

**3475 Third Avenue  
BRONX, NEW YORK**

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# **Final Engineering Report**

**NYSDEC Site Number: C203080**

**Prepared for:**

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**Prepared by:**

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**DECEMBER 2016**

# CERTIFICATIONS

I, Jolanda G. Jansen, am currently a registered professional engineer licensed by the State of New York, I had primary direct responsibility for implementation of the remedial program activities, and I certify that the Remedial Action Work Plan was implemented and that all construction activities were completed in substantial conformance with the Department-approved Remedial Action Work Plan.

I certify that the data submitted to the Department with this Final Engineering Report demonstrates that the remediation requirements set forth in the Remedial Action Work Plan and in all applicable statutes and regulations have been or will be achieved in accordance with the time frames, if any, established for the remedy.

I certify that all documents generated in support of this report have been submitted in accordance with the DER's electronic submission protocols and have been accepted by the Department.

I certify that all data generated in support of this report have been submitted in accordance with the Department's electronic data deliverable and have been accepted by the Department.

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, Jolanda G. Jansen, of Jansen Engineering, PLLC, 72 Colburn Drive, Poughkeepsie, NY 12603, am certifying as Owner's Designated Site Representative [and I have been authorized and designated by all site owners to sign this certification] for the site.

068972-1  
NYS Professional Engineer #

12/12/2016  
Date

Jolanda G. Jansen  
Signature



# TABLE OF CONTENTS

CERTIFICATIONS.....	II
TABLE OF CONTENTS .....	III
LIST OF ACRONYMS .....	VI
FINAL ENGINEERING REPORT .....	1
1.0 BACKGROUND AND SITE DESCRIPTION.....	1
2.1 REMEDIAL ACTION OBJECTIVES .....	2
2.1.1 Soil RAOs .....	2
2.1.2 Soil Vapor RAOs .....	2
2.1.3 Groundwater RAOs .....	2
2.2 DESCRIPTION OF SELECTED REMEDY .....	2
3.0 INTERIM REMEDIAL MEASURES, OPERABLE UNITS AND REMEDIAL CONTRACTS .....	3
4.0 DESCRIPTION OF REMEDIAL ACTIONS PERFORMED .....	3
4.1 GOVERNING DOCUMENTS .....	3
4.1.1 Site Specific Health & Safety Plan (HASP) .....	3
4.1.2 Quality Assurance Project Plan (QAPP).....	3
4.1.3 Soil/Materials Management Plan (S/MMP).....	6
4.1.4 Storm-Water Pollution Prevention Plan (SWPPP) .....	9
4.1.5 Community Air Monitoring Plan (CAMP) .....	9
4.1.6 Contractors Site Operations Plans (SOPs) .....	10
4.1.7 Community Participation Plan .....	10
4.2 REMEDIAL PROGRAM ELEMENTS .....	10
4.2.1 Contractors and Consultants.....	10
4.2.2 Site Preparation .....	11
4.2.3 General Site Controls.....	11
4.2.4 Nuisance Controls .....	12
4.2.5 CAMP Results .....	12
4.2.6 Reporting.....	13
4.3 CONTAMINATED MATERIALS REMOVAL.....	13
4.4 REMEDIAL PERFORMANCE/DOCUMENTATION SAMPLING .....	15
4.5 CONTAMINATION REMAINING AT THE SITE .....	18
4.6 DEVIATIONS FROM THE REMEDIAL ACTION WORK PLAN.....	18

## **LIST OF FIGURES**

1. Site Map
2. Excavation End-point Sampling Map

## **LIST OF TABLES**

1. Summary of Waste Characterization Samples (Page 8)
2. Summary of Waste Disposal (Page 15)
3. End-point Samples
  - a – VOCs in Soils
  - b – SVOCs in Soils
  - c – Pesticides & PCBs in Soils
  - d – TAL Metals in Soils

## **LIST OF APPENDICES**

1. Survey Map
2. Digital Copy of FER
3. NYS Approvals of Substantive Technical Requirements
4. Daily and Monthly Reports
5. Photo Log
6. CAMP Data
7. Waste Characterization and Disposal Documentation
8. Laboratory Data
9. DUSR

# LIST OF ACRONYMS

Acronym	Definition
AST	Aboveground Storage Tank
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
bsg	below surface grade
CAMP	Community Air Monitoring Plan
C & D	Construction and Demolition
COC	Certificate of Completion
CPP	Citizen Participation Plan
DD	Decision Document
ECL	Environmental Conservation Law
FER	Final Engineering Report
HASP	Health and Safety Plan
NYCDEP	New York City Department of Environmental Protection
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYSDOT	New York State Department of Transportation
OSHA	Occupational Safety and Health Administration
PBS	Petroleum Bulk Storage
Phase I ESA	Phase I Environmental Site Assessment
QAPP	Quality Assurance Project Plan
RAOs	Remedial Action Objectives
RAWP	Remedial Action Work Plan
RI	Remedial Investigation
RIR	Remedial Investigation Report
SCOs	Soil Cleanup Objectives
SEQRA	State Environmental Quality Review Act
S/MMP	Soil/Materials Management Plan
SVOCs	Semi-volatile Organic Compounds
TAL Metals	Target Analyte List Metals
TCL	Target Compound List
QHHEA	Qualitative Human Health Exposure Assessment
UUSCOs	Unrestricted Use Soil Cleanup Objectives
VOCs	Volatile Organic Compounds

# **FINAL ENGINEERING REPORT**

## **1.0 BACKGROUND AND SITE DESCRIPTION**

3475 Third Avenue Owner Realty LLC entered into a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) in May 2015, to investigate and remediate a 0.4-acre property located at 3475 Third Avenue in Bronx, New York. The property was remediated to unrestricted use and will contain a twelve-story residential apartment building with commercial use on the first floor and a cellar parking garage.

The site is located in the County of Bronx, New York and is identified as Block 2372 and Lot 37. The site is an approximately 0.4-acre lot bounded by two 5-story commercial structures to the north, multi-family residential to the south, Third Avenue to the east, and a combination of multi-family residential, vacant land and automotive repair to the west (see Figure 1). The boundaries of the site are fully described in Appendix 1: Survey Map, Metes and Bounds.

An electronic copy of this FER with all supporting documentation is included as Appendix 2.

## **2.0 SUMMARY OF SITE REMEDY**

### **2.1 REMEDIAL ACTION OBJECTIVES**

Based on the results of the Remedial Investigation, the following Remedial Action Objectives (RAOs) were identified for this site.

#### **2.1.1 Soil RAOs**

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.

#### **2.1.2 Soil Vapor RAOs**

RAOs for Public Health Protection

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

#### **2.1.3 Groundwater RAOs**

RAOs for Public Health Protection

Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.

### **2.2 DESCRIPTION OF SELECTED REMEDY**

The site was remediated to Track 1, a higher remedy than had been anticipated by the RAWP, dated November 2015 and the Decision Document, dated November 2015 (see Section 4.6 Deviations From The Remedial Action Work Plan).

The factors considered during the selection of the remedy are those listed in 6NYCRR 375-1.8. The following are the components of the selected remedy:

1. Removal and proper off-site management of the two known vaulted ASTs (both tanks were found to be intact, with no evidence of any releases);
2. Excavation of soil/fill exceeding unrestricted SCOs to a depth of 15.5 feet (elevation 29.5 feet) or bedrock, as applicable;

3. Proper off-site management of excavated soils; and,
4. Collection and analysis of post-excavation confirmation samples.

### **3.0 INTERIM REMEDIAL MEASURES, OPERABLE UNITS AND REMEDIAL CONTRACTS**

The remedy for this site was performed as a single project, and no interim remedial measures, operable units or separate construction contracts were performed.

### **4.0 DESCRIPTION OF REMEDIAL ACTIONS PERFORMED**

Remedial activities completed at the Site were conducted in accordance with the NYSDEC-approved Remedial Action Work Plan (RAWP) for the 3475 Third Avenue site (November 2015). All deviations from the RAWP are noted below.

#### **4.1 GOVERNING DOCUMENTS**

##### **4.1.1 Site Specific Health & Safety Plan (HASP)**

All remedial work performed under this Remedial Action was in full compliance with governmental requirements, including Site and worker safety requirements mandated by Federal OSHA.

The Health and Safety Plan (HASP) was complied with for all remedial and invasive work performed at the Site.

##### **4.1.2 Quality Assurance Project Plan (QAPP)**

The QAPP was included as Appendix L of the Remedial Action Work Plan (RAWP) approved by the NYSDEC. The QAPP describes the specific policies, objectives, organization, functional activities and quality assurance/ quality control activities designed to achieve the project data quality objectives.

The Quality Assurance Project Plan (QAPP) managed performance of the Remedial Action tasks through designed and documented QA/QC methodologies applied in the field and in the lab. The QAPP provided a detailed description of the observation and testing activities that were used to monitor construction quality and confirm that

remedial construction was in conformance with the remediation objectives and specifications.

The QAPP detailed procedures necessary to generate data of sufficient quality and quantity to represent successful performance of the Remedial Action at the Site. The QAPP included a Sampling and Analysis Plan (SAP), detailing sampling and analysis of all media (endpoint samples, waste characterization samples, fill samples, etc.), and identified methods for sample collection and handling.

#### *Quality Objectives and Criteria*

The data collected in this project was used to characterize contaminated media prior to off-site disposal, and to provide confirmatory data indicating effective remedial actions.

In order to meet the data quality objectives of precision, accuracy, representation, comparability and completeness the following actions were taken:

- Duplicate samples were collected and analyzed in order to determine the degree to which measurements obtained under the same protocols were consistent and reproducible;
- Matrix spike samples were collected and analyzed in order to determine accuracy for the samples;
- Trip blank samples were analyzed in order to detect potential contamination during sample transport of VOC samples; and,
- Data generated during the completion of the RAWP was submitted for review by a third, independent party.

Prior to field activities, the Project Manager and on-site personnel reviewed the RAWP to ensure that the data quality objectives of precision, accuracy, representation, comparability and completeness were met during the field activities.

### *Sampling Overview*

Sampling was conducted to document the integrity of soils remaining at the base of the excavation. No samples were collected where bedrock was present at the base of the excavation.

### *General Methodology*

Material selected for sampling was obtained in a manner consistent with NYSDEC sample collection protocols. All samples were properly characterized and field screened, and findings were recorded in logbooks. Field parameters were measured at sampling locations (screening for volatile vapors with a PID) using properly calibrated precision instruments operated according to manufacturer's instructions.

Samples were collected into appropriately-sized and preserved laboratory-supplied containers, using either disposable or properly decontaminated sampling equipment. The field technician wore a new pair of disposable gloves during the collection of each sample, and handled samples such that the potential for cross-contamination, and contamination of exterior surfaces of collection containers, was minimized.

### *Sampling Frequency*

Where soil remained at the base of the excavation one sample was collected for every 900 square feet of bottom area. One sample was collected for every 30 feet of sidewall.

### *Reporting*

Once generated by the lab, all data went to the Project Manager for review and verification that samples were collected at the proper locations by the proper persons and that all field and laboratory logs were complete. In addition, a Data Usability Summary Report (DUSR) in accordance with DER-10, has been prepared by an independent third party, which maintains NYSDOH ELAP CLP Certification (the DUSR includes a current resume for the person who prepared it).

#### **4.1.3 Soil/Materials Management Plan (S/MMP)**

The S/MMP (Section 5.4 of the RAWP) was implemented under direct supervision of the Site Remedial Engineer or a Qualified Environmental Professional (QEP). Live-loading was conducted during material removal from the Site. Visual, olfactory and PID soil screening and assessment was performed under the supervision of the Remedial Engineer or QEP during invasive work performed during the remedy

##### **4.1.3.1 Materials Excavation and Load-Out**

All invasive work and the excavation and load-out of all excavated material were performed under the direct supervision of the Remedial Engineer or QEP. Site entrances and exits, including truck routes and decontamination areas were established prior to the start of excavation. The Volunteer and its contractors performed safe execution of all invasive and other work as dictated in the RAWP.

Loaded vehicles leaving the Site were appropriately tarped, manifested, and placarded in accordance with appropriate Federal, State, local, and New York State Department of Transportation (NYSDOT) requirements (and all other applicable transportation requirements).

A truck cleaning area was maintained and actively utilized on-site. Tires of all outbound trucks were brushed before leaving the Site until the remedial activities were completed.

All egress points for truck and equipment transport from the Site were kept clean of dirt and other materials derived from the Site during Site remediation. Cleaning of Third Avenue at the egress points was performed as needed to maintain a clean condition with respect to Site-derived materials.

All soil and structures to be remediated (e.g., USTs, vaults and associated piping, etc.) were removed and confirmatory end-point sampling was conducted subsequent to excavation activities, as appropriate.

#### **4.1.3.2 Materials Transport Off-Site**

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

All trucks loaded with excavated materials followed the approved truck route north along Third Avenue to I-95 as described in the RAWP, which was determined to be the most appropriate route and took the following items 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.

Trucks were prohibited from idling in the neighborhood outside the Site.

#### **4.1.3.3 Materials Disposal Off-Site**

The Site Remedial Engineer or a QEP under the supervision of the Remedial Engineer oversaw the off-site material disposal performed from the Site, which included: waste characterization sampling, on-site delineation of contaminated materials and transport of contaminated materials to an acceptable repository, as detailed below.

#### **4.1.3.4 Waste Characterization Sampling**

According to Section 5.3 of the RAWP it had been anticipated that the material to be would be comprised of three waste streams including: soils containing elevated lead requiring special handling and disposition (the sole “hotspot” on the site) poor quality urban fill exclusive of the “hotspot” (2,600 cubic yards), bedrock (1,600 cubic yards), and native soils (3,800 cubic yards). The poor quality urban fill would be disposed of as non-hazardous regulated waste; bedrock and native soils would be managed at unregulated material. Due to the co-mingling of the urban fill and native soils during

construction excavations, all urban fill (exclusive of lead hot spot soils) and native soils were disposed of as a single waste stream (urban fill).

Waste characterization sampling was conducted pursuant to Section 5.45 of the RAWP to secure the selected repository's approval for disposal of the on-site soil. Ten waste characterization samples (WC-AB 0-4, WC-CD 0-4, WC-EF 0-4, WC-AB 4-9, WC-CD 4-9, WC-EF 4-9, WC-CD 9-14, WC-EF 9-14, WC TP-3 and WC TP-3 Base) representative of the on-site soils were collected and analyzed as per the repository's requirements.

Table 1, below, provides a summary of the waste characterization samples collected and analyzed for the disposal of the on-site soils. Waste Characterization laboratory data are included in Appendix 7 and correspondence with repositories (Request Letters, Approval Letters, Facility Permits and manifests) are included as Appendix 7.

Table 1: Summary of Waste Characterization Samples			
Material Sampled	Sample Date	Sample ID	Parameters (as per repository requirements)
Urban Fill	January 1, 2016	WC-AB 0-4,  WC-CD 0-4,  WC-EF 0-4,  WC-AB 4-9,  WC-CD 4-9,  WC-EF 4-9	TCL VOCs + 10, TCL SVOCs + 20, PCBs, TCL pesticides, total Herbicides, TAL Metals, total Cyanide, Hexavalent Chromium, NJEPH Cat 2 Screen, TCLP 8 RCRA Metals, RCRA Characteristics
Native material	January 1, 2016	WC-CD 9-14,  WC-EF 9-14	TCL VOCs + 10, TCL SVOCs + 20, PCBs, TCL pesticides, TAL Metals, total Cyanide, Hexavalent Chromium, NJEPH Cat 2 Screen
Lead hot spot	January 1, 2016	WC TP-3	total SVOCs, TCLP SVOCs, PCBs, TCLP pesticides, TCLP herbicides, total 8 RCRA Metals + Cu, Ni, Zn, TCLP 8 RCRA Metals + Cu, Ni Zn, RCRA Characteristics, total and TCLP VOCs, TPH-GRO/TPH-DRO (c44) and total lead.
		WC TP-3 Base	total lead
Note: All samples analyzed by York Analytical Laboratories.			

#### **4.1.4 Storm-Water Pollution Prevention Plan (SWPPP)**

The erosion and sediment controls for all remedial construction were performed in conformance with requirements presented in the New York State Guidelines for Urban Erosion and Sediment Control.

The Volunteer was responsible for ensuring that all demolition, soil removal and site work activities met the requirements of New York State Storm-Water Management Regulations. Volunteer provided physical methods to control and/or divert surface water flows and to limit the potential for erosion and migration of Site soils, via wind or water, and accommodated the construction sequencing and staging areas.

#### **4.1.5 Community Air Monitoring Plan (CAMP)**

The CAMP was implemented while regulated material remained at the site. Exceedances observed in the CAMP (if any) were reported to NYSDEC and NYSDOH Project Managers and included in the Daily Reports. Dust suppression activities implemented on an as needed basis during site/construction activities included watering/misting of soil and rock during excavation and/or loading, reduction in soil movement, or cessation of excavation.

Real-time air monitoring for VOCs (using a handheld photoionization detector [PID]) and particulate levels at the perimeter of the work area was performed. VOCs were monitored at the downwind perimeter of the immediate work area on a continuous basis during invasive work. Particulate concentrations were monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations.

If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeded 5 parts per million (ppm) above background for a 15-minute average, work activities were temporarily halted and monitoring continued level readily decreased below 5 ppm over background. The CAMP provides for further action levels.

The particulate monitoring was performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and

capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. All fugitive dust migration was visually assessed during all work activities. If the downwind PM-10 particulate level was 100 micrograms per cubic meter (mcg/m3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques were employed. The CAMP provides additional information on action levels.

#### **4.1.6 Contractors Site Operations Plans (SOPs)**

The Remediation Engineer reviewed all plans and submittals for this remedial project (i.e. those listed above plus contractor and subcontractor submittals) and confirmed that they were in compliance with the RAWP. All remedial documents were submitted to NYSDEC and NYSDOH in a timely manner and prior to the start of work.

#### **4.1.7 Community Participation Plan**

A Citizen Participation Plan, including an overview of the BCP program, background of the Site, a summary of the investigative findings for the Site, and citizen participation activities was implemented, as provided in Appendix G of the RAWP.

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

**Morrisania Public Library**  
610 East 169th Street  
Bronx, NY, 10456

**NYSDEC, Region 2 Office**  
47-40 21st Street  
Long Island City, NY

## **4.2 REMEDIAL PROGRAM ELEMENTS**

### **4.2.1 Contractors and Consultants**

<b>List of Contractors and Consultants</b>		
<b>Type of Contractor/Consultant</b>	<b>Company Name:</b>	<b>Representative/Contact:</b>
General Contractor	Real Builders, Inc., Great Neck, NY	Daniel Rad
Remedial Engineer	Jansen Engineering, PLLC Poughkeepsie, NY	Jolanda G. Jansen, P.E., President
Environmental consultant	Ecosystems Strategies, Inc. Poughkeepsie, NY	Paul H. Ciminello, QEP, President

#### **4.2.2 Site Preparation**

A pre-construction meeting was held with NYSDEC and all contractors on December 9, 2015.

Documentation of agency approvals required by the RAWP is included in Appendix 3.

- a) Mobilization: Site mobilization (including building demolition) was conducted during January 2016 in a manner such that erosion and sedimentation control, utility markout, and other applicable Site preparation tasks were fully instituted prior to the commencement of construction activities, as needed.
- b) Utility Markout: Utility markout was requested and confirmed by the GC, prior to initiation of ground intrusive activities. Confirmation of services termination of water, sewer and gas were secured from the respective utilities prior to excavation.
- c) Approval of RAWP: November 11, 2015.  
All SEQRA requirements and all substantive compliance requirements for attainment of applicable natural resource or other permits were achieved during this Remedial Action.

A NYSDEC-approved project sign was erected at the project entrance and remained in place during all phases of the Remedial Action.

#### **4.2.3 General Site Controls**

Site security procedures, such as wooden fencing/barrier (6 feet in height with a locking gate), were established around the site to reduce the possibility of visitor contact with on-site contamination and to protect the public in the area surrounding the Site and to limit access to the Site to only those persons required to be in the work zone. Notices were placed near the Site warning the public not to enter fieldwork areas and indicating other relevant Site conditions (e.g., 'hard-hat zone'). The entrance(s) to the Site was locked when construction personnel were not present at the Site. All workers involved in the remedial work were verified to have had the 40-hour OSHA HAZWOPER training.

Direct loading and off-site disposal of contaminated soils was performed instead of stockpiling.

#### **4.2.4 Nuisance Controls**

In order to prevent off-site migration of the on-site contaminated soil, trucks hauling contaminated material utilized a constructed tracking pad/ramp, where they were brushed to remove contaminated material adhering to their surfaces. Trucks hauling contaminated material were covered in order to control the generation of fugitive dust from the trucks during transport.

#### **4.2.5 CAMP Results**

Dust monitoring was conducted during waste characterization sampling in January 2016 and from late March 2016, through July 2016.

Particulate concentrations were monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring was performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level.

In addition, fugitive dust migration was visually assessed during all work activities. If the downwind PM-10 particulate level is 100 micrograms per cubic meter ( $\text{mcg}/\text{m}^3$ ) greater than background (upwind perimeter) for the 15-minute period or if airborne dust was observed leaving the work area, then dust suppression techniques were employed. Work continued with dust suppression techniques provided that downwind PM-10 particulate levels did not exceed  $150 \text{ mcg}/\text{m}^3$  above the upwind level and provided that no visible dust was migrating from the work area. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels were greater than  $150 \text{ mcg}/\text{m}^3$  above the upwind level, work was stopped and a re-evaluation of activities initiated. Work resumed provided that dust suppression measures and other controls were successful in reducing the downwind PM-10 particulate concentration to within  $150 \text{ mcg}/\text{m}^3$  of the upwind level and in preventing visible dust migration.

Visible dust was observed migrating from the work area during the following activities: concrete and rock demolition. No exceedances of particulate action levels were noted for the duration of the construction/remediation. Copies of all field data sheets relating to the CAMP are provided in electronic format in Appendix 6.

#### **4.2.6 Reporting**

Daily reports for each workday were submitted to NYSDEC and NYSDOH. Daily reports included: an update of progress made during the reporting day; locations of work and quantities of material imported and exported from the Site; references to the alpha-numeric map for Site activities; a summary of any and all complaints with relevant details (names, phone numbers); a summary of CAMP findings, including excursions; and an explanation of notable Site conditions.

Daily reports were 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 would also have been included in the daily reports. Any emergency conditions and changes to the RAWP were addressed directly to NYSDEC Project Manager via personal communication.

Monthly reports prepared in accordance with DER-10 Section 5.7(b) were submitted to NYSDEC and NYSDOH Project Managers and included, at a minimum, 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.). Monthly reports also included a description of approved activity modifications, including changes of work scope and/or schedule and sampling results received following internal data review and validation, as applicable. All daily and monthly reports are included in electronic format in Appendix 4.

The digital photo log required by the RAWP is included in electronic format in Appendix 5.

### **4.3 CONTAMINATED MATERIALS REMOVAL**

#### **4.3.1 Removal of ASTS and Associated Liquid**

Two ASTs in concrete vaults were known to be present at the southeastern portion of the Site.

Both tanks located at the Site were excavated, removed, cut and cleaned by Iverson Mechanical Corp. (Brooklyn, New York). The work was performed through April 5, 2015 - April 10, 2015 for one tank and May 10, 2015 and May 14, 2015 for the other. The tanks did not require registration because they had been on separate tax lots, were less than 1,100 gallon capacity and were used to contain fuel for on-site heating.

No field evidence of contamination was encountered at either tank and no confirmatory endpoint sampling was conducted (as per the RAWP).

No other buried tanks were encountered at the site during construction and remediation activities. Locations of the two former tanks are illustrated in Figure 2. Waste disposal documentation for the liquids removed from the UST is provided in Appendix 7.

#### **4.3.2 Removal of Demolition Debris and Other Materials**

At the start of site preparation/construction activities, the lot was vacant; former high one-story commercial buildings on each lot were demolished in January 2016 down to the concrete slabs (which were left in place).

Demolition of former concrete building slabs, foundation piles and shallow bedrock from the southwestern portion of the site generated approximately 700 CY of unregulated concrete and rock debris that were disposed of at the Thalle Industries facility (Elmsford, New York) from March through September, 2016.

Documentation for all off-site disposal of concrete debris is provided in Appendix 7.

#### **4.3.3 Removal of Urban Fill Soils and Native Sands**

Soils classified as urban fill were excavated throughout the Site from the surface to as deep as 13 feet bsg (elevation 32 feet). Native sands were encountered at depths between 9 feet bsg (elevation 36 feet) and 15.5 feet bsg (excavation base at elevation 29.5 feet). Commingling of these materials during excavation meant that separation into different waste streams was impractical so all the excavated material was disposed of as urban fill. Based on waste characterization sampling, the urban fill soil was approved at two facilities: 1. Clean Earth of Carteret, New Jersey and 2. Clean Earth, Bethlehem, PA. A total of 4,223 tons of urban fill was disposed of at Clean Earth, Bethlehem, PA and 7,186 of urban fill was disposed of at Clean Earth of Carteret.

#### **4.3.4 Removal of Lead Contaminated Soils from Hot Spot**

The RAWP identified a Hot Spot located in the central western portion of the site, based on previous boring observations and sampling. This material had been approved

for the Clean Earth of Philadelphia facility. A total of 1,677 tons of material was disposed of at Clean Earth of Philadelphia.

Table 2 shows the total quantities of each category of material removed from the site and the disposal locations. A summary of the samples collected to characterize the waste, and associated analytical results are summarized on Table 3.

Letters from Applicants to disposal facility owners and acceptance letters from disposal facility owners are attached in Appendix 7.

Manifests and bills of lading are included in electronic format in Appendix 7.

<b>Table 2: Summary of Waste-Disposal</b>			
<b>Material Removed</b>	<b>Volume of material Removed</b>	<b>Disposal Location</b>	<b>Disposal Period</b>
Urban Fill/Native Sand	7,186 tons	Clean Earth of Carteret	03/24/2016 through 5/03/2016 and 11/30/2016 – 01/12/2016
	4,223 tons	Clean Earth Bethlehem	03/31/2016 through 08/26/2016
Lead contaminated soil from hot spot	1,677 tons	Clean Earth of Philadelphia	03/22/16 through 03/28/2016
Concrete and cut bedrock	Approximately 700 cubic yards	Thalle Industries, Warehouse Ln, Elmsford, NY 10523	March 2016 through September 2016
Fuel Oil ASTs and piping	Two 1,080-gallon tanks	Scrap Metal (no specific destination recorded)	May 2015
Residual Tank Liquid	800 gallons	Clean Water of New York, Inc., 3249 Richmond Terrace; Staten Island, New York 10303	04/10/2015 and 05/12/2015

#### **4.4 REMEDIAL PERFORMANCE/DOCUMENTATION SAMPLING**

This section describes the methodology and results of confirmatory end-point sampling activities to demonstrate that Track 1 SCOs were achieved subsequent to the remedial activities.

##### **4.4.1 Identification of Standards, Criteria and Guidance (SCG)**

Guidance levels for all compounds in soils are based on NYSDEC UUSCOs, as provided in 6 NYCRR Subpart 375, Table 375-6.8(a). Compounds without a listed SCOs were compared to Tables 1, 2 and/or 3 in NYSDEC CP-51 Soil Cleanup Guidance, as applicable. Tables 3a, 3b, 3c and 3d provide a comparison of the soil guidance levels with the soil sampling data for the Site.

#### **4.4.2 Soil Sampling Approach and Methodology**

Pursuant to the RAWP post-excavation end-point sampling was conducted to document the quality of remaining soils, subsequent to excavation and removal of the on-site soils, as described below:

- a) End-Point Sampling Frequency: one base sample was collected for every 900 square feet of bottom area. No wall samples were collected at the western perimeter because of the presence of bedrock. No wall samples were collected at the northern and southern perimeters of the excavation because of the presence of the foundation walls of adjoining structures. Wall samples were collected along the eastern boundary of the excavation; however, subsequent measurements determined that these sample locations were off-site (the western sidewalk of Third Avenue). The data for these samples is not discussed in this FER.
- b) End-Point Sampling Analysis: the first round of eight endpoint samples (EP-1 through EP-8) were analyzed for:
  - TCL VOCs by EPA Method 8260C
  - TCL SVOCs by EPA Method 8270D
  - TCL Pesticides by EPA Method 8081B
  - TCL PCBs by EPA Method 8082A
  - TAL Metals by EPA Method 6010C/7471B.

Exceedances of the UUSCO for mercury was detected in sample EP-2 and exceedances of the respective UUSCOs for chromium and nickel were detected in sample EP-7. Additional soil was subsequently excavated from these locations and endpoint sample 2EP-2 was collected and analyzed for total weight mercury; endpoint sample 2EP-7 was collected and analyzed for total weight chromium and nickel.

- c) **Sampling Methodology:** All soil samples were properly characterized in the field and findings were recorded in field logbook. Material selected for sampling was obtained in a manner consistent with NYSDEC DER-10 Section 5.4 sample frequency requirements. Disposable plastic trowels and dedicated gloves were used at each sample location to place the material into laboratory-supplied glassware to avoid cross contamination between samples.
- d) **QA/QC Sampling:** QA/QC sampling was conducted consistent with the QAPP (Appendix L of the RAWP), and included analysis of duplicate, matrix spike and matrix spike duplicate samples.

#### **4.4.3 Soil Sampling Results**

A total of ten confirmatory end-point soil samples were collected and analyzed in order to document remedial performance (eight for all parameters and two for metals). Tables and a figure summarizing all end-point sampling are included as Tables 3a through 3d, and Figure 2, respectively.

Data Usability Summary Reports (DUSRs) were prepared for all data generated in this remedial performance evaluation program. DUSRs are included in Appendix 9, and associated laboratory reports are provided electronically in Appendix 8. The DUSRs confirm that no data associated with soil sampling was deemed unreliable. A summary report reviewed describing the DUSRs are included in Appendix 9. All soil sample results have been submitted to NYSDEC in the appropriate electronic data deliverable format.

Laboratory analysis of end-point samples documents the following:

Removal and off-site disposal of on-site soils (for both site development and remediation) resulted in an excavation base comprised of both exposed bedrock and soil. Soils were removed to 15.5' bsg (elevation 29.5'). End-point samples EP-1, EP-2, 2EP-2, EP-3, EP-4, EP-5, EP-7 and 2EP-7 document conditions in remaining soils at the base of the excavation. All analyte concentrations are below Unrestricted Use SCOs. These data support the conclusion that the site has achieved a Track 1 Cleanup.

#### **4.5 CONTAMINATION REMAINING AT THE SITE**

Figure 2 summarizes the results of all soil samples remaining at the site after completion of the remedial action that meet the SCOs for unrestricted use of the site.

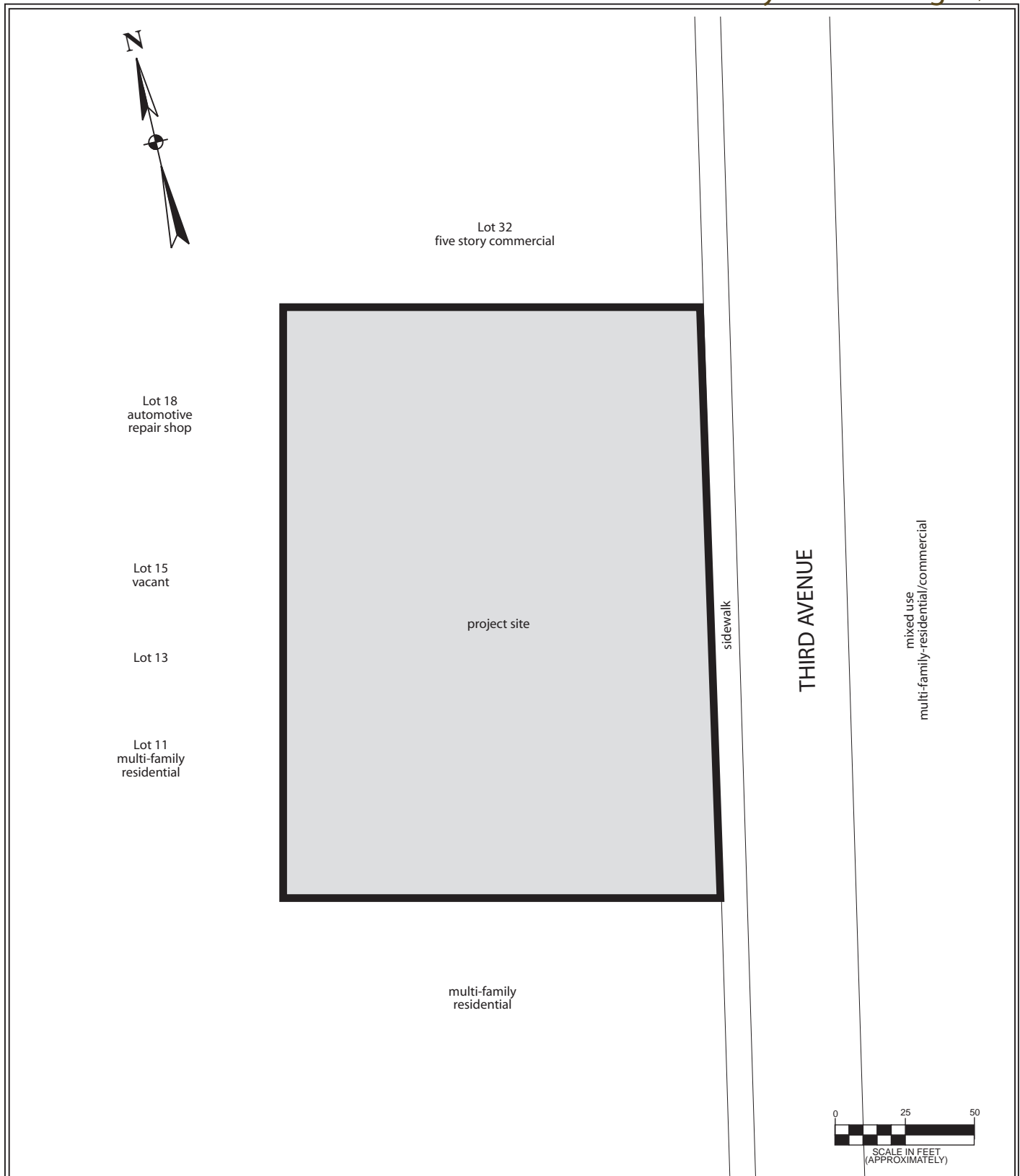
No contaminated soil remains beneath the site after completion of the Remedial Action, therefore no Institutional and Engineering Controls are required to protect human health and the environment.

#### **4.6 DEVIATIONS FROM THE REMEDIAL ACTION WORK PLAN**

The RAWP had anticipated a Track 2 or Track 4 cleanup; however, at the conclusion of construction excavations, results of endpoint sampling documented contaminant concentrations in remaining soils below UUSCOs, demonstrating that the site had achieved a higher level of cleanup than had been anticipated by the RAWP. As a result, the site achieved a Track 1 cleanup.



## **FIGURES**



All feature locations are approximate. This map is intended as a schematic to be used in conjunction with the associated report, and it should not be relied upon as a survey for planning or other activities.

**Figure 1: Site Map**  
3475 Third Avenue  
Borough of Bronx  
New York City, New York

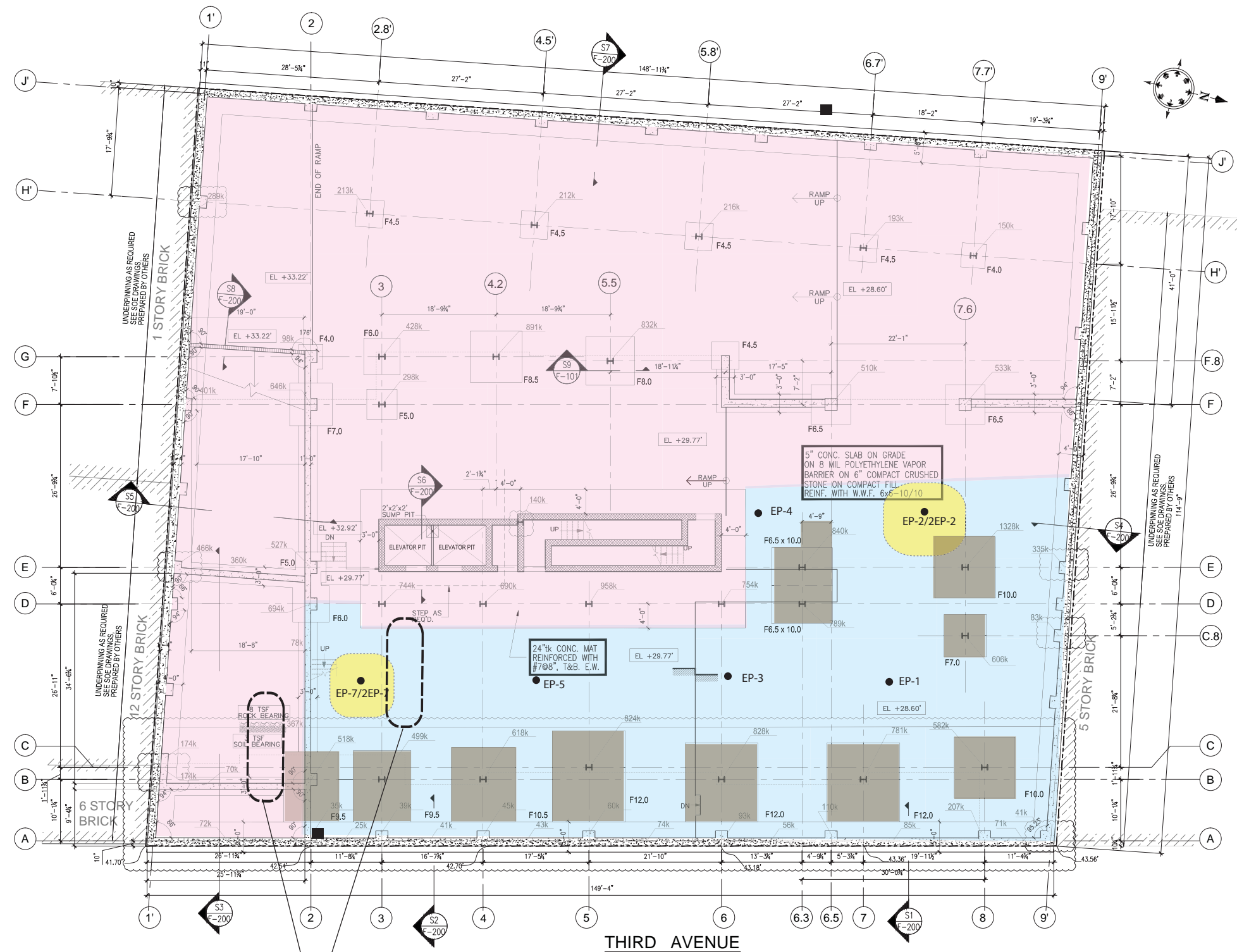
Legend:  
— subject property border

ESI File: KB15012.50

December 2016

Scale as shown

Figures



**Legend:**

**Soil:**

- Excavation depth 15.5'
- Excavation depth 16' for footings
- Excavation depth 18'
- Sample location

**Bedrock:**

- Bedrock at base of excavation
- dust monitor locations

**Figure 2: Excavation Depth and End-point Sample Map**

3475 Third Avenue Borough of Bronx New York City, New York		ESI File: KB15012.40	
		Scale as shown	
		December 2016	Figures

Base map provided by OCV Architects - Drawing F-100.00 dated 2/2/16. All feature locations are approximate. This map is intended as a schematic to be used in conjunction with the associated report, and it should not be relied upon as a survey for planning or other activities.



Ecosystems Strategies, Inc.

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## **TABLES**

**Table 3a: VOCs in Soils**  
**NYSDEC BCP Site ID: C203080**

All data in mg/Kg (ppm)			Sample ID		EP-1		EP-2		EP-3		EP-4	
U= Not Detected ≥ indicated value			Sample Date		(2016-04-28)		(2016-04-28)		(2016-04-28)		(2016-04-28)	
Data above SCO's shown in <b>Bold</b>			Dilution Factor		1		1		1		1	
VOCs, 8260	UUSCO	RRUSCO	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1,2-Tetrachloroethane	NA	NA	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
1,1,1-Trichloroethane	0.68	100	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
1,1,2,2-Tetrachloroethane	NA	NA	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	NA	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
1,1,2-Trichloroethane	NA	NA	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
1,1-Dichloroethane	0.27	26	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
1,1-Dichloroethylene (1,1-DCE)	0.33	100	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
1,2,3-Trichlorobenzene	NA	NA	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
1,2,3-Trichloropropane	NA	NA	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
1,2,4-Trichlorobenzene	NA	NA	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
1,2,4-Trimethylbenzene	3.6	52	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
1,2-Dibromo-3-chloropropane	NA	NA	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
1,2-Dibromoethane	NA	NA	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
1,2-Dichlorobenzene	1.1	100	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
1,2-Dichloroethane	0.2	31	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
1,2-Dichloropropane	NA	NA	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
1,3,5-Trimethylbenzene	8.4	52	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
1,3-Dichlorobenzene	2.4	49	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
1,4-Dichlorobenzene	1.8	13	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
1,4-Dioxane	0.1	13	0.094	U	0.059	U	0.043	U	0.076	U		
2-Butanone (MEK)	0.12	100	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
2-Hexanone	NA	NA	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
4-Methyl-2-pentanone	NA	NA	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
Acetone	0.05	100	0.02		0.0087	J	0.0081	J	0.017			
Acrolein	NA	NA	0.0094	U	0.0059	U	0.0043	U	0.0076	U		
Acrylonitrile	NA	NA	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
Benzene	0.06	48	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
Bromochloromethane	NA	NA	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
Bromodichloromethane	NA	NA	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
Bromoform	NA	NA	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
Bromomethane	NA	NA	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
Carbon disulfide	NA	NA	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
Carbon tetrachloride	0.76	24	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
Chlorobenzene	1.1	100	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
Chloroethane	NA	NA	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
Chloroform	0.37	49	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
Chloromethane	NA	NA	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
cis-1,2-Dichloroethylene (cis-DCE)	0.25	100	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
cis-1,3-Dichloropropylene	NA	NA	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
Cyclohexane	NA	NA	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
Dibromochloromethane	NA	NA	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
Dibromomethane	NA	NA	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
Dichlorodifluoromethane	NA	NA	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
Ethyl Benzene	1	41	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
Hexachlorobutadiene	NA	NA	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
Isopropylbenzene	2.3	100	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
Methyl acetate	NA	NA	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
Methyl tert-butyl ether (MTBE)	0.93	100	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
Methylcyclohexane	NA	NA	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
Methylene chloride	0.05	500	0.0094	U	0.0059	U	0.0043	U	0.0078	JB		
n-Butylbenzene	12	100	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
n-Propylbenzene	3.9	100	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
o-Xylene	0.26	100	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
p- & m- Xylenes	0.26	100	0.0094	U	0.0059	U	0.0043	U	0.0076	U		
p-Isopropyltoluene	10	NA	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
sec-Butylbenzene	11	100	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
Styrene	NA	NA	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
tert-Butyl alcohol (TBA)	NA	NA	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
tert-Butylbenzene	5.9	100	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
Tetrachloroethylene (PCE)	1.3	19	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
Toluene	0.7	100	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
trans-1,2-Dichloroethylene (trans-DCE)	0.19	100	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
trans-1,3-Dichloropropylene	NA	NA	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
Trichloroethylene (TCE)	0.47	21	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
Trichlorofluoromethane	NA	NA	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
Vinyl chloride (VC)	0.02	0.9	0.0047	U	0.0029	U	0.0022	U	0.0038	U		
Xylenes, Total	0.26	100	0.014	U	0.0088	U	0.0065	U	0.011	U		

Analyte Detected

Notes: SCO's based on NYSDEC Part 375-6.8 and CP-51 NA = not available  
 Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

**Table 3a: VOCs in Soils**  
**NYSDEC BCP Site ID: C203080**

All data in mg/Kg (ppm)			Sample ID		EP-5		EP-6		EP-7		EP-8	
U= Not Detected ≥ indicated value			Sample Date		(2016-04-28)		(2016-04-28)		(2016-05-05)		(2016-05-05)	
Data above SCOs shown in <b>Bold</b>			Dilution Factor		1		1		1		1	
VOCs, 8260	UUSCO	RRUSCO	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1,2-Tetrachloroethane	NA	NA	0.004	U	0.0039	U	0.0013	U	0.0044	U		
1,1,1-Trichloroethane	0.68	100	0.004	U	0.0039	U	0.0013	U	0.0044	U		
1,1,2,2-Tetrachloroethane	NA	NA	0.004	U	0.0039	U	0.0013	U	0.0044	U		
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	NA	0.004	U	0.0039	U	0.0013	U	0.0044	U		
1,1,2-Trichloroethane	NA	NA	0.004	U	0.0039	U	0.0013	U	0.0044	U		
1,1-Dichloroethane	0.27	26	0.004	U	0.0039	U	0.0013	U	0.0044	U		
1,1-Dichloroethylene (1,1-DCE)	0.33	100	0.004	U	0.0039	U	0.0013	U	0.0044	U		
1,2,3-Trichlorobenzene	NA	NA	0.004	U	0.0039	U	0.0013	U	0.0044	U		
1,2,3-Trichloropropane	NA	NA	0.004	U	0.0039	U	0.0013	U	0.0044	U		
1,2,4-Trichlorobenzene	NA	NA	0.004	U	0.0039	U	0.0013	U	0.0044	U		
1,2,4-Trimethylbenzene	3.6	52	0.004	U	0.0039	U	0.0013	U	0.0044	U		
1,2-Dibromo-3-chloropropane	NA	NA	0.004	U	0.0039	U	0.0013	U	0.0044	U		
1,2-Dibromoethane	NA	NA	0.004	U	0.0039	U	0.0013	U	0.0044	U		
1,2-Dichlorobenzene	1.1	100	0.004	U	0.0039	U	0.0013	U	0.0044	U		
1,2-Dichloroethane	0.2	31	0.004	U	0.0039	U	0.0013	U	0.0044	U		
1,2-Dichloropropane	NA	NA	0.004	U	0.0039	U	0.0013	U	0.0044	U		
1,3,5-Trimethylbenzene	8.4	52	0.004	U	0.0039	U	0.0013	U	0.0044	U		
1,3-Dichlorobenzene	2.4	49	0.004	U	0.0039	U	0.0013	U	0.0044	U		
1,4-Dichlorobenzene	1.8	13	0.004	U	0.0039	U	0.0013	U	0.0044	U		
1,4-Dioxane	0.1	13	0.081	U	0.078	U	0.026	U	0.089	U		
2-Butanone (MEK)	0.12	100	0.004	U	0.0039	U	0.0013	U	0.0044	U		
2-Hexanone	NA	NA	0.004	U	0.0039	U	0.0013	U	0.0044	U		
4-Methyl-2-pentanone	NA	NA	0.004	U	0.0039	U	0.0013	U	0.0044	U		
Acetone	0.05	100	0.018		0.0078	U	0.0043	J	0.0089	U		
Acrolein	NA	NA	0.0081	U	0.0078	U	0.0026	U	0.0089	U		
Acrylonitrile	NA	NA	0.004	U	0.0039	U	0.0013	U	0.0044	U		
Benzene	0.06	48	0.004	U	0.0039	U	0.0013	U	0.0044	U		
Bromochloromethane	NA	NA	0.004	U	0.0039	U	0.0013	U	0.0044	U		
Bromodichloromethane	NA	NA	0.004	U	0.0039	U	0.0013	U	0.0044	U		
Bromoform	NA	NA	0.004	U	0.0039	U	0.0013	U	0.0044	U		
Bromomethane	NA	NA	0.004	U	0.0039	U	0.0013	U	0.0044	U		
Carbon disulfide	NA	NA	0.004	U	0.0039	U	0.0013	U	0.0044	U		
Carbon tetrachloride	0.76	24	0.004	U	0.0039	U	0.0013	U	0.0044	U		
Chlorobenzene	1.1	100	0.004	U	0.0039	U	0.0013	U	0.0044	U		
Chloroethane	NA	NA	0.004	U	0.0039	U	0.0013	U	0.0044	U		
Chloroform	0.37	49	0.004	U	0.0039	U	0.0013	U	0.0044	U		
Chloromethane	NA	NA	0.004	U	0.0039	U	0.0013	U	0.0044	U		
cis-1,2-Dichloroethylene (cis-DCE)	0.25	100	0.004	U	0.0039	U	0.0013	U	0.0044	U		
cis-1,3-Dichloropropylene	NA	NA	0.004	U	0.0039	U	0.0013	U	0.0044	U		
Cyclohexane	NA	NA	0.004	U	0.0039	U	0.0013	U	0.0044	U		
Dibromochloromethane	NA	NA	0.004	U	0.0039	U	0.0013	U	0.0044	U		
Dibromomethane	NA	NA	0.004	U	0.0039	U	0.0013	U	0.0044	U		
Dichlorodifluoromethane	NA	NA	0.004	U	0.0039	U	0.0013	U	0.0044	U		
Ethyl Benzene	1	41	0.004	U	0.0039	U	0.0013	U	0.0044	U		
Hexachlorobutadiene	NA	NA	0.004	U	0.0039	U	0.0013	U	0.0044	U		
Isopropylbenzene	2.3	100	0.004	U	0.0039	U	0.0013	U	0.0044	U		
Methyl acetate	NA	NA	0.004	U	0.0039	U	0.0013	U	0.0044	U		
Methyl tert-butyl ether (MTBE)	0.93	100	0.004	U	0.0039	U	0.0013	U	0.0044	U		
Methylcyclohexane	NA	NA	0.004	U	0.0039	U	0.0013	U	0.0044	U		
Methylene chloride	0.05	500	0.0081	U	0.0078	U	0.0026	U	0.0089	U		
n-Butylbenzene	12	100	0.004	U	0.0039	U	0.0013	U	0.0044	U		
n-Propylbenzene	3.9	100	0.004	U	0.0039	U	0.0013	U	0.0044	U		
o-Xylene	0.26	100	0.004	U	0.0039	U	0.0013	U	0.0044	U		
p- & m- Xylenes	0.26	100	0.0081	U	0.0078	U	0.0026	U	0.0089	U		
p-Isopropyltoluene	10	NA	0.004	U	0.0039	U	0.0013	U	0.0044	U		
sec-Butylbenzene	11	100	0.004	U	0.0039	U	0.0013	U	0.0044	U		
Styrene	NA	NA	0.004	U	0.0039	U	0.0013	U	0.0044	U		
tert-Butyl alcohol (TBA)	NA	NA	0.004	U	0.0039	U	0.0026	U	0.0089	U		
tert-Butylbenzene	5.9	100	0.004	U	0.0039	U	0.0013	U	0.0044	U		
Tetrachloroethylene (PCE)	1.3	19	0.004	U	0.0039	U	0.0013	U	0.0044	U		
Toluene	0.7	100	0.004	U	0.0039	U	0.0013	U	0.0044	U		
trans-1,2-Dichloroethylene (trans-DCE)	0.19	100	0.004	U	0.0039	U	0.0013	U	0.0044	U		
trans-1,3-Dichloropropylene	NA	NA	0.004	U	0.0039	U	0.0013	U	0.0044	U		
Trichloroethylene (TCE)	0.47	21	0.004	U	0.0039	U	0.0013	U	0.0044	U		
Trichlorofluoromethane	NA	NA	0.004	U	0.0039	U	0.0013	U	0.0044	U		
Vinyl chloride (VC)	0.02	0.9	0.004	U	0.0039	U	0.0013	U	0.0044	U		
Xylenes, Total	0.26	100	0.012	U	0.012	U	0.0039	U	0.013	U		

Analyte Detected

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51 NA = not available  
 Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 3b: SVOCs in Soils

NYSDEC Site ID: C203080

All data in mg/Kg (ppm)			Sample ID		EP-1		EP-2		EP-3		EP-4	
U= Not Detected ≥ indicated value			Sample Date		(2016-04-28)		(2016-04-28)		(2016-04-28)		(2016-04-28)	
Data above SCOs shown in <b>Bold</b>			Dilution Factor		2		2		2		2	
SVOCs, 8270	UUSCO	RRUSCO	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1'-Biphenyl	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
1,2,4,5-Tetrachlorobenzene	NA	NA	0.0957	U	0.0967	U	0.0921	U	0.0914	U		
1,2,4-Trichlorobenzene	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
1,2-Dichlorobenzene	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
1,2-Diphenylhydrazine (Azobenzene)	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
1,3-Dichlorobenzene	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
1,4-Dichlorobenzene	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
2,3,4,6-Tetrachlorophenol	NA	NA	0.0957	U	0.0967	U	0.0921	U	0.0914	U		
2,4,5-Trichlorophenol	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
2,4,6-Trichlorophenol	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
2,4-Dichlorophenol	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
2,4-Dimethylphenol	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
2,4-Dinitrophenol	NA	NA	0.0957	U	0.0967	U	0.0921	U	0.0914	U		
2,4-Dinitrotoluene	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
2,6-Dinitrotoluene	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
2-Chloronaphthalene	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
2-Chlorophenol	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
2-Methylnaphthalene	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
2-Methylphenol	0.33	100	0.048	U	0.0485	U	0.0462	U	0.0458	U		
2-Nitroaniline	NA	NA	0.0957	U	0.0967	U	0.0921	U	0.0914	U		
2-Nitrophenol	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
3- & 4-Methylphenols	0.33	100	0.048	U	0.0485	U	0.0462	U	0.0458	U		
3,3'-Dichlorobenzidine	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
3-Nitroaniline	NA	NA	0.0957	U	0.0967	U	0.0921	U	0.0914	U		
4,6-Dinitro-2-methylphenol	NA	NA	0.0957	U	0.0967	U	0.0921	U	0.0914	U		
4-Bromophenyl phenyl ether	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
4-Chloro-3-methylphenol	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
4-Chloroaniline	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
4-Chlorophenyl phenyl ether	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
4-Nitroaniline	NA	NA	0.0957	U	0.0967	U	0.0921	U	0.0914	U		
4-Nitrophenol	NA	NA	0.0957	U	0.0967	U	0.0921	U	0.0914	U		
Acenaphthene	20	100	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Acenaphthylene	100	100	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Acetophenone	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Aniline	NA	NA	0.192	U	0.194	U	0.184	U	0.183	U		
Anthracene	100	100	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Atrazine	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Benzaldehyde	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Benidine	NA	NA	0.192	U	0.194	U	0.184	U	0.183	U		
Benzo(a)anthracene	1	1	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Benzo(a)pyrene	1	1	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Benzo(b)fluoranthene	1	1	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Benzo(g,h,i)perylene	100	100	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Benzo(k)fluoranthene	0.8	3.9	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Benzoic acid	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Benzyl alcohol	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Benzyl butyl phthalate	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Bis(2-chloroethoxy)methane	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Bis(2-chloroethyl)ether	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Bis(2-chloroisopropyl)ether	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Bis(2-ethylhexyl)phthalate	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Caprolactam	NA	NA	0.0957	U	0.0967	U	0.0921	U	0.0914	U		
Carbazole	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Chrysene	1	3.9	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Dibenzo(a,h)anthracene	0.33	0.33	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Dibenzofuran	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Diethyl phthalate	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Dimethyl phthalate	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Di-n-butyl phthalate	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Di-n-octyl phthalate	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Fluoranthene	100	100	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Fluorene	30	100	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Hexachlorobenzene	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Hexachlorobutadiene	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Hexachlorocyclopentadiene	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Hexachloroethane	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Indeno(1,2,3-cd)pyrene	0.5	0.5	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Isophorone	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Naphthalene	12	100	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Nitrobenzene	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
N-Nitrosodimethylamine	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
N-nitroso-di-n-propylamine	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
N-Nitrosodiphenylamine	NA	NA	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Pentachlorophenol	0.8	6.7	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Phenanthrene	100	100	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Phenol	0.33	100	0.048	U	0.0485	U	0.0462	U	0.0458	U		
Pyrene	100	100	0.048	U	0.0485	U	0.0462	U	0.0458	U		

Analyte Detected

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51 NA = not available

Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 3b: SVOCs in Soils

NYSDEC Site ID: C203080

All data in mg/Kg (ppm)			Sample ID		EP-5		EP-6		EP-7		EP-8	
U= Not Detected ≥ indicated value			Sample Date		(2016-04-28)		(2016-04-28)		(2016-05-05)		(2016-05-05)	
Data above SCOs shown in <b>Bold</b>			Dilution Factor		2		2		2		2	
SVOCs, 8270	UUSCO	RRUSCO	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1'-Biphenyl	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
1,2,4,5-Tetrachlorobenzene	NA	NA	0.0929	U	0.0873	U	0.091	U	0.097	U		
1,2,4-Trichlorobenzene	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
1,2-Dichlorobenzene	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
1,2-Diphenylhydrazine (Azobenzene)	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
1,3-Dichlorobenzene	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
1,4-Dichlorobenzene	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
2,3,4,6-Tetrachlorophenol	NA	NA	0.0929	U	0.0873	U	0.091	U	0.097	U		
2,4,5-Trichlorophenol	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
2,4,6-Trichlorophenol	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
2,4-Dichlorophenol	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
2,4-Dimethylphenol	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
2,4-Dinitrophenol	NA	NA	0.0929	U	0.0873	U	0.091	U	0.097	U		
2,4-Dinitrotoluene	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
2,6-Dinitrotoluene	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
2-Chloronaphthalene	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
2-Chlorophenol	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
2-Methylnaphthalene	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
2-Methylphenol	0.33	100	0.0466	U	0.0437	U	0.046	U	0.049	U		
2-Nitroaniline	NA	NA	0.0929	U	0.0873	U	0.091	U	0.097	U		
2-Nitrophenol	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
3- & 4-Methylphenols	0.33	100	0.0466	U	0.0437	U	0.046	U	0.049	U		
3,3'-Dichlorobenzidine	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
3-Nitroaniline	NA	NA	0.0929	U	0.0873	U	0.091	U	0.097	U		
4,6-Dinitro-2-methylphenol	NA	NA	0.0929	U	0.0873	U	0.091	U	0.097	U		
4-Bromophenyl phenyl ether	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
4-Chloro-3-methylphenol	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
4-Chloroaniline	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
4-Chlorophenyl phenyl ether	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
4-Nitroaniline	NA	NA	0.0929	U	0.0873	U	0.091	U	0.097	U		
4-Nitrophenol	NA	NA	0.0929	U	0.0873	U	0.091	U	0.097	U		
Acenaphthene	20	100	0.0466	U	0.0437	U	0.046	U	0.049	U		
Acenaphthylene	100	100	0.0466	U	0.0437	U	0.046	U	0.049	U		
Acetophenone	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
Aniline	NA	NA	0.186	U	0.175	U	0.18	U	0.19	U		
Anthracene	100	100	0.0466	U	0.0437	U	0.046	U	0.049	U		
Atrazine	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
Benzaldehyde	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
Benidine	NA	NA	0.186	U	0.175	U	0.18	U	0.19	U		
Benzo(a)anthracene	1	1	0.0466	U	0.0437	U	0.046	U	0.049	U		
Benzo(a)pyrene	1	1	0.0466	U	0.0437	U	0.046	U	0.049	U		
Benzo(b)fluoranthene	1	1	0.0466	U	0.0437	U	0.046	U	0.049	U		
Benzo(g,h,i)perylene	100	100	0.0466	U	0.0437	U	0.046	U	0.049	U		
Benzo(k)fluoranthene	0.8	3.9	0.0466	U	0.0437	U	0.046	U	0.049	U		
Benzoic acid	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
Benzyl alcohol	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
Benzyl butyl phthalate	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
Bis(2-chloroethoxy)methane	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
Bis(2-chloroethyl)ether	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
Bis(2-chloroisopropyl)ether	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
Bis(2-ethylhexyl)phthalate	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
Caprolactam	NA	NA	0.0929	U	0.0873	U	0.091	U	0.097	U		
Carbazole	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
Chrysene	1	3.9	0.0466	U	0.0437	U	0.046	U	0.049	U		
Dibenzo(a,h)anthracene	0.33	0.33	0.0466	U	0.0437	U	0.046	U	0.049	U		
Dibenzofuran	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
Diethyl phthalate	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
Dimethyl phthalate	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
Di-n-butyl phthalate	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
Di-n-octyl phthalate	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
Fluoranthene	100	100	0.0466	U	0.0858	JD	0.046	U	0.049	U		
Fluorene	30	100	0.0466	U	0.0437	U	0.046	U	0.049	U		
Hexachlorobenzene	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
Hexachlorobutadiene	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
Hexachlorocyclopentadiene	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
Hexachloroethane	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
Indeno(1,2,3-cd)pyrene	0.5	0.5	0.0466	U	0.0437	U	0.046	U	0.049	U		
Isophorone	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
Naphthalene	12	100	0.0466	U	0.0437	U	0.046	U	0.049	U		
Nitrobenzene	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
N-Nitrosodimethylamine	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
N-nitroso-di-n-propylamine	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
N-Nitrosodiphenylamine	NA	NA	0.0466	U	0.0437	U	0.046	U	0.049	U		
Pentachlorophenol	0.8	6.7	0.0466	U	0.0437	U	0.046	U	0.049	U		
Phenanthrene	100	100	0.0466	U	0.0437	U	0.046	U	0.049	U		
Phenol	0.33	100	0.0466	U	0.0437	U	0.046	U	0.049	U		
Pyrene	100	100	0.0466	U	0.06	JD	0.046	U	0.049	U		

Analyte Detected

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51 NA = not available

Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 3c: Pesticides and PCBs in Soils

NYSDEC Site ID: C203080

All data in mg/Kg (ppm) U= Not Detected ≥ indicated value Data above SCOs shown in <b>Bold</b>			Sample ID		EP-1		EP-2		EP-3		EP-4	
			Sample Date		(2016-04-28)		(2016-04-28)		(2016-04-28)		(2016-04-28)	
			Dilution Factor		5		5		5		5	
Pesticides, 8081	UUSCO	RRUSCO	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
4,4'-DDD	0.0033	13	0.00189	U	0.00191	U	0.00182	U	0.00181	U	0.00181	U
4,4'-DDE	0.0033	8.9	0.00189	U	0.00191	U	0.00182	U	0.00241	D	0.00241	D
4,4'-DDT	0.0033	7.9	0.00189	U	0.00191	U	0.00182	U	0.00181	U	0.00181	U
Aldrin	0.005	0.097	0.00189	U	0.00191	U	0.00182	U	0.00181	U	0.00181	U
alpha-BHC	0.02	0.48	0.00189	U	0.00191	U	0.00182	U	0.00181	U	0.00181	U
alpha-Chlordane	0.094	4.2	0.00189	U	0.00191	U	0.00182	U	0.00181	U	0.00181	U
beta-BHC	0.036	0.36	0.00189	U	0.00191	U	0.00182	U	0.00181	U	0.00181	U
Chlordane (total)	NA	NA	0.0757	U	0.0765	U	0.0729	U	0.0723	U	0.0723	U
delta-BHC	0.04	100	0.00189	U	0.00191	U	0.00182	U	0.00181	U	0.00181	U
Dieldrin	0.005	0.2	0.00189	U	0.00191	U	0.00182	U	0.00181	U	0.00181	U
Endosulfan I	2.4	24	0.00189	U	0.00191	U	0.00182	U	0.00181	U	0.00181	U
Endosulfan II	2.4	24	0.00189	U	0.00191	U	0.00182	U	0.00181	U	0.00181	U
Endosulfan sulfate	2.4	24	0.00189	U	0.00191	U	0.00182	U	0.00181	U	0.00181	U
Endrin	0.014	11	0.00189	U	0.00191	U	0.00182	U	0.00181	U	0.00181	U
Endrin aldehyde	NA	NA	0.00189	U	0.00191	U	0.00182	U	0.00181	U	0.00181	U
Endrin ketone	NA	NA	0.00189	U	0.00191	U	0.00182	U	0.00181	U	0.00181	U
gamma-BHC (Lindane)	0.1	1.3	0.00189	U	0.00191	U	0.00182	U	0.00181	U	0.00181	U
gamma-Chlordane	NA	0.54	0.00189	U	0.00191	U	0.00182	U	0.00181	U	0.00181	U
Heptachlor	0.042	2.1	0.00189	U	0.00191	U	0.00182	U	0.00181	U	0.00181	U
Heptachlor Epoxide	NA	0.077	0.00189	U	0.00191	U	0.00182	U	0.00181	U	0.00181	U
Methoxychlor	NA	100	0.00947	U	0.00956	U	0.00911	U	0.00904	U	0.00904	U
Toxaphene	NA	NA	0.0958	U	0.0968	U	0.0922	U	0.0915	U	0.0915	U

			Sample ID		EP-1		EP-2		EP-3		EP-4	
			Sample Date		(2016-04-28)		(2016-04-28)		(2016-04-28)		(2016-04-28)	
			Dilution Factor		1		1		1		1	
PCBs, 8082	UUSCO	RRUSCO	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
Aroclor 1016	0.1	1.00	0.0191	U	0.0193	U	0.0184	U	0.0183	U	0.0183	U
Aroclor 1221	0.1	1.00	0.0191	U	0.0193	U	0.0184	U	0.0183	U	0.0183	U
Aroclor 1232	0.1	1.00	0.0191	U	0.0193	U	0.0184	U	0.0183	U	0.0183	U
Aroclor 1242	0.1	1.00	0.0191	U	0.0193	U	0.0184	U	0.0183	U	0.0183	U
Aroclor 1248	0.1	1.00	0.0191	U	0.0193	U	0.0184	U	0.0183	U	0.0183	U
Aroclor 1254	0.1	1.00	0.0191	U	0.0193	U	0.0184	U	0.0183	U	0.0183	U
Aroclor 1260	0.1	1.00	0.0191	U	0.0193	U	0.0184	U	0.0183	U	0.0183	U
Aroclor, Total	0.1	1.00	0.0191	U	0.0193	U	0.0184	U	0.0183	U	0.0183	U

Analyte Detected

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51 NA = not available  
Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 3c: Pesticides and PCBs in Soils

NYSDEC Site ID: C203080

All data in mg/Kg (ppm) U= Not Detected ≥ indicated value Data above SCOs shown in <b>Bold</b>			Sample ID		EP-5		EP-6		EP-7		EP-8	
			Sample Date		(2016-04-28)		(2016-04-28)		(2016-05-05)		(2016-05-05)	
			Dilution Factor		5		5		1		1	
Pesticides, 8081	UUSCO	RRUSCO	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
4,4'-DDD	0.0033	13	0.00184	U	0.00173	U	0.0018	U	0.0019	U	0.0019	U
4,4'-DDE	0.0033	8.9	0.00184	U	0.00173	U	0.0018	U	0.0019	U	0.0019	U
4,4'-DDT	0.0033	7.9	0.00184	U	0.00173	U	0.0018	U	0.0019	U	0.0019	U
Aldrin	0.005	0.097	0.00184	U	0.00173	U	0.0018	U	0.0019	U	0.0019	U
alpha-BHC	0.02	0.48	0.00184	U	0.00173	U	0.0018	U	0.0019	U	0.0019	U
alpha-Chlordane	0.094	4.2	0.00184	U	0.00173	U	0.0018	U	0.0019	U	0.0019	U
beta-BHC	0.036	0.36	0.00184	U	0.00173	U	0.0018	U	0.0019	U	0.0019	U
Chlordane (total)	NA	NA	0.0735	U	0.0691	U	0.072	U	0.077	U	0.077	U
delta-BHC	0.04	100	0.00184	U	0.00173	U	0.0018	U	0.0019	U	0.0019	U
Dieldrin	0.005	0.2	0.00184	U	0.00173	U	0.0018	U	0.0019	U	0.0019	U
Endosulfan I	2.4	24	0.00184	U	0.00173	U	0.0018	U	0.0019	U	0.0019	U
Endosulfan II	2.4	24	0.00184	U	0.00173	U	0.0018	U	0.0019	U	0.0019	U
Endosulfan sulfate	2.4	24	0.00184	U	0.00173	U	0.0018	U	0.0019	U	0.0019	U
Endrin	0.014	11	0.00184	U	0.00173	U	0.0018	U	0.0019	U	0.0019	U
Endrin aldehyde	NA	NA	0.00184	U	0.00173	U	0.0018	U	0.0019	U	0.0019	U
Endrin ketone	NA	NA	0.00184	U	0.00173	U	0.0018	U	0.0019	U	0.0019	U
gamma-BHC (Lindane)	0.1	1.3	0.00184	U	0.00173	U	0.0018	U	0.0019	U	0.0019	U
gamma-Chlordane	NA	0.54	0.00184	U	0.00173	U	0.0018	U	0.0019	U	0.0019	U
Heptachlor	0.042	2.1	0.00184	U	0.00173	U	0.0018	U	0.0019	U	0.0019	U
Heptachlor Epoxide	NA	0.077	0.00184	U	0.00173	U	0.0018	U	0.0019	U	0.0019	U
Methoxychlor	NA	100	0.00919	U	0.00863	U	0.009	U	0.0096	U	0.0096	U
Toxaphene	NA	NA	0.0931	U	0.0874	U	0.091	U	0.097	U	0.097	U

			Sample ID		EP-5		EP-6		EP-7		EP-8	
			Sample Date		(2016-04-28)		(2016-04-28)		(2016-05-05)		(2016-05-05)	
			Dilution Factor		1		1		1		1	
PCBs, 8082	UUSCO	RRUSCO	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
Aroclor 1016	0.1	1.00	0.0186	U	0.0174	U	0.018	U	0.019	U	0.019	U
Aroclor 1221	0.1	1.00	0.0186	U	0.0174	U	0.018	U	0.019	U	0.019	U
Aroclor 1232	0.1	1.00	0.0186	U	0.0174	U	0.018	U	0.019	U	0.019	U
Aroclor 1242	0.1	1.00	0.0186	U	0.0174	U	0.018	U	0.019	U	0.019	U
Aroclor 1248	0.1	1.00	0.0186	U	0.0174	U	0.018	U	0.019	U	0.019	U
Aroclor 1254	0.1	1.00	0.0186	U	0.0174	U	0.018	U	0.019	U	0.019	U
Aroclor 1260	0.1	1.00	0.0186	U	0.0174	U	0.018	U	0.019	U	0.019	U
Aroclor, Total	0.1	1.00	0.0186	U	0.0174	U	0.018	U	0.019	U	0.019	U

Analyte Detected

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51 NA = not available  
Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 3d: TAL Metals in Soils

NYSDEC Site ID: C203080

All data in mg/Kg (ppm) U= Not Detected ≥ indicated value Data above SCOs shown in <b>Bold</b>			Sample ID		EP-1		EP-2		EP-3		EP-4	
			Sample Date		(2016-04-28)		(2016-04-28)		(2016-04-28)		(2016-04-28)	
			Dilution Factor		1		1		1		1	
Metals, 6010 and 7473	UUSCO	RRUSCO	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
Aluminum	NA	NA	6,790		6,070		4,170		8,730			
Antimony	NA	NA	0.574	U	0.58	U	0.552	U	0.548	U		
Arsenic	13	16	4.05		3.81		1.1	U	3.3			
Barium	350	400	23.4		13.5		25.2		59.1			
Beryllium	7.2	72	0.115	U	0.116	U	0.11	U	0.11	U		U
Cadmium	2.5	4.3	0.344	U	0.348	U	0.331	U	0.42			
Calcium	NA	NA	145,000	E	149,000	E	1,030		75,100			
Chromium	30	180	11.5		8.3		13.2		19.2			
Cobalt	NA	NA	4.22		3.29		4.81		9.36			
Copper	50	270	8.73		6.58		14.3		19.3			
Iron	NA	NA	7,540		6,950		5,700		16,200			
Lead	63	400	10.9		8.44		3.78		28.3			
Magnesium	NA	NA	76,200		79,400		1,700		41,600			
Manganese	1,600	2,000	216		189		56		359			
Mercury	0.18	0.81	0.0693		0.203		0.0331	U	0.0891			
Nickel	30	310	10.5		8.57		9.33		18.4			
Potassium	NA	NA	900		864		685		1,150			
Selenium	3.9	180	1.15	U	1.16	U	1.1	U	1.1	U		U
Silver	2	180	0.574	U	0.58	U	0.552	U	0.548	U		U
Sodium	NA	NA	193		123		137		199			
Thallium	NA	NA	1.15	U	1.16	U	1.1	U	1.1	U		U
Vanadium	NA	NA	11.1		8.43		9.22		21.2			
Zinc	109	10,000	31.7		21		15.3		54.4			

Analyte Detected

Analyte Above UUSCO

Table 3d: TAL Metals in Soils

NYSDEC Site ID: C203080

All data in mg/Kg (ppm) U= Not Detected ≥ indicated value Data above SCOs shown in <b>Bold</b>			Sample ID		EP-5		EP-6		EP-7		EP-8	
			Sample Date		(2016-04-28)		(2016-04-28)		(2016-05-05)		(2016-05-05)	
			Dilution Factor		1		1		1		1	
Metals, 6010 and 7473	UUSCO	RRUSCO	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
Aluminum	NA	NA	5,850		6,750		10,400		8,600			
Antimony	NA	NA	0.557	U	0.523	U	0.547	U	0.582	U		
Arsenic	13	16	1.11	U	2.67		1.09	U	2.44			
Barium	350	400	40.7		25.2		41.3		39.4			
Beryllium	7.2	72	0.111	U	0.105	U	0.109	U	0.116	U		
Cadmium	2.5	4.3	0.334	U	0.314	U	0.328	U	0.349	U		
Calcium	NA	NA	2,000		171,000	E	1,590		2,020			
Chromium	30	180	21.4		9.96		63.5		26			
Cobalt	NA	NA	6.03		3.37		10.3		12.2			
Copper	50	270	14.9		8.07		21.3		25			
Iron	NA	NA	7,040		5,620		21,300	B	19,900	B		
Lead	63	400	3.04		26.4		5.03		5.15			
Magnesium	NA	NA	2,660		74,200		4,880		6,060			
Manganese	1,600	2,000	116		163		178		186			
Mercury	0.18	0.81	0.0334	U	0.0616		0.0328	U	0.0349	U		
Nickel	30	310	13.1		7.1		33.3		19.9			
Potassium	NA	NA	828		1,290		1,460		1,460			
Selenium	3.9	180	1.11	U	1.05	U	3.22		2.62			
Silver	2	180	0.557	U	0.523	U	0.547	U	0.582	U		
Sodium	NA	NA	264		134		138		226			
Thallium	NA	NA	1.11	U	1.05	U	1.09	U	1.16	U		
Vanadium	NA	NA	13.7		10.8		39.8		27.6			
Zinc	109	10,000	18.6		37.5		40		57.5			

Analyte Detected

Analyte Above UUSCO

**Table 3d: TAL Metals in Soils**

NYSDEC Site ID: C203080

All data in mg/Kg (ppm) U= Not Detected ≥ indicated value Data above SCOs shown in <b>Bold</b>			Sample ID		2EP-2		2EP-7	
			Sample Date		(2016-05-13)		(2016-05-13)	
			Dilution Factor		1		1	
Metals, 6010 and 7473	UUSCO	RRUSCO	Result	Qualifier	Result	Qualifier	Result	Qualifier
Aluminum	NA	NA	NA		NA		NA	
Antimony	NA	NA	NA		NA		NA	
Arsenic	13	16	NA		NA		NA	
Barium	350	400	NA		NA		NA	
Beryllium	7.2	72	NA		NA		NA	
Cadmium	2.5	4.3	NA		NA		NA	
Calcium	NA	NA	NA		NA		NA	
Chromium	30	180	NA		24.8		NA	
Cobalt	NA	NA	NA		NA		NA	
Copper	50	270	NA		NA		NA	
Iron	NA	NA	NA		NA		NA	
Lead	63	400	NA		NA		NA	
Magnesium	NA	NA	NA		NA		NA	
Manganese	1,600	2,000	NA		NA		NA	
Mercury	0.18	0.81	0.0637		NA		NA	
Nickel	30	310	NA		16.2		NA	
Potassium	NA	NA	NA		NA		NA	
Selenium	3.9	180	NA		NA		NA	
Silver	2	180	NA		NA		NA	
Sodium	NA	NA	NA		NA		NA	
Thallium	NA	NA	NA		NA		NA	
Vanadium	NA	NA	NA		NA		NA	
Zinc	109	10,000	NA		NA		NA	

Analyte Detected

Analyte Above UUSCO