

**94-15 SUTPHIN BOULEVARD – SITE B  
QUEENS COUNTY  
JAMAICA, NEW YORK**

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**SITE MANAGEMENT PLAN**

**NYSDEC Site Number: C241278**

**Prepared for:**

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670 Myrtle Avenue, Suite 6373  
Brooklyn, NY 11205

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**Revisions to Final Approved Site Management Plan:**

Revision No.	Date Submitted	Summary of Revision	NYSDEC Approval Date

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**DECEMBER 2024**

CERTIFICATION STATEMENT

I, Matthew M. Carroll, certify that I am currently a NYS registered professional engineer as in defined in 6 NYCRR Part 375 and that this Site Management 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) and Green Remediation (DER-31).



\_\_\_\_\_ P.E.  
\_\_\_\_\_ 12/20/2024 \_\_\_\_\_ DATE

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JAMAICA, NEW YORK

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## **List of Acronyms**

AS	Air Sparging
ASP	Analytical Services Protocol
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
BMP	Best Management Practice
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CAMP	Community Air Monitoring Plan
C/D	Construction and Demolition
CFR	Code of Federal Regulation
CLP	Contract Laboratory Program
COC	Certificate of Completion
CO2	Carbon Dioxide
CP	Commissioner Policy
DER	Division of Environmental Remediation
DUSR	Data Usability Summary Report
EC	Engineering Control
ECL	Environmental Conservation Law
ELAP	Environmental Laboratory Approval Program
ERP	Environmental Restoration Program
EWP	Excavation Work Plan
GHG	Greenhouse Gas
GWE&T	Groundwater Extraction and Treatment
HASP	Health and Safety Plan
IC	Institutional Control
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYCRR	New York Codes, Rules and Regulations
O&M	Operation and Maintenance
OM&M	Operation, Maintenance and Monitoring
OSHA	Occupational Safety and Health Administration
OU	Operable Unit
P.E. or PE	Professional Engineer
PFAS	Per- and Polyfluoroalkyl Substances
PID	Photoionization Detector
PRP	Potentially Responsible Party
PRR	Periodic Review Report
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
QEP	Qualified Environmental Professional
RAO	Remedial Action Objective
RAWP	Remedial Action Work Plan
RCRA	Resource Conservation and Recovery Act
RI/FS	Remedial Investigation/Feasibility Study

ROD	Record of Decision
RP	Remedial Party
RSO	Remedial System Optimization
SAC	State Assistance Contract
SCG	Standards, Criteria and Guidelines
SCO	Soil Cleanup Objective
SMP	Site Management Plan
SOP	Standard Operating Procedures
SOW	Statement of Work
SPDES	State Pollutant Discharge Elimination System
SSD	Sub-slab Depressurization
SVE	Soil Vapor Extraction
SVI	Soil Vapor Intrusion
TAL	Target Analyte List
TCL	Target Compound List
TCLP	Toxicity Characteristic Leachate Procedure
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VCA	Voluntary Cleanup Agreement
VCP	Voluntary Cleanup Program

## ES EXECUTIVE SUMMARY

The following provides a brief summary of the controls implemented for the Site, as well as the inspections, monitoring, maintenance and reporting activities required by this Site Management Plan:

Site Identification: C241278 – 94-15 Sutphin Boulevard, Jamaica, NY

Institutional Controls:	1. The property may be used for restricted-residential, commercial, or industrial use;
	2. All ECs must be operated and maintained as specified in the SMP;
	3. All ECs must be inspected at a frequency and in a manner defined in the SMP.
	4. The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the New York City Department of Health and Mental Hygiene (NYCDOHMH) to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;
	5. Groundwater and other environmental or public health monitoring must be performed as defined in this SMP;
	6. Data and information pertinent to site management must be reported at the frequency and in a manner as defined in this SMP;
	7. All future activities that will disturb remaining contaminated material must be conducted in accordance with this SMP;
	8. Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in this SMP;
	9. Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in this SMP;

Site Identification:

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	10. Access to the Site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement;
	11. The potential for vapor intrusion must be evaluated for any buildings developed in the area within the IC boundaries noted on Figure 6, and any potential impacts that are identified must be monitored or mitigated; and
	12. Vegetable gardens and farming on the Site are prohibited
Engineering Controls:	1. Active Sub-Slab Depressurization System (SSDS)
Inspections:	Frequency
1. Active SSDS	Monthly by trained building personnel and annually by PE/QEP
Monitoring:	
1. SSDS Pressure Monitoring	At SSDS start up by PE/QEP, monthly by trained building personnel, and annually by PE/QEP
2. Baseline and Post-Remedial Indoor Air Sampling to assess efficacy of the SSDS	Baseline samples collected prior to SSDS start up, post-remedial samples collected 30 days after SSDS start up
Maintenance:	
1. SSDS Blower Maintenance	As needed
2. SSDS Valves and Alarms	Annually

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Reporting:	
1. SSDS Pressure Monitoring (to be provided with Periodic Review Report)	Annually
2. Post-Remedial Indoor Air Letter Report	Following completion of post-remedial indoor air sampling
3. Periodic Review Report	16 months after issuance of COC, annually thereafter

Further descriptions of the above requirements are provided in detail in the latter sections of this Site Management Plan.



## 1.0 INTRODUCTION

### 1.1 General

This Site Management Plan (SMP) is a required element of the remedial program for the 94-15 Sutphin Boulevard – Site B property located in Jamaica, New York (hereinafter referred to as the “Site”). See **Figure 1**. The Site is currently in the New York State (NYS) Brownfield Cleanup Program (BCP), Site No. C241278, which is administered by New York State Department of Environmental Conservation (NYSDEC or Department).

95<sup>th</sup> Avenue Equities LLC entered into a Brownfield Cleanup Agreement (BCA), Index No. C241278-01-24, on February 12, 2024 with the NYSDEC to remediate the Site. The BCA was amended on February 29, 2024 to document a change in ownership of the Site from Sutphin Boulevard Equities LLC to 95<sup>th</sup> Avenue Equities LLC. The BCA was amended a second time on August 27, 2024 to add a second remedial party/Volunteer, Sutphin QOZB LLC, which is also the ground lessee. The BCA was amended a third time on December 12, 2024 to obtain a formal eligibility determination for the tangible property credit component of the brownfield redevelopment tax credits through the Brownfield Opportunity Area (BOA) conformance gateway.

A figure showing the site location and boundaries of this Site is provided in Figures 1 and 2. The boundaries of the Site are more fully described in the metes and bounds site description that is part of the Environmental Easement provided in Appendix 3.

After completion of the remedial work, some contamination was left at this Site, which is hereafter referred to as “remaining contamination”. Institutional and Engineering Controls (ICs and ECs) have been incorporated into the site remedy to control exposure to remaining contamination to ensure protection of public health and the environment. An Environmental Easement granted to the NYSDEC, and recorded with the Office of the City Register of the City of New York, requires compliance with this SMP and all ECs and ICs placed on the site.

This SMP was prepared to manage remaining contamination at the site until the Environmental Easement is extinguished in accordance with ECL Article 71, Title 36. This plan has been approved by the NYSDEC, and compliance with this plan is required by the

grantor of the Environmental Easement and the grantor's successors and assigns. This SMP may only be revised with the approval of the NYSDEC.

It is important to note that:

- This SMP details the site-specific implementation procedures that are required by the Environmental Easement. Failure to properly implement the SMP is a violation of the Environmental Easement, which is grounds for revocation of the Certificate of Completion (COC); and
- Failure to comply with this SMP is also a violation of Environmental Conservation Law, 6 NYCRR Part 375 and the BCA (Index #C241278-01-24; Site #C241278) for the site, and thereby subject to applicable penalties.

All reports associated with the site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State. A list of contacts for persons involved with the site is provided in Appendix 1 of this SMP.

This SMP was prepared by Matthew Carroll, PE, on behalf of 95<sup>th</sup> Avenue Equities LLC and Sutphin QOZB LLC, in accordance with the requirements of the NYSDEC's DER-10 ("Technical Guidance for Site Investigation and Remediation"), dated May 3, 2010, and the guidelines provided by the NYSDEC. This SMP addresses the means for implementing the ICs and/or ECs that are required by the Environmental Easement for the site.

## 1.2 Revisions and Alterations

Revisions and alterations to this plan will be proposed in writing to the NYSDEC's project manager. The NYSDEC can also make changes to the SMP or request revisions from the remedial party. Revisions will be necessary upon, but not limited to, the following occurring: a change in media monitoring requirements, upgrades to or shutdown of a remedial system, post-remedial removal of contaminated sediment or soil, or other significant change to the site conditions. All approved alterations must conform with Article 145 Section 7209 of the Education Law regarding the application of professional seals and alterations. For example, any changes to as-built drawings must be stamped by a New York State Professional Engineer. In accordance with the Environmental Easement

for the site, the NYSDEC project manager will provide a notice of any approved changes to the SMP, and append these notices to the SMP that is retained in its files.

### 1.3 Notifications

Notifications will be submitted by the property owner to the NYSDEC, as needed, in accordance with NYSDEC's DER – 10 for the following reasons:

1. 60-day advance notice of any proposed changes in site use that are required under the terms of the BCA, 6 NYCRR Part 375 and/or Environmental Conservation Law.
2. 7-day advance notice of any field activity associated with the remedial program.
3. 15-day advance notice of any proposed ground-intrusive activity pursuant to the Excavation Work Plan. If the ground-intrusive activity qualifies as a change of use as defined in 6 NYCRR Part 375, the above mentioned 60-day advance notice is also required.
4. Notice within 48 hours of any damage or defect to the foundation, structures or EC that reduces or has the potential to reduce the effectiveness of an EC, and likewise, any action to be taken to mitigate the damage or defect.
5. Notice within 48 hours of any non-routine maintenance activities.
6. Verbal notice by noon of the following day of any emergency, such as a fire; flood; or earthquake that reduces or has the potential to reduce the effectiveness of ECs in place at the site, with written confirmation within 7 days that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.
7. Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action submitted to the NYSDEC within 45 days describing and documenting actions taken to restore the effectiveness of the ECs.

Any change in the ownership of the site or the responsibility for implementing this SMP will include the following notifications:

8. At least 60 days prior to the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective

purchaser/Remedial Party has been provided with a copy of the Brownfield Cleanup Agreement (BCA), and all approved work plans and reports, including this SMP.

9. Within 15 days after the transfer of all or part of the site, the new owner's name, contact representative, and contact information will be confirmed in writing to the NYSDEC.

Table 1 on the following page includes contact information for the above notifications. The information on this table will be updated as necessary to provide accurate contact information. A full listing of site-related contact information is provided in Appendix 1.

**Table 1: Notifications\***

<b><u>Name</u></b>	<b><u>Contact Information</u></b>	<b><u>Required Notification**</u></b>
Madeleine Babick, EIT, NYSDEC Project Manager	(718) 482-4992 madeleine.babick@dec.ny.gov	All Notifications
Jane O'Connell, P.G., NYSDEC Regional Remediation Engineer	(718) 482-4599 jane.oconnell@dec.ny.gov	All Notifications
Cris-Sandra Maycock, NYSDEC Section Chief, Division of Environmental Remediation	(718) 482-4679 cris- sandra.maycock@dec.ny.gov	All Notifications
Kelly A. Lewandowski, P.E., NYSDEC Chief, Site Control	(518) 402-9543, kelly.lewandowski@nyc.ny.gov	Notifications 1, 8, and 9
Julia Kenney, NYSDOH Project Manager	(518) 402-7873, julia.kenney@health.ny.gov	Notifications 4, 6, and 7

\* Note: Notifications are subject to change and will be updated as necessary.

\*\* Note: Numbers in this column reference the numbered bullets in the notification list in this section.

## **2.0 SUMMARY OF PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS**

### **2.1 Site Location and Description**

The site is located in Jamaica, Queens County, New York and is identified as Block 9999 and Lot 1 on the New York City Tax Map (see Figure 1). Lot 1 was formerly part of a larger Block 9999, Lot 1, which also encompassed current Block 9999, Lot 40 (147-35 95<sup>th</sup> Avenue – Site A, BCP Site No. C241263) adjoining the Site to the east. Former Lot 1 was subdivided into two approximately equal area lots in January 2022. This lot was referenced as ‘Site B’ and retained the Lot 1 designation following the subdivision. The site is an approximately 0.69-acre area and is bounded by 94<sup>th</sup> Avenue followed by a mixed commercial and residential building to the north, 95<sup>th</sup> Avenue followed by mixed commercial and residential buildings to the south, a mixed commercial and residential building and new construction followed by 148<sup>th</sup> Street to the east, and Sutphin Boulevard followed by mixed commercial and residential buildings to the west (see Figure 2 – Site Layout Map). The boundaries of the site are more fully described in Appendix 3 – Environmental Easement. The owner and operator of the site parcel at the time of issuance of this SMP are:

Owner: 95<sup>th</sup> Avenue Equities LLC

Operator: Sutphin QOZB LLC

### **2.2 Physical Setting**

#### **2.2.1 Land Use**

The Site consists of the following: a new 24-story mixed-use commercial and residential building with a full cellar and an affordable housing component. The Site is zoned C6-4, a designation that typically denotes high-bulk commercial districts requiring a central location. High-rise mixed-use commercial and residential buildings are also

permitted under this zoning designation. The Site is currently utilized as a high-rise mixed-use commercial and residential building. Commercial tenant spaces have not yet been leased.

The properties adjoining the Site and in the neighborhood surrounding the Site to the south, north, east, and west primarily include commercial and residential properties.

### 2.2.2 Geology

Prior to remediation and redevelopment, the Site was underlain by a continuous layer of historic fill that ranged in thickness from eight to 18 feet and generally consists of brown silt with sand, gravel, concrete fragments, brick fragments, and coal fragments. The historic fill layer is underlain by a layer of native, brown, medium- to coarse-grained sand, which was found at depths ranging from eight to at least 30 feet below grade (ft-bg). The remedial excavation was extended to a depth of 12 ft-bg across the Site, with localized deeper excavation to 19 ft-bg in the vicinity of Remedial Investigation soil boring SB-3 for removal of a hotspot exceeding Unrestricted Use Soil Cleanup Objectives (SCOs).

A geologic cross section is shown in Figure 3.

### 2.2.3 Hydrogeology

Groundwater at the Site was encountered between approximately 21 to 23 ft-bg in groundwater monitoring wells. The shallow groundwater flow has been measured to be toward the southwest.

A groundwater contour map is shown in Figure 4. Groundwater elevation data is provided in Table 5.

## 2.3 Investigation and Remedial History

The Site was initially developed with dwellings and a carpenter's shop sometime prior to 1901. By 1911, non-residential uses of the property included a saw clamp manufacturer and a contractor's stable. By 1925, the property was redeveloped with a 1 ½-

story building that was utilized by a meat packing facility until at least 2006. The Site building was demolished prior to 2008 and the Site remained vacant until 2024, when construction began for the redevelopment of the Site as described in Section 2.2.1.

The following narrative provides a remedial history timeline and a brief summary of the available project records to document key investigative and remedial milestones for the Site. Full titles for each of the reports referenced below are provided in Section 8.0 – References.

Investigations and sampling efforts conducted at the Site are described in the following reports:

- *Phase I Environmental Site Assessment Report, 94-01 Sutphin Boulevard, Jamaica, NY.* Middleton Environmental Inc., February 11, 2021.
- *Limited Due Diligence Environmental Site Investigation, 94-01 Sutphin Boulevard, Jamaica, NY.* Tenen Environmental, LLC. November 3, 2021.
- *Remedial Investigation Report, 94-15 Sutphin Boulevard – Site B, Jamaica, NY.* Tenen Environmental, LLC. February 2024.
- *Remedial Action Work Plan, 94-15 Sutphin Boulevard – Site B, Jamaica, NY.* Tenen Environmental, LLC. March 2024.

Summaries of the above-mentioned reports are provided below.

*Phase I Environmental Site Assessment Report, 94-01 Sutphin Boulevard, Jamaica, NY.* Middleton Environmental Inc., February 11, 2021.

Middleton Environmental Inc. (Middleton) prepared a Phase I Environmental Site Assessment (ESA) for former Lot 1 in February 2021. The Phase I ESA identified the following Recognized Environmental Conditions (RECs) in association with the Site:

- Potential subsurface contamination associated with potential abandoned fuel oil tanks at the Site.

Middleton also noted the Site has a Hazmat, Air, and Noise E-Designation (E-175) as part of the Downtown Jamaica Redevelopment Plan (CEQR No. 05DCP081Q).



*Limited Due Diligence Environmental Site Investigation, 94-01 Sutphin Boulevard, Jamaica, NY.* Tenen Environmental, LLC, November 3, 2021.

Tenen completed a Limited Due Diligence Environmental Site Investigation (LDDESI) at former Lot 1 in October 2021 (report dated November 3, 2021) to evaluate the quality of soil, groundwater, and soil vapor across the Site. The scope of work performed during the LDDESI included the installation of 13 test pits, the collection of twelve soil samples, the installation of three temporary groundwater monitoring wells, the collection of three groundwater samples, the installation of six temporary soil vapor sample points, and the collection of six soil vapor samples. Of these, three test pits, two temporary groundwater monitoring wells, and four temporary soil vapor points were installed on current Lot 1 (the Site). In addition, a geophysical survey was performed to locate the potential oil tanks in the area offsite along 94<sup>th</sup> Avenue on current Lot 1 as identified in Middleton's Phase I ESA. All soil samples were analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), target analyte list (TAL) metals, pesticides, and polychlorinated biphenyls (PCBs); all groundwater samples were analyzed for VOCs and SVOCs; and, all soil vapor samples were analyzed for VOCs. The geophysical survey could not successfully confirm the presence of underground gasoline storage tanks onsite. A summary of the results of samples collected from the Site is provided below:

#### Soil Results

VOCs were not detected in exceedance of Unrestricted Use or Restricted-Residential Use SCOs in any soil samples.

Several SVOCs, most notable polyaromatic hydrocarbons (PAHs), were detected in shallow and deep soil samples at concentrations exceeding Unrestricted Use and Restricted-Residential Use SCOs, including benzo(a)anthracene (max. 48 parts-per-million [ppm]), benzo(a)pyrene (max. 42 ppm), benzo(b)fluoranthene (max. 57 ppm), benzo(k)fluoranthene (max. 14 ppm), chrysene (max. 40 ppm), dibenzo(a,h)anthracene (max. 5.1 ppm), indeno(1,2,3-cd)pyrene (max. 26 ppm), and dibenzofuran (max. 8.9 ppm).

The highest concentrations of all SVOCs were detected in TP-6 (8-10). No other SVOCs were detected in exceedance of Unrestricted Use or Restricted-Residential Use SCOs in any soil samples.

A variety of metals, including lead, mercury, and zinc, were detected in shallow and deep soil samples in exceedance of Unrestricted Use SCOs. Of these, mercury was also detected in exceedance of its Restricted-Residential Use SCO in one shallow soil sample, TP-2 (0-2). Lead was detected at a max. concentration of 180 ppm (Unrestricted Use SCO: 63 ppm; Restricted-Residential Use SCO: 400 ppm); mercury was detected at a max. concentration of 0.823 ppm (Unrestricted Use SCO: 0.18 ppm; Restricted-Residential Use SCO: 0.81 ppm), and, zinc was detected at a max. concentration of 591 ppm (Unrestricted Use SCO: 109 ppm; Restricted-Residential Use SCO: 10,000 ppm). No other metals were detected in exceedance of Unrestricted Use or Restricted-Residential Use SCOs in any soil samples.

Four pesticides, dieldrin, 4,4'-DDE, 4,4'-DDD, and 4,4'-DDT, were detected in exceedance of Unrestricted Use SCOs, but below Restricted-Residential Use SCOs, in one or more soil samples. Dieldrin was detected at a max. concentration of 0.00729 ppm; 4,4'-DDE was detected at a max. concentration of 0.00562 ppm; 4,4'-DDD was detected at a max. concentration of 0.0248 ppm; and, 4,4'-DDT was detected at a max. concentration of 0.117 ppm. All of the above-mentioned analytes have an Unrestricted Use SCO of 0.0033 ppm, with the exception of dieldrin, which has an Unrestricted Use SCO of 0.005 ppm. No other pesticides were detected in exceedance of Unrestricted Use SCOs in any soil samples. Pesticides were not detected in exceedance of Restricted-Residential Use SCOs in any soil samples.

Two PCBs, aroclor 1248 and aroclor 1260, were each detected slightly in exceedance of their Unrestricted Use SCOs of 0.1 ppm in one soil sample. Aroclor 1248 was detected at a concentration of 0.156 ppm in TP-7 (6-8) and aroclor 1260 was detected at a concentration of 0.122 ppm in TP-6 (8-10). In addition, total PCBs were also detected slightly in exceedance of their Unrestricted Use SCO of 0.1 ppm in two soil samples. Total PCBs were detected at a max. concentration of 0.363 ppm in TP-6 (8-10). No other PCBs

were detected in exceedance of Unrestricted Use SCOs in any soil samples. PCBs were not detected in exceedance of Restricted-Residential Use SCOs in any soil samples.

#### Groundwater Results

One chlorinated VOC (cVOC), tetrachloroethene (PCE), was detected in exceedance of the Class GA Standard in one groundwater sample. PCE was detected at a concentration of 24 parts-per-billion (ppb) in TW-3, collected from the northern portion of the Site, with a Class GA Standard of 5 ppb. No other VOCs were detected in exceedance of Class GA Standards in any groundwater samples.

A variety of SVOCs, specifically PAHs, were detected slightly in exceedance of their respective Class GA Standards in both groundwater samples. Benzo(b)fluoranthene (max. 0.01 ppb) and chrysene (max. 0.03 ppb) were detected in both groundwater samples in exceedance of Class GA Standards, and benzo(a)anthracene (0.04 ppb) was detected in one groundwater sample in exceedance of the Class GA Standard. The highest concentrations of all SVOCs were detected in TW-1, located in the southern portion of the Site. The Class GA Standard for all aforementioned PAHs is 0.002 ppb. No other SVOCs were detected in exceedance of Class GA Standards in any groundwater samples.

#### Soil Vapor Results

A variety of cVOCs, including PCE, trichloroethene (TCE), 1,1,1-trichloroethane (1,1,1-TCA), methylene chloride, and chloroform were detected in one or more soil vapor samples in exceedance of background (ambient) air concentrations. PCE was detected in all four soil vapor samples at concentrations ranging from 19.7 micrograms per cubic meter (ug/m<sup>3</sup>) in SV-1 to 29.6 ug/m<sup>3</sup> in SV-4; TCE was detected in three soil vapor samples at concentrations ranging from 2.07 ug/m<sup>3</sup> in SV-1 to 4.3 ug/m<sup>3</sup> in SV-5; 1,1,1-TCA was detected in all four soil vapor samples at concentrations ranging from 2.31 ug/m<sup>3</sup> in SV-6 to 7.97 ug/m<sup>3</sup> in SV-5; methylene chloride was detected in two soil vapor samples at concentrations ranging from 3.75 ug/m<sup>3</sup> in SV-4 to 4.38 ug/m<sup>3</sup> in SV-5; and, chloroform was detected in three soil vapor samples at concentrations ranging from 1.71 ug/m<sup>3</sup> in SV-

1 to 2.38 ug/m<sup>3</sup> in SV-5. All of the above-mentioned analytes were non-detect in the ambient air sample, AA. No other cVOCs were detected in soil vapor samples.

A variety of petroleum-related VOCs were detected at concentrations exceeding background (ambient) concentrations in all four soil vapor samples, including the following: benzene (max. 8.15 ug/m<sup>3</sup>), toluene (max. 266 ug/m<sup>3</sup>), ethylbenzene (max. 2.65 ug/m<sup>3</sup>), p/m-xylene (max. 7.08 ug/m<sup>3</sup>), o-xylene (max. 2.84 ug/m<sup>3</sup>), 1,2,4-trimethylbenzene (max. 4.37 ug/m<sup>3</sup>), 1,3,5-trimethylbenzene (max. 1.53 ug/m<sup>3</sup>), 4-ethyltoluene (max. 1.24 ug/m<sup>3</sup>), heptane (max. 6.76 ug/m<sup>3</sup>), and cyclohexane (max. 8.4 ug/m<sup>3</sup>). The highest concentrations of petroleum-related VOCs were detected in SV-5, located in the center of Site B.

*Remedial Investigation Report, 94-15 Sutphin Boulevard – Site B, Jamaica, NY.* Tenen Environmental, LLC, February 2024.

A Phase II ESI was completed at the Site in December 2021 and January 2022 (report dated February 2024) by Tenen pursuant to a New York City Mayor's Office of Environmental Remediation (NYC OER)-approved Phase II Work Plan to further evaluate the quality of soil, groundwater, and soil vapor across the Site. The results of the Phase II ESI were presented in the Remedial Investigation Report (RIR) dated February 2024. The scope of work performed during the Phase II ESI included the installation of ten soil borings/test pits, the collection of 26 soil samples (including quality assurance/quality control [QA/QC] samples), the installation of four temporary groundwater monitoring wells, the collection of seven groundwater samples (including QA/QC samples), the installation of six temporary soil vapor sample points, the collection of six soil vapor samples, and the collection of one ambient air sample. All soil and groundwater samples were analyzed for full scan Part 375 analytes, 1,4-dioxane, and per- and polyfluoroalkyl acids (PFAS), and all soil vapor samples were analyzed for VOCs. A summary of the results is included below.

### Soil Results

VOCs were not detected in exceedance of Unrestricted Use or Restricted-Residential Use SCOs in any soil samples. Although not detected in exceedance of Unrestricted Use or Restricted-Residential Use SCOs, the cVOC PCE was detected at low concentrations in four soil samples. PCE was detected at a max. concentration of 0.011 ppm in SB-7 (17-19). No other cVOCs were detected in any soil samples.

Several SVOCs, specifically PAHs, were detected in six soil samples at concentrations exceeding the Unrestricted Use and Restricted-Residential Use SCOs, including benzo(a)anthracene (max. 36 ppm), benzo(a)pyrene (max. 32 ppm), benzo(b)fluoranthene (max. 40 ppm), benzo(k)fluoranthene (max. 13 ppm), chrysene (max. 33 ppm), dibenzo(a,h)anthracene (max. 6.3 ppm), and indeno(1,2,3-cd)pyrene (max. 31 ppm). The highest concentrations of all SVOCs were detected in SB-2 (10-12). No other SVOCs were detected in exceedance of Unrestricted Use or Restricted-Residential Use SCOs in any soil samples.

A variety of metals, specifically lead, mercury, and zinc, were each detected in one or more soil samples in exceedance of Unrestricted Use SCOs, but below Restricted-Residential Use SCOs. Lead was detected at a max. concentration of 103 ppm (Unrestricted Use SCO: 63 ppm); mercury was detected at a max. concentration of 0.232 ppm (Unrestricted Use SCO: 0.18 ppm); and, zinc was detected at a max. concentration of 325 ppm (Unrestricted Use SCO: 109 ppm). No other metals were detected in exceedance of Unrestricted Use SCOs in any soil samples. Metals were not detected in exceedance of Restricted-Residential Use SCOs in any soil samples.

Four pesticides, dieldrin, 4,4'-DDE, 4,4'-DDD, and 4,4'-DDT, were detected in exceedance of Unrestricted Use SCOs, but below Restricted-Residential Use SCOs, in one or more soil samples. Dieldrin was detected at a max. concentration of 0.00886 ppm; 4,4'-DDE was detected at a max. concentration of 0.0327 ppm; 4,4'-DDD was detected at a max. concentration of 0.00501 ppm; and, 4,4'-DDT was detected at a max. concentration of 0.151 ppm. All of the above-mentioned analytes have an Unrestricted Use SCO of 0.0033 ppm, with the exception of dieldrin, which has an Unrestricted Use SCO of 0.005

ppm. No other pesticides were detected in exceedance of Unrestricted Use SCOs in any soil samples. Pesticides were not detected in exceedance of Restricted-Residential Use SCOs in any soil samples.

Total PCBs were detected slightly in exceedance of their Unrestricted Use SCO of 0.1 ppm in two soil samples. Total PCBs were detected at a max. concentration of 0.218 ppm. No individual PCB analytes were detected in exceedance of Unrestricted Use SCOs in any soil samples. PCBs were not detected in exceedance of Restricted-Residential Use SCOs in any soil samples.

Herbicides, total cyanide, hexavalent chromium, and trivalent chromium were not detected in exceedance of Unrestricted Use or Restricted-Residential Use SCOs in any soil samples.

1,4-Dioxane was not detected in any soil samples.

One PFAS analyte, perfluorooctane sulfonic acid (PFOS) was detected slightly in exceedance of its proposed Unrestricted Use SCO of 0.88 ppb, but below its proposed Restricted-Residential Use SCO of 44 ppb, in one soil sample, SB-3 (10-12). PFOS was detected at a concentration of 1.04 ppb. No other PFAS were detected in exceedance of the proposed Unrestricted Use SCOs in any soil samples. PFAS were not detected in exceedance of the proposed Restricted-Residential Use SCOs in any soil samples.

### Groundwater Results

One cVOC, PCE, was detected in exceedance of the Class GA Standard of 5 ppb in one groundwater sample, B-TW-3, collected from the northeastern corner of the Site. PCE was detected at a concentration of 13 ppb. No other VOCs were detected in exceedance of Class GA Standards in any groundwater samples.

A variety of SVOCs, including PAHs, were detected slightly in exceedance of their respective Class GA Standards in five of six groundwater samples and the duplicate sample, including benzo(a)anthracene (max. 0.06 ppb), benzo(a)pyrene (max. 0.02 ppb),

benzo(b)fluoranthene (max. 0.02 ppb), benzo(k)fluoranthene (max. 0.02 ppb), chrysene (max. 0.04 ppb), indeno(1,2,3-cd)pyrene (max. 0.02 ppb), and hexachlorobenzene (max. 0.14 ppb). All of the aforementioned analytes have a Class GA Standard of 0.002 ppb, with the exception of benzo(a)pyrene and hexachlorobenzene, which has a Class GA Standard of 0 ppb and 0.04 ppb, respectively. No other SVOCs were detected in exceedance of Class GA Standards in any groundwater samples. SVOCs were not detected in exceedance of Class GA Standards in monitoring well B-TW-1.

One metal, antimony, was detected in one dissolved groundwater sample in exceedance of the Class GA Standard. Dissolved antimony was detected at a concentration of 4.2 ppb in B-MW-4 with a Class GA Standard of 3 ppb.

Several naturally occurring earth metals were detected in all six groundwater samples and the duplicate sample. Total iron was detected in three samples in exceedance of the Class GA Standard of 300 ppb (max. 1,200 ppb in B-MW-1); total manganese was detected in four samples and the duplicate sample in exceedance of the Class GA Standard of 300 ppb (max. 725.7 ppb in B-MW-2); and, total sodium was detected in all six samples and the duplicate sample in exceedance of the Class GA Standard of 20,000 ppb (max. 107,000 ppb in B-MW-4). Of these, manganese and sodium also exceeded their respective Class GA Standards in one or more dissolved groundwater samples. Dissolved manganese was detected in four samples and the duplicate sample in exceedance of the Class GA Standard of 300 ppb (max. 726.5 ppb in B-MW-2) and dissolved sodium was detected in all six samples and the duplicate sample in exceedance of the Class GA Standard of 20,000 ppb (max. 102,000 ppb in B-MW-4 and B-MW-4\_DUP). No other metals were detected in exceedance of Class GA Standards in any total or dissolved groundwater samples.

Pesticides, herbicides, PCBs, total cyanide, trivalent chromium, and hexavalent chromium were not detected in exceedance of Class GA Standards in any groundwater samples.

1,4-Dioxane was not detected in any groundwater samples.

Concentrations of PFAS, specifically perfluorooctanoic acid (PFOA) and PFOS, were detected in exceedance of the Class GA Standards in all six groundwater samples and the duplicate sample. PFOA was detected at a max. concentration of 31.3 parts-per-trillion (ppt) in B-MW-4\_DUP with a Class GA Standard of 6.7 ppt and PFOS was detected at a max. concentration of 33.4 ppt in B-MW-4 with a Class GA Standard of 2.7 ppb.

### Soil Vapor

A variety of cVOCs, including PCE, TCE, cis-1,2-dichloroethene (cis-1,2-DCE), 1,1,1-TCA, carbon tetrachloride, trans-1,2-dichloroethene (trans-1,2-DCE), and chloroform were detected in soil vapor samples across the Site at concentrations exceeding background (ambient) concentrations. PCE, TCE, 1,1,1-TCA, and chloroform were detected in all six soil vapor samples exceeding background concentrations; cis-1,2-DCE was detected in three soil vapor samples exceeding background concentrations; and, carbon tetrachloride and trans-1,2-DCE were each detected in one soil vapor sample exceeding background concentrations. PCE was detected at a max. concentration of 458 ug/m<sup>3</sup> in B-SV-3; TCE was detected at a max. concentration of 57.5 ug/m<sup>3</sup> in B-SV-5; 1,1,1-TCA was detected at a max. concentration of 70.4 ug/m<sup>3</sup> in B-SV-5; chloroform was detected at a max. concentration of 27.9 ug/m<sup>3</sup> in B-SV-5; cis-1,2-DCE was detected at a max. concentration of 23.9 ug/m<sup>3</sup> in B-SV-2; carbon tetrachloride was detected at a concentration of 2.78 ug/m<sup>3</sup> in B-SV-6; and trans-1,2-DCE was detected at a concentration of 0.956 ug/m<sup>3</sup> in B-SV-2. All of the aforementioned cVOCs were non-detect in the ambient air sample, B-AA. No other cVOCs were detected in exceedance of background concentrations in any soil vapor samples.

A variety of petroleum-related VOCs were detected at concentrations exceeding background concentrations in four of six soil vapor samples, including the following: benzene (max. 3.35 ug/m<sup>3</sup>), toluene (max. 28.5 ug/m<sup>3</sup>), ethylbenzene (max. 29.3 ug/m<sup>3</sup>), p/m-xylene (max. 59.5 ug/m<sup>3</sup>), o-xylene (max. 15 ug/m<sup>3</sup>), 1,2,4-trimethylbenzene (max. 9.93 ug/m<sup>3</sup>), 1,3,5-trimethylbenzene (max. 3.23 ug/m<sup>3</sup>), heptane (max. 9.1 ug/m<sup>3</sup>), 4-ethyltoluene (max. 1.82 ug/m<sup>3</sup>), styrene (max. 1.38 ug/m<sup>3</sup>), cyclohexane (max. 3.92 ug/m<sup>3</sup>),



and 2,2,4-trimethylpentane (max. 6.59 ug/m<sup>3</sup>). Petroleum-related VOCs were not detected in exceedance of background concentrations in B-SV-3 and B-SV-4.

*Remedial Action Work Plan, 94-15 Sutphin Boulevard – Site B, Jamaica, NY.* Tenen Environmental, LLC, March 2024.

Following the Remedial Investigation, a Remedial Action Work Plan (RAWP) and Alternatives Analysis (AA) was prepared by Tenen to address the contamination detected onsite during the Remedial Investigation and previous investigations. The RAWP contemplated two remedial alternatives: one to meet Unrestricted Use (Track 1) SCOs and one to meet Restricted-Residential Use (Track 2) SCOs. Both remedial alternatives included mitigation of soil vapor intrusion via the installation of an active sub-slab depressurization system (SSDS). Groundwater remediation was not contemplated as part of the RAWP. The Unrestricted Use (Track 1) remedy was chosen for the Site in the RAWP. The Final Engineering Report (FER) documents the remedy completed at the Site and all deviations from the RAWP. The Site achieved a Conditional Track 1 (unrestricted use) soil remedy with an engineering control (active SSDS) that is anticipated to be discontinued within 5 years of issuance of the COC, upon NYSDEC and NYSDOH written approval of a petition to discontinue the active SSDS.

## 2.4 Remedial Action Objectives

The Remedial Action Objectives (RAOs) for the Site as listed in the Decision Document dated March 2024 are as follows:

### **Groundwater**

#### RAOs for Public Health Protection

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

#### RAOs for Environmental Protection

- Remove the source of ground or surface water contamination.

#### **Soil**

#### RAOs for Public Health Protection

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

#### RAOs for Environmental Protection

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

#### **Soil Vapor**

#### 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.

### 2.5 Remaining Contamination

#### 2.5.1 Soil

End-point sampling was conducted across the Site following the remedial excavation activities. End-point samples were collected from the base of the excavation every 900 square feet (SF) across the Site and from the base of excavation sidewalls every 30 linear feet (LF) where access was not restricted due to support of excavation or adjoining building foundations, in accordance with NYSDEC's DER-10. Sample collection was biased towards the location of highest suspected contamination based on PID readings, field observations, and historic data.

A total of 33 bottom end-point samples, one sidewall end-point sample, and two sets of quality assurance/quality control (QA/QC) samples (field blank, duplicate, and

MS/MSD) were collected from the Site. End-point samples were analyzed for Part 375 VOCs, SVOCs, pesticides, PCBs, TAL metals, 1,4-dioxane, and PFAS. End-point analytical results for all samples were compared to the Unrestricted Use SCOs.

#### End-Point Sampling Results

VOCs, SVOCs, pesticides, PCBs, TAL metals, 1,4-dioxane, and PFAS were not detected in exceedance of Unrestricted Use SCOs in any end-point samples. All end-point samples confirmed the Unrestricted Use SCOs for a Conditional Track 1 remedy were attained.

Tables 6a through 6e summarizes the results of all soil samples collected at the site after completion of remedial action.

#### 2.5.2 Groundwater

Contamination remains in the groundwater; however, the bulk of the soil contaminant mass has been removed and concentrations of contaminants in groundwater should decrease over time. Groundwater is not used as a potable source of water in this part of Queens pursuant to a local prohibition; all potable water is received from upstate watersheds by the New York City Department of Environmental Protection (NYC DEP). Groundwater sampling was conducted during the December 2021 – January 2022 Remedial Investigation for this project; sample locations are shown on Figure 2 and results are included in Tables 7a through 7e.

#### 2.5.3 Soil Vapor/Indoor Air

Contamination remains in the soil vapor; however, the bulk of the soil contaminant mass has been removed and concentrations of contaminants in soil vapor should decrease over time. Remaining soil vapor contamination onsite will be addressed by the operation of an active SSDS. Soil vapor sampling was completed during the Remedial Investigation phase of this project; sample locations are shown on Figure 2 and results are included in Table 8.

Baseline indoor air sampling will be conducted prior to SSDS start-up and post-remedial indoor air sampling will be conducted approximately one month following SSDS

start-up to confirm the efficacy of the remedial system. This sampling will be conducted following issuance of the Certificate of Completion (COC), as part of site management under this SMP and the results will be provided to NYSDEC and NYSDOH in a letter report. Occupancy of the onsite building will not be permitted until permission is granted in writing by NYSDEC and NYSDOH following review of the post-remedial indoor air sampling results.

### **3.0 INSTITUTIONAL AND ENGINEERING CONTROL PLAN**

#### **3.1 General**

Since remaining contamination exists at the site, Institutional Controls (ICs) and Engineering Controls (ECs) are required to protect human health and the environment. This IC/EC Plan describes the procedures for the implementation and management of all IC/ECs at the site. The IC/EC Plan is one component of the SMP and is subject to revision by the NYSDEC project manager.

This plan provides:

- A description of all IC/ECs on the site;
- The basic implementation and intended role of each IC/EC;
- A description of the key components of the ICs set forth in the Environmental Easement;
- A description of the controls to be evaluated during each required inspection and periodic review;
- A description of plans and procedures to be followed for implementation of IC/ECs for the proper handling of remaining contamination that may be disturbed during maintenance or redevelopment work on the site; and
- Any other provisions necessary to identify or establish methods for implementing the IC/ECs required by the site remedy, as determined by the NYSDEC project manager.

#### **3.2 Institutional Controls**

A series of ICs is required by the Decision Document to: (1) implement, maintain and monitor Engineering Control systems; (2) prevent future exposure to remaining contamination; and, (3) limit the use and development of the site to restricted-residential, commercial, or industrial uses only. Adherence to these ICs on the site is required by the Environmental Easement and will be implemented under this SMP. ICs identified in the Environmental Easement may not be discontinued without an amendment to or

extinguishment of the Environmental Easement. The IC boundaries are shown on Figure 6. These ICs are:

- The property may be used for: restricted-residential, commercial, or industrial use, although land use is subject to local zoning;
- All ECs must be operated and maintained as specified in this SMP;
- All ECs must be inspected at a frequency and in a manner defined in the SMP;
- The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the New York City Department of Health and Mental Hygiene (NYCDOHMH) to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;
- Groundwater and other environmental or public health monitoring must be performed as defined in this SMP;
- Data and information pertinent to site management must be reported at the frequency and in a manner as defined in this SMP;
- All future activities that will disturb remaining contaminated material must be conducted in accordance with this SMP;
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in this SMP;
- Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in this SMP;
- Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement;
- The potential for vapor intrusion must be evaluated for any buildings developed in the area within the IC boundaries noted on Figure 6, and any potential impacts that are identified must be monitored or mitigated; and

Vegetable gardens and farming on the site are prohibited.

### 3.3 Engineering Controls

### 3.3.1 Active Sub-Slab Depressurization System

To mitigate the potential for vapor intrusion into the new onsite building, an active sub-slab depressurization system (SSDS) was installed onsite beneath the cellar foundation slab. A SSDS Design Document dated April 30, 2024 was submitted to NYSDEC and approved on the same day. The SSDS installation was conducted concurrently with the construction of the new onsite building. Two SSDS blowers will be installed on the roof of the new building following issuance of the COC.

The SSDS consists of two sub-grade loops (one beneath the northern portion of the building and one beneath the southern portion of the building) of perforated corrugated PVC pipes set horizontally within subgrade trenches consisting of a minimum of six-inches of  $\frac{3}{4}$ -inch stone aggregate overlying gas-permeable geotextile fabric. The SSDS underlies the concrete foundation slab. Two six-inch diameter cast iron riser pipes connect to each of the subgrade loops and extend vertically through the building to the roof, where each pipe is connected to a blower fan for exhaust. Six pressure monitoring points will be installed throughout the slab within the cellar of the new building to confirm the system is achieving its design goals.

The overall goal of the system is to create a pressure differential of -0.02 inches of water column (in-wc) between the cellar foundation slab and the sub-slab environment; however, differential pressure readings above -0.004 in-wc are considered acceptable. An alarm system was installed that will notify the building management if a drop in pressure occurs, which indicates that the system is not operating as designed. The system has been designed in general conformance with the New York State Department of Health (NYSDOH) Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006 and as subsequently updated (NYSDOH Soil Vapor Guidance), including Section 4.2.2, *System-Specific Recommendations*. The exhaust locations meet the requirements of the NYSDOH Soil Vapor Guidance and NYC Mechanical Code, and are located a minimum two feet above the access roof level and at least ten feet away from adjoining buildings and HVAC intakes.

Fans manufactured by Obar Systems, Inc. will be installed on the roof of the new building following issuance of the COC in order to meet design goals (Model No. GBR

76UD for both the north and south loops). All fans will be equipped with a weather-proof enclosure.

Following issuance of the COC and as part of the site management phase, the SSDS will be started up and six vapor monitoring points (VMP-1 through VMP-6) will be installed in the cellar slab following issuance of the COC. Following SSDS start up, pressure readings will be collected from each of the installed vapor monitoring points to ensure design goals are being met. As noted above, the performance goal of the SSDS is to depressurize below the slab to at least -0.02 in-wc; however, differential pressure readings above -0.004 in-wc are considered acceptable. Results of the vapor monitoring point testing will be provided to NYSDEC and NYSDOH for review. Occupancy of the onsite building will not be permitted until permission is granted in writing by NYSDEC and NYSDOH following review of the vapor monitoring point results. Locations of the vapor monitoring points are shown on Figure 5.

Procedures for operating and maintaining the sub-slab depressurization system are documented in the Operation and Maintenance Plan (Section 5.0 of this SMP). As-built drawings, signed and sealed by a PE who is licensed and registered in New York State, are included in Appendix 9 – Operations and Maintenance Manual. Figure 6 shows the location of the ECs for the site.

### 3.3.2 Criteria for Completion of Remediation/Termination of Remedial Systems

Generally, remedial processes are considered completed when monitoring indicates that the remedy has achieved the remedial action objectives identified by the decision document. The framework for determining when remedial processes are complete is provided in Section 6.4 of NYSDEC DER-10. Unless waived by the NYSDEC, confirmation samples of applicable environmental media are required before terminating any remedial actions at the site. Confirmation samples require Category B deliverables and a Data Usability Summary Report (DUSR).

As discussed below, the NYSDEC may approve termination of a groundwater monitoring program. When a remedial party receives this approval, the remedial party will



decommission all site-related monitoring, injection and recovery wells as per the NYSDEC CP-43 policy.

The remedial party will also conduct any needed site restoration activities, such as asphalt patching and decommissioning treatment system equipment. In addition, the remedial party will conduct any necessary restoration of vegetation coverage, trees and wetlands, and will comply with NYSDEC and United States Army Corps of Engineers regulations and guidance. Also, the remedial party will ensure that no ongoing erosion is occurring on the site.

#### 3.3.2.1 – Sub-Slab Depressurization (SSD) System

The SSD system will not be discontinued unless prior written approval is granted by the NYSDEC and the NYSDOH project managers. If monitoring data indicates that the SSD system may no longer be required, a proposal to discontinue the SSD system will be submitted by the remedial party to the NYSDEC and NYSDOH project managers.

## **4.0 MONITORING AND SAMPLING PLAN**

### **4.1 General**

This Monitoring and Sampling Plan describes the measures for evaluating the overall performance and effectiveness of the remedy. This Monitoring and Sampling Plan may only be revised with the approval of the NYSDEC project manager. Details regarding the sampling procedures, data quality usability objectives, analytical methods, etc. for all samples collected as part of site management for the site are included in the Quality Assurance Project Plan provided in Appendix 5.

This Monitoring and Sampling Plan describes the methods to be used for:

- Sampling and analysis of all appropriate media (e.g., groundwater, indoor air, soil vapor, soils);
- Assessing compliance with applicable NYSDEC standards, criteria and guidance (SCGs), particularly groundwater standards and Part 375 SCOs for soil; and
- Evaluating site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment;

To adequately address these issues, this Monitoring and Sampling Plan provides information on:

- Sampling locations, protocol and frequency;
- Information on all designed monitoring systems;
- Analytical sampling program requirements;
- Inspection and maintenance requirements for monitoring wells;
- Monitoring well decommissioning procedures; and
- Annual inspection and periodic certification.

Reporting requirements are provided in Section 7.0 of this SMP.

#### 4.2 Site – wide Inspection

Site-wide inspections will be performed at a minimum of once per year. These periodic inspections must be conducted when the ground surface is visible (i.e. no snow cover). Site-wide inspections will be performed by a qualified environmental professional as defined in 6 NYCRR Part 375, a Professional Engineer (PE) who is licensed and registered in New York State, or a qualified person who directly reports to a PE who is licensed and registered in New York State. Modification to the frequency or duration of the inspections will require approval from the NYSDEC project manager. Site-wide inspections will also be performed after all severe weather conditions that may affect ECs or monitoring devices. During these inspections, an inspection form will be completed as provided in Appendix 8 – Site Management Forms. The form will compile sufficient information to assess the following:

- Compliance with all ICs, including site usage;
- An evaluation of the condition and continued effectiveness of ECs;
- General site conditions at the time of the inspection;
- Whether stormwater management systems, such as basins and outfalls, are working as designed;
- The site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection; and
- Confirm that site records are up to date.

Inspections of all remedial components installed at the site will be conducted. A comprehensive site-wide inspection will be conducted and documented according to the SMP schedule, regardless of the frequency of the Periodic Review Report. The inspections will determine and document the following:

- Whether ECs continue to perform as designed;
- If these controls continue to be protective of human health and the environment;
- Compliance with requirements of this SMP and the Environmental Easement;
- Achievement of remedial performance criteria; and
- If site records are complete and up to date.

Reporting requirements are outlined in Section 7.0 of this plan.

Inspections will also be performed in the event of an emergency. If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs that reduces or has the potential to reduce the effectiveness of ECs in place at the site, verbal notice to the NYSDEC project manager must be given by noon of the following day. In addition, an inspection of the site will be conducted within 5 days of the event to verify the effectiveness of the IC/ECs implemented at the site by a qualified environmental professional, as defined in 6 NYCCR Part 375. Written confirmation must be provided to the NYSDEC project manager within 7 days of the event that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public. The remedial party will submit follow-up status reports to the NYSDEC within 45 days of the event on actions taken to respond to any emergency event requiring ongoing responsive action, describing and documenting actions taken to restore the effectiveness of the ECs.

#### 4.3 Treatment System Monitoring and Sampling

##### 4.3.1 SSDS Remedial System Monitoring

Monitoring of the active SSDS will be performed on a routine basis, as identified in Table 2 Remedial System Monitoring Requirements and Schedule (see below). The monitoring of remedial systems must be conducted by a qualified environmental professional as defined in 6 NYCRR Part 375, a Professional Engineer (PE) who is licensed and registered in New York State, or a qualified person who directly reports to a PE who is licensed and registered in New York State. Modification to the frequency or sampling

requirements will require approval from the NYSDEC project manager. A visual inspection of the complete system will be conducted during each monitoring event. Unscheduled inspections and/or sampling may take place when a suspected failure of the active SSDS has been reported or an emergency occurs that is deemed likely to affect the operation of the system. Active SSDS system components to be monitored include, but are not limited to, the components included in Table 2 below.

**Table 2 – Remedial System Monitoring Requirements and Schedule**

<b>Remedial System Component</b>	<b>Monitoring Parameter</b>	<b>Operating Range</b>	<b>Monitoring Schedule</b>
SSDS Vacuum Blowers	Pressure readings at six installed vapor monitoring points	Design goal of $\leq -0.02$ in-wc; $\leq -0.004$ in-wc acceptable	Monthly by trained building personnel and annually by PE/QEP
	Alarm system test	Pass/Fail	
SSDS Piping	Visual inspection of the SSDS mechanical and above-grade piping components	N/A	

A complete list of components to be inspected is provided in the Inspection Checklist, provided in Appendix 8 – Site Management Forms. If any equipment readings are not within their specified operation range, any equipment is observed to be malfunctioning or the system is not performing within specifications; maintenance and repair, as per the Operation and Maintenance Plan, is required immediately.

#### 4.4 Post-Remediation Media Monitoring and Sampling

Indoor air samples shall be collected approximately 30 days following the start-up of the active SSDS. Sub-slab soil vapor samples and co-located indoor air samples will be collected prior to any petition to shut down the SSDS. Sampling locations, required analytical parameters and schedule are provided in Table 3 – Remedial System Sampling

Requirements and Schedule below. Modification to the frequency or sampling requirements will require approval from the NYSDEC project manager.

**Table 3 – Post Remediation Sampling Requirements and Schedule**

<b>Sampling Location</b>	<b>Analytical Parameters</b>	<b>Schedule</b>
Indoor Air	VOCs (EPA TO-15)	30 days following SSDS start-up
Sub-slab soil vapor and co-located indoor air	VOCs (EPA TO-15)	Two consecutive rounds during the heating season prior to petition shut down of SSDS

Detailed sample collection and analytical procedures and protocols are provided in Appendix 4 – Field Sampling Plan and Appendix 5 – Quality Assurance Project Plan.

#### 4.4.1 Indoor Air Sampling

Indoor air sampling will be performed approximately 30 days following SSDS start-up to assess the performance of the system. Five indoor air samples will be collected from the basement of the onsite building during the sampling event to confirm that soil vapor intrusion has been mitigated. Modification to the frequency or sampling requirements will require approval from the NYSDEC project manager.

The sampling frequency may only be modified with the approval of the NYSDEC project manager. This SMP will be modified to reflect changes in sampling plans approved by the NYSDEC project manager. Results of the indoor air sampling will be provided to NYSDEC and NYSDOH for review. Occupancy of the onsite building will not be permitted until permission is granted in writing by NYSDEC and NYSDOH following review of the indoor air sampling results.

Deliverables for the indoor air sampling program are specified in Section 7.0 – Reporting Requirements.

#### 4.4.2 Soil Vapor Intrusion Sampling

Soil vapor intrusion sampling will be performed prior to any petition to shutdown the onsite SSDS. Modification to the frequency or sampling requirements will require approval from the NYSDEC project manager.

The network of onsite soil vapor intrusion sample locations has been designed based on the following criteria:

- Six onsite sub-slab soil vapor samples, six co-located indoor air samples, and one outdoor (ambient) air sample will be collected during the heating season. One set of samples will be collected during each of two sampling events conducted over two consecutive heating seasons; and,
- Samples will be sent to an ELAP-certified laboratory for analysis of TO-15 VOCs.

The sampling frequency may only be modified with the approval of the NYSDEC project manager. This SMP will be modified to reflect changes in sampling plans approved by the NYSDEC project manager.

Deliverables for the soil vapor intrusion sampling program are specified in Section 7.0 – Reporting Requirements.

#### 4.4.3 Monitoring and Sampling Protocol

All sampling activities will be recorded in a field book and associated sampling log as provided in Appendix 8 – Site Management Forms. Other observations (e.g., groundwater monitoring well integrity) will be noted on the sampling log. The sampling log will serve as the inspection form for the monitoring network. Additional detail regarding monitoring and sampling protocols are provided in the site-specific Field Sampling Plan provided as Appendix 4 of this document. The Field Sampling Plan describes the methodology to be utilized for the collection of baseline and post-remedial

indoor air samples, as well as sub-slab soil vapor and co-located indoor air samples prior to any petition to shut down the SSDS.



## 5.0 OPERATION AND MAINTENANCE PLAN

### 5.1 General

This Operation and Maintenance Plan provides a brief description of the measures necessary to operate, monitor and maintain the mechanical components of the remedy selected for the site. This Operation and Maintenance Plan:

- Includes the procedures necessary to allow individuals unfamiliar with the site to operate and maintain the active SSDS;
- Will be updated periodically to reflect changes in site conditions or the manner in which the active SSDS is operated and maintained.

Further detail regarding the Operation and Maintenance of the active SSDS is provided in Appendix 9 – Operation and Maintenance Manual. A copy of this Operation and Maintenance Manual, along with the complete SMP, is to be maintained at the site. This Operation and Maintenance Plan is not to be used as a stand-alone document, but as a component document of this SMP.

### 5.2 SSDS Performance Criteria

Details of the system design and operation procedures are presented in the Sub-Slab Depressurization System *OM&M Plan*, which is included as Appendix 9. The active SSDS performance criteria are specified in Table 2 (Section 4.3.1) of this SMP. The SSDS consists of two sub-grade loops of perforated piping (one beneath the northern portion of the building foundation and one beneath the southern portion) that are each connected to a riser pipe that extends vertically to blower fans on the roof. Six vacuum monitoring points, VMP-1 through VMP-6, will be installed in the cellar slab following issuance of the COC to confirm the system is operating as designed.

The piping layout of the SSDS is shown in Figure 5. The as-built system construction details, including vapor monitoring point locations, piping installation details, and blower specifications are provided in Appendix 9.

### 5.3 Operation and Maintenance of Sub-slab Depressurization System

The following sections provide a description of the operations and maintenance of the active SSDS. Cut-sheets and as-built drawings for the SSDS are provided in Appendix 9 – Operations and Maintenance Manual.

#### 5.3.1 System Start-Up and Testing

The following activities will be completed following system installation, and will be implemented any time system re-start is required:

1. Blowers will be turned on.
2. After allowing appropriate time for the blowers and system to equilibrate, sub-slab vacuum will be measured at six vapor monitoring points (VMP-1 through VMP-6) to ensure that the goal of -0.02 in-wc has been achieved.
3. Verification that the system alarms are functioning will be completed by disconnecting pressure tubing hookups and observing whether all alarms are operational.

The system testing described above will be conducted if, in the course of the SSDS lifetime, the system goes down or significant changes are made to the system and the system must be restarted.

#### 5.3.2 Routine System Operation and Maintenance

The long-term operation and maintenance program described here shall continue throughout the life cycle of the SSDS to ensure a proper working order. The long-term operation and maintenance program for the major SSDS components includes manufacturer's recommendations for the replacement of SSDS components if any of the components fail, inspection procedures, an operation schedule, typical routine maintenance activities and schedules, and troubleshooting. Table 2 provides a summary and schedule of routine maintenance. Appendix 9 contains the O&M Manual.

### 5.3.3 Non-Routine Operation and Maintenance

Common issues that may cause the vacuum switch/alarm to not indicate a vacuum level or respond sluggishly include the following:

- Pressure ports (high or low) are not hooked up correctly;
- The fitting or sending lines are blocked, pinched, or leaking;
- The cover is loose;
- The pressure sensor is improperly located; and/or,
- The ambient temperature is too low (below 20 degrees Celsius)

### 5.3.4 System Monitoring Devices and Alarms

The active SSDS has warning devices to indicate that the system is not operating properly. An alarm system was installed to notify the building management if a drop in pressure indicates that the system is not operating as designed. In the event that warning device is activated, applicable maintenance and repairs will be conducted, as specified in the Operation and Maintenance Plan, and the SSDS will be restarted. Operational problems will be noted in the Periodic Review Report to be prepared for that reporting period.

The alarm system, described below, shall run continuously and only be disconnected for routine maintenance and inspection activities or replacement. Each riser pipe is equipped with the following:

- Obar Systems, Inc. Model No. GBR 25 mini differential pressure gauge with alarm

The Obar Systems, Inc. Model No. GBR 25 mini differential pressure gauge with alarm includes a scaled adjustment knob to allow changes to the switching pressure to be made without a pressure gauge; the product is a single pole double throw (SPDT) pressure switch and alarm combination. The alarm is wired to send a signal remotely to the building management system. In case there is a need to relocate a switch/alarm, the new location shall ensure that the switch/alarm remains in close proximity to the riser pipes and is installed

under the supervision of the Remedial Engineer. If the device is not indicating a vacuum while the SSDS is on, staff trained to perform inspections will make sure that the tubing connected to the riser pipe is connected to the low-pressure port. High-pressure ports on the vacuum/switch alarm are vented to the atmosphere.

The vacuum switch/alarm does not require lubrication or periodic servicing. Each vacuum switch/alarm is connected to a low-voltage transformer for power, and, barring a power outage, routine checkups will not be required. Repairs or alterations made to the vacuum switches by others will void the units' warranty. The vacuum switches are factory calibrated and cannot be recalibrated in the field. The installation and operating instructions for the vacuum alarm/monitor have been included in Appendix 9.

When testing the vacuum alarms, the tubing that connects the vacuum alarms to the riser pipes shall be disconnected and the low set point raised above the current reading. If the vacuum alarms are powered at the time of disconnecting the tubing from the riser pipe, the alarms will go off. If the system is in alarm mode when there is a vacuum present in the riser pipe, inspect the tubing and riser pipe tap to ensure that there are no blockages. If there is a blockage in either the tubing or the riser pipe tap, remove the blockage and retest the vacuum alarm/monitor.

The SSDS fans shall operate continuously and only be turned off for routine maintenance and inspection activities or replacement under the direction of the PE/QEP. The SSDS fans shall not be left on the system piping without electrical power for more than 48 hours in order to prevent potential fan failure, which could result from the extended non-operational state. The SSDS fan units do not require periodic servicing and should be returned to the manufacturer or supplied for service. Repairs or alterations made to the SSDS fan units by others will void the units' warranties. The installation and operating instructions for the SSDS fan units have been included in Appendix 9.

Inspections of the SSDS components shall include the following:

- Observe visible components (fan, vacuum, switch/alarm, tubing, riser pipe, etc.) for physical wear, damage and operational issues, and replace as necessary;
- Remove any blockages in vacuum switch/alarm tubing and riser pipe taps;

- Verify operation of vacuum switch/alarm by disconnecting tubing from riser pipe and noting if the system goes into alarm mode;
- Inspect riser pipe penetrations in concrete slab for proper seal;
- Inspect riser pipe connections at fan for leaks and tightness; and,
- Inspect power to fan by operating dedicated switch.

A copy of the Operations and Maintenance (O&M) Plan specific to the system components is provided in Appendix 9, which will provide further detail on the above.

#### 5.3.5 Fire Safety

The remedial party will conduct an annual facility walk with the local fire chief and/or fire suppression team. The site walk will allow for the addition of the facility to any local preplanning efforts. The NYSDEC project manager will be provided with the local fire chief's/fire suppression team's recommendations as soon as they become available. Following review, the NYSDEC project manager may direct the remedial party to implement the recommendations and/or revise the SMP.

## 6.0 PERIODIC ASSESSMENTS/EVALUATIONS

### 6.1 Climate Change Vulnerability Assessment

Increases in both the severity and frequency of storms/weather events, an increase in sea level elevations along with accompanying flooding impacts, shifting precipitation patterns and wide temperature fluctuation, resulting from global climactic change and instability, have the potential to significantly impact the performance, effectiveness and protectiveness of a given site and associated remedial systems. Vulnerability assessments provide information so that the site and associated remedial systems are prepared for the impacts of the increasing frequency and intensity of severe storms/weather events and associated flooding.

This section provides a current vulnerability assessment that evaluates the vulnerability of the site and/or engineering controls to severe storms/weather events and associated flooding. This section also identifies vulnerability assessment updates that will be conducted for the site in Periodic Review Reports.

**Flood Plain:** The Federal Emergency Management Agency (FEMA) flood insurance rate map for the Site (Map Number 3604970233F) indicates that the Site and surrounding area is not located within the 0.2% annual chance floodplain (500-year flood).

**Sea Level Rise:** The Site is situated at an elevation of approximately 39 feet above mean sea level (ft-msl), and the closest surface water body to the Site is approximately 2.6 miles away. Sea level rise is not likely to have an impact on the SSDS.

**Site Drainage and Storm Water Management:** The Site is located within a Municipal Separate Storm Sewer System (MS4) area of NYC, and a permit for storm water discharges is required and was obtained from NYC DEP.

**Erosion:** No evidence of erosion has been observed at the Site, and the SSDS will not be affected by stormwater.

**High Wind:** Two blowers for the SSDS with weather enclosures are located on the roof of the new building and could become susceptible to damage due to high winds.

**Drought:** Drought is not likely to occur at the Site, and the SSDS would not be susceptible to damage due to drought.

**Electricity:** The SSDS would be susceptible to power loss and/or dips/surges in voltage during severe weather events, including lightning strikes, and the associated impact on Site equipment and operations.

**Spill/Contaminant Release:** The SSDS is not susceptible to a spill or other contaminant release due to storm-related damage caused by flooding, erosion, high winds, loss of power etc.

**Wildfires:** The risk of wildfires in the surrounding area is low and unlikely to impact the SSDS.

## 6.2 Green Remediation Evaluation

NYSDEC's DER-31 Green Remediation requires that green remediation concepts and techniques be considered during all stages of the remedial program including site management, with the goal of improving the sustainability of the cleanup and summarizing the net environmental benefit of any implemented green technology. This section provides an environmental footprint analysis of the remedy, as implemented at the time of this SMP. This section of the SMP also provides a summary of green remediation evaluations to be completed for the site during site management and reported in Periodic Review Reports (PRRs).

Green remediation principles and techniques will be implemented to the extent feasible in the site management of the remedy as per DER-31. The major green remediation components are as follows:

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long-term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;

- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste; and
- Additionally, to incorporate green remediation principles and techniques to the extent feasible in the future development at this site, any future on-site buildings shall be constructed, at a minimum, to meet the 2020 Energy Conservation Construction Code of New York (or most recent edition) to improve energy efficiency as an element of construction.

To evaluate the remedy with respect to green and sustainable remediation principles, an environmental footprint analysis was completed and included in Appendix 12. The environmental footprint analysis was completed using SEFA (Spreadsheets for Environmental Footprint Analysis, USEPA), which is a NYSDEC-accepted tool. Water consumption, greenhouse gas emissions, renewable and non-renewable energy use, waste reduction and material were estimated, and goals for the project related to these green and sustainable remediation metrics, as well as for minimizing community impacts, protecting habitats and natural and cultural resources, and promoting environmental justice, will be established for the site management activities, as appropriate. Further, progress with respect to green and sustainable remediation metrics will be tracked and reported in periodic review reports and remedial system optimization reports as part of the site management program, and opportunities to further reduce the environmental footprint of the project will be identified as appropriate. The following is a summary of the green remediation evaluation with regards to the above-mentioned metrics:

**Waste Generation:** Approximately 31,770 tons of non-hazardous soil was disposed of offsite as part of this Remedial Action. Disposal facilities in close proximity to the Site were utilized to minimize truck emissions and fuel consumption. Soil reuse onsite was not implemented as part of this Remedial Action.

**Energy Usage:** The onsite SSDS utilizes electricity for operation of two roof-mounted blowers.



**Emissions:** The SSDS releases vapor-phase emissions from two blowers located on the roof of the new building. The emissions from the blowers are diluted with ambient air above the roof, and the exhaust locations are in compliance with all local, State, and Federal laws and regulations. Whenever possible, site visits for inspections, Remedial Action implementation, or sampling were conducted by staff utilizing public transit to reduce fuel usage for transportation.

**Water Usage:** All water utilized onsite for the purposes of mixing cement, installing piles, mitigating dust emissions, etc., was obtained from fire hydrants on sidewalks surrounding the Site. A hydrant permit was obtained from NYC DEP for the operation of hydrants surrounding the Site.

**Land and/or Ecosystems:** There were no disturbances or restoration of land and/or ecosystems as part of this Remedial Action.

Best management practices (BMPs) were implemented at the Site at all stages of the Remedial Action to reduce the environmental footprint and included the following:

- Utilized nearby sources for backfill import and soil/fill disposal to reduce fuel consumption and associated air emissions from trucks;
- Utilized machinery and equipment that was suitably sized for the Site and were capable of performing multiple tasks whenever possible to avoid field deployment of multiple machines;
- Shut down of machinery and equipment during extended periods of downtime instead of idling the engines to avoid fuel consumption when the machinery is not actively engaged;
- Performed routine, on-time maintenance to all machinery and equipment to ensure fuel efficiency;
- When direct load-out of soil/fill was not possible, soil was stockpiled on minimum double layers of 8-mil poly sheeting and was covered with poly sheeting at the end of each work day to promote dust suppression;

- Sprayed potable water onto surfaces and area of exposed soil, as necessary, to promote dust suppression;
- Emplaced a tight-fitting, opaque cover on all trucks removing soil/fill from the Site to promote dust suppression;
- Utilized piping of sufficient diameter for the SSDS to minimize pressure drops and resulting need for additional energy to operate blowers; and,
- Utilized blowers for the SSDS that can accommodate changes in operating requirements as treatment progresses.

In total, two remedial components (soil excavation and SSDS) were evaluated. The majority of the energy use (94.6%) was from the soil excavation activities, of which the offsite transportation accounted for the majority. The SSDS accounted for the remaining 5.4% of total energy use. The remedy was associated with 3,959.6 million British Thermal Units (MMBtus).

Approximately 300.4 tons of CO<sub>2</sub> equivalent were generated during the remedy. Of this, approximately 96.4% was associated with soil excavation, while the remaining 3.6% was associated with the SSDS. In summary, the majority of the energy use and emissions generated during the Remedial Action are associated with the soil excavation, which has been completed. The climate screen checklist and environmental footprint analysis prepared for the Site is included in Appendix 12.

#### 6.2.1 Timing of Green Remediation Evaluations

For major remedial system components, green remediation evaluations and corresponding modifications will be undertaken as part of a formal Remedial System Optimization (RSO), or at any time that the NYSDEC project manager feels appropriate, (e.g. during significant maintenance events or in conjunction with storm recovery activities).

Modifications resulting from green remediation evaluations will be routinely implemented and scheduled to occur during planned/routine operation and maintenance

activities after approval from the DER project manager. Reporting of these modifications will be presented in the PRR.

#### 6.2.2 Remedial Systems

Remedial systems will be operated properly considering the current site conditions to conserve materials and resources to the greatest extent possible. Consideration will be given to operating rates and use of reagents and consumables. Spent materials will be sent for recycling, as appropriate.

The active SSDS is electrically powered and has minimal fuel emissions associated with it. Fuel usage for transportation to and from the Site to conduct inspections and sampling events will be quantified and included in the PRR.

#### 6.2.3 Building Operations

Structures including buildings and sheds will be operated and maintained to provide for the most efficient operation of the remedy, while minimizing energy, waste generation and water consumption.

#### 6.2.4 Frequency of System Checks, Sampling and Other Periodic Activities

Transportation to and from the Site, use of consumables in relation to visiting the Site in order to conduct system checks and/or collect samples, and shipping samples to a laboratory for analyses have direct and/or inherent energy costs. The schedule and/or means of these periodic activities have been prepared so that these tasks can be accomplished in a manner that does not impact remedy protectiveness but reduces expenditure of energy or resources. Soil vapor and indoor air sampling events will be conducted on the same day as SSDS pressure monitoring or inspection dates to minimize number of visits to the Site by the Remedial Engineer or engineers or geologists under direct supervision of the Remedial Engineer. In addition, a telemetry system will be installed for the SSDS to allow for remote system checks to minimize number of visits to the Site.

### 6.2.5 Metrics and Reporting

As discussed in Section 7.0 and as shown in Appendix 8 – Site Management Forms, information on energy usage, solid waste generation, transportation and shipping, water usage and land use and ecosystems will be recorded to facilitate and document consistent implementation of green remediation during site management and to identify corresponding benefits. A set of metrics has been developed and will be evaluated over time to ensure that green remediation actions are achieving the desired results. The specific metrics to be quantified and tracked following COC issuance include electricity usage of the onsite SSDS, waste generation of the onsite SSDS (if any), and transportation to and from the Site for sampling and inspection events. There are no onsite engineering controls utilizing water, therefore, there will be no water usage tracking. Following redevelopment, the entirety of the Site will be occupied by a new, 24-story mixed-use commercial and residential building. Therefore, land and ecosystem disturbance or restoration is not anticipated at the Site following COC issuance.

## 6.3 Remedial System Optimization

A Remedial System Optimization (RSO) study will be conducted any time that the NYSDEC project manager or the remedial party requests in writing that an in-depth evaluation of the remedy is needed. An RSO may be appropriate if any of the following occur:

- The remedial actions have not met or are not expected to meet RAOs in the time frame estimated in the Decision Document;
- The management and operation of the remedial system is exceeding the estimated costs;
- The remedial system is not performing as expected or as designed;
- Previously unidentified source material may be suspected;
- Plume shift has potentially occurred;

- Site conditions change due to development, change of use, change in groundwater use, etc.;
- There is an anticipated transfer of the site management to another remedial party or agency; and
- A new and applicable remedial technology becomes available.

An RSO will provide a critique of a site's conceptual model, give a summary of past performance, document current cleanup practices, summarize progress made toward the site's cleanup goals, gather additional performance or media specific data and information and provide recommendations for improvements to enhance the ability of the present system to reach RAOs or to provide a basis for changing the remedial strategy.

The RSO study will focus on overall site cleanup strategy, process optimization and management with the intent of identifying impediments to cleanup and improvements to site operations to increase efficiency, cost effectiveness and remedial time frames. Green remediation technology and principals are to be considered when performing the RSO.

## 7.0. REPORTING REQUIREMENTS

### 7.1 Site Management Reports

All site management inspection, maintenance and monitoring events will be recorded on the appropriate site management forms provided in Appendix 8. These forms are subject to NYSDEC revision. All site management inspection, maintenance, and monitoring events will be conducted by a qualified environmental professional as defined in 6 NYCRR Part 375, a Professional Engineer (PE) who is licensed and registered in New York State, or a qualified person who directly reports to a PE who is licensed and registered in New York State.

All applicable inspection forms and other records, including media sampling data and system maintenance reports, generated for the site during the reporting period will be provided in electronic format to the NYSDEC in accordance with the requirements of Table 4 and summarized in the Periodic Review Report.

**Table 4: Schedule of Interim Monitoring/Inspection Reports**

<b>Task/Report</b>	<b>Reporting Frequency*</b>
Post-Remedial Indoor Air Letter Report	Following collection of baseline and post-remedial indoor air samples and pressure field extension testing
Periodic Review Report (to include SSDS pressure monitoring results)	16 months after issuance of COC then annually thereafter, or as otherwise determined by the NYSDEC

\* The frequency of events will be conducted as specified until otherwise approved by the NYSDEC project manager.

All interim monitoring/inspections reports will include, at a minimum:

- Date of event or reporting period;

- Name, company, and position of person(s) conducting monitoring/inspection activities;
- Description of the activities performed;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents noted (included either on the checklist/form or on an attached sheet);
- Type of samples collected (e.g., sub-slab vapor, indoor air, outdoor air);
- Copies of all field forms completed (e.g., well sampling logs, chain-of-custody documentation);
- Sampling results in comparison to appropriate standards/criteria;
- A figure illustrating sample type and sampling locations;
- Copies of all laboratory data sheets and the required laboratory data deliverables required for all points sampled (to be submitted electronically in the NYSDEC-identified format);
- Any observations, conclusions, or recommendations; and
- A determination as to whether contaminant conditions have changed since the last reporting event.

Routine maintenance event reporting forms will include, at a minimum:

- Date of event;
- Name, company, and position of person(s) conducting maintenance activities;
- Description of maintenance activities performed;
- Any modifications to the system;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents noted (included either on the checklist/form or on an attached sheet); and
- Other documentation such as copies of invoices for maintenance work, receipts for replacement equipment, etc., (attached to the checklist/form).

Non-routine maintenance event reporting forms will include, at a minimum:

- Date of event;

- Name, company, and position of person(s) conducting non-routine maintenance/repair activities;
- Description of non-routine activities performed;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents (included either on the form or on an attached sheet); and
- Other documentation such as copies of invoices for repair work, receipts for replacement equipment, etc. (attached to the checklist/form).

Data will be reported in digital format as determined by the NYSDEC. Currently, data is to be supplied electronically and submitted to the NYSDEC EQuIS™ database in accordance with the requirements found at this link <http://www.dec.ny.gov/chemical/62440.html>.

## 7.2 Periodic Review Report

A Periodic Review Report (PRR) will be submitted to the NYSDEC project manager beginning sixteen (16) months after the Certificate of Completion is issued. After submittal of the initial Periodic Review Report, the next PRR shall be submitted annually to the NYSDEC project manager or at another frequency as may be required by the NYSDEC project manager. In the event that the site is subdivided into separate parcels with different ownership, a single Periodic Review Report will be prepared that addresses the site described in Appendix 3 - Environmental Easement. The report will be prepared in accordance with NYSDEC's DER-10 and submitted within 30 days of the end of each certification period. Media sampling results will also be incorporated into the Periodic Review Report. The report will include:

- Identification, assessment and certification of all ECs/ICs required by the remedy for the site.
- Results of the required annual site inspections, SSDS pressure monitoring, fire inspections and severe condition inspections, if applicable.



- Description of any change of use, import of materials, or excavation that occurred during the certifying period.
- All applicable site management forms and other records generated for the site during the reporting period in the NYSDEC-approved electronic format, if not previously submitted.
- Identification of any wastes generated during the reporting period, along with waste characterization data, manifests, and disposal documentation.
- A summary of any discharge monitoring data and/or information generated during the reporting period, with comments and conclusions.
- Data summary tables and graphical representations of contaminants of concern by media (groundwater, soil vapor, etc.), which include a listing of all compounds analyzed, along with the applicable standards, with all exceedances highlighted. These tables and figures will include a presentation of past data as part of an evaluation of contaminant concentration trends, including but not limited to:
  - Trend monitoring graphs that present groundwater contaminant levels from before the start of the remedy implementation to the most current sampling data;
  - Trend monitoring graphs depicting system influent analytical data on a per event and cumulative basis;
  - O&M data summary tables;
  - A current plume map for sites with remaining groundwater contamination; and
  - A groundwater elevation contour map for each gauging event.
- Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period will be submitted in digital format as determined by the NYSDEC. Currently, data is supplied electronically and submitted to the NYSDEC EQuIS™ database in accordance with the requirements found at this link: <http://www.dec.ny.gov/chemical/62440.html>.
- A site evaluation, which includes the following:
  - The compliance of the remedy with the requirements of the site-specific Remedial Action Work Plan (RAWP), ROD or Decision Document;
  - The operation and the effectiveness of all treatment units, etc., including identification of any needed repairs or modifications;

- Any new conclusions or observations regarding site contamination based on inspections or data generated by the Monitoring and Sampling Plan for the media being monitored;
  - Recommendations regarding any necessary changes to the remedy and/or Monitoring and Sampling Plan;
  - An update to the climate change vulnerability assessment if site or external conditions have changed since the previous assessment, and recommendations to address vulnerabilities.
  - A summary of the Green Remediation evaluation, including a quantitative and qualitative overview of a site's environmental impacts and recommendations to improve the remedy's environmental footprint. The PRR will include the completed Summary of Green Remediation Metrics form provided in Appendix 8.
  - An evaluation of trends in contaminant levels in the affected media to determine if the remedy continues to be effective in achieving remedial goals as specified by the RAWP, ROD or Decision Document; and
  - The overall performance and effectiveness of the remedy.
- A performance summary for all treatment systems at the site during the calendar year, including information such as:
    - The number of days the system operated for the reporting period;
    - The average, high, and low flows per day;
    - The contaminant mass removed and the cost per pound of mass removed during the certification period and during the life of the treatment system;
    - A description of breakdowns and/or repairs along with an explanation for any significant downtime;
    - A description of the resolution of performance problems;
    - Alarm conditions;
    - Trends in equipment failure;
    - A summary of the performance, effluent and/or effectiveness monitoring, including SSDS pressure monitoring; and

- Comments, conclusions, and recommendations based on data evaluation. Recommendations must address how receptors would be impacted. Recommendations can include:
  - Proposals to address efficiency and costs such as: instituting remote operation, system changes to decrease maintenance costs and downtime, and system changes to decrease energy use; and
  - Proposals to modify or shut down a treatment system due to remediation completion, system performance or changed conditions. System shutdowns are addressed in Section 6.4 of DER-10.

#### 7.2.1 Certification of Institutional and Engineering Controls

Following the last inspection of the reporting period, a Professional Engineer licensed to practice and registered in New York State will prepare, and include in the Periodic Review Report, the following certification as per the requirements of NYSDEC DER-10:

*“For each institutional or engineering control identified for the site, I certify that all of the following statements are true:*

- *The inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction;*
- *The institutional control and/or engineering control employed at this site is unchanged from the date the control was put in place, or last approved by the Department;*
- *Nothing has occurred that would impair the ability of the control to protect the public health and environment;*
- *Nothing has occurred that would constitute a violation or failure to comply with any site management plan for this control;*
- *Access to the site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control;*
- *Use of the site is compliant with the environmental easement;*

- *The engineering control systems are performing as designed and are effective;*
- *To the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program and generally accepted engineering practices;*
- *The information presented in this report is accurate and complete; and*
- *No new information has come to my attention, including groundwater monitoring data from wells located at the site boundary, if any, to indicate that the assumptions made in the qualitative exposure assessment of off-site contamination are no longer valid.*

*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, Matthew M. Carroll, of 1085 Sackett Avenue, Bronx, NY 10461, am certifying as Owner’s Designated Site Representative for the site.”*

For BCP projects, every five years the following certification will be added:

- *The assumptions made in the qualitative exposure assessment remain valid.*

The signed certification will be included in the Periodic Review Report.

The Periodic Review Report will be submitted, in electronic format, to the NYSDEC project manager and the NYSDOH project manager. The Periodic Review Report may also need to be submitted in hard-copy format if requested by the NYSDEC project manager.

### 7.3 Corrective Measures Work Plan

If any component of the remedy is found to have failed, or if the periodic certification cannot be provided due to the failure of an institutional or engineering control or failure to conduct site management activities, a Corrective Measures Work Plan will be submitted to the NYSDEC project manager for approval. This plan will explain the failure and provide the details and schedule for performing work necessary to correct the failure. Unless an emergency condition exists, no work will be performed pursuant to the

Corrective Measures Work Plan until it has been approved by the NYSDEC project manager.

#### 7.4 Remedial System Optimization Report

If an RSO is to be performed (see Section 6.3), upon completion of an RSO, an RSO report must be submitted to the NYSDEC project manager for approval. A general outline for the RSO report is provided in Appendix 10. The RSO report will document the research/ investigation and data gathering that was conducted, evaluate the results and facts obtained, present a revised conceptual site model and present recommendations. RSO recommendations are to be implemented upon approval from the NYSDEC. Additional work plans, design documents, HASPs etc., may still be required to implement the recommendations, based upon the actions that need to be taken. A final engineering report and update to the SMP may also be required.

The RSO report will be submitted, in electronic format, to the NYSDEC project manager and the NYSDOH project manager.

## **8.0 REFERENCES**

6 NYCRR Part 375, Environmental Remediation Programs. December 14, 2006.

Limited Due Diligence Environmental Site Investigation Report, 94-01 Sutphin Boulevard, Jamaica, NY 11435, Tenen Environmental, LLC, November 2021.

NYSDEC DER-10 – “Technical Guidance for Site Investigation and Remediation”.

NYSDEC, 1998. Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1. June 1998 (April 2000 addendum).

New York State Department of Health (NYSDOH). Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH, October 2006 and as updated).

Phase I Environmental Site Assessment, 94-01 Sutphin Boulevard, Jamaica, NY 11435, Middleton Environmental Inc., February 2021.

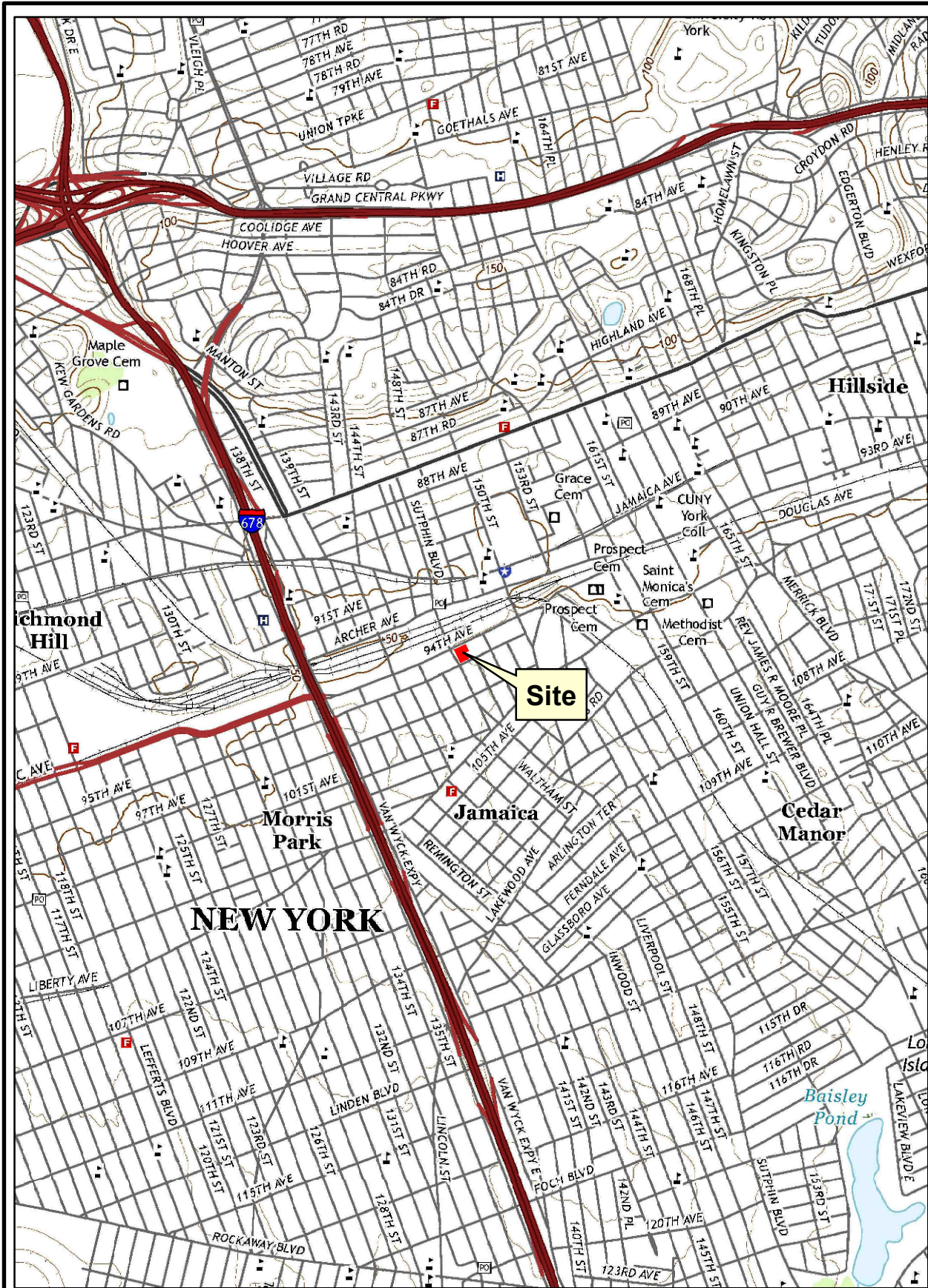
Remedial Action Work Plan, 94-15 Sutphin Boulevard – Site B, Jamaica, NY 11435, Matthew Carroll, PE, March 2024.

Remedial Investigation Report, 94-15 Sutphin Boulevard – Site B, Jamaica, NY 11435, Tenen Environmental, LLC, February 2024.

Sub-Slab Depressurization System (SSDS) Remedial Design Document, 94-15 Sutphin Boulevard – Site B, Jamaica, NY 11435, Tenen Environmental, LLC, April 30, 2024.

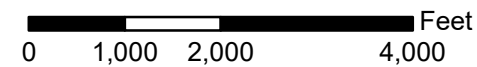
# Figures





Basemap: USGS Topographic Map, 7.5 Minute Quadrangles, Jamaica, NY

Site Location



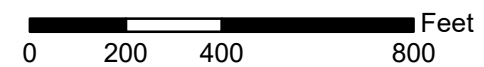
<http://gis.nyc.gov/taxmap/map.htm>

Department of Finance Digital Tax Map



Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community  
NYC Department of City Planning, Information Technology Division

Department of City Planning MapPLUTO - 2021 v2



Site

**94-15 Sutphin Blvd. - Site B**  
**Queens, New York**  
**Block 9999, Lot 1**  
**BCP Site No. C241278**

**TENEN ENVIRONMENTAL**

Tenen Environmental, LLC  
121 West 27th Street  
Suite 702  
New York, NY 10001  
O: (646) 606-2332  
F: (646) 606-2379

Drawn By LM

Checked By AP

Date  
January 2021

Scale  
As Noted

**Site Location Map**

**Figure 1**

Drawing Title

Drawing No





Basemap: Nearmap Aerial 8/12/2021  
NYC Department of City Planning, Information Technology Division  
94-01 Sutphin Boulevard, J Frank C Mallea Associates, Cellar & First Floor Plan, A1 (Rec'd 11/23/21)

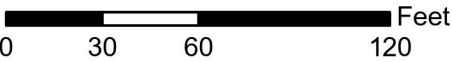


Legend

- Soil Boring Sample Locations
- Groundwater Sample Locations
- Groundwater and Soil Sample Locations
- Groundwater Sample Locations from Previously Installed Monitoring Wells
- TP Soil Sample Locations
- Soil Vapor Sample Locations
- Ambient Air Sample Location
- Previous Soil Vapor Sample Locations - LDDSI Tenen 2021
- Previous Test Pit Soil Sample Locations - LDDSI, Tenen 2021
- Bottom of Excavation End-point Samples
- Sidewall End-point Samples
- Site A - 30,067 SF
- Site B - 30,047 SF

SampleLocations

- Descr
- SV Previous Soil Vapor Sample Locations - LDDSI Tenen 2021



Site

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Date December 2024

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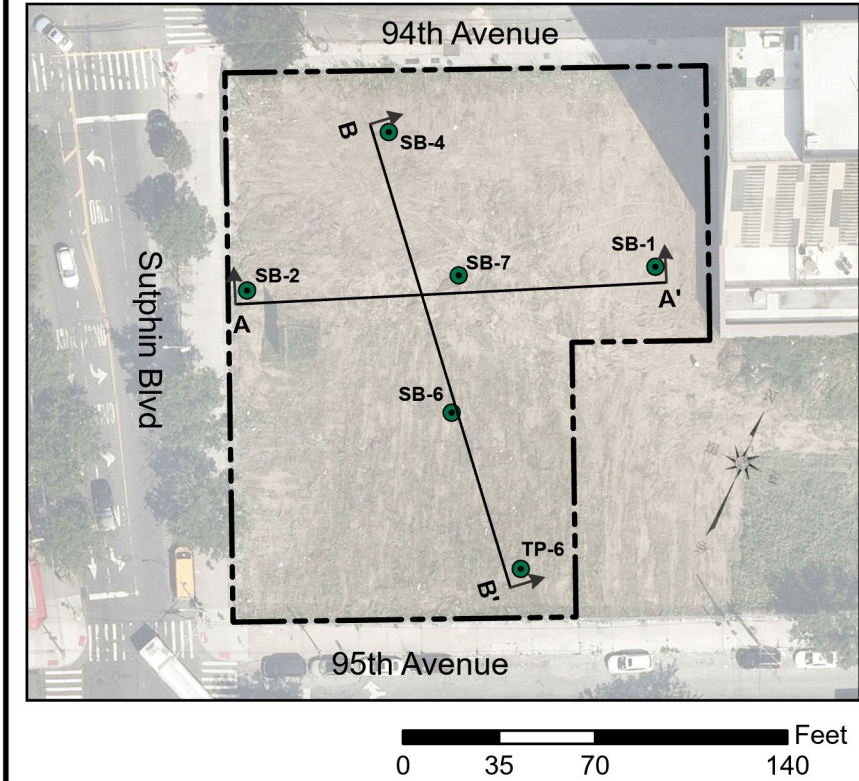
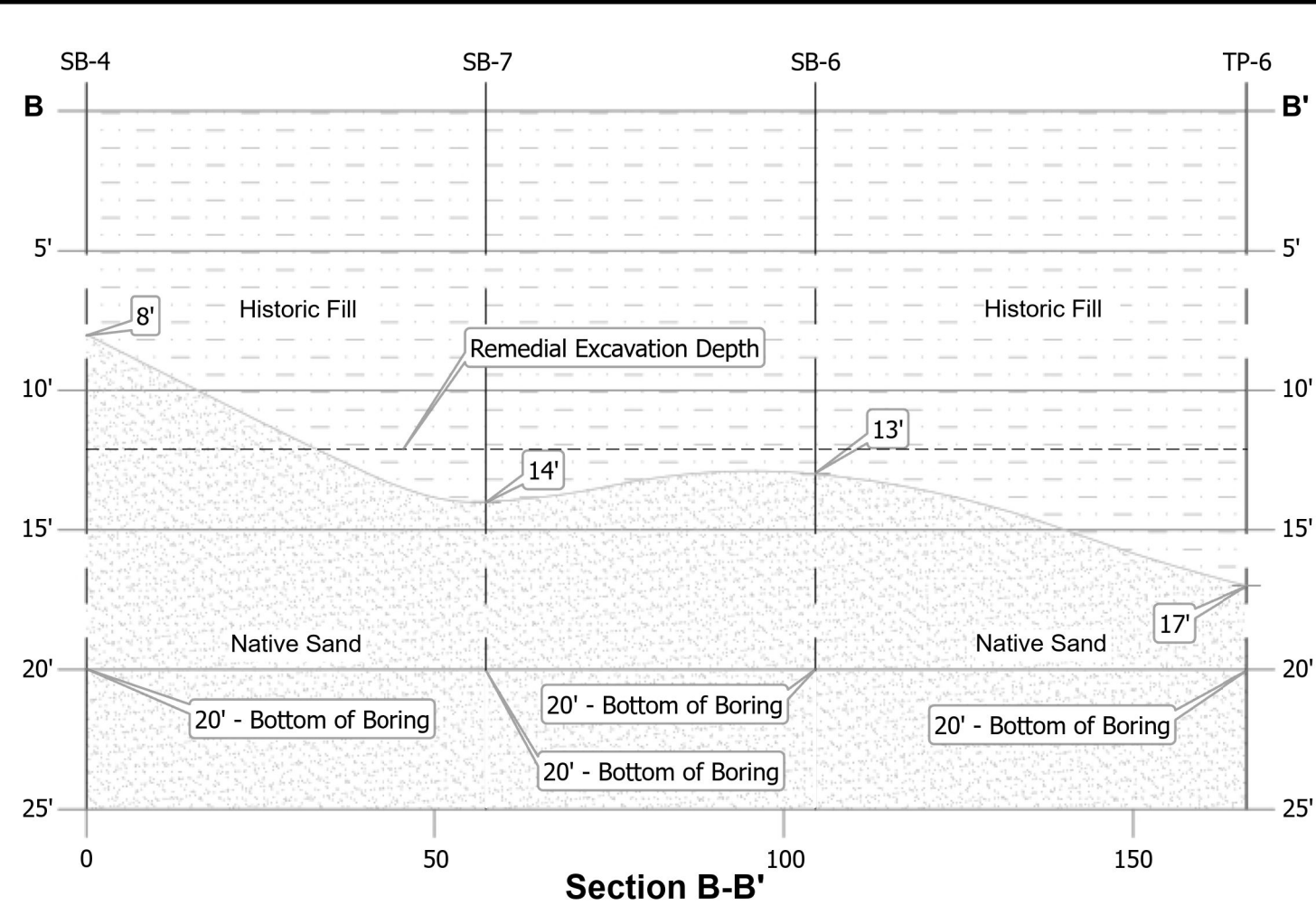
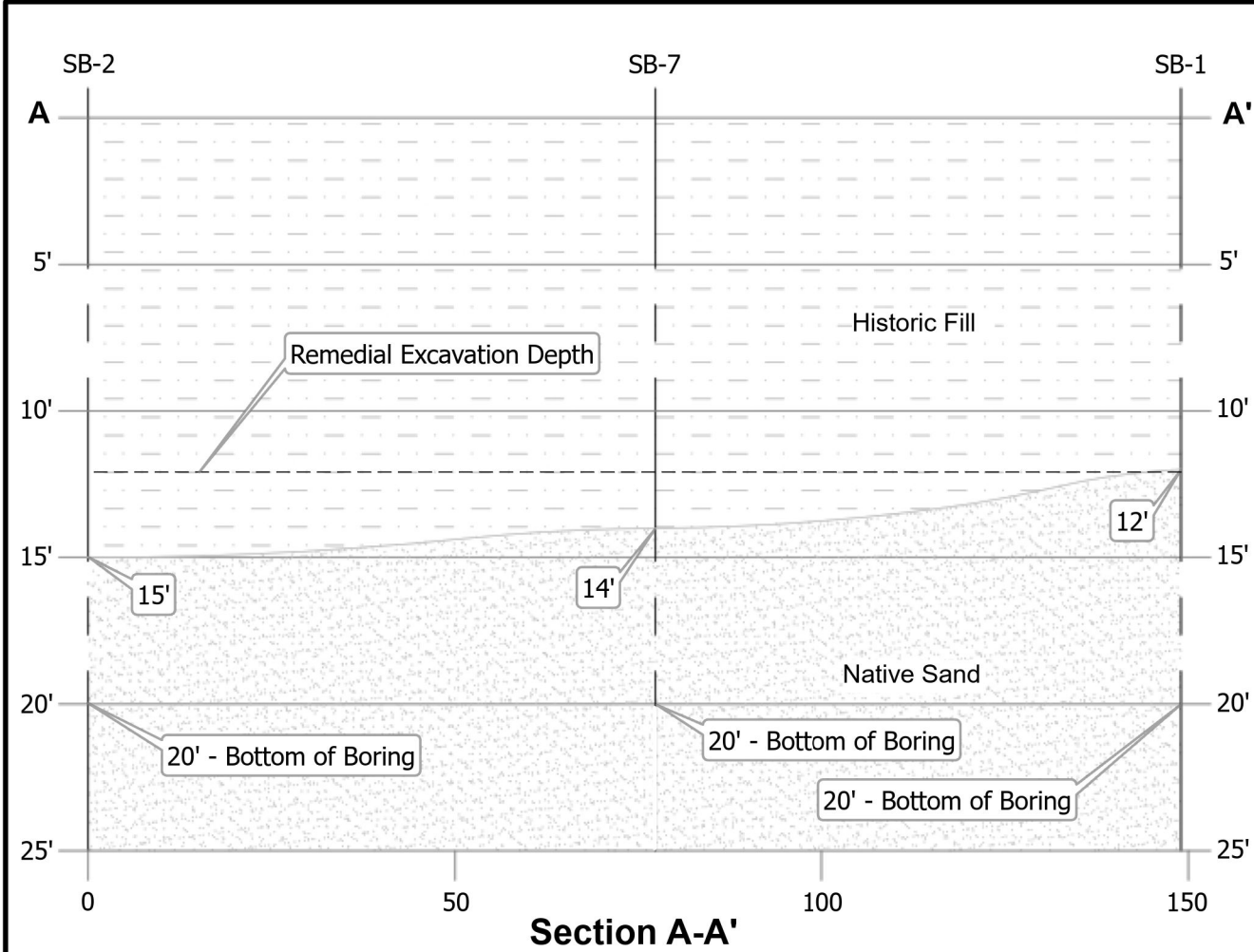
Site Layout Map

Figure 2

Drawing Title

Drawing No

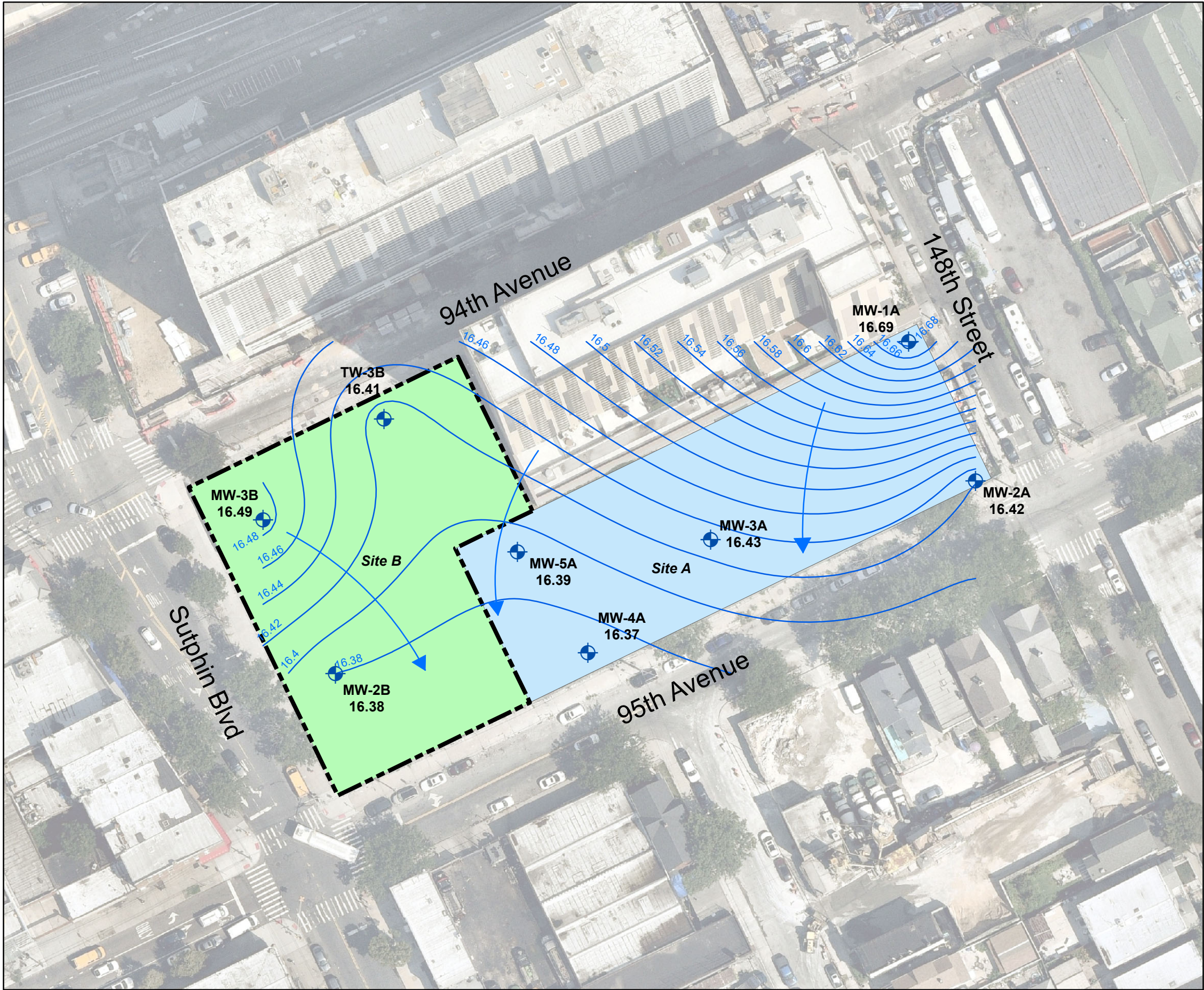




Basemap: Nearmap Aerial 8/12/2021  
NYC Department of City Planning, Information Technology Division

Drawing Title		Geologic Cross Section		Drawn By LM		TENEN ENVIRONMENTAL		Site	
				Checked By AP					
Drawing No		Figure 3		Date December 2024		Tenen Environmental, LLC 121 West 27th Street Suite 702 New York, NY 10001 O: (646) 606-2332 F: (646) 606-2379			
				Scale As Noted					



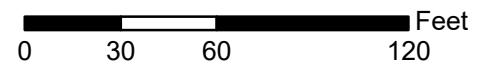


Basemap: Nearmap Aerial 8/12/2021  
NYC Department of City Planning, Information Technology Division  
94-01 Sutphin Boulevard, J Frank C Mallea Associates, Cellar & First Floor Plan, A1 (Rec'd 11/23/21)



Legend

- Groundwater Sample Location
- Groundwater Elevation Contour
- Site A - 30,067 SF
- Site B - 30,047 SF



Site

**94-15 Sutphin Blvd. - Site B**  
**Queens, New York**  
**Block 9999, Lot 1**  
**BCP Site No. C241278**

**TENEN ENVIRONMENTAL**

Tenen Environmental, LLC  
121 West 27th Street  
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Drawn By  
LM

Checked By  
AP

Date  
January 2022

Scale  
As Noted

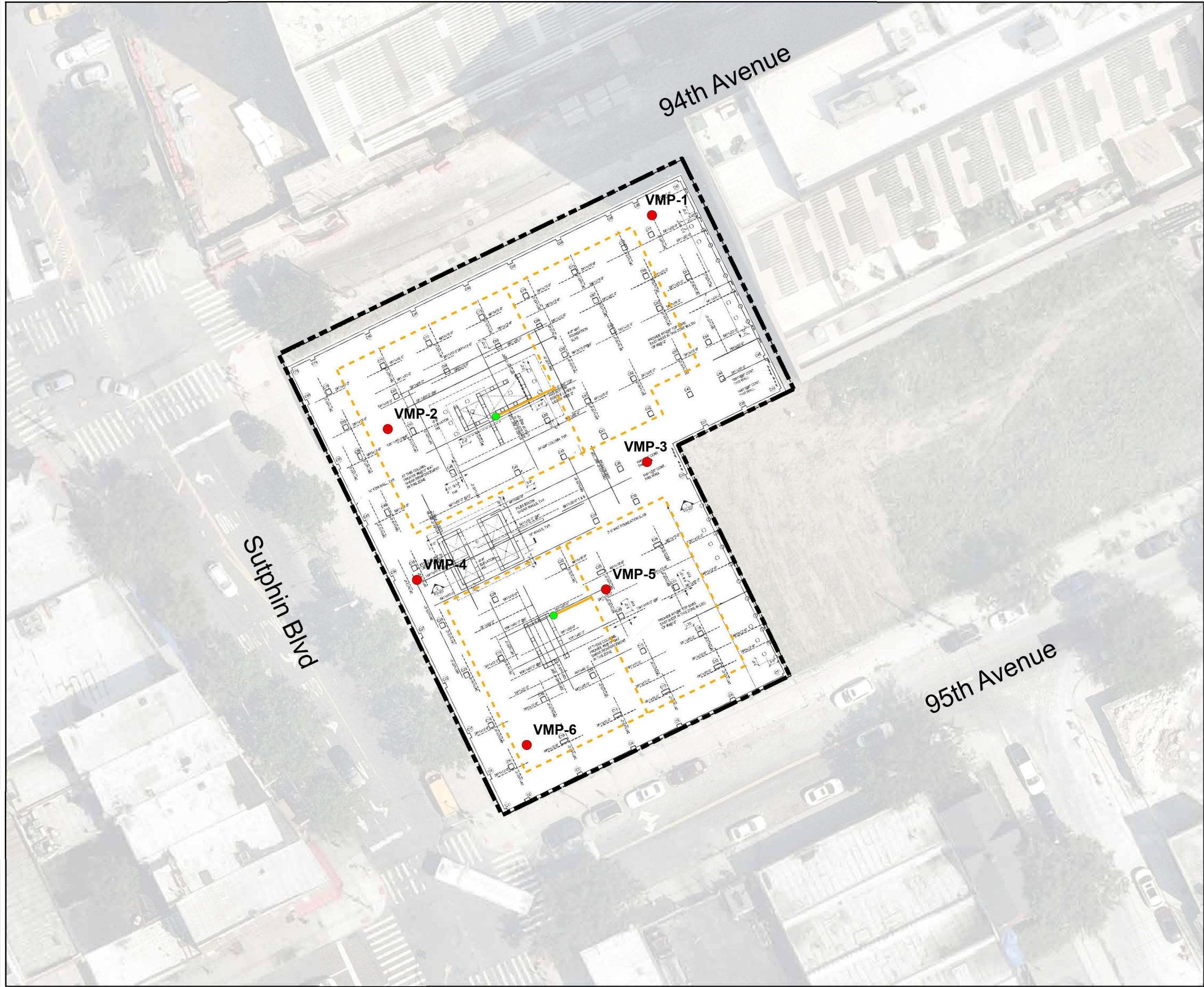
Drawing Title

**Groundwater Contour Map**

Drawing No

**Figure 4**





Basemap: Nearmap Aerial 8/12/2021  
NYC Department of City Planning, Information Technology Division  
BM Best Mechanical Services, Underground SSDS, 94-15 Sutphin Blvd., Jamaica, NY, 3/12/24



Legend

- 4-in UP SSDS Riser
- Vapor Monitoring
- Four-inch Slotted PVC SSDS Pipe
- Four-inch Solid PVC SSDS Pipe
- Site Boundary

Vapor monitoring points VMP-1 through VMP-6 will be installed following issuance of the Certificate of Completion.

The VMPs act as both vapor monitoring points and vacuum monitoring points



94-15 Sutphin Blvd.-Site B  
Queens, New York  
Block 9999, Lot 1  
BCP Site No. C241278

Site

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Drawn By	LM
Checked By	AP
Date	December 2024
Scale	As Noted

Drawing Title	SSDS Sub-Grade Layout
Drawing No	Figure 5





Basemap: Nearmap Aerial 8/12/2021  
NYC Department of City Planning, Information Technology Division  
BM Best Mechanical Services, Underground SSDS, 94-15 Sutphin Blvd., Jamaica, NY, 3/12/24



Legend

- 4-in UP SSDS Riser
- Vapor Monitoring Point
- Four-inch Slotted PVC SSDS Pipe
- Four-inch Solid PVC SSDS Pipe
- Site Boundary
- Institutional Control Boundaries

Vapor monitoring points VMP-1 through VMP-6 will be installed following issuance of the Certificate of Completion.

The VMPs act as both vapor monitoring points and vacuum monitoring points.



Site



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New York, NY 10001  
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F: (646) 606-2379

Drawn By	LM
Checked By	AP
Date	December 2024
Scale	As Noted

Drawing Title  
**Institutional Control Boundaries  
and Engineering Control Location**

Drawing No  
**Figure 6**

**94-15 Sutphin Blvd.-Site B**  
**Queens, New York**  
**Block 9999, Lot 1**  
**BCP Site No. C241278**

# Tables

Table 4. Schedule of Interim Monitoring/Inspection Reports  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

Task/Report	Reporting Frequency
SSDS Vacuum Monitoring (to be provided with Periodic Review Report)	Annually
Post-Remedial Indoor Air Letter Report	Following collection of post-remedial indoor air samples 30 days following SSDS start-up
Periodic Review Report	16 months after issuance of COC, then annually thereafter

**Notes:**

COC = Certificate of Completion

**Table 5.**  
**Groundwater Elevation Measurements**  
**94-15 Sutphin Boulevard - Site B**  
**Site Management Plan**  
**BCP #C241278**

Location	Measuring Point Elevation - feet (NAVD)	Depth to Water (ft)	Water Elevation - feet (NAVD)
MW-1	38.86	21.41	17.45
MW-2	39.04	22.66	16.38
MW-3	38.86	22.37	16.49
MW-4	38.36	20.92	17.44
TW-3	39.06	22.65	16.41

**Notes:**

1. Data collected by Tenen on January 10 and 12, 2022.
2. All elevations shown are in NAVD 1988 (NAVD) vertical datum.
3. Depth to water measurements are in feet below measuring point (top of casing).



Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP1	EP2	EP3
SAMPLING DATE			7/15/2024	7/15/2024	7/15/2024
LAB SAMPLE ID			L2439688-01	L2439688-02	L2439688-03
SAMPLE DEPTH (ft-bg)			12	12	12
			Qual	Qual	Qual
<b>General Chemistry</b>					
Solids, Total	NS	%	93.9	94.2	83.1
<b>Volatile Organic Compounds</b>					
Methylene chloride	0.05	mg/kg	ND	ND	ND
1,1-Dichloroethane	0.27	mg/kg	ND	ND	ND
Chloroform	0.37	mg/kg	ND	ND	ND
Carbon tetrachloride	0.76	mg/kg	ND	ND	ND
1,2-Dichloropropane	NS	mg/kg	ND	ND	ND
Dibromochloromethane	NS	mg/kg	ND	ND	ND
1,1,2-Trichloroethane	NS	mg/kg	ND	ND	ND
Tetrachloroethene	1.3	mg/kg	ND	ND	ND
Chlorobenzene	1.1	mg/kg	ND	ND	ND
Trichlorofluoromethane	NS	mg/kg	ND	ND	ND
1,2-Dichloroethane	0.02	mg/kg	ND	ND	ND
1,1,1-Trichloroethane	0.68	mg/kg	ND	ND	ND
Bromodichloromethane	NS	mg/kg	ND	ND	ND
trans-1,3-Dichloropropene	NS	mg/kg	ND	ND	ND
cis-1,3-Dichloropropene	NS	mg/kg	ND	ND	ND
1,3-Dichloropropene, Total	NS	mg/kg	ND	ND	ND
1,1-Dichloropropene	NS	mg/kg	ND	ND	ND
Bromoform	NS	mg/kg	ND	ND	ND
1,1,2,2-Tetrachloroethane	NS	mg/kg	ND	ND	ND
Benzene	0.06	mg/kg	ND	ND	ND
Toluene	0.7	mg/kg	ND	ND	ND
Ethylbenzene	1	mg/kg	ND	ND	ND
Chloromethane	NS	mg/kg	ND	ND	ND
Bromomethane	NS	mg/kg	ND	ND	ND
Vinyl chloride	0.02	mg/kg	ND	ND	ND
Chloroethane	NS	mg/kg	ND	ND	ND
1,1-Dichloroethene	0.33	mg/kg	ND	ND	ND
trans-1,2-Dichloroethene	0.19	mg/kg	ND	ND	ND
Trichloroethene	0.47	mg/kg	ND	ND	ND
1,2-Dichlorobenzene	1.1	mg/kg	ND	ND	ND
1,3-Dichlorobenzene	2.4	mg/kg	ND	ND	ND
1,4-Dichlorobenzene	1.8	mg/kg	ND	ND	ND
Methyl tert butyl ether	0.93	mg/kg	ND	ND	ND
p/m-Xylene	NS	mg/kg	ND	ND	ND
o-Xylene	NS	mg/kg	ND	ND	ND
Xylenes, Total	0.26	mg/kg	ND	ND	ND

Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP1	EP2	EP3
SAMPLING DATE			7/15/2024	7/15/2024	7/15/2024
LAB SAMPLE ID			L2439688-01	L2439688-02	L2439688-03
SAMPLE DEPTH (ft-bg)			12	12	12
			Qual	Qual	Qual
cis-1,2-Dichloroethene	0.25	mg/kg	ND	ND	ND
1,2-Dichloroethene, Total	NS	mg/kg	ND	ND	ND
Dibromomethane	NS	mg/kg	ND	ND	ND
Styrene	NS	mg/kg	ND	ND	ND
Dichlorodifluoromethane	NS	mg/kg	ND	ND	ND
Acetone	0.05	mg/kg	0.016	0.0091 J	0.014
Carbon disulfide	NS	mg/kg	ND	ND	ND
2-Butanone	0.12	mg/kg	ND	ND	ND
Vinyl acetate	NS	mg/kg	ND	ND	ND
4-Methyl-2-pentanone	NS	mg/kg	ND	ND	ND
1,2,3-Trichloropropane	NS	mg/kg	ND	ND	ND
2-Hexanone	NS	mg/kg	ND	ND	ND
Bromochloromethane	NS	mg/kg	ND	ND	ND
2,2-Dichloropropane	NS	mg/kg	ND	ND	ND
1,2-Dibromoethane	NS	mg/kg	ND	ND	ND
1,3-Dichloropropane	NS	mg/kg	ND	ND	ND
1,1,1,2-Tetrachloroethane	NS	mg/kg	ND	ND	ND
Bromobenzene	NS	mg/kg	ND	ND	ND
n-Butylbenzene	12	mg/kg	ND	ND	ND
sec-Butylbenzene	11	mg/kg	ND	ND	ND
tert-Butylbenzene	5.9	mg/kg	ND	ND	ND
o-Chlorotoluene	NS	mg/kg	ND	ND	ND
p-Chlorotoluene	NS	mg/kg	ND	ND	ND
1,2-Dibromo-3-chloropropane	NS	mg/kg	ND	ND	ND
Hexachlorobutadiene	NS	mg/kg	ND	ND	ND
Isopropylbenzene	NS	mg/kg	ND	ND	ND
p-Isopropyltoluene	NS	mg/kg	ND	ND	ND
Naphthalene	12	mg/kg	ND	ND	ND
Acrylonitrile	NS	mg/kg	ND	ND	ND
n-Propylbenzene	3.9	mg/kg	ND	ND	ND
1,2,3-Trichlorobenzene	NS	mg/kg	ND	ND	ND
1,2,4-Trichlorobenzene	NS	mg/kg	ND	ND	ND
1,3,5-Trimethylbenzene	8.4	mg/kg	ND	ND	ND
1,2,4-Trimethylbenzene	3.6	mg/kg	ND	ND	ND
1,4-Dioxane	0.1	mg/kg	ND	ND	ND
p-Diethylbenzene	NS	mg/kg	ND	ND	ND
p-Ethyltoluene	NS	mg/kg	ND	ND	ND
1,2,4,5-Tetramethylbenzene	NS	mg/kg	ND	ND	ND
Ethyl ether	NS	mg/kg	ND	ND	ND

Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
 94-15 Sutphin Boulevard - Site B  
 BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP1	EP2	EP3
SAMPLING DATE			7/15/2024	7/15/2024	7/15/2024
LAB SAMPLE ID			L2439688-01	L2439688-02	L2439688-03
SAMPLE DEPTH (ft-bg)			12	12	12
			Qual	Qual	Qual
trans-1,4-Dichloro-2-butene	NS	mg/kg	ND	ND	ND

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCO**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil

Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard

Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP4	EP5	EP6
SAMPLING DATE			7/15/2024	7/15/2024	7/15/2024
LAB SAMPLE ID			L2439688-04	L2439688-05	L2439688-06
SAMPLE DEPTH (ft-bg)			12	12	12
			Qual	Qual	Qual
<b>General Chemistry</b>					
Solids, Total	NS	%	90.3	93.6	92.4
<b>Volatile Organic Compounds</b>					
Methylene chloride	0.05	mg/kg	ND	ND	ND
1,1-Dichloroethane	0.27	mg/kg	ND	ND	ND
Chloroform	0.37	mg/kg	ND	ND	ND
Carbon tetrachloride	0.76	mg/kg	ND	ND	ND
1,2-Dichloropropane	NS	mg/kg	ND	ND	ND
Dibromochloromethane	NS	mg/kg	ND	ND	ND
1,1,2-Trichloroethane	NS	mg/kg	ND	ND	ND
Tetrachloroethene	1.3	mg/kg	ND	ND	ND
Chlorobenzene	1.1	mg/kg	ND	ND	ND
Trichlorofluoromethane	NS	mg/kg	ND	ND	ND
1,2-Dichloroethane	0.02	mg/kg	ND	ND	ND
1,1,1-Trichloroethane	0.68	mg/kg	ND	ND	ND
Bromodichloromethane	NS	mg/kg	ND	ND	ND
trans-1,3-Dichloropropene	NS	mg/kg	ND	ND	ND
cis-1,3-Dichloropropene	NS	mg/kg	ND	ND	ND
1,3-Dichloropropene, Total	NS	mg/kg	ND	ND	ND
1,1-Dichloropropene	NS	mg/kg	ND	ND	ND
Bromoform	NS	mg/kg	ND	ND	ND
1,1,2,2-Tetrachloroethane	NS	mg/kg	ND	ND	ND
Benzene	0.06	mg/kg	ND	ND	ND
Toluene	0.7	mg/kg	ND	ND	ND
Ethylbenzene	1	mg/kg	ND	ND	ND
Chloromethane	NS	mg/kg	ND	ND	ND
Bromomethane	NS	mg/kg	ND	ND	ND
Vinyl chloride	0.02	mg/kg	ND	ND	ND
Chloroethane	NS	mg/kg	ND	ND	ND
1,1-Dichloroethene	0.33	mg/kg	ND	ND	ND
trans-1,2-Dichloroethene	0.19	mg/kg	ND	ND	ND
Trichloroethene	0.47	mg/kg	ND	ND	ND
1,2-Dichlorobenzene	1.1	mg/kg	ND	ND	ND
1,3-Dichlorobenzene	2.4	mg/kg	ND	ND	ND
1,4-Dichlorobenzene	1.8	mg/kg	ND	ND	ND
Methyl tert butyl ether	0.93	mg/kg	ND	ND	ND
p/m-Xylene	NS	mg/kg	ND	ND	ND
o-Xylene	NS	mg/kg	ND	ND	ND
Xylenes, Total	0.26	mg/kg	ND	ND	ND

Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP4	EP5	EP6
SAMPLING DATE			7/15/2024	7/15/2024	7/15/2024
LAB SAMPLE ID			L2439688-04	L2439688-05	L2439688-06
SAMPLE DEPTH (ft-bg)			12	12	12
			Qual	Qual	Qual
cis-1,2-Dichloroethene	0.25	mg/kg	ND	ND	ND
1,2-Dichloroethene, Total	NS	mg/kg	ND	ND	ND
Dibromomethane	NS	mg/kg	ND	ND	ND
Styrene	NS	mg/kg	ND	ND	ND
Dichlorodifluoromethane	NS	mg/kg	ND	ND	ND
Acetone	0.05	mg/kg	0.016	0.012 J	0.017
Carbon disulfide	NS	mg/kg	ND	ND	ND
2-Butanone	0.12	mg/kg	ND	ND	ND
Vinyl acetate	NS	mg/kg	ND	ND	ND
4-Methyl-2-pentanone	NS	mg/kg	ND	ND	ND
1,2,3-Trichloropropane	NS	mg/kg	ND	ND	ND
2-Hexanone	NS	mg/kg	ND	ND	ND
Bromochloromethane	NS	mg/kg	ND	ND	ND
2,2-Dichloropropane	NS	mg/kg	ND	ND	ND
1,2-Dibromoethane	NS	mg/kg	ND	ND	ND
1,3-Dichloropropane	NS	mg/kg	ND	ND	ND
1,1,1,2-Tetrachloroethane	NS	mg/kg	ND	ND	ND
Bromobenzene	NS	mg/kg	ND	ND	ND
n-Butylbenzene	12	mg/kg	ND	ND	ND
sec-Butylbenzene	11	mg/kg	ND	ND	ND
tert-Butylbenzene	5.9	mg/kg	ND	ND	ND
o-Chlorotoluene	NS	mg/kg	ND	ND	ND
p-Chlorotoluene	NS	mg/kg	ND	ND	ND
1,2-Dibromo-3-chloropropane	NS	mg/kg	ND	ND	ND
Hexachlorobutadiene	NS	mg/kg	ND	ND	ND
Isopropylbenzene	NS	mg/kg	ND	ND	ND
p-Isopropyltoluene	NS	mg/kg	ND	ND	ND
Naphthalene	12	mg/kg	ND	ND	ND
Acrylonitrile	NS	mg/kg	ND	ND	ND
n-Propylbenzene	3.9	mg/kg	ND	ND	ND
1,2,3-Trichlorobenzene	NS	mg/kg	ND	ND	ND
1,2,4-Trichlorobenzene	NS	mg/kg	ND	ND	ND
1,3,5-Trimethylbenzene	8.4	mg/kg	ND	ND	ND
1,2,4-Trimethylbenzene	3.6	mg/kg	ND	ND	ND
1,4-Dioxane	0.1	mg/kg	ND	ND	ND
p-Diethylbenzene	NS	mg/kg	ND	ND	ND
p-Ethyltoluene	NS	mg/kg	ND	ND	ND
1,2,4,5-Tetramethylbenzene	NS	mg/kg	ND	ND	ND
Ethyl ether	NS	mg/kg	ND	ND	ND

Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP4	EP5	EP6
SAMPLING DATE			7/15/2024	7/15/2024	7/15/2024
LAB SAMPLE ID			L2439688-04	L2439688-05	L2439688-06
SAMPLE DEPTH (ft-bg)			12	12	12
			Qual	Qual	Qual
trans-1,4-Dichloro-2-butene	NS	mg/kg	ND	ND	ND

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil

Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard

Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP7	EP8	EP9
SAMPLING DATE			7/15/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2439688-07	L2440298-01	L2440298-02
SAMPLE DEPTH (ft-bg)			12	12	12
			Qual	Qual	Qual
<b>General Chemistry</b>					
Solids, Total	NS	%	95.4	80.1	80.2
<b>Volatile Organic Compounds</b>					
Methylene chloride	0.05	mg/kg	ND	ND	ND
1,1-Dichloroethane	0.27	mg/kg	ND	ND	ND
Chloroform	0.37	mg/kg	ND	ND	ND
Carbon tetrachloride	0.76	mg/kg	ND	ND	ND
1,2-Dichloropropane	NS	mg/kg	ND	ND	ND
Dibromochloromethane	NS	mg/kg	ND	ND	ND
1,1,2-Trichloroethane	NS	mg/kg	ND	ND	ND
Tetrachloroethene	1.3	mg/kg	ND	ND	ND
Chlorobenzene	1.1	mg/kg	ND	ND	ND
Trichlorofluoromethane	NS	mg/kg	ND	ND	ND
1,2-Dichloroethane	0.02	mg/kg	ND	ND	ND
1,1,1-Trichloroethane	0.68	mg/kg	ND	ND	ND
Bromodichloromethane	NS	mg/kg	ND	ND	ND
trans-1,3-Dichloropropene	NS	mg/kg	ND	ND	ND
cis-1,3-Dichloropropene	NS	mg/kg	ND	ND	ND
1,3-Dichloropropene, Total	NS	mg/kg	ND	ND	ND
1,1-Dichloropropene	NS	mg/kg	ND	ND	ND
Bromoform	NS	mg/kg	ND	ND	ND
1,1,2,2-Tetrachloroethane	NS	mg/kg	ND	ND	ND
Benzene	0.06	mg/kg	ND	ND	ND
Toluene	0.7	mg/kg	ND	ND	ND
Ethylbenzene	1	mg/kg	ND	ND	ND
Chloromethane	NS	mg/kg	ND	ND	ND
Bromomethane	NS	mg/kg	ND	ND	ND
Vinyl chloride	0.02	mg/kg	ND	ND	ND
Chloroethane	NS	mg/kg	ND	ND	ND
1,1-Dichloroethene	0.33	mg/kg	ND	ND	ND
trans-1,2-Dichloroethene	0.19	mg/kg	ND	ND	ND
Trichloroethene	0.47	mg/kg	ND	ND	ND
1,2-Dichlorobenzene	1.1	mg/kg	ND	ND	ND
1,3-Dichlorobenzene	2.4	mg/kg	ND	ND	ND
1,4-Dichlorobenzene	1.8	mg/kg	ND	ND	ND
Methyl tert butyl ether	0.93	mg/kg	ND	ND	ND
p/m-Xylene	NS	mg/kg	ND	0.0012 J	0.0014 J
o-Xylene	NS	mg/kg	ND	0.001 J	0.0011 J
Xylenes, Total	0.26	mg/kg	ND	0.0022 J	0.0025 J

Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP7	EP8	EP9
SAMPLING DATE			7/15/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2439688-07	L2440298-01	L2440298-02
SAMPLE DEPTH (ft-bg)			12	12	12
			Qual	Qual	Qual
cis-1,2-Dichloroethene	0.25	mg/kg	ND	ND	ND
1,2-Dichloroethene, Total	NS	mg/kg	ND	ND	ND
Dibromomethane	NS	mg/kg	ND	ND	ND
Styrene	NS	mg/kg	ND	0.0011 J	0.0011 J
Dichlorodifluoromethane	NS	mg/kg	ND	ND	ND
Acetone	0.05	mg/kg	0.012 J	0.0084 J	0.012 J
Carbon disulfide	NS	mg/kg	ND	ND	ND
2-Butanone	0.12	mg/kg	ND	ND	ND
Vinyl acetate	NS	mg/kg	ND	ND	ND
4-Methyl-2-pentanone	NS	mg/kg	ND	ND	ND
1,2,3-Trichloropropane	NS	mg/kg	ND	ND	ND
2-Hexanone	NS	mg/kg	ND	ND	ND
Bromochloromethane	NS	mg/kg	ND	ND	ND
2,2-Dichloropropane	NS	mg/kg	ND	ND	ND
1,2-Dibromoethane	NS	mg/kg	ND	ND	ND
1,3-Dichloropropane	NS	mg/kg	ND	ND	ND
1,1,1,2-Tetrachloroethane	NS	mg/kg	ND	ND	ND
Bromobenzene	NS	mg/kg	ND	ND	ND
n-Butylbenzene	12	mg/kg	ND	ND	ND
sec-Butylbenzene	11	mg/kg	ND	ND	ND
tert-Butylbenzene	5.9	mg/kg	ND	ND	ND
o-Chlorotoluene	NS	mg/kg	ND	ND	ND
p-Chlorotoluene	NS	mg/kg	ND	ND	ND
1,2-Dibromo-3-chloropropane	NS	mg/kg	ND	ND	ND
Hexachlorobutadiene	NS	mg/kg	ND	ND	ND
Isopropylbenzene	NS	mg/kg	ND	ND	ND
p-Isopropyltoluene	NS	mg/kg	ND	ND	ND
Naphthalene	12	mg/kg	ND	ND	ND
Acrylonitrile	NS	mg/kg	ND	ND	ND
n-Propylbenzene	3.9	mg/kg	ND	ND	ND
1,2,3-Trichlorobenzene	NS	mg/kg	ND	ND	ND
1,2,4-Trichlorobenzene	NS	mg/kg	ND	ND	ND
1,3,5-Trimethylbenzene	8.4	mg/kg	ND	ND	ND
1,2,4-Trimethylbenzene	3.6	mg/kg	ND	ND	ND
1,4-Dioxane	0.1	mg/kg	ND	ND	ND
p-Diethylbenzene	NS	mg/kg	ND	ND	ND
p-Ethyltoluene	NS	mg/kg	ND	ND	ND
1,2,4,5-Tetramethylbenzene	NS	mg/kg	ND	ND	ND
Ethyl ether	NS	mg/kg	ND	ND	ND



Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
 94-15 Sutphin Boulevard - Site B  
 BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP7	EP8	EP9
SAMPLING DATE			7/15/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2439688-07	L2440298-01	L2440298-02
SAMPLE DEPTH (ft-bg)			12	12	12
			Qual	Qual	Qual
trans-1,4-Dichloro-2-butene	NS	mg/kg	ND	ND	ND

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil

Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard

Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP10	EP11	EP12
SAMPLING DATE			7/17/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2440298-03	L2440298-04	L2440298-05
SAMPLE DEPTH (ft-bg)			12	12	12
			Qual	Qual	Qual
<b>General Chemistry</b>					
Solids, Total	NS	%	85.8	86.7	80.5
<b>Volatile Organic Compounds</b>					
Methylene chloride	0.05	mg/kg	ND	ND	ND
1,1-Dichloroethane	0.27	mg/kg	ND	ND	ND
Chloroform	0.37	mg/kg	ND	ND	ND
Carbon tetrachloride	0.76	mg/kg	ND	ND	ND
1,2-Dichloropropane	NS	mg/kg	ND	ND	ND
Dibromochloromethane	NS	mg/kg	ND	ND	ND
1,1,2-Trichloroethane	NS	mg/kg	ND	ND	ND
Tetrachloroethene	1.3	mg/kg	ND	ND	ND
Chlorobenzene	1.1	mg/kg	ND	ND	ND
Trichlorofluoromethane	NS	mg/kg	ND	ND	ND
1,2-Dichloroethane	0.02	mg/kg	ND	ND	ND
1,1,1-Trichloroethane	0.68	mg/kg	ND	ND	ND
Bromodichloromethane	NS	mg/kg	ND	ND	ND
trans-1,3-Dichloropropene	NS	mg/kg	ND	ND	ND
cis-1,3-Dichloropropene	NS	mg/kg	ND	ND	ND
1,3-Dichloropropene, Total	NS	mg/kg	ND	ND	ND
1,1-Dichloropropene	NS	mg/kg	ND	ND	ND
Bromoform	NS	mg/kg	ND	ND	ND
1,1,2,2-Tetrachloroethane	NS	mg/kg	ND	ND	ND
Benzene	0.06	mg/kg	ND	ND	ND
Toluene	0.7	mg/kg	ND	ND	ND
Ethylbenzene	1	mg/kg	ND	ND	ND
Chloromethane	NS	mg/kg	ND	ND	ND
Bromomethane	NS	mg/kg	ND	ND	ND
Vinyl chloride	0.02	mg/kg	ND	ND	ND
Chloroethane	NS	mg/kg	ND	ND	ND
1,1-Dichloroethene	0.33	mg/kg	ND	ND	ND
trans-1,2-Dichloroethene	0.19	mg/kg	ND	ND	ND
Trichloroethene	0.47	mg/kg	ND	ND	ND
1,2-Dichlorobenzene	1.1	mg/kg	ND	ND	ND
1,3-Dichlorobenzene	2.4	mg/kg	ND	ND	ND
1,4-Dichlorobenzene	1.8	mg/kg	ND	ND	ND
Methyl tert butyl ether	0.93	mg/kg	ND	ND	ND
p/m-Xylene	NS	mg/kg	0.0013 J	0.0019 J	0.001 J
o-Xylene	NS	mg/kg	0.0011 J	0.0016 J	0.00087 J
Xylenes, Total	0.26	mg/kg	0.0024 J	0.0035 J	0.0019 J

Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP10	EP11	EP12
SAMPLING DATE			7/17/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2440298-03	L2440298-04	L2440298-05
SAMPLE DEPTH (ft-bg)			12	12	12
			Qual	Qual	Qual
cis-1,2-Dichloroethene	0.25	mg/kg	ND	ND	ND
1,2-Dichloroethene, Total	NS	mg/kg	ND	ND	ND
Dibromomethane	NS	mg/kg	ND	ND	ND
Styrene	NS	mg/kg	0.0011 J	0.0016 J	0.0009 J
Dichlorodifluoromethane	NS	mg/kg	ND	ND	ND
Acetone	0.05	mg/kg	0.0091 J	0.014 J	0.0068 J
Carbon disulfide	NS	mg/kg	ND	ND	ND
2-Butanone	0.12	mg/kg	ND	ND	ND
Vinyl acetate	NS	mg/kg	ND	ND	ND
4-Methyl-2-pentanone	NS	mg/kg	ND	ND	ND
1,2,3-Trichloropropane	NS	mg/kg	ND	ND	ND
2-Hexanone	NS	mg/kg	ND	ND	ND
Bromochloromethane	NS	mg/kg	ND	ND	ND
2,2-Dichloropropane	NS	mg/kg	ND	ND	ND
1,2-Dibromoethane	NS	mg/kg	ND	ND	ND
1,3-Dichloropropane	NS	mg/kg	ND	ND	ND
1,1,1,2-Tetrachloroethane	NS	mg/kg	ND	ND	ND
Bromobenzene	NS	mg/kg	ND	ND	ND
n-Butylbenzene	12	mg/kg	ND	ND	ND
sec-Butylbenzene	11	mg/kg	ND	ND	ND
tert-Butylbenzene	5.9	mg/kg	ND	ND	ND
o-Chlorotoluene	NS	mg/kg	ND	ND	ND
p-Chlorotoluene	NS	mg/kg	ND	ND	ND
1,2-Dibromo-3-chloropropane	NS	mg/kg	ND	ND	ND
Hexachlorobutadiene	NS	mg/kg	ND	ND	ND
Isopropylbenzene	NS	mg/kg	ND	ND	ND
p-Isopropyltoluene	NS	mg/kg	ND	ND	ND
Naphthalene	12	mg/kg	ND	ND	ND
Acrylonitrile	NS	mg/kg	ND	ND	ND
n-Propylbenzene	3.9	mg/kg	ND	ND	ND
1,2,3-Trichlorobenzene	NS	mg/kg	ND	ND	ND
1,2,4-Trichlorobenzene	NS	mg/kg	ND	ND	ND
1,3,5-Trimethylbenzene	8.4	mg/kg	ND	ND	ND
1,2,4-Trimethylbenzene	3.6	mg/kg	ND	ND	ND
1,4-Dioxane	0.1	mg/kg	ND	ND	ND
p-Diethylbenzene	NS	mg/kg	ND	ND	ND
p-Ethyltoluene	NS	mg/kg	ND	ND	ND
1,2,4,5-Tetramethylbenzene	NS	mg/kg	ND	ND	ND
Ethyl ether	NS	mg/kg	ND	ND	ND

Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
 94-15 Sutphin Boulevard - Site B  
 BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP10	EP11	EP12
SAMPLING DATE			7/17/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2440298-03	L2440298-04	L2440298-05
SAMPLE DEPTH (ft-bg)			12	12	12
			Qual	Qual	Qual
trans-1,4-Dichloro-2-butene	NS	mg/kg	ND	ND	ND

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil

Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard

Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP13	EP14	EP15
SAMPLING DATE			7/17/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2440298-06	L2440298-07	L2440298-08
SAMPLE DEPTH (ft-bg)			12	12	12
			Qual	Qual	Qual
<b>General Chemistry</b>					
Solids, Total	NS	%	95.8	78.5	95.8
<b>Volatile Organic Compounds</b>					
Methylene chloride	0.05	mg/kg	ND	ND	ND
1,1-Dichloroethane	0.27	mg/kg	ND	ND	ND
Chloroform	0.37	mg/kg	ND	ND	ND
Carbon tetrachloride	0.76	mg/kg	ND	ND	ND
1,2-Dichloropropane	NS	mg/kg	ND	ND	ND
Dibromochloromethane	NS	mg/kg	ND	ND	ND
1,1,2-Trichloroethane	NS	mg/kg	ND	ND	ND
Tetrachloroethene	1.3	mg/kg	ND	ND	ND
Chlorobenzene	1.1	mg/kg	ND	ND	ND
Trichlorofluoromethane	NS	mg/kg	ND	ND	ND
1,2-Dichloroethane	0.02	mg/kg	ND	ND	ND
1,1,1-Trichloroethane	0.68	mg/kg	ND	ND	ND
Bromodichloromethane	NS	mg/kg	ND	ND	ND
trans-1,3-Dichloropropene	NS	mg/kg	ND	ND	ND
cis-1,3-Dichloropropene	NS	mg/kg	ND	ND	ND
1,3-Dichloropropene, Total	NS	mg/kg	ND	ND	ND
1,1-Dichloropropene	NS	mg/kg	ND	ND	ND
Bromoform	NS	mg/kg	ND	ND	ND
1,1,2,2-Tetrachloroethane	NS	mg/kg	ND	ND	ND
Benzene	0.06	mg/kg	ND	ND	ND
Toluene	0.7	mg/kg	ND	ND	ND
Ethylbenzene	1	mg/kg	ND	ND	ND
Chloromethane	NS	mg/kg	ND	ND	ND
Bromomethane	NS	mg/kg	ND	ND	ND
Vinyl chloride	0.02	mg/kg	ND	ND	ND
Chloroethane	NS	mg/kg	ND	ND	ND
1,1-Dichloroethene	0.33	mg/kg	ND	ND	ND
trans-1,2-Dichloroethene	0.19	mg/kg	ND	ND	ND
Trichloroethene	0.47	mg/kg	ND	ND	ND
1,2-Dichlorobenzene	1.1	mg/kg	ND	ND	ND
1,3-Dichlorobenzene	2.4	mg/kg	ND	ND	ND
1,4-Dichlorobenzene	1.8	mg/kg	ND	ND	ND
Methyl tert butyl ether	0.93	mg/kg	ND	ND	ND
p/m-Xylene	NS	mg/kg	0.00091 J	0.0012 J	0.0012 J
o-Xylene	NS	mg/kg	0.00075 J	0.001 J	0.001 J
Xylenes, Total	0.26	mg/kg	0.0017 J	0.0022 J	0.0022 J

Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP13	EP14	EP15
SAMPLING DATE			7/17/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2440298-06	L2440298-07	L2440298-08
SAMPLE DEPTH (ft-bg)			12	12	12
			Qual	Qual	Qual
cis-1,2-Dichloroethene	0.25	mg/kg	ND	ND	ND
1,2-Dichloroethene, Total	NS	mg/kg	ND	ND	ND
Dibromomethane	NS	mg/kg	ND	ND	ND
Styrene	NS	mg/kg	ND	0.001 J	0.001 J
Dichlorodifluoromethane	NS	mg/kg	ND	ND	ND
Acetone	0.05	mg/kg	0.0078 J	0.009 J	0.01 J
Carbon disulfide	NS	mg/kg	ND	ND	ND
2-Butanone	0.12	mg/kg	ND	ND	ND
Vinyl acetate	NS	mg/kg	ND	ND	ND
4-Methyl-2-pentanone	NS	mg/kg	ND	ND	ND
1,2,3-Trichloropropane	NS	mg/kg	ND	ND	ND
2-Hexanone	NS	mg/kg	ND	ND	ND
Bromochloromethane	NS	mg/kg	ND	ND	ND
2,2-Dichloropropane	NS	mg/kg	ND	ND	ND
1,2-Dibromoethane	NS	mg/kg	ND	ND	ND
1,3-Dichloropropane	NS	mg/kg	ND	ND	ND
1,1,1,2-Tetrachloroethane	NS	mg/kg	ND	ND	ND
Bromobenzene	NS	mg/kg	ND	ND	ND
n-Butylbenzene	12	mg/kg	ND	ND	ND
sec-Butylbenzene	11	mg/kg	ND	ND	ND
tert-Butylbenzene	5.9	mg/kg	ND	ND	ND
o-Chlorotoluene	NS	mg/kg	ND	ND	ND
p-Chlorotoluene	NS	mg/kg	ND	ND	ND
1,2-Dibromo-3-chloropropane	NS	mg/kg	ND	ND	ND
Hexachlorobutadiene	NS	mg/kg	ND	ND	ND
Isopropylbenzene	NS	mg/kg	ND	ND	ND
p-Isopropyltoluene	NS	mg/kg	ND	ND	ND
Naphthalene	12	mg/kg	ND	ND	ND
Acrylonitrile	NS	mg/kg	ND	ND	ND
n-Propylbenzene	3.9	mg/kg	ND	ND	ND
1,2,3-Trichlorobenzene	NS	mg/kg	ND	ND	ND
1,2,4-Trichlorobenzene	NS	mg/kg	ND	ND	ND
1,3,5-Trimethylbenzene	8.4	mg/kg	ND	ND	ND
1,2,4-Trimethylbenzene	3.6	mg/kg	ND	ND	ND
1,4-Dioxane	0.1	mg/kg	ND	ND	ND
p-Diethylbenzene	NS	mg/kg	ND	ND	ND
p-Ethyltoluene	NS	mg/kg	ND	ND	ND
1,2,4,5-Tetramethylbenzene	NS	mg/kg	ND	ND	ND
Ethyl ether	NS	mg/kg	ND	ND	ND

Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP13	EP14	EP15
SAMPLING DATE			7/17/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2440298-06	L2440298-07	L2440298-08
SAMPLE DEPTH (ft-bg)			12	12	12
			Qual	Qual	Qual
trans-1,4-Dichloro-2-butene	NS	mg/kg	ND	ND	ND

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCO**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil

Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard

Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP16	EP17	EP18
SAMPLING DATE			7/17/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2440298-09	L2440298-10	L2440298-11
SAMPLE DEPTH (ft-bg)			12	12	12
			Qual	Qual	Qual
<b>General Chemistry</b>					
Solids, Total	NS	%	86.3	95.6	92.9
<b>Volatile Organic Compounds</b>					
Methylene chloride	0.05	mg/kg	ND	ND	ND
1,1-Dichloroethane	0.27	mg/kg	ND	ND	ND
Chloroform	0.37	mg/kg	ND	ND	ND
Carbon tetrachloride	0.76	mg/kg	ND	ND	ND
1,2-Dichloropropane	NS	mg/kg	ND	ND	ND
Dibromochloromethane	NS	mg/kg	ND	ND	ND
1,1,2-Trichloroethane	NS	mg/kg	ND	ND	ND
Tetrachloroethene	1.3	mg/kg	ND	ND	ND
Chlorobenzene	1.1	mg/kg	ND	ND	ND
Trichlorofluoromethane	NS	mg/kg	ND	ND	ND
1,2-Dichloroethane	0.02	mg/kg	ND	ND	ND
1,1,1-Trichloroethane	0.68	mg/kg	ND	ND	ND
Bromodichloromethane	NS	mg/kg	ND	ND	ND
trans-1,3-Dichloropropene	NS	mg/kg	ND	ND	ND
cis-1,3-Dichloropropene	NS	mg/kg	ND	ND	ND
1,3-Dichloropropene, Total	NS	mg/kg	ND	ND	ND
1,1-Dichloropropene	NS	mg/kg	ND	ND	ND
Bromoform	NS	mg/kg	ND	ND	ND
1,1,2,2-Tetrachloroethane	NS	mg/kg	ND	ND	ND
Benzene	0.06	mg/kg	ND	ND	ND
Toluene	0.7	mg/kg	ND	ND	ND
Ethylbenzene	1	mg/kg	ND	ND	ND
Chloromethane	NS	mg/kg	ND	ND	ND
Bromomethane	NS	mg/kg	ND	ND	ND
Vinyl chloride	0.02	mg/kg	ND	ND	ND
Chloroethane	NS	mg/kg	ND	ND	ND
1,1-Dichloroethene	0.33	mg/kg	ND	ND	ND
trans-1,2-Dichloroethene	0.19	mg/kg	ND	ND	ND
Trichloroethene	0.47	mg/kg	ND	ND	ND
1,2-Dichlorobenzene	1.1	mg/kg	ND	ND	ND
1,3-Dichlorobenzene	2.4	mg/kg	ND	ND	ND
1,4-Dichlorobenzene	1.8	mg/kg	ND	ND	ND
Methyl tert butyl ether	0.93	mg/kg	ND	ND	ND
p/m-Xylene	NS	mg/kg	0.0012 J	0.00095 J	0.0016 J
o-Xylene	NS	mg/kg	0.001 J	0.00081 J	0.0013 J
Xylenes, Total	0.26	mg/kg	0.0022 J	0.0018 J	0.0029 J



Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP16	EP17	EP18
SAMPLING DATE			7/17/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2440298-09	L2440298-10	L2440298-11
SAMPLE DEPTH (ft-bg)			12	12	12
			Qual	Qual	Qual
cis-1,2-Dichloroethene	0.25	mg/kg	ND	ND	ND
1,2-Dichloroethene, Total	NS	mg/kg	ND	ND	ND
Dibromomethane	NS	mg/kg	ND	ND	ND
Styrene	NS	mg/kg	ND	ND	0.0012 J
Dichlorodifluoromethane	NS	mg/kg	ND	ND	ND
Acetone	0.05	mg/kg	0.011 J	0.0074 J	0.013 J
Carbon disulfide	NS	mg/kg	ND	ND	ND
2-Butanone	0.12	mg/kg	ND	ND	ND
Vinyl acetate	NS	mg/kg	ND	ND	ND
4-Methyl-2-pentanone	NS	mg/kg	ND	ND	ND
1,2,3-Trichloropropane	NS	mg/kg	ND	ND	ND
2-Hexanone	NS	mg/kg	ND	ND	ND
Bromochloromethane	NS	mg/kg	ND	ND	ND
2,2-Dichloropropane	NS	mg/kg	ND	ND	ND
1,2-Dibromoethane	NS	mg/kg	ND	ND	ND
1,3-Dichloropropane	NS	mg/kg	ND	ND	ND
1,1,1,2-Tetrachloroethane	NS	mg/kg	ND	ND	ND
Bromobenzene	NS	mg/kg	ND	ND	ND
n-Butylbenzene	12	mg/kg	ND	ND	ND
sec-Butylbenzene	11	mg/kg	ND	ND	ND
tert-Butylbenzene	5.9	mg/kg	ND	ND	ND
o-Chlorotoluene	NS	mg/kg	ND	ND	ND
p-Chlorotoluene	NS	mg/kg	ND	ND	ND
1,2-Dibromo-3-chloropropane	NS	mg/kg	ND	ND	ND
Hexachlorobutadiene	NS	mg/kg	ND	ND	ND
Isopropylbenzene	NS	mg/kg	ND	ND	ND
p-Isopropyltoluene	NS	mg/kg	ND	ND	ND
Naphthalene	12	mg/kg	ND	ND	ND
Acrylonitrile	NS	mg/kg	ND	ND	ND
n-Propylbenzene	3.9	mg/kg	ND	ND	ND
1,2,3-Trichlorobenzene	NS	mg/kg	ND	ND	ND
1,2,4-Trichlorobenzene	NS	mg/kg	ND	ND	ND
1,3,5-Trimethylbenzene	8.4	mg/kg	ND	ND	ND
1,2,4-Trimethylbenzene	3.6	mg/kg	ND	ND	ND
1,4-Dioxane	0.1	mg/kg	ND	ND	ND
p-Diethylbenzene	NS	mg/kg	ND	ND	ND
p-Ethyltoluene	NS	mg/kg	ND	ND	ND
1,2,4,5-Tetramethylbenzene	NS	mg/kg	ND	ND	ND
Ethyl ether	NS	mg/kg	ND	ND	ND

Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
 94-15 Sutphin Boulevard - Site B  
 BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP16	EP17	EP18
SAMPLING DATE			7/17/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2440298-09	L2440298-10	L2440298-11
SAMPLE DEPTH (ft-bg)			12	12	12
			Qual	Qual	Qual
trans-1,4-Dichloro-2-butene	NS	mg/kg	ND	ND	ND

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil

Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard

Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP19	EP20	EP21
SAMPLING DATE			7/17/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2440298-12	L2440298-13	L2440298-14
SAMPLE DEPTH (ft-bg)			12	12	12
			Qual	Qual	Qual
<b>General Chemistry</b>					
Solids, Total	NS	%	95.3	93.4	92.8
<b>Volatile Organic Compounds</b>					
Methylene chloride	0.05	mg/kg	ND	ND	ND
1,1-Dichloroethane	0.27	mg/kg	ND	ND	ND
Chloroform	0.37	mg/kg	ND	ND	ND
Carbon tetrachloride	0.76	mg/kg	ND	ND	ND
1,2-Dichloropropane	NS	mg/kg	ND	ND	ND
Dibromochloromethane	NS	mg/kg	ND	ND	ND
1,1,2-Trichloroethane	NS	mg/kg	ND	ND	ND
Tetrachloroethene	1.3	mg/kg	ND	ND	ND
Chlorobenzene	1.1	mg/kg	ND	ND	ND
Trichlorofluoromethane	NS	mg/kg	ND	ND	ND
1,2-Dichloroethane	0.02	mg/kg	ND	ND	ND
1,1,1-Trichloroethane	0.68	mg/kg	ND	ND	ND
Bromodichloromethane	NS	mg/kg	ND	ND	ND
trans-1,3-Dichloropropene	NS	mg/kg	ND	ND	ND
cis-1,3-Dichloropropene	NS	mg/kg	ND	ND	ND
1,3-Dichloropropene, Total	NS	mg/kg	ND	ND	ND
1,1-Dichloropropene	NS	mg/kg	ND	ND	ND
Bromoform	NS	mg/kg	ND	ND	ND
1,1,2,2-Tetrachloroethane	NS	mg/kg	ND	ND	ND
Benzene	0.06	mg/kg	ND	ND	ND
Toluene	0.7	mg/kg	ND	ND	ND
Ethylbenzene	1	mg/kg	ND	ND	ND
Chloromethane	NS	mg/kg	ND	ND	ND
Bromomethane	NS	mg/kg	ND	ND	ND
Vinyl chloride	0.02	mg/kg	ND	ND	ND
Chloroethane	NS	mg/kg	ND	ND	ND
1,1-Dichloroethene	0.33	mg/kg	ND	ND	ND
trans-1,2-Dichloroethene	0.19	mg/kg	ND	ND	ND
Trichloroethene	0.47	mg/kg	ND	ND	ND
1,2-Dichlorobenzene	1.1	mg/kg	ND	ND	ND
1,3-Dichlorobenzene	2.4	mg/kg	ND	ND	ND
1,4-Dichlorobenzene	1.8	mg/kg	ND	ND	ND
Methyl tert butyl ether	0.93	mg/kg	ND	ND	ND
p/m-Xylene	NS	mg/kg	0.00094 J	0.00094 J	0.00096 J
o-Xylene	NS	mg/kg	0.0008 J	0.00079 J	0.00083 J
Xylenes, Total	0.26	mg/kg	0.0017 J	0.0017 J	0.0018 J

Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP19	EP20	EP21
SAMPLING DATE			7/17/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2440298-12	L2440298-13	L2440298-14
SAMPLE DEPTH (ft-bg)			12	12	12
			Qual	Qual	Qual
cis-1,2-Dichloroethene	0.25	mg/kg	ND	ND	ND
1,2-Dichloroethene, Total	NS	mg/kg	ND	ND	ND
Dibromomethane	NS	mg/kg	ND	ND	ND
Styrene	NS	mg/kg	0.00081 J	ND	ND
Dichlorodifluoromethane	NS	mg/kg	ND	ND	ND
Acetone	0.05	mg/kg	0.0082 J	0.0092 J	ND
Carbon disulfide	NS	mg/kg	ND	ND	ND
2-Butanone	0.12	mg/kg	ND	ND	ND
Vinyl acetate	NS	mg/kg	ND	ND	ND
4-Methyl-2-pentanone	NS	mg/kg	ND	ND	ND
1,2,3-Trichloropropane	NS	mg/kg	ND	ND	ND
2-Hexanone	NS	mg/kg	ND	ND	ND
Bromochloromethane	NS	mg/kg	ND	ND	ND
2,2-Dichloropropane	NS	mg/kg	ND	ND	ND
1,2-Dibromoethane	NS	mg/kg	ND	ND	ND
1,3-Dichloropropane	NS	mg/kg	ND	ND	ND
1,1,1,2-Tetrachloroethane	NS	mg/kg	ND	ND	ND
Bromobenzene	NS	mg/kg	ND	ND	ND
n-Butylbenzene	12	mg/kg	ND	ND	ND
sec-Butylbenzene	11	mg/kg	ND	ND	ND
tert-Butylbenzene	5.9	mg/kg	ND	ND	ND
o-Chlorotoluene	NS	mg/kg	ND	ND	ND
p-Chlorotoluene	NS	mg/kg	ND	ND	ND
1,2-Dibromo-3-chloropropane	NS	mg/kg	ND	ND	ND
Hexachlorobutadiene	NS	mg/kg	ND	ND	ND
Isopropylbenzene	NS	mg/kg	ND	ND	ND
p-Isopropyltoluene	NS	mg/kg	ND	ND	ND
Naphthalene	12	mg/kg	ND	ND	ND
Acrylonitrile	NS	mg/kg	ND	ND	ND
n-Propylbenzene	3.9	mg/kg	ND	ND	ND
1,2,3-Trichlorobenzene	NS	mg/kg	ND	ND	ND
1,2,4-Trichlorobenzene	NS	mg/kg	ND	ND	ND
1,3,5-Trimethylbenzene	8.4	mg/kg	ND	ND	ND
1,2,4-Trimethylbenzene	3.6	mg/kg	ND	ND	ND
1,4-Dioxane	0.1	mg/kg	ND	ND	ND
p-Diethylbenzene	NS	mg/kg	ND	ND	ND
p-Ethyltoluene	NS	mg/kg	ND	ND	ND
1,2,4,5-Tetramethylbenzene	NS	mg/kg	ND	ND	ND
Ethyl ether	NS	mg/kg	ND	ND	ND

Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP19	EP20	EP21
SAMPLING DATE			7/17/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2440298-12	L2440298-13	L2440298-14
SAMPLE DEPTH (ft-bg)			12	12	12
			Qual	Qual	Qual
trans-1,4-Dichloro-2-butene	NS	mg/kg	ND	ND	ND

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil

Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard

Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP22	EP23	EP24
SAMPLING DATE			7/17/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2440298-15	L2440298-16	L2440298-17
SAMPLE DEPTH (ft-bg)			12	12	12
			Qual	Qual	Qual
<b>General Chemistry</b>					
Solids, Total	NS	%	76.4	95.1	94.1
<b>Volatile Organic Compounds</b>					
Methylene chloride	0.05	mg/kg	ND	ND	ND
1,1-Dichloroethane	0.27	mg/kg	ND	ND	ND
Chloroform	0.37	mg/kg	ND	ND	ND
Carbon tetrachloride	0.76	mg/kg	ND	ND	ND
1,2-Dichloropropane	NS	mg/kg	ND	ND	ND
Dibromochloromethane	NS	mg/kg	ND	ND	ND
1,1,2-Trichloroethane	NS	mg/kg	ND	ND	ND
Tetrachloroethene	1.3	mg/kg	ND	ND	ND
Chlorobenzene	1.1	mg/kg	ND	ND	ND
Trichlorofluoromethane	NS	mg/kg	ND	ND	ND
1,2-Dichloroethane	0.02	mg/kg	ND	ND	ND
1,1,1-Trichloroethane	0.68	mg/kg	ND	ND	ND
Bromodichloromethane	NS	mg/kg	ND	ND	ND
trans-1,3-Dichloropropene	NS	mg/kg	ND	ND	ND
cis-1,3-Dichloropropene	NS	mg/kg	ND	ND	ND
1,3-Dichloropropene, Total	NS	mg/kg	ND	ND	ND
1,1-Dichloropropene	NS	mg/kg	ND	ND	ND
Bromoform	NS	mg/kg	ND	ND	ND
1,1,2,2-Tetrachloroethane	NS	mg/kg	ND	ND	ND
Benzene	0.06	mg/kg	ND	ND	ND
Toluene	0.7	mg/kg	ND	ND	ND
Ethylbenzene	1	mg/kg	ND	ND	ND
Chloromethane	NS	mg/kg	ND	ND	ND
Bromomethane	NS	mg/kg	ND	ND	ND
Vinyl chloride	0.02	mg/kg	ND	ND	ND
Chloroethane	NS	mg/kg	ND	ND	ND
1,1-Dichloroethene	0.33	mg/kg	ND	ND	ND
trans-1,2-Dichloroethene	0.19	mg/kg	ND	ND	ND
Trichloroethene	0.47	mg/kg	ND	ND	ND
1,2-Dichlorobenzene	1.1	mg/kg	ND	ND	ND
1,3-Dichlorobenzene	2.4	mg/kg	ND	ND	ND
1,4-Dichlorobenzene	1.8	mg/kg	ND	ND	ND
Methyl tert butyl ether	0.93	mg/kg	ND	ND	ND
p/m-Xylene	NS	mg/kg	0.0012 J	0.00091 J	0.001 J
o-Xylene	NS	mg/kg	0.001 J	0.00078 J	0.00084 J
Xylenes, Total	0.26	mg/kg	0.0022 J	0.0017 J	0.0018 J

Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP22	EP23	EP24
SAMPLING DATE			7/17/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2440298-15	L2440298-16	L2440298-17
SAMPLE DEPTH (ft-bg)			12	12	12
			Qual	Qual	Qual
cis-1,2-Dichloroethene	0.25	mg/kg	ND	ND	ND
1,2-Dichloroethene, Total	NS	mg/kg	ND	ND	ND
Dibromomethane	NS	mg/kg	ND	ND	ND
Styrene	NS	mg/kg	ND	ND	0.00092 J
Dichlorodifluoromethane	NS	mg/kg	ND	ND	ND
Acetone	0.05	mg/kg	0.01 J	0.009 J	0.0091 J
Carbon disulfide	NS	mg/kg	ND	ND	ND
2-Butanone	0.12	mg/kg	ND	ND	ND
Vinyl acetate	NS	mg/kg	ND	ND	ND
4-Methyl-2-pentanone	NS	mg/kg	ND	ND	ND
1,2,3-Trichloropropane	NS	mg/kg	ND	ND	ND
2-Hexanone	NS	mg/kg	ND	ND	ND
Bromochloromethane	NS	mg/kg	ND	ND	ND
2,2-Dichloropropane	NS	mg/kg	ND	ND	ND
1,2-Dibromoethane	NS	mg/kg	ND	ND	ND
1,3-Dichloropropane	NS	mg/kg	ND	ND	ND
1,1,1,2-Tetrachloroethane	NS	mg/kg	ND	ND	ND
Bromobenzene	NS	mg/kg	ND	ND	ND
n-Butylbenzene	12	mg/kg	ND	ND	ND
sec-Butylbenzene	11	mg/kg	ND	ND	ND
tert-Butylbenzene	5.9	mg/kg	ND	ND	ND
o-Chlorotoluene	NS	mg/kg	ND	ND	ND
p-Chlorotoluene	NS	mg/kg	ND	ND	ND
1,2-Dibromo-3-chloropropane	NS	mg/kg	ND	ND	ND
Hexachlorobutadiene	NS	mg/kg	ND	ND	ND
Isopropylbenzene	NS	mg/kg	ND	ND	ND
p-Isopropyltoluene	NS	mg/kg	ND	ND	ND
Naphthalene	12	mg/kg	ND	ND	ND
Acrylonitrile	NS	mg/kg	ND	ND	ND
n-Propylbenzene	3.9	mg/kg	ND	ND	ND
1,2,3-Trichlorobenzene	NS	mg/kg	ND	ND	ND
1,2,4-Trichlorobenzene	NS	mg/kg	ND	ND	ND
1,3,5-Trimethylbenzene	8.4	mg/kg	ND	ND	ND
1,2,4-Trimethylbenzene	3.6	mg/kg	ND	ND	ND
1,4-Dioxane	0.1	mg/kg	ND	ND	ND
p-Diethylbenzene	NS	mg/kg	ND	ND	ND
p-Ethyltoluene	NS	mg/kg	ND	ND	ND
1,2,4,5-Tetramethylbenzene	NS	mg/kg	ND	ND	ND
Ethyl ether	NS	mg/kg	ND	ND	ND

Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP22	EP23	EP24
SAMPLING DATE			7/17/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2440298-15	L2440298-16	L2440298-17
SAMPLE DEPTH (ft-bg)			12	12	12
			Qual	Qual	Qual
trans-1,4-Dichloro-2-butene	NS	mg/kg	ND	ND	ND

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCO**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil

Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard



Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP25	EP26	EP26 DUP
SAMPLING DATE			7/19/2024	7/19/2024	7/19/2024
LAB SAMPLE ID			L2440933-03	L2440933-04	L2440933-05
SAMPLE DEPTH (ft-bg)			12	12	12
			Qual	Qual	Qual
<b>General Chemistry</b>					
Solids, Total	NS	%	97.6	96	96.1
<b>Volatile Organic Compounds</b>					
Methylene chloride	0.05	mg/kg	ND	ND	ND
1,1-Dichloroethane	0.27	mg/kg	ND	ND	ND
Chloroform	0.37	mg/kg	ND	ND	ND
Carbon tetrachloride	0.76	mg/kg	ND	ND	ND
1,2-Dichloropropane	NS	mg/kg	ND	ND	ND
Dibromochloromethane	NS	mg/kg	ND	ND	ND
1,1,2-Trichloroethane	NS	mg/kg	ND	ND	ND
Tetrachloroethene	1.3	mg/kg	ND	ND	ND
Chlorobenzene	1.1	mg/kg	ND	ND	ND
Trichlorofluoromethane	NS	mg/kg	ND	ND	ND
1,2-Dichloroethane	0.02	mg/kg	ND	ND	ND
1,1,1-Trichloroethane	0.68	mg/kg	ND	ND	ND
Bromodichloromethane	NS	mg/kg	ND	ND	ND
trans-1,3-Dichloropropene	NS	mg/kg	ND	ND	ND
cis-1,3-Dichloropropene	NS	mg/kg	ND	ND	ND
1,3-Dichloropropene, Total	NS	mg/kg	ND	ND	ND
1,1-Dichloropropene	NS	mg/kg	ND	ND	ND
Bromoform	NS	mg/kg	ND	ND	ND
1,1,2,2-Tetrachloroethane	NS	mg/kg	ND	ND	ND
Benzene	0.06	mg/kg	ND	ND	ND
Toluene	0.7	mg/kg	ND	ND	ND
Ethylbenzene	1	mg/kg	ND	ND	ND
Chloromethane	NS	mg/kg	ND	ND	ND
Bromomethane	NS	mg/kg	ND	ND	ND
Vinyl chloride	0.02	mg/kg	ND	ND	ND
Chloroethane	NS	mg/kg	ND	ND	ND
1,1-Dichloroethene	0.33	mg/kg	ND	ND	ND
trans-1,2-Dichloroethene	0.19	mg/kg	ND	ND	ND
Trichloroethene	0.47	mg/kg	ND	ND	ND
1,2-Dichlorobenzene	1.1	mg/kg	ND	ND	ND
1,3-Dichlorobenzene	2.4	mg/kg	ND	ND	ND
1,4-Dichlorobenzene	1.8	mg/kg	ND	ND	ND
Methyl tert butyl ether	0.93	mg/kg	ND	ND	ND
p/m-Xylene	NS	mg/kg	ND	ND	ND
o-Xylene	NS	mg/kg	ND	ND	ND
Xylenes, Total	0.26	mg/kg	ND	ND	ND

Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP25	EP26	EP26 DUP
SAMPLING DATE			7/19/2024	7/19/2024	7/19/2024
LAB SAMPLE ID			L2440933-03	L2440933-04	L2440933-05
SAMPLE DEPTH (ft-bg)			12	12	12
			Qual	Qual	Qual
cis-1,2-Dichloroethene	0.25	mg/kg	ND	ND	ND
1,2-Dichloroethene, Total	NS	mg/kg	ND	ND	ND
Dibromomethane	NS	mg/kg	ND	ND	ND
Styrene	NS	mg/kg	ND	ND	ND
Dichlorodifluoromethane	NS	mg/kg	ND	ND	ND
Acetone	0.05	mg/kg	ND	ND	ND
Carbon disulfide	NS	mg/kg	ND	ND	ND
2-Butanone	0.12	mg/kg	ND	ND	ND
Vinyl acetate	NS	mg/kg	ND	ND	ND
4-Methyl-2-pentanone	NS	mg/kg	ND	ND	ND
1,2,3-Trichloropropane	NS	mg/kg	ND	ND	ND
2-Hexanone	NS	mg/kg	ND	ND	ND
Bromochloromethane	NS	mg/kg	ND	ND	ND
2,2-Dichloropropane	NS	mg/kg	ND	ND	ND
1,2-Dibromoethane	NS	mg/kg	ND	ND	ND
1,3-Dichloropropane	NS	mg/kg	ND	ND	ND
1,1,1,2-Tetrachloroethane	NS	mg/kg	ND	ND	ND
Bromobenzene	NS	mg/kg	ND	ND	ND
n-Butylbenzene	12	mg/kg	ND	ND	ND
sec-Butylbenzene	11	mg/kg	ND	ND	ND
tert-Butylbenzene	5.9	mg/kg	ND	ND	ND
o-Chlorotoluene	NS	mg/kg	ND	ND	ND
p-Chlorotoluene	NS	mg/kg	ND	ND	ND
1,2-Dibromo-3-chloropropane	NS	mg/kg	ND	ND	ND
Hexachlorobutadiene	NS	mg/kg	ND	ND	ND
Isopropylbenzene	NS	mg/kg	ND	ND	ND
p-Isopropyltoluene	NS	mg/kg	ND	ND	ND
Naphthalene	12	mg/kg	ND	ND	ND
Acrylonitrile	NS	mg/kg	ND	ND	ND
n-Propylbenzene	3.9	mg/kg	ND	ND	ND
1,2,3-Trichlorobenzene	NS	mg/kg	ND	ND	ND
1,2,4-Trichlorobenzene	NS	mg/kg	ND	ND	ND
1,3,5-Trimethylbenzene	8.4	mg/kg	ND	ND	ND
1,2,4-Trimethylbenzene	3.6	mg/kg	ND	ND	ND
1,4-Dioxane	0.1	mg/kg	ND	ND	ND
p-Diethylbenzene	NS	mg/kg	ND	ND	ND
p-Ethyltoluene	NS	mg/kg	ND	ND	ND
1,2,4,5-Tetramethylbenzene	NS	mg/kg	ND	ND	ND
Ethyl ether	NS	mg/kg	ND	ND	ND

Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP25	EP26	EP26 DUP
SAMPLING DATE			7/19/2024	7/19/2024	7/19/2024
LAB SAMPLE ID			L2440933-03	L2440933-04	L2440933-05
SAMPLE DEPTH (ft-bg)			12	12	12
			Qual	Qual	Qual
trans-1,4-Dichloro-2-butene	NS	mg/kg	ND	ND	ND

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil

Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard

Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP27	EP28	EP29
SAMPLING DATE			7/19/2024	7/24/2024	7/24/2024
LAB SAMPLE ID			L2440933-06	L2441719-01	L2441719-02
SAMPLE DEPTH (ft-bg)			12	12	12
			Qual	Qual	Qual
<b>General Chemistry</b>					
Solids, Total	NS	%	79.7	87.6	85.9
<b>Volatile Organic Compounds</b>					
Methylene chloride	0.05	mg/kg	ND	ND	ND
1,1-Dichloroethane	0.27	mg/kg	ND	ND	ND
Chloroform	0.37	mg/kg	ND	ND	ND
Carbon tetrachloride	0.76	mg/kg	ND	ND	ND
1,2-Dichloropropane	NS	mg/kg	ND	ND	ND
Dibromochloromethane	NS	mg/kg	ND	ND	ND
1,1,2-Trichloroethane	NS	mg/kg	ND	ND	ND
Tetrachloroethene	1.3	mg/kg	ND	ND	ND
Chlorobenzene	1.1	mg/kg	ND	ND	ND
Trichlorofluoromethane	NS	mg/kg	ND	ND	ND
1,2-Dichloroethane	0.02	mg/kg	ND	ND	ND
1,1,1-Trichloroethane	0.68	mg/kg	ND	ND	ND
Bromodichloromethane	NS	mg/kg	ND	ND	ND
trans-1,3-Dichloropropene	NS	mg/kg	ND	ND	ND
cis-1,3-Dichloropropene	NS	mg/kg	ND	ND	ND
1,3-Dichloropropene, Total	NS	mg/kg	ND	ND	ND
1,1-Dichloropropene	NS	mg/kg	ND	ND	ND
Bromoform	NS	mg/kg	ND	ND	ND
1,1,2,2-Tetrachloroethane	NS	mg/kg	ND	ND	ND
Benzene	0.06	mg/kg	ND	ND	ND
Toluene	0.7	mg/kg	ND	ND	ND
Ethylbenzene	1	mg/kg	ND	ND	ND
Chloromethane	NS	mg/kg	ND	ND	ND
Bromomethane	NS	mg/kg	ND	ND	ND
Vinyl chloride	0.02	mg/kg	ND	ND	ND
Chloroethane	NS	mg/kg	ND	ND	ND
1,1-Dichloroethene	0.33	mg/kg	ND	ND	ND
trans-1,2-Dichloroethene	0.19	mg/kg	ND	ND	ND
Trichloroethene	0.47	mg/kg	ND	ND	ND
1,2-Dichlorobenzene	1.1	mg/kg	ND	ND	ND
1,3-Dichlorobenzene	2.4	mg/kg	ND	ND	ND
1,4-Dichlorobenzene	1.8	mg/kg	ND	ND	ND
Methyl tert butyl ether	0.93	mg/kg	ND	ND	ND
p/m-Xylene	NS	mg/kg	ND	ND	ND
o-Xylene	NS	mg/kg	ND	ND	ND
Xylenes, Total	0.26	mg/kg	ND	ND	ND

Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP27	EP28	EP29
SAMPLING DATE			7/19/2024	7/24/2024	7/24/2024
LAB SAMPLE ID			L2440933-06	L2441719-01	L2441719-02
SAMPLE DEPTH (ft-bg)			12	12	12
			Qual	Qual	Qual
cis-1,2-Dichloroethene	0.25	mg/kg	ND	ND	ND
1,2-Dichloroethene, Total	NS	mg/kg	ND	ND	ND
Dibromomethane	NS	mg/kg	ND	ND	ND
Styrene	NS	mg/kg	ND	ND	ND
Dichlorodifluoromethane	NS	mg/kg	ND	ND	ND
Acetone	0.05	mg/kg	ND	ND	0.0092 J
Carbon disulfide	NS	mg/kg	ND	ND	ND
2-Butanone	0.12	mg/kg	ND	ND	ND
Vinyl acetate	NS	mg/kg	ND	ND	ND
4-Methyl-2-pentanone	NS	mg/kg	ND	ND	ND
1,2,3-Trichloropropane	NS	mg/kg	ND	ND	ND
2-Hexanone	NS	mg/kg	ND	ND	ND
Bromochloromethane	NS	mg/kg	ND	ND	ND
2,2-Dichloropropane	NS	mg/kg	ND	ND	ND
1,2-Dibromoethane	NS	mg/kg	ND	ND	ND
1,3-Dichloropropane	NS	mg/kg	ND	ND	ND
1,1,1,2-Tetrachloroethane	NS	mg/kg	ND	ND	ND
Bromobenzene	NS	mg/kg	ND	ND	ND
n-Butylbenzene	12	mg/kg	ND	ND	ND
sec-Butylbenzene	11	mg/kg	ND	ND	ND
tert-Butylbenzene	5.9	mg/kg	ND	ND	ND
o-Chlorotoluene	NS	mg/kg	ND	ND	ND
p-Chlorotoluene	NS	mg/kg	ND	ND	ND
1,2-Dibromo-3-chloropropane	NS	mg/kg	ND	ND	ND
Hexachlorobutadiene	NS	mg/kg	ND	ND	ND
Isopropylbenzene	NS	mg/kg	ND	ND	ND
p-Isopropyltoluene	NS	mg/kg	ND	ND	ND
Naphthalene	12	mg/kg	ND	ND	ND
Acrylonitrile	NS	mg/kg	ND	ND	ND
n-Propylbenzene	3.9	mg/kg	ND	ND	ND
1,2,3-Trichlorobenzene	NS	mg/kg	ND	ND	ND
1,2,4-Trichlorobenzene	NS	mg/kg	ND	ND	ND
1,3,5-Trimethylbenzene	8.4	mg/kg	ND	ND	ND
1,2,4-Trimethylbenzene	3.6	mg/kg	ND	ND	ND
1,4-Dioxane	0.1	mg/kg	ND	ND	ND
p-Diethylbenzene	NS	mg/kg	ND	ND	ND
p-Ethyltoluene	NS	mg/kg	ND	ND	ND
1,2,4,5-Tetramethylbenzene	NS	mg/kg	ND	ND	ND
Ethyl ether	NS	mg/kg	ND	ND	ND

Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
 94-15 Sutphin Boulevard - Site B  
 BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP27	EP28	EP29
SAMPLING DATE			7/19/2024	7/24/2024	7/24/2024
LAB SAMPLE ID			L2440933-06	L2441719-01	L2441719-02
SAMPLE DEPTH (ft-bg)			12	12	12
			Qual	Qual	Qual
trans-1,4-Dichloro-2-butene	NS	mg/kg	ND	ND	ND

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil

Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard

Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP30	EP30 DUP	SW1
SAMPLING DATE			7/31/2024	7/31/2024	7/31/2024
LAB SAMPLE ID			L2443186-01	L2443186-02	L2443186-03
SAMPLE DEPTH (ft-bg)			19	19	19
			Qual	Qual	Qual
<b>General Chemistry</b>					
Solids, Total	NS	%	97.2	97.4	93.1
<b>Volatile Organic Compounds</b>					
Methylene chloride	0.05	mg/kg	ND	ND	ND
1,1-Dichloroethane	0.27	mg/kg	ND	ND	ND
Chloroform	0.37	mg/kg	ND	ND	ND
Carbon tetrachloride	0.76	mg/kg	ND	ND	ND
1,2-Dichloropropane	NS	mg/kg	ND	ND	ND
Dibromochloromethane	NS	mg/kg	ND	ND	ND
1,1,2-Trichloroethane	NS	mg/kg	ND	ND	ND
Tetrachloroethene	1.3	mg/kg	ND	ND	ND
Chlorobenzene	1.1	mg/kg	ND	ND	ND
Trichlorofluoromethane	NS	mg/kg	ND	ND	ND
1,2-Dichloroethane	0.02	mg/kg	ND	ND	ND
1,1,1-Trichloroethane	0.68	mg/kg	ND	ND	ND
Bromodichloromethane	NS	mg/kg	ND	ND	ND
trans-1,3-Dichloropropene	NS	mg/kg	ND	ND	ND
cis-1,3-Dichloropropene	NS	mg/kg	ND	ND	ND
1,3-Dichloropropene, Total	NS	mg/kg	ND	ND	ND
1,1-Dichloropropene	NS	mg/kg	ND	ND	ND
Bromoform	NS	mg/kg	ND	ND	ND
1,1,2,2-Tetrachloroethane	NS	mg/kg	ND	ND	ND
Benzene	0.06	mg/kg	ND	ND	ND
Toluene	0.7	mg/kg	ND	ND	ND
Ethylbenzene	1	mg/kg	ND	ND	ND
Chloromethane	NS	mg/kg	ND	ND	ND
Bromomethane	NS	mg/kg	ND	ND	ND
Vinyl chloride	0.02	mg/kg	ND	ND	ND
Chloroethane	NS	mg/kg	ND	ND	ND
1,1-Dichloroethene	0.33	mg/kg	ND	ND	ND
trans-1,2-Dichloroethene	0.19	mg/kg	ND	ND	ND
Trichloroethene	0.47	mg/kg	ND	ND	ND
1,2-Dichlorobenzene	1.1	mg/kg	ND	ND	ND
1,3-Dichlorobenzene	2.4	mg/kg	ND	ND	ND
1,4-Dichlorobenzene	1.8	mg/kg	ND	ND	ND
Methyl tert butyl ether	0.93	mg/kg	ND	ND	ND
p/m-Xylene	NS	mg/kg	ND	ND	ND
o-Xylene	NS	mg/kg	0.00092 J	ND	ND
Xylenes, Total	0.26	mg/kg	0.00092 J	ND	ND

Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP30	EP30 DUP	SW1
SAMPLING DATE			7/31/2024	7/31/2024	7/31/2024
LAB SAMPLE ID			L2443186-01	L2443186-02	L2443186-03
SAMPLE DEPTH (ft-bg)			19	19	19
			Qual	Qual	Qual
cis-1,2-Dichloroethene	0.25	mg/kg	ND	ND	ND
1,2-Dichloroethene, Total	NS	mg/kg	ND	ND	ND
Dibromomethane	NS	mg/kg	ND	ND	ND
Styrene	NS	mg/kg	ND	ND	ND
Dichlorodifluoromethane	NS	mg/kg	ND	ND	ND
Acetone	0.05	mg/kg	0.0072 J	ND	ND
Carbon disulfide	NS	mg/kg	ND	ND	ND
2-Butanone	0.12	mg/kg	ND	ND	ND
Vinyl acetate	NS	mg/kg	ND	ND	ND
4-Methyl-2-pentanone	NS	mg/kg	ND	ND	ND
1,2,3-Trichloropropane	NS	mg/kg	ND	ND	ND
2-Hexanone	NS	mg/kg	ND	ND	ND
Bromochloromethane	NS	mg/kg	ND	ND	ND
2,2-Dichloropropane	NS	mg/kg	ND	ND	ND
1,2-Dibromoethane	NS	mg/kg	ND	ND	ND
1,3-Dichloropropane	NS	mg/kg	ND	ND	ND
1,1,1,2-Tetrachloroethane	NS	mg/kg	ND	ND	ND
Bromobenzene	NS	mg/kg	ND	ND	ND
n-Butylbenzene	12	mg/kg	ND	ND	ND
sec-Butylbenzene	11	mg/kg	ND	ND	ND
tert-Butylbenzene	5.9	mg/kg	ND	ND	ND
o-Chlorotoluene	NS	mg/kg	ND	ND	ND
p-Chlorotoluene	NS	mg/kg	ND	ND	ND
1,2-Dibromo-3-chloropropane	NS	mg/kg	ND	ND	ND
Hexachlorobutadiene	NS	mg/kg	ND	ND	ND
Isopropylbenzene	NS	mg/kg	ND	ND	ND
p-Isopropyltoluene	NS	mg/kg	ND	ND	ND
Naphthalene	12	mg/kg	ND	ND	ND
Acrylonitrile	NS	mg/kg	ND	ND	ND
n-Propylbenzene	3.9	mg/kg	ND	ND	ND
1,2,3-Trichlorobenzene	NS	mg/kg	ND	ND	ND
1,2,4-Trichlorobenzene	NS	mg/kg	ND	ND	ND
1,3,5-Trimethylbenzene	8.4	mg/kg	ND	ND	ND
1,2,4-Trimethylbenzene	3.6	mg/kg	ND	ND	ND
1,4-Dioxane	0.1	mg/kg	ND	ND	ND
p-Diethylbenzene	NS	mg/kg	ND	ND	ND
p-Ethyltoluene	NS	mg/kg	ND	ND	ND
1,2,4,5-Tetramethylbenzene	NS	mg/kg	ND	ND	ND
Ethyl ether	NS	mg/kg	ND	ND	ND



Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
 94-15 Sutphin Boulevard - Site B  
 BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP30	EP30 DUP	SW1
SAMPLING DATE			7/31/2024	7/31/2024	7/31/2024
LAB SAMPLE ID			L2443186-01	L2443186-02	L2443186-03
SAMPLE DEPTH (ft-bg)			19	19	19
			Qual	Qual	Qual
trans-1,4-Dichloro-2-butene	NS	mg/kg	ND	ND	ND

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil

Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard

Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP-31	EP-32	EP-33
SAMPLING DATE			8/26/2024	8/26/2024	8/26/2024
LAB SAMPLE ID			L2448656-01	L2448656-02	L2448656-03
SAMPLE DEPTH (ft-bg)			12	12	12
			Qual	Qual	Qual
<b>General Chemistry</b>					
Solids, Total	NS	%	97.4	98.1	91.2
<b>Volatile Organic Compounds</b>					
Methylene chloride	0.05	mg/kg	ND	ND	ND
1,1-Dichloroethane	0.27	mg/kg	ND	ND	ND
Chloroform	0.37	mg/kg	ND	ND	ND
Carbon tetrachloride	0.76	mg/kg	ND	ND	ND
1,2-Dichloropropane	NS	mg/kg	ND	ND	ND
Dibromochloromethane	NS	mg/kg	ND	ND	ND
1,1,2-Trichloroethane	NS	mg/kg	ND	ND	ND
Tetrachloroethene	1.3	mg/kg	ND	ND	ND
Chlorobenzene	1.1	mg/kg	ND	ND	ND
Trichlorofluoromethane	NS	mg/kg	ND	ND	ND
1,2-Dichloroethane	0.02	mg/kg	ND	ND	ND
1,1,1-Trichloroethane	0.68	mg/kg	ND	ND	ND
Bromodichloromethane	NS	mg/kg	ND	ND	ND
trans-1,3-Dichloropropene	NS	mg/kg	ND	ND	ND
cis-1,3-Dichloropropene	NS	mg/kg	ND	ND	ND
1,3-Dichloropropene, Total	NS	mg/kg	ND	ND	ND
1,1-Dichloropropene	NS	mg/kg	ND	ND	ND
Bromoform	NS	mg/kg	ND	ND	ND
1,1,2,2-Tetrachloroethane	NS	mg/kg	ND	ND	ND
Benzene	0.06	mg/kg	ND	ND	ND
Toluene	0.7	mg/kg	ND	ND	ND
Ethylbenzene	1	mg/kg	ND	ND	ND
Chloromethane	NS	mg/kg	ND	ND	ND
Bromomethane	NS	mg/kg	ND	ND	ND
Vinyl chloride	0.02	mg/kg	ND	ND	ND
Chloroethane	NS	mg/kg	ND	ND	ND
1,1-Dichloroethene	0.33	mg/kg	ND	ND	ND
trans-1,2-Dichloroethene	0.19	mg/kg	ND	ND	ND
Trichloroethene	0.47	mg/kg	ND	ND	ND
1,2-Dichlorobenzene	1.1	mg/kg	ND	ND	ND
1,3-Dichlorobenzene	2.4	mg/kg	ND	ND	ND
1,4-Dichlorobenzene	1.8	mg/kg	ND	ND	ND
Methyl tert butyl ether	0.93	mg/kg	ND	ND	ND
p/m-Xylene	NS	mg/kg	ND	ND	ND
o-Xylene	NS	mg/kg	ND	ND	ND
Xylenes, Total	0.26	mg/kg	ND	ND	ND

Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP-31	EP-32	EP-33
SAMPLING DATE			8/26/2024	8/26/2024	8/26/2024
LAB SAMPLE ID			L2448656-01	L2448656-02	L2448656-03
SAMPLE DEPTH (ft-bg)			12	12	12
			Qual	Qual	Qual
cis-1,2-Dichloroethene	0.25	mg/kg	ND	ND	ND
1,2-Dichloroethene, Total	NS	mg/kg	ND	ND	ND
Dibromomethane	NS	mg/kg	ND	ND	ND
Styrene	NS	mg/kg	ND	ND	ND
Dichlorodifluoromethane	NS	mg/kg	ND	ND	ND
Acetone	0.05	mg/kg	ND	ND	ND
Carbon disulfide	NS	mg/kg	ND	ND	ND
2-Butanone	0.12	mg/kg	ND	ND	ND
Vinyl acetate	NS	mg/kg	ND	ND	ND
4-Methyl-2-pentanone	NS	mg/kg	ND	ND	ND
1,2,3-Trichloropropane	NS	mg/kg	ND	ND	ND
2-Hexanone	NS	mg/kg	ND	ND	ND
Bromochloromethane	NS	mg/kg	ND	ND	ND
2,2-Dichloropropane	NS	mg/kg	ND	ND	ND
1,2-Dibromoethane	NS	mg/kg	ND	ND	ND
1,3-Dichloropropane	NS	mg/kg	ND	ND	ND
1,1,1,2-Tetrachloroethane	NS	mg/kg	ND	ND	ND
Bromobenzene	NS	mg/kg	ND	ND	ND
n-Butylbenzene	12	mg/kg	ND	ND	ND
sec-Butylbenzene	11	mg/kg	ND	ND	ND
tert-Butylbenzene	5.9	mg/kg	ND	ND	ND
o-Chlorotoluene	NS	mg/kg	ND	ND	ND
p-Chlorotoluene	NS	mg/kg	ND	ND	ND
1,2-Dibromo-3-chloropropane	NS	mg/kg	ND	ND	ND
Hexachlorobutadiene	NS	mg/kg	ND	ND	ND
Isopropylbenzene	NS	mg/kg	ND	ND	ND
p-Isopropyltoluene	NS	mg/kg	ND	ND	ND
Naphthalene	12	mg/kg	ND	ND	ND
Acrylonitrile	NS	mg/kg	ND	ND	ND
n-Propylbenzene	3.9	mg/kg	ND	ND	ND
1,2,3-Trichlorobenzene	NS	mg/kg	ND	ND	ND
1,2,4-Trichlorobenzene	NS	mg/kg	ND	ND	ND
1,3,5-Trimethylbenzene	8.4	mg/kg	ND	ND	ND
1,2,4-Trimethylbenzene	3.6	mg/kg	ND	ND	ND
1,4-Dioxane	0.1	mg/kg	ND	ND	ND
p-Diethylbenzene	NS	mg/kg	ND	ND	ND
p-Ethyltoluene	NS	mg/kg	ND	ND	ND
1,2,4,5-Tetramethylbenzene	NS	mg/kg	ND	ND	ND
Ethyl ether	NS	mg/kg	ND	ND	ND

Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
 94-15 Sutphin Boulevard - Site B  
 BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP-31	EP-32	EP-33
SAMPLING DATE			8/26/2024	8/26/2024	8/26/2024
LAB SAMPLE ID			L2448656-01	L2448656-02	L2448656-03
SAMPLE DEPTH (ft-bg)			12	12	12
			Qual	Qual	Qual
trans-1,4-Dichloro-2-butene	NS	mg/kg	ND	ND	ND

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil

Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard

Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP-34
SAMPLING DATE			8/26/2024
LAB SAMPLE ID			L2448656-04
SAMPLE DEPTH (ft-bg)			12
			Qual
<b>General Chemistry</b>			
Solids, Total	NS	%	78.9
<b>Volatile Organic Compounds</b>			
Methylene chloride	0.05	mg/kg	ND
1,1-Dichloroethane	0.27	mg/kg	ND
Chloroform	0.37	mg/kg	ND
Carbon tetrachloride	0.76	mg/kg	ND
1,2-Dichloropropane	NS	mg/kg	ND
Dibromochloromethane	NS	mg/kg	ND
1,1,2-Trichloroethane	NS	mg/kg	ND
Tetrachloroethene	1.3	mg/kg	ND
Chlorobenzene	1.1	mg/kg	ND
Trichlorofluoromethane	NS	mg/kg	ND
1,2-Dichloroethane	0.02	mg/kg	ND
1,1,1-Trichloroethane	0.68	mg/kg	ND
Bromodichloromethane	NS	mg/kg	ND
trans-1,3-Dichloropropene	NS	mg/kg	ND
cis-1,3-Dichloropropene	NS	mg/kg	ND
1,3-Dichloropropene, Total	NS	mg/kg	ND
1,1-Dichloropropene	NS	mg/kg	ND
Bromoform	NS	mg/kg	ND
1,1,2,2-Tetrachloroethane	NS	mg/kg	ND
Benzene	0.06	mg/kg	ND
Toluene	0.7	mg/kg	ND
Ethylbenzene	1	mg/kg	ND
Chloromethane	NS	mg/kg	ND
Bromomethane	NS	mg/kg	ND
Vinyl chloride	0.02	mg/kg	ND
Chloroethane	NS	mg/kg	ND
1,1-Dichloroethene	0.33	mg/kg	ND
trans-1,2-Dichloroethene	0.19	mg/kg	ND
Trichloroethene	0.47	mg/kg	ND
1,2-Dichlorobenzene	1.1	mg/kg	ND
1,3-Dichlorobenzene	2.4	mg/kg	ND
1,4-Dichlorobenzene	1.8	mg/kg	ND
Methyl tert butyl ether	0.93	mg/kg	ND
p/m-Xylene	NS	mg/kg	ND
o-Xylene	NS	mg/kg	ND
Xylenes, Total	0.26	mg/kg	ND

Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP-34
SAMPLING DATE			8/26/2024
LAB SAMPLE ID			L2448656-04
SAMPLE DEPTH (ft-bg)			12
			Qual
cis-1,2-Dichloroethene	0.25	mg/kg	ND
1,2-Dichloroethene, Total	NS	mg/kg	ND
Dibromomethane	NS	mg/kg	ND
Styrene	NS	mg/kg	ND
Dichlorodifluoromethane	NS	mg/kg	ND
Acetone	0.05	mg/kg	ND
Carbon disulfide	NS	mg/kg	ND
2-Butanone	0.12	mg/kg	ND
Vinyl acetate	NS	mg/kg	ND
4-Methyl-2-pentanone	NS	mg/kg	ND
1,2,3-Trichloropropane	NS	mg/kg	ND
2-Hexanone	NS	mg/kg	ND
Bromochloromethane	NS	mg/kg	ND
2,2-Dichloropropane	NS	mg/kg	ND
1,2-Dibromoethane	NS	mg/kg	ND
1,3-Dichloropropane	NS	mg/kg	ND
1,1,1,2-Tetrachloroethane	NS	mg/kg	ND
Bromobenzene	NS	mg/kg	ND
n-Butylbenzene	12	mg/kg	ND
sec-Butylbenzene	11	mg/kg	ND
tert-Butylbenzene	5.9	mg/kg	ND
o-Chlorotoluene	NS	mg/kg	ND
p-Chlorotoluene	NS	mg/kg	ND
1,2-Dibromo-3-chloropropane	NS	mg/kg	ND
Hexachlorobutadiene	NS	mg/kg	ND
Isopropylbenzene	NS	mg/kg	ND
p-Isopropyltoluene	NS	mg/kg	ND
Naphthalene	12	mg/kg	ND
Acrylonitrile	NS	mg/kg	ND
n-Propylbenzene	3.9	mg/kg	ND
1,2,3-Trichlorobenzene	NS	mg/kg	ND
1,2,4-Trichlorobenzene	NS	mg/kg	ND
1,3,5-Trimethylbenzene	8.4	mg/kg	ND
1,2,4-Trimethylbenzene	3.6	mg/kg	ND
1,4-Dioxane	0.1	mg/kg	ND
p-Diethylbenzene	NS	mg/kg	ND
p-Ethyltoluene	NS	mg/kg	ND
1,2,4,5-Tetramethylbenzene	NS	mg/kg	ND
Ethyl ether	NS	mg/kg	ND

Table 6a. Remaining Contamination in Soil - Volatile Organic Compounds  
 94-15 Sutphin Boulevard - Site B  
 BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP-34
SAMPLING DATE			8/26/2024
LAB SAMPLE ID			L2448656-04
SAMPLE DEPTH (ft-bg)			12
			Qual
trans-1,4-Dichloro-2-butene	NS	mg/kg	ND

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil

Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard

Table 6b. Remaining Contamination in Soil - Semivolatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP1	EP2	EP3	EP4
SAMPLING DATE			7/15/2024	7/15/2024	7/15/2024	7/15/2024
LAB SAMPLE ID			L2439688-01	L2439688-02	L2439688-03	L2439688-04
SAMPLE DEPTH (ft-bg)			12	12	12	12
			Qual	Qual	Qual	Qual
<b>Semivolatile Organic Compounds</b>						
Acenaphthene	20	mg/kg	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NS	mg/kg	--	--	--	--
Hexachlorobenzene	0.33	mg/kg	ND	ND	ND	ND
Bis(2-chloroethyl)ether	NS	mg/kg	ND	ND	ND	ND
2-Chloronaphthalene	NS	mg/kg	ND	ND	ND	ND
1,2-Dichlorobenzene	1.1	mg/kg	--	--	--	--
1,3-Dichlorobenzene	2.4	mg/kg	--	--	--	--
1,4-Dichlorobenzene	1.8	mg/kg	--	--	--	--
3,3'-Dichlorobenzidine	NS	mg/kg	ND	ND	ND	ND
2,4-Dinitrotoluene	NS	mg/kg	ND	ND	ND	ND
2,6-Dinitrotoluene	NS	mg/kg	ND	ND	ND	ND
Fluoranthene	100	mg/kg	ND	ND	ND	0.11
4-Chlorophenyl phenyl ether	NS	mg/kg	ND	ND	ND	ND
4-Bromophenyl phenyl ether	NS	mg/kg	ND	ND	ND	ND
Bis(2-chloroisopropyl)ether	NS	mg/kg	ND	ND	ND	ND
Bis(2-chloroethoxy)methane	NS	mg/kg	ND	ND	ND	ND
Hexachlorobutadiene	NS	mg/kg	ND	ND	ND	ND
Hexachlorocyclopentadiene	NS	mg/kg	ND	ND	ND	ND
Hexachloroethane	NS	mg/kg	ND	ND	ND	ND
Isophorone	NS	mg/kg	ND	ND	ND	ND
Naphthalene	12	mg/kg	ND	ND	ND	ND
Nitrobenzene	NS	mg/kg	ND	ND	ND	ND
NDPA/DPA	NS	mg/kg	ND	ND	ND	ND
n-Nitrosodi-n-propylamine	NS	mg/kg	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	NS	mg/kg	ND	ND	ND	0.064 J
Butyl benzyl phthalate	NS	mg/kg	ND	ND	ND	ND
Di-n-butylphthalate	NS	mg/kg	ND	ND	ND	ND
Di-n-octylphthalate	NS	mg/kg	ND	ND	ND	ND
Diethyl phthalate	NS	mg/kg	ND	ND	ND	ND
Dimethyl phthalate	NS	mg/kg	ND	ND	ND	ND
Benzo(a)anthracene	1	mg/kg	ND	ND	ND	0.063 J
Benzo(a)pyrene	1	mg/kg	ND	ND	ND	0.047 J
Benzo(b)fluoranthene	1	mg/kg	ND	ND	ND	0.055 J
Benzo(k)fluoranthene	0.8	mg/kg	ND	ND	ND	ND
Chrysene	1	mg/kg	ND	ND	ND	0.056 J



Table 6b. Remaining Contamination in Soil - Semivolatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP1	EP2	EP3	EP4
SAMPLING DATE			7/15/2024	7/15/2024	7/15/2024	7/15/2024
LAB SAMPLE ID			L2439688-01	L2439688-02	L2439688-03	L2439688-04
SAMPLE DEPTH (ft-bg)			12	12	12	12
			Qual	Qual	Qual	Qual
<b>Semivolatile Organic Compounds</b>						
Acenaphthylene	100	mg/kg	ND	ND	ND	ND
Anthracene	100	mg/kg	ND	ND	ND	ND
Benzo(ghi)perylene	100	mg/kg	ND	ND	ND	0.033 J
Fluorene	30	mg/kg	ND	ND	ND	ND
Phenanthrene	100	mg/kg	ND	ND	ND	0.076 J
Dibenzo(a,h)anthracene	0.33	mg/kg	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	ND	ND	ND	0.028 J
Pyrene	100	mg/kg	ND	ND	ND	0.11
Biphenyl	NS	mg/kg	ND	ND	ND	ND
4-Chloroaniline	NS	mg/kg	ND	ND	ND	ND
2-Nitroaniline	NS	mg/kg	ND	ND	ND	ND
3-Nitroaniline	NS	mg/kg	ND	ND	ND	ND
4-Nitroaniline	NS	mg/kg	ND	ND	ND	ND
Dibenzofuran	7	mg/kg	ND	ND	ND	ND
2-Methylnaphthalene	NS	mg/kg	ND	ND	ND	ND
1,2,4,5-Tetrachlorobenzene	NS	mg/kg	ND	ND	ND	ND
Acetophenone	NS	mg/kg	ND	ND	ND	ND
2,4,6-Trichlorophenol	NS	mg/kg	ND	ND	ND	ND
p-Chloro-m-cresol	NS	mg/kg	ND	ND	ND	ND
2-Chlorophenol	NS	mg/kg	ND	ND	ND	ND
2,4-Dichlorophenol	NS	mg/kg	ND	ND	ND	ND
2,4-Dimethylphenol	NS	mg/kg	ND	ND	ND	ND
2-Nitrophenol	NS	mg/kg	ND	ND	ND	ND
4-Nitrophenol	NS	mg/kg	ND	ND	ND	ND
2,4-Dinitrophenol	NS	mg/kg	ND	ND	ND	ND
4,6-Dinitro-o-cresol	NS	mg/kg	ND	ND	ND	ND
Pentachlorophenol	0.8	mg/kg	ND	ND	ND	ND
Phenol	0.33	mg/kg	ND	ND	ND	ND
2-Methylphenol	0.33	mg/kg	ND	ND	ND	ND
3-Methylphenol/4-Methylphenol	0.33	mg/kg	ND	ND	ND	ND
2,4,5-Trichlorophenol	NS	mg/kg	ND	ND	ND	ND
Benzoic Acid	NS	mg/kg	--	--	--	--
Benzyl Alcohol	NS	mg/kg	--	--	--	--
Carbazole	NS	mg/kg	ND	ND	ND	ND
Atrazine	NS	mg/kg	ND	ND	ND	ND

Table 6b. Remaining Contamination in Soil - Semivolatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP1	EP2	EP3	EP4
SAMPLING DATE			7/15/2024	7/15/2024	7/15/2024	7/15/2024
LAB SAMPLE ID			L2439688-01	L2439688-02	L2439688-03	L2439688-04
SAMPLE DEPTH (ft-bg)			12	12	12	12
			Qual	Qual	Qual	Qual
<b>Semivolatile Organic Compounds</b>						
Benzaldehyde	NS	mg/kg	ND	ND	ND	ND
Caprolactam	NS	mg/kg	ND	ND	ND	ND
2,3,4,6-Tetrachlorophenol	NS	mg/kg	ND	ND	ND	ND
1,4-Dioxane	0.1	mg/kg	ND	ND	ND	ND

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard

-- = Not analyzed

Table 6b. Remaining Contamination in Soil - Semivolatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP5	EP6	EP7	EP8
SAMPLING DATE			7/15/2024	7/15/2024	7/15/2024	7/17/2024
LAB SAMPLE ID			L2439688-05	L2439688-06	L2439688-07	L2440298-01
SAMPLE DEPTH (ft-bg)			12	12	12	12
			Qual	Qual	Qual	Qual
<b>Semivolatile Organic Compounds</b>						
Acenaphthene	20	mg/kg	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NS	mg/kg	--	--	--	--
Hexachlorobenzene	0.33	mg/kg	ND	ND	ND	ND
Bis(2-chloroethyl)ether	NS	mg/kg	ND	ND	ND	ND
2-Chloronaphthalene	NS	mg/kg	ND	ND	ND	ND
1,2-Dichlorobenzene	1.1	mg/kg	--	--	--	--
1,3-Dichlorobenzene	2.4	mg/kg	--	--	--	--
1,4-Dichlorobenzene	1.8	mg/kg	--	--	--	--
3,3'-Dichlorobenzidine	NS	mg/kg	ND	ND	ND	ND
2,4-Dinitrotoluene	NS	mg/kg	ND	ND	ND	ND
2,6-Dinitrotoluene	NS	mg/kg	ND	ND	ND	ND
Fluoranthene	100	mg/kg	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NS	mg/kg	ND	ND	ND	ND
4-Bromophenyl phenyl ether	NS	mg/kg	ND	ND	ND	ND
Bis(2-chloroisopropyl)ether	NS	mg/kg	ND	ND	ND	ND
Bis(2-chloroethoxy)methane	NS	mg/kg	ND	ND	ND	ND
Hexachlorobutadiene	NS	mg/kg	ND	ND	ND	ND
Hexachlorocyclopentadiene	NS	mg/kg	ND	ND	ND	ND
Hexachloroethane	NS	mg/kg	ND	ND	ND	ND
Isophorone	NS	mg/kg	ND	ND	ND	ND
Naphthalene	12	mg/kg	ND	ND	ND	ND
Nitrobenzene	NS	mg/kg	ND	ND	ND	ND
NDPA/DPA	NS	mg/kg	ND	ND	ND	ND
n-Nitrosodi-n-propylamine	NS	mg/kg	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	NS	mg/kg	ND	ND	ND	ND
Butyl benzyl phthalate	NS	mg/kg	ND	ND	ND	ND
Di-n-butylphthalate	NS	mg/kg	ND	ND	ND	ND
Di-n-octylphthalate	NS	mg/kg	ND	ND	ND	ND
Diethyl phthalate	NS	mg/kg	ND	ND	ND	ND
Dimethyl phthalate	NS	mg/kg	ND	ND	ND	ND
Benzo(a)anthracene	1	mg/kg	ND	ND	ND	ND
Benzo(a)pyrene	1	mg/kg	ND	ND	ND	ND
Benzo(b)fluoranthene	1	mg/kg	ND	ND	ND	ND
Benzo(k)fluoranthene	0.8	mg/kg	ND	ND	ND	ND
Chrysene	1	mg/kg	ND	ND	ND	ND

Table 6b. Remaining Contamination in Soil - Semivolatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP5	EP6	EP7	EP8
SAMPLING DATE			7/15/2024	7/15/2024	7/15/2024	7/17/2024
LAB SAMPLE ID			L2439688-05	L2439688-06	L2439688-07	L2440298-01
SAMPLE DEPTH (ft-bg)			12	12	12	12
			Qual	Qual	Qual	Qual
<b>Semivolatile Organic Compounds</b>						
Acenaphthylene	100	mg/kg	ND	ND	ND	ND
Anthracene	100	mg/kg	ND	ND	ND	ND
Benzo(ghi)perylene	100	mg/kg	ND	ND	ND	ND
Fluorene	30	mg/kg	ND	ND	ND	ND
Phenanthrene	100	mg/kg	ND	ND	ND	ND
Dibenzo(a,h)anthracene	0.33	mg/kg	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	ND	ND	ND	ND
Pyrene	100	mg/kg	ND	ND	ND	ND
Biphenyl	NS	mg/kg	ND	ND	ND	ND
4-Chloroaniline	NS	mg/kg	ND	ND	ND	ND
2-Nitroaniline	NS	mg/kg	ND	ND	ND	ND
3-Nitroaniline	NS	mg/kg	ND	ND	ND	ND
4-Nitroaniline	NS	mg/kg	ND	ND	ND	ND
Dibenzofuran	7	mg/kg	ND	ND	ND	ND
2-Methylnaphthalene	NS	mg/kg	ND	ND	ND	ND
1,2,4,5-Tetrachlorobenzene	NS	mg/kg	ND	ND	ND	ND
Acetophenone	NS	mg/kg	ND	ND	ND	ND
2,4,6-Trichlorophenol	NS	mg/kg	ND	ND	ND	ND
p-Chloro-m-cresol	NS	mg/kg	ND	ND	ND	ND
2-Chlorophenol	NS	mg/kg	ND	ND	ND	ND
2,4-Dichlorophenol	NS	mg/kg	ND	ND	ND	ND
2,4-Dimethylphenol	NS	mg/kg	ND	ND	ND	ND
2-Nitrophenol	NS	mg/kg	ND	ND	ND	ND
4-Nitrophenol	NS	mg/kg	ND	ND	ND	ND
2,4-Dinitrophenol	NS	mg/kg	ND	ND	ND	ND
4,6-Dinitro-o-cresol	NS	mg/kg	ND	ND	ND	ND
Pentachlorophenol	0.8	mg/kg	ND	ND	ND	ND
Phenol	0.33	mg/kg	ND	ND	ND	ND
2-Methylphenol	0.33	mg/kg	ND	ND	ND	ND
3-Methylphenol/4-Methylphenol	0.33	mg/kg	ND	ND	ND	ND
2,4,5-Trichlorophenol	NS	mg/kg	ND	ND	ND	ND
Benzoic Acid	NS	mg/kg	--	--	--	--
Benzyl Alcohol	NS	mg/kg	--	--	--	--
Carbazole	NS	mg/kg	ND	ND	ND	ND
Atrazine	NS	mg/kg	ND	ND	ND	ND

Table 6b. Remaining Contamination in Soil - Semivolatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP5	EP6	EP7	EP8
SAMPLING DATE			7/15/2024	7/15/2024	7/15/2024	7/17/2024
LAB SAMPLE ID			L2439688-05	L2439688-06	L2439688-07	L2440298-01
SAMPLE DEPTH (ft-bg)			12	12	12	12
			Qual	Qual	Qual	Qual
Semivolatile Organic Compounds						
Benzaldehyde	NS	mg/kg	ND	ND	ND	ND
Caprolactam	NS	mg/kg	ND	ND	ND	ND
2,3,4,6-Tetrachlorophenol	NS	mg/kg	ND	ND	ND	ND
1,4-Dioxane	0.1	mg/kg	ND	ND	ND	ND

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil  
Cleanup Objectives  
J = Estimated value  
ND = Not detected  
NS = No standard  
-- = Not analyzed

Table 6b. Remaining Contamination in Soil - Semivolatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP9	EP10	EP11	EP12
SAMPLING DATE			7/17/2024	7/17/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2440298-02	L2440298-03	L2440298-04	L2440298-05
SAMPLE DEPTH (ft-bg)			12	12	12	12
			Qual	Qual	Qual	Qual
Semivolatile Organic Compounds						
Acenaphthene	20	mg/kg	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NS	mg/kg	--	--	--	--
Hexachlorobenzene	0.33	mg/kg	ND	ND	ND	ND
Bis(2-chloroethyl)ether	NS	mg/kg	ND	ND	ND	ND
2-Chloronaphthalene	NS	mg/kg	ND	ND	ND	ND
1,2-Dichlorobenzene	1.1	mg/kg	--	--	--	--
1,3-Dichlorobenzene	2.4	mg/kg	--	--	--	--
1,4-Dichlorobenzene	1.8	mg/kg	--	--	--	--
3,3'-Dichlorobenzidine	NS	mg/kg	ND	ND	ND	ND
2,4-Dinitrotoluene	NS	mg/kg	ND	ND	ND	ND
2,6-Dinitrotoluene	NS	mg/kg	ND	ND	ND	ND
Fluoranthene	100	mg/kg	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NS	mg/kg	ND	ND	ND	ND
4-Bromophenyl phenyl ether	NS	mg/kg	ND	ND	ND	ND
Bis(2-chloroisopropyl)ether	NS	mg/kg	ND	ND	ND	ND
Bis(2-chloroethoxy)methane	NS	mg/kg	ND	ND	ND	ND
Hexachlorobutadiene	NS	mg/kg	ND	ND	ND	ND
Hexachlorocyclopentadiene	NS	mg/kg	ND	ND	ND	ND
Hexachloroethane	NS	mg/kg	ND	ND	ND	ND
Isophorone	NS	mg/kg	ND	ND	ND	ND
Naphthalene	12	mg/kg	ND	ND	ND	ND
Nitrobenzene	NS	mg/kg	ND	ND	ND	ND
NDPA/DPA	NS	mg/kg	ND	ND	ND	ND
n-Nitrosodi-n-propylamine	NS	mg/kg	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	NS	mg/kg	ND	ND	ND	ND
Butyl benzyl phthalate	NS	mg/kg	ND	ND	ND	ND
Di-n-butylphthalate	NS	mg/kg	ND	ND	ND	ND
Di-n-octylphthalate	NS	mg/kg	ND	ND	ND	ND
Diethyl phthalate	NS	mg/kg	ND	ND	ND	ND
Dimethyl phthalate	NS	mg/kg	ND	ND	ND	ND
Benzo(a)anthracene	1	mg/kg	ND	ND	ND	ND
Benzo(a)pyrene	1	mg/kg	ND	ND	ND	ND
Benzo(b)fluoranthene	1	mg/kg	ND	ND	ND	ND
Benzo(k)fluoranthene	0.8	mg/kg	ND	ND	ND	ND
Chrysene	1	mg/kg	ND	ND	ND	ND

Table 6b. Remaining Contamination in Soil - Semivolatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP9	EP10	EP11	EP12
SAMPLING DATE			7/17/2024	7/17/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2440298-02	L2440298-03	L2440298-04	L2440298-05
SAMPLE DEPTH (ft-bg)			12	12	12	12
			Qual	Qual	Qual	Qual
Semivolatile Organic Compounds						
Acenaphthylene	100	mg/kg	ND	ND	ND	ND
Anthracene	100	mg/kg	ND	ND	ND	ND
Benzo(ghi)perylene	100	mg/kg	ND	ND	ND	ND
Fluorene	30	mg/kg	ND	ND	ND	ND
Phenanthrene	100	mg/kg	ND	ND	ND	ND
Dibenzo(a,h)anthracene	0.33	mg/kg	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	ND	ND	ND	ND
Pyrene	100	mg/kg	ND	ND	ND	ND
Biphenyl	NS	mg/kg	ND	ND	ND	ND
4-Chloroaniline	NS	mg/kg	ND	ND	ND	ND
2-Nitroaniline	NS	mg/kg	ND	ND	ND	ND
3-Nitroaniline	NS	mg/kg	ND	ND	ND	ND
4-Nitroaniline	NS	mg/kg	ND	ND	ND	ND
Dibenzofuran	7	mg/kg	ND	ND	ND	ND
2-Methylnaphthalene	NS	mg/kg	ND	ND	ND	ND
1,2,4,5-Tetrachlorobenzene	NS	mg/kg	ND	ND	ND	ND
Acetophenone	NS	mg/kg	ND	ND	ND	ND
2,4,6-Trichlorophenol	NS	mg/kg	ND	ND	ND	ND
p-Chloro-m-cresol	NS	mg/kg	ND	ND	ND	ND
2-Chlorophenol	NS	mg/kg	ND	ND	ND	ND
2,4-Dichlorophenol	NS	mg/kg	ND	ND	ND	ND
2,4-Dimethylphenol	NS	mg/kg	ND	ND	ND	ND
2-Nitrophenol	NS	mg/kg	ND	ND	ND	ND
4-Nitrophenol	NS	mg/kg	ND	ND	ND	ND
2,4-Dinitrophenol	NS	mg/kg	ND	ND	ND	ND
4,6-Dinitro-o-cresol	NS	mg/kg	ND	ND	ND	ND
Pentachlorophenol	0.8	mg/kg	ND	ND	ND	ND
Phenol	0.33	mg/kg	ND	ND	ND	ND
2-Methylphenol	0.33	mg/kg	ND	ND	ND	ND
3-Methylphenol/4-Methylphenol	0.33	mg/kg	ND	ND	ND	ND
2,4,5-Trichlorophenol	NS	mg/kg	ND	ND	ND	ND
Benzoic Acid	NS	mg/kg	--	--	--	--
Benzyl Alcohol	NS	mg/kg	--	--	--	--
Carbazole	NS	mg/kg	ND	ND	ND	ND
Atrazine	NS	mg/kg	ND	ND	ND	ND

Table 6b. Remaining Contamination in Soil - Semivolatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP9	EP10	EP11	EP12
SAMPLING DATE			7/17/2024	7/17/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2440298-02	L2440298-03	L2440298-04	L2440298-05
SAMPLE DEPTH (ft-bg)			12	12	12	12
			Qual	Qual	Qual	Qual
Semivolatile Organic Compounds						
Benzaldehyde	NS	mg/kg	ND	ND	ND	ND
Caprolactam	NS	mg/kg	ND	ND	ND	ND
2,3,4,6-Tetrachlorophenol	NS	mg/kg	ND	ND	ND	ND
1,4-Dioxane	0.1	mg/kg	ND	ND	ND	ND

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard

-- = Not analyzed



Table 6b. Remaining Contamination in Soil - Semivolatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP13	EP14	EP15	EP16
SAMPLING DATE			7/17/2024	7/17/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2440298-06	L2440298-07	L2440298-08	L2440298-09
SAMPLE DEPTH (ft-bg)			12	12	12	12
			Qual	Qual	Qual	Qual
<b>Semivolatile Organic Compounds</b>						
Acenaphthene	20	mg/kg	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NS	mg/kg	--	--	--	--
Hexachlorobenzene	0.33	mg/kg	ND	ND	ND	ND
Bis(2-chloroethyl)ether	NS	mg/kg	ND	ND	ND	ND
2-Chloronaphthalene	NS	mg/kg	ND	ND	ND	ND
1,2-Dichlorobenzene	1.1	mg/kg	--	--	--	--
1,3-Dichlorobenzene	2.4	mg/kg	--	--	--	--
1,4-Dichlorobenzene	1.8	mg/kg	--	--	--	--
3,3'-Dichlorobenzidine	NS	mg/kg	ND	ND	ND	ND
2,4-Dinitrotoluene	NS	mg/kg	ND	ND	ND	ND
2,6-Dinitrotoluene	NS	mg/kg	ND	ND	ND	ND
Fluoranthene	100	mg/kg	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NS	mg/kg	ND	ND	ND	ND
4-Bromophenyl phenyl ether	NS	mg/kg	ND	ND	ND	ND
Bis(2-chloroisopropyl)ether	NS	mg/kg	ND	ND	ND	ND
Bis(2-chloroethoxy)methane	NS	mg/kg	ND	ND	ND	ND
Hexachlorobutadiene	NS	mg/kg	ND	ND	ND	ND
Hexachlorocyclopentadiene	NS	mg/kg	ND	ND	ND	ND
Hexachloroethane	NS	mg/kg	ND	ND	ND	ND
Isophorone	NS	mg/kg	ND	ND	ND	ND
Naphthalene	12	mg/kg	ND	ND	ND	ND
Nitrobenzene	NS	mg/kg	ND	ND	ND	ND
NDPA/DPA	NS	mg/kg	ND	ND	ND	ND
n-Nitrosodi-n-propylamine	NS	mg/kg	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	NS	mg/kg	ND	ND	ND	ND
Butyl benzyl phthalate	NS	mg/kg	ND	ND	ND	ND
Di-n-butylphthalate	NS	mg/kg	ND	ND	ND	ND
Di-n-octylphthalate	NS	mg/kg	ND	ND	ND	ND
Diethyl phthalate	NS	mg/kg	ND	ND	ND	ND
Dimethyl phthalate	NS	mg/kg	ND	ND	ND	ND
Benzo(a)anthracene	1	mg/kg	ND	ND	ND	ND
Benzo(a)pyrene	1	mg/kg	ND	ND	ND	ND
Benzo(b)fluoranthene	1	mg/kg	ND	ND	ND	ND
Benzo(k)fluoranthene	0.8	mg/kg	ND	ND	ND	ND
Chrysene	1	mg/kg	ND	ND	ND	ND

Table 6b. Remaining Contamination in Soil - Semivolatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP13	EP14	EP15	EP16
SAMPLING DATE			7/17/2024	7/17/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2440298-06	L2440298-07	L2440298-08	L2440298-09
SAMPLE DEPTH (ft-bg)			12	12	12	12
			Qual	Qual	Qual	Qual
Semivolatile Organic Compounds						
Acenaphthylene	100	mg/kg	ND	ND	ND	ND
Anthracene	100	mg/kg	ND	ND	ND	ND
Benzo(ghi)perylene	100	mg/kg	ND	ND	ND	ND
Fluorene	30	mg/kg	ND	ND	ND	ND
Phenanthrene	100	mg/kg	ND	ND	ND	ND
Dibenzo(a,h)anthracene	0.33	mg/kg	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	ND	ND	ND	ND
Pyrene	100	mg/kg	ND	ND	ND	ND
Biphenyl	NS	mg/kg	ND	ND	ND	ND
4-Chloroaniline	NS	mg/kg	ND	ND	ND	ND
2-Nitroaniline	NS	mg/kg	ND	ND	ND	ND
3-Nitroaniline	NS	mg/kg	ND	ND	ND	ND
4-Nitroaniline	NS	mg/kg	ND	ND	ND	ND
Dibenzofuran	7	mg/kg	ND	ND	ND	ND
2-Methylnaphthalene	NS	mg/kg	ND	ND	ND	ND
1,2,4,5-Tetrachlorobenzene	NS	mg/kg	ND	ND	ND	ND
Acetophenone	NS	mg/kg	ND	ND	ND	ND
2,4,6-Trichlorophenol	NS	mg/kg	ND	ND	ND	ND
p-Chloro-m-cresol	NS	mg/kg	ND	ND	ND	ND
2-Chlorophenol	NS	mg/kg	ND	ND	ND	ND
2,4-Dichlorophenol	NS	mg/kg	ND	ND	ND	ND
2,4-Dimethylphenol	NS	mg/kg	ND	ND	ND	ND
2-Nitrophenol	NS	mg/kg	ND	ND	ND	ND
4-Nitrophenol	NS	mg/kg	ND	ND	ND	ND
2,4-Dinitrophenol	NS	mg/kg	ND	ND	ND	ND
4,6-Dinitro-o-cresol	NS	mg/kg	ND	ND	ND	ND
Pentachlorophenol	0.8	mg/kg	ND	ND	ND	ND
Phenol	0.33	mg/kg	ND	ND	ND	ND
2-Methylphenol	0.33	mg/kg	ND	ND	ND	ND
3-Methylphenol/4-Methylphenol	0.33	mg/kg	ND	ND	ND	ND
2,4,5-Trichlorophenol	NS	mg/kg	ND	ND	ND	ND
Benzoic Acid	NS	mg/kg	--	--	--	--
Benzyl Alcohol	NS	mg/kg	--	--	--	--
Carbazole	NS	mg/kg	ND	ND	ND	ND
Atrazine	NS	mg/kg	ND	ND	ND	ND

Table 6b. Remaining Contamination in Soil - Semivolatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP13	EP14	EP15	EP16
SAMPLING DATE			7/17/2024	7/17/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2440298-06	L2440298-07	L2440298-08	L2440298-09
SAMPLE DEPTH (ft-bg)			12	12	12	12
			Qual	Qual	Qual	Qual
Semivolatile Organic Compounds						
Benzaldehyde	NS	mg/kg	ND	ND	ND	ND
Caprolactam	NS	mg/kg	ND	ND	ND	ND
2,3,4,6-Tetrachlorophenol	NS	mg/kg	ND	ND	ND	ND
1,4-Dioxane	0.1	mg/kg	ND	ND	ND	ND

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives  
J = Estimated value  
ND = Not detected  
NS = No standard  
-- = Not analyzed

Table 6b. Remaining Contamination in Soil - Semivolatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP17	EP18	EP19	EP20
SAMPLING DATE			7/17/2024	7/17/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2440298-10	L2440298-11	L2440298-12	L2440298-13
SAMPLE DEPTH (ft-bg)			12	12	12	12
			Qual	Qual	Qual	Qual
Semivolatile Organic Compounds						
Acenaphthene	20	mg/kg	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NS	mg/kg	--	--	--	--
Hexachlorobenzene	0.33	mg/kg	ND	ND	ND	ND
Bis(2-chloroethyl)ether	NS	mg/kg	ND	ND	ND	ND
2-Chloronaphthalene	NS	mg/kg	ND	ND	ND	ND
1,2-Dichlorobenzene	1.1	mg/kg	--	--	--	--
1,3-Dichlorobenzene	2.4	mg/kg	--	--	--	--
1,4-Dichlorobenzene	1.8	mg/kg	--	--	--	--
3,3'-Dichlorobenzidine	NS	mg/kg	ND	ND	ND	ND
2,4-Dinitrotoluene	NS	mg/kg	ND	ND	ND	ND
2,6-Dinitrotoluene	NS	mg/kg	ND	ND	ND	ND
Fluoranthene	100	mg/kg	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NS	mg/kg	ND	ND	ND	ND
4-Bromophenyl phenyl ether	NS	mg/kg	ND	ND	ND	ND
Bis(2-chloroisopropyl)ether	NS	mg/kg	ND	ND	ND	ND
Bis(2-chloroethoxy)methane	NS	mg/kg	ND	ND	ND	ND
Hexachlorobutadiene	NS	mg/kg	ND	ND	ND	ND
Hexachlorocyclopentadiene	NS	mg/kg	ND	ND	ND	ND
Hexachloroethane	NS	mg/kg	ND	ND	ND	ND
Isophorone	NS	mg/kg	ND	ND	ND	ND
Naphthalene	12	mg/kg	ND	ND	ND	ND
Nitrobenzene	NS	mg/kg	ND	ND	ND	ND
NDPA/DPA	NS	mg/kg	ND	ND	ND	ND
n-Nitrosodi-n-propylamine	NS	mg/kg	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	NS	mg/kg	ND	ND	ND	ND
Butyl benzyl phthalate	NS	mg/kg	ND	ND	ND	ND
Di-n-butylphthalate	NS	mg/kg	ND	ND	ND	ND
Di-n-octylphthalate	NS	mg/kg	ND	ND	ND	ND
Diethyl phthalate	NS	mg/kg	ND	ND	ND	ND
Dimethyl phthalate	NS	mg/kg	ND	ND	ND	ND
Benzo(a)anthracene	1	mg/kg	ND	ND	ND	ND
Benzo(a)pyrene	1	mg/kg	ND	ND	ND	ND
Benzo(b)fluoranthene	1	mg/kg	ND	ND	ND	ND
Benzo(k)fluoranthene	0.8	mg/kg	ND	ND	ND	ND
Chrysene	1	mg/kg	ND	ND	ND	ND

Table 6b. Remaining Contamination in Soil - Semivolatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP17	EP18	EP19	EP20
SAMPLING DATE			7/17/2024	7/17/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2440298-10	L2440298-11	L2440298-12	L2440298-13
SAMPLE DEPTH (ft-bg)			12	12	12	12
			Qual	Qual	Qual	Qual
Semivolatile Organic Compounds						
Acenaphthylene	100	mg/kg	ND	ND	ND	ND
Anthracene	100	mg/kg	ND	ND	ND	ND
Benzo(ghi)perylene	100	mg/kg	ND	ND	ND	ND
Fluorene	30	mg/kg	ND	ND	ND	ND
Phenanthrene	100	mg/kg	ND	ND	ND	ND
Dibenzo(a,h)anthracene	0.33	mg/kg	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	ND	ND	ND	ND
Pyrene	100	mg/kg	ND	ND	ND	ND
Biphenyl	NS	mg/kg	ND	ND	ND	ND
4-Chloroaniline	NS	mg/kg	ND	ND	ND	ND
2-Nitroaniline	NS	mg/kg	ND	ND	ND	ND
3-Nitroaniline	NS	mg/kg	ND	ND	ND	ND
4-Nitroaniline	NS	mg/kg	ND	ND	ND	ND
Dibenzofuran	7	mg/kg	ND	ND	ND	ND
2-Methylnaphthalene	NS	mg/kg	ND	ND	ND	ND
1,2,4,5-Tetrachlorobenzene	NS	mg/kg	ND	ND	ND	ND
Acetophenone	NS	mg/kg	ND	ND	ND	ND
2,4,6-Trichlorophenol	NS	mg/kg	ND	ND	ND	ND
p-Chloro-m-cresol	NS	mg/kg	ND	ND	ND	ND
2-Chlorophenol	NS	mg/kg	ND	ND	ND	ND
2,4-Dichlorophenol	NS	mg/kg	ND	ND	ND	ND
2,4-Dimethylphenol	NS	mg/kg	ND	ND	ND	ND
2-Nitrophenol	NS	mg/kg	ND	ND	ND	ND
4-Nitrophenol	NS	mg/kg	ND	ND	ND	ND
2,4-Dinitrophenol	NS	mg/kg	ND	ND	ND	ND
4,6-Dinitro-o-cresol	NS	mg/kg	ND	ND	ND	ND
Pentachlorophenol	0.8	mg/kg	ND	ND	ND	ND
Phenol	0.33	mg/kg	ND	ND	ND	ND
2-Methylphenol	0.33	mg/kg	ND	ND	ND	ND
3-Methylphenol/4-Methylphenol	0.33	mg/kg	ND	ND	ND	ND
2,4,5-Trichlorophenol	NS	mg/kg	ND	ND	ND	ND
Benzoic Acid	NS	mg/kg	--	--	--	--
Benzyl Alcohol	NS	mg/kg	--	--	--	--
Carbazole	NS	mg/kg	ND	ND	ND	ND
Atrazine	NS	mg/kg	ND	ND	ND	ND

Table 6b. Remaining Contamination in Soil - Semivolatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP17	EP18	EP19	EP20
SAMPLING DATE			7/17/2024	7/17/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2440298-10	L2440298-11	L2440298-12	L2440298-13
SAMPLE DEPTH (ft-bg)			12	12	12	12
			Qual	Qual	Qual	Qual
Semivolatile Organic Compounds						
Benzaldehyde	NS	mg/kg	ND	ND	ND	ND
Caprolactam	NS	mg/kg	ND	ND	ND	ND
2,3,4,6-Tetrachlorophenol	NS	mg/kg	ND	ND	ND	ND
1,4-Dioxane	0.1	mg/kg	ND	ND	ND	ND

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard

-- = Not analyzed

Table 6b. Remaining Contamination in Soil - Semivolatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP21	EP22	EP23	EP24
SAMPLING DATE			7/17/2024	7/17/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2440298-14	L2440298-15	L2440298-16	L2440298-17
SAMPLE DEPTH (ft-bg)			12	12	12	12
			Qual	Qual	Qual	Qual
<b>Semivolatile Organic Compounds</b>						
Acenaphthene	20	mg/kg	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NS	mg/kg	--	--	--	--
Hexachlorobenzene	0.33	mg/kg	ND	ND	ND	ND
Bis(2-chloroethyl)ether	NS	mg/kg	ND	ND	ND	ND
2-Chloronaphthalene	NS	mg/kg	ND	ND	ND	ND
1,2-Dichlorobenzene	1.1	mg/kg	--	--	--	--
1,3-Dichlorobenzene	2.4	mg/kg	--	--	--	--
1,4-Dichlorobenzene	1.8	mg/kg	--	--	--	--
3,3'-Dichlorobenzidine	NS	mg/kg	ND	ND	ND	ND
2,4-Dinitrotoluene	NS	mg/kg	ND	ND	ND	ND
2,6-Dinitrotoluene	NS	mg/kg	ND	ND	ND	ND
Fluoranthene	100	mg/kg	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NS	mg/kg	ND	ND	ND	ND
4-Bromophenyl phenyl ether	NS	mg/kg	ND	ND	ND	ND
Bis(2-chloroisopropyl)ether	NS	mg/kg	ND	ND	ND	ND
Bis(2-chloroethoxy)methane	NS	mg/kg	ND	ND	ND	ND
Hexachlorobutadiene	NS	mg/kg	ND	ND	ND	ND
Hexachlorocyclopentadiene	NS	mg/kg	ND	ND	ND	ND
Hexachloroethane	NS	mg/kg	ND	ND	ND	ND
Isophorone	NS	mg/kg	ND	ND	ND	ND
Naphthalene	12	mg/kg	ND	ND	ND	ND
Nitrobenzene	NS	mg/kg	ND	ND	ND	ND
NDPA/DPA	NS	mg/kg	ND	ND	ND	ND
n-Nitrosodi-n-propylamine	NS	mg/kg	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	NS	mg/kg	ND	ND	ND	ND
Butyl benzyl phthalate	NS	mg/kg	ND	ND	ND	ND
Di-n-butylphthalate	NS	mg/kg	ND	ND	ND	ND
Di-n-octylphthalate	NS	mg/kg	ND	ND	ND	ND
Diethyl phthalate	NS	mg/kg	ND	ND	ND	ND
Dimethyl phthalate	NS	mg/kg	ND	ND	ND	ND
Benzo(a)anthracene	1	mg/kg	ND	ND	ND	ND
Benzo(a)pyrene	1	mg/kg	ND	ND	ND	ND
Benzo(b)fluoranthene	1	mg/kg	ND	ND	ND	ND
Benzo(k)fluoranthene	0.8	mg/kg	ND	ND	ND	ND
Chrysene	1	mg/kg	ND	ND	ND	ND

Table 6b. Remaining Contamination in Soil - Semivolatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP21	EP22	EP23	EP24
SAMPLING DATE			7/17/2024	7/17/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2440298-14	L2440298-15	L2440298-16	L2440298-17
SAMPLE DEPTH (ft-bg)			12	12	12	12
			Qual	Qual	Qual	Qual
Semivolatile Organic Compounds						
Acenaphthylene	100	mg/kg	ND	ND	ND	ND
Anthracene	100	mg/kg	ND	ND	ND	ND
Benzo(ghi)perylene	100	mg/kg	ND	ND	ND	ND
Fluorene	30	mg/kg	ND	ND	ND	ND
Phenanthrene	100	mg/kg	ND	ND	ND	ND
Dibenzo(a,h)anthracene	0.33	mg/kg	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	ND	ND	ND	ND
Pyrene	100	mg/kg	ND	ND	ND	ND
Biphenyl	NS	mg/kg	ND	ND	ND	ND
4-Chloroaniline	NS	mg/kg	ND	ND	ND	ND
2-Nitroaniline	NS	mg/kg	ND	ND	ND	ND
3-Nitroaniline	NS	mg/kg	ND	ND	ND	ND
4-Nitroaniline	NS	mg/kg	ND	ND	ND	ND
Dibenzofuran	7	mg/kg	ND	ND	ND	ND
2-Methylnaphthalene	NS	mg/kg	ND	ND	ND	ND
1,2,4,5-Tetrachlorobenzene	NS	mg/kg	ND	ND	ND	ND
Acetophenone	NS	mg/kg	ND	ND	ND	ND
2,4,6-Trichlorophenol	NS	mg/kg	ND	ND	ND	ND
p-Chloro-m-cresol	NS	mg/kg	ND	ND	ND	ND
2-Chlorophenol	NS	mg/kg	ND	ND	ND	ND
2,4-Dichlorophenol	NS	mg/kg	ND	ND	ND	ND
2,4-Dimethylphenol	NS	mg/kg	ND	ND	ND	ND
2-Nitrophenol	NS	mg/kg	ND	ND	ND	ND
4-Nitrophenol	NS	mg/kg	ND	ND	ND	ND
2,4-Dinitrophenol	NS	mg/kg	ND	ND	ND	ND
4,6-Dinitro-o-cresol	NS	mg/kg	ND	ND	ND	ND
Pentachlorophenol	0.8	mg/kg	ND	ND	ND	ND
Phenol	0.33	mg/kg	ND	ND	ND	ND
2-Methylphenol	0.33	mg/kg	ND	ND	ND	ND
3-Methylphenol/4-Methylphenol	0.33	mg/kg	ND	ND	ND	ND
2,4,5-Trichlorophenol	NS	mg/kg	ND	ND	ND	ND
Benzoic Acid	NS	mg/kg	--	--	--	--
Benzyl Alcohol	NS	mg/kg	--	--	--	--
Carbazole	NS	mg/kg	ND	ND	ND	ND
Atrazine	NS	mg/kg	ND	ND	ND	ND



Table 6b. Remaining Contamination in Soil - Semivolatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP21	EP22	EP23	EP24
SAMPLING DATE			7/17/2024	7/17/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2440298-14	L2440298-15	L2440298-16	L2440298-17
SAMPLE DEPTH (ft-bg)			12	12	12	12
			Qual	Qual	Qual	Qual
Semivolatile Organic Compounds						
Benzaldehyde	NS	mg/kg	ND	ND	ND	ND
Caprolactam	NS	mg/kg	ND	ND	ND	ND
2,3,4,6-Tetrachlorophenol	NS	mg/kg	ND	ND	ND	ND
1,4-Dioxane	0.1	mg/kg	ND	ND	ND	ND

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard

-- = Not analyzed

Table 6b. Remaining Contamination in Soil - Semivolatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP25	EP26	EP26 DUP	EP27
SAMPLING DATE			7/19/2024	7/19/2024	7/19/2024	7/19/2024
LAB SAMPLE ID			L2440933-03	L2440933-04	L2440933-05	L2440933-06
SAMPLE DEPTH (ft-bg)			12	12	12	12
			Qual	Qual	Qual	Qual
Semivolatile Organic Compounds						
Acenaphthene	20	mg/kg	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NS	mg/kg	--	--	--	--
Hexachlorobenzene	0.33	mg/kg	ND	ND	ND	ND
Bis(2-chloroethyl)ether	NS	mg/kg	ND	ND	ND	ND
2-Chloronaphthalene	NS	mg/kg	ND	ND	ND	ND
1,2-Dichlorobenzene	1.1	mg/kg	--	--	--	--
1,3-Dichlorobenzene	2.4	mg/kg	--	--	--	--
1,4-Dichlorobenzene	1.8	mg/kg	--	--	--	--
3,3'-Dichlorobenzidine	NS	mg/kg	ND	ND	ND	ND
2,4-Dinitrotoluene	NS	mg/kg	ND	ND	ND	ND
2,6-Dinitrotoluene	NS	mg/kg	ND	ND	ND	ND
Fluoranthene	100	mg/kg	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NS	mg/kg	ND	ND	ND	ND
4-Bromophenyl phenyl ether	NS	mg/kg	ND	ND	ND	ND
Bis(2-chloroisopropyl)ether	NS	mg/kg	ND	ND	ND	ND
Bis(2-chloroethoxy)methane	NS	mg/kg	ND	ND	ND	ND
Hexachlorobutadiene	NS	mg/kg	ND	ND	ND	ND
Hexachlorocyclopentadiene	NS	mg/kg	ND	ND	ND	ND
Hexachloroethane	NS	mg/kg	ND	ND	ND	ND
Isophorone	NS	mg/kg	ND	ND	ND	ND
Naphthalene	12	mg/kg	ND	ND	ND	ND
Nitrobenzene	NS	mg/kg	ND	ND	ND	ND
NDPA/DPA	NS	mg/kg	ND	ND	ND	ND
n-Nitrosodi-n-propylamine	NS	mg/kg	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	NS	mg/kg	ND	ND	ND	ND
Butyl benzyl phthalate	NS	mg/kg	ND	ND	ND	ND
Di-n-butylphthalate	NS	mg/kg	ND	ND	ND	ND
Di-n-octylphthalate	NS	mg/kg	ND	ND	ND	ND
Diethyl phthalate	NS	mg/kg	ND	ND	ND	ND
Dimethyl phthalate	NS	mg/kg	ND	ND	ND	ND
Benzo(a)anthracene	1	mg/kg	ND	ND	ND	ND
Benzo(a)pyrene	1	mg/kg	ND	ND	ND	ND
Benzo(b)fluoranthene	1	mg/kg	ND	ND	ND	ND
Benzo(k)fluoranthene	0.8	mg/kg	ND	ND	ND	ND
Chrysene	1	mg/kg	ND	ND	ND	ND

Table 6b. Remaining Contamination in Soil - Semivolatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP25	EP26	EP26 DUP	EP27
SAMPLING DATE			7/19/2024	7/19/2024	7/19/2024	7/19/2024
LAB SAMPLE ID			L2440933-03	L2440933-04	L2440933-05	L2440933-06
SAMPLE DEPTH (ft-bg)			12	12	12	12
			Qual	Qual	Qual	Qual
Semivolatile Organic Compounds						
Acenaphthylene	100	mg/kg	ND	ND	ND	ND
Anthracene	100	mg/kg	ND	ND	ND	ND
Benzo(ghi)perylene	100	mg/kg	ND	ND	ND	ND
Fluorene	30	mg/kg	ND	ND	ND	ND
Phenanthrene	100	mg/kg	ND	ND	ND	ND
Dibenzo(a,h)anthracene	0.33	mg/kg	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	ND	ND	ND	ND
Pyrene	100	mg/kg	ND	ND	ND	ND
Biphenyl	NS	mg/kg	ND	ND	ND	ND
4-Chloroaniline	NS	mg/kg	ND	ND	ND	ND
2-Nitroaniline	NS	mg/kg	ND	ND	ND	ND
3-Nitroaniline	NS	mg/kg	ND	ND	ND	ND
4-Nitroaniline	NS	mg/kg	ND	ND	ND	ND
Dibenzofuran	7	mg/kg	ND	ND	ND	ND
2-Methylnaphthalene	NS	mg/kg	ND	ND	ND	ND
1,2,4,5-Tetrachlorobenzene	NS	mg/kg	ND	ND	ND	ND
Acetophenone	NS	mg/kg	ND	ND	ND	ND
2,4,6-Trichlorophenol	NS	mg/kg	ND	ND	ND	ND
p-Chloro-m-cresol	NS	mg/kg	ND	ND	ND	ND
2-Chlorophenol	NS	mg/kg	ND	ND	ND	ND
2,4-Dichlorophenol	NS	mg/kg	ND	ND	ND	ND
2,4-Dimethylphenol	NS	mg/kg	ND	ND	ND	ND
2-Nitrophenol	NS	mg/kg	ND	ND	ND	ND
4-Nitrophenol	NS	mg/kg	ND	ND	ND	ND
2,4-Dinitrophenol	NS	mg/kg	ND	ND	ND	ND
4,6-Dinitro-o-cresol	NS	mg/kg	ND	ND	ND	ND
Pentachlorophenol	0.8	mg/kg	ND	ND	ND	ND
Phenol	0.33	mg/kg	ND	ND	ND	ND
2-Methylphenol	0.33	mg/kg	ND	ND	ND	ND
3-Methylphenol/4-Methylphenol	0.33	mg/kg	ND	ND	ND	ND
2,4,5-Trichlorophenol	NS	mg/kg	ND	ND	ND	ND
Benzoic Acid	NS	mg/kg	--	--	--	--
Benzyl Alcohol	NS	mg/kg	--	--	--	--
Carbazole	NS	mg/kg	ND	ND	ND	ND
Atrazine	NS	mg/kg	ND	ND	ND	ND

Table 6b. Remaining Contamination in Soil - Semivolatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP25	EP26	EP26 DUP	EP27
SAMPLING DATE			7/19/2024	7/19/2024	7/19/2024	7/19/2024
LAB SAMPLE ID			L2440933-03	L2440933-04	L2440933-05	L2440933-06
SAMPLE DEPTH (ft-bg)			12	12	12	12
			Qual	Qual	Qual	Qual
Semivolatile Organic Compounds						
Benzaldehyde	NS	mg/kg	ND	ND	ND	ND
Caprolactam	NS	mg/kg	ND	ND	ND	ND
2,3,4,6-Tetrachlorophenol	NS	mg/kg	ND	ND	ND	ND
1,4-Dioxane	0.1	mg/kg	ND	ND	ND	ND

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard

-- = Not analyzed

Table 6b. Remaining Contamination in Soil - Semivolatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP28	EP29	EP30	EP30 DUP
SAMPLING DATE			7/24/2024	7/24/2024	7/31/2024	7/31/2024
LAB SAMPLE ID			L2441719-01	L2441719-02	L2443186-01	L2443186-02
SAMPLE DEPTH (ft-bg)			12	12	19	19
			Qual	Qual	Qual	Qual
Semivolatile Organic Compounds						
Acenaphthene	20	mg/kg	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NS	mg/kg	ND	ND	--	--
Hexachlorobenzene	0.33	mg/kg	ND	ND	ND	ND
Bis(2-chloroethyl)ether	NS	mg/kg	ND	ND	ND	ND
2-Chloronaphthalene	NS	mg/kg	ND	ND	ND	ND
1,2-Dichlorobenzene	1.1	mg/kg	ND	ND	--	--
1,3-Dichlorobenzene	2.4	mg/kg	ND	ND	--	--
1,4-Dichlorobenzene	1.8	mg/kg	ND	ND	--	--
3,3'-Dichlorobenzidine	NS	mg/kg	ND	ND	ND	ND
2,4-Dinitrotoluene	NS	mg/kg	ND	ND	ND	ND
2,6-Dinitrotoluene	NS	mg/kg	ND	ND	ND	ND
Fluoranthene	100	mg/kg	0.22	0.042 J	ND	ND
4-Chlorophenyl phenyl ether	NS	mg/kg	ND	ND	ND	ND
4-Bromophenyl phenyl ether	NS	mg/kg	ND	ND	ND	ND
Bis(2-chloroisopropyl)ether	NS	mg/kg	ND	ND	ND	ND
Bis(2-chloroethoxy)methane	NS	mg/kg	ND	ND	ND	ND
Hexachlorobutadiene	NS	mg/kg	ND	ND	ND	ND
Hexachlorocyclopentadiene	NS	mg/kg	ND	ND	ND	ND
Hexachloroethane	NS	mg/kg	ND	ND	ND	ND
Isophorone	NS	mg/kg	ND	ND	ND	ND
Naphthalene	12	mg/kg	ND	ND	ND	ND
Nitrobenzene	NS	mg/kg	ND	ND	ND	ND
NDPA/DPA	NS	mg/kg	ND	ND	ND	ND
n-Nitrosodi-n-propylamine	NS	mg/kg	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	NS	mg/kg	ND	ND	ND	ND
Butyl benzyl phthalate	NS	mg/kg	ND	ND	ND	ND
Di-n-butylphthalate	NS	mg/kg	ND	ND	ND	ND
Di-n-octylphthalate	NS	mg/kg	ND	ND	ND	ND
Diethyl phthalate	NS	mg/kg	ND	ND	ND	ND
Dimethyl phthalate	NS	mg/kg	ND	ND	ND	ND
Benzo(a)anthracene	1	mg/kg	0.12	0.026 J	ND	ND
Benzo(a)pyrene	1	mg/kg	0.11 J	ND	ND	ND
Benzo(b)fluoranthene	1	mg/kg	0.12	ND	ND	ND
Benzo(k)fluoranthene	0.8	mg/kg	0.038 J	ND	ND	ND
Chrysene	1	mg/kg	0.12	0.023 J	ND	ND

Table 6b. Remaining Contamination in Soil - Semivolatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP28	EP29	EP30	EP30 DUP
SAMPLING DATE			7/24/2024	7/24/2024	7/31/2024	7/31/2024
LAB SAMPLE ID			L2441719-01	L2441719-02	L2443186-01	L2443186-02
SAMPLE DEPTH (ft-bg)			12	12	19	19
			Qual	Qual	Qual	Qual
Semivolatile Organic Compounds						
Acenaphthylene	100	mg/kg	ND	ND	ND	ND
Anthracene	100	mg/kg	0.036 J	ND	ND	ND
Benzo(ghi)perylene	100	mg/kg	0.066 J	ND	ND	ND
Fluorene	30	mg/kg	ND	ND	ND	ND
Phenanthrene	100	mg/kg	0.16	0.029 J	ND	ND
Dibenzo(a,h)anthracene	0.33	mg/kg	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	0.061 J	ND	ND	ND
Pyrene	100	mg/kg	0.23	0.044 J	ND	ND
Biphenyl	NS	mg/kg	ND	ND	ND	ND
4-Chloroaniline	NS	mg/kg	ND	ND	ND	ND
2-Nitroaniline	NS	mg/kg	ND	ND	ND	ND
3-Nitroaniline	NS	mg/kg	ND	ND	ND	ND
4-Nitroaniline	NS	mg/kg	ND	ND	ND	ND
Dibenzofuran	7	mg/kg	ND	ND	ND	ND
2-Methylnaphthalene	NS	mg/kg	ND	ND	ND	ND
1,2,4,5-Tetrachlorobenzene	NS	mg/kg	ND	ND	ND	ND
Acetophenone	NS	mg/kg	ND	ND	ND	ND
2,4,6-Trichlorophenol	NS	mg/kg	ND	ND	ND	ND
p-Chloro-m-cresol	NS	mg/kg	ND	ND	ND	ND
2-Chlorophenol	NS	mg/kg	ND	ND	ND	ND
2,4-Dichlorophenol	NS	mg/kg	ND	ND	ND	ND
2,4-Dimethylphenol	NS	mg/kg	ND	ND	ND	ND
2-Nitrophenol	NS	mg/kg	ND	ND	ND	ND
4-Nitrophenol	NS	mg/kg	ND	ND	ND	ND
2,4-Dinitrophenol	NS	mg/kg	ND	ND	ND	ND
4,6-Dinitro-o-cresol	NS	mg/kg	ND	ND	ND	ND
Pentachlorophenol	0.8	mg/kg	ND	ND	ND	ND
Phenol	0.33	mg/kg	ND	ND	ND	ND
2-Methylphenol	0.33	mg/kg	ND	ND	ND	ND
3-Methylphenol/4-Methylphenol	0.33	mg/kg	ND	ND	ND	ND
2,4,5-Trichlorophenol	NS	mg/kg	ND	ND	ND	ND
Benzoic Acid	NS	mg/kg	ND	ND	--	--
Benzyl Alcohol	NS	mg/kg	ND	ND	--	--
Carbazole	NS	mg/kg	ND	ND	ND	ND
Atrazine	NS	mg/kg	--	--	ND	ND

Table 6b. Remaining Contamination in Soil - Semivolatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP28	EP29	EP30	EP30 DUP
SAMPLING DATE			7/24/2024	7/24/2024	7/31/2024	7/31/2024
LAB SAMPLE ID			L2441719-01	L2441719-02	L2443186-01	L2443186-02
SAMPLE DEPTH (ft-bg)			12	12	19	19
			Qual	Qual	Qual	Qual
Semivolatile Organic Compounds						
Benzaldehyde	NS	mg/kg	--	--	ND	ND
Caprolactam	NS	mg/kg	--	--	ND	ND
2,3,4,6-Tetrachlorophenol	NS	mg/kg	--	--	ND	ND
1,4-Dioxane	0.1	mg/kg	ND	ND	ND	ND

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard

-- = Not analyzed

Table 6b. Remaining Contamination in Soil - Semivolatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	SW1	EP-31	EP-32	EP-33
SAMPLING DATE			7/31/2024	8/26/2024	8/26/2024	8/26/2024
LAB SAMPLE ID			L2443186-03	L2448656-01	L2448656-02	L2448656-03
SAMPLE DEPTH (ft-bg)			19	12	12	12
			Qual	Qual	Qual	Qual
Semivolatile Organic Compounds						
Acenaphthene	20	mg/kg	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NS	mg/kg	--	ND	ND	ND
Hexachlorobenzene	0.33	mg/kg	ND	ND	ND	ND
Bis(2-chloroethyl)ether	NS	mg/kg	ND	ND	ND	ND
2-Chloronaphthalene	NS	mg/kg	ND	ND	ND	ND
1,2-Dichlorobenzene	1.1	mg/kg	--	ND	ND	ND
1,3-Dichlorobenzene	2.4	mg/kg	--	ND	ND	ND
1,4-Dichlorobenzene	1.8	mg/kg	--	ND	ND	ND
3,3'-Dichlorobenzidine	NS	mg/kg	ND	ND	ND	ND
2,4-Dinitrotoluene	NS	mg/kg	ND	ND	ND	ND
2,6-Dinitrotoluene	NS	mg/kg	ND	ND	ND	ND
Fluoranthene	100	mg/kg	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NS	mg/kg	ND	ND	ND	ND
4-Bromophenyl phenyl ether	NS	mg/kg	ND	ND	ND	ND
Bis(2-chloroisopropyl)ether	NS	mg/kg	ND	ND	ND	ND
Bis(2-chloroethoxy)methane	NS	mg/kg	ND	ND	ND	ND
Hexachlorobutadiene	NS	mg/kg	ND	ND	ND	ND
Hexachlorocyclopentadiene	NS	mg/kg	ND	ND	ND	ND
Hexachloroethane	NS	mg/kg	ND	ND	ND	ND
Isophorone	NS	mg/kg	ND	ND	ND	ND
Naphthalene	12	mg/kg	ND	ND	ND	ND
Nitrobenzene	NS	mg/kg	ND	ND	ND	ND
NDPA/DPA	NS	mg/kg	ND	ND	ND	ND
n-Nitrosodi-n-propylamine	NS	mg/kg	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	NS	mg/kg	ND	ND	ND	ND
Butyl benzyl phthalate	NS	mg/kg	ND	ND	ND	ND
Di-n-butylphthalate	NS	mg/kg	ND	ND	ND	ND
Di-n-octylphthalate	NS	mg/kg	ND	ND	ND	ND
Diethyl phthalate	NS	mg/kg	ND	ND	ND	ND
Dimethyl phthalate	NS	mg/kg	ND	ND	ND	ND
Benzo(a)anthracene	1	mg/kg	ND	ND	ND	ND
Benzo(a)pyrene	1	mg/kg	ND	ND	ND	ND
Benzo(b)fluoranthene	1	mg/kg	ND	ND	ND	ND
Benzo(k)fluoranthene	0.8	mg/kg	ND	ND	ND	ND
Chrysene	1	mg/kg	ND	ND	ND	ND



Table 6b. Remaining Contamination in Soil - Semivolatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	SW1	EP-31	EP-32	EP-33
SAMPLING DATE			7/31/2024	8/26/2024	8/26/2024	8/26/2024
LAB SAMPLE ID			L2443186-03	L2448656-01	L2448656-02	L2448656-03
SAMPLE DEPTH (ft-bg)			19	12	12	12
			Qual	Qual	Qual	Qual
Semivolatile Organic Compounds						
Acenaphthylene	100	mg/kg	ND	ND	ND	ND
Anthracene	100	mg/kg	ND	ND	ND	ND
Benzo(ghi)perylene	100	mg/kg	ND	ND	ND	ND
Fluorene	30	mg/kg	ND	ND	ND	ND
Phenanthrene	100	mg/kg	ND	ND	ND	ND
Dibenzo(a,h)anthracene	0.33	mg/kg	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	ND	ND	ND	ND
Pyrene	100	mg/kg	ND	ND	ND	ND
Biphenyl	NS	mg/kg	ND	ND	ND	ND
4-Chloroaniline	NS	mg/kg	ND	ND	ND	ND
2-Nitroaniline	NS	mg/kg	ND	ND	ND	ND
3-Nitroaniline	NS	mg/kg	ND	ND	ND	ND
4-Nitroaniline	NS	mg/kg	ND	ND	ND	ND
Dibenzofuran	7	mg/kg	ND	ND	ND	ND
2-Methylnaphthalene	NS	mg/kg	ND	ND	ND	ND
1,2,4,5-Tetrachlorobenzene	NS	mg/kg	ND	ND	ND	ND
Acetophenone	NS	mg/kg	ND	ND	ND	ND
2,4,6-Trichlorophenol	NS	mg/kg	ND	ND	ND	ND
p-Chloro-m-cresol	NS	mg/kg	ND	ND	ND	ND
2-Chlorophenol	NS	mg/kg	ND	ND	ND	ND
2,4-Dichlorophenol	NS	mg/kg	ND	ND	ND	ND
2,4-Dimethylphenol	NS	mg/kg	ND	ND	ND	ND
2-Nitrophenol	NS	mg/kg	ND	ND	ND	ND
4-Nitrophenol	NS	mg/kg	ND	ND	ND	ND
2,4-Dinitrophenol	NS	mg/kg	ND	ND	ND	ND
4,6-Dinitro-o-cresol	NS	mg/kg	ND	ND	ND	ND
Pentachlorophenol	0.8	mg/kg	ND	ND	ND	ND
Phenol	0.33	mg/kg	ND	ND	ND	ND
2-Methylphenol	0.33	mg/kg	ND	ND	ND	ND
3-Methylphenol/4-Methylphenol	0.33	mg/kg	ND	ND	ND	ND
2,4,5-Trichlorophenol	NS	mg/kg	ND	ND	ND	ND
Benzoic Acid	NS	mg/kg	--	ND	ND	ND
Benzyl Alcohol	NS	mg/kg	--	ND	ND	ND
Carbazole	NS	mg/kg	ND	ND	ND	ND
Atrazine	NS	mg/kg	ND	--	--	--

Table 6b. Remaining Contamination in Soil - Semivolatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	SW1	EP-31	EP-32	EP-33
SAMPLING DATE			7/31/2024	8/26/2024	8/26/2024	8/26/2024
LAB SAMPLE ID			L2443186-03	L2448656-01	L2448656-02	L2448656-03
SAMPLE DEPTH (ft-bg)			19	12	12	12
			Qual	Qual	Qual	Qual
Semivolatile Organic Compounds						
Benzaldehyde	NS	mg/kg	ND	--	--	--
Caprolactam	NS	mg/kg	ND	--	--	--
2,3,4,6-Tetrachlorophenol	NS	mg/kg	ND	--	--	--
1,4-Dioxane	0.1	mg/kg	ND	ND	ND	ND

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil  
Cleanup Objectives  
J = Estimated value  
ND = Not detected  
NS = No standard  
-- = Not analyzed

Table 6b. Remaining Contamination in Soil - Semivolatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP-34
SAMPLING DATE			8/26/2024
LAB SAMPLE ID			L2448656-04
SAMPLE DEPTH (ft-bg)			12
			Qual
<b>Semivolatile Organic Compounds</b>			
Acenaphthene	20	mg/kg	ND
1,2,4-Trichlorobenzene	NS	mg/kg	ND
Hexachlorobenzene	0.33	mg/kg	ND
Bis(2-chloroethyl)ether	NS	mg/kg	ND
2-Chloronaphthalene	NS	mg/kg	ND
1,2-Dichlorobenzene	1.1	mg/kg	ND
1,3-Dichlorobenzene	2.4	mg/kg	ND
1,4-Dichlorobenzene	1.8	mg/kg	ND
3,3'-Dichlorobenzidine	NS	mg/kg	ND
2,4-Dinitrotoluene	NS	mg/kg	ND
2,6-Dinitrotoluene	NS	mg/kg	ND
Fluoranthene	100	mg/kg	ND
4-Chlorophenyl phenyl ether	NS	mg/kg	ND
4-Bromophenyl phenyl ether	NS	mg/kg	ND
Bis(2-chloroisopropyl)ether	NS	mg/kg	ND
Bis(2-chloroethoxy)methane	NS	mg/kg	ND
Hexachlorobutadiene	NS	mg/kg	ND
Hexachlorocyclopentadiene	NS	mg/kg	ND
Hexachloroethane	NS	mg/kg	ND
Isophorone	NS	mg/kg	ND
Naphthalene	12	mg/kg	ND
Nitrobenzene	NS	mg/kg	ND
NDPA/DPA	NS	mg/kg	ND
n-Nitrosodi-n-propylamine	NS	mg/kg	ND
Bis(2-ethylhexyl)phthalate	NS	mg/kg	ND
Butyl benzyl phthalate	NS	mg/kg	ND
Di-n-butylphthalate	NS	mg/kg	ND
Di-n-octylphthalate	NS	mg/kg	ND
Diethyl phthalate	NS	mg/kg	ND
Dimethyl phthalate	NS	mg/kg	ND
Benzo(a)anthracene	1	mg/kg	ND
Benzo(a)pyrene	1	mg/kg	ND
Benzo(b)fluoranthene	1	mg/kg	ND
Benzo(k)fluoranthene	0.8	mg/kg	ND
Chrysene	1	mg/kg	ND

Table 6b. Remaining Contamination in Soil - Semivolatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP-34
SAMPLING DATE			8/26/2024
LAB SAMPLE ID			L2448656-04
SAMPLE DEPTH (ft-bg)			12
			Qual
<b>Semivolatile Organic Compounds</b>			
Acenaphthylene	100	mg/kg	ND
Anthracene	100	mg/kg	ND
Benzo(ghi)perylene	100	mg/kg	ND
Fluorene	30	mg/kg	ND
Phenanthrene	100	mg/kg	ND
Dibenzo(a,h)anthracene	0.33	mg/kg	ND
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	ND
Pyrene	100	mg/kg	ND
Biphenyl	NS	mg/kg	ND
4-Chloroaniline	NS	mg/kg	ND
2-Nitroaniline	NS	mg/kg	ND
3-Nitroaniline	NS	mg/kg	ND
4-Nitroaniline	NS	mg/kg	ND
Dibenzofuran	7	mg/kg	ND
2-Methylnaphthalene	NS	mg/kg	ND
1,2,4,5-Tetrachlorobenzene	NS	mg/kg	ND
Acetophenone	NS	mg/kg	ND
2,4,6-Trichlorophenol	NS	mg/kg	ND
p-Chloro-m-cresol	NS	mg/kg	ND
2-Chlorophenol	NS	mg/kg	ND
2,4-Dichlorophenol	NS	mg/kg	ND
2,4-Dimethylphenol	NS	mg/kg	ND
2-Nitrophenol	NS	mg/kg	ND
4-Nitrophenol	NS	mg/kg	ND
2,4-Dinitrophenol	NS	mg/kg	ND
4,6-Dinitro-o-cresol	NS	mg/kg	ND
Pentachlorophenol	0.8	mg/kg	ND
Phenol	0.33	mg/kg	ND
2-Methylphenol	0.33	mg/kg	ND
3-Methylphenol/4-Methylphenol	0.33	mg/kg	ND
2,4,5-Trichlorophenol	NS	mg/kg	ND
Benzoic Acid	NS	mg/kg	ND
Benzyl Alcohol	NS	mg/kg	ND
Carbazole	NS	mg/kg	ND
Atrazine	NS	mg/kg	--

Table 6b. Remaining Contamination in Soil - Semivolatile Organic Compounds  
 94-15 Sutphin Boulevard - Site B  
 BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP-34
SAMPLING DATE			8/26/2024
LAB SAMPLE ID			L2448656-04
SAMPLE DEPTH (ft-bg)			12
			Qual
Semivolatile Organic Compounds			
Benzaldehyde	NS	mg/kg	--
Caprolactam	NS	mg/kg	--
2,3,4,6-Tetrachlorophenol	NS	mg/kg	--
1,4-Dioxane	0.1	mg/kg	ND

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard

-- = Not analyzed

Table 6c. Remaining Contamination in Soil - Metals  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP1	EP2	EP3	EP4	EP5	EP6	EP7	EP8	EP9
SAMPLING DATE			7/15/2024	7/15/2024	7/15/2024	7/15/2024	7/15/2024	7/15/2024	7/15/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2439688-01	L2439688-02	L2439688-03	L2439688-04	L2439688-05	L2439688-06	L2439688-07	L2440298-01	L2440298-02
SAMPLE DEPTH (ft-bg)			12	12	12	12	12	12	12	12	12
			Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual
<b>Total Metals</b>											
Aluminum, Total	NS	mg/kg	3000	2190	2020	2950	3010	3000	2370	2600	2540
Antimony, Total	NS	mg/kg	0.327 J	ND	ND	ND	ND	0.354 J	ND	ND	ND
Arsenic, Total	13	mg/kg	1.34	1.09	0.625 J	1.56	1.33	1.8	0.914	1.48	1.44
Barium, Total	350	mg/kg	19.4	15.8	10.1	20.7	20.5	21.4	19.4	28.8	23.4
Beryllium, Total	7.2	mg/kg	0.192 J	0.217 J	0.137 J	0.204 J	0.16 J	0.239 J	0.146 J	0.248 J	0.141 J
Cadmium, Total	2.5	mg/kg	ND	ND	ND	0.097 J	ND	0.13 J	ND	ND	ND
Calcium, Total	NS	mg/kg	261	117	202	2060	162	411	216	384	362
Chromium, Total	NS	mg/kg	10.2	8.07	6.67	10.4	8.04	12.2	7.17	9.85	7.59
Cobalt, Total	NS	mg/kg	3.34	3.1	2.21	3.19	3.12	4.61	3	3.59	3.05
Copper, Total	50	mg/kg	9.04	6.21	6.48	10	7.84	11.8	6.86	10.6	8.2
Iron, Total	NS	mg/kg	17200	11100	10800	19900	14700	24700	15100	23600	10500
Lead, Total	63	mg/kg	2.1 J	1.32 J	1.3 J	9.2	1.74 J	2.2 J	1.37 J	1.85 J	1.58 J
Magnesium, Total	NS	mg/kg	853	738	559	897	996	919	790	865	917
Manganese, Total	1600	mg/kg	194	222	133	260	285	494	364	500	177
Mercury, Total	0.18	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel, Total	30	mg/kg	7.55	7.58	4.38	7	7.37	8.86	5.98	7.78	6.27
Potassium, Total	NS	mg/kg	384	419	302	361	550	470	455	354	495
Selenium, Total	3.9	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver, Total	2	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium, Total	NS	mg/kg	189	84.8 J	32.9 J	88.4 J	196	59.6 J	41 J	20.1 J	26.9 J
Thallium, Total	NS	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium, Total	NS	mg/kg	16.8	9.73	12.2	14.8	12.7	23.6	11.2	23.7	9.66
Zinc, Total	109	mg/kg	13.6	12	9.34	23.1	13.2	17.1	13.8	13	8.94

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard

Table 6c. Remaining Contamination in Soil - Metals  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP10	EP11	EP12	EP13	EP14	EP15	EP16	EP17	EP18
SAMPLING DATE			7/17/2024	7/17/2024	7/17/2024	7/17/2024	7/17/2024	7/17/2024	7/17/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2440298-03	L2440298-04	L2440298-05	L2440298-06	L2440298-07	L2440298-08	L2440298-09	L2440298-10	L2440298-11
SAMPLE DEPTH (ft-bg)			12	12	12	12	12	12	12	12	12
			Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual
<b>Total Metals</b>											
Aluminum, Total	NS	mg/kg	2710	2460	3210	3010	3060	2850	2540	2330	2760
Antimony, Total	NS	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic, Total	13	mg/kg	0.798 J	0.954	1.31	2.23	1.52	1.15	1.2	1.11	1.05
Barium, Total	350	mg/kg	19.4	22.8	25.8	21.6	29	22	24.4	27.6	22.8
Beryllium, Total	7.2	mg/kg	0.168 J	0.135 J	0.208 J	0.19 J	0.219 J	0.249 J	0.18 J	0.159 J	0.167 J
Cadmium, Total	2.5	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
Calcium, Total	NS	mg/kg	309	316	296	539	350	329	370	224	280
Chromium, Total	NS	mg/kg	7.62	8.02	11.1	12.9	10.2	7.1	9.82	8.03	10.3
Cobalt, Total	NS	mg/kg	2.41	2.52	3.73	3.21	3.31	2.96	2.98	3.44	3.63
Copper, Total	50	mg/kg	6.54	6.87	7.39	10.2	10.1	8.12	10.1	7.12	8.53
Iron, Total	NS	mg/kg	10600	12600	13800	17800	17800	15400	15500	12800	12800
Lead, Total	63	mg/kg	1.66 J	1.3 J	2.1 J	1.82 J	2.24 J	2.27 J	1.7 J	1.61 J	1.85 J
Magnesium, Total	NS	mg/kg	753	1100	1080	1050	900	880	905	802	995
Manganese, Total	1600	mg/kg	187	216	267	268	328	258	256	318	262
Mercury, Total	0.18	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel, Total	30	mg/kg	5.6	5.67	8.39	8.19	8.81	6.39	6.83	6.16	9.34
Potassium, Total	NS	mg/kg	349	514	477	461	502	488	437	434	516
Selenium, Total	3.9	mg/kg	0.322 J	0.24 J	ND	ND	ND	0.202 J	0.268 J	ND	0.249 J
Silver, Total	2	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium, Total	NS	mg/kg	64.6 J	25.9 J	135 J	103 J	70.6 J	70 J	35.1 J	75.2 J	71.5 J
Thallium, Total	NS	mg/kg	ND	ND	ND	0.312 J	ND	0.247 J	ND	ND	ND
Vanadium, Total	NS	mg/kg	9.68	11.3	14	17.5	16.9	14	16.9	11.6	13.8
Zinc, Total	109	mg/kg	11.4	10.5	13.3	13.4	13.5	13.6	11.5	11.8	13.1

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard

Table 6c. Remaining Contamination in Soil - Metals  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP19	EP20	EP21	EP22	EP23	EP24	EP25	EP26	EP26 DUP
SAMPLING DATE			7/17/2024	7/17/2024	7/17/2024	7/17/2024	7/17/2024	7/17/2024	7/19/2024	7/19/2024	7/19/2024
LAB SAMPLE ID			L2440298-12	L2440298-13	L2440298-14	L2440298-15	L2440298-16	L2440298-17	L2440933-03	L2440933-04	L2440933-05
SAMPLE DEPTH (ft-bg)			12	12	12	12	12	12	12	12	12
			Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual
<b>Total Metals</b>											
Aluminum, Total	NS	mg/kg	2460	2210	3110	3040	2600	2430	1870	2340	2130
Antimony, Total	NS	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic, Total	13	mg/kg	1.22	1.36	1.86	2.14	1.23	1.07	0.789 J	1.24	0.899
Barium, Total	350	mg/kg	19.6	16.7	24	23.6	19.2	17.2	19.6	43.7	20.9
Beryllium, Total	7.2	mg/kg	0.204 J	0.205 J	0.254 J	0.297 J	0.203 J	0.134 J	0.15 J	0.201 J	0.174 J
Cadmium, Total	2.5	mg/kg	ND	ND	ND	0.127 J	ND	ND	ND	ND	ND
Calcium, Total	NS	mg/kg	470	292	294	409	198	233	302	311	241
Chromium, Total	NS	mg/kg	8.02	10.2	10.8	12.3	10	7.87	5.92	5.97	6.97
Cobalt, Total	NS	mg/kg	3.02	3.35	3.6	5.31	3.08	2.81	2.9	5.43	2.77
Copper, Total	50	mg/kg	8.04	7.9	11	12.8	8.46	6.77	6.35	8.7	6.94
Iron, Total	NS	mg/kg	15600	21300	18500	28400	15800	10900	9460	14900	12800
Lead, Total	63	mg/kg	2.42 J	1.97 J	1.93 J	2.71 J	1.8 J	1.48 J	1.83 J	1.78 J	2.45 J
Magnesium, Total	NS	mg/kg	1080	651	986	984	938	758	825	712	664
Manganese, Total	1600	mg/kg	231	325	336	575	265	235	260	780	343
Mercury, Total	0.18	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel, Total	30	mg/kg	7.9	5.31	7.76	9.36	6.58	6.55	4.2	6.21	4.59
Potassium, Total	NS	mg/kg	370	372	510	439	470	372	342	313	319
Selenium, Total	3.9	mg/kg	ND	ND	0.441 J	0.411 J	ND	ND	ND	0.293 J	ND
Silver, Total	2	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium, Total	NS	mg/kg	86 J	43.6 J	112 J	68.1 J	136 J	83.2 J	16.4 J	30.9 J	27.2 J
Thallium, Total	NS	mg/kg	ND	ND	ND	0.33 J	ND	ND	ND	ND	ND
Vanadium, Total	NS	mg/kg	14.2	14.7	13.9	28.3	14	9.68	8.04	13.2	10.1
Zinc, Total	109	mg/kg	10.9	13.2	13.2	21.9	12.4	9.02	12	14.1	9.87

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard



Table 6c. Remaining Contamination in Soil - Metals  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP27	EP28	EP29	EP30	EP30 DUP	SW1	EP-31	EP-32	EP-33
SAMPLING DATE			7/19/2024	7/24/2024	7/24/2024	7/31/2024	7/31/2024	7/31/2024	8/26/2024	8/26/2024	8/26/2024
LAB SAMPLE ID			L2440933-06	L2441719-01	L2441719-02	L2443186-01	L2443186-02	L2443186-03	L2448656-01	L2448656-02	L2448656-03
SAMPLE DEPTH (ft-bg)			12	12	12	19	19	19	12	12	12
			Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual
<b>Total Metals</b>											
Aluminum, Total	NS	mg/kg	2250	2890	2130	2750	2140	2780	1970	2010	2070
Antimony, Total	NS	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic, Total	13	mg/kg	0.839 J	1.32	0.585 J	1.21	0.706 J	1.14	ND	0.948	1.02
Barium, Total	350	mg/kg	16.3	19.3	12.9	37.2	14.6	20.8	12.2	15.1	16
Beryllium, Total	7.2	mg/kg	0.15 J	0.199 J	0.096 J	0.357 J	0.126 J	0.186 J	ND	ND	ND
Cadmium, Total	2.5	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
Calcium, Total	NS	mg/kg	245	970	335	348	250	400	268	294	219
Chromium, Total	NS	mg/kg	7.14	8.39	4.92	9.15	6.2	8.85	6.3	7.59	6.08
Cobalt, Total	NS	mg/kg	2.28	2.88	2.27	3.74	2.11	2.79	2.24	2.36	2.68
Copper, Total	50	mg/kg	5.89	7.4	9.73	7.71	4.79	8.34	5.54	6.26	7.24
Iron, Total	NS	mg/kg	9850	14900	8370	16500	8480	13900	9010	12000	13000
Lead, Total	63	mg/kg	1.5 J	3.21 J	1.3 J	2.16 J	1.11 J	1.66 J	ND	ND	ND
Magnesium, Total	NS	mg/kg	804	858	600	912	815	841	701	709	685
Manganese, Total	1600	mg/kg	154	220	120	344	138	269	153	206	161
Mercury, Total	0.18	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel, Total	30	mg/kg	4.95	6.14	4.26	6.87	5.31	6.69	7.36	6.04	5.48
Potassium, Total	NS	mg/kg	328	430	395	522	386	450	308	340	342
Selenium, Total	3.9	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver, Total	2	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium, Total	NS	mg/kg	25.9 J	59.2 J	32.9 J	48.8 J	36.2 J	51.2 J	ND	ND	ND
Thallium, Total	NS	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium, Total	NS	mg/kg	10.1	13.2	7.83	19.3	8.59	13	8.2	12.3	9.51
Zinc, Total	109	mg/kg	8.82	14.2	8.34	13.2	7.92	10	8.29	8.72	10.6

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard

Table 6c. Remaining Contamination in Soil - Metals  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP-34
SAMPLING DATE			8/26/2024
LAB SAMPLE ID			L2448656-04
SAMPLE DEPTH (ft-bg)			12
			Qual
Total Metals			
Aluminum, Total	NS	mg/kg	2520
Antimony, Total	NS	mg/kg	ND
Arsenic, Total	13	mg/kg	1.41
Barium, Total	350	mg/kg	24.6
Beryllium, Total	7.2	mg/kg	ND
Cadmium, Total	2.5	mg/kg	ND
Calcium, Total	NS	mg/kg	430
Chromium, Total	NS	mg/kg	9.06
Cobalt, Total	NS	mg/kg	3.34
Copper, Total	50	mg/kg	9.18
Iron, Total	NS	mg/kg	15200
Lead, Total	63	mg/kg	ND
Magnesium, Total	NS	mg/kg	1010
Manganese, Total	1600	mg/kg	279
Mercury, Total	0.18	mg/kg	ND
Nickel, Total	30	mg/kg	7.74
Potassium, Total	NS	mg/kg	470
Selenium, Total	3.9	mg/kg	ND
Silver, Total	2	mg/kg	ND
Sodium, Total	NS	mg/kg	ND
Thallium, Total	NS	mg/kg	ND
Vanadium, Total	NS	mg/kg	16
Zinc, Total	109	mg/kg	13.4

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard

Table 6d. Remaining Contamination in Soil - Pesticides and Polychlorinated Biphenyls  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP1	EP2	EP3	EP4	EP5	EP6	EP7	EP8	EP9	EP10	EP11
SAMPLING DATE			7/15/2024	7/15/2024	7/15/2024	7/15/2024	7/15/2024	7/15/2024	7/15/2024	7/17/2024	7/17/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2439688-01	L2439688-02	L2439688-03	L2439688-04	L2439688-05	L2439688-06	L2439688-07	L2440298-01	L2440298-02	L2440298-03	L2440298-04
SAMPLE DEPTH (ft-bg)			12	12	12	12	12	12	12	12	12	12	12
			Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual
<b>Pesticides</b>													
Delta-BHC	0.04	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lindane	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Alpha-BHC	0.02	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Beta-BHC	0.036	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	0.042	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aldrin	0.005	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	NS	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin	0.014	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin aldehyde	NS	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin ketone	NS	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	0.005	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDE	0.0033	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDD	0.0033	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	0.0033	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan I	2.4	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan II	2.4	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan sulfate	2.4	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methoxychlor	NS	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toxaphene	NS	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-Chlordane	0.094	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-Chlordane	NS	mg/kg	ND	ND	ND	0.000558 JIP	0.000591 JIP	ND	ND	ND	ND	ND	ND
Chlordane	NS	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>Polychlorinated Biphenyls</b>													
Aroclor 1016	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1221	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1232	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1242	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1248	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1254	0.1	mg/kg	0.00749 J	ND	0.0105 J	0.0112 J	0.0105 J	ND	ND	ND	ND	ND	ND
Aroclor 1260	0.1	mg/kg	ND	ND	ND	ND	ND	0.0103 J	ND	ND	ND	ND	ND
Aroclor 1262	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1268	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCBs, Total	0.1	mg/kg	0.00749 J	ND	0.0105 J	0.0112 J	0.0105 J	0.0103 J	ND	ND	ND	ND	ND

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard

Table 6d. Remaining Contamination in Soil - Pesticides and Polychlorinated Biphenyls  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP12	EP13	EP14	EP15	EP16	EP17	EP18	EP19	EP20	EP21	EP22
SAMPLING DATE			7/17/2024	7/17/2024	7/17/2024	7/17/2024	7/17/2024	7/17/2024	7/17/2024	7/17/2024	7/17/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2440298-05	L2440298-06	L2440298-07	L2440298-08	L2440298-09	L2440298-10	L2440298-11	L2440298-12	L2440298-13	L2440298-14	L2440298-15
SAMPLE DEPTH (ft-bg)			12	12	12	12	12	12	12	12	12	12	12
			Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual
<b>Pesticides</b>													
Delta-BHC	0.04	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lindane	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Alpha-BHC	0.02	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Beta-BHC	0.036	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	0.042	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aldrin	0.005	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	NS	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin	0.014	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin aldehyde	NS	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin ketone	NS	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	0.005	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDE	0.0033	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDD	0.0033	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	0.0033	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan I	2.4	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan II	2.4	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan sulfate	2.4	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methoxychlor	NS	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toxaphene	NS	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-Chlordane	0.094	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-Chlordane	NS	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlordane	NS	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>Polychlorinated Biphenyls</b>													
Aroclor 1016	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1221	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1232	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1242	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1248	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1254	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1260	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1262	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1268	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCBs, Total	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard

Table 6d. Remaining Contamination in Soil - Pesticides and Polychlorinated Biphenyls  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP23	EP24	EP25	EP26	EP26 DUP	EP27	EP28	EP29	EP30	EP30 DUP	SW1
SAMPLING DATE			7/17/2024	7/17/2024	7/19/2024	7/19/2024	7/19/2024	7/19/2024	7/24/2024	7/24/2024	7/31/2024	7/31/2024	7/31/2024
LAB SAMPLE ID			L2440298-16	L2440298-17	L2440933-03	L2440933-04	L2440933-05	L2440933-06	L2441719-01	L2441719-02	L2443186-01	L2443186-02	L2443186-03
SAMPLE DEPTH (ft-bg)			12	12	12	12	12	12	12	12	19	19	19
			Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual
<b>Pesticides</b>													
Delta-BHC	0.04	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lindane	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Alpha-BHC	0.02	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Beta-BHC	0.036	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	0.042	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aldrin	0.005	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	NS	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin	0.014	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin aldehyde	NS	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin ketone	NS	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	0.005	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDE	0.0033	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDD	0.0033	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	0.0033	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan I	2.4	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan II	2.4	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan sulfate	2.4	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methoxychlor	NS	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toxaphene	NS	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-Chlordane	0.094	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-Chlordane	NS	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlordane	NS	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>Polychlorinated Biphenyls</b>													
Aroclor 1016	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1221	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1232	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1242	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1248	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1254	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1260	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1262	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1268	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCBs, Total	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard

Table 6d. Remaining Contamination in Soil - Pesticides and Polychlorinated Biphenyls  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP-31	EP-32	EP-33	EP-34
SAMPLING DATE			8/26/2024	8/26/2024	8/26/2024	8/26/2024
LAB SAMPLE ID			L2448656-01	L2448656-02	L2448656-03	L2448656-04
SAMPLE DEPTH (ft-bg)			12	12	12	12
			Qual	Qual	Qual	Qual
<b>Pesticides</b>						
Delta-BHC	0.04	mg/kg	ND	ND	ND	ND
Lindane	0.1	mg/kg	ND	ND	ND	ND
Alpha-BHC	0.02	mg/kg	ND	ND	ND	ND
Beta-BHC	0.036	mg/kg	ND	ND	ND	ND
Heptachlor	0.042	mg/kg	ND	ND	ND	ND
Aldrin	0.005	mg/kg	ND	ND	ND	ND
Heptachlor epoxide	NS	mg/kg	ND	ND	ND	ND
Endrin	0.014	mg/kg	ND	ND	ND	ND
Endrin aldehyde	NS	mg/kg	ND	ND	ND	ND
Endrin ketone	NS	mg/kg	ND	ND	ND	ND
Dieldrin	0.005	mg/kg	ND	ND	ND	ND
4,4'-DDE	0.0033	mg/kg	ND	ND	ND	ND
4,4'-DDD	0.0033	mg/kg	ND	ND	ND	ND
4,4'-DDT	0.0033	mg/kg	ND	ND	ND	ND
Endosulfan I	2.4	mg/kg	ND	ND	ND	ND
Endosulfan II	2.4	mg/kg	ND	ND	ND	ND
Endosulfan sulfate	2.4	mg/kg	ND	ND	ND	ND
Methoxychlor	NS	mg/kg	ND	ND	ND	ND
Toxaphene	NS	mg/kg	ND	ND	ND	ND
cis-Chlordane	0.094	mg/kg	ND	ND	ND	ND
trans-Chlordane	NS	mg/kg	ND	ND	ND	ND
Chlordane	NS	mg/kg	ND	ND	ND	ND
<b>Polychlorinated Biphenyls</b>						
Aroclor 1016	0.1	mg/kg	ND	ND	ND	ND
Aroclor 1221	0.1	mg/kg	ND	ND	ND	ND
Aroclor 1232	0.1	mg/kg	ND	ND	ND	ND
Aroclor 1242	0.1	mg/kg	ND	ND	ND	ND
Aroclor 1248	0.1	mg/kg	ND	ND	ND	ND
Aroclor 1254	0.1	mg/kg	ND	ND	ND	ND
Aroclor 1260	0.1	mg/kg	ND	ND	ND	ND
Aroclor 1262	0.1	mg/kg	ND	ND	ND	ND
Aroclor 1268	0.1	mg/kg	ND	ND	ND	ND
PCBs, Total	0.1	mg/kg	ND	ND	ND	ND

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard

Table 6e. Remaining Contamination in Soil - Emerging Contaminants  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP1	EP2	EP3	EP4	EP5	EP6	EP7	EP8	EP9	EP10	EP11
SAMPLING DATE			7/15/2024	7/15/2024	7/15/2024	7/15/2024	7/15/2024	7/15/2024	7/15/2024	7/17/2024	7/17/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2439688-01	L2439688-02	L2439688-03	L2439688-04	L2439688-05	L2439688-06	L2439688-07	L2440298-01	L2440298-02	L2440298-03	L2440298-04
SAMPLE DEPTH (ft-bg)			12	12	12	12	12	12	12	12	12	12	12
			Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual
<b>1,4-Dioxane</b>													
1,4-Dioxane	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>Per- and Polyfluoroalkyl Substances</b>													
Perfluorobutanoic Acid (PFBA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoropentanoic Acid (PFPeA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorobutanesulfonic Acid (PFBS)	NS	ng/g	ND	ND	0.081 J	ND	ND	ND	ND	ND	ND	ND	ND
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanoic Acid (PFHxA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoropentanesulfonic Acid (PFPeS)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoroheptanoic Acid (PFHpA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanesulfonic Acid (PFHxS)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanoic Acid (PFOA)	0.66	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	NS	ng/g	0.315 J	0.519 J	ND	ND	0.48 J	0.44 J	ND	ND	ND	ND	ND
Perfluoroheptanesulfonic Acid (PFHpS)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorononanoic Acid (PFNA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanesulfonic Acid (PFOS)	0.88	ng/g	ND	ND	ND	0.084 J	ND	ND	ND	ND	ND	ND	ND
Perfluorodecanoic Acid (PFDA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorononanesulfonic Acid (PFNS)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoroundecanoic Acid (PFUnA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorodecanesulfonic Acid (PFDS)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanesulfonamide (PFOSA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorododecanoic Acid (PFDoA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotridecanoic Acid (PFTriDA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotetradecanoic Acid (PFTeDA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorododecanesulfonic Acid (PFDoS)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3OUS)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUDS)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEEESA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard

Table 6e. Remaining Contamination in Soil - Emerging Contaminants  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP12	EP13	EP14	EP15	EP16	EP17	EP18	EP19	EP20	EP21	EP22
SAMPLING DATE			7/17/2024	7/17/2024	7/17/2024	7/17/2024	7/17/2024	7/17/2024	7/17/2024	7/17/2024	7/17/2024	7/17/2024	7/17/2024
LAB SAMPLE ID			L2440298-05	L2440298-06	L2440298-07	L2440298-08	L2440298-09	L2440298-10	L2440298-11	L2440298-12	L2440298-13	L2440298-14	L2440298-15
SAMPLE DEPTH (ft-bg)			12	12	12	12	12	12	12	12	12	12	12
			Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual
<b>1,4-Dioxane</b>													
1,4-Dioxane	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>Per- and Polyfluoroalkyl Substances</b>													
Perfluorobutanoic Acid (PFBA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoropentanoic Acid (PFPeA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorobutanesulfonic Acid (PFBS)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanoic Acid (PFHxA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoropentanesulfonic Acid (PFPeS)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoroheptanoic Acid (PFHpA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanesulfonic Acid (PFHxS)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanoic Acid (PFOA)	0.66	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoroheptanesulfonic Acid (PFHpS)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorononanoic Acid (PFNA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanesulfonic Acid (PFOS)	0.88	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorodecanoic Acid (PFDA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorononanesulfonic Acid (PFNS)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoroundecanoic Acid (PFUnA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorodecanesulfonic Acid (PFDS)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanesulfonamide (PFOSA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorododecanoic Acid (PFDoA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotridecanoic Acid (PFTriDA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotetradecanoic Acid (PFTeDA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorododecanesulfonic Acid (PFDoS)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3OUdS)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard



Table 6e. Remaining Contamination in Soil - Emerging Contaminants  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP23	EP24	EP25	EP26	EP26 DUP	EP27	EP28	EP29	EP30	EP30 DUP	SW1
SAMPLING DATE			7/17/2024	7/17/2024	7/19/2024	7/19/2024	7/19/2024	7/19/2024	7/24/2024	7/24/2024	7/31/2024	7/31/2024	7/31/2024
LAB SAMPLE ID			L2440298-16	L2440298-17	L2440933-03	L2440933-04	L2440933-05	L2440933-06	L2441719-01	L2441719-02	L2443186-01	L2443186-02	L2443186-03
SAMPLE DEPTH (ft-bg)			12	12	12	12	12	12	12	12	19	19	19
			Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual
<b>1,4-Dioxane</b>													
1,4-Dioxane	0.1	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>Per- and Polyfluoroalkyl Substances</b>													
Perfluorobutanoic Acid (PFBA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	0.068 J	ND	ND	ND
Perfluoropentanoic Acid (PFPeA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorobutanesulfonic Acid (PFBS)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanoic Acid (PFHxA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoropentanesulfonic Acid (PFPeS)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoroheptanoic Acid (PFHpA)	NS	ng/g	ND	ND	ND	0.043 J	0.042 J	ND	ND	ND	ND	ND	ND
Perfluorohexanesulfonic Acid (PFHxS)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanoic Acid (PFOA)	0.66	ng/g	ND	ND	ND	0.16 J	0.191 J	0.173 J	ND	ND	0.079 J	ND	0.158 J
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoroheptanesulfonic Acid (PFHpS)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorononanoic Acid (PFNA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanesulfonic Acid (PFOS)	0.88	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorodecanoic Acid (PFDA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorononanesulfonic Acid (PFNS)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoroundecanoic Acid (PFUnA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorodecanesulfonic Acid (PFDS)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanesulfonamide (PFOSA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorododecanoic Acid (PFDoA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotridecanoic Acid (PFTriDA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotetradecanoic Acid (PFTeDA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorododecanesulfonic Acid (PFDoS)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3OUdS)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	NS	ng/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard

Table 6e. Remaining Contamination in Soil - Emerging Contaminants  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	NY-UNRES	Units	EP-31	EP-32	EP-33	EP-34
SAMPLING DATE			8/26/2024	8/26/2024	8/26/2024	8/26/2024
LAB SAMPLE ID			L2448656-01	L2448656-02	L2448656-03	L2448656-04
SAMPLE DEPTH (ft-bg)			12	12	12	12
			Qual	Qual	Qual	Qual
<b>1,4-Dioxane</b>						
1,4-Dioxane	0.1	mg/kg	ND	ND	ND	ND
<b>Per- and Polyfluoroalkyl Substances</b>						
Perfluorobutanoic Acid (PFBA)	NS	ng/g	ND	ND	ND	ND
Perfluoropentanoic Acid (PFPeA)	NS	ng/g	ND	ND	ND	ND
Perfluorobutanesulfonic Acid (PFBS)	NS	ng/g	ND	ND	ND	ND
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	NS	ng/g	ND	ND	ND	ND
Perfluorohexanoic Acid (PFHxA)	NS	ng/g	ND	ND	ND	ND
Perfluoropentanesulfonic Acid (PFPeS)	NS	ng/g	ND	ND	ND	ND
Perfluoroheptanoic Acid (PFHpA)	NS	ng/g	ND	ND	ND	ND
Perfluorohexanesulfonic Acid (PFHxS)	NS	ng/g	ND	ND	ND	ND
Perfluorooctanoic Acid (PFOA)	0.66	ng/g	ND	ND	ND	ND
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	NS	ng/g	ND	ND	ND	ND
Perfluoroheptanesulfonic Acid (PFHpS)	NS	ng/g	ND	ND	ND	ND
Perfluorononanoic Acid (PFNA)	NS	ng/g	ND	ND	ND	ND
Perfluorooctanesulfonic Acid (PFOS)	0.88	ng/g	ND	ND	ND	ND
Perfluorodecanoic Acid (PFDA)	NS	ng/g	ND	ND	ND	ND
1H,1H,2H,2H-Perfluorodecane sulfonic Acid (8:2FTS)	NS	ng/g	ND	ND	ND	ND
Perfluorononanesulfonic Acid (PFNS)	NS	ng/g	ND	ND	ND	ND
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	NS	ng/g	ND	ND	ND	ND
Perfluoroundecanoic Acid (PFUnA)	NS	ng/g	ND	ND	ND	ND
Perfluorodecane sulfonic Acid (PFDS)	NS	ng/g	ND	ND	ND	ND
Perfluorooctanesulfonamide (PFOSA)	NS	ng/g	ND	ND	ND	ND
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	NS	ng/g	ND	ND	ND	ND
Perfluorododecanoic Acid (PFDoA)	NS	ng/g	ND	ND	ND	ND
Perfluorotridecanoic Acid (PFTrDA)	NS	ng/g	ND	ND	ND	ND
Perfluorotetradecanoic Acid (PFTeDA)	NS	ng/g	ND	ND	ND	ND
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	NS	ng/g	ND	ND	ND	ND
4,8-Dioxo-3h-Perfluorononanoic Acid (ADONA)	NS	ng/g	ND	ND	ND	ND
Perfluorododecane sulfonic Acid (PFDoS)	NS	ng/g	ND	ND	ND	ND
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	NS	ng/g	ND	ND	ND	ND
11-Chloroicosafafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	NS	ng/g	ND	ND	ND	ND
N-Methyl Perfluorooctane Sulfonamide (NMcFOSA)	NS	ng/g	ND	ND	ND	ND
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	NS	ng/g	ND	ND	ND	ND
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	NS	ng/g	ND	ND	ND	ND
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	NS	ng/g	ND	ND	ND	ND
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	NS	ng/g	ND	ND	ND	ND
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	NS	ng/g	ND	ND	ND	ND
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	NS	ng/g	ND	ND	ND	ND
Nonafluoro-3,6-Dioxahexanoic Acid (NFDHA)	NS	ng/g	ND	ND	ND	ND
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	NS	ng/g	ND	ND	ND	ND
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	NS	ng/g	ND	ND	ND	ND
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	NS	ng/g	ND	ND	ND	ND

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs**

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard

Table 7a. Remaining Contamination in Groundwater - Volatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

SAMPLE ID:	NY-AWQS	Units	B-MW-1	B-MW-2	B-MW-3	B-MW-4	B-MW-4-DUP	B-TW-1	B-TW-3	FIELD BLANK_01122022
LAB ID:			L2201315-03	L2201832-07	L2201832-02	L2201315-01	L2201315-02	L2201832-06	L2201832-01	L2201832-03
COLLECTION DATE:			1/10/2022	1/12/2022	1/12/2022	1/10/2022	1/10/2022	1/12/2022	1/12/2022	1/12/2022
			Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual
<b>Volatile Organic Compounds</b>										
Methylene chloride	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	7	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	1	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	50	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5	ug/l	0.69	0.59	0.28	J	0.91	1.1	3.2	<b>13</b>
Chlorobenzene	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.6	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	50	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.4	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	50	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	NS	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	2	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	3	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert butyl ether	10	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
p/m-Xylene	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	50	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	60	ug/l	4.2	J	ND	ND	ND	ND	ND	ND
2-Butanone	50	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	NS	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	50	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	0.0006	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.04	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	10	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Methyl Acetate	NS	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	NS	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Freon-113	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Methyl cyclohexane	NS	ug/l	ND	ND	ND	ND	ND	ND	ND	ND

**Notes:**

NY-AWQS: New York TOGS 1.1.1 Ambient Water Quality Standards criteria reflects all addendum to criteria through February 2023.

**Bold and shaded yellow value indicates concentration exceeds NY-AWQS**

DUP = designation for duplicate sample

J = Estimated value

NS = No standard

ND = Not detected

Table 7b. Remaining Contamination in Groundwater - Semivolatile Organic Compounds  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

SAMPLE ID:	NY-AWQS	Units	B-MW-1	B-MW-2	B-MW-3	B-MW-4	B-MW-4-DUP	B-TW-1	B-TW-3	FIELD BLANK 01122022
LAB ID:			L2201315-03	L2201832-07	L2201832-02	L2201315-01	L2201315-02	L2201832-06	L2201832-01	L2201832-03
COLLECTION DATE:			1/10/2022	1/12/2022	1/12/2022	1/10/2022	1/10/2022	1/12/2022	1/12/2022	1/12/2022
			Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual
<b>Semivolatile Organic Compounds</b>										
Bis(2-chloroethyl)ether	1	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NS	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether	NS	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroisopropyl)ether	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethoxy)methane	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	50	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	0.4	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
NDPA/DPA	50	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
n-Nitrosodi-n-propylamine	NS	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate	50	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butylphthalate	50	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octylphthalate	50	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	50	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	50	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Biphenyl	NS	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NS	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4,5-Tetrachlorobenzene	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Acetophenone	NS	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	NS	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
p-Chloro-m-cresol	NS	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	NS	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	1	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	50	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	NS	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	NS	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	10	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-o-cresol	NS	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	1	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	NS	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
3-Methylphenol/4-Methylphenol	NS	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	NS	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	NS	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Atrazine	7.5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Benzaldehyde	NS	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Caprolactam	NS	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
2,3,4,6-Tetrachlorophenol	NS	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	20	ug/l	ND	ND	0.02 J	ND	ND	ND	ND	ND
2-Chloronaphthalene	10	ug/l	ND	ND	0.04 J	ND	ND	ND	0.03 J	ND
Fluoranthene	50	ug/l	0.06 J	ND	0.14 J	0.04 J	0.02 J	ND	0.06 J	ND
Hexachlorobutadiene	0.5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	10	ug/l	ND	ND	ND	ND	ND	ND	0.05 J	ND
Benzo(a)anthracene	0.002	ug/l	0.03 J	0.02 J	0.06 J	0.02 J	0.02 J	ND	0.04 J	ND
Benzo(a)pyrene	0	ug/l	0.02 J	ND	ND	ND	ND	ND	0.02 J	ND
Benzo(b)fluoranthene	0.002	ug/l	0.02 J	ND	0.02 J	ND	0.01 J	ND	0.02 J	ND
Benzo(k)fluoranthene	0.002	ug/l	0.02 J	ND	0.02 J	ND	0.02 J	ND	0.02 J	ND
Chrysene	0.002	ug/l	0.02 J	ND	0.04 J	ND	ND	ND	0.02 J	ND
Acenaphthylene	NS	ug/l	ND	ND	0.01 J	ND	ND	ND	ND	ND
Anthracene	50	ug/l	0.02 J	ND	0.09 J	0.02 J	0.01 J	0.02 J	0.07 J	ND
Benzo(ghi)perylene	NS	ug/l	0.02 J	ND	ND	ND	ND	ND	ND	ND
Fluorene	50	ug/l	ND	ND	0.05 J	ND	ND	ND	0.03 J	ND
Phenanthrene	50	ug/l	0.05 J	ND	0.1 J	0.05 J	0.03 J	ND	0.08 J	ND
Dibenzo(a,h)anthracene	NS	ug/l	ND	ND	ND	ND	0.01 J	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.002	ug/l	0.02 J	ND	0.01 J	ND	0.01 J	ND	0.01 J	ND
Pyrene	50	ug/l	0.07 J	0.03 J	0.17 J	0.04 J	0.03 J	0.03 J	0.06 J	ND
2-Methylnaphthalene	NS	ug/l	ND	ND	0.03 J	ND	ND	ND	0.04 J	ND
Pentachlorophenol	1	ug/l	0.06 J	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.04	ug/l	ND	0.01 J	0.14 J	ND	ND	0.01 J	0.11 J	ND
Hexachloroethane	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND

**Notes:**

NY-AWQS: New York TOGS 1.1.1 Ambient Water Quality Standards criteria reflects all addendum to criteria through February 2023.

**Bold and shaded yellow value indicates concentration exceeds NY-AWQS**

DUP = designation for duplicate sample

J = Estimated value

NS = No standard

ND = Not detected

Table 7c. Remaining Contamination in Groundwater - Metals  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

SAMPLE ID:	NY-AWQS	Units	B-MW-1	B-MW-2	B-MW-3	B-MW-4	B-MW-4-DUP	B-TW-1	B-TW-3	FIELD BLANK 01122022
LAB ID:			L2201315-03	L2201832-07	L2201832-02	L2201315-01	L2201315-02	L2201832-06	L2201832-01	L2201832-03
COLLECTION DATE:			1/10/2022	1/12/2022	1/12/2022	1/10/2022	1/10/2022	1/12/2022	1/12/2022	1/12/2022
			Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual
<b>Dissolved Metals</b>										
Aluminum, Dissolved	NS	ug/l	14.5	ND	ND	3.82 J	12.7	ND	ND	ND
Antimony, Dissolved	3	ug/l	1.07 J	ND	0.48 J	4.2	1.37 J	1.24 J	0.63 J	0.57 J
Arsenic, Dissolved	25	ug/l	ND	ND	ND	0.46 J	0.25 J	ND	ND	ND
Barium, Dissolved	1000	ug/l	90.15	110.4	76.31	55.22	55.07	55.01	33.86	ND
Beryllium, Dissolved	3	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium, Dissolved	5	ug/l	0.08 J	ND	ND	0.06 J	ND	ND	ND	ND
Calcium, Dissolved	NS	ug/l	40200	33400	38900	29600	29800	38700	20700	ND
Chromium, Dissolved	50	ug/l	1.51	0.97 J	5.24	11.85	6.46	3.76	1.55	ND
Cobalt, Dissolved	NS	ug/l	2.42	1.94	2.21	3.15	2.42	0.41 J	ND	ND
Copper, Dissolved	200	ug/l	0.45 J	0.84 J	1.35	0.74 J	0.55 J	0.65 J	0.45 J	ND
Iron, Dissolved	300	ug/l	23.6 J	19.7 J	ND	32.1 J	113	ND	ND	ND
Lead, Dissolved	25	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Magnesium, Dissolved	35000	ug/l	10000	5990	6350	5680	5890	6090	2960	ND
Manganese, Dissolved	300	ug/l	534.1	726.5	545	718.7	568.9	88.68	14.86	ND
Mercury, Dissolved	0.7	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Nickel, Dissolved	100	ug/l	7.48	4.11	4.24	6.16	4.18	0.95 J	ND	ND
Potassium, Dissolved	NS	ug/l	13300	20500	21100	15800	15600	14400	10300	ND
Selenium, Dissolved	10	ug/l	ND	2.01 J	ND	2 J	1.93 J	ND	1.88 J	ND
Silver, Dissolved	50	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Sodium, Dissolved	20000	ug/l	84600	88700	57600	102000	102000	93400	54600	ND
Thallium, Dissolved	0.5	ug/l	ND	0.29 J	0.25 J	0.32 J	ND	0.32 J	0.38 J	0.3 J
Vanadium, Dissolved	NS	ug/l	ND	ND	ND	44.18	47.1	ND	ND	ND
Zinc, Dissolved	2000	ug/l	ND	10.12	ND	ND	ND	ND	ND	ND
<b>Total Metals</b>										
Aluminum, Total	NS	ug/l	422	12.3	7.45 J	46.8	216	328	6.4 J	5.51 J
Antimony, Total	3	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic, Total	25	ug/l	0.26 J	ND	ND	ND	0.2 J	0.2 J	ND	ND
Barium, Total	1000	ug/l	92.97	110.1	79.99	56.67	56.72	59.94	33.29	0.24 J
Beryllium, Total	3	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium, Total	5	ug/l	0.08 J	ND	ND	ND	ND	ND	ND	ND
Calcium, Total	NS	ug/l	37100	34200	41400	30800	27600	40200	21200	ND
Chromium, Total	50	ug/l	3.09	1.2	5.45	17.46	18.06	4.91	1.51	ND
Cobalt, Total	NS	ug/l	3.19	1.98	2.23	3.11	2.77	1.13	ND	ND
Copper, Total	200	ug/l	1.58	0.51 J	0.67 J	0.84 J	1.2	1.67	ND	ND
Iron, Total	300	ug/l	1200	67.3	23.7 J	176	682	999	ND	ND
Lead, Total	25	ug/l	0.63 J	ND	ND	ND	ND	0.42 J	ND	ND
Magnesium, Total	35000	ug/l	9780	6030	6750	5900	5810	6210	3020	ND
Manganese, Total	300	ug/l	572.3	725.7	565.2	724.2	564.6	137.6	15.02	ND
Mercury, Total	0.7	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Nickel, Total	100	ug/l	8.2	4.1	4.48	6.13	4.35	1.67 J	0.58 J	ND
Potassium, Total	NS	ug/l	12600	21100	22900	16200	14900	14700	10900	ND
Selenium, Total	10	ug/l	ND	2.12 J	ND	1.98 J	2.06 J	1.95 J	2.24 J	ND
Silver, Total	50	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Sodium, Total	20000	ug/l	77200	89900	60800	107000	94200	95200	55800	ND
Thallium, Total	0.5	ug/l	ND	ND	ND	ND	ND	ND	0.28 J	ND
Vanadium, Total	NS	ug/l	ND	ND	ND	48.52	54.15	ND	ND	ND
Zinc, Total	2000	ug/l	ND	ND	ND	12.73	ND	ND	ND	ND
<b>General Chemistry</b>										
Chromium, Trivalent	NS	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide, Total	200	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Chromium, Hexavalent	50	ug/l	ND	ND	5 J	10	9 J	3 J	ND	ND

**Notes:**

NY-AWQS: New York TOGS 111 Ambient Water Quality Standards criteria reflects all addendum to criteria through February 2023.

**Bold and shaded yellow value indicates concentration exceeds NY-AWQS**

DUP = designation for duplicate sample

J = Estimated value

NS = No standard

ND = Not detected

Table 7d. Remaining Contamination in Groundwater - Herbicides, Pesticides, and Polychlorinated Biphenyls  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

SAMPLE ID:	NY-AWQS	Units	B-MW-1	B-MW-2	B-MW-3	B-MW-4	B-MW-4-DUP	B-TW-1	B-TW-3	FIELD BLANK 01122022
LAB ID:			L2201315-03	L2201832-07	L2201832-02	L2201315-01	L2201315-02	L2201832-06	L2201832-01	L2201832-03
COLLECTION DATE:			1/10/2022	1/12/2022	1/12/2022	1/10/2022	1/10/2022	1/12/2022	1/12/2022	1/12/2022
			Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual
<b>Chlorinated Herbicides</b>										
2,4-D	50	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-T	35	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-TP (Silvex)	NS	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
<b>Organochlorine Pesticides</b>										
Delta-BHC	0.04	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Lindane	0.05	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Alpha-BHC	0.01	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Beta-BHC	0.04	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	0.04	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Aldrin	0	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	0.03	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Endrin	0	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Endrin aldehyde	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Endrin ketone	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	0.004	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDE	0.2	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDD	0.3	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	0.2	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan I	NS	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan II	NS	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan sulfate	NS	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Methoxychlor	35	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Toxaphene	0.06	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
cis-Chlordane	NS	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
trans-Chlordane	NS	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Chlordane	0.05	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
<b>Polychlorinated Biphenyls</b>										
Aroclor 1016	0.09	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1221	0.09	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1232	0.09	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1242	0.09	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1248	0.09	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1254	0.09	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1260	0.09	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1262	0.09	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1268	0.09	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
PCBs, Total	NS	ug/l	ND	ND	ND	ND	ND	ND	ND	ND

**Notes:**

NY-AWQS: New York TOGS 111 Ambient Water Quality Standards criteria reflects all addendum to criteria through February 2023.

**Bold and shaded yellow value indicates concentration exceeds NY-AWQS**

DUP = designation for duplicate sample

J = Estimated value

NS = No standard

ND = Not detected

Table 7e. Remaining Contamination in Groundwater - Emerging Contaminants  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

SAMPLE ID:	NY-AWQS	Units	B-MW-1	B-MW-2	B-MW-3	B-MW-4	B-MW-4-DUP	B-TW-1	B-TW-3	FIELD
LAB ID:			L2201315-03	L2201832-07	L2201832-02	L2201315-01	L2201315-02	L2201832-06	L2201832-01	BLANK 01122022
COLLECTION DATE:			1/10/2022	1/12/2022	1/12/2022	1/10/2022	1/10/2022	1/12/2022	1/12/2022	L2201832-03
			Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual
<b>1,4 Dioxane</b>										
1,4-Dioxane	0.35	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
<b>Perfluorinated Alkyl Acids</b>										
Perfluorobutanoic Acid (PFBA)	NS	ng/l	12.7	7.97	21	9.05	9.22	10.1	8.44	ND
Perfluoropentanoic Acid (PFPeA)	NS	ng/l	11.9	14.2	66.6	10.8	10.4	13.8	8.85	ND
Perfluorobutanesulfonic Acid (PFBS)	NS	ng/l	4.45	11.4	7.68	5.55	5.84	5.42	3.47	ND
Perfluorohexanoic Acid (PFHxA)	NS	ng/l	10.2	12.9	44.2	9.53	9.74	11.3	7.3	ND
Perfluoroheptanoic Acid (PFHpA)	NS	ng/l	8.07	8.33	15	8.42	8.92	8.49	7.07	ND
Perfluorohexanesulfonic Acid (PFHxS)	NS	ng/l	4.86	7.09	4.76	17.5	17.8	13.9	4.79	ND
Perfluorooctanoic Acid (PFOA)	6.7	ng/l	25.4	30.4	30.8	30.2	31.1	28.5	26.5	ND
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	NS	ng/l	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoroheptanesulfonic Acid (PFHpS)	NS	ng/l	ND	ND	ND	1.62 J	1.63 J	1.01 J	ND	ND
Perfluorononanoic Acid (PFNA)	NS	ng/l	0.822 J	1.94	2.3	2.18 F	2.17	2.54	0.856 J	ND
Perfluorooctanesulfonic Acid (PFOS)	2.7	ng/l	16.5	28.4	31	33.4	30.6	29.3	10.7	ND
Perfluorodecanoic Acid (PFDA)	NS	ng/l	ND	ND	1.11 J	1.26 J	1.13 J	ND	0.402 JF	ND
1H,1H,2H,2H-Perfluorodecane sulfonic Acid (8:2FTS)	NS	ng/l	ND	ND	ND	ND	ND	ND	ND	ND
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	NS	ng/l	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoroundecanoic Acid (PFUnA)	NS	ng/l	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorodecane sulfonic Acid (PFDS)	NS	ng/l	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanesulfonamide (FOSA)	NS	ng/l	ND	ND	ND	ND	ND	ND	ND	ND
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	NS	ng/l	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorododecanoic Acid (PFDoA)	NS	ng/l	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotridecanoic Acid (PFTrDA)	NS	ng/l	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotetradecanoic Acid (PFTA)	NS	ng/l	ND	0.877 J	0.982 J	ND	ND	0.841 J	0.786 J	0.996 J
PFOA/PFOS, Total	NS	ng/l	41.9	58.8	61.8	63.6	61.7	57.8	37.2	ND

**Notes:**

NY-AWQS: New York TOGS 111 Ambient Water Quality Standards criteria reflects all addendum to criteria through February 2023.

**Bold and shaded yellow value indicates concentration exceeds NY-AWQS**

DUP = designation for duplicate sample

J = Estimated value

NS = No standard

ND = Not detected

F = The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria

Table 8. Remaining Contamination in Soil Vapor  
94-15 Sutphin Boulevard - Site B  
BCP Site No. C241278

LOCATION	Units	B-SV-1	B-SV-2	B-SV-3	B-SV-4	B-SV-5	B-SV-6	B-AA
SAMPLING DATE		1/12/2022	1/12/2022	1/12/2022	1/12/2022	1/12/2022	1/12/2022	1/12/2022
LAB SAMPLE ID		L2201830-01	L2201830-02	L2201830-03	L2201830-04	L2201830-05	L2201830-06	L2201830-07
		Qual	Qual	Qual	Qual	Qual	Qual	Qual
<b>Volatile Organic Compounds</b>								
Dichlorodifluoromethane	ug/m3	56.9	8.31	19.1	42.3	37.6	39.6	3.43
Chloromethane	ug/m3	ND	ND	ND	0.419	2.85	0.555	1.42
Freon-114	ug/m3	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ug/m3	ND	ND	ND	ND	ND	ND	ND
1,3-Butadiene	ug/m3	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ug/m3	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ug/m3	ND	ND	ND	ND	ND	ND	ND
Ethanol	ug/m3	ND	50.7	ND	ND	101	ND	12.8
Vinyl bromide	ug/m3	ND	ND	ND	ND	ND	ND	ND
Acetone	ug/m3	--	--	--	--	3540	--	--
Acetone	ug/m3	237	820	34.4	30.4	2800 E	318	5.42
Trichlorofluoromethane	ug/m3	257	36.8	125	237	373	335	1.61
Isopropanol	ug/m3	1.34	7.35	ND	ND	25.8	1.73	1.53
1,1-Dichloroethene	ug/m3	ND	ND	ND	ND	ND	ND	ND
Tertiary butyl Alcohol	ug/m3	1.6	7.37	3.18	ND	18.5	1.82	ND
Methylene chloride	ug/m3	ND	ND	ND	ND	ND	ND	ND
3-Chloropropene	ug/m3	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	ug/m3	5.11	1.93	1.61	2.3	ND	2.17	ND
Freon-113	ug/m3	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	ug/m3	ND	0.956	ND	ND	ND	ND	ND
1,1-Dichloroethane	ug/m3	ND	ND	ND	ND	ND	ND	ND
Methyl tert butyl ether	ug/m3	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ug/m3	23.2	81.4	3.6	1.79	187	23.3	ND
cis-1,2-Dichloroethene	ug/m3	0.912	23.9	ND	ND	ND	1.33	ND
Ethyl Acetate	ug/m3	ND	ND	ND	ND	ND	ND	ND
Chloroform	ug/m3	7.23	11.2	4.98	14.4	27.9	14.3	ND
Tetrahydrofuran	ug/m3	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ug/m3	ND	ND	ND	ND	ND	ND	ND
n-Hexane	ug/m3	0.821	2.43	ND	ND	6.52	0.878	ND
1,1,1-Trichloroethane	ug/m3	27.8	10.7	36.1	49.9	70.4	58.9	ND
Benzene	ug/m3	ND	ND	ND	ND	ND	ND	0.831
Carbon tetrachloride	ug/m3	ND	ND	ND	ND	ND	2.78	ND
Cyclohexane	ug/m3	ND	0.95	ND	ND	3.61	ND	ND
1,2-Dichloropropane	ug/m3	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ug/m3	ND	ND	ND	ND	ND	ND	ND
1,4-Dioxane	ug/m3	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ug/m3	19.6	35.1	13.3	25.4	57.5	51.2	ND
2,2,4-Trimethylpentane	ug/m3	1.3	1.82	ND	ND	7.19	ND	ND
Heptane	ug/m3	3.01	6.64	ND	ND	10.7	1.86	ND
cis-1,3-Dichloropropene	ug/m3	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ug/m3	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	ug/m3	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ug/m3	ND	ND	ND	ND	ND	ND	ND
Toluene	ug/m3	6.22	10.7	ND	ND	13.1	3.67	1.05
2-Hexanone	ug/m3	10.2	23.1	ND	ND	19.2	8.52	ND
Dibromochloromethane	ug/m3	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ug/m3	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ug/m3	228	361	458	351	39.6	124	ND
Chlorobenzene	ug/m3	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ug/m3	16.5	21.4	ND	ND	26.7	10.6	ND
p/m-Xylene	ug/m3	35.1	42.8	ND	ND	55.2	22.8	ND
Bromoform	ug/m3	ND	ND	ND	ND	ND	ND	ND
Styrene	ug/m3	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ug/m3	ND	ND	ND	ND	ND	ND	ND
o-Xylene	ug/m3	9.3	11	ND	ND	13.9	6.43	ND
4-Ethyltoluene	ug/m3	1.6	1.93	ND	ND	ND	1.11	ND
1,3,5-Trimethylbenzene	ug/m3	2.4	2.89	ND	ND	3.85	2.09	ND
1,2,4-Trimethylbenzene	ug/m3	7.82	9.44	ND	ND	12.5	7.18	ND
Benzyl chloride	ug/m3	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ug/m3	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ug/m3	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ug/m3	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ug/m3	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ug/m3	ND	ND	ND	ND	ND	ND	ND

Notes:

**Bold and shaded yellow value indicates soil vapor concentration exceeds ambient air concentration (B-AA)**

ND = Not detected

-- = Not analyzed



**APPENDIX 1 – LIST OF SITE CONTACTS**

<b>Name</b>	<b>Phone/Email Address</b>
J.J. Weiss; 95 <sup>th</sup> Avenue Equities LLC & Sutphin QOZB LLC (Site Owner/Operator and Remedial Parties)	(718) 619-0014, <a href="mailto:jj@keydevelopersny.com">jj@keydevelopersny.com</a>
Mohamed Ahmed, Ph.D, P.G., CPG; QEP	(646) 606-2332, <a href="mailto:mahmed@tenen-env.com">mahmed@tenen-env.com</a>
Matthew Carroll, P.E.; Remedial Engineer	(646) 606-2332, <a href="mailto:mcarroll@tenen-env.com">mcarroll@tenen-env.com</a>
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Michael Bogin; Sive, Paget & Riesel, P.C.	(646) 378-7210, <a href="mailto:mbogin@sprlaw.com">mbogin@sprlaw.com</a>

## **APPENDIX 2 - RESPONSIBILITIES of OWNER and REMEDIAL PARTY**

## **Responsibilities**

The responsibilities for implementing the Site Management Plan (“SMP”) for the 94-15 Sutphin Boulevard – Site B site (the “site”), number C241278, are divided between the site owner and a Remedial Party, as defined below. The owner is currently listed as:

95<sup>th</sup> Avenue Equities LLC (the “owner”) with business address at 670 Myrtle Avenue, Suite 6373, Brooklyn, NY.

**Solely for the purposes of this document and based upon the facts related to a particular site and the remedial program being carried out,** the term Remedial Party (“RP”) refers to any of the following: certificate of completion holder, volunteer, applicant, responsible party, and, in the event the New York State Department of Environmental Conservation (“NYSDEC”) is carrying out remediation or site management, the NYSDEC and/or an agent acting on its behalf. The RP is: 95<sup>th</sup> Avenue Equities LLC and Sutphin QOZB LLC, both with business address at 670 Myrtle Avenue, Suite 6373, Brooklyn, NY.

Nothing on this page shall supersede the provisions of an Environmental Easement, Consent Order, Consent Decree, agreement, or other legally binding document that affects rights and obligations relating to the site.

### **Site Owner’s Responsibilities:**

- 1) The owner shall follow the provisions of the SMP as they relate to future construction and excavation at the site.
- 2) In accordance with a periodic time frame determined by the NYSDEC, the owner shall periodically certify, in writing, that all Institutional Controls set forth in an Environmental Easement remain in place and continue to be complied with. The owner shall provide a written certification to the RP, upon the RP’s request, in order to allow the RP to include the certification in the site’s Periodic Review Report (PRR) certification to the NYSDEC.

- 3) In the event the site is delisted, the owner remains bound by the Environmental Easement and shall submit, upon request by the NYSDEC, a written certification that the Environmental Easement is still in place and has been complied with.
- 4) The owner shall grant access to the site to the RP and the NYSDEC and its agents for the purposes of performing activities required under the SMP and assuring compliance with the SMP.
- 5) The owner is responsible for assuring the security of the remedial components located on its property to the best of its ability. If damage to the remedial components or vandalism is evident, the owner shall notify the site's RP and the NYSDEC in accordance with the timeframes indicated in Section 1.3 - Notifications.
- 6) If some action or inaction by the owner adversely impacts the site, the owner must notify the site's RP and the NYSDEC in accordance with the time frame indicated in Section 1.3 - Notifications and coordinate the performance of necessary corrective actions with the RP.
- 7) The owner must notify the RP and the NYSDEC of any change in ownership of the site property (identifying the tax map numbers in any correspondence) and provide contact information for the new owner of the site property. 6 NYCRR Part contains notification requirements applicable to any construction or activity changes and changes in ownership. Among the notification requirements is the following: Sixty days prior written notification must be made to the NYSDEC. Notification is to be submitted to the NYSDEC Division of Environmental Remediation's Site Control Section. Notification requirements for a change in use are detailed in Section 1.3 of the SMP. A change of use includes, but is not limited to, any activity that may increase direct human or environmental exposure (e.g., day care, school or park). A 60-Day Advance Notification Form and Instructions are found at <http://www.dec.ny.gov/chemical/76250.html>.
- 8) Until such time as the NYSDEC deems the vapor mitigation system unnecessary, the owner shall operate the system, pay for the utilities for the system's operation, and report any maintenance issues to the RP and the NYSDEC.
- 9) In accordance with the tenant notification law, within 15 days of receipt, the owner must supply a copy of any vapor intrusion data, that is produced with respect to structures and that exceeds NYSDOH or OSHA guidelines on the site, whether produced by the NYSDEC, RP, or owner, to the tenants on the property. The owner must otherwise comply with the tenant and occupant notification provisions of Environmental Conservation Law Article 27, Title 24.

### **Remedial Party Responsibilities**

- 1) The RP must follow the SMP provisions regarding any construction and/or excavation it undertakes at the site.
- 2) The RP shall report to the NYSDEC all activities required for remediation, operation, maintenance, monitoring, and reporting. Such reporting includes, but is not limited to, periodic review reports and certifications, electronic data deliverables, corrective action work plans and reports, and updated SMPs.
- 3) Before accessing the site property to undertake a specific activity, the RP shall provide the owner advance notification that shall include an explanation of the work expected to be completed. The RP shall provide to (i) the owner, upon the owner's request, (ii) the NYSDEC, and (iii) other entities, if required by the SMP, a copy of any data generated during the site visit and/or any final report produced.
- 4) If the NYSDEC determines that an update of the SMP is necessary, the RP shall update the SMP and obtain final approval from the NYSDEC. Within 5 business days after NYSDEC approval, the RP shall submit a copy of the approved SMP to the owner(s).
- 5) The RP shall notify the NYSDEC and the owner of any changes in RP ownership and/or control and of any changes in the party/entity responsible for the operation, maintenance, and monitoring of and reporting with respect to any remedial system (Engineering Controls). The RP shall provide contact information for the new party/entity. Such activity constitutes a Change of Use pursuant to 375-1.11(d) and requires 60-days prior notice to the NYSDEC. A 60-Day Advance Notification Form and Instructions are found at <http://www.dec.ny.gov/chemical/76250.html> .
- 6) The RP shall notify the NYSDEC of any damage to or modification of the systems as required under Section 1.3 - Notifications of the SMP.
- 7) The RP is responsible for the proper maintenance of any installed vapor intrusion mitigation systems associated with the site, as required in Section 5.0 or Appendix 9 (Operation, Monitoring and Maintenance Manual) of the SMP.
- 8) Prior to a change in use that impacts the remedial system or requirements and/or responsibilities for implementing the SMP, the RP shall submit to the NYSDEC for approval an amended SMP.
- 9) Any change in use, change in ownership, change in site classification (*e.g.*, delisting), reduction or expansion of remediation, and other significant changes related to the site may result in a change in responsibilities and, therefore, necessitate an update to the

SMP and/or updated legal documents. The RP shall contact the NYSDEC project manager to discuss the need to update such documents.

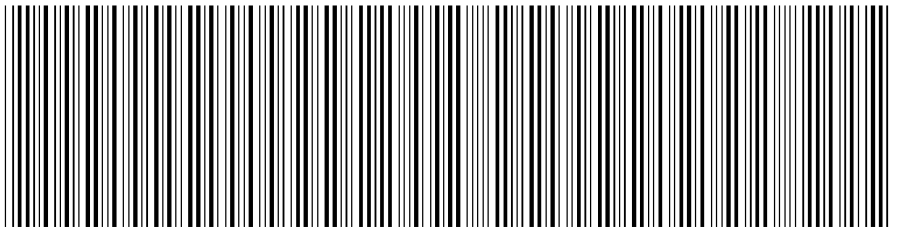
Change in RP ownership and/or control and/or site ownership does not affect the RP's obligations with respect to the site unless a legally binding document executed by the NYSDEC releases the RP of its obligations.

Future site owners and RPs and their successors and assigns are required to carry out the activities set forth above.

## **APPENDIX 3 – ENVIRONMENTAL EASEMENT**

NYC DEPARTMENT OF FINANCE  
OFFICE OF THE CITY REGISTER

This page is part of the instrument. The City Register will rely on the information provided by you on this page for purposes of indexing this instrument. The information on this page will control for indexing purposes in the event of any conflict with the rest of the document.



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RECORDING AND ENDORSEMENT COVER PAGE

PAGE 1 OF 12

Document ID: 2024082700383001

Document Date: 08-23-2024

Preparation Date: 09-10-2024

Document Type: EASEMENT

Document Page Count: 10

PRESENTER:

SIVE PAGET & RIESEL, P.C.  
560 LEXINGTON AVENUE, 15TH FLOOR  
NEW YORK, NY 10022  
212-421-2150  
NDUNCAN@SPRLAW.COM

RETURN TO:

SIVE PAGET & RIESEL, P.C.  
560 LEXINGTON AVENUE, 15TH FLOOR  
NEW YORK, NY 10022  
212-421-2150  
NDUNCAN@SPRLAW.COM

PROPERTY DATA

Borough	Block	Lot	Unit	Address
QUEENS	9999	1	Entire Lot	94-15 SUTPHIN BOULEVARD
Property Type: NON-RESIDENTIAL VACANT LAND				

CROSS REFERENCE DATA

CRFN \_\_\_\_\_ or DocumentID \_\_\_\_\_ or \_\_\_\_\_ Year \_\_\_\_\_ Reel \_\_\_\_\_ Page \_\_\_\_\_ or File Number \_\_\_\_\_

PARTIES

GRANTOR/SELLER:

95TH AVENUE EQUITIES LLC  
670 MYRTLE AVENUE, SUITE 6373  
BROOKLYN, NY 11205

GRANTEE/BUYER:

PEOPLE OF NEW YORK BY DEPT. ENVIRONMENTAL  
CONSERVA  
625 BROADWAY  
ALBANY, NY 12233

☒ Additional Parties Listed on Continuation Page

FEES AND TAXES

Mortgage :

Mortgage Amount: \$ 0.00

Taxable Mortgage Amount: \$ 0.00

Exemption:

TAXES: County (Basic): \$ 0.00

City (Additional): \$ 0.00

Spec (Additional): \$ 0.00

TASF: \$ 0.00

MTA: \$ 0.00

NYCTA: \$ 0.00

Additional MRT: \$ 0.00

TOTAL: \$ 0.00

Recording Fee: \$ 87.00

Affidavit Fee: \$ 0.00

Filing Fee:

\$ 100.00

NYC Real Property Transfer Tax:

\$ 0.00

NYS Real Estate Transfer Tax:

\$ 0.00

RECORDED OR FILED IN THE OFFICE  
OF THE CITY REGISTER OF THE

CITY OF NEW YORK

Recorded/Filed 09-11-2024 09:47

City Register File No.(CRFN):

2024000236145

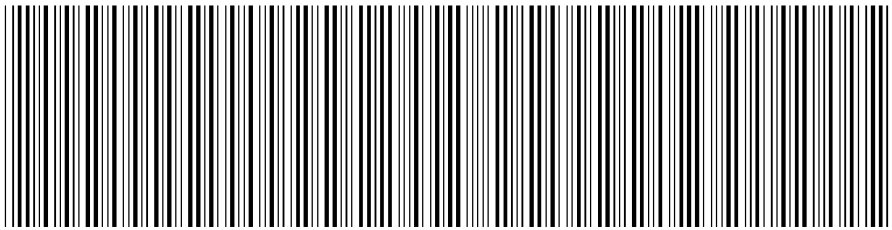


*Colette McChia-Jacques*

City Register Official Signature



NYC DEPARTMENT OF FINANCE  
OFFICE OF THE CITY REGISTER



2024082700383001002CF1F2

RECORDING AND ENDORSEMENT COVER PAGE (CONTINUATION) PAGE 2 OF 12

Document ID: 2024082700383001 Document Date: 08-23-2024 Preparation Date: 09-10-2024  
Document Type: EASEMENT

PARTIES

GRANTOR/SELLER:  
SUTPHIN QOZB LLC  
670 MYRTLE AVENUE, SUITE 6373  
BROOKLYN, NY 11205

**ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36  
OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW**

**THIS INDENTURE** made this 23rd day of August, 2024, between Owner(s), 95th Avenue Equities LLC (the "Grantor Fee Owner") and Sutphin QOZB LLC (the "Grantor Leaseholder"), both having an office at 670 Myrtle Ave., Suite 6373, Brooklyn, County of Kings State of New York (together with Grantor Fee Owner, collectively, the "Grantor"), and The People of the State of New York (the "Grantee"), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

**WHEREAS**, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

**WHEREAS**, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of Environmental Easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and the restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

**WHEREAS**, the Legislature of the State of New York has declared that Environmental Easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and

**WHEREAS**, Grantor, is the owner of real property located at the address of 94-15 Sutphin Boulevard in the City of New York, County of Queens and State of New York, known and designated on the tax map of the New York City Department of Finance as tax map parcel number: Block 9999 Lot 1, being the same as that property conveyed to Grantor by deed dated as of October 13, 2023 and recorded in the City Register of the City of New York as City Register File No. 2023000271220. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 0.69 +/- acres, and is hereinafter more fully described in the Land Title Survey dated April 16, 2024 prepared by Arkadiusz Jusiega, which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

**WHEREAS**, the Department accepts this Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation established for the Controlled Property until such time as this Environmental Easement is

extinguished pursuant to ECL Article 71, Title 36; and

**WHEREAS**, Grantor Leaseholder, is the holder of a 99-year ground lease interest in the Controlled Property, as memorialized in a Ground Lease dated as of May 31, 2024; and

**NOW THEREFORE**, in consideration of the mutual covenants contained herein and the terms and conditions of Brownfield Cleanup Agreement Index Number: C241278-01-24, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement").

1. Purposes. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. Institutional and Engineering Controls. The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.

A. (1) The Controlled Property may be used for:

**Restricted Residential as described in 6 NYCRR Part 375-1.8(g)(2)(ii),  
Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial  
as described in 6 NYCRR Part 375-1.8(g)(2)(iv)**

(2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);

(3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP;

(4) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the New York City Department of Health and Mental Hygiene to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;

(5) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;

(6) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;

(7) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

(8) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;

(9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP;

(10) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.

B. The Controlled Property shall not be used for Residential purposes as defined in 6NYCRR 375-1.8(g)(2)(i), and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Site Control Section  
Division of Environmental Remediation  
NYSDEC  
625 Broadway  
Albany, New York 12233  
Phone: (518) 402-9553

D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.

E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

**This property is subject to an Environmental Easement held**

**by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the Environmental Conservation Law.**

F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.

G. Grantor covenants and agrees that it shall, at such time as NYSDEC may require, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:

- (1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).
- (2) the institutional controls and/or engineering controls employed at such site:
  - (i) are in-place;
  - (ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved by the NYSDEC and that all controls are in the Department-approved format; and
  - (iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;
- (3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;
- (4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;
- (5) the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;
- (6) to the best of his/her knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and
- (7) the information presented is accurate and complete.

3. Right to Enter and Inspect. Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

4. Reserved Grantor's Rights. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:

A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

B. The right to give, sell, assign, or otherwise transfer part or all of the underlying fee interest to the Controlled Property, subject and subordinate to this Environmental Easement;

5. Enforcement

A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. If any person violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.

C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.

D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.

6. Notice. Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

County, NYSDEC Site Number, NYSDEC Brownfield Cleanup Agreement, State Assistance Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to:      Site Number: C241278  
Office of General Counsel  
NYSDEC  
625 Broadway  
Albany New York 12233-5500

With a copy to:      Site Control Section  
Division of Environmental Remediation  
NYSDEC  
625 Broadway  
Albany, NY 12233

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and

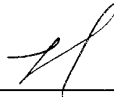
communicating notices and responses to requests for approval.

7. Recordation. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.
8. Amendment. Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.
9. Extinguishment. This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.
10. Joint Obligation. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.
11. Consistency with the SMP. To the extent there is any conflict or inconsistency between the terms of this Environmental Easement and the SMP, regarding matters specifically addressed by the SMP, the terms of the SMP will control.

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**IN WITNESS WHEREOF**, Grantor Fee Owner has caused this instrument to be signed in its name.

95th Avenue Equities LLC:

By: 

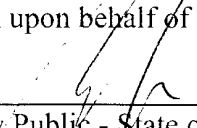
Print Name: Joel Zupnick

Title: MANAGER Date: 8/15/24

**Grantor's Acknowledgment**

STATE OF NEW YORK     )  
  ) ss:  
COUNTY OF Kings     )

On the 15<sup>th</sup> day of August, in the year 2024, before me, the undersigned, personally appeared Joel Zupnick, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

  
Notary Public - State of New York





**IN WITNESS WHEREOF**, Grantor Leaseholder has caused this instrument to be signed in its name.

Sutphin QOZB LLC:

By:                     *JS*                    

Print Name:           Joel Zupnick          

Title:           manager           Date:           8/15/29          

**Grantor's Acknowledgment**

STATE OF NEW YORK     )  
  ) ss:  
COUNTY OF   Kings       )

On the   15<sup>th</sup>   day of   August  , in the year 20  29  , before me, the undersigned, personally appeared   Joel Zupnick  , personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

                    *Isaac Hirsch*                      
Notary Public - State of New York

ISAAC HIRSCH NOTARY PUBLIC, STATE OF NEW YORK Registration No. 01HI6264479 Qualified in Kings County Commission Expires July 02, 2028
---

**THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK**, Acting by and Through the Department of Environmental Conservation as Designee of the Commissioner,

By: Andrew O. Guglielmi  
Andrew O. Guglielmi, Director  
Division of Environmental Remediation

**Grantee's Acknowledgment**

STATE OF NEW YORK     )  
  ) ss:  
COUNTY OF ALBANY     )

On the 23rd day of August, in the year 2024, before me, the undersigned, personally appeared Andrew O. Guglielmi, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

Cheryl A. Salem  
Notary Public - State of New York

Cheryl A. Salem  
Notary Public State of New York  
Registration No. 01SA0002177  
Qualified in Albany County  
My Commission Expires March 3, 2027

**SCHEDULE "A" PROPERTY DESCRIPTION**

**ENVIRONMENTAL EASEMENT AREA & DEED DESCRIPTION:**

**BOROUGH OF QUEENS, BLOCK: 9999, LOT: 1**

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

BEGINNING at the corner formed by the Intersection of the easterly side of Sutphin Boulevard (as now legally opened) and the southerly side of 94th Avenue (formerly Johnson Avenue);

RUNNING THENCE easterly along the southerly side of 94th Avenue, a distance of 175.20 feet to a point;

THENCE southerly at right angles with the southerly side of 94th Avenue, a distance of 100.09 feet (deed and actual) 100.13 feet (tax map) to a point;

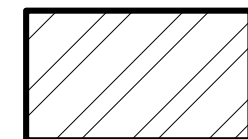
THENCE westerly at right angles with the last mentioned course, a distance of 50.2 feet to a point;

THENCE southerly at right angles with the last mentioned course, a distance of 100.09 feet to the northerly side of 95th Avenue;

THENCE westerly along the northerly side of 95th Avenue, a distance of 125 feet to the easterly side of Sutphin Boulevard;

THENCE northerly along the easterly side of Sutphin Boulevard, a distance of 200.18 feet to the point or place of BEGINNING.

Deed & Environmental Easement Area = 30,047 sq. ft. or 0.690 Acres



**GRAPHIC SCALE**







































































ALL WRITTEN MEASUREMENTS AND OFFSETS NOTED ON THIS SURVEY SUPERSEDE MEASUREMENTS SCALED OF THIS PLOT.

**SCALE 1:20**

0 5 10 15 20 25 30 35 40 45 50 100 feet

3.05 m 6.10 m 9.14 m 12.20 m 15.24 m 30.48 meters

DEED & ENVIRONMENTAL EASEMENT AREA = 30047 sq.ft. = 0.690 acre

FENCE		WOOD FE.	
UTILITY POLE		W.P.	
PARKING METER		P.M.	
OIL FILL		O.F.	
MONITORING WELL		M.W.	
TRAFFIC LIGHT		T.L.	
LIGHT		L.	
STREET LIGHT		L.P.	
FIRE HYDRANT		H.Y.D.	
SIAMESE CONNECTION		S.S.	
SHUT OFF VALVE		G. V.	
HANDICAPPED PARKING		M. V.	
EXISTING TREE		DR	
DRAINS		DR	
ROOF OVER		R.O.	
EXISTING ELEVATIONS		43.15 TOP OF CURB	
CITY ESTABLISHED GRADES		42.85 BOTTOM OF CURB	
CURB AND CURB CUT		L. G. 7.52	
OVERHEAD SIGN		CURB CUT	
MANHOLE TIE		O.H.S.W.	
CATCH BASIN		C.B.	
FIRE ESCAPE		F.E.	
PLATFORM		PL. or PLTF.	
BASEMENT		B.E.	
CELLAR ENTRANCE		C.E.	
AIR WAY		A.W.	
BAY WINDOW		B.W.	
CONCRETE		CONC.	
OVERHANG		O.H.	
AIR CONDITION		AC	
METAL		MET.	
NORTH OF PROPERTY LINE		N	
SOUTH OF PROPERTY LINE		S	
EAST OF PROPERTY LINE		E	
WEST OF PROPERTY LINE		W	

EASEMENTS IF ANY ARE NOT SHOWN ON THIS SURVEY. NO INFORMATION PROVIDED TO SURVEYOR AT THIS TIME.

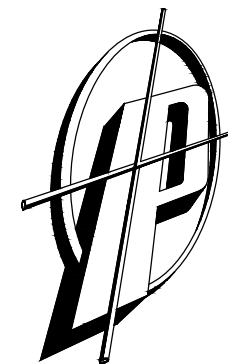
UNDERGROUND, OVERHEAD AND GROUND LEVEL UTILITIES ARE NOT GUARANTEED  
AS TO ACCURACY, EXACT LOCATION, TYPE OR USE, ACTIVE OR INACTIVE.  
VERIFICATION IS MANDATORY WITH MUNICIPAL AGENCIES, PUBLIC AND PRIVATE  
UTILITY COMPANIES PRIOR TO TAKING TITLE AND OR DESIGN WORK. BOUNDARIES  
ARE NOT GUARANTEED UNLESS SO NOTED.

PROFESSIONAL LAND SURVEYOR  
**ARKADIUSZ JUSIEGA**  
 N.Y.S. L.L.S. 050569-2  
 8629 BAY PARKWAY, UNIT CFU  
 BROOKLYN, NY 11214  
 TEL. 718-474-7700

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PROPERTY ADDRESS: 94-15 SUTPHIN BOULEVARD

## PREPARED BY



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## **APPENDIX 4 – FIELD SAMPLING PLAN**

## APPENDIX 4 – FIELD SAMPLING PLAN

The indoor air sampling methodology described below will be utilized for all baseline and post-remedial indoor air sampling. The sub-slab soil vapor and co-located indoor air sampling methodology described below will be utilized prior to any petition to shut down the active sub-slab depressurization system (SSDS). A separate work plan will also be submitted to NYSDEC and NYSDOH for review and approval prior to any sampling event to shut down the SSDS.

### *Sub-Slab Soil Vapor*

Sub-slab soil vapor samples will be collected prior to any petition to shut down the SSDS in accordance with the New York State Department of Health (NYSDOH) *Guidance for Evaluating Soil Vapor Intrusion In the State of New York*, dated October 2006. All sub-slab soil vapor samples will be co-located with an indoor air sample.

Sub-slab soil vapor samples will be collected from six existing vapor monitoring points (VMPs) in the cellar of the new Site building. Prior to sampling, ambient air will be purged from the VMP by attaching ¼-inch diameter Teflon® tube to the VMP and attaching the surface end of the tube to an air valve and then to a vacuum pump. The vacuum pump will remove three volumes of air (volume of the sample probe and tube) prior to sample collection. The flow rate for both purging and sample collection will not exceed 0.2 liter per minute (L/min).

The sub-slab soil vapor samples will first be screened for organic vapors using a photoionization detector (PID). A tracer gas will be used in accordance with NYSDOH protocols to verify the integrity of the soil vapor probe seal. Helium will be used as the tracer gas and a bucket will serve to keep it in contact with the probe during testing. A portable monitoring device will be used to analyze a sample of soil vapor for the tracer prior to sampling. If the tracer sample results show a significant presence of the tracer, the probe seals will be adjusted to prevent infiltration.

A sample log sheet will be maintained summarizing sample identification, date and time of sample collection, sampling depth, purge volumes, volume of the soil vapor extracted, vacuum of canisters before and after the samples are collected, apparent moisture content of the sampling zone, and chain of custody.

Sub-slab soil vapor samples will be collected in laboratory-supplied 6-liter Summa

canisters using 8-hour regulators. All sub-slab soil vapor sample containers will be appropriately labeled and closed. Chain-of-custody documents will be completed before shipment. All sub-slab soil vapor samples will be analyzed for volatile organic compounds (VOCs) using EPA Method TO-15 and sent to an ELAP certified laboratory.

#### *Indoor Air*

Indoor air samples will be collected prior to start up of the SSDS (baseline samples) and approximately 30 days following SSDS start up (post-remedial samples). Indoor air samples co-located with sub-slab soil vapor samples will be collected prior to any petition to shut down the SSDS. All indoor air samples will be collected in accordance with the NYSDOH *Guidance for Evaluating Soil Vapor Intrusion In the State of New York*, dated October 2006.

The indoor air samples will be collected from breathing height (three to five feet above the floor) from within the Site building. The sampling flow rate will not exceed 0.2 L/min. Sampling will occur for 8-hours in commercial structures or 24-hours in residential structures.

Indoor air samples will be collected in laboratory-supplied 6-liter Summa canisters using 8-hour regulators. All indoor air sample containers will be appropriately labeled and closed. Chain-of-custody documents will be completed before shipment. All indoor air samples will be analyzed for VOCs by EPA Method TO-15 and sent to an ELAP certified laboratory.

## **APPENDIX 5 – QUALITY ASSURANCE PROJECT PLAN**



**Quality Assurance Project Plan**  
**for**  
**94-15 Sutphin Boulevard – Site B**  
**Site Management Plan**

94-15 Sutphin Boulevard  
Jamaica, NY  
Block 9999, Lot 1  
BCP Site # C241278

Submitted to:  
New York State Department of Environmental Conservation  
Division of Environmental Remediation  
Remedial Bureau B  
625 Broadway, 12<sup>th</sup> Floor  
Albany, NY 12233-7016

Prepared for:  
95<sup>th</sup> Avenue Equities LLC & Sutphin QOZB LLC  
670 Myrtle Avenue, Suite 6373  
Brooklyn, NY 11205

Prepared by:



121 West 27<sup>th</sup> Street, Suite 702  
New York, NY 10001

**December 2024**

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### Appendices

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## 1.0 INTRODUCTION

This Quality Assurance Project Plan (QAPP) has been developed for the Site Management Plan (SMP) prepared for the 94-15 Sutphin Boulevard property (the Site).

The Site, located at 94-15 Sutphin Boulevard in the Jamaica section of Queens, New York is a irregular-shaped parcel of land located at the northwestern corner of the intersection of 94th Avenue and Sutphin Boulevard. The Site is bounded by a mixed commercial and residential building and new construction to the east, 95th Avenue to the south, 94th Avenue to the north, and Sutphin Boulevard to the west.

The Site is currently occupied by a new 24-story mixed commercial and residential building. Prior to redevelopment, the Site was vacant, unimproved, and vegetated. Previously, the Site was occupied by a 1 ½-story building that was most recently utilized for meat packaging and was demolished prior to 2008. The Site is an approximate 30,047 square foot parcel of land and is generally identified as Block 9999 and Lot 1 on the New York City Tax Map. Lot 1 was formerly part of a larger Block 9999, Lot 1, which also included current Block 9999, Lot 40. Former Lot 1 was subdivided into two approximately equal lots in January 2022. This lot was referenced as ‘Site B’ and retained the Lot 1 designation following the subdivision.

### 1.1 Project Scope and QAPP Objective

The proposed scope of work includes the following:

- Collection of baseline and post-remedial indoor air samples to assess the efficacy of the sub-slab depressurization system (SSDS); and,
- Collection of sub-slab soil vapor and co-located indoor air samples prior to any petition to shut down the active SSDS.

The objective of the QAPP is to detail the policies, organization, objectives, functional activities and specific quality assurance/quality control activities designed to achieve the data quality goals or objectives of the Remedial Action Work Plan. This QAPP addresses how the acquisition and handling of samples and the review and reporting of data will be documented for quality control (QC) purposes. Specifically, this QAPP addresses the following:

- The procedures to be used to collect, preserve, package, and transport samples;
- Field data collection and record keeping;
- Data management;
- Chain-of-custody procedures; and,
- Determination of precision, accuracy, completeness, representativeness, decision rules, comparability and level of quality control effort.

## 2.0 PROJECT ORGANIZATION

The personnel detailed are responsible for the implementation of the QAPP. Tenen Environmental, LLC (Tenen) will implement the sampling outlined in the SMP on behalf of 95<sup>th</sup> Avenue Equities LLC and Sutphin QOZB LLC (the Volunteers).

The Project Manager and Qualified Environmental Professional (QEP) will be Mohamed Ahmed, Ph.D., CPG, principal at Tenen. Dr. Ahmed is a certified professional geologist with over 20 years of experience in the New York City metropolitan area. He has designed and implemented subsurface investigations and is proficient in groundwater modeling, design of groundwater treatment systems, and soil remediation. He has managed numerous projects focused on compliance with the requirements of the New York State Brownfield Cleanup Program and spills programs and the New York City E-designation program. Dr. Ahmed also has extensive experience in conducting regulatory negotiations with the New York State Department of Environmental Conservation, the New York City Department of Environmental Protection, the NYC Office of Housing Preservation and Development, and the Mayor's Office of Environmental Remediation. Dr. Ahmed holds advanced degrees in geology and Earth and Environmental Sciences from Brooklyn College and the Graduate Center of the City University of New York; his resume is included in Appendix A.

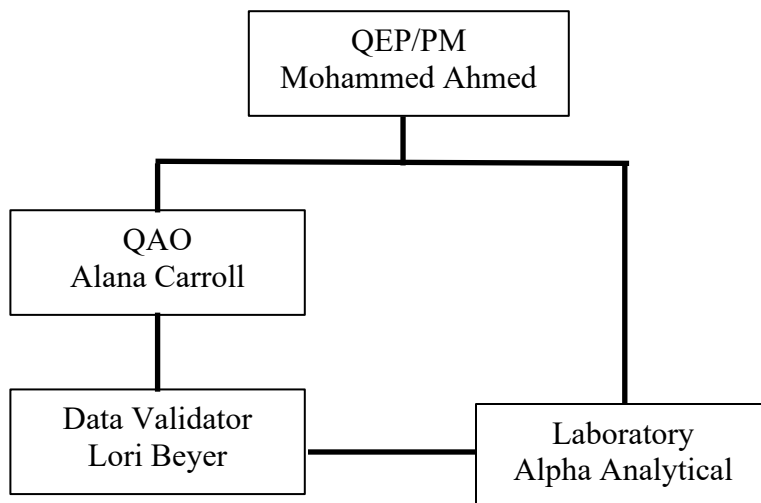
The Quality Assurance Officer will be Mrs. Alana Carroll, CPG, managing scientist at Tenen. Mrs. Carroll is a certified professional geologist with experience in all aspects of site assessment, development and implementation of remedial strategies. Her experience involves projects from inception through investigation, remediation and closure. Her expertise includes soil, soil vapor and groundwater remediation; remedial selection and design; field/health and safety oversight and preparation of work plans and reports to satisfy the requirements of various regulatory agencies. Mrs. Carroll received her BS in Geology from Hofstra University; her resume is included in Appendix A.

In addition, Tenen will utilize subcontractors for laboratory services (Alpha Analytical of Westborough, MA) and data validation (L.A.B. Validation Corp. of East Northport, NY). The resume for the DUSR preparer, Ms. Lori Beyer, is included in Appendix A.

### Contact Information

Remedial Party (95<sup>th</sup> Avenue Equities LLC and Sutphin QOZB LLC), J.J. Weiss, 718.619.0014  
Tenen Environmental, Mohammed Ahmed or Alana Carroll, 646.606.2332

An organization chart for the implementation of the Remedial Action Work Plan and QAPP is below.



### **3.0 SAMPLING AND DECONTAMINATION PROCEDURES**

A detailed description of the procedures to be used during this program for collection of the baseline indoor air, post-remedial indoor air, sub-slab soil vapor, and co-located indoor air samples is provided below. An Analytical Methods/Quality Assurance Summary is provided in Table 1, included in Section 3.11.

#### **3.1 Level of Effort for QC Samples**

Field blank, trip blank, field duplicate and matrix spike (MS) / matrix spike duplicate (MSD) samples will be analyzed to assess the quality of the data resulting from the field sampling and analytical programs. Each type of QC sample is discussed below.

- Field and trip blanks consisting of distilled water will be submitted to the analytical laboratories to provide the means to assess the quality of the data resulting from the field-sampling program. Field (equipment) blank samples are analyzed to check for procedural chemical constituents that may cause sample contamination. Trip blanks are used to assess the potential for contamination of samples due to contaminant migration during sample shipment and storage.
- Duplicate samples are analyzed to check for sampling and analytical reproducibility.
- MS/MSD samples provide information about the effect of the sample matrix on the digestion and measurement methodology.

The general level of QC effort will be one field duplicate and one field blank for every 20 or fewer investigative samples of a given matrix. Additional sample volume will also be provided to the laboratory to allow one site-specific MS/MSD for every 20 or fewer investigative samples of a given matrix. One trip blank will be included along with each sample delivery group of volatile organic compound (VOC) samples. One equipment blank will be collected at a frequency of one per day that PFAS samples are collected for a given matrix.

The analytical laboratory, Alpha Analytical, is certified under the New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) as Lab IDs 11148 and 11627. NYSDEC Analytical Services Protocol (ASP) Category B deliverables will be prepared by the laboratory.

QC samples (e.g., field blank, trip blank, field duplicate, and MS/MSD samples) will not be collected with soil vapor, indoor air, or ambient air samples.

#### **3.2 Sample Handling**

Samples will either be picked up by the laboratory, delivered to the laboratory in person by the sampler, or transported to the laboratory by overnight courier. All samples will be shipped to the laboratory to arrive within 48 hours after collection, and the laboratory will adhere to the analytical holding times for these analyses, as listed in the current version of the New York State ASP.

### 3.3 Custody Procedures

Sample custody will be controlled and maintained through the chain-of-custody procedures. The chain of custody is the means by which the possession and handling of samples is tracked from the site to the laboratory. Sample containers will be cleaned and preserved at the laboratory before shipment to the Site. The following sections (Sections 3.4 and 3.5) describe procedures for maintaining sample custody from the time samples are collected to the time they are received by the analytical laboratory.

### 3.4 Sample Storage

Samples will be stored in secure limited-access areas. Walk-in coolers or refrigerators will be maintained at 4°C, +/- 2°C, or as required by the applicable regulatory program. The temperatures of all refrigerated storage areas are monitored and recorded a minimum of once per day. Deviations of temperature from the applicable range require corrective action, including moving samples to another storage location, if necessary.

### 3.5 Sample Custody

Sample custody is defined by this QAPP as the following:

- The sample is in someone's actual possession;
- The sample is in someone's view after being in his or her physical possession;
- The sample was in someone's possession and then locked, sealed, or secured in a manner that prevents unsuspected tampering; or,
- The sample is placed in a designated and secured area.

Samples will be removed from storage areas by the sample custodian or laboratory personnel and transported to secure laboratory areas for analysis. Access to the laboratory and sample storage areas is restricted to laboratory personnel and escorted visitors only; all areas of the laboratory are therefore considered secure.

Laboratory documentation used to establish chain of custody and sample identification may include the following:

- Field chains of custody or other paperwork that arrives with the sample;
- Laboratory chain of custody;
- Sample labels or tags attached to each sample container;
- Sample custody seals;
- Sample preparation logs (i.e., extraction and digestion information) recorded in hardbound laboratory books, filled out in legible handwriting, and signed and dated by the chemist;
- Sample analysis logs (e.g., metals, GC/MS, etc.) information recorded in hardbound laboratory books that are filled out in legible handwriting, and signed and dated by the chemist;

- Sample storage log (same as the laboratory chain of custody); and,
- Sample disposition log, which documents sample disposal by a contracted waste disposal company.

### **3.6 Sample Tracking**

All samples will be maintained in the appropriate coolers prior to and after analysis. Laboratory analysts will remove and return their samples, as needed. Samples that require internal chain of custody procedures will be relinquished to the analysts by the sample custodians. The analyst and sample custodian will sign the original chain of custody relinquishing custody of the samples from the sample custodian to the analyst. When the samples are returned, the analyst will sign the original chain of custody returning sample custody to the sample custodian. Sample extracts will be relinquished to the instrumentation analysts by the preparatory analysts. Each preparation department will track internal chain of custody through their logbooks/spreadsheets.

Any change in the sample during the time of custody will be noted on the chain of custody (e.g., sample breakage or depletion).

### **3.7 Sub-slab Soil Vapor Sampling Methodology**

All sub-slab soil vapor samples will be collected in accordance with the NYSDOH Soil Vapor Guidance prior to any petition to shut down the SSDS. All sub-slab soil vapor samples will be co-located with an indoor air sample.

Sub-slab soil vapor samples will be collected from six newly installed vapor monitoring points (VMPs) in the cellar of the new Site building. Prior to sampling, ambient air will be purged from the VMP by attaching 1/4-inch diameter Teflon® tube to the VMP and attaching the surface end of the tube to an air valve and then to a vacuum pump. The vacuum pump will remove three volumes of air (volume of the sample probe and tube) prior to sample collection. The flow rate for both purging and sample collection will not exceed 0.2 liter per minute (L/min).

The sub-slab soil vapor samples will first be screened for organic vapors using a photoionization detector (PID). A tracer gas will be used in accordance with NYSDOH protocols to verify the integrity of the soil vapor probe seal. Helium will be used as the tracer gas and a bucket will serve to keep it in contact with the probe during testing. A portable monitoring device will be used to analyze a sample of soil vapor for the tracer prior to sampling. If the tracer sample results show a significant presence of the tracer, the probe seals will be adjusted to prevent infiltration.

A sample log sheet will be maintained summarizing sample identification, date and time of sample collection, sampling depth, purge volumes, volume of the soil vapor extracted, vacuum of canisters before and after the samples are collected, apparent moisture content of the sampling zone, and chain of custody.

Sub-slab soil vapor samples will be collected in laboratory-supplied 6-liter Summa canisters using



8-hour regulators. All sub-slab soil vapor sample containers will be appropriately labeled and closed. Chain-of-custody documents will be completed before shipment. All sub-slab soil vapor samples will be analyzed for volatile organic compounds (VOCs) using EPA Method TO-15 and sent to an ELAP certified laboratory.

### **3.8 Indoor Air Sampling Methodology**

All indoor air samples will be collected in accordance with the NYSDOH Soil Vapor Guidance. All baseline and post-remedial indoor air samples will be collected without a co-located sub-slab soil vapor sample. All indoor air samples collected to petition shut down of the SSDS will be co-located with a sub-slab soil vapor sample.

The indoor air samples will be collected from breathing height (three to five feet above the floor) from within the Site building. The sampling flow rate will not exceed 0.2 L/min. Sampling will occur for eight hours in commercial structures. A sample log sheet will be maintained summarizing sample identification, date and time of sample collection, identity of samplers, sampling methods and devices, vacuum of canisters before and after the samples are collected, apparent moisture content of the sampling zone, and chain-of-custody protocols.

Indoor air samples will be collected during the heating season in laboratory-supplied 6-liter Summa canisters using eight-hour regulators in commercial structures. Indoor air samples will be analyzed for VOCs using EPA Method TO-15 and sent to an ELAP certified laboratory.

### **3.9 Analytical Methods/Quality Assurance Summary Table**

A summary of the analytical methods and quality assurance methods are included in Table 1, below.

Table 1  
Analytical Methods/Quality Assurance Summary

Matrix	Proposed Samples	QA/QC Samples					Total # Samples	Analytical	Method	Preservative	Holding Times	Container
		TB	FB	DUP	MS/MSD	EB		Parameter				
Indoor Air (Baseline or Post-Remedial)	5 (per sampling event)	0	0	0	0	0	5	VOCs	TO-15	None	30 days	(1) 6-L Summa
Sub-Slab Soil Vapor	6 (per sampling event)	0	0	0	0	0	6	VOCs	TO-15	None	30 days	(1) 6-L Summa
Co-Located Indoor Air	6 (per sampling event)	0	0	0	0	0	6	VOCs	TO-15	None	30 days	(1) 6-L Summa
Ambient Air	1 (per sampling event)	0	0	0	0	0	1	VOCs	TO-15	None	30 days	(1) 6-L Summa

TB – Trip Blank  
 FB – Field Blank  
 DUP – Duplicate  
 EB – Equipment Blank  
 °C – degrees Celsius  
 mL – milliliter  
 L – liter

### **3.10 Decontamination**

Where possible, samples will be collected using new, dedicated sampling equipment so that decontamination is not required. All non-dedicated drilling tools and equipment will be decontaminated between boring locations using potable tap water and a phosphate-free detergent (e.g., Alconox) and/or a steam cleaner. All non-dedicated sampling equipment will also have a final rinse with deionized water. Decontamination water will be collected and disposed as investigation-derived waste (IDW).

### **3.11 Data Review and Reporting**

The NYSDEC ASP Category B data package will be validated by an independent data validation subconsultant and a DUSR summarizing the results of the data validation process will be prepared. All reported analytical results will be qualified as necessary by the data validation and will be reviewed and compared against background concentrations and/or applicable New York State criteria:

*Baseline and Post-Remedial Indoor Air – NYSDOH Air Guideline Values (AGVs)*

*Sub-Slab Soil Vapor and Co-Located Indoor Air – NYSDOH Matrices and AGVs (AGVs will be compared to indoor air samples only).*

Baseline and post-remedial indoor air analytical results will be documented in a letter report following sampling. All co-located sub-slab soil vapor and indoor air analytical results will be documented in the Periodic Review Report (PRR) for that reporting period, and will describe Site conditions and document applicable observations made during the sample collection. In addition, the PRR will include a description of the sampling procedures, tabulated sample results and an assessment of the data and conclusions. The laboratory data packages, DUSR, and field notes will be included in the PRR as appendices. All data will also be submitted electronically to NYSDEC via the Environmental Information Management System (EIMS) in EQUIS format.

**Appendix A**  
Resumes

**Matthew Carroll, P.E.**  
**Environmental Engineer/Principal**

**Experience Summary**

Matthew Carroll is an environmental engineer experienced in all aspects of site assessment and development and implementation of remedial strategies. He has managed projects from inception through investigation, remediation and closure. His expertise includes soil, soil gas, and groundwater remediation, preparation of cost estimates, remedial alternative selection and design, soil characterization for disposal, field safety oversight, and preparation of work plans and reports to satisfy New York and New Jersey state requirements, and New York City "e" designation and restrictive declarations. Mr. Carroll's project management experience includes past management of a New York City School Construction Authority hazardous materials contract. He is responsible for all engineering work performed by Tenen and is currently the project manager and remedial engineer for several New York State Brownfield Cleanup Program sites.

**Selected Project Experience**

**470 Kent Avenue, Brooklyn**

As project manager, supported the client in due diligence and transactional activities, including a Phase I ESA, preliminary site investigation, and remedial cost estimate; preparation of BCP application and remedial investigation work plan. The former manufactured gas plant, sugar refinery and lumberyard will be developed as a mixed-use project with market rate and affordable housing and public waterfront access. As remedial engineer, will be responsible for development of remedial alternatives and oversight and certification of all remedial activities.

**500 Exterior Street, Bronx**

Designed and implemented the investigation of this former lumberyard and auto repair shop that will be redeveloped as mixed use development with an affordable housing component; prepared BCP application and subsequent work plans and reports. Designed a remedial strategy incorporating both interim remedial measures (IRMs) and remediation during the development phase.

**Gateway Elton I and II, Brooklyn**

Conducted soil disposal characterization, prepared Remedial Action Work Plans and designed methane mitigation systems for two phases of a nine-building residential development and commercial space; prepared and oversaw implementation of a Stormwater Pollution Prevention Plan during construction and prepared and certified the remedial closure reports for the project.

**Affordable Housing Development, Rye, NY**

Consultant to the City of Rye on environmental issues pertaining to a county-owned development site slated for an afford senior housing; reviewed environmental documentation for the project and prepared summary memorandum for City Council review; recommended engineering controls to address potential exposure to petroleum constituents, presented report findings at public meetings and currently providing ongoing environmental support during project implementation.

### **Queens West Development BCP Site, Long Island City, New York**

Assistant Project Manager for two developers involved in the site.

- Responsible for oversight of remediation under the New York State Brownfield Cleanup Program
- Technical review of work plans and reports and coordination of the Applicant's investigation and oversight efforts
- Provided input for mass calculations and well placement for an in-situ oxidation remedy implemented on a proposed development parcel and within a City street
- Conducted technical review of work pertaining to a former refinery. Documents reviewed included work plans for characterization and contaminant delineation; pilot test (chemical oxidation); remediation (excavation and groundwater treatment). Managed field personnel conducting full time oversight and prepared progress summaries for distribution to project team
- Following implementation of remedial action, implemented the Site Management Plan and installation/design of engineering controls (SSDS, vapor barrier/concrete slab, NAPL recovery). Also responsible for coordination with NYSDEC

### **Brownfield Cleanup Program Redevelopment Sites – West Side, New York City**

Managed remediation of a development consisting of four parcels being addressed under one or more State and city regulatory programs (NYS Brownfield Cleanup Program, NYS Spills, and NYC "e" designation program). Remediation includes soil removal, screening and disposal; treatment of groundwater during construction dewatering and implementation of a worker health and safety plan and community air monitoring plan (HASP/CAMP)

Managed an additional BCP site, supported the Applicant in coordination with MTA to create station access for the planned No. 7 subway extension; also provided support the client in coordination with Amtrak to obtain access for remedial activities on the portion of the site that is within an Amtrak easement. The site will eventually be used for construction of a mixed-use high-rise building.

### **BCP Site, Downtown Brooklyn, New York**

Performed investigation on off-site properties and designed an SSDS for an adjacent building, retrofitting the system within the constraints of the existing structure; coordinated the installation of the indoor HVAC controls and vapor barrier; provided input to the design of a SVE system to address soil vapor issues on the site.

### **West Chelsea Brownfield Cleanup Program Site**

Designed an in-situ remediation program and sub-slab depressurization system to address contamination remaining under the High Line Viaduct; SSDS design included specification of sub-grade components, fan modeling and selection, identifying exhaust location within building constraints and performance modeling; prepared the Operations Maintenance and Monitoring Plan and Site Management Plan sections pertaining to the SSDS.

### **Historic Creosote Spill Remediation – Queens, New York – New York State Voluntary Cleanup Program**

Modeled contamination volume and extent and prepared mass estimates of historic fill constituents and creosote-related contamination; designed a soil vapor extraction (SVE) and dewatering system to address historic creosote release both above and below static

Matthew Carroll, Environmental Engineer/Principal  
Tenen Environmental

water table; coordinated with the Metropolitan Transit Authority and prepared drawings to secure approval to drill in the area of MTA subway tunnels.

**NYSDEC Spill Site- Far West Side, Manhattan**

Provided support to client during negotiations with a major oil company regarding allocation of remedial costs. Worked with client's attorney to develop a regulatory strategy to address the client's obligations under the NYSDEC Spills Program and the New York City "e" designation requirements.

**Affordable Housing Site, Brooklyn, New York**

Modified prior work plans for soil, soil vapor and groundwater investigation to address requirements for site entry into the New York City Brownfield Cleanup Program. Prepared technical basis for use of prior data previously disallowed by OER. Currently conducting site investigation.

**New York City School Construction Authority Hazardous Materials Contract**

Provided work scopes and cost estimates, managed and implemented concurrent projects, including Phase I site assessments, Phase II soil, groundwater and soil gas investigations, review of contractor bid documents, preparation of SEQR documents, specifications and field oversight for above- and underground storage tank removal, and emergency response and spill control.

**Former Manufacturing Facility, Hoboken, New Jersey**

Evaluated site investigation data to support a revision of the current property use to unrestricted; modified the John & Ettinger vapor intrusion model to apply the model to a site-specific, mixed use commercial/residential development; implemented a Remedial Action Work Plan that included the characterization, removal and separation of 9,500 cubic yards of historic fill; designed and implemented a groundwater characterization/delineation program using a real-time Triad approach; designed and implemented an innovative chemical oxidation technology for the property.

**Former Varnish Manufacturer - Newark, New Jersey**

Prepared a Phase I environmental site assessment; implemented soil and groundwater sampling to assess presence of petroleum and chlorinated compounds; prepared alternate cost remediation scenarios for settlement purposes and implemented a groundwater investigation plan, including pump tests and piezometer installation to assess the effect of subsurface utilities and unique drainage pathways upon contaminant transport.

**Education and Certifications**

Professional Engineer, New York

Bachelor of Engineering, Environmental; Stevens Institute of Technology, 2002

Bachelor of Science, Chemistry, New York University, 2002

Technical and Regulatory Training in Underground Storage Tanks, Cook College, Rutgers University, 2006

**Mohamed Ahmed, Ph.D., C.P.G.**  
**Sr. Geologist/Principal**

**Experience Summary**

Mohamed Ahmed is a certified professional geologist with nearly 23 years of experience in the New York City metropolitan area. He has designed and implemented subsurface investigations and is proficient in groundwater modeling, design of groundwater treatment systems and soil remediation. He has managed numerous projects focused on compliance with the New York State Brownfield Cleanup and Spills programs and the New York City “e” designation program. Dr. Ahmed also has extensive experience in conducting regulatory negotiations with the New York State Department of Environmental Conservation, the NYC Office of Housing Preservation and Development, and the Mayor’s Office of Environmental Remediation.

**Selected Project Experience**

**Willoughby Square, Downtown Brooklyn**

As Project Manager, directs all regulatory interaction and investigation on this joint public-private sector redevelopment that will include a public park and four-level underground parking garage. Prepared the remedial investigation work plan and remedial action work plan, conducted investigation activities and waste characterization, and negotiated with the NYC Department of Environmental Protection and the Mayor’s Office of Environmental Remediation to transition the site into the NYC Voluntary Cleanup Program.

**School Facility, Borough Park, Brooklyn**

Managed all regulatory agency coordination, work plan and report preparation and remedial oversight; worked with OER to determine measures to retroactively address the hazardous materials and air quality E-designations on a previously constructed school building and prepared supporting documentation to justify the use of electrical units rather than natural gas.

**LGA Hotel Site, East Elmhurst, Queens**

Project manager for all work conducted at this former gasoline service station which is being remediated under the NYS Brownfield Cleanup Program; technical oversight of work plans, reports, and design and implementation of field and soil disposal characterization.

**436 10<sup>th</sup> Avenue, Manhattan**

As project manager and technical lead, assisted client in developing remedial cost estimates used for property transaction, developed regulatory strategy to address NYS Spills and NYC E-designation requirements, and currently overseeing remedial activities which include removal and disposal of petroleum-contaminated bedrock and dewatering and disposal of impacted groundwater.

**Brownfield Cleanup Program Site, Downtown Brooklyn**

Managed investigation and remediation under the BCP program for a proposed mixed-use development; designed the remedial investigation and prepared the remedial action work plan which includes an SVE system monitored natural attenuation. Prepared remedial cost



estimates for several scenarios. The project will include a 53-story mixed-use structure and parking garage.

**Queens West Development, Long Island City**

Directed project team and subcontractors for soil investigation/remediation studies on multiple properties; provided technical support for negotiations with NYSDEC during investigation and remediation.

**Former Creosote Site, Long Island City**

Designed and implemented a complex investigation to assess the nature and extent of historic creosote contamination at this former industrial site; conducted studies to optimize recovery of LNAPL and DNAPL and developed strategies using bioremediation and natural attenuation in conjunction with conventional remedial approaches. Performed pilot tests for soil vapor extraction system design and coordinated with NYSDEC and NYSDOH to implement sub-slab soil vapor sampling.

**NYSDEC Spill Site – Far West Side, Manhattan**

Developed a detailed remedial cost estimate for to support client negotiations with a major oil company. The estimate included costs pertaining to: chipping, removal and disposal of petroleum-impacted bedrock; removal/disposal of recycled concrete; costs for dewatering and disposal of impacted groundwater during construction; and design and installation of a vapor barrier below the redevelopment.

**Active Industrial Facility, Newburgh, New York**

Designed remedial investigation of soil and groundwater contaminated with trichloroethane; performed soil vapor pilot test and pump test to aid in design of soil and groundwater remediation alternatives; conducted sub-slab vapor sampling in accordance with NYSDOH guidance.

**Former Dry Cleaning Facility, New York City**

Conducted soil and groundwater investigations, designed and installed a soil vapor extraction system and performed extensive testing of indoor air. Negotiated the scope of the RI and IRM with NYSDEC.

**Waterfront Redevelopment, Yonkers, NY**

Designed and performed geophysics survey of six parcels to determine locations of subsurface features; supervised test pit excavation to confirm geophysics results and evaluate and classify soil conditions prior to development activities.

**Prince's Point, Staten Island, New York**

Performed soil, groundwater and sediment sampling to delineate the extent of contamination; used field-screening techniques to control analytical costs and supervised soil excavation and disposal.

**Apartment Complex, New York City, New York**

Coordinated with Con Edison, the owner of the adjacent property and NYSDEC to determine oil recovery protocol; assessed hydrogeological conditions and conducted pilot tests to design cost-effective recovery system; designed and supervised installation of recovery system.

## **Publications**

“Impact of Toxic Waste Dumping on the Submarine Environment: A Case Study from the New York Bight”. Northeastern Geology and Environmental Sciences, V. 21, No. 12, p. 102-120. (With G. Friedman)

Metals Fluxes Across the Water/Sediment Interface and the Influence of pH. Northeastern Geology and Environmental Sciences, in press. (With G. Friedman)

“Water and Organic Waste Near Dumping Ground in the New York Bight”. International Journal of Coal Geology, volume 43. (With G. Friedman)

## **Education and Certifications**

Ph.D., Earth and Environmental Sciences, Graduate Center of the City of New York (2001)

M.Ph., Earth and Environmental Sciences, City University of New York (1998)

M.A. Geology, Brooklyn College (1993)

B.S. Geology, Alexandria University, Egypt (1982)

American Institute of Professional Geologists, Certified Professional Geologist, 1997-2015

**L.A.B. Validation Corp., 14 West Point Drive, East Northport, New York 11731**

**Lori A. Beyer**

**SUMMARY:**

General Manager/Laboratory Director with a solid technical background combined with Management experience in environmental testing industry. Outstanding organizational, leadership, communication and technical skills. Customer focused, quality oriented professional with consistently high marks in customer/employee satisfaction.

**EXPERIENCE:**

1998-Present L.A.B. Validation Corporation, 14 West Point Drive, East Northport, NY

**President**

- Perform Data Validation activities relating to laboratory generated Organic and Inorganic Environmental Data.

1998-Present American Analytical Laboratories, LLC. 56 Toledo Street, Farmingdale, NY

**Laboratory Director/Technical Director**

- Plan, direct and control the operation, development and implementation of programs for the entire laboratory in order to meet AAL's financial and operational performance standards.
- Ensures that all operations are in compliance with AAL's QA manual and other appropriate regulatory requirements.
- Actively maintains a safe and healthy working environment that is demanded by local laws/regulations.
- Monitors and manages group's performance with respect to data quality, on time delivery, safety, analyst development/goal achievement and any other key performance indices.
- Reviews work for accuracy and completeness prior to release of results to customers.

1996-1998 Nytest Environmental, Inc. (NEI) Port Washington, New York

**General Manager**

- Responsible for controlling the operation of an 18,000 square foot facility to meet NEI's financial and operational performance standards.
- Management of 65 FTEs including Sales and Operations
- Ensure that all operations are in compliance with NEI's QA procedures
- Ensures that productivity indicators, staffing levels and other cost factors are held within established guidelines
- Maintains a quantified model of laboratory's capacity and uses this model as the basis for controlling the flow of work into and through the lab so as to ensure that customer requirements and lab's revenue and contribution targets are achieved.

1994-1996 Nytest Environmental, Inc. (NEI) Port Washington, New York

**Technical Project Manager**

- Responsible for the coordination and implementation of environmental testing programs requirements between NEI and their customers
- Supervise Customer Service Department
- Assist in the development of major proposals
- Complete management of all Federal and State Contracts and assigned commercial contracts
- Provide technical assistance to the customer, including data validation and interpretation
- Review and Implement Project specific QAPP's.

1995-1996 Nytest Environmental, Inc. (NEI) Port Washington, New York

**Corporate QA/QC Officer**

- Responsible for the implementation of QA practices as required in the NJDEP and EPA Contracts
- Primary contact for NJDEP QA/QC issues including SOP preparation, review and approval
- Responsible for review, verification and adherence to the Contract requirements and NEI QA Plan

1992-1994 Nytest Environmental, Inc. (NEI) Port Washington, New York

**Data Review Manager**

- Responsible for the accurate compilation, review and delivery of analytical data to the company's customers. Directly and effectively supervised a department of 22 personnel.
- Managed activities of the data processing software including method development, form creation, and production
- Implement new protocol requirements for report and data management formats
- Maintained control of data storage/archival areas as EPA/CLP document control officer

1987-1991 Nytest Environmental, Inc. (NEI) Port Washington, New York

**Data Review Specialist**

- Responsible for the review of GC, GC/MS, Metals and Wet Chemistry data in accordance with regulatory requirements
- Proficient with USEPA, NYSDEC, NJDEP and NEESA requirements
- Review data generated in accordance with SW846, NYSDEC ASP, EPA/CLP and 40 CFR Methodologies

1986-1987 Nytest Environmental, Inc. (NEI) Port Washington, New York

**GC/MS VOA Analyst**

**EDUCATION:**

1982-1985 State University of New York at Stony Brook, New York; BS Biology/Biochemistry

1981-1982 University of Delaware; Biology/Chemistry

5/91 Rutgers University; Mass Spectral Data Interpretation Course, GC/MS Training

8/92 Westchester Community College; Organic Data Validation Course

9/93 Westchester Community College; Inorganic Data Validation Course

# Westchester Community College

## Professional Development Center

Awards this Certificate of Achievement To

LORI BEYER

for Successfully Completing

ORGANIC DATA VALIDATION COURSE (35 HOURS)

Dr. John Samuelian

Date AUGUST 1992

*[Signature]*

Assistant Dean  
Professional Development Center

President



The Professional  
Development Center

# Westchester Community College

## Professional Development Center

Awards this Certificate of Achievement To

LORI BEYER

for Successfully Completing

INORGANIC DATA VALIDATION

Instructor: Dale Boshart

Date MARCH 1993

Arch. A. West  
Assistant Dean  
Professional Development Center

J. Boshart  
President



The Professional  
Development Center

New York State Department of Environmental Conservation  
60 Wolf Road, Albany, New York 12233



Thomas C. Jorling  
Commissioner

July 8, 1992

Ms. Elaine Sall  
Program Coordinator  
Westchester Community College  
Valhalla, NY 10595-1698

Dear Elaine,

Thank you for your letter of June 29, 1992. I have reviewed the course outline for organic data validation, qualifications for teachers and qualifications for students. The course that you propose to offer would be deemed equivalent to that which is offered by EPA. The individuals who successfully complete the course and pass the final written exam would be acceptable to perform the task of organic data validation for the Department of Environmental Conservation, Division of Hazardous Waste Remediation.

As we have discussed in our conversation of July 7, 1992, you will forward to me prior to the August course deadline, the differences between the EPA SOW/90 and the NYSDEC ASP 12/91. You stated these differences will be compiled by Mr. John Samulian.

I strongly encourage you to offer an inorganic data validation course. I anticipate the same list of candidates would be interested in an inorganic validation course as well, since most of the data to be validated consists of both organic and inorganic data.

Thank you for your efforts and please contact me if I can be of any further assistance.

Sincerely,

*Maureen P. Serafini*

Maureen P. Serafini  
Environmental Chemist II  
Division of Hazardous Waste  
Remediation

②



The Professional  
Development Center  
AT  
WESTCHESTER COMMUNITY COLLEGE

914 285-6619

October 2, 1992

Ms. Lori Beyer  
3 sparkill Drive  
East Northport, NY 11731

Dear Ms. Beyer:

Congratulations upon successful completion of the Organic Data Validation course held August 17 - 21, 1992, through Westchester Community College, Professional Development Center. This course has been deemed by New York State Department of Environmental Conservation as equivalent to EPA's Organic Data Validation Course.

Enclosed is your Certificate. Holders of this Certificate are deemed competent to perform organic data validation for the New York State DEC Division of Hazardous Waste Remediation.

The Professional Development Center at Westchester Community College plans to continue to offer courses and seminars which will be valuable to environmental engineers, chemists and related personnel. Current plans include a TCLP seminar on November 17th and a conference on Environmental Monitoring Regulations on November 18th.

We look forward to seeing you again soon at another environmental program or event. Again, congratulations.

Very truly yours,

Passing Grade is 70%  
Your Grade is 99%

Elaine Sall  
Program Coordinator

ES/bf



SUNY  
WESTCHESTER COMMUNITY COLLEGE  
Valhalla, New York 10595



The Professional  
Development Center  
AT  
WESTCHESTER COMMUNITY COLLEGE

914 285-6619

June 21, 1993

Dear Ms. Beyer:

Enclosed is your graded final examination in the Inorganic Data Validation course you completed this past March. A score of 70% was required in order to receive a certificate of satisfactory completion. Persons holding this certificate are deemed acceptable to perform Inorganic Data Validation for the New York State Department of Environmental Conservation, Division of Hazardous Waste Remediation.

I am also enclosing a course evaluation for you to complete if you have not already done so. The information you provide will greatly aid us in structuring further courses. We wish to make these course offerings as relevant, targeted and comprehensive as possible. Your evaluation is vital to that end.

Congratulations on your achievement. I look forward to seeing you again at another professional conference or course. We will be co-sponsoring an environmental monitoring conference on October 21, 1993 with the New York Water Pollution Control Association, Lower Hudson Chapter, at IBM's Yorktown Heights, NY site. Information regarding this event will be going out in August.

Very truly yours,

Elaine Sall  
Program Coordinator

ES/bf

Enclosures



SUNY  
WESTCHESTER COMMUNITY COLLEGE  
Valhalla, New York 10595



## **APPENDIX 6 – HEALTH AND SAFETY PLAN**

**Health and Safety Plan**  
**for**  
**94-15 Sutphin Boulevard – Site B**  
**Site Management Plan**

94-15 Sutphin Boulevard Avenue  
Jamaica, New York 11435  
Block 9999, Lot 1  
BCP Site # C241278

Submitted to:  
New York State Department of Environmental Conservation  
Division of Environmental Remediation  
Remedial Bureau B  
625 Broadway, 12<sup>th</sup> Floor  
Albany, NY 12233-7016

Prepared for:  
95<sup>th</sup> Avenue Equities LLC & Sutphin QOZB LLC  
670 Myrtle Avenue, Suite 6373  
Brooklyn, NY 11205

Prepared by:



121 West 27<sup>th</sup> Street, Suite 702  
New York, NY 10001

**December 2024**

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## **1.0 INTRODUCTION**

This Health and Safety Plan (HASP) has been prepared in conformance with the Occupational Safety and Health Administration (OSHA) standards and guidance that govern site investigation activities, other applicable regulations, and Tenen Environmental LLC (Tenen) health and safety policies and procedures. The purpose of this HASP is the protection of Tenen field personnel and others during the implementation of the Site Management Plan (SMP).

The Site, located at 94-15 Sutphin Boulevard in the Jamaica section of Queens, New York is an irregular-shaped parcel of land located at the northwestern corner of the intersection of 94<sup>th</sup> Avenue and Sutphin Boulevard. The Site is bounded by a mixed commercial and residential building and new construction to the east, 95<sup>th</sup> Avenue to the south, 94<sup>th</sup> Avenue to the north, and Sutphin Boulevard to the west.

The Site is currently occupied by a new 24-story mixed commercial and residential building. Prior to redevelopment, the Site was vacant, unimproved, and vegetated. Previously, the Site was occupied by a 1 ½-story building that was most recently utilized for meat packaging and was demolished prior to 2008. The Site is an approximate 30,047 square foot parcel of land and is generally identified as Block 9999 and Lot 1 on the New York City Tax Map. Lot 1 was formerly part of a larger Block 9999, Lot 1, which also contained current Block 9999, Lot 40. Former Lot 1 was subdivided into two approximately equal lots in January 2022. This lot was referenced as ‘Site B’ and retain Lot 1 designation following the subdivision.

### **1.1 Scope of HASP**

This HASP includes safety procedures to be used by Tenen staff during the following activities:

- Collection of baseline and post-remedial indoor air samples to evaluate the efficacy of the sub-slab depressurization system (SSDS); and,
- Collection of sub-slab soil vapor and co-located indoor air samples prior to any petition to shut down the active SSDS.

Subcontractors will ensure that performance of the work is in compliance with this HASP and applicable laws and regulations.

## **2.0 PROJECT SAFETY AUTHORITY**

The following personnel are responsible for project health and safety under this HASP.

- Project Manager, Mohamed Ahmed
- Health and Safety Officer (HSO), Ashley Platt

In addition, each individual working at the Site will be responsible for compliance with this HASP and general safe working practices. All Site workers will have the authority to stop work if a potentially hazardous situation or event is observed.

### **2.1 Designated Personnel**

The Project Manager is responsible for the overall operation of the project, including compliance with the HASP and general safe work practices. The Project Manager may also act as the Health and Safety Officer (HSO) for this project.

Tenen will appoint one of its on-site personnel as the on-site HSO. This individual will be responsible for the implementation of the HASP. The HSO will have a 4-year college degree in occupational safety or a related science/engineering field, and at least two (2) years of experience in implementation of air monitoring and hazardous materials sampling programs. The HSO will have completed a 40-hour training course that meets OSHA requirements of 29 CFR Part 1910, Occupational Safety and Health Standards.

The HSO will be present on-site during all field operations involving drilling or other subsurface disturbance, and will be responsible for all health and safety activities and the delegation of duties to the field crew. The HSO has stop-work authorization, which he/she will execute on his/her determination of an imminent safety hazard, emergency situation, or other potentially dangerous situation. If the HSO must be absent from the field, a replacement who is familiar with the Construction Health and Safety Plan, air monitoring and personnel protective equipment (PPE) will be designated.

### 3.0 HAZARD ASSESSMENT AND CONTROL MEASURES

Former Lot 1 was developed with dwellings and a carpenter's shop sometime prior to 1901. By 1911, non-residential uses of the property included a saw clamp manufacturer and a contractor's stable. By 1925, the property was redeveloped with a 1 1/2-story building that was utilized by a meat packing facility until at least 2006.

Environmental investigations conducted to date at the Site include a Phase I Environmental Site Assessment (ESA) and a Limited Due Diligence Environmental Site Investigation (ESI), and a Remedial Investigation (RI). Summaries of each report are provided below.

*Phase I Environmental Site Assessment Report, 94-01 Sutphin Boulevard, Jamaica, NY, Middleton Environmental Inc., February 11, 2021.*

Middleton Environmental Inc. (Middleton) prepare a Phase I ESA for the Site in February 2021. The Phase I ESA identified the following Recognized Environmental Conditions (RECs) in association with the Site:

- Potential subsurface contamination associated with potential abandoned fuel oil tanks at the Site.

*Limited Due Diligence Environmental Site Investigation, 94-01 Sutphin Boulevard, Jamaica, NY, Tenen Environmental, LLC, November 3, 2021.*

A Limited Due Diligence ESI was completed at the Site in November 2021 by Tenen Environmental, LLC (Tenen) to evaluate the quality of soil, groundwater, and soil vapor across the Site. The scope of work performed during the Limited Due Diligence ESI included the installation of 13 test pits, the collection of twelve soil samples, the installation of three temporary groundwater monitoring wells, the collection of three groundwater samples, the installation of six temporary soil vapor sample points, and the collection of six soil vapor samples. In addition, a geophysical survey was performed to locate the potential oil tanks in the area along 94<sup>th</sup> Avenue as identified in Middleton's Phase I ESA. All soil samples were analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), target analyte list (TAL) metals, pesticides, and polychlorinated biphenyls (PCBs); all groundwater samples were analyzed for VOCs and SVOCs; and, all soil vapor samples were analyzed for VOCs. A summary of the results is included below:

- The geophysical survey could not successfully confirm the presence of underground gasoline storage tanks;
- Chlorinated VOCs (cVOCs) and petroleum-related VOCs were present in soil vapor samples;
- The cVOC tetrachloroethene (PCE) was present in all soil vapor samples, at a maximum concentration of 125 micrograms per cubic meter (ug/m3);
- VOCs were not detected in soil above Unrestricted Use Soil Cleanup Objectives (SCOs), with the exception of acetone, a common laboratory artifact;
- Historic-fill related polyaromatic hydrocarbons (PAHs) and metals were detected in soil above the Unrestricted Use and Restricted-Residential Use SCOs. Of note, mercury was detected at a concentration of 0.823 milligrams per kilogram (mg/kg);
- Pesticides and PCBs were not detected above the Restricted-Residential Use SCOs. Four pesticides and two PCBs were detected above the Unrestricted Use SCOs;
- The cVOC PCE was detected in one groundwater sample in exceedance of its Class GA Standard; and,
- Historic-fill related SVOCs were detected above the Class GA Standards.

LLC, February 2024.

A Remedial Investigation (RI) was completed at the Site in December 2021 and January 2022 by Tenen to further evaluate the quality of soil, groundwater, and soil vapor across the Site. The scope of work performed during the RI included the installation of ten soil borings/test pits, the collection of 26 soil samples (including QA/QC samples), the installation of four temporary groundwater monitoring wells, the collection of seven groundwater samples (including QA/QC samples), the installation of six temporary soil vapor sample points, and the collection of six soil vapor samples. All soil and groundwater samples were analyzed for VOCs, SVOCs, TAL metals (total and dissolved for groundwater), pesticides, herbicides, PCBs, total cyanide, trivalent and hexavalent chromium, 1,4-dioxane, and per- and polyfluoroalkyl substances (PFAS). All soil vapor samples were analyzed for VOCs. A summary of the results is included below:

- One chlorinated VOCs (cVOCs), tetrachloroethene (PCE) was present in soil across the Site at low concentrations below the Unrestricted Use SCOs in four samples;
- VOCs were not detected in exceedance of its Unrestricted Use SCOs;
- Historic fill-related PAHs, metals, pesticides, and PCBs were detected in exceedance of Unrestricted Use SCOs in soil across the Site. Of these, one or more PAHs were also detected in exceedance of Restricted-Residential Use SCOs;
- One PFAS, specifically PFOS, was detected in one soil sample slightly in exceedance of the proposed Unrestricted Use SCOs;
- Herbicides were not detected in exceedance of applicable SCOs in any soil samples;
- PCE was detected in exceedance of the Class GA Standards in groundwater in one sample;
- Historic fill-related PAHs were detected slightly in exceedance of Class GA Standards in five of six groundwater samples;
- One metal, antimony, was detected in one dissolved groundwater sample in exceedance of its Class GA Standard;
- Naturally-occurring earth metals, including iron, manganese, and sodium, were detected in total and dissolved groundwater samples across the Site. Of these, manganese and sodium also exceeded their respective Class GA Standards in one or more dissolved groundwater samples.;
- PFAS, specifically PFOA and PFOS, were detected in exceedance of the NYSDEC PFAS Guidelines in groundwater across the Site;
- Pesticides, herbicides, and PCBs were not detected in exceedance of Class GA Standards in any groundwater samples;
- A variety of cVOCs, including PCE, TCE, cis-1,2-dichloroethene (cis-1,2-DCE), 1,1,1-TCA, carbon tetrachloride, trans-1,2-dichloroethene (trans-1,2-DCE), and chloroform were detected in soil vapor samples across the Site at concentrations exceeding background concentrations; and,
- A variety of petroleum-related VOCs were detected at concentrations exceeding background concentrations in four of six soil vapor samples.

### **3.1 Human Exposure Pathways**

The media of concern at the Site include potentially-impacted soil, groundwater and soil vapor. Potential exposure pathways include dermal contact, incidental ingestion and inhalation of vapors. The risk of dermal contact and incidental ingestion will be minimized through general safe work practices, a personal hygiene program and the use of PPE. The risk of inhalation will be minimized through the use of an air monitoring program for VOCs and particulates.

### **3.2 Chemical Hazards**

Based on previous investigations and the RI, the following contaminants of concern may be present at the Site:

#### Chlorinated Solvents

- PCE
- TCE

#### SVOCs

- PAHs

#### Metals

- Mercury

Material Safety Data Sheets (MSDSs) for each contaminant of concern are included in Appendix C. All personnel are required to review the MSDSs included in this HASP.

### **3.3 Physical Hazards**

The physical hazards associated with the field activities likely present a greater risk of injury than the chemical constituents at the Site. Activities within the scope of this project shall comply with New York State and Federal OSHA construction safety standards.

#### Head Trauma

To minimize the potential for head injuries, field personnel will be required to wear National Institutes of Occupational Safety and Health (NIOSH)-approved hard hats during field activities. Hats must be worn properly and not altered in any way that would decrease the degree of protection provided.

#### Foot Trauma

To avoid foot injuries, field personnel will be required to wear steel-toed safety shoes while field activities are being performed. To afford maximum protection, all safety shoes must meet American National Standards Institute (ANSI) standards.

#### Eye Trauma

Field personnel will be required to wear eye protection (safety glasses with side shields) while field activities are being performed to prevent eye injuries caused by contact with chemical or physical agents.

#### Noise Exposure

Field personnel will be required to wear hearing protection (ear plugs or muffs) in high noise areas (noise from heavy equipment) while field activities are being performed.

#### Buried Utilities and Overhead Power Lines

Boring locations will be cleared by an underground utility locator service. In addition, prior to intrusive activities, the drilling subcontractor will contact the One Call Center to arrange for a utility mark-out, in accordance with New York State requirements. Protection from overhead power lines will be accomplished by maintaining safe distances of at least 15 feet at all times.

#### Thermal Stress

The effects of ambient temperature can cause physical discomfort, personal injury, and increase the probability of accidents. In addition, heat stress due to lack of body ventilation caused by protective clothing is an important consideration. Heat-related illnesses commonly consist of heat stroke and heat exhaustion.



The symptoms of heat stroke include: sudden onset; change in behavior; confusion; dry, hot and flushed skin; dilated pupils; fast pulse rate; body temperature reaching 105° or more; and/or, deep breathing later followed by shallow breathing.

The symptoms of heat exhaustion include: weak pulse; general weakness and fatigue; rapid shallow breathing; cold, pale and clammy skin; nausea or headache; profuse perspiration; unconsciousness; and/or, appearance of having fainted.

Heat-stress monitoring will be conducted if air temperatures exceed 70 degrees Fahrenheit. The initial work period will be set at 2 hours. Each worker will check his/her pulse at the wrist for 30 seconds early in each rest period. If the pulse rate exceeds 110 beats per minute, the next work period will be shortened by one-third.

One or more of the following precautions will reduce the risk of heat stress on the Site:

- Provide plenty of liquids to replace lost body fluids; water, electrolytic drinks, or both will be made available to minimize the risk of dehydration and heat stress
- Establish a work schedule that will provide appropriate rest periods
- Establish work regimens consistent with the American Conference of Governmental Industrial Hygienists (ACGIH) guidelines
- Provide adequate employee training on the causes of heat stress and preventive measures

In the highly unlikely event of extreme low temperatures, reasonable precautions will be made to avoid risks associated with low temperature exposure.

#### Traffic

Field activities will occur near public roadways. As a result, vehicular traffic will be a potential hazard during these activities and control of these areas will be established using barricades or traffic cones. Additional staff will be assigned, as warranted, for the sole purpose of coordinating traffic. Personnel will also be required to wear high-visibility traffic vests while working in the vicinity of the public roadways and local requirements for lane closure will be observed as needed. All work in public rights-of-way will be coordinated with local authorities and will adhere to their requirements for working in traffic zones.

#### Hazardous Weather Conditions

All Site workers will be made aware of hazardous weather conditions, specifically including extreme heat, and will be requested to take the precautions described herein to avoid adverse health risks. All workers are encouraged to take reasonable, common sense precautions to avoid potential injury associated with possible rain or high wind, sleet, snow or freezing.

#### Slip, Trip and Fall

Areas at the Site may be slippery from mud or water. Care should be taken by all Site workers to avoid slip, trip, and fall hazards. Workers shall not enter areas that do not have adequate lighting. Additional portable lighting will be provided at the discretion of the HSO.

#### Biological Hazards

Drugs and alcohol are prohibited from the Site. Any on-site personnel violating this requirement will be immediately expelled from the site.

Any worker or oversight personnel with a medical condition that may require attention must inform the HSO of such condition. The HSO will describe appropriate measures to be taken if the individual should become symptomatic.

Due to the Site location in an urban area, it is highly unlikely that poisonous snakes, spiders, plants and insects will be encountered. However, other animals (dogs, cats, etc.) may be encountered and care should be taken to avoid contact.

#### 4.0 COVID-19 HEALTH AND SAFETY

The following requirements apply to all Tenen employees working on project sites for the duration of the COVID-19 pandemic. These guidelines are based on information provided by the Centers for Disease Control, the Occupational Safety and Health Administration and the New York State “New York Forward” Covid-19 management plans. Information regarding the health status of Tenen employees will be kept confidential, with the exception of required notifications to health authorities. The following are guidelines. **As with any potential workplace hazard, employees should report any concerns related to potential Covid-19 exposure to the Project Manager.**

##### Communication/Reporting:

Employees should not report to work and should notify the Project Manager immediately in the event of the following:

- You are exhibiting flu-like symptoms (fever, body aches, cough, difficulty breathing). Contact your health care provider and follow their instructions.
- You do not exhibit symptoms but have a sick (i.e., diagnosed with Covid-19 or exhibiting flu-like symptoms) family member at home. Remember that the virus can be spread by asymptomatic individuals.
- You have been exposed to someone who has been diagnosed with Covid-19.

In each of the above cases, inform your Project Manager regarding others who may have been exposed in order to facilitate any necessary notification or contact tracing efforts.

##### Hygiene

- Wash hands frequently with soap and water for at least 20 seconds or use hand sanitizer with at least 60% alcohol if soap and water are not available. Key times for employees to clean their hands include:
  - Before and after work shifts
  - Before and after work breaks
  - After blowing the nose, coughing, or sneezing
  - After using the restroom
  - Before eating or preparing food
  - After putting on, touching, or removing face coverings
- Avoid touching the eyes, nose, and mouth with unwashed hands.
- Practice good respiratory etiquette, including covering coughs and sneezes.
- To the extent possible, avoid sharing tools and sampling equipment. Shared tools and equipment should be regularly disinfected.

##### Physical Distancing

- Minimize contact with others, maintaining a distance of at least six feet to the extent possible
- Employees should wear masks over their nose and mouth to prevent spread of the virus; this is especially important when a minimum 6-foot distance cannot be maintained.
- Maintain the 6-foot distance to the extent possible during sampling efforts and pickup and delivery of sampling equipment and containers.

- Keep job site meetings to a minimum and of short duration; limit the number of people involved and maintain social distance.

## 5.0 AIR MONITORING

The NYSDOH Generic Community Air Monitoring Plan (CAMP), included as Appendix 1A of DER-10, will be implemented during all ground-intrusive sampling activities if work is performed after approval of the RIWP.

### VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must 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, particularly if wind direction changes. The monitoring should be performed using equipment appropriate for 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.

1. 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.
2. 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.
3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shut down.
4. All 15-minute readings must be recorded and be available for State (NYSDEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded. At a minimum, all readings will be provided to NYSDEC and NYSDOH for review on a weekly basis. All exceedances of action levels will be provided to NYSDEC and NYSDOH on the date of exceedance, or on the following business day if the exceedance occurs after hours, and will include the reason for the exceedance, actions taken to correct it, and note if the actions were effective at reducing concentrations.

### Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be 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. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m<sup>3</sup>) greater than background (upwind perimeter) 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 150 mcg/m<sup>3</sup> above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m<sup>3</sup> above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m<sup>3</sup> of the upwind level and in preventing visible dust migration.
3. All readings must be recorded and be available for State (NYSDEC and NYSDOH) personnel to review. At a minimum, all readings will be provided to NYSDEC and NYSDOH for review on a weekly basis. All exceedances of action levels will be provided to NYSDEC and NYSDOH on the date of exceedance, or on the following business day if the exceedance occurs after hours, and will include the reason for the exceedance, actions taken to correct it, and note if the actions were effective at reducing concentrations.

## 6.0 PERSONAL PROTECTIVE EQUIPMENT

The personal protection equipment required for various kinds of site investigation tasks is based on 29 CFR 1910.120, Hazardous Waste Operations and Emergency Response, “General Description and Discussion of the Levels of Protection and Protective Gear” and the Centers for CDC COVID-19 “Guidelines on How to Protect Yourself and Others”.

Tenen field personnel and other site personnel will wear Modified Level D-1 personal protective equipment. During activities such as drilling, well installation, or sampling, where there is a chance of contact with contaminated materials, Modified Level D-2 equipment will be worn. The protection will be upgraded to Level C if warranted by the results of the air monitoring. A six-foot minimum distance between individuals (both workers and non-workers) will be maintained at all times. A description of the personnel protective equipment for Levels D and C is provided below.

### **Modified Level D-1**

Respiratory Protection:	Cloth face covering
Protective Clothing:	Hard hat, steel-toed shoes, long pants, nitrile gloves

### **Modified Level D-2**

Respiratory Protection:	Cloth face covering
Protective Clothing:	Hard hat, steel-toed shoes, coveralls/tyvek, nitrile gloves

### **Level C**

Respiratory Protection:	Air purifying respirator with organic vapor cartridges and filters.
Protective Clothing:	Same as Modified Level D-2

## **7.0 EXPOSURE MONITORING**

### **7.1 Hazardous Materials**

Selective monitoring of workers in the exclusion area may be conducted, as determined by the HSO, if sources of hazardous materials are identified. Personal monitoring may be conducted in the breathing zone at the discretion of the Project Manager or HSO. All monitoring will comply with the CDCs Guidance on Social Distancing.

### **7.2 COVID-19**

For any employee that may have come into contact with a person who has COVID-19, a 14-day quarantine will be imposed for that individual and any employee that individual was in contact with.



## **8.0 SITE ACCESS**

Access to the Site during the investigation will be controlled by the Project Manager or HSO. Unauthorized personnel will not be allowed access to the sampling areas.

## **9.0 WORK AREAS**

During any activities involving drilling or other subsurface disturbance, the work area must be divided into various zones to prevent the spread of contamination, clarify the type of protective equipment needed, and provide an area for decontamination.

The Exclusion Zone is defined as the area where potentially contaminated materials are generated as the result of drilling, sampling, or similar activities. The Contamination Reduction Zone (CRZ) is the area where decontamination procedures take place and is located adjacent to the Exclusion Zone. The Support Zone is the area where support facilities such as vehicles, a field phone, fire extinguisher and/or first aid supplies are located. The emergency staging area (part of the Support Zone) is the area where all Site workers will assemble in the event of an emergency. These zones shall be designated daily, depending on that day's activities. All field personnel will be informed of the location of these zones before work begins.

Control measures such as "Caution" tape and traffic cones will be placed around the perimeter of the work area when work is being done in the areas of concern (i.e., areas with exposed soil) to prevent unnecessary access.

## 10.0 DECONTAMINATION PROCEDURES

### Personnel Decontamination

Personnel decontamination (decon), if deemed necessary by the HSO, will take place in the designated decontamination area delineated for each sampling location. Personnel decontamination will consist of the following steps:

- Soap and potable water wash and potable water rinse of gloves;
- Tyvek removal;
- Glove removal;
- Disposable clothing removal; and
- Field wash of hands and face.

### Equipment Decontamination

Sampling equipment, such as split-spoons and bailers, will be decontaminated in accordance with U.S. Environmental Protection Agency methodologies, as described in the work plan.

### Disposal of Materials

Purged well water, water used to decontaminate any equipment and well cuttings will be containerized and disposed off-site in accordance with federal, state and local regulations.

## **11.0 GENERAL SAFE WORK PRACTICES**

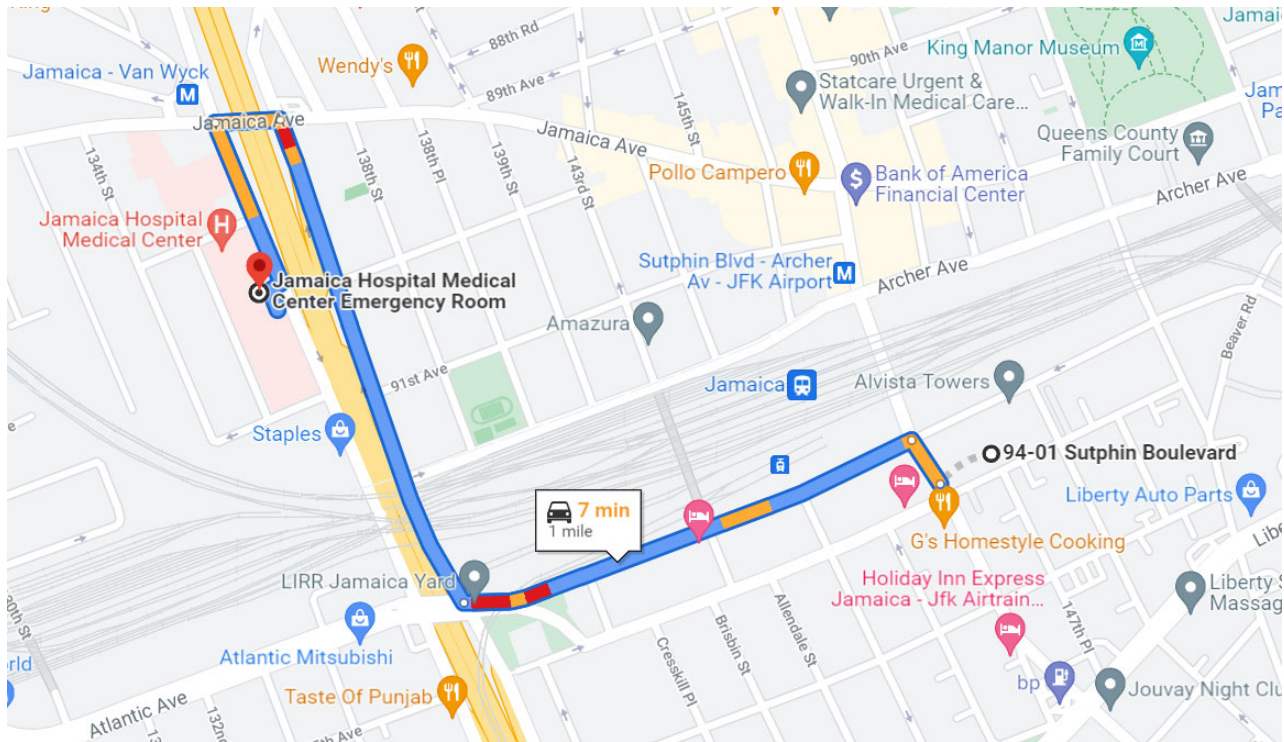
To protect the health and safety of the field personnel, all field personnel will adhere to the guidelines listed below during activities involving subsurface disturbance.

- Eating, drinking, chewing gum or tobacco, and smoking are prohibited, except in designated areas on the site. These areas will be designated by the HSO.
- Workers must wash their hands and face thoroughly on leaving the work area and before eating, drinking, or any other such activity. The workers should shower as soon as possible after leaving the site.
- Removal of potential contamination from PPE and equipment by blowing, shaking or any means that may disperse materials into the air is prohibited.
- Contact with contaminated or suspected surfaces should be avoided.
- The buddy system should always be used; each buddy should watch for signs of fatigue, exposure, and heat stress.
- Personnel will be cautioned to inform each other of symptoms of chemical exposure such as headache, dizziness, nausea, and irritation of the respiratory tract and heat stress.
- No excessive facial hair that interferes with a satisfactory fit of the face-piece of the respirator to the face will be allowed on personnel required to wear respiratory protective equipment.
- On-site personnel will be thoroughly briefed about the anticipated hazards, equipment requirements, safety practices, emergency procedures, and communications methods.

## 12.0 EMERGENCY PROCEDURES

The field crew will be equipped with emergency equipment, such as a first aid kit and disposable eye washes. In the case of a medical emergency, the HSO will determine the nature of the emergency and will have someone call for an ambulance, if needed. If the nature of the injury is not serious—i.e., the person can be moved without expert emergency medical personnel—onsite personnel should drive injured person to a hospital. **The nearest emergency room is located at the Jamaica Hospital Medical Center located at 8900 Van Wyck Expressway, Queens, NY 11418. The phone number is (718) 206-6000.** The route to the hospital is shown and detailed on the next page.

## 12.1 Route to Hospital



Driving directions to **Jamaica Hospital Medical Center Emergency Room** from **94-15 Sutphin Boulevard, Jamaica, New York**.

### Driving Directions

1. Head northwest on Sutphin Boulevard towards 94<sup>th</sup> Avenue/Atlantic Avenue (207 ft).
2. Turn left onto 94<sup>th</sup> Avenue (0.4 mi).
3. Turn right onto Van Wyck Expressway (0.4 mi).
4. Turn left onto Jamaica Avenue (256 ft).
5. Turn right (138 ft). Destination will be on the right.

## 12.2 Emergency Contacts

There will be an on-site field phone. Emergency and contact telephone numbers are listed below:

Table 1 – Emergency Contacts

Ambulance	911
Emergency Room	(718) 918-5000
NYSDEC Spill Hotline	(800) 457-7362
NYSDEC	(518) 402-8013
Project Manager, Mohamed Ahmed	(917) 612-6018
On-site Personnel, Ashley Platt	(908) 892-1354
On-site Personnel, Sara Babyatsky	(718) 551-1300

### **13.0 TRAINING**

All personnel performing the field activities described in this HASP will have received the initial safety training required by 29 CFR, 1910.120. Current refresher training status also will be required for all personnel engaged in field activities.

All those who enter the work area while intrusive activities are being performed must recognize and understand the potential hazards to health and safety. All field personnel must attend a training program covering the following areas:

- potential hazards that may be encountered;
- the knowledge and skills necessary for them to perform the work with minimal risk to health and safety;
- the purpose and limitations of safety equipment; and
- protocols to enable field personnel to safely avoid or escape from emergencies.

Each member of the field crew will be instructed in the above objectives before he/she goes onto the site. The HSO will be responsible for conducting the training program.

#### **14.0 MEDICAL SURVEILLANCE**

All Tenen and subcontractor personnel performing field work involving drilling or other subsurface disturbance at the site are required to have passed a complete medical surveillance examination in accordance with 29 CFR 1910.120 (f). The medical examination for Tenen employees will, at a minimum, be provided annually and upon termination of hazardous waste site work.



**Appendix A**

Acknowledgement of HASP

**ACKNOWLEDGMENT OF HASP**

Below is an affidavit that must be signed by all Tenen Environmental employees who enter the site. A copy of the HASP must be on-site at all times and will be kept by the HSO.

**AFFIDAVIT**

I have read the Construction Health and Safety Plan (HASP) for the 94-15 Sutphin Boulevard – Site B site in Jamaica, NY. I agree to conduct all on-site work in accordance with the requirements set forth in this HASP and understand that failure to comply with this HASP could lead to my removal from the site.

Signature: _____	Date: _____
Signature: _____	Date: _____
Signature: _____	Date: _____
Signature: _____	Date: _____
Signature: _____	Date: _____

**Appendix B**

Injury Reporting Form (OSHA Form 300)

OSHA’s Form 300 (Rev. 01/2004)

Log of Work-Related Injuries and Illnesses

**Attention:** This form contains information relating to employee health and must be used in a manner that protects the confidentiality of employees to the extent possible while the information is being used for occupational safety and health purposes.

Form approved OMB no. 1218-0176

You must record information about every work-related death and about every work-related injury or illness that involves loss of consciousness, restricted work activity or job transfer, days away from work, or medical treatment beyond first aid. You must also record significant work-related injuries and illnesses that are diagnosed by a physician or licensed health care professional. You must also record work-related injuries and illnesses that meet any of the specific recording criteria listed in 29 CFR Part 1904.8 through 1904.12. Feel free to use two lines for a single case if you need to. You must complete an Injury and Illness Incident Report (OSHA Form 301) or equivalent form for each injury or illness recorded on this form. If you're not sure whether a case is recordable, call your local OSHA office for help.

Establishment name \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

Identify the person			Describe the case			Classify the case												
(A) Case no.	(B) Employee’s name	(C) Job title <i>(e.g., Welder)</i>	(D) Date of injury or onset of illness	(E) Where the event occurred <i>(e.g., Loading dock north end)</i>	(F) Describe injury or illness, parts of body affected, and object/substance that directly injured or made person ill <i>(e.g., Second degree burns on right forearm from acetylene torch)</i>	CHECK ONLY ONE box for each case based on the most serious outcome for that case:				Enter the number of days the injured or ill worker was:	Check the “Injury” column or choose one type of illness:							
						Remained at Work				Away from work	On job transfer or restriction	(M)						
						Death	Days away from work	Job transfer or restriction	Other record-able cases	(K)	(L)	Injury	Skin disorder	Respiratory condition	Poisoning	Hearing loss	All other illnesses	
						(G)	(H)	(I)	(J)			(1)	(2)	(3)	(4)	(5)	(6)	
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Public reporting burden for this collection of information is estimated to average 14 minutes per response, including time to review the instructions, search and gather the data needed, and complete and review the collection of information. Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number. If you have any comments about these estimates or any other aspects of this data collection, contact: US Department of Labor, OSHA Office of Statistical Analysis, Room N-3644, 200 Constitution Avenue, NW, Washington, DC 20210. Do not send the completed forms to this office.

Be sure to transfer these totals to the Summary page (Form 300A) before you post it.

Page \_\_\_\_ of \_\_\_\_

Injury

Skin disorder

Respiratory condition

Poisoning

Hearing loss

All other illnesses

(1)

(2)

(3)

(4)

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(6)

**Appendix C**

Material Safety Data Sheets (MSDS)

## SAFETY DATA SHEET

Creation Date 20-Aug-2014

Revision Date 17-Jan-2018

Revision Number 3

### 1. Identification

**Product Name** Mercury (Certified ACS)

**Cat No. :** M141-1LB; M141-6LB

**Synonyms** Colloidal mercury; Hydrargyrum; Metallic mercury

**Recommended Use** Laboratory chemicals.

**Uses advised against** Not for food, drug, pesticide or biocidal product use

#### Details of the supplier of the safety data sheet

##### Company

Fisher Scientific  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

##### **Emergency Telephone Number**

CHEMTREC®, Inside the USA: 800-424-9300  
CHEMTREC®, Outside the USA: 001-703-527-3887

### 2. Hazard(s) identification

#### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Corrosive to metals	Category 1
Acute Inhalation Toxicity - Vapors	Category 2
Reproductive Toxicity	Category 1B
Specific target organ toxicity - (repeated exposure)	Category 1
Target Organs - Central nervous system (CNS), Kidney.	

#### Label Elements

##### **Signal Word**

Danger

##### **Hazard Statements**

May be corrosive to metals  
Fatal if inhaled  
May damage the unborn child  
Causes damage to organs through prolonged or repeated exposure

**Precautionary Statements****Prevention**

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Use personal protective equipment as required  
Do not get in eyes, on skin, or on clothing  
Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Do not breathe dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area  
Wear respiratory protection

**Response**

IF exposed or concerned: Get medical attention/advice

**Inhalation**

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
Immediately call a POISON CENTER or doctor/physician

**Skin**

Immediately call a POISON CENTER or doctor/physician  
IF ON SKIN: Gently wash with plenty of soap and water  
Remove/Take off immediately all contaminated clothing  
Wash contaminated clothing before reuse

**Storage**

Store locked up  
Store in a well-ventilated place. Keep container tightly closed

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Very toxic to aquatic life with long lasting effects

**WARNING.** Reproductive Harm - <https://www.p65warnings.ca.gov/>.

**3. Composition/Information on Ingredients**

Component	CAS-No	Weight %
Mercury	7439-97-6	100

**4. First-aid measures****Eye Contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.  
Immediate medical attention is required.

**Skin Contact**

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required.

**Inhalation**

Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.

**Ingestion**

Do not induce vomiting. Call a physician or Poison Control Center immediately.

<b>Most important symptoms and effects</b>	No information available.
<b>Notes to Physician</b>	Treat symptomatically

## 5. Fire-fighting measures

<b>Suitable Extinguishing Media</b>	Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.
<b>Unsuitable Extinguishing Media</b>	No information available
<b>Flash Point</b>	No information available
<b>Method -</b>	No information available
<b>Autoignition Temperature</b>	No information available
<b>Explosion Limits</b>	
<b>Upper</b>	No data available
<b>Lower</b>	No data available
<b>Sensitivity to Mechanical Impact</b>	No information available
<b>Sensitivity to Static Discharge</b>	No information available

### Specific Hazards Arising from the Chemical

Very toxic. Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. Keep product and empty container away from heat and sources of ignition.

### Hazardous Combustion Products

Mercury oxide Highly toxic fumes

### Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### NFPA

<b>Health</b>	<b>Flammability</b>	<b>Instability</b>	<b>Physical hazards</b>
4	0	0	N/A

## 6. Accidental release measures

<b>Personal Precautions</b>	Wear self-contained breathing apparatus and protective suit. Evacuate personnel to safe areas. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing.
<b>Environmental Precautions</b>	Should not be released into the environment. See Section 12 for additional ecological information.
<b>Methods for Containment and Clean Up</b>	Wear self-contained breathing apparatus and protective suit. Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

## 7. Handling and storage

<b>Handling</b>	Use only under a chemical fume hood. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Do not breathe vapors or spray mist. Do not ingest.
<b>Storage</b>	Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area.

## 8. Exposure controls / personal protection

### Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
Mercury	TWA: 0.025 mg/m <sup>3</sup> Skin	(Vacated) TWA: 0.05 mg/m <sup>3</sup> Ceiling: 0.1 mg/m <sup>3</sup> (Vacated) STEL: 0.03 mg/m <sup>3</sup> Skin (Vacated) Ceiling: 0.1 mg/m <sup>3</sup>	IDLH: 10 mg/m <sup>3</sup> TWA: 0.05 mg/m <sup>3</sup> Ceiling: 0.1 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>



Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH IDLH: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health

**Engineering Measures** Use only under a chemical fume hood. Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

**Personal Protective Equipment**

**Eye/face Protection** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin and body protection** Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

Physical State	Liquid
Appearance	Silver
Odor	Odorless
Odor Threshold	No information available
pH	No information available
Melting Point/Range	-38.87 °C / -38 °F
Boiling Point/Range	356.72 °C / 674.1 °F
Flash Point	No information available
Evaporation Rate	No information available
Flammability (solid,gas)	No information available
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	0.002 mmHg @ 25 °C
Vapor Density	7.0
Specific Gravity	13.59 (H <sub>2</sub> O=1)
Solubility	Insoluble in water
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	No information available
Decomposition Temperature	No information available
Viscosity	No information available
Molecular Formula	Hg
Molecular Weight	200.59

## 10. Stability and reactivity

<b>Reactive Hazard</b>	None known, based on information available
<b>Stability</b>	Stable under normal conditions.
<b>Conditions to Avoid</b>	Incompatible products. Excess heat.
<b>Incompatible Materials</b>	Strong oxidizing agents, Ammonia, Metals, Halogens

**Hazardous Decomposition Products** Mercury oxide, Highly toxic fumes

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

### Acute Toxicity

**Product Information** No acute toxicity information is available for this product

**Component Information**

**Toxicologically Synergistic Products** No information available

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Irritation** No information available

**Sensitization** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Mercury	7439-97-6	Not listed	Not listed	Not listed	Not listed	Not listed

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** May cause harm to the unborn child.

**Teratogenicity** No information available.

**STOT - single exposure** None known

**STOT - repeated exposure** Central nervous system (CNS) Kidney

**Aspiration hazard** No information available

**Symptoms / effects, both acute and delayed** No information available

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.

## 12. Ecological information

### Ecotoxicity

This product contains the following substance(s) which are hazardous for the environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Mercury	Not listed	0.9 mg/L LC50 96h 0.18 mg/L LC50 96h 0.16 mg/L LC50 96h 0.5 mg/L LC50 96h	Not listed	EC50: = 5.0 µg/L, 96h (water flea)

**Persistence and Degradability** No information available

**Bioaccumulation/ Accumulation** No information available.

**Mobility** No information available.

## 13. Disposal considerations

**Waste Disposal Methods**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Component	RCRA - U Series Wastes	RCRA - P Series Wastes
Mercury - 7439-97-6	U151	-

## 14. Transport information

**DOT**

UN-No UN2809  
 Proper Shipping Name MERCURY  
 Hazard Class 8  
 Subsidiary Hazard Class 6.1  
 Packing Group III

**TDG**

UN-No UN2809  
 Proper Shipping Name MERCURY  
 Hazard Class 8  
 Subsidiary Hazard Class 6.1  
 Packing Group III

**IATA**

UN-No UN2809  
 Proper Shipping Name MERCURY  
 Hazard Class 8  
 Subsidiary Hazard Class 6.1  
 Packing Group III

**IMDG/IMO**

UN-No UN2809  
 Proper Shipping Name MERCURY  
 Hazard Class 8  
 Subsidiary Hazard Class 6.1  
 Packing Group III

## 15. Regulatory information

**International Inventories**

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Mercury	X	X	-	231-106-7	-		X	-	X	X	X

**Legend:**

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

**U.S. Federal Regulations****TSCA 12(b)**

Component	TSCA 12(b)
Mercury	Section 5

**SARA 313**

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Mercury	7439-97-6	100	1.0

**SARA 311/312 Hazard Categories** See section 2 for more information

**CWA (Clean Water Act)**

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Mercury	-	-	X	X

**Clean Air Act**

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Mercury	X		-

**OSHA** Occupational Safety and Health Administration  
Not applicable

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs
Mercury	1 lb	-

**California Proposition 65** This product contains the following proposition 65 chemicals

Component	CAS-No	California Prop. 65	Prop 65 NSRL	Category
Mercury	7439-97-6	Developmental	-	Developmental

**U.S. State Right-to-Know Regulations**

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Mercury	X	X	X	X	X

**U.S. Department of Transportation**

Reportable Quantity (RQ): N  
DOT Marine Pollutant N  
DOT Severe Marine Pollutant N

**U.S. Department of Homeland Security**

This product does not contain any DHS chemicals.

**Other International Regulations**

**Mexico - Grade** No information available

## 16. Other information

**Prepared By** Regulatory Affairs  
Thermo Fisher Scientific  
Email: EMSDS.RA@thermofisher.com

**Creation Date** 20-Aug-2014

**Revision Date** 17-Jan-2018

**Print Date** 17-Jan-2018

**Revision Summary** This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**

**MATERIAL SAFETY DATA SHEET****Polyaromatic Hydrocarbons**

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION	
IDENTITY Decanter Tank Tar Sludge Polyaromatic Hydrocarbons (TDG name - Toxic Solid, organic NOS (Waste) (Pyrene)	DATE PREPARED February 7, 2007
SYNONYMS, CHEMICAL NAMES, COMMON NAMES Aromatics, PAH, Yellow Sludge	USE: Waste Sludge
MANUFACTURER'S NAME Cancarb Ltd.	EMERGENCY TELEPHONE NUMBER (Health) (403) 502-6614
ADDRESS P.O. Box 1000, Station M Calgary, Alberta Canada, T2P 4K5	TELEPHONE NUMBER – TECHNICAL INFORMATION (403)-527-1121

<b>SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS</b>			
<b>HAZARDOUS COMPONENTS</b>	<b>OSHA PEL</b>	<b>ACGIH TLV</b>	<b>%/wt</b>
Variable blend of Polynuclear Aromatic Hydrocarbons (PAHs) plus inert solids in water. Concentrations will vary depending upon the extent of product dryness. Hazardous ingredients may include:			
Pyrene (CAS# 129-00-0)	0.2 mg m <sup>-3</sup>	None established	<7%
Benzo (g,h,i) Fluoroanthrene (CAS# 203-12-3)	None established	None established	<6%
Fluoroanthene (CAS# 206-44-0)	None established	None established	<4%
Phenanthrene (CAS# 85-01-8)	0.2 mg/m <sup>3</sup>	None established	<2%
Cyclopenta(d,e,f)Phenanthrene (CAS#203-64-5)	None established	None established	<2%
Anthracene (CAS# 120-12-7)	0.2 mg/m <sup>3</sup>	None established	<1%
Benzo(a)Pyrene (CAS# 50-32-8)		None established	<0.1%
Benzo(a)Anthracene (CAS# 56-55-3)	0.2 mg/m <sup>3</sup>	None established	<0.1%
Benzo(b)Fluoroanthene CAS # 205-99-2)	None established	None established	<0.1%
Benzo(j)Fluoroanthene (CAS# 205-82-3)	None established	None established	<0.1%
Benzo(k)Fluoroanthene (CAS# 207-08-9)	None established	None established	<0.1%
Indeno(1,2,3)Pyrene (CAS# 193-39-5)	None established	None established	<0.1%
*Coal Tar Pitch Volatile. Remaining components are not hazardous.			

<b>EMERGENCY OVERVIEW</b>
Black, brown or yellow aqueous sludge May cause skin and eye irritation Suspected carcinogenic components.

**SECTION 3 -HAZARDS IDENTIFICATION**

**PRIMARY ROUTE(s) OF EXPOSURE:** Skin; Eyes. Inhalation if Sludge is Dry

**IRRITATION DATA:** May cause irritation to skin and eyes and burns to skin with sunlight..

**INHALATION:**

**ACUTE :** Not a likely route of exposure in sludge state. Mist may cause respiratory irritation.

**CHRONIC :** Repeated and prolonged exposure may cause toxicity to the liver and blood.  
Suspected carcinogenicity .

**SKIN CONTACT:**

ACUTE: Prolonged and repeated contact may cause irritation. Contact in the presence of sunlight may enhance irritant effects leading to skin burns..

CHRONIC: Systemic toxicity. Suspected carcinogenicity.

**EYE CONTACT:**

ACUTE: May be irritating, resulting in tearing, reddening, and swelling.

CHRONIC: None known.

**INGESTION:**

ACUTE: May cause gastric irritation and disturbance.

CHRONIC: Chronic effects of phenanthrene ingestion include liver effects; chronic effects of pyrene ingestion include muscle contraction or spasticity and blood changes; effects of chronic fluoranthene ingestion include kidney, urethra, and bladder effects.

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE**

Persons with pre-existing skin disorders may be at increased risk from exposure.

**SECTION 4 - EMERGENCY AND FIRST AID PROCEDURES**

INHALATION: Remove from exposure to fresh air immediately. If breathing has stopped, give artificial respiration. Oxygen may be given if breathing is difficult. Get medical attention.

SKIN CONTACT: Remove contaminated clothing and shoes immediately. Wash affected area with soap and water until no evidence of the chemical remains. Get medical attention if irritation develops.

EYE CONTACT: Flush thoroughly with water for at least 15 minutes, occasionally lifting the upper and lower lids, until no evidence of the chemical remains. Get medical attention if irritation develops.

INGESTION: Do not induce vomiting. Treat symptomatically and supportively. Get medical attention if irritation develops.

**SECTION 5 - FIRE FIGHTING MEASURES**

<b>FLASH POINT:</b> None	<b>FLAMMABLE LIMITS:</b>	<b>LEL:</b> Not applicable	<b>UEL:</b> Not applicable
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**AUTOIGNITION TEMPERATURE:** Will not ignite as aqueous solution. If dried, will support combustion.

**EXTINGUISHING MEDIA**

Water spray, foam, or dry chemical powder. Carbon dioxide may be ineffective on large fires.

**SPECIAL FIRE FIGHTING PROCEDURES**

Firefighters should wear full protective NIOSH approved self-contained breathing apparatus.

**UNUSUAL FIRE AND EXPLOSION HAZARDS**

None Known.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

Stop discharge and control spill to avoid discharge to the environment. Use wet vacuum to limit spreading and place in suitable container for further handling and disposal. For dry material avoid generation of dust, use limited wetting to prevent spreading and use wet vacuum. Place in metal drum for disposal.

**SECTION 7 - HANDLING AND STORAGE**

Handling: KEEP WET. Do not allow to dry. Place wet vacuum discharge in metal drum. Empty drum into settling pond tanks. Avoid prolonged or repeated skin contact. Observe good personal and industrial hygiene practices.

Storage: Do not freeze.

## SECTION 8 – EXPOSURE CONTROLS, PERSONAL PROTECTION

### RESPIRATORY PROTECTION

Where airborne concentrations may exceed guidelines for permissible air concentrations, choose a respirator in accordance with OSHA Respirator Standard 29 CFR 1910.134. (i.e. organic vapor and P100 cartridges, powered air hoods.

### VENTILATION

Use general dilution or local exhaust ventilation to maintain exposure below the exposure limits.

### PROTECTIVE GLOVES

Choose appropriate gloves in accordance with OSHA Personal Protective Equipment Standard 29 CFR 1910.132.

### EYE PROTECTION:

Safety glasses with side shields or choose in accordance with OSHA 29 CFR 1910.133.

### OTHER PROTECTIVE CLOTHING OR EQUIPMENT

Appropriate protective clothing to minimize repeated and prolonged skin contact. (i.e. Sarnex or Coated Sarnex).

### RECOMMENDED EXPOSURE LIMITS

OH&S, OSHA and ACGIH have not set exposure limits for this waste mixture.  
See Section 2 for exposure guidelines for the components of this waste.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>BOILING POINT</b>	100° C	<b>SPECIFIC GRAVITY</b>	> 1
<b>pH</b>	Not available	<b>FREEZING POINT</b>	0° C
<b>VAPOR PRESSURE (mm Hg)</b>	Same as Water	<b>SOFTENING POINT</b>	Not applicable
<b>VAPOR DENSITY (Air = 1)</b>	Not available	<b>EVAPORATION RATE</b>	Not applicable
<b>SOLUBILITY IN WATER</b>	PAHs low solubility		
<b>SOLUBILITY</b>	Dry material soluble in hydrocarbon solvents		
<b>COEFFICIENT OF WATER/OIL DISTRIBUTION:</b>		Not available .	
<b>APPEARANCE AND ODOR:</b>		Black, Brown or Yellow Sludge.	

## SECTION 10 - STABILITY AND REACTIVITY

<b>STABILITY</b>	<b>Unstable</b>		<b>Conditions to Avoid</b>
	<b>Stable</b>	X	None Known. Stable under normal temperature and pressure.
<b>INCOMPATIBILITY (Materials to Avoid)</b>			
Strong oxidizing agents.			
<b>HAZARDOUS DECOMPOSITION PRODUCTS</b>			
Thermal decomposition may release toxic and/or hazardous gases from dried sludge.			
<b>HAZARDOUS POLYMERIZATION</b>	<b>May Occur</b>		<b>Conditions to Avoid</b>
	<b>Will Not Occur</b>	X	None known.



## SECTION 11 - TOXICOLOGICAL INFORMATION

This waste sludge has not been tested for acute or chronic toxicity. The following data is for its components >1%:

Pyrene	Oral LD <sub>50</sub> (mouse): 800 mg/kg Inhalation LC <sub>50</sub> (rat): 170 mg/m <sup>3</sup>
Fluoranthene	Oral LD <sub>50</sub> (rat): 2 gm/kg Dermal LD <sub>50</sub> (rabbit): 3180 mg/kg
Phenanthrene	Oral LD <sub>50</sub> (mouse): 700 mg/kg

**TARGET ORGANS:** Skin and eyes

**CARCINOGENICITY:** Some low level PAH components have been identified as suspected carcinogens by IARC and ACGIH. These include benzo(a)anthracene, benzo(a)pyrene, benz(b,j&k)fluoranthene, and indeno(1,2,3-cd) pyrene.

**TUMORIGENIC DATA (RTECS):** Phenanthrene, Clclopenta (def) phenanthrene, Benzo fluoranthrene, Pyrene, and fluoranthene.

**MUTAGEN DATA (RTECS):** Phenanthrene, Cyclopenta (def) phenanthrene, Pyrene, Benzo fluoroanthrene, Fluoranthene, Benzo (ghi) fluoranthene.

### OTHER EFFECTS:

PAHs contained in the sludge have the property of photoallergenicity. In the presence of sunlight, these materials have the capacity to irritate the skin to a much greater degree, possibility leading to skin burns, than exposure without sunlight.

## SECTION 12 - ECOLOGICAL INFORMATION

Sludge has not been tested for ecotoxicity.

## SECTION 13 - DISPOSAL CONSIDERATIONS

Dispose in accordance with all applicable federal, provincial, and local environmental regulations. Residual solids may be present in any containers used to handle this sludge. Do not reuse for food, clothing or products for human or animal consumption.

## SECTION 14 - TRANSPORT INFORMATION

PROPER SHIPPING NAME	TDG CLASSIFICATION	TDG UN/NA
Waste Type 97	6.1 PG II	UN 9397
Decantar Tank Tar Sludge		

## SECTION 15 - REGULATORY INFORMATION

**OSHA:** This material is classified as hazardous under OSHA regulations.

**WHMS:** This material is considered a D2A, D2B Controlled Product.

This material has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

**IDL:** The following components are on the Canadian Ingredient Disclosure List:

Pyrene  
Fluoranthene  
Benzanthracene  
Phenanthrene  
Indeno (1,2,3-cd) pyrene  
Benzopyrene  
Naphthalene  
Anthracene

**SARA Title III - Toxic chemicals list 40 CFR 372.65:**

Pyrene  
Naphthalene  
Anthracene

**CERCLA Toxic Chemicals List 40 CFR 302:**

Pyrene	RQ: 5000 pounds
Fluoranthene	RQ: 100 pounds
Benzanthracene	RQ: 10 pounds
Phenanthrene	RQ: 5000 pounds
Indeno (1,2,3-cd) pyrene	RQ: 100 pounds
Benzopyrene	RQ: 1 pound
Naphthalene	RQ: 100 pounds
Anthracene	RQ: 5000 pounds

**RCRA Hazardous Waste Codes 40 CFR 261.24, 261.33 :**

Fluoranthene	U120
Benzanthracene	U108
Indeno(1,2,3-cd)pyrene	U137
Benzopyrene	U022
Naphthalene	U165

<b>SECTION 16 - OTHER INFORMATION</b>
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**HMIS Ratings:**

Health 2\*  
Flammability 1  
Reactivity 0

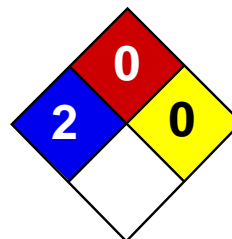
where 0=minimal, 1=slight, 2=moderate, 3=serious, 4=severe

This MSDS was prepared by: CANCARB Health, Safety & Environment Department  
Telephone Number (403) 527-1121

R: 45; 36/37/38

S: 36/37/39

The information and recommendations set forth herein are made in good faith and are believed to be accurate as of the date of preparation. CANCARB makes no warranty, either express or implied, with respect to this information and disclaims all liability from reliance thereon.



Health	2
Fire	0
Reactivity	0
Personal Protection	G

## Material Safety Data Sheet

### Tetrachloroethylene MSDS

#### Section 1: Chemical Product and Company Identification

**Product Name:** Tetrachloroethylene

**Catalog Codes:** SLT3220

**CAS#:** 127-18-4

**RTECS:** KX3850000

**TSCA:** TSCA 8(b) inventory: Tetrachloroethylene

**CI#:** Not available.

**Synonym:** Perchloroethylene; 1,1,2,2-Tetrachloroethylene; Carbon bichloride; Carbon dichloride; Ankilostin; Didakene; Dilatin PT; Ethene, tetrachloro-; Ethylene tetrachloride; Perawin; Perchlor; Perclene; Perclene D; Percosolve; Tetrachloroethene; Tetraleno; Tetralex; Tetravec; Tetrogue; Tetropil

**Chemical Name:** Ethylene, tetrachloro-

**Chemical Formula:** C<sub>2</sub>-Cl<sub>4</sub>

#### Contact Information:

**Sciencelab.com, Inc.**

14025 Smith Rd.

Houston, Texas 77396

US Sales: **1-800-901-7247**

International Sales: **1-281-441-4400**

Order Online: [ScienceLab.com](http://ScienceLab.com)

**CHEMTREC (24HR Emergency Telephone), call:**  
1-800-424-9300

**International CHEMTREC, call:** 1-703-527-3887

**For non-emergency assistance, call:** 1-281-441-4400

#### Section 2: Composition and Information on Ingredients

##### Composition:

Name	CAS #	% by Weight
Tetrachloroethylene	127-18-4	100

**Toxicological Data on Ingredients:** Tetrachloroethylene: ORAL (LD<sub>50</sub>): Acute: 2629 mg/kg [Rat]. DERMAL (LD): Acute: >3228 mg/kg [Rabbit]. MIST(LC<sub>50</sub>): Acute: 34200 mg/m 8 hours [Rat]. VAPOR (LC<sub>50</sub>): Acute: 5200 ppm 4 hours [Mouse].

#### Section 3: Hazards Identification

##### Potential Acute Health Effects:

Hazardous in case of skin contact (irritant), of inhalation. Slightly hazardous in case of skin contact (permeator), of eye contact (irritant), of ingestion.

##### Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Classified A3 (Proven for animal.) by ACGIH. Classified 2A (Probable for human.) by IARC, 2 (anticipated carcinogen) by NTP. MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to kidneys, liver, peripheral nervous system, respiratory tract, skin, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage.

## Section 4: First Aid Measures

### Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

### Skin Contact:

In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

### Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.

### Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear.

### Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

### Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

**Serious Ingestion:** Not available.

## Section 5: Fire and Explosion Data

**Flammability of the Product:** Non-flammable.

**Auto-Ignition Temperature:** Not applicable.

**Flash Points:** Not applicable.

**Flammable Limits:** Not applicable.

**Products of Combustion:** Not available.

**Fire Hazards in Presence of Various Substances:** Not applicable.

### Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

**Fire Fighting Media and Instructions:** Not applicable.

**Special Remarks on Fire Hazards:** Not available.

**Special Remarks on Explosion Hazards:** Not available.

## Section 6: Accidental Release Measures

**Small Spill:** Absorb with an inert material and put the spilled material in an appropriate waste disposal.

### Large Spill:

Absorb with an inert material and put the spilled material in an appropriate waste disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

## Section 7: Handling and Storage

**Precautions:**

Do not ingest. Do not breathe gas/fumes/ vapor/spray. Avoid contact with skin. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, metals, acids, alkalis.

**Storage:** Keep container tightly closed. Keep container in a cool, well-ventilated area.

## Section 8: Exposure Controls/Personal Protection

**Engineering Controls:**

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

**Personal Protection:**

Safety glasses. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

**Personal Protection in Case of a Large Spill:**

Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits:**

TWA: 25 (ppm) from OSHA (PEL) [United States] TWA: 25 STEL: 100 (ppm) from ACGIH (TLV) [United States] TWA: 170 (mg/m3) from OSHA (PEL) [United States] Consult local authorities for acceptable exposure limits.

## Section 9: Physical and Chemical Properties

**Physical state and appearance:** Liquid.

**Odor:** Ethereal.

**Taste:** Not available.

**Molecular Weight:** 165.83 g/mole

**Color:** Clear Colorless.

**pH (1% soln/water):** Not available.

**Boiling Point:** 121.3°C (250.3°F)

**Melting Point:** -22.3°C (-8.1°F)

**Critical Temperature:** 347.1°C (656.8°F)

**Specific Gravity:** 1.6227 (Water = 1)

**Vapor Pressure:** 1.7 kPa (@ 20°C)

**Vapor Density:** 5.7 (Air = 1)

**Volatility:** Not available.

**Odor Threshold:** 5 - 50 ppm

**Water/Oil Dist. Coeff.:** The product is more soluble in oil; log(oil/water) = 3.4

**Ionicity (in Water):** Not available.

**Dispersion Properties:** Not available.

**Solubility:**

Miscible with alcohol, ether, chloroform, benzene, hexane. It dissolves in most of the fixed and volatile oils. Solubility in water: 0.015 g/100 ml @ 25 deg. C It slowly decomposes in water to yield Trichloroacetic and Hydrochloric acids.

## Section 10: Stability and Reactivity Data

**Stability:** The product is stable.

**Instability Temperature:** Not available.

**Conditions of Instability:** Incompatible materials

**Incompatibility with various substances:** Reactive with oxidizing agents, metals, acids, alkalis.

**Corrosivity:** Non-corrosive in presence of glass.

**Special Remarks on Reactivity:**

Oxidized by strong oxidizing agents. Incompatible with sodium hydroxide, finely divided or powdered metals such as zinc, aluminum, magnesium, potassium, chemically active metals such as lithium, beryllium, barium. Protect from light.

**Special Remarks on Corrosivity:** Slowly corrodes aluminum, iron, and zinc.

**Polymerization:** Will not occur.

## Section 11: Toxicological Information

**Routes of Entry:** Absorbed through skin. Eye contact. Inhalation. Ingestion.

**Toxicity to Animals:**

WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE. Acute oral toxicity (LD50): 2629 mg/kg [Rat]. Acute dermal toxicity (LD50): >3228 mg/kg [Rabbit]. Acute toxicity of the vapor (LC50): 5200 4 hours [Mouse].

**Chronic Effects on Humans:**

CARCINOGENIC EFFECTS: Classified A3 (Proven for animal.) by ACGIH. Classified 2A (Probable for human.) by IARC, 2 (Some evidence.) by NTP. MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast. May cause damage to the following organs: kidneys, liver, peripheral nervous system, upper respiratory tract, skin, central nervous system (CNS).

**Other Toxic Effects on Humans:**

Hazardous in case of skin contact (irritant), of inhalation. Slightly hazardous in case of skin contact (permeator), of ingestion.

**Special Remarks on Toxicity to Animals:**

Lowest Published Lethal Dose/Conc: LDL [Rabbit] - Route: Oral; Dose: 5000 mg/kg LDL [Dog] - Route: Oral; Dose: 4000 mg/kg LDL [Cat] - Route: Oral; Dose: 4000 mg/kg

**Special Remarks on Chronic Effects on Humans:**

May cause adverse reproductive effects and birth defects (teratogenic). May affect genetic material (mutagenic). May cause cancer.

**Special Remarks on other Toxic Effects on Humans:**

Acute Potential Health Effects: Skin: Causes skin irritation with possible dermal blistering or burns. Symptoms may include redness, itching, pain, and possible dermal blistering or burns. It may be absorbed through the skin with possible systemic effects. A single prolonged skin exposure is not likely to result in the material being absorbed in harmful amounts. Eyes: Contact causes transient eye irritation, lacrimation. Vapors cause eye/conjunctival irritation. Symptoms may include redness and pain. Inhalation: The main route to occupational exposure is by inhalation since it is readily absorbed through the lungs. It causes respiratory tract irritation, . It can affect behavior/central nervous system (CNS depressant and anesthesia ranging from slight inebriation to death, vertigo, somnolence, anxiety, headache, excitement, hallucinations, muscle incoordination, dizziness, lightheadness, disorientation, seizures, emotional instability, stupor, coma). It may cause pulmonary edema. Ingestion: It can cause nausea, vomiting, anorexia, diarrhea, bloody stool. It may affect the liver, urinary system (proteinuria, hematuria, renal failure, renal tubular disorder), heart (arrhythmias). It may affect behavior/central nervous system with symptoms similar to that of inhalation. Chronic Potential Health Effects: Skin: Prolonged or repeated skin contact may result in excessive drying of the skin, and irritation. Ingestion/Inhalation: Chronic exposure can affect the liver (hepatitis, fatty liver degeneration), kidneys, spleen, and heart (irregular heartbeat/arrhythmias, cardiomyopathy, abnormal EEG), brain, behavior/central nervous system/peripheral nervous system (impaired memory, numbness of extremities, peripheral neuropathy and other

## Section 12: Ecological Information

**Ecotoxicity:**

Ecotoxicity in water (LC50): 18.4 mg/l 96 hours [Fish (Fathead Minnow)]. 18 mg/l 48 hours [Daphnia (daphnia)]. 5 mg/l 96 hours [Fish (Rainbow Trout)]. 13 mg/l 96 hours [Fish (Bluegill sunfish)].

**BOD5 and COD:** Not available.

**Products of Biodegradation:**

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation:** The product itself and its products of degradation are not toxic.

**Special Remarks on the Products of Biodegradation:** Not available.

## Section 13: Disposal Considerations

**Waste Disposal:**

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

## Section 14: Transport Information

**DOT Classification:** CLASS 6.1: Poisonous material.

**Identification:** : Tetrachloroethylene UNNA: 1897 PG: III

**Special Provisions for Transport:** Marine Pollutant

## Section 15: Other Regulatory Information

**Federal and State Regulations:**

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Tetrachloroethylene California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Tetrachloroethylene Connecticut hazardous material survey.: Tetrachloroethylene Illinois toxic substances disclosure to employee act: Tetrachloroethylene Illinois chemical safety act: Tetrachloroethylene New York release reporting list: Tetrachloroethylene Rhode Island RTK hazardous substances: Tetrachloroethylene Pennsylvania RTK: Tetrachloroethylene Minnesota: Tetrachloroethylene Michigan critical material: Tetrachloroethylene Massachusetts RTK: Tetrachloroethylene Massachusetts spill list: Tetrachloroethylene New Jersey: Tetrachloroethylene New Jersey spill list: Tetrachloroethylene Louisiana spill reporting: Tetrachloroethylene California Director's List of Hazardous Substances: Tetrachloroethylene TSCA 8(b) inventory: Tetrachloroethylene TSCA 8(d) H and S data reporting: Tetrachloroethylene: Effective date: 6/1/87; Sunset date: 6/1/97 SARA 313 toxic chemical notification and release reporting: Tetrachloroethylene CERCLA: Hazardous substances.: Tetrachloroethylene: 100 lbs. (45.36 kg)

**Other Regulations:**

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

**Other Classifications:****WHMIS (Canada):**

CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC). CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

**DSCL (EEC):**

R40- Possible risks of irreversible effects. R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. S23- Do not breathe gas/fumes/vapour/spray S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S37- Wear suitable gloves. S61- Avoid release to the environment. Refer to special instructions/Safety data sheets.

**HMIS (U.S.A.):****Health Hazard:** 2**Fire Hazard:** 0**Reactivity:** 0**Personal Protection:** g**National Fire Protection Association (U.S.A.):****Health:** 2**Flammability:** 0**Reactivity:** 0**Specific hazard:****Protective Equipment:**

Gloves. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Safety glasses.

**Section 16: Other Information****References:** Not available.**Other Special Considerations:** Not available.**Created:** 10/10/2005 08:29 PM**Last Updated:** 05/21/2013 12:00 PM

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Health	2
Fire	1
Reactivity	0
Personal Protection	H

## Material Safety Data Sheet

### Trichloroethylene MSDS

#### Section 1: Chemical Product and Company Identification

**Product Name:** Trichloroethylene

**Catalog Codes:** SLT3310, SLT2590

**CAS#:** 79-01-6

**RTECS:** KX4560000

**TSCA:** TSCA 8(b) inventory: Trichloroethylene

**CI#:** Not available.

**Synonym:**

**Chemical Formula:** C<sub>2</sub>HCl<sub>3</sub>

**Contact Information:**

**Sciencelab.com, Inc.**

14025 Smith Rd.

Houston, Texas 77396

US Sales: **1-800-901-7247**

International Sales: **1-281-441-4400**

Order Online: [ScienceLab.com](http://ScienceLab.com)

**CHEMTREC (24HR Emergency Telephone), call:**

1-800-424-9300

**International CHEMTREC, call:** 1-703-527-3887

**For non-emergency assistance, call:** 1-281-441-4400

#### Section 2: Composition and Information on Ingredients

**Composition:**

Name	CAS #	% by Weight
Trichloroethylene	79-01-6	100

**Toxicological Data on Ingredients:** Trichloroethylene: ORAL (LD50): Acute: 5650 mg/kg [Rat]. 2402 mg/kg [Mouse].  
DERMAL (LD50): Acute: 20001 mg/kg [Rabbit].

#### Section 3: Hazards Identification

**Potential Acute Health Effects:** Hazardous in case of skin contact (irritant, permeator), of eye contact (irritant), of ingestion, of inhalation.

**Potential Chronic Health Effects:**

**CARCINOGENIC EFFECTS:** Classified + (PROVEN) by OSHA. Classified A5 (Not suspected for human.) by ACGIH.

**MUTAGENIC EFFECTS:** Not available. **TERATOGENIC EFFECTS:** Not available. **DEVELOPMENTAL TOXICITY:** Not

available. The substance is toxic to kidneys, the nervous system, liver, heart, upper respiratory tract. Repeated or prolonged exposure to the substance can produce target organs damage.

#### Section 4: First Aid Measures

**Eye Contact:**

Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek medical attention.

**Skin Contact:**

After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

**Serious Skin Contact:**

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.

**Inhalation:** Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

**Serious Inhalation:**

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

**Ingestion:**

Do not induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

**Serious Ingestion:** Not available.

## Section 5: Fire and Explosion Data

**Flammability of the Product:** May be combustible at high temperature.

**Auto-Ignition Temperature:** 420°C (788°F)

**Flash Points:** Not available.

**Flammable Limits:** LOWER: 8% UPPER: 10.5%

**Products of Combustion:** These products are carbon oxides (CO, CO<sub>2</sub>), halogenated compounds.

**Fire Hazards in Presence of Various Substances:** Not available.

**Explosion Hazards in Presence of Various Substances:**

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

**Fire Fighting Media and Instructions:**

SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

**Special Remarks on Fire Hazards:** Not available.

**Special Remarks on Explosion Hazards:** Not available.

## Section 6: Accidental Release Measures

**Small Spill:** Absorb with an inert material and put the spilled material in an appropriate waste disposal.

**Large Spill:**

Absorb with an inert material and put the spilled material in an appropriate waste disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

## Section 7: Handling and Storage

**Precautions:**

Keep locked up Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapour/

spray. Wear suitable protective clothing In case of insufficient ventilation, wear suitable respiratory equipment If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes

**Storage:**

Keep container dry. Keep in a cool place. Ground all equipment containing material. Carcinogenic, teratogenic or mutagenic materials should be stored in a separate locked safety storage cabinet or room.

## Section 8: Exposure Controls/Personal Protection

**Engineering Controls:**

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

**Personal Protection:**

Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

**Personal Protection in Case of a Large Spill:**

Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits:**

TWA: 50 STEL: 200 (ppm) from ACGIH (TLV) TWA: 269 STEL: 1070 (mg/m<sup>3</sup>) from ACGIH Consult local authorities for acceptable exposure limits.

## Section 9: Physical and Chemical Properties

**Physical state and appearance:** Liquid.

**Odor:** Not available.

**Taste:** Not available.

**Molecular Weight:** 131.39 g/mole

**Color:** Clear Colorless.

**pH (1% soln/water):** Not available.

**Boiling Point:** 86.7°C (188.1°F)

**Melting Point:** -87.1°C (-124.8°F)

**Critical Temperature:** Not available.

**Specific Gravity:** 1.4649 (Water = 1)

**Vapor Pressure:** 58 mm of Hg (@ 20°C)

**Vapor Density:** 4.53 (Air = 1)

**Volatility:** Not available.

**Odor Threshold:** 20 ppm

**Water/Oil Dist. Coeff.:** The product is equally soluble in oil and water; log(oil/water) = 0

**Ionicity (in Water):** Not available.

**Dispersion Properties:** See solubility in water, methanol, diethyl ether, acetone.

**Solubility:**

Easily soluble in methanol, diethyl ether, acetone. Very slightly soluble in cold water.

## Section 10: Stability and Reactivity Data

**Stability:** The product is stable.

**Instability Temperature:** Not available.

**Conditions of Instability:** Not available.

**Incompatibility with various substances:** Not available.

**Corrosivity:**

Extremely corrosive in presence of aluminum. Non-corrosive in presence of glass.

**Special Remarks on Reactivity:** Not available.

**Special Remarks on Corrosivity:** Not available.

**Polymerization:** No.

## Section 11: Toxicological Information

**Routes of Entry:** Dermal contact. Eye contact. Inhalation. Ingestion.

**Toxicity to Animals:**

Acute oral toxicity (LD50): 2402 mg/kg [Mouse]. Acute dermal toxicity (LD50): 20001 mg/kg [Rabbit].

**Chronic Effects on Humans:**

CARCINOGENIC EFFECTS: Classified + (PROVEN) by OSHA. Classified A5 (Not suspected for human.) by ACGIH. The substance is toxic to kidneys, the nervous system, liver, heart, upper respiratory tract.

**Other Toxic Effects on Humans:** Hazardous in case of skin contact (irritant, permeator), of ingestion, of inhalation.

**Special Remarks on Toxicity to Animals:** Not available.

**Special Remarks on Chronic Effects on Humans:** Passes through the placental barrier in human. Detected in maternal milk in human.

**Special Remarks on other Toxic Effects on Humans:** Not available.

## Section 12: Ecological Information

**Ecotoxicity:** Not available.

**BOD5 and COD:** Not available.

**Products of Biodegradation:**

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation:** The products of degradation are more toxic.

**Special Remarks on the Products of Biodegradation:** Not available.

## Section 13: Disposal Considerations

**Waste Disposal:**

## Section 14: Transport Information

**DOT Classification:** CLASS 6.1: Poisonous material.

**Identification:** : Trichloroethylene : UN1710 PG: III

**Special Provisions for Transport:** Not available.

## Section 15: Other Regulatory Information

### Federal and State Regulations:

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Trichloroethylene California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Trichloroethylene Pennsylvania RTK: Trichloroethylene Florida: Trichloroethylene Minnesota: Trichloroethylene Massachusetts RTK: Trichloroethylene New Jersey: Trichloroethylene TSCA 8(b) inventory: Trichloroethylene CERCLA: Hazardous substances.: Trichloroethylene

**Other Regulations:** OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

### Other Classifications:

#### WHMIS (Canada):

CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC). CLASS D-2B: Material causing other toxic effects (TOXIC).

#### DSCL (EEC):

R36/38- Irritating to eyes and skin. R45- May cause cancer.

#### HMIS (U.S.A.):

**Health Hazard:** 2

**Fire Hazard:** 1

**Reactivity:** 0

**Personal Protection:** h

#### National Fire Protection Association (U.S.A.):

**Health:** 2

**Flammability:** 1

**Reactivity:** 0

**Specific hazard:**

#### Protective Equipment:

Gloves. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

## Section 16: Other Information

**References:** Not available.

**Other Special Considerations:** Not available.

**Created:** 10/10/2005 08:54 PM

**Last Updated:** 05/21/2013 12:00 PM

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## **APPENDIX 7 – COMMUNITY AIR MONITORING PLAN**

## Appendix 1A

### New York State Department of Health Generic Community Air Monitoring Plan

#### Overview

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical-specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

#### Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate DEC/NYSDOH staff.

**Continuous monitoring** will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

**Periodic monitoring** for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or

overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

### VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must 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, particularly if wind direction changes. 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.

1. 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.
2. 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.
3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.
4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

### Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be 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. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.



1. 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 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  $150 \text{ mcg}/\text{m}^3$  above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than  $150 \text{ mcg}/\text{m}^3$  above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are 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.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

December 2009

## **Appendix 1B**

### **Fugitive Dust and Particulate Monitoring**

A program for suppressing fugitive dust and particulate matter monitoring at hazardous waste sites is a responsibility on the remedial party performing the work. These procedures must be incorporated into appropriate intrusive work plans. The following fugitive dust suppression and particulate monitoring program should be employed at sites during construction and other intrusive activities which warrant its use:

1. Reasonable fugitive dust suppression techniques must be employed during all site activities which may generate fugitive dust.
2. Particulate monitoring must be employed during the handling of waste or contaminated soil or when activities on site may generate fugitive dust from exposed waste or contaminated soil. Remedial activities may also include the excavation, grading, or placement of clean fill. These control measures should not be considered necessary for these activities.
3. Particulate monitoring must be performed using real-time particulate monitors and shall monitor particulate matter less than ten microns (PM<sub>10</sub>) with the following minimum performance standards:
  - (a) Objects to be measured: Dust, mists or aerosols;
  - (b) Measurement Ranges: 0.001 to 400 mg/m<sup>3</sup> (1 to 400,000 :ug/m<sup>3</sup>);
  - (c) Precision (2-sigma) at constant temperature: +/- 10 :g/m<sup>3</sup> for one second averaging; and +/- 1.5 g/m<sup>3</sup> for sixty second averaging;
  - (d) Accuracy: +/- 5% of reading +/- precision (Referred to gravimetric calibration with SAE fine test dust (mmd= 2 to 3 :m, g= 2.5, as aerosolized);
  - (e) Resolution: 0.1% of reading or 1g/m<sup>3</sup>, whichever is larger;
  - (f) Particle Size Range of Maximum Response: 0.1-10;
  - (g) Total Number of Data Points in Memory: 10,000;
  - (h) Logged Data: Each data point with average concentration, time/date and data point number
  - (i) Run Summary: overall average, maximum concentrations, time/date of maximum, total number of logged points, start time/date, total elapsed time (run duration), STEL concentration and time/date occurrence, averaging (logging) period, calibration factor, and tag number;
  - (j) Alarm Averaging Time (user selectable): real-time (1-60 seconds) or STEL (15 minutes), alarms required;
  - (k) Operating Time: 48 hours (fully charged NiCd battery); continuously with charger;
  - (l) Operating Temperature: -10 to 50° C (14 to 122° F);
  - (m) Particulate levels will be monitored upwind and immediately downwind at the working site and integrated over a period not to exceed 15 minutes.
4. In order to ensure the validity of the fugitive dust measurements performed, there must be appropriate Quality Assurance/Quality Control (QA/QC). It is the responsibility of the remedial party to adequately supplement QA/QC Plans to include the following critical features: periodic instrument calibration, operator training, daily instrument performance (span) checks, and a record keeping plan.
5. The action level will be established at 150 ug/m<sup>3</sup> (15 minutes average). While conservative,

this short-term interval will provide a real-time assessment of on-site air quality to assure both health and safety. If particulate levels are detected in excess of 150 ug/m<sup>3</sup>, the upwind background level must be confirmed immediately. If the working site particulate measurement is greater than 100 ug/m<sup>3</sup> above the background level, additional dust suppression techniques must be implemented to reduce the generation of fugitive dust and corrective action taken to protect site personnel and reduce the potential for contaminant migration. Corrective measures may include increasing the level of personal protection for on-site personnel and implementing additional dust suppression techniques (see paragraph 7). Should the action level of 150 ug/m<sup>3</sup> continue to be exceeded work must stop and DER must be notified as provided in the site design or remedial work plan. The notification shall include a description of the control measures implemented to prevent further exceedances.

6. It must be recognized that the generation of dust from waste or contaminated soil that migrates off-site, has the potential for transporting contaminants off-site. There may be situations when dust is being generated and leaving the site and the monitoring equipment does not measure PM<sub>10</sub> at or above the action level. Since this situation has the potential to allow for the migration of contaminants off-site, it is unacceptable. While it is not practical to quantify total suspended particulates on a real-time basis, it is appropriate to rely on visual observation. If dust is observed leaving the working site, additional dust suppression techniques must be employed. Activities that have a high dusting potential--such as solidification and treatment involving materials like kiln dust and lime--will require the need for special measures to be considered.

7. The following techniques have been shown to be effective for the controlling of the generation and migration of dust during construction activities:

- (a) Applying water on haul roads;
- (b) Wetting equipment and excavation faces;
- (c) Spraying water on buckets during excavation and dumping;
- (d) Hauling materials in properly tarped or watertight containers;
- (e) Restricting vehicle speeds to 10 mph;
- (f) Covering excavated areas and material after excavation activity ceases; and
- (g) Reducing the excavation size and/or number of excavations.

Experience has shown that the chance of exceeding the 150ug/m<sup>3</sup> action level is remote when the above-mentioned techniques are used. When techniques involving water application are used, care must be taken not to use excess water, which can result in unacceptably wet conditions. Using atomizing sprays will prevent overly wet conditions, conserve water, and provide an effective means of suppressing the fugitive dust.

8. The evaluation of weather conditions is necessary for proper fugitive dust control. When extreme wind conditions make dust control ineffective, as a last resort remedial actions may need to be suspended. There may be situations that require fugitive dust suppression and particulate monitoring requirements with action levels more stringent than those provided above. Under some circumstances, the contaminant concentration and/or toxicity may require additional monitoring to protect site personnel and the public. Additional integrated sampling and chemical analysis of the dust may also be in order. This must be evaluated when a health and safety plan is developed and when appropriate suppression and monitoring requirements are established for protection of health and the environment.

## **APPENDIX 8 - SITE MANAGEMENT FORMS**

**94-15 Sutphin Boulevard - Site B**  
**BCP Site No. C241278**  
**Site Management - Annual Inspection Checklist**

Engineering Control	Condition	Field Notes/Observations:
Sub-slab Depressurization System (SSDS)	Observe visible components (fan, vacuum alarm/monitor, vacuum gauge,tubing, riser pipe, etc.) for physical wear, damage and operational issues, and replace as necessary	
	Remove any blockages in vacuum monitor and gauge tubing and riser pipe taps	
	Verify operation of vacuum monitor by disconnecting tubing from riser pipe and noting if the building notification system goes into alarm mode	
	Verify operation of vacuum gauge by disconnecting tubing from riser pipe and noting if the indicator moves to zero (check high and low pressure ports to see if they are plugged correctly)	
	Inspect riser pipe penetrations in concrete slab for proper seal	
	Inspect riser pipe connections at fan for leaks and tightness	
	Inspect power to fan by operating dedicated switch	

Comments/Notes:

---

Name of inspector:

---

Signature of inspector:

---

Date of inspection:

---

**94-15 Sutphin Boulevard - Site B**  
**BCP Site No. C241278**  
**Site Management - Monthly Inspection Checklist**

Engineering Control	Condition	Field Notes/Observations:
Sub-slab Depressurization System (SSDS)	Are both of the system's manometers operational?	
	Do both of the system's manometers indicate proper vacuum?	
	What are the pressure gauge readings?	
	Are clamps in the system piping and properly fastened and are seals near the blower intact and properly sealed?	
	Are there any holes, cracks, or other physical deficiencies in the SSDS piping?	
	Are there any blockages in the SSDS piping?	

Comments/Notes:

---

Name of inspector:

---

Signature of inspector:

---

Date of inspection:

---

## Summary of Green Remediation Metrics for Site Management

Site Name: \_\_\_\_\_ Site Code: \_\_\_\_\_  
 Address: \_\_\_\_\_ City: \_\_\_\_\_  
 State: \_\_\_\_\_ Zip Code: \_\_\_\_\_ County: \_\_\_\_\_

### Initial Report Period (Start Date of period covered by the Initial Report submittal)

Start Date: \_\_\_\_\_

### Current Reporting Period

Reporting Period From: \_\_\_\_\_ To: \_\_\_\_\_

### Contact Information

Preparer's Name: \_\_\_\_\_ Phone No.: \_\_\_\_\_  
 Preparer's Affiliation: \_\_\_\_\_

**I. Energy Usage:** Quantify the amount of energy used directly on-site and the portion of that derived from renewable energy sources.

	Current Reporting Period	Total to Date
Fuel Type 1 (e.g. natural gas (cf))		
Fuel Type 2 (e.g. fuel oil, propane (gals))		
Electricity (kWh)		
<b>Of that Electric usage, provide quantity:</b>		
Derived from renewable sources (e.g. solar, wind)		
<b>Other energy sources</b> (e.g. geothermal, solar thermal (Btu))		

*Provide a description of all energy usage reduction programs for the site in the space provided on Page 3.*

**II. Solid Waste Generation:** Quantify the management of solid waste generated on-site.

	Current Reporting Period (tons)	Total to Date (tons)
<b>Total waste generated on-site</b>		
OM&M generated waste		
<b>Of that total amount, provide quantity:</b>		
Transported off-site to landfills		
Transported off-site to other disposal facilities		
Transported off-site for recycling/reuse		
Reused on-site		

*Provide a description of any implemented waste reduction programs for the site in the space provided on Page 3.*

**III. Transportation/Shipping:** Quantify the distances travelled for delivery of supplies and lab-supplied bottles, shipping of laboratory samples, and the removal of waste.

	<b>Current Reporting Period (miles)</b>	<b>Total to Date (miles)</b>
Standby Engineer/Contractor		
Laboratory Courier/Delivery Service (bottle and sample delivery)		
Waste Removal/Hauling		

*Provide a description of all mileage reduction programs for the site in the space provided on Page 3. Include specifically any local vendor/services utilized that are within 50 miles of the site.*

**IV. Water Usage:** Quantify the volume of water used on-site from various sources.

	<b>Current Reporting Period (gallons)</b>	<b>Total to Date (gallons)</b>
Total quantity of water used on-site (not including treated water)		
<b>Of that total amount, provide quantity:</b>		
Public potable water supply usage		
Surface water usage		
On-site groundwater usage		
Collected or diverted storm water usage		

*Provide a description of any implemented water consumption reduction programs for the site in the space provided on Page 3.*

**V. Land Use and Ecosystems:** Quantify the amount of land and/or ecosystems disturbed and the area of land and/or ecosystems restored to a pre-development condition (i.e. Green Infrastructure).

	<b>Current Reporting Period (acres)</b>	<b>Total to Date (acres)</b>
Land disturbed		
Land restored		

*Provide a description of any implemented land restoration/green infrastructure programs for the site in the space provided on Page 3.*



<b>Description of green remediation programs reported above</b> (Attach additional sheets if needed)
Energy Usage:
Waste Generation:
Transportation/Shipping:
Water usage:
Land Use and Ecosystems:
Recommendations/Other:

<b>CONTRACTOR CERTIFICATION</b>	
<p>I, _____ (Name) do hereby certify that I am _____ (Title) of _____ (Contractor Name), which is responsible for the work documented on this form. According to my knowledge and belief, all of the information provided in this form is accurate and the site management program complies with the DER-10, DER-31, and CP-49 policies.</p>	
_____	_____
<b>Date</b>	<b>Contractor</b>

## **APPENDIX 9 - O&M MANUAL (FOR EACH ACTIVE EC)**

# **Sub-Slab Depressurization System (SSDS) Operations, Maintenance and Monitoring (OM&M) Plan**

**For**

**94-15 Sutphin Boulevard - Site B**

**QUEENS COUNTY**

**NYSDEC Site Number: C241278**

**Prepared for:**

95th Avenue Equities LLC

670 Myrtle Avenue, Suite 6292

Brooklyn, New York 11205

**Prepared by:**



121 West 27<sup>th</sup> Street, Suite 702

New York, NY 10001

[mcarroll@tenen-env.com](mailto:mcarroll@tenen-env.com)

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**December 2024**

# **OPERATIONS, MAINTENANCE AND MONITORING (OM&M) PLAN**

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## **APPENDICES**

Appendix A	SSDS Design – As-Built
Appendix B	SSDS Operation – Routine Operating Procedures
Appendix C	SSDS Vacuum Gauge and Switch
Appendix D	SSDS Fan and Motor

# **OPERATIONS, MAINTENANCE AND MONITORING (OM&M) PLAN**

## **1.0 INTRODUCTION**

This Operations, Maintenance and Monitoring (OM&M) Plan has been developed to detail the engineering control (EC) implemented at the property located at 94-15 Sutphin Boulevard in the Jamaica neighborhood of Queens, NY (Site). The EC was incorporated as part of the New York State Department of Environmental Conservation (NYSDEC) requirements for soil vapor mitigation.

The Site is located at 94-15 Sutphin Boulevard, in the Jamaica neighborhood of Queens, NY and is identified as Block 9999, Lot 1 on the New York City Tax Map. The former Lot 1 was subdivided into two approximately equal area lots (Lot 1 and 40) in January 2022. This lot was referenced as ‘Site B’ and remained as Lot 1 following the subdivision. The Site has been redeveloped with a new 24-story mixed-use commercial and residential building with a full cellar.

The Site is an approximately 0.69-acre area and is bounded by a mixed commercial and residential building and new construction to the east, 95th Avenue to the south, 94th Avenue to the north, and Sutphin Boulevard to the west.

The objective of the Site Management Plan (SMP) is to maintain a negative pressure under the entire footprint of the Site building. The Site location is shown in Figure 1 of the SMP.

### **1.1 Background**

Environmental investigations at the Site have documented elevated concentrations of chlorinated solvents in the soil vapor. There is the potential for an indoor air intrusion condition.

In order to address the potential for indoor air quality impacts from the sub-slab soil vapor, an active sub-slab depressurization system (SSDS) has been designed and was incorporated into the current building plan.

The goals of the active SSDS for the Site are to mitigate soil vapor intrusion into the new onsite building, and to prevent off-Site migration of soil vapors.

## **1.2 Summary of Engineering Control (EC)**

One Engineering Control (EC) to address remaining contamination through physical protective measures at the Site has been incorporated to ensure that the Site remains protective of public health and the environment.

A sub-slab depressurization system (SSDS) was installed below the cellar foundation slab of the new onsite building. The principal components of the SSDS include two sub-grade loops (one beneath the northern portion of the building and one beneath the southern portion of the building) of perforated corrugated PVC pipe set horizontally within subgrade trenches consisting of a minimum of six-inches of  $\frac{3}{4}$ -inch or 1.5-inch stone aggregate overlying gas-permeable geotextile fabric. The SSDS underlies the concrete foundation slab. Two six-inch diameter cast iron riser pipes connect to each of the subgrade loops and extends vertically through the building to the roof, where each pipe is connected to a blower fan for exhaust. The goal of the system was to create a pressure differential of at least -0.02 inches of water column (in-wc) between the cellar foundation slab and the sub-slab environment; however, differential pressure readings above -0.004 in-wc are considered acceptable. An alarm system was installed to notify the building management if a drop in pressure occurs, which indicates that the system is not operating as designed. The system was designed in general accordance with NYSDOH's Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006 (NYSDOH Soil Vapor Guidance).

## **2.0 Engineering Control Operations**

One temporary EC was incorporated into the new onsite building to address potential remaining contamination at the Site. The EC is:

- An active sub-slab depressurization system (SSDS)

General design drawings and specifications are included in the Appendices.

### **2.1 Sub-Slab Depressurization System (SSDS)**

The SSDS will reduce the potential for soil vapor migration into the new onsite building. The SSDS will be inspected at specific intervals as defined in this OM&M.



### **3.0 Routine Maintenance and Monitoring**

EC inspections will be performed by a person knowledgeable with the mechanical systems present in the building and familiar with the property and may include a building or property superintendent.

#### **3.1 EC Inspection Frequency**

Site inspection and certification for performance of the active SSDS will be performed on a schedule detailed in the SMP and reported in an annual Periodic Review Report (PRR).

#### **3.2 EC Inspection Components**

The EC inspections will evaluate the following:

- continued performance of ECs as designed;
- compliance with this RAWP;
- continued achievement of remedial performance criteria;
- accuracy and completeness of Site records;
- necessity for any changes to the remedial systems; and
- general Site conditions at the time of inspection.

In the event of an emergency, such as a natural disaster or an unforeseen failure of any of the ECs, an inspection of the ECs will be conducted by a Qualified Environmental Professional (QEP), as defined by NYSDEC.

### **3.3 Engineering Control (EC) Inspections**

#### **3.3.1 Sub-Slab Depressurization System (SSDS)**

EC inspections of the SSDS components shall include the following:

- Observe visible components (fan, vacuum switch/alarm, tubing, riser pipe, etc.) for physical wear, damage and operational issues, and replace as necessary;
- Remove any blockages in vacuum switch/alarm tubing and riser pipe taps;
- Verify operation of vacuum switch/alarm by disconnecting tubing from riser pipe and noting if the system goes into alarm mode;
- Inspect riser pipe penetrations in concrete slab for proper seal;
- Inspect riser pipe connections at fan for leaks and tightness;
- Inspect condition of muffler (if installed) at end of outlet pipe; and,
- Inspect power to fan by operating dedicated switch.

### **3.4 Inspection Reporting**

EC inspections will be performed by a person with knowledge of the mechanical systems present in the building and familiar with the property. Such person may include a building or property superintendent. Inspections will be completed and reported to NYSDEC at the frequency detailed in Section 3.1. The letter report will include, at a minimum:

- Date of inspection;
- Personnel conducting inspection;
- Description of the inspection activities performed;
- Observations for each EC inspected, noting any deficiencies, conclusions and recommendations;
- Copies of inspection forms;
- Indoor air sampling results if applicable; and
- Certification of ECs, as discussed below.

PRR's containing the findings from inspections and associated certifications will be submitted to NYSDEC on an annual basis. PRR's will be submitted in digital format to NYSDEC. The Department will send a reminder notice indicating the date in which the PRR is due.

### **3.5 Certifications**

The results of the EC inspections will be certified at the time of the inspection and the signed certifications included with the PRR.

The Inspection Certification will certify whether:

- on-site ECs are unchanged from the previous certification;
- on-site ECs remain in-place and effective;
- on-site ECs are performing as designed; and
- anything has occurred that would impair the ability of the controls to protect public health and the environment.

## 4.0 EMERGENCY CONTACT NUMBERS

In the event of any emergency condition pertaining to any EC, the current Owner's representative(s) should contact the appropriate parties from the contact list below. Prompt contact should also be made to a Qualified Environmental Professional (QEP), as defined by NYSDEC. These emergency contact lists must be maintained in an easily accessible location at the Site.

### Emergency Contact Numbers

Contact	Number
Medical, Fire and Police:	911
One Call Center:	(800) 272-4480 (3 day notice required for utility markout)
Poison Control Center:	(800) 222-1222
Pollution Toxic Chemical Oil Spills:	(800) 424-8802
NYSDEC Spills Hotline	(800) 457-7362

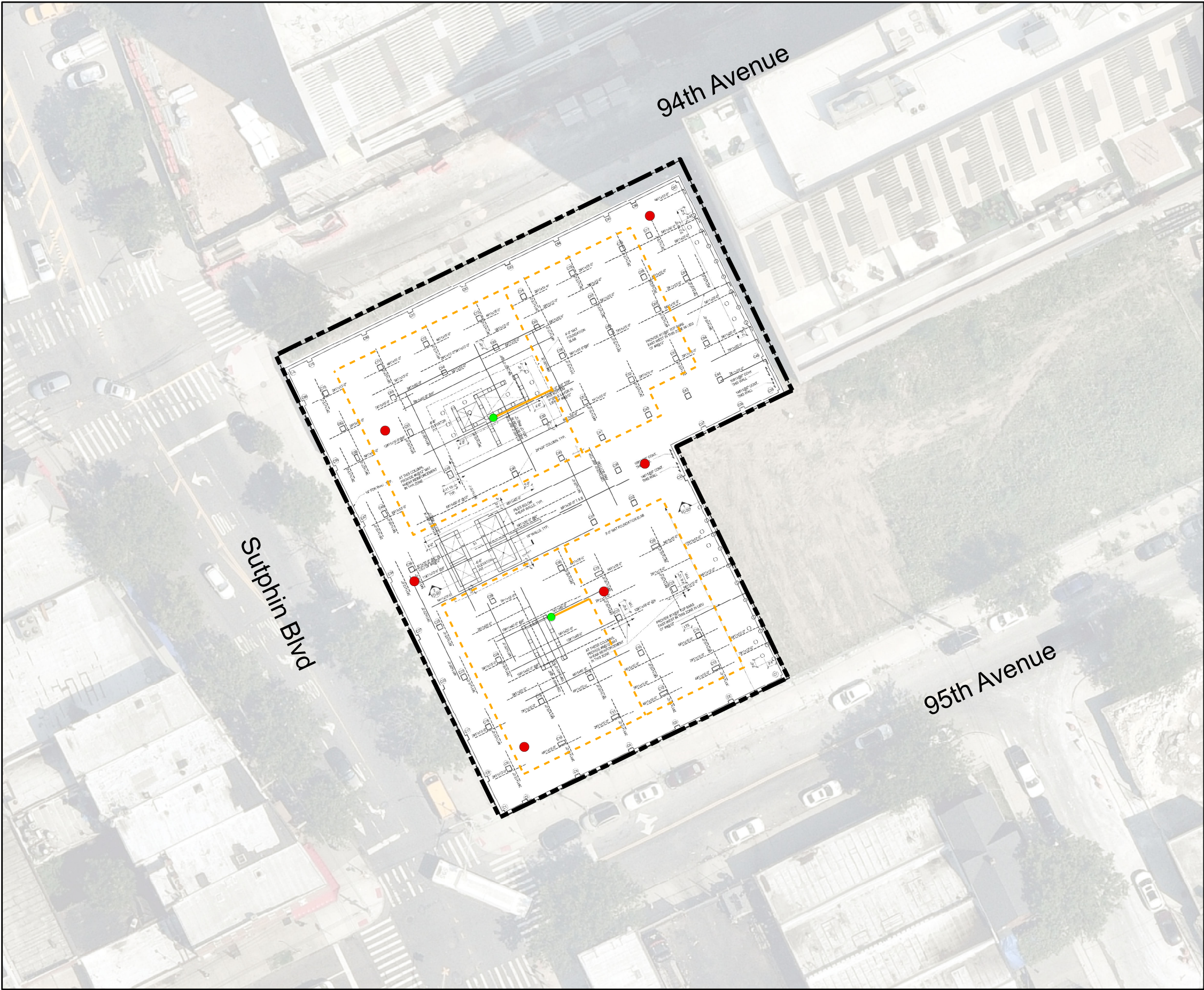
### Project Contact Numbers

Contact	Number
Matthew Carroll Tenen Environmental	(646) 606-2332

## **Appendix A**

### **SSDS Design – As-Built**



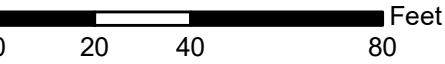


Basemap: Nearmap Aerial 8/12/2021  
NYC Department of City Planning, Information Technology Division  
BM Best Mechanical Services, Underground SSDS, 94-15 Sutphin Blvd., Jamaica, NY, 3/12/24



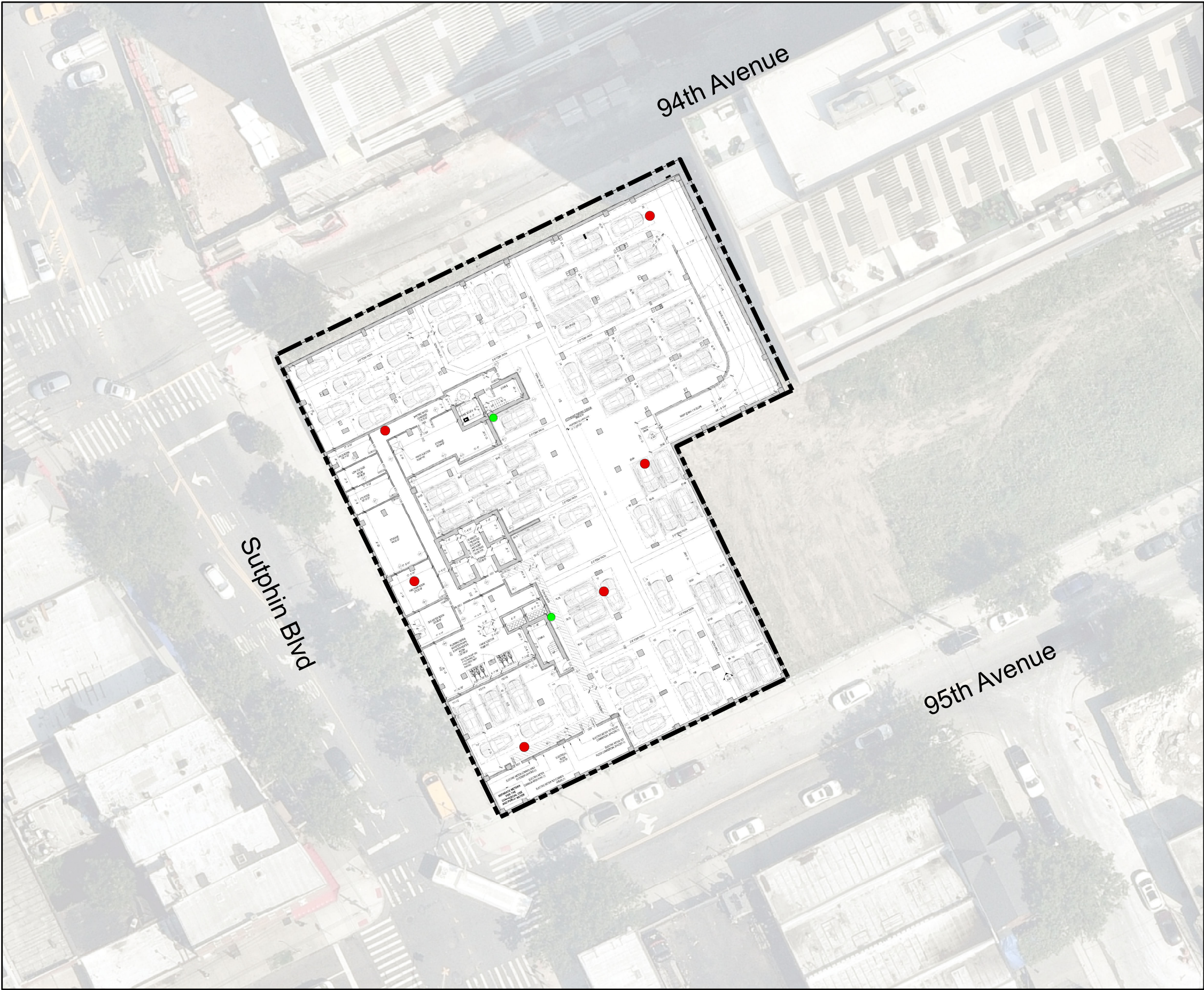
Legend

- 4-in SSDS Riser
- Vapor Monitoring Point
- Four-inch Slotted PVC SSDS Pipe
- Four-inch Solid PVC SSDS Pipe
- Site Boundary



Drawing Title	SSDS Sub-Grade Layout			
	X-100			
Drawing No				
Date	April 2024			
Scale	As Noted			
Checked By	AP			
Drawn By	LM			
Site	TENEN ENVIRONMENTAL			
	Tenen Environmental, LLC 121 West 27th Street Suite 702 New York, NY 10001 O: (646) 606-2332 F: (646) 606-2379			
94-15 Sutphin Blvd. (Site B) Queens, New York Block 9999, Lot 1				



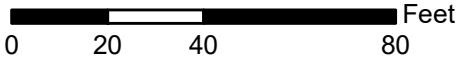


Basemap: Nearmap Aerial 8/12/2021  
NYC Department of City Planning, Information Technology Division  
J Frankl Architects, Proposed Cellar Key Plan, 94-15 Sutphin Blvd., Jamaica, NY, 1/12/2023



**Legend**

- 4-in SSDS Riser
- Vapor Monitoring Point
- Site Boundary



**94-15 Sutphin Blvd. (Site B)**  
**Queens, New York**  
**Block 9999, Lot 1**

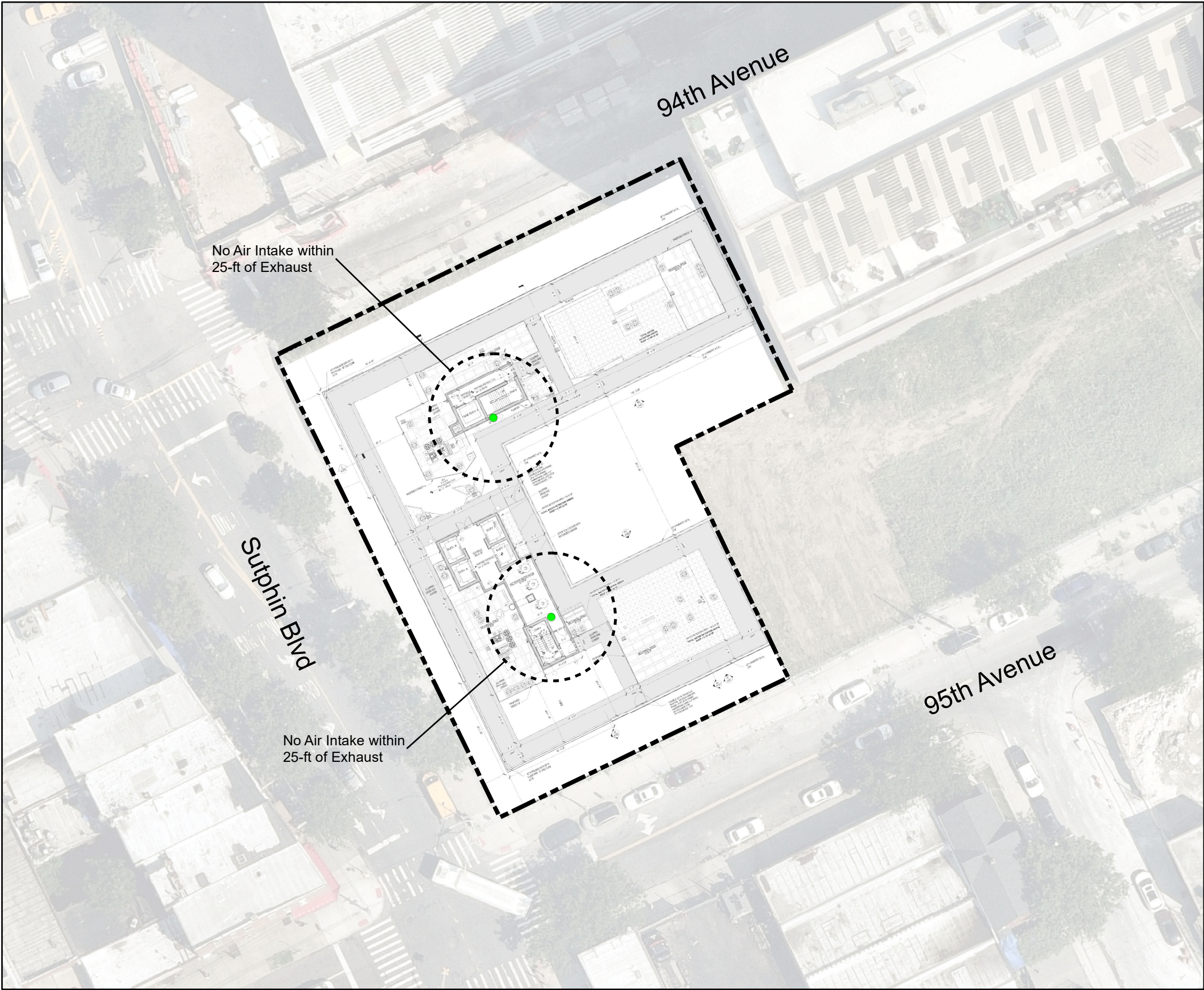
**TENEN ENVIRONMENTAL**

Tenen Environmental, LLC  
121 West 27th Street  
Suite 702  
New York, NY 10001  
O: (646) 606-2332  
F: (646) 606-2379

Drawn By	LM
Checked By	AP
Date	April 2024
Scale	As Noted

Drawing Title	<b>SSDS Cellar Layout</b>
Drawing No	<b>X-101</b>






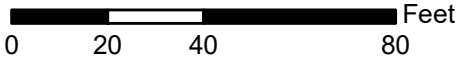


Basemap: Nearmap Aerial 8/12/2021  
NYC Department of City Planning, Information Technology Division  
J Frankl Architects, Proposed Cellar Key Plan, 94-15 Sutphin Blvd., Jamaica, NY, 1/12/2023



**Legend**

-  4-in SSDS Riser  
Terminate 2-ft Above Roof
-  No Air Intake 25-ft Radius
-  Site Boundary



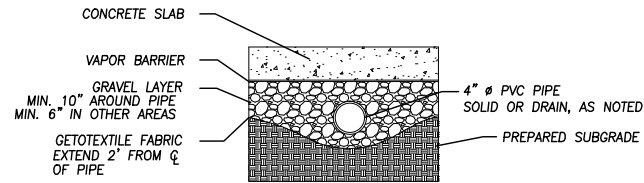
**94-15 Sutphin Blvd. (Site B)**  
**Queens, New York**  
**Block 9999, Lot 1**

**TENEN ENVIRONMENTAL**  
Tenen Environmental, LLC  
121 West 27th Street  
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O: (646) 606-2332  
F: (646) 606-2379

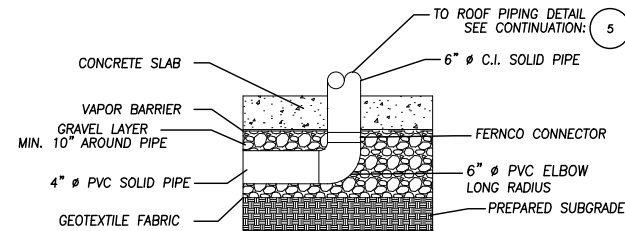
Drawn By	LM
Checked By	AP
Date	April 2024
Scale	As Noted

Drawing Title	<b>SSDS Roof Layout</b>
Drawing No	<b>X-103</b>

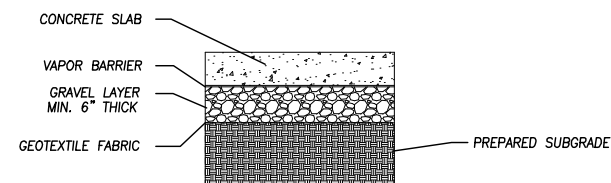




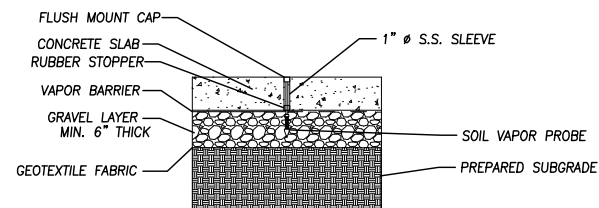
1 Sub-Slab Depressurization Pipe - Through Slab - Side View  
Not To Scale



2 Sub-Slab Pipe to Riser - Through Slab - Side View  
Not To Scale

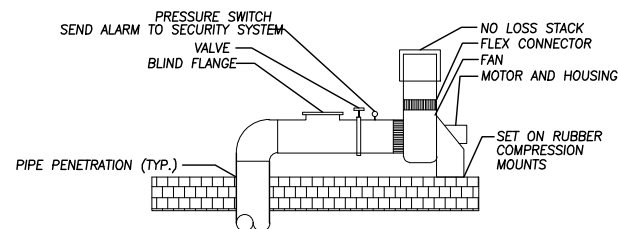


3 Typical Sub-Slab Details - Through Slab - Side View  
Not To Scale

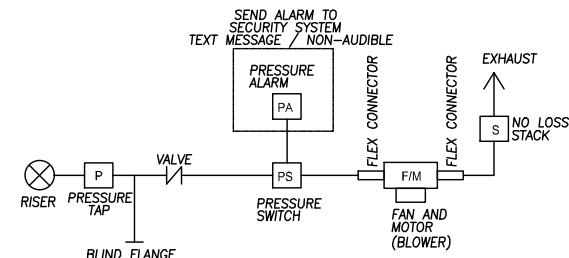


SEAL PENETRATION PER VAPOR BARRIER MANUFACTURER'S SPECIFICATIONS

4 Pressure Monitoring Point - Through Slab - Side View  
Not To Scale



5 Suction Fan Detail - Through Roof - Side View  
Not To Scale



6 Sub-Slab Depressurization System Schematic  
Not To Scale - On Bulkhead Roof Unless Specified

SUB-SLAB DEPRESSURIZATION (SSDS) DETAILS - GENERAL NOTES  
DRAWING NOT TO BE USED FOR STRUCTURAL, ARCHITECTURAL OR OTHER REFERENCE EXCEPT FOR SUB-SLAB DEPRESSURIZATION SYSTEM (SSDS).  
C.I. = CAST IRON; S.S. = STAINLESS STEEL



PROJECT LOCATION  
94-15 Sutphin Blvd. (Site B)  
Queens, New York  
Block 9999, Lot 1

CONSULTANT  
**TENEN ENVIRONMENTAL**

TENEN ENVIRONMENTAL, LLC  
121 West 27th Street  
Suite 702  
New York, NY 10001  
O: 646-606-2332  
F: 646-606-2379

DRAWN BY  
LM

CHECKED BY  
AP

DATE  
April 2024

SCALE:  
Not to Scale

DRAWING TITLE  
SSDS Details

DRAWING NO.  
X-103

## **Appendix B**

### **Sub-Slab Depressurization System (SSDS)**

#### **Routine Operating Procedures**

The long-term operation and maintenance program described below shall continue throughout the life cycle of the SSDS to ensure a proper working order. The long-term operation and maintenance program for the major SSDS components includes manufacturer's recommendations for the reinstallation of SSDS components if modifications to the existing system need to be made, inspection procedures, an operation schedule, typical routine maintenance activities and schedules, and troubleshooting.

The alarm system, described below, shall run continuously and only be disconnected for routine maintenance and inspection activities or replacement. Each riser pipe is equipped with the following:

- Obar Systems, Inc. Model No. GBR 25 mini digital differential pressure gauge with alarm

The Obar Systems, Inc. Model No. GBR 25 mini digital differential pressure gauge with alarm includes a scaled adjustment knob to allow changes to the switching pressure to be made without a pressure gauge; the product is an SPDT pressure switch and alarm combination. The alarm is wired to send a signal remotely to the 94-15 Sutphin Boulevard building management system. In case there is a need to relocate a switch/alarm, the new location shall ensure that the switch/alarm remains in close proximity to the riser pipes and is installed correctly. If the device is not indicating a vacuum while the SSDS is on, staff will make sure that the tubing connected to the riser pipe is connected to the low pressure port. High pressure ports on the vacuum switch/alarm should be vented to atmosphere.

The vacuum switch/alarm does not require lubrication or periodic servicing. Repairs or alterations made to the vacuum switches by others will void the unit's warranty. The vacuum switches are factory calibrated and cannot be recalibrated in the field. The installation and operating instructions for the vacuum alarm/monitor have been included in Appendix 9.

When testing the vacuum alarms, the tubing that connects the vacuum alarms to the riser pipe shall be disconnected and the low set point raised above the current reading. If the vacuum alarms are powered at the time of disconnecting the tubing from the riser pipe, the alarms will go off. The alarms should go back on-line when the tubing is reconnected to the riser pipe. If the system is in alarm when there is a vacuum present in the riser pipe, inspect the tubing and riser pipe tap to ensure that there are no blockages. If there is a blockage in either the tubing or the riser pipe tap, remove the blockage and retest the vacuum alarm/monitor.

The SSDS fans shall operate continuously and only be turned off for routine maintenance and inspection activities or replacement. The SSDS fans shall not be left on the system piping without electrical power for more than 48 hours due to possible fan failure that could result from this non-operational storage. The SSDS fan units do not require periodic servicing and should be returned to the manufacturer or supplier for service. Repairs or alterations made to the SSDS fan units by others will void the unit's warranty. The installation and operating instructions for the SSDS fan units have been included in Appendix 9.

Inspections of the SSDS components shall include the following:

- Observe visible components (fan, vacuum switch/alarm, tubing, riser pipe, etc.) for physical wear, damage and operational issues, and replace as necessary;
- Remove any blockages in vacuum switch/alarm tubing and riser pipe taps;
- Verify operation of vacuum switch/alarm by disconnecting tubing from riser pipe and noting if the system goes into alarm mode;
- Inspect riser pipe penetrations in concrete slab for proper seal;
- Inspect riser pipe connections at fan for leaks and tightness;
- Inspect condition of muffler (if installed) at end of outlet pipe; and,
- Inspect power to fan by operating dedicated switch.

Common troubleshooting tips that can be followed if the vacuum switch/alarm will not indicate a vacuum or is sluggish include the following:

- The pressure ports (high or low) are not hooked up correctly;
- The fittings or sensing lines are blocked, pinched or leaking;
- The cover is loose;

- The pressure sensor is improperly located;
- The ambient temperature is too low (below 20-deg C)

The installation and operating instructions for the vacuum alarm/monitor have been included in Appendix C. The installation and operating instructions for the fan unit have been included in Appendix D.

## **Appendix C**

### **SSDS Vacuum Switch and Alarm**

## GBR 25 Mini Digital Differential Pressure Gauge With Alarm



### System alarms and monitoring made simple and affordable.

Finally a product that has what you need and can be easily installed.

The GBR 25 is a compact stand alone system gauge with an audible and visual alarm that works for VOC and Radon systems operating at system pressures greater than 2" wc. Included is a second relay that can be used to trigger additional alarms.

Includes Power supply

Optional 4-20 MA or 0-10 outputs can be used to monitor system pressure.

Contact OBAR for a quote to build custom alarm panels for your needs.

### Applications and features

- Scale 0-40 inches WC eliminates need for multiple gauges.
- Visual and audible alarm included and factory set at 1" WC
- The alarm set point can be changed in the field.
- Second adjustable relay for triggering additional alarms.
- Optional 4-20 MA or 0-10 output for data.
- Accuracy is up to  $\pm 1\%$  FS, with large LCD display.
- Function keys: zero reset, units select, display update time, automatic sleep time, alarm, etc.

### Specifications

**Medium:** Non-combustible, non-corrosive air, insensitive to moisture, dust, condensation and oil

**Working Temp.:** 20~70°C

**Medium Temp.:** 0~60°C

**Temp. Compensation:** 0~50°C

**Working Pressure:** overload 10xFS, burst 15xFS

**Display:** 5 bits LCD, with engineering unit & backlight

**Output:** 0-10V / 4-20mA (3 wires)

**Output load:**  $\leq 500\Omega$  (current),  $\geq 2K\Omega$  (voltage)

**Relay Output:** 2xSPST, 3A/30VDC, 3A/250VAC or 1xBuzzer

**Accuracy:** up to  $\pm 1.0\%$  FS ( $\pm 2.0\%$  FS @ 25Pa range)

**Long term stability:**  $\pm 0.5\%$  FS /Year

**Thermal effect:**  $< 0.05\%$  FS/°C (zero),  $< 0.08\%$  FS/°C (FS)

**Power type** 16~28VDC/AC

**24V Power Supply included**

**Process Connection:** 5mm ID tubing, two pairs (left/back)

**Keys:** 3 touch buttons

**Protection:** IP54

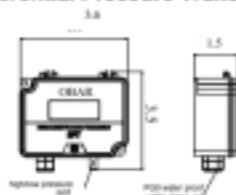
**Approval:** CE

**Display update time:** selectable for 0.5/1/5/10s (default 1s)



Other OBAR products you may be interested in.

DPT(DPT-F Flush Mount) Differential Pressure Transmitter



**Pricing:** \$125 per unit

**Add \$20 for 4-20 mA / 0-10V version**

**Custom options and bulk order pricing available. Call or email for details.**

## Low Profile Custom Alarm Panel

### Features

Pre-wired solution for SSDS systems.

Vacuum tube connections pre-labeled to corresponding gauge.

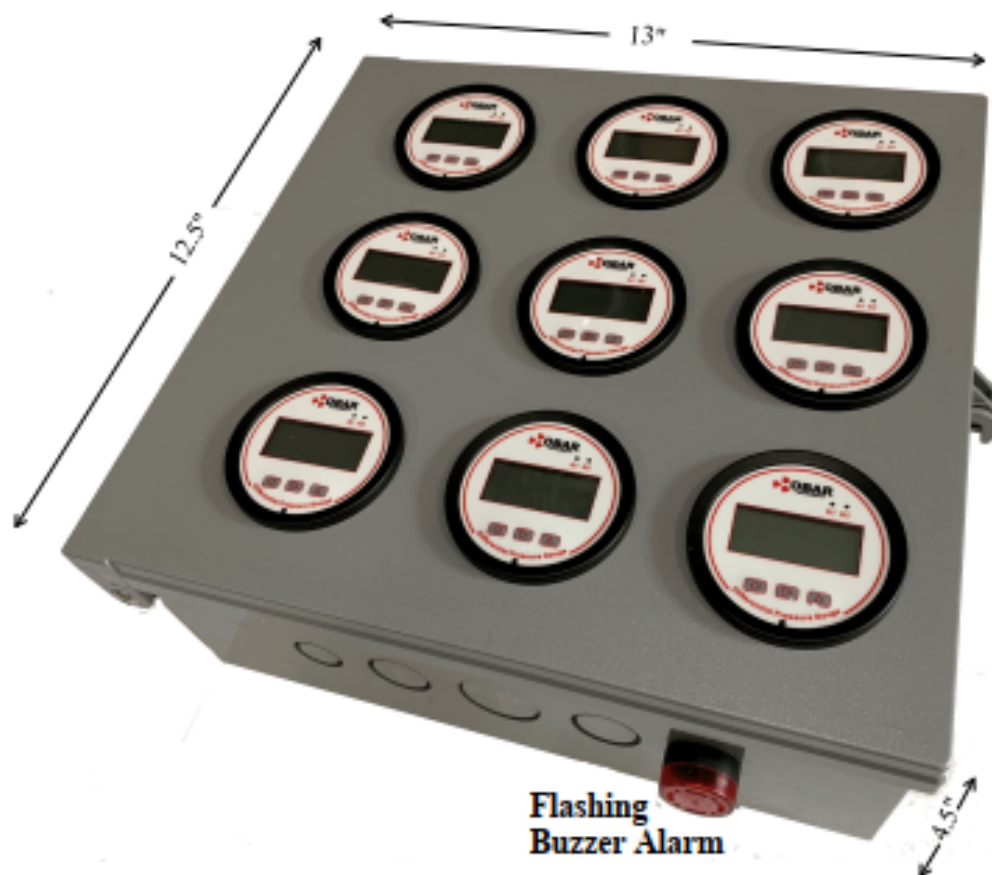
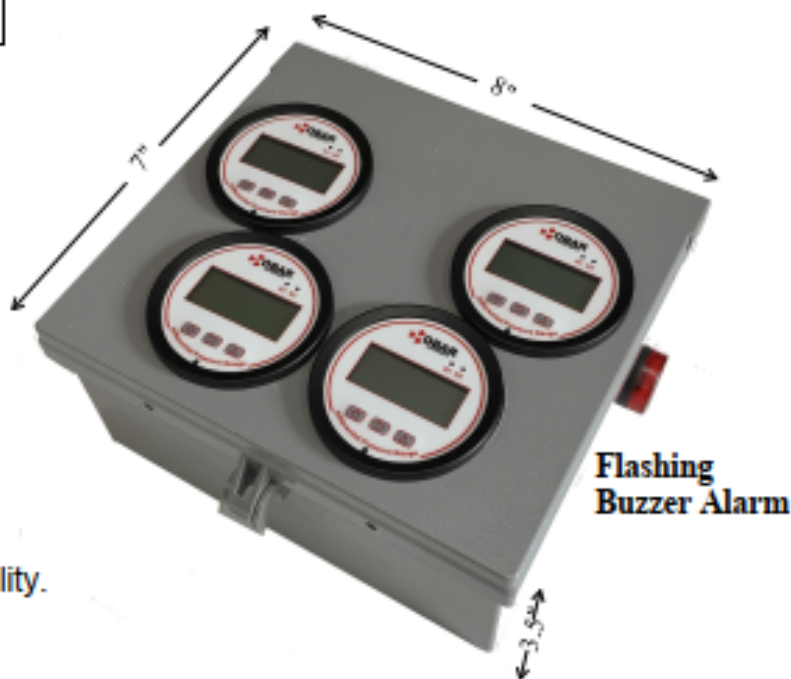
Hinge orientation can be customized.

Secondary relay can be used for secondary alarm/MarCell Pro monitor or upgrade to a 4-20 mA/0-10v output for remote monitoring capability.

Low profile, wall mountable design.

Power supply included.

Custom labeling available.



## **Appendix D**

### **SSDS Fan and Motor**



# THE OBAR GBR76

## COMPACT RADIAL BLOWER



Based on 25 years of experience and 2 years of research and development, the patent pending GBR series of compact radial blowers provide the perfect combination of performance and design.

### PERFORMANCE

- GBR76 SOE 16" WC @ 0 Max flow 155 CFM.
- GBR76 UD 40" WC @ 0 Max flow 195 CFM.
- Built in speed control to customize performance.
- Condensate bypass built in.
- 12 month warranty - 40,000 hr sealed bearings.



*GBR76 WITH ROOF MOUNT*

### DESIGN

- Our modular design means the blower and manifold assembly can be removed and replaced as a unit. This makes repairs cost effective and easy and allows contractors to upgrade systems simply by swapping assemblies.
- The GBR series is based on a bypass blower designed to handle combustible materials.
- The housing is not required to be air tight, so you can add gauges and alarms without compromising the system.
- Built in condensate bypass.
- Built in speed control.
- Quick disconnect electrical harness.
- All UL listed components including UL listed enclosure for outside use.
- Wall fastening lugs included.
- GBR series roof and wall mounts available to quickly configure the blowers for your installation while providing a custom built look.
- Compact design 16"x 14"x 8" weighing only 18 lbs.
- 3" schedule 40 inlet and exhaust.
- Universal Drive model accepts voltage from 120-240V without alteration

### COST

### GBR76 SOE

### GBR76 UD

**COMPLETE UNIT**  
**3 YEAR WARRANTY**

**\$1289.00**  
**\$450.00**

**\$1489.00**  
**\$550.00**

GBR76 SOE	0"	2"	4"	6"	8"	10"	12"	16"	Wattage
SOE 16	150	140	129	118	105	90	75	35	150-320
SOE 12	125	115	100	83	62	39	0		110-200
SOE 8	105	90	70	42	0				60-120
SOE 4	75	50	0						37-50

**GBR SOE** performance using built in potentiometer set at sealed vacuums of 16, 12, 8, and 4" WC

GBR76 UD	0"	10"	20"	30"	37"	Wattage
110V	195	158	118	63	20	700-870
220V	197	162	130	89	50	800-1100

## Blower Specifications

### Notes:

- **Input Voltage Range:** 108-132 Volts AC RMS, 50/60 Hz, single phase.
  - **Input Current:** 6 amps AC RMS
  - **Operating Temperature (Ambient Air and Working Air):** 0°C to 50°C
  - **Storage Temperature:** -40°C to 85°C
  - **Dielectric Testing:** 1500 Volts AC RMS 60 Hz applied for one second between input pins and ground, 3mA leakage maximum.
  - **Speed Control Methods:** PWM (Pulse Width Modulation) (1 kHz to 10 kHz)  
0 to 10 VDC speed control.
- Mechanical: A potentiometer is available for speed control of the blower. The potentiometer can be preset for a specific speed. Access for speed adjustment located in motor housing.
- **Approximate Weight:** 4.8 Lbs. / 2.2 Kg
  - **Regulatory Agency Certification:** Underwriters Laboratories Inc. UL507 Recognized under File E94403 and compliant under the CE Low Voltage Directive 2006/95/EC.
  - **Design Features:** Designed to provide variable airflow for low NOx & CO emission in high efficiency gas fired combustion systems. Built with non-sparking materials. Blower housing assembly constructed of die cast aluminum. Impeller constructed from hardened aluminum. Rubber isolation mounts built into blower construction to dampen vibration within the motor. Two piece blower housing assembly sealed with O-ring gasket for combustion applications. Customer is responsible to check for any leakage once the blower is installed into the final application.
  - **Miscellaneous:** Blower inlet, discharge, and all motor cooling inlet and discharge vents must not be obstructed. Motor ventilation air to be free of oils and other foreign particles, (i.e. breathing quality air). Blower is to be mounted so ventilation air cannot be re-circulated.
- POWER CONNECTION:** Blower connector, AMP Universal MATE-N-LOK, part no. 1-350943-0.  
**SPEED CONNECTION:** Blower connector, Molex Mini-Fit Jr., part no. 39-30-3056.  
Mating harnesses available upon request.

## Enclosure Specifications

### Ratings:

Ingress Protection (EN 60529): 66/67

Electrical insulation: Totally insulated

Halogen free (DIN/VDE 0472, Part 815): yes

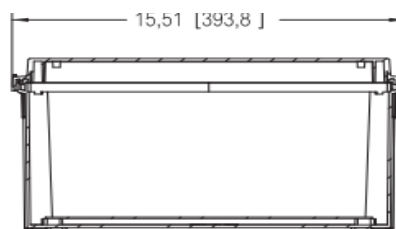
UV resistance: UL 508

Flammability Rating (UL 746 C 5): complies with UL 508

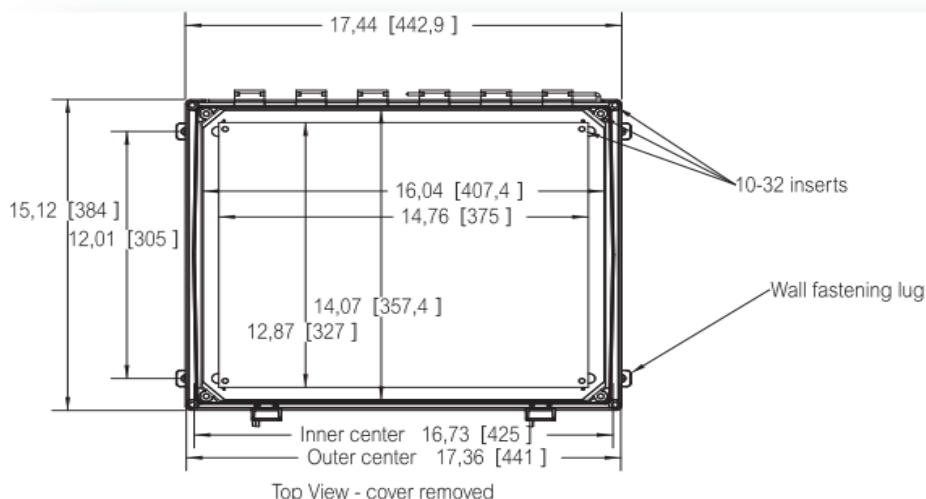
Glow Wire Test (IEC 695-2-1) °C: 960

NEMA Class: UL Type 4, 4X, 6, 6P, 12 and 13

Certificates: Underwriters Laboratories



Screw cover



## **APPENDIX 10 - REMEDIAL SYSTEM OPTIMIZATION TABLE OF CONTENTS**

# REMEDIAL SYSTEM OPTIMIZATION FOR 94-15 SUTPHIN BOULEVARD – SITE B

## TABLE OF CONTENTS

### 1.0 INTRODUCTION

#### 1.1 SITE OVERVIEW

#### 1.2 PROJECT OBJECTIVES AND SCOPE OF WORK

#### 1.3 REPORT OVERVIEW

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#### 2.2 REGULATORY HISTORY AND REQUIREMENTS

#### 2.3 CLEAN-UP GOALS AND SITE CLOSURE CRITERIA

#### 2.4 PREVIOUS REMEDIAL ACTIONS

#### 2.5 DESCRIPTION OF EXISTING REMEDY

##### 2.5.1 System Goals and Objectives

##### 2.5.2 System Description

##### 2.5.3 Operation and Maintenance Program

### 3.0 FINDINGS AND OBSERVATIONS

#### 3.1 SUBSURFACE PERFORMANCE

#### 3.2 TREATMENT SYSTEM PERFORMANCE

#### 3.3 REGULATORY COMPLIANCE

#### 3.4 MAJOR COST COMPONENTS OR PROCESSES

#### 3.5 SAFETY RECORD

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##### 4.1.1 Source Reduction/Treatment

##### 4.1.2 Sampling

##### 4.1.3 Conceptual Site Model (Risk Assessment)

#### 4.2 RECOMMENDATIONS TO IMPROVE PERFORMANCE

##### 4.2.1 Maintenance Improvements

##### 4.2.2 Monitoring Improvements

#### 4.2.3 Process Modifications

### 4.3 RECOMMENDATIONS TO REDUCE COSTS

#### 4.3.1 Supply Management

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#### 4.3.3 Optimize Monitoring Program

#### 4.3.4 Maintenance and Repairs

### 4.4 RECOMMENDATIONS FOR IMPLEMENTATION

## **APPENDIX 11 - REQUEST TO IMPORT/REUSE FILL MATERIAL FORM**



**NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION**



**Request to Import/Reuse Fill or Soil**

\*This form is based on the information required by DER-10, Section 5.4(e). Use of this form is not a substitute for reading the applicable Technical Guidance document.\*

**SECTION 1 – SITE BACKGROUND**

The allowable site use is:

Have Ecological Resources been identified?

Is this soil originating from the site?

How many cubic yards of soil will be imported/reused?

If greater than 1000 cubic yards will be imported, enter volume to be imported:

**SECTION 2 – MATERIAL OTHER THAN SOIL**

Is the material to be imported gravel, rock or stone?

Does it contain less than 10%, by weight, material that would pass a size 10 sieve?

Does it contain less than 10%, by weight, material that would pass a size 100 sieve?

Is this virgin material from a permitted mine or quarry?

Is this material recycled concrete or brick from a DEC registered processing facility?

**SECTION 3 - SAMPLING**

Provide a brief description of the number and type of samples collected in the space below:

-----  
*Example Text: 5 discrete samples were collected and analyzed for VOCs. 2 composite samples were collected and analyzed for SVOCs, Inorganics & PCBs/Pesticides.*

*If the material meets requirements of DER-10 section 5.4(e)5 (other material), no chemical testing needed.*

### SECTION 3 CONT'D - SAMPLING

Provide a brief written summary of the sampling results or attach evaluation tables (compare to DER-10, Appendix 5):

---

*Example Text: Arsenic was detected up to 17 ppm in 1 (of 5) samples; the allowable level is 16 ppm.*

*If Ecological Resources have been identified use the "If Ecological Resources are Present" column in Appendix 5.*

### SECTION 4 – SOURCE OF FILL

Name of person providing fill and relationship to the source:

Location where fill was obtained:

Identification of any state or local approvals as a fill source:

If no approvals are available, provide a brief history of the use of the property that is the fill source:

Provide a list of supporting documentation included with this request:



The information provided on this form is accurate and complete.

---

Signature

---

Date

---

Print Name

---

Firm

## **APPENDIX 12 – ENVIRONMENTAL FOOTPRINT ANALYSIS AND CLIMATE SCREENING CHECKLIST**

# Climate Screening Checklist

## Background Information

- Project Manager: **Matthew Carroll, PE**
- Site Name: **94-15 Sutphin Boulevard - Site B**
- Site Number: **C241278**
- Site Location: **94-15 Sutphin Boulevard, Jamaica, NY 11435**
- Site Elevation (average above sea level): **39 feet above sea level (from USGS Flushing, NY Topographic Maps [2013]).**
- ClimAID Region ([Responding Climate Change in New York State \(ClimAID\) - NYSERDA](#)): **Region 4 (NYC and Long Island)**
- Remedial Stage/site classification: **Site Management - Class 4**
- Contamination - Media Impacted/ Contaminants of Concern: **Soil, groundwater, and soil vapor at the Site are impacted with cVOCs, specifically PCE. Soil is impacted with historic fill-related SVOCs, metals, pesticides, and PCBs.**
- Proposed/Current Remedy: **Remediation completed, onsite SSDS, Institutional Controls (Environmental Easement).**
- What is the predicted timeframe of the remedy? Will components of the remedy still be in place in 10+ years? **COC issuance for the Site is anticipated in December 2024. The SSDS will operate in perpetuity until permission to shut down the system is granted in writing by NYSDEC and NYSDOH based on post-remedial soil vapor intrusion sampling results. It is anticipated that the SVE system will be shut down in less than 5 years and the Site will achieve a conditional Track 1 remedy.**
- Is the site in proximity to any sensitive receptors? (e.g. wetlands, waterbodies, residential properties, hospitals, schools, drinking water supplies, etc.) **There are no sensitive receptors located within 500 feet of the Site.**

Is the site in a disadvantaged community (DAC) or potential environmental justice area (PEJA) (Use DECinfoLocator: [DECinfo Locator \(ny.gov\)](#))?

☐ Yes ☐ No

If the site is in a DAC or PEJA, will climate impacts be magnified? If yes, list how and why.

☐ Yes ☐ No

Should thresholds of concern be lowered to account for magnification of impacts? If yes, indicate how lower thresholds will be used in the screening.

☐ Yes ☐ No

--

### **Climate Screening Table\***

Potential Climate Hazards	Relevant to the Site Location (Y/N/NA) <sup>1</sup>	Projected Change (Reference data source/Model) <sup>3</sup>	Potential to Impact Remedy (Y/N)	Is remedy/site already resilient? (Y/N) <sup>4</sup>
Precipitation				
Temperature <sup>2</sup> (Extreme Heat or Cold Weather Impacts)				
Sea Level Rise				
Flooding				
Storm Surge				
Wildfire				
Drought				
Storm Severity				
Landslides				
Other Hazards:				

\* Links to potential data sources can be found on the following page

<sup>1</sup> If the first column is N --> The rest of the columns will be N/A, the hazard is not applicable to the site.

<sup>2</sup> Extreme Heat: periods of three or more days above 90°F- Extreme Cold: Individual days with minimum temperatures at or below 0 degrees F (NYSERDA ClimAID report)

<sup>3</sup> List the projected change in specific terms or units e.g. inches of rain fall, feet of sea level rise, etc.

<sup>4</sup> If final column is Y, provide reasoning, if the final column is N --> Climate Vulnerability Assessment (CVA) required.

**Required Next Steps (If no further action is required, provide justification):**

--

**Potential Data Sources** (not an exhaustive list)- from [Superfund Climate Resilience: Vulnerability Assessment | US EPA](#)

**NYSERDA ClimAID report-** [Responding Climate Change in New York State \(ClimAID\) - NYSERDA](#)

FEMA- [National Flood Hazard Layer | FEMA.gov](#)

NOAA- [National Storm Surge Risk Maps - Version 3 \(noaa.gov\)](#)

Department of Agriculture Forest Service [Wildfire Risk to Communities](#)

EPA [Climate Change Indicators in the United States](#)

EPA [Climate Resilience Evaluation & Awareness Tool \(CREAT\) | U.S. Climate Resilience Toolkit](#)

EPA [National Stormwater Calculator](#)

National Integrated Drought Information System [U.S. Drought Portal](#)

National Interagency Coordination Center [National Interagency Fire Center](#)

National Oceanic and Atmospheric Administration Coastal Services [Digital Coast](#)

- Resources to help communities assess coastal hazards, such as the [Sea Level Rise Viewer](#) for visualizing community-level impacts of flooding or sea level rise and [downloadable LIDAR data](#)

National Oceanic and Atmospheric Administration [National Centers for Environmental Information](#) website

National Oceanic and Atmospheric Administration [Sea Level Trends](#)

National Weather Service [Climate Prediction Center](#)

National Weather Service [National Hurricane Center](#)

National Weather Service [Sea, Lake, and Overland Surges from Hurricanes \(SLOSH\)](#)

National Weather Service [Storm Surge Hazard Maps](#)

U.S. Federal Government Climate Resilience Toolkit: [The Climate Explorer](#)

U.S. Army Corps of Engineers [Climate Preparedness and Resilience](#)

U.S. Geological Survey [Coastal Change Hazards Portal](#)

U.S. Geological Survey [Landslide Hazards Program](#)

U.S. Geological Survey [National Ground-water Monitoring Network Data Portal](#)

U.S. Geological Survey [National Climate Change Viewer](#)

U.S. Geological Survey [National Water Dashboard](#)

U.S. Geological Survey [StreamStats](#)

NYS Department of State- [Assess | Department of State \(ny.gov\)](#)

NYSERDA NY Coastal Floodplain Mapper- [Home Page \(ny.gov\)](#)

NYSDEC Coastal Erosion Hazards- [Coastal Areas Regulated By The CEHA Permit Program - NYDEC](#)

NYSDOH Heat Index- [health.ny.gov/environmental/weather/vulnerability\\_index/county\\_maps.htm](#)

### Environmental Footprint Summary

Core Element	Metric		Unit of Measure	Footprint					
				Excavation and Offsite Disposal of Soil/Fill	Active SSDS	< Component 4 >	< Component 5 >	< Component 6 >	Total
Materials & Waste	M&W-1	Refined materials used on-site	Tons	0.0	782.5	0.0	0.0	0.0	782.5
	M&W-2	% of refined materials from recycled or reused material	%		0.0%				0.0%
	M&W-3	Unrefined materials used on-site	Tons	0.000	0.000	0.000	0.000	0.000	0.0
	M&W-4	% of unrefined materials from recycled or reused material	%						
	M&W-5	On-site hazardous waste disposed of off-site	Tons	0.0	0.0	0.0	0.0	0.0	0.0
	M&W-6	On-site non-hazardous waste disposed of off-site	Tons	0.0	0.0	0.0	0.0	0.0	0.0
	M&W-7	Recycled or reused waste	Tons	31,200.0	0.0	0.0	0.0	0.0	31,200.0
	M&W-8	% of total potential waste recycled or reused	%	100.0%					100.0%
Water (used on-site)	W-1	Public water use	MG	0.1	0.0	0.0	0.0	0.0	0.1
	W-2	Groundwater use	MG	0.0	0.0	0.0	0.0	0.0	0.0
	W-3	Surface water use	MG	0.0	0.0	0.0	0.0	0.0	0.0
	W-4	Reclaimed water use	MG	0.0	0.0	0.0	0.0	0.0	0.0
	W-5	Storm water use	MG	0.0	0.0	0.0	0.0	0.0	0.0
	W-6	User-defined water resource #1	MG	0.0	0.0	0.0	0.0	0.0	0.0
	W-7	User-defined water resource #2	MG	0.0	0.0	0.0	0.0	0.0	0.0
	W-8	Wastewater generated	MG	0.0	0.0	0.0	0.0	0.0	0.0
Energy	E-1	Total energy used (on-site and off-site)	MMBtu	3,747.4	212.3	0.0	0.0	0.0	3,959.6
	E-2	Energy voluntarily derived from renewable resources							
	E-2A	On-site renewable energy generation or use + on-site biodiesel use + biodiesel and other renewable resource use for transportation	MMBtu	0.0	0.0	0.0	0.0	0.0	0.0
	E-2B	Voluntary purchase of renewable electricity	MWh	0.0	0.0	0.0	0.0	0.0	0.0
	E-3	Voluntary purchase of RECs	MWh	0.0	0.0	0.0	0.0	0.0	0.0
	E-4	On-site grid electricity use	MWh	17.520	0.010	0.000	0.000	0.000	17.5
Air	A-1	On-site NOx, SOx, and PM emissions	Pounds	2,172.4	0.0	0.0	0.0	0.0	2,172.4
	A-2	On-site HAP emissions	Pounds	0.1	0.0	0.0	0.0	0.0	0.1
	A-3	Total NOx, SOx, and PM emissions	Pounds	4,266.3	133.8	0.0	0.0	0.0	4,400.1
	A-3A	Total NOx emissions	Pounds	3,702.5	81.1	0.0	0.0	0.0	3,783.6
	A-3B	Total SOx emissions	Pounds	427.9	40.4	0.0	0.0	0.0	468.3
	A-3C	Total PM emissions	Pounds	136.0	12.3	0.0	0.0	0.0	148.2
	A-4	Total HAP emissions	Pounds	54.9	2.6	0.0	0.0	0.0	57.6
	A-5	Total greenhouse gas emissions	Tons CO2e*	289.5	10.9	0.0	0.0	0.0	300.4
Land & Ecosystems		Qualitative Description							

\* Total greenhouse gases emissions (in CO2e) include consideration of CO2, CH4, and N2O (Nitrous oxide) e) The above metrics are consistent with EPA's Methodology for Understanding and Reducing a Project's Environmental Footprint (EPA 542-R-12-002), February 2012

"MMBtu" = millions of Btus

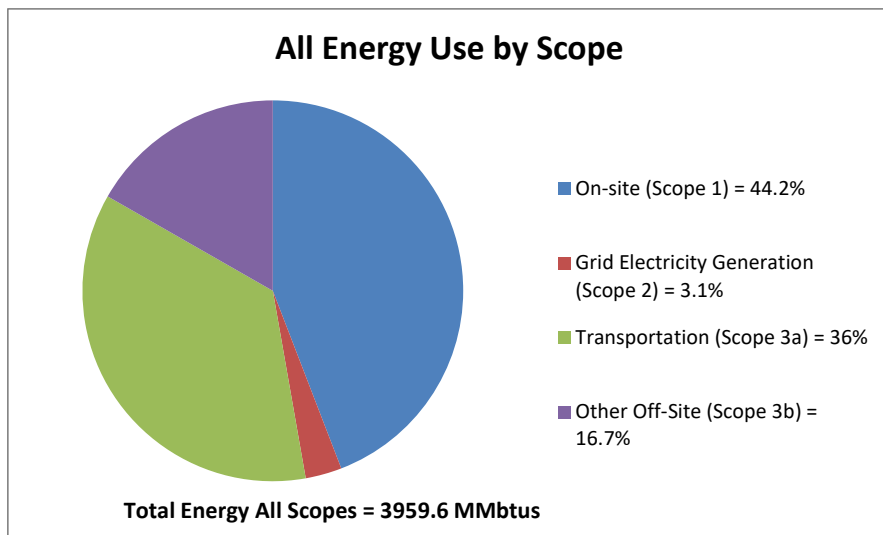
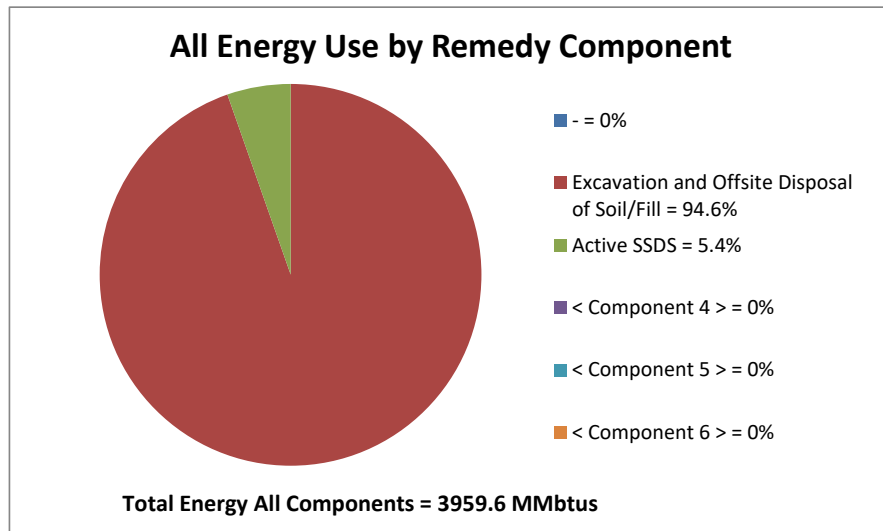
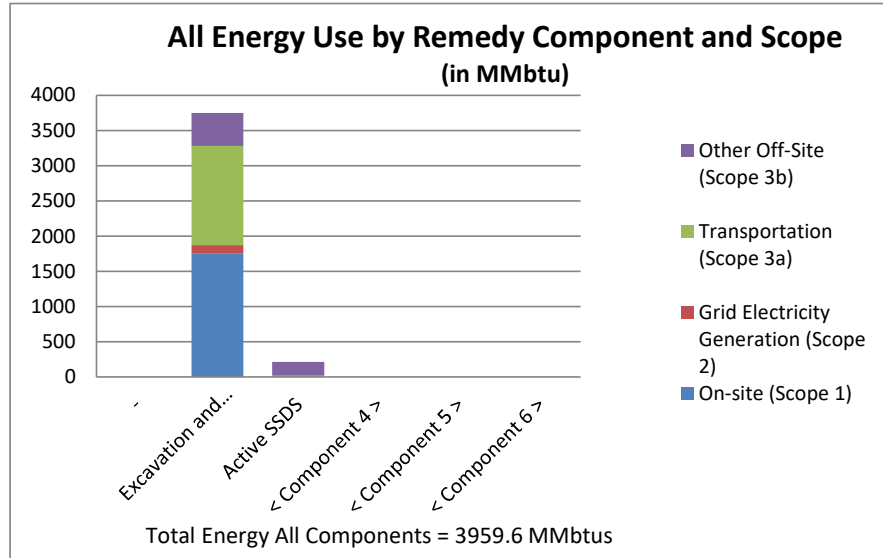
"MG" = millions of gallons

"CO2e" = carbon dioxide equivalents of global warming potential

"MWh" = megawatt hours (i.e., thousands of kilowatt-hours or millions of Watt-hours)

"Tons" = short tons (2,000 pounds)

Notes:





Total Energy MMbtus	-	Excavation	Active SSD	< Component 4	< Component 5	< Component 6	Total	
On-site (Scope 1)	0.0	1,748.6	0.0	0.0	0.0	0.0	1,748.7	
Electricity Generation (Scope 2)	0.0	121.4	0.1	0.0	0.0	0.0	121.5	d Electricity
Transportation (Scope 3a)	0.0	1,407.9	19.1	0.0	0.0	0.0	1,427.0	Trar
Other Off-Site (Scope 3b)	0.0	469.4	193.1	0.0	0.0	0.0	662.5	Oth
Total	0.0	3,747.4	212.3	0.0	0.0	0.0	3,959.6	

- = 0%

On-site (Scope 1) = 44.2%

Excavation and Offsite Disposal of Soil/Fill = 5.6%

Grid Electricity Generation (Scope 2) = 3.1%

Active SSDS = 5.4%

Transportation (Scope 3a) = 36%

< Component 4 > = 0%

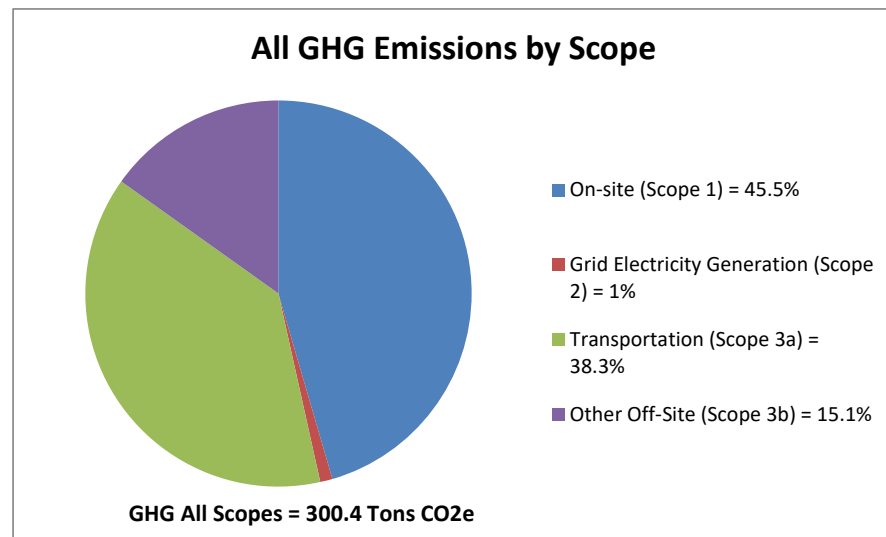
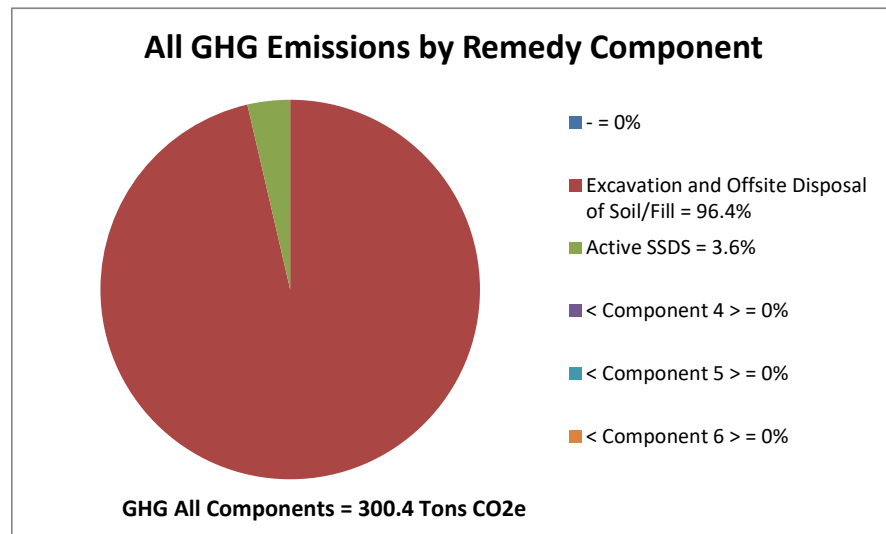
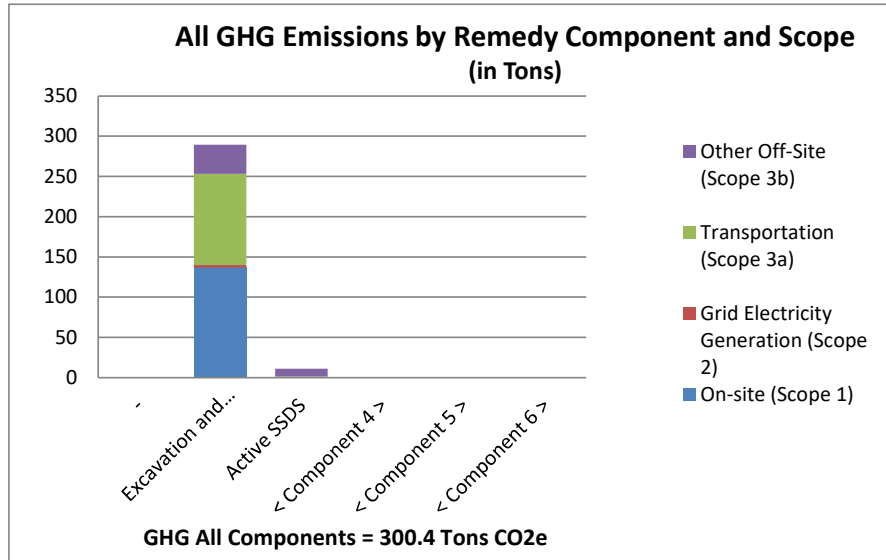
Other Off-Site (Scope 3b) = 16.7%

< Component 5 > = 0%

< Component 6 > = 0%

Total Energy All Components = 3959.6 MMBtus

Total Energy All Scopes = 3959.6 MMBtus



GHG							
Tons CO2e							
	-	Excavation	Active SSD	< Component 4	< Component 5	< Component 6	Total
On-site (Scope 1)	0.0	136.7	0.0	0.0	0.0	0.0	136.7
Grid Electricity Generation (Scope 2)	0.0	3.1	0.0	0.0	0.0	0.0	3.1 d Electricity
Transportation (Scope 3a)	0.0	113.6	1.5	0.0	0.0	0.0	115.2 Trar
Other Off-Site (Scope 3b)	0.0	36.1	9.3	0.0	0.0	0.0	45.5 Oth
Total	0.0	289.5	10.9	0.0	0.0	0.0	300.4

- = 0%

On-site (Scope 1) = 45.5%

Excavation and Offsite Disposal of Soil/Fill = 5%

Grid Electricity Generation (Scope 2) = 1%

Active SSDS = 3.6%

Transportation (Scope 3a) = 38.3%

< Component 4 > = 0%

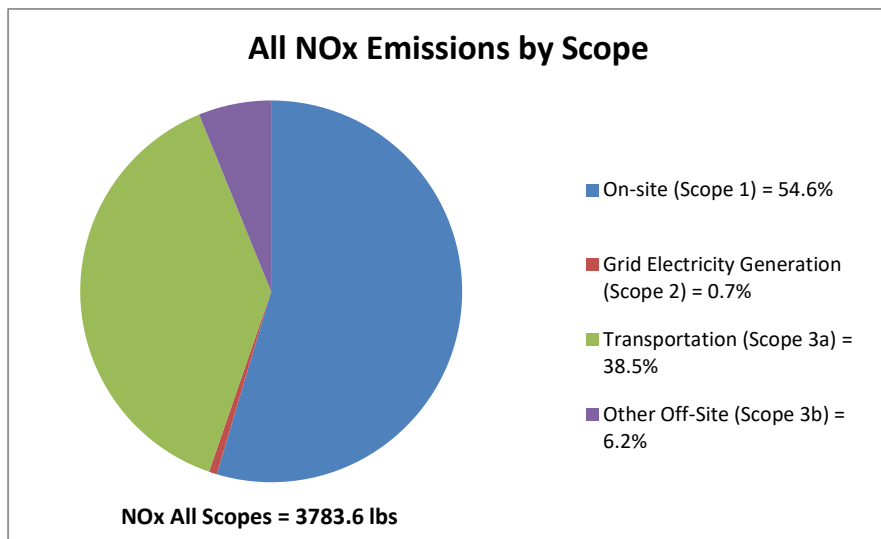
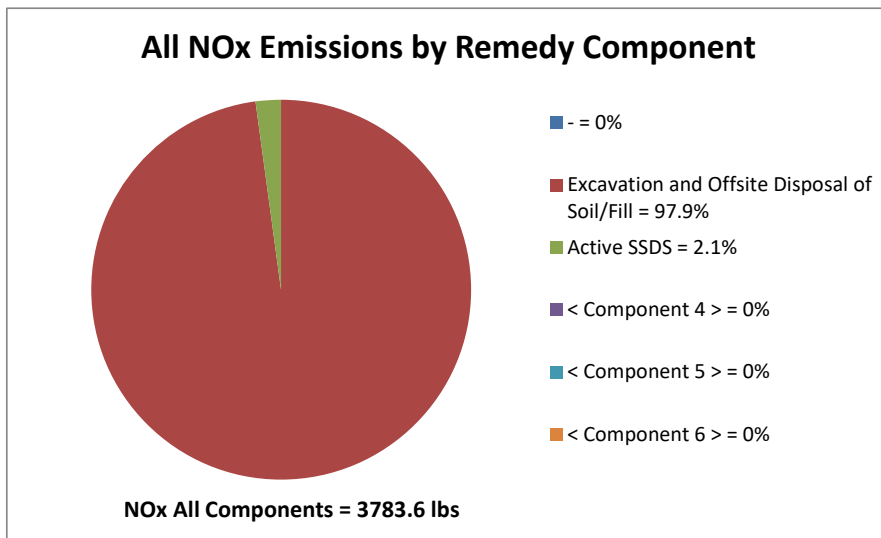
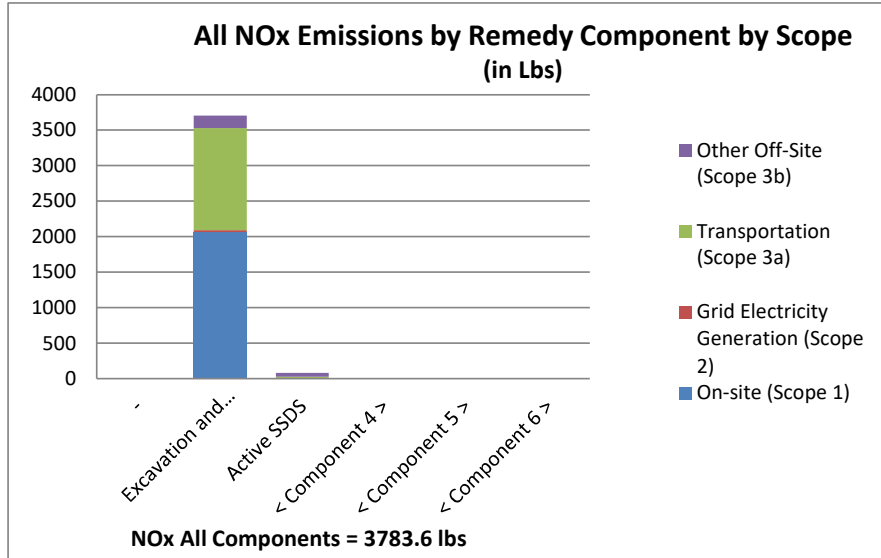
Other Off-Site (Scope 3b) = 15.1%

< Component 5 > = 0%

< Component 6 > = 0%

GHG All Components = 300.4 Tons CO2e

GHG All Scopes = 300.4 Tons CO2e



NOx lbs	-	Excavation	Active SSD	< Component 4	< Component 5	< Component 6	Total	
On-site (Scope 1)	0.0	2,065.5	0.0	0.0	0.0	0.0	2,065.5	
Electricity Generation (Scope 2)	0.0	26.4	0.0	0.0	0.0	0.0	26.4	Electricity
Transportation (Scope 3a)	0.0	1,435.1	23.1	0.0	0.0	0.0	1,458.3	Transportation
Other Off-Site (Scope 3b)	0.0	175.5	57.9	0.0	0.0	0.0	233.4	Other Off-Site
Total	0.0	3,702.5	81.1	0.0	0.0	0.0	3,783.6	

- = 0%

On-site (Scope 1) = 54.6%

Excavation and Offsite Disposal of Soil/Fill = 0.7%

Electricity Generation (Scope 2) = 0.7%

Active SSDS = 2.1%

Transportation (Scope 3a) = 38.5%

< Component 4 > = 0%

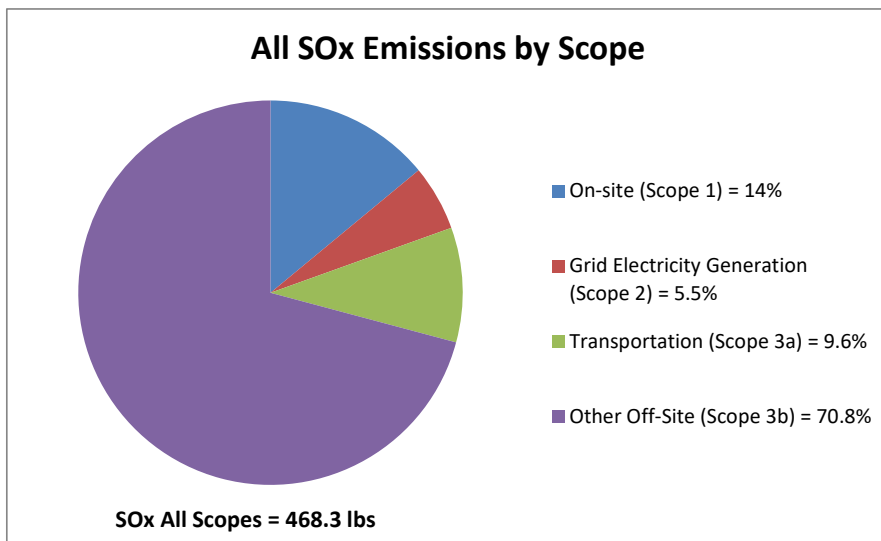
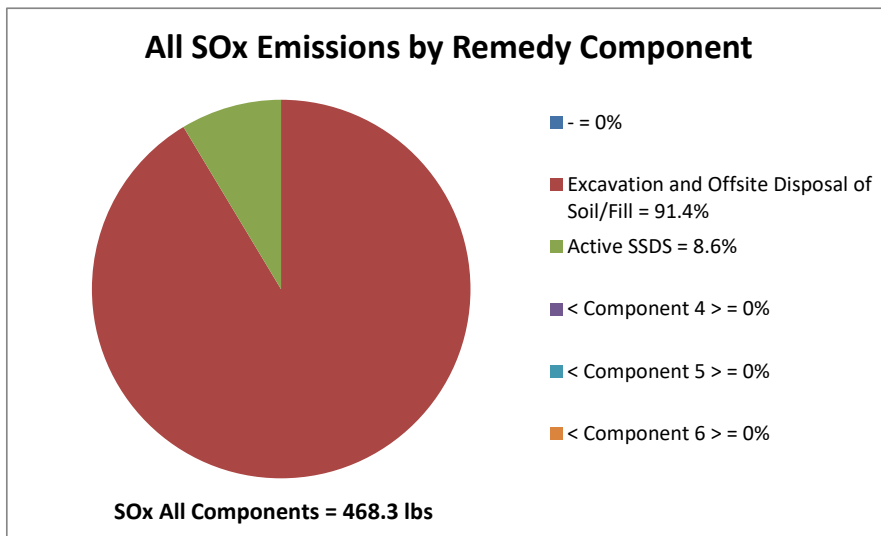
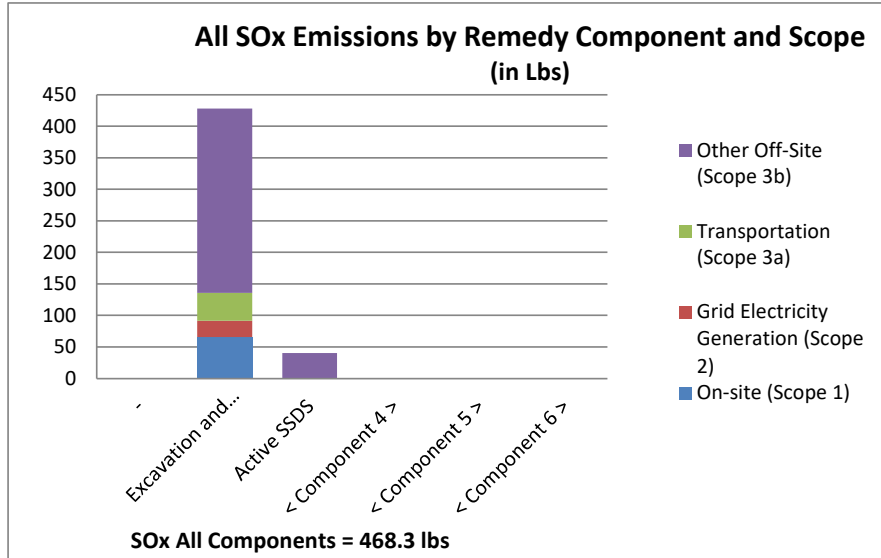
Other Off-Site (Scope 3b) = 6.2%

< Component 5 > = 0%

< Component 6 > = 0%

NOx All Components = 3783.6 lbs

NOx All Scopes = 3783.6 lbs



SOx lbs	-	Excavation	Active SSD	< Component 4	< Component 5	< Component 6	Total	
On-site (Scope 1)	0.0	65.6	0.0	0.0	0.0	0.0	65.6	
Electricity Generation (Scope 2)	0.0	25.7	0.0	0.0	0.0	0.0	25.7	Electricity
Transportation (Scope 3a)	0.0	44.4	0.7	0.0	0.0	0.0	45.2	Transportation
Other Off-Site (Scope 3b)	0.0	292.1	39.7	0.0	0.0	0.0	331.7	Other Off-Site
Total	0.0	427.9	40.4	0.0	0.0	0.0	468.3	

- = 0%

On-site (Scope 1) = 14%

Excavation and Offsite Disposal of Soil/Fill = 5%

Grid Electricity Generation (Scope 2) = 5.5%

Active SSDS = 8.6%

Transportation (Scope 3a) = 9.6%

< Component 4 > = 0%

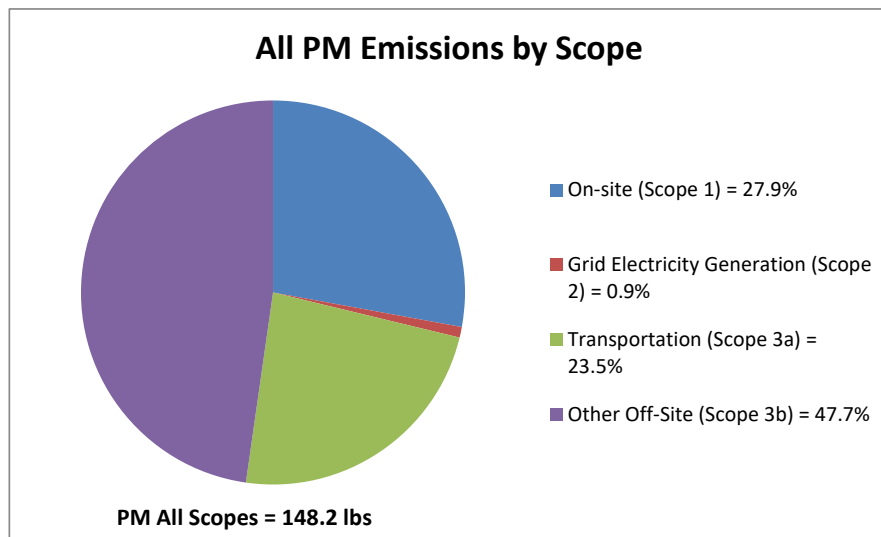
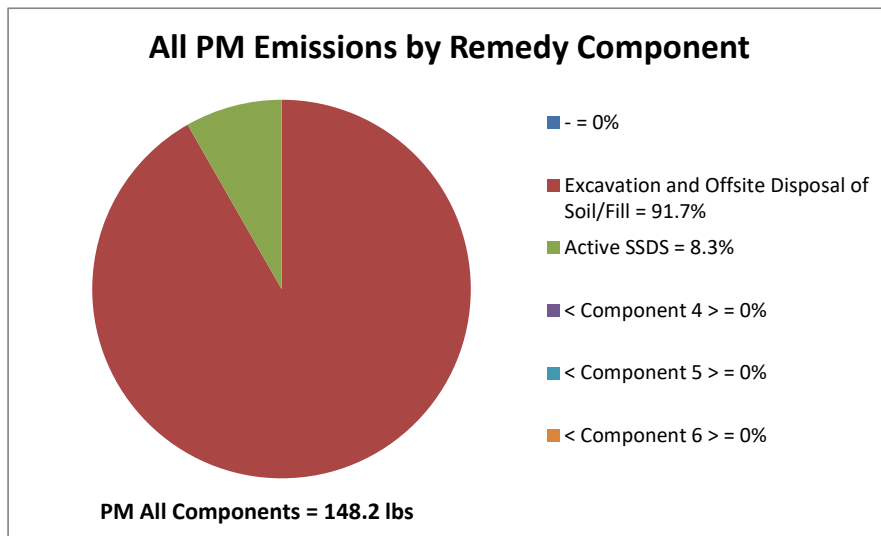
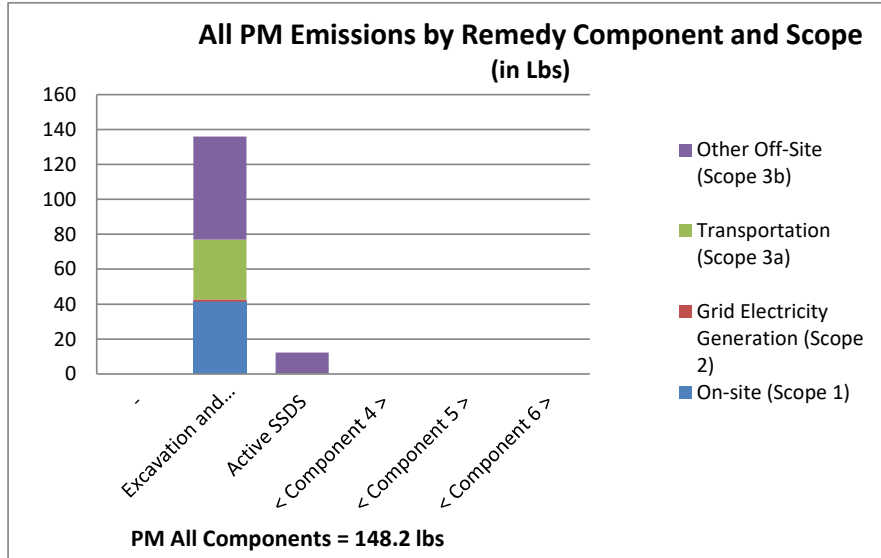
Other Off-Site (Scope 3b) = 70.8%

< Component 5 > = 0%

< Component 6 > = 0%

SOx All Components = 468.3 lbs

SOx All Scopes = 468.3 lbs





PM lbs	-	Excavation	Active SSDs	< Component 4	< Component 5	< Component 6	Total	
On-site (Scope 1)	0.0	41.3	0.0	0.0	0.0	0.0	41.3	
Electricity Generation (Scope 2)	0.0	1.3	0.0	0.0	0.0	0.0	1.3	d Electricity
Transportation (Scope 3a)	0.0	34.4	0.5	0.0	0.0	0.0	34.8	Trar
Other Off-Site (Scope 3b)	0.0	59.0	11.8	0.0	0.0	0.0	70.7	Oth
Total	0.0	136.0	12.3	0.0	0.0	0.0	148.2	

- = 0%

On-site (Scope 1) = 27.9%

Excavation and Offsite Disposal of Soil/Fill = 9.3%

Grid Electricity Generation (Scope 2) = 0.9%

Active SSDs = 8.3%

Transportation (Scope 3a) = 23.5%

< Component 4 > = 0%

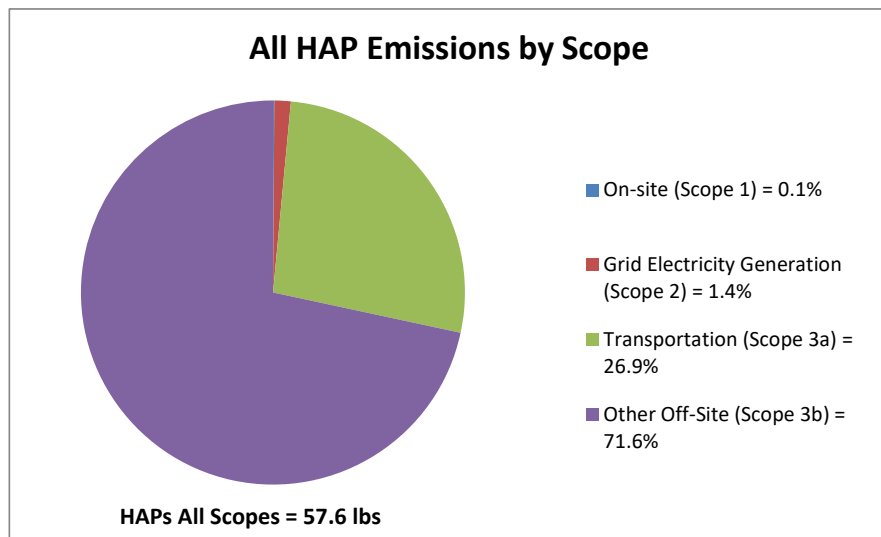
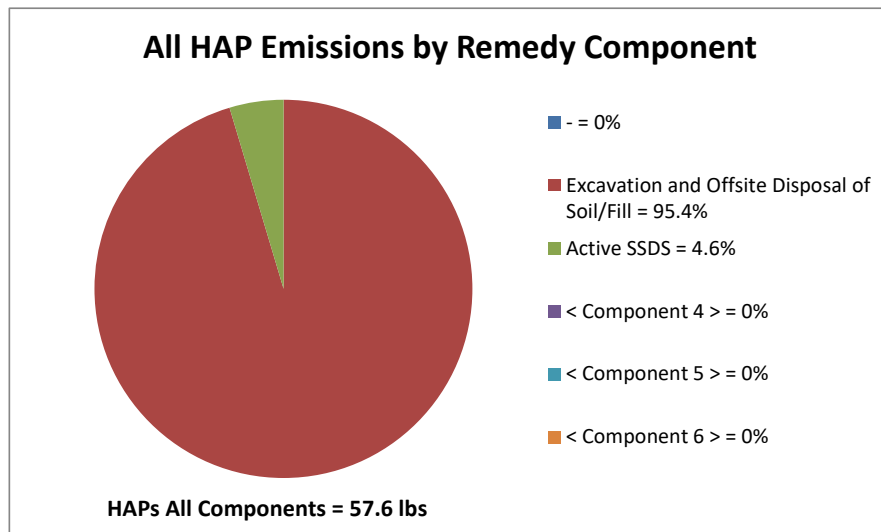
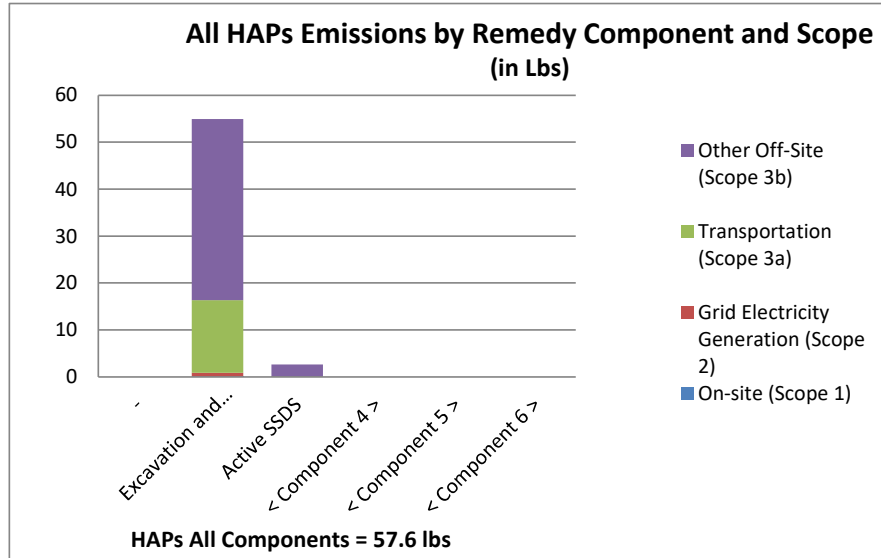
Other Off-Site (Scope 3b) = 47.7%

< Component 5 > = 0%

< Component 6 > = 0%

PM All Components = 148.2 lbs

PM All Scopes = 148.2 lbs



HAPs lbs	-	Excavation	Active SSD	< Component 4	< Component 5	< Component 6	Total
On-site (Scope 1)	0.0	0.1	0.0	0.0	0.0	0.0	0.1
Electricity Generation (Scope 2)	0.0	0.8	0.0	0.0	0.0	0.0	0.8
Transportation (Scope 3a)	0.0	15.5	0.0	0.0	0.0	0.0	15.5
Other Off-Site (Scope 3b)	0.0	38.6	2.6	0.0	0.0	0.0	41.3
Total	0.0	54.9	2.6	0.0	0.0	0.0	57.6

- = 0%

On-site (Scope 1) = 0.1%

Excavation and Offsite Disposal of Soil/Fill = 0% Grid Electricity Generation (Scope 2) = 1.4%

Active SSDS = 4.6%

Transportation (Scope 3a) = 26.9%

< Component 4 > = 0%

Other Off-Site (Scope 3b) = 71.6%

< Component 5 > = 0%

< Component 6 > = 0%

HAPs All Components = 57.6 lbs

HAPs All Scopes = 57.6 lbs

Remedy Component Number →		Input Summary														Remedy Component Subtotals						Total
		Column headings in Row 6 must match the name of "Input" tabs in this workbook for Columns C - P in this table to be populated ("0" in Row 4 means "Input" tab is turned Off and will not be grouped to a Remedy Component (Columns Q - V) or used in subsequent calculations)																				
Item		Excavation	SSDS	Input Template (4)	Input Template (5)	Input Template (6)	Input Template (7)	Input Template (8)	Input Template (9)	Input Template (10)	Input Template (11)	Input Template (12)	Input Template (13)	Input Template (14)		1	2	3	4	5	6	
<b>On-Site</b>																						
<i>On-site Renewable Energy</i>																						
Renewable electricity generated on-site	MWh	0	0													0	0	0	0	0	0	0
Landfill gas combusted on-site for energy use	ccf CH <sub>4</sub>	0	0													0	0	0	0	0	0	0
On-site biodiesel use	gal	0	0													0	0	0	0	0	0	0
On-site biodiesel use - Other	gal	0	0													0	0	0	0	0	0	0
User-defined on-site renewable energy use #1	TBD	0	0													0	0	0	0	0	0	0
User-defined on-site renewable energy use #2	TBD	0	0													0	0	0	0	0	0	0
<i>On-Site Conventional Energy</i>																						
Grid electricity	MWh	17.52	0.0099													0	17.52	0.0099	0	0	0	17.5299
On-site diesel use - Other	Gal	12150	0													0	12150	0	0	0	0	12150
On-site diesel use <75 hp	Gal	0	0													0	0	0	0	0	0	0
On-site diesel use 75-hp-750	Gal	0	0													0	0	0	0	0	0	0
On-site diesel use >750 hp	Gal	0	0													0	0	0	0	0	0	0
On-site gasoline use - Other	Gal	0	0													0	0	0	0	0	0	0
On-site gasoline use <25 hp	Gal	0	0													0	0	0	0	0	0	0
On-site gasoline use >25 hp	Gal	0	0													0	0	0	0	0	0	0
On-site natural gas use	ccf	0	0													0	0	0	0	0	0	0
On-site compressed natural gas use - Other	ccf	0	0													0	0	0	0	0	0	0
On-site compressed natural gas use	ccf	0	0													0	0	0	0	0	0	0
On-site liquified petroleum gas use - Other	gal	0	0													0	0	0	0	0	0	0
On-site liquified petroleum gas use	gal	0	0													0	0	0	0	0	0	0
Other forms of on-site conventional energy use #1	TBD	0	0													0	0	0	0	0	0	0
Other forms of on-site conventional energy use #2	TBD	0	0													0	0	0	0	0	0	0
<i>Other On-site Emissions</i>																						
On-site HAP process emissions	Lbs	0	0													0	0	0	0	0	0	0
On-site GHG emissions	Lbs CO <sub>2</sub> e	0	0													0	0	0	0	0	0	0
On-site carbon storage	Lbs CO <sub>2</sub> e	0	0													0	0	0	0	0	0	0
GHG avoided by flaring on-site landfill methane	ccf CH <sub>4</sub>	0	0													0	0	0	0	0	0	0
Other on-site NOx emissions or reductions	Lbs	0	0													0	0	0	0	0	0	0
Other on-site SOx emissions or reductions	Lbs	0	0													0	0	0	0	0	0	0
Other on-site PM emissions or reductions	Lbs	0	0													0	0	0	0	0	0	0
<b>Electricity Generation</b>																						
Grid electricity	MWh	17.52	0.0099													0	17.52	0.0099	0	0	0	17.5299
Voluntary purchase of renewable electricity	MWh	0	0													0	0	0	0	0	0	0
Voluntary purchase of RECs	MWh	0	0													0	0	0	0	0	0	0
<b>Transportation</b>																						
<i>Transportation Fuel Use Breakdown</i>																						
Biodiesel use - Personnel Transport	gal	0	0													0	0	0	0	0	0	0
Biodiesel use - Personnel Transport - User Defined	gal	0	0													0	0	0	0	0	0	0
Biodiesel use - Equipment Transport	gal	0	0													0	0	0	0	0	0	0
Biodiesel use - Equipment Transport - User Defined	gal	0	0													0	0	0	0	0	0	0
Biodiesel use - Material Transport	gal	0	0													0	0	0	0	0	0	0
Biodiesel use - Material Transport - User Defined	gal	0	0													0	0	0	0	0	0	0
Biodiesel use - Waste Transport	gal	0	0													0	0	0	0	0	0	0
Biodiesel use - Waste Transport - User Defined	gal	0	0													0	0	0	0	0	0	0
Diesel use - Personnel Transport - other vehicles	gal	0	0													0	0	0	0	0	0	0
Diesel use - Personnel Transport - car	gal	0	0													0	0	0	0	0	0	0
Diesel use - Personnel Transport - passenger truck	gal	0	0													0	0	0	0	0	0	0
Diesel use - Personnel Transport - User Defined	gal	0	0													0	0	0	0	0	0	0
Diesel use - Equipment Transport	gal	7.4	0													0	7.4	0	0	0	0	7.4
Diesel use - Equipment Transport - User Defined	gal	0	0													0	0	0	0	0	0	0
Diesel use - Material Transport	gal	0	135.666													0	0	135.666	0	0	0	135.666
Diesel use - Material Transport - User Defined	gal	0	0													0	0	0	0	0	0	0
Diesel use - Waste Transport	gal	8069.3	0													0	8069.3	0	0	0	0	8069.3
Diesel use - Waste Transport - User Defined	gal	0	0													0	0	0	0	0	0	0
Gasoline use - Personnel Transport - other vehicles	gal	0	0													0	0	0	0	0	0	0
Gasoline use - Personnel Transport - car	gal	2300.4	2.2													0	2300.4	2.2	0	0	0	2302.6
Gasoline use - Personnel Transport - passenger truck	gal	0	0													0	0	0	0	0	0	0
Gasoline use - Personnel Transport - User Defined	gal	0	0													0	0	0	0	0	0	0
Gasoline use - Equipment Transport	gal	0	0													0	0	0	0	0	0	0
Gasoline use - Equipment Transport - User Defined	gal	0	0													0	0	0	0	0	0	0
Natural Gas use - Personnel Transport	ccf	0	0													0	0	0	0	0	0	0
Natural Gas use - Personnel Transport - User Defined	ccf	0	0													0	0	0	0	0	0	0
Natural Gas use - Equipment Transport	ccf	0	0													0	0	0	0	0	0	0

Remedy Component Number →		Input Summary														Remedy Component Subtotals						Total
		Column headings in Row 6 must match the name of "Input" tabs in this workbook for Columns C - P in this table to be populated ("0" in Row 4 means "Input" tab is turned Off and will not be grouped to a Remedy Component (Columns Q - V) or used in subsequent calculations)																				
Item		Excavation	SSDS	Input Template (4)	Input Template (5)	Input Template (6)	Input Template (7)	Input Template (8)	Input Template (9)	Input Template (10)	Input Template (11)	Input Template (12)	Input Template (13)	Input Template (14)		1	2	3	4	5	6	
<b>Conventional Energy</b>																						
Transportation diesel use	gal	8076.7	135.666													0	8076.7	135.666	0	0	0	8212.366
Transportation gasoline use	gal	2300.4	2.2													0	2300.4	2.2	0	0	0	2302.6
Transportation natural gas use	ccf	0	0													0	0	0	0	0	0	0
User-defined conventional energy transportation #1	TBD	10	10													0	10	10	0	0	0	20
User-defined conventional energy transportation #2	TBD	0	0													0	0	0	0	0	0	0
<b>Renewable Energy</b>																						
Transportation biodiesel use	gal	0	0													0	0	0	0	0	0	0
User-defined renewable energy transportation #1	TBD	0	0													0	0	0	0	0	0	0
User-defined renewable energy transportation #2	TBD	0	0													0	0	0	0	0	0	0
<b>Off-Site</b>																						
<b>Construction Materials</b>																						
Aluminum, Rolled Sheet	lb	0	0													0	0	0	0	0	0	0
Asphalt, mastic	lb	0	0													0	0	0	0	0	0	0
Asphalt, paving-grade	lb	0	0													0	0	0	0	0	0	0
Ethanol, Corn, 95%	lb	0	0													0	0	0	0	0	0	0
Ethanol, Corn, 99.7%	lb	0	0													0	0	0	0	0	0	0
Ethanol, Petroleum, 99.7%	lb	0	0													0	0	0	0	0	0	0
Gravel/Sand Mix, 65% Gravel	lb	0	0													0	0	0	0	0	0	0
Gravel/sand/clay	lb	0	0													0	0	0	0	0	0	0
HDPE	lb	0	0													0	0	0	0	0	0	0
Photovoltaic system (installed)	W	0	0													0	0	0	0	0	0	0
PVC	lb	0	2750													0	0	2750	0	0	0	2750
Portland cement, US average	lb	0	0													0	0	0	0	0	0	0
Ready-mixed concrete, 20 MPa	ft3	0	0													0	0	0	0	0	0	0
Round Gravel	lb	0	1558000													0	0	1558000	0	0	0	1558000
Sand	lb	0	0													0	0	0	0	0	0	0
Stainless Steel	lb	0	0													0	0	0	0	0	0	0
Steel	lb	0	0													0	0	0	0	0	0	0
Other refined construction materials	lb	0	4194													0	0	4194	0	0	0	4194
Other unrefined construction materials	lb	0	0													0	0	0	0	0	0	0
<b>Treatment Materials &amp; Chemicals</b>																						
Cheese Whey	lbs	0	0													0	0	0	0	0	0	0
Emulsified vegetable oil	lbs	0	0													0	0	0	0	0	0	0
Granular activated carbon, primary	lbs	0	0													0	0	0	0	0	0	0
Granular activated carbon, regenerated	lbs	0	0													0	0	0	0	0	0	0
Hydrogen Peroxide, 50% in H2O	lbs	0	0													0	0	0	0	0	0	0
Iron (II) Sulfate	lbs	0	0													0	0	0	0	0	0	0
Lime, Hydrated, Packed	lbs	0	0													0	0	0	0	0	0	0
Molasses	lbs	0	0													0	0	0	0	0	0	0
Phosphoric Acid, 70% in H2O	lbs	0	0													0	0	0	0	0	0	0
Potassium Permanganate	lbs	0	0													0	0	0	0	0	0	0
Sodium Hydroxide, 50% in H2O	lbs	0	0													0	0	0	0	0	0	0
Other Treatment Chemicals & Materials	lbs	0	0													0	0	0	0	0	0	0
<b>Material Type</b>																						
Total Virgin Refined Materials	tons	0	782.472													0	0	782.472	0	0	0	782.472
Total Recycled Refined Materials	tons	0	0													0	0	0	0	0	0	0
Total Reused Refined Materials	tons	0	0													0	0	0	0	0	0	0
Total Refined Material	tons	0	782.472													0	0	782.472	0	0	0	782.472
Total Virgin Unrefined Materials	tons	0	0													0	0	0	0	0	0	0
Total Recycled Unrefined Materials	tons	0	0													0	0	0	0	0	0	0
Total Reused Unrefined Materials	tons	0	0													0	0	0	0	0	0	0
Total Unrefined Material	tons	0	0													0	0	0	0	0	0	0
<b>Fuel Processing</b>																						
Biodiesel produced	gal	0	0													0	0	0	0	0	0	0
Diesel produced	gal	20226.7	135.666													0	20226.7	135.666	0	0	0	20362.366
Gasoline produced	gal	2300.4	2.2													0	2300.4	2.2	0	0	0	2302.6
Compressed natural gas produced	ccf	0	0													0	0	0	0	0	0	0
Liquified petroleum gas produced	gal	0	0													0	0	0	0	0	0	0
Natural gas produced	ccf	0	0													0	0	0	0	0	0	0
<b>Water Use</b>																						
Public Water Supply	gal x 1000	100	0													0	100	0	0	0	0	100
Extracted Groundwater	gal x 1000	0	0													0	0	0	0	0	0	0
Surface Water	gal x 1000	0	0													0	0	0	0	0	0	0
Reclaimed Water	gal x 1000	0	0													0	0	0	0	0	0	0
Collected/Diverted Storm Water	gal x 1000	0	0													0	0	0	0	0	0	0
User-defined water resource #1	gal x 1000	0	0													0	0	0	0	0	0	0
User-defined water resource #2	gal x 1000	0	0													0	0	0	0	0	0	0

Remedy Component Number →		Input Summary														Remedy Component Subtotals						Total
		Column headings in Row 6 must match the name of "Input" tabs in this workbook for Columns C - P in this table to be populated ("0" in Row 4 means "Input" tab is turned Off and will not be grouped to a Remedy Component (Columns Q - V) or used in subsequent calculations)																				
Item		Excavation	SSDS	Input Template (4)	Input Template (5)	Input Template (6)	Input Template (7)	Input Template (8)	Input Template (9)	Input Template (10)	Input Template (11)	Input Template (12)	Input Template (13)	Input Template (14)	1	2	3	4	5	6		
<u>Waste/Recycle Handling</u>																						
Hazardous waste incineration	lbs	0	0												0	0	0	0	0	0	0	0
Off-site waste water treatment (POTW)	gal x 1000	0	0												0	0	0	0	0	0	0	0
Off-site non-hazardous waste landfill	tons	0	0												0	0	0	0	0	0	0	0
Off-site hazardous waste landfill	tons	0	0												0	0	0	0	0	0	0	0
Recycled/Reused On-Site	tons	0	0												0	0	0	0	0	0	0	0
Recycled/Reused Off-Site	tons	31200	0												0	31200	0	0	0	0	0	31200
<u>Solid Waste Totals</u>																						
Total Non-Hazardous Waste	tons	0	0												0	0	0	0	0	0	0	0
Total Hazardous Waste	tons	0	0												0	0	0	0	0	0	0	0
Total Recycled/Reused	tons	31200	0												0	31200	0	0	0	0	0	31200
Total Waste (all types)	tons	31200	0												0	31200	0	0	0	0	0	31200
<u>Lab Services</u>																						
Off-site Laboratory Analysis - Other	sample	111	0												0	111	0	0	0	0	0	111
Off-site Laboratory Analysis - Metals	sample	37	0												0	37	0	0	0	0	0	37
Off-site Laboratory Analysis - Mercury	sample	37	0												0	37	0	0	0	0	0	37
Off-site Laboratory Analysis - Inorganic Anions	sample	0	0												0	0	0	0	0	0	0	0
Off-site Laboratory Analysis - Alkalinity	sample	0	0												0	0	0	0	0	0	0	0
Off-site Laboratory Analysis - Perchlorate	sample	0	0												0	0	0	0	0	0	0	0
Off-site Laboratory Analysis - Nitrogen/Nitrate	sample	0	0												0	0	0	0	0	0	0	0
Off-site Laboratory Analysis - Sulfate	sample	0	0												0	0	0	0	0	0	0	0
Off-site Laboratory Analysis - PCBs	sample	0	0												0	0	0	0	0	0	0	0
Off-site Laboratory Analysis - VOCs	sample	37	12												0	37	12	0	0	0	0	49
Off-site Laboratory Analysis - SVOCs	sample	37	0												0	37	0	0	0	0	0	37
<u>Resource Extraction for Electricity</u>																						
Coal extraction and processing	MWh	1.0512	0.000594												0	1.0512	0.000594	0	0	0	0	1.051794
Natural gas extraction and processing	MWh	1.752	0.00099												0	1.752	0.00099	0	0	0	0	1.75299
Nuclear fuel extraction and processing	MWh	0.3504	0.000198												0	0.3504	0.000198	0	0	0	0	0.350598
Oil extraction and processing	MWh	0.876	0.000495												0	0.876	0.000495	0	0	0	0	0.876495
Other fuel extraction and processing	MWh	0	0												0	0	0	0	0	0	0	0
<u>Electricity Transmission</u>																						
Transmission and distribution losses	MWh	17.52	0.0099												0	17.52	0.0099	0	0	0	0	17.5299

Remedy Component Number →		Input Summary													Remedy Component Subtotals						Total
		Column headings in Row 6 must match the name of "Input" tabs in this workbook for Columns C - P in this table to be populated ("0" in Row 4 means "Input" tab is turned Off and will not be grouped to a Remedy Component (Columns Q - V) or used in subsequent calculations)																			
Item		Excavation	SSDS	Input Template (4)	Input Template (5)	Input Template (6)	Input Template (7)	Input Template (8)	Input Template (9)	Input Template (10)	Input Template (11)	Input Template (12)	Input Template (13)	Input Template (14)	1	2	3	4	5	6	
<i>Other</i>																					
User-defined material #1	TBD	0	0												0	0	0	0	0	0	0
User-defined material #2	TBD	0	0												0	0	0	0	0	0	0
User-defined material #3	TBD	0	0												0	0	0	0	0	0	0
User-defined material #4	TBD	0	0												0	0	0	0	0	0	0
User-defined material #5	TBD	0	0												0	0	0	0	0	0	0
User-defined material #6	TBD	0	0												0	0	0	0	0	0	0
User-defined material #7	TBD	0	0												0	0	0	0	0	0	0
User-defined material #8	TBD	0	0												0	0	0	0	0	0	0
User-defined material #9	TBD	0	0												0	0	0	0	0	0	0
User-defined material #10	TBD	0	0												0	0	0	0	0	0	0
User-defined material #11	TBD	0	0												0	0	0	0	0	0	0
User-defined material #12	TBD	0	0												0	0	0	0	0	0	0
User-defined material #13	TBD	0	0												0	0	0	0	0	0	0
User-defined material #14	TBD	0	0												0	0	0	0	0	0	0
User-defined material #15	TBD	0	0												0	0	0	0	0	0	0
User-defined material #16	TBD	0	0												0	0	0	0	0	0	0
User-defined material #17	TBD	0	0												0	0	0	0	0	0	0
User-defined material #18	TBD	0	0												0	0	0	0	0	0	0
User-defined material #19	TBD	0	0												0	0	0	0	0	0	0
User-defined material #20	TBD	0	0												0	0	0	0	0	0	0
<i>User-defined Waste Destinations</i>																					
User-defined recycled/reused on-site #1	TBD	0	0												0	0	0	0	0	0	0
User-defined recycled/reused on-site #2	TBD	0	0												0	0	0	0	0	0	0
User-defined recycled/reused on-site #3	TBD	0	0												0	0	0	0	0	0	0
User-defined recycled/reused off-site #1	TBD	0	0												0	0	0	0	0	0	0
User-defined recycled/reused off-site #2	TBD	0	0												0	0	0	0	0	0	0
User-defined recycled/reused off-site #3	TBD	0	0												0	0	0	0	0	0	0
User-defined non-hazardous waste destination #1	TBD	0	0												0	0	0	0	0	0	0
User-defined non-hazardous waste destination #2	TBD	0	0												0	0	0	0	0	0	0
User-defined non-hazardous waste destination #3	TBD	0	0												0	0	0	0	0	0	0
User-defined hazardous waste destination #1	TBD	0	0												0	0	0	0	0	0	0
User-defined hazardous waste destination #2	TBD	0	0												0	0	0	0	0	0	0
User-defined hazardous waste destination #3	TBD	0	0												0	0	0	0	0	0	0

Excavation and Offsite Disposal of Soil/Fill - On-Site Footprint (Scope 1)

Contributors to Footprints	Units	Usage	Energy		GHG		NOx		SOx		PM		HAPs	
			Conv. Factor	MMBtus	Conv. Factor	lbs CO2e	Conv. Factor	lbs	Conv. Factor	lbs	Conv. Factor	lbs	Conv. Factor	lbs
On-Site														
On-site Renewable Energy														
Renewable electricity generated on-site	MWh	0	3.413	0										
Landfill gas combusted on-site for energy use	ccf CH4	0	0.103	0	13.1	0	0.01	0	0.000063	0	0.00076	0	0.000084	0
On-site biodiesel use	gal	0	0.127	0	22.3	0	0.2	0	0	0	0.00099	0	NP	
On-site biodiesel use - User Defined	gal	0	0.127	0	22.3	0	0.2	0	0	0	0.00099	0	NP	
User-defined on-site renewable energy use #1	gal	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined on-site renewable energy use #2	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
On-site Renewable Energy Subtotals				0		0		0		0		0		0
Notes:														
On-site Conventional Energy														
On-site grid electricity	MWh	0	3.413	0										
On-site diesel use - Other	Gal	0	0.139	0	22.5	0	0.17	0	0.0054	0	0.0034	0	0.000052	0
On-site diesel use <75 hp	Gal	0	0.139	0	22.21	0	0.1565	0	0.000145	0	0.0145	0	0.00004	0
On-site diesel use 75<hp<750	Gal	0	0.139	0	22.24	0	0.101	0	0.00013	0	0.009	0	0.00004	0
On-site diesel use >750 hp	Gal	0	0.139	0	22.24	0	0.149	0	0.00013	0	0.006	0	0.00004	0
On-site gasoline use - Other	Gal	0	0.124	0	19.6	0	0.11	0	0.0045	0	0.00054	0	0.000039	0
On-site gasoline use <25 hp	Gal	0	0.124	0	17.48	0	0.037	0	0.00025	0	0.165	0	0.00008	0
On-site gasoline use >25 hp	Gal	0	0.124	0	19.93	0	0.032	0	0.00029	0	0.002	0	0.00009	0
On-site natural gas use	ccf	0	0.103	0	13.1	0	0.01	0	0.0000063	0	0.00076	0	0.000084	0
On-site compressed natural gas use - Other	ccf	0	NP		1957.835	0	16.0325	0	0.023045	0	0.2775	0	0	0
On-site compressed natural gas use	ccf	0	NP		1957.835	0	16.0325	0	0.023045	0	0.2775	0	0	0
On-site liquified petroleum gas use - Other	gal	0	NP		12.69	0	0.021	0	0.00013	0	0.001	0	0	0
On-site liquified petroleum gas use	gal	0	NP		12.69	0	0.021	0	0.00013	0	0.001	0	0	0
Other forms of on-site conventional energy use #1	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
Other forms of on-site conventional energy use #2	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
On-site Conventional Energy Subtotals				0		0		0		0		0		0
Notes:														
Other On-site Emissions														
On-site HAP process emissions	lbs	0											1	0
On-site GHG emissions	lbs CO2e	0			1	0								
On-site carbon storage	lbs CO2e	0			1	0								
GHG avoided by flaring on-site landfill methane	Lbs	0			-262	0	0.01	0	0.0000063	0	0.00076	0	0.000084	0
Other on-site NOx emissions or reductions	lbs	0					1	0						
Other on-site SOx emissions or reductions	lbs	0							1	0				
Other on-site PM emissions or reductions	lbs	0									1	0		
User-defined recycled/reused on-site #2	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined recycled/reused on-site #3	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined recycled/reused off-site #1	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
Notes:														
On-site Totals				0.00		0		0		0		0		0



Excavation and Offsite Disposal of Soil/Fill - Electricity Generation Footprint (Scope 2)

Contributors to Footprints	Units	Usage	Energy		GHG		NOx		SOx		PM		HAPs	
			Conv. Factor	MMBtus	Conv. Factor	lbs CO2e	Conv. Factor	lbs	Conv. Factor	lbs	Conv. Factor	lbs	Conv. Factor	lbs
Electricity Generation														
Grid electricity	MWh	0	6.929	0	1124.3	0	2.2421	0	4.6078874	0	0.057518	0	0.2102371	0
Voluntary purchase of renewable electricity	MWh	0												
Voluntary purchase of RECs	MWh	0												
Notes:														

Excavation and Offsite Disposal of Soil/Fill - Transportation Footprint (Scope 3a)

Category	Units	Usage	Energy		Greenhouse Gas		NOx		SOx		PM		HAPs	
			Conv. Factor	MMBtus	Conv. Factor	lbs CO2e	Conv. Factor	lbs	Conv. Factor	lbs	Conv. Factor	lbs	Conv. Factor	lbs
Conventional Energy														
Transportation diesel use	gal	0	0.139	0	22.5	0	0.17	0	0.0054	0	0.0034	0	0.0000052	0
Transportation diesel use - car	gal	0	0.139	0	22.57	0	0.015	0	0.0002	0	0.003	0	0.00252	0
Transportation diesel use - passenger truck	gal	0	0.139	0	22.545	0	0.0585	0	0.0002	0	0.007	0	0.002605	0
Transportation diesel use - User Defined	gal	0	0.139	0	22.5	0	0.17	0	0.0054	0	0.0034	0	0.0000052	0
Transportation gasoline use	gal	0	0.124	0	19.6	0	0.11	0	0.0045	0	0.00054	0	0.000039	0
Transportation gasoline use - car	gal	0	0.124	0	19.77	0	0.027	0	0.00036	0	0.003	0	0.0067	0
Transportation gasoline use - passenger truck	gal	0	0.124	0	19.79	0	0.035	0	0.00036	0	0.003	0	0.00661	0
Transportation gasoline use - User Defined	gal	0	0.124	0	19.6	0	0.11	0	0.0045	0	0.00054	0	0.000039	0
Transportation natural gas use	ccf	0	0.103	0	13.1	0	0.01	0	0.0000063	0	0.00076	0	0.0000084	0
Transportation natural gas use - User Defined	ccf	0	0.103	0	13.1	0	0.01	0	0.0000063	0	0.00076	0	0.0000084	0
User-defined conventional energy transportation #1	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined conventional energy transportation #2	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
Conventional Energy Subtotals				0		0		0		0		0		0
Notes:														
Renewable Energy														
Transportation biodiesel use	gal	0	0.127	0	22.3	0	0.2	0	0	0	0.00099	0	NP	
Transportation biodiesel use - User Defined	gal	0	0.127	0	22.3	0	0.2	0	0	0	0.00099	0	NP	
User-defined renewable energy transportation #1	TBD	0	Biodiesel		0	0	0	0	0	0	0	0	Ref.	
User-defined renewable energy transportation #2	TBD	0	npg or pmg		0	0	0	0	0	0	0	0	0	0
Renewable Energy Subtotals				0		0		0		0		0		0
Notes:														
Transportation Totals				0		0		0		0		0		0

Excavation and Offsite Disposal of Soil/Fill - Off-Site Footprint (Scope 3b)

Category	Units	Usage	Energy		Greenhouse Gas		NOx		SOx		PM		HAPs	
			Conv.	MMBtus	Conv.	lbs CO2e	Conv.	lbs	Conv.	lbs	Conv.	lbs	Conv.	lbs
			Factor		Factor		Factor		Factor		Factor		Factor	
<u>Construction Materials</u>														
Aluminum, Rolled Sheet	lb	0	0.0633	0	9.15	0	0.0148	0	0.0283	0	0.0088	0	0.00102	0
Asphalt, mastic	lb	0	0.0412	0	0.85	0	0.00271	0	0.00798	0	0.000766	0	0.00107	0
Asphalt, paving-grade	lb	0	0.5	0	8.58	0	0.0299	0	0.0969	0	0.0091	0	0.0133	0
Ethanol, Corn, 95%	lb	0	0.0318	0	-0.0199	0	0.00425	0	0.00303	0	0.000469	0	0.0000846	0
Ethanol, Corn, 99.7%	lb	0	0.0324	0	0.0591	0	0.00431	0	0.0031	0	0.000472	0	0.000087	0
Ethanol, Petroleum, 99.7%	lb	0	0.0205	0	1.25	0	0.00199	0	0.00214	0	0.000277	0	0.0000589	0
Gravel/Sand Mix, 65% Gravel	lb	0	0.0000248	0	0.0024	0	0.000018	0	4.52E-06	0	2.61E-06	0	3.08E-07	0
Gravel/sand/clay	lb	0	0.000028	0	0.00335	0	0.0000165	0	0.000015	0	0.000002	0	2.05E-10	0
HDPE	lb	0	0.0332	0	1.94	0	0.00325	0	0.00409	0	0.000439	0	0.0000641	0
Photovoltaic system (installed)	W	0	0.0336	0	4.47	0	0.015	0	0.032	0	0.00063	0	0.0000029	0
PVC	lb	0	0.0262	0	2.02	0	0.004	0	0.00274	0	0.000372	0	0.000375	0
Portland cement, US average	lb	0	0.0139	0	1.34	0	0.00654	0	0.0104	0	0.00378	0	0.00097	0
Ready-mixed concrete, 20 MPa	ft3	0	0.217	0	19.5	0	0.0975	0	0.154	0	0.057	0	0.0141	0
Round Gravel	lb	0	0.0000248	0	0.0024	0	0.000018	0	4.52E-06	0	2.61E-06	0	3.08E-07	0
Sand	lb	0	0.0000248	0	0.0024	0	0.000018	0	4.52E-06	0	2.61E-06	0	3.08E-07	0
Stainless Steel	lb	0	0.0116	0	3.4	0	0.0075	0	0.012	0	0.0044	0	0.000144	0
Steel	lb	0	0.0044	0	1.1	0	0.0014	0	0.0017	0	0.00056	0	0.000067	0
Other refined construction materials	lb	0	0.01885	0	2.115	0	0.0040375	0	0.0051325	0	0.0014428	0	0.0001625	0
Other unrefined construction materials	lb	0	0.000028	0	0.00335	0	0.0000165	0	0.000015	0	0.000002	0	2.05E-10	0
Notes:														

Excavation and Offsite Disposal of Soil/Fill - Off-Site Footprint (Scope 3b)

Category	Units	Usage	Energy		Greenhouse Gas		NOx		SOx		PM		HAPs	
			Conv.	MMBTus	Conv.	lbs CO2e	Conv.	lbs	Conv.	lbs	Conv.	lbs	Conv.	lbs
			Factor		Factor		Factor		Factor		Factor		Factor	
Treatment Materials & Chemicals														
Cheese Whey	lbs	0	0.0025	0	0.031	0	0.000062	0	0.000033	0	0.000002	0	NP	
Emulsified vegetable oil	lbs	0	0.0077	0	3.44	0	0.0066	0	0.0019	0	0.000033	0	NP	
Granular activated carbon, primary	lbs	0	0.0356	0	4.82	0	0.0793	0	0.128	0	0.000987	0	0.000657	0
Granular activated carbon, regenerated	lbs	0	0.00873	0	1.7	0	0.00733	0	0.0129	0	0.000886	0	0.000671	0
Hydrogen Peroxide, 50% in H2O	lbs	0	0.00979	0	1.19	0	0.00142	0	0.0024	0	0.000308	0	0.0000629	0
Iron (II) Sulfate	lbs	0	0.00147	0	0.167	0	0.000316	0	0.000589	0	0.000103	0	0.000023	0
Lime, Hydrated, Packed	lbs	0	0.00206	0	0.762	0	0.000513	0	0.000358	0	0.00013	0	6.57E-06	0
Molasses	lbs	0	0.0044	0	0.48	0	0.0011	0	0.00024	0	0.0000041	0	NP	
Phosphoric Acid, 70% in H2O	lbs	0	0.0067	0	0.882	0	0.00282	0	0.0294	0	0.00171	0	0.000163	0
Potassium Permanganate	lbs	0	0.00981	0	1.16	0	0.00234	0	0.0032	0	0.000422	0	0.000122	0
Sodium Hydroxide, 50% in H2O	lbs	0	0.00977	0	1.09	0	0.00194	0	0.00352	0	0.000403	0	0.000129	0
Other Treatment Chemicals & Materials	lbs	0	0.015	0	1.67	0	0.003	0	0.0065	0	0.00061	0	0.000016	0
Notes:														
Fuel Processing														
Biodiesel produced	gal	0	0.029	0	-16.8	0	0.018	0	0.033	0	0.00082	0	NP	
Diesel produced	gal	0	0.017	0	3.02	0	0.0051	0	0.0062	0	0.0017	0	0.0011	0
Gasoline produced	gal	0	0.033	0	2.8	0	0.0046	0	0.005	0	0.0015	0	0.001	0
Liquefied Petroleum Gas Produced	gal	0	0.088	0	1.47	0	0.0016	0	0.0024	0	0.0007	0	0.0003	0
Natural Gas - Compressed Produced	ccf	0	19.983	0	343.92	0	0.4732	0	2.1651	0	0.1846	0	0.2895	0
Natural Gas Produced	ccf	0	0.0052	0	2.2	0	0.0037	0	0.0046	0	0.000072	0	0.0000061	0
Fuel Processing Subtotals				0		0		0		0		0		0
Notes:														
Public water														
gal x 1000	0	0.0092	0		5	0	0.0097	0	0.0059	0	0.016	0	0.000015	0
User-defined water resource #1	gal x 1000	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined water resource #2	gal x 1000	0	0	0	0	0	0	0	0	0	0	0	0	0
Notes:														

Excavation and Offsite Disposal of Soil/Fill - Off-Site Footprint (Scope 3b)

Category	Units	Usage	Energy		Greenhouse Gas		NOx		SOx		PM		HAPs	
			Conv.	MMBtus	Conv.	lbs CO2e	Conv.	lbs	Conv.	lbs	Conv.	lbs	Conv.	lbs
			Factor		Factor		Factor		Factor		Factor		Factor	
<u>Off-Site Services</u>														
Hazardous waste incineration	lb	0	0.00609	0	2.43	0	0.0016	0	0.00167	0	0.000209	0	0.000087	0
Off-site waste water treatment (POTW)	gal x 1000	0	0.015	0	4.4	0	0.016	0	0.015	0	NP		NP	
Off-site non-hazardous waste landfill	ton	0	0.16	0	25	0	0.14	0	0.075	0	0.4	0	0.0014	0
Off-site hazardous waste landfill	ton	0	0.18	0	27.5	0	0.154	0	0.0825	0	0.44	0	0.00154	0
Off-site Laboratory Analysis - Other	sample	0	0.058071	0	6.8534384	0	0.131402	0	0.3038758	0	0.0455698	0	0.0330165	0
Off-site Laboratory Analysis - Metals	sample	0	0.212	0	27.4693	0	0.6423	0	1.5072	0	0.2264	0	0.1643	0
Off-site Laboratory Analysis - Mercury	sample	0	0.0731715	0	9.325458	0	0.2127439	0	0.4982396	0	0.0747359	0	0.0542332	0
Off-site Laboratory Analysis - Inorganic Anions	sample	0	0.0074025	0	0.6459478	0	0.0067681	0	0.0147929	0	0.0022024	0	0.0015542	0
Off-site Laboratory Analysis - Alkalinity	sample	0	0.0174398	0	1.3381922	0	0.0070106	0	0.0132496	0	0.00194	0	0.0012831	0
Off-site Laboratory Analysis - Perchlorate	sample	0	0.023885	0	1.8717054	0	0.0079807	0	0.0141535	0	0.0020547	0	0.0012875	0
Off-site Laboratory Analysis - Nitrogen/Nitrate	sample	0	0.0336475	0	4.29897	0	0.0954592	0	0.2226646	0	0.0335099	0	0.0242506	0
Off-site Laboratory Analysis - Sulfate	sample	0	0.0141225	0	1.4726728	0	0.0079807	0	0.0136024	0	0.0019797	0	0.0012015	0
Off-site Laboratory Analysis - PCBs	sample	0	0.0512769	0	5.224902	0	0.0833339	0	0.1904774	0	0.0284393	0	0.0212083	0
Off-site Laboratory Analysis - VOCs	sample	0	0.0762045	0	9.016814	0	0.104498	0	0.2270738	0	0.0339508	0	0.0235892	0
Off-site Laboratory Analysis - SVOCs	sample	0	0.0715602	0	7.870422	0	0.1459445	0	0.3373038	0	0.0504853	0	0.0372577	0
Notes:														
<u>Resource Extraction for Electricity</u>														
Coal extraction and processing	MWh	0	3.1	0	180.0	0	0.8	0	0.2	0	0.0	0	NP	
Natural gas extraction and processing	MWh	0	1.6	0	270.0	0	0.2	0	13.0	0	0.0	0	NP	
Nuclear fuel extraction and processing	MWh	0	0.2	0	25.0	0	0.2	0	0.5	0	0.0	0	NP	
Oil extraction and processing	MWh	0	2.3	0	270.0	0	1.7	0	0.1	0	0.0	0	NP	
Other fuel extraction and processing	MWh	0	0	0	0	0	0	0	0	0	0	0	0	0
Resource Extraction Subtotals				0		0		0		0		0		0
Notes:														
<u>Electricity Transmission</u>														
Transmission and distribution losses	MWh	0	1.0342	0	112.43	0	0.22421	0	0.4607887	0	0.0057518	0	0.0210237	0
Notes:														

Excavation and Offsite Disposal of Soil/Fill - Off-Site Footprint (Scope 3b)

Category	Units	Usage	Energy		Greenhouse Gas		NOx		SOx		PM		HAPs	
			Conv.	MMBtus	Conv.	lbs CO2e	Conv.	lbs	Conv.	lbs	Conv.	lbs	Conv.	lbs
			Factor		Factor		Factor		Factor		Factor		Factor	
<u>User-defined Materials</u>														
User-defined material #1	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #2	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #3	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #4	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #5	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #6	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #7	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #8	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #9	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #10	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #11	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #12	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #13	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #14	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #15	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #16	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #17	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #18	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #19	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #20	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
Notes:														
<u>User-defined Waste Destinations</u>														
User-defined recycled/reused off-site #1	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined recycled/reused off-site #2	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined recycled/reused off-site #3	TBD	0	g(MMBtu)		lbs CO2e		lbs/unit		lbs/unit		M(lbs/unit)		lbs/unit	
User-defined non-hazardous waste destination #1	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined non-hazardous waste destination #2	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined non-hazardous waste destination #3	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined hazardous waste destination #1	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined hazardous waste destination #2	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined hazardous waste destination #3	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
Notes:														
Off-site Totals				0		0		0		0		0		0

Excavation and Offsite Disposal of Soil/Fill - Intermediate Totals

Category	Units	Usage	Energy		Greenhouse Gas		NOx		SOx		PM		HAPs	
			Conv. Factor	MMBtus	Conv. Factor	lbs CO2e	Conv. Factor	lbs	Conv. Factor	lbs	Conv. Factor	lbs	Conv. Factor	lbs
<b>Total Grid Electricity Footprint</b>														
On-site grid electricity	MWh	0	3.413	0										
<i>Electricity Generation</i>														
Grid electricity	MWh	0	6.929	0	1124.3	0	2.2421	0	4.6078874	0	0.057518	0	0.2102371	0
<i>Resource Extraction for Electricity</i>														
Coal extraction and processing	MWh	0	3.1	0	180.0	0	0.8	0	0.2	0	0.0	0	NP	
Natural gas extraction and processing	MWh	0	1.6	0	270.0	0	0.2	0	13.0	0	0.0	0	NP	
Nuclear fuel extraction and processing	MWh	0	0.2	0	25.0	0	0.2	0	0.5	0	0.0	0	NP	
Oil extraction and processing	MWh	0	2.3	0	270.0	0	1.7	0	0.1	0	0.0	0	NP	
Other fuel extraction and processing	MWh	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
<i>Electricity Transmission</i>														
Transmission and distribution losses	MWh	0	1.0342	0	112.43	0	0.22421	0	0.4607887	0	0.0057518	0	0.0210237	0
<b>Total Grid Electricity Footprint</b>				<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>
<b>Total Fuel Footprints</b>														
<b>Total Gasoline Footprint</b>														
On-site gasoline use - Other	gal	0	0.124	0	19.6	0	0.11	0	0.0045	0	0.00054	0	0.000039	0
On-site gasoline use <25 hp	gal	0	0.124	0	17.48	0	0.037	0	0.00025	0	0.165	0	0.00008	0
On-site gasoline use >25 hp	gal	0	0.124	0	19.93	0	0.032	0	0.00029	0	0.002	0	0.00009	0
Transportation gasoline use	gal	0	0.124	0	19.6	0	0.11	0	0.0045	0	0.00054	0	0.000039	0
Transportation gasoline use - car	gal	0	0.124	0	19.77	0	0.027	0	0.00036	0	0.003	0	0.0067	0
Transportation gasoline use - passenger truck	gal	0	0.124	0	19.79	0	0.035	0	0.00036	0	0.003	0	0.00661	0
Transportation gasoline use - User Defined	gal	0	0.124	0	19.6	0	0.11	0	0.0045	0	0.00054	0	0.000039	0
Gasoline produced	gal	0	0.033	0	2.8	0	0.0046	0	0.005	0	0.0015	0	0.001	0
<b>Total Gasoline Footprint</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>
<b>Total Diesel Footprint</b>														
On-site diesel use - Other	gal	0	0.139	0	22.5	0	0.17	0	0.0054	0	0.0034	0	0.0000052	0
On-site diesel use <75 hp	gal	0	0.139	0	22.21	0	0.1565	0	0.000145	0	0.0145	0	0.00004	0
On-site diesel use 75-hp<750	gal	0	0.139	0	22.24	0	0.101	0	0.00013	0	0.009	0	0.00004	0
On-site diesel use >750 hp	gal	0	0.139	0	22.24	0	0.149	0	0.00013	0	0.006	0	0.00004	0
Transportation diesel use	gal	0	0.139	0	22.5	0	0.17	0	0.0054	0	0.0034	0	0.0000052	0
Transportation diesel use - car	gal	0	0.139	0	22.57	0	0.015	0	0.0002	0	0.003	0	0.00252	0
Transportation diesel use - passenger truck	gal	0	0.139	0	22.545	0	0.0585	0	0.0002	0	0.007	0	0.002605	0
Transportation diesel use - User Defined	gal	0	0.139	0	22.5	0	0.17	0	0.0054	0	0.0034	0	0.0000052	0
Diesel produced	gal	0	0.017	0	3.02	0	0.0051	0	0.0062	0	0.0017	0	0.0011	0
<b>Total Diesel Footprint</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>
<b>Total Biodiesel Footprint</b>														
On-site biodiesel use	gal	0	0.127	0	22.3	0	0.2	0	0	0	0.00099	0	NP	
On-site biodiesel use - User Defined	gal	0	0.127	0	22.3	0	0.2	0	0	0	0.00099	0	NP	
Transportation biodiesel use	gal	0	0.127	0	22.3	0	0.2	0	0	0	0.00099	0	NP	
Transportation biodiesel use - User Defined	gal	0	0.127	0	22.3	0	0.2	0	0	0	0.00099	0	NP	
Biodiesel produced	gal	0	0.029	0	-16.8	0	0.018	0	0.033	0	0.00082	0	NP	
<b>Total Biodiesel Footprint</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>
<b>Total Natural Gas Footprint</b>														
On-site natural gas use	ccf	0	0.103	0	13.1	0	0.01	0	0.0000063	0	0.00076	0	0.0000084	0
Transportation natural gas use	ccf	0	0.103	0	13.1	0	0.01	0	0.0000063	0	0.00076	0	0.0000084	0
Transportation natural gas use - User Defined	ccf	0	0.103	0	13.1	0	0.01	0	0.0000063	0	0.00076	0	0.0000084	0
Natural gas produced	ccf	0	0.0052	0	2.2	0	0.0037	0	0.0046	0	0.000072	0	0.0000061	0
<b>Total Natural Gas Footprint</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>
<b>Total Liquefied Petroleum Gas Footprint</b>														
On-site liquefied petroleum gas use - Other	ccf	0	NP		12.69	0	0.021	0	0.00013	0	0.001	0	0	0
On-site liquefied petroleum gas use	ccf	0	NP		12.69	0	0.021	0	0.00013	0	0.001	0	0	0
Liquefied petroleum gas produced	ccf	0	0.088	0	1.47	0	0.0016	0	0.0024	0	0.0007	0	0.0003	0
<b>Total Natural Gas Footprint</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>
<b>Total Compressed Gas Footprint</b>														
On-site compressed gas use - Other	ccf	0	NP		1957.835	0	16.0325	0	0.023045	0	0.2775	0	0	0
On-site compressed gas use	ccf	0	NP		1957.835	0	16.0325	0	0.023045	0	0.2775	0	0	0
Compressed gas produced	ccf	0	19.983	0	343.92	0	0.4732	0	2.1651	0	0.1846	0	0.2895	0
<b>Total Natural Gas Footprint</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>

Notes:

*Note: Please refer to the "Default Conversions" tab for references for the default conversion factors used on this calculation sheet.*

Space below available for notes and calculations:



Active SSDS - On-Site Footprint (Scope 1)

Contributors to Footprints	Units	Usage	Energy		GHG		NOx		SOx		PM		HAPs	
			Conv. Factor	MMBtus	Conv. Factor	lbs CO2e	Conv. Factor	lbs	Conv. Factor	lbs	Conv. Factor	lbs	Conv. Factor	lbs
<b>On-Site</b>														
<u>On-site Renewable Energy</u>														
Renewable electricity generated on-site	MWh	0	3.413	0										
Landfill gas combusted on-site for energy use	ccf CH4	0	0.103	0	13.1	0	0.01	0	0.000063	0	0.00076	0	0.000084	0
On-site biodiesel use	gal	0	0.127	0	22.3	0	0.2	0	0	0	0.00099	0	NP	
On-site biodiesel use - User Defined	gal	0	0.127	0	22.3	0	0.2	0	0	0	0.00099	0	NP	
User-defined on-site renewable energy use #1	gal	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined on-site renewable energy use #2	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>On-site Renewable Energy Subtotals</b>				0		0		0		0		0		0
Notes:														
<u>On-site Conventional Energy</u>														
On-site grid electricity	MWh	17.52	3.413	59.79576										
On-site diesel use - Other	Gal	12150	0.139	1688.85	22.5	273375	0.17	2065.5	0.0054	65.61	0.0034	41.31	0.000052	0.06318
On-site diesel use <75 hp	Gal	0	0.139	0	22.21	0	0.1565	0	0.000145	0	0.0145	0	0.00004	0
On-site diesel use 75<hp<750	Gal	0	0.139	0	22.24	0	0.101	0	0.00013	0	0.009	0	0.00004	0
On-site diesel use >750 hp	Gal	0	0.139	0	22.24	0	0.149	0	0.00013	0	0.006	0	0.00004	0
On-site gasoline use - Other	Gal	0	0.124	0	19.6	0	0.11	0	0.0045	0	0.00054	0	0.000039	0
On-site gasoline use <25 hp	Gal	0	0.124	0	17.48	0	0.037	0	0.00025	0	0.165	0	0.00008	0
On-site gasoline use >25 hp	Gal	0	0.124	0	19.93	0	0.032	0	0.00029	0	0.002	0	0.00009	0
On-site natural gas use	ccf	0	0.103	0	13.1	0	0.01	0	0.0000063	0	0.00076	0	0.0000084	0
On-site compressed natural gas use - Other	ccf	0	NP		1957.835	0	16.0325	0	0.023045	0	0.2775	0	0	0
On-site compressed natural gas use	ccf	0	NP		1957.835	0	16.0325	0	0.023045	0	0.2775	0	0	0
On-site liquified petroleum gas use - Other	gal	0	NP		12.69	0	0.021	0	0.00013	0	0.001	0	0	0
On-site liquified petroleum gas use	gal	0	NP		12.69	0	0.021	0	0.00013	0	0.001	0	0	0
Other forms of on-site conventional energy use #1	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
Other forms of on-site conventional energy use #2	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>On-site Conventional Energy Subtotals</b>				1,749		273,375		2,066		66		41		0
Notes:														
<u>Other On-site Emissions</u>														
On-site HAP process emissions	lbs	0											1	0
On-site GHG emissions	lbs CO2e	0			1	0								
On-site carbon storage	lbs CO2e	0			1	0								
GHG avoided by flaring on-site landfill methane	Lbs	0			-262	0	0.01	0	0.0000063	0	0.00076	0	0.0000084	0
Other on-site NOx emissions or reductions	lbs	0					1	0						
Other on-site SOx emissions or reductions	lbs	0							1	0				
Other on-site PM emissions or reductions	lbs	0									1	0		
User-defined recycled/reused on-site #2	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined recycled/reused on-site #3	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined recycled/reused off-site #1	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
Notes:														
<b>On-site Totals</b>				1,748.65		273,375		2,066		66		41		0

Active SSDS - Electricity Generation Footprint (Scope 2)

Contributors to Footprints	Units	Usage	Energy		GHG		NOx		SOx		PM		HAPs	
			Conv. Factor	MMBtus	Conv. Factor	lbs CO2e	Conv. Factor	lbs	Conv. Factor	lbs	Conv. Factor	lbs	Conv. Factor	lbs
Electricity Generation														
Grid electricity	MWh	17.52	6.929	121.39608	352	6167.04	1.504	26.35008	1.46966	25.748443	0.07546	1.3220592	0.0454035	0.7954693
Voluntary purchase of renewable electricity	MWh	0												
Voluntary purchase of RECs	MWh	0												
Notes:														

Active SSDS - Transportation Footprint (Scope 3a)

Category	Units	Usage	Energy		Greenhouse Gas		NOx		SOx		PM		HAPs	
			Conv. Factor	MMBtus	Conv. Factor	lbs CO2e	Conv. Factor	lbs	Conv. Factor	lbs	Conv. Factor	lbs	Conv. Factor	lbs
<i>Conventional Energy</i>														
Transportation diesel use	gal	8076.7	0.139	1122.6613	22.5	181725.75	0.17	1373.039	0.0054	43.61418	0.0034	27.46078	0.0000052	0.0419988
Transportation diesel use - car	gal	0	0.139	0	22.57	0	0.015	0	0.0002	0	0.003	0	0.00252	0
Transportation diesel use - passenger truck	gal	0	0.139	0	22.545	0	0.0585	0	0.0002	0	0.007	0	0.002605	0
Transportation diesel use - User Defined	gal	0	0.139	0	22.5	0	0.17	0	0.0054	0	0.0034	0	0.0000052	0
Transportation gasoline use	gal	0	0.124	0	19.6	0	0.11	0	0.0045	0	0.00054	0	0.000039	0
Transportation gasoline use - car	gal	2300.4	0.124	285.2496	19.77	45478.908	0.027	62.1108	0.00036	0.828144	0.003	6.9012	0.0067	15.41268
Transportation gasoline use - passenger truck	gal	0	0.124	0	19.79	0	0.035	0	0.00036	0	0.003	0	0.00661	0
Transportation gasoline use - User Defined	gal	0	0.124	0	19.6	0	0.11	0	0.0045	0	0.00054	0	0.000039	0
Transportation natural gas use	ccf	0	0.103	0	13.1	0	0.01	0	0.0000063	0	0.00076	0	0.0000084	0
Transportation natural gas use - User Defined	ccf	0	0.103	0	13.1	0	0.01	0	0.0000063	0	0.00076	0	0.0000084	0
User-defined conventional energy transportation #1	TBD	10	0	0	0	0	0	0	0	0	0	0	0	0
User-defined conventional energy transportation #2	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
Conventional Energy Subtotals				1,408		227,205		1,435		44		34		15
Notes:														
<i>Renewable Energy</i>														
Transportation biodiesel use	gal	0	0.127	0	22.3	0	0.2	0	0	0	0.00099	0	NP	
Transportation biodiesel use - User Defined	gal	0	0.127	0	22.3	0	0.2	0	0	0	0.00099	0	NP	
User-defined renewable energy transportation #1	TBD	0	Biodiesel		0	0	0	0	0	0	0	0	Ref.	
User-defined renewable energy transportation #2	TBD	0	npg or pmg		0	0	0	0	0	0	0	0	0	0
Renewable Energy Subtotals				0		0		0		0		0		0
Notes:														
Transportation Totals				1408		227205		1435		44		34		15

Active SSDS - Off-Site Footprint (Scope 3b)

Category	Units	Usage	Energy		Greenhouse Gas		NOx		SOx		PM		HAPs	
			Conv.	MMBtus	Conv.	lbs CO2e	Conv.	lbs	Conv.	lbs	Conv.	lbs	Conv.	lbs
			Factor		Factor		Factor		Factor		Factor		Factor	
<u>Construction Materials</u>														
Aluminum, Rolled Sheet	lb	0	0.0633	0	9.15	0	0.0148	0	0.0283	0	0.0088	0	0.00102	0
Asphalt, mastic	lb	0	0.0412	0	0.85	0	0.00271	0	0.00798	0	0.000766	0	0.00107	0
Asphalt, paving-grade	lb	0	0.5	0	8.58	0	0.0299	0	0.0969	0	0.0091	0	0.0133	0
Ethanol, Corn, 95%	lb	0	0.0318	0	-0.0199	0	0.00425	0	0.00303	0	0.000469	0	0.0000846	0
Ethanol, Corn, 99.7%	lb	0	0.0324	0	0.0591	0	0.00431	0	0.0031	0	0.000472	0	0.000087	0
Ethanol, Petroleum, 99.7%	lb	0	0.0205	0	1.25	0	0.00199	0	0.00214	0	0.000277	0	0.0000589	0
Gravel/Sand Mix, 65% Gravel	lb	0	0.0000248	0	0.0024	0	0.000018	0	4.52E-06	0	2.61E-06	0	3.08E-07	0
Gravel/sand/clay	lb	0	0.000028	0	0.00335	0	0.0000165	0	0.000015	0	0.000002	0	2.05E-10	0
HDPE	lb	0	0.0332	0	1.94	0	0.00325	0	0.00409	0	0.000439	0	0.0000641	0
Photovoltaic system (installed)	W	0	0.0336	0	4.47	0	0.015	0	0.032	0	0.00063	0	0.0000029	0
PVC	lb	0	0.0262	0	2.02	0	0.004	0	0.00274	0	0.000372	0	0.000375	0
Portland cement, US average	lb	0	0.0139	0	1.34	0	0.00654	0	0.0104	0	0.00378	0	0.00097	0
Ready-mixed concrete, 20 MPa	ft3	0	0.217	0	19.5	0	0.0975	0	0.154	0	0.057	0	0.0141	0
Round Gravel	lb	0	0.0000248	0	0.0024	0	0.000018	0	4.52E-06	0	2.61E-06	0	3.08E-07	0
Sand	lb	0	0.0000248	0	0.0024	0	0.000018	0	4.52E-06	0	2.61E-06	0	3.08E-07	0
Stainless Steel	lb	0	0.0116	0	3.4	0	0.0075	0	0.012	0	0.0044	0	0.000144	0
Steel	lb	0	0.0044	0	1.1	0	0.0014	0	0.0017	0	0.00056	0	0.000067	0
Other refined construction materials	lb	0	0.01885	0	2.115	0	0.0040375	0	0.0051325	0	0.0014428	0	0.0001625	0
Other unrefined construction materials	lb	0	0.000028	0	0.00335	0	0.0000165	0	0.000015	0	0.000002	0	2.05E-10	0
Notes:														

Active SSDS - Off-Site Footprint (Scope 3b)

Category	Units	Usage	Energy		Greenhouse Gas		NOx		SOx		PM		HAPs	
			Conv. Factor	MMBTus	Conv. Factor	lbs CO2e	Conv. Factor	lbs	Conv. Factor	lbs	Conv. Factor	lbs	Conv. Factor	lbs
Treatment Materials & Chemicals														
Cheese Whey	lbs	0	0.0025	0	0.031	0	0.000062	0	0.000033	0	0.000002	0	NP	
Emulsified vegetable oil	lbs	0	0.0077	0	3.44	0	0.0066	0	0.0019	0	0.000033	0	NP	
Granular activated carbon, primary	lbs	0	0.0356	0	4.82	0	0.0793	0	0.128	0	0.000987	0	0.000657	0
Granular activated carbon, regenerated	lbs	0	0.00873	0	1.7	0	0.00733	0	0.0129	0	0.000886	0	0.000671	0
Hydrogen Peroxide, 50% in H2O	lbs	0	0.00979	0	1.19	0	0.00142	0	0.0024	0	0.000308	0	0.0000629	0
Iron (II) Sulfate	lbs	0	0.00147	0	0.167	0	0.000316	0	0.000589	0	0.000103	0	0.000023	0
Lime, Hydrated, Packed	lbs	0	0.00206	0	0.762	0	0.000513	0	0.000358	0	0.00013	0	6.57E-06	0
Molasses	lbs	0	0.0044	0	0.48	0	0.0011	0	0.00024	0	0.0000041	0	NP	
Phosphoric Acid, 70% in H2O	lbs	0	0.0067	0	0.882	0	0.00282	0	0.0294	0	0.00171	0	0.000163	0
Potassium Permanganate	lbs	0	0.00981	0	1.16	0	0.00234	0	0.0032	0	0.000422	0	0.000122	0
Sodium Hydroxide, 50% in H2O	lbs	0	0.00977	0	1.09	0	0.00194	0	0.00352	0	0.000403	0	0.000129	0
Other Treatment Chemicals & Materials	lbs	0	0.015	0	1.67	0	0.003	0	0.0065	0	0.00061	0	0.000016	0
Notes:														
Fuel Processing														
Biodiesel produced	gal	0	0.029	0	-16.8	0	0.018	0	0.033	0	0.00082	0	NP	
Diesel produced	gal	20226.7	0.017	343.8539	3.02	61084.634	0.0051	103.15617	0.0062	125.40554	0.0017	34.38539	0.0011	22.24937
Gasoline produced	gal	2300.4	0.033	75.9132	2.8	6441.12	0.0046	10.58184	0.005	11.502	0.0015	3.4506	0.001	2.3004
Liquefied Petroleum Gas Produced	gal	0	0.088	0	1.47	0	0.0016	0	0.0024	0	0.0007	0	0.0003	0
Natural Gas - Compressed Produced	ccf	0	19.983	0	343.92	0	0.4732	0	2.1651	0	0.1846	0	0.2895	0
Natural Gas Produced	ccf	0	0.0052	0	2.2	0	0.0037	0	0.0046	0	0.000072	0	0.0000061	0
Fuel Processing Subtotals					419.7671		67525.754		113.73801		136.90754		37.83599	24.54977
Notes:														
Public water														
gal x 1000	100		0.0092	0.92	5	500	0.0097	0.97	0.0059	0.59	0.016	1.6	0.000015	0.0015
User-defined water resource #1														
gal x 1000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined water resource #2														
gal x 1000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Notes:														

Active SSDS - Off-Site Footprint (Scope 3b)

Category	Units	Usage	Energy		Greenhouse Gas		NOx		SOx		PM		HAPs	
			Conv.	MMBtus	Conv.	lbs CO2e	Conv.	lbs	Conv.	lbs	Conv.	lbs	Conv.	lbs
			Factor		Factor		Factor		Factor		Factor		Factor	
<u>Off-Site Services</u>														
Hazardous waste incineration	lb	0	0.00609	0	2.43	0	0.0016	0	0.00167	0	0.000209	0	0.000087	0
Off-site waste water treatment (POTW)	gal x 1000	0	0.015	0	4.4	0	0.016	0	0.015	0	NP		NP	
Off-site non-hazardous waste landfill	ton	0	0.16	0	25	0	0.14	0	0.075	0	0.4	0	0.0014	0
Off-site hazardous waste landfill	ton	0	0.18	0	27.5	0	0.154	0	0.0825	0	0.44	0	0.00154	0
Off-site Laboratory Analysis - Other	sample	111	0.058071	6.4458842	6.8534384	760.73166	0.131402	14.585617	0.3038758	33.73021	0.0455698	5.0582505	0.0330165	3.6648347
Off-site Laboratory Analysis - Metals	sample	37	0.212	7.844	27.4693	1016.3641	0.6423	23.7651	1.5072	55.7664	0.2264	8.3768	0.1643	6.0791
Off-site Laboratory Analysis - Mercury	sample	37	0.0731715	2.7073445	9.325458	345.04195	0.2127439	7.8715243	0.4982396	18.434865	0.0747359	2.7652298	0.0542332	2.0066269
Off-site Laboratory Analysis - Inorganic Anions	sample	0	0.0074025	0	0.6459478	0	0.0067681	0	0.0147929	0	0.0022024	0	0.0015542	0
Off-site Laboratory Analysis - Alkalinity	sample	0	0.0174398	0	1.3381922	0	0.0070106	0	0.0132496	0	0.00194	0	0.0012831	0
Off-site Laboratory Analysis - Perchlorate	sample	0	0.023885	0	1.8717054	0	0.0079807	0	0.0141535	0	0.0020547	0	0.0012875	0
Off-site Laboratory Analysis - Nitrogen/Nitrate	sample	0	0.0336475	0	4.29897	0	0.0954592	0	0.2226646	0	0.0335099	0	0.0242506	0
Off-site Laboratory Analysis - Sulfate	sample	0	0.0141225	0	1.4726728	0	0.0079807	0	0.0136024	0	0.0019797	0	0.0012015	0
Off-site Laboratory Analysis - PCBs	sample	0	0.0512769	0	5.224902	0	0.0833339	0	0.1904774	0	0.0284393	0	0.0212083	0
Off-site Laboratory Analysis - VOCs	sample	37	0.0762045	2.819566	9.016814	333.62212	0.104498	3.8664275	0.2270738	8.4017306	0.0339508	1.2561811	0.0235892	0.8728011
Off-site Laboratory Analysis - SVOCs	sample	37	0.0715602	2.6477268	7.870422	291.20561	0.1459445	5.3999472	0.3373038	12.480241	0.0504853	1.8679576	0.0372577	1.3785364
Notes:														
<u>Resource Extraction for Electricity</u>														
Coal extraction and processing	MWh	5.3436	3.1	16.318286	180.0	961.848	0.8	4.114572	0.2	0.80154	0.0	0.0961848	NP	
Natural gas extraction and processing	MWh	5.93928	1.6	9.6917171	270.0	1603.6056	0.2	1.0690704	13.0	77.21064	0.0	0.0421689	NP	
Nuclear fuel extraction and processing	MWh	3.46896	0.2	0.5393261	25.0	86.724	0.2	0.520344	0.5	1.73448	0.0	0.0052034	NP	
Oil extraction and processing	MWh	0.12264	2.3	0.2815079	270.0	33.1128	1.7	0.208488	0.1	0.0084622	0.0	0.0051509	NP	
Other fuel extraction and processing	MWh	0.01752	0	0	0	0	0	0	0	0	0	0	0	0
Resource Extraction Subtotals				26.830837		2685.2904		5.9124744		79.755122		0.148708		0
Notes:														
<u>Electricity Transmission</u>														
Transmission and distribution losses	MWh	17.52	1.0342	18.119184	35.2	616.704	0.1504	2.635008	0.146966	2.5748443	0.007546	0.1322059	0.0045403	0.0795469
Notes:														

Active SSDS - Off-Site Footprint (Scope 3b)

Category	Units	Usage	Energy		Greenhouse Gas		NOx		SOx		PM		HAPs	
			Conv.	MMBtu	Conv.	lbs CO2e	Conv.	lbs	Conv.	lbs	Conv.	lbs	Conv.	lbs
			Factor		Factor		Factor		Factor		Factor		Factor	
<i>User-defined Materials</i>														
User-defined material #1	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #2	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #3	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #4	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #5	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #6	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #7	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #8	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #9	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #10	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #11	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #12	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #13	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #14	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #15	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #16	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #17	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #18	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined material #19	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Notes:														
<i>User-defined Waste Destinations</i>														
User-defined recycled/reused off-site #1	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined recycled/reused off-site #2	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined recycled/reused off-site #3	TBD	0	y(MMBtu)		lbs CO2e		Ox(lbs/unit)		Ox(lbs/unit)		M(lbs/unit)		Ps(lbs/unit)	
User-defined non-hazardous waste destination #1	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined non-hazardous waste destination #2	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined non-hazardous waste destination #3	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined hazardous waste destination #1	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined hazardous waste destination #2	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
User-defined hazardous waste destination #3	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0
Notes:														
Off-site Totals				488.10164		74074.714		178.74411		348.64095		59.041323		38.632716

## Active SSDS - Intermediate Totals

Category	Units	Usage	Energy		Greenhouse Gas		NOx		SOx		PM		HAPs	
			Conv. Factor	MMBtus	Conv. Factor	lbs CO2e	Conv. Factor	lbs	Conv. Factor	lbs	Conv. Factor	lbs	Conv. Factor	lbs
<b>Total Grid Electricity Footprint</b>														
On-site grid electricity	MWh	17.52	3.413	59.79576										
<i>Electricity Generation</i>														
Grid electricity	MWh	17.52	6.929	121.39608	1124.3	19697.736	2.2421	39.281592	4.6078874	80.730187	0.057518	1.0077154	0.2102371	3.6833538
<i>Resource Extraction for Electricity</i>														
Coal extraction and processing	MWh	5.3436	3.1	16.318286	180.0	961.848	0.8	4.114572	0.2	0.80154	0.0	0.0961848	NP	
Natural gas extraction and processing	MWh	5.93928	1.6	9.6917171	270.0	1603.6056	0.2	1.0690704	13.0	77.21064	0.0	0.0421689	NP	
Nuclear fuel extraction and processing	MWh	3.46896	0.2	0.5393261	25.0	86.724	0.2	0.520344	0.5	1.73448	0.0	0.0052034	NP	
Oil extraction and processing	MWh	0.12264	2.3	0.2815079	270.0	33.1128	1.7	0.208488	0.1	0.0084622	0.0	0.0051509	NP	
Other fuel extraction and processing	MWh	0.01752	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
<i>Electricity Transmission</i>														
Transmission and distribution losses	MWh	17.52	1.0342	18.119184	112.43	1969.7736	0.22421	3.9281592	0.4607887	8.0730187	0.0057518	0.1007715	0.0210237	0.3683354
<b>Total Grid Electricity Footprint</b>				<b>226</b>		<b>24353</b>		<b>49</b>		<b>169</b>		<b>1</b>		<b>4</b>
<b>Total Fuel Footprints</b>														
<i>Total Gasoline Footprint</i>														
On-site gasoline use - Other	gal	0	0.124	0	19.6	0	0.11	0	0.0045	0	0.00054	0	0.000039	0
On-site gasoline use <25 hp	gal	0	0.124	0	17.48	0	0.037	0	0.00025	0	0.165	0	0.00008	0
On-site gasoline use >25 hp	gal	0	0.124	0	19.93	0	0.032	0	0.00029	0	0.002	0	0.00009	0
Transportation gasoline use	gal	0	0.124	0	19.6	0	0.11	0	0.0045	0	0.00054	0	0.000039	0
Transportation gasoline use - car	gal	2300.4	0.124	285.2496	19.77	45478.908	0.027	62.1108	0.00036	0.828144	0.003	6.9012	0.0067	15.41268
Transportation gasoline use - passenger truck	gal	0	0.124	0	19.79	0	0.035	0	0.00036	0	0.003	0	0.00061	0
Transportation gasoline use - User Defined	gal	0	0.124	0	19.6	0	0.11	0	0.0045	0	0.00054	0	0.000039	0
Gasoline produced	gal	2300.4	0.033	75.9132	2.8	6441.12	0.0046	10.58184	0.005	11.502	0.0015	3.4506	0.001	2.3004
<b>Total Gasoline Footprint</b>		<b>2300.4</b>		<b>361.1628</b>		<b>51920.028</b>		<b>72.69264</b>		<b>12.330144</b>		<b>10.3518</b>		<b>17.71308</b>
<i>Total Diesel Footprint</i>														
On-site diesel use - Other	gal	12150	0.139	1688.85	22.5	273375	0.17	2065.5	0.0054	65.61	0.0034	41.31	0.0000052	0.06318
On-site diesel use <75 hp	gal	0	0.139	0	22.21	0	0.1565	0	0.000145	0	0.0145	0	0.00004	0
On-site diesel use 75-hp<750	gal	0	0.139	0	22.24	0	0.101	0	0.00013	0	0.009	0	0.00004	0
On-site diesel use >750 hp	gal	0	0.139	0	22.24	0	0.149	0	0.00013	0	0.006	0	0.00004	0
Transportation diesel use	gal	8076.7	0.139	1122.6613	22.5	181725.75	0.17	1373.039	0.0054	43.61418	0.0034	27.46078	0.0000052	0.0419988
Transportation diesel use - car	gal	0	0.139	0	22.57	0	0.015	0	0.0002	0	0.003	0	0.00025	0
Transportation diesel use - passenger truck	gal	0	0.139	0	22.545	0	0.0585	0	0.0002	0	0.007	0	0.0002605	0
Transportation diesel use - User Defined	gal	0	0.139	0	22.5	0	0.17	0	0.0054	0	0.0034	0	0.0000052	0
Diesel produced	gal	20226.7	0.017	343.8539	3.02	61084.634	0.0051	103.15617	0.0062	125.40554	0.0017	34.38539	0.0011	22.24937
<b>Total Diesel Footprint</b>		<b>20226.7</b>		<b>3155.3652</b>		<b>516185.38</b>		<b>3541.6952</b>		<b>234.62972</b>		<b>103.15617</b>		<b>22.354549</b>
<i>Total Biodiesel Footprint</i>														
On-site biodiesel use	gal	0	0.127	0	22.3	0	0.2	0	0	0	0.00099	0	NP	
On-site biodiesel use - User Defined	gal	0	0.127	0	22.3	0	0.2	0	0	0	0.00099	0	NP	
Transportation biodiesel use	gal	0	0.127	0	22.3	0	0.2	0	0	0	0.00099	0	NP	
Transportation biodiesel use - User Defined	gal	0	0.127	0	22.3	0	0.2	0	0	0	0.00099	0	NP	
Biodiesel produced	gal	0	0.029	0	-16.8	0	0.018	0	0.033	0	0.00082	0	NP	
<b>Total Biodiesel Footprint</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>
<i>Total Natural Gas Footprint</i>														
On-site natural gas use	ccf	0	0.103	0	13.1	0	0.01	0	0.0000063	0	0.00076	0	0.0000084	0
Transportation natural gas use	ccf	0	0.103	0	13.1	0	0.01	0	0.0000063	0	0.00076	0	0.0000084	0
Transportation natural gas use - User Defined	ccf	0	0.103	0	13.1	0	0.01	0	0.0000063	0	0.00076	0	0.0000084	0
Natural gas produced	ccf	0	0.0052	0	2.2	0	0.0037	0	0.0046	0	0.000072	0	0.0000061	0
<b>Total Natural Gas Footprint</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>
<i>Total Liquefied Petroleum Gas Footprint</i>														
On-site liquefied petroleum gas use - Other	ccf	0	NP		12.69	0	0.021	0	0.00013	0	0.001	0	0	0
On-site liquefied petroleum gas use	ccf	0	NP		12.69	0	0.021	0	0.00013	0	0.001	0	0	0
Liquefied petroleum gas produced	ccf	0	0.088	0	1.47	0	0.0016	0	0.0024	0	0.0007	0	0.0003	0
<b>Total Natural Gas Footprint</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>
<i>Total Compressed Gas Footprint</i>														
On-site compressed gas use - Other	ccf	0	NP		1957.835	0	16.0325	0	0.023045	0	0.2775	0	0	0
On-site compressed gas use	ccf	0	NP		1957.835	0	16.0325	0	0.023045	0	0.2775	0	0	0
Compressed gas produced	ccf	0	19.983	0	343.92	0	0.4732	0	2.1651	0	0.1846	0	0.2895	0
<b>Total Natural Gas Footprint</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>

Notes:



*Note: Please refer to the "Default Conversions" tab for references for the default conversion factors used on this calculation sheet.*

Space below available for notes and calculations: