluoranthene 2,800
Chrysene 2,400
Indeno(1,2,3-cd)pyrene 930
Copper 88.5
Lead 479
Mercury 0.59
Zinc 220
VOCs (0-2', 5-7') ND
SVOCs (5-7') ND
Pest / PCBs (0-2', 5-7') ND
B11 (0-2') 3/5/15
Lead 63.7
VOCs, SVOCs, PCBs ND
Pest NS
B11 (5-7') 3/5/15
Methlyene Chloride 86
Copper 131
Lead 546
Mercury 4.29
VOCs, SVOCs ND
Pest / PCBs NS
B8(6-7') 3/6/14
VOCs ND
SVOCs NS
Metals NS
Pest / PCBs NS
B7(6-7') 3/6/14
VOCs ND
SVOCs NS
Metals NS
Pest / PCBs NS
B4 (0-2') 3/6/14
Benz(a)anthracene 63,000
Benzo(a)pyrene 54,000
Benzo(b)fluoranthene 77,000
Benzo(k)fluoranthene 25,000
Chrysene 59,000
Fluorene 120,000
Indeno(1,2,3-cd)pyrene 21,000
Barium 452
Copper 156
Lead 901
Mercury 1.01
Zinc 600
VOCs (0-2', 5-7') ND
SVOCs (5-7') ND
PCBs (0-2', 5-7') ND
Pest (0-2', 5-7') NS
B2(6-7') 3/6/14
VOCs ND
SVOCs NS
Metals NS
Pest / PCBs NS
B1(6-7') 3/6/14
VOCs ND
SVOCs NS
Metals NS
Pest / PCBs NS
B17
B18
B19
B24
B25
B29
B30
B14
B23/MW10
B22
B13
B12
B11
B21
B26
B15
B16
B31
B28
B27/MW12
B6
B32/MW13
B33
B34/MW14
B20
B9
B7
B35/MW15
B36
B3
B8
B2
B1
B10
B4
EAST RIVER
WEST STREET
KEY
Property Boundary
Bx Nov. / Dec. 2014 Soil Boringl Location
Bx March 2014 Soil Boring Location
2,800 Parameter Detected above USCOs
722 Parameter Detected above RRSCOs
ND Not Detected above SCOs
NS NotAnalyzed
SCALE
0 60 120 240
1 inch = 120 feet
Units: VOCs, SVOCs, Pest/PCBs - ug/kg, Metals - mg/kg
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Fax 631. 924 .2870
Figure No. 8a
Site Name: FORMER CONSOLIDATED FREIGHTWAYS TERMINAL
Site Address: 11 WEST STREET, BROOKLYN, NY
Drawing Title: Soil Results above SCOs B1-B22 (March 2014)

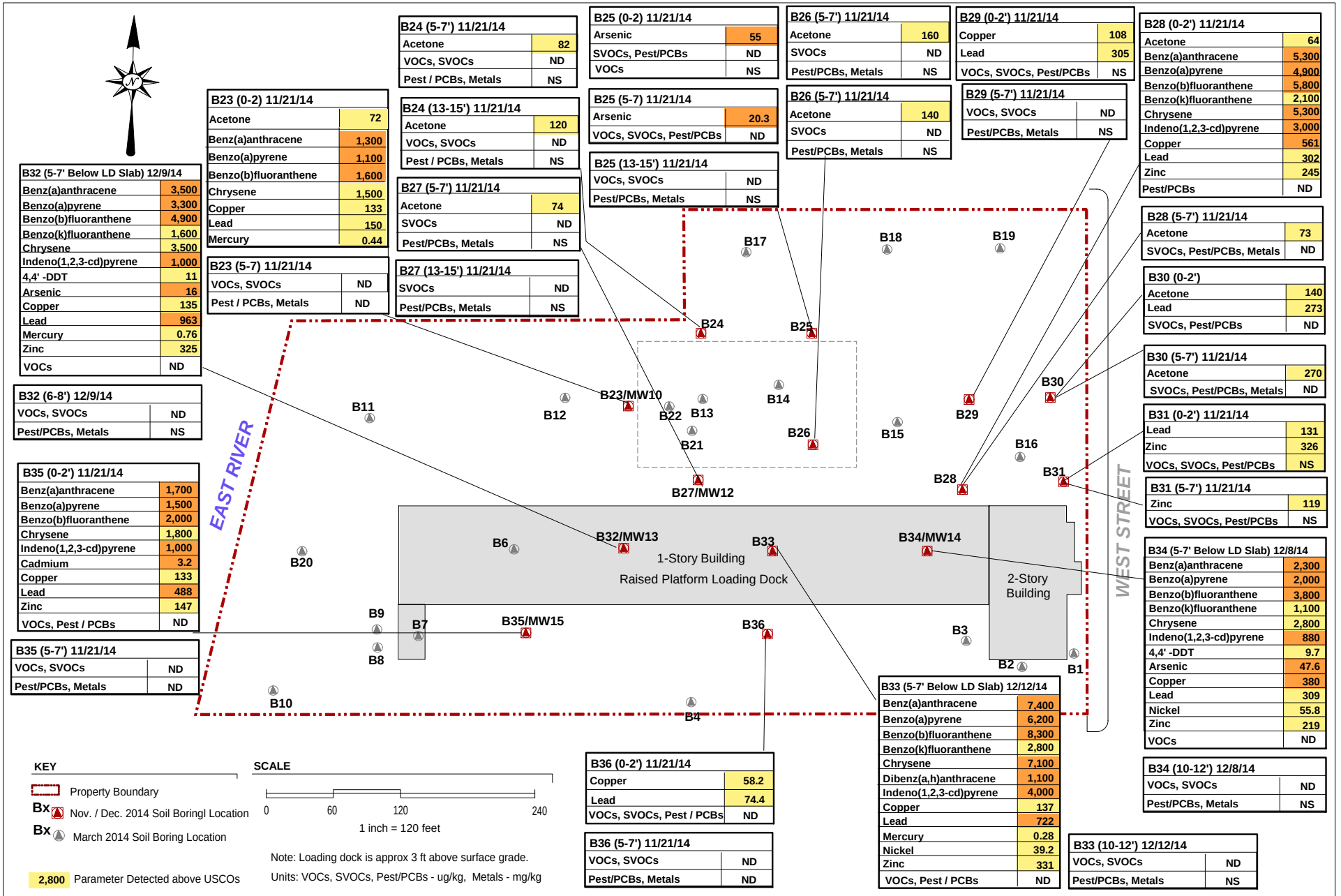

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Figure No. 8b

Site Name: FORMER CONSOLIDATED FREIGHTWAYS TERMINAL
Site Address: 11 WEST STREET, BROOKLYN, NY
Drawing Title: SOIL RESULTS ABOVE SCOS B23-B35 (NOV. / DEC. 2014)

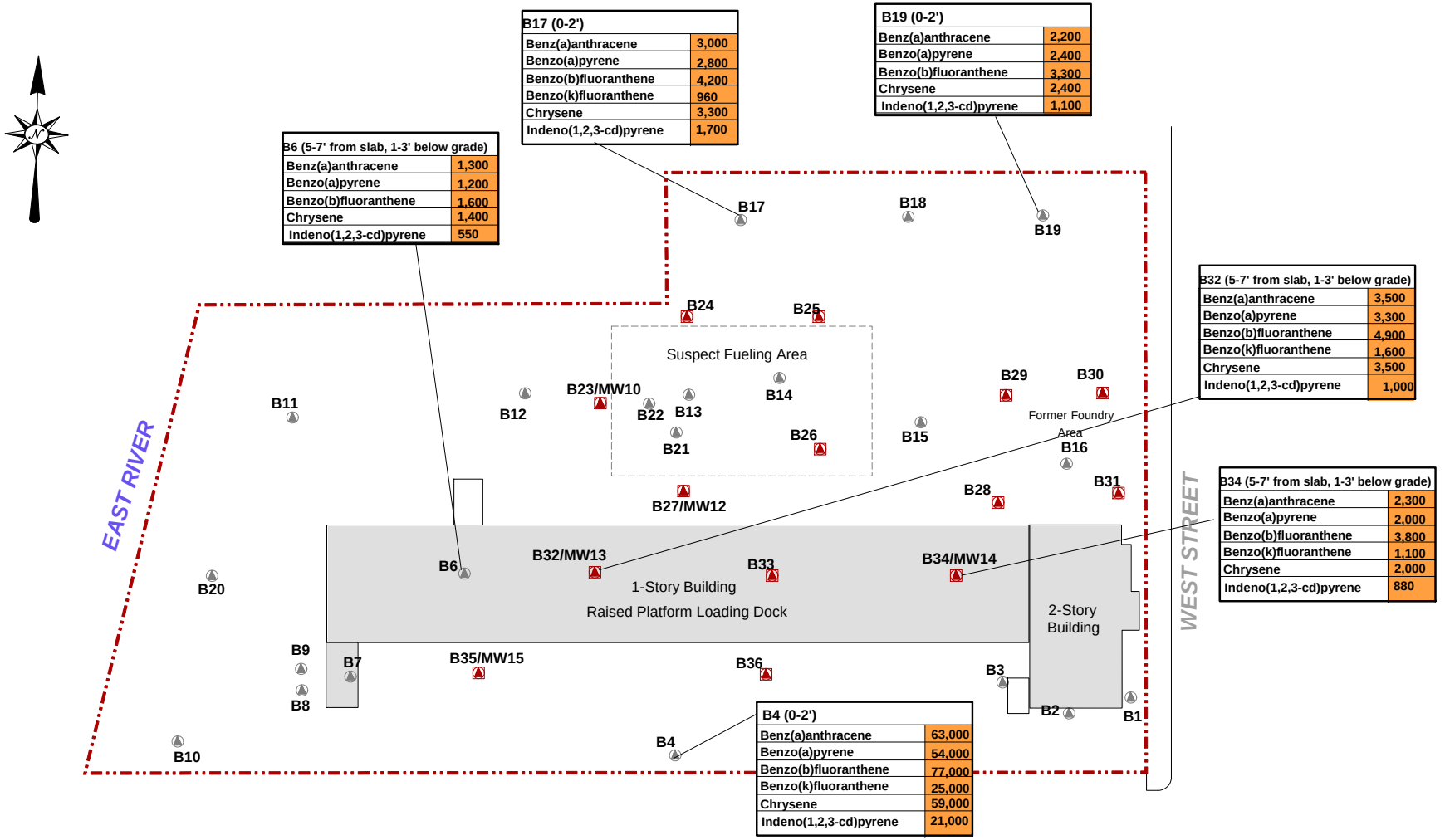

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Figure No. 9

Site Name: FORMER CONSOLIDATED FREIGHTWAYS TERMINAL

Site Address: 11 WEST STREET, BROOKLYN, NY

Drawing Title: PARAMETERS ABOVE SITE SPECIFIC SCOs

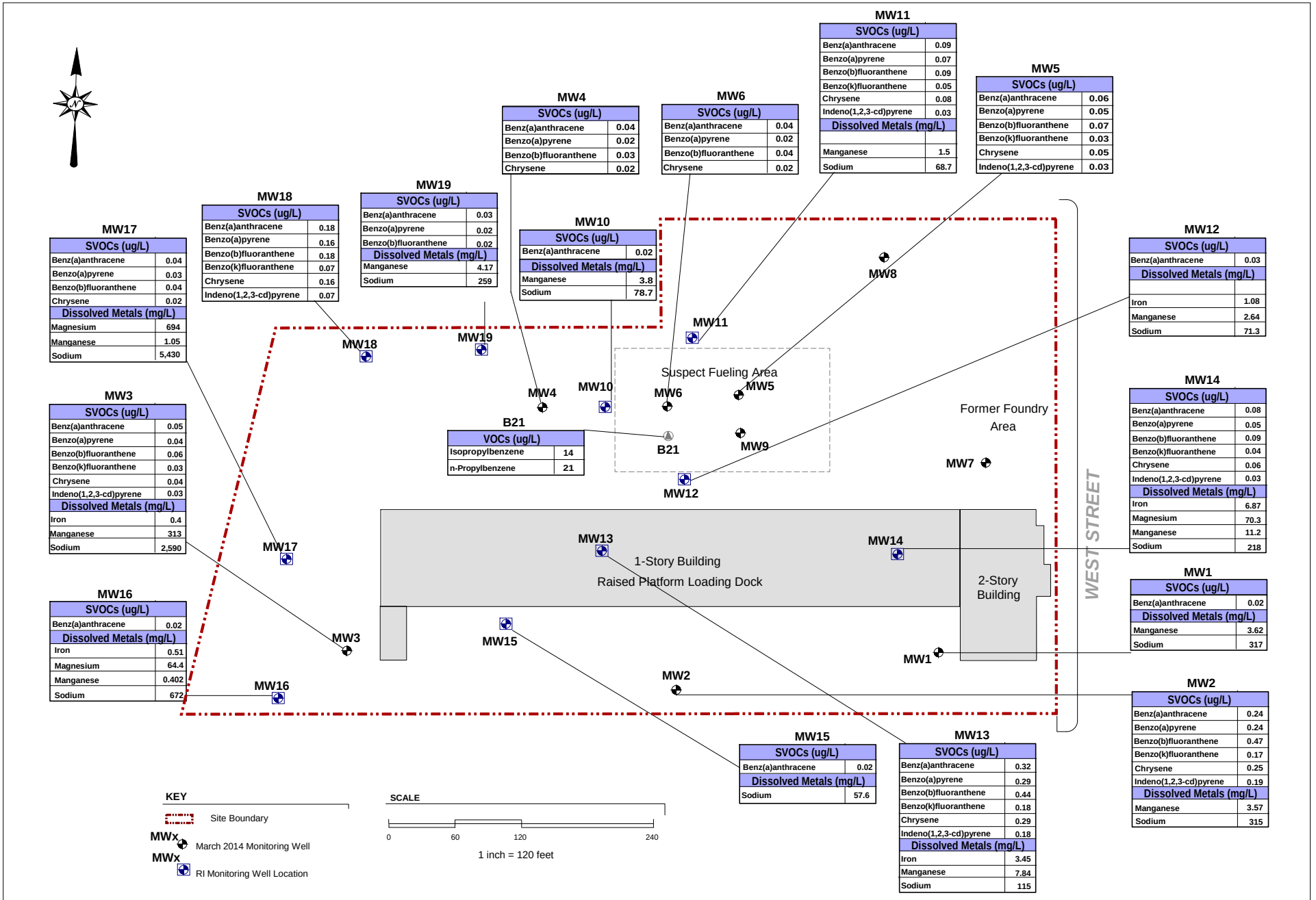

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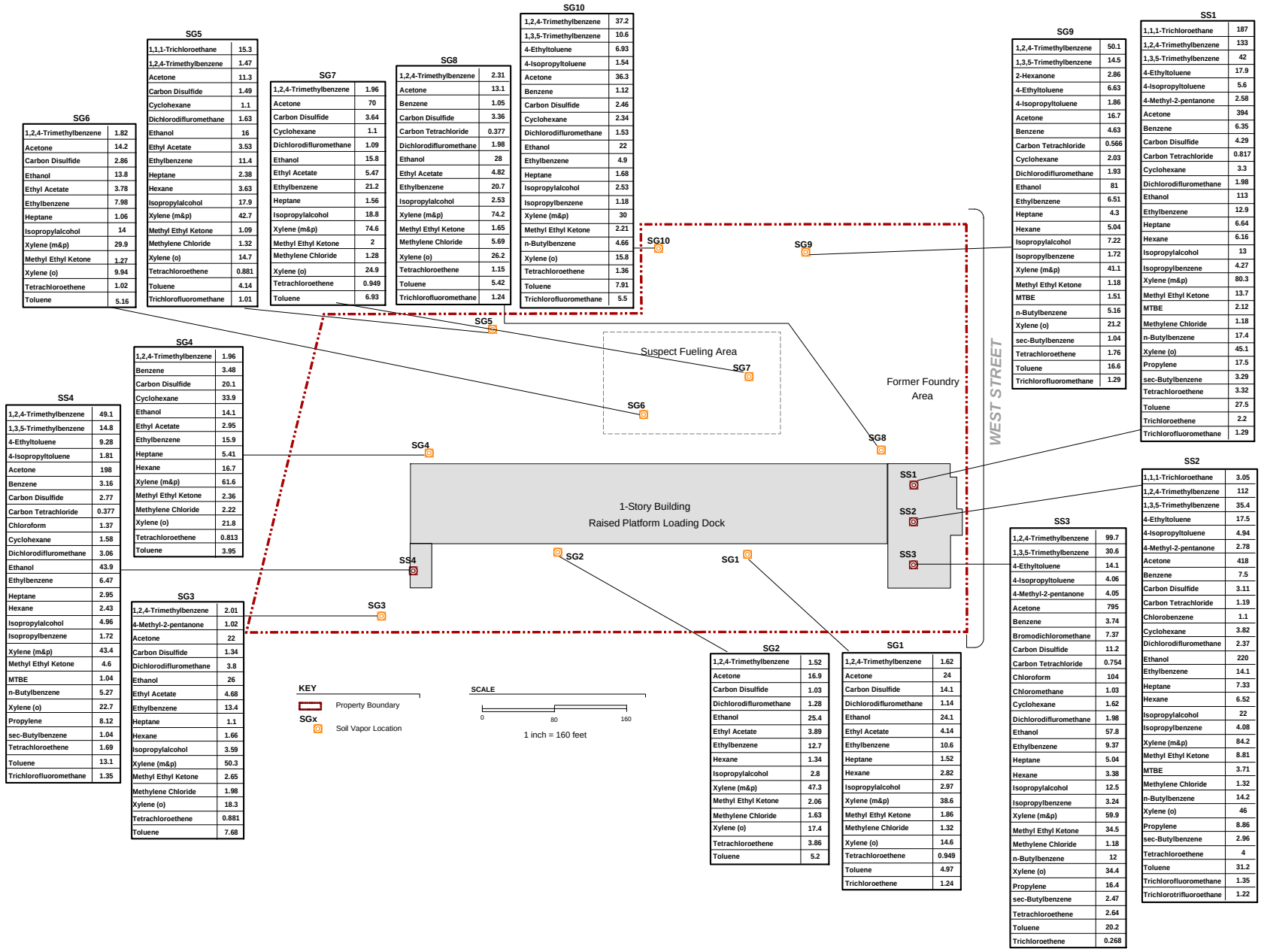
Figure No. 10

Site Name: FORMER CONSOLIDATED FREIGHTWAYS TERMINAL

Site Address: 11 WEST STREET, BROOKLYN, NY

Drawing Title: GROUND WATER RESULTS ABOVE AWQS



SG6	
1,2,4-Trimethylbenzene	1.82
Acetone	14.2
Carbon Disulfide	2.86
Ethanol	13.8
Ethyl Acetate	3.78
Ethylbenzene	7.98
Heptane	1.06
Isopropylalcohol	14
Xylene (m&p)	29.9
Methyl Ethyl Ketone	1.27
Xylene (o)	9.94
Tetrachloroethene	1.02
Toluene	5.16

SG5	
1,1,1-Trichloroethane	15.3
1,2,4-Trimethylbenzene	1.47
Acetone	11.3
Carbon Disulfide	1.49
Cyclohexane	1.1
Dichlorodifluromethane	1.63
Ethanol	16
Ethyl Acetate	3.53
Ethylbenzene	11.4
Heptane	2.38
Hexane	3.63
Isopropylalcohol	17.9
Xylene (m&p)	42.7
Methyl Ethyl Ketone	1.09
Methylene Chloride	1.32
Xylene (o)	14.7
Tetrachloroethene	0.881
Toluene	4.14
Trichlorofluoromethane	1.01

SG7	
1,2,4-Trimethylbenzene	1.96
Acetone	70
Carbon Disulfide	3.64
Cyclohexane	1.1
Dichlorodifluromethane	1.09
Ethanol	15.8
Ethyl Acetate	5.47
Ethylbenzene	21.2
Heptane	1.56
Isopropylalcohol	18.8
Xylene (m&p)	74.6
Methyl Ethyl Ketone	2
Methylene Chloride	1.28
Xylene (o)	24.9
Tetrachloroethene	0.949
Toluene	6.93

SG8	
1,2,4-Trimethylbenzene	2.31
Acetone	13.1
Benzene	1.05
Carbon Disulfide	3.36
Carbon Tetrachloride	0.377
Dichlorodifluromethane	1.98
Ethanol	28
Ethyl Acetate	4.82
Ethylbenzene	20.7
Isopropylalcohol	2.53
Xylene (m&p)	74.2
Methyl Ethyl Ketone	1.65
Methylene Chloride	5.69
Xylene (o)	26.2
Tetrachloroethene	1.15
Toluene	5.42
Trichlorofluoromethane	1.24

SG10	
1,2,4-Trimethylbenzene	37.2
1,3,5-Trimethylbenzene	10.6
4-Ethyltoluene	6.93
4-Isopropyltoluene	1.54
Acetone	36.3
Benzene	1.12
Carbon Disulfide	2.46
Cyclohexane	2.34
Dichlorodifluromethane	1.53
Ethanol	22
Ethylbenzene	4.9
Heptane	1.68
Isopropylalcohol	2.53
Isopropylbenzene	1.18
Xylene (m&p)	30
Methyl Ethyl Ketone	2.21
n-Butylbenzene	4.66
Xylene (o)	15.8
Tetrachloroethene	1.36
Toluene	7.91
Trichlorofluoromethane	5.5

SG9	
1,2,4-Trimethylbenzene	50.1
1,3,5-Trimethylbenzene	14.5
2-Hexanone	2.86
4-Ethyltoluene	6.63
4-Isopropyltoluene	1.86
Acetone	16.7
Benzene	4.63
Carbon Tetrachloride	0.566
Cyclohexane	2.03
Dichlorodifluromethane	1.93
Ethanol	81
Ethylbenzene	6.51
Heptane	4.3
Hexane	5.04
Isopropylalcohol	7.22
Isopropylbenzene	1.72
Xylene (m&p)	41.1
Methyl Ethyl Ketone	1.18
MTBE	1.51
n-Butylbenzene	5.16
Xylene (o)	21.2
sec-Butylbenzene	1.04
Tetrachloroethene	1.76
Toluene	16.6
Trichlorofluoromethane	1.29

SS1	
1,1,1-Trichloroethane	187
1,2,4-Trimethylbenzene	133
1,3,5-Trimethylbenzene	42
4-Ethyltoluene	17.9
4-Isopropyltoluene	5.6
4-Methyl-2-pentanone	2.58
Acetone	394
Benzene	6.35
Carbon Disulfide	4.29
Carbon Tetrachloride	0.817
Cyclohexane	3.3
Dichlorodifluromethane	1.98
Ethanol	113
Ethylbenzene	12.9
Heptane	6.64
Hexane	6.16
Isopropylalcohol	13
Isopropylbenzene	4.27
Xylene (m&p)	80.3
Methyl Ethyl Ketone	13.7
MTBE	2.12
Methylene Chloride	1.18
n-Butylbenzene	17.4
Xylene (o)	45.1
Propylene	17.5
sec-Butylbenzene	3.29
Tetrachloroethene	3.32
Toluene	27.5
Trichloroethene	2.2
Trichlorofluoromethane	1.29

SG4	
1,2,4-Trimethylbenzene	1.96
Benzene	3.48
Carbon Disulfide	20.1
Cyclohexane	33.9
Ethanol	14.1
Ethyl Acetate	2.95
Ethylbenzene	15.9
Heptane	5.41
Hexane	16.7
Xylene (m&p)	61.6
Methyl Ethyl Ketone	2.36
Methylene Chloride	2.22
Xylene (o)	21.8
Tetrachloroethene	0.813
Toluene	3.95

SS4	
1,2,4-Trimethylbenzene	49.1
1,3,5-Trimethylbenzene	14.8
4-Ethyltoluene	9.28
4-Isopropyltoluene	1.81
Acetone	198
Benzene	3.16
Carbon Disulfide	2.77
Carbon Tetrachloride	0.377
Chloroform	1.37
Cyclohexane	1.58
Dichlorodifluromethane	3.06
Ethanol	43.9
Ethylbenzene	6.47
Heptane	2.95
Hexane	2.43
Isopropylalcohol	4.96
Isopropylbenzene	1.72
Xylene (m&p)	43.4
Methyl Ethyl Ketone	4.6
MTBE	1.04
n-Butylbenzene	5.27
Xylene (o)	22.7
Propylene	8.12
sec-Butylbenzene	1.04
Tetrachloroethene	1.69
Toluene	13.1
Trichlorofluoromethane	1.35

SG3	
1,2,4-Trimethylbenzene	2.01
4-Methyl-2-pentanone	1.02
Acetone	22
Carbon Disulfide	1.34
Dichlorodifluromethane	3.8
Ethanol	26
Ethyl Acetate	4.68
Ethylbenzene	13.4
Heptane	1.1
Hexane	1.66
Isopropylalcohol	3.59
Xylene (m&p)	50.3
Methyl Ethyl Ketone	2.65
Methylene Chloride	1.98
Xylene (o)	18.3
Tetrachloroethene	0.881
Toluene	7.68

SG2	
1,2,4-Trimethylbenzene	1.52
Acetone	16.9
Carbon Disulfide	1.03
Dichlorodifluromethane	1.28
Ethanol	25.4
Ethyl Acetate	3.89
Ethylbenzene	12.7
Hexane	1.34
Isopropylalcohol	2.8
Xylene (m&p)	47.3
Methyl Ethyl Ketone	2.06
Methylene Chloride	1.63
Xylene (o)	17.4
Tetrachloroethene	3.86
Toluene	5.2

SG1	
1,2,4-Trimethylbenzene	1.62
Acetone	24
Carbon Disulfide	14.1
Dichlorodifluromethane	1.14
Ethanol	24.1
Ethyl Acetate	4.14
Ethylbenzene	10.6
Heptane	1.52
Hexane	2.82
Isopropylalcohol	2.97
Xylene (m&p)	38.6
Methyl Ethyl Ketone	1.86
Methylene Chloride	1.32
Xylene (o)	14.6
Tetrachloroethene	0.949
Toluene	4.97
Trichloroethene	1.24

SS3	
1,2,4-Trimethylbenzene	99.7
1,3,5-Trimethylbenzene	30.6
4-Ethyltoluene	14.1
4-Isopropyltoluene	4.06
4-Methyl-2-pentanone	4.05
Acetone	795
Benzene	3.74
Bromodichloromethane	7.37
Carbon Disulfide	11.2
Carbon Tetrachloride	0.754
Chloroform	104
Chloromethane	1.03
Cyclohexane	1.62
Dichlorodifluromethane	1.98
Ethanol	57.8
Ethylbenzene	9.37
Heptane	5.04
Hexane	3.38
Isopropylalcohol	12.5
Isopropylbenzene	3.24
Xylene (m&p)	59.9
Methyl Ethyl Ketone	34.5
Methylene Chloride	1.18
n-Butylbenzene	12
Xylene (o)	34.4
Propylene	16.4
sec-Butylbenzene	2.47
Tetrachloroethene	2.64
Toluene	20.2
Trichloroethene	0.268

SS2	
1,1,1-Trichloroethane	3.05
1,2,4-Trimethylbenzene	112
1,3,5-Trimethylbenzene	35.4
4-Ethyltoluene	17.5
4-Isopropyltoluene	4.94
4-Methyl-2-pentanone	2.78
Acetone	418
Benzene	7.5
Carbon Disulfide	3.11
Carbon Tetrachloride	1.19
Chlorobenzene	1.1
Cyclohexane	3.82
Dichlorodifluromethane	2.37
Ethanol	220
Ethylbenzene	14.1
Heptane	7.33
Hexane	6.52
Isopropylalcohol	22
Isopropylbenzene	4.08
Xylene (m&p)	84.2
Methyl Ethyl Ketone	8.81
MTBE	3.71
Methylene Chloride	1.32
n-Butylbenzene	14.2
Xylene (o)	46
Propylene	8.86
sec-Butylbenzene	2.96
Tetrachloroethene	4
Toluene	31.2
Trichlorofluoromethane	1.35
Trichlorotrifluoroethane	1.22

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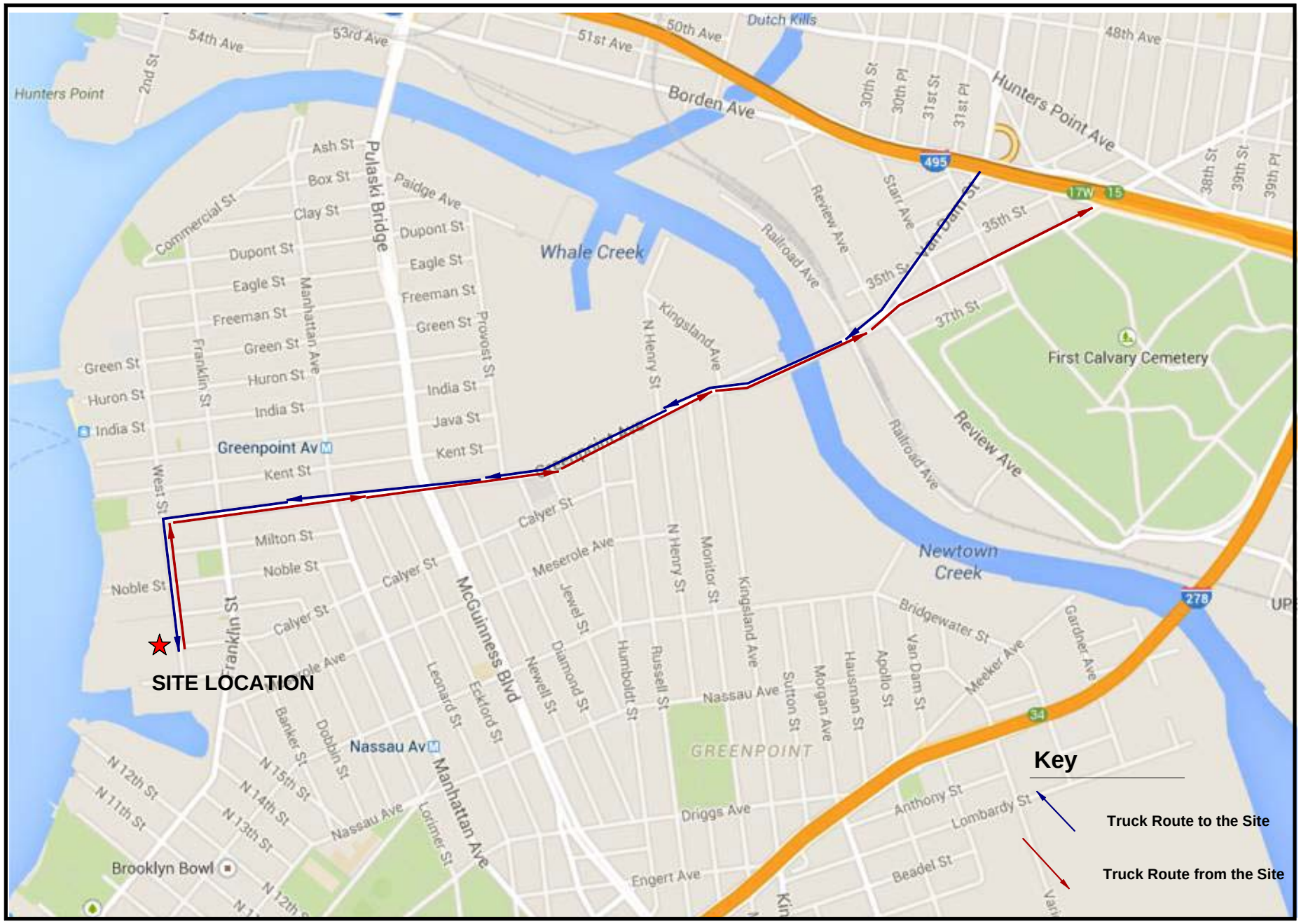
Figure No. 11

Site Name: FORMER CONSOLIDATED FREIGHTWAYS TERMINAL

Site Address: 11 WEST STREET, BROOKLYN, NY

Drawing Title: SOIL VAPOR RESULTS (MICROGRAMS PER CUBIC METER)



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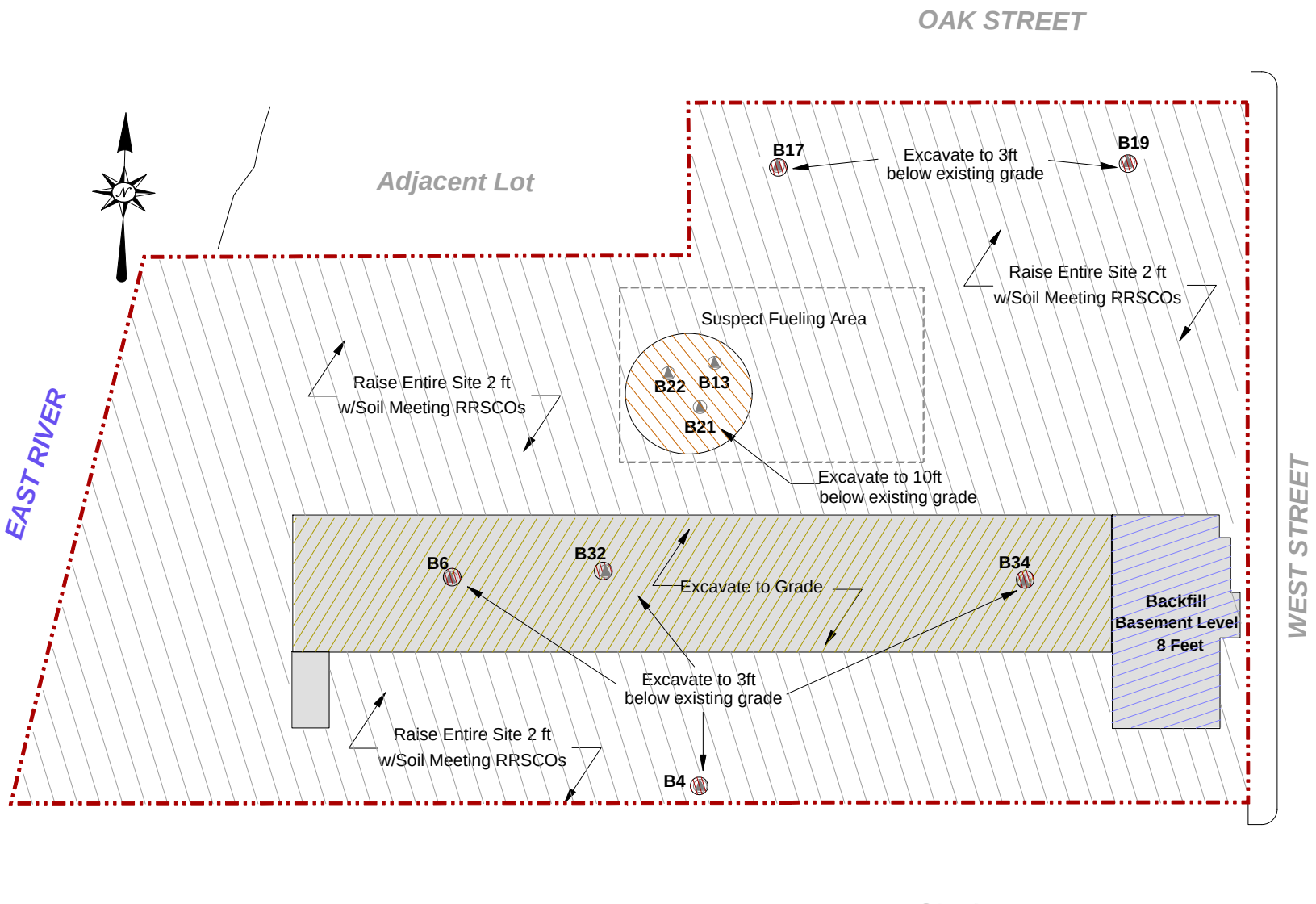
FORMER CONSOLIDATED FREIGHTWAYS
11 WEST STREET BROOKLYN, NY

FIGURE 12 TRUCK ROUTES



KEY

- Site Boundary
- Bx — RI Boringl Location
- Bx — March 2014 Soil Boring Location

SCALE

0 50 100 200

1 inch = 100 feet

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Figure No. 13

Site Name: FORMER CONOLIDATED FREIGHTWAYS TERMINAL

Site Address: 11 WEST STREET, BROOKLYN, NY

Drawing Title: EXCAVATION PLAN

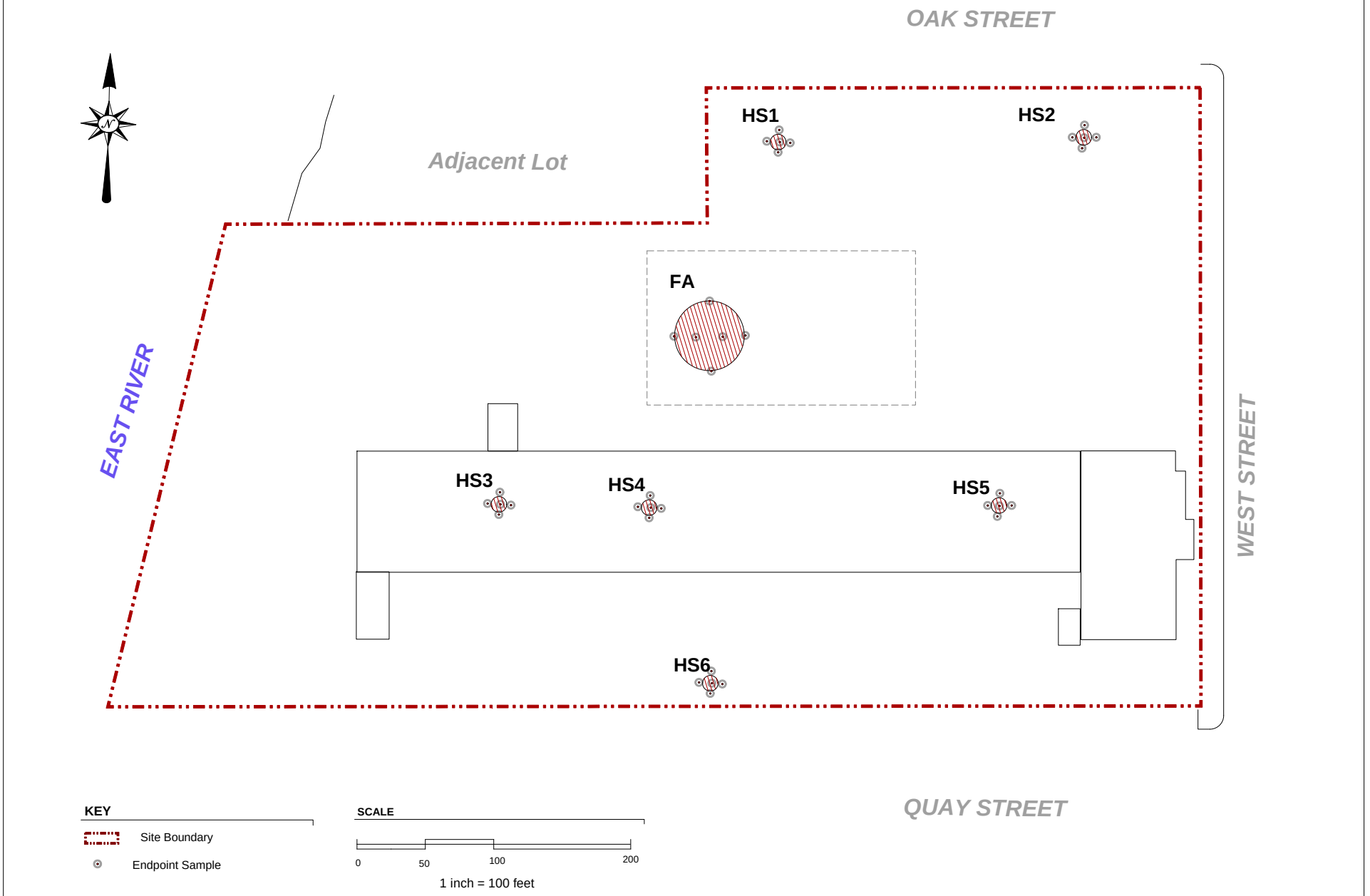

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Figure No. 14

Site Name: FORMER CONSOLIDATED FREIGHTWAYS TERMINAL

Site Address: 11 WEST STREET, BROOKLYN, NY

Drawing Title: ENDPOINT SAMPLING LOCATIONS

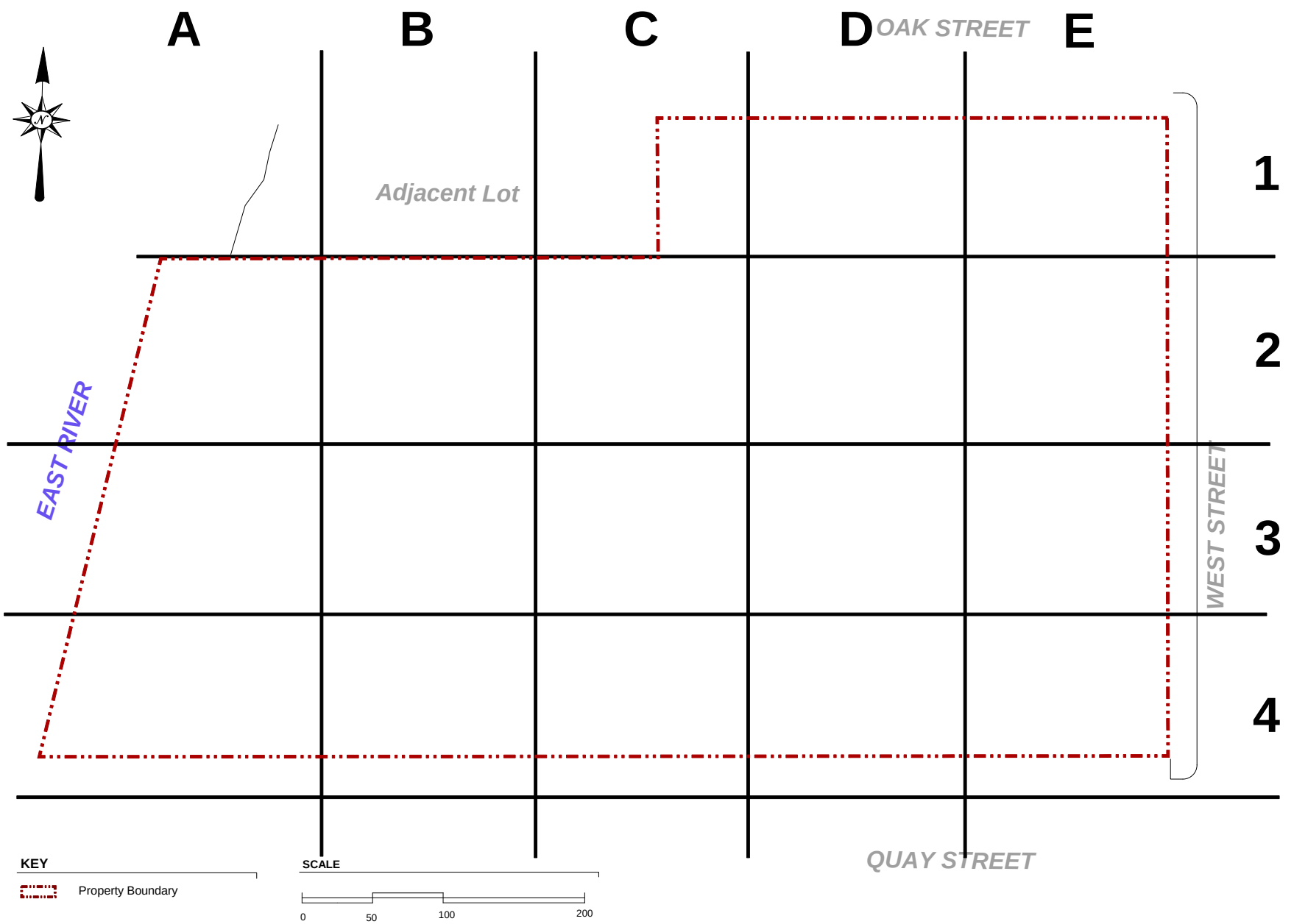

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Figure No. 15

Site Name: FORMER CONOLIDATED FREIGHTWAYS TERMINAL

Site Address: 11 WEST STREET, BROOKLYN, NY

Drawing Title: ALPHA-NUMERIC GRID MAP

ATTACHMENT A
Metes and Bounds Description of Property

METES AND BOUNDS DESCRIPTION

ALL that certain plot, piece or parcel of land, situate, lying and being in the borough of Brooklyn, County of Kings, City and State of New York, bounded and described as follows:

BEGINNING at the comer formed by the intersection of the northerly side of Quay Street with the westerly side of West Street;

RUNNING THENCE northerly along the westerly side of West Street, 460 feet to the southerly side of Oak Street;

THENCE westerly along the southerly side of Oak Street, 364 feet;

THENCE southerly parallel with West Street, 101 feet 6 inches;

THENCE westerly parallel with Oak Street, 355 feet 10-3/8 inches to the U.S. Bulkhead Line approved by the Secretary of War on 11/7/1917 and 6/30/1947;

THENCE southerly along the westerly side of the said bulkhead line, 371 feet 5-1/8 inches to the northerly side of Quay Street;

THENCE easterly along the northerly side of Quay Street, 808 feet 5-1/2 inches to the corner, the point or place of BEGINNING.

ATTACHMENT B
Health and Safety Plan

FORMER
CONSOLIDATED FREIGHTWAYS
TERMINAL BCP No. C224191

11 WEST STREET, BROOKLYN, NEW YORK
Block 2570 Lot 1

CONSTRUCTION HEALTH AND SAFETY PLAN

FEBRUARY 2015

Prepared By:

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS

1808 Middle Country Road
Ridge, NY 11961

CONSTRUCTION HEALTH AND SAFETY PLAN

Site:	**Former Consolidated Freightways Terminal**
Location:	**11 West Street, Brooklyn, NY**
Prepared By:	**ENVIRONMENTAL BUSINESS CONSULTANTS**
Date Prepared:	**February - 2015**
Version:	**1**
Revision:	**0**

Project Description:

Waste types:	Solid, vapor, groundwater
Characteristics:	SVOCs (PAHs) and Metals in historic fill (From grade to depths as great as 5 feet), CVOCs in soil vapor, VOCs and SVOCs in groundwater.
Overall Hazard:	Low

ENVIRONMENTAL BUSINESS CONSULTANTS (EBC) AND EBC'S SUBCONTRACTORS DO NOT GUARANTEE THE HEALTH OR SAFETY OF ANY PERSON ENTERING THIS SITE. DUE TO THE NATURE OF THIS SITE AND THE ACTIVITY OCCURRING THEREON, IT IS NOT POSSIBLE TO DISCOVER, EVALUATE, AND PROVIDE PROTECTION FOR ALL POSSIBLE HAZARDS WHICH MAY BE ENCOUNTERED. STRICT ADHERENCE TO THE HEALTH AND SAFETY GUIDELINES SET FORTH HEREIN WILL REDUCE, BUT NOT ELIMINATE, THE POTENTIAL FOR INJURY AT THIS SITE. THE HEALTH AND SAFETY GUIDELINES IN THIS PLAN WERE PREPARED SPECIFICALLY FOR THIS SITE AND SHOULD NOT BE USED ON ANY OTHER SITE WITHOUT PRIOR RESEARCH AND EVALUATION.

CONSTRUCTION HEALTH AND SAFETY PLAN
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APPENDIX C CHEMICAL HAZARDS
APPENDIX D HOSPITAL INFORMATION, MAP AND FIELD ACCIDENT REPORT

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STATEMENT OF COMMITMENT

This Construction Health and Safety Plan (CHASP) has been prepared to ensure that workers are not exposed to risks from hazardous materials during the Remedial Activities planned for 34-11 Beach Channel Drive, Queens, New York.

This CHASP, which applies to persons present at the site actually or potentially exposed to hazardous materials, describes emergency response procedures for actual and potential chemical hazards. This CHASP is also intended to inform and guide personnel entering the work area or exclusion zone. Persons are to acknowledge that they understand the potential hazards and the contents of this Health and Safety policy by signing off on receipt of their individual copy of the document. The General Contractor and their subcontractors and suppliers are retained as independent contractors and are responsible for ensuring the health and safety of their own employees. The General contractor has the option of adopting this CHASP or providing its own for the planned scope of work under the Remedial Action Plan.

1.0 INTRODUCTION

This document describes the health and safety guidelines developed by Environmental Business Consultants (EBC) for implementation of a Remedial Action Plan at thd Former Consolidated Freightways Terminal Site located at 11 West Street, Brooklyn, New York, to protect on-site personnel, visitors, and the public from physical harm and exposure to hazardous materials or wastes during the removal of underground storage tanks and the excavation and loading of contaminated soil. In accordance with the Occupational Safety and Health Administration (OSHA) 29 CFR Part 1910.120 Hazardous Waste Operations and Emergency Response Final rule, this CHASP, including the attachments, addresses safety and health hazards related to subsurface sample collection activities and is based on the best information available. The CHASP may be revised by EBC at the request of the Developer and/or the New York State Department of Environmental Conservation (NYCDEC) upon receipt of new information regarding site conditions. Changes will be documented by written amendments signed by EBC's Project Manager, site safety officer and/or the EBC Health and Safety Consultant.

1.1 Scope

This CHASP addresses the potential hazards related to the site Remedial Action Plan (RAP). The RAP activities are as described below:

1) Site mobilization of General Contractor (GC) and Subcontractors to install the buildings' foundations.
    a) Excavate historic fill required for construction of the new proposed building.

1.2 Application

The CHASP applies to all personnel involved in the above tasks who wish to gain access to active work areas, including but not limited to:

- General Contractor
- EBC employees and subcontractors;
- Client representatives; and
- Federal, state or local representatives.

1.3 Site Safety Plan Acceptance, Acknowledgment and Amendments

The project superintendent and the site safety officer are responsible for informing personnel (EBC employees and/or owner or owners representatives) entering the work area of the contents of this plan and ensuring that each person signs the safety plan acknowledging the on-site hazards and procedures required to minimize exposure to adverse effects of these hazards. A copy of the Acknowledgement Form is included in **Appendix A**.

Site conditions may warrant an amendment to the CHASP. Amendments to the CHASP are acknowledged by completing forms included in **Appendix B**.

1.4 Key Personnel - Roles and Responsibilities

Personnel responsible for implementing this Construction Health and Safety Plan are:

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PHONE 631.504.6000
FAX 631.924.2870

Name	Title	Address	Contact Numbers
Mr. Robert Bennett	EBC Project Manager	1808 Middle Country Road Ridge, NY 11961	(631) 504-6000
Mr. Kevin Waters	EBC Site Safety Officer	1808 Middle Country Road Ridge, NY 11961	(631) 504-6000

The project manager is responsible for overall project administration and, with guidance from the site safety officer, for supervising the implementation of this CHASP. The site safety officer will conduct daily (tail gate or tool box) safety meetings at the project site and oversee daily safety issues. Each subcontractor and supplier (defined as an OSHA employer) is also responsible for the health and safety of its employees. If there is any dispute about health and safety or project activities, on-site personnel will attempt to resolve the issue. If the issue cannot be resolved at the site, then the project manager will be consulted.

The site safety officer is also responsible for coordinating health and safety activities related to hazardous material exposure on-site. The site safety officer is responsible for the following:

1. Educating personnel about information in this CHASP and other safety requirements to be observed during site operations, including, but not limited to, decontamination procedures, designation of work zones and levels of protection, air monitoring, fit testing, and emergency procedures dealing with fire and first aid.

2. Coordinating site safety decisions with the project manager.

3. Designating exclusion, decontamination and support zones on a daily basis.

4. Monitoring the condition and status of known on-site hazards and maintaining and implementing the air quality monitoring program specified in this CHASP.

5. Maintaining the work zone entry/exit log and site entry/exit log.

6. Maintaining records of safety problems, corrective measures and documentation of chemical exposures or physical injuries (the site safety officer will document these conditions in a bound notebook and maintain a copy of the notebook on-site).

The person who observes safety concerns and potential hazards that have not been addressed in the daily safety meetings should immediately report their observations/concerns to the site safety officer or appropriate key personnel.

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2.0 SITE BACKGROUND AND SCOPE OF WORK

The Site is located at 11 West Street in the Borough of Brooklyn, Kings County, New York City, New York and is identified as Block 2570 Lot 1 on the New York City Tax Map. A United States Geological Survey (USGS) topographical quadrangle map shows the Site location.

The lot is located on the west side of West Street between Quay and Oak Streets. The lot consists of 480 feet of street frontage on West Street, 400 feet of frontage on the East River and is approximately 750 feet deep for a total area of 213,000 square feet (4.88 acres).The property is currently developed with three buildings: a 90 ft x 530 ft single story raised platform, two-sided loading dock and storage building, a 50 ft x 70 ft two story building formerly used for truck maintenance which includes a cellar utilized for the boiler and electrical rooms and a 25 ft x 50 ft building formerly used for truck repair/maintenance. The remainder of the property is an open lot.

2.1 Remedial Investigation

A Remedial Investigation was completed at the Site by FPM Group (FPM) from EBC from March through November 2014. The goals of the Remedial Investigation were to define the nature and extent of contamination in soil, groundwater and any other impacted media; to identify the source(s) of the contamination; to assess the impact of the contamination on public health and/or the environment; and to provide information to support the development of a Remedial Work Plan to address the contamination.

Activities completed under the RI:

- Sampling for non-petroleum contaminants such as pesticides, PCBs and metals in soil and groundwater including the analysis of soil and groundwater samples
- Soil sampling and analysis for petroleum compounds in soil samples from soil boring locations;
- The installation of groundwater monitoring wells
- The collection and analysis of groundwater samples for petroleum compounds;
- The collection of analysis of soil gas and indoor air samples for VOCs from soil gas sampling locations.

The results of sampling performed during the RI identified petroleum impacted soil to a depth of 8 ft in the vicinity of B21 and B22 within the former UST and dispensers area. In addition fill materials containing elevated levels of metals were documented throughout the Site to depths as great as 7 feet below grade.

Groundwater was not found to be impacted at the Site with petroleum or metals related to the historic use of the Site. SVOC's reported in groundwater were limited to those parameters with part per trillion standards and are a function of background conditions throughout the area and the extremely low detection resolution which the laboratory was able to achieve. Metals including sodium, manganese and iron are related to brackish conditions due to the proximity to the East River.

Total petroleum related volatile organic compounds (BTEX) were generally low around the perimeter of and beneath the Site with no apparent correlation with the on-site source.

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Chlorinated VOCs (CVOCs) were reported in all soil gas samples with PCE the most frequently detected compound followed by TCE and TCA with three detections each. PCE and TCE concentrations were generally low, are not related an on-site source and do not represent a potential vapor intrusion concern. TCA was detected in a subslab soil vapor at one location at a level which may require future monitoring.

Qualitative Human Health Exposure Assessment
The qualitative exposure assessment identified potential completed routes of exposure to construction workers and remediation workers through inhalation, ingestion and dermal contact during excavation activities. The Health and Safety Plan prepared for the site identifies such exposures and provides instructions for on-site workers to minimize potential exposure. Occupants in the proposed on-site residential buildings may be exposed to CVOCs originating from an off-site source through the vapor intrusion pathway if preventive measures are not incorporated into the design of the new building.

2.2 Redevelopment Plans

The site is to be redeveloped through the new construction of 4 new mixed-use tower-base buildings. The towers will range from 10 to 40-stories while the base structures will range from 4 to 6 stories. The project includes 50,000 square feet (sf) of commercial (retail) space, 330,000 sf of affordable housing and 1.28 million sf of market-rate apartments. The project will feature a water-front park with public access through walkways extending to West Street.

The buildings will cover approximately 50% of the lot, leaving the remainder of the space for the water-front park, recreation areas, walkways and building grounds. Excavation will be required for the building foundations and to remove contaminated soil. Soil will also need to be imported to the site to raise the grade approximately two-feet across the Site.

2.3 Description of Remedial Action Plan

Site activities included within the Remedial Action Plan that are included within the scope of this CHASP include the following:

The proposed remedial action will consist of:

1. Excavation of soil/fill exceeding Site Specific use SCOs as listed in Table 1 to depths as great as 4 feet below grade;
2. Screening for indications of contamination (by visual means, odor, and monitoring with PID) of all excavated soil during any intrusive Site work;
3. Collection and analysis of end-point samples to evaluate the performance of the remedy with respect to attainment of Track 1 SCOs;
4. Appropriate off-Site disposal of all material removed from the Site in accordance with all Federal, State and local rules and regulations for handling, transport, and disposal;
5. Import of materials to be used for backfill and cover in compliance with: (1) chemical limits and other specifications included in Table 2, (2) all Federal, State and local rules and regulations for handling and transport of material;
6. Installation and operation of subslab depressurization systems beneath all occupied areas of the planned buildings;
7. A composite cover system consisting of the concrete building slab will be constructed;

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8. Implementation of a Site Management Plan (SMP) for long term maintenance of the Engineering Controls;

9. An Environmental Easement will be filed against the Site to ensure implementation of the SMP.

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3.0 HAZARD ASSESSMENT

This section identifies the hazards associated with the proposed scope of work, general physical hazards that can be expected at most sites; and presents a summary of documented or potential chemical hazards at the site. Every effort must be made to reduce or eliminate these hazards. Those that cannot be eliminated must be guarded against using engineering controls and/or personal protective equipment.

3.1 Physical Hazards

3.1.1 Tripping Hazards

An area of risk associated with on-site activities are presented by uneven ground, concrete, curbstones or equipment which may be present at the site thereby creating a potential tripping hazard. During intrusive work, care should be taken to mark or remove any obstacles within the exclusion zone.

3.1.2 Climbing Hazards

During site activities, workers may have to work on excavating equipment by climbing. The excavating contractor will conform with any applicable NIOSH and OSHA requirements or climbing activities.

3.1.3 Cuts and Lacerations

Field activities that involve excavating activities usually involve contact with various types of machinery. A first aid kit approved by the American Red Cross will be available during all intrusive activities.

3.1.4 Lifting Hazards

Improper lifting by workers is one of the leading causes of industrial injuries. Field workers in the excavation program may be required to lift heavy objects. Therefore, all members of the field crew should be trained in the proper methods of lifting heavy objects. All workers should be cautioned against lifting objects too heavy for one person.

3.1.5 Utility Hazards

Before conducting any excavation, the excavation contractor will be responsible for locating and verifying all existing utilities at each excavation.

3.1.6 Traffic Hazards

All traffic, vehicular and pedestrian, shall be maintained and protected at all times consistent with local, state and federal agency regulations regarding such traffic and in accordance with NYCDOT guidelines. The excavation contractor shall carry on his operations without undue interference or delays to traffic. The excavation contractor shall furnish all labor, materials, guards, barricades, signs, lights, and anything else necessary to maintain traffic and to protect his work and the public, during operations.

3.2 Work in Extreme Temperatures

Work under extremely hot or cold weather conditions requires special protocols to minimize the chance that employees will be affected by heat or cold stress.

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3.2.1 Heat Stress

The combination of high ambient temperature, high humidity, physical exertion, and personal protective apparel, which limits the dissipation of body heat and moisture, can cause heat stress.

The following prevention, recognition and treatment strategies will be implemented to protect personnel from heat stress. Personnel will be trained to recognize the symptoms of heat stress and to apply the appropriate treatment.

1. Prevention
    a. Provide plenty of fluids. Available in the support zone will be a 50% solution of fruit punch and water or plain water.
    b. Work in Pairs. Individuals should avoid undertaking any activity alone.
    c. Provide cooling devices. A spray hose and a source of water will be provided to reduce body temperature, cool protective clothing and/or act as a quick-drench shower in case of an exposure incident.
    d. Adjustment of the work schedule. As is practical, the most labor-intensive tasks should be carried out during the coolest part of the day.

2. Recognition and Treatment
    a Heat Rash (or prickly heat):
        Cause: Continuous exposure to hot and humid air, aggravated by chafing clothing.
        Symptoms: Eruption of red pimples around sweat ducts accompanied by intense itching and tingling.
        Treatment: Remove source or irritation and cool skin with water or wet cloths.

    b. Heat Cramps (or heat prostration)
        Cause: Profuse perspiration accompanied by inadequate replenishment of body water and electrolytes.
        Symptoms: Muscular weakness, staggering gait, nausea, dizziness, shallow breathing, pale and clammy skin, approximately normal body temperature.
        Treatment: Perform the following while making arrangement for transport to a medical facility. Remove the worker to a contamination reduction zone. Remove protective clothing. Lie worker down on back in a cool place and raise feet 6 to 12 inches. Keep warm, but loosen all clothing. If conscious, provide sips of salt-water solution, using one teaspoon of salt in 12 ounces of water. Transport to a medical facility.
    c. Heat Stroke
        Cause: Same as heat exhaustion. This is also an extremely serious condition.
        Symptoms: Dry hot skin, dry mouth, dizziness, nausea, headache, rapid pulse.
        Treatment: Cool worker immediately by immersing or spraying with cool water or sponge bare skin after removing protective clothing. Transport to hospital.

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3.2.2 Cold Exposure

Exposure to cold weather, wet conditions and extreme wind-chill factors may result in excessive loss of body heat (hypothermia) and /or frostbite. To guard against cold exposure and to prevent cold injuries, appropriate warm clothing should be worn, warm shelter must be readily available, rest periods should be adjusted as needed, and the physical conditions of on-site field personnel should be closely monitored. Personnel and supervisors working on-site will be made aware of the signs and symptoms of frost bite and hypothermia such as shivering, reduced blood pressure, reduced coordination, drowsiness, impaired judgment, fatigue, pupils dilated but reactive to light and numbing of the toes and fingers.

3.3 Chemical Hazards

Soil collected from the site as part of several subsurface investigations performed at the site have revealed elevated levels of metals and SVOCs in historic fill, elevated levels of VOCs in groundwater and elevated levels of CVOCs in soil vapor.

Metals reported to be present at elevated concentrations in historic fill materials at the Site include the following:

Arsenic	Barium	Cadmium	Chromium	Copper	Mercury	Nickel	Zinc

SVOCs reported to be present at elevated concentrations in historic fill materials at the Site include the following:

Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene
Dibenzo(a,h)anthracene	Fluoranthene	Indeno(1,2,3-cd)pyrene		

CVOCs reported to be present at elevated concentrations in soil vapor at the Site include the following:

1,1,1-Tetrachloroethane

The primary routes of exposure to identified contaminants in soil to on-site construction workers are through inhalation, ingestion and absorption.

Appendix C includes information sheets for all detected chemicals that may be encountered at the site.

3.3.1 Respirable Dust

Dust may be generated from vehicular traffic and/or excavation activities. If visible observation detects elevated levels of dust, a program of wetting will be employed by the site safety officer. If elevated dust levels persist, the site safety office will employ dust monitoring using a particulate monitor (Miniram or equivalent). If monitoring detects concentrations greater than 150 µg/m3 over daily background, the site safety officer will take corrective actions as defined herein, including the use of water for dust suppression and if this is not effective, requiring workers to wear APRs with efficiency particulate air (HEPA) cartridges.

Absorption pathways for dust and direct contact with soils or groundwater will be mitigated with the implementation of latex gloves, hand washing and decontamination exercises when necessary.

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3.3.2 Dust Control and Monitoring During Earthwork

Dust generated during excavation activities or other earthwork may contain contaminants identified in soils at the site. Dust will be controlled by wetting the working surface with water. Calcium chloride may be used if the problem cannot be controlled with water. Air monitoring and dust control techniques are specified in a site specific Dust Control Plan (if applicable). Site workers will not be required to wear APR's unless dust concentrations are consistently over 150 $\mu g/m^3$ over site-specific background in the breathing zone as measured by a dust monitor unless the site safety officer directs workers to wear APRs. The site safety officer will use visible dust as an indicator to implement the dust control plan.

3.3.3 Organic Vapors

Although no VOCs were detected within any of the soil samples collected at the Site, the site safety officer will periodically monitor organic vapors with a Photo-ionization Detector (PID) during excavation activities to determine whether organic vapor concentrations exceed action levels shown in Section 5 and/or the Community Air Monitoring Plan.

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4.0 PERSONAL PROTECTIVE EQUIPMENT

Personal protective equipment (PPE) shall be selected in accordance with the site air monitoring program, OSHA 29 CFR 1910.120(c), (g), and 1910.132. Protective equipment shall be NIOSH approved and respiratory protection shall conform to OSHA 29 CFR Part 1910.133 and 1910.134 specifications; head protection shall conform to 1910.135; eye and face protection shall conform to 1910.133; and foot protection shall conform to 1910.136. The only true difference among the levels of protection from D thru B is the addition of the type of respiratory protection. **It is anticipated that work will be performed in Level D PPE.**

4.1 Level D

Level D PPE shall be donned when the atmosphere contains no known hazards and work functions preclude splashes, immersion, or the potential for inhalation of, or contact with, hazardous concentrations of harmful chemicals. Level D PPE consists of:

- standard work clothes, coveralls, or tyvek, as needed;
- steel toe and steel shank work boots;
- hard hat;
- gloves, as needed;
- safety glasses;
- hearing protection;
- equipment replacements are available as needed.

4.2 Level C

Level C PPE shall be donned when sustained concentrations of measured total organic vapors in the breathing zone exceed background concentrations (using a portable OVA, or equivalent), by more than 5 ppm. The specifications on the APR filters used must be appropriate for contaminants identified or expected to be encountered. Level C PPE shall be donned when the identified contaminants have adequate warning properties and criteria for using APR have been met. Level C PPE consists of:

- chemical resistant or coated tyvek coveralls;
- steel-toe and steel-shank workboots;
- chemical resistant overboots or disposable boot covers;
- disposable inner gloves (surgical gloves);
- disposable outer gloves;
- full face APR fitted with organic vapor/dust and mist filters or filters appropriate for the identified or expected contaminants;
- hard hat;
- splash shield, as needed; and,
- ankles/wrists taped with duct tape.

The site safety officer will verify if Level C is appropriate by checking organic vapor concentrations using compound and/or class-specific detector tubes.

The exact PPE ensemble is decided on a site-by-site basis by the Site Safety Officer with the intent to provide the most protective and efficient worker PPE.

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4.3 Activity-Specific Levels of Personal Protection

The required level of PPE is activity-specific and is based on air monitoring results (Section 4.0) and properties of identified or expected contaminants. **It is expected that site work will be performed in Level D.** If air monitoring results indicate the necessity to upgrade the level of protection, engineering controls (i.e. Facing equipment away from the wind and placing site personnel upwind of excavations, active venting, etc.) will be implemented before requiring the use of respiratory protection.

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5.0 AIR MONITORING AND ACTION LEVELS

29 CFR 1910.120(h) specifies that monitoring shall be performed where there may be a question of employee exposure to hazardous concentrations of hazardous substances in order to assure proper selection of engineering controls, work practices and personal protective equipment so that employees are not exposed to levels which exceed permissible exposure limits, or published exposure levels if there are no permissible exposure limits, for hazardous substances.

5.1 Air Monitoring Requirements

If excavation work is performed, air will be monitored for VOCs with a portable ION Science 3000EX photoionization detector, or the equivalent. If necessary, Lower Explosive Limit (LEL) and oxygen will be monitored with a Combustible Gas Indicator (CGI). If appropriate, fugitive dust will be monitored using a MiniRam Model PDM-3 aerosol monitor. Air will be monitored when any of the following conditions apply:

- initial site entry;
- during any work where a potential IDLH condition or flammable atmosphere could develop;
- excavation work begins on another portion of the site;
- contaminants, other than those previously identified, have been discovered;
- each time a different task or activity is initiated;
- during trenching and/or excavation work.

The designated site safety officer will record air monitoring data and ensure that air monitoring instruments are calibrated and maintained in accordance with manufacturer's specifications. Instruments will be zeroed daily and checked for accuracy. Monitoring results will be recorded in a field notebook and will be transferred to instrument reading logs.

5.2 Work Stoppage Responses

The following responses will be initiated whenever one or more of the action levels necessitating a work stoppage are exceeded:

1 The SSO will be consulted immediately
2 All personnel (except as necessary for continued monitoring and contaminant migration, if applicable) will be cleared from the work area (eg from the exclusion zone).
3 Monitoring will be continued until intrusive work resumes.

5.3 Action Levels During Excavation Activities

Instrument readings will be taken in the breathing zone above the excavation pit unless otherwise noted. Each action level is independent of all other action levels in determining responses.

Organic Vapors (PID)	LEL %	Responses
0-1 ppm above background	0%	• Continue excavating • Level D protection • Continue monitoring every 10 minutes
1-5 ppm Above Background, Sustained Reading	1-10%	• Continue excavating • Go to Level C protection or employ

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		engineering controls • Continue monitoring every 10 minutes
5-25 ppm Above Background, Sustained Reading	10-20%	• Discontinue excavating, unless PID is only action level exceeded. • Level C protection or employ engineering controls • Continue monitoring for organic vapors 200 ft downwind • Continuous monitoring for LEL at excavation pit
>25 ppm Above Background, Sustained Reading	>20%	• Discontinue excavating • Withdraw from area, shut off all engine ignition sources. • Allow pit to vent • Continuous monitoring for organic vapors 200 ft downwind.

Notes: Air monitoring will occur in the breathing zone 30 inches above the excavation pit. Readings may also be taken in the excavation pit but will not be used for action levels.

If action levels for any one of the monitoring parameters are exceeded, the appropriate responses listed in the right hand column should be taken. If instrument readings do not return to acceptable levels after the excavation pit has been vented for a period of greater than one-half hour, a decision will then be made whether or not to seal the pit with suppressant foam.

If, during excavation activities, downwind monitoring PID readings are greater than 5 ppm above background for more than one-half hour, excavation will stop until sustained levels are less then 5 ppm (see Community Air Monitoring Plan).

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6.0 SITE CONTROL

6.1 Work Zones

The primary purpose of site controls is to establish the perimeter of a hazardous area, to reduce the migration of contaminants into clean areas, and to prevent access or exposure to hazardous materials by unauthorized persons. When operations are to take place involving hazardous materials, the site safety officer will establish an exclusion zone, a decontamination zone, and a support zone. These zones "float" (move around the site) depending on the tasks being performed on any given day. The site safety officer will outline these locations before work begins and when zones change. The site safety officer records this information in the site log book.

Due to the dimensions of the Site and the work area, it is expected that an exclusion zone will include the entire fenced area with the exception of the construction entrance area, which will serve as the decontamination zone. A support zone if needed will be located outside of the fenced area. All onsite workers who will come into contact with hazardous materials must provide evidence of OSHA 24 or 40-hour Hazardous Waste Operations and Emergency Response Operations training to conduct work within the exclusion zone established by the site safety officer. The exclusion zone is defined by the site safety officer but will typically be a 50-foot area around work activities. Gross decontamination (as determined by the site Health and Safety Officer) is conducted in the exclusion zone; all other decontamination is performed in the decontamination zone or trailer, if provided.

Protective equipment is removed in the decontamination zone. Disposable protective equipment is stored in receptacles staged in the decontamination zone, and non-disposable equipment is decontaminated. All personnel and equipment exit the exclusion zone through the decontamination zone. If a decontamination trailer is provided the first aid equipment, an eye wash unit, and drinking water are kept in the decontamination trailer.

The support zone is used for vehicle parking, daily safety meetings, and supply storage. Eating, drinking, and smoking are permitted only in the support zone. When a decontamination trailer is not provided, the eye wash unit, first aid equipment, and drinking water are kept at a central location designated by the site safety officer.

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7.0 CONTINGENCY PLAN/EMERGENCY RESPONSE PLAN

Site personnel must be prepared in the event of an emergency. Emergencies can take many forms: illnesses, injuries, chemical exposure, fires, explosions, spills, leaks, releases of harmful contaminants, or sudden changes in the weather.

Emergency telephone numbers and a map to the hospital will be posted in the command post. Site personnel should be familiar with the emergency procedures, and the locations of site safety, first aid, and communication equipment.

7.1 Emergency Equipment On-site

Private telephones:	Site personnel.
Two-way radios:	Site personnel where necessary.
Emergency Alarms:	On-site vehicle horns*.
First aid kits:	On-site, in vehicles or office.
Fire extinguisher:	On-site, in office or on equipment.

* Horns: Air horns will be supplied to personnel at the discretion of the project superintendent or site safety officer.

7.2 Emergency Telephone Numbers

General Emergencies	911
NYC Police Department	911
NYC Fire Department	911
Woodhull Medical Center	(718) 963-800
NYSDEC Spills Hotline	1-800-457-7362
NYSDEC Project Manager	(718) 482-4078
NYSDOH Project Manager	(518) 402-7860
NYC Department of Health	(212) 676-2400
National Response Center	1-800-424-8802
Poison Control	1-800-222-1222
Project Manager	(631) 504-6000
Site Safety Officer	(631) 504-6000

7.3 Personnel Responsibilities During an Emergency

The project manager is primarily responsible for responding to and correcting any emergency situations. However, in the absence of the project manager, the site safety officer shall act as the project manager's on-site designee and perform the following tasks:

- Take appropriate measures to protect personnel including: withdrawal from the exclusion zone, evacuate and secure the site, or upgrade/downgrade the level of protective clothing and respiratory protection;

- Ensure that appropriate federal, state, and local agencies are informed and emergency response plans are coordinated. In the event of fire or explosion, the local fire department should be summoned immediately. If toxic materials are released to the air, the local authorities should be informed in order to assess the need for evacuation;

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- Ensure appropriate decontamination, treatment, or testing for exposed or injured personnel;

- Determine the cause of incidents and make recommendations to prevent recurrence; and,

- Ensure that all required reports have been prepared.

The following key personnel are planned for this project:

- Project Manager — Mr. Robert Bennett (631) 504-6000
- Site Safety Officer — Mr. Kevin Waters (631) 504-6000

7.4 Medical Emergencies

A person who becomes ill or injured in the exclusion zone will be decontaminated to the maximum extent possible. If the injury or illness is minor, full decontamination will be completed and first aid administered prior to transport. First aid will be administered while waiting for an ambulance or paramedics. A Field Accident Report (**Appendix D**) must be filled out for any injury.

A person transporting an injured/exposed person to a clinic or hospital for treatment will take the directions to the hospital (**Appendix D**).and information on the chemical(s) to which they may have been exposed (**Appendix C**).

7.5 Fire or Explosion

In the event of a fire or explosion, the local fire department will be summoned immediately. The site safety officer or his designated alternate will advise the fire commander of the location, nature and identification of the hazardous materials on-site. If it is safe to do so, site personnel may:

- use fire fighting equipment available on site; or,
- remove or isolate flammable or other hazardous materials that may contribute to the fire.

7.6 Evacuation Routes

Evacuation routes established by work area locations for each site will be reviewed prior to commencing site operations. As the work areas change, the evacuation routes will be altered accordingly, and the new route will be reviewed.

Under extreme emergency conditions, evacuation is to be immediate without regard for equipment. The evacuation signal will be a continuous blast of a vehicle horn, if possible, and/or by verbal/radio communication. When evacuating the site, personnel will follow these instructions:

- Keep upwind of smoke, vapors, or spill location.
- Exit through the decontamination corridor if possible.
- If evacuation through the decontamination corridor is not possible, personnel should remove contaminated clothing once they are in a safe location and leave it near the exclusion zone or in a safe place.

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- The site safety officer will conduct a head count to ensure that all personnel have been evacuated safely. The head count will be correlated to the site and/or exclusion zone entry/exit log.
- If emergency site evacuation is necessary, all personnel are to escape the emergency situation and decontaminate to the maximum extent practical.

7.7 Spill Control Procedures

Spills associated with site activities may be attributed to project equipment and include gasoline, diesel and hydraulic oil. In the event of a leak or a release, site personnel will inform their supervisor immediately, locate the source of spillage and stop the flow if it can be done safely. A spill containment kit including absorbent pads, booms and/or granulated speedy dry absorbent material will be available to site personnel to facilitate the immediate recovery of the spilled material. Daily inspections of site equipment components including hydraulic lines, fuel tanks, etc. will be performed by their respective operators as a preventative measure for equipment leaks and to ensure equipment soundness. In the event of a spill, site personnel will immediately notify the NYSDEC (1-800-457-7362), and a spill number will be generated.

7.8 Vapor Release Plan

If work zone organic vapor (excluding methane) exceeds 5 ppm, then a downwind reading will be made either 200 feet from the work zone or at the property line, whichever is closer. If readings at this location exceed 5 ppm over background, the work will be stopped.

If 5 ppm of VOCs are recorded over background on a PID at the property line, then an off-site reading will be taken within 20 feet of the nearest residential or commercial property, whichever is closer. If efforts to mitigate the emission source are unsuccessful for 30 minutes, then the designated site safety officer will:

- contact the local police;
- continue to monitor air every 30 minutes, 20 feet from the closest off-site property. If two successive readings are below 5 ppm (non-methane), off-site air monitoring will be halted.
- All property line and off site air monitoring locations and results associated with vapor releases will be recorded in the site safety log book.

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APPENDIX A

SITE SAFETY ACKNOWLEDGEMENT FORM

DAILY BREIFING SIGN-IN SHEET

Date:_____ Person Conducting Briefing:_____

Project Name and Location:_____

1. AWARENESS (topics discussed, special safety concerns, recent incidents, etc…):

_____

_____

_____

_____

2. OTHER ISSUES (HASP changes, attendee comments, etc…):

_____

_____

_____

3. ATTENDEES (Print Name):

1.	11.
2.	12.
3.	13.
4.	14.
5.	15.
6.	16.
7.	17.
8.	18.
9.	19.
10.	20.

APPENDIX B

SITE SAFETY PLAN AMENDMENTS

SITE SAFETY PLAN AMENDMENT FORM

Site Safety Plan Amendment #: _____

Site Name: _____

Reason for Amendment: _____

_____

_____

_____

Alternative Procedures: _____

_____

_____

_____

Required Changes in PPE: _____

_____

_____

_____

_____ _____

Project Superintendent (signature) **Date**

_____ _____

Health and Safety Consultant (signature) **Date**

_____ _____

Site Safety Officer (signature) **Date**

APPENDIX C

CHEMICAL HAZARDS

CHEMICAL HAZARDS

The attached International Chemical Safety Cards are provided for contaminants of concern that have been identified in soils and/or groundwater at the site.

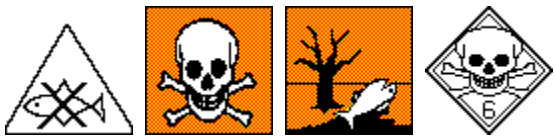
International Chemical Safety Cards

ARSENIC

ICSC: 0013

Grey arsenic
As
Atomic mass: 74.9

ICSC # 0013
CAS # 7440-38-2
RTECS # CG0525000
UN # 1558
EC # 033-001-00-X
October 18, 1999 Peer reviewed



TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Combustible. Gives off irritating or toxic fumes (or gases) in a fire.	NO open flames. NO contact with strong oxidizers. NO contact with hot surfaces.	Powder, water spray, foam, carbon dioxide.
EXPLOSION	Risk of fire and explosion is slight when exposed to hot surfaces or flames in the form of fine powder or dust.	Prevent deposition of dust; closed system, dust explosion-proof electrical equipment and lighting.	
EXPOSURE		PREVENT DISPERSION OF DUST! AVOID ALL CONTACT! AVOID EXPOSURE OF (PREGNANT) WOMEN!	IN ALL CASES CONSULT A DOCTOR!
•INHALATION	Cough. Sore throat. Shortness of breath. Weakness. See Ingestion.	Closed system and ventilation.	Fresh air, rest. Artificial respiration may be needed. Refer for medical attention.
•SKIN	Redness.	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse skin with plenty of water or shower.
•EYES	Redness.	Face shield or eye protection in combination with breathing protection if powder.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION	Abdominal pain. Diarrhoea. Nausea. Vomiting. Burning sensation in the throat and chest. Shock or collapse. Unconsciousness.	Do not eat, drink, or smoke during work. Wash hands before eating.	Rinse mouth. Induce vomiting (ONLY IN CONSCIOUS PERSONS!). Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Evacuate danger area! Sweep spilled substance into sealable containers. Carefully collect remainder, then remove to safe place. Chemical protection suit including self-contained breathing apparatus. Do NOT let this chemical enter the environment.	Separated from strong oxidants, acids, halogens, food and feedstuffs. Well closed.	Do not transport with food and feedstuffs. Marine pollutant. T symbol N symbol R: 23/25-50/53 S: 1/2-20/21-28-45-60-61 UN Hazard Class: 6.1 UN Packing Group: II

SEE IMPORTANT INFORMATION ON BACK

International Chemical Safety Cards

ARSENIC

ICSC: 0013

I M P O R T A N T D A T A

PHYSICAL STATE; APPEARANCE:
ODOURLESS, BRITTLE, GREY, METALLIC-LOOKING CRYSTALS.

PHYSICAL DANGERS:

CHEMICAL DANGERS:
Upon heating, toxic fumes are formed. Reacts violently with strong oxidants and halogens, causing fire and explosion hazard. Reacts with acids to produce

OCCUPATIONAL EXPOSURE LIMITS:
TLV: 0.01 mg/m³ as TWA A1 (confirmed human carcinogen); BEI issued (ACGIH 2004).
MAK:
Carcinogen category: 1; Germ cell mutagen group: 3A; (DFG 2004).
OSHA PEL: 1910.1018 TWA 0.010 mg/m^3
NIOSH REL: Ca C 0.002 mg/m^3 15-minute See Appendix A
NIOSH IDLH: Ca 5 mg/m^3 (as As) See: 7440382

ROUTES OF EXPOSURE:
The substance can be absorbed into the body by inhalation of its aerosol and by ingestion.

INHALATION RISK:
Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly, when dispersed.

EFFECTS OF SHORT-TERM EXPOSURE:
The substance is irritating to the eyes the skin and the respiratory tract. The substance may cause effects on the gastrointestinal tract cardiovascular system central nervous system kidneys , resulting in severe gastroenteritis, loss of fluid, and electrolytes, cardiac disorders shock convulsions and kidney impairment Exposure above the OEL may result in death. The effects may be delayed. Medical observation is indicated.

EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:
Repeated or prolonged contact with skin may cause dermatitis. The substance may have effects on the mucous membranes, skin, peripheral nervous system liver bone marrow , resulting in pigmentation disorders, hyperkeratosis, perforation of nasal septum, neuropathy, liver impairment anaemia This substance is carcinogenic to humans. Animal tests show that this substance possibly causes toxicity to human reproduction or development.

PHYSICAL PROPERTIES

Sublimation point: 613°C
Density: 5.7 g/cm^3

Solubility in water:
none

ENVIRONMENTAL DATA

The substance is toxic to aquatic organisms. It is strongly advised that this substance does not enter the environment.

N O T E S

The substance is combustible but no flash point is available in literature. Depending on the degree of exposure, periodic medical examination is suggested. Do NOT take working clothes home. Refer also to cards for specific arsenic compounds, e.g., Arsenic pentoxide (ICSC 0377), Arsenic trichloride (ICSC 0221), Arsenic trioxide (ICSC 0378), Arsine (ICSC 0222).

Transport Emergency Card: TEC (R)-61GT5-II

ADDITIONAL INFORMATION

IMPORTANT LEGAL NOTICE:

International Chemical Safety Cards

BARIUM SULFATE

ICSC: 0827

Barium sulphate
Blanc fixe
Artificial barite
$BaSO_4$
Molecular mass: 233.43

ICSC # 0827
CAS # 7727-43-7
RTECS # CR0600000
October 20, 1999 Peer reviewed

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Not combustible. Gives off irritating or toxic fumes (or gases) in a fire.		In case of fire in the surroundings: use appropriate extinguishing media.
EXPLOSION			
EXPOSURE		PREVENT DISPERSION OF DUST!	
•INHALATION		Local exhaust or breathing protection.	Fresh air, rest.
•SKIN		Protective gloves.	Remove contaminated clothes. Rinse skin with plenty of water or shower.
•EYES		Safety spectacles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION		Do not eat, drink, or smoke during work.	Rinse mouth.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Sweep spilled substance into containers; if appropriate, moisten first to prevent dusting. Personal protection: P1 filter respirator for inert particles.		R: S:

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0827

Prepared in the context of cooperation between the International Programme on Chemical Safety & the Commission of the European Communities (C) IPCS CEC 1994. No modifications to the International version have been made except to add the OSHA PELs, NIOSH RELs and NIOSH IDLH values.

International Chemical Safety Cards

BARIUM SULFATE

ICSC: 0827

IMPORTANT DATA	**PHYSICAL STATE; APPEARANCE:** ODOURLESS TASTELESS, WHITE OR YELLOWISH CRYSTALS OR POWDER. **PHYSICAL DANGERS:** **CHEMICAL DANGERS:** Reacts violently with aluminium powder. **OCCUPATIONAL EXPOSURE LIMITS:** TLV: 10 mg/m³ as TWA; (ACGIH 2004). MAK: (Inhalable fraction) 4 mg/m³; (Respirable fraction) 1.5 mg/m³; (DFG 2004). OSHA PEL†: TWA 15 mg/m^3 (total) TWA 5 mg/m^3 (resp) NIOSH REL: TWA 10 mg/m^3 (total) TWA 5 mg/m^3 (resp) NIOSH IDLH: N.D. See: IDLH INDEX **ROUTES OF EXPOSURE:** The substance can be absorbed into the body by inhalation of its aerosol. **INHALATION RISK:** Evaporation at 20°C is negligible; a nuisance-causing concentration of airborne particles can, however, be reached quickly. **EFFECTS OF SHORT-TERM EXPOSURE:** **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:** Lungs may be affected by repeated or prolonged exposure to dust particles , resulting in baritosis (a form of benign pneumoconiosis).
PHYSICAL PROPERTIES	Melting point (decomposes): 1600°C Density: 4.5 g/cm³ Solubility in water: none
ENVIRONMENTAL DATA	

NOTES

Occurs in nature as the mineral barite; also as barytes, heavy spar. Card has been partly updated in October 2005. See section Occupational Exposure Limits.

ADDITIONAL INFORMATION

International Chemical Safety Cards

CADMIUM

ICSC: 0020

Cd
Atomic mass: 112.4

ICSC # 0020
CAS # 7440-43-9
RTECS # EU9800000
UN # 2570
EC # 048-002-00-0
April 22, 2005 Peer reviewed

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Flammable in powder form and spontaneously combustible in pyrophoric form. Gives off irritating or toxic fumes (or gases) in a fire.	NO open flames, NO sparks, and NO smoking. NO contact with heat or acid(s).	Dry sand. Special powder. NO other agents.
EXPLOSION	Finely dispersed particles form explosive mixtures in air.	Prevent deposition of dust; closed system, dust explosion-proof electrical equipment and lighting.	
EXPOSURE		PREVENT DISPERSION OF DUST! AVOID ALL CONTACT!	IN ALL CASES CONSULT A DOCTOR!
•**INHALATION**	Cough. Sore throat.	Local exhaust or breathing protection.	Fresh air, rest. Refer for medical attention.
•**SKIN**		Protective gloves.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•**EYES**	Redness. Pain.	Safety goggles or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•**INGESTION**	Abdominal pain. Diarrhoea. Headache. Nausea. Vomiting.	Do not eat, drink, or smoke during work.	Rest. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Evacuate danger area! Personal protection: chemical protection suit including self-contained breathing apparatus. Remove all ignition sources. Sweep spilled substance into containers. Carefully collect remainder, then remove to safe place.	Fireproof. Dry. Keep under inert gas. Separated from igntion sources, oxidants acids, food and feedstuffs	Airtight. Unbreakable packaging; put breakable packaging into closed unbreakable container. Do not transport with food and feedstuffs. Note: E T+ symbol N symbol R: 45-26-48/23/25-62-63-68-50/53 S: 53-45-60-61 UN Hazard Class: 6.1

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0020

Prepared in the context of cooperation between the International Programme on Chemical Safety & the Commission of the European Communities (C) IPCS CEC 1994. No modifications to the International version have been made except to add the OSHA PELs, NIOSH RELs and NIOSH IDLH values.

International Chemical Safety Cards

CADMIUM

ICSC: 0020

I M P O R T A N T D A T A

PHYSICAL STATE; APPEARANCE:
SOFT BLUE-WHITE METAL LUMPS OR GREY POWDER. MALLEABLE. TURNS BRITTLE ON EXPOSURE TO 80°C AND TARNISHES ON EXPOSURE TO MOIST AIR.

PHYSICAL DANGERS:
Dust explosion possible if in powder or granular form, mixed with air.

CHEMICAL DANGERS:
Reacts with acids forming flammable/explosive gas (hydrogen - see ICSC0001.) Dust reacts with oxidants, hydrogen azide, zinc, selenium or tellurium , causing fire and explosion hazard.

OCCUPATIONAL EXPOSURE LIMITS:
TLV: (Total dust) 0.01 mg/m³
(Respirable fraction)
0.002 mg/m³ as TWA A2 (suspected human carcinogen); BEI issued (ACGIH 2005).
MAK: skin absorption (H);
Carcinogen category: 1; Germ cell mutagen group: 3A; (DFG 2004).
OSHA PEL*: 1910.1027 TWA 0.005 mg/m^3 *Note: The PEL applies to all Cadmium compounds (as Cd).
NIOSH REL*: Ca See Appendix A *Note: The REL applies to all Cadmium compounds (as Cd).
NIOSH IDLH: Ca 9 mg/m^3 (as Cd) See: IDLH INDEX

ROUTES OF EXPOSURE:
The substance can be absorbed into the body by inhalation of its aerosol and by ingestion.

INHALATION RISK:
A harmful concentration of airborne particles can be reached quickly when dispersed, especially if powdered.

EFFECTS OF SHORT-TERM EXPOSURE:
The fume is irritating to the respiratory tract Inhalation of fume may cause lung oedema (see Notes). Inhalation of fumes may cause metal fume fever. The effects may be delayed. Medical observation is indicated.

EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:
Lungs may be affected by repeated or prolonged exposure to dust particles. The substance may have effects on the kidneys , resulting in kidney impairment This substance is carcinogenic to humans.

PHYSICAL PROPERTIES

Boiling point: 765°C
Melting point: 321°C
Density: 8.6
g/cm3

Solubility in water: none
Auto-ignition temperature: (cadmium metal dust) 250°C

ENVIRONMENTAL DATA

N O T E S

Reacts violently with fire extinguishing agents such as water,foam,carbon dioxideand halons. Depending on the degree of exposure, periodic medical examination is indicated. The symptoms of lung oedema often do not become manifest until a few hours have passed and they are aggravated by physical effort. Rest and medical observation are therefore essential. Do NOT take working clothes home. Cadmium also exists in a pyrophoric form (EC No. 048-011-00-X), which bears the additional EU labelling symbol F, R phrase 17, and S phrases 7/8 and 43. UN numbers and packing group will vary according to the physical form of the substance.

ADDITIONAL INFORMATION

International Chemical Safety Cards

CHROMIUM

ICSC: 0029

Chrome
Cr
Atomic mass: 52.0
(powder)

ICSC # 0029
CAS # 7440-47-3
RTECS # GB4200000
October 27, 2004 Peer reviewed

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Combustible under specific conditions.	No open flames if in powder form.	In case of fire in the surroundings: use appropriate extinguishing media.
EXPLOSION		Prevent deposition of dust; closed system, dust explosion-proof electrical equipment and lighting.	
EXPOSURE		PREVENT DISPERSION OF DUST!	
•INHALATION	Cough.	Local exhaust or breathing protection.	Fresh air, rest.
•SKIN		Protective gloves.	Remove contaminated clothes. Rinse skin with plenty of water or shower.
•EYES	Redness.	Safety goggles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION		Do not eat, drink, or smoke during work.	Rinse mouth.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Sweep spilled substance into containers; if appropriate, moisten first to prevent dusting. Personal protection: P2 filter respirator for harmful particles.		R: S:

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0029

International Chemical Safety Cards

CHROMIUM

ICSC: 0029

I

M

P

PHYSICAL STATE; APPEARANCE:
GREY POWDER

PHYSICAL DANGERS:
Dust explosion possible if in powder or granular form, mixed with air.

ROUTES OF EXPOSURE:

INHALATION RISK:
A harmful concentration of airborne particles can be reached quickly when dispersed.

O R T A N T D A T A	**CHEMICAL DANGERS:** Chromium is a catalytic substance and may cause reaction in contact with many organic and inorganic substances , causing fire and explosion hazard. **OCCUPATIONAL EXPOSURE LIMITS:** TLV: (as Cr metal, Cr(III) compounds) 0.5 mg/m³ as TWA A4 (ACGIH 2004). MAK not established. OSHA PEL*: TWA 1 mg/m^3 See Appendix C *Note: The PEL also applies to insoluble chromium salts. NIOSH REL: TWA 0.5 mg/m^3 See Appendix C NIOSH IDLH: 250 mg/m^3 (as Cr) See: 7440473 **EFFECTS OF SHORT-TERM EXPOSURE:** May cause mechanical irritation tothe eyesandthe respiratory tract. **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:**
PHYSICAL PROPERTIES	Boiling point: 2642°C Melting point: 1900°C Density: 7.15 g/cm³ Solubility in water: none
ENVIRONMENTAL DATA	

N O T E S

The surface of the chromium particles is oxidized to chromium(III)oxide in air. See ICSC 1531 Chromium(III) oxide.

ADDITIONAL INFORMATION

ICSC: 0029 **CHROMIUM**

IMPORTANT LEGAL NOTICE:	Neither NIOSH, the CEC or the IPCS nor any person acting on behalf of NIOSH, the CEC or the IPCS is responsible for the use which might be made of this information. This card contains the collective views of the IPCS Peer Review Committee and may not reflect in all cases all the detailed requirements included in national legislation on the subject. The user should verify compliance of the cards with the relevant legislation in the country of use. The only modifications made to produce the U.S. version is inclusion of the OSHA PELs, NIOSH RELs and NIOSH IDLH values.

International Chemical Safety Cards

COPPER

ICSC: 0240

Cu
(powder)

ICSC # 0240
CAS # 7440-50-8
RTECS # GL5325000
September 24, 1993 Validated

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Combustible.	NO open flames.	Special powder, dry sand, NO other agents.
EXPLOSION			
EXPOSURE		PREVENT DISPERSION OF DUST!	
•INHALATION	Cough. Headache. Shortness of breath. Sore throat.	Local exhaust or breathing protection.	Fresh air, rest. Refer for medical attention.
•SKIN	Redness.	Protective gloves.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES	Redness. Pain.	Safety goggles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION	Abdominal pain. Nausea. Vomiting.	Do not eat, drink, or smoke during work.	Rinse mouth. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Sweep spilled substance into containers. Carefully collect remainder. Then remove to safe place. (Extra personal protection: P2 filter respirator for harmful particles).	Separated from - See Chemical Dangers.	R: S:

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0240

International Chemical Safety Cards

COPPER

ICSC: 0240

I

M

P

PHYSICAL STATE; APPEARANCE:
RED POWDER, TURNS GREEN ON EXPOSURE TO MOIST AIR.

PHYSICAL DANGERS:

CHEMICAL DANGERS:

ROUTES OF EXPOSURE:
The substance can be absorbed into the body by inhalation and by ingestion.

INHALATION RISK:
Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly when dispersed.

O **R** **T** **A** **N** **T** **D** **A** **T** **A**	Shock-sensitive compounds are formed with acetylenic compounds, ethylene oxides and azides. Reacts with strong oxidants like chlorates, bromates and iodates, causing explosion hazard. **OCCUPATIONAL EXPOSURE LIMITS:** TLV: 0.2 mg/m³ fume (ACGIH 1992-1993). TLV (as Cu, dusts & mists): 1 mg/m³ (ACGIH 1992-1993). Intended change 0.1 mg/m³ Inhal., A4 (not classifiable as a human carcinogen); MAK: 0.1 mg/m³ (Inhalable fraction) Peak limitation category: II(2) Pregnancy risk group: D (DFG 2005). OSHA PEL*: TWA 1 mg/m^3 *Note: The PEL also applies to other copper compounds (as Cu) except copper fume. NIOSH REL*: TWA 1 mg/m^3 *Note: The REL also applies to other copper compounds (as Cu) except Copper fume. NIOSH IDLH: 100 mg/m^3 (as Cu) See: 7440508	**EFFECTS OF SHORT-TERM EXPOSURE:** Inhalation of fumes may cause metal fume fever. See Notes. **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:** Repeated or prolonged contact may cause skin sensitization.
PHYSICAL PROPERTIES	Boiling point: 2595°C Melting point: 1083°C Relative density (water = 1): 8.9	Solubility in water: none
ENVIRONMENTAL DATA		

N O T E S

The symptoms of metal fume fever do not become manifest until several hours.

ADDITIONAL INFORMATION

ICSC: 0240 **COPPER**

IMPORTANT LEGAL NOTICE:	Neither NIOSH, the CEC or the IPCS nor any person acting on behalf of NIOSH, the CEC or the IPCS is responsible for the use which might be made of this information. This card contains the collective views of the IPCS Peer Review Committee and may not reflect in all cases all the detailed requirements included in national legislation on the subject. The user should verify compliance of the cards with the relevant legislation in the country of use. The only modifications made to produce the U.S. version is inclusion of the OSHA PELs, NIOSH RELs and NIOSH IDLH values.

International Chemical Safety Cards

LEAD

ICSC: 0052

Lead metal
Plumbum
Pb
Atomic mass: 207.2
(powder)

ICSC # 0052
CAS # 7439-92-1
RTECS # OF7525000
October 08, 2002 Peer reviewed

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Not combustible. Gives off irritating or toxic fumes (or gases) in a fire.		In case of fire in the surroundings: use appropriate extinguishing media.
EXPLOSION	Finely dispersed particles form explosive mixtures in air.	Prevent deposition of dust; closed system, dust explosion-proof electrical equipment and lighting.	
EXPOSURE	See EFFECTS OF LONG-TERM OR REPEATED EXPOSURE.	PREVENT DISPERSION OF DUST! AVOID EXPOSURE OF (PREGNANT) WOMEN!	
•INHALATION		Local exhaust or breathing protection.	Fresh air, rest.
•SKIN		Protective gloves.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES		Safety spectacles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION	Abdominal pain. Nausea. Vomiting.	Do not eat, drink, or smoke during work. Wash hands before eating.	Rinse mouth. Give plenty of water to drink. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Sweep spilled substance into containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place. Do NOT let this chemical enter the environment. Personal protection: P3 filter respirator for toxic particles.	Separated from food and feedstuffs incompatible materials See Chemical Dangers.	R: S:

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0052

Prepared in the context of cooperation between the International Programme on Chemical Safety & the Commission of the European Communities (C) IPCS CEC 1994. No modifications to the International version have been made except to add the OSHA PELs, NIOSH RELs and NIOSH IDLH values.

International Chemical Safety Cards

LEAD

ICSC: 0052

I M P O R T A N T D A T A

PHYSICAL STATE; APPEARANCE:
BLUISH-WHITE OR SILVERY-GREY SOLID IN VARIOUS FORMS. TURNS TARNISHED ON EXPOSURE TO AIR.

PHYSICAL DANGERS:
Dust explosion possible if in powder or granular form, mixed with air.

CHEMICAL DANGERS:
On heating, toxic fumes are formed. Reacts with oxidants. Reacts with hot concentrated nitric acid, boiling concentrated hydrochloric acid and sulfuric acid. Attacked by pure water and by weak organic acids in the presence of oxygen.

OCCUPATIONAL EXPOSURE LIMITS:
TLV: 0.05 mg/m³ A3 (confirmed animal carcinogen with unknown relevance to humans); BEI issued (ACGIH 2004).
MAK:
Carcinogen category: 3B; Germ cell mutagen group: 3A; (DFG 2004).
EU OEL: as TWA 0.15 mg/m³ (EU 2002).
OSHA PEL*: 1910.1025 TWA 0.050 mg/m^3 See Appendix C *Note: The PEL also applies to other lead compounds (as Pb) -- see Appendix C.
NIOSH REL*: TWA 0.050 mg/m^3 See Appendix C
*Note: The REL also applies to other lead compounds (as Pb) -- see Appendix C.
NIOSH IDLH: 100 mg/m^3 (as Pb) See: 7439921

ROUTES OF EXPOSURE:
The substance can be absorbed into the body by inhalation and by ingestion.

INHALATION RISK:
A harmful concentration of airborne particles can be reached quickly when dispersed, especially if powdered.

EFFECTS OF SHORT-TERM EXPOSURE:

EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:
The substance may have effects on the blood bone marrow central nervous system peripheral nervous system kidneys , resulting in anaemia, encephalopathy (e.g., convulsions), peripheral nerve disease, abdominal cramps and kidney impairment. Causes toxicity to human reproduction or development.

PHYSICAL PROPERTIES		
	Boiling point: 1740°C	Density: 11.34 g/cm3
	Melting point: 327.5°C	Solubility in water: none

ENVIRONMENTAL DATA	
	Bioaccumulation of this chemical may occur in plants and in mammals. It is strongly advised that this substance does not enter the environment. 

N O T E S

Depending on the degree of exposure, periodic medical examination is suggested. Do NOT take working clothes home.

Transport Emergency Card: TEC (R)-51S1872

ADDITIONAL INFORMATION

ICSC: 0052 **LEAD**

International Chemical Safety Cards

MERCURY

ICSC: 0056

Quicksilver
Liquid silver
Hg
Atomic mass: 200.6

ICSC # 0056
CAS # 7439-97-6
RTECS # OV4550000
UN # 2809
EC # 080-001-00-0
April 22, 2004 Peer reviewed

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Not combustible. Gives off irritating or toxic fumes (or gases) in a fire.		In case of fire in the surroundings: use appropriate extinguishing media.
EXPLOSION	Risk of fire and explosion.		In case of fire: keep drums, etc., cool by spraying with water.
EXPOSURE		STRICT HYGIENE! AVOID EXPOSURE OF (PREGNANT) WOMEN! AVOID EXPOSURE OF ADOLESCENTS AND CHILDREN!	IN ALL CASES CONSULT A DOCTOR!
•INHALATION	Abdominal pain. Cough. Diarrhoea. Shortness of breath. Vomiting. Fever or elevated body temperature.	Local exhaust or breathing protection.	Fresh air, rest. Artificial respiration if indicated. Refer for medical attention.
•SKIN	MAY BE ABSORBED! Redness.	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap. Refer for medical attention.
•EYES		Face shield, or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION		Do not eat, drink, or smoke during work. Wash hands before eating.	Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Evacuate danger area in case of a large spill! Consult an expert! Ventilation. Collect leaking and spilled liquid in sealable non-metallic containers as far as possible. Do NOT wash away into sewer. Do NOT let this chemical enter the environment. Chemical protection suit including self-contained breathing apparatus.	Provision to contain effluent from fire extinguishing. Separated from food and feedstuffs Well closed.	Special material. Do not transport with food and feedstuffs. T symbol N symbol R: 23-33-50/53 S: 1/2-7-45-60-61 UN Hazard Class: 8 UN Packing Group: III

SEE IMPORTANT INFORMATION ON BACK

International Chemical Safety Cards

MERCURY

ICSC: 0056

IMPORTANT DATA

PHYSICAL STATE; APPEARANCE:
ODOURLESS, HEAVY AND MOBILE SILVERY LIQUID METAL.

PHYSICAL DANGERS:

CHEMICAL DANGERS:
Upon heating, toxic fumes are formed. Reacts violently with ammonia and halogens causing fire and explosion hazard. Attacks aluminium and many other metals forming amalgams.

OCCUPATIONAL EXPOSURE LIMITS:
TLV: 0.025 mg/m³ as TWA (skin) A4 BEI issued (ACGIH 2004).
MAK: 0.1 mg/m³ Sh
Peak limitation category: II(8) Carcinogen category: 3B (DFG 2003).
OSHA PEL†: C 0.1 mg/m^3
NIOSH REL: Hg Vapor: TWA 0.05 mg/m^3 skin
Other: C 0.1 mg/m^3 skin
NIOSH IDLH: 10 mg/m^3 (as Hg) See: 7439976

ROUTES OF EXPOSURE:
The substance can be absorbed into the body by inhalation of its vapour and through the skin , also as a vapour!

INHALATION RISK:
A harmful contamination of the air can be reached very quickly on evaporation of this substance at 20°C.

EFFECTS OF SHORT-TERM EXPOSURE:
The substance is irritating to the skin. Inhalation of the vapours may cause pneumonitis. The substance may cause effects on the central nervous systemandkidneys. The effects may be delayed. Medical observation is indicated.

EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:
The substance may have effects on the central nervous system kidneys , resulting in irritability, emotional instability, tremor, mental and memory disturbances, speech disorders. Danger of cumulative effects. Animal tests show that this substance possibly causes toxic effects upon human reproduction.

PHYSICAL PROPERTIES

Boiling point: 357°C
Melting point: -39°C
Relative density (water = 1): 13.5
Solubility in water:
none

Vapour pressure, Pa at 20°C: 0.26
Relative vapour density (air = 1): 6.93
Relative density of the vapour/air-mixture at 20°C (air = 1): 1.009

ENVIRONMENTAL DATA

The substance is very toxic to aquatic organisms. In the food chain important to humans, bioaccumulation takes place, specifically in fish.

N O T E S

Depending on the degree of exposure, periodic medical examination is indicated. No odour warning if toxic concentrations are present. Do NOT take working clothes home.

Transport Emergency Card: TEC (R)-80GC9-II+III

ADDITIONAL INFORMATION

ICSC: 0056 **MERCURY**

International Chemical Safety Cards

ZINC POWDER

ICSC: 1205

Blue powder
Merrillite
Zn
Atomic mass: 65.4
(powder)

ICSC # 1205
CAS # 7440-66-6
RTECS # ZG8600000
UN # 1436 (zinc powder or dust)
EC # 030-001-00-1
October 24, 1994 Peer reviewed

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Highly flammable. Many reactions may cause fire or explosion. Gives off irritating or toxic fumes (or gases) in a fire.	NO open flames, NO sparks, and NO smoking. NO contact with acid(s), base (s) and incompatible substances (see Chemical Dangers).	Special powder, dry sand, NO other agents. NO water.
EXPLOSION	Risk of fire and explosion on contact with acid(s), base(s), water and incompatible substances.	Closed system, ventilation, explosion-proof electrical equipment and lighting. Prevent build-up of electrostatic charges (e.g., by grounding). Prevent deposition of dust.	In case of fire: cool drums, etc., by spraying with water but avoid contact of the substance with water.
EXPOSURE		PREVENT DISPERSION OF DUST! STRICT HYGIENE!	
•**INHALATION**	Metallic taste and metal fume fever. Symptoms may be delayed (see Notes).	Local exhaust.	Fresh air, rest. Refer for medical attention.
•**SKIN**	Dry skin.	Protective gloves.	Rinse and then wash skin with water and soap.
•**EYES**		Safety spectacles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•**INGESTION**	Abdominal pain. Nausea. Vomiting.	Do not eat, drink, or smoke during work. Wash hands before eating.	Rinse mouth. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Extinguish or remove all ignition sources. Do NOT wash away into sewer. Sweep spilled substance into containers. then remove to safe place. Personal protection: self-contained breathing apparatus.	Fireproof. Separated from acids, bases oxidants Dry.	Airtight. F symbol N symbol R: 15-17-50/53 S: 2-7/8-43-46-60-61 UN Hazard Class: 4.3 UN Subsidiary Risks: 4.2

SEE IMPORTANT INFORMATION ON BACK

International Chemical Safety Cards

ZINC POWDER

ICSC: 1205

I M P O R T A N T D A T A

PHYSICAL STATE; APPEARANCE:
ODOURLESS GREY TO BLUE POWDER.

PHYSICAL DANGERS:
Dust explosion possible if in powder or granular form, mixed with air. If dry, it can be charged electrostatically by swirling, pneumatic transport, pouring, etc.

CHEMICAL DANGERS:
Upon heating, toxic fumes are formed. The substance is a strong reducing agent and reacts violently with oxidants. Reacts with water and reacts violently with acids and bases forming flammable/explosive gas (hydrogen - see ICSC0001) Reacts violently with sulfur, halogenated hydrocarbons and many other substances causing fire and explosion hazard.

OCCUPATIONAL EXPOSURE LIMITS:
TLV not established.

ROUTES OF EXPOSURE:
The substance can be absorbed into the body by inhalation and by ingestion.

INHALATION RISK:
Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly when dispersed.

EFFECTS OF SHORT-TERM EXPOSURE:
Inhalation of fumes may cause metal fume fever. The effects may be delayed.

EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:
Repeated or prolonged contact with skin may cause dermatitis.

PHYSICAL PROPERTIES

Boiling point: 907°C
Melting point: 419°C
Relative density (water = 1): 7.14
Solubility in water: reaction
Vapour pressure, kPa at 487°C: 0.1
Auto-ignition temperature: 460°C

ENVIRONMENTAL DATA

N O T E S

Zinc may contain trace amounts of arsenic, when forming hydrogen, may also form toxic gas arsine (see ICSC 0001 and ICSC 0222). Reacts violently with fire extinguishing agents such as water, halons, foam and carbon dioxide. The symptoms of metal fume fever do not become manifest until several hours later. Rinse contaminated clothes (fire hazard) with plenty of water.

Transport Emergency Card: TEC (R)-43GWS-II+III
NFPA Code: H0; F1; R1;

ADDITIONAL INFORMATION

ICSC: 1205 **ZINC POWDER**

IMPORTANT LEGAL NOTICE:

International Chemical Safety Cards

BENZ(a)ANTHRACENE

ICSC: 0385

1,2-Benzoanthracene
Benzo(a)anthracene
2,3-Benzphenanthrene
Naphthanthracene
$C_{18}H_{12}$
Molecular mass: 228.3

ICSC # 0385
CAS # 56-55-3
RTECS # CV9275000
EC # 601-033-00-9
October 23, 1995 Validated

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Combustible.		Water spray, powder. In case of fire in the surroundings: use appropriate extinguishing media.
EXPLOSION	Finely dispersed particles form explosive mixtures in air.	Prevent deposition of dust; closed system, dust explosion-proof electrical equipment and lighting.	
EXPOSURE		AVOID ALL CONTACT!	
•INHALATION		Local exhaust or breathing protection.	Fresh air, rest.
•SKIN		Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES		Safety goggles face shield or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION		Do not eat, drink, or smoke during work. Wash hands before eating.	Rinse mouth.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Sweep spilled substance into sealable containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place. Personal protection: complete protective clothing including self-contained breathing apparatus.	Well closed.	T symbol N symbol R: 45-50/53 S: 53-45-60-61

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0385

International Chemical Safety Cards

BENZ(a)ANTHRACENE

I M P O R T A N T D A T A

PHYSICAL STATE; APPEARANCE:
COLOURLESS TO YELLOW BROWN FLUORESCENT FLAKES OR POWDER.

PHYSICAL DANGERS:
Dust explosion possible if in powder or granular form, mixed with air.

CHEMICAL DANGERS:

OCCUPATIONAL EXPOSURE LIMITS:
TLV: A2 (suspected human carcinogen); (ACGIH 2004).
MAK:
Carcinogen category: 2 (as pyrolysis product of organic materials)
(DFG 2005).

ROUTES OF EXPOSURE:
The substance can be absorbed into the body by inhalation, through the skin and by ingestion.

INHALATION RISK:
Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly.

EFFECTS OF SHORT-TERM EXPOSURE:

EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:
This substance is probably carcinogenic to humans.

PHYSICAL PROPERTIES

Sublimation point: 435°C
Melting point: 162°C
Relative density (water = 1): 1.274
Solubility in water:
none

Vapour pressure, Pa at 20°C: 292
Octanol/water partition coefficient as log Pow: 5.61

ENVIRONMENTAL DATA

Bioaccumulation of this chemical may occur in seafood.

N O T E S

This substance is one of many polycyclic aromatic hydrocarbons - standards are usually established for them as mixtures, e.g., coal tar pitch volatiles. However, it may be encountered as a laboratory chemical in its pure form. Insufficient data are available on the effect of this substance on human health, therefore utmost care must be taken. Do NOT take working clothes home. Tetraphene is a common name. Card has been partly updated in October 2005 and August 2006: see sections Occupational Exposure Limits, EU classification.

ADDITIONAL INFORMATION

ICSC: 0385 **BENZ(a)ANTHRACENE**

BENZO(a)PYRENE

ICSC: 0104

Benz(a)pyrene
3,4-Benzopyrene
Benzo(d,e,f)chrysene
$C_{20}H_{12}$
Molecular mass: 252.3

ICSC # 0104
CAS # 50-32-8
RTECS # DJ3675000
EC # 601-032-00-3
October 17, 2005 Peer reviewed

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Combustible.	NO open flames.	Water spray, foam, powder, carbon dioxide.
EXPLOSION			
EXPOSURE	See EFFECTS OF LONG-TERM OR REPEATED EXPOSURE.	AVOID ALL CONTACT! AVOID EXPOSURE OF (PREGNANT) WOMEN!	
•INHALATION		Local exhaust or breathing protection.	Fresh air, rest.
•SKIN	MAY BE ABSORBED!	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES		Safety goggles or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION		Do not eat, drink, or smoke during work.	Induce vomiting (ONLY IN CONSCIOUS PERSONS!). Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Evacuate danger area! Personal protection: complete protective clothing including self-contained breathing apparatus. Do NOT let this chemical enter the environment. Sweep spilled substance into sealable containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place.	Separated from strong oxidants.	T symbol N symbol R: 45-46-60-61-43-50/53 S: 53-45-60-61

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0104

Prepared in the context of cooperation between the International Programme on Chemical Safety & the Commission of the European Communities (C) IPCS CEC 1994. No modifications to the International version have been made except to add the OSHA PELs, NIOSH RELs and NIOSH IDLH values.

BENZO(a)PYRENE

ICSC: 0104

I M P O R T A N T D A T A

PHYSICAL STATE; APPEARANCE:
PALE-YELLOW CRYSTALS

PHYSICAL DANGERS:

CHEMICAL DANGERS:
Reacts with strong oxidants causing fire and explosion hazard.

OCCUPATIONAL EXPOSURE LIMITS:
TLV: Exposure by all routes should be carefully controlled to levels as low as possible A2 (suspected human carcinogen); (ACGIH 2005).
MAK:
Carcinogen category: 2; Germ cell mutagen group: 2; (DFG 2005).

ROUTES OF EXPOSURE:
The substance can be absorbed into the body by inhalation of its aerosol, through the skin and by ingestion.

INHALATION RISK:
Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly when dispersed.

EFFECTS OF SHORT-TERM EXPOSURE:

EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:
This substance is carcinogenic to humans. May cause heritable genetic damage to human germ cells. Animal tests show that this substance possibly causes toxicity to human reproduction or development.

PHYSICAL PROPERTIES

Boiling point: 496°C
Melting point: 178.1°C
Density: 1.4
g/cm³

Solubility in water: none (<0.1 g/100 ml)
Vapour pressure :
negligible
Octanol/water partition coefficient as log Pow: 6.04

ENVIRONMENTAL DATA

The substance is very toxic to aquatic organisms. Bioaccumulation of this chemical may occur in fish, in plants and in molluscs. The substance may cause long-term effects in the aquatic environment.

N O T E S

Do NOT take working clothes home. Benzo(a)pyrene is present as a component of polycyclic aromatic hydrocarbons (PAHs) in the environment, usually resulting from the incomplete combustion or pyrolysis of organic matters, especially fossil fuels and tobacco.

ADDITIONAL INFORMATION

International Chemical Safety Cards

BENZO(b)FLUORANTHENE

ICSC: 0720

Benz(e)acephenanthrylene
2,3-Benzofluoroanthene
Benzo(e)fluoranthene
3,4-Benzofluoranthene
$C_{20}H_{12}$
Molecular mass: 252.3

ICSC # 0720
CAS # 205-99-2
RTECS # CU1400000
EC # 601-034-00-4
March 25, 1999 Peer reviewed

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE			In case of fire in the surroundings: use appropriate extinguishing media.
EXPLOSION			
EXPOSURE		AVOID ALL CONTACT!	
•INHALATION		Local exhaust or breathing protection.	Fresh air, rest.
•SKIN		Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES		Safety spectacles or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION		Do not eat, drink, or smoke during work.	Rinse mouth. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Sweep spilled substance into covered containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place. Do NOT let this chemical enter the environment.	Provision to contain effluent from fire extinguishing. Well closed.	T symbol N symbol R: 45-50/53 S: 53-45-60-61

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0720

Prepared in the context of cooperation between the International Programme on Chemical Safety & the Commission of the European Communities (C) IPCS CEC 1994. No modifications to the International version have been made except to add the OSHA PELs, NIOSH RELs and NIOSH IDLH values.

International Chemical Safety Cards

BENZO(b)FLUORANTHENE

ICSC: 0720

I	**PHYSICAL STATE; APPEARANCE:** COLOURLESS CRYSTALS	**ROUTES OF EXPOSURE:** The substance can be absorbed into the body by inhalation

IMPORTANT DATA	**PHYSICAL DANGERS:** **CHEMICAL DANGERS:** Upon heating, toxic fumes are formed. **OCCUPATIONAL EXPOSURE LIMITS:** TLV: A2 (suspected human carcinogen); (ACGIH 2004). MAK: Carcinogen category: 2; (DFG 2004).	of its aerosol and through the skin. **INHALATION RISK:** Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly. **EFFECTS OF SHORT-TERM EXPOSURE:** **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:** This substance is possibly carcinogenic to humans. May cause genetic damage in humans.
PHYSICAL PROPERTIES	Boiling point: 481°C Melting point: 168°C Solubility in water: none	Octanol/water partition coefficient as log Pow: 6.12
ENVIRONMENTAL DATA	This substance may be hazardous to the environment; special attention should be given to air quality and water quality. 	

N O T E S

Benzo(b)fluoranthene is present as a component of polycyclic aromatic hydrocarbons (PAH) content in the environment usually resulting from the incomplete combustion or pyrolysis of organic matters, especially fossil fuels and tobacco.ACGIH recommends environment containing benzo(b)fluoranthene should be evaluated in terms of the TLV-TWA for coal tar pitch volatile, as benzene soluble 0.2 mg/m^3. Insufficient data are available on the effect of this substance on human health, therefore utmost care must be taken.

ADDITIONAL INFORMATION

ICSC: 0720 **BENZO(b)FLUORANTHENE**

International Chemical Safety Cards

BENZO(k)FLUORANTHENE

ICSC: 0721

Dibenzo(b,jk)fluorene
8,9-Benzofluoranthene
11,12-Benzofluoranthene
$C_{20}H_{12}$
Molecular mass: 252.3

ICSC # 0721
CAS # 207-08-9
RTECS # DF6350000
EC # 601-036-00-5
March 25, 1999 Peer reviewed

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE			In case of fire in the surroundings: use appropriate extinguishing media.
EXPLOSION			
EXPOSURE		AVOID ALL CONTACT!	
•INHALATION		Local exhaust or breathing protection.	Fresh air, rest.
•SKIN		Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES		Safety spectacles or eye protection in combination with breathing protection if powder.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION		Do not eat, drink, or smoke during work.	Rinse mouth. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Sweep spilled substance into covered containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place. Do NOT let this chemical enter the environment.	Provision to contain effluent from fire extinguishing. Well closed.	T symbol N symbol R: 45-50/53 S: 53-45-60-61

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0721

Prepared in the context of cooperation between the International Programme on Chemical Safety & the Commission of the European Communities (C) IPCS CEC 1994. No modifications to the International version have been made except to add the OSHA PELs, NIOSH RELs and NIOSH IDLH values.

International Chemical Safety Cards

BENZO(k)FLUORANTHENE

ICSC: 0721

I **M**	**PHYSICAL STATE; APPEARANCE:** YELLOW CRYSTALS	**ROUTES OF EXPOSURE:** The substance can be absorbed into the body by inhalation of its aerosol and through the skin.

P O R T A N T D A T A	**PHYSICAL DANGERS:** **CHEMICAL DANGERS:** Upon heating, toxic fumes are formed. **OCCUPATIONAL EXPOSURE LIMITS:** TLV not established. MAK: Carcinogen category: 2; (DFG 2004). **INHALATION RISK:** Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly. **EFFECTS OF SHORT-TERM EXPOSURE:** **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:** This substance is possibly carcinogenic to humans.
PHYSICAL PROPERTIES	Boiling point: 480°C Melting point: 217°C Solubility in water: none Octanol/water partition coefficient as log Pow: 6.84
ENVIRONMENTAL DATA	This substance may be hazardous to the environment; special attention should be given to air quality and water quality. Bioaccumulation of this chemical may occur in crustacea and in fish. 

N O T E S

Benzo(k)fluoranthene is present as a component of polycyclic aromatic hydrocarbons (PAH) content in the environment usually resulting from the incomplete combustion or pyrolysis of organic matters, especially fossil fuels and tobacco.ACGIH recommends environment containing benzo(k)fluoranthene should be evaluated in terms of the TLV-TWA for coal tar pitch volatile, as benzene soluble 0.2 mg/m^3. Insufficient data are available on the effect of this substance on human health, therefore utmost care must be taken.

ADDITIONAL INFORMATION

ICSC: 0721 **BENZO(k)FLUORANTHENE**

International Chemical Safety Cards

CHRYSENE

ICSC: 1672

Benzoaphenanthrene
1,2-Benzophenanthrene
1,2,5,6-Dibenzonaphthalene
$C_{18}H_{12}$
Molecular mass: 228.3

ICSC # 1672
CAS # 218-01-9
RTECS # GC0700000
UN # 3077
EC # 601-048-00-0
October 12, 2006 Validated

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Combustible.	NO open flames.	Water spray. Dry powder. Foam. Carbon dioxide.
EXPLOSION	Finely dispersed particles form explosive mixtures in air.	Prevent deposition of dust; closed system, dust explosion-proof electrical equipment and lighting.	
EXPOSURE	See EFFECTS OF LONG-TERM OR REPEATED EXPOSURE.	AVOID ALL CONTACT!	
•INHALATION		Local exhaust or breathing protection.	Fresh air, rest.
•SKIN		Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES		Safety goggles	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION		Do not eat, drink, or smoke during work.	Rinse mouth.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Personal protection: P3 filter respirator for toxic particles. Do NOT let this chemical enter the environment. Sweep spilled substance into sealable containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place.	Separated from strong oxidants, Provision to contain effluent from fire extinguishing. Store in an area without drain or sewer access.	T symbol N symbol R: 45-68-50/53 S: 53-45-60-61 UN Hazard Class: 9 UN Packing Group: III Signal: Warning Aqua-Cancer Suspected of causing cancer Very toxic to aquatic life with long lasting effects Very toxic to aquatic life

SEE IMPORTANT INFORMATION ON BACK

Prepared in the context of cooperation between the International Programme on Chemical Safety & the Commission of the European

International Chemical Safety Cards

CHRYSENE

ICSC: 1672

IMPORTANT DATA

PHYSICAL STATE; APPEARANCE:
COLOURLESS TO BEIGE CRYSTALS OR POWDER

PHYSICAL DANGERS:
Dust explosion possible if in powder or granular form, mixed with air.

CHEMICAL DANGERS:
The substance decomposes on burning producing toxic fumes Reacts violently with strong oxidants

OCCUPATIONAL EXPOSURE LIMITS:
TLV: A3 (confirmed animal carcinogen with unknown relevance to humans); (ACGIH 2006).
MAK not established.

ROUTES OF EXPOSURE:
The substance can be absorbed into the body by inhalation of its aerosol, through the skin and by ingestion.

INHALATION RISK:
A harmful concentration of airborne particles can be reached quickly when dispersed

EFFECTS OF SHORT-TERM EXPOSURE:

EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:
This substance is possibly carcinogenic to humans.

PHYSICAL PROPERTIES

Boiling point: 448°C
Melting point: 254 - 256°C
Density: 1.3 g/cm³

Solubility in water:
very poor
Octanol/water partition coefficient as log Pow: 5.9

ENVIRONMENTAL DATA

The substance is very toxic to aquatic organisms. Bioaccumulation of this chemical may occur in seafood. It is strongly advised that this substance does not enter the environment.

NOTES

Depending on the degree of exposure, periodic medical examination is suggested. Do NOT take working clothes home. This substance does not usually occur as a pure substance but as a component of polyaromatic hydrocarbon (PAH) mixtures. Human population studies have associated PAH's exposure with cancer and cardiovascular diseases.

Transport Emergency Card: TEC (R)-90GM7-III

ADDITIONAL INFORMATION

International Chemical Safety Cards

DIBENZO(a,h)ANTHRACENE

ICSC: 0431

1,25,6-Dibenzanthracene
$C_{22}H_{14}$
Molecular mass: 278.4

ICSC # 0431
CAS # 53-70-3
RTECS # HN2625000
EC # 601-041-00-2
October 23, 1995 Peer reviewed

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Combustible.	NO open flames.	Water spray, powder.
EXPLOSION			
EXPOSURE		AVOID ALL CONTACT!	
•INHALATION		Local exhaust or breathing protection.	Fresh air, rest.
•SKIN	Redness. Swelling. Itching.	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES	Redness.	Face shield or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION		Do not eat, drink, or smoke during work. Wash hands before eating.	Rinse mouth.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Sweep spilled substance into sealable containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place. Personal protection: P3 filter respirator for toxic particles.	Well closed.	T symbol N symbol R: 45-50/53 S: 53-45-60-61

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0431

Prepared in the context of cooperation between the International Programme on Chemical Safety & the Commission of the European Communities (C) IPCS CEC 1994. No modifications to the International version have been made except to add the OSHA PELs, NIOSH RELs and NIOSH IDLH values.

International Chemical Safety Cards

DIBENZO(a,h)ANTHRACENE

ICSC: 0431

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M

P

O

PHYSICAL STATE; APPEARANCE:
COLOURLESS CRYSTALLINE POWDER.

PHYSICAL DANGERS:

ROUTES OF EXPOSURE:
The substance can be absorbed into the body by inhalation, through the skin and by ingestion.

INHALATION RISK:
Evaporation at 20°C is negligible; a harmful concentration

R T A N T D A T A	**CHEMICAL DANGERS:** **OCCUPATIONAL EXPOSURE LIMITS:** TLV not established.	of airborne particles can, however, be reached quickly. **EFFECTS OF SHORT-TERM EXPOSURE:** **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:** The substance may have effects on the skin , resulting in photosensitization. This substance is probably carcinogenic to humans.
PHYSICAL PROPERTIES	Boiling point: 524°C Melting point: 267°C Relative density (water = 1): 1.28	Solubility in water: none Octanol/water partition coefficient as log Pow: 6.5
ENVIRONMENTAL DATA	Bioaccumulation of this chemical may occur in seafood. 	

N O T E S

This is one of many polycyclic aromatic hydrocarbons - standards are usually established for them as mixtures, e.g., coal tar pitch volatiles. However, it may be encountered as a laboratory chemical in its pure form. Insufficient data are available on the effect of this substance on human health, therefore utmost care must be taken. Do NOT take working clothes home. DBA is a commonly used name. This substance is one of many polycyclic aromatic hydrocarbons (PAH).

ADDITIONAL INFORMATION

ICSC: 0431 **DIBENZO(a,h)ANTHRACENE**

Material Safety Data Sheet

Version 4.2
Revision Date 05/19/2011
Print Date 12/09/2011

1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	Fluoranthene
Product Number	:	423947
Brand	:	Aldrich
Supplier	:	Sigma-Aldrich 3050 Spruce Street SAINT LOUIS MO 63103 USA
Telephone	:	+1 800-325-5832
Fax	:	+1 800-325-5052
Emergency Phone # (For both supplier and manufacturer)	:	(314) 776-6555
Preparation Information	:	Sigma-Aldrich Corporation Product Safety - Americas Region 1-800-521-8956

2. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards
Harmful by ingestion., Carcinogen

GHS Classification
Acute toxicity, Oral (Category 4)
Acute toxicity, Dermal (Category 5)
Acute aquatic toxicity (Category 1)
Chronic aquatic toxicity (Category 1)

GHS Label elements, including precautionary statements

Pictogram

Signal word Warning

Hazard statement(s)

H302	Harmful if swallowed.
H313	May be harmful in contact with skin.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P273	Avoid release to the environment.
P501	Dispose of contents/ container to an approved waste disposal plant.

HMIS Classification

Health hazard:	1
Chronic Health Hazard:	*
Flammability:	1
Physical hazards:	0

NFPA Rating

Health hazard:	1
Fire:	1
Reactivity Hazard:	0

Potential Health Effects

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Skin	Harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.
Ingestion	Harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Benzo[*j*,*k*]fluorene

Formula : $C_{16}H_{10}$

Molecular Weight : 202.25 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
Fluoranthene			
206-44-0	205-912-4	-	-

4. FIRST AID MEASURES

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Consult a physician.

In case of eye contact
Flush eyes with water as a precaution.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters
Wear self contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products
Hazardous decomposition products formed under fire conditions. - Carbon oxides

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Conditions for safe storage
Keep container tightly closed in a dry and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection
For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator.For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection
Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form	solid
Colour	no data available

Safety data

pH	no data available
Melting point/freezing point	Melting point/range: 105 - 110 °C (221 - 230 °F) - lit.
Boiling point	384 °C (723 °F) - lit.
Flash point	198.0 °C (388.4 °F) - closed cup
Ignition temperature	no data available
Autoignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Vapour pressure	no data available
Density	no data available
Water solubility	no data available
Partition coefficient: n-octanol/water	no data available
Relative vapour density	no data available
Odour	no data available

Odour Threshold	no data available
Evaporation rate	no data available

10. STABILITY AND REACTIVITY

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
no data available

Conditions to avoid
no data available

Materials to avoid
Strong oxidizing agents

Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides
Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral LD50
LD50 Oral - rat - 2,000 mg/kg

Inhalation LC50
no data available

Dermal LD50
LD50 Dermal - rabbit - 3,180 mg/kg

Other information on acute toxicity
no data available

Skin corrosion/irritation
no data available

Serious eye damage/eye irritation
no data available

Respiratory or skin sensitization
no data available

Germ cell mutagenicity
Laboratory experiments have shown mutagenic effects.

Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC:	3 - Group 3: Not classifiable as to its carcinogenicity to humans (Fluoranthene)
ACGIH:	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP:	Reasonably anticipated to be human carcinogens. (Fluoranthene)
	Reasonably anticipated to be a human carcinogen (Fluoranthene)
OSHA:	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

no data available

Teratogenicity

no data available

Specific target organ toxicity - single exposure (Globally Harmonized System)
no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)
no data available

Aspiration hazard
no data available

Potential health effects

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion	Harmful if swallowed.
Skin	Harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.

Signs and Symptoms of Exposure
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Synergistic effects
no data available

Additional Information
RTECS: LL4025000

12. ECOLOGICAL INFORMATION

Toxicity

Toxicity to fish	LC50 - Oncorhynchus mykiss (rainbow trout) - 0.0077 mg/l - 96 h
	NOEC - Cyprinodon variegatus (sheepshead minnow) - 560 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates.	Immobilization EC50 - Daphnia magna (Water flea) - > 0.005 - < 0.01 mg/l - 3 d
	Immobilization EC50 - Daphnia magna (Water flea) - 0.78 mg/l - 20 h
	NOEC - Daphnia magna (Water flea) - 0.085 mg/l - 48 h

Persistence and degradability
no data available

Bioaccumulative potential
no data available

Mobility in soil
no data available

PBT and vPvB assessment
no data available

Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Very toxic to aquatic life with long lasting effects.

no data available

13. DISPOSAL CONSIDERATIONS

Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)
UN number: 3077 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substances, solid, n.o.s. (Fluoranthene)
Reportable Quantity (RQ): 100 lbs
Marine pollutant: No
Poison Inhalation Hazard: No

IMDG
Not dangerous goods

IATA
Not dangerous goods

15. REGULATORY INFORMATION

OSHA Hazards
Harmful by ingestion., Carcinogen

SARA 302 Components
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
The following components are subject to reporting levels established by SARA Title III, Section 313:

	CAS-No.	Revision Date
Fluoranthene	206-44-0	2007-03-01

SARA 311/312 Hazards
Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components

	CAS-No.	Revision Date
Fluoranthene	206-44-0	2007-03-01

Pennsylvania Right To Know Components

	CAS-No.	Revision Date
Fluoranthene	206-44-0	2007-03-01

New Jersey Right To Know Components

	CAS-No.	Revision Date
Fluoranthene	206-44-0	2007-03-01

California Prop. 65 Components

	CAS-No.	Revision Date
WARNING! This product contains a chemical known to the State of California to cause cancer. Fluoranthene	206-44-0	1990-01-01

16. OTHER INFORMATION

Further information

International Chemical Safety Cards

INDENO(1,2,3-cd)PYRENE

ICSC: 0730

o-Phenylenepyrene
2,3-Phenylenepyrene
$C_{22}H_{12}$
Molecular mass: 276.3

ICSC # 0730
CAS # 193-39-5
RTECS # NK9300000
March 25, 1999 Peer reviewed

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE			In case of fire in the surroundings: use appropriate extinguishing media.
EXPLOSION			
EXPOSURE		AVOID ALL CONTACT!	
•INHALATION		Local exhaust or breathing protection.	Fresh air, rest.
•SKIN		Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES		Safety spectacles or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION		Do not eat, drink, or smoke during work.	Rinse mouth. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Sweep spilled substance into covered containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place. Do NOT let this chemical enter the environment.	Provision to contain effluent from fire extinguishing. Well closed.	R: S:

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0730

International Chemical Safety Cards

INDENO(1,2,3-cd)PYRENE

ICSC: 0730

I **M** **P**	**PHYSICAL STATE; APPEARANCE:** YELLOW CRYSTALS **PHYSICAL DANGERS:**	**ROUTES OF EXPOSURE:** The substance can be absorbed into the body by inhalation of its aerosol and through the skin. **INHALATION RISK:**

O R T A N T D A T A	**CHEMICAL DANGERS:** Upon heating, toxic fumes are formed. **OCCUPATIONAL EXPOSURE LIMITS:** TLV not established. MAK: Carcinogen category: 2; (DFG 2004).	Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly. **EFFECTS OF SHORT-TERM EXPOSURE:** **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:** This substance is possibly carcinogenic to humans.
PHYSICAL PROPERTIES	Boiling point: 536°C Melting point: 164°C Solubility in water: none	Octanol/water partition coefficient as log Pow: 6.58
ENVIRONMENTAL DATA	This substance may be hazardous to the environment; special attention should be given to air quality and water quality. Bioaccumulation of this chemical may occur in fish. 	

N O T E S

Indeno(1,2,3-cd)pyrene is present as a component of polycyclic aromatic hydrocarbons (PAH) content in the environment usually resulting from the incomplete combustion or pyrolysis of organic matters, especially fossil fuels and tobacco.ACGIH recommends environment containing Indeno(1,2,3-c,d)pyrene should be evaluated in terms of the TLV-TWA for coal tar pitch volatile, as benzene soluble 0.2 mg/m^3. Insufficient data are available on the effect of this substance on human health, therefore utmost care must be taken.

ADDITIONAL INFORMATION

ICSC: 0730 **INDENO(1,2,3-cd)PYRENE**

International Chemical Safety Cards

1,1,1-TRICHLOROETHANE

ICSC: 0079

Methyl chloroform
Methyltrichloromethane
alpha-Trichloroethane
$C_2H_3Cl_3$ / CCl_3CH_3
Molecular mass: 133.4

ICSC # 0079
CAS # 71-55-6
RTECS # KJ2975000
UN # 2831
EC # 602-013-00-2
April 19, 2007 Validated

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Combustible under specific conditions. Heating will cause rise in pressure with risk of bursting. Gives off irritating or toxic fumes (or gases) in a fire. See Notes.		In case of fire in the surroundings: use appropriate extinguishing media.
EXPLOSION			In case of fire: keep drums, etc., cool by spraying with water.
EXPOSURE		PREVENT GENERATION OF MISTS!	
•**INHALATION**	Cough. Sore throat. Headache. Dizziness. Drowsiness. Nausea. Ataxia. Unconsciousness.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Artificial respiration may be needed. Refer for medical attention.
•**SKIN**	Dry skin. Redness.	Protective gloves.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•**EYES**	Redness. Pain.	Safety goggles or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•**INGESTION**	Nausea. Vomiting. Abdominal pain. Diarrhoea. (Further see Inhalation).	Do not eat, drink, or smoke during work.	Do NOT induce vomiting. Rinse mouth. Give a slurry of activated charcoal in water to drink. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Personal protection: self-contained breathing apparatus. Ventilation. Collect leaking and spilled liquid in sealable, suitable containers as far as possible. Absorb remaining liquid in sand or inert absorbent and remove to safe place. Do NOT let this chemical enter the environment.	Separated from food and feedstuffs and strong oxidants, aluminium , manganese and zinc . Cool. Dry. Store in an area without drain or sewer access.	Do not transport with food and feedstuffs. Note: F Xn symbol N symbol R: 20-59 S: 2-24/25-59-61 UN Hazard Class: 6.1 UN Packing Group: III Signal: Warning

		Excl mark-Health haz Causes mild skin irritation Causes eye irritation May cause drowsiness or dizziness May cause damage to cardiovascular system if inhaled Harmful to aquatic life

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0079

Prepared in the context of cooperation between the International Programme on Chemical Safety & the Commission of the European Communities (C) IPCS CEC 1994. No modifications to the International version have been made except to add the OSHA PELs, NIOSH RELs and NIOSH IDLH values.

International Chemical Safety Cards

1,1,1-TRICHLOROETHANE

ICSC: 0079

IMPORTANT DATA

PHYSICAL STATE; APPEARANCE:
COLOURLESS LIQUID , WITH CHARACTERISTIC ODOUR.

PHYSICAL DANGERS:
The vapour is heavier than air.

CHEMICAL DANGERS:
The substance decomposes on burning, producing toxic and corrosive fumes . Reacts violently with aluminium and its alloys with magnesium, bases , strong oxidants , acetone, and zinc

OCCUPATIONAL EXPOSURE LIMITS:
TLV: 350 ppm as TWA, 450 ppm as STEL; A4 (not classifiable as a human carcinogen); BEI issued (ACGIH 2006).
MAK: 200 ppm, 1100 mg/m³;
Peak limitation category: II(1);
skin absorption (H);
Pregnancy risk group: C;
(DFG 2006).
OSHA PEL†: TWA 350 ppm (1900 mg/m^3)
NIOSH REL: C 350 ppm (1900 mg/m^3) 15-minute See Appendix C (Chloroethanes)
NIOSH IDLH: 700 ppm See: 71556

ROUTES OF EXPOSURE:
The substance can be absorbed into the body by inhalation of its vapour and by ingestion.

INHALATION RISK:
A harmful contamination of the air can be reached rather quickly on evaporation of this substance at 20°C.

EFFECTS OF SHORT-TERM EXPOSURE:
The substance is mildly irritating to the eyes , the respiratory tract and the skin . The substance may cause effects on the central nervous system , resulting in lowering of consciousness . Exposure at high levels may result in cardiac dysrhythmia.

EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:
The liquid defats the skin.

PHYSICAL PROPERTIES

Boiling point: 74°C
Melting point: -30°C
Relative density (water = 1): 1.34
Solubility in water: (poor)
Vapour pressure, kPa at 20°C: 13.3
Relative vapour density (air = 1): 4.6
Flash point: see Notes
Auto-ignition temperature: 537°C
Explosive limits, vol% in air: 8-16
Octanol/water partition coefficient as log Pow: 2.49

ENVIRONMENTAL DATA

The substance is harmful to aquatic organisms.

NOTES

Combustible vapour/air mixtures difficult to ignite, may be developed under certain conditions. The substance burns only in excess oxygen or if a strong source of ignition is present. Do NOT use in the vicinity of a fire or a hot surface, or during welding. Use of alcoholic beverages enhances the harmful effect. Depending on the degree of exposure, periodic medical examination is suggested. An added stabilizer or inhibitor can influence the toxicological properties of this substance, consult an expert.

Transport Emergency Card: TEC (R)-61S2831 or 61GTI-III

NFPA Code: H2; F1; R0

APPENDIX D

HOSPITAL INFORMATION AND MAP

FIELD ACCIDENT REPORT

FIELD ACCIDENT REPORT

This report is to be filled out by the designated Site Safety Officer after EVERY accident.

PROJECT NAME _____ PROJECT. NO._____

Date of Accident _____ Time _____ Report By _____

Type of Accident (Check One):

( ) Vehicular ( ) Personal ( ) Property

Name of Injured _____ DOB or Age _____

How Long Employed _____

Names of Witnesses _____

_____

Description of Accident _____

_____

_____

Action Taken _____

_____

_____

Did the Injured Lose Any Time? _____ How Much (Days/Hrs.)? _____

Was Safety Equipment in Use at the Time of the Accident (Hard Hat, Safety Glasses, Gloves, Safety Shoes, etc.)? _____

_____

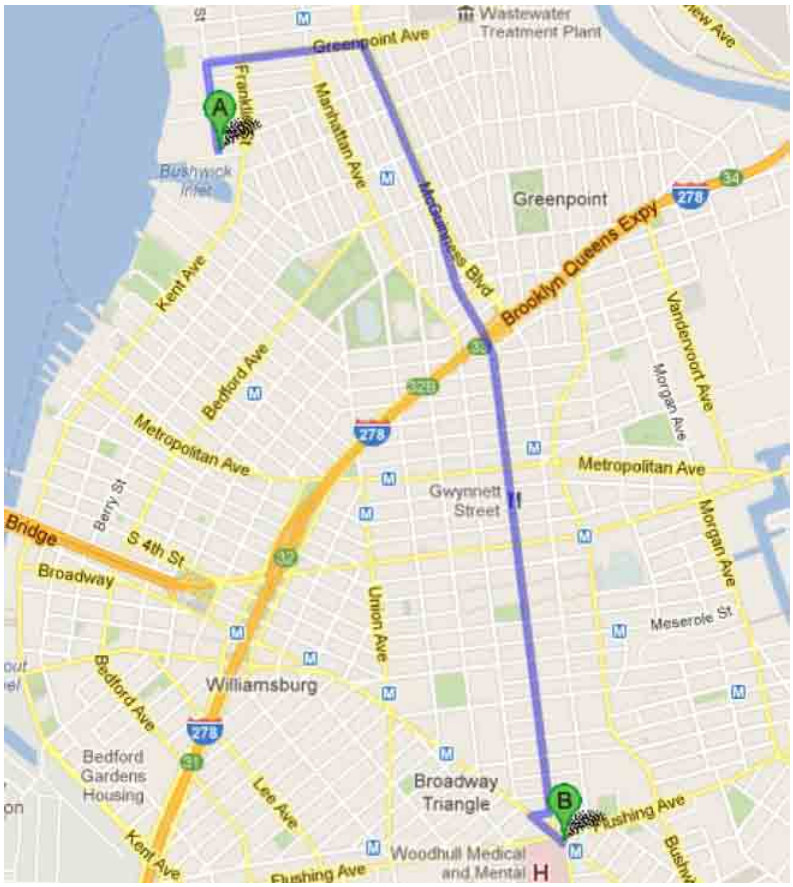
(If not, it is the EMPLOYEE'S sole responsibility to process his/her claim through his/her Health and Welfare Fund.)

INDICATE STREET NAMES, DESCRIPTION OF VEHICLES, AND NORTH ARROW

HOSPITAL INFORMATION AND MAP

The hospital nearest the site is:

WOODHUL MEDICAL CENTER
760 Broadway, Brooklyn, New York 11206
718-963-8000
2.9 Miles – About 9 Minutes



A 11 West St, Brooklyn, NY 11222

1.	Head **north** on **West St** toward **Calyer St** About 57 secs	go 0.2 mi total 0.2 mi
2.	Turn right onto **Greenpoint Ave** About 2 mins	go 0.4 mi total 0.6 mi
3.	Turn right onto **McGuinness Blvd** About 1 min	go 0.5 mi total 1.2 mi
4.	Slight right onto **Graham Ave** About 4 mins	go 1.5 mi total 2.7 mi
5.	Turn right onto **Debevoise St**	go 272 ft total 2.8 mi
6.	Turn left onto **Broadway** Destination will be on the right About 1 min	go 0.1 mi total 2.9 mi

B 760 Broadway, Brooklyn, NY 11206

ATTACHMENT C
Quality Assurance Project Plan

QUALITY ASSURANCE PROJECT PLAN
Former Consolidated Freightways Site
11 West Street, Brooklyn, NY

Prepared on behalf of:

M & H Realty LLC
420 9th Avenue
New York, NY 10001

Prepared by:

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961

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Former Consolidated Freightways Terminal Site
11 West Street, Brooklyn, NY

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1.0 INTRODUCTION

This Quality Assurance Project Plan (QAPP) has been prepared in accordance with DER-10 to detail procedures to be followed during the course of the sampling and analytical portion of the project, as required by the approved work plan.

To ensure the successful completion of the project each individual responsible for a given component of the project must be aware of the quality assurance objectives of his / her particular work and of the overall project. The EBC Project Director, Charles Sosik will be directly responsible to the client for the overall project conduct and quality assurance/quality control (QA/QC) for the project. The Project Director will be responsible for overseeing all technical and administrative aspects of the project and for directing QA/QC activities. Ms. Chawinie Miller will serve as the Quality Assurance Officer (QAO) and in this role may conduct:

- conduct periodic field and sampling audits;
- interface with the analytical laboratory to resolve problems; and
- interface with the data validator and/or the preparer of the DUSR to resolve problems.

Robert Bennett will serve as the Project Manager and will be responsible for implementation of the Remedial Action Workplan and coordination with field sampling crews and subcontractors. Reporting directly to the Project Manager will be the Field Operations Officer, Kevin Waters; who will serve as the on-Site qualified environmental professional who will record observations, direct the drilling crew and be responsible for the collection and handling of all samples.

1.1 Organization

Project QA will be maintained under the direction of the Project Manager, in accordance with this QAPP. QC for specific tasks will be the responsibility of the individuals and organizations listed below, under the direction and coordination of the Project Manager

.

GENERAL RESPONSIBILITY	SCOPE OF WORK	RESPONSIBILITY OF QUALITY CONTROL
Field Operations	Supervision of Field Crew, sample collection and handling	K. Waters, EBC
Project Manager	Implementation of the RAWP.	Robert Bennett, EBC
Laboratory Analysis	Analysis of soil samples by NYSDEC ASP methods Laboratory	NYSDOH-Certified Laboratory
Data review	Review for completeness and compliance	3rd party validation

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2.0 QUALITY ASSURANCE PROJECT PLAN OBJECTIVES

2.1 Overview

Overall project goals are defined through the development of Data Quality Objectives (DQOs), which are qualitative and quantitative Statements that specify the quality of the data required to support decisions; DQOs, as described in this section, are based on the end uses of the data as described in the work plan.

In this plan, Quality Assurance and Quality Control are defined as follows:

- Quality Assurance - The overall integrated program for assuring reliability of monitoring and measurement data.

- Quality Control - The routine application of procedures for obtaining prescribed standards of performance in the monitoring and measurement process.

2.2 QA / QC Requirements for Analytical Laboratory

Samples will be analyzed by a New York State Department of Health (NYSDOH) certified laboratory, certified in the appropriate categories. Data generated from the laboratory will be used to evaluate contaminants such as metals and semi-volatile organic compounds (SVOCs) in both historic fills and hot-spot areas, chlorinated volatile organic compounds (VOCs) in soil, soil gas and groundwater and SVOCs in groundwater. The QA requirements for all subcontracted analytical laboratory work performed on this project are described below. QA elements to be evaluated include accuracy, precision, sensitivity, representativeness, and completeness. The data generated by the analytical laboratory for this project are required to be sensitive enough to achieve detection levels low enough to meet required quantification limits as specified in NYSDEC Analytical Services Protocol (NYSDEC ASP, 07/2005). The analytical results meeting the required quantification limits will provide data sensitive enough to meet the data quality objectives of this remedial program as described in the work plan. Reporting of the data must be clear, concise, and comprehensive. The QC elements that are important to this project are completeness of field data, sample custody, sample holding times, sample preservation, sample storage, instrument calibration and blank contamination.

2.2.1 Instrument Calibration

Calibration curves will be developed for each of the compounds to be analyzed. Standard concentrations and a blank will be used to produce the initial curves. The development of calibration curves and initial calibration response factors must be consistent with method requirements presented in NYSDEC ASP 07/2005.

2.2.2 Continuing Instrument Calibration

The initial calibration curve will be verified every 12 hrs by analyzing one calibration standard. The standard concentration will be the midpoint concentration of the initial calibration curve. The calibration check compound must come within 25% relative percent difference (RPD) of the average response factor obtained during initial calibration. If the RPD is greater than 25%, then corrective action must be taken as provided in the specific methodology.

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2.2.3 Method Blanks

Method blank or preparation blank is prepared from an analyte·free matrix which includes the same reagents, internal standards and surrogate standards as me related samples. II is carried through the entire sample preparation and analytical procedure. A method blank analysis will be performed once for each 12 hr period during the analysis of samples for volatiles. An acceptable method blank will contain less than two (2) times the CRQL of methylene chloride, acetone and 2-butanone. For all other target compounds, the method blank must contain less than or equal to the CRQL of any single target compound. For non-target peaks in the method blank, the peak area must be less than 10 percent of the nearest internal standard. The method blank will be used to demonstrate the level of laboratory background and reagent contamination that might result from the analytical process itself.

2.2.4 Trip Blanks.

Trip blanks consist of a single set of sample containers filled at the laboratory with deionized. laboratory-grade water. The water used will be from the same source as that used for the laboratory method blank. The containers will be carried into the field and handled and transported in the same way as the samples collected that day. Analysis of the trip blank for VOCs is used to identify contamination from the air, shipping containers, or from other items coming in contact with the sample bottles. (The bottles holding the trip blanks will be not opened during this procedure.) A complete set of trip blanks will be provided with each shipment of samples to the certified laboratory.

2.2.5 Surrogate Spike Analysis

For organic analyses, all samples and blanks will be spiked with surrogate compounds before purging or extraction in order to monitor preparation and analyses of samples. Surrogate spike recoveries shall fall within the advisory limits in accordance with the NYSDEC ASP protocols for samples falling within the quantification limits without dilution.

2.2.6 Matrix Spike / Matrix Spike Duplicate / Matrix Spike Blank (MS/MSDIMSB) Analysis

MS, MSD and MSB analyses will be performed to evaluate the matrix effect of the sample upon the analytical methodology along with the precision of the instrument by measuring recoveries. The MS / MSD / MSB samples will be analyzed for each group of samples of a similar matrix at a rate of one for every 20 field samples. The RPD will be calculated from the difference between the MS and MSD. Matrix spike blank analysis will be performed to indicate the appropriateness of the spiking solution(s) used for the MS/MSD.

2.3 Accuracy

Accuracy is defined as the nearness of a real or the mean (x) of a set of results to the true value. Accuracy is assessed by means of reference samples and percent recoveries. Accuracy includes both precision and recovery and is expressed as percent recovery (% REC). The MS sample is used to determine the percent recovery. The matrix spike percent recovery (% REC) is calculated by the following equation:

$$\%REC = \frac{SSR - SR}{SA} \times 100$$

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Where:

SSR = spike sample results
SR = sample results
SA = spike added from spiking mix

2.4 Precision

Precision is defined as the measurement of agreement of a set of replicate results among themselves without a Precision is defined as the measurement of agreement of a set of replicate results among themselves without assumption of any prior information as to the true result. Precision is assessed by means of duplicate/replicate sample analyses.

Analytical precision is expressed in terms of RPD. The RPD is calculated using the following formula:

$$RPD = \frac{D^1 - D^2}{(D^1 + D^2)/2} \times 100$$

Where:
RPD = relative percent difference
D^1 = first sample value
D^2 = second sample value (duplicate)

2.5 Sensitivity

The sensitivity objectives for this plan require that data generated by the analytical laboratory achieve quantification levels low enough to meet the required detection limits specified by NYSDEC ASP and to meet all site-specific standards, criteria and guidance values (SGCs) established for this project.

2.6 Representativeness

Representativeness is a measure of the relationship of an individual sample taken from a particular site to the remainder of that site and the relationship of a small aliquot of the sample (i.e., the one used in the actual analysis) to the sample remaining on site. The representativeness of samples is assured by adherence to sampling procedures described in the Remedial Investigation Work Plan.

2.7 Completeness

Completeness is a measure of the quantity of data obtained from a measurement system as compared to the amount of data expected from the measurement system. Completeness is defined as the percentage of all results that are not affected by failing QC qualifiers, and should be between 70 and 100% of all analyses performed. The objective of completeness in laboratory reporting is to provide a thorough data support package. The laboratory data package provides documentation of sample analysis and results in the form of summaries, QC data, and raw analytical data. The laboratory will be required to submit data packages that follow NYSDEC ASP reporting format which, at a minimum, will include the following components:

1. All sample chain-of-custody forms.
2. The case narrative(s) presenting a discussion of any problems and/or procedural changes required during analyses. Also presented in the case narrative are sample summary forms.
3. Documentation demonstrating the laboratory's ability to attain the contract specified detection limits for all target analytes in all required matrices.

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4. Tabulated target compound results and tentatively identified compounds.
5. Surrogate spike analysis results (organics).
6. Matrix spike/matrix spike duplicate/matrix spike blank results.
7. QC check sample and standard recovery results
8. Blank results (field, trip, and method).
9. Internal standard area and RT summary.

2.8 Laboratory Custody Procedures

The following elements are important for maintaining the field custody of samples:

- Sample identification
- Sample labels
- Custody records
- Shipping records
- Packaging procedures

Sample labels will be attached to all sampling bottles before field activities begin; each label will contain an identifying number. Each number will have a suffix that identifies the site and where the sample was taken. Approximate sampling locations will be marked on a map with a description of the sample location. The number, type of sample, and sample identification will be entered into the field logbook. A chain-of-custody form, initiated at the analytical laboratory will accompany the sample bottles from the laboratory into the field. Upon receipt of the bottles and cooler, the sampler will sign and date the first received blank space. After each sample is collected and appropriately identified, entries will be made on the chain-of-custody form that will include:

- Site name and address
- Samplers' names and signatures

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3.0 ANALYTICAL PROCEDURES

3.1 Laboratory Analysis

Samples will be analyzed by the NYSDEC ASP laboratory for one or more of the following parameters: VOCs in soil by USEPA Method 8260C, SVOCs in soil by USEPA Method 8270D, Target Analyte Metals 6010C in soil, pesticides and PCBs by USEPA Method 8081B/8082A. If any modifications or additions to the standard procedures are anticipated. and if any nonstandard sample preparation or analytical protocol is to be used, the modifications and the nonstandard protocol will be explicitly defined and documented. Prior approval by EBC's PM will be necessary for any nonstandard analytical or sample preparation protocol used by the laboratory, i.e., dilution of samples or extracts by greater than a factor of five (5).

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4.0 DATA REDUCTION, REVIEW, AND REPORTING

4.1 Overview

The process of data reduction, review, and reporting ensures the assessments or a conclusion based on the final data accurately reflects actual site conditions. This plan presents the specific procedures, methods, and format that will be employed for data reduction, review and reporting of each measurement parameter determined in the laboratory and field. Also described in this section is the process by which all data, reports, and work plans are proofed and checked for technical and numerical errors prior to final submission.

4.2 Data Reduction

Standard methods and references will be used as guidelines for data handling, reduction, validation, and reporting. All data for the project will be compiled and summarized with an independent verification at each step in the process to prevent transcription/typographical errors. Any computerized entry of data will also undergo verification review.

Sample analysis will be provided by a New York State certified environmental laboratory. Laboratory reports will include ASP category B deliverables for use in the preparation of a data usability summary report (DUSR). All results will be provided in accordance with the NYSDEC Environmental Information Management System (EIMS) electronic data deliverable (EDD) format. Analytical results shall be presented on standard NYSDEC ASP-B forms or equivalents, and include the dates the samples were received and analyzed, and the actual methodology used. Note that waste characterization samples (if collected) will be in results only format and will not be evaluated in the DUSR.

Laboratory QA/QC information required by the method protocols will be compiled, including the application of data QA/QC qualifiers as appropriate. In addition, laboratory worksheets, laboratory notebooks, chains-of-custody, instrument logs, standards records, calibration records, and maintenance records, as applicable, will be provided in the laboratory data packages to determine the validity of data. Specifics on internal laboratory data reduction protocols are identified in the laboratory's SOPs.

Following receipt of the laboratory analytical results by EBC, the data results will be compiled and presented in an appropriate tabular form. Where appropriate, the impacts of QA/QC qualifiers resulting from laboratory or external validation reviews will be assessed in terms of data usability.

4.3 Laboratory Data Reporting

All sample data packages submitted by the analytical laboratory will be required to be reported in conformance to the NYSDEC ASP (7/2005), Category B data deliverable requirements as applicable to the method utilized. All results will be provided in accordance with the NYSDEC Environmental Information Management System (EIMS) electronic data deliverable (EDD) format. Note that waste characterization samples will be in results only format and will not be evaluated in the DUSR.

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5.0 CORRECTIVE ACTION

Review and implementation of systems and procedures may result in recommendations for corrective action. Any deviations from the specified procedures within approved project plans due to unexpected site-specific conditions shall warrant corrective action. All errors, deficiencies, or other problems shall be brought to the immediate attention of the EBC PM, who in turn shall contact the Quality Assurance/Data Quality Manager or his designee (if applicable).

Procedures have been established to ensure that conditions adverse to data quality are promptly investigated, evaluated and corrected. These procedures for review and implementation of a change are as follows:

- Define the problem.
- Investigate the cause of the problem.
- Develop a corrective action to eliminate the problem, in consultation with the personnel who defined the problem and who will implement the change.
- Complete the required form describing the change and its rationale (see below for form requirements).
- Obtain all required written approvals.
- Implement the corrective action.
- Verify that the change has eliminated the problem.

During the field investigation, all changes to the sampling program will be documented in field logs/sheets and the EBC PM advised.

If any problems occur with the laboratory or analyses, the laboratory must immediately notify the PM, who will consult with other project staff. All approved corrective actions shall be controlled and documented.

All corrective action documentation shall include an explanation of the problem and a proposed solution which will be maintained in the project file or associated logs. Each report must be approved by the necessary personnel (e.g., the PM) before implementation of the change occurs. The PM shall be responsible for controlling, tracking, implementing and distributing identified changes.

EBC
Environmental Business Consultants
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Ridge, NY 11961
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TABLE 1
SUMMARY OF
SAMPLING PROGRAM RATIONALE AND ANALYSIS

Matrix	Location	Approximate Number of Samples	Frequency	Rationale for Sampling	Laboratory Analysis	Duplicates	Matrix Spikes	Spike Duplicates	Trip Blanks
Soil	Metals Hot Spot Excavation Bottom	6	1 per 900 square feet	Endpoint verification	TAL Metals 6010C, Hexavalent Cr	1 per day	1 per 20 samples	1 per 20 samples	1 per trip
Soil	Metals Hot Spot Excavation Sidewells	24	1 per sidewall	Endpoint verification	TAL Metals 6010C, Hexavalent Cr	1 per day	1 per 20 samples	1 per 20 samples	1 per trip
Soil	Petroleum Hot Spot Excavation Bottom	5	1 per 900 square feet	Endpoint verification	PAHs (8270)	1 per day	1 per 20 samples	1 per 20 samples	1 per trip
Soil	Petroleum Hot Spot Excavation Sidewells	4	1 per sidewall	Endpoint verification	PAHs (8270)	1 per day	1 per 20 samples	1 per 20 samples	1 per trip

TABLE 2
SAMPLE COLLECTION AND ANALYSIS PROTOCOLS

Sample Type	Matrix	Sampling Device	Parameter	Sample Container	Sample Preservation	Analytical Method#	CRQL / MDLH	Holding Time
Soil	Soil	Scoop Direct into Jar	VOCs	(1) 2 oz Jar	Cool to 4^{o} C	EPA Method 8260C	Compound specific (1-5 ug/kg)	14 days*
Soil	Soil	Scoop Direct into Jar	SVOCs	(1) 8 oz jar	Cool to 4^{o} C	EPA Method 8270D	Compound specific (1-5 ug/kg)	14 day ext/40 days*
Soil	Soil	Scoop Direct into Jar	Pest/PCBs	from 8oz jar above	Cool to 4^{o} C	EPA Method 8081B/8082A	Compound specific (1-5 ug/kg)	14 day ext/40 days*
Soil	Soil	Scoop Direct into Jar	Metals	from above	Cool to 4^{o} C	TAL Metals 6010C	Compound specific (01-1 mg/kg)	6 months*

Notes:
All holding times listed are from Verified Time of Sample Receipt (VTSR) unless noted otherwise. * Holding time listed is from time of sample collection.
The number in parentheses in the "Sample Container" column denotes the number of containers needed.
Triple volume required when collected MS/MSD samples
The number of trip blanks are estimated.
CRQL / MDL = Contract Required Quantitation Limit / Method Detection Limit.
MCAWW = Methods for Chemical Analysis of Water and Wastes.
NA = Not available or not applicable.
* = all collection and holding times will be as be the ASP

ATTACHMENT D
Community Air Monitoring Plan

COMMUNITY AIR MONITORING PLAN

FORMER CONSOLIDATED FREIGHTWAYS SITE
11 WEST STREET, BROOKLYN, NY

FEBRUARY - 2015

COMMUNITY AIR MONITORING PLAN
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APPENDICES

Appendix A Action Limit Report

1.0 INTRODUCTION

This Community Air Monitoring Plan (CAMP) has been prepared for the excavation and building activities to be performed under a Remedial Action Work Plan (RAWP) at the Former Consolidated Freightways Site. The CAMP provides measures for protection for the downwind community (i.e., off-site receptors including residences, businesses, and on-site workers not directly involved in the remedial activities) from potential airborne contaminant releases resulting from remedial activities at the site.

Compliance with this CAMP is required during all activities associated with soil excavation that have the potential to generate airborne particulate matter and volatile organic compounds (VOCs). These activities include excavation of soils, stockpiling, loading, and backfilling. This CAMP has been prepared to ensure that soil disturbance activities do not adversely affect passersby, residents, or workers in the area immediately surrounding the Site and to preclude or minimize airborne migration of construction-related contaminants to offsite areas.

1.1 Regulatory Requirements

This CAMP was established in accordance with the following requirements:

- New York State Department of Health's (NYSDOH) Generic Community Air Monitoring Plan as presented in DER-10 Technical Guidance for Site Investigation and Remediation (NYSDEC May 3, 2010). This guidance specifies that a community air-monitoring program shall be implemented to protect the surrounding community and to confirm that the work does not spread contamination off-site through the air;

- New York State Department of Environmental Conservation (NYSDEC) Technical and Guidance Memorandum (TAGM) #4031 - Fugitive Dust Suppression and Particulate Monitoring Program at Inactive Hazardous Waste Sites: This guidance provides a basis for developing and implementing a fugitive dust suppression and particulate monitoring program as an element of a hazardous waste site's health and safety program.

2.0 AIR MONITORING

VOCs in air and metals / SVOCs in dust are the constituents of concern at the Site. The appropriate method to monitor air for these constituents during soil disturbance activities is through real-time VOC and air particulate (dust) monitoring.

2.1 Meteorological Data

At a minimum, wind direction will be evaluated at the start of each workday, noon of each workday, and the end of each workday. These readings will be utilized to position the monitoring equipment in appropriate upwind and downwind locations.

2.2 Community Air Monitoring Requirements

To establish ambient air background concentrations, air will be monitored at several locations around the site perimeter before activities begin. These points will be monitored periodically in series during the site work. When the excavation area is within 20 feet of potentially exposed populations or occupied structures, the perimeter monitoring points will be located to represent the nearest potentially exposed individuals at the downwind location.

Fugitive respirable dust will be monitored using a MiniRam Model PDM-3 aerosol monitor (or equivalent). Air will be monitored for VOCs with a portable Ionscience 3000 photoionization detector (PID), minirae 2000, or equivalent. All air monitoring data will be documented in a site log book by the designated site safety officer. The site safety officer or delegate must ensure that air monitoring instruments are calibrated and maintained in accordance with manufacturer's specifications. All instruments will be zeroed daily and checked for accuracy. A daily log will be kept. If additional monitoring is required, the protocols will be developed and appended to this plan

3.0 VOC MONITORING, RESPONSE LEVELS, AND ACTIONS

Volatile organic compounds (VOCs) will be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present.

The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown. All 15-minute readings must be recorded and be available for State (DEC and DOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

All readings will be recorded and made available for NYSDEC and NYSDOH personnel to review. If an exceedance of the Action Limits occurs, an Action Limit Report, as shown in Appendix A, will be completed.

3.1 Potential Corrective Measures and VOC Suppression Techniques

If the 15-minute integrated VOC level at the downwind location persists at a concentration that exceeds the upwind level by more than 5 ppm but less than 25 ppm during remedial activities, then vapor suppression techniques will be employed. The following techniques, or others, may be employed to mitigate the generation and migration of fugitive organic vapors:

- limiting the excavation size;
- backfilling the excavation;
- spraying water onto the excavation faces and equipment;
- covering soil stockpiles with 6-mil plastic sheeting;
- hauling waste materials in properly tarped containers; and/or
- applying vapor suppressant foam (BioSolve, Pinkwater or similar).

4.0 PARTICULATE MONITORING

Air monitoring for particulates (i.e., dust) will be performed continuously during excavation and loading activities using both air monitoring equipment and visual observation at upwind and downwind locations. Monitoring equipment capable of measuring particulate matter smaller than 10 microns (PM_{10}) and capable of integrating (averaging) over periods of 15 minutes or less will be set up at upwind (i.e., background) and downwind locations, at heights approximately four to five feet above land surface (i.e., the breathing zone). Monitoring equipment will be MIE Data Ram monitors, or equivalent. The audible alarm on the particulate monitoring device will be set at 90 micrograms per cubic meter ($\mu g/m_3$). This setting will allow proactive evaluation of worksite conditions prior to reaching the action level of 100 $\mu g/m^3$ above background. The monitors will be calibrated at least once per day prior to work activities and recalibrated as needed thereafter. In addition, fugitive dust migration will be visually assessed during all intrusive work activities.

The following summarizes particulate action levels and the appropriate responses:

- If the downwind PM-10 particulate level is 150 $\mu g/m^3$ for the 15-minute period, or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 100 $\mu g/m^3$ above the upwind level and provided that no visible dust is migrating from the work area.

- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 100 $\mu g/m^3$ above the upwind level, work must be stopped and an evaluation of activities initiated. Work can resume provided that dust suppression measures (as described in Section 2.3.1 below) and other controls are successful in reducing the downwind PM-10 particulate concentration to within 100 $\mu g/m^3$ of the upwind level and in preventing visible dust migration.

All readings will be recorded and be available for NYSDEC and NYSDOH personnel to review. If an exceedance of the Action Limits occurs, an Action Limit Report as shown in **Appendix A** will be completed.

4.1 Potential Particulate Suppression Techniques

If the integrated particulate level at the downwind location exceeds the upwind level by more than 100 $\mu g/m^3$ at any time during remediation activities, then dust suppression techniques will be employed. The following techniques, or others, may be employed to mitigate the generation and migration of fugitive dusts:

- limiting the excavation size;
- backfilling the excavation;
- spraying water onto the excavation faces and equipment;
- covering soil stockpiles with 8-mil plastic sheeting;
- hauling waste materials in properly tarped containers; and/or
- limiting vehicle speeds onsite.

Work may continue with dust suppression techniques provided that downwind PM_{10} levels are not more than 150 $\mu g/m^3$ greater than the upwind levels.

There may also be situations where the dust is generated by remediation activities and migrates to downwind locations, but is not detected by the monitoring equipment at or above the action level. Therefore, if dust is observed leaving the working area, dust suppression techniques such as those listed above will be employed.

If dust suppression techniques do not lower particulates to below 150 $\mu g/m^3$, or visible dust persists, work will be suspended until appropriate corrective measures are identified and implemented to remedy the situation.

All air monitoring readings will be recorded in the field logbook and will be available for the NYSDEC and NYSDOH personnel to review.

5.0 DATA QUALITY ASSURANCE

5.1 Calibration

Instrument calibration shall be documented on instrument calibration and maintenance sheets or in the designated field logbook. All instruments shall be calibrated as required by the manufacturer. Calibration checks may be used during the day to confirm instrument accuracy. Duplicate readings may be taken to confirm individual instrument response.

5.2 Operations

All instruments shall be operated in accordance with the manufacturer's specifications. Manufacturers' literature, including an operations manual for each piece of monitoring equipment will be maintained on-site by the SSO for reference.

5.3 Data Review

The SSO will interpret all monitoring data based the established criteria and his/her professional judgment. The SSO shall review the data with the PM to evaluate the potential for worker exposure, upgrades/downgrades in level of protection, comparison to direct reading instrumentation and changes in the integrated monitoring strategy.

Monitoring and sampling data, along with all sample documentation will be periodically reviewed by the PM.

6.0 RECORDS AND REPORTING

All air readings must be recorded on daily air monitoring log sheets and made available for review by personnel from NYSDEC and NYSDOH.

APPENDIX A
ACTION LIMIT REPORT

CAMP
ACTION LIMIT REPORT

Project Location: _____

Date: _____ Time: _____

Name: _____

Contaminant: _____ PM-10: _____ VOC: _____

Wind Speed: _____ Wind Direction: _____

Temperature: _____ Barometric Pressure: _____

DOWNWIND DATA

Monitor ID #: _____ Location: _____ Level Reported: _____

Monitor ID#: _____ Location: _____ Level Reported: _____

UPWIND DATA

Monitor ID #: _____ Location: _____ Level Reported: _____

Monitor ID#: _____ Location: _____ Level Reported: _____

BACKGROUND CORRECTED LEVELS

Monitor ID #: Location: _____ Level Reported: Level Reported: _____

ACTIONS TAKEN

_____
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ATTACHMENT E
Citizen Participation Plan

New York State Department of Environmental Conservation

Brownfield Cleanup Program

Citizen Participation Plan

for

FORMER CONSOLIDATED FREIGHTWAYS TRUCK TERMINAL SITE

M & H Realty LLC
420 9th Avenue
New York, NY 10001

September 2014

Contents

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* * * * *

Note: The information presented in this Citizen Participation Plan was current as of the date of its approval by the New York State Department of Environmental Conservation. Portions of this Citizen Participation Plan may be revised during the site's investigation and cleanup process.

Applicant: **M & H Realty LLC**
Site Name: **Former Consolidated Freightways Truck Terminal ("Site")**
Site Address: **11 West Street**
Site County: **Kings**
Site Number: **C224191**

1. What is New York's Brownfield Cleanup Program?

New York's Brownfield Cleanup Program (BCP) works with private developers to encourage the voluntary cleanup of contaminated properties known as "brownfields" so that they can be reused and developed. These uses include recreation, housing, and business.

A *brownfield* is any real property that is difficult to reuse or redevelop because of the presence or potential presence of contamination. A brownfield typically is a former industrial or commercial property where operations may have resulted in environmental contamination. A brownfield can pose environmental, legal, and financial burdens on a community. If a brownfield is not addressed, it can reduce property values in the area and affect economic development of nearby properties.

The BCP is administered by the New York State Department of Environmental Conservation (NYSDEC) which oversees Applicants that conduct brownfield site investigation and cleanup activities. An Applicant is a person who has requested to participate in the BCP and has been accepted by NYSDEC. The BCP contains investigation and cleanup requirements, ensuring that cleanups protect public health and the environment. When NYSDEC certifies that these requirements have been met, the property can be reused or redeveloped for the intended use.

For more information about the BCP, go online at: http://www.dec.ny.gov/chemical/8450.html.

2. Citizen Participation Activities

Why NYSDEC Involves the Public and Why It Is Important

NYSDEC involves the public to improve the process of investigating and cleaning up contaminated sites, and to enable citizens to participate more fully in decisions that affect their health, environment, and social well being. NYSDEC provides opportunities for citizen involvement and encourages early two-way communication with citizens before decision makers form or adopt final positions.

Involving citizens affected and interest in site investigation and cleanup programs is important for many reasons. These include:

- Promoting the development of timely, effective site investigation and cleanup programs that protect public health and the environment;

- Improving public access to, and understanding of, issues and information related to a particular site and that Site's investigation and cleanup process;

- Providing citizens with early and continuing opportunities to participate in NYSDEC's site investigation and cleanup process;

- Ensuring that NYSDEC makes site investigation and cleanup decisions that benefit from input that reflects the interests and perspectives found within the affected community; and

- Encouraging dialogue to promote the exchange of information among the affected/interested public, State agencies, and other interested parties that strengthens trust among the parties, increases understanding of site and community issues and concerns, and improves decision making.

This Citizen Participation (CP) Plan provides information about how NYSDEC will inform and involve the public during the investigation and cleanup of the Site identified above. The public information and involvement program will be carried out with assistance, as appropriate, from the Applicant.

Project Contacts

Appendix A identifies NYSDEC project contact(s) to whom the public should address questions or request information about the site's investigation and cleanup program. The public's suggestions about this CP Plan and the CP program for the Site are always welcome. Interested people are encouraged to share their ideas and suggestions with the project contacts at any time.

Locations of Reports and Information

The locations of the reports and information related to the Site's investigation and cleanup program also are identified in Appendix A. These locations provide convenient access to important project documents for public review and comment. Some documents may be placed on the NYSDEC website. If this occurs, NYSDEC will inform the public in fact sheets distributed about the Site and by other means, as appropriate.

Site Contact List

Appendix B contains the site contact list. This list has been developed to keep the community informed about, and involved in, the site's investigation and cleanup process. The site contact list will be used periodically to distribute fact sheets that provide updates about the status of the project. These will include notifications of upcoming activities at the Site (such as fieldwork), as well as availability of project documents and announcements about public comment periods.
The site contact list includes, at a minimum:

- Chief executive officer and planning board chairperson of each county, city, town and village in which the Site is located;
- Residents, owners, and occupants of the Site and properties adjacent to the Site;
- The public water supplier which services the area in which the Site is located;
- Any person who has requested to be placed on the site contact list;

- The administrator of any school or day care facility located on or near the Site for purposes of posting and/or dissemination of information at the facility; and
- Location(s) of reports and information.

The site contact list will be reviewed periodically and updated as appropriate. Individuals and organizations will be added to the site contact list upon request. Such requests should be submitted to the NYSDEC project contact(s) identified in Appendix A. Other additions to the site contact list may be made at the discretion of the NYSDEC project manager, in consultation with other NYSDEC staff as appropriate.

CP Activities

The table at the end of this section identifies the CP activities, at a minimum, that have been and will be conducted during the Site's investigation and cleanup program. The flowchart in Appendix D shows how these CP activities integrate with the site investigation and cleanup process. The public is informed about these CP activities through fact sheets and notices distributed at significant points during the program. Elements of the investigation and cleanup process that match up with the CP activities are explained briefly in Section 5.

- **Notices and fact sheets** help the interested and affected public to understand contamination issues related to a site, and the nature and progress of efforts to investigate and clean up a site.

- **Public forums, comment periods and contact with project managers** provide opportunities for the public to contribute information, opinions and perspectives that have potential to influence decisions about a site's investigation and cleanup.

- **Document repositories** allow the public to access and review project documents including investigation and cleanup work plans and final reports.

The public is encouraged to contact project staff at any time during the Site's investigation and cleanup process with questions, comments, or requests for information. This CP Plan may be revised due to changes in major issues of public concern identified in Section 3 or in the nature and scope of investigation and cleanup activities. Modifications may include additions to the site contact list and changes in planned citizen participation activities.

Technical Assistance Grant

NYSDEC must determine if the Site poses a significant threat to public health or the environment. This determination generally is made using information developed during the investigation of the Site, as described in Section 5.

If the Site is determined to be a significant threat, a qualifying community group may apply for a Technical Assistance Grant (TAG). The purpose of a TAG is to provide funds to the qualifying group to obtain independent technical assistance. This assistance helps the TAG recipient to interpret

and understand existing environmental information about the nature and extent of contamination related to the Site and the development/implementation of a remedy.

An eligible community group must certify that its membership represents the interests of the community affected by the Site, and that its members' health, economic well-being or enjoyment of the environment may be affected by a release or threatened release of contamination at the Site.

For more information about TAGs, go online at http://www.dec.ny.gov/regulations/2590.html.

Note: The table identifying the citizen participation activities related to the Site's investigation and cleanup program follows on the next page:

Citizen Participation Requirements (Activities)	Timing of CP Activity(ies)
Application Process:	
• Prepare site contact list • Establish document repositories	At time of preparation of application to participate in the BCP.
• Publish notice in Environmental Notice Bulletin (ENB) announcing receipt of application and 30-day public comment period • Publish above ENB content in local newspaper • Mail above ENB content to site contact list • Conduct 30-day public comment period	When NYSDEC determines that BCP application is complete. The 30-day public comment period begins on date of publication of notice in ENB. End date of public comment period is as stated in ENB notice. Therefore, ENB notice, newspaper notice, and notice to the site contact list should be provided to the public at the same time.
After Execution of Brownfield Site Cleanup Agreement:	
• Prepare Citizen Participation (CP) Plan	Before start of Remedial Investigation
Before NYSDEC Approves Remedial Investigation (RI) Work Plan:	
• Distribute fact sheet to site contact list about proposed RI activities and announcing 30-day public comment period about draft RI Work Plan • Conduct 30-day public comment period	Before NYSDEC approves RI Work Plan. If RI Work Plan is submitted with application, public comment periods will be combined and public notice will include fact sheet. Thirty-day public comment period begins/ends as per dates identified in fact sheet.
After Applicant Completes Remedial Investigation:	
• Distribute fact sheet to site contact list that describes RI results	Before NYSDEC approves RI Report
Before NYSDEC Approves Remedial Work Plan (RWP):	
• Distribute fact sheet to site contact list about proposed RWP and announcing 45-day public comment period • Public meeting by NYSDEC about proposed RWP (if requested by affected community or at discretion of NYSDEC project manager) • Conduct 45-day public comment period	Before NYSDEC approves RWP. Forty-five day public comment period begins/ends as per dates identified in fact sheet. Public meeting would be held within the 45-day public comment period.
Before Applicant Starts Cleanup Action:	
• Distribute fact sheet to site contact list that describes upcoming cleanup action	Before the start of cleanup action.
After Applicant Completes Cleanup Action:	
• Distribute fact sheet to site contact list that announces that cleanup action has been completed and that summarizes the Final Engineering Report • Distribute fact sheet to site contact list announcing issuance of Certificate of Completion (COC)	At the time NYSDEC approves Final Engineering Report. These two fact sheets are combined if possible if there is not a delay in issuing the COC.

3. Major Issues of Public Concern

This section of the CP Plan identifies major issues of public concern that relate to the Site. Additional major issues of public concern may be identified during the course of the Site's investigation and cleanup process.

The Site is not located in an Environmental Justice Area. Environmental justice is defined as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

Environmental justice efforts focus on improving the environment in communities, specifically minority and low-income communities, and addressing disproportionate adverse environmental impacts that may exist in those communities. Therefore, it will not be necessary to translate any fact sheets into another language.

The major issues of concern to the public will be potential impacts of nuisance odors and dust during the removal of affected soil at the Site. Another example of a major issue of public concern would be the impact of increased truck traffic on the surrounding neighborhood. Construction safety issues will also be addressed.

This work will be performed in accordance with procedures which will be specified under a detailed Remedial Program which considers and takes preventive measures for exposures to future residents of the property and those on adjacent properties during construction. Detailed plans to monitor the potential for exposure including a Health and Safety Plan (HASP) and a Community Air Monitoring Plan (CAMP) are required components of the remedial program. Implementation of these plans will be under the direct oversight of the NYSDEC and the New York State Department of Health (NYSDOH).

These plans will specify the following worker and community health and safety activities during remedial activity at the Site:

- On-site air monitoring for worker protection;
- Perimeter air monitoring for community protection;
- The use of odor, vapor, and dust controls, such as water or foam sprays, as needed;
- Monitoring and control of soil, sediments, and water generated during remediation; and
- Truck routes which avoid residential streets.

The HASP and the CAMP will be prepared as part of the Remedial Action Work Plan (RAWP) and will be available for public review at the document repository as identified in Appendix A (page 11).

Furthermore, the Applicant has prepared a Scoping Sheet for Major Issues of Public Concern which will assist them in identifying any concerns. Experience from similar projects, 311 complaints and other construction projects in the area will help in identifying such issues.

4. Site Information

Appendix C contains a map identifying the location of the Site.

Site Description

The Site to be remediated and redeveloped is located at 11 West Street in the Greenpoint section of Brooklyn, NY and is comprised of a single tax parcel totaling 213,000 square feet (4.88 acres).

The subject site is listed as Block 2570, Lot 1 by the City of New York. The lot is located on the west side of West Street between Quay and Oak Streets. The lot consists of 480 feet of street frontage on West Avenue, 400 feet of frontage on the East River and is approximately 750 feet deep for a total area of 213,000 square feet (4.88 acres). The property is currently developed with three buildings: a 90 ft x 530 ft single story raised platform, two-sided loading dock and storage building, a 50 ft x 70 ft two story building formerly used for truck maintenance and a 25 ft x 50 ft building formerly used for truck maintenance.

The area surrounding the property is highly urbanized and predominantly consists of commercial, industrial and residential buildings with mixed-use buildings (residential w/ first floor retail) along main corridors / thoroughfares.

The elevation of the Site is from 9 feet to 1 foot above the National Geodetic Vertical Datum (NGVD). The area topography gradually slopes to the east. Groundwater at the Site is present under water table conditions at a depth of approximately 5-15 feet below grade. Based on Site specific references, the predominant groundwater flow direction is expected to be west toward the East River, though flow will likely reverse up to 400 feet inland during periods of high tide.

History of Site Use, Investigation, and Cleanup
The property is currently owned by M & H Realty LLC. The existing building and grounds are currently occupied by two temporary tenants: Southern portion - Tri-State Lumber & Building Supply and Northern portion - One Stop LIC a company which leases individual parking and storage space on a monthly basis.

The Site was originally developed by the Continental Iron Works in 1887 through 1916. It appears that the property was vacated sometime between 1916 and 1922. The property remained vacant till 1942 when the southeast corner was used by a lumber yard. Sometime between 1942 and 1951 the lumber yard was replaced by a machine shop and welding company which occupied a greater portion of the property. By 1965 the existing buildings were constructed and occupied by Associated Transport. Auto repair shops are identified in the east and west end of the building with a fueling station shown on the north side of the building. Associated Trucking was replaced by Consolidated Freightways in 1978 which occupied the property until the company filed for bankruptcy in 2002.

A Remedial investigation performed at the Site in March 2014 identified petroleum contamination within the former fueling station area related to a release of diesel fuel from the Underground Storage Tank (UST) system. Elevated levels of metals including arsenic, cadmium, chromium, lead, mercury and zinc are present in fill materials at the Site.

5. Investigation and Cleanup Process

Application

The Applicant has applied for and been accepted into New York's Brownfield Cleanup Program (BCP) as a Volunteer. This means that the Applicant was not responsible for the disposal or discharge of the contaminants or whose ownership or operation of the Site took place after the discharge or disposal of contaminants. The Volunteer must fully characterize the nature and extent of contamination on-site, and must conduct a qualitative exposure assessment, (a process that characterizes the actual or potential exposures of people, fish and wildlife to contaminants on the Site and to contamination that has migrated from the Site).

The Applicant proposes that the Site will be used for the construction of 4 new mixed-use tower-base buildings. The towers will range from 10 to 40-stories while the base structures will range from 4 to 6 stories. The project includes 50,000 square feet (sf) of commercial (retail) space, 330,000 sf of affordable housing and 1.28 million sf of market-rate apartments. The project will feature a water-front park with public access through walkways extending to West Street.

The buildings will cover approximately 50% of the lot, leaving the remainder of the space for the water-front park, recreation areas, walkways and building grounds. Excavation will be required for the building foundations and to remove contaminated soil. Soil will also need to be imported to the Site to raise the grade approximately two-feet across the Site.

To achieve this goal, the Applicant will conduct investigation and cleanup activities at the Site with oversight provided by NYSDEC. The Brownfield Cleanup Agreement (BCA) executed by NYSDEC and the Applicant sets forth the responsibilities of each party in conducting these activities at the Site.

Investigation

The Applicant has completed a preliminary site investigation before it entered into the BCP. The Applicant will now conduct an investigation of the Site officially called a "remedial investigation" (RI). This investigation will be performed with NYSDEC oversight. The Applicant previously developed a remedial investigation workplan, which was subject to public comment.

The site investigation has several goals:

1) Define the nature and extent of contamination in soil, surface water, groundwater and any other parts of the environment that may be affected;
2) Identify the source(s) of the contamination;
3) Assess the impact of the contamination on public health and the environment; and
4) Provide information to support the development of a proposed remedy to address the contamination or the determination that cleanup is not necessary.

When the investigation is complete, the Applicant will prepare and submit a report that summarizes the results. This report also will recommend whether cleanup action is needed to address site-related contamination. The investigation report is subject to review and approval by NYSDEC.

NYSDEC will use the information in the investigation report to determine if the Site poses a significant threat to public health or the environment. If the Site is a significant threat, it must be cleaned up using a remedy selected by NYSDEC from an analysis of alternatives prepared by the Applicant and approved by NYSDEC. If the Site does not pose a significant threat, the Applicant may select the remedy from the approved analysis of alternatives.

Remedy Selection

When the investigation of the Site has been determined to be complete, the project likely would proceed in one of two directions:

1. The Applicant may recommend in its investigation report that no action is necessary at the Site. In this case, NYSDEC would make the investigation report available for public comment for 45 days. NYSDEC then would complete its review, make any necessary revisions, and, if appropriate, approve the investigation report. NYSDEC would then issue a Certificate of Completion (COC) (described below) to the Applicant.

or

2. The Applicant may recommend in its investigation report that action needs to be taken to address site contamination. After NYSDEC approves the investigation report, the Applicant may then develop a cleanup plan, officially called a Remedial Work Plan. The Remedial Work Plan describes the Applicant's proposed remedy for addressing contamination related to the Site.

When the Applicant submits a proposed Remedial Work Plan for approval, NYSDEC would announce the availability of the proposed plan for public review during a 45-day public comment period.

Cleanup Action

NYSDEC will consider public comments, and revise the draft cleanup plan if necessary, before approving the proposed remedy. The New York State Department of Health (NYSDOH) must concur with the proposed remedy. After approval, the proposed remedy becomes the selected remedy.

The Applicant may then design and perform the cleanup action to address the site contamination. NYSDEC and NYSDOH oversee the activities. When the Applicant completes cleanup activities, it will prepare a Final Engineering Report (FER) that certifies that cleanup requirements have been achieved or will be achieved within a specific time frame. NYSDEC will review the report to be certain that the cleanup is protective of public health and the environment for the intended use of the Site.

Certificate of Completion

When NYSDEC is satisfied that cleanup requirements have been achieved or will be achieved for the Site, it will approve the FER. NYSDEC then will issue a COC to the Applicant. The COC states that cleanup goals have been achieved, and relieves the Applicant from future liability for site-related contamination, subject to certain conditions. The Applicant would be eligible to redevelop the Site after it receives a COC.

Site Management

Site management is the last phase of the site cleanup program. This phase begins when the COC is issued. Site management may be conducted by the Applicant under NYSDEC oversight, if contamination will remain in place. Site management incorporates any institutional and engineering controls required to ensure that the remedy implemented for the Site remains protective of public health and the environment. All significant activities are detailed in a Site Management Plan (SMP).

An institutional control is a non-physical restriction on use of the Site, such as a deed restriction that would prevent or restrict certain uses of the property. An institutional control may be used when the cleanup action leaves some contamination that makes the Site suitable for some, but not all uses.

An engineering control is a physical barrier or method to manage contamination. Examples include: caps, covers, barriers, fences, and treatment of water supplies.

Site management also may include the operation and maintenance of a component of the remedy, such as a system that is pumping and treating groundwater. Site management continues until NYSDEC determines that it is no longer needed.

Appendix A
Project Contacts and Locations of Reports and Information

Project Contacts

For information about the site's investigation and cleanup program, the public may contact any of the following project staff:

New York State Department of Environmental Conservation (NYSDEC):

Manfred Magloire, Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
47-40 21st Street
Long Island City, NY 11101-5407
Tel: (718) 482-4078
Email: manfred.magloire@dec.ny.gov

Thomas Panzone
Regional Citizen Participation Specialist
NYSDEC Region 2
Office of Communications Services
47-40 21st Street
Long Island City, NY 11101-5407
Tel: (718) 482-4953
Email: thomas.panzone(@dec.ny.gov

New York State Department of Health (NYSDOH):
Jacquelyn Nealon, Project Manager
New York State Department of Health
Bureau of Environmental Exposure Investigation
Empire State Plaza – Corning Tower Room 1787
Albany, New York 12237
Tel: (518) 402-7860
Email: beei@health.ny.gov

Locations of Reports and Information

The facilities identified below are being used to provide the public with convenient access to important project documents:

Brooklyn Public Library
Greenpoint Branch
107 Norman Ave
Brooklyn, NY 11222

Hours:
Sunday: Closed
Monday: 10am- 6pm
Tuesday: 10 am- 6pm
Wednesday & Thursday: 1pm- 8pm
Friday: 10am - 6pm
Saturday 10am - 5pm

Appendix B - Site Contact List

Local Government Contacts:

City of New York
Hon. Bill de Blasio
Mayor of New York City
City Hall
New York, NY 10007

Hon. Eric Adams
Brooklyn Borough President
209 Joralemon Street
Brooklyn, NY 11201

Dealice Fuller
Chair, Brooklyn Community Board 1
435 Graham Avenue
Brooklyn, New York 1121145-02

Gerald A. Esposito
District Manager, Brooklyn Community Board 1
435 Graham Avenue
Brooklyn, New York 1121145-02

Environmental Committee Chairman
Brooklyn Community Board 1
435 Graham Avenue
Brooklyn, New York 1121145-02

Hon. Stephen Levin
NYC Council Member
33rd District
410 Atlantic Avenue
Brooklyn, NY 11217

Carl Weisbrod
Chair of City Planning (Zoning)
22 Reade St.
Third Floor
New York, NY 10007

Dalila Hall
New York City Department of Transportation
Brooklyn Borough Commissioner
55 Water Street, 9th Floor
New York, NY 10041

Kings County Clerk's Office
Nancy Sunshine, County Clerk
360 Adams Street, Room 189
Brooklyn, NY 11201

Hon Letitia James
Public Advocate
1 Centre Street, 15th Floor
New York, NY 10007

Hon. Scott M. Stringer
Office of the Comptroller
1 Centre Street
New York, NY 10007

Hon. Daniel L. Squadron
NYS Senator
209 Joralemon Street, Suite 310
Brooklyn, NY 11201

Hon. Joseph Lentol
NYS Assembly Member
619 Lorimer Street
Brooklyn, NY 11211

Hon. Charles Schumer
U.S. Senator
780 Third Avenue, Suite 2301
New York, NY 10017

Hon. Kirsten Gillibrand
U.S. Senator
780 Third Avenue, Suite 2601
New York, NY 10017

Hon. Carolyn Maloney
U.S. House of Representatives
619 Lorimer Street
Brooklyn, NY 11211

John Wuthenow
Office of Environmental Planning & Assessment
NYC Dept. of Environmental Protection
96-05 Horace Harding Expressway
Flushing, NY 11373

Nilda Mesa Director
NYC Office of Environmental Coordination
100 Gold Street – 2nd Floor
New York, NY 10038

Daniel Walsh
Director
NYC Office of Environmental Remediation
100 Gold Street – 2nd Floor
New York, NY 10038

Local News Media

The Brooklyn Paper
One Metrotech Center, Suite 1001
Brooklyn, NY 11201
(718) 260-4504

NY 1 News
75 Ninth Avenue
New York, NY 10011

Courier-Life Publications
1 Metro-Tech Center North - 10th Floor
Brooklyn, NY 11201

Brooklyn Daily Eagle
30 Henry Street
Brooklyn, NY 11201

New York Daily News
4 New York Plaza
New York, NY 10004

New York Post
1211 Avenue of the Americas
New York, NY 10036-8790

Public Water Supplier

New York City Department of Environmental Protection
Emily Lloyd, Commissioner
59-17 Junction Boulevard
Flushing, NY 11373

Schools and Daycare Facilities:

1 P.S. 31 Samuel F. Dupont School
75 Meserole Ave, New York, NY 11222
(718) 383-8998
Attn: Mary J. Scarlato

Resident or Business Owners:

North

1. 24 Oak LLC
155 Water St. Fl. 3
Brooklyn, NY 11201-1044

   Occupant / Resident
   2 Oak Street
   Brooklyn, NY 11222

2. 57 West LLC
155 Water Street Fl. 3
Brooklyn, NY 11201-1044

   Occupant / Resident
   43 West Street
   Brooklyn, NY 11222

East

3. 56 West, LLC
155 Water Street Fl. 3
Brooklyn, NY 11201-1044

   Occupant / Resident
   71 West Street
   Brooklyn, NY 11222

4. Penguin Air Conditioning Corp.
26 West Street
Brooklyn, NY 11222-2048

   Occupant / Resident
   26 West Street
   Brooklyn, NY 11222-2048

5. Annie Kwok
   8000 River Rd. Apt. 7D
   North Bergen, NJ 07047-6267

   Occupant / Resident
   56 Calyer Street
   Brooklyn, NY 11222

6. 79 Quay Development LLC
   79 Quay Street
   Brooklyn, NY 11222

   Occupant / Resident
   79 Quay Street
   Brooklyn, NY 11222

South

7. New York City Transit Authority
   40 Quay Street
   Brooklyn, NY 11222

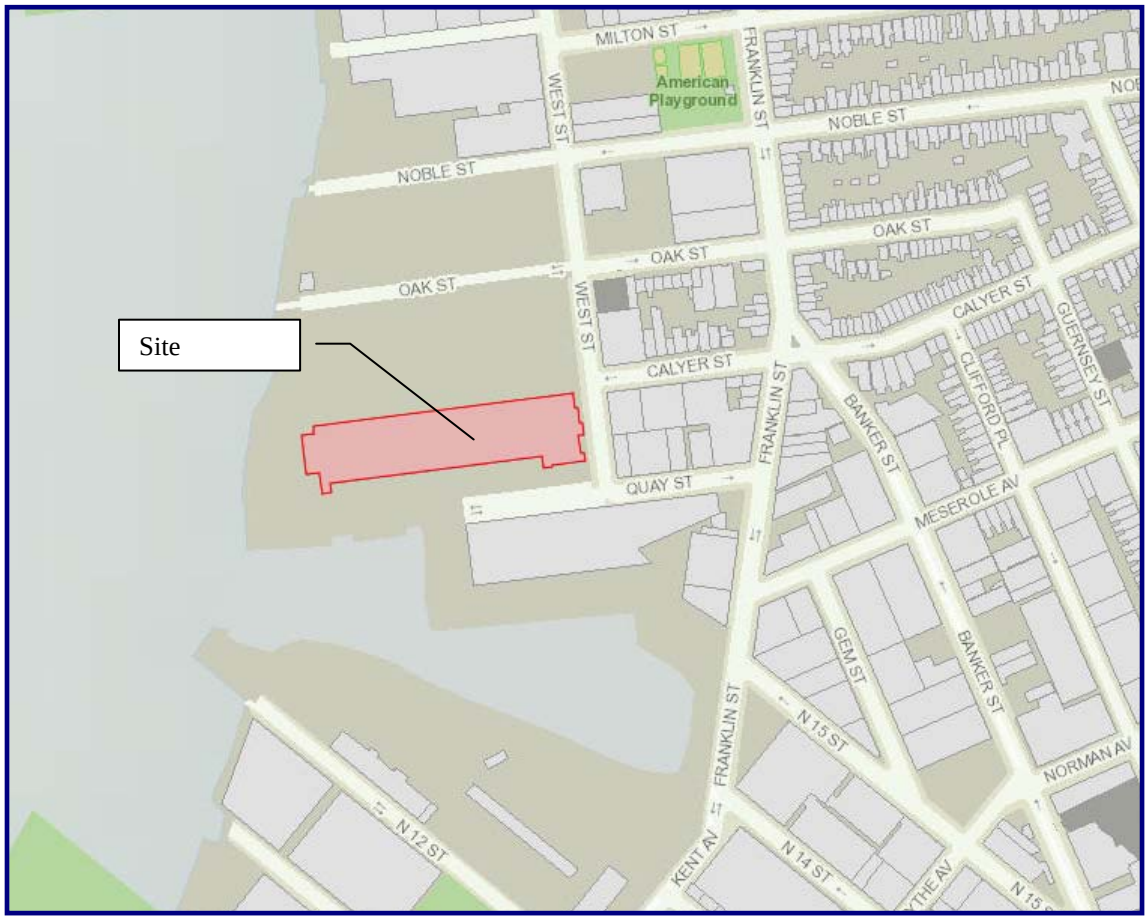
   Occupant / Resident
   40 Quay Street
   Brooklyn, NY 11222

8. Greenpoint Monitor Museum
   56 Quay Street
   Brooklyn, NY 11222

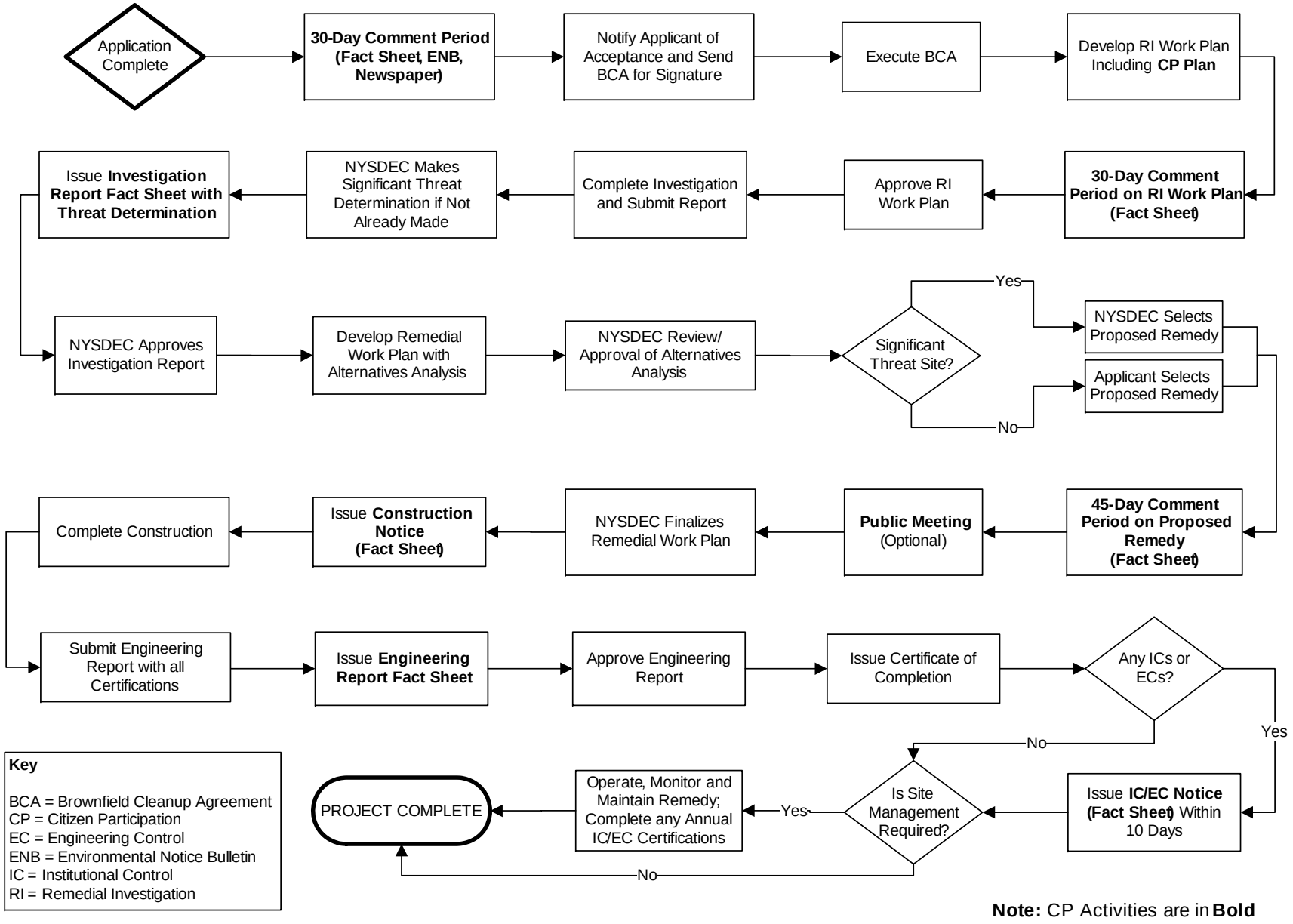
   Occupant / Resident
   56 Quay Street
   Brooklyn, NY 11222

	A	B	C	D	E	F	G	H	I	J
1										
2	Site Contact List									
3	Site #: C224191									
4	Site Name: Former Consolidated Freightways Truck Terminal Site			List Last Updated: 9-16-14						
5	Current Occupant	Name, Title	Address 1	Address 2	Address 3	Street Address	City	State	Zip	Site Name (County)
6	Current Occupant	Hon. Bill de Blasio	NYC Mayor			City Hall	New York	NY	10007	Former Consolidated Railways Site (Kings)
7	Current Occupant	Hon. Scott Stringer	NYC Comptroller			1 Centre Street	New York	NY	10007	Former Consolidated Railways Site (Kings)
8	Current Occupant	Hon. Letitia James	Public Advocate			1 Centre Street	New York	NY	10007	Former Consolidated Railways Site (Kings)
9	Current Occupant	Carl Weisbrod	Commissioner, NYC Dept. of City Planning			22 Reade Street	New York	NY	10007	Former Consolidated Railways Site (Kings)
10		Emily Lloyd	Commissioner, NYC Dept. of Environmental Protection			59-17 Junction Boulevard	Flushing	NY	11373	Former Consolidated Railways Site (Kings)
11		Nilda Mesa, Director	NYC Office of Environmental Coordination			100 Gold Street - 2nd Floor	New York	NY	10038	Former Consolidated Railways Site (Kings)
12		John Wuthenow	Office of Environmental Assessment & Plannir	NYC Dept. of Environmental Protection		96-05 Horace Harding Expressw	Flushing	NY	11373	Former Consolidated Railways Site (Kings)
13		Hon. Eric Adams	Brooklyn Borough President			209 Joralemon Street	Brooklyn	NY	11201	Former Consolidated Railways Site (Kings)
14		Manfred Magloire	NYSDEC Project Manager			47-40 21st Street	Long Island City	NY	11101	Former Consolidated Railways Site (Kings)
15		Dealice Fuller	Chair, Brooklyn Community Board 1			435 Graham Avenue	Brooklyn	NY	11211	Former Consolidated Railways Site (Kings)
16		Thomas V. Panzone	NYSDEC Regional Citizen Participation Specialist			47-40 21st Street	Long Island City	NY	11101	Former Consolidated Railways Site (Kings)
17		Jacquelyn Nealon	NYSDOH Project Manager	Bureau of Environmental Exposure Investigation		Empire State Plaza – Corning	Albany	NY	12237	Former Consolidated Railways Site (Kings)
18		Larry Ennist	NYSDEC			625 Broadway	Albany	NY	12233	Former Consolidated Railways Site (Kings)
19		Gerald A. Esposito	District Manager, Brooklyn Community Board 1			435 Graham Avenue	Brooklyn	NY	11211	Former Consolidated Railways Site (Kings)
20		Environmental Committee Chairman	Brooklyn Community Board 1			435 Graham Avenue	Brooklyn	NY	11211	Former Consolidated Railways Site (Kings)
21		Hon. Stephen Levin	NYC Council Member			410 Atlantic Avenue	Brooklyn	NY	11217	Former Consolidated Railways Site (Kings)
22		Dalila Hall	New York City Department of Transportati	Brooklyn Borough Commissioner		55 Water Street, 9th Floor	New York	NY	10041	Former Consolidated Railways Site (Kings)
23		Nancy Sunshine, County Clerk	Kings County Clerk's Office			360 Adams Street, Room 189	Brooklyn	NY	11201	Former Consolidated Railways Site (Kings)
24		Hon. Daniel L. Squadron	NYS Senator			209 Joralemon Street, Suite 3	Brooklyn	NY	11201	Former Consolidated Railways Site (Kings)
25		Hon. Joseph Lentol	NYS Assembly Member			619 Lorimer Street	Brooklyn	NY	11211	Former Consolidated Railways Site (Kings)
26		Hon. Charles Schumer	U.S. Senator			780 Third Avenue, Suite 2301	New York	NY	10017	Former Consolidated Railways Site (Kings)
27		Hon. Kirsten Gillibrand	U.S. Senator			780 Third Avenue, Suite 2601	New York	NY	10017	Former Consolidated Railways Site (Kings)
28		Hon. Carolyn Maloney	U.S. House of Representatives			619 Lorimer Street	Brooklyn	NY	11211	Former Consolidated Railways Site (Kings)
29		Daniel Walsh	Director	NYC Office of Environmental Remediation		100 Gold Street – 2nd Floor	New York	NY	10038	Former Consolidated Railways Site (Kings)
30		The Brooklyn Paper				One Metrotech Center, Suite	Brooklyn	NY	11201	Former Consolidated Railways Site (Kings)
31		NY 1 News				75 Ninth Avenue	New York	NY	10011	Former Consolidated Railways Site (Kings)
32		Courier-Life Publications				1 Metro-Tech Center North -	Brooklyn	NY	11201	Former Consolidated Railways Site (Kings)
33		Greenpoint Star				69-60 Grand Avenue	Maspeth	NY	11378	Former Consolidated Railways Site (Kings)
34		Brooklyn Daily Eagle				30 Henry Street	Brooklyn	NY	11201	Former Consolidated Railways Site (Kings)
35		New York Daily News				4 New York Plaza	New York	NY	10004	Former Consolidated Railways Site (Kings)
36		New York Post				1211 Avenue of the Americas	New York	NY	10036	Former Consolidated Railways Site (Kings)
37		P.S. 31 Samuel F. Dupont School	Attn: Mary J. Scarlato, Principal			75 Meserole Ave	Brooklyn	NY	11222	Former Consolidated Railways Site (Kings)
38		24 Oak LLC				155 Water St. Fl. 3	Brooklyn	NY	11201	Former Consolidated Railways Site (Kings)
39		Occupant / Resident				2 Oak Street	Brooklyn	NY	11222	Former Consolidated Railways Site (Kings)
40		57 West LLC				155 Water Street Fl. 3	Brooklyn	NY	11201	Former Consolidated Railways Site (Kings)
41		Occupant / Resident				43 West Street	Brooklyn	NY	11222	Former Consolidated Railways Site (Kings)
42		56 West, LLC				155 Water Street Fl. 3	Brooklyn	NY	11201	Former Consolidated Railways Site (Kings)
43		Occupant / Resident				71 West Street	Brooklyn	NY	11222	Former Consolidated Railways Site (Kings)
44		Penguin Air Conditioning Corp.				26 West Street	Brooklyn	NY	11222	Former Consolidated Railways Site (Kings)
45		Occupant / Resident				26 West Street	Brooklyn	NY	11222	Former Consolidated Railways Site (Kings)
46		Annie Kwok				8000 River Rd. Apt. 7D	North Bergen	NJ	07047	Former Consolidated Railways Site (Kings)
47		Occupant / Resident				56 Calyer Street	Brooklyn	NY	11222	Former Consolidated Railways Site (Kings)
48		79 Quay Development LLC				79 Quay Street	Brooklyn	NY	11222	Former Consolidated Railways Site (Kings)
49		Occupant / Resident				79 Quay Street	Brooklyn	NY	11222	Former Consolidated Railways Site (Kings)
50		New York City Transit Authority				40 Quay Street	Brooklyn	NY	11222	Former Consolidated Railways Site (Kings)

Appendix C - Site Location Map



Appendix D– Brownfield Cleanup Program Process



Note: CP Activities are in **Bold**

ATTACHMENT F
Resumes

EBC

ENVIRONMENTAL BUSINESS CONSULTANTS

Charles B. Sosik, PG, PHG, Principal

Professional Experience

25 years

Education

MS, Hydrogeology, Adelphi University, NY
BS, Geology, Northern Arizona University, AZ

Areas of Expertise

- Brownfields Redevelopment
- Hazardous Waste Site Investigations
- Pre-purchase Site Evaluations and Support
- Regulatory Negotiations
- Remedial Planning and "Cost to Cure" Analysis
- Strategic Planning
- Real Estate Transactions
- NYC "E" Designations

Professional Certification

- Professional Geologist, NH
- Professional Geologist, Hydrogeologist, WA
- OSHA 40-hr HAZMAT
- OSHA 8-hr. Supervisor
- NYC OER Qualified Environmental Professional

Professional Affiliation / Committees

- NYS Council of Professional Geologists (NYSCPG)
- Association of Groundwater Scientists & Engineers (AGSE)
- NYS RBCA Advisory Committee
- Massachusetts LSP Association
- New Hampshire Association of Professional Geologists
- Interstate Technology Regulatory Council/MTBE Team
- Environmental Business Association, Brownfields Task Force
- Part 375 Working Group

PROFILE

Mr. Sosik has 25 years of experience in environmental consulting. He specializes in advising clients on managing environmental compliance with federal, state, and municipal agencies and has successfully directed numerous investigation and remediation projects involving petroleum, pesticides, chlorinated solvents, heavy metals and radiologically activated media. His work included extensive three-dimensional investigations on MTBE, which have been used effectively to help shape public policy. He also has experience in applying models to groundwater related problems and has completed several large-scale projects to determine fate and transport of contaminants, establish spill scenarios, and closure criteria. His experience and expertise in the area of contaminant hydrogeology has resulted in requests from environmental attorneys, property owners and New York State to serve as an expert witness and technical advisor on a variety of legal disputes.

For the past 10 years Mr. Sosik has been primarily engaged in providing environmental consulting to developers responding to the extensive re-zoning of former industrial and commercial properties, which is currently taking place throughout New York City. These services include everything from pre-purchase evaluations and contract negotiations to gaining acceptance in and moving projects through the NYS Brownfields Program. Mr. Sosik has taken a pro-active role in the continued development of the NYS Brownfields Program and related policy, by attending numerous working seminars, active participation in work groups and task forces and by providing commentary to draft versions of new guidance documents. Throughout his professional career, Mr. Sosik has remained committed to developing innovative cost- efficient solutions to environmental issues, specifically tailored to the needs of his clients.

SELECTED PROJECTS

Scavenger Waste Treatment Facility (SWTF), Suffolk County, NY

Water Treatment Plant EIS - Focused EIS - In response to requests from the Suffolk County Council on Environmental Quality and the Brookhaven Conservation Advisory Council, Mr. Sosik prepared a focused EIS to evaluate the potential impacts to an important surface water resource from the proposed facility including cumulative and synergistic effects with established contaminant plumes in the area.

Advanced Residential Communities, Rockville Centre, NY

Brownfield Project – As the senior project manager on this large scale, high profile redevelopment project, Mr. Sosik was asked to develop a plan to accelerate the regulatory process in the face of general community opposition. Through numerous discussions with the BCP management team, He was able to condense the schedule and review period, through the submission of supporting documents (Investigation Report, Remedial Work Plan) with the BCP application package. Community opposition, which focused on the environmental condition of the site as a means to block the project, was used to advantage in expediting approval of the aggressive interim remedial plan. This will allow the developer to begin remedial work approximately 5 months ahead of schedule.

Former Temco Uniform site, West Haverstraw, NY

Brownfield Project – Mr. Sosik took over management of this project from another consultant following transition of this VCP site to the BCP. Mr. Sosik used the opportunity to renegotiate and revise the scope of work to allow a more cost effective and focused investigation plan without re-writing or resubmitting the RIWP. During the NYSDEC's review of the transition package, he met with and coordinated changes with the NYSDEC Project Manager to gain approval. The result saved the client a significant amount of money, but perhaps more importantly in this case, did so without loss of time.

Grovick Properties, Jackson Heights, NY

Brownfield Project – This Brownfield property is somewhat unique in that it had been investigated and partially remediated by the NYSDEC through the petroleum spill fund. The client was interested in

purchasing the property and redeveloping it as office and retail space. Mr. Sosik reviewed the NYSDEC investigation and developed a supplemental plan to meet the requirements of an RI under the BCP program. By performing this limited amount of field work "up-front" he was able to complete an RI Report and Remedial Plan and submit both with the BCP application package. The NYSDEC and NYSDOH approved the RI Report and the Remedial Plan with minor changes. This cut 120 days from the review process and allowed the client to arrange financing and move his project forward knowing what the clean-up costs would be at the outset.

Metro Management, Bronx, NY

Brownfield Project – The site of a former gas station, the developer had planned to construct a 12-story affordable housing apartment complex with first floor retail space. Since the site was located in an Environmental zone, potential tax credits of 22% for site development, remediation and tangible property could be realized under the BCP. In a pre-application meeting with the NYSDEC, Mr. Sosik realized that the department did not believe the site was eligible for the BCP, since it had been previously investigated and closed under the spills program.

Mr. Sosik assisted the developer in securing financing, and due to the demands of an aggressive construction schedule developed an Interim Remedial Measure (IRM), based on chemical oxidation treatment. Working closely with the clients environmental counsel, Mr. Sosik was able to get the IRM approved without a public comment period. Implementation of the IRM is currently underway.

The project was awarded the 2009 NYC Brownfield Award for Innovation.

Brandt Airflex, NY

Technical Consulting Services - Mr. Sosik provided senior level technical advice and strategic planning in developing an off-site RI/FS for the site, in negotiating a tax reduction for the property due to the environmental condition and in preparing a cost to cure estimate for settlement between business partners. After achieving a favorable tax consideration and settlement agreement for his client

Allied Aviation Services, Dallas, Fort Worth, Airport, Dallas, TX

Jet Fuel Investigation - Mr. Sosik developed and managed an investigative plan to quickly identify the extent and source of jet fuel which was discharging from the Airport's storm drain system to a creek a mile away. Through the use of a refined conceptual model, accelerated investigative techniques and a flexible work plan, he was able to identify the source of the fuel and the migration route within a single week. He then identifled remedial options and successfully negotiated a risk based plan with the Texas regulatory agency that had issued a notice of enforcement action against the facility.

KeySpan – Former LILCO Facilities, Various NY Locations

Pesticide Impact Evaluation - Mr. Sosik developed, negotiated and implemented a site screening procedure to evaluate impact to public health and the environment as the result of past herbicide use at 211 utility sites. Using an unsaturated zone leaching model (PRZM) on a small subset of the sites, he was able to establish mass loading schedules for the remaining sites. This was combined with public well data in a GIS environment to perform queries with respect to mass loading, time transport and proximity to vunerable public supply wells. Using this approach Mr. Sosik was able to show that there were no concerns for future impact. This effort satisfied the public health and resource concerns of the state environmental agency and county health department in a reasonable amount of time and at a fraction of the cost of a full scale investigation.

Former Computer Circuits (Superfund) Site, Hauppauge, NY

CERCLA RI/FS - As Senior Project Manager for the site, he played a major role in regaining control of the investigation activites for the PRP. This action prevented the USEPA from initiating an extensive investigation at the site using a RAC II contractor allowing the client to perform a more efficient investigation. He was involved in all negotiations with EPA and was the project lead in developing a revised site characterization plan (work plan, field sampling plan, quality assurance plan, etc.). By carefully managing all phases of the investigation and continued interaction with each of the three regulatory agencies involved, Mr. Sosik was able to keep the project focused and incrementally reinforce the clients position. The estimated cost of the revised investigation is expected to save the client 1.5 to 2 million dollars.

Sun Oil, Seaford, NY

Remediation Consuliting Services & Project Management - Under an atmosphere of regulatory distrust, political pressure and mounting public hostility toward the client, Mr. Sosik conducted an off-site 3-D investigation to define the extent of contamination and the potential impact on public health. By designing and implementing an aggressive source area remediation program and personal interaction with the public and regulatory agencies, he was able to successfully negotiate a limited off-site remediation favorable to the client. Source area remediation was completed within 6 months and the project successfully closed without damage to the client's public image or working relationship with the regulatory agencies.

Con Edison, Various Locations, NY

Hydrogeologic Consulting Services - Under a general consulting contract, Mr. Sosik conducted detailed subsurface hydrogeologic investigations at five locations to assist in the development of groundwater contingency planning. He also developed and implemented work plans to investigate and remediate existing petroleum, cable fluid, and PCB releases at many of the generating facilities and substations. An important aspect of his role was in assisting the client in strategic planning and negotiations with the regulatory agency.

Keyspan - Tuthill Substation, Aqueboque, NY

Accelerated Site Characterization - Using accelerated site characterization techniques, Mr. Sosik presented the project as a case study in establishing the transport of an herbacide and its metobolites aplied at utility sites in the 1980's The results were then used to establish a screening method for evaluating 211 similar sites controlled by the client in a reasonable and eficient manner.

NYSDEC Spill, East Moriches, NY

Spill Release Analysis - With recognized expertise in the area of gasoline plume development on Long Island, Mr. Sosik was asked by

Charles B. Sosik, PG, PHG, Principal

the State to establish the release date (and principal responsible party) of an extensive petroleum spill, which impacted a residential neighborhood. He used multiple lines of evidence, and a new EPA model (HSSM), which he has helped to refine, to reconstruct the release scenario and spill date, in support of the State Attorney General's cost recovery effort from the PRP.

Minmilt Realty, Farmingdale, NY

Fate & Transport Modeling - He completed an RI/FS at this location for a PCE plume that had been in transit for over 30 years. Mr. Sosik applied a conservative model to evaluate time/concentration impacts under a variety of transport scenarios to a municipal wellfield located 13,000 feet away. Through the use of the model and careful interpretation of an extensive data set compiled from several sources, Mr. Sosik was able to propose a plan which was both acceptable to the regulator and favorable to the client.

Sebonack Golf Course Project, Town of Southampton, NY

IPM Pesticide Study - Provided professional hydrogeologic services in support of the EIS prepared for the development of the site. The proposed development included an 18-hole golf course, clubhouse, dormitory facility, cottages, associated structures, and a 6,000 square foot research station for Southampton College. Mr. Sosik performed an extensive evaluation (using a pesticide-leaching model) on the effects of pesticide and nitrogen loading to groundwater as part of the projects commitment to an Integrated Pest Management (IPM) approach.

NYSDEC, Spills Division, Regions 1 – 4

Petroleum Spills Investigation & Remediation - As a prime contractor/consultant for the NYSDEC in Regions 1-4, Mr. Sosik has managed the investigation and remediation of numerous petroleum spills throughout the State. Many of these projects required the development of innovative investigation and remediation techniques to achieve project goals. He was also involved in many pilot projects and research studies to evaluate innovative investigation techniques such as accelerated site characterization, and alternative approaches to remediation such as monitored natural attenuation and risk based corrective action.

Sun Oil, E. Meadow, NY

Exposure Assessment - Performed to seek closure of the spill file, despite the presence of contaminants above standards, Mr. Sosik determined after the extended assessment that the level of remaining contamination would not pose a future threat to human health or the environment. He used multiple lines of evidence, and a fate and transport model to show that degradation processes would achieve standards within a reasonable time.

Sand & Gravel Mine, NY

Property Development - As part of the development of a sand and gravel mine, Mr. Sosik provided environmental consulting services to assist in obtaining a mining permit, which would result in the construction of a 150-acre lake. Specifically, Mr. Sosik investigated if the proposed lake would reduce groundwater quantity to domestic and public well fields, and/or accelerate the migration of potential surface contaminants to the lower part of the aquifer. After assuming the lead role in negotiations with the regulatory agency, Mr. Sosik was able to obtain a permit for the client by adequately addressing water quality and quantity issues, and by preparing a monitoring plan and spill response plan, acceptable to all parties.

NYSDEC, Mamaroneck, NY

Site Characterization / Source Identification - In a complex hydrogeologic setting consisting of contaminant transport through fractured metomorphic bedrock and variable overburden materials, Mr. Sosik was able to develop and implement a sub-surface investigation to differentiate and separate the impact associated with each of two sources. The results of this investigation were successful in encouraging the spiller to accept responsibility for the release.

Riverhead Municipal Water District, NY

Site Characterization / Remedial Planning - Using accelerated characterization techniques, he implemented a 3-D site investigation to identify two service stations 4,000 ft. away as the source of contamination impacting a municipal wellfield. In accordance with the strict time table imposed by the need to return the wellfield to production by early spring, he designed and implemented a multi-point (9 RW, 6 IW) recovery and injection well system using a 3-d numerical flow model, and completed the project on time. Using a contaminant transport model, Mr. Sosik developed clean-up goals which were achieved in 9 months of operation, well below the projected 3 to 5 year project duration.

Montauk Fire Department, NY

Site Assessment - Mr. Sosik performed a limited investigation and used a 2-D flow model to demonstrate that the property could not have been the source of contamination which had impacted an adjacent wellfield as per the results of a previous investigation. This small focused effort successfully reversed a $500,000, and rising, claim against the department by the water district and the NYSDEC.

PREVIOUS EXPERIENCE

P.W. Grosser Consulting, Bohemia, NY
Senior Project Manager, 1999-2006

Environmental Assessment & Remediation, Patchogue, NY
Senior Project Manager, 1994-1999

Miller Environmental Group, Calverton, NY
Project Manager, 1989-1994

DuPont Biosystems, Aston, PA
Hydrogeologist, 1988-1989

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ENVIRONMENTAL BUSINESS CONSULTANTS

Charles B. Sosik, PG, PHG, Principal

EXPERT WITNESS TESTIMONY AND DEPOSITIONS

Fact Witness -Testimony on relative age of petroleum spill based on nature and extent of residual and dissolved components at the Delta Service Station in Uniondale, NY Fall/1999

Expert Witness / Expert Report for defendant in cost recovery case by NYS Attorney General regarding a Class II Inactive Hazardous Waste (State Superfund) project by the NYSDEC (October 2004 – present, Report: March 2005, Deposition: April 2005, 2nd Report: Aug. 2013, 2nd Deposition Nov. 2013, Bench Trial: December 2013 - qualified as expert in Federal Court),

Expert Witness / Fact Witness for plaintiff seeking compensation for partial expenses incurred during the investigation and remediation of a USEPA CERCLA site due to the release and migration of contaminants from an "upgradient" industrial property. (Deposition May 2005, case settled April 2007).

Expert Witness / Fact Witness for NYS Attorney General with respect to cost recovery for a NYSDEC petroleum spill site in Holtzville, NY (Deposition April 2005 - case settled).

Expert Witness – Statement of opinion and expert testimony at trial for plaintiff seeking damages from a major oil corporation for contamination under a prior leasing agreement in Rego Park, NY. Case decided in favor of plaintiff. Trial July 2007, in favor of Plaintiff. Qualified as Expert.

Expert Witness / Fact Witness for NYS Attorney General with respect to cost recovery for a NYSDEC petroleum spill site in Lindenhurst, NY (Trial date Dec. 2009, in favor of plaintiff. Qualified as Expert State Supreme Court.

Expert Witness - for NYS Attorney General regarding NYSDEC cost recovery for a petroleum spill site at Riverhead, NY. Case settled July 2008.

Expert Witness for plaintiffs in class action case with respect to damages from chlorinated plume impact to residences in Dayton, OH. (Draft Report – May 2013).

Expert Witness / Fact Witness for defendant with respect to cost recovery and third party responsibility for a NYSDEC petroleum spill site in Lindenhurst, NY (Expert Statement of Fact – October 2005).

Expert Witness for plaintiff seeking damages related to a petroleum spill from the previous owner/operator of a gas station in College Point, NY. Case settled 2009.

Expert Witness for plaintiff (municipal water supply purveyor) seeking damages from major oil companies and manufacturer of MTBE at various locations in Suffolk County, NY. Expert reports July 2007, August 2007 and October 2007, Case settled August, 2008.

Expert Witness - Deposition for NYS Attorney General regarding NYSDEC cost recovery for a petroleum spill site at Sag Harbor, NY. August 2002

Expert Witness for defendant responding to a claim from adjacent commercial property owner on the origin of chlorinated solvents on plaintiff's property located in Cedarhurst, NY. Expert opinion submitted to lead counsel on March 6, 2009, case settled April 2009.

Expert Report - for Attorney General on modeling performed to determine the spill release scenario at a NYSDEC petroleum spill site in East Moriches, NY. June 2000.

Expert Witness - for plaintiff in case regarding impact to private wells from a spill at adjacent Town and County properties with open gasoline spill files in Goshen, NY. Expert report submitted August 2013.

Expert Witness for defendant with respect to cost recovery from Sunoco for a NYSDEC petroleum spill site. (Declaration – January 2013).

Expert Witness - for plaintiff (municipal water supply purveyor) seeking damages from Dow Chemical for PCE impact at various locations in Suffolk County, NY. Affidavit submitted 2011.

MODELING EXPERIENCE (PARTIAL LISTING)

PROJECT	MODEL	APPLICATION
Riverhead Water District, Riverhead, NY	MODFLOW, MODPATH	Remediation system design to intercept MTBE plume and prevent continued impact to municipal well field.
NYSDEC - Region 1, Holbrook, NY	MODFLOW, MODPATH	Simulate transport of MTBE plume to predict future impact.
NYSDEC - Region 1, East Moriches, NY	HSSM	Evaluate release scenario and start date of petroleum spill in support of cost recovery by NYS AG office.
AMOCO, Deer Park, NY	HSSM	Estimate release amount, start date and spill scenario to evaluate the potential for mass unaccounted for
Keyspan Energy, Nassau/Suffolk Counties Substations	PRZM	Estimate mass load of simazine used at 211 electric substations and screen sites according to potential for human health and ecological impacts.
Saboneck Golf Club, Southampton NY	PRZM	Estimate mass load of proposed pesticides on new golf course to evaluate acceptability under an IPM program.
Suffolk County Department of Public Works (SCDPW) Scavenger Waste Treatment Plant, Yaphank, NY	DYNFLOW, DYNTRAC	Evaluate time-transport and nitrogen impact on local river system.
SCDPW SUNY Waste Water Treatment Plant, Stony Brook, NY	DYNFLOW, DYNTRAC	Determine outfall location and time-transport of nitrogen from proposed upgrades to an existing wastewater treatment plant
Water Authority of Great Neck North Great Neck, NY	MODFLOW, MODPATH, MT3D	Review of modeling study performed by EPA to evaluate potential future impact to Well field from PCE plume. Identified serious flaws in model construction and implementation, which invalidated conclusions

PUBLICATIONS / PROFESSIONAL PAPERS

Smart Pump & Treat Strategy for MTBE Impacting a Public Water Supply (14th Annual Conference on Contaminated Soils Proceedings, 1998)

Transport & Transformation of BTEX & MTBE in a Sand Aquifer (Groundwater Monitoring & Remediation 05/1998)

Characteristics of Gasoline Releases in the Water Table Aquifer of Long Island (Petroleum Hydrocarbons Conference Proceedings, 1999)

Field Applications of the Hydrocarbon Spill Screening Model (HSSM) (USEPA Interactive Modeling Web Course www.epa.gov/athens/software/training/webcourse Authored module on model application and applied use of calculators, 02/2000)

Comparative Evaluation of MTBE Sites on Long Island, US EPA Workshop on MTBE Bioremediation (Cincinnati, 02/2000)

Comparison of Four MTBE Plumes in the Upper Glacial Aquifer of Long Island (American Geophysical Union, San Francisco, 12/1996)

Analysis and Simulation of the Gasoline Spill at East Patchogue, New York (American Geophysical Union, San Francisco, 12/1998)

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ENVIRONMENTAL BUSINESS CONSULTANTS

Chawinie Reilly, Project Manager / Industrial Hygienist

Professional Experience
EBC: March 2013
Prior: 8 years

Education
Bachelor of Science, Environmental Health and Safety, Stony Brook University, NY

Areas of Expertise
- Phase I / Property Condition Assessments
- Occupational Health and Safety Sampling
- Indoor Air Quality (IAQ) Investigations
- Mold Investigations and Remediation
- Soil and Ground Water Investigations
- Noise Studies
- Lead Paint and Asbestos Surveys
- Hazardous Materials Assessments

Professional Certification
- OSHA 40-hr HAZWOPER
- NYS Asbestos Inspector
- NYC Asbestos Investigator
- USEPA Lead Inspector
- USEPA Lead Risk Assessor
- OSHA 10-hr Construction Health and Safety
- Hazard Analysis and Critical Control Point (HACCP) Certified

PROFILE

Mrs. Reilly has 9 year's experience as an environmental consultant/contractor and has worked on and managed a wide range of environmental projects. Ms. Miller has conducted Phase Is and Property Condition Assessments for commercial, industrial, and residential properties in New York, New Jersey and Connecticut. In addition, Ms. Miller has conducted various IAQ, asbestos, mold and occupational health and safety sampling investigations for a variety of city, state, federal and private clients.

PREVIOUS EXPERIENCE

The Louis Berger Group, New York, New York
Industrial Hygienist, 2008-2013

AEI Consultants, Jersey City, New Jersey
Environmental Scientist, 2005-2008

AMC Engineering
99 Jericho Turnpike, Suite 300J
Jericho, NY 11590
Phone: (516) 417-8588

ARIEL CZEMERINSKI, P.E.

Mr. Czemerinski is a New York State Professional Engineer and CEO of AMC Engineering PLLC an EBC affiliate. Mr. Czemerinski has with 20 years of experience in the chemical and environmental areas. Areas of expertise include environmental compliance, permitting, remedial system design, process and plant safety, and management of a production facility. Mr. Czemerinski is a Registered Professional Engineer in NY, IN, IL, and MI.

Professional Experience
AMC: 14
Prior: 6 years

Education
Master of Science in Chemical Engineering, Columbia University, New York, NY, Feb. 1990. Bachelor of Science in Chemical Engineering, University Of Buenos Aires, Buenos Aires, Argentina, May 1987

Areas of Expertise

- Vapor Intrusion - Barrier and Sub Slab Venting System Design
- Environmental Assessment Statements and Environmental Impact Assessments under CEQR, ULURP
- Remedial Program Design and Management
- Environmental Compliance, Clean Water Act, Clean Air Act, Hazardous Materials
- Dewatering & Treatment System Design
- NYCDEP Sewer Discharge Permitting
- Transfer Station Permitting and Compliance
- Chemical Process Design and Optimization
- Wastewater Treatment Systems and Permitting, SPEDES, Air
- Zoning Regulations and Permitting
- Safety and Environmental Training
- Waste Management Plans

Professional Certifications

- OSHA 40-hr HAZWOPER
- OSHA 8-hr HAZWOPER Supervisor

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ENVIRONMENTAL BUSINESS CONSULTANTS

Kevin R. Brussee, Senior Project Manager

Professional Experience
EBC: January 2008
Prior: 6 years

Education
Bachelor of Science, Environmental Science, Plattsburgh State University, NY
Master of Science, Environmental Studies, University of Massachusetts, Lowell

Areas of Expertise
- Management of Site Investigations / Remedial Oversight NYC "E" Designation Sites
- Management of RI Investigations / RAWP Implementation NYS BCP Sites
- NYSDEC Spill Site Investigations
- Phase I / Phase II Property Assessments
- Waste Characterization / Soil Management

Professional Certification
- OSHA 40-hr HAZWOPER
- OSHA 8-hr HAZWOPER Supervisor

PROFILE

Mr. Brussee has 10 years experience as an environmental consultant/contractor and has worked on and managed a wide range of environmental projects. Mr. Brussee has conducted Phase I, II and III Environmental Site Assessments for commercial, industrial, and residential properties in New York, New Jersey, Maryland and Delaware.

Mr. Brussee's field experience includes tank removal and installations, spill management and closure, soil and groundwater sampling, and both the oversight and operation of soil boring and well installation equipment. In addition, Mr. Brussee has performed project research, data reduction and evaluation, and has prepared reports for both regulatory and client use.

PREVIOUS EXPERIENCE

Eastern Environmental Solutions, Inc., Manorville, NY
Project Manager, 2006-2008

EA Engineering, Science & Technology
Hydrogeologist, 2005-2006

P.W. Grosser Consulting, Bohemia, NY
Field Hydrogeologist, 2002-2003

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ENVIRONMENTAL BUSINESS CONSULTANTS

Kevin R. Brussee, Senior Project Manager

SELECT PROJECT EXPERIENCE

Project:	Former Dico G, Autio and Truck Repair Site - Bronx Park Apartments, redevelopment from commercial to mixed use
Location:	Bronx, NY, White Plains Road
Type:	NYS BCP Site, Former gas station, repair shop & junk yard
Contamination:	Petroleum - Gasoline
Role:	Project Manager, during Site Management Phase

Project:	Former Uniforms for Industry Site – Richmond Hill Senior Living Residences / Richmond Place
Location:	Jamaica Ave, Richmond Hill Queens, NY
Type:	NYS BCP, NYC E-Site Hazmat, Noise, Former industrial Laundry
Contamination:	Chlorinated Solvents, Historic Fill, Petroleum - Fuel oil/Mop oil
Role:	Project Manager, RAWP implementation

Project:	Former Gas Station / car wash to mixed use affordable housing / commercial
Location:	Bronx, NY, Southern Boulevard
Type:	NYS BCP, NYC E-Site Hazmat, Former gas station / gar wash
Contamination:	Petroleum - Gasoline
Role:	Project Manager, RAWP implementation

Project:	Redevelopment of former industrial property to residential
Location:	Williamsburg section of Brooklyn, NY, Bedford Ave
Type:	NYC E-Designation Site, Former dye manufacturing plant
Contamination:	Hazardous levels of heavy metals, fuel oil tanks
Role:	Project Manager, RAWP implementation

Project:	Former Domsey Fiber Corp Site
Location:	Williamsburg section of Brooklyn, NY, Kent Ave
Type:	NYC E-Designation Site, Former commercial property
Contamination:	Chlorinated solvents, fuel oil and Historic fill
Role:	Project Manager, RIWP Development and Implementation, RAWP development and implementation, waste characterization and soil management

PUBLICATIONS

Chemical Stress Induced by Copper, Examination of a Biofilm System;
(Water Science Technology, 2006; 54(9): 191-199.)

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ENVIRONMENTAL BUSINESS CONSULTANTS

Robert Bennett, Project Manager

Professional Experience

EBC: February 2015
Prior: 7 years

Education

Bachelor of Science, Environmental Science, State University of New York College at Oneonta, Oneonta, NY

Associates in Applied Sciences, Field Biology, State University of New York College at Delhi, Delhi, NY

Areas of Expertise

- Phase I / Phase II Property Assessments
- Waste Characterization / Soil Management
- Brownfield Closure and Planning Board
- Remedial Investigations
- Landfill Closure and Monitoring
- Dredging Monitoring and Management
- Title V & NY Air Permitting and Registrations
- NYS / Nassau & Suffolk County Sanitary Code Compliance

Professional Certification

- OSHA 40-hr HAZWOPER
- OSHA 10-hr Construction Safety
- NYSDOH Asbestos Inspector & Project Monitor
- NYCDEP Asbestos Investigator
- EPA Lead-Based Paint Inspector & Risk Assessor

PROFILE

Mr. Bennett has 7 years experience as an environmental consultant and is responsible for assessment and investigative services for a wide variety of projects, including industrial and commercial properties, mass transit facilities, parking structures, and sanitary and wastewater treatment facilities. Mr. Bennett has conducted Phase I, II and III Environmental Site Assessments for commercial, industrial, and residential properties in New York, New Jersey, and Massachusetts.

Mr. Bennett conducts research and provides support for various projects on a daily basis and coordinates with clients, regulatory agencies, attorneys and sub-contractors to provide cost-effective business solutions for a plethora of environmental concerns. Mr. Bennett's field experience includes tank removal and installations, dredging oversight and monitoring, asbestos and lead inspections, compliance audits, spill management and closure, soil and groundwater sampling, and both the oversight and operation of soil boring and well installation equipment. In

Robert Bennett, Project Manager

addition, Mr. Bennett has performed project research, data reduction and evaluation, and has prepared reports for both regulatory and client use.

PREVIOUS EXPERIENCE

Dvirka & Bartilucci Engineers and Architects, P.C., Woodbury, NY
Environmental Scientist II, 2014-2015

Gannett Fleming Engineers and Architects, P.C., Woodbury, NY
Environmental Scientist, 2012-2014

Apex Companies L.L.C., Bohemia, NY
Environmental Scientist / Project Manager, 2008-2012

SELECT PROJECT EXPERIENCE

Project:	Governor's Office of Storm Recovery (GOSR) New York Rising Buyout and Acquisition Program / Superstorm Sandy Relief Program
Location:	Long Island and New York City
Type:	Phase I Environmental Site Assessments (ESAs) and Property Evaluation
Contamination:	Asbestos, Lead, Mold and PCBs
Role:	Environmental Scientist II responsible for the creation and review of a high volume of Phase I ESAs

Project:	WMATA Metrorail System Assessment Program
Location:	Washington D.C. Area
Type:	Hazardous materials inspection and evaluation for planning and engineering design purposes.
Contamination:	Asbestos, Lead and PCBs
Role:	Environmental Scientist and Inspection Team Leader

Project:	Armonk Square Redevelopment Plan
Location:	Armonk Square, Armonk, NY
Type:	Monitoring well and recovery well installation. Sub-slab depressurization system (SSDS) installation and operational modifications.
Contamination:	Chlorinated Solvents
Role:	Environmental Scientist responsible for the planning and oversight of monitoring well and recovery well installation. Planning, oversight, and modifications to SSDS.

Project:	Newtown Creek Dredging Project for NYCDEP
Location:	NYCDEP Newtown Creek Wastewater Treatment Facility, Brooklyn, NY
Type:	Navigational waterway dredging
Contamination:	Hazardous and biological pollutants in bottom sediment.

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Robert Bennett, Project Manager

Role:	Environmental Scientist responsible for the implementation and operation of engineering controls and turbidity monitoring.
Project:	Boring / Coring Program, Northeast U.S. Region
Location:	New Bedford Harbor, New Bedford, MA. Long Island and Massachusetts.
Type:	Bathymetric surveys. Borings and Corings advanced through deep sediment and bedrock to determine the proper allocation dredge areas and confined aquatic disposal zones. Additionally, Vibracore drilling was conducted in shallow and easily accessible areas.
Contamination:	PCBs
Role:	Environmental Scientist / Project Manager serving as an on-site geologist to interpret and record geological investigations.
Project:	New York State Air Permit Facilities
Location:	Westchester, Orange and Rockland County, NY
Type:	Title V Air Permits, state registration and permitting for multiple industrial laundering facilities.
Contamination:	Hazardous Air Pollutants
Role:	Environmental Scientist / Project Manager responsible for all air permitting work for a NY-branch office.
Project:	Dredging Oversight and Water Quality Monitoring
Location:	New Bedford Harbor, New Bedford, MA
Type:	Bathymetric surveys. Supervised maintenance dredging and confined aquatic disposal zone excavation operations. Turbidity and sediment flocculation monitoring.
Contamination:	PCBs
Role:	Environmental Scientist providing project oversight, coordinating daily with Mass DEP and sub-contractors. Documenting geological data.
Project:	Stormwater Abatement System Inspections, Repairs and Reporting
Location:	Multiple retailer locations throughout New York State
Type:	Stormwater drainage system and stormwater control structure inspections and repairs
Contamination:	PCBs
Role:	Environmental Scientist / Project Manager assigned to coordinate and perform routine inspections of drainage systems and stormwater control structures. Made repairs to stormwater appurtenances where neccesary.
Project:	ConEdison Truck-flush facility, effluent discharge monitoring.
Location:	Multiple ConEdison truck-flush facilities located throughout New York City, NY.

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Ph 631.504.6000 • Fax 631.924.2870 • Email rbennett@ebcincny.com

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Robert Bennett, Project Manager

Type:	Compliance sampling and evaluation with regard to New York City Sewer Effluent Limitations.
Contamination:	Oil & Grease, Metals, Pesticides/PCBs , VOCs, SVOCs
Role:	Effluent sampling. Coordinating with client and laboratory to conduct quarterly sampling events.
Project:	RCRA Closure Support
Location:	Pall Corporation Former Headquarters, East Hills, NY
Type:	Environmental closure of a medical equipment manufacturing facility
Contamination:	Formic Acid, Dimethylacetamide (DMAC)
Role:	Environmental Scientist / Project Manager responsible for the supervision of the removal of all process tanks, piping and associated appurtenances. Accomplished final decommissioning activities. RCRA Closure Report.
Project:	Brownfield Closure Support
Location:	Multiple locations throughout New York City
Type:	Remedial investigations. Interim remedial measures. Soil vapor intrusion studies. RCRA Closure.
Contamination:	VOCs, SVOCs, Oil & Grease, Pesticides/PCBs , Metals
Role:	Environmental Scientist / Project Manager responsible for preparing and conducting remedial investigations, interim remedial measures, soil vapor intrusion studies and RCRA closure.
Project:	Mirant Bowline Power Plant Asbestos Survey
Location:	West Haverstraw, NY
Type:	Asbestos inspection. Personal exposure monitoring. Asbestos labeling Program. Reporting.
Contamination:	Asbestos
Role:	Environmental Scientist / Project Manager serving as a team leader to conduct large scale asbestos inspection, labeling program and reporting.
Project:	Estee Lauder SPCC Facilities
Location:	Multiple manufacturing facilities throughout Long Island
Type:	Spill Prevention Control & Countermeasures (SPCC) inspections, evaluation and reporting.
Contamination:	N/A
Role:	Environmental Scientist / Project Manager responsible for conducting inspections, facility engineering review, and reporting.
Project:	Nassau and Suffolk County Sanitary Code Facility Compliance Audits
Location:	Multiple medical equipment manufacturing facilities throughout Long Island.
Type:	Article XI and XII Sanitary Code Compliance Audits and multiple medical equipment manufacturing facilities.

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ENVIRONMENTAL BUSINESS CONSULTANTS

Robert Bennett, Project Manager

Contamination: N/A
Role: Environmental Scientist / Project Manager responsible for conducting inspections, facility engineering review, and reporting.

PUBLICATIONS

Dredging and Beach Nourishment Public Notices
(Cape Cod Times, 2008-2010)

Dredging and Beach Nourishment Public Notices
(Yarmouth Weekly, 2008-2010)

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Ph 631.504.6000 • Fax 631.924.2870 • Email rbennett@ebcincny.com

EBC

ENVIRONMENTAL BUSINESS CONSULTANTS

Kevin Waters, Hydrogeologist

Professional Experience
EBC: October 2010
Prior: 5 years

Education
Bachelor of Science, Geology, State University of New York, Stony Brook

Areas of Expertise
- Field Operations
- Phase II and RI Implementation, Site Characterization Studies
- Health & Safety Monitoring and Oversight
- Waste Characterization / Soil Management
- Site Logistics

Professional Certification
- OSHA 40-hr HAZWOPER
- OSHA 8-hr HAZWOPER Supervisor

PROFILE

Mr. Waters has 7 years experience as an environmental consultant and has worked on a wide range of environmental projects. Mr. Waters has conducted Phase II and III Environmental Site Assessments for commercial, industrial, and residential properties in New York.

Mr. Waters' field experience includes soil, air and groundwater sampling, operations and maintenance of groundwater remediation systems, tank removals, spill management and closure, and oversight of monitoring well installations. In addition, Mr. Waters has prepared reports for both regulatory and client use.

PREVIOUS EXPERIENCE

P.W. Grosser Consulting, Bohemia, NY
Field Hydrogeologist, 2003-2008

SELECT PROJECT EXPERIENCE

Project:	Former Gas Station / car wash to mixed use affordable housing / commercial
Location:	Bronx, NY, Southern Boulevard
Type:	NYS BCP, NYC E-Site Hazmat, Former gas station / gar wash
Contamination:	Petroleum - Gasoline
Role:	Field Operations Manager, Health and Safety Officer

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ENVIRONMENTAL BUSINESS CONSULTANTS

Kevin Waters, Hydrogeologist

SELECT PROJECT EXPERIENCE

Project:	Former Uniforms for Industry Site – Richmond Hill Senior Living Residences / Richmond Place
Location:	Jamaica Ave, Richmond Hill Queens, NY
Type:	NYS BCP, NYC E-Site Hazmat, Noise, Former industrial Laundry
Contamination:	Chlorinated Solvents, Historic Fill, Petroleum - Fuel oil/Mop oil
Role:	Field Operations Manager, Health and Safety Monitoring and Field Oversight

Project:	Rikers Island – West Intake Facility
Location:	NYC Department of Corrections, Rikers Island, NY
Type:	Municipal Construction Project
Contamination:	Hazardous levels of lead, heavy metals in Historic fill
Role:	Field Operations Manager, Health and Safety Monitoring and Field Oversight

Project:	Residential Redevelopment Project
Location:	Williamsburg Section of Brooklyn, Wallabout Street
Type:	NYC E-Designation Site
Contamination:	Hazardous levels of lead, heavy metals, SVOCs in Historic fill
Role:	Implement RI Work Plan, Supervise sample collection in all media

ATTACHMENT G
BCP Signage Specifications

New York State Brownfields Cleanup Program

FORMER CONSOLIDATED FREIGHTWAYS SITE
BCP Site No. C-224191
M & H Realty LLC

Governor Andrew M. Cuomo
NYSDEC Commissioner Joe Martens
Mayor Bill de Blasio

Transform the Past. Build for the Future.

Sign Requirements

Size: Horizontal format – 96" wide by 48" high

Construction Materials: Aluminum or wood blank sign boards with vinyl sheeting.

Inserts: **"**New York State and DEC logo", "Program Name", "Site Name", "Site No.", "Name of Party Performing Remedial Activities or New York State Department of Environmental Conservation", "Governor", "DEC Commissioner", "Municipal Executive", "Transform the Past...Build for the Future".

Color Scheme: All body font should be black or green Pantone 350 C or CMYK 80/43/83/42. If blue is desired, use following values: Pantone 288 C or CMYK 100/87/27/19.

New York State and DEC logo: use eps file here (it is high resolution and scalable. If vendor needs a different format, use jpg file here . Both utilize the correct color.

Text:

Program Name (choose one):

State Superfund Program
Brownfield Cleanup Program
1996 Clean Water/Clean Air Bond Act – Environmental Restoration Program
Voluntary Cleanup Program
Petroleum Remediation Program

} Green text (PANTONE 350C or CMYK 100/43/83/42

Site Name: Blue text (PANTONE 288C or CMYK 100/87/27/19)

Site Number: Blue text (PANTONE 288C or CMYK 100/87/27/19)

Name of Party Performing Remedial Activities or New York State Department of Environmental Conservation: Green text (PANTONE 350C or CMYK 100/43/ 83/42

Governor: Black text

DEC Commissioner: Black text

Municipal Executive: Black text

Transform the Past....Build for the Future: Blue text (PANTONE 288C or CMYK 100/87/27/19)

Type Specifications: All type is Ariel.
Format is: Center each line of copy with initial caps and small Letters.

Production Notes: 96” wide x 48” high aluminum blanks will be covered with vinyl sheeting to achieve background color. Copy and logo will be silk screened on this surface.

See Attached Format: Next page.

8'

4'

2"

NEW YORK STATE OF OPPORTUNITY.

Department of Environmental Conservation

Logo (Use eps or jpg file)
Green Text (See Key) White Background

6"

2"

Program Name

4" Green Text (See Key)

2"

Site Name

4" Blue Text (See Key)

2"

2" **Site No.** BlueText (See Key)

2"

2" **Remedial Party or New York State Department of Environmental Conservation** Green Text (See Key)

2"

2" **Governor** Black Text

2"

2" **Commissioner** Black Text

2"

2" **Municipal Executive** Black Text

2"

Transform the Past…. Build for the Future Blue Text (See Key)

4"

2"

Color Key for Text
Green Text = Pantone 350C or CMYK 80/43/83/42
Blue Text = Pantone 288C or CMYK 100/87/27/19

Project Sign Format

ATTACHMENT H
Estimated Remedial Costs

FORMER CONSOLIDATED FREIGHTWAYS TERMINAL
11 West Street, Brooklyn, NY

Summary of Project Costs

NYS Brownfields Cleanup Program
Costs by Task

TASK - ENVIRONMENTAL REMEDIATION	Alternative 1 - Track 1	Alternative 2 - Track 4
BCP Entry Documents	Completed	Completed
Supplemental Investigation And RI Report	Completed	Completed
Remedial Work Plan, Remedy Scoping & Coordination	$ 18,450.00	$ 18,450.00
Remedial Program Implementation	$ 7,075,413.50	$ 1,020,037.50
Final Engineering Report, Site Management Plan & IC/ECs	$ 18,200.00	$ 50,450.00
DEC / DOH Costs (estimated)	$ 70,000.00	$ 70,000.00
Subtotal	$ 7,112,063.50	$ 1,088,937.50
15% Contigency	$ 1,066,809.53	$ 163,340.63
Total	**$ 8,178,873.03**	**$ 1,252,278.13**