HALEY ALDRICH

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REPORT ON

DRAFT SITE MANAGEMENT PLAN
FORMER BP GASOLINE SERVICE STATION SITE
860 FLUSHING AVENUE
BROOKLYN, KINGS COUNTY, NEW YORK
NYSDEC SITE NUMBER: C224424

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Prepared by
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New York, New York

Prepared for
Flushing Holdings NY LLC
Brooklyn, New York

File No. 0211437
October 2026

Revisions to Final Approved Site Management Plan:

Revision No.	Date Submitted	Summary of Revisions	NYSDEC Approval Date

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SITE MANAGEMENT PLAN
FORMER BP GASOLINE SERVICE STATION SITE
860 FLUSHING AVENUE
BROOKLYN, NEW YORK
NYSDEC SITE NUMBER: C224424

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Certification Statement

I, Zhan Shu, certify that I am currently a New York State (NYS)-registered professional engineer and that this Site Management Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the Division of Environmental Remediation Technical Guidance for Site Investigation and Remediation (DER-10).

NYS Professional Engineer No. 112052 Date

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List of Acronyms and Abbreviations

AWQS	Ambient Water Quality Standards
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
BTEX	benzene, toluene, ethylbenzene, and xylenes
btoc	below top of casing
COC	Certificate of Completion
CP	Commissioner's Policy
CVOC	chlorinated volatile organic compound
Department	New York State Department of Environmental Conservation
DER	Division of Environmental Remediation
EC	Engineering Control
EE	Environmental Easement
FER	Final Engineering Report
ft	feet
ft bgs	feet below ground surface
GAC	granular activated carbon
GV	Guidance Value
Haley & Aldrich of New York	H & A of New York Engineering and Geology, LLP
HASP	Health and Safety Plan
HREC	Historical Recognized Environmental Condition
IC	Institutional Control
Kleinfelder	Kleinfelder East, Inc.
L/min	liters per minute
Merritt	Merritt Environmental Consulting Corp.
MTBE	methyl tertiary-butyl ether
NYC	New York City
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYCOER	New York City Office of Environmental Remediation
NYCRR	New York Codes, Rules, and Regulations

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List of Acronyms and Abbreviations (continued)

O&M	operations and maintenance
P.E.	Professional Engineer
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
PCE	tetrachloroethene
PFAS	per- and polyfluoroalkyl substances
PFOA	perfluorooctanoic acid
PFOS	perfluorooctanesulfonic acid
Phase I ESA	Phase I Environmental Site Assessment
PID	photoionization detector
ppm	parts per million
PRR	Periodic Review Report
PVC	polyvinyl chloride
QA/QC	quality assurance/quality control
QAPP	Quality Assurance Project Plan
RAO	Remedial Action Objective
RAWP	Remedial Action Work Plan
REC	Recognized Environmental Condition
RI	Remedial Investigation
ROD	Record of Decision
RP	Remedial Party
RRSCO	Restricted Residential Soil Cleanup Objective
RSO	Remedial System Optimization
Site	Former BP Gasoline Service Station Site in Brooklyn, New York
SMP	Site Management Plan
SRI	Supplemental Remedial Investigation
SSDS	sub-slab depressurization system
SVOC	semi-volatile organic compound
SVI	soil vapor intrusion
USEPA	United States Environmental Protection Agency
UUSCO	Unrestricted Use Soil Cleanup Objective
UST	underground storage tank

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List of Acronyms and Abbreviations (continued)

VOC	volatile organic compound
Volunteer	Flushing Holdings NY LLC

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Executive Summary

Flushing Holdings NY LLC (the Volunteer) remediated a 0.24-acre (±10,600-square-foot) property known as the Former BP Gasoline Service Station Site, designated under Brownfield Cleanup Program (BCP) Site No. C224424. The Former BP Gasoline Service Station Site (hereafter referred to as "the Site") is located at 860 Flushing Avenue in Brooklyn, Kings County, New York on Lot 32, Block 3138 of the New York City Tax Map. Remediation activities that addressed soil and soil vapor contamination were conducted in accordance with the May 2026 approved *Remedial Action Work Plan* (H & A of New York Engineering and Geology, LLP, 2026) and May 2026 Decision Document (New York State Department of Environmental Conservation, 2026). The remediation activities included the removal of impacted materials above Restricted Residential Soil Cleanup Objectives from the Site at depths ranging from 10 to 15 feet below ground surface (ft bgs) and installation of an active sub-slab depressurization system (SSDS) beneath the building footprint. The general excavation depth for the Site redevelopment is 12 ft bgs, with deeper excavations up to 16 ft bgs for foundation elements and approximately 20 ft bgs for the elevator pit.

The following summarizes the controls implemented for the Site, as well as the inspections, monitoring, maintenance, and reporting activities required by this *Site Management Plan* (SMP):

Site Identification:	BCP Site #: C224424 Former BP Gasoline Service Station Site 860 Flushing Avenue Brooklyn, New York 11206
Institutional and Engineering Controls:	1. The property may be used for Restricted Residential use as defined in Title 6 New York Codes, Rules, and Regulations (6 NYCRR) Part 375-1.8(g)(2)(ii), Commercial use as defined in 6 NYCRR Part 375-1.8(g)(2)(iii), and Industrial use as defined in 6 NYCRR Part 375-1.8(g)(2)(ii) only, consistent with current zoning.
	2. All Engineering Controls (ECs) must be operated and maintained as specified in this SMP.
	3. All ECs on the Site must be inspected and certified at a frequency and in the manner defined in the SMP.
	4. The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the New York State Department of Health or the Kings County Department of Health to render it safe for use as drinking water or for industrial purposes. 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 for the Site must be reported at the frequency and in the manner defined in the SMP.
	7. Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in this SMP.
	8. Operations, maintenance, monitoring, inspection, and reporting of mechanical and physical components of the remedy will be performed as defined in this SMP.

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Site Identification:	BCP Site #: C224424 Former BP Gasoline Service Station Site 860 Flushing Avenue Brooklyn, New York 11206	
	9. 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.	
	10. The potential for vapor intrusion must be evaluated for any buildings developed in the area within the institutional control boundaries, and any potential impacts that are identified must be monitored or mitigated.	
	11. Vegetable gardens and farming on the site are prohibited. All future activities that will disturb remaining contaminated material must be conducted in accordance with this SMP.	
	12. Active SSDS.	
Inspections:		Frequency:
1. SSDS Inspection		Annually
Monitoring:		
1. Post-Mitigation Indoor Air Quality Sampling		During the upcoming 2026 to 2027 heating season after completion of the building envelope and before site occupancy.
Maintenance:		
1. SSDS		As needed
Reporting:		
1. SSDS Inspection		Annually with Periodic Review Report
2. Post-Mitigation Indoor Air Report		After completion of the Post-Mitigation Indoor Air Report
3. Periodic Review Report		16 months after the Certificate of Completion is issued; annually thereafter.

Further descriptions of the above requirements are provided in detail in this SMP.

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1. Introduction

1.1 GENERAL

This *Site Management Plan* (SMP) is a required element of the remedial program for the Former BP Gasoline Service Station Site located in Brooklyn, New York (hereinafter referred to as the "Site"). The Site is currently in the New York State (NYS) Brownfield Cleanup Program (BCP), Site No. C224424, which is administered by the New York State Department of Environmental Conservation (NYSDEC or Department) and is located at 860 Flushing Avenue, Brooklyn, Kings County, New York, identified on the New York City (NYC) Tax Map as Brooklyn borough Tax Block 3138, Lot 32.

Flushing Holdings NY LLC entered into a Brownfield Cleanup Agreement (BCA) (BCA Index No. C224424-02-25) in June 2025 with the NYSDEC to remediate the Site as a Volunteer. A BCA Amendment was issued on June 20, 2025 to Flushing Holdings NY LLC. A Site location map is provided on Figure 1. A figure showing the Site location and boundaries is provided on Figure 2. The Site boundaries are more fully described in the metes and bounds Site description that is part of the Environmental Easement (EE) provided in Appendix A (pending).

After completion of the remedial work, contamination remained at the Site, which is hereafter referred to as "remaining contamination." Institutional Controls (ICs) and Engineering Controls (ECs) have been incorporated into the Site remedy to control exposure to remaining contamination and ensure protection of public health and the environment. The EE is pending. Once granted to the NYSDEC and recorded with the Kings County Clerk, the EE will require compliance with the Site's SMP and the ECs and ICs established for the Site.

H & A of New York Engineering and Geology, LLP (Haley & Aldrich of New York) prepared this SMP to manage remaining contamination at the Site until the EE is extinguished in accordance with the Environmental Conservation Law Article 71, Title 36. Once this plan has been approved by the NYSDEC, compliance with this plan is required by the grantor of the EE and the grantor's successors and assigns. This SMP may only be revised with NYSDEC approval.

Note that:

- This SMP details the Site-specific implementation procedures required by the EE. Failure to properly implement the SMP is a violation of the EE, which is grounds for revocation of the Certificate of Completion (COC);
- Failure to comply with this SMP is also a violation of Environmental Conservation Law, Title 6 New York Codes, Rules, and Regulations (NYCRR) Part 375 and the BCA (Index # C224424-02-25; Site # C224424) for the Site, and is thereby subject to applicable penalties.

Reports associated with the Site can be obtained by contacting the NYSDEC or its successor agency managing environmental issues in NYS. A list of contacts for persons involved with the Site is provided in Tables I and II in Section 1.3 of this SMP.

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Haley & Aldrich of New York prepared this SMP on behalf of Flushing Holdings NY LLC in accordance with the requirements of the NYSDEC's Division of Environmental Remediation (DER)-10 (Technical Guidance for Site Investigation and Remediation) and other applicable NYSDEC guidelines. This SMP addresses the means for implementing the ICs and ECs that are required by the EE for the Site.

1.2 REVISIONS AND ALTERATIONS

Revisions and alterations to this plan will be proposed in writing to NYSDEC's project manager. The NYSDEC can also make changes to the SMP or request revisions from the Remedial Party (RP). Revisions will be necessary upon, but not limited to the following: 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 NYS Professional Engineer (P.E.). In accordance with the EE for the Site, the NYSDEC project manager will provide notice of any approved changes to the SMP and append the notices to the SMP.

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:

- A 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.
- A seven-day advance notice of any field activity associated with the remedial program.
- A 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.
- A 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.
- A notice within 48 hours of any non-routine maintenance activities.
- A 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 seven days that includes a summary of actions taken or to be taken and the potential impact to the environment and the public.
- A follow-up status report on actions taken to respond to an 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.

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

- At least 60 days before the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser/RP has been provided with a copy of the BCA and all approved work plans and reports, including this SMP.
- 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 with the NYSDEC.

Table I below includes contact information for the above notifications. The information on this table will be updated as necessary to ensure accurate contact information. A full listing of Site-related contact information is provided in Table II. A full listing of Site-related and adjacent property owner contact information is provided in Appendix B.

Table I: NYSDEC/New York State Department of Health (NYSDOH) Notifications*

Regulator	Contact Name	Contact Title	Required Notification**	Contact Number	Contact Email
NYSDEC	Nour Haredy	Project Manager	All Notifications	718.482.6333	nour.haredy@dec.ny.gov
	Andre Obligado	Section Chief	All Notifications	718.482.6412	andre.obligado@dec.ny.gov
	Kelly Lewandowski	Chief, Site Control	Notifications 1 and 8	518.402.9569	Kelly.Lewandowski@dec.ny.gov
NYSDOH	Kari Pollard	Project Manager	Notifications 4, 6, and 7	518.402.7817	Kari.Pollard@health.ny.gov

Notes:
** Notifications are subject to change and will be updated as necessary.*
*** Numbers in this column reference the numbered bullets in the notification list in this section.*

Table II: Site Contact List

Company	Contact Name	Title	Contact Number	Contact Email
Haley & Aldrich of New York	James Bellew	Principal	646.277.5686	jbellew@haleyaldrich.com
	Zhan Shu, P.E.	Remedial Engineer	201.213.6178	zshu@haleyaldrich.com
	Mari Cate Conlon, P.G	Senior Associate	646.277.5688	mconlon@haleyaldrich.com
	Luke J. McCartney, P.G.	Senior Project Manager	551.655.7720	LMcCartney@haleyaldrich.com
Flushing Holdings NY LLC	Jack Klein	Member	718.408.8778	jack@bmanage.com
Fox Rothschild LLP	George C.D. Duke	Attorney	212.450.9847	gduke@foxrothschild.com

2. Summary of Previous Investigations and Remedial Actions

2.1 SITE LOCATION AND DESCRIPTION

The Site is located in Brooklyn, Kings County, New York, and is identified as Section 3, Block 3138 and Lot 32 on the NYC Tax Map. The approximately 0.24-acre Site is bounded to the north by Flushing Avenue and a multi-story residential building that is part of the Bushwick Houses apartment complex; to the east by a one-story restaurant and two four-story residential buildings with ground-floor commercial use; to the south by a six-story residential building with ground-floor commercial use; and to the west by a two-story deli (see Figure 2). The Site boundaries are more fully described in Appendix A. Flushing Holdings NY LLC is the owner of the Site parcel at the time of issuance of this SMP.

2.2 PHYSICAL SETTING

2.2.1 Land Use

The Site consists of an under-construction eight-story, mixed-use commercial and residential building with a full cellar. The building encompasses most of the Site lot footprint (approximately 9,816 square feet) and extends approximately 14 feet below ground surface (ft bgs), with deeper localized excavations for foundation footings, grade beams, and foundation walls at approximately 16 ft bgs. According to the NYC Planning Commission Zoning Map 13b, the Site is located within a residential and commercial zoning district (R6A and C2-4), and the intended use of the building under construction is residential, which is consistent with current zoning. When completed, the residential building will contain approximately 59 dwelling units, of which about 16 units will be designated as affordable housing. The cellar level will be used as a retail commercial space and for bicycle storage, compactor space, and mechanical rooms. The first floor will be occupied with commercial retail space, a recreation room, a residential lobby, and a package room. The second through eighth floors will be residential apartments. The roof will include mechanical, utility, and recreational spaces. The Site use is consistent with current zoning for the property.

The properties adjoining and surrounding the Site primarily include mixed-use commercial and residential properties. The Site is bounded to the north by Flushing Avenue and a multi-story residential building that is part of the Bushwick Houses apartment complex; to the east by a one-story restaurant and two four-story residential buildings with ground-floor commercial use; to the south by a six-story residential building with ground-floor commercial use; and to the west by a two-story deli.

2.2.2 Geology

Based on field observations during the Remedial Investigation (RI) and Supplemental Remedial Investigation (SRI), the Site was underlain by a layer of urban fill consisting of brown to dark brown to light gray fine to medium sand with varying amounts of silt, fine gravel, brick, glass, concrete, and wood observed from surface grade to approximately 10 to 17 ft bgs. A geotechnical report prepared by Big Apple Group dated September 2025 identified clayey sand from 8 to 22 ft bgs near the northern portion of the Site, which is consistent with RI field observations. The urban fill layer was underlain by a potential native

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layer consisting of brown to light brown fine to medium sand with varying amounts of clay, silt, fine gravel, and cobbles.

Most impacted materials above Restricted Residential Soil Cleanup Objectives (RRSCOs) were removed from the Site to depths ranging from 10 to 15 ft bgs. The general excavation depth for the Site redevelopment is 12 ft bgs, with deeper excavations up to 16 ft bgs for foundation elements and approximately 20 ft bgs for the elevator pit. The remediation activities include installation of an active sub-slab depressurization system (SSDS) beneath the building footprint.

Geologic cross-sections are shown on Figure 3.

2.2.3 Hydrogeology

Based on Site-specific groundwater measurements, groundwater beneath the Site ranges from approximately 26.31 to 28.2 feet (ft) below top of casing (btoc) during the RI and from approximately 26.59 to 28.75 ft btoc during the SRI. Groundwater flow beneath the Site is generally from east to west. Groundwater contour maps with the August 2025 and December 2025 synoptic gauging data are provided in Figure 4A and Figure 4B, respectively.

2.3 INVESTIGATION AND REMEDIAL HISTORY

The following narrative provides a remedial history timeline and a summary of the available project records to document key Site investigation and remedial milestones. Full titles for each of the reports referenced below are provided in the References section at the end of this SMP.

The following reports were prepared for the Site:

- November 2023 Phase 1 Environmental Update, prepared by Merritt Environmental Consulting Corp. (Merritt).
- August 2024 Phase I Environmental Site Assessment (Phase I ESA), prepared by Haley & Aldrich of New York.
- September 2024 Limited Phase II Environmental Site Investigation (ESI) Report, prepared by Haley & Aldrich of New York.
- Remedial Investigation Report (Haley & Aldrich of New York, February 2026).
- Remedial Action Work Plan (RAWP; Haley & Aldrich of New York, May 2026).
- Decision Document (NYSDEC, May 2026)

A summary of environmental findings of the previous investigations is provided below.

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2.3.1 Phase I Environmental Update (Merritt, November 2023)

In November 2023, Merritt conducted a Phase I Environmental Update for the subject property. The assessment revealed no evidence of Recognized Environmental Conditions (RECs) in connection with the property; however, Merritt noted the following:

- The station is registered with the NYSDEC for two active 12,000-gallon gasoline underground storage tanks (USTs) that were installed with a monitoring system in 1998. The report further lists eight USTs that have been registered at the subject property, including the two active USTs, three 4,000-gallon gasoline USTs removed on July 1, 1998, and three 4,000-gallon USTs listed as non-regulated use. Merritt also noted that the three NYSDEC Spill events and observation of groundwater monitoring wells constitute Historical Recognized Environmental Conditions (HRECs) and that the subject property has an environmental E-designation that needs to be complied with during redevelopment.
- Merritt noted that the process to address an E-designation and receive a notice of satisfaction includes submitting a work plan to the New York City Office of Environmental Remediation (NYCOER), conducting a subsurface investigation, and submitting the results to the NYCOER.
- Appended to Merritt's Phase I Environmental Update, subsurface investigation reports detail soil and groundwater sampling completed at the subject property by Kleinfelder East, Inc. (Kleinfelder) on behalf of Exxon Mobil Corp. in reference to the closure of Spill Number 0701041.
- These reports summarized the subsurface investigations Kleinfelder completed that included installation of five monitoring wells and the collection of soil and groundwater samples required for NYSDEC spill closure regulations.
- Subsurface deposits consisting predominantly of artificial fill were observed extending from grade to 7 ft bgs and are underlain by native deposits consisting predominantly of poorly sorted, medium- to fine-grained sand with trace gravel. Groundwater was measured between 24.95 and 27.46 ft bgs with a north-northwest flow direction.
- Based on the data developed during the subsurface investigation activities, Kleinfelder petitioned NYSDEC for spill closure based on documented concentrations and trends for benzene, toluene, ethylbenzene, and xylenes (BTEX) and methyl tertiary-butyl ether (MTBE) in groundwater samples, the absence of known impacts/effects to identified sensitive receptors, the absence of potable wells located within 2,500 ft of the subject property, and the absence of surface water bodies within 1,000 ft of the subject property. Kleinfelder further stated that the lateral and vertical extent of adsorbed-phase hydrocarbons and dissolved-phase BTEX and MTBE have been delineated at the subject property.
- Based on these findings, NYSDEC issued the closure of Spill Number 0701041, and the wells were abandoned on April 10, 2008 with a grout-slurry mixture.

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2.3.2 Phase I ESA (Haley & Aldrich of New York, August 2024)

In August 2024, Haley & Aldrich of New York prepared a Phase I ESA for the Site. The findings include the following RECs:

- Spill Number 0701041 was reported at the subject property for an unknown amount of gasoline affecting groundwater based on the results of soil sampling. NYSDEC transferred Spill Number 9614354 related to a gasoline spill that affected groundwater during the Site's use as a Getty Station to Spill Number 0701041. Subsurface Investigations were completed that included the installation of five monitoring wells and the collection of soil and groundwater samples; the NYSDEC closed the spill on March 27, 2008. However, records indicate that MTBE was detected above regulatory standards in off-Site monitoring wells downgradient to the Site, and a source was not identified before closure.
- Records identify the current and former use of the Site as a petroleum filling station and auto-related facility since 1947, with three historical spills reported that were transferred or closed with NYSDEC. Additionally, the property was used as a dentist's office from circa 1928 to 1934, and the potential for liquid mercury as an amalgam component for use in fillings exists. The Site is currently still operating as a filling station with two active 12,000-gallon USTs. Petroleum stains were observed on the ground surface near the pump islands and driveway areas of the Site, and one 55-gallon capacity unsecured and improperly closed drum labeled for benzene-listed (D018) hazardous contents was observed at the Site without implementation of spill prevention measures.
- Additional environmental findings for the Site identified one HREC, one *de minimis* condition, and one Other Finding, including the following:
  - Spill Number 0607879 resulting from a suspected gasoline UST leak was reported on October 11, 2006. The spill report indicates that the incident resulted from an inventory discrepancy, and no leak was identified. The spill was closed by NYSDEC on November 16, 2006.
  - Former Site uses, including paint spraying, upholstering, and chair manufacturing, that could have potentially used materials containing perfluorooctanoic acid (PFOA) or perfluorooctanesulfonic acid (PFOS), compounds historically associated with painting and textile operations.
  - The environmental E-designation (E-315) for hazardous materials, noise, and air quality.
- Based on the findings of the Phase I ESA, Haley & Aldrich of New York recommended that a Phase II Subsurface Investigation be performed to determine the nature and extent of contamination at the subject site.

As part of the Phase I ESA, Haley & Aldrich of New York reviewed Sanborn Fire Insurance Maps available for this Site.

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2.3.3 Limited Phase II Environmental Subsurface Investigation Report (Haley & Aldrich of New York, September 2024)

Haley & Aldrich of New York completed a limited sampling event at the Site to investigate soil, groundwater, and sub-slab vapor quality. Urban fill, generally consisting of brown to dark brown to light gray sand with varying amounts of silt, gravel, brick, asphalt, glass, and ceramic, was observed from surface grade to approximately 11.5 to 22.5 ft bgs. The urban fill layer was underlain by a potential native layer consisting of brown to light brown sand with varying amounts of clay, silt, and gravel. Soil samples were collected, characterized, and screened for visual and olfactory evidence of contamination, such as staining and odors. Instrumental screening for the presence of organic vapors was performed using a photoionization detector (PID). No apparent subsurface impacts were observed, including odors or staining, and PID readings did not exceed 0.8 parts per million (ppm). Groundwater was encountered between 26 and 28 ft bgs, and temporary wells were installed to 35 ft bgs to facilitate the collection of groundwater samples.

A geophysical survey was completed before the completion of intrusive activities. Geophysical anomalies resembling potential and main subsurface utilities, subsurface fuel lines, electrical lines, and large anomalies consistent with the known USTs were identified and marked. An unknown geophysical anomaly located along the eastern side of the USTs was also identified.

Field observations and analytical results identified historical urban fill contaminated with heavy metals and semi-volatile organic compounds (SVOCs); specifically polycyclic aromatic hydrocarbons [PAHs]) at concentrations consistent with characteristics of urban fill found throughout the NYC area. Urban fill was observed up to a depth of 22.5 ft bgs. SVOCs and total metals exceeding RRSCOs were observed widely distributed throughout the Site in urban fill up to 18 ft bgs, with total metals exceeding Unrestricted Use Soil Cleanup Objectives (UUSCOs) up to 19 ft bgs. A hazardous lead hotspot was identified in soil collected from boring B-8 at a depth of 17 to 18 ft bgs in the central region of the Site. Groundwater results indicate the presence of one SVOC, PAHs, and metals exceeding Ambient Water Quality Standards (AWQS). Groundwater was encountered between 26 and 28 ft bgs. Sub-slab soil vapor sampled in the central and northern regions of the Site is impacted with petroleum-related volatile organic compounds (VOCs) and chlorinated VOCs (CVOCs), including BTEX compounds and perchloroethylene/tetrachloroethene (PCE).

Haley & Aldrich of New York concluded that further delineation would be required to determine the extent of SVOCs and total metals in Site soils and hazardous lead in soil in the central region of the Site. Considering that VOCs were identified in Site soil, and VOCs, including PCE, were detected in sub-slab soil vapor, an on-Site source may exist.

2.3.4 Remedial Investigation Report (Haley & Aldrich of New York, February 2026)

The RI and SRI consisted of the following:

1. The advancement of 19 soil borings to a maximum depth of 35 ft bgs. Three to four samples were collected from each boring, including from surface grade (or immediately below the concrete cover) at specific intervals, including 0 to 2 ft, the fill material between 6 to 8 ft, the development

depth of approximately 14 to 16 ft, and the 2-ft interval above the groundwater interface at 25 to 27 ft. In addition, samples were collected at 20 and 25 ft in SB-15, 23 to 25 ft in SB-17, and 17 to 19 ft in SB-19. A total of 63 soil samples were collected (including quality assurance/quality control [QA/QC] samples) for laboratory analysis.

2. The installation of six permanent groundwater monitoring wells to a maximum depth of 35 ft bgs, each screened across the groundwater interface. Eleven groundwater samples were collected from the wells, including QA/QC samples, for laboratory analysis.
3. The installation of five soil vapor probes to a depth of approximately 24 ft bgs, targeting the 2-ft interval above the groundwater interface. Five soil vapor samples were collected for laboratory analysis.
4. The collection of grab sediment samples from three dry wells and a grab water sample from one dry well. Three sediment samples and one water sample were collected from the dry wells at the Site.

A summary of the RI environmental findings includes the following:

- In general, Site contaminants of concern include metals, SVOCs (specifically PAHs), one VOC, pesticides, and per- and polyfluoroalkyl substances (PFAS) in soil, SVOCs (specifically PAHs), VOCs, and PFAS in groundwater, and petroleum-related VOCs in soil vapor.
- Elevated concentrations of metals, PAHs, pesticides, and PFAS are present throughout the historical fill layer that extends from surface grade to about 17 ft bgs. These contaminants are characteristic of historical fill material commonly found throughout the NYC area. Exceedances of metals and pesticides in deeper native soil (25 to 27 ft bgs) are likely due to the presence of historic fill at the Site.
- PAH and VOC contamination in Site groundwater, encountered solely in the northern portion of the Site near the former pump islands, may potentially be a result of historical Site uses. The elevated concentrations of PAHs and VOCs in Site groundwater may have been introduced through the use of petroleum products during historical Site operations.
- Petroleum-related VOCs in soil vapor were significantly elevated on the northern boundary of the Site near the former fuel pump island.
- PFAS impacts to groundwater observed Site-wide are likely the result of an off-Site source.

Impacts to sediments in the on-Site dry wells are likely attributed to exposure to contaminated fill and former historical operations.

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2.4 REMEDIAL ACTION OBJECTIVES

The Remedial Action Objectives (RAOs) for the Site are based on the RI results and established in the RAWP.

2.4.1 Soil

RAOs for Public Health Protection:

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation exposure to contaminants volatilizing from soil.

RAOs for Environmental Protection:

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

2.4.2 Groundwater

RAOs for Public Health Protection:

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

2.4.3 Soil Vapor

RAOs for Public Health Protection:

- Mitigate impacts to public health resulting from existing, or potential soil vapor intrusion (SVI) into buildings at the Site.

2.5 SUMMARY OF REMEDIAL ACTIONS

Haley & Aldrich of New York performed remedial actions at the Site in accordance with the NYSDEC-approved RAWP dated May 11, 2026, the Decision Document dated May 18, 2026, and applicable federal, state, and local rules and regulations. Remedial activities began on June 1, 2026 and are ongoing.[1]

The remedial actions performed at the Site included:

- Implementation of a *Construction Health and Safety Plan* and *Community Air Monitoring Plan* for the protection of on-Site workers, community/residents, and the environment during remediation and construction activities.
- Construction of a support of excavation system to facilitate excavation of soil exceeding RRSCOs to a depth of 10 ft bgs Site-wide, with deeper localized excavations to 15 ft bgs. Consistent with

[1] The revised and final SMP will identify the remedial action completion date.

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the Track 2 remedy, impacts above the RRSCOs at the Site may be left in place below 15 ft bgs where not considered source material.

- Implementation of soil erosion, pollution, and sediment control measures in compliance with applicable laws and regulations.
- Removal of the existing concrete cover and miscellaneous debris from the Site.
- Decommissioning of on-Site monitoring wells, as necessary, in accordance with NYSDEC Commissioner Policy (CP)-43 – Groundwater Monitoring Well Decommissioning Policy.
- Excavation, stockpiling, off-Site transport, and disposal of approximately 3,990[2] cubic yards of contaminated soil and fill material that exceeded RRSCOs in the upper 15 ft. The excavation extended up to 10 ft bgs across most of the Site, with deeper localized excavations to approximately 15 ft bgs.
- Removal of two 12,000-gallon USTs and associated appurtenances, as well as decommissioning and off-Site disposal during redevelopment in accordance with DER-10, 6 NYCRR Part 613.9, NYSDEC CP-51 – Soil Cleanup Guidance, and other applicable NYSDEC UST closure requirements.
- Screening for indications of contamination by visual means, odor, and monitoring PIDs of excavated material during intrusive Site work.
- Implementation of a preliminary waste characterization to facilitate off-Site disposal of excavated soil and fill.
- Appropriate off-Site disposal of material removed from the Site in accordance with federal, state, and local rules and regulations for handling, transport, and disposal.
- Backfilled the Site as needed for the redevelopment with certified-clean material (i.e., meeting RRSCOs), recycled concrete aggregate, or virgin, native crushed stone). Collection and analysis of confirmation soil samples at the proposed remediation depth in accordance with DER-10 to confirm a Track 2 remedy was achieved. Confirmation soil samples were analyzed for the Part 375 list of VOCs, SVOCs, pesticides, polychlorinated biphenyls (PCBs), metals, PFAS, and 1,4-dioxane. Over-excavation and additional endpoint sampling were performed to ensure impacted materials above RRSCOs were removed from the Site. In addition, documentation samples were collected from the 15-ft excavation depths in the northwestern and central portions of the Site.
- Operation of an active SSDS as an EC in the building. The active SSDS consists of a horizontal perforated polyvinyl chloride (PVC) pipeline within a permeable layer immediately beneath the building foundation slab and a vapor barrier system connecting to steel risers penetrating through the building to the roof. A blower fan will be installed on the roof and connected to the SSDS piping.

[2] Disposal volume estimated per the approved RAWP. The final volume to be included in revised and final SMP and Final Engineering Report (FER).

- Completion of post-mitigation sampling conducted concurrently with performance testing of the active SSDS no sooner than 30 days after installation. Details of the SSDS operations, maintenance, and monitoring are provided in the SMP.
- An EE, including ICs, was recorded to mitigate future exposure to residual contamination remaining at the Site.
- Publication of this SMP for long-term management of residual contamination as required by the EE, including plans for: (1) ICs and ECs; (2) monitoring; (3) operations and maintenance; and (4) reporting.
- Establishment of use restrictions, including prohibitions on the use of groundwater from the Site and prohibitions on sensitive Site uses, such as farming or vegetable gardening, in residual Site soil to significantly reduce the potential for future exposure pathways.
- Responsibilities associated with the remedial action, including permitting requirements and pretreatment requirements, were addressed in accordance with applicable federal, state, and local rules and regulations.

2.6 REMAINING CONTAMINATION

The achieved remedy includes Track 2 cleanup objectives, including removal of soil above RRSCOs to a depth of up to 15 ft bgs. Before building occupancy, a post-mitigation indoor air sampling event will be conducted at the Site to evaluate the potential for vapor intrusion into the on-Site building. The results will be submitted to the NYSDEC and NYSDOH.

2.6.1 Soil

Site-wide remedial excavation was completed to between 10 to 15 ft bgs to remove historic fill and contaminated materials that exceed RRSCOs within the Site boundary. RI and documentation endpoint sampling results indicate that remaining contamination consists of the VOCs acetone and n-propylbenzene, SVOCs, specifically PAHs, metals including barium, copper, lead, nickel, manganese, mercury, and zinc, PCBs, and pesticides. Endpoint sample results documenting the achievement of the remedial objectives will be included in the FER.

Table 1 and Figure 5 summarize the soil sample results that exceed UUSCOs and RRSCOs after completion of the remedial action.

2.6.2 Groundwater

Groundwater quality was characterized during the RI conducted as part of the BCP. During the RI, groundwater beneath the Site was found to have concentrations of VOCs, SVOCs, PFOS, and PFOA exceeding applicable NYS AWQS or Guidance Values (GVs). Total metals were also identified above the AWQS; however, dissolved metal samples detected only naturally occurring elements, such as iron, sodium, and manganese. Pesticides and PCBs were not detected above the AWQS GVs in the groundwater samples.

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Groundwater use at the Site is also subject to the ICs documented within the EE and is restricted for use as a source of potable or process water without necessary water quality treatment as determined by NYSDOH.

2.6.3 Soil Vapor

RI soil vapor analytical results completed before the remediation identified elevated concentrations of petroleum-related VOCs, such as BTEX, primarily in the northern portion of the former gasoline pump island area located on the northern-central Site boundary. In addition, CVOC contamination in soil vapor was also observed, with Site-wide slightly elevated concentrations. The remedy mitigated potential exposure pathways by removing source material, installing the foundation and vapor barrier, operating the active SSDS, and implementing land and groundwater use restrictions.

Remediation removed Site soil to a maximum depth of 15 ft bgs, which likely removed potential on-Site soil vapor sources at concentrations requiring monitoring or mitigation. To address remaining potential SVI at the Site, the active SSDS and a vapor barrier will be installed beneath the cellar slab of the new building constructed at the Site.

A post-mitigation indoor air sampling event will be conducted after completion of the building envelope, within one year of SSDS startup during the 2026 to 2027 heating season, to serve as final confirmation of the system efficacy. The evaluation will include up to six indoor air samples in the basement and cellar of the proposed building. Field parameters, such as PID readings and sub-slab pressure measurements, will be collected at sub-slab vapor monitoring points. Details are provided in Section 4.3. Sampling results, evaluations, and follow-up actions will be summarized in a letter report for NYSDEC review and approval.

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3. Institutional and Engineering Control Plan

3.1 GENERAL

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

This plan provides:

- a description of Site IC and ECs;
- the basic implementation and intended role of each IC and EC;
- a description of the key components of the ICs set forth in the EE;
- 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 and ECs, such as the implementation of the *Excavation Work Plan* (provided in Appendix C) for the proper handling of remaining contamination that may be disturbed during maintenance or redevelopment work on the Site; and
- other provisions necessary to identify or establish methods for implementing the IC and 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 EC systems; 2) prevent future exposure to remaining contamination, and; 3) limit the use and development of the Site to restricted residential, commercial, and industrial uses only. The EE requires adherence to these Site ICs that will be implemented under this SMP. ICs identified in the EE may not be discontinued without an amendment to or extinguishment of the EE. The IC boundaries are shown on Figure 2. These ICs are:

- The property may be used for restricted residential, commercial, or industrial use;
- ECs must be operated and maintained as specified in this SMP;
- ECs on the Site must be inspected and certified at a frequency and in the 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 NYC Department of Health and Mental Hygiene to render it safe for use as drinking water or for industrial purposes. The user must first notify and obtain written approval to do so from the Department;

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- 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 the manner defined in this SMP;
- All future activities that will disturb remaining contaminated material must be conducted in accordance with this SMP and the Excavation Work Plan provided in Appendix C, which details the provisions for management of future excavations in areas of remaining contamination;
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in this SMP;
- Operations, maintenance, monitoring, inspection, and reporting of mechanical or physical components of the remedy will be performed as defined in this SMP;
- Access to the Site must be provided to agents, employees, or other NYS representatives with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the EE;
- The potential for vapor intrusion must be evaluated for any buildings developed in the area within the IC boundaries noted on Figure 2, and potential impacts that are identified must be monitored or mitigated; and
- Vegetable gardens and farming on the Site are prohibited.

3.3 ENGINEERING CONTROLS

The primary EC for the Site is an active SSDS.

3.3.1 Active Sub-Slab Depressurization System

A start-up test will be conducted upon installation of the blower. Vacuum readings will be collected at each sub-slab Vapor Pin® and will be provided in the final FER. The as-built layout of the SSDS and subgrade details are included in Figures 6 through 8. The SSDS design plans are included in Appendix H.

The active SSDS mitigates the potential for SVI by providing a pathway for soil vapor to vent to the atmosphere. The major components of the active SSDS include:

- interconnected perforated 3-inch Schedule 40 PVC horizontal pipe embedded within a 8-inch permeable layer (3/4-inch washed aggregate);
- an exhaust stack consisting of solid steel pipe risers with a sample port assembly installed in the cellar for each riser at least 12 inches above the highest roof surface and at least 10 ft from an adjacent building or heating, ventilation, and air conditioning intakes. The riser includes a check valve and rain cap;

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- a pressure gauge and an alarm system installed to monitor riser pressure. If the blower or the SSDS does not function properly and the vacuum drops below 0.1 inches of water column, the warning device will be triggered, notifying the building superintendent, who in turn will notify Haley & Aldrich of New York; and
- seven permanent sub-slab vapor vacuum monitoring points (MP-1 to MP-7) in the permeable layer 2 to 3 inches below the vapor barrier to allow for the collection of post-mitigation sub-slab vacuum readings and additional system monitoring as needed.

The active SSDS layout and sub-grade details are provided on Figures 6 through 8. The blower and vapor barrier specifications are provided in Appendix D. The SSDS operations, maintenance, and monitoring requirements consist of initial startup testing, routine maintenance and monitoring activities, and non-routine maintenance activities and procedures for operating and maintaining the SSDS are documented in the Operations and Maintenance (O&M) Plan (Section 5 of this SMP).

3.3.2 SVI Evaluation and Media Monitoring Program

An SVI evaluation will be completed under this SMP. The evaluation is to include provisions for implementing actions recommended to address exposures related to SVI. The SVI will be conducted in the heating season and will be performed in general accordance with the NYSDOH's *Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York*. The data will evaluate whether SVI is a current potential exposure pathway, whether the active SSDS will be required to continue to operate, and whether any additional sampling is required. A discussion and summary of the results will be provided as outlined in the SMP.

As part of the Track 2 remedy, indoor air and ambient air samples will be collected after completion of the building envelope during the 2026 to 2027 heating season to demonstrate the effectiveness of the remedy. A total of six indoor air samples and one ambient air sample will be collected as shown on Figure 9. The sample locations were selected to be representative of Site conditions. The indoor and ambient air samples will be collected from breathing height (3 to 5 ft above the floor) from within the Site building and outside the Site building, respectively. The sampling flow rate will not exceed 0.2 liters per minute (L/min). Sampling will occur over 24 hours in residential spaces and over eight hours in commercial spaces. Indoor and ambient air samples will be collected in laboratory-supplied 2- or 6-liter SUMMA® canisters. 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 U.S. Environmental Protection Agency (USEPA) Method TO-15 and sent to an Environmental Laboratory Accreditation Program-certified laboratory. While post-mitigation indoor air sampling is conducted, field parameters, including PID readings and the sub-slab vacuum, will be measured at each sub-slab vapor monitoring point to confirm the system efficacy. The SSDS will have a network of seven sub-slab monitoring points as shown on Figure 6 (pending).

Sampling will be conducted as detailed in the Quality Assurance Project Plan (QAPP) provided in Appendix E. The Health and Safety Plan (HASP) is provided in Appendix F.

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After the initial sampling event, additional indoor air monitoring will continue as determined in consultation with NYSDEC and the NYSDOH. The SVI Evaluation must demonstrate that there is not a current exposure pathway prior to occupancy.

3.3.3 Criteria for Completion of Remediation/Termination of Remedial Systems

Generally, remedial processes are considered complete when monitoring indicates that the remedy has achieved the RAOs identified in 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 NYSDEC, confirmation samples of applicable environmental media are required before terminating remedial actions at the Site. Confirmation samples require Category B deliverables and a Data Usability Summary Report.

The RP will also conduct needed Site restoration activities, such as asphalt patching and decommissioning treatment system equipment.

3.3.3.1 Active Sub-Slab Depressurization System

Monitoring and maintaining the active SSDS will not be discontinued unless prior written approval is granted by the NYSDEC and the NYSDOH project managers. If monitoring data indicate that the SSDS may no longer be required, a work plan to discontinue the SSDS will be submitted by the RP to the NYSDEC and NYSDOH project managers. The work plan must include SVI sampling to verify that the SSDS is no longer needed and must comply with NYSDOH Soil Vapor Intrusion Guidance.

If the NYSDEC project manager approves termination of O&M of the SSDS, the RP will notify the property owner and ask whether the property owner wants to maintain the SSDS. If the property owner elects to maintain the system, the property owner will be responsible for the O&M of the SSDS going forward. If the property owner wants the SSDS removed, the RP will remove and dispose of the system and repair parts of the structure that were altered or modified by the SSDS, such as holes in the basement floor or walls.

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4. 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, and analytical methods for samples collected for Site management are included in the QAPP provided in Appendix E.

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

- sampling and analysis of all appropriate media (e.g., indoor air);
- assessing compliance with applicable 6 NYCRR, particularly Part 375 Soil Cleanup Objectives 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, protocols, and frequency;
- 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 of this SMP.

4.2 SITE-WIDE INSPECTION

Site-wide inspections will be performed at least once per year. These periodic inspections must be conducted when the ground surface is visible (e.g., there is no snow cover). Site-wide inspections will be performed by a qualified environmental professional as defined in 6 NYCRR Part 375, a P.E. who is licensed and registered in NYS, or a qualified person who directly reports to a P.E. who is licensed and registered in NYS. 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 severe weather conditions that may affect ECs or monitoring devices. SSDS inspection forms will be used for Site-wide inspections. During these inspections, inspection forms will be completed as provided in Appendix G (Site Management Forms).

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The forms will include sufficient information to assess the following:

- compliance with ICs, including Site usage;
- an evaluation of the condition and continued effectiveness of the Site ECs;
- general Site conditions at the time of the inspection;
- the Site management activities being conducted, including where appropriate, confirmation sampling and a health and safety inspection; and
- confirming that Site records are up to date.

Inspections of Site remedial components 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 (PRR). 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;
- if the Site is compliant with requirements of this SMP and the EE;
- achievement of remedial performance criteria; and
- if Site records are complete and up to date.

Reporting requirements are outlined in Section 7 of this SMP.

Inspections will also be performed in the event of an emergency. If an emergency, such as a natural disaster or an unforeseen failure 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 provided by noon of the following day. In addition, a Site inspection will be conducted within five days of the event to verify the effectiveness of the IC and ECs implemented at the Site by a qualified environmental professional as defined in 6 NYCRR Part 375. Written confirmation must be provided to the NYSDEC project manager within seven 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 RP will submit follow-up status reports to the NYSDEC within 45 days of the event on actions taken to respond to an emergency event requiring ongoing responsive action, describing and documenting actions taken to restore the effectiveness of the ECs.

If there are on-Site and/or off-Site SSDSs at the Site, periodic inspections are required. For simple systems, such as a standard SSDS in a single-family home with no complications, exterior inspections should be conducted at least annually, and comprehensive inspections should be conducted at least every five years. For more complex systems, inspection frequency will be determined with the NYSDEC project manager before submitting the SMP.

The RP will conduct exterior inspections of the SSDS annually and perform comprehensive inspections annually. Exterior inspections will include confirming that the fan is operating as designed, determining

whether there is damage to the stack or other exterior system components, and determining whether there have been structural changes, such as an addition to the structure. Comprehensive inspections include all of the activities required in the exterior inspection and an interior inspection, which include confirming a pressure differential on the manometer, inspecting the interior components for damage, recording vacuum readings from sub-slab vacuum monitoring points, and inspecting the basement area for cracks in the basement floors and walls that may have developed since the SSDS was installed. The RP will notify the NYSDEC project manager regarding problems within three days of the inspection. Inspection reports will be emailed to the NYSDEC Project Manager and included in the next PRR. Needed repairs will be made promptly according to the procedures in the Operation and Maintenance Plan (Section 5).

4.3 REMEDIAL SYSTEM MONITORING AND SAMPLING

4.3.1 Remedial System Monitoring

Monitoring of the SSDS will be performed on a routine basis, as identified in the table below (Table III – Remedial System Monitoring Requirements and Schedule). The monitoring of remedial systems must be conducted by a QEP as defined in 6 NYCRR Part 375, a P.E. who is licensed and registered in New York State, or a qualified person who directly reports to a P.E. who is licensed and registered in New York State (depending on the need to evaluate ECs). 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 SSDS has been reported or an emergency occurs that is deemed likely to affect the operation of the system. SSDS components to be monitored include, but are not limited to, the components included in Table III on the following page.

Table III: Remedial System Monitoring Requirements and Schedule

SSDS Component	Monitoring Parameter	Operating Range	Monitoring Schedule
Vacuum Monitoring Points	Functionality and Integrity	0.004 inches of water column (minimum)	Monthly for the first quarter and quarterly thereafter for the first year, then annually
Vacuum Gauges	Vacuum Pressure	greater than 0.1 inches of water column	Annually
Exhaust Points	Motor Operation, Functionality, and Integrity	not applicable	Annually
Alarm System	Functionality and Integrity	not applicable	Annually
Suction Blower	Functionality and Integrity	to be determined	Annually

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A complete list of components to be inspected is provided in the Inspection Checklist, provided in Appendix G. If equipment readings are not within their specified operational range, or if equipment is observed to be malfunctioning, or the system is not performing within specifications, maintenance and repair consistent with the O&M Plan are required.

4.4 POST-REMEDIATION MEDIA MONITORING AND SAMPLING

4.4.1 Post-Mitigation Indoor Air Quality Sampling

Post-mitigation sampling will be performed after the building envelope is complete during the heating season and after the SSDS has been active for at least 30 days to assess the remedy performance. Modification to the frequency or sampling requirements will require approval from the NYSDEC project manager.

The network of on-Site sample locations has been designed to be representative of Site conditions. The locations of the indoor and ambient air samples are shown on Figure 9. Analytical parameters are provided in Table 1 of the QAPP included in Appendix E.

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.

Table IV: Post-Remediation Sampling Requirements and Schedule

Sampling Location	Analytical Parameters	Schedule
	VOCs (USEPA Method 8260B)	VOCs (USEPA Method TO-15)
Six Indoor and One Ambient Air Samples	X	One sampling event during the heating season upon completion of Building Envelope

Detailed sample collection and analytical procedures and protocols are provided in the QAPP included in Appendix E and the following sampling plans.

4.4.1.1 Post-Mitigation Indoor Air Quality Sampling Plan

Six indoor air samples and one ambient air sample will be collected from breathing height (3 to 5 ft above the floor) from within the Site building and outside the Site building, respectively. The sampling flow rate will not exceed 0.2 L/min. Sampling will occur over 24 hours in residential spaces and over eight hours in commercial spaces. Indoor air samples will be collected in laboratory-supplied 2- or 6-liter SUMMA® canisters. 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 USEPA Method TO-15 and sent to an Environmental Laboratory Accreditation Program-certified laboratory. While post-mitigation indoor air sampling is conducted, field parameters, such as PID readings and the sub-slab vacuum, will be measured at each sub-slab vapor monitoring point to confirm the system

efficacy. A minimum vacuum of 0.004 inches of water column (1 Pascal) must be achieved to demonstrate that the SSDS is effective.

4.4.2 Monitoring and Sampling Protocol

All sampling activities will be recorded in a field book or the associated sampling log provided in Appendix G. Other observations, including the 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 details regarding monitoring and sampling protocols are provided in the QAPP included in Appendix E.

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5. Operations and Maintenance Plan

5.1 GENERAL

This O&M Plan provides a description of the measures necessary to operate, monitor, and maintain the mechanical components of the remedy selected for the Site. This O&M Plan includes:

- the procedures necessary to allow individuals unfamiliar with the Site to operate and maintain the SSDS; and
- updates to reflect changes in Site conditions or the manner in which the SSDS is operated and maintained.

Further details regarding SSDS O&M are provided in Appendix H. A copy of this O&M Manual and the complete SMP will be maintained at the Site. This O&M Plan is not to be used as a stand-alone document, but as a component of this SMP.

5.2 REMEDIAL SYSTEM PERFORMANCE CRITERIA

An active SSDS was installed at the Site to mitigate the potential for SVI into the building. As-built drawings for the SSDS are included on Figures 6 through 8. A minimum vacuum of 0.004 inches of water column (1 Pascal) must be achieved to demonstrate that the SSDS is effective. Details pertaining to the performance monitoring of the SSDS is outlined in Section 5.3.

5.3 ACTIVE SSDS OPERATIONS AND MAINTENANCE

The following sections describe SSDS O&M. Blower and vapor barrier specifications, an O&M Manual, and as-built drawings of the SSDS are provided in Appendix D, Appendix H, and Figures 6 through 8, respectively.

5.3.1 SSDS Startup and Testing

This subsection outlines the procedures for confirming the effectiveness and proper installation of the SSDS before building occupancy and complies with the post-mitigation and confirmation testing requirements of NYSDOH's Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, dated October 2006 and is consistent with the NYSDEC-approved RAWP. The following actions will be performed after SSDS startup:

1. Negative Pressure of the sub-slab area relative to indoor air will be measured at each monitoring point using an appropriate hand-held instrument. A negative differential pressure of 0.004 inches of water column will be confirmed between the indoor and the sub-slab vapor spaces.
2. The operation of the alarm device for low or no vacuum will be confirmed.

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The system testing described above will be conducted if in the course of the SSDS lifetime, significant changes are made to the system and the system must be restarted. Additionally, startup testing will be required if there is a change in building use or occupancy. NYSDEC and NYSDOH must be notified of changes in building use or occupancy. Subsequent to the initial startup testing, bi-annual inspection and monitoring of the SSDS will be performed, as described below.

5.3.2 Routine System Operations and Maintenance

Routine operation involves the effective distribution of soil vapor from the subsurface, through the SSDS conduits, and out from the riser outlets. Routine inspection will be conducted by a qualified engineer or building personnel to ensure that components of the SSDS are operating properly and will continue until NYSDEC and NYSDOH have determined there is no need for such a system. The operation of the SSDSs will not be discontinued without written approval from the NYSDEC.

Personnel will continue routine maintenance on the SSDS bi-annually and will include, at a minimum:

- conducting a visual inspection of the complete system;
- identifying and repairing of damage;
- inspecting the discharge location of the vent pipe to ensure that no new air intake or operable window is located nearby;
- inspecting the floor slab and foundation walls for evidence of cracks and/or holes, and repair of cracks and/or holes, if required; and
- inspecting of sealing around any monitoring wells and floor cleanout covers.

The SSDS fan does not require routine and preventive maintenance for efficient operation. If maintenance is required, it shall be performed by qualified building personnel. NYSDOH and NYSDEC must be notified of any maintenance required as a result of the routine inspections. **Appendix G** contains a routine maintenance SSDS checklist.

5.3.3 Non-Routine Operation and Maintenance

Non-routine maintenance would typically occur when the warning device indicates that the SSDS is not working properly, or the system becomes damaged. The scope of non-routine maintenance will vary depending upon the situation and the severity of the condition. A severe condition is defined as a condition where the system cannot be repaired by qualified building personnel.

If an emergency occurs, such as a natural disaster or an unforeseen failure of the ECs, which results in a severe condition, an inspection of the Site will be conducted by qualified building personnel immediately following the event and reported to NYSDEC and NYSDOH by noon the following day. If a severe condition is observed during a routine inspection, the NYSDEC and NYSDOH will be notified within 48 hours of the inspection. NYSDOH and NYSDEC must be notified of any maintenance required as a result of the routine inspections.

5.3.4 System Monitoring Devices and Alarms

The SSDS has a warning device to indicate that the system is not generating vacuum. In the event that warning device is activated, applicable maintenance and repairs will be conducted, as specified in the O&M Plan, and the SSDS will be restarted. Operational problems will be noted in the PRR to be prepared for that reporting period.

5.3.5 Fire Safety

The RP will conduct an annual facility walk with the appropriate building personnel if requested by local authorities. 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 RP to implement the recommendations and/or revise the SMP.

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6. Periodic Assessments/Evaluations

6.1 CLIMATE CHANGE VULNERABILITY ASSESSMENT

Increases in both the severity and frequency of storms and weather events, an increase in sea level elevations and accompanying flooding impacts, shifting precipitation patterns, and wide temperature fluctuation resulting from global climate change and instability have the potential to significantly impact the performance, effectiveness, and protectiveness of a given site and its 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 its ECs to severe storms, weather events, and associated flooding. This section also identifies vulnerability assessment updates that will be conducted for the Site in PRRs.

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 an implemented green technology. This section provides an environmental footprint analysis of the remedy as implemented at the time this SMP was prepared. This section of the SMP also provides a summary of green remediation evaluations to be completed for the Site during Site management reported in PRRs.

A blank copy of the climate screening checklist, which assesses potential climate impacts alongside Site work, is included in Appendix I. During the SVI evaluation at the Site, the environmental footprint can be minimized by taking public transportation to the Site and reducing waste generated during the SVI evaluation investigation. Matrices that will be evaluated for the environmental footprint analysis in the SVI evaluation report will include transportation to the Site and on-Site grid electricity usage.

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 NYSDEC project manager. Reporting of these modifications will be presented in PRRs.

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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 using reagents and consumables. Spent materials will be sent for recycling, as appropriate.

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 to conduct system checks and collect samples, and shipping samples to a laboratory for analyses have direct or inherent energy costs. The schedule and means of these periodic activities have been prepared so that these tasks can be accomplished in a manner that does not impact remedy protectiveness, yet reduces energy and resource expenditures.

6.2.5 Metrics and Reporting

As discussed in Section 6.2 and as shown in Appendix I (Green Remediation Metrics), 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 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.

6.3 REMEDIAL SYSTEM OPTIMIZATION

An RSO study will be conducted any time that the NYSDEC project manager or the RP requests in writing that an in-depth evaluation of the remedy is needed. An RSO may be appropriate if any of the following occurs:

- 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 exceed the estimated costs.
- The remedial system is not performing as expected or as designed.
- A previously unidentified source material may be suspected.
- A plume shift has potentially occurred.
- The Site conditions change due to development, change of use, or change in groundwater use.
- There is an anticipated transfer of the Site management to another RP or agency.
- A new and applicable remedial technology becomes available.

An RSO will provide a critique of a Site's conceptual model, summarize 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 provide a basis for changing the remedial strategy.

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

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7. 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 G. 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 P.E. who is licensed and registered in NYS, or a qualified person who directly reports to a P.E. who is licensed and registered in NYS.

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 V (see below) and summarized in the PRR.

Table V: Schedule of Interim Monitoring/Inspection Reports

Task/Report	Reporting Frequency*
Post-Mitigation Indoor Air Sampling	One time, upon the completion of the building envelope, and during heating season; if the results require further action, additional sampling will be conducted as determined by NYSDEC.
Periodic Review Report	16 months after issuance of the COC; annually thereafter.

Notes:

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

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

- date of event or reporting period;
- name, company, and position of persons conducting monitoring/inspection activities;
- description of the activities performed;
- where appropriate, color photographs or sketches showing the approximate location of 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, and/or outdoor air);
- copies of field forms completed (e.g., well sampling logs and chain of custody documentation);
- sampling results in comparison to appropriate standards/criteria;
- a figure illustrating sample type and sampling locations;
- copies of laboratory data sheets and the required laboratory data deliverables required for the points sampled (to be submitted electronically in the NYSDEC-identified format);
- observations, conclusions, or recommendations; and

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- 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 persons 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 (attached to the checklist/form).

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

- date of event;
- name, company, and position of persons 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 (attached to the checklist/form).

Data will be reported in digital format as determined by the NYSDEC. Currently, data will 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 PRR will be submitted to the NYSDEC project manager beginning 16 months after the COC is issued. After submittal of the initial PRR, the next PRR will 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 PRR will be prepared that addresses the Site described in Appendix A (EE). 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 PRR. The report will include:

- Identification, assessment, and certification of all ECs/ICs required by the Site remedy.
- Results of the required annual Site inspections, 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.
- 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 wastes generated during the reporting period, along with waste characterization data, manifests, and disposal documentation.
- A summary of any discharge monitoring data and information generated during the reporting period with comments and conclusions.
- Data summary tables and graphical representations of contaminants of concern by media (groundwater and soil vapor), which include a listing of all compounds analyzed, and 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 analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for the samples collected during the reporting period will be submitted in digital format as determined by the NYSDEC. Currently, data are 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 RAWP, Record of Decision (ROD), or Decision Document;
  - the operation and the effectiveness of treatment units, including identification of any needed repairs or modifications;
  - 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 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;

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- 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 I;
- 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.

7.2.1 Certification of Institutional and Engineering Controls

Following the last inspection of the reporting period, a P.E. licensed to practice and registered in NYS will prepare and include in the PRR the following certification per NYSDEC DER-10 requirements:

"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;
- If a financial assurance mechanism is required under the oversight document for the Site, the mechanism remains valid and sufficient for the intended purpose under the document;
- Use of the Site is compliant with the EE;
- 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;

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

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Law. I, [name], of [business address], am certifying as [Owner/Remedial Party or Owner's/Remedial Party's Designated Site Representative] for the Site."

Every five years, the PRR will also include certification of:

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

The signed certification will be included in the PRR.

The PRR will be submitted, in electronic format, to the NYSDEC project manager and the NYSDOH project manager. The PRR 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 performed (see Section 6.3), upon completion of an RSO, an RSO report must be submitted to the NYSDEC project manager for approval. 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 will be implemented upon NYSDEC approval. Additional work plans, design documents, and HASPs may still be required to implement the recommendations based upon the actions that need to be taken. A FER 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.

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5. Haley & Aldrich of New York, 2024b. *Limited Phase II Environmental Site Investigation Report, 860 Flushing Avenue*. Prepared for Flushing Holdings NY LLC. September.

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9. New York State Department of Environmental Conservation, 2011. DER-31 – Green Remediation. January.

10. New York State Department of Environmental Conservation, 2026. Decision Document. May.

11. New York State Department of Environmental Conservation, Commissioner Policy 43 – Groundwater Monitoring Well Decommissioning.

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TABLE 1
REMAINING CONTAMINATION IN SOIL
860 FLUSHING AVENUE
BROOKLYN, NEW YORK
FILE NO. 0211437

	Criteria																						
Location Name	Restricted Use Soil Cleanup Objectives - Protection of Groundwater 2025	Restricted Use Soil Cleanup Objectives - Residential 2025	Unrestricted Use Soil Cleanup Objectives 2025	SB-01	SB-03	SB-03_N	SB-06_S	SB-07	SB-10	SB-11	SB-11_N	SB-11_S	SB-12	SB-14	SB-15	SB-16	SB-17	UST_W2_SW	EP-03	EP-06	EP-07	EP-08	EP-9	EP-10	EP-11
Sample Name				SB-01_14-16	SB-03_15	SB-03_N_13	SB-06_S_13	SB-07_14-16	SB-10_14-16	SB-11_25-27	SB-11_N_13	SB-11_S_13	SB-12_25-27	SB-14_14-16	SB-15_20	SB-16_14-16	SB-17_23-25	UST_W2_SW_13	EP-03_10	EP-06_10	EP-07_11	EP-08_15	EP-9_11	EP-10_10	EP-11_10
Sample Date				07/22/2025	08/14/2026	8/14/2026	07/24/2026	07/21/2025	07/24/2025	07/24/2025 07/24/2025 25G1657-05	07/24/2026	07/24/2026	07/24/2025	07/25/2025	07/24/2025	11/20/2025	11/20/2025	08/19/2026	07/02/2026	07/02/2026	08/04/2026	8/19/2026	07/20/2026	07/17/2026	07/20/2026
Lab Sample ID				25G1455-04	L2652833-01	L2652833-02	L2647551-08	25G1376-08	25G1657-15	25G1657-05RE1	L2647551-02	L2647551-03	25G1657-12	25G1718-08	25G1657-16	L2574359-04	L2574359-08	L2654062-05	L2641792-03	L2641792-05	L2649891-05	L2574359-08	L2645979-03	L2645704-02	L2645984-01
Sample Depth (bgs)				14 - 16 (ft)	15 - 15.5 (ft)	13 - 13.5 (ft)	13 - 13.5 (ft)	14 - 16 (ft)	14 - 16 (ft)	25 - 27 (ft)	13 - 13.5 (ft)	13 - 13.5 (ft)	25 - 27 (ft)	14 - 16 (ft)	20 (ft)	14 - 16 (ft)	23 - 25 (ft)	13 - 13.5 (ft)	10 - 10.5 (ft)	10 - 10.5 (ft)	11 - 11.5 (ft)	15 - 15.5 (ft)	11 - 11.5 (ft)	10 - 10.5 (ft)	10 - 10.5 (ft)
Volatile Organic Compounds (mg/kg)																									
1,1,1,2-Tetrachloroethane	NA	NA	NA	ND (0.0042)	ND (0.00059)	ND (0.00066)	ND (0.0008)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.00077)	ND (0.00059)	ND (0.47)	ND (0.0054)	ND (0.0054)	ND (0.00064)	ND (0.027)	ND (0.00052)	ND (0.00053)	ND (0.00053)	-	-	-	ND (0.00042)	ND (0.00038)
1,1,1-Trichloroethane	0.68	100	0.68	ND (0.0042)	ND (0.00059)	ND (0.00066)	ND (0.0008)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.00077)	ND (0.00059)	ND (0.47)	ND (0.0054)	ND (0.0054)	ND (0.00064)	ND (0.027)	ND (0.00052)	ND (0.00053)	ND (0.00053)	-	-	-	ND (0.00042)	ND (0.00038)
1,1,2,2-Tetrachloroethane	NA	NA	NA	ND (0.0042)	ND (0.00059)	ND (0.00066)	ND (0.0008)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.00077)	ND (0.00059)	ND (0.47)	ND (0.0054)	ND (0.0054)	ND (0.00064)	ND (0.027)	ND (0.00052)	ND (0.00053)	ND (0.00053)	-	-	-	ND (0.00042)	ND (0.00038)
1,1,2-Trichloroethane	NA	NA	NA	ND (0.0042)	ND (0.0012)	ND (0.0013)	ND (0.0016)	ND (0.0057)	ND (0.004) J	ND (0.0048)	ND (0.0015)	ND (0.0012)	ND (0.47)	ND (0.0054)	ND (0.0054) J	ND (0.0013)	ND (0.054)	ND (0.001)	ND (0.001)	ND (0.0011)	-	-	-	ND (0.00084)	ND (0.00077)
1,1-Dichloroethane	0.27	47	0.27	ND (0.0042)	ND (0.0012)	ND (0.0013)	ND (0.0016)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.0015)	ND (0.0012)	ND (0.47)	ND (0.0054)	ND (0.0054)	ND (0.0013)	ND (0.054)	ND (0.001)	ND (0.001)	ND (0.0011)	-	-	-	ND (0.00084)	ND (0.00077)
1,1-Dichloroethene	0.33	0.98	0.24	ND (0.0042)	ND (0.0012)	ND (0.0013)	ND (0.0016)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.0015)	ND (0.0012)	ND (0.47)	ND (0.0054)	ND (0.0054)	ND (0.0013)	ND (0.054)	ND (0.001)	ND (0.001)	ND (0.0011)	-	-	-	ND (0.00084)	ND (0.00077)
1,1-Dichloropropene	NA	NA	NA	-	ND (0.00059)	ND (0.00066)	ND (0.0008)	-	-	-	ND (0.00077)	ND (0.00059)	-	-	-	ND (0.00064)	ND (0.027)	ND (0.00052)	ND (0.00053)	ND (0.00053)	-	-	-	ND (0.00042)	ND (0.00038)
1,2,3-Trichlorobenzene	NA	NA	NA	ND (0.0042)	ND (0.0024)	ND (0.0026)	ND (0.0032)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.0031)	ND (0.0024)	ND (0.47)	ND (0.0054)	ND (0.0054)	ND (0.0025)	ND (0.11)	ND (0.0021)	ND (0.0021)	ND (0.0021)	-	-	-	ND (0.0017)	ND (0.0015)
1,2,3-Trichloropropane	NA	NA	NA	ND (0.0042)	ND (0.0024)	ND (0.0026)	ND (0.0032)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.0031)	ND (0.0024)	ND (0.47)	ND (0.0054)	ND (0.0054)	ND (0.0025)	ND (0.11)	ND (0.0021)	ND (0.0021)	ND (0.0021)	-	-	-	ND (0.0017)	ND (0.0015)
1,2,4,5-Tetramethylbenzene	NA	NA	NA	-	ND (0.0024)	ND (0.0026)	ND (0.0032)	-	-	-	ND (0.0031)	ND (0.0024)	-	-	-	0.00059 J	50	ND (0.0021)	0.061	ND (0.0021)	-	-	-	ND (0.0017)	0.0025
1,2,4-Trichlorobenzene	NA	NA	NA	ND (0.0042)	ND (0.0024)	ND (0.0026)	ND (0.0032)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.0031)	ND (0.0024)	ND (0.47)	ND (0.0054)	ND (0.0054)	ND (0.0025)	ND (0.11)	ND (0.0021)	ND (0.0021)	ND (0.0021)	-	-	-	0.00032 J	0.0015
1,2,4-Trimethylbenzene	5.9	100	5.9	ND (0.0042)	ND (0.0024)	ND (0.0026)	ND (0.0032)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.0031)	ND (0.0024)	2.5 J	ND (0.0054)	ND (0.0054)	0.0034	0.059 J	ND (0.0021)	2.3	ND (0.0021)	-	-	-	ND (0.0017)	ND (0.0015)
1,2-Dibromo-3-chloropropane (DBCP)	NA	NA	NA	ND (0.0042)	ND (0.0036)	ND (0.004)	ND (0.0048)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.0046)	ND (0.0035)	ND (0.47) J	ND (0.0054)	ND (0.0054)	ND (0.0038)	ND (0.16)	ND (0.0031)	ND (0.0032)	ND (0.0032)	-	-	-	ND (0.0025)	ND (0.0023)
1,2-Dibromoethane (Ethylene Dibromide)	NA	NA	NA	ND (0.0042)	ND (0.0012)	ND (0.0013)	ND (0.0016)	ND (0.0057)	ND (0.004) J	ND (0.0048)	ND (0.0015)	ND (0.0012)	ND (0.47) J	ND (0.0054)	ND (0.0054) J	ND (0.0013)	ND (0.054)	ND (0.001)	ND (0.001)	ND (0.0011)	-	-	-	ND (0.00084)	ND (0.00077)
1,2-Dichlorobenzene	1.1	100	1.1	ND (0.0042)	ND (0.0024)	ND (0.0026)	ND (0.0032)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.0031)	ND (0.0024)	ND (0.47)	ND (0.0054)	ND (0.0054)	ND (0.0025)	ND (0.11)	ND (0.0021)	ND (0.0021)	ND (0.0021)	-	-	-	ND (0.0017)	ND (0.0015)
1,2-Dichloroethane	0.02	5.8	0.02	ND (0.0042)	ND (0.0012)	ND (0.0013)	ND (0.0016)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.0015)	ND (0.0012)	ND (0.47)	ND (0.0054)	ND (0.0054)	ND (0.0013)	ND (0.054)	ND (0.001)	ND (0.001)	ND (0.0011)	-	-	-	ND (0.00084)	ND (0.00077)
1,2-Dichloroethene (total)	NA	NA	NA	-	ND (0.0012)	ND (0.0013)	ND (0.0016)	-	-	-	ND (0.0015)	ND (0.0012)	-	-	-	ND (0.0013)	ND (0.054)	ND (0.001)	ND (0.001)	ND (0.0011)	-	-	-	ND (0.00084)	ND (0.00077)
1,2-Dichloropropane	NA	NA	NA	ND (0.0042)	ND (0.0012)	ND (0.0013)	ND (0.0016)	ND (0.0057)	ND (0.004) J	ND (0.0048)	ND (0.0015)	ND (0.0012)	ND (0.47)	ND (0.0054)	ND (0.0054) J	ND (0.0013)	ND (0.054)	ND (0.001)	ND (0.001)	ND (0.0011)	-	-	-	ND (0.00084)	ND (0.00077)
1,3,5-Trimethylbenzene	3.1	100	3.1	ND (0.0042)	ND (0.0024)	ND (0.0026)	ND (0.0032)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.0031)	ND (0.0024)	0.79	ND (0.0054)	ND (0.0054)	0.0016 J	0.01 J	ND (0.0021)	0.048	ND (0.0021)	-	-	-	ND (0.0017)	ND (0.0015)
1,3-Dichlorobenzene	2.6	38	2.6	ND (0.0042)	ND (0.0024)	ND (0.0026)	ND (0.0032)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.0031)	ND (0.0024)	ND (0.47)	ND (0.0054)	ND (0.0054)	ND (0.0025)	ND (0.11)	ND (0.0021)	ND (0.0021)	ND (0.0021)	-	-	-	ND (0.0017)	0.00017 J
1,3-Dichloropropane	NA	NA	NA	-	ND (0.0024)	ND (0.0026)	ND (0.0032)	-	-	-	ND (0.0031)	ND (0.0024)	-	-	-	ND (0.0025)	ND (0.11)	ND (0.0021)	ND (0.0021)	ND (0.0021)	-	-	-	ND (0.0017)	ND (0.0015)
1,3-Dichloropropene	NA	NA	NA	-	ND (0.00059)	ND (0.00066)	ND (0.0008)	-	-	-	ND (0.00077)	ND (0.00059)	-	-	-	ND (0.00064)	ND (0.027)	ND (0.00052)	ND (0.00053)	ND (0.00053)	-	-	-	ND (0.00042)	ND (0.00038)
1,4-Dichlorobenzene	1.8	24	1.8	ND (0.0042)	ND (0.0024)	ND (0.0026)	ND (0.0032)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.0031)	ND (0.0024)	ND (0.47)	ND (0.0054)	ND (0.0054)	ND (0.0025)	ND (0.11)	ND (0.0021)	ND (0.0021)	ND (0.0021)	-	-	-	ND (0.0017)	0.00019 J
1,4-Diethylbenzene	NA	NA	NA	-	ND (0.0024)	ND (0.0026)	ND (0.0032)	-	-	-	ND (0.0031)	ND (0.0024)	-	-	-	0.0017 J	12	ND (0.0021)	0.0075	ND (0.0021)	-	-	-	ND (0.0017)	0.00052 J
1,4-Dioxane	0.1	5.7	0.1	-	ND (0.095)	ND (0.1)	ND (0.13)	-	-	-	ND (0.12)	ND (0.094)	-	-	-	ND (0.1)	ND (4.4)	ND (0.083)	ND (0.084)	ND (0.085)	-	-	-	ND (0.067)	ND (0.062)
2,2-Dichloropropane	NA	NA	NA	-	ND (0.0024)	ND (0.0026)	ND (0.0032)	-	-	-	ND (0.0031)	ND (0.0024)	-	-	-	ND (0.0025)	ND (0.11)	ND (0.0021)	ND (0.0021)	ND (0.0021)	-	-	-	ND (0.0017)	ND (0.0015)
2-Butanone (Methyl Ethyl Ketone)	0.1	100	0.1	ND (0.0042)	ND (0.012)	ND (0.013)	ND (0.016)	ND (0.0057)	ND (0.004)	0.0044 J	ND (0.015)	ND (0.012)	ND (0.47)	ND (0.0054)	ND (0.0054)	ND (0.013)	ND (0.54)	ND (0.01)	0.0023 J	ND (0.011)	-	-	-	ND (0.0084)	ND (0.0077)
2-Chlorotoluene	NA	NA	NA	-	ND (0.0024)	ND (0.0026)	ND (0.0032)	-	-	-	ND (0.0031)	ND (0.0024)	-	-	-	ND (0.0025)	ND (0.11)	ND (0.0021)	ND (0.0021)	ND (0.0021)	-	-	-	ND (0.0017)	ND (0.0015)
2-Hexanone (Methyl Butyl Ketone)	NA	NA	NA	ND (0.0042)	ND (0.012)	ND (0.013)	ND (0.016)	ND (0.0057)	ND (0.004) J	ND (0.0048)	ND (0.015)	ND (0.012)	ND (0.47)	ND (0.0054)	ND (0.0054) J	ND (0.013)	ND (0.54)	ND (0.01)	ND (0.01)	ND (0.011)	-	-	-	0.0084 R	ND (0.0077)
2-Phenylbutane (sec-Butylbenzene)	25	100	25	ND (0.0042)	ND (0.0012)	ND (0.0013)	ND (0.0016)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.0015)	ND (0.0012)	ND (0.47) J	ND (0.0054)	ND (0.0054)	0.00031 J	8	ND (0.001)	0.0062	ND (0.0011)	-	-	-	ND (0.00084)	0.0006 J
4-Chlorotoluene	NA	NA	NA	-	ND (0.0024)	ND (0.0026)	ND (0.0032)	-	-	-	ND (0.0031)	ND (0.0024)	-	-	-	ND (0.0025)	ND (0.11)	ND (0.0021)	ND (0.0021)	ND (0.0021)	-	-	-	ND (0.0017)	ND (0.0015)
4-Ethyltoluene (1-Ethyl-4-Methylbenzene)	NA	NA	NA	-	ND (0.0024)	ND (0.0026)	ND (0.0032)	-	-	-	ND (0.0031)	ND (0.0024)	-	-	-	0.0017 J	0.14	ND (0.0021)	0.12	ND (0.0021)	-	-	-	ND (0.0017)	ND (0.0015)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	NA	NA	NA	ND (0.0042)	ND (0.012)	ND (0.013)	ND (0.016)	ND (0.0057)	ND (0.004) J	ND (0.0048)	ND (0.015)	ND (0.012)	ND (0.47)	ND (0.0054)	ND (0.0054) J	ND (0.013)	ND (0.54)	ND (0.01)	ND (0.01)	ND (0.011)	-	-	-	0.0084 R	ND (0.0077)
Acetone	0.03	100	0.03	ND (0.0083)	ND (0.012)	***0.036***	ND (0.016)	0.0068 J	ND (0.0081)	***0.053***	ND (0.015)	0.017	ND (0.94)	ND (0.011)	0.0085 J	ND (0.013)	ND (0.54)	ND (0.01)	***0.035 J+***	ND (0.011)	-	-	-	ND (0.0084)	0.0083
Acrolein	NA	NA	NA	ND (0.0083)	-	-	-	ND (0.011)	ND (0.0081)	ND (0.0096)	-	-	ND (0.94)	ND (0.011)	ND (0.011)	-	-	-	-	-	-	-	-	-	-
Acrylonitrile	NA	NA	NA	ND (0.0042)	ND (0.0047)	ND (0.0053)	ND (0.0064)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.0061)	ND (0.0047)	ND (0.47)	ND (0.0054)	ND (0.0054)	ND (0.0051)	ND (0.22)	ND (0.0042)	ND (0.0042)	ND (0.0042)	-	-	-	ND (0.0034)	ND (0.0031)
Benzene	0.06	3.7	0.06	ND (0.0042)	ND (0.00059)	ND (0.00066)	ND (0.0008)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.00077)	ND (0.00059)	ND (0.47)	ND (0.0054)	ND (0.0054)	ND (0.00064)	ND (0.027)	ND (0.00052)	ND (0.00053)	ND (0.00053)	-	-	-	ND (0.00042)	ND (0.00038)
Bromobenzene	NA	NA	NA	-	ND (0.0024)	ND (0.0026)	ND (0.0032)	-	-	-	ND (0.0031)	ND (0.0024)	-	-	-	ND (0.0025)	ND (0.11)	ND (0.0021)	ND (0.0021)	ND (0.0021)	-	-	-	ND (0.0017)	ND (0.0015)
Bromodichloromethane	NA	NA	NA	ND (0.0042)	ND (0.00059)	ND (0.00066)	ND (0.0008)	ND (0.0057)	ND (0.004) J	ND (0.0048)	ND (0.00077)	ND (0.00059)	ND (0.47) J	ND (0.0054)	ND (0.0054) J	ND (0.00064)	ND (0.027)	ND (0.00052)	ND (0.00053)	ND (0.00053)	-	-	-	ND (0.00042)	ND (0.00038)
Bromoform	NA	NA	NA	ND (0.0042)	ND (0.0047)	ND (0.0053)	ND (0.0064)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.0061)	ND (0.0047)	ND (0.47) J	ND (0.0054)	ND (0.0054)	ND (0.0051)	ND (0.22)	ND (0.0042)	ND (0.0042)	ND (0.0042)	-	-	-	ND (0.0034)	ND (0.0031)
Bromomethane (Methyl Bromide)	NA	NA	NA	ND (0.0042)	ND (0.0024)	ND (0.0026)	ND (0.0032)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.0031)	ND (0.0024)	ND (0.47)	ND (0.0054)	ND (0.0054)	ND (0.0025)	ND (0.11)	ND (0.0021)	ND (0.0021)	ND (0.0021)	-	-	-	ND (0.0017)	ND (0.0015)
Carbon disulfide	NA	NA	NA	ND (0.0042)	ND (0.012)	ND (0.013)	ND (0.016)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.015)	ND (0.012)	ND (0.47)	ND (0.0054)	ND (0.0054)	ND (0.013)	ND (0.54)	ND (0.01)	ND (0.01)	ND (0.011)	-	-	-	ND (0.0084)	ND (0.0077)
Carbon tetrachloride	0.76	7.1	0.76	ND (0.0042)	ND (0.0012)	ND (0.0013)	ND (0.0016)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.0015)	ND (0.0012)	ND (0.47)	ND (0.0054)	ND (0.0054)	ND (0.0013)	ND (0.054)	ND (0.001)	ND (0.001)	ND (0.0011)	-	-	-	ND (0.00084)	ND (0.00077)
Chlorobenzene	4.5	100	4.5	ND (0.0042)	ND (0.00059)	ND (0.00066)	ND (0.0008)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.00077)	ND (0.00059)	ND (0.47)	ND (0.0054)	ND (0.0054)	ND (0.00064)	ND (0.027)	ND (0.00052)	ND (0.00053)	ND (0.00053)	-	-	-	ND (0.00042)	ND (0.00038)
Chlorobromomethane	NA	NA	NA	ND (0.0042)	ND (0.0024)	ND (0.0026)	ND (0.0032)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.0031)	ND (0.0024)	ND (0.47)	ND (0.0054)	ND (0.0054)	ND (0.0025)	ND (0.11)	ND (0.0021)	ND (0.0021)	ND (0.0021)	-	-	-	ND (0.0017)	ND (0.0015)
Chloroethane	NA	NA	NA	ND (0.0042)	ND (0.0024)	ND (0.0026)	ND (0.0032)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.0031)	ND (0.0024)	ND (0.47)	ND (0.0054)	ND (0.0054)	ND (0.0025)	ND (0.11)	ND (0.0021)	ND (0.0021)	ND (0.0021)	-	-	-	ND (0.0017)	ND (0.0015)
Chloroform (Trichloromethane)	0.37	24	0.37	ND (0.0042)	ND (0.0018)	ND (0.002)	ND (0.0024)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.0023)	ND (0.0018)	ND (0.47)	ND (0.0054)	ND (0.0054)	ND (0.0019)	ND (0.082)	ND (0.0016)	ND (0.0016)	ND (0.0016)	-	-	-	ND (0.0012)	ND (0.0012)
Chloromethane (Methyl Chloride)	NA	NA	NA	ND (0.0042)	ND (0.0047)	ND (0.0053)	ND (0.0064)	ND (0.0057)	ND (0.004)	ND (0.0048) J	ND (0.0061)	ND (0.0047)	ND (0.47)	ND (0.0054)	ND (0.0054)	ND (0.0051)	ND (0.22)	ND (0.0042)	ND (0.0042)	ND (0.0042)	-	-	-	ND (0.0034)	ND (0.0031)
cis-1,2-Dichloroethene	0.19	41	0.19	ND (0.0042)	ND (0.0012)	ND (0.0013)	ND (0.0016)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.0015)	ND (0.0012)	ND (0.47)	ND (0.0054)	ND (0.0054)	ND (0.0013)	ND (0.054)	ND (0.001)	ND (0.001)	ND (0.0011)	-	-	-	ND (0.00084)	ND (0.00077)
cis-1,3-Dichloropropene	NA	NA	NA	ND (0.0042)	ND (0.00059)	ND (0.00066)	ND (0.0008)	ND (0.0057)	ND (0.004) J	ND (0.0048)	ND (0.00077)	ND (0.00059)	ND (0.47) J	ND (0.0054)	ND (0.0054) J	ND (0.00064)	ND (0.027)	ND (0.00052)	ND (0.00053)	ND (0.00053)	-	-	-	ND (0.00042)	ND (0.00038)
Cyclohexane	NA	NA	NA	ND (0.0042)	-	-	-	ND (0.0057)	ND (0.004)	ND (0.0048)	-	-	0.8	ND (0.0054)	ND (0.0054)	-	-	-	-	-	-	-	-	-	-
Cymene (p-Isopropyltoluene)	NA	NA	NA	ND (0.0042)	ND (0.0012)	ND (0.0013)	ND (0.0016)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.0015)	ND (0.0012)	ND (0.47) J	ND (0.0054)	ND (0.0054)	0.00014 J	0.049 J	ND (0.001)	0.0025	ND (0.0011)	-	-	-	ND (0.00084)	0.00061 J
Dibromochloromethane	NA	NA	NA	ND (0.0042)	ND (0.0012)	ND (0.0013)	ND (0.0016)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.0015)	ND (0.0012)	ND (0.47)	ND (0.0054)	ND (0.0054)	ND (0.0013)	ND (0.054)	ND (0.001)	ND (0.001)	ND (0.0011)	-	-	-	ND (0.00084)	ND (0.00077)
Dibromomethane	NA	NA	NA	ND (0.0042)	ND (0.0024)	ND (0.0026)	ND (0.0032)	ND (0.0057)	ND (0.004) J	ND (0.0048)	ND (0.0031)	ND (0.0024)	ND (0.47)	ND (0.0054) J	ND (0.0054) J	ND (0.0025)	ND (0.11)	ND (0.0021)	ND (0.0021)	ND (0.0021)	-	-	-	ND (0.0017)	ND (0.0015)
Dichlorodifluoromethane (CFC-12)	NA	NA	NA	ND (0.0042)	ND (0.012)	ND (0.013)	ND (0.016)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.015)	ND (0.012)	ND (0.47)	ND (0.0054)	ND (0.0054)	ND (0.013)	ND (0.54)	ND (0.01)	ND (0.01)	ND (0.011)	-	-	-	ND (0.0084)	ND (0.0077)
Ethyl Ether	NA	NA	NA	-	ND (0.0024)	ND (0.0026)	ND (0.0032)	-	-	-	ND (0.0031)	ND (0.0024)	-	-	-	ND (0.0025)	ND (0.11)	ND (0.0021)	ND (0.0021)	ND (0.0021)	-	-	-	ND (0.0017)	ND (0.0015)
Ethylbenzene	1	76	1	ND (0.0042)	ND (0.0012)	ND (0.0013)	ND (0.0016)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.0015)	ND (0.0012)	***1.3 J***	ND (0.0054)	ND (0.0054)	0.00064 J	0.41	ND (0.001)	0.16	ND (0.0011)	-	-	-	ND (0.00084)	ND (0.00077)
Hexachlorobutadiene	NA	NA	NA	ND (0.0042)	ND (0.0047)	ND (0.0053)	ND (0.0064)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.0061)	ND (0.0047)	ND (0.47)	ND (0.0054)	ND (0.0054)	ND (0.0051)	ND (0.22)	ND (0.0042)	ND (0.0042)	ND (0.0042)	-	-	-	ND (0.0034)	ND (0.0031)
Isopropylbenzene (Cumene)	NA	NA	NA	ND (0.0042)	ND (0.0012)	ND (0.0013)	ND (0.0016)	ND (0.0057)	ND (0.004) J	ND (0.0048)	ND (0.0015)	ND (0.0012)	ND (0.47)	ND (0.0054)	ND (0.0054) J	ND (0.0027)	8.4	ND (0.001)	0.018	ND (0.0011)	-	-	-	ND (0.00084)	ND (0.00077)
m,p-Xylenes	NA	NA	NA	ND (0.0083)	ND (0.0024)	ND (0.0026)	ND (0.0032)	ND (0.011)	ND (0.0081)	ND (0.0096)	ND (0.0031)	ND (0.0024)	2.2	ND (0.011)	ND (0.011)	0.0025	ND (0.11)	ND (0.0021)	0.1	ND (0.0021)	-	-	-	ND (0.0017)	ND (0.0015)
Methyl acetate	NA	NA	NA	ND (0.0042)	-	-	-	ND (0.0057)	ND (0.004)	ND (0.0048)	-	-	ND (0.47)	ND (0.0054) J	ND (0.0054)	-	-	-	-	-	-	-	-	-	-
Methyl Tert Butyl Ether (MTBE)	0.1	100	0.1	ND (0.0042)	ND (0.0024)	ND (0.0026)	ND (0.0032)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.0031)	ND (0.0024)	ND (0.47)	ND (0.0054) J	ND (0.0054)	ND (0.0025)	ND (0.11)	ND (0.0021)	ND (0.0021)	ND (0.0021)	-	-	-	ND (0.0017)	ND (0.0015)
Methylcyclohexane	NA	NA	NA	ND (0.0042)	-	-	-	ND (0.0057)	ND (0.004)	ND (0.0048)	-	-	1.3	ND (0.0054)	ND (0.0054)	-	-	-	-	-	-	-	-	-	-
Methylene chloride (Dichloromethane)	0.05	81	0.05	ND (0.0083)	ND (0.0059)	ND (0.0066)	ND (0.008)	ND (0.011)	ND (0.0081)	ND (0.0096)	ND (0.0077)	ND (0.0059)	ND (0.94)	ND (0.011)	ND (0.011)	ND (0.0064)	ND (0.27)	ND (0.0052)	ND (0.0053)	ND (0.0053)	-	-	-	ND (0.0042)	ND (0.0038)
Naphthalene	12	100	12	-	ND (0.0047)	ND (0.0053)	ND (0.0064)	-	-	-	ND (0.0061)	ND (0.0047)	-	-	-	0.23	ND (0.22)	ND (0.0042)	0.086	0.0025 J	-	-	-	ND (0.0034)	0.0031 J
n-Butylbenzene	18	100	18	ND (0.0042)	ND (0.0012)	ND (0.0013)	ND (0.0016)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.0015)	ND (0.0012)	ND (0.47) J	ND (0.0054)	ND (0.0054)	0.00059 J	9.8	ND (0.001)	0.014	ND (0.0011)	-	-	-	ND (0.00084)	0.00023 J
n-Propylbenzene	5	100	5	ND (0.0042)	ND (0.0012)	ND (0.0013)	ND (0.0016)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.0015)	ND (0.0012)	0.67	ND (0.0054)	ND (0.0054)	ND (0.0013)	***38***	ND (0.001)	0.066	ND (0.0011)	-	-	-	ND (0.00084)	ND (0.00077)
o-Xylene	NA	NA	NA	ND (0.0042)	ND (0.0012)	ND (0.0013)	ND (0.0016)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.0015)	ND (0.0012)	ND (0.47)	ND (0.0054)	ND (0.0054)	0.0015	0.022 J	ND (0.001)	0.0015	ND (0.0011)	-	-	-	ND (0.00084)	ND (0.00077)
Styrene	NA	NA	NA	ND (0.0042)	ND (0.0012)	ND (0.0013)	ND (0.0016)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.0015)	ND (0.0012)	ND (0.47) J	ND (0.0054)	ND (0.0054)	ND (0.0013)	ND (0.054)	ND (0.001)	ND (0.001)	ND (0.0011)	-	-	-	ND (0.00084)	ND (0.00077)
Tert-Butyl Alcohol (tert-Butanol)	NA	NA	NA	ND (0.021)	-	-	-	ND (0.028)	ND (0.02)	ND (0.024)	-	-	ND (2.3) J	ND (0.027)	ND (0.027)	-	-	-	-	-	-	-	-	-	-
tert-Butylbenzene	11	100	11	ND (0.0042)	ND (0.0024)	ND (0.0026)	ND (0.0032)	ND (0.0057)	ND (0.004) J	ND (0.0048) J	ND (0.0031)	ND (0.0024)	ND (0.47)	ND (0.0054)	ND (0.0054) J	ND (0.0025)	0.25	ND (0.0021)	ND (0.0021)	ND (0.0021)	-	-	-	ND (0.0017)	ND (0.0015)
Tetrachloroethene	1.3	18	1.3	ND (0.0042)	ND (0.00059)	ND (0.00066)	ND (0.0008)	ND (0.0057) J	ND (0.004)	ND (0.0048)	ND (0.00077)	ND (0.00059)	ND (0.47) J	ND (0.0054)	ND (0.0054)	ND (0.00064)	ND (0.027)	ND (0.00052)	ND (0.00053)	ND (0.00053)	-	-	-	ND (0.00042)	ND (0.00038)
Toluene	0.7	100	0.7	ND (0.0042)	0.00093 J	ND (0.0013)	ND (0.0016)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.0015)	ND (0.0012)	ND (0.47)	ND (0.0054)	ND (0.0054)	0.00092 J	ND (0.054)	ND (0.001)	ND (0.001)	ND (0.0011)	-	-	-	ND (0.00084)	ND (0.00077)
trans-1,2-Dichloroethene	0.19	100	0.19	ND (0.0042)	ND (0.0018)	ND (0.002)	ND (0.0024)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.0023)	ND (0.0018)	ND (0.47)	ND (0.0054) J	ND (0.0054)	ND (0.0019)	ND (0.082)	ND (0.0016)	ND (0.0016)	ND (0.0016)	-	-	-	ND (0.0012)	ND (0.0012)
trans-1,3-Dichloropropene	NA	NA	NA	ND (0.0042)	ND (0.0012)	ND (0.0013)	ND (0.0016)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.0015)	ND (0.0012)	ND (0.47) J	ND (0.0054)	ND (0.0054)	ND (0.0013)	ND (0.054)	ND (0.001)	ND (0.001)	ND (0.0011)	-	-	-	ND (0.00084)	ND (0.00077)
trans-1,4-Dichloro-2-butene	NA	NA	NA	-	ND (0.0059)	ND (0.0066)	ND (0.008)	-	-	-	ND (0.0077)	ND (0.0059)	-	-	-	ND (0.0064)	ND (0.27)	ND (0.0052)	ND (0.0053)	ND (0.0053)	-	-	-	ND (0.0042)	ND (0.0038)
Trichloroethene	0.47	6.4	0.47	ND (0.0042)	ND (0.00059)	ND (0.00066)	ND (0.0008)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.00077)	ND (0.00059)	ND (0.47)	ND (0.0054)	ND (0.0054)	ND (0.00064)	ND (0.027)	ND (0.00052)	ND (0.00053)	ND (0.00053)	-	-	-	ND (0.00042)	ND (0.00038)
Trichlorofluoromethane (CFC-11)	NA	NA	NA	ND (0.0042)	ND (0.0047)	ND (0.0053)	ND (0.0064)	ND (0.0057)	ND (0.004)	ND (0.0048)	ND (0.0061)	ND (0.0047)	ND (0.47)	ND (0.0054)	ND (0.0054)	ND (0.0051)	ND (0.22)	ND (0.0042)	ND (0.0042)	ND (0.0042)	-	-	-	ND (0.0034)	ND (0.0031)
Trifluorotrichloroethane (Freon 113)	NA	NA	NA	ND (0.0042)	-	-	-	ND (0.0057)	ND (0.004)	ND (0.0048)	-	-	ND (0.47)	ND (0.0054)	ND (0.0054)	-	-	-	-	-	-	-	-	-	-
Vinyl acetate	NA	NA	NA	-	ND (0.012)	ND (0.013)	ND (0.016)	-	-	-	ND (0.015)	ND (0.012)	-	-	-	ND (0.013)	ND (0.54)	ND (0.01)	ND (0.01)	ND (0.011)	-

Location Name Sample Name Sample Date Lab Sample ID Sample Depth (bgs)	Criteria Restricted Use Soil Cleanup Objectives - Protection of Groundwater 2025	Criteria Restricted Use Soil Cleanup Objectives - Residential 2025	Criteria Unrestricted Use Soil Cleanup Objectives 2025	SB-01 SB-01_14-16 07/22/2025 25G1455-04 14 - 16 (ft)	SB-03 SB-03_15 08/14/2026 L2652833-01 15 - 15.5 (ft)	SB-03_N SB-03_N_13 8/14/2026 L2652833-02 13 - 13.5 (ft)	SB-06_S SB-06_S_13 07/24/2026 L2647551-08 13 - 13.5 (ft)	SB-07 SB-07_14-16 07/21/2025 25G1376-08 14 - 16 (ft)	SB-10 SB-10_14-16 07/24/2025 25G1657-15 14 - 16 (ft)	SB-11 SB-11_25-27 07/24/2025 25G1657-05 25G1657-05RE1 25 - 27 (ft)	SB-11_N SB-11_N_13 07/24/2026 L2647551-02 13 - 13.5 (ft)	SB-11_S SB-11_S_13 07/24/2026 L2647551-03 13 - 13.5 (ft)	SB-12 SB-12_25-27 07/24/2025 25G1657-12 25 - 27 (ft)	SB-14 SB-14_14-16 07/25/2025 25G1718-08 14 - 16 (ft)	SB-15 SB-15_20 07/24/2025 25G1657-16 20 (ft)	SB-16 SB-16_14-16 11/20/2025 L2574359-04 14 - 16 (ft)	SB-17 SB-17_23-25 11/20/2025 L2574359-08 23 - 25 (ft)	UST_W2_SW UST_W2_SW_13 08/19/2026 L2654062-05 13 - 13.5 (ft)	EP-03 EP-03_10 07/02/2026 L2641792-03 10 - 10.5 (ft)	EP-06 EP-06_10 07/02/2026 L2641792-05 10 - 10.5 (ft)	EP-07 EP-07_11 08/04/2026 L2649891-05 11 - 11.5 (ft)	EP-08 EP-08_15 8/19/2026 L2574359-08 15 - 15.5 (ft)	EP-9 EP-9_11 07/20/2026 L2645979-03 11 - 11.5 (ft)	EP-10 EP-10_10 07/17/2026 L2645704-02 10 - 10.5 (ft)	EP-11 EP-11_10 07/20/2026 L2645984-01 10 - 10.5 (ft)
Semi-Volatile Organic Compounds (mg/kg)																												
1,2,4,5-Tetrachlorobenzene	NA	NA	NA	ND (0.185)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.165)	ND (0.188)	ND (0.187)	ND (0.19)	ND (0.18)	ND (0.186)	ND (0.179)	ND (0.178)	ND (0.93)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	ND (0.18)	ND (0.18)
1,2,4-Trichlorobenzene	NA	NA	NA	ND (0.0928)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.19)	ND (0.18)	0.093 R	ND (0.0898)	ND (0.0891)	ND (0.93)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	ND (0.18)	ND (0.18)
1,2-Dichlorobenzene	1.1	100	1.1	ND (0.0928)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.19)	ND (0.18)	0.093 R	ND (0.0898)	ND (0.0891)	ND (0.93)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	ND (0.18)	ND (0.18)
1,2-Diphenylhydrazine	NA	NA	NA	ND (0.0928)	-	-	-	ND (0.0826)	ND (0.0941)	ND (0.0935)	-	-	ND (0.093)	ND (0.0898)	ND (0.0891)	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	2.6	38	2.6	ND (0.0928)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.19)	ND (0.18)	0.093 R	ND (0.0898)	ND (0.0891)	ND (0.93)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	ND (0.18)	ND (0.18)
1,4-Dichlorobenzene	1.8	24	1.8	ND (0.0928)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.19)	ND (0.18)	0.093 R	ND (0.0898)	ND (0.0891)	ND (0.93)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	ND (0.18)	ND (0.18)
1,4-Dioxane	0.1	5.7	0.1	-	ND (0.028)	ND (0.027)	ND (0.027)	-	-	-	ND (0.028)	ND (0.027)	-	-	-	ND (0.14)	ND (0.027)	ND (0.027)	ND (0.027)	ND (0.028)	-	-	-	ND (0.027)	ND (0.027)
2,2'-oxybis(1-Chloropropane)	NA	NA	NA	ND (0.0928)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.22)	ND (0.22)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (1.1)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	-	-	-	ND (0.22)	ND (0.22)
2,3,4,6-Tetrachlorophenol	NA	NA	NA	ND (0.185)	-	-	-	ND (0.165)	ND (0.188)	ND (0.187)	-	-	ND (0.186)	ND (0.179)	ND (0.178)	-	-	-	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	NA	NA	NA	ND (0.0928)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.19)	ND (0.18)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (0.93)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	ND (0.18)	ND (0.18)
2,4,6-Trichlorophenol	NA	NA	NA	ND (0.0928)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.11)	ND (0.11)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (0.56)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	-	-	-	ND (0.11)	ND (0.11)
2,4-Dichlorophenol	NA	NA	NA	ND (0.0928)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.17)	ND (0.16)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (0.84)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	-	-	-	ND (0.16)	ND (0.16)
2,4-Dimethylphenol	NA	NA	NA	ND (0.0928)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.19)	ND (0.18)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (0.93)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	ND (0.18)	ND (0.18)
2,4-Dinitrophenol	NA	NA	NA	ND (0.185)	ND (0.88)	ND (0.87)	ND (0.88)	ND (0.165)	ND (0.188)	ND (0.187)	ND (0.9)	ND (0.88)	ND (0.186)	ND (0.179)	ND (0.178)	ND (4.4)	ND (0.86)	ND (0.87)	ND (0.87)	ND (0.88)	-	-	-	ND (0.87)	ND (0.87)
2,4-Dinitrotoluene	NA	NA	NA	ND (0.0928)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.19)	ND (0.18)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (0.93)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	ND (0.18)	ND (0.18)
2,6-Dinitrotoluene	NA	NA	NA	ND (0.0928)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.19)	ND (0.18)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (0.93)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	ND (0.18)	ND (0.18)
2-Chloronaphthalene	NA	NA	NA	ND (0.0928)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.19)	ND (0.18)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (0.93)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	ND (0.18)	ND (0.18)
2-Chlorophenol	NA	NA	NA	ND (0.0928)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.19)	ND (0.18)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (0.93)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	ND (0.18)	ND (0.18)
2-Methylnaphthalene	NA	NA	NA	ND (0.0928)	0.048 J	ND (0.22)	0.034 J	ND (0.0826)	ND (0.0941)	0.0763 J+	ND (0.22)	0.033 J	ND (0.093)	ND (0.0898)	ND (0.0891)	0.73 J	2.4	ND (0.22)	ND (0.22)	ND (0.22)	-	-	-	ND (0.22)	ND (0.22)
2-Methylphenol (o-Cresol)	0.33	100	0.33	ND (0.0928)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.19)	ND (0.18)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (0.93)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	ND (0.18)	ND (0.18)
2-Nitroaniline	NA	NA	NA	ND (0.185)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.165)	ND (0.188)	ND (0.187)	ND (0.19)	ND (0.18)	ND (0.186)	ND (0.179)	ND (0.178)	ND (0.93)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	ND (0.18)	ND (0.18)
2-Nitrophenol	NA	NA	NA	ND (0.0928)	ND (0.4)	ND (0.39)	ND (0.4)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.4)	ND (0.4)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (2)	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.4)	-	-	-	ND (0.39)	ND (0.39)
3&4-Methylphenol	NA	NA	NA	-	ND (0.26)	ND (0.26)	ND (0.26)	-	-	-	ND (0.27)	ND (0.26)	-	-	-	0.19 J	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	-	-	-	ND (0.26)	ND (0.26)
3,3'-Dichlorobenzidine	NA	NA	NA	ND (0.0928)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.19)	ND (0.18)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (0.93)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	ND (0.18)	ND (0.18)
3-Nitroaniline	NA	NA	NA	ND (0.185)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.165)	ND (0.188)	ND (0.187)	ND (0.19)	ND (0.18)	ND (0.186)	ND (0.179)	ND (0.178)	ND (0.93)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	ND (0.18)	ND (0.18)
4,6-Dinitro-2-methylphenol	NA	NA	NA	ND (0.185)	ND (0.48)	ND (0.47)	ND (0.48)	ND (0.165)	ND (0.188)	ND (0.187)	ND (0.49)	ND (0.48)	ND (0.186)	ND (0.179)	ND (0.178)	ND (2.4)	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.48)	-	-	-	ND (0.47)	ND (0.47)
4-Bromophenyl phenyl ether (BDE-3)	NA	NA	NA	ND (0.0928)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.19)	ND (0.18)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (0.93)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	ND (0.18)	ND (0.18)
4-Chloro-3-methylphenol	NA	NA	NA	ND (0.0928)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.19)	ND (0.18)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (0.93)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	ND (0.18)	ND (0.18)
4-Chloroaniline	NA	NA	NA	ND (0.0928)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.19)	ND (0.18)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (0.93)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	ND (0.18)	ND (0.18)
4-Chlorophenyl phenyl ether	NA	NA	NA	ND (0.0928)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.19)	ND (0.18)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (0.93)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	ND (0.18)	ND (0.18)
4-Nitroaniline	NA	NA	NA	ND (0.185)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.165)	ND (0.188)	ND (0.187)	ND (0.19)	ND (0.18)	ND (0.186)	ND (0.179)	ND (0.178)	ND (0.93)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	ND (0.18)	ND (0.18)
4-Nitrophenol	NA	NA	NA	ND (0.185)	ND (0.26)	ND (0.25)	ND (0.26)	ND (0.165)	ND (0.188)	ND (0.187)	ND (0.26)	ND (0.26)	ND (0.186)	ND (0.179)	ND (0.178)	ND (1.3)	ND (0.25)	ND (0.25)	ND (0.26)	ND (0.26)	-	-	-	ND (0.25)	ND (0.25)
Acenaphthene	98	100	20	ND (0.0928)	0.092 J	ND (0.14)	0.067 J	ND (0.0826)	ND (0.0941)	0.182 J+	0.034 J	0.11 J	ND (0.093)	0.113	ND (0.0891)	0.76	0.028 J	ND (0.14)	ND (0.14)	ND (0.15)	-	-	-	0.071 J	0.02 J
Acenaphthylene	365	100	100	ND (0.0928)	ND (0.15)	ND (0.14)	0.06 J	ND (0.0826)	ND (0.0941)	0.318 J+	0.039 J	0.093 J	0.0483 J	0.0905	ND (0.0891)	0.79	ND (0.14)	ND (0.14)	ND (0.14)	0.059 J	-	-	-	0.12 J	0.044 J
Acetophenone	NA	NA	NA	ND (0.0928)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.19)	ND (0.18)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (0.93)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	ND (0.18)	ND (0.18)
Aniline	NA	NA	NA	ND (0.372)	-	-	-	ND (0.331)	ND (0.377)	ND (0.375)	-	-	ND (0.372)	ND (0.36)	ND (0.357)	-	-	-	-	-	-	-	-	-	-
Anthracene	1000	100	100	ND (0.0928)	0.1 J	ND (0.11)	0.2	ND (0.0826)	ND (0.0941)	0.707 J+	0.11	0.32	ND (0.093)	0.276	ND (0.0891)	2	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	-	-	-	0.22	0.078 J
Atrazine	NA	NA	NA	ND (0.0928)	-	-	-	ND (0.0826)	ND (0.0941)	ND (0.0935)	-	-	ND (0.093)	ND (0.0898)	ND (0.0891)	-	-	-	-	-	-	-	-	-	-
Benzaldehyde	NA	NA	NA	ND (0.0928)	-	-	-	ND (0.0826)	ND (0.0941)	ND (0.0935)	-	-	ND (0.093)	ND (0.0898)	ND (0.0891)	-	-	-	-	-	-	-	-	-	-
Benzidine	NA	NA	NA	ND (0.372)	-	-	-	ND (0.331)	ND (0.377)	ND (0.375)	-	-	ND (0.372)	ND (0.36)	ND (0.357)	-	-	-	-	-	-	-	-	-	-
Benzo(a)anthracene	1	1.4	1	ND (0.0928)	0.21	ND (0.11)	0.69	0.104	0.0474 J+	***2.36 J+***	0.41	1	0.0921 J	0.844	ND (0.0891)	***3.6***	0.021 J	0.068 J	ND (0.11)	0.073 J	1	-	0.82	0.88	0.24
Benzo(a)pyrene	22	1	1	ND (0.0928)	0.2	ND (0.14)	0.61	0.113	ND (0.0941)	2.09 J+	0.35	0.91	0.143	0.62	ND (0.0891)	2.9	ND (0.14)	0.062 J	ND (0.14)	0.06 J	0.99	-	0.76	0.81	0.23
Benzo(b)fluoranthene	2.1	1.4	1	ND (0.0928)	0.24	ND (0.11)	0.8	0.101	ND (0.0941)	***1.95 J+***	0.48	1.1	0.187	0.569	ND (0.0891)	***3.6***	ND (0.11)	0.079 J	ND (0.11)	0.063 J	1.3	-	0.95	1	0.28
Benzo(g,h,i)perylene	1000	4.9	0.64	ND (0.0928)	0.11 J	ND (0.14)	0.36	0.0911	ND (0.0941)	1.16 J+	0.21	0.49	0.11	0.272	ND (0.0891)	1.8	ND (0.14)	0.043 J	ND (0.14)	0.12 J	-	-	-	0.51	0.16
Benzo(k)fluoranthene	2	4.9	0.8	ND (0.0928)	0.095 J	ND (0.11)	0.22	0.095 J+	ND (0.0941)	1.59 J+	0.12	0.37	0.0617 J	0.49	ND (0.0891)	1.2	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	-	-	0.28	0.28	0.11
Benzoic acid	NA	NA	NA	ND (0.0928)	ND (0.6)	ND (0.59)	ND (0.59)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.61)	ND (0.59)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (3)	ND (0.58)	ND (0.59)	ND (0.59)	ND (0.6)	-	-	-	ND (0.59)	ND (0.58)
Benzyl Alcohol	NA	NA	NA	ND (0.0928)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.19)	ND (0.18)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (0.93)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	ND (0.18)	ND (0.18)
Biphenyl	NA	NA	NA	ND (0.0928)	ND (0.42)	ND (0.41)	ND (0.42)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.43)	ND (0.42)	ND (0.093)	ND (0.0898)	ND (0.0891)	0.15 J	0.035 J	ND (0.41)	ND (0.41)	ND (0.42)	-	-	-	ND (0.41)	ND (0.41)
bis(2-Chloroethoxy)methane	NA	NA	NA	ND (0.0928)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.2)	ND (0.2)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (1)	ND (0.19)	ND (0.2)	ND (0.2)	ND (0.2)	-	-	-	ND (0.2)	ND (0.2)
bis(2-Chloroethyl)ether	NA	NA	NA	ND (0.0928)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.17)	ND (0.16)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (0.84)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	-	-	-	ND (0.16)	ND (0.16)
bis(2-Ethylhexyl)phthalate	NA	NA	NA	ND (0.0928)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.19)	ND (0.18)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (0.93)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	ND (0.18)	ND (0.18)
Butyl benzylphthalate (BBP)	NA	NA	NA	ND (0.0928)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.19)	ND (0.18)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (0.93)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	ND (0.18)	ND (0.18)
Caprolactam	NA	NA	NA	ND (0.185)	-	-	-	ND (0.165)	ND (0.188)	ND (0.187)	-	-	ND (0.186)	ND (0.179)	ND (0.178)	-	-	-	-	-	-	-	-	-	-
Carbazole	NA	NA	NA	ND (0.0928)	0.067 J	ND (0.18)	0.094 J	ND (0.0826)	ND (0.0941)	0.262 J+	0.046 J	0.11 J	ND (0.093)	0.116	ND (0.0891)	0.86 J	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	0.094 J	0.029 J
Chrysene	1	4.9	1	ND (0.0928)	0.21	ND (0.11)	0.67	0.101	ND (0.0941)	***2.67 J+***	0.37	0.97	0.103	0.789	ND (0.0891)	***3.9***	ND (0.11)	0.058 J	ND (0.11)	0.077 J	1	-	0.78	0.78	0.25
Dibenz(a,h)anthracene	1000	0.33	0.33	ND (0.0928)	0.031 J	ND (0.11)	0.076 J	ND (0.0826)	ND (0.0941)	0.381 J+	0.043 J	0.1 J	ND (0.093)	ND (0.0898)	ND (0.0891)	0.46 J	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	0.15	-	0.1 J	0.11	0.036 J
Dibenzofuran	110	18	2.1	ND (0.0928)	0.045 J	ND (0.18)	0.039 J	ND (0.0826)	ND (0.0941)	0.092 J+	0.021 J	0.065 J	ND (0.093)	0.056 J	ND (0.0891)	0.81 J	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	0.036 J	ND (0.18)
Diethyl phthalate	NA	NA	NA	ND (0.0928)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.19)	ND (0.18)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (0.93)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	ND (0.18)	ND (0.18)
Dimethyl phthalate	NA	NA	NA	ND (0.0928)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.19)	ND (0.18)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (0.93)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	ND (0.18)	ND (0.18)
Di-n-butylphthalate (DBP)	NA	NA	NA	ND (0.0928)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.19)	ND (0.18)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (0.93)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	ND (0.18)	ND (0.18)
Di-n-octyl phthalate (DnOP)	NA	NA	NA	ND (0.0928)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.19)	ND (0.18)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (0.93)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	ND (0.18)	ND (0.18)
Fluoranthene	1000	100	85	ND (0.0928)	0.5	ND (0.11)	1.3	0.183	0.0902 J	3.13	0.75	1.8	0.128	1.8	ND (0.0891)	8.7	0.031 J	0.13	ND (0.11)	0.13	-	-	-	1.6	0.54
Fluorene	386	100	30	ND (0.0928)	0.066 J	ND (0.18)	0.072 J	ND (0.0826)	ND (0.0941)	0.215 J+	0.037 J	0.14 J	ND (0.093)	0.11	ND (0.0891)	1.4	0.034 J	ND (0.18)	ND (0.18)	0.023 J	-	-	-	0.069 J	0.033 J
Hexachlorobenzene	3.2	0.33	0.33	ND (0.0928)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.11)	ND (0.11)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (0.56)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	-	-	-	ND (0.11)	ND (0.11)
Hexachlorobutadiene	NA	NA	NA	ND (0.0928)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.19)	ND (0.18)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (0.93)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	ND (0.18)	ND (0.18)
Hexachlorocyclopentadiene	NA	NA	NA	ND (0.0928)	ND (0.53)	ND (0.52)	ND (0.52)	0.0826 R	ND (0.0941)	ND (0.0935)	ND (0.54)	ND (0.52)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (2.6)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.53)	-	-	-	ND (0.52)	ND (0.52)
Hexachloroethane	NA	NA	NA	ND (0.0928)	ND (0.15)	ND (0.14)	ND (0.15)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.15)	ND (0.15)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (0.74)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.15)	-	-	-	ND (0.14)	ND (0.14)
Indeno(1,2,3-cd)pyrene	6.6	1.4	0.5	ND (0.0928)	0.12 J	ND (0.14)	0.34	0.0785 J	ND (0.0941)	0.932 J+	0.2	0.47	0.109	0.317	ND (0.0891)	1.8	ND (0.14)	0.04 J	ND (0.14)	0.068 J	0.71	-	0.46	0.5	0.15
Isophorone	NA	NA	NA	ND (0.0928)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.17)	ND (0.16)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (0.84)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	-	-	-	ND (0.16)	ND (0.16)
m,p-Cresols	NA	NA	NA	ND (0.0928)	-	-	-	ND (0.0826)	ND (0.0941)	ND (0.0935)	-	-	ND (0.093)	ND (0.0898)	ND (0.0891)	-	-	-	-	-	-	-	-	-	-
Naphthalene	12	100	12	ND (0.0928)	0.092 J	ND (0.18)	0.044 J	ND (0.0826)	ND (0.0941)	0.117 J+	ND (0.19)	0.042 J	ND (0.093)	ND (0.0898)	ND (0.0891)	1.7	0.33	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	0.047 J	ND (0.18)
Nitrobenzene	0.08	1.8	0.08	ND (0.0928)	ND (0.037)	ND (0.036)	ND (0.037)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.037)	ND (0.037)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (0.84)	ND (0.16)	ND (0.036)	ND (0.036)	ND (0.037)	-	-	-	ND (0.036)	ND (0.036)
N-Nitrosodimethylamine (NDMA)	NA	NA	NA	ND (0.0928)	-	-	-	ND (0.0826)	ND (0.0941)	ND (0.0935)	-	-	ND (0.093)	ND (0.0898)	ND (0.0891)	-	-	-	-	-	-	-	-	-	-
N-Nitrosodi-n-propylamine	NA	NA	NA	ND (0.0928)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.19)	ND (0.18)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (0.93)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	ND (0.18)	ND (0.18)
N-Nitrosodiphenylamine	NA	NA	NA	ND (0.0928)	ND (0.15)	ND (0.14)	ND (0.15)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.15)	ND (0.15)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (0.74)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.15)	-	-	-	ND (0.14)	ND (0.14)
Pentachlorophenol	0.8	1.3	0.8	ND (0.0928)	ND (0.15)	ND (0.14)	ND (0.15)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.15)	ND (0.15)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (0.74)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.15)	-	-	-	ND (0.14)	ND (0.14)
Phenanthrene	1000	4.9	1.1	ND (0.0928)	0.51	ND (0.11)	0.89	0.0799 J	0.0617 J+	2.22	0.46	1.3	0.0684 J	1.19	ND (0.0891)	9.6	0.057 J	0.079 J	ND (0.11)	0.18	-	-	1.7	0.92	0.32
Phenol	0.33	100	0.33	ND (0.0928)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.0826)	ND (0.0941)	ND (0.0935)	ND (0.19)	ND (0.18)	ND (0.093)	ND (0.0898)	ND (0.0891)	ND (0.93)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	ND (0.18)	ND (0.18)
Pyrene	1000	100	64	ND (0.0928)	0.4	ND (0.11)	1.2	0.161	0.0955 J+	3.58	0.66	1.7	0.0988	1.72	ND (0.0891)	8.1	0.032 J	0.12	ND (0.11)	0.15	-	-	-	1.6	0.51
Semi-Volatile Organic Compounds (SIM) (mg/kg)																									
1,4-Dioxane	0.1	13	0.1	ND (0.0192)	-	-	-	ND (0.0189)	ND (0.0183)	ND (0.0196)	-	-	ND (0.0183)	ND (0.0185)	ND (0.0183)	-	-	-	-	-	-	-	-	-	-

DRAFT

Location Name Sample Name Sample Date Lab Sample ID Sample Depth (bgs)	Criteria Restricted Use Soil Cleanup Objectives - Protection of Groundwater 2025	Criteria Restricted Use Soil Cleanup Objectives - Residential 2025	Criteria Unrestricted Use Soil Cleanup Objectives 2025	SB-01 SB-01_14-16 07/22/2025 25G1455-04 14 - 16 (ft)	SB-03 SB-03_15 08/14/2026 L2652833-01 15 - 15.5 (ft)	SB-03_N SB-03_N_13 8/14/2026 L2652833-02 13 - 13.5 (ft)	SB-06_S SB-06_S_13 07/24/2026 L2647551-08 13 - 13.5 (ft)	SB-07 SB-07_14-16 07/21/2025 25G1376-08 14 - 16 (ft)	SB-10 SB-10_14-16 07/24/2025 25G1657-15 14 - 16 (ft)	SB-11 SB-11_25-27 07/24/2025 25G1657-05 25G1657-05RE1 25 - 27 (ft)	SB-11_N SB-11_N_13 07/24/2026 L2647551-02 13 - 13.5 (ft)	SB-11_S SB-11_S_13 07/24/2026 L2647551-03 13 - 13.5 (ft)	SB-12 SB-12_25-27 07/24/2025 25G1657-12 25 - 27 (ft)	SB-14 SB-14_14-16 07/25/2025 25G1718-08 14 - 16 (ft)	SB-15 SB-15_20 07/24/2025 25G1657-16 20 (ft)	SB-16 SB-16_14-16 11/20/2025 L2574359-04 14 - 16 (ft)	SB-17 SB-17_23-25 11/20/2025 L2574359-08 23 - 25 (ft)	UST_W2_SW UST_W2_SW_13 08/19/2026 L2654062-05 13 - 13.5 (ft)	EP-03 EP-03_10 07/02/2026 L2641792-03 10 - 10.5 (ft)	EP-06 EP-06_10 07/02/2026 L2641792-05 10 - 10.5 (ft)	EP-07 EP-07_11 08/04/2026 L2649891-05 11 - 11.5 (ft)	EP-08 EP-08_15 8/19/2026 L2574359-08 15 - 15.5 (ft)	EP-9 EP-9_11 07/20/2026 L2645979-03 11 - 11.5 (ft)	EP-10 EP-10_10 07/17/2026 L2645704-02 10 - 10.5 (ft)	EP-11 EP-11_10 07/20/2026 L2645984-01 10 - 10.5 (ft)
PFAS (mg/kg)																											
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	NA	NA	NA	ND (0.00084)	ND (0.000786)	ND (0.0008)	ND (0.000791)	ND (0.000771) J	ND (0.000856) J	ND (0.000856)	ND (0.000806)	ND (0.000792)	ND (0.000861) J	ND (0.000812) J	ND (0.000811) J	ND (0.000792)	ND (0.000791)	ND (0.000787)	ND (0.000821)	ND (0.000807)	-	-	-	ND (0.000812)	ND (0.000801)
2H,2H,3H-Perfluorooctanoic acid (5:3 FTCA)	NA	NA	NA	ND (0.00556)	ND (0.00491) J	ND (0.005) J	ND (0.00494)	ND (0.0051)	ND (0.00566) J	ND (0.00566) J	ND (0.00504)	ND (0.00495)	ND (0.00537)	ND (0.00537)	ND (0.00536) J	ND (0.00495)	ND (0.00494)	ND (0.00492)	ND (0.00513)	ND (0.00504)	-	-	-	ND (0.00508)	ND (0.005)
3-(Perfluoroheptyl)propanoic acid (7:3 FTCA)	NA	NA	NA	ND (0.00556)	ND (0.00491)	ND (0.005)	ND (0.00494)	ND (0.0051)	ND (0.00566)	ND (0.00566)	ND (0.00504)	ND (0.00495)	ND (0.00569)	ND (0.00537)	ND (0.00536)	ND (0.00495)	ND (0.00494)	ND (0.00492)	ND (0.00513)	ND (0.00504)	-	-	-	ND (0.00508)	ND (0.005)
3:3 Fluorotelomer carboxylic acid (3:3 FTCA)	NA	NA	NA	ND (0.00111)	ND (0.000982) J	ND (0.001) J	ND (0.000989)	ND (0.00102) J	ND (0.00113) J	ND (0.00113)	ND (0.00101)	ND (0.00099)	ND (0.00114) J	ND (0.00107)	ND (0.00107) J	ND (0.00099)	ND (0.000989)	ND (0.000984)	ND (0.00103)	ND (0.00101)	-	-	-	ND (0.00102)	ND (0.001)
4,8-Dioxa-3H-Perfluorononanoic Acid (ADONA)	NA	NA	NA	ND (0.00084)	ND (0.000786)	ND (0.0008)	ND (0.000791)	ND (0.000771)	ND (0.000856)	ND (0.000856)	ND (0.000806)	ND (0.000792)	ND (0.000861)	ND (0.000812)	ND (0.000811)	ND (0.000792)	ND (0.000791)	ND (0.000787)	ND (0.000821)	ND (0.000807)	-	-	-	ND (0.000812)	ND (0.000801)
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	NA	NA	NA	ND (0.000834)	ND (0.000786)	ND (0.0008)	ND (0.000791)	ND (0.000765)	ND (0.000849)	ND (0.000849)	ND (0.000806)	ND (0.000792)	ND (0.000854)	ND (0.000806)	ND (0.000804)	ND (0.000792)	ND (0.000791)	ND (0.000787)	ND (0.000821)	ND (0.000807)	-	-	-	ND (0.000812)	ND (0.000801)
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	NA	NA	NA	ND (0.000845)	ND (0.000786)	ND (0.0008)	ND (0.000791)	ND (0.000775)	ND (0.000861)	ND (0.000861)	ND (0.000806)	ND (0.000792)	ND (0.000865)	ND (0.000817)	ND (0.000815)	ND (0.000792)	ND (0.000791)	ND (0.000787)	ND (0.000821)	ND (0.000807)	-	-	-	ND (0.000812)	ND (0.000801)
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	NA	NA	NA	ND (0.000854)	ND (0.000786)	ND (0.0008)	ND (0.000791)	ND (0.000783)	ND (0.00087)	ND (0.00087)	ND (0.000806)	ND (0.000792)	ND (0.000874)	ND (0.000825)	ND (0.000823)	ND (0.000792)	ND (0.000791)	ND (0.000787)	ND (0.000821)	ND (0.000807)	-	-	-	ND (0.000812)	ND (0.000801)
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	NA	NA	NA	ND (0.000832)	ND (0.000786) J	ND (0.0008) J	ND (0.000791)	ND (0.000763) J	ND (0.000847)	ND (0.000847) J	ND (0.000806)	ND (0.000792)	ND (0.000852)	ND (0.000804) J	ND (0.000802)	ND (0.000792)	ND (0.000791)	ND (0.000787)	ND (0.000821)	ND (0.000807)	-	-	-	ND (0.000812)	ND (0.000801)
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	NA	NA	NA	ND (0.000222)	ND (0.000196)	ND (0.0002)	ND (0.000198)	ND (0.000204)	ND (0.000226)	ND (0.000227)	ND (0.000202)	ND (0.000198)	ND (0.000228)	ND (0.000215)	ND (0.000214)	ND (0.000198)	ND (0.000198)	ND (0.000197)	ND (0.000205)	ND (0.000202)	-	-	-	ND (0.000203)	ND (0.0002)
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	NA	NA	NA	ND (0.000222)	ND (0.000196) J	ND (0.0002) J	ND (0.000198)	ND (0.000204)	ND (0.000226) J	ND (0.000227)	ND (0.000202)	ND (0.000198)	ND (0.000228) J	ND (0.000215)	ND (0.000214) J	ND (0.000198)	ND (0.000198)	ND (0.000197)	ND (0.000205)	ND (0.000202)	-	-	-	ND (0.000203)	ND (0.0002)
N-Ethylperfluorooctane sulfonamidoethanol (N-EtFOSE)	NA	NA	NA	ND (0.00222) J	ND (0.00196) J	ND (0.002) J	ND (0.00198)	ND (0.00204)	ND (0.00226) J	ND (0.00227)	ND (0.00202)	ND (0.00198)	ND (0.00228) J	ND (0.00215)	ND (0.00214) J	ND (0.00198)	ND (0.00198)	ND (0.00197)	ND (0.00205)	ND (0.00202)	-	-	-	ND (0.00203)	ND (0.002)
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	NA	NA	NA	ND (0.000222)	ND (0.000196)	ND (0.0002)	ND (0.000198)	ND (0.000204)	ND (0.000226)	ND (0.000227)	ND (0.000202)	ND (0.000198)	ND (0.000228)	ND (0.000215)	ND (0.000214)	ND (0.000198)	ND (0.000198)	ND (0.000197)	ND (0.000205)	ND (0.000202)	-	-	-	ND (0.000203)	ND (0.0002)
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	NA	NA	NA	ND (0.000222)	ND (0.000196)	ND (0.0002)	ND (0.000198)	ND (0.000204)	ND (0.000226)	ND (0.000227)	ND (0.000202)	ND (0.000198)	ND (0.000228)	ND (0.000215)	ND (0.000214)	ND (0.000198)	ND (0.000198)	ND (0.000197)	ND (0.000205)	ND (0.000202)	-	-	-	ND (0.000203)	ND (0.0002)
N-Methylperfluorooctane sulfonamidoethanol (N-MeFOSE)	NA	NA	NA	ND (0.00222) J	ND (0.00196) J	ND (0.002) J	ND (0.00198)	ND (0.00204)	ND (0.00226)	ND (0.00227)	ND (0.00202)	ND (0.00198)	ND (0.00228)	ND (0.00215)	ND (0.00214) J	ND (0.00198)	ND (0.00198)	ND (0.00197)	ND (0.00205)	ND (0.00202)	-	-	-	ND (0.00203)	ND (0.002)
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NA	NA	NA	ND (0.000445) J	0.000393 R	0.0004 R	ND (0.000396)	ND (0.000408)	ND (0.000453) J	ND (0.000453)	ND (0.000403)	ND (0.000396)	ND (0.000455) J	ND (0.00043)	ND (0.000429) J	ND (0.000396)	ND (0.000396)	0.000394 R	ND (0.00041)	ND (0.000404)	-	-	-	ND (0.000406)	ND (0.0004)
Perfluoro(2-ethoxyethane) sulphonic acid (PFEESA)	NA	NA	NA	ND (0.000396)	ND (0.000393) J	ND (0.0004) J	ND (0.000396)	ND (0.000363)	ND (0.000403)	ND (0.000403)	ND (0.000403)	ND (0.000396)	ND (0.000405)	ND (0.000382)	ND (0.000382)	ND (0.000396)	ND (0.000396)	ND (0.000394)	ND (0.00041)	ND (0.000404)	-	-	-	ND (0.000406)	ND (0.0004)
Perfluoro(4-methoxybutanoic) acid (PFMBA)	NA	NA	NA	ND (0.000445)	ND (0.000393)	ND (0.0004)	ND (0.000396)	ND (0.000408)	ND (0.000453)	ND (0.000453)	ND (0.000403)	ND (0.000396)	ND (0.000455)	ND (0.00043)	ND (0.000429)	ND (0.000396)	ND (0.000396)	ND (0.000394)	ND (0.00041)	ND (0.000404)	-	-	-	ND (0.000406)	ND (0.0004)
Perfluoro-2-propoxypropanoic acid (PFPrOPrA)(GenX) (HFPO-DA)	NA	NA	NA	ND (0.000889) J	ND (0.000786) J	ND (0.0008) J	ND (0.000791)	ND (0.000816) J	ND (0.000906)	ND (0.000906) J	ND (0.000806)	ND (0.000792)	ND (0.000911)	ND (0.000859) J	ND (0.000858)	ND (0.000792)	ND (0.000791)	ND (0.000787)	ND (0.000821)	ND (0.000807) J	-	-	-	ND (0.000812)	ND (0.000801)
Perfluoro-3-methoxypropanoic acid (PFMPA)	NA	NA	NA	ND (0.000445)	ND (0.000393)	ND (0.0004)	ND (0.000396)	ND (0.000408)	ND (0.000453)	0.0000577 J	ND (0.000403)	ND (0.000396)	ND (0.000455)	ND (0.00043)	ND (0.000429)	ND (0.000396)	ND (0.000396)	ND (0.000394)	ND (0.00041)	ND (0.000404)	-	-	-	ND (0.000406)	ND (0.0004)
Perfluorobutanesulfonic acid (PFBS)	NA	NA	NA	ND (0.000197)	ND (0.000196)	ND (0.0002)	ND (0.000198)	ND (0.000181)	ND (0.0002)	ND (0.0002)	ND (0.000202)	ND (0.000198)	ND (0.000202)	ND (0.00019)	ND (0.00019)	ND (0.000198)	ND (0.000198)	ND (0.000197)	ND (0.000205)	ND (0.000202)	-	-	-	ND (0.000203)	ND (0.0002)
Perfluorobutanoic acid (PFBA)	NA	NA	NA	ND (0.000889)	ND (0.000786)	ND (0.0008)	ND (0.000791)	ND (0.000816) J	ND (0.000906)	ND (0.000906)	ND (0.000806)	ND (0.000792)	ND (0.000911)	ND (0.000859)	ND (0.000858)	ND (0.000792)	ND (0.000791)	ND (0.000787)	ND (0.000821)	ND (0.000807)	-	-	-	ND (0.000812)	ND (0.000801)
Perfluorodecanesulfonic acid (PFDS)	NA	NA	NA	ND (0.000215)	ND (0.000196)	ND (0.0002)	ND (0.000198)	ND (0.000197)	ND (0.000219)	ND (0.000219)	ND (0.000202)	ND (0.000198)	ND (0.00022)	ND (0.000207)	ND (0.000207)	ND (0.000198)	ND (0.000198)	ND (0.000197)	ND (0.000205)	ND (0.000202)	-	-	-	ND (0.000203)	ND (0.0002)
Perfluorodecanoic acid (PFDA)	NA	NA	NA	ND (0.000222)	ND (0.000196)	ND (0.0002)	ND (0.000198)	ND (0.000204)	ND (0.000226)	ND (0.000227)	ND (0.000202)	ND (0.000198)	ND (0.000228)	ND (0.000215)	ND (0.000214)	ND (0.000198)	ND (0.000198)	ND (0.000197)	ND (0.000205)	ND (0.000202)	-	-	-	ND (0.000203)	0.000052 J
Perfluorododecane sulfonic acid (PFDoDS)	NA	NA	NA	ND (0.000216)	ND (0.000196)	ND (0.0002)	ND (0.000198)	ND (0.000198)	ND (0.00022)	ND (0.00022)	ND (0.000202)	ND (0.000198)	ND (0.000221)	ND (0.000208)	ND (0.000208)	ND (0.000198)	ND (0.000198)	ND (0.000197)	ND (0.000205)	ND (0.000202)	-	-	-	ND (0.000203)	ND (0.0002)
Perfluorododecanoic acid (PFDoDA)	NA	NA	NA	ND (0.000222)	ND (0.000196)	ND (0.0002)	ND (0.000198)	ND (0.000204)	ND (0.000226)	ND (0.000227)	ND (0.000202)	ND (0.000198)	ND (0.000228)	ND (0.000215)	ND (0.000214)	ND (0.000198)	ND (0.000198)	ND (0.000197)	ND (0.000205)	ND (0.000202)	-	-	-	ND (0.000203)	ND (0.0002)
Perfluoroheptanesulfonic acid (PFHpS)	NA	NA	NA	ND (0.000222)	ND (0.000196)	ND (0.0002)	ND (0.000198)	ND (0.000204)	ND (0.000226)	ND (0.000227)	ND (0.000202)	ND (0.000198)	ND (0.000228)	ND (0.000215)	ND (0.000214)	ND (0.000198)	ND (0.000198)	ND (0.000197)	ND (0.000205)	ND (0.000202)	-	-	-	ND (0.000203)	ND (0.0002)
Perfluoroheptanoic acid (PFHpA)	NA	NA	NA	ND (0.000222)	ND (0.000196)	ND (0.0002)	ND (0.000198)	ND (0.000204)	ND (0.000226) J	ND (0.000227)	ND (0.000202)	ND (0.000198)	ND (0.000228) J	ND (0.000215) J	ND (0.000214) J	ND (0.000198)	ND (0.000198)	ND (0.000197)	ND (0.000205)	ND (0.000202)	-	-	-	ND (0.000203)	ND (0.0002)
Perfluorohexanesulfonic acid (PFHxS)	NA	NA	NA	ND (0.000203)	ND (0.000196)	ND (0.0002)	ND (0.000198)	ND (0.000187)	ND (0.000207)	ND (0.000207)	ND (0.000202)	ND (0.000198)	ND (0.000208)	ND (0.000197)	ND (0.000196)	ND (0.000198)	ND (0.000198)	ND (0.000197)	ND (0.000205)	ND (0.000202)	-	-	-	ND (0.000203)	ND (0.0002)
Perfluorohexanoic acid (PFHxA)	NA	NA	NA	ND (0.000222)	ND (0.000196) J	ND (0.0002) J	ND (0.000198)	ND (0.000204)	ND (0.000226) J	ND (0.000227)	ND (0.000202)	ND (0.000198)	ND (0.000228) J	ND (0.000215)	ND (0.000214) J	ND (0.000198)	ND (0.000198)	ND (0.000197)	ND (0.000205)	ND (0.000202)	-	-	-	ND (0.000203)	ND (0.0002)
Perfluorononane sulfonic acid (PFNS)	NA	NA	NA	ND (0.000213)	ND (0.000196)	ND (0.0002)	ND (0.000198)	ND (0.000196) J	ND (0.000217)	ND (0.000217)	ND (0.000202)	ND (0.000198)	ND (0.000219)	ND (0.000206)	ND (0.000206)	ND (0.000198)	ND (0.000198)	ND (0.000197)	ND (0.000205)	ND (0.000202)	-	-	-	ND (0.000203)	ND (0.0002)
Perfluorononanoic acid (PFNA)	NA	NA	NA	ND (0.000222)	0.000041 J	ND (0.0002)	ND (0.000198)	ND (0.000204)	ND (0.000226)	ND (0.000227)	ND (0.000202)	ND (0.000198)	ND (0.000228)	ND (0.000215)	ND (0.000214)	ND (0.000198)	ND (0.000198)	ND (0.000197)	ND (0.000205)	ND (0.000202)	-	-	-	ND (0.000203)	0.000046 J
Perfluorooctane sulfonamide (PFOSA)	NA	NA	NA	ND (0.000222)	ND (0.000196)	ND (0.0002)	ND (0.000198)	ND (0.000204)	ND (0.000226)	ND (0.000227)	ND (0.000202)	ND (0.000198)	ND (0.000228)	ND (0.000215)	ND (0.000214)	ND (0.000198)	ND (0.000198)	ND (0.000197)	ND (0.000205)	ND (0.000202)	-	-	-	ND (0.000203)	ND (0.0002)
Perfluorooctanesulfonic acid (PFOS)	0.001	0.044	0.00088	ND (0.000207)	0.00024	0.000206	0.000124 J	0.000124 J	ND (0.000211)	ND (0.000211)	0.000119 J	ND (0.000198)	ND (0.000212)	0.000258	ND (0.000199)	ND (0.000198)	0.000142 J	0.000136 J	ND (0.000205)	ND (0.000202)	-	-	-	0.000128 J	0.000318
Perfluorooctanoic acid (PFOA)	0.0008	0.033	0.00066	ND (0.000222)	0.000085 J	0.000132 J	0.000065 J	0.0000752 J	ND (0.000226)	ND (0.000227)	0.000077 J	ND (0.000198)	ND (0.000228)	ND (0.000215)	0.000233	ND (0.000198)	0.000057 J	0.000091 J	ND (0.000205)	ND (0.000202)	-	-	-	0.000063 J	0.000172 J
Perfluoropentanesulfonic acid (PFPeS)	NA	NA	NA	ND (0.000209)	ND (0.000196)	ND (0.0002)	ND (0.000198)	ND (0.000192)	ND (0.000213)	ND (0.000213)	ND (0.000202)	ND (0.000198)	ND (0.000214)	ND (0.000202)	ND (0.000202)	ND (0.000198)	ND (0.000198)	ND (0.000197)	ND (0.000205)	ND (0.000202)	-	-	-	ND (0.000203)	ND (0.0002)
Perfluoropentanoic acid (PFPeA)	NA	NA	NA	ND (0.000445)	ND (0.000393)	ND (0.0004)	ND (0.000396)	ND (0.000408)	ND (0.000453)	ND (0.000453)	ND (0.000403)	ND (0.000396)	ND (0.000455)	ND (0.00043)	ND (0.000429)	ND (0.000396)	ND (0.000396)	ND (0.000394)	ND (0.00041)	ND (0.000404)	-	-	-	ND (0.000406)	ND (0.0004)
Perfluorotetradecanoic acid (PFTeDA)	NA	NA	NA	ND (0.000222) J	ND (0.000196)	ND (0.0002)	ND (0.000198)	ND (0.000204)	ND (0.000226)	ND (0.000227)	ND (0.000202)	ND (0.000198)	ND (0.000228)	ND (0.000215)	ND (0.000214)	ND (0.000198)	ND (0.000198)	ND (0.000197)	ND (0.000205)	ND (0.000202)	-	-	-	ND (0.000203)	ND (0.0002)
Perfluorotridecanoic acid (PFTrDA)	NA	NA	NA	ND (0.000222)	ND (0.000196)	ND (0.0002)	ND (0.000198)	ND (0.000204)	ND (0.000226)	ND (0.000227)	ND (0.000202)	ND (0.000198)	ND (0.000228)	ND (0.000215)	ND (0.000214)	ND (0.000198)	ND (0.000198)	ND (0.000197)	ND (0.000205)	ND (0.000202)	-	-	-	ND (0.000203)	ND (0.0002)
Perfluoroundecanoic acid (PFUnDA)	NA	NA	NA	ND (0.000222)	ND (0.000196)	ND (0.0002)	ND (0.000198)	ND (0.000204)	ND (0.000226)	ND (0.000227)	ND (0.000202)	ND (0.000198)	ND (0.000228)	ND (0.000215)	ND (0.000214)	ND (0.000198)	ND (0.000198)	ND (0.000197)	ND (0.000205)	ND (0.000202)	-	-	-	ND (0.000203)	ND (0.0002)
Pesticides (mg/kg)																											
4,4'-DDD	14	5	0.0033	ND (0.00184)	ND (0.00174)	ND (0.00174)	ND (0.00175)	ND (0.00164)	ND (0.00185)	ND (0.00186)	ND (0.00173)	ND (0.00173)	ND (0.00186)	ND (0.00175)	ND (0.00176)	ND (0.00178)	ND (0.00164)	ND (0.00176)	ND (0.0017)	ND (0.0017)	-	-	-	ND (0.0017)	0.00171 J
4,4'-DDE	9.3	3.4	0.0033	ND (0.00184)	ND (0.00174)	ND (0.00174)	ND (0.00175)	ND (0.00164)	ND (0.00185)	0.00194 J	0.000771 J	ND (0.00173)	ND (0.00186)	ND (0.00175)	ND (0.00176)	ND (0.00178)	ND (0.00164)	ND (0.00176)	ND (0.0017)	ND (0.0017)	-	-	-	0.0012 J	0.00466
4,4'-DDT	135	3.8	0.0033	ND (0.00184)	ND (0.00174)	ND (0.00174)	0.00546 J	ND (0.00164)	ND (0.00185)	0.0054	0.00567 J	0.00481 J	ND (0.00186)	0.00765	ND (0.00176)	ND (0.00178)	ND (0.00164)	ND (0.00176)	ND (0.0017)	ND (0.0017)	-	-	-	0.0108 J	0.0243 J
Aldrin	0.19	0.044	0.0048	ND (0.00184)	ND (0.00174)	ND (0.00174)	ND (0.00175)	ND (0.00164)	ND (0.00185)	ND (0.00186)	ND (0.00173)	ND (0.00173)	ND (0.00186)	ND (0.00175)	ND (0.00176)	ND (0.00178)	ND (0.00164)	ND (0.00176)	ND (0.0017)	ND (0.0017)	-	-	-	ND (0.0017)	ND (0.00172)
alpha-BHC	0.02	0.18	0.02	ND (0.00184)	ND (0.000725)	ND (0.000725)	ND (0.000729)	ND (0.00164)	ND (0.00185)	ND (0.00186)	ND (0.00072)	ND (0.000721)	ND (0.00186)	ND (0.00175)	ND (0.00176)	ND (0.00074)	ND (0.000686)	ND (0.000736)	ND (0.000706)	ND (0.00071)	-	-	-	ND (0.000707)	ND (0.000714)
alpha-Chlordane (cis)	4.5	0.65	0.014	ND (0.00184)	ND (0.00217)	ND (0.00218)	0.000879 J	0.00621	ND (0.00185)	0.0162	0.0025 J	0.000646 J	ND (0.00186)	ND (0.00175)	ND (0.00176)	ND (0.00222)	ND (0.00206)	ND (0.00221)	ND (0.00212)	ND (0.00213)	-	-	-	0.00143 J	0.00278
beta-BHC	0.09	0.18	0.021	ND (0.00184)	ND (0.00174)	ND (0.00174)	ND (0.00175)	ND (0.00164)	ND (0.00185)	ND (0.00186)	ND (0.00173)	ND (0.00173)	ND (0.00186)	ND (0.00175)	ND (0.00176)	ND (0.00178)	ND (0.00164)	ND (0.00176)	ND (0.0017)	ND (0.0017)	-	-	-	ND (0.0017)	ND (0.00172)
Chlordane	NA	NA	NA	-	ND (0.0145)	ND (0.0145)	ND (0.0146)	-	-	-	0.0208	ND (0.0144)	-	-	-	ND (0.0148)	ND (0.0137)	ND (0.0147)	ND (0.0141)	ND (0.0142)	-	-	-	ND (0.0141)	ND (0.0143)
delta-BHC	0.1	100	0.04	ND (0.00184)	ND (0.00174)	ND (0.00174)	ND (0.00175)	ND (0.00164)	ND (0.00185)	ND (0.00186)	ND (0.00173)	ND (0.00173)	ND (0.00186)	ND (0.00175)	ND (0.00176)	ND (0.00178)	ND (0.00164)	ND (0.00176)	ND (0.0017)	ND (0.0017)	-	-	-	ND (0.0017)	ND (0.00172)
Dieldrin	0.1	0.075	0.005	ND (0.00184)	ND (0.00109)	ND (0.00109)	ND (0.00109)	ND (0.00164)	ND (0.00185)	ND (0.00186)	0.00251 J	ND (0.00108)	ND (0.00186)	ND (0.00175)	ND (0.00176)	ND (0.00111)	ND (0.00103)	ND (0.0011)	ND (0.00106)	ND (0.00106)	-	-	-	ND (0.00106)	ND (0.00107)
Endosulfan I	65	35	4.3	ND (0.00184)	ND (0.00174)	ND (0.00174)	ND (0.00175)	ND (0.00164)	ND (0.00185)	ND (0.00186)	ND (0.00173)	ND (0.00173)	ND (0.00186)	ND (0.00175)	ND (0.00176)	ND (0.00178)	ND (0.00164)	ND (0.00176)	ND (0.0017)	ND (0.0017)	-	-	-	ND (0.0017)	ND (0.00172)
Endosulfan II	44	35	4.3	ND (0.00184)	ND (0.00174)	ND (0.00174)	ND (0.00175)	ND (0.00164)	ND (0.00185)	ND (0.00186)	ND (0.00173)	ND (0.00173)	ND (0.00186)	ND (0.00175)	ND (0.00176)	ND (0.00178)	ND (0.00164)	ND (0.00176)	ND (0.0017)	ND (0.0017)	-	-	-	ND (0.0017)	ND (0.00172)
Endosulfan sulfate	47	35	4.3	ND (0.00184)	ND (0.000725)	ND (0.000725)	ND (0.000729)	ND (0.00164)	ND (0.00185)	ND (0.00186)	ND (0.00072)	ND (0.000721)	ND (0.00186)	ND (0.00175)	ND (0.00176)	ND (0.00074)	ND (0.000686)	ND (0.000736)	ND (0.000706)	ND (0.00071)	-	-	-	ND (0.000707)	ND (0.000714)
Endrin	0.06	5.3	0.014	ND (0.00184)	ND (0.000725)	ND (0.000725)	ND (0.000729)	ND (0.00164)	ND (0.00185)	ND (0.00186)	ND (0.00072)	ND (0.000721)	ND (0.00186)	ND (0.00175)	ND (0.00176)	ND (0.00074)	ND (0.000686)	ND (0.000736)	ND (0.000706)	ND (0.00071)	-	-	-	ND (0.000707)	ND (0.000714)
Endrin aldehyde	NA	NA	NA	ND (0.00184)	ND (0.00217)	ND (0.00218)	ND (0.00219)	ND (0.00164)	ND (0.00185)	ND (0.00186)	ND (0.00216)	ND (0.00216)	ND (0.00186)	ND (0.00175)	ND (0.00176)	ND (0.00222)	ND (0.00206)	ND (0.00221)	ND (0.00212)	ND (0.00213)	-	-	-	ND (0.00212)	ND (0.00214)
Endrin ketone	NA	NA	NA	ND (0.00184)	ND (0.00174)	ND (0.00174)	ND (0.00175)	ND (0.00164)	ND (0.00185)	ND (0.00186)	ND (0.00173)	ND (0.00173)	ND (0.00186)	ND (0.00175)	ND (0.00176)	ND (0.00178)	ND (0.00164)	ND (0.00176)	ND (0.0017)	ND (0.0017)	-	-	-	ND (0.0017)	ND (0.00172)
gamma-BHC (Lindane)	0.05	0.21	0.025	ND (0.00184)	ND (0.000725)	ND (0.000725)	ND (0.000729)	ND (0.00164)	ND (0.00185)	ND (0.00186)	ND (0.00072)	ND (0.000721)	ND (0.00186)	ND (0.00175)	ND (0.00176)	ND (0.00074)	ND (0.000686)	ND (0.000736)	ND (0.000706)	ND (0.00071)	-	-	-	ND (0.000707)	ND (0.000714)
gamma-Chlordane	NA	NA	NA	ND (0.00184)	-	-	-	0.008	ND (0.00185)	0.0216	-	-	ND (0.00186)	ND (0.00175)	ND (0.00176)	-	-	-	-	-	-	-	-	-	-
gamma-Chlordane (trans)	NA	NA	NA	-	ND (0.00217)	ND (0.00218)	0.000816 J	-	-	-	0.00248 J	0.00124 J	-	-	-	ND (0.00222)	ND (0.00206)	ND (0.00221)	ND (0.00212)	ND (0.00213)	-	-	-	0.00153 J	0.00157 J
Heptachlor	0.38	0.53	0.013	ND (0.00184)	ND (0.00087)	ND (0.00087)	ND (0.000875)	ND (0.00164)	ND (0.00185)	0.0031	ND (0.000864)	ND (0.000865)	ND (0.00186)	ND (0.00175)	ND (0.00176)	ND (0.000888)	ND (0.000823)	ND (0.000883)	ND (0.000848)	ND (0.000852)	-	-	-	ND (0.000849)	ND (0.000858)
Heptachlor epoxide	NA	NA	NA	ND (0.00184)	ND (0.00326)	ND (0.00326)	ND (0.00328)	ND (0.00164)	ND (0.00185)	ND (0.00186)	ND (0.00324)	ND (0.00324)	ND (0.00186)	ND (0.00175)	ND (0.00176)	ND (0.00333)	ND (0.00308)	ND (0.00331)	ND (0.00318)	ND (0.0032)	-	-	-	ND (0.00318)	ND (0.00322)
Methoxychlor	NA	NA	NA	ND (0.00184)	ND (0.00326)	ND (0.00326)	ND (0.00328)	ND (0.00164)	ND (0.00185)	ND (0.00186)	ND (0.00324)	ND (0.00324)	ND (0.00186)	ND (0.00175)	ND (0.00176)	ND (0.00333)	ND (0.00308)	ND (0.00331)	ND (0.00318)	ND (0.0032)	-	-	-	ND (0.00318)	ND (0.00322)
Toxaphene	NA	NA	NA	ND (0.184)	ND (0.0326)	ND (0.0326)	ND (0.0328)	ND (0.164)	ND (0.185)	ND (0.186)	ND (0.0324)	ND (0.0324)	ND (0.186)	ND (0.175)	ND (0.176)	ND (0.0333)	ND (0.0308)	ND (0.0331)	ND (0.0318)	ND (0.032)	-	-	-	ND (0.0318)	ND (0.0322)
Polychlorinated Biphenyls (mg/kg)																											
Aroclor-1016 (PCB-1016)	NA	NA	NA	ND (0.0185)	ND (0.0532)	ND (0.0539)	ND (0.0532)	ND (0.0165)	ND (0.0195)	ND (0.0188)	ND (0.0529)	ND (0.0526)	ND (0.0195)	ND (0.0177)	ND (0.0178)	ND (0.0536)	ND (0.0527)	ND (0.0507)	ND (0.0546)	ND (0.0516)	-	-	-	ND (0.0554)	ND (0.054)
Aroclor-1221 (PCB-1221)	NA	NA	NA	ND (0.0185)	ND (0.0532)	ND (0.0539)	ND (0.0532)	ND (0.0165)	ND (0.0195)	ND (0.0188)	ND (0.0529)	ND (0.0526)	ND (0.0195)	ND (0.0177)	ND (0.0178)	ND (0.0536)	ND (0.0527)	ND (0.0507)	ND (0.0546)	ND (0.0516)	-	-	-	ND (0.0554)	ND (0.054)
Aroclor-1232 (PCB-1232)	NA	NA	NA	ND (0.0185)	ND (0.0532)	ND (0.0539)	ND (0.0532)	ND (0.0165)	ND (0.0195)	ND (0.0188)	ND (0.0529)	ND (0.0526)	ND (0.0195)	ND (0.0177)	ND (0.0178)	ND (0.0536)	ND (0.0527)	ND (0.0507)	ND (0.0546)	ND (0.0516)	-	-	-	ND (0.0554)	ND (0.054)
Aroclor-1242 (PCB-1242)	NA	NA	NA	ND (0.0185)	ND (0.0532)	ND (0.0539)	ND (0.0532)	ND (0.0165)	ND (0.0195)	ND (0.0188)	ND (0.0529)	ND (0.0526)	ND (0.0195)	ND (0.0177)	ND (0.0178)	ND (0.0536)	ND (0.0527)	ND (0.0507)	ND (0.0546)	ND (0.0516)	-	-	-	ND (0.0554)	ND (0.054)
Aroclor-1248 (PCB-1248)	NA	NA	NA	ND (0.0185)	ND (0.0532)	ND (0.0539)	ND (0.0532)	ND (0.0165)	ND (0.0195)	ND (0.0188)	ND (0.0529)	ND (0.0526)	ND (0.0195)	ND (0.0177)	ND (0.0178)	ND (0.0536)	ND (0.0527)	ND (0.0507)	ND (0.0546)	ND (0.0516)	-	-	-	ND (0.0554)	ND (0.054)
Aroclor-1254 (PCB-1254)	NA	NA	NA	ND (0.0185)	ND (0.0532)	ND (0.0539)	ND (0.0532)	ND (0.0165)	ND (0.0195)	ND (0.0188)	ND (0.0529)	ND (0.0526)	ND (0.0195)	ND (0.0177)	ND (0.0178)	ND (0.0536)	ND (0.0527)	ND (0.0507)	ND (0.0546)	ND (0.0516)	-	-	-	0.063	ND (0.054)
Aroclor-1260 (PCB-1260)	NA	NA	NA	ND (0.0185)	ND (0.0532)	ND (0.0539)	0.125	ND (0.0165)	ND (0.0195)	0.0343	0.182	0.163	ND (0.0195)	0.0343	ND (0.0178)	0.0144 J	ND (0.0527)	0.33	ND (0.0546)	ND (0.0516)	-	-	-	0.257	0.347
Aroclor-1262 (PCB-1262)	NA	NA	NA	ND (0.0185)	ND (0.0532)	ND (0.0539)	ND (0.0532)	ND (0.0165)	ND (0.0195)

Location Name Sample Name Sample Date Lab Sample ID Sample Depth (bgs)	Criteria Restricted Use Soil Cleanup Objectives - Protection of Groundwater 2025	Restricted Use Soil Cleanup Objectives - Residential 2025	Unrestricted Use Soil Cleanup Objectives 2025	SB-01 SB-01_14-16 07/22/2025 25G1455-04 14 - 16 (ft)	SB-03 SB-03_15 08/14/2026 L2652833-01 15 - 15.5 (ft)	SB-03_N SB-03_N_13 8/14/2026 L2652833-02 13 - 13.5 (ft)	SB-06_S SB-06_S_13 07/24/2026 L2647551-08 13 - 13.5 (ft)	SB-07 SB-07_14-16 07/21/2025 25G1376-08 14 - 16 (ft)	SB-10 SB-10_14-16 07/24/2025 25G1657-15 14 - 16 (ft)	SB-11 SB-11_25-27 07/24/2025 25G1657-05RE1 25 - 27 (ft)	SB-11_N SB-11_N_13 07/24/2026 L2647551-02 13 - 13.5 (ft)	SB-11_S SB-11_S_13 07/24/2026 L2647551-03 13 - 13.5 (ft)	SB-12 SB-12_25-27 07/24/2025 25G1657-12 25 - 27 (ft)	SB-14 SB-14_14-16 07/25/2025 25G1718-08 14 - 16 (ft)	SB-15 SB-15_20 07/24/2025 25G1657-16 20 (ft)	SB-16 SB-16_14-16 11/20/2025 L2574359-04 14 - 16 (ft)	SB-17 SB-17_23-25 11/20/2025 L2574359-08 23 - 25 (ft)	UST_W2_SW UST_W2_SW_13 08/19/2026 L2654062-05 13 - 13.5 (ft)	EP-03 EP-03_10 07/02/2026 L2641792-03 10 - 10.5 (ft)	EP-06 EP-06_10 07/02/2026 L2641792-05 10 - 10.5 (ft)	EP-07 EP-07_11 08/04/2026 L2649891-05 11 - 11.5 (ft)	EP-08 EP-08_15 8/19/2026 L2574359-08 15 - 15.5 (ft)	EP-9 EP-9_11 07/20/2026 L2645979-03 11 - 11.5 (ft)	EP-10 EP-10_10 07/17/2026 L2645704-02 10 - 10.5 (ft)	EP-11 EP-11_10 07/20/2026 L2645984-01 10 - 10.5 (ft)
Inorganic Compounds (mg/kg)																										
Aluminum	NA	NA	NA	19000 J	3920	3500	**4220**	8610	8150	8040	3560	4480	8070	6990	6130	3610	3660	5000	4160	5570	-	-	-	-	5100
Antimony	NA	NA	NA	ND (2.32) J	ND (4.34)	ND (4.28)	**ND (4.2) J**	ND (2.12)	2.37 R	2.36 R	ND (4.48) J	ND (4.28) J	2.38 R	ND (2.25)	2.25 R	ND (4.36)	ND (4.17)	ND (4.37) J	ND (4.33)	ND (4.29)	-	-	-	-	ND (4.36)
Arsenic	16	16	13	3.02 J	1.85	1.61	**1.76 J**	3.08	2.3	3.29	1.44 J	2.07 J	4.86	4.4	4.58	1.73	1.98	1.69	2.36	2.01	-	-	-	2.02	2.66
Barium	820	410	410	81.6 J	379	29.4	**88.3**	57.7	66.7	58.3	49.4	71.7	399	198	157	46.3	27.1	41.2 J	34.9	40.9	-	-	-	111	94.3
Beryllium	47	43	4.4	0.673 J	0.318 J	0.27 J	**0.424**	0.228	2.07	0.259	0.396 J	0.43	0.279	0.149	0.585	0.347 J	0.376 J	0.43 J	0.428 J	0.455	-	-	-	0.338 J	0.385 J
Cadmium	7.5	2.5	2.5	0.363	0.203 J	ND (0.855)	**0.111 J**	ND (0.255)	0.598	ND (0.283)	0.072 J	0.104 J	1.45	0.468	0.521	ND (0.872)	ND (0.834)	ND (0.874)	ND (0.867)	ND (0.859)	-	-	0.19 J	0.282 J	ND (0.872)
Calcium	NA	NA	NA	2400	1960	1180	**5680**	2840	2910	2390	3650	4350	11300	18300	2560	1190	1080	2230 J+	900	1830	-	-	-	-	3830
Chromium	NA	NA	NA	45.4 J	11.4	9.94	**16.3**	23.5	39.7 J+	37.5 J+	12.5	15.6	26.9 J+	19	17.8 J+	11.3	13.6	18.5 J+	13.7	19	-	-	-	12.8	13
Chromium VI (Hexavalent)	19	1	1	-	-	-	**-**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (0.898)	-
Cobalt	NA	NA	NA	23.5 J	5.33	5.05	**6.7**	11.1	13.9	9.04	5.82	6.08	8.11	7.23	27.6	5.63	6.48	6.98	6.82	7.22	-	-	-	-	6.78
Copper	1720	280	50	35.6	46.1	17.4	**26.8**	51.5	70.8 J+	21.4 J+	26.9	23.3	47.5 J+	40.6	35.1 J+	16	19.1	19.8 J+	17.5	22.8	-	-	-	22	27.1
Iron	NA	NA	NA	65600 J	13700	15300	**16200 J**	26100	78700	23400	14500 J	14400 J	21000	20700	52900	15300	19500	16300	18000	19300	-	-	-	-	15800
Lead	450	400	63	12.2 J	417	5.27	**51.1**	10.3	25.4	7.43	33.6	49.9	311	139	7.81	9.55	7.65	10.1 J	8.75	15.8	-	-	-	70.2	84.3
Magnesium	NA	NA	NA	10200 J	1880	1210	**2280**	2880	2680	2440	1600	2220	3370	3160	2130	1580	2110	2650 J+	1700	2640	-	-	-	-	1880
Manganese	2000	2000	1600	1320 J	242	321	**292 J**	762	1510	632	191 J	219 J	340	367	***3880***	461	768	423	313	384	-	-	-	261	416
Mercury	0.73	0.3	0.18	ND (0.0335)	ND (0.07)	ND (0.072)	**0.061 J**	ND (0.0306)	ND (0.0342)	ND (0.034)	0.16	0.154	***1.42***	ND (0.0324)	ND (0.0324)	ND (0.081)	ND (0.076)	ND (0.09)	ND (0.072)	0.247	-	0.552 J	0.191	0.181	0.17
Nickel	130	320	30	40.9 J	10.8	8.83	**13**	28	17.4	16	10.4	12.3	17.9	13.1	25.8	9.53	10.9	13.3 J+	12.1	11.5	-	-	-	8.48	12.8
Potassium	NA	NA	NA	6340 J	1190	689	**1070**	1210	1360	1600	840	1140	1360	1300	1160	1100	492	968 J+	1150	2060	-	-	-	-	910
Selenium	4	110	3.9	ND (2.32)	ND (1.74)	ND (1.71)	**ND (1.68)**	ND (2.12)	ND (2.37)	ND (2.36)	ND (1.79)	ND (1.71)	ND (2.38)	ND (2.25)	ND (2.25)	ND (1.74)	ND (1.67)	ND (1.75)	ND (1.73)	ND (1.72)	-	-	-	ND (1.75)	ND (1.74)
Silver	8.3	110	2	ND (0.469)	ND (0.434)	ND (0.428)	**ND (0.42)**	ND (0.428)	ND (0.478)	ND (0.476)	ND (0.448)	ND (0.428)	ND (0.479)	ND (0.454)	ND (0.453)	ND (0.436)	ND (0.417)	ND (0.437)	ND (0.433)	ND (0.429)	-	-	-	ND (0.437)	0.335 J
Sodium	NA	NA	NA	389 J	139 J	131 J	**132 J**	535	414	315	132 J	119 J	512	291	219	106 J	192	104 J+	250	140 J	-	-	-	-	109 J
Thallium	NA	NA	NA	ND (1.86)	ND (1.74)	ND (1.71)	**ND (1.68)**	ND (1.7)	ND (1.9)	ND (1.89)	ND (1.79)	ND (1.71)	ND (1.91)	ND (1.8)	ND (1.8)	ND (1.74)	ND (1.67)	ND (1.75)	ND (1.73)	ND (1.72)	-	-	-	-	ND (1.74)
Vanadium	NA	NA	NA	59.2 J	22.6	21.9	**23.8**	49.2	37.6	31.1	20	24	26.7	45.1	49.5	20.2	23.2	26.6 J+	22.3	29.9	-	-	-	-	28.7
Zinc	2480	6600	109	112 J	125	18	**77.2 J-**	29.7	115	29.7	116 J-	67.2 J-	722	199	73.9	26.2	24.3	32.7 J+	23.8	39.6	-	-	-	120	88.2
Other																									
Percent Solids, vol. (%)	-	-	-	89.6	-	-	-	98.1	87.8	88.3	-	-	87.7	92.5	92.7	-	-	-	-	-	-	-	-	-	-
Total Solids (%)	NA	NA	NA	-	90.1	91.7	89.9	-	-	-	88.2	88.6	-	-	-	89	91.5	90.3	89.8	89.7	87.6	89.3	74.5	89.1	90.4
Chromium III (Trivalent)	NA	110	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.8	-
Cyanide (mg/kg)	40	13	2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND (1)	ND (1.1)	-	-	-	ND (1.1) J	-

Notes:

mg/kg: milligram per kilogram

-: Not Analyzed

bgs: below ground surface

F: Results are considered to be an estimated maximum concentration

ft: feet

I: The lower value for the two columns has been reported due to obvious interference.

J: Value is estimated.

NA: Not Applicable

ND (2.5): Not detected, number in parentheses is the laboratory reporting limit

P: The RPD between the results for the two columns exceeds the method-specified criteria.

- For test methods used, see the laboratory data sheets.

- Soil analytical results are compared to the New York State Department of Environmental Conservation (NYSDEC) Title 6 of the Official Compilation of New York Codes, Rules, and Regulations (NYCRR) Part 375 Unrestricted Use Soil Cleanup Objectives (SCO), Restricted-Use Residential SCOs, and Protection of Groundwater SCO's.

*- **Bold italic** values indicate an exceedance of the Protection of Groundwater Criteria.*

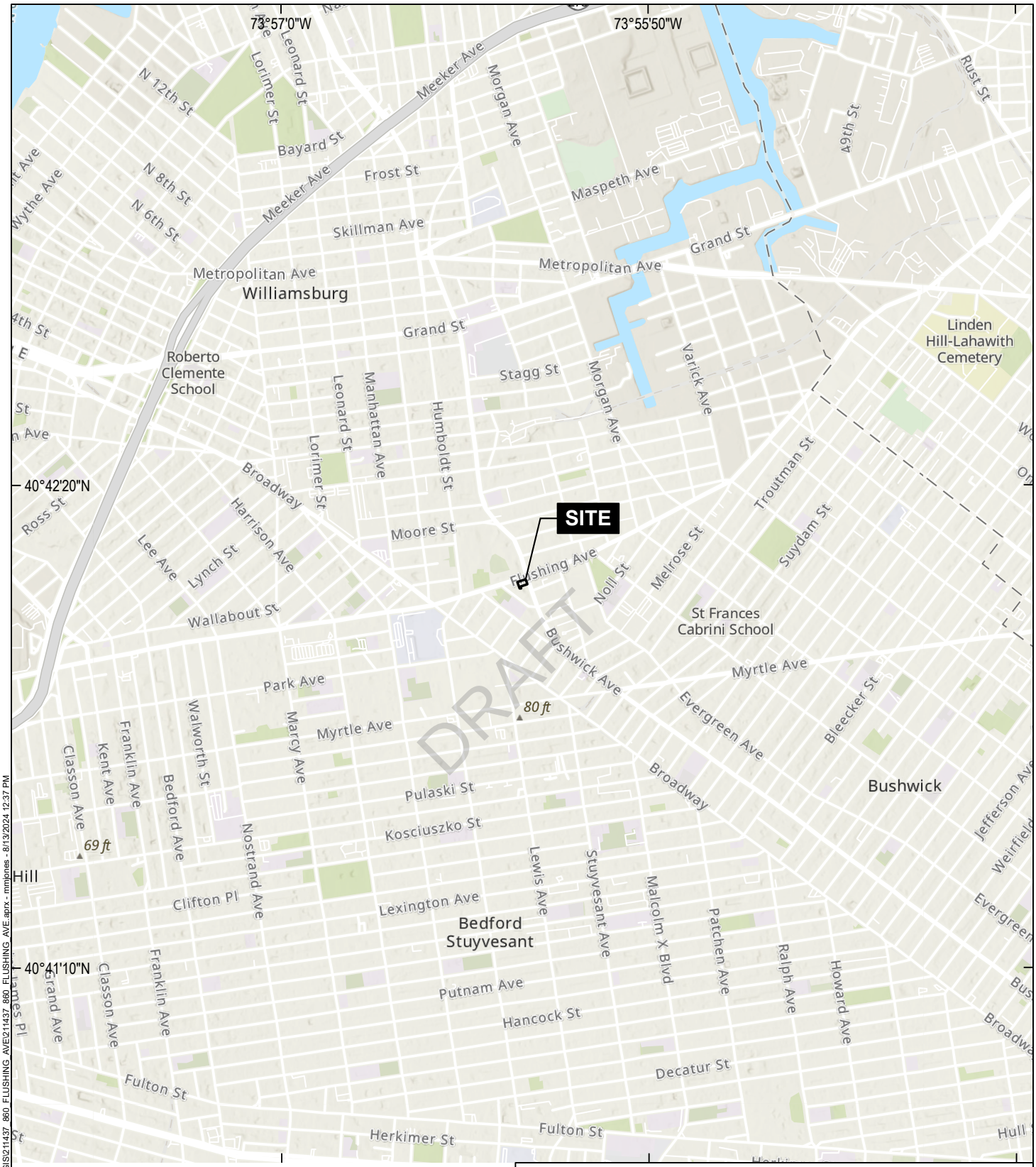
- Grey shading indicates an exceedance of the Unrestricted Use Soil Cleanup Objectives.

- Yellow shading indicates an exceedance of the Restricted Use Residential Soil Cleanup Objectives.

DRAFT

FIGURES

DRAFT







MAP SOURCE: ESRI
SITE COORDINATES: 40°42'06"N, 73°56'14"W

HALEY ALDRICH

860 FLUSHING AVENUE
BROOKLYN, NEW YORK

PROJECT LOCUS

APPROXIMATE SCALE: 1 IN = 2000 FT
SEPTEMBER 2025

FIGURE 1

GIS: \\haleyaldrich.com\share\CF\Projects\021143\7\GIS\211437_860_FLUSHING_AVE\211437_860_FLUSHING_AVE aprx - mmjones - 8/13/2024 12:37 PM



LEGEND

SITE BOUNDARY

PARCEL BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.

2. PARCEL DATA SOURCE: NEW YORK CITY DEPARTMENT OF CITY PLANNING, INFORMATION TECHNOLOGY DIVISION

3. AERIAL IMAGERY SOURCE: NEARMAP, JULY 3, 2025

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SCALE IN FEET

HALEY ALDRICH

860 FLUSHING AVENUE
BROOKLYN, NEW YORK

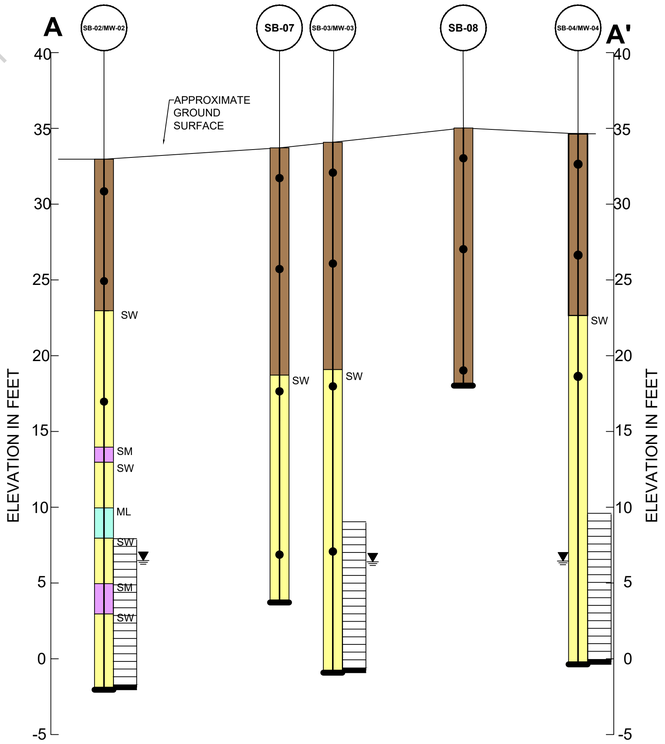
SITE MAP

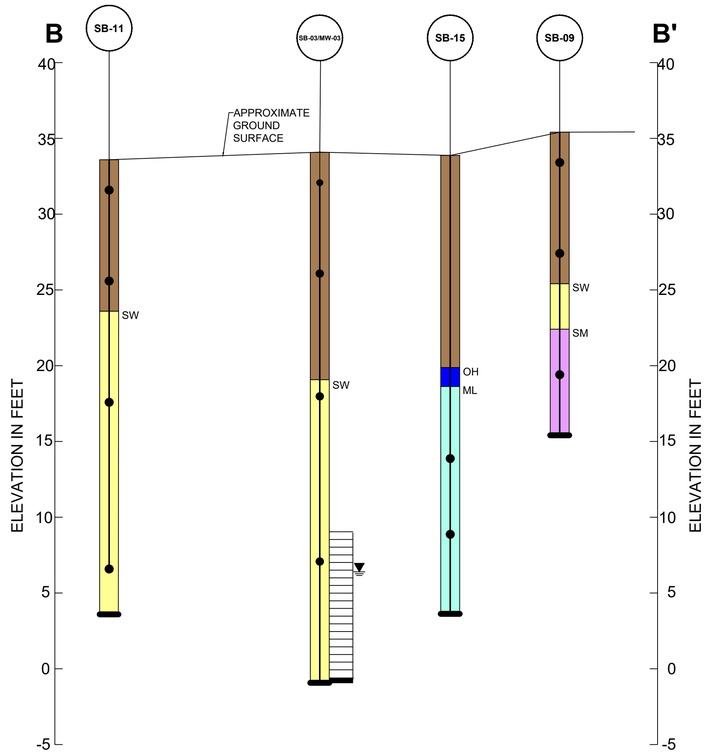
NOVEMBER 2025

FIGURE 2

GIS FILE PATH: \\haleyaldrich\share\CF\Projects\0211437\GIS\211437_860_FLUSHING_AVE.aprx - USER: gwilde - LAST SAVED: 8/8/2025 9:51 AM

DRAFT





LEGEND



EXPLORATION DESIGNATION

INDICATES SAMPLE COLLECTED

INTERPRETED GEOLOGIC STRATUM INTERFACE

GROUNDWATER WATER LEVEL

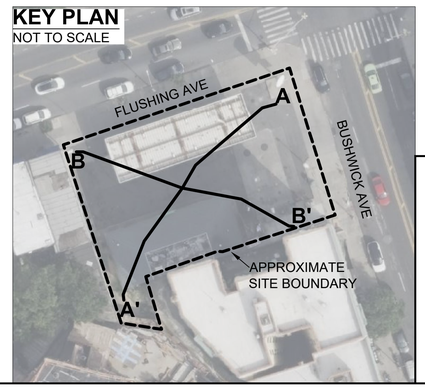
MONITORING WELL SCREEN INTERVAL

BOTTOM OF EXPLORATION

GEOLOGY KEY

- FILL
- SW (WELL GRADED SAND)
- SM (SILTY SAND)
- ML (CLAYEY SILT)
- OH (ORGANIC SILTY CLAY)

KEY PLAN
NOT TO SCALE



HORIZ. 0 40 80
VERT. 0 5 10 15 20
SCALE IN FEET

HALEY ALDRICH

860 FLUSHING AVE
BROOKLYN, NEW YORK

GEOLOGIC CROSS SECTIONS A-A' AND B-B'

DECEMBER 2025

FIGURE 3

Saved by: ZRICHARDS C:\USERS\ZRICHARDS\ONEDRIVE - HALEYALDRICH.COM\TEITELBAUM MANAGEMENT CORP_ - 02114437.860 FLUSHING AVENUE\EIGLOBAL\CAD\02114437-000-003-06_FIGURE_1.DWG
Printed: 8/21/2025 3:34 PM
Sheet: HA-FIGURE 1



LEGEND

- MONITORING WELL
- SITE BOUNDARY
- PARCEL BOUNDARY
- 6.27 — GROUNDWATER ELEVATION (FT NAVD88)
- 6.30 — GROUNDWATER CONTOUR ELEVATION (FT NAVD88)
- GROUNDWATER CONTOUR
- INFERRED GROUNDWATER CONTOUR
- INFERRED GROUNDWATER FLOW DIRECTION

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. PARCEL DATA SOURCE: NEW YORK CITY DEPARTMENT OF CITY PLANNING, INFORMATION TECHNOLOGY DIVISION
3. AERIAL IMAGERY SOURCE: NEARMAP, JULY 3, 2025
4. MONITORING WELLS WERE SURVEYED BY DPK LAND SURVEYING ON AUGUST 4, 2025
5. ELEVATION DATUM NAVD 1988

N

020 40
SCALE IN FEET

HALEY ALDRICH

860 FLUSHING AVENUE
BROOKLYN, NEW YORK

GROUNDWATER CONTOUR MAP - AUGUST 2025

DECEMBER 2025

FIGURE 4A

GIS FILE PATH: \\haleyaldrich\share\CF\Projects\021143\GIS\211437_860_FLUSHING_AVE.aprx - USER: gwilde - LAST SAVED: 8/26/2025 7:05 PM



LEGEND

- RI MONITORING WELL
- SRI MONITORING WELL
- SITE BOUNDARY
- PARCEL BOUNDARY
- 5.73 GROUNDWATER ELEVATION (FT NAVD88)
- 5.74 GROUNDWATER CONTOUR ELEVATION (FT NAVD88)
- GROUNDWATER CONTOUR
- INFERRED GROUNDWATER CONTOUR
- INFERRED GROUNDWATER FLOW DIRECTION

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. PARCEL DATA SOURCE: NEW YORK CITY DEPARTMENT OF CITY PLANNING, INFORMATION TECHNOLOGY DIVISION
3. AERIAL IMAGERY SOURCE: NEARMAP, JULY 3, 2025
4. MONITORING WELLS WERE SURVEYED BY DPK LAND SURVEYING ON AUGUST 4, 2025 AND DECEMBER 4, 2025
5. ELEVATION DATUM NAVD 1988

N

020 40
SCALE IN FEET

HALEY ALDRICH

860 FLUSHING AVENUE
BROOKLYN, NEW YORK

GROUNDWATER CONTOUR MAP - DECEMBER 1, 2025

DECEMBER 2025

FIGURE 4B

GIS FILE PATH: \\haleyaldrich\share\CF\Projects\0211437\GIS\211437_860_FLUSHING_AVE.aprx - USER: gwilde - LAST SAVED: 8/26/2025 7:05 PM

Sample Name	SB-16_14-16
Sample Date	11/20/2025
Sample Depth (bgs)	14 - 16 (ft)
Benzo(a)anthracene	***3.6***
Benzo(a)pyrene	2.9
Benzo(b)fluoranthene	***3.6***
Benzo(k)fluoranthene	1.2
Chrysene	***3.9***
Dibenz(a,h)anthracene	0.46 J
Indeno(1,2,3-cd)pyrene	1.8

Sample Name	SB-07_14-16
Sample Date	7/21/2025
Sample Depth (bgs)	14 - 16 (ft)
Copper	51.5

Sample Name	SB-01_14-16
Sample Date	07/22/2025
Sample Depth (bgs)	14 - 16 (ft)
Nickel	40.9 J
Zinc	112 J

Sample Name	SB-03_N_13
Sample Date	8/14/2026
Sample Depth (bgs)	13 - 13.5 (ft)
Acetone	0.036

Sample Name	SB-12_25-27
Sample Date	7/24/2025
Sample Depth (bgs)	25 - 27 (ft)
Ethylbenzene	***1.3 J***
Xyelene (total)	***2.3***
Barium	399
Lead	311
Mercury	***1.42***
Zinc	722

Sample Name	SB-17_23-25
Sample Date	11/20/2025
Sample Depth (bgs)	23 - 25 (ft)
n-Propylbenzene	***38***

Sample Name	EP-03_10
Sample Date	07/02/2026
Sample Depth (bgs)	10 - 10.5 (ft)
Acetone	0.035 J+

Sample Name	EP-08_15
Sample Date	8/19/2026
Sample Depth (bgs)	15 - 15.5 (ft)
Mercury	0.552 J

Sample Name	SB-11_N_13
Sample Date	7/24/2026
Sample Depth (bgs)	13 - 13.5 (ft)
4,4'-DDT	0.00567 J
PCBs	0.182
Zinc	116 J-

SB-11 HOTSPOT EXCAVATION TO 15 FEET

SB-06 HOTSPOT EXCAVATION TO 15 FEET

SB-03 HAZARDOUS LEAD HOTSPOT EXCAVATION TO 15 FEET

APPROXIMATE FORMER UST AREA

FLUSHING AVENUE

BUSHWICK AVENUE

EP-01 EP-02 EP-03 EP-04 EP-05 EP-06 EP-07 EP-08 EP-09 EP-10 EP-11 EP-12

Sample Name	EP-07_11
Sample Date	8/4/2026
Sample Depth (bgs)	11 - 11.5 (ft)
Benzo(b)fluoranthene	1.3
Indeno(1,2,3-cd)pyrene	0.71

Sample Name	UST_W2_SW_13
Sample Date	8/19/2026
Sample Depth (bgs)	13 - 13.5 (ft)
PCBs	0.33

Sample Name	SB-10_14-16
Sample Date	7/24/2025
Sample Depth (bgs)	14 - 16 (ft)
Copper	70.8 J+
Zinc	115

Sample Name	SB-15_20
Sample Date	7/24/2025
Sample Depth (bgs)	20 (ft)
Manganese	***3880***

Sample Name	SB-11_25-27
Sample Date	7/24/2025
Sample Depth (bgs)	25 - 27 (ft)
Acetone	***0.053***
Benzo(a)anthracene	***2.36 J+***
Benzo(a)pyrene	2.09 J+
Benzo(b)fluoranthene	***1.95 J+***
Benzo(k)fluoranthene	1.59 J+
Chrysene	***2.67 J+***
Dibenz(a,h)anthracene	0.381 J+
Indeno(1,2,3-cd)pyrene	0.932 J+
4,4'-DDT	0.0054

Sample Name	SB-11_S_13
Sample Date	7/24/2026
Sample Depth (bgs)	13 - 13.5 (ft)
Benzo(b)fluoranthene	1.1
Phenanthrene	1.3
4,4'-DDT	0.00481 J
PCBs	0.163

Sample Name	SB-06_S_13
Sample Date	7/24/2026
Sample Depth (bgs)	13 - 13.5 (ft)
4,4'-DDT	0.00546 J
PCBs	0.125

Sample Name	EP-11_10
Sample Date	7/20/2026
Sample Depth (bgs)	10 - 10.5 (ft)
4,4'-DDE	0.00466
4,4'-DDT	0.0243 J
PCBs	0.347
Mercury	84.3

Sample Name	SB-14_14-16
Sample Date	7/25/2025
Sample Depth (bgs)	14 - 16 (ft)
4,4'-DDT	0.00765
Lead	139
Zinc	199

Sample Name	EP-06_10
Sample Date	07/02/2026
Sample Depth (bgs)	10 - 10.5 (ft)
Mercury	0.247

Sample Name	EP-09_11
Sample Date	7/20/2026
Sample Depth (bgs)	11 - 11.5 (ft)
Phenanthrene	1.7
Mercury	0.191

Sample Name	EP-10_10
Sample Date	7/17/2026
Sample Depth (bgs)	10 - 10.5 (ft)
4,4'-DDT	0.0108 J
PCBs	0.32
Lead	70.2
Mercury	0.181
Zinc	120

Sample Name	SB-03_15
Sample Date	8/14/2026
Sample Depth (bgs)	15 - 15.5 (ft)
Lead	417
Zinc	125

Compound	Applicable Standard		
	PGWSCO	RRSCO	UUSCO
Ethylbenzene	1	76	1
Xylene (Total)	1.2	100	0.26
Acetone	0.03	100	0.03
n-Propylbenzene	5	100	5
Benzo(a)anthracene	1	1.4	1
Benzo(a)pyrene	22	1	1
Benzo(b)fluoranthene	2.1	1.4	1
Benzo(k)fluoranthene	2	4.9	0.8
Chrysene	1	4.9	1
Dibenz(a,h)anthracene	1000	0.33	0.33
Indeno(1,2,3-cd)pyrene	6.6	1.4	0.5
Phenanthrene	1000	4.9	1.1
Barium	820	410	410
Copper	1720	280	50
Lead	450	400	63
Manganese	2000	2000	1600
Mercury	0.73	0.3	0.18
Nickel	130	320	30
Zinc	2480	6600	109
4,4'-DDT	135	3.8	0.0033
4,4'-DDE	9.3	3.4	0.0033
PCBs	3.2	1	0.1

LEGEND

- SITE BOUNDARY
- PARCEL BOUNDARY
- PROPOSED SITE-WIDE EXCAVATION BASE CONFIRMATION SAMPLE
- PROPOSED HOTSPOT BASE CONFIRMATION SAMPLE
- PROPOSED HOTSPOT SIDEWALL CONFIRMATION SAMPLE

HOTSPOT SAMPLE KEY

SB-11_N_'SIDEWALL DEPTH' · SB-11_'BOTTOM DEPTH' · SB-11_E_'SIDEWALL DEPTH' · SB-11_W_'SIDEWALL DEPTH' · SB-11_S_'SIDEWALL DEPTH'

- 2025 REMEDIAL INVESTIGATION BORING LOCATION

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. PARCEL DATA SOURCE: NEW YORK CITY DEPARTMENT OF CITY PLANNING, INFORMATION TECHNOLOGY DIVISION
3. AERIAL IMAGERY SOURCE: NEARMAP, JULY 3, 2025
4. PGWSCO - NYSDEC PROTECTION OF GROUNDWATER SOIL CLEANUP OBJECTIVES
5. UUSCO - NYSDEC UNRESTRICTED USE SOIL CLEANUP OBJECTIVES
6. RRSCO - RESTRICTED RESIDENTIAL SOIL CLEANUP OBJECTIVES
7. BOLD ITALIC VALUES INDICATE EXCEEDANCES OF PGWSCOS; GREY SHADING INDICATE EXCEEDANCE OF UUSCOS; YELLOW SHADING INDICATE EXCEEDANCE OF RRSCOS
8. ENDPOINT LOCATIONS SHOWN WITHOUT DATA INDICATE COMPLIANCE WITH UUSCOs, RRSCOs, AND PGWSCOs
9. SB-16 AREA SOIL EXCAVATED TO APPROXIMATELY 17 FEET BELOW GRADE SURFACE (FT BGS) FOR DEVELOPMENT

N

0 30 60

SCALE IN FEET

STATE OF NEW YORK · ZHAN SHU · 112052 · LICENSED PROFESSIONAL ENGINEER

HALEY ALDRICH

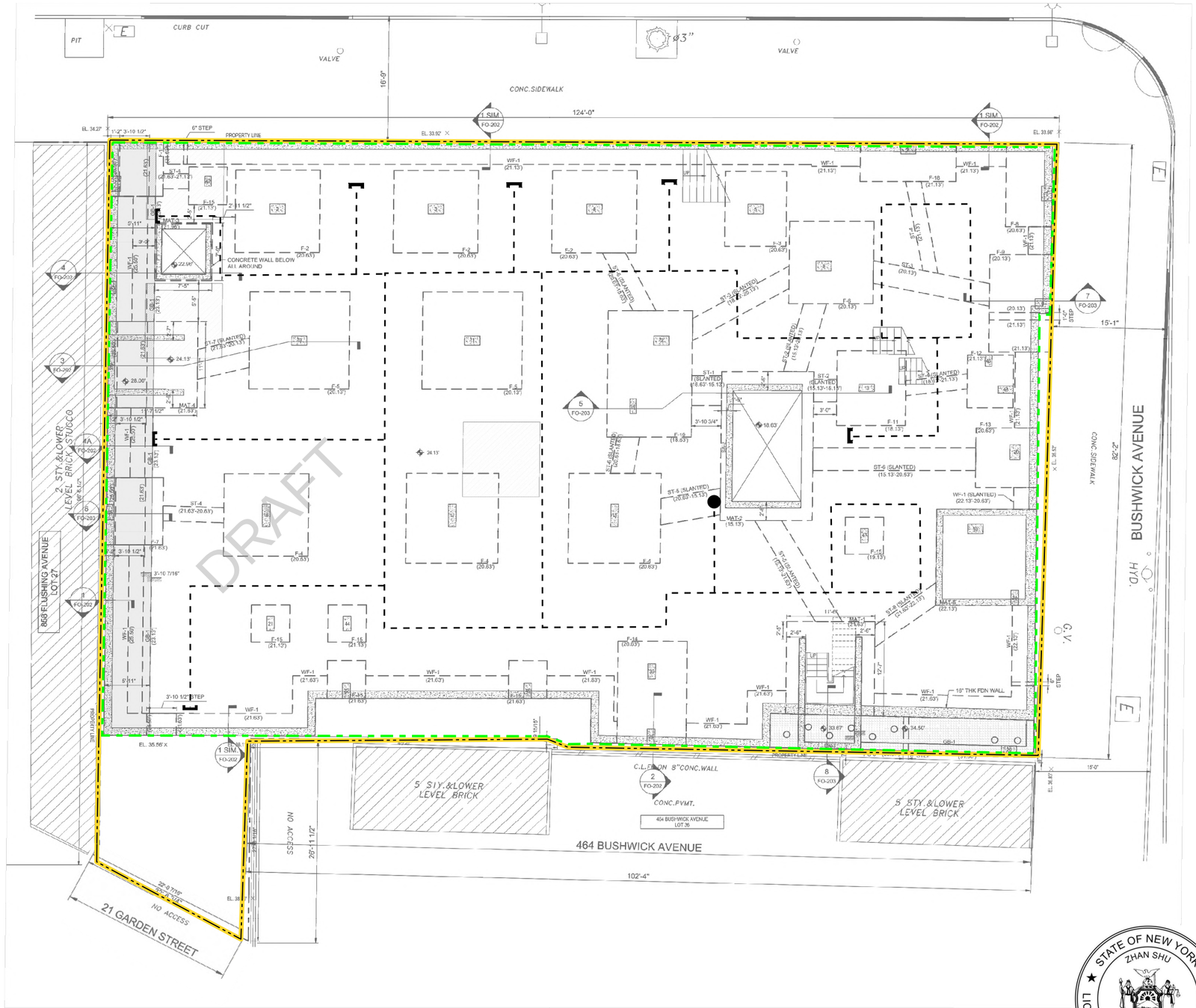
860 FLUSHING AVENUE
BROOKLYN, NEW YORK

REMAINING CONTAMINATION IN SOIL AFTER REMEDY

OCTOBER 2026

FIGURE 5

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LEGEND

- SITE BOUNDARY
- 3-INCH PERFORATED PVC SCH 40 PIPE
- PIPE END CAP
- PIPE SLEEVE
- APPROXIMATE EXTENT OF 20-MIL VAPOR BARRIER MEMBRANE
- 4-INCH VERTICAL RISER PIPE THROUGH-SLAB LOCATION

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.

2. FOUNDATION PLAN EXTRACTED FROM FOUNDATION PLAN DRAWING NO. FO-101.00, PREPARED BY STRUCTURAL ENGINEERING TECHNOLOGIES, P.C. FOR 460 BUSHWICK AVENUE, BROOKLYN, NY 11206, DATED DECEMBER 16, 2025.

3. AERIAL IMAGERY SOURCE: NEARMAP, JULY 20, 2026

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SCALE IN FEET

STATE OF NEW YORK
ZHAN SHU
112052
LICENSED PROFESSIONAL ENGINEER

HALEY ALDRICH

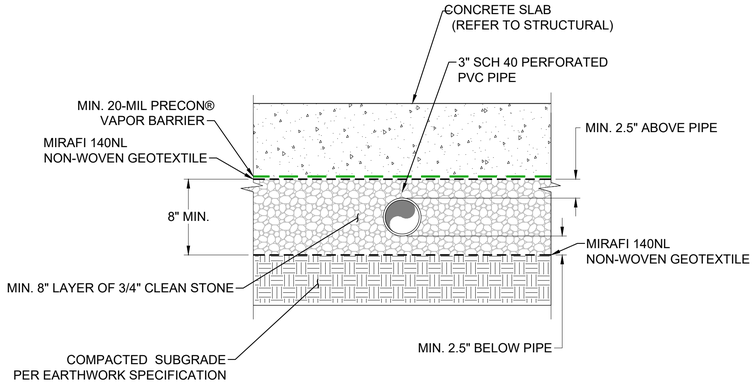
860 FLUSHING AVENUE
BROOKLYN, NEW YORK

SSDS LAYOUT AS-BUILT

OCTOBER 2026

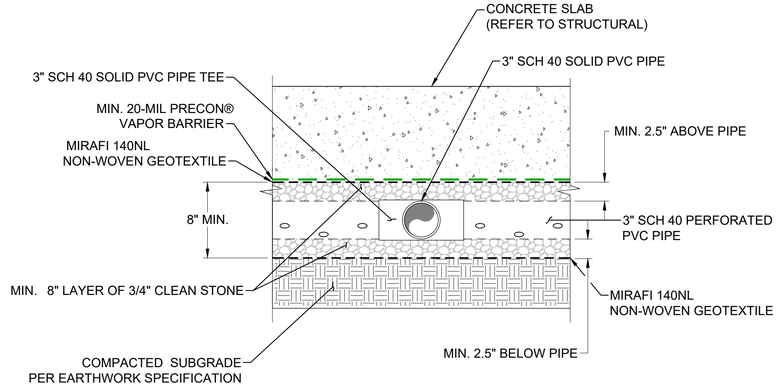
FIGURE 6

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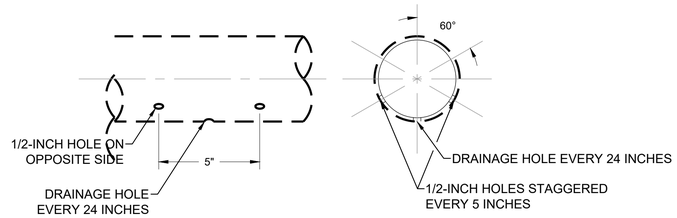
1 SSDS-200 **TYPICAL SUB-SLAB 3" PERFORATED CONVEYANCE PIPING**

NTS



2 SSDS-200 **TYPICAL SUB-SLAB 3" PERFORATED CONVEYANCE PIPING TEE CONNECTION**

NTS

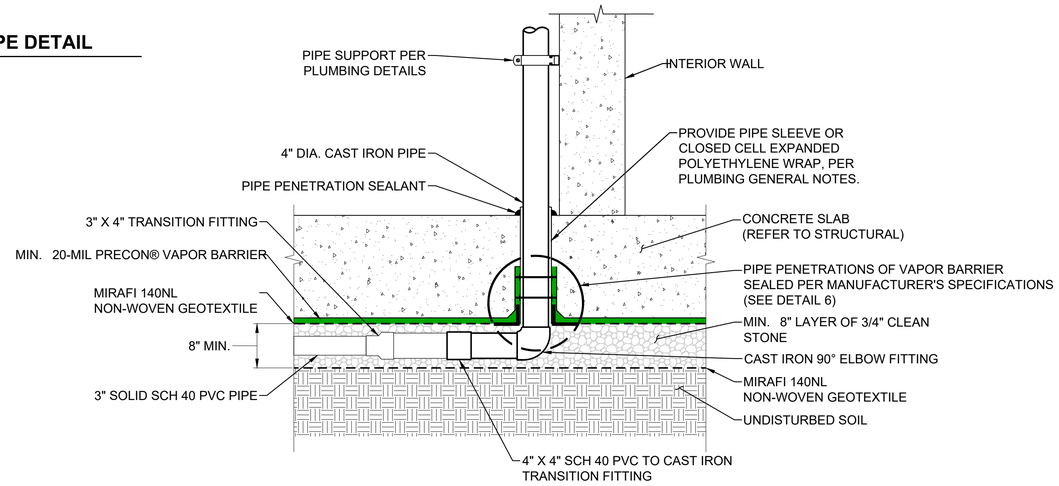


NOTES:

1. PERFORATED PIPE IS 3" SCH 40 PVC WITH PERFORATION ARRANGEMENT OF TWO 1/2-INCH HOLES SEPARATED BY 120 DEGREES, 60 DEGREE FROM THE HORIZONTAL TOWARD THE BOTTOM OF THE PIPE, SPACED 5" CENTER-TO-CENTER WITH HOLES STAGGERED ON OPPOSITE SIDES AND ONE DRAINAGE HOLE ON THE BOTTOM OF THE PIPE EVERY 24 INCHES.

3 SSDS-200 **3" PERFORATED PIPE DETAIL**

NTS



4 SSDS-200 **PERFORATED PIPE TRANSITION TO VERTICAL RISER (TYP.)**

NTS

HALEY ALDRICH

H & A OF NEW YORK
ENGINEERING AND GEOLOGY, LLP
213 W 35th Street, 7th Floor
New York, NY 10001
Tel: 646.277.5685
www.haleyaldrich.com

100% DESIGN

Project No.	0211437
Scale:	AS SHOWN
Date:	02/18/2026
Drawn By:	KFP
Designed By:	MDF
Checked By:	ZS
Approved By:	ZS

Stamp:

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Rev.	Description	By	Date

FORMER BP GASOLINE SERVICE STATION SITE
860 FLUSHING AVENUE
BROOKLYN, NEW YORK
ACTIVE SUB-SLAB DEPRESSURIZATION SYSTEM (SSDS) DESIGN

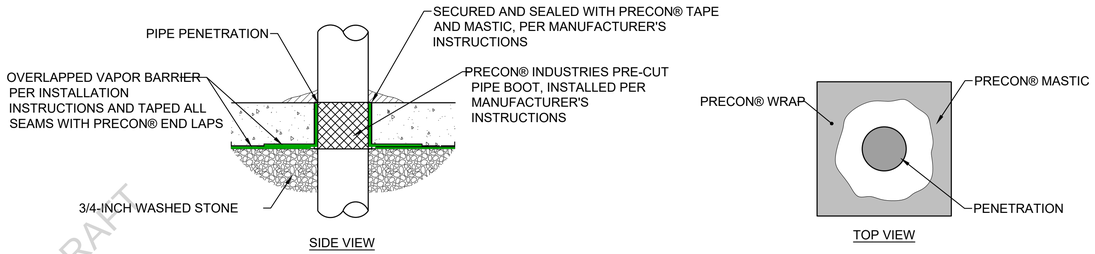
SUB-SLAB DEPRESSURIZATION SYSTEM AS-BUILT DETAILS - 1

FIGURE 7

Sheet: of

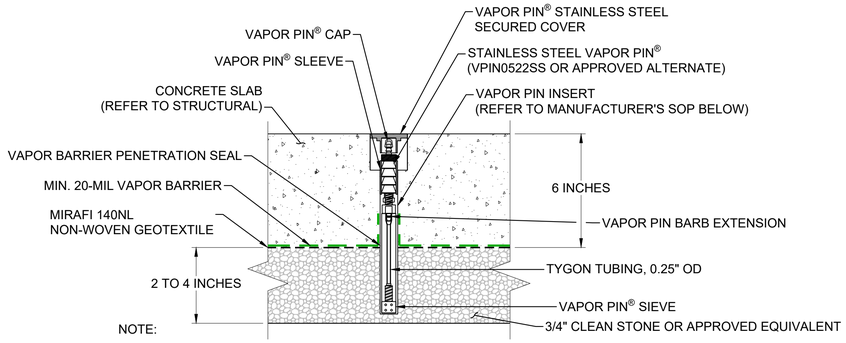
DRAFT

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\\HALEYALDRICH.COM\SHARE\CF\PROJECTS\0211437\CAD\2026 SSDS DESIGN\0211437_SSDS-300-303.DWG



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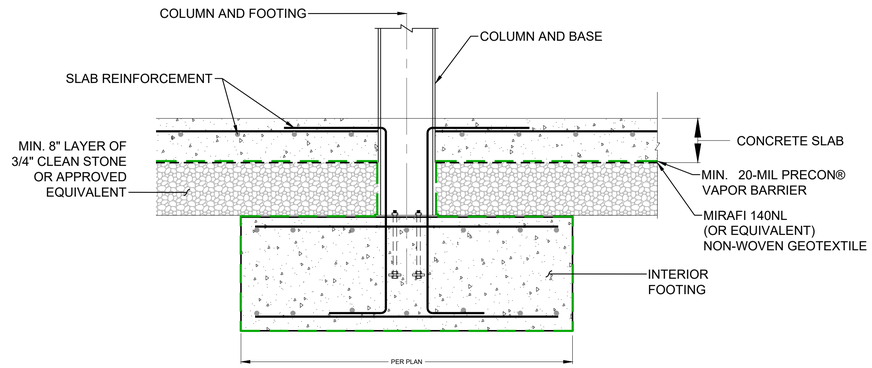
5 SSDS-200 — PIPE PENETRATION SEAL - PRECON® AND PIPE BOOT (TYP.) NTS



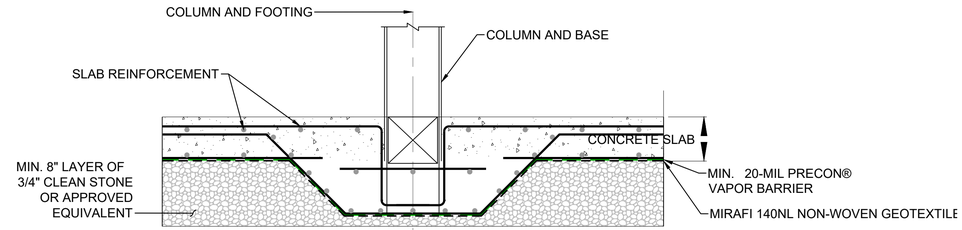
NOTE:

1. TYPICAL CONSTRUCTION SHOWN IN THE DETAIL. CONTRACTOR MUST FOLLOW MANUFACTURER INSTRUCTIONS/MANUALS FOR ACTUAL CONSTRUCTION.

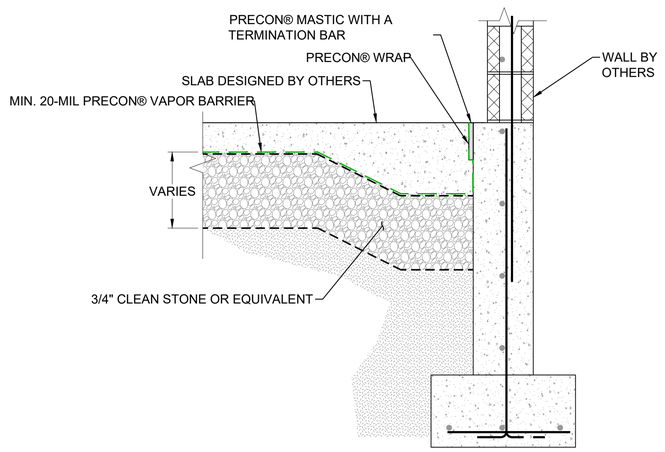
6 SSDS-200 — TYPICAL SUB-SLAB VACUUM MONITORING POINT NTS



7 SSDS-200 — TYPICAL SECTION FOR INTERIOR COLUMN FOOTINGS NTS



8 SSDS-200 — TYPICAL SUMP PIT AT ELEVATOR MAT FOUNDATION DETAIL NTS



NOTES:

1. VAPOR BARRIER INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS AND TERMINATED AT SLAB ELEVATION.

9 SSDS-200 — TYPICAL SECTION FOR TERMINATION OF VAPOR BARRIER NTS

HALEY ALDRICH

H & A OF NEW YORK
ENGINEERING AND GEOLOGY, LLP
213 W 35th Street, 7th Floor
New York, NY 10001
Tel: 646.277.5685
www.haleyaldrich.com

100% DESIGN

Project No.	0211437
Scale:	AS SHOWN
Date:	10/22/2026
Drawn By:	KFP
Designed By:	MDF
Checked By:	ZS
Approved By:	ZS

Stamp:

STATE OF NEW YORK · ZHAN SHU · 112052 · LICENSED PROFESSIONAL ENGINEER

Rev.	Description	By	Date

FORMER BP GASOLINE SERVICE STATION SITE
860 FLUSHING AVENUE
BROOKLYN, NEW YORK
ACTIVE SUB-SLAB DEPRESSURIZATION SYSTEM (SSDS) DESIGN

SUB-SLAB DEPRESSURIZATION SYSTEM AS-BUILT DETAILS - 2

FIGURE 8

Sheet: of

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\\HALEYALDRICH.COM\SHARE\CF\PROJECTS\0211437\CAD\2026 SSDS DESIGN\0211437_SSDS-300-303.DWG



LEGEND

- SITE BOUNDARY
- PARCEL BOUNDARY
- INDOOR AIR SAMPLE LOCATION
- AMBIENT AIR SAMPLE LOCATION

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. PARCEL DATA SOURCE: NEW YORK CITY DEPARTMENT OF CITY PLANNING, INFORMATION TECHNOLOGY DIVISION
3. AERIAL IMAGERY SOURCE: NEARMAP, JULY 3, 2025
4. BUILDING FOUNDATION LAYOUT SOURCE: DRAWING SOE-102.00 - DRAFT FOUNDATION SET DATED JULY 17, 2025

N

0 30 60
SCALE IN FEET

HALEY ALDRICH

860 FLUSHING AVENUE
BROOKLYN, NEW YORK

POST-REMEDIATION INDOOR AND AMBIENT AIR SAMPLING LOCATIONS

OCTOBER 2026

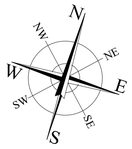
FIGURE 9

GIS FILE PATH: \\haleyaldrichshare\CP\Projects\0211437\GIS\211437_860_FLUSHING_AVE.aprx - USER: gwilde - LAST SAVED: 8/8/2025 9:51 AM

APPENDIX A
Environmental Easement and Site Survey

DRAFT

JOB NO.: 25-56282E



LEGAL DESCRIPTION OF TAX LOT

BLOCK: 3138, LOT: 32

All that certain plot, piece or parcel of land, with the buildings and improvements thereon erected, situate, lying and being in the Borough of Brooklyn, county of Kings, City and State of New York, bounded and described as follows:

BEGINNING at the corner formed by the intersection of the westerly side of Bushwick Avenue with the southerly side of Flushing Avenue;

RUNNING THENCE southerly along the westerly side of Bushwick Avenue. 82.17 feet;

THENCE westerly at 90 degrees to Bushwick Avenue, 62.28 feet;

THENCE northerly along a line drawn at 90 degrees to Flushing Avenue, 0.83 feet to a point distant 80 feet southerly from the southerly side of Flushing Avenue measured along said line;

THENCE westerly parallel with Flushing Avenue, 40 feet;

THENCE southerly at 90 degrees to Flushing Avenue, 26.94 feet;

THENCE northwesterly in a straight line, 22.55 feet to a point 96.54 feet southerly from Flushing Avenue measured, along a line drawn at 90 degrees to Flushing Avenue at a point distant 124 feet westerly from the corner formed by the intersection of Flushing Avenue and Bushwick Avenue;

THENCE northerly along said line 96.54 feet inches to the southerly side of Flushing Avenue;

THENCE easterly along the southerly side of Flushing Avenue. 124 feet to the point or place of BEGINNING.

Tax Lot Area = 0.237 acre

LEGAL DESCRIPTION OF ENVIRONMENTAL EASEMENT

BLOCK: 3138, LOT: 32

All that certain plot, piece or parcel of land, with the buildings and improvements thereon erected, situate, lying and being in the Borough of Brooklyn, county of Kings, City and State of New York, bounded and described as follows:

BEGINNING at the corner formed by the intersection of the westerly side of Bushwick Avenue with the southerly side of Flushing Avenue;

RUNNING THENCE southerly along the westerly side of Bushwick Avenue. 82.17 feet;

THENCE westerly at 90 degrees to Bushwick Avenue, 62.28 feet;

THENCE northerly along a line drawn at 90 degrees to Flushing Avenue, 0.83 feet to a point distant 80 feet southerly from the southerly side of Flushing Avenue measured along said line;

THENCE westerly parallel with Flushing Avenue, 40 feet;

THENCE southerly at 90 degrees to Flushing Avenue, 26.94 feet;

THENCE northwesterly in a straight line, 22.55 feet to a point 96.54 feet southerly from Flushing Avenue measured, along a line drawn at 90 degrees to Flushing Avenue at a point distant 124 feet westerly from the corner formed by the intersection of Flushing Avenue and Bushwick Avenue;

THENCE northerly along said line 96.54 feet inches to the southerly side of Flushing Avenue;

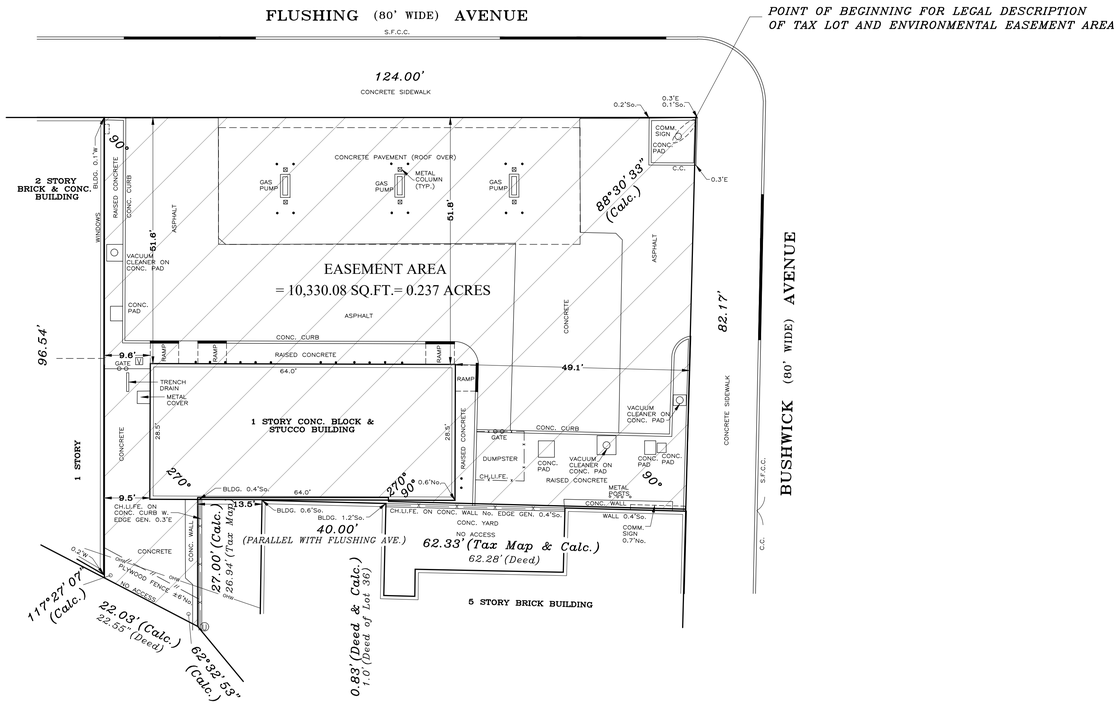
THENCE easterly along the southerly side of Flushing Avenue. 124 feet to the point or place of BEGINNING.

Environmental Easement Area = 0.237 acre

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 NEW YORK ENVIRONMENTAL CONSERVATION LAW. THE ENGINEERING AND INSTITUTIONAL CONTROLS FOR THIS EASEMENT ARE SET FORTH IN THE SITE MANAGEMENT PLAN (SMP). A COPY OF THE SMP MUST BE OBTAINED BY ANY PARTY WITH AN INTEREST IN THE PROPERTY. THE SMP CAN BE OBTAINED FROM NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION, DIVISION OF ENVIRONMENTAL REMEDIATION, SITE CONTROL SECTION, 625 BROADWAY, ALBANY, NY 12233 OR AT DERWEB@DEC.NY.GOV

ENVIRONMENTAL EASEMENT BOUNDARY

TOTAL AREA OF THE PARCEL= 10,330.08 SQ.FT.= 0.237 ACRE



ENVIRONMENTAL EASEMENT

OF DESCRIBED PROPERTY

LOCATED AT:
860 FLUSHING AVENUE, BROOKLYN, NY 11206, BOROUGH OF BROOKLYN, COUNTY OF KINGS, CITY AND STATE OF NEW YORK

TAX DESIGNATION:
BLOCK: 3138, LOT: 32

SURVEYED ON: *MARCH 21, 2025*

AMENDED ON: *JANUARY 9, 2026 (CONVERTED TO TITLE)*
FEBRUARY 26, 2026 (CERTIFICATIONS ONLY)
JUNE 1, 2026 (ENVIRONMENTAL EASEMENT)

ALEXANDER TSUKERMAN N.Y.S. L.S. N0 050189

DRAWN BY: *AH/ZS* | ***CHECKED BY:*** *AT*

NOTES:

1) ELEVATIONS AND ESTABLISHED GRADES SHOWN HEREON REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

2) LEGAL GRADES SHOWN HEREON REFER TO THE TOP OF THE CURB TAKEN AT THE PROJECTION OF THE PROPERTY LINES.

3) THE INFORMATION GIVEN ON THIS SURVEY PERTAINING TO SUBSURFACE UTILITIES AND/OR SUBSTRUCTURES IS NOT CERTIFIED AS TO ACCURACY OR COMPLETENESS.

4) SIZES AND TYPES OF SEWERS SHOWN HEREON AS OBTAINED FROM NYC DEP RECORDS. SEWER MANHOLE RIM AND INVERT ELEVATIONS SHOWN HEREON OBTAINED BY FIELD MEASUREMENTS.

5) SIZE OF WATER MAIN SHOWN HEREON AS OBTAINED FROM THE CITY OF NEW YORK DEPARTMENT OF ENVIRONMENTAL PROTECTION RECORDS, AS SHOWN ON DEP MAP.

6) THE OWNER, CONTRACTOR AND/OR HIS AGENTS MUST NOTIFY THE APPROPRIATE UTILITY COMPANIES AND/OR AGENCIES AT LEAST 72 HOURS PRIOR TO ANY CONSTRUCTION IN ACCORDANCE WITH INDUSTRIAL CODE RULE 53.

7) THIS IS TO CERTIFY THAT THERE ARE NO STREAMS NOR NATURAL WATERCOURSES IN THE PROPERTY AS SHOWN ON THIS SURVEY.

THE OFFSETS OR DIMENSIONS SHOWN FROM THE STRUCTURES TO THE PROPERTY LINES ARE FOR A SPECIFIC PURPOSE AND USE AND THEREFORE ARE NOT INTENDED TO GUIDE THE ERECTION OF FENCES, RETAINING WALLS, POOLS, PLANTING AREAS, ADDITIONS TO STRUCTURES AND ANY OTHER CONSTRUCTION.

UNAUTHORIZED ALTERATION OR ADDITION TO THIS SURVEY IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW.
COPIES OF THIS SURVEY MAP NOT BEARING THE LAND SURVEYOR'S INKED SEAL OR EMBOSSED SEAL SHALL NOT BE CONSIDERED TO BE A VALID TRUE COPY.

CERTIFICATION INDICATED HEREON SHALL RUN ONLY TO THE PERSON FOR WHOM THE SURVEY IS PREPARED, AND ON HIS BEHALF TO THE TITLE COMPANY, GOVERNMENTAL AGENCY AND LENDING INSTITUTION LISTED HEREON, AND TO THE ASSIGNEES OF THE LENDING INSTITUTION. CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS OR SUBSEQUENT OWNERS.

THE EXISTENCE OF RIGHT OF WAYS AND/OR EASEMENTS OF RECORD, IF ANY, NOT SHOWN ARE NOT CERTIFIED.

15 0 15 30 45

Scale 1" = 15'

360 180 0 360 720

SCALE IN METER
1CM = 180CM

LEONARD J. STRANDBERG AND ASSOCIATES,
CONSULTING ENGINEERS AND LAND SURVEYORS, P.C.
32 SMITH STREET, FREEPORT, NY 11520
*516-378-2064 * 212-213-4090 * FAX 516-378-6649*
EMAIL: INFO@LJSPC.COM

APPENDIX B
List of Site Contacts

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Appendix B – Site Contact List

Company	Contact Name	Title	Contact Number	Contact Email
NYSDEC	Nour Haredy	Project Manager	718.482.6333	nour.haredy@dec.ny.gov
	Andre Obligado	Section Chief	718.482.6412	andre.obligado@dec.ny.gov
	Kelly Lewandowski	Chief, Site Control	518.402.9569	Kelly.Lewandowski@dec.ny.gov
NYSDOH	Kari Pollard	Project Manager	518.402.7817	Kari.Pollard@health.ny.gov
H & A of New York Engineering and Geology, LLP	James Bellew	Principal	646.277.5686	jbellew@haleyaldrich.com
	Zhan Shu, P.E.	Remediation Engineer	201.213.6178	zshu@haleyaldrich.com
	Mari Cate Conlon, P.G.	Senior Associate	646.277.5688	mconlon@haleyaldrich.com
	Luke J. McCartney, P.G.	Senior Project Manager	551.655.7720	lmccartney@haleyaldrich.com
Flushing Holdings NY LLC	Jack Klein	Member/Remedial Party/Volunteer	718.408.8778	jack@bmanage.com
Fox Rothschild LLP	George C.D. Duke	Remedial Party's Attorney	212.450.9847	gduke@foxrothschild.com
456 Bushwick LLC	George Macchia	Site Owner	516.659.8018	george@themacchiagroup.net

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APPENDIX C
Excavation Work Plan

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Appendix C – Excavation Work Plan (EWP)

C-1 NOTIFICATION

At least 15 days prior to the start of any activity that is anticipated to encounter remaining contamination or breach or alter the cover system at the property located at 860 Flushing Avenue, Brooklyn, New York 11206 (the "Site"), the Site owner or their representative will notify the New York State Department of Environmental Conservation (NYSDEC) contacts listed in the table below. Table I includes contact information for the above notification. The information in this table will be updated as necessary to provide accurate contact information. A full listing of Site-related contact information is provided in Appendix B of the Site Management Plan (SMP).

Table I: Notifications*	
Nour Haredy, NYSDEC Project Manager	718.482.6333, nour.haredy@dec.ny.gov
Andre Obligado, NYSDEC Supervisor	718.482.6412, andre.obligado@dec.ny.gov
Kari Pollard, NYSDOH Project Manager	518.402.7817; kari.pollard@heatlh.ny.gov
Kelly Lewandowski, NYSDEC Site Control	518.402.9553, kelly.lewandowski@dec.ny.gov
Notes: ** Notifications are subject to change and will be updated as necessary.* *** NYSDOH = New York State Department of Health*	

This notification will include:

- a detailed description of the work to be performed, including the location and areal extent of excavation, plans/drawings for Site re-grading, intrusive elements or utilities to be installed below the soil cover, estimated volumes of contaminated soil to be excavated, any modifications of truck routes, and any work that may impact an Engineering Control (EC);
- a summary of environmental conditions anticipated to be encountered in the work areas, including the nature and concentration levels of contaminants of concern, potential presence of grossly contaminated media, and plans for any pre-construction sampling;
- a schedule for the work, detailing the start and completion of all intrusive work, and submittals (e.g., reports) to the NYSDEC documenting the completed intrusive work;
- a summary of the applicable components of this EWP;
- a statement that the work will be performed in compliance with this EWP, Title 29 of the Code of Federal Regulations (29 CFR) 1910.120 and 29 CFR 1926 Subpart P;
- a copy of the contractor's Health and Safety Plan (HASP), in electronic format, if it differs from the HASP provided in Appendix I of the SMP;
- identification of disposal facilities for potential waste streams; and
- identification of sources of any anticipated backfill, along with the required request to import form and all supporting documentation including, but not limited to, chemical testing results.

The NYSDEC project manager will review the notification and may impose additional requirements for the excavation that are not listed in this EWP. The alteration, restoration, and modification of ECs must conform with Article 145 Section 7209 of the Education Law regarding the application of professional seals and alterations.

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C-2 SOIL SCREENING METHODS

Visual, olfactory, and instrument-based (e.g., photoionization detector) soil screening will be performed during all excavations into known or potentially contaminated material (remaining contamination) or a breach of the cover system. A qualified environmental professional as defined in Title 6 of the New York Codes, Rules and Regulations (6 NYCRR) Part 375, a Professional Engineer (P.E.) who is licensed and registered in New York State, or a qualified person who directly reports to a P.E. who is licensed and registered in New York State will perform the screening. Soil screening will be performed when invasive work is done and will include all excavation and invasive work performed during development, such as excavations for foundations and utility work, after issuance of the Certificate of Completion (COC).

Soils will be segregated based on previous environmental data and screening results into material that requires off-Site disposal and material that requires testing to determine if the material can be reused on Site as soil beneath a cover or if the material can be used as cover soil. Further discussion of off-Site disposal of materials and on-site reuse is provided in Sections C-6 and C-7 of this EWP.

C-3 SOIL STAGING METHODS

Soil stockpiles will be continuously encircled with a berm and/or silt fence. Hay bales will be used as needed near catch basins, surface waters, and other discharge points. Stockpiles will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced. Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by the NYSDEC.

C-4 MATERIALS EXCAVATION AND LOAD-OUT

A qualified environmental professional as defined in 6 NYCRR Part 375, a P.E. who is licensed and registered in New York State, or a qualified person who directly reports to a P.E. who is licensed and registered in New York State will oversee all invasive work and the excavation and load-out of all excavated material. The owner of the property and Remedial Party (RP; if applicable) and its contractors are responsible for safe execution of all invasive and other work performed under this EWP.

The presence of utilities and easements on the Site will be investigated by the qualified environmental professional. It will be determined whether a risk or impediment to the planned work under the SMP is posed by utilities or easements on the Site. A Site utility stakeout will be completed for all utilities prior to any ground-intrusive activities at the Site.

Loaded vehicles leaving the Site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate federal, state, local, and New York State Department of Transportation (NYSDOT) requirements (and all other applicable transportation requirements). Trucks transporting contaminated soil must have either tight-fitting opaque covers that are secured on the sides and/or back, or opaque covers that are locked on all sides.

A truck wash will be operated on Site, as appropriate. The qualified environmental professional will be responsible for ensuring that all outbound trucks will be washed at the truck wash before leaving the Site until the activities performed under this section are complete. Truck wash waters will be collected and

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disposed of off Site in an appropriate manner. Locations where vehicles enter or exit the Site shall be inspected daily for evidence of off-Site soil tracking.

The qualified environmental professional will be responsible for ensuring that all egress points for truck and equipment transport from the Site are clean of dirt and other materials derived from the Site during intrusive excavation activities. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to Site-derived materials. Material accumulated from the street cleaning and egress cleaning activities will be disposed of off Site at a permitted landfill facility in accordance with all applicable local, state, and federal regulations.

C-5 MATERIALS TRANSPORT OFF SITE

All transport of materials will be performed by licensed haulers in accordance with appropriate local, state, and federal regulations, including 6 NYCRR Part 364. Haulers will be appropriately licensed, and trucks will be properly placarded. Material transported by trucks exiting the Site will be secured with tight-fitting covers. Loose-fitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.

Truck transport routes are as follows: Trucks will enter the Site from the south side on Sackett Street and exit by turning left onto Sackett Street from the designated point of egress along the southern boundary of the Site. All trucks loaded with Site materials will exit the vicinity of the Site using this approved truck route. This is the most appropriate route and takes into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city mapped truck routes; (c) prohibiting off-Site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport. A figure depicting the approved truck route is provided in this EWP as Figure 1.

Trucks will be prohibited from stopping and idling in the neighborhood outside the project Site. Egress points for truck and equipment transport from the Site will be kept clean of dirt and other materials during Site remediation and development. Queuing of trucks will be performed on Site in order to minimize off-Site disturbance. Off-Site queuing will be prohibited.

C-6 MATERIALS DISPOSAL OFF SITE

All material excavated and removed from the Site will be treated as contaminated and regulated material and will be transported and disposed of off Site in a permitted facility in accordance with all local, state and federal regulations. If disposal of material from this Site is proposed for unregulated off-Site disposal (i.e. clean soil removed for development purposes), a formal request with an associated plan will be made to the NYSDEC project manager. Unregulated off-Site management of materials from this Site will not occur without formal NYSDEC project manager approval.

Off-Site disposal locations for excavated soils will be identified in the pre-excavation notification. This will include estimated quantities and a breakdown by class of disposal facility if appropriate (e.g., hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, construction and demolition [C&D] debris recovery facility). Actual disposal quantities and associated documentation will be reported to the NYSDEC in the Periodic Review Report (PRR). This documentation will include, but will not be limited to, waste profiles, test results, facility acceptance letters, manifests, bills of lading and facility receipts.

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Non-hazardous historic fill and contaminated soils taken off Site will be handled consistent with 6 NYCRR Parts 360, 361, 362, 363, 364, and 365. Material that does not meet Unrestricted Use Soil Cleanup Objectives is prohibited from being taken to a New York State C&D debris recovery facility (6 NYCRR Subpart 360-15 registered or permitted facility).

C-7 MATERIALS REUSE ON SITE

The qualified environmental professional, as defined in 6 NYCRR Part 375, will ensure that procedures defined for materials reuse in this SMP are followed and that unacceptable material (i.e., contaminated) does not remain on Site. Contaminated on-Site material, including historic fill and contaminated soil, that is acceptable for on-Site reuse will be placed below the demarcation layer or impervious surface and will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines.

Proposed materials for on-Site reuse must be sampled for a full suite of analytical parameters, including per- and polyfluoroalkyl substances (PFAS) and 1,4-dioxane. The sampling frequency will be in accordance with NYSDEC Division of Environmental Remediation (DER)-10 Table 5.4(e)10 unless prior approval is obtained from the NYSDEC project manager for modification of the sampling frequency. The analytical results of soil/fill material testing must meet the site use criteria presented in NYSDEC's DER-10 Appendix 5 "Allowable Constituent Levels for Imported Fill or Soil" for all constituents listed, and the guidance values presented in the "Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs," dated April 2023. Approvals for modifications to the analytical parameters must be obtained from the NYSDEC project manager prior to the sampling event.

Soil/fill material for on-Site reuse will be segregated and staged as described in Sections C-2 and C-3 of this EWP. The anticipated size and location of stockpiles will be provided in the 15-day notification to the NYSDEC project manager. Stockpile locations will be based on the location of Site excavation activities and proximity to nearby Site features. Material reuse on the Site will comply with requirements of NYSDEC DER- 10 Section 5.4(e)4. Any modifications to the requirements of DER-10 Section 5.4(e)4 must be approved by the NYSDEC project manager.

Any demolition material proposed for on-Site reuse will be sampled for asbestos, and the results will be reported to the NYSDEC for acceptance. Concrete crushing or processing on Site will not be performed without prior NYSDEC approval. Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the site will not be reused on Site.

C-8 FLUIDS MANAGEMENT

All liquids to be removed from the Site, including but not limited to, excavation dewatering, decontamination waters, and groundwater monitoring well purge and development waters, will be handled, transported, and disposed of off Site at a permitted facility in accordance with applicable local, state, and federal regulations. Dewatering, purge, and development fluids will not be recharged back to the land surface or subsurface of the Site, and will be managed off Site, unless prior approval is obtained from NYSDEC. Discharge of water generated during large-scale construction activities to surface waters (i.e., a local pond, stream, or river) will be performed under a State Pollutant Discharge Elimination System (SPDES) permit.

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C-9 BACKFILL FROM OFF-SITE SOURCES

All materials proposed for import onto the Site will be approved by the qualified environmental professional, as defined in 6 NYCRR Part 375, and will be in compliance with provisions in this SMP prior to receipt at the Site. A Request to Import/Reuse Fill or Soil form, which can be found at http://www.dec.ny.gov/regulations/67386.html, will be prepared and submitted to the NYSDEC project manager, allowing a minimum of five business days for review. A copy of the form is presented in Appendix G of the SMP. Material from industrial sites, spill sites, other environmental remediation sites, or potentially contaminated sites will not be imported to the Site.

All imported soils will meet the backfill and cover soil quality standards established in 6 NYCRR 375-6.7(d) and DER-10 Appendix 5 for residential use. Based on an evaluation of the land use and the protection of groundwater and protection of ecological resources criteria, the resulting soil quality standards meet Track 4 Restricted Residential Use Soil Cleanup Objectives. Soils that meet "general" fill requirements under 6 NYCRR Part 360.13, but do not meet backfill or cover soil objectives for this Site, will not be imported onto the Site without prior approval by the NYSDEC project manager. Soil material will be sampled for the full suite of analytical parameters, including PFAS and 1, 4-dioxane. Solid waste will not be imported onto the Site.

Trucks entering the Site with imported soils will be securely covered with tight-fitting covers. Imported soils will be stockpiled separately from excavated materials and covered to prevent dust releases.

C-10 STORMWATER POLLUTION PREVENTION

Barriers and hay bale checks will be installed and inspected once a week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by the NYSDEC. All necessary repairs shall be made immediately. Accumulated sediments will be removed as required to keep the barrier and hay bale check functional. All undercutting or erosion of the silt fence toe anchor shall be repaired immediately with appropriate backfill materials. Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.

Erosion and sediment control measures identified in the SMP shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Silt fencing or hay bales will be installed around the entire perimeter of the construction area.

C-11 EXCAVATION CONTINGENCY PLAN

If underground tanks or other previously unidentified contaminant sources are found during post-remedial subsurface excavations or development-related construction, excavation activities will be suspended until sufficient equipment is mobilized to address the condition. The NYSDEC project manager will be promptly notified of the discovery.

Sampling will be performed on product, sediment, and surrounding soils, etc. as necessary to determine the nature of the material and proper disposal method. Chemical analysis will be performed for a full list of analytes (Target Analyte List [TAL] metals, Target Compound List [TCL] volatiles and semi-volatiles (including 1,4-dioxane), TCL pesticides and polychlorinated biphenyls (PCBs), and PFAS), unless the Site history and previous sampling results provide sufficient justification to limit the list of analytes. In this

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case, a reduced list of analytes will be proposed to the NYSDEC project manager for approval prior to sampling. Any tanks will be closed as per NYSDEC regulations and guidance.

Identification of unknown or unexpected contaminated media identified by screening during invasive Site work will be promptly communicated by phone within two hours to NYSDEC's project manager. Reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline. These findings will also be included in the PRR.

C-12 COMMUNITY AIR MONITORING PLAN

A figure showing the location of air sampling stations based on generally prevailing wind conditions is provided in this EWP as Figure 2. These locations will be adjusted on a daily or more frequent basis based on actual wind directions to provide an upwind and at least one downwind monitoring station. Exceedances of action levels listed in the Community Air Monitoring Plan (CAMP) will be reported to NYSDEC and NYSDOH project managers.

C-13 SPECIAL REQUIREMENTS FOR WORK WITHIN 20 FEET OF POTENTIALLY EXPOSED INDIVIDUALS OR STRUCTURES

When work areas are within 20 feet of potentially exposed populations or occupied structures, the continuous monitoring locations for volatile organic compounds (VOCs) and particulates must reflect the nearest potentially exposed individuals and the location of ventilation system intakes for nearby structures. The use of ECs, such as vapor/dust barriers, temporary negative-pressure enclosures, or special ventilation devices, should be considered to prevent exposures related to the work activities and to control dust and odors. Consideration should be given to implementing the planned activities when potentially exposed populations are at a minimum, such as during weekends or evening hours in non-residential settings.

- If total VOC concentrations opposite the walls of occupied structures or next to intake vents exceed 1 part-per-million (ppm), monitoring should occur within the occupied structure(s). Depending upon the nature of contamination, chemical-specific colorimetric tubes of sufficient sensitivity may be necessary for comparing the exposure point concentrations with appropriate pre-determined response levels (response actions should also be pre-determined). Background readings in the occupied spaces must be taken prior to commencement of the planned work. Any unusual background readings should be discussed with NYSDOH prior to commencement of the work.
- If total particulate concentrations opposite the walls of occupied structures or next to intake vents exceed 150 micrograms per cubic meter ($\mu g/m^3$), work activities should be suspended until controls are implemented and are successful in reducing the total particulate concentration to 150 $\mu g/m^3$ or less at the monitoring point.
- Depending upon the nature of contamination and remedial activities, other parameters (e.g., explosivity, oxygen, hydrogen sulfide, carbon monoxide) may also need to be monitored. Response levels and actions should be pre-determined, as necessary, for each site.

C-14 ODOR CONTROL PLAN

This Odor Control Plan is capable of controlling on-Site and off-Site emissions of nuisance odors. If nuisance odors are identified at the Site boundary, or if odor complaints are received, work will be

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halted, and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all odor events and of any other complaints about the project. Implementation of all odor controls, including the halt of work, is the responsibility of the RP's Remediation Engineer, and any measures that are implemented will be discussed in the PRR.

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

If nuisance odors develop during intrusive work that cannot be corrected, or where the control of nuisance odors cannot otherwise be achieved due to on-Site conditions or close proximity to sensitive receptors, odor control will be achieved by sheltering the excavation and handling areas in a temporary containment structure equipped with appropriate air venting/filtering systems.

C-15 DUST SUPPRESSION PLAN

Particulate monitoring must be conducted according to the CAMP provided in Section C-12. If particulate levels at the Site exceed the thresholds listed in the CAMP or if airborne dust is observed on the Site or leaving the Site, the dust suppression techniques listed below will be employed. The RP will also take measures listed below to prevent dust production on the Site.

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

- Dust suppression will be achieved using a dedicated on-Site water truck for road wetting. The truck will be equipped with a water cannon capable of spraying water directly onto off-road areas including excavations and stockpiles.
- Clearing and grubbing of larger sites will be done in stages to limit the area of exposed, unvegetated soils vulnerable to dust production.
- Gravel will be used on roadways to provide a clean and dust-free road surface.
- On-Site roads will be limited in total area to minimize the area required for water truck sprinkling.

C-16 OTHER NUISANCES

A plan for rodent control will be developed and utilized by the contractor prior to and during Site clearing and grubbing, and during all remedial work. A plan will be developed and utilized by the contractor for all remedial work to ensure compliance with local noise control ordinances.

Attachments:

Figure 1 – Truck Route Map
Figure 2 – Proposed CAMP Station Locations Map

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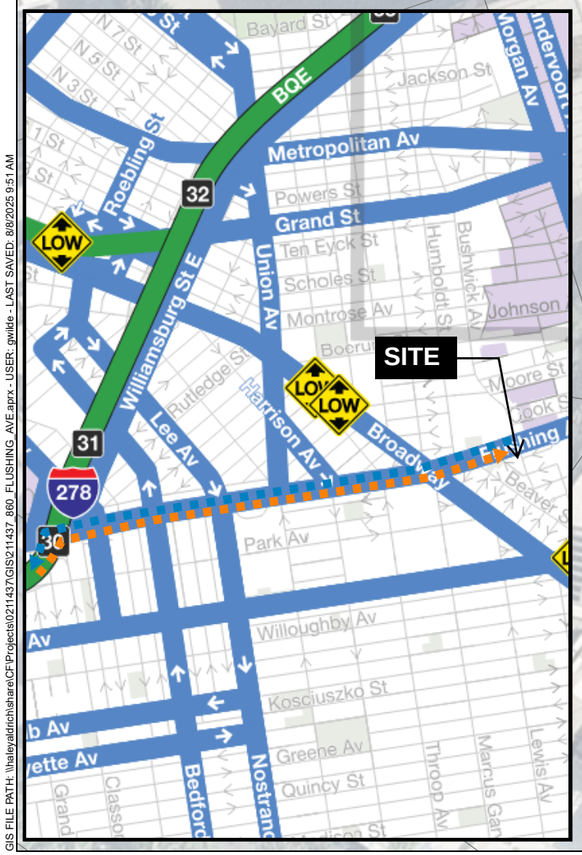
ATTACHMENTS

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BUSHWICK HOUSES PEDESTRIAN PATH

FLUSHING AVENUE

BUSHWICK AVENUE



Legend

Truck Routes

Local Truck Route
Trucks with an origin or destination for the purpose of delivery, loading or servicing within the respective Borough, shall only operate on designated local routes, except that an operator may operate on a non-designated street for the purpose of arriving at their destination. This shall be accomplished by leaving a designated truck route at the intersection that is nearest to their destination, proceeding by the most direct route, and then returning to the nearest designated truck route by the most direct route. If the operator has additional destinations in the same general area, they may proceed by the most direct route to their next destination without returning to a designated truck route, provided that the operator's next destination does not require that they cross a designated truck route.

Through Truck Route
Trucks having neither an origin nor a destination within the respective Borough shall restrict the operation of such vehicles to those street segments designated as Through Truck Routes.

Through Truck Route on Expressway

53 FT Trailer Exception

Connecting Road Outside NYC

Restricted Routes

No Commercial Vehicles

Hazards

Alert: see additional information

Low Vertical Clearance (14 feet and under)

Navigation / Landmarks

Highway Exit

Major Highway

Industrial Business Zone

Parks and Open Spaces

Limited Truck Zone

LEGEND

SITE BOUNDARY

PARCEL BOUNDARY

TRUCK INGRESS

TRUCK EGRESS

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.

2. PARCEL DATA SOURCE: NEW YORK CITY DEPARTMENT OF CITY PLANNING, INFORMATION TECHNOLOGY DIVISION

3. AERIAL IMAGERY SOURCE: NEARMAP, JULY 3, 2025

N

0 30 60
SCALE IN FEET

HALEY ALDRICH

860 FLUSHING AVENUE
BROOKLYN, NEW YORK

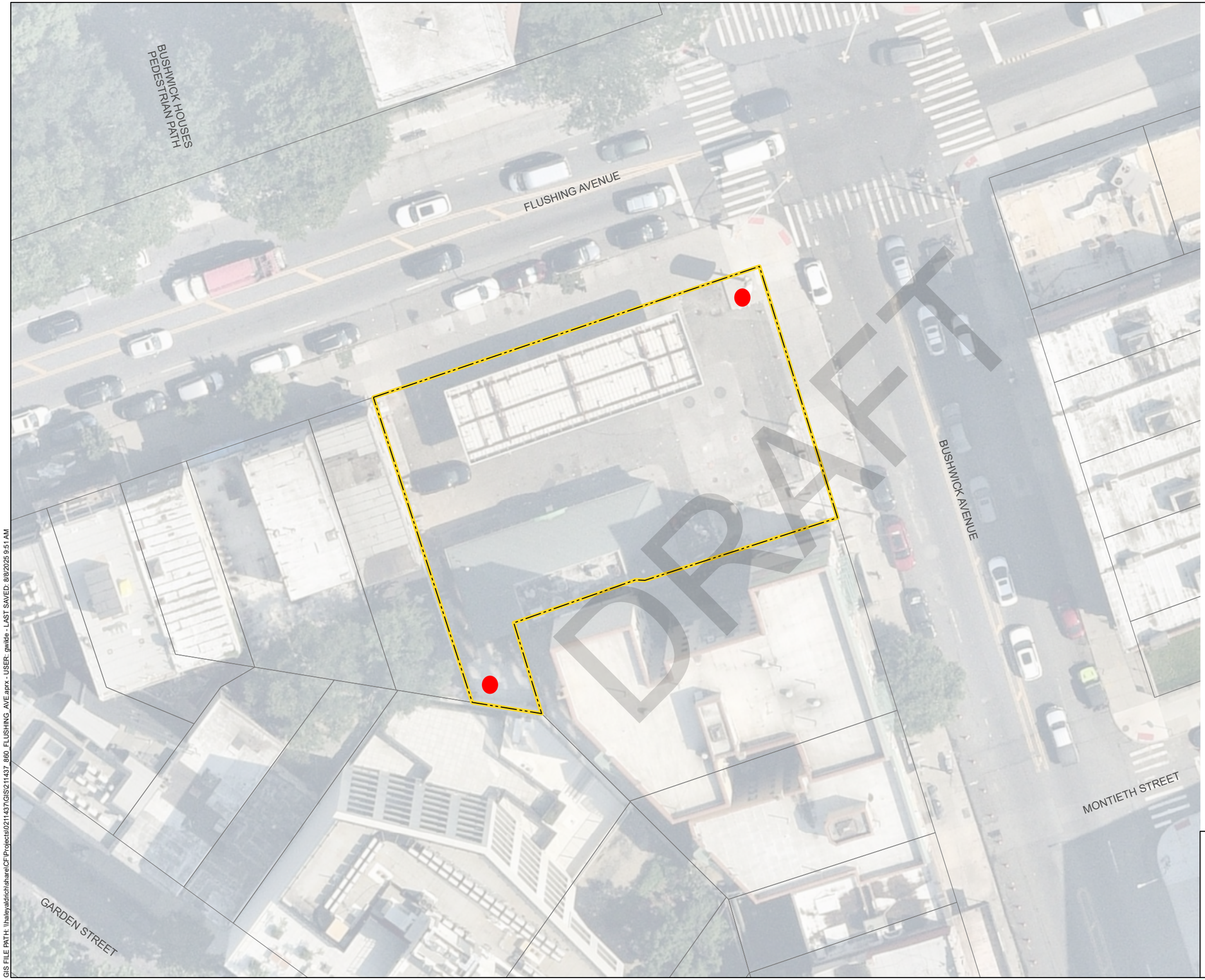
TRUCK ROUTE MAP

JULY 2026

FIGURE 1

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GIS FILE PATH: \\haleyaldrich\share\CP\Projects\0211437\GIS\211437_860_FLUSHING_AVE.aprx - USER: gwilde - LAST SAVED: 8/8/2025 9:51 AM



LEGEND

- SITE BOUNDARY
- PARCEL BOUNDARY
- PROPOSED COMMUNITY AIR MONITORING PROGRAM (CAMP) STATION LOCATIONS

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. PARCEL DATA SOURCE: NEW YORK CITY DEPARTMENT OF CITY PLANNING, INFORMATION TECHNOLOGY DIVISION
3. AERIAL IMAGERY SOURCE: NEARMAP, JULY 3, 2025

N

0 30 60
SCALE IN FEET

HALEY ALDRICH

860 FLUSHING AVENUE
BROOKLYN, NEW YORK

PROPOSED CAMP STATION LOCATIONS MAP

JULY 2026

FIGURE 2

GIS FILE PATH: \\haleyaldrich\share\CF\Projects\0211437\GIS\211437_860_FLUSHING_AVE.aprx - USER: gwilde - LAST SAVED: 8/8/2025 9:51 AM

APPENDIX D
Blower Specifications and Vapor Barrier Manufacturer's Specifications

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PRECON®

PRE-APPLIED / UNDERSLAB WATERPROOFING MEMBRANE

WATERLESS.
VAPORLESS.
CONFIDENCE.

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QUALITY | SERVICE | INTEGRITY
W. R. MEADOWS®
A Family Company Since 1926

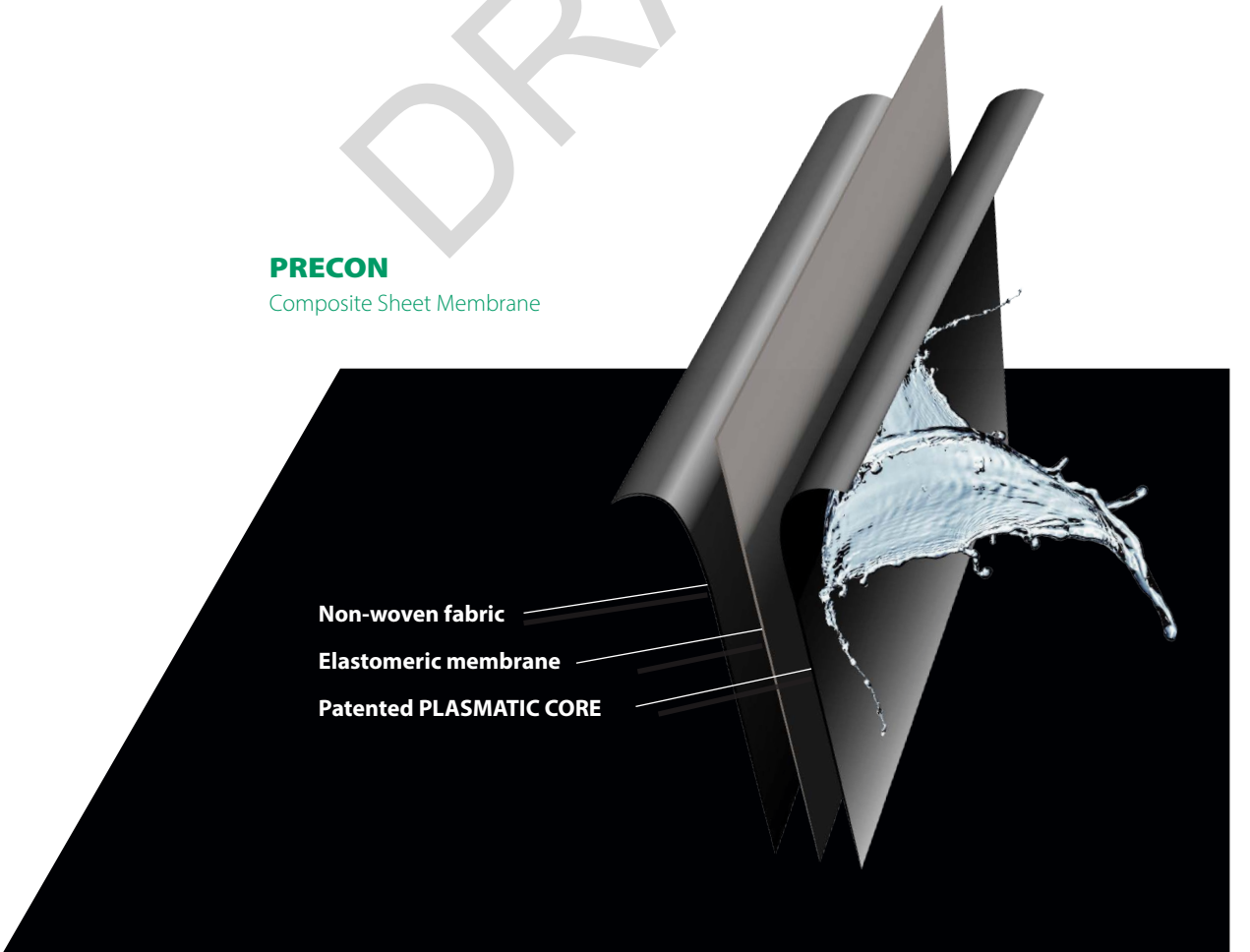
Keep confidence in and water out.

Water is adept at tunneling and forging new paths. The last place it should be, however, is in the buildings where we live, work and play. Long-lasting PRECON membrane ensures the strongest bonds with your foundations, so the water outside stays outside.

PRECON waterproofing, vaporproofing blindside and underslab membrane fortifies structural foundations, even in demanding environments. Its composite sheet membrane is comprised of a non-woven fabric, elastomeric membrane and W. R. MEADOWS' exclusive, patented PLASMATIC CORE.

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PRECON
Composite Sheet Membrane



Protecting the indoors from the outdoors.

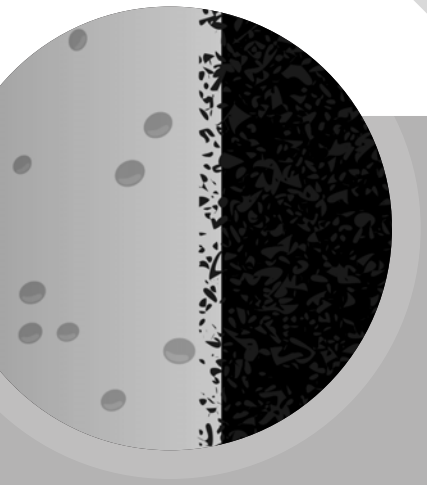
Withstanding intense pressure and unfavorable conditions, PRECON waterproof membrane keeps foundations strong and structures dry.

PRECON is proven to not only block the ingress of water, but also inhibit vapor intrusion for an environmentally friendly indoor environment. Designed for long-term toughness, the seven-layer matrix PLASMATIC CORE provides the industry's lowest water vapor transmission (WVT) rating.

Superior bonds for a powerful seal.

Secure mechanical bonds form between PRECON fabric and curing concrete. These tenacious bonds create a solid waterproofing system that effectively protects foundations from water damage in both underslab horizontal and blindside vertical applications.

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PRECON bonds at the molecular level.

As soon as the foundation concrete is poured and begins to cure, PRECON fabric forms interlocking bonds that create an unmatched waterproofing barrier.

PRECON is more than a waterproof seal.

Its waterproofing system is designed to protect foundations against a spectrum of problems.

- Waterproof/vaporproof seal
- Reduces methane and radon gas intrusion
- Resilient mechanical bond
- Vertical blindside application
- Horizontal underslab application

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TECHNICAL DATA*

PROPERTY	TEST METHOD	PRECON RESULTS
Color		Black
Thickness	ASTM D 1000	73 mil (1.85 mm)
Low Temp Flexibility	ASTM D 1970, 180° @ -25° F (-32° C)	Pass
Resistance to Hydrostatic Head	ASTM D 5385-93	230' (70 m)
Elongation	ASTM D 412-06	> 400%
Tensile Strength, Film	ASTM D 882	9200 psi (63.4 MPa)
Crack Cycling	ASTM C 836 @ -15° F (-26° C)	Pass
Puncture Resistance	ASTM E 154	> 210 lb. (> 934 N)
Peel Adhesion to Concrete	ASTM D 903	10 lb./in (1754 N/m)
Moisture Vapor Transmission	ASTM E 96B	0.0011 perms (0.0004 grains/ft.^{2}/hr) (0.007 grams/m^2/24 hr)
Radon Transmittance (m/s)	k124/02/95	<3.0 x 10^{-9}
Radon Coefficient (m2/s)	k124/02/95	<5.6 x 10^{-12}

* For low temperature installations, PRECON LOW TEMP is available and can be installed in temperatures as low as 25° F (-4° C).

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Arizona State University Center for Law and Society

Waterproof barrier of choice for notable projects.

PRECON is the preferred and trusted waterproofing solution for a wide-range of projects across a spectrum of environments.

Arizona State University Center for Law and Society
50,000 square feet, LEED-Certified Gold
Phoenix, Arizona, USA

Dallas/Fort Worth International Airport
240,000 square feet
DFW Airport, Texas, USA

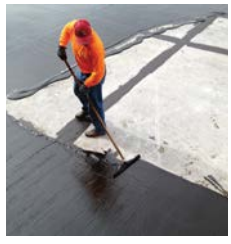
Cancer Center at Munson Medical Center
52,000 square feet, LEED-Certified
Traverse City, Michigan, USA

Toronto Transit Commission Subway System
300,000 square feet
Toronto, Ontario, Canada

Marina Heights
940,000 square feet – LEED-Certified Silver
Tempe, Arizona, USA

Verizon Data Center
40,000 square feet
Southlake, Texas, USA

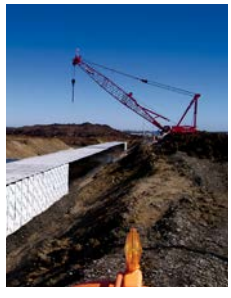
W. R. MEADOWS' products are designed together to work as one.



HYDRALASTIC 836 is a cold-applied, solvent-free, single-component waterproofing compound. It has low volatile organic compound (VOC) content and very low odor. It will not shrink or crack in extreme cold or slump at high temperatures.



HRM 714 is a hot-applied rubberized asphalt waterproofing membrane. It's a 100% solids blend of asphalts, synthetic rubber polymers and filler formulated for toughness, flexibility and low moisture vapor permeance.



MEL-ROL® is a flexible, versatile, dependable, roll-type waterproofing membrane. It is composed of a nominally 56 mil thick layer of polymeric waterproofing membrane on a heavy duty, four-mil thick, cross-laminated polyethylene carrier film. The two components are laminated together under strict quality-controlled production procedures.



MEL-ROL LM is a single-component, polymer-modified, cold-applied, water-based, liquid membrane ideal for below-grade vertical seamless waterproofing applications. We have taken the same high quality rubber polymers found in our successful MEL-ROL "peel and stick" membrane and converted them into a heavy-bodied, high solids, quick drying liquid membrane.

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Call 800.342.5976 to request a FREE waterproofing contractor's handbook.

Visit wrmeadows.com/precon to view or request guide specifications, CAD details, independent test results and more.



Trusted performance.
Lower cost.
Easy installation for all applications.

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Beginning with design, a building requires trusted waterproofing that performs to the highest standards and fits within budgets.

Final installation on the jobsite demands a durable product that goes up with efficiency and ease.

PRECON's proven seal delivers protection against water and other common intrusions. It keeps budgets in check with lower costs. It installs with ease in any construction environment, including difficult blindside applications.

APPLICATIONS:

- Offices
- Retail Complexes
- Hospitals
- Airports
- Utilities
- Universities
- Industrial Applications
- Laboratories
- Subways

Improving ways to keep water out.

W. R. MEADOWS has been supplying the building industry with quality materials since 1926. Our team of industry experts has the knowledge to ensure your project gets done right with the right products.

PRECON is available from all authorized W. R. MEADOWS distributors. Contact us to find your closest authorized distributor. Our distributors can also supply educational materials and product samples.

For more information on our complete line of building envelope products, visit **wrmeadows.com**.

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A Family Company Since 1926

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APPENDIX E
Field Sampling Plan and Quality Assurance Project Plan

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FIELD SAMPLING PLAN
FORMER BP GASOLINE SERVICE STATION SITE
860 FLUSHING AVENUE
BROOKLYN, NEW YORK
NYSDEC SITE NUMBER: C224424

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by
H & A of New York Engineering and Geology, LLP
New York, New York

for
Flushing Holdings NY LLC
Brooklyn, New York

File No. 0211437
July 2026

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1	Sample Location Map

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Attachment	Title
A	Sample Field Forms

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1. Introduction

This Field Sampling Plan (FSP) has been prepared as a component of the Site Management Plan (SMP) for the Former BP Gasoline Service Station Site located at 860 Flushing Avenue in Brooklyn, New York (the "Site"). This document was prepared to establish field procedures for field data collection to be performed to support the SMP for the Site.

The SMP includes this FSP, a Quality Assurance Project Plan (QAPP), a Health and Safety Plan (HASP), and a Community Air Monitoring Plan (CAMP), which are included as part of this plan by reference.

The standard operating procedures (SOPs) included as components of this plan will provide the procedures necessary to meet the project objectives. The SOPs will be used as reference for the methods to be employed for field sample collection and handling and the management of field data collected in the execution of the approved SMP. The SOPs include numerous methods to execute the tasks of the SMP. The Project Manager will select the appropriate method as required by field conditions and/or the objective of the respective project task at the time of sample collection. Field procedures will be conducted in general accordance with the New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation's (DER's) Technical Guidance for Site Investigation and Remediation (DER-10) and the New York State Department of Health (NYSDOH) "Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York." dated October 2006 (Vapor Intrusion Guidance Document).

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2. Field Program

This FSP provides the general purpose of sampling as well as procedural information. The SMP contains the details on sampling and analysis (locations, depths, frequency, analyte lists, etc.). The field program has been designed to acquire the necessary data to comply with the SMP and includes soil vapor sampling.

Flushing Holdings NY LLC (the Volunteer) has remediated a 024-acre (10,600-square-foot) property known as the Former BP Gasoline Service Station Site, designated under Brownfield Cleanup Program (BCP) Site No. C224424. Site remediation addressing both soil and soil vapor contamination was conducted as per the approved 2025 Remedial Action Work Plan (RAWP) and Decision Document.

These SOPs presented herein may be changed as required and are dependent on Site conditions or equipment limitations at the time of sample collection. If the procedures employed differ from the SOP, the deviations will be documented in the associated sampling report.

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3. Field Data Recording

This procedure describes the protocol for documenting the post-remediation sampling activities in the field. Field data serve as the cornerstone for an environmental project, not only for Site characterization but for additional phases of investigation or remedial design. Producing defensible data includes proper and appropriate recording of field data as it is obtained in a manner to preserve the information for future use. This procedure provides guidelines for accurate, thorough collection and preservation of written and electronic field data.

Field data to be recorded during the project generally includes, but is not limited to:

- general field observations;
- numeric field measurements and instrument readings;
- quantity estimates;
- sample locations and corresponding sample numbers;
- relevant comments and details pertaining to the samples collected;
- documentation of activities, procedures, and progress achieved;
- contractor pay item quantities;
- weather conditions;
- a listing of personnel involved in Site-related activities;
- a log of conversations, Site meetings, and other communications; and
- field decisions and pertinent information associated with the decisions.

3.1 Written Field Data

Written field data will be collected using a standardized, pre-printed field log form. In general, use of a field log form is preferable as it prompts field personnel to make appropriate observations and record data in a standardized format. This promotes completeness and consistency from one person to the next. Otherwise, electronic data collection using a hand-held device produces equal completeness and consistency using a pre-formatted log form.

In the absence of an appropriate pre-printed form, the data should be recorded in an organized and structured manner in a dedicated project field logbook. Logbooks must be hardcover, bound so that pages cannot be added or removed, and should be made from high-grade 50 percent rag paper with a water-resistant surface.

The following are guidelines for use of field log forms and logbooks:

1. Information must be factual and complete.
2. All entries will be made in black indelible ink with a ballpoint pen and will be written legibly. Do not use “rollerball” or felt-tip-style pens, since the water-soluble ink can run or smear in the presence of moisture.
3. Field log forms should be consecutively numbered.

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4. Each day's work must start a new form/page.
5. At the end of each day, the current logbook page or forms must be signed and dated by the field personnel making the entries.
6. Make data entries immediately upon obtaining the data. Do not make temporary notes in other locations for later transfer; this only increases the potential for error or loss of data.
7. Entry errors are to be crossed out with a single line and initialed by the person making the correction.
8. Do not leave blanks on log forms; if no entry is applicable for a given data field, indicate so with "NA" or a dash ("—").
9. At the earliest practical time, photocopies or typed versions of log forms and logbook pages should be made and placed in the project file as a backup in the event the book or forms are lost or damaged.
10. Logbooks should be dedicated to one project only; i.e., do not record data from multiple projects in one logbook.

3.2 Electronic Data

Electronic data recording involves electronic measurement of field information through the use of monitoring instruments, sensors, gauges, and equipment controls. The following is a list of guidelines for proper recording and management of electronic field data:

1. Field data management should follow requirements of a project-specific Data Management Plan (DMP), if applicable.
2. Use only instruments that have been calibrated in accordance with manufacturer's recommendations.
3. Usage of instruments, controls, and computers for the purpose of obtaining field data should only be performed by personnel properly trained and experienced in the use of the equipment and software.
4. Use only fully licensed software on personal computers and laptops.
5. Loss of electronic files may mean loss of irreplaceable data. Every effort should be made to back up electronic files obtained in the field as soon as practical. A backup file placed on the file server will minimize the potential for loss.
6. Electronic files, once transferred from field instruments or laptops to office computers, should be protected if possible, to prevent unwanted or inadvertent manipulation or modification of data. Several levels of protection are usually available for spreadsheets, including making a file "read-only" or assigning a password to access the file.
7. Protect CDs from exposure to moisture, excessive heat or cold, magnetic fields, or other potentially damaging conditions.
8. Remote monitoring is often used to obtain stored electronic data from Site environmental systems. A thorough discussion of this type of electronic field data recording is beyond the scope of this Section. Such on-Site systems are generally capable of storing a limited amount of data as a comma-delimited or spreadsheet file. Users must remotely access the monitoring equipment files via modem or other access and download the data. To minimize the potential

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for loss of data, access and downloading of data should be performed frequently enough to ensure the data storage capacity of the remote equipment is not exceeded.

Equipment/Materials:

- Appropriate field log forms, or iPad® or equivalent with preformatted log forms;
- Indelible ballpoint pen (do not use “rollerball” or felt-tip-style pens);
- Straight edge;
- Pocket calculator; and
- Laptop computer (if required).

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4. Sample Collection for Laboratory Analysis

4.1 SUB-SLAB SOIL VAPOR AND INDOOR AIR SAMPLING

The following procedure will be performed during the heating season within the first reporting period sub-slab depressurization system (SSDS) startup (i) to confirm SSDS efficacy or (ii) to submit a shutdown request to alter the active SSDS to passive. Refer to Figure 1 for the proposed sampling locations.

4.1.1 Preparatory Requirements

In accordance with the NYSDOH Vapor Intrusion Guidance Document, sample locations and adjacent spaces will be inspected and screened with a part-per-billion(ppb)-range photoionization detector (PID) to determine if interfering conditions, such as open containers of cleaning supplies or petroleum products, are present. Additionally, the "Indoor Air Quality Questionnaire and Building Inventory" form presented in Appendix B of the Vapor Intrusion Guidance Document will be completed. It will be verified during the inspection and noted in the questionnaire that the SSDS is operational prior to proceeding with sampling.

If interfering conditions are identified during the inspection, the interferences will be eliminated to the extent feasible (e.g., products will be removed or stowed in a sealed area isolated from the sampling location[s], cleaning/maintenance will cease, etc.) and the area will be ventilated either by way of the building's heating, ventilation, and air conditioning (HVAC) system (opening the fresh air intake fully) or by opening windows and using box fans. Ventilation will be considered complete when PID readings within the proposed sampling space are within a similar range to ambient outdoor air (up to eight hours). The building will then be restored to normal conditions (i.e., windows will be closed, the HVAC system will be returned to normal settings, and/or fans will be removed) for a period of at least 24 hours prior to sampling.

4.1.2 Sampling Techniques

Five sub-slab soil vapor samples will be collected from each monitoring point with co-located indoor air samples from the cellar of the Site building. In addition, one Summa canister will be placed adjacent outside the Site building at breathing level to collect a sample of ambient outdoor air (AA-01). Indoor air samples will be collected from approximately 3 to 5 feet above the floor/ground surface to simulate the breathing zone in laboratory-supplied, individually certified-clean 6-liter Summa canisters equipped with 0.0125-liter-per-minute (L/min) flow controllers for a sample collection time of approximately eight hours. Sampling will be considered complete after an eight-hour collection time, or when the vacuum measured in the canister reaches 5 inches of mercury, whichever occurs sooner.

Canister vacuum and the time will be recorded in the dedicated field logbook at the beginning and end of sampling. After sample collection, the indoor and ambient air samples will be shipped overnight to a NYSDOH Environmental Laboratory Approval Program (ELAP)-certified laboratory for analysis for volatile organic compounds (VOCs) by United States Environmental Protection Agency (EPA) Methods TO-15 and TO-15 SIM within a five-day turnaround time (TAT). The laboratory will report the full list of TO-15 and TO-15 SIM parameters.

EPA Method TO-15 will provide detection limits of 1.0 micrograms per cubic meter ($\mu g/m^3$) for all analytes, except for carbon tetrachloride, 1,1-dichloroethene (DCE), cis-1,2-DCE, trichloroethene (TCE),

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and vinyl chloride. The detection limits for carbon tetrachloride, 1,1-DCE, cis-1,2-DCE, TCE, and vinyl chloride will be 0.20 µg/m^3. This will allow for comparison with the lowest action levels for these compounds in the NYSDOH Vapor Intrusion Guidance Document. The laboratory will provide the data in an Analytical Services Protocol (ASP) Category B laboratory data package and NYSDEC EQuIS electronic data deliverable (EDD).

4.2 SAMPLE HANDLING AND SHIPPING

Sample management is the continuous care given to each sample from the point of collection to receipt at the analytical laboratory. Good sample management ensures that samples are properly recorded, properly labeled, and not lost, broken, or exposed to conditions which may affect the sample's integrity.

All sample submissions must be accompanied by a chain of custody (COC) document to record sample collection and submission. Personnel performing sampling tasks must check the sample preparation and preservation requirements to ensure compliance with the QAPP.

The following sections provide the minimum standards for sample management.

4.2.1 Sample Handling

Prior to entering the field area where sampling is to be conducted, especially at sites with defined exclusion zones, the sampler should ensure that all materials necessary to complete the sampling are on hand. When sampling in cold weather, proper protection of samples must be considered.

4.2.2 Sample Labeling

Samples must be properly labeled immediately upon collection.

Note that the data shown on the sample label is the minimum data required. The sample label data requirements are listed below for clarity.

- Project name
- Sample name/number/unique identifier
- Sampler's initials
- Date of sample collection
- Time of sample collection
- Analysis required

To ensure that samples are not confused, a clear notation should be made on the container with a permanent marker.

All sample names will be as follows:

- Sample unique identifier: Enter the sample name or number. There should be NO slashes, spaces, or periods in the date.
- Date: Enter the six-digit date when the sample was collected. Note that for one-digit days, months, and/or years, add zeros so that the format is MMDDYY (050210). There should be NO slashes, dashes, or periods in the date.

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4.2.3 Field Code

The field code will be written in the "Comments" field on the COC for EVERY sample but will not be a part of the actual sample name. Enter the one/two-character code for type of sample (must be in CAPITALS):

N	Normal Field Sample
MS	Matrix Spike Sample (note on "Comments" field of COC – laboratory to spike matrix)
MD	Matrix Spike Duplicate Sample (note on "Comments" field of COC – laboratory to spike matrix)
RM	Reference Material

The sample labeling – both chain and sample bottles must be EXACTLY as detailed above. In addition, the Field Sample Key for each sample collected must be filled out.

4.2.4 Packaging

Sample container preparation and packing for shipment should be completed in a well-organized and clean area, free of any potential cross-contamination. The following is a list of standard guidelines that must be followed when packing samples for shipment.

- Containers must be wiped clean of all debris/water using paper towels (paper towels must be disposed of with other contaminated materials).
- Clear, wide packing tape must be placed over the sample label for protection.
- Do not bulk pack. Each sample must be individually padded.

4.2.5 Chain of Custody Records

COC forms will be completed for all samples collected. The form documents the transfer of sample containers. The COC record, completed at the time of sampling, will contain, but not be limited to, the sample number, date and time of sampling, and the name of the sampler. The COC document will be signed and dated by the sampler when transferring the samples.

Each sample cooler being shipped to the laboratory will contain a COC form. The cooler will be sealed properly for shipment. The laboratory will maintain a copy for its records. One copy will be returned with the data deliverables package.

The following list provides guidance for the completion and handling of all COCs:

- COCs used should be an H & A of New York Engineering and Geology, LLP standard form or supplied by the analytical laboratory.
- COCs must be completed in black ballpoint ink only.
- COCs must be completed neatly using printed text.
- If a simple mistake is made, cross out the error with a single line and initial and date the correction.
- Each separate sample entry must be sequentially numbered.

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- If numerous repetitive entries must be made in the same column, place a continuous vertical arrow between the first entry and the next different entry.
- When more than one COC form is used for a single shipment, each form must be consecutively numbered using the “Page ___ of ___” format.
- If necessary, place additional instructions directly onto the COC in the Comment section. Do not enclose separate instructions.
- Include a contact name and phone number on the COC in case there is a problem with the shipment.
- Before using an acronym on a COC, define clearly the full interpretation of your designation (i.e., polychlorinated biphenyls [PCBs]).

4.2.6 Shipment

Prior to the start of the field sampling, the carrier should be contacted to determine if pick-up will be at the field Site location. If pick-up is not available at the Site, the nearest pickup or drop-off location should be determined. Sample shipments must not be left at unsecured drop locations.

Copies of all shipment manifests must be maintained in the field file.

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5. Field Instruments – Use and Calibration

A significant number of field activities involve usage of electronic instruments to monitor environmental conditions and for health and safety purposes. It is imperative that the instruments are used and maintained properly to optimize their performance and minimize the potential for inaccuracies in the data obtained. This section provides guidance on the usage, maintenance, and calibration of electronic field equipment.

- All monitoring equipment will be in proper working order and operated in accordance with manufacturer's recommendations.
- Field personnel will be responsible for ensuring that the equipment is maintained and calibrated in the field in accordance with manufacturer's recommendations.
- Instruments will be operated only by personnel trained in the proper usage and calibration.
- Personnel must be aware of the range of conditions such as temperature and humidity for instrument operation. Usage of instruments in conditions outside these ranges will only proceed with approval of the Project Manager and/or Health and Safety Officer as appropriate.
- Instruments that contain radioactive source material, such as x-ray fluorescence (XRF) analyzers or moisture-density gauges, require specific transportation, handling, and usage procedures that are generally associated with a license from the Nuclear Regulatory Commission (NRC) or an NRC-Agreement State. Under no circumstance will operation of such instruments be allowed on Site unless by properly authorized and trained personnel, using the proper personal dosimetry badges or monitoring instruments.

5.1 DECONTAMINATION OF MONITORING EQUIPMENT

As Summa canisters will be provided certified clean from an ELAP-certified laboratory and dedicated tubing will be used for each sample location, decontamination will not be required. However, should unanticipated sampling occur, the following procedures will be implemented.

Care must be taken to minimize the potential for transfer of contaminated materials to the ground or onto other materials. Regardless of the size or nature of the equipment being decontaminated, the process will utilize a series of steps that involve removal of gross material (dirt, grease, oil, etc.), washing with a detergent, and multiple rinsing steps. In lieu of a series of washes and rinse steps, steam cleaning with low-volume, high-pressure equipment (i.e., steam cleaner) is acceptable.

Exploration equipment and all monitoring equipment in contact with the sampling media must be decontaminated prior to initiating Site activities, in between exploration locations to minimize cross-contamination, and prior to mobilizing off Site after completion of Site work.

The following specific decontamination procedure is recommended for sampling equipment and tools:

- Brush loose soil off equipment;
- Wash equipment with laboratory grade detergent (i.e., Alconox or equivalent);
- Rinse with tap water;
- Rinse equipment with distilled water;
- Allow water to evaporate before reusing equipment; and

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- Wrap equipment in aluminum foil when not being used.

All contaminated wash water, rinses, solids, and materials used in the decontamination process that cannot be effectively decontaminated (such as polyethylene sheeting) will be containerized and disposed of in accordance with applicable regulations. All containers will be labeled with an indelible marker as to contents and date of placement in the container, and any appropriate stickers required (such as PCBs). Storage of decontamination wastes on Site will not exceed 90 days under any circumstances.

Equipment/Materials:

Decontamination equipment and solutions are generally selected based on ease of decontamination and disposability.

- Polyethylene sheeting;
- Metal racks to hold equipment;
- Soft-bristle scrub brushes or long-handle brushes for removing gross contamination and scrubbing with wash solutions;
- Large, galvanized wash tubs, stock tanks, or wading pools for wash and rinse solutions;
- Plastic buckets or garden sprayers for rinse solutions;
- Large plastic garbage cans or other similar containers lined with plastic bags can be used to store contaminated clothing; and
- Contaminated liquids and solids should be segregated and containerized in New York State Department of Transportation (NYSDOT)-approved plastic or metal drums, appropriate for off-Site shipping/disposal if necessary.

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6. Investigation-Derived Waste Disposal

6.1 RATIONALE/ASSUMPTIONS

This procedure applies to the disposal of investigation-derived waste (IDW). IDW is dealt with the following "Best Management Practices" and is not considered a listed waste due to the lack of generator knowledge concerning chemical source, chemical origin, and timing of chemical introduction to the subsurface. The actions of this SMP do not anticipate generation of IDW; however, procedures are included herein in the event unanticipated handling is required.

Consequently, waste sampling and characterization are performed to determine if the wastes exhibit a characteristic of hazardous waste. Two scenarios typically exist:

- When no information is available in the area of activity or investigation, and impacted media/soils are identified. Activities such as new construction and /or maintenance below grade may encounter environmental conditions that were unknown.
- Disposal Required/Containerization Required – When sufficient Site information regarding the investigative Site conditions warrants that all materials handled will be contained and disposed of.

If a known listed hazardous and/or characteristically hazardous waste/contaminated environmental media is being handled, then handling must be performed in accordance with Resource Conservation and Recovery Act (RCRA) Subtitle C (reference 2, Part V, Section 1(a),(b),(c)).

The following outlines the waste characterization procedures to be employed when IDW disposal is required.

The following procedure describes the techniques for characterization of IDW for disposal purposes. IDW may consist of personal protective equipment (PPE) and disposal equipment (DE).

6.2 PROCEDURE

The procedures for handling and characterization of field activity generated wastes are:

A.) PPE/DE – A number of disposal options exist for spent PPE/DE generated from investigation tasks. The options typically employed are:

- Immediately disposed of within on-Site dumpster/municipal trash.
- If known to be contaminated with RCRA hazardous waste, dispose of off Site at an RCRA Subtitle C facility.
- Spent Solvent/Acid Rinses – The need for sampling must be determined in consultation with the waste management organization handling the materials. If known that only the solvent and/or acids are present, then direct disposal/treatment using media-specific options may be possible without sampling (i.e., incineration).
- PPE/DE – Typically not sampled and included with the disposal of the solid wastes.

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Equipment/Materials:

- Sample spoons, trier, and auger;
- Sample mixing bowl;
- Sampling bailer or pump; and
- Sample glassware.

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References

1. American Public Works Association, 1999. Uniform Color Code. April. apwa.net.

2. ASTM International. ASTM D5088, Standard Practice for Decontamination of Field Equipment Used at Nonradioactive Waste Sites.

3. New York State Department of Environmental Conservation, 2021. DER-10: Technical Guidance for Site Investigation and Remediation. May 3.

4. New York State Department of Health, 2006. Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York. October.

5. New York State. Code Rule 753: Protection of Underground Facilities.

6. Occupational Safety and Health Administration. Excavation and Trenching Standard. Title 29 of the Code of Federal Regulations, Part 1926.650.

7. U.S. Environmental Protection Agency, 1986a. Resource Conservation and Recovery Act Ground-Water Monitoring Technical Enforcement Guidance Document. Office of Solid Waste and Emergency Response Directive 9950.1.

8. U.S. Environmental Protection Agency, 1986b. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846): Chapter 9, Sampling Plan, and Chapter 10, Sampling Methods. Office of Solid Waste. September.

9. U.S. Environmental Protection Agency, 1992. Comprehensive Environmental Response, Compensation, and Liability Act Guidance—Options Relevant to Resource Conservation and Recovery Act Facilities: Guide to Management of Investigation-Derived Wastes. January.

10. U.S. Environmental Protection Agency, 1998a. Resource Conservation and Recovery Act Guidance and Policies: Management of Contaminated Media. October.

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FIGURE



LEGEND

- SITE BOUNDARY
- PARCEL BOUNDARY
- INDOOR AIR SAMPLE LOCATION
- AMBIENT AIR SAMPLE LOCATION

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.

2. PARCEL DATA SOURCE: NEW YORK CITY DEPARTMENT OF CITY PLANNING, INFORMATION TECHNOLOGY DIVISION

3. AERIAL IMAGERY SOURCE: NEARMAP, JULY 3, 2025

4. BUILDING FOUNDATION LAYOUT SOURCE: DRAWING SOE-102.00 - DRAFT FOUNDATION SET DATED JULY 17, 2025

N

0 30 60

SCALE IN FEET

HALEY ALDRICH

860 FLUSHING AVENUE
BROOKLYN, NEW YORK

POST-REMEDIATION INDOOR AND AMBIENT AIR SAMPLING LOCATIONS

JULY 2026

FIGURE 1

GIS FILE PATH: \\haleyaldrich\share\CF\Projects\0211437\GIS\211437_860_FLUSHING_AVE.aprx - USER: gwilde - LAST SAVED: 8/8/2025 9:51 AM

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ATTACHMENT A
Sample Field Forms

DAILY FIELD REPORT

Project	224 3rd Avenue Site	**Report No.**	155
NYSDEC BCP Site	C224373	**Date**	5/20/2026
Location	224 3rd Avenue, Brooklyn, NY	**File No.**	0212758
Client	Sackett Apartments LLC	**Temperature**	68-90˚F
Contractor	N/A	**Wind Direction**	SE to NW, up to 6 mph
Weather	Clear	**Personnel on Site**	S. Greco
Humidity	82%	**Time on Site**	12:30 PM – 4:30 PM

H & A of New York Engineering and Geology, LLP (Haley & Aldrich of New York) was present to document the implementation of the October 2023 NYSDEC-approved Remedial Action Work Plan (RAWP) prepared by Langan Engineering, Environmental, Surveying Landscape Architecture and Geology, D.P.C. (Langan) for the 224 3rd Avenue Site C224373, located at 224 3rd Avenue. Site Observations are summarized below.

Daily Observations:

- Haley & Aldrich of New York mobilized to the site to conduct sub-slab depressurization system (SSDS) startup testing, which included an inspection of the RadonAway™ RP140 fan on the cast iron riser located on the roof of the building and collection of additional vacuum readings from the sub-slab monitoring points. The fan was determined to be operational and the alarm was functioning. A panel that houses the gauge and alarm is in the cellar.

Waste Disposal/Backfill Import Tracking:

Material Export

- Soil exports are summarized below:

Material Import

- Material import is summarized below:

Samples Collected:

- None.

CAMP Activities:

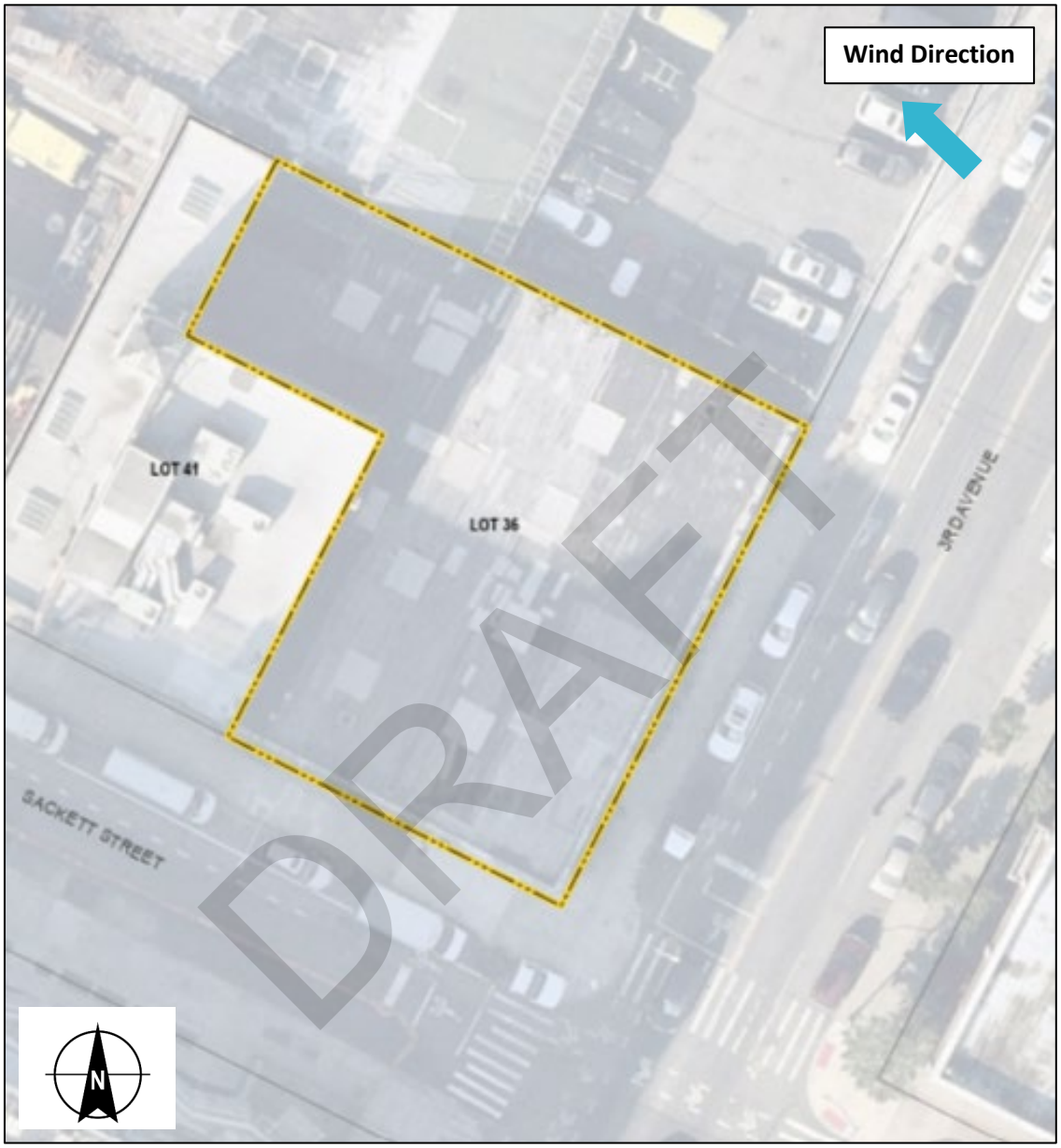
- No intrusive activities were conducted; therefore, CAMP was not performed. No visible dust was observed leaving the Site perimeter.

Activities Planned for Coming Weeks:

- None.

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Site Map:



LEGEND:

Area of work

CAMP Station

Site Photographs:

Photo 1:

Photo 2:

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INDOOR AIR QUALITY BUILDING SURVEY

DATE: _____

Address: _____

Use? Residential or Commercial:

Owner/Developer/Property Manager

Contact

Name: _____

Address: _____

_____

Phone: _____

Email: _____

Tenant (if applicable)

Contact

Name: _____

Address: _____

_____

Phone: _____

Email: _____

Notes

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Building Construction Characteristics:

- General description of building construction materials (Check all that apply):

  Reinforced concrete Steel-framed Wood-framed Concrete Masonry Units (CMU)

- How many occupied stories does the building have? _____

- What year was the building constructed? _____

- What type(s) of fuel(s) for space heating and water heating are used in this building? (Select all that apply)

  Natural gas Electric Oil Other (specify): _____

- Does the building have a basement? (Check all that apply)

  None Full basement Other (specify): _____

- If present, how is the basement used? (Check all that apply)

  Not used Office space Storage Utilities Other (specify): _____

- If present, what are the characteristics of the basement? (Check all that apply)

  Basement floor: Concrete Other (specify): _____

  Foundation walls: Poured concrete Other (specify): _____

  Moisture: Dry Wet Damp Other (specify): _____

- What are the characteristics of the floor slab? (Check all that apply)

  Concrete Carpeted Tiled Stone

  Cracks Seams Other (specify): _____

- Are drains or sumps present? Y ____ N ____ Describe each, including information on contents :

  _____

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_____

- Are elevator shafts present? Y _____ N ____ Describe each: _____

_____

- Are plumbing pipes or utility conduits present that penetrate the floor slab or basement wall? Y ___ N ____

  Check all that apply:

  Water Sanitary Sewer Communication Gas Electrical

  Other (specify): _____

- Were foundation design specifications and as-built drawings for the building obtained? Y ____ N ___

- Was soil beneath the floor slab treated with lime or cement prior to placing the slab? Y ____ N ____

  Describe: _____

- Was a vapor barrier or other liner installed under the floor slab? Y ____ N _____

  Describe:_____

If present - Heating, Ventilation and Air Conditioning Systems (HVAC):

- Were HVAC as-built drawings for the building obtained? Y ____ N _____
- Is the HVAC system a zone cooling/heating system? Y ____ N _____
- If not, what type of HVAC system is used in this building? _____
- How Many? _____
- Describe, and delineate HVAC zones in the facility and corresponding rooftop HVAC air inlets:

_____

_____

_____

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_____

Other (specify and describe): _____

- Does the HVAC system have an exhaust capability? Y ____ N _____
- What other type of mechanical ventilation systems are present and/or currently operating in the building?

  Mechanical fans Open windows Restroom vent fans Fume Hoods

  Other (specify): _____

- Who maintains and manages the HVAC system operation? _____
- Describe the control sequencing and operation of the HVAC system with respect to hours of operation, the intake of outside air, minimums, maximums, relative percentage outside air, differences between day and evening operation on weekdays and weekends:

_____

_____

_____

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Sources of Chemical Contaminants:

Which of these items were observed in the building? (Check all that apply)

Potential chemical source	Location of Source	MSDS obtained?
Lacquers, paints or paint thinners		Y N
Gas-powered equipment		Y N
Gasoline storage cans		Y N
Cleaning solvents		Y N
Lubricants		Y N
Air fresheners		Y N
Oven cleaners		Y N
Carpet/upholstery cleaners		Y N
Hairspray		Y N
Nail polish/polish remover		Y N
Bathroom cleaner		Y N
Appliance cleaner		Y N
Furniture/floor polish		Y N
Moth balls		Y N
Fuel tank		Y N
Wood stove		Y N
Fireplace		Y N
Perfume/colognes		Y N
Photographic darkroom chemicals		Y N
Glues		Y N
Scented trees, wreaths, potpourri, etc.		Y N
Other (specify):		Y N
Other (specify):		Y N

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- If commercial use building, what are the hours during which a majority of the workers are in the

building during a work day?

_____

- Do the occupants of the building frequently have their clothes dry-cleaned? Y ____ N _____
- Was there any recent remodeling or painting done in the building? Y ____ N _____
- When and where was the most recent carpeting applied in the building? _____
- Were glues used to attach the carpeting to the floor slab? Y ____ N _____
- Are there any pressed wood products in the building (e.g. hardwood plywood wall paneling, particleboard, fiberboard)? Y ____ N _____
- Are there any new upholstery, drapes, or other textiles in the building? Y ____ N _____
- Has the building been treated with any insecticides/pesticides? Y ____ N _____

  If so, what chemicals were used and how often were they applied? _____

Outdoor sources of contamination:

- Is there any stationary emission source in the vicinity of the building? _____
- Are there any mobile emission sources (e.g. highway, bus stop, high-traffic area) in the vicinity of the building? _____
- Is there any other information about the structural features of this building, the habits of its occupants or potential sources of chemical contaminants to the indoor air that may be of importance in facilitating the evaluation of the indoor air quality of the building? _____

_____

_____

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HALEY ALDRICH

www.haleyaldrich.com

QUALITY ASSURANCE PROJECT PLAN
FORMER BP GASOLINE SERVICE STATION SITE
860 FLUSHING AVENUE
BROOKLYN, NEW YORK
NYSDEC SITE NUMBER: C224424

DRAFT

by
H & A of New York Engineering and Geology, LLP
New York, New York

for
Flushing Holdings NY LLC
Brooklyn, New York

File No. 0211437
July 2026

Executive Summary

This Quality Assurance Project Plan (QAPP) outlines the scope of the quality assurance and quality control (QA/QC) activities associated with the site monitoring activities associated with the Site Management Plan (SMP) for 860 Flushing Avenue (Site) in Brooklyn, New York.

Protocols for sample collection, sample handling and storage, chain-of-custody procedures, and laboratory and field analyses are described herein or specifically referenced to related project documents.

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1. Project Description

This Quality Assurance Project Plan (QAPP) has been prepared as a component of the Site Management Plan (SMP) for the Former BP Gasoline Service Station Site located at 860 Flushing Avenue in Brooklyn, New York (Site).

1.1 PROJECT OBJECTIVES

The primary objective for data collection activities is to collect sufficient data necessary to confirm the results of the remedial action.

1.2 SITE DESCRIPTION AND HISTORY

The general Site description and Site history are provided in the Site Description and History Summary that accompanies the SMP for the Site and are incorporated herein by reference.

1.3 LABORATORY PARAMETERS

The laboratory parameters for soil vapor, indoor air, and ambient air include volatile organic compounds (VOCs) using U.S. Environmental Protection Agency (EPA) Method TO-15.

1.4 SAMPLING LOCATIONS

The SMP provides the locations of indoor air/ambient air locations that may be sampled as part of implementation of the remedy; see Figure 6 of the SMP.

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2. Project Organization and Responsibilities

This section defines the roles and responsibilities of the individuals who will perform the SMP monitoring activities. A New York State Department of Health (NYSDOH)-certified analytical laboratory will perform the analyses of environmental samples collected at the Site.

2.1 MANAGEMENT RESPONSIBILITIES

The Project Manager is responsible for managing the implementation of the SMP and monitoring and coordinating the collection of data. The Project Manager is responsible for technical quality control (QC) and project oversight. The Project Manager is responsible for:

- acquiring and applying technical and corporate resources as needed to ensure performance within budget and schedule restraints;
- reviewing work performed to ensure quality, responsiveness, and timelines;
- communicating with the client point of contact concerning the progress of the monitoring activities;
- assuring corrective actions are taken for deficiencies cited during audits of SMP monitoring activities; and
- overall Site Health and Safety Plan (HASP) compliance.

2.2 QUALITY ASSURANCE RESPONSIBILITIES

The Quality Assurance (QA) team will consist of a QA Officer and the Data Validation Staff. QA responsibilities are described in the following sections.

2.2.1 QA Officer

The QA Officer reports directly to the Project Manager and will be responsible for overseeing the review of field and laboratory data. Additional responsibilities include:

- assuring the application and effectiveness of the QAPP by the analytical laboratory and the project staff;
- providing input to the Project Manager as to corrective actions that may be required as a result of the above-mentioned evaluations; and
- preparing and/or reviewing data validation and audit reports.

The QA Officer will be assisted by the Data Validation Staff in the evaluation and validation of field and laboratory-generated data.

2.2.2 Data Validation Staff

The Data Validation Staff will be independent of the laboratory and familiar with the analytical procedures performed. The validation will include a review of each validation criterion as prescribed by the guidelines presented in Section 9.2 of this document and will be presented in a Data Usability Summary Report (DUSR) for submittal to the QA Officer.

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2.3 LABORATORY RESPONSIBILITIES

Laboratory services in support of the SMP monitoring include the following personnel.

2.3.1 Laboratory Project Manager

The Laboratory Project Manager will report directly to the QA Officer and Project Manager and will be responsible for ensuring all resources of the laboratory are available on an as-required basis. The Laboratory Project Manager will also be responsible for the approval of the final analytical reports.

2.3.2 Laboratory Operations Manager

The Laboratory Operations Manager will report to the Laboratory Project Manager and will be responsible for coordinating laboratory analysis, supervising in-house chain-of-custody (COC) reports, scheduling sample analyses, overseeing data review, and overseeing preparation of analytical reports.

2.3.3 Laboratory QA Officer

The Laboratory QA Officer will have sole responsibility for review and validation of the analytical laboratory data. The Laboratory QA Officer will provide Case Narrative descriptions of any data quality issues encountered during the analyses conducted by the laboratory. The QA Officer will also define appropriate QA procedures, overseeing QA/QC documentation.

2.3.4 Laboratory Sample Custodian

The Laboratory Sample Custodian will report to the Laboratory Operations Manager and will be responsible for:

- receiving and inspecting the incoming sample containers;
- recording the condition of the incoming sample containers;
- signing appropriate documents;
- verifying COC and its correctness;
- notifying the Project Manager and Operations Manager of sample receipt and inspection;
- assigning a unique identification number and entering each into the sample receiving log;
- initiating transfer of samples to laboratory analytical sections; and
- controlling and monitoring access/storage of samples and extracts.

2.3.5 Laboratory Technical Personnel

The Laboratory Technical Staff will have the primary responsibility for the performance of sample analysis and the execution of the QA procedures developed to determine the data quality. These activities will include the proper preparation and analysis of the project samples in accordance with the laboratory's Quality Assurance Manual (QAM) and associated Standard Operating Procedures (SOPs).

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2.4 FIELD RESPONSIBILITIES

2.4.1 Field Coordinator

The Field Coordinator is responsible for the overall operation of the field team and reports directly to the Project Manager. The Field Coordinator works with the project Health and Safety Officer (HSO) to conduct operations in compliance with the project HASP. The Field Coordinator will facilitate communication and coordinate efforts between the Project Manager and the field team members.

Other responsibilities include:

- developing and implementing field-related work plans, ensuring schedule compliance, and adhering to management-developed project requirements;
- coordinating and managing field staff;
- performing field system audits;
- overseeing QC for technical data provided by the field staff;
- preparing and approving text and graphics required for field team efforts;
- coordinating and overseeing technical efforts of subcontractors assisting the field team;
- identifying problems in the field, resolving difficulties in consultation with the Project QA Officer and Project Manager, implementing and documenting corrective action procedures; and
- participating in preparation of the final reports.

2.4.2 Field Team Personnel

Field Team Personnel will be responsible for:

- performing field activities as detailed in the SMP and in compliance with the Field Sampling Plan (FSP) provided in the New York State Department of Environmental Conservation (NYSDEC)-approved Remedial Investigation Work Plan (RIWP) and this QAPP.
- Immediately report any accidents and/or unsafe conditions to the Site HSO and take reasonable precautions to prevent injury.

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3. Sampling Procedures

The FSP in the NYSDEC-approved RIWP provides the SOPs for sampling required by the SMP. Sampling will be conducted in general accordance with the NYSDEC Technical Guidance for Site Investigation and Remediation (Division of Environmental Remediation [DER]-10).

3.1 SAMPLE CONTAINERS

Sample containers for each sampling task will be provided by the laboratory performing the analysis. The containers will be cleaned by the manufacturer to meet or exceed the analyte specifications established in the EPA's "Specifications and Guidance for Obtaining Contaminant-Free Sample Containers," April 1992, OSWER Directive #9240.0-0.5A. Certificates of analysis for each lot of sample containers used will be maintained by the laboratory.

The appropriate sample containers, preservation method, maximum holding times, and handling requirements for each sampling task are provided in Table I.

3.2 SAMPLE LABELING

Each sample will be labeled with a unique sample identifier that will facilitate tracking and cross-referencing of sample information. Equipment rinse blanks and field duplicate samples also will be numbered with a unique sample identifier to prevent analytical bias of field QC samples.

Refer to the FSP in the NYSDEC-approved RIWP for the sample labeling procedures.

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4. Custody Procedures

Sample custody is addressed in three parts: field sample collection, laboratory analysis, and final project files. Custody of a sample begins when it is collected by or transferred to an individual and ends when that individual relinquishes or disposes of the sample.

A sample is under custody if:

1. The item is in actual possession of a person;
2. The item is in the view of the person after being in actual possession of the person;
3. The item was in actual possession and subsequently stored to prevent tampering; or
4. The item is in a designated and identified secure area.

4.1 FIELD CUSTODY PROCEDURES

Field personnel will keep written records of field activities on applicable preprinted field forms or in a bound field notebook to record data-collecting activities. These records will be written legibly in ink and will contain pertinent field data and observations. Entry errors or changes will be crossed out with a single line, dated, and initialed by the person making the correction. Field forms and notebooks will be periodically reviewed by the Field Coordinator.

The beginning of each entry in the logbook or preprinted field form will contain the following information:

- date;
- start time;
- weather;
- names of field personnel (including subcontractors);
- level of personal protection used at the Site; and
- names of all visitors and the purpose of their visit.

For each measurement and sample collected, the following information will be recorded:

- detailed description of sample location;
- equipment used to collect sample or make measurement and the date equipment was calibrated;
- time sample was collected;
- description of the sample conditions;
- depth sample was collected (if applicable);
- volume and number of containers filled with the sample; and
- sampler's identification.

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4.1.1 Field Procedures

The following procedure describes the process to maintain the integrity of the samples:

- Upon collection, samples are placed in the proper containers. In general, samples collected for organic analysis will be placed in pre-cleaned glass containers and samples collected for inorganic analysis will be placed in pre-cleaned plastic (polyethylene) bottles. Refer to the FSP for sample packaging procedures.
- Samples will be assigned a unique sample number and will be affixed to a sample label. Refer to the FSP for sample labeling procedures.
- Samples will be properly and appropriately preserved by field personnel in order to minimize loss of the constituent(s) of interest due to physical, chemical, or biological mechanisms.
- Appropriate volumes will be collected to ensure that the appropriate reporting limits can be successfully achieved and that the required QC sample analyses can be performed.

4.1.2 Transfer of Custody and Shipment Procedures

- A COC record will be completed at the time of sample collection and will accompany each shipment of project samples to the laboratory. The field personnel collecting the samples will be responsible for the custody of the samples until the samples are relinquished to the laboratory. Sample transfer will require the individuals relinquishing and receiving the samples to sign, date, and note the time of sample transfer on the COC record.
- Samples will be shipped or delivered in a timely fashion to the laboratory so that holding times and/or analysis times as prescribed by the methodology can be met.
- Samples will be transported in containers (coolers) which will maintain the refrigeration temperature for those parameters for which refrigeration is required in the prescribed preservation protocols.
- Samples will be placed in an upright position and limited to one layer of samples per cooler. Additional bubble wrap or packaging material will be added to fill the cooler. Shipping containers will be secured with strapping tape and custody tape for shipment to the laboratory.
- When samples are split with the NYSDEC representatives, a separate COC will be prepared and marked to indicate with whom the samples are shared. The person relinquishing the samples will require the representative's signature acknowledging sample receipt.
- If samples are sent by a commercial carrier, a bill of lading will be used. A copy of the bill of lading will be retained as part of the permanent record. Commercial carriers will not sign the custody record as long as the custody record is sealed inside the sample cooler and the custody tape remains intact.
- Samples will be picked up by a laboratory courier or transported to the laboratory the same day they are collected unless collected on a weekend or holiday. In these cases, the samples will be stored in a secure location until delivery to the laboratory. Additional ice will be added to the cooler as needed to maintain proper preservation temperatures.

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4.2 LABORATORY COC PROCEDURES

A Sample Custodian will be designated by the laboratory and will have the responsibility to receive all incoming samples. Once received, the custodian will document if the sample is received in good condition (i.e., unbroken, cooled, etc.) and that the associated paperwork, such as COC forms, has been completed. The custodian will sign the COC forms.

The custodian will also document if sufficient sample volume has been received to complete the analytical program. The Sample Custodian will then place the samples into secure, limited access storage (refrigerated storage, if required). The Sample Custodian will assign a unique number to each incoming sample for use in the laboratory. The unique number will then be entered into the sample-receiving log with the verified time and date of receipt also noted.

Consistent with the analyses requested on the COC form, analyses by the laboratory's analysts will begin in accordance with the appropriate methodologies. Samples will be removed from secure storage with internal COC sign-out procedures followed.

4.3 STORAGE OF SAMPLES

Empty sample bottles will be returned to secure and limited access storage after the available volume has been consumed by the analysis. Upon completion of the entire analytical work effort, samples will be disposed of by the Sample Custodian. The length of time that samples are held will be at least 30 days after reports have been submitted. Disposal of remaining samples will be completed in compliance with all federal, state, and local requirements.

4.4 FINAL PROJECT FILES CUSTODY PROCEDURES

The final project files will be the central repository for all documents with information relevant to sampling and analysis activities as described in this QAPP. The H & A of New York Engineering and Geology, LLP (Haley & Aldrich of New York) Project Manager will be the custodian of the project file. The project files, including all relevant records, reports, logs, field notebooks, pictures, subcontractor reports, and data reviews, will be maintained in a secured, limited access area and under the custody of the Project Director or their designee.

The final project file will include:

- project plans and drawings;
- field data records;
- sample identification documents and soil boring/monitoring well logs;
- all COC documentation;
- correspondence;
- references and literature;
- laboratory data deliverables;
- data validation and assessment reports;
- progress and QA reports; and

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- final report.

The laboratory will be responsible for maintaining analytical logbooks, laboratory data, and sample COC documents. Raw laboratory data files and copies of hard copy reports will be inventoried and maintained by the laboratory for a period of six years, at which time the laboratory will contact the Haley & Aldrich of New York Project Manager regarding the disposition of the project-related files.

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5. Calibration Procedures and Frequency

5.1 FIELD INSTRUMENT CALIBRATION PROCEDURES

Several field instruments will be used for both on-site screening of samples and for health and safety monitoring, as described in the Construction Health and Safety Plan (CHASP). On-site air monitoring for health and safety purposes may be accomplished using a vapor detection device, such as a photoionization detector (PID).

Field instruments will be calibrated at the beginning of each day and checked during field activities to verify performance. Instrument-specific calibration procedures will be performed in accordance with the instrument manufacturer's requirements.

5.2 LABORATORY INSTRUMENT CALIBRATION PROCEDURES

Reference materials of known purity and quality will be utilized for the analysis of environmental samples. The laboratory will carefully monitor the preparation and use of reference materials including solutions, standards, and reagents through well-documented procedures.

All solid chemicals and acids/bases used by the laboratory will be rated as "reagent grade" or better. All gases will be "high" purity or better. All Standard Reference Materials (SRMs) or Performance Evaluation (PE) materials will be obtained from approved vendors of the National Institute of Standards and Technology (NIST; formerly National Bureau of Standards), the EPA Environmental Monitoring Support Laboratories (EMSL), or reliable Cooperative Research and Development Agreement (CRADA)-certified commercial sources.

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6. Analytical Procedures

Analytical procedures to be utilized for analysis of environmental samples will be based on referenced EPA analytical protocols and/or project-specific SOP.

6.1 LABORATORY ANALYTICAL PROCEDURES

Laboratory analyses will be based on the EPA methodology requirements promulgated in:

- "Test Methods for Evaluating Solid Waste," SW-846, EPA, Office of Solid Waste, and promulgated updates, 1986.
- "Air Method, Toxic Organics-15 (TO-15): Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition: Determination of Volatile Organic Compounds (VOCs) in Air Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS)." EPA, 1999, and promulgated updates.

6.1.1 List of Project Target Compounds and Laboratory Detection Limits

The laboratory reporting limits (RLs) and associated method detection limits (MDLs) for the target analytes and compounds for the environmental media to be analyzed are presented in Table I. MDLs have been experimentally determined by the project laboratory using the method provided in Title 40 of the Code of Federal Regulations (40 CFR), Part 136 Appendix B.

Laboratory parameters for soil vapor and indoor air samples are listed in the SMP. Laboratory parameters for disposal samples will be determined by the disposal facility after an approved facility has been determined.

6.1.2 List of Method-Specific Quality Control Criteria

The laboratory SOPs include a section that presents the minimum QC requirements for the project analyses. Section 7 references the frequency of the associated QC samples for each sampling effort and matrix.

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7. Internal Quality Control Checks

This section presents the internal QC checks that will be employed for field and laboratory measurements.

7.1 FIELD QUALITY CONTROL

7.1.1 Field Blanks

Internal QC checks will include analysis of field blanks to validate equipment cleanliness. Whenever possible, dedicated equipment will be employed to reduce the possibility of cross-contamination of samples.

7.1.2 Trip Blanks

Trip blank samples will be prepared by the project laboratory using ASTM International (ASTM) Type II or equivalent water placed within pre-cleaned 40-milliliter (mL) VOC vials equipped with Teflon™ septa. Trip blanks will accompany each sample delivery group (SDG) of environmental samples collected for analysis of VOCs.

Trip blank samples will be placed in each cooler that stores and transports project samples that are to be analyzed for VOCs.

7.2 LABORATORY PROCEDURES

Procedures that contribute to maintenance of overall laboratory QA/QC include appropriately cleaned sample containers, proper sample identification and logging, applicable sample preservation, storage, and analysis within prescribed holding times, and use of controlled materials.

7.2.1 Field Duplicate Samples

The precision or reproducibility of the data generated will be monitored through the use of field duplicate samples. Field duplicate analysis will be performed at a frequency of one in 20 project samples.

Precision will be measured in terms of the absolute value of the relative percent difference (RPD) as expressed by the following equation:

$$RPD = [|R1-R2|/[(R1+R2)/2]] \; X \; 100\%$$

Acceptance criteria for duplicate analyses performed on solid matrices will be 100 percent, and aqueous matrices will be 35 percent. RPD values outside these limits will require an evaluation of the sampling and/or analysis procedures by the project QA Officer and/or laboratory QA Director. Corrective actions may include re-analysis of additional sample aliquots and/or qualification of the data for use.

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7.2.2 Matrix Spike Samples

Ten percent of each project sample matrix for each analytical method performed will be spiked with known concentrations of the specific target compounds/analytes.

The amount of the compound recovered from the sample compared to the amount added will be expressed as a percent recovery (%R). The %R of an analyte is an indication of the accuracy of an analysis within the Site-specific sample matrix. The %R will be calculated for matrix spike/matrix spike duplicate (MS/MSD) using the following equation.

$$\%\ Recovery = \frac{Spiked\ Sample - Background}{Known\ Value\ of\ Spike} x\,100\%$$

If the QC value falls outside the control limits (upper control limit [UCL] or lower control limit [LCL]) due to sample matrix effects, the results will be reported with appropriate data qualifiers. To determine the effect a non-compliant MS recovery has on the reported results, the recovery data will be evaluated as part of the validation process.

7.2.3 Laboratory Control Sample Analyses

The laboratory will perform laboratory control sample (LCS) analyses prepared from SRMs. The SRMs will be supplied from an independent manufacturer and traceable to NIST materials with known concentrations of each target analyte to be determined by the analytical methods performed. In cases where an independently supplied SRM is not available, the LCS may be prepared by the laboratory from a reagent lot other than that used for instrument calibration.

The laboratory will evaluate LCS analyses in terms of %R using the most recent laboratory-generated control limits.

LCS recoveries that do not meet acceptance criteria will be deemed invalid. Analysis of project samples will cease until an acceptable LCS analysis has been performed. If sample analysis is performed in association with an out-of-control LCS sample analysis, the data will be deemed invalid.

Corrective actions will be initiated by the Haley & Aldrich of New York QA Officer and/or Laboratory QA Officer to investigate the problem. After the problem has been identified and corrected, the solution will be noted in the instrument run logbook, and a re-analysis of project samples will be performed, if possible.

The analytical anomaly will be noted in the SDG Case Narrative and reviewed by the Data Validator. The Data Validator will confirm that appropriate corrective actions were implemented and recommend the applicable use of the affected data.

7.2.4 Surrogate Compound/Internal Standard Recoveries

For VOCs, surrogates will be added to each sample prior to analysis to establish purge and trap efficiency. Quantitation will be accomplished via internal standardization techniques.

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The recovery of surrogate compounds and internal standards will be monitored by laboratory personnel to assess possible Site-specific matrix effects on instrument performance. For semi-volatile organics analyses, surrogates will be added to the raw sample to assess extraction efficiency. Internal standards will be added to all sample extracts and instrument calibration standards immediately before analysis for quantitation via internal standardization techniques.

Method-specific QC limits are provided in the attached laboratory method SOPs. Surrogate compound/internal standard recoveries that do not fall within accepted QC limits for the analytical methodology performed will have the analytical results flagged with data qualifiers as appropriate by the laboratory and will not be noted in the laboratory report Case Narrative.

To ascertain the effect non-compliant surrogate compound/internal standard recoveries may have on the reported results, the recovery data will be evaluated as part of the validation process. The Data Validator will provide recommendations for corrective actions including but not limited to additional data qualification.

7.2.5 Calibration Verification Standards

Calibration verification (CV) standards will be utilized to confirm instrument calibrations and performance throughout the analytical process. CV standards will be prepared as prescribed by the respective analytical protocols. Continuing calibration will be verified by compliance with method-specific criteria prior to additional analysis of project samples.

Non-compliant analysis of CV standards will require immediate corrective action by the project laboratory QA officer and/or designated personnel. Corrective action may include re-analysis of each affected project sample, a detailed description of the problem, the corrective action undertaken, the person who performed the action, and the resolution of the problem.

7.2.6 Laboratory Method Blank Analyses

Method blank sample analysis will be performed as part of each analytical batch for each methodology performed. If target compounds are detected in the method blank samples, the reported results will be flagged by the laboratory in accordance with standard operating procedures. The Data Validator will provide recommendations for corrective actions, including but not limited to additional data qualification.

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8. Data Quality Objectives

Sampling that will be performed as described in the SMP is designed to produce data of the quality necessary to achieve the minimum standard requirements of the field and laboratory analytical objectives described below. These data are being obtained with the primary objective to assess levels of contaminants of concern associated with the Site.

The overall project data quality objective (DQO) is to implement procedures for field data collection, sample collection, handling, and laboratory analysis and reporting that achieve the project objectives. The following section is a general discussion of the criteria that will be used to measure achievement of the project DQO.

8.1 PRECISION

8.1.1 Definition

Precision is defined as a quantitative measure of the degree to which two or more measurements are in agreement. Precision will be determined by collecting and analyzing field duplicate samples and by creating and analyzing laboratory duplicates from one or more of the field samples. The overall precision of measurement data is a mixture of sampling and analytical factors. The analytical results from the field duplicate samples will provide data on sampling precision. The results from duplicate samples created by the laboratory will provide data on analytical precision. The measurement of precision will be stated in terms of RPD.

8.1.2 Field Precision Sample Objectives

Field precision will be assessed through collection and measurement of field duplicate samples at a rate of one duplicate per 20 investigative samples. The RPD criteria for the project field duplicate samples will be +/- 100 percent for soil and +/- 35 percent for groundwater for parameters of analysis detected at concentrations greater than five times the laboratory RL.

8.1.3 Laboratory Precision Sample Objectives

Laboratory precision will be assessed through the analysis of LCS and laboratory control sample duplicate(LCSD) and MS/MSD samples for groundwater and soil samples and the analysis of laboratory duplicate samples for air and soil vapor samples. Air and soil vapor laboratory duplicate sample analyses will be performed by analyzing the same Summa canister twice. The RPD criteria for the air/soil vapor laboratory duplicate samples will be +/- 35 percent for parameters of analysis detected at concentrations greater than five times the laboratory RL.

8.2 ACCURACY

8.2.1 Definition

Accuracy relates to the bias in a measurement system. Bias is the difference between the observed and the “true” value. Sources of error are the sampling process, field contamination, preservation techniques, sample handling, sample matrix, sample preparation, and analytical procedure limitations.

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8.2.2 Field Accuracy Objectives

Sampling bias will be assessed by evaluating the results of field equipment rinse and trip blanks. Equipment rinse and trip blanks will be collected as appropriate based on sampling and analytical methods for each sampling effort.

If non-dedicated sampling equipment is used, equipment rinse blanks will be collected by passing ASTM Type II water over and/or through the respective sampling equipment utilized during each sampling effort. One equipment rinse blank will be collected for each type of non-dedicated sampling equipment used for the sampling effort. Equipment rinse blanks will be analyzed for each target parameter for the respective sampling effort for which environmental media have been collected.

Note: If dedicated or disposable sampling equipment is used, equipment rinse samples will not be collected as part of that field effort.

Trip blank samples will be prepared by the laboratory and provided with each shipping container that includes containers for the collection of groundwater samples for the analysis of VOC. Trip blank samples will be analyzed for each VOC for which groundwater samples have been collected for analysis.

8.3 LABORATORY ACCURACY OBJECTIVES

Analytical bias will be assessed through the use of LCS and Site-specific MS sample analyses. LCS analyses will be performed with each analytical batch of project samples to determine the accuracy of the analytical system.

One set of MS/MSD analyses will be performed with each batch of 20 project samples collected for analysis to assess the accuracy of the identification and quantification of analytes within the Site-specific sample matrices. Additional sample volume will be collected at sample locations selected for the preparation of MS/MSD samples so that the standard laboratory RLs are achieved.

The accuracy of analyses that include a sample extraction procedure will be evaluated through the use of system monitoring or surrogate compounds. Surrogate compounds will be added to each sample, standard, blank, and QC sample prior to sample preparation and analysis. Surrogate compound %R will provide information on the effect of the sample matrix on the accuracy of the analyses.

8.4 REPRESENTATIVENESS

8.4.1 Definition

Representativeness expresses the degree to which sample data represent a characteristic of a population, a parameter variation at a sampling point or an environmental condition. Representativeness is a qualitative parameter that is dependent upon the design of the sampling program. The representativeness criterion is satisfied through the proper selection of sampling locations, the quantity of samples, and the use of appropriate procedures to collect and analyze the samples.

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8.4.2 Measures to Ensure Representativeness of Field Data

Representativeness will be addressed by prescribing sampling techniques and the rationale used to select sampling locations. Sampling locations may be biased (based on existing data, instrument surveys, observations, etc.) or unbiased (completely random or stratified-random approaches).

8.5 COMPLETENESS

8.5.1 Definition

Completeness is a measure of the amount of valid (usable) data obtained from a measuring system compared to the total amount anticipated to be obtained. The completeness goal for all data uses is that a sufficient amount of valid data be generated so that determinations can be made related to the intended data use with a sufficient degree of confidence.

8.5.2 Field Completeness Objectives

Completeness is a measure of the amount of valid measurements obtained from measurements taken in this project versus the number planned. The field completeness objective for this project will be greater than 90 percent.

8.5.3 Laboratory Completeness Objectives

The laboratory data completeness objective is a measure of the amount of valid data obtained from laboratory measurements. The evaluation of the data completeness will be performed at the conclusion of each sampling and analysis effort.

The completeness of the data generated will be determined by comparing the amount of valid data, based on independent validation, with the total laboratory data set. The completeness goal will be greater than 90 percent.

8.6 COMPARABILITY

8.6.1 Definition

Comparability is a qualitative parameter expressing the confidence with which one data set can be compared to another.

8.6.2 Measures to Ensure Comparability of Laboratory Data

Comparability of laboratory data will be measured from the analysis of SRMs obtained from either EPA CRADA suppliers or NIST. The reported analytical data will also be presented in standard units of mass of contaminant within a known volume of environmental media. The standard units for various sample matrices are as follows:

- Aqueous Matrices – nanograms per liter (ng/L) for per- and polyfluoroalkyl substances (PFAS) analyses, micrograms per liter (µg/L) of media for organic analyses, and milligrams per liter (mg/L) for inorganic analyses.
- Soil Vapor and Indoor Air – micrograms per cubic meter (µg/m^3).

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8.7 LEVEL OF QUALITY CONTROL EFFORT

If non-dedicated sampling equipment is used, equipment rinse blanks will be prepared by field personnel and submitted for analysis of target parameters. Equipment rinse blank samples will be analyzed to check for potential cross-contamination between sampling locations that may be introduced during the investigation. One equipment rinse blank will be collected per sampling event to the extent that non-dedicated sampling equipment is used.

If necessary, a separate equipment rinse blank sample will be collected for PFAS using the sample collection procedure described in Section 8.1.1 of the NYSDEC-approved FSP.

Note: If dedicated or disposable sampling equipment is used, equipment rinse samples will not be collected as part of that field effort.

Trip blanks will be used to assess the potential for contamination during sample storage and shipment. Trip blanks will be provided with the sample containers to be used for the collection of groundwater samples for the analysis of VOC. Trip blanks will be preserved and handled in the same manner as the project samples. One trip blank will be included along with each shipping container containing project samples to be analyzed for VOC.

Method blank samples will be prepared by the laboratory and analyzed concurrently with all project samples to assess potential contamination introduced during the analytical process.

Field duplicate samples will be collected and analyzed to determine sampling and analytical reproducibility. One field duplicate will be collected for every 20 or fewer investigative samples collected for off-Site laboratory analysis.

MS will provide information to assess the precision and accuracy of the analysis of the target parameters within the environmental media collected. One MS/MSD will be collected for every 20 or fewer investigative samples per sample matrix.

Note: Soil MS/MSD samples require triple sample volume for VOC only. Aqueous MS/MSD samples require triple the normal sample volume for VOC analysis and double the volume for the remaining parameters.

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9. Data Reduction, Validation and Reporting

Data generated by the laboratory operation will be reduced and validated prior to reporting in accordance with the following procedures:

9.1 DATA REDUCTION

9.1.1 Field Data Reduction Procedures

Field data reduction procedures will be minimal in scope compared to those implemented in the laboratory setting. The pH, conductivity, temperature, turbidity, dissolved oxygen (DO), oxidation-reduction potential (ORP), and breathing zone VOC readings collected in the field will be generated from direct-read instruments. The data will be written into field logbooks immediately after measurements are taken. If errors are made, data will be legibly crossed out, initialed and dated by the field member, and corrected in a space adjacent to the original entry.

9.1.2 Laboratory Data Reduction Procedures

Laboratory data reduction procedures are provided by the appropriate chapter of EPA's "Test Methods for Evaluating Solid Waste," SW-846, Third Edition. Errors will be noted; corrections made with the original notations crossed out legibly. Analytical results for soil samples will be calculated and reported on a dry weight basis.

9.1.3 Quality Control Data

QC data (e.g., laboratory duplicates, surrogates, MS, and MSD) will be compared to the method acceptance criteria. Data determined to be acceptable will be entered into the laboratory information management system.

Unacceptable data will be appropriately qualified in the project report. Case Narratives will be prepared which will include information concerning data that fell outside acceptance limits and any other anomalous conditions encountered during sample analysis.

9.2 DATA VALIDATION

Data validation procedures of the analytical data will be performed by the Haley & Aldrich of New York QA Officer or designee using the following documents as guidance for the review process:

- "U.S. EPA National Functional Guidelines for Organic Data Review," and the "U.S. EPA National Functional Guidelines for Inorganic Data Review."
- The specific data qualifiers used will be applied to the reported results as presented and defined in the EPA National Functional Guidelines. Validation will be performed by qualified personnel at the direction of the Haley & Aldrich of New York QA Officer. Tier 1 data validation (the equivalent of EPA's Stage 2A validation) will be performed to evaluate data quality.
- The completeness of each data package will be evaluated by the Data Validator. Completeness checks will be administered on all data to determine that the deliverables are consistent with the NYSDEC Analytical Services Protocol (ASP) Category A and Category B data package

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requirements. The validator will determine whether the required items are present and request copies of missing deliverables (if necessary) from the laboratory.

9.3 DATA REPORTING

Data reporting procedures will be carried out for field and laboratory operations as indicated below:

- Field Data Reporting: Field data reporting will be conducted principally through the transmission of report sheets containing tabulated results of measurements made in the field and documentation of field calibration activities.
- Laboratory Data Reporting: The laboratory data reporting package will enable data validation based on the protocols described above. The final laboratory data report format will include the QA/QC sample analysis deliverables to enable the development of a DUSR based on NYSDEC DER-10 Appendix 2B.

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10. Performance and System Audits

A performance audit is an independent quantitative comparison with data routinely obtained in the field or the laboratory. Performance audits include two separate, independent parts: internal and external audits.

10.1 FIELD PERFORMANCE AND SYSTEM AUDITS

10.1.1 Internal Field Audit Responsibilities

Internal audits of field activities will be initiated at the discretion of the Project Manager and will include the review of sampling and field measurements. The audits will verify that all procedures are being followed. Internal field audits will be conducted periodically during the project. The audits will include examination of:

- field sampling records, screening results, instrument operating records;
- sample collection;
- handling and packaging in compliance with procedures;
- maintenance of QA procedures; and
- COC reports.

10.1.2 External Field Audit Responsibilities

External audits may be conducted by the Project Coordinator at any time during the field operations. These audits may or may not be announced and are at the discretion of the NYSDEC. The external field audits can include, but are not limited to:

- sampling equipment decontamination procedures;
- sample bottle preparation procedures;
- sampling procedures;
- examination of HASPs;
- procedures for verification of field duplicates; and
- field screening practices.

10.2 LABORATORY PERFORMANCE AND SYSTEM AUDITS

10.2.1 Internal Laboratory Audit Responsibilities

The laboratory system audits are typically conducted by the laboratory QA Officer or designee on an annual basis. The system audit will include an examination of laboratory documentation, including sample receiving logs, sample storage, COC procedures, sample preparation and analysis, and instrument operating records.

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At the conclusion of internal system audits, reports will be provided to the laboratory's operating divisions for appropriate comment and remedial/corrective action where necessary. Records of audits and corrective actions will be maintained by the Laboratory QA Officer.

10.2.2 External Laboratory Audit Responsibilities

External audits will be conducted as required by the NYSDOH or designee. External audits may include any of the following:

- a review of laboratory analytical procedures;
- laboratory on-site visits; and/or
- submission of performance evaluation samples for analysis.

Failure of any of the above audit procedures can lead to laboratory de-certification. An audit may consist of, but is not limited to:

- sample receipt procedures;
- custody, sample security and log-in procedures;
- review of instrument calibration logs;
- review of QA procedures;
- review of log books;
- review of analytical SOPs; and
- personnel interviews.

A review of a data package from samples recently analyzed by the laboratory can include, but not be limited to:

- a comparison of resulting data to the SOP or method;
- verification of initial and continuing calibrations within control limits;
- verification of surrogate recoveries and instrument timing results;
- review of extended quantitation reports for comparisons of library spectra to instrument spectra, where applicable; and
- assurance that samples are run within holding times.

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11. Preventive Maintenance

11.1 FIELD INSTRUMENT PREVENTIVE MAINTENANCE

The field equipment preventive maintenance program is designed to ensure the effective completion of the sampling effort and to minimize equipment downtime. Program implementation is concentrated in three areas:

- Maintenance responsibilities
- Maintenance schedules
- Inventory of critical spare parts and equipment

The maintenance responsibilities for field equipment will be assigned to the task leaders in charge of specific field operations. Field personnel will be responsible for daily field checks and calibrations and for reporting any problems with the equipment. The maintenance schedule will follow the manufacturer's recommendations. In addition, the field personnel will be responsible for determining that an inventory of spare parts will be maintained with the field equipment. The inventory will primarily contain parts that are subject to frequent failure, have limited useful lifetimes and/or cannot be obtained in a timely manner.

In addition to regular maintenance, the field personnel will be responsible for decontaminating monitoring equipment. Because monitoring equipment is difficult to decontaminate, care should be exercised to prevent contamination. Sensitive monitoring instruments should be protected when they are at risk of exposure to contaminants. This may include enclosing them in plastic bags, allowing an opening for the sample intake. Ventilation ports should not be covered.

If contamination does occur, decontamination of the equipment will be required; however, immersion in decontamination fluids is not possible. As such, care must be taken to wipe the instruments down with detergent-wetted wipes or sponges, and then with de-ionized water-wetted wipes or sponges.

11.2 LABORATORY INSTRUMENT PREVENTIVE MAINTENANCE

Analytical instruments at the laboratory will undergo routine and/or preventive maintenance. The extent of the preventive maintenance will be a function of the complexity of the equipment.

Generally, annual preventive maintenance service will involve cleaning, adjusting, inspecting, and testing procedures designed to reduce instrument failure and/or extend useful instrument life. Between visits, routine operator maintenance and cleaning will be performed according to manufacturer's specifications by laboratory personnel.

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12. Specific Routine Procedures Used to Assess Data Precision, Accuracy, and Completeness

12.1 FIELD MEASUREMENTS

Field-generated information will be reviewed by the Field Coordinator and typically includes evaluation of bound logbooks/forms, data entry and calculation checks. Field data will be assessed by the Project Coordinator, who will review the field results for compliance with the established QC criteria that are specified in Section 7 of this QAPP. The accuracy of pH and specific conductance will be assessed using daily instrument calibration, calibration checks, and blank data. Accuracy will be measured by determining the % R of calibration check standards. Precision of the pH and specific conductance measurements will be assessed on the basis of the reproducibility of duplicate readings of a field sample and will be measured by determining the RPD. Accuracy and precision of the soil VOC screening will be determined using duplicate readings of calibration checks. Field data completeness will be calculated using the following equation:

$$Completeness = \frac{Valid\ (usable)\ Data\ Obtained}{Total\ Data\ Planned} X\ 100$$

12.2 LABORATORY DATA

Surrogate, internal standard, and MS recoveries will be used to evaluate data quality. The laboratory QA/QC program will include the following elements:

- Precision, in terms of RPD, will be determined by relative sample analysis at a frequency of one duplicate analysis for each batch of 10 project samples or a frequency of 10 percent. RPD is defined as the absolute difference of duplicate measurements divided by the mean of these analyses normalized to a percentage.
- Accuracy, in terms of %R (recovery of known constituent additions or surrogate recoveries), will be determined by the analysis of spiked and unspiked samples. MS/MSD will be used to determine analytical accuracy. The frequency of MS/MSD analyses will be one project sample MS/MSD per set of 20 project samples.
- One method blank will be prepared and analyzed with each batch of project samples. The total number of method blank sample analyses will be determined by the laboratory analytical batch size.
- SRMs will be used for each analysis. Sources of SRMs include the EPA, commercially available material from CRADA-certified vendors, and/or laboratory-produced solutions. SRMs, when available and appropriate, will be processed and analyzed on a frequency of one per set of samples.
- Completeness is the evaluation of the amount of valid data generated versus the total set of data produced from a particular sampling and analysis event. Valid data are determined by independent confirmation of compliance with method-specific and project-specific DQOs. The calculation of data set completeness will be performed by the following equation.

$$\frac{Number\ of\ Valid\ Sample\ Results}{Total\ Number\ of\ Samples\ Planned} X\ 100 = \%\ Complete$$

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13. QA Reports

Critically important to the successful implementation of the QAPP is a reporting system that provides the means by which the program can be reviewed, problems identified, and programmatic changes made to improve the plan.

QA reports to management can include:

- Audit reports, internal and external audits with responses
- Performance evaluation sample results; internal and external sources
- Daily QA/QC exception reports/corrective actions

QA/QC corrective action reports will be prepared by the Haley & Aldrich of New York QA Officer when appropriate and presented to the project and/or laboratory management personnel so that performance criteria can be monitored for all analyses from each analytical department. The updated trend/QA charts prepared by the laboratory QA personnel will be distributed and reviewed by various levels of the laboratory management.

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TABLE I
ANALYTICAL METHODS AND QUALITY ASSURANCE SUMMARY TABLE
860 FLUSHING AVENUE
BROOKLYN, NEW YORK

Analysis/Method	Sample Type	Preservation	Holding Time	Volume/Weight	Container
Volatile Organic Compounds/TO-15	Indoor Air	N/A	30 days	2.7 - 6 L	1 2.7 or 6 L Summa Canister
Volatile Organic Compounds/TO-15	Soil Vapor	N/A	30 days	2.7 - 6 L	1 2.7 or 6 L Summa Canister

Notes:
1. L - liters

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APPENDIX F
Health and Safety Plan

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HALEY & ALDRICH, INC.
SITE-SPECIFIC SAFETY PLAN

FOR

860 Flushing Avenue

Brooklyn, New York

Project/File No. 0211437

Gensuite EZ Scan®

BI - Developers

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Prepared By: Calvin R. Jackson	**Date: 6/15/2026**
Approvals: The following signatures constitute approval of this Health & Safety Plan.	
Field Safety Manager: Luke J. McCartney, P.G.	**Date: 6/15/2026**
Project Manager: Luke J. McCartney, P.G.	**Date: 6/15/2026**
HASP Valid Through: 12/31/2026	

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Attachment E Project Site Forms

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STOP WORK AUTHORITY

In accordance with Haley & Aldrich (Haley & Aldrich) Stop Work Authority Operating Procedure (OP1035), any individual has the right to refuse to perform work that he or she believes to be unsafe without fear of retaliation. He or she also has the authority, obligation, and responsibility to stop others from working in an unsafe manner.

STOP Work Authority is the stop work policy for all personnel and subcontractors on the Site. When work has been stopped due to an unsafe condition, Haley & Aldrich site management (e.g., Project Manager [PM], Site Health & Safety Officer [SHSO], etc.) and the Haley & Aldrich Senior Project Manager (SPM) will be notified immediately.

Reasons for issuing a stop work order include, but are not limited to:

- The belief/perception that injury to personnel or accident causing significant damage to property or equipment is imminent.
- An Haley & Aldrich subcontractor is in breach of site safety requirements and/or their own site HASP.
- Identifying a substandard condition (e.g., severe weather) or activity that creates an unacceptable safety risk as determined by a qualified person.

Work will not resume until the unsafe act has been stopped OR sufficient safety precautions have been taken to remove or mitigate the risk to an acceptable degree. Stop work orders will be documented as part of an on-site stop work log, on daily field reports to include the activity/activities stopped, the duration, person stopping work, person in-charge of stopped activity/activities, and the corrective action agreed to and/or taken. Once work has been stopped, only the Haley & Aldrich SPM or SHSO can give the order to resume work. Haley & Aldrich senior management is committed to support anyone who exercises his or her “Stop Work” authority.

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ISSUANCE AND COMPLIANCE

This HASP has been prepared in accordance with Occupational Safety and Health Administration (OSHA) regulations (CFR 29, Parts 1904, 1910, and 1926) if such are applicable.

The specific requirements of this HASP include precautions for hazards that exist during this project and may be revised as new information is received or as site conditions change.

- This HASP must be signed by all Haley & Aldrich personnel involved in implementation of the SOW (Section 2 of this HASP).
- This HASP, or a current signed copy, must be retained at all times when Haley & Aldrich staff are present.
- Revisions to this HASP must be outlined within the contents of the HASP. If immediate or minor changes are necessary, the Field Safety Manager (FSM), Haley & Aldrich, SSO and/or Project Manager (PM) may use Attachment 1 (HASP Amendment Form), presented at the end of this HASP. Any revision to the HASP requires employees and subcontractors to be informed of the changes so that they understand the requirements of the change.
- Deviations from this HASP are permitted with approval from the Haley & Aldrich FSM, PM, or Senior Health & Safety Manager (SHSM). Unauthorized deviations may constitute a violation of Haley & Aldrich company procedures/policies and may result in disciplinary action.
- This HASP will be relied upon by Haley & Aldrich's subcontractors and visitors to the site. Haley & Aldrich's subcontractors must have their own HASP which will address hazards specific to their trade that is not included in this HASP. This HASP will be made available for review to Haley & Aldrich's subcontractors and other interested parties (e.g. Facility personnel and regulatory agencies) to ensure that Haley & Aldrich has properly informed our subcontractors and others of the potential hazards associated with the implementation of the SOW to the extent that Haley &Aldrich is aware.

This site-specific HASP provides only site-specific descriptions and work procedures. General safety and health compliance programs in support of this HASP (e.g., injury reporting, medical surveillance, personal protective equipment (PPE) selection, etc.) are described in detail in the Haley &Aldrich Corporate Health and Safety Program Manual and within Haley & Aldrich's Standard Operating Procedures Both the manual and SOPs can be located on the Haley & Aldrich's Company Intranet. When appropriate, users of this HASP should always refer to these resources and incorporate to the extent possible. The manual and SOPs are available to clients and regulators upon request.

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EMERGENCY EVENT PROCEDURES

1 - ASSESS THE SCENE

- **STOP WORK**
- Review the situation and ascertain if it's safe to enter the area.
- Evacuate the site if the conditions are unsafe.

2 - EVALUATE THE EMERGENCY

- **Call 911, or designated emergency number, if required.**
- **Provide first aid for the victim if qualified and safe to do so.**
  - First aid will be addressed using the onsite first aid kit. *
    - If providing first aid, remember to use proper first aid universal precautions if blood or bodily fluids are present.
- **If exposure to hazardous substance is suspected, immediately vacate the contaminated area.**
  - Remove any contaminated clothing and/or equipment.
  - Wash any affected dermal/ocular area(s) with water for at least 15 minutes.
  - Seek immediate medical assistance if any exposure symptoms are present.

* *Note: Haley & Aldrich employees are not required or expected to administer first aid / CPR to any Haley & Aldrich staff member, Contractor, or Civilian personnel at any time; it is Haley & Aldrich´s position that those who do are doing so on their own behalf and not as a function of their job.*

3 - SECURE THE AREA

- **Cordon off the incident area, if possible.**
  - Notify any security personnel, if required.
  - Escort all non-essential personnel out of the area, if able.

4 - REPORT ON-SITE ACCIDENTS / INCIDENTS TO PM / SSO

- **Notify the PM and SSO as soon as it is safe to do so.**
  - Assist PM and SSO in completing any additional tasks, as required.

5 - INVESTIGATE / REPORT THE INCIDENT

- **Record details of the incident for input to the Gensuite.**
  - Complete any additional forms as requested by the PM and SSO.

6 - TAKE CORRECTIVE ACTION

- **Implement corrective actions per the PM following root cause analysis.**
  - Complete Lessons Learned form.

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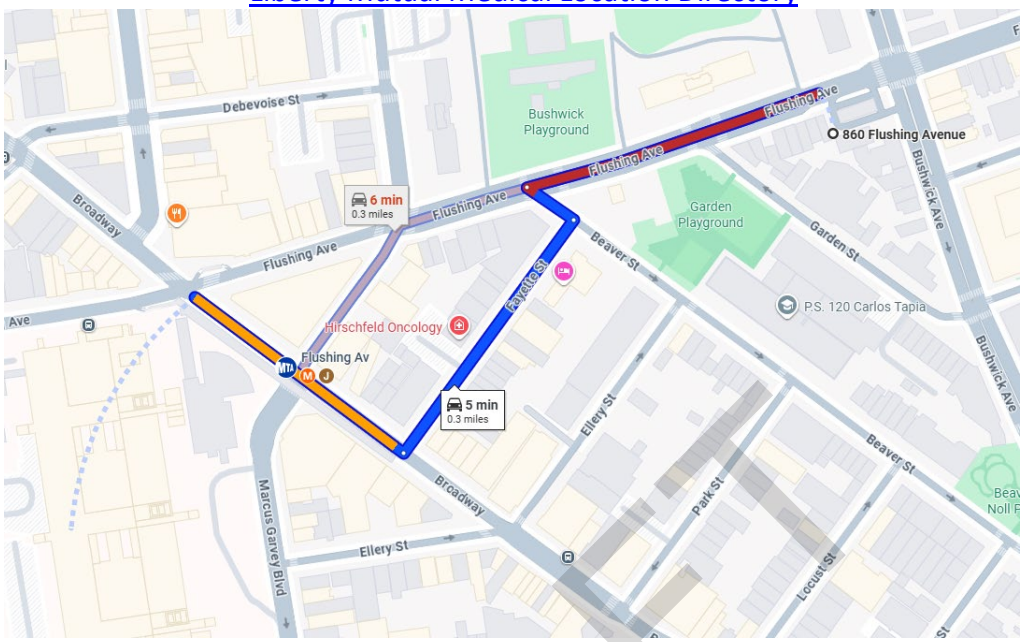
PROJECT INFORMATION AND CONTACTS	
Project Name: 860 Flushing Avenue	**Haley & Aldrich File No.:** 0211437
Location: 860 Flushing Avenue, Brooklyn, NY	
Client/Site Contact: Phone Number:	Flushing Holdings NY LLC Enter Phone Number
Haley & Aldrich Field Representative: Phone Number: Emergency Phone Number:	Calvin R. Jackson 929-729-1243 914-343-4057
Haley & Aldrich Project Manager: Phone Number: Emergency Phone Number:	Luke McCartney 646.568.9357 551.655.7720
Field Safety Manager: Phone Number: Emergency Phone Number:	Luke McCartney 646.568.9357 551.655.7720
Subcontractor Project Manager: Phone Number:	Enter Name Enter Phone Number
Nearest Hospital: Address: (see map on next page) Phone Number:	NYC Health & Hospitals/Woodhull 760 Broadway, Brooklyn, NY (718) 963-8000
Nearest Occ. Health Clinic: http://www.talispoint.com/liberty/ext/ Address: (see map on next page) Phone Number:	**CALL ACUITY** **1-888-397-8099**
Liberty Mutual Claim Policy	**WC6Z11254100036**
Emergency Response Number:	**911**
Other Local Emergency Response Number:	N/A
Other Ambulance, Fire, Police, or Environmental Emergency Resources:	911

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DIRECTIONS TO THE NEAREST HOSPITAL

Liberty Mutual Medical Location Directory



Directions to the Nearest Hospital:

from 860 Flushing Ave, Brooklyn, NY 11206
to NYC Health + Hospitals/Woodhull

5 min (0.3 mile)

via Flushing Ave, Fayette St and Broadway
Fastest route now due to traffic conditions

860 Flushing Ave
Brooklyn, NY 11206

Head west on Flushing Ave toward Garden St
0.1 mi

Turn left onto Beaver St
108 ft

Turn right onto Fayette St
0.1 mi

Turn right onto Broadway
0.1 mi

NYC Health + Hospitals/Woodhull
760 Broadway, Brooklyn, NY 11206

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DIRECTIONS TO THE NEAREST URGENT CARE

Liberty Mutual Medical Location Directory

CALL ACUITY
1-888-397-8099

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1. WORK SCOPE

This Site-Specific Health and Safety Plan addresses the health and safety practices and procedures that will be exercised by all Haley & Aldrich employees participating in all work on the Project Site. This plan is based on an assessment of the site-specific health and safety risks available to Haley & Aldrich and Haley & Aldrich's experience with other similar project sites. The scope of work includes the following:

Site mobilization involving site walks, equipment mobilization and utility mark outs (GPR). Remedial oversight and soil sampling. Screening of soil cored during intrusive work for indications of contamination by visual means, odor, and monitoring with a PID.

Project Task Breakdown

Task No.	Task Description	Employee(s) Assigned	Work Date(s) or Duration
1	SSDS and Monitoring and Maintenance	Calvin R. Jackson	1 year
2	Air Sampling	Calvin R. Jackson	1 year

Subcontractor(s) Tasks

Firm Name	Work Activity	Work Date(s) or Duration
Enter name.	Enter task description.	Enter dates/duration.

Projected Start Date: Click or tap to enter a date.

Projected Completion Date: Click or tap to enter a date.

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2. SITE OVERVIEW / DESCRIPTION

Site Classification

Mixed-use commercial and residential

Site Description

The Site, located in the County of Kings, Brooklyn, New York and is identified as Block 3138, Lot 32 on the New York City Tax Map, is approximately 0.24-acres in size. The Site is bounded to the north by Flushing Avenue and a multi-story residential building that is part of the Bushwick Houses apartment complex; to the east by a one-story restaurant and two four-story residential buildings with ground-floor commercial use; to the south by a six-story residential building with ground-floor commercial use; and to the west by a two-story deli.

Background and Historic Site Usage

The subject property was first developed as early as 1887 with multiple dwellings and storefronts. By 1934, the subject property was occupied by commercial businesses including a chair manufacturer with paint spraying, an upholsterer, a dentist, a scrap iron business, a plumbing supply business, and a shoe store. From as early as 1946 to the present day, the subject property has operated as a gasoline filling station with auto service until at least 1979. Historical operations have included a laundry, lubritorium, repair shop, auto inspection, auto washing and sales, and parking and storage of more than five cars. Since 1979, the property remained relatively unchanged except for the addition of a pump island canopy around 2001. The Site entered the NYSDEC Brownfield Cleanup Program (BCP) and underwent remedial action with installation of an active Sub-Slab Depressurization System (SSDS). The site is currently developed with a 10-story building.

Site Status

Indicate current activity status and describe operations at the site:

Active

The site underwent remedial action and the Site is being managed under the Site Management Plan.

Site Plan

Is a site plan or sketch available? Yes

Work Areas

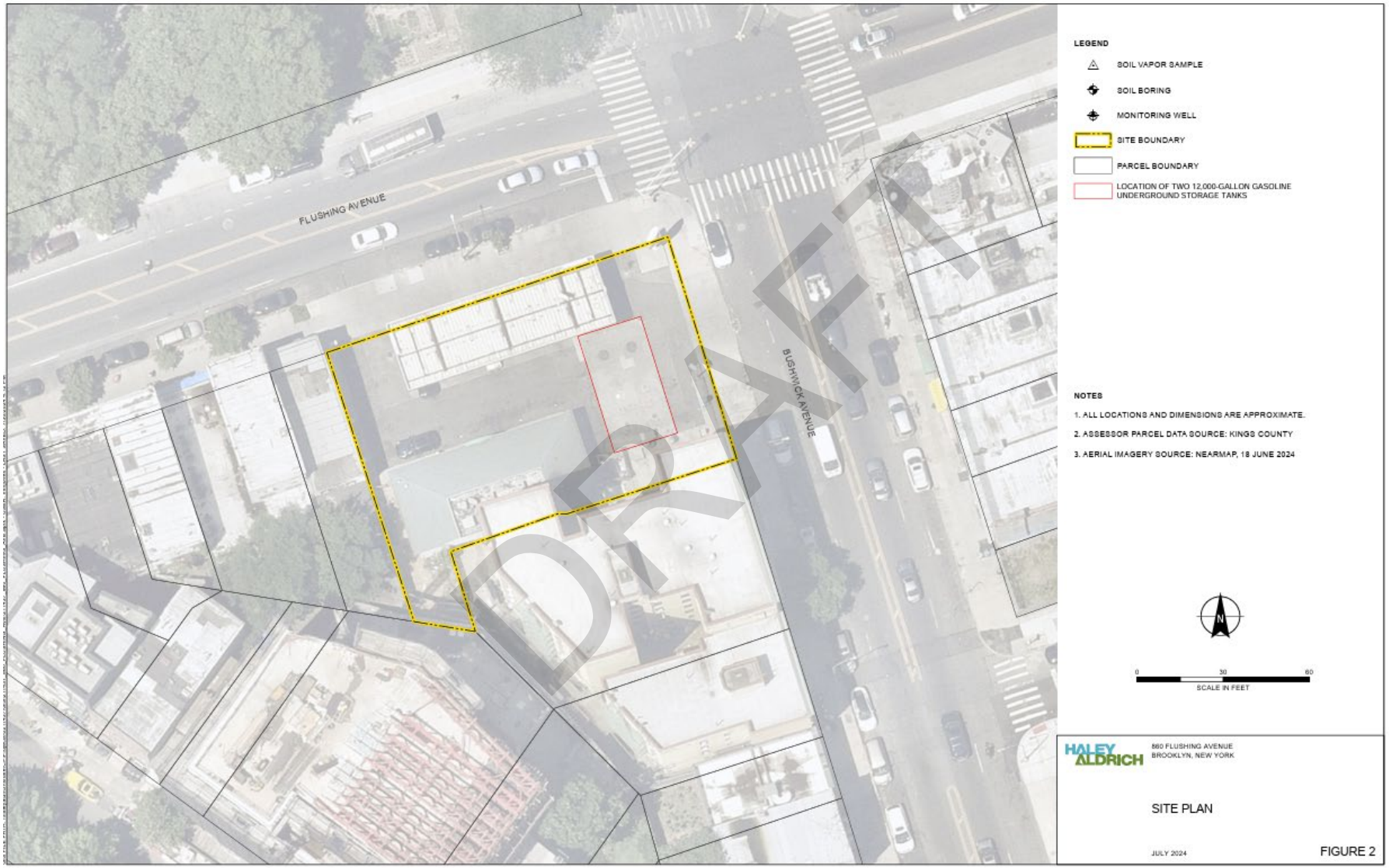
List and identify each specific work areas(s) on the job site and indicate its location(s) on the site plan:

Entire Site

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Site Plan



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3. HAZARD ASSESSMENT

Indicate all hazards that may be present at the site and for each task. If any of these potential hazards are checked, it is the Project Manager's responsibility to determine how to eliminate / minimize the hazard to protect onsite personnel.

Site Chemical Hazards

Is this Site impacted with chemical contamination? Yes

Source of information about contaminants: Previous Investigation

Contaminant of Concern	Location/Media	Concentration	Units
Acetone	Soil	0.072	mg/kg
BTEX/VOCs	Soil	2.3	mg/kg
Polycyclic aromatic hydrocarbons (PAHs)	Soil	141	mg/kg
Organochlorine Pesticides	Soil	0.0264	mg/kg
Arsenic	Soil	13.3	mg/kg
Barium	Soil	3,160	mg/kg
Cadmium	Soil	6.79	mg/kg
Copper	Soil	305	mg/kg
Lead	Soil	3,150	mg/kg
Mercury	Soil	6.07	mg/kg
Nickel	Soil	42.9	mg/kg
Zinc	Soil	2,270	mg/kg
Polychlorinated biphenyls (PCBs)	Soil	0.291	mg/kg
PFOS/PFOA	Soil	2.06	ppb
Chloroform	Groundwater	10	ug/L
SVOCs	Groundwater	0.226	ug/L
Total Metals	Groundwater	205,000	ug/L

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Dissolved Metals	**Groundwater**	**238,000**	**ug/L**
PFOA	**Groundwater**	**94.7**	**Other**

BTEX/VOCs: BTEX is an acronym for benzene, toluene, ethylbenzene and xylenes. These compounds are VOCs, are common in petroleum-related products (e.g., oil, gasoline, coal-tar DNAPL, etc.), and frequently co-occur at hazardous waste sites. Benzene, toluene, ethylbenzene, and xylenes have acute and chronic harmful effects on the central nervous system. Benzene is classified as a carcinogen. Short-term health effects of low-level BTEX exposure include drowsiness, dizziness, accelerated heart rate, headaches, tremors, confusion, and unconsciousness.

Polycyclic aromatic hydrocarbons (PAHs): are a class of chemicals that occur naturally in coal, crude oil, and gasoline. They also are produced when coal, oil, gas, wood, garbage, and tobacco are burned. PAHs generated from these sources can bind to or form small particles in the air. High-temperature cooking will form PAHs in meat and in other foods. Naphthalene is a PAH that is produced commercially in the United States to make other chemicals and mothballs. Cigarette smoke contains many PAHs.

Organochlorine Pesticides: are chlorinated hydrocarbons used extensively from the 1940s through the 1960s in agriculture and mosquito control. Representative compounds include DDT, methoxychlor, dieldrin, chlordane, toxaphene, mirex, kepone, lindane, and benzene hexachloride. As neurotoxicants, many organochlorine pesticides were banned in the United States, few are still registered for use.

People can be exposed to organochlorine pesticides through accidental inhalation exposure if in an area where they were recently applied. The chemicals can also be ingested in fish, dairy products, and other fatty foods that are contaminated. Organochlorine pesticides accumulate in the environment and are very persistent and move long distances in surface runoff or groundwater.

Exposure to these chemicals over a short period may produce convulsions, headache, dizziness, nausea, vomiting, tremors, confusion, muscle weakness, slurred speech, salivation and sweating. Long-term exposure may damage the liver, kidney, central nervous system, thyroid and bladder. Many of these pesticides have been linked to elevated rates of liver or kidney cancer in animals. There is some evidence indicating that organochlorine pesticides may also cause cancer in humans.

Arsenic: The Occupational Safety and Health Administration has set limits of 10 microgram arsenic per cubic meter of workplace air (10 µg/m3) for 8 hour shifts and 40 hour work weeks. Several studies have shown that inorganic arsenic can increase the risk of lung cancer, skin cancer, bladder cancer, liver cancer, kidney cancer, and prostate cancer. The World Health Organization (WHO), the Department of Health and Human Services (DHHS), and the EPA have determined that inorganic arsenic is a human carcinogen.

Breathing high levels of inorganic arsenic can give you a sore throat or irritated lungs. Ingesting high levels of inorganic arsenic can result in death. Lower levels of arsenic can cause nausea and vomiting, decreased production of red and white blood cells, abnormal heart rhythm, damage to blood vessels, and a sensation of "pins and needles" in hands and feet.

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Barium: is a soft, silvery metal that rapidly tarnishes in air and reacts with water. It is mostly used in drilling fluids for oil and gas wells and used in paint and in glassmaking. All barium compounds are toxic; however, barium sulfate is insoluble and so can be safely swallowed. A suspension of barium sulfate is sometimes given to patients suffering from digestive disorders.

Barium has no known biological role, although barium sulfate has been found in one type of algae. Barium is toxic, as are its water- or acid-soluble compounds. Barium occurs only in combination with other elements. The major ores are barite (barium sulfate) and witherite (barium carbonate). Barium metal can be prepared by electrolysis of molten barium chloride, or by heating barium oxide with aluminum powder.

Cadmium: Cadmium became an important metal in the production of nickel-cadmium (Ni-Cd) rechargeable batteries and as a sacrificial corrosion-protection coating for iron and steel. Common industrial uses for cadmium today are in batteries, alloys, coatings (electroplating), solar cells, plastic stabilizers, and pigments. Acute (short-term) exposure to Cadmium fumes is irritating to the respiratory tract. Inhalation of fumes may cause a buildup of fluid in the lungs. Inhalation of fumes may cause metal fume fever. The effects may be delayed, and medical observation is recommended. Prolonged (chronic) exposure to Cadmium dust may result in impairment of lungs. Cadmium and its compounds are highly toxic and exposure to this metal is known to cause cancer and targets the body's cardiovascular, renal, gastrointestinal, neurological, reproductive, and respiratory systems. Cadmium is a carcinogen.

Lead: The effects of lead are the same whether it enters the body through breathing or swallowing. Lead can affect almost every organ and system in your body. The main target for lead toxicity is the nervous system. Long-term exposure to lead can result in decreased performance in some tests measuring functions of the nervous system in adults. It may also cause weakness in fingers, wrists, or ankles. Lead exposure also causes small increases in blood pressure, particularly in middle-aged and older people and can cause anemia. Exposure to high lead levels can severely damage the brain and kidneys and ultimately cause death.

Mercury: is an odorless, silver metallic liquid. It can be inhaled or absorbed through the skin. Contact may cause irritation to the skin or eyes. Toxic if ingested. Fume inhalation may cause irritation in the nose, throat or lungs. This is a corrosive chemical. Symptoms of poisoning include, muscle tremors, loss of appetite, and nausea. Long-term exposure may have effects on the central nervous system and kidneys. The PEL is 0.1 mg/m^3 averaged over an 8 hour shift.

Nickel: is silvery-white metal with a gold tinge. It is used in batteries and making of alloys and is found in Earth's core and crust. If reduced to dust particles it can cause chronic bronchitis, reduced lung function and potential cancer of lung and sinus if overexposed.

Zinc: is an odorless, bluish-white powder. It is typically used in paints and can be mixed with other metals to make bass and other types of alloys. Zinc can produce flammable gases when in contact with water, sometimes creating vigorous or explosive reactions. It can also create gaseous hydrogen in contact with water or moist air. Inhalation will cause irritation to eyes and respiratory system. Exposures cause flu-like symptoms, called "metal fume fever", which can sometimes be delayed up to 48 hours after initial exposure.

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Polychlorinated biphenyls (PCBs): are a group of manufactured organic chemicals that contain 209 individual chlorinated chemicals. PCBs are either oily liquids or solids and are colorless to light yellow in color. They have no known smell or taste. There are no known natural sources of PCBs. Some commercial PCB mixtures are known in the United States by their industrial trade name e.g. Aroclor.

Site Hazards Checklist			
Weather			
High Winds	Cold Temperatures	Hot Temperatures	Select Hazard

High Winds

While high winds are commonly associated with severe thunderstorms and hurricanes they may also occur as a result of differences in air pressures, such as when a cold front passes across the area. They can cause downed trees and power lines, and flying debris (such as dust or larger debris), which adds additional risks and could lead to power outages, transportation disruptions, damage to buildings and vehicles, and serious injury.

Wind Advisory are issued for sustained winds 25 to 39 mph and/or gusts to 57 mph. High Wind warnings are issued by the National Weather Service when high wind speeds may pose a hazard or is life threatening. The criteria for this warning will varies by state. The Beaufort Wind Scale is a helpful tool to when dealing with high winds.

Cold Temperatures

Cold stress may occur at any time work is being performed at low ambient temperatures and high velocity winds. Because cold stress is common and has potentially serious illnesses associated with outdoor work during cold seasons, regular monitoring and other preventative measures are vital.

Refer to OP1003-Cold Stress for additional information and mitigation controls.

Hot Temperatures

Heat stress may occur at any time work is being performed at elevated ambient temperatures. Because heat stress is one of the most common and potentially serious illnesses associated with outdoor work during hot seasons, regular monitoring and other preventative measures are vital. Site workers must learn to recognize and treat the various forms of heat stress. The best approach is preventative heat stress management.

H&A employees and their subcontractors should be aware of potential health effects and/or physical hazards of working when there are hot temperatures or a high heat index. Refer OP1015-Heat Stress for a discussion on hot weather hazards.

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Biological			
Stinging Insects	Large/Small Mammals	Mosquitoes	Choose an item.

Stinging Insects

Stinging Insects fall into two major groups: Apidae (honeybees and bumblebees) and vespids (wasps, yellow jackets, and hornets). Apidae are docile and usually do not sting unless provoked. The stinger of the honeybee has multiple barbs, which usually detach after a sting. Vespids have few barbs and can inflict multiple stings.

There are several kinds of stinging insects that might be encountered on the project site. Most stings will only result in a temporary injury. However, sometimes the effects can be more severe, even life-threatening depending on where you are stung and what allergies you have. Being stung in the throat area of the neck may cause edema (swelling caused by fluid build-up in the tissues) around the throat and may make breathing difficult.

In rare cases, a severe allergic reaction can occur. This can cause "anaphylaxis" or anaphylactic shock with symptoms appearing immediately or up to 30 minutes later. Symptoms include; Hives, itching and swelling in areas other than the sting site, swollen eyes/eyelids, wheezing, chest tightness, difficulty breathing, hoarse voice, swelling of the tongue, dizziness or sharp drop in blood pressure, shock, unconsciousness or cardiac arrest. Reactions can occur the first time you are stung or with subsequent stings. If you see any signs of reaction, or are unsure, call or have a co-worker call emergency medical services (e.g., 911) right away. Get medical help for stings near the eyes, nose or throat. Stay with the person who has been stung to monitor their reaction.

Staff who are allergic to bee stings are encouraged to inform their staff/project manager. If staff member carries an Epi-pen (i.e., epinephrine autoinjector) they are encouraged to inform their colleagues in case they are stung and are incapable of administering the injection. Examine site for any signs of activity or a hive/nest. If you see several insects flying around, see if they are entering/exiting from the same place. Most will not sting unless startled or attacked. Do not swat, let insects fly away on their own. If you must, walk away slowly or gently "blow" them away. If a nest is disturbed and you hear "wild" buzzing, protect your face with your hands and run from the area immediately. Wear long sleeves, long pants, and closed-toed boots. Wear light colored clothes such as khakis. Avoid brightly colored, patterned, or black clothing. Tie back long hair to avoid bees or wasps from entanglement. Do not wear perfumes, colognes or scented soaps as they contain fragrances that are attractive. If bee or wasp is found in your car, stop and leave windows open.

Small Mammals

Rodents, are the most abundant order of mammals. There are hundreds of species of rats; the most common are the black and brown rat. Other rodents you may encounter are mice, beavers, squirrels, guinea pigs, capybaras and coypu.

The Brown Rat has small ears, blunt nose, and short hair. It is approximately 14-18” long (with tail).

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They frequently infest garbage/rubbish, slaughterhouses, domestic dwellings, warehouses, and supermarkets. They also frequent any space with an easy meal and potential nesting sites. The Black Rat is identified by its tail, that is always longer than the length from the head to the body. It is also slimmer and more agile than the Brown rat. Its size varies according to its environment and food supply.

The House Mouse has the amazing ability to adapt and can frequently be found in human dwellings. In buildings, mice will live anywhere and difficult to keep out. Mice are omnivorous, they will eat anything. Rats and mice often become a serious problem in cold winter months when they seek food and warmth inside buildings. They may suddenly appear in large numbers when excavation work disturbs their in-ground nesting locations or their food source is changed.

Some major problems caused by rats and mice are contaminating the food they eat with urine and excrement. Gnawing into materials such as paper, wood, or upholstery, to use as nest material. Also gnawing plastic, cement, soft metals such as lead and aluminum, and wiring, which may cause a fire hazard. Occasionally biting people and may kill small animals. They, or the parasites they carry, like fleas, mites and worms, spread many diseases such as salmonella, trichinosis, rat bite fever, hantavirus, Weil's disease, and bubonic plague. They damage ornamental plants by burrowing among the roots or feeding on new growth. They also eat garden vegetables, such as corn and squash. These rodents have been a problem for centuries, because of their incredible ability to survive and are so difficult to eliminate. In addition, they are extremely compatible with human behavior and needs.

Avoid contact with rodents, if possible. Avoid contact with rodent excrement. Do not eat food or water that may have encountered rodent excrement. If exposed, wash hands and avoid touching your face with your hands.

Mosquitos

Work outdoors with temperatures above freezing will likely bring staff into contact with mosquitos. There are a variety of mosquito species that can transmit a range of diseases. Birds act as reservoirs for the viruses that can be collected by the mosquito and transmitted to a person. Majority of mosquitos are mainly a nuisance but staff need to take appropriate precautions to minimize the potential transmission of a virus that can result in one of the following diseases: West Nile, Eastern Equine Encephalitides and Western Encephalitides. Knowing some key steps that can minimize the risk of mosquito bites is, therefore, important in reducing the risks. Workers working outdoors should be aware that the use of PPE techniques is essential to preventing mosquito bites especially when working at sites where mosquitoes may be active and biting.

Use repellents containing DEET, picaridin, IR3535, and some oil of lemon eucalyptus and para-menthane-diol products provide longer-lasting protection. To optimize safety and effectiveness, repellents should be used according to the label instructions. Cover as much of your skin as possible by wearing shirts with long-sleeves, long pants, and socks whenever possible. Avoid use of perfumes and colognes when working outdoors during peak times when mosquitoes may be active; mosquitoes may be more attracted to individuals wearing perfumes and colognes.

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Location/Terrain			
Slip/Trip/Falls	Public Rd/Right of Way	SIMOPS	Economically Depressed

Slips, Trips & Falls

Slip and trip injuries are the most frequent injuries to workers. Statistics show most falls happen on the same level resulting from slips and trips. Both slips and trips result from unintended or unexpected change in the contact between the feet and the ground or walking surface. Good housekeeping, quality of walking surfaces (flooring), awareness of surroundings, selection of proper footwear, and appropriate pace of walking are critical for preventing fall accidents.

Site workers will be walking on a variety of irregular surfaces, that may affect their balance. Extra care must be taken to walk cautiously near rivers because the bottom of the riverbed maybe slick and may not be visible. Rocks, gradient changes, sandy bottoms, and debris may be present but not observable.

Take your time and pay attention to where you are going. Adjust your stride to a pace that is suitable for the walking surface and the tasks you are doing. Check the work area to identify hazards - beware of trip hazards such as wet floors, slippery floors, and uneven surfaces or terrain. Establish and utilize a pathway free of slip and trip hazards. Choose a safer walking route. Carry loads you can see over. Keep work areas clean and free of clutter. Communicate hazards to on-site personnel and remove hazards as appropriate.

Public Right of Way

H&A staff and their subcontractors conducting work on public roads and/or right of ways can be exposed to vehicular traffic and expose the public to the hazards of the job site. Where a hazard exists to site workers because of traffic or haulage conditions at work sites that encroach public streets or highways, a system of traffic controls in conformance with the Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD), or state program, is required. A Temporary Traffic Control Plan (TCP) describes traffic controls to be used for facilitating vehicle and pedestrian traffic through a temporary traffic control zone TCPs are required to provide for worker protection and safe passage of traffic through and around job sites with as little inconvenience and delay as possible.

The plan may range in scope from being very detailed, to merely referencing typical drawings contained in the MUTCD. The degree of detail in the TCP depends entirely on the complexity of the situation, and TCP's should be prepared by persons knowledgeable about the fundamental principles of temporary traffic control and the work activities to be performed.

H&A Project Managers or their subcontractors need to establish appropriate control measures and obtain any permits when project work is on or encroaches public roadways. You may need flaggers or police details. Cease work and notify the field supervisor immediately if any conditions are such that safety is jeopardized. Utilize protective vehicles whenever appropriate or position equipment so in between the work and oncoming traffic.

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SIMOPS

SIMOPS are described as the potential class of activities which could bring about an undesired event or set of circumstances, e.g., safety, environment, damage to assets, schedule, commercial, financial, etc. SIMOPS are defined as performing two or more operations concurrently.

SIMOPS should be identified at an early stage before operations commence to understand issues such as schedule and physical clashes, maintenance activities, failure impacts, interferences between vessels, contracts and third part interfaces and environmental impacts.

Coordinate project with site activities. Identify and understand the hazards associated with the host and client's activities. Integrate site emergency response protocols where appropriate and communicate to all project staff. Integrate site communication protocols and communicate to all project staff.

Economically Depressed Areas

Economically depressed areas may have high crime rates. Projects involving work in and around inactive industrial sites may bring staff into contact with indigent and homeless persons. Staff could be subjected to crime that includes but may not be limited to thievery, vandalism, and violence. Prior to the start of work staff need to understand the work locations and the potential for exposure to low level crime.

Staff members should never work alone in these areas. A buddy system is required. Conduct during daylight hours. Secure equipment and vehicles. If warranted, contact the local police department for a security detail. Leave the work area immediately and contact the local authorities if staff members feel threatened or are threatened.

Miscellaneous			
Extended Shift	Choose an item.	Choose an item.	Choose an item.

Extended Shift

An extended shift can include extending a workday beyond eight hours. Extended or unusual work shifts may be more stressful physically, mentally, and emotionally. Non-traditional shifts and extended work hours may disrupt the body's regular schedule, leading to increased fatigue, stress, and lack of concentration. This leads to an increased risk of operator error, injuries and/or accidents. The degree to which an individual is exposed to fatigue risk factors depends upon the work schedule. As both the duration of the workday and the number of days worked increase so does the fatigue risk factors. Staff Managers need to be aware of the fatigue risk factors and ensure projects are structured to mitigate these factors. Staff Members also have a responsibility to manage the personal fatigue risk factors that they can control outside of work (e.g, duration and quality of sleep, diet, drugs, and alcohol)

Fatigue is a message to the body to rest and can be eliminated with proper rest. However, if rest is not possible, fatigue can increase and becomes distressing and eventually debilitating. Fatigue symptoms, both mental and physical, vary and depend on the person and degree of overexertion. Examples

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include: weariness, sleepiness, irritability, reduced alertness, lack of memory, concentration and motivation, increased susceptibility to illness, depression, headache, loss of appetite, and digestive problems.

When possible, managers should limit use of extended shifts and increase the number of days worked. Working shifts longer than 8 hours generally result in reduced productivity and alertness. Additional breaks and meals should be provided when working extended shift periods. Tasks requiring heavy physical labor or intense concentration should be performed at the beginning of the shift if possible. This is an important consideration for pre-emergency planning.

Make efforts, when feasible, to ensure that unavoidable extended work shifts and shift changes allow affected employees time for adequate rest and recovery. Project Managers need to plan to have an adequate number of personnel available to enable workers to take breaks, eat meals, relax, and sleep.

Plan for regular and frequent breaks throughout the work shift. If at remote sites, ensure if possible, that there is a quiet, secluded area designated for rest and recuperation. In addition to formal breaks such as lunch or dinner, encourage use of micro breaks to change positions, move about, and shift concentration. Personnel should look to obtain an adequate quantity and quality of sleep.

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Task Hazard Summary

Task 2 – Air Sampling

Air sampling is conducted to monitor levels of air contaminants. Air is the most transient environmental medium and subject to extreme spatial and temporal heterogeneity. Air sampling matrices include: Ambient (outdoor) air, indoor air, point sources (stacks, exhausts, and other emission sources), fugitive emissions (sources of air pollutants other than stacks or vents), and monitor and evaluate remediation processes. Samples can be collected in tedlar bags, sorbent tubes, or summa canisters.

Safety precautions during air sampling include a review of possible environmental hazards before entering the site and the use of proper clothing and equipment. Workers performing stack sampling and air monitoring during emergency situations may be exposed to hazardous levels of air pollutants. Therefore, the JHA must specify what kind of real-time air monitoring will be performed, the action levels for the use of respirators, and the types of respirators to be worn if action levels are exceeded. Safety must always be considered to ensure that the chosen field measurement instrument is compatible with the potential hazard. For example, some instruments are capable of detecting explosive hazards, but not all are safe for operations under these conditions. If the atmospheric concentration is potentially greater than 25% of the lower explosive limit, the meter itself must be certified safe for operation (FM, UL or MSHA certified). Operators should be thoroughly familiar with the instrument and operating instructions before use. Always read or review the manual prior to using an instrument in the field.

Safety concerns are of critical importance in performing sampling at heights due to the possibility of, falling, dropping equipment on workers below, and possibly weather related hazards such as ice, snow, and rain if sampling outdoors.

Gases used to calibrate and operate some instruments come in pressurized cylinders and many are flammable. Proper care should be taken when handling these materials. Light sources from some instruments can cause eye damage when viewed directly.

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Potential Task Hazards	Task 1 SSDS Monitoring and Maintenance	Task 2 Air Sampling
Congested Area	☐	☐
Compressed Gas	☐	☐
Ergonomics	☒	☒
Energized Equipment	☒	☐
Generated Wastes	☐	☐
Ground Disturbance	☐	☐
Hand/Power Tools	☒	☐
Heavy Equipment	☐	☐
Manual Lifting	☒	☒
Noise	☒	☐
Overhead Utilities	☐	☐
Repetitive Motion	☒	☒
Slippery Surfaces	☒	☒
Sharp Objects	☐	☐
Traffic	☐	☐
Other: Specify	☐	☐

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Summary of Physical Hazards & Controls

Ergonomics

Most Work-related Musculoskeletal Disorders (WMSDs) are caused by Ergonomic Stressors. Ergonomic Stressors are caused by poor workplace practices and/or insufficient design, which may present ergonomic risk factors. These stressors include, but not limited to, repetition, force, extreme postures, static postures, quick motions, contact pressure, vibration, and cold temperatures.

WMSDs are injuries to the musculoskeletal system, which involves bones, muscles, tendons, ligaments, and other tissues in the system. Symptoms may include numbness, tightness, tingling, swelling, pain, stiffness, fatigue, and/or redness. WMSD are usually caused by one or more Ergonomic Stressors. There

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may be individual differences in susceptibility and symptoms among employees performing similar tasks. Any symptoms are to be taken seriously and reported immediately.

See OP1053 Ergonomics for more information.

Controls

- Ensure workstations are ergonomically correct so bad posture is not required to complete tasks.
- Take periodic breaks over the course of the day.
- Stretch during break times.
- Break up tasks that require repetitive motion.
- Contact Corporate H&S with any ergonomic concerns

Energized Equipment

Energy sources including electrical, mechanical, hydraulic, pneumatic, or other sources in machines and equipment can be hazardous to workers. During servicing and maintenance of machines and equipment, the unexpected startup or release of stored energy can result in serious injury or death to workers.

Staff members that are required to work on energized equipment must first ensure that the source of energy is isolated and/or de-energized. In addition, any stored energy must also be released. Staff must ensure that the process to de-energize and isolate energy sources is documented and communicated to those who are working on the equipment. Staff must be trained on and understand the procedure.

See OP 1032 Control of Hazardous Energy for more information.

Controls

- Document process to de-energize or isolate energy sources.
- Ensure staff are appropriately trained to conduct work requiring LOTO.
- Affix log or tag to equipment to ensure improper start-up or release of energy.
- Execute an Energy Isolation Permit.

Hand and Power Tools

Hand and power tools can expose staff to a wide range of hazards depending upon the tool used. Hazards can include but are not limited to: falling, flying, abrasive, and splashing objects, or harmful dusts, fumes, mists, vapors, or gases.

Serious accidents often occur before steps are taken to evaluate and avoid or eliminate tool-related hazards. Staff must recognize the hazards associated with the different types of tools and the safety precautions necessary to prevent those hazards.

See OP 1026 Hand and Power Tools for more information.

Controls

- Keep all tools in good condition with regular maintenance.
- Use the right tool for the job. Do not use a tool for a task which it was not designed for.
- Examine each tool for damage before use and do not use damaged tools.
- For tools that are damaged or defective, red tag the tool and take out of service.

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- Operate tools per the manufacturers' instructions.
- Use the appropriate personal protective equipment.
- All electrically powered tools will be connected through a ground fault circuit interrupter (GFCI).
- All personnel must be trained on the use of the tool they are utilizing.

Manual Lifting/Moving

Most materials associated with investigation, remedial, or construction-related activities are moved by hand. The human body is subject to damage in the forms of back injury, muscle strains, and hernia if caution is not observed in the handling process.

Controls

- Under no circumstances should any one person lift more than 49 pounds unassisted.
- Always push, not pull, the object when possible.
- Size up the load before lifting. If it is heavy or clumsy, get a mechanical aid or help from a worker.
- Bend the knees; it is the single most important aspect of lifting.
- When performing the lift:
    - Place your feet close to the object and center yourself over the load.
    - Get a good handhold.
    - Lift straight up, smoothly and let your legs do the work, not your back!
    - Avoid overreaching or stretching to pick up or set down a load.
    - Do not twist or turn your body once you have made the lift.
    - Make sure beforehand that you have a clear path to carry the load.
    - Set the load down properly.

Noise

Working around heavy equipment (drill rigs, excavators, etc.) often creates excessive noise. The effects of noise include physical damage to the ear, pain, and temporary and/or permanent hearing loss. Workers can also be startled, annoyed, or distracted by noise during critical activities. Noise monitoring data that indicates that working within 25 feet of operating heavy equipment result in exposure to hazardous levels of noise (levels greater than 85 dBA).

See OP 1031 Hearing Conservation for additional information.

Controls

- Personnel are required to use hearing protection (earplugs or earmuffs) within 25 feet of any operating piece of heavy equipment.
- Limit the amount of time spent at a noise source.
- Move to a quiet area to gain relief from hazardous noise sources.
- Increase the distance from the noise source to reduce exposure.

Repetitive Motion

Repetitive Motion or Strain Injuries are injuries effecting muscles, nerves, and tendons by repetitive movement and overuse. Almost any kind of awkward or repetitive motion you make could lead to an injury over time. Actions like bending or twisting of the wrists, reaching for materials, working with your hands above shoulder level, or grasping objects can increase wear and tear on the body. The condition mostly effects the upper body.

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Controls

- Arrange your work zone, supplies and tools as much as possible to avoid reaching, leaning, bending and twisting your waist or wrists.
- During rest breaks, use stretches to loosen up your body.
- Vary tasks if you can so that you are not making the same movement repeatedly over for a long period.

Slippery Surfaces

Both slips and trips result from unintended or unexpected change in the contact between the feet and ground or walking surface. Good housekeeping, quality of walking surfaces, selection of proper footwear, and appropriate pace of walking are critical for preventing fall accidents. Slips happen where there is too little friction or traction between the footwear and walking surface.

Common causes of slips are wet or oily surfaces, spills, weather hazards, loose unanchored rugs or mats and flooring or other walking surfaces that do not have same degree of traction in all areas.

Weather-related slips and falls become a serious hazard as winter conditions often make for wet or icy surfaces outdoors. Even wet organic material or mud can create hazardous walking conditions. Spills and leaks can also lead to slips and falls.

Controls

- Evaluate the work area to identify any conditions that may pose a slip hazard.
- Address any spills, drips or leaks immediately.
- Mark areas where slippery conditions exist.
- Select proper footwear or enhance traction with additional PPE.
- Where conditions are uncertain or environmental conditions result in slippery surfaces walk slowly, take small steps, and slide feet on wet or slippery surfaces.

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4. PROTECTIVE MEASURES

The personal protective equipment and safety equipment (if listed) is specific to the associated task. The required PPE and equipment listed must be onsite during the task being performed. Work shall not commence unless the required PPE or Safety Equipment is present.

Required Safety & Personal Protective Equipment

Required Personal Protective Equipment (PPE)	**Task 1**	**Task 2**	**Task 3**	**Task 4**
	SSDS Monitoring and Maintenance	Air Sampling	Enter task description.	Enter task description.
Hard hat	☒	☒	☐	☐
Safety Glasses	☒	☒	☐	☐
Safety Toed Shoes	☒	☒	☐	☐
Class 2 Safety Vest	☒	☒	☐	☐
Nitrile Gloves	☐	☒	☐	☐
Cut Resistant Gloves	☒	☒	☐	☐
Level of protection required	D	D	Select	Select
Required Safety Equipment				
First Aid Kit	☒	☒	☐	☐

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5. TRAINING REQUIREMENTS

The table below lists the training requirements staff must have respective to their assigned tasks and that are required to access the Site.

Site Specific Training Requirements
HAZWOPER - 40 Hour (Initial)
HAZWOPER - 8 Hour (Annual Refresher)
Site Specific Orientation
40 Hour SST

Task Specific Training Requirements				
Required Training Type	**Task 1**	**Task 2**	**Task 3**	**Task 4**
	SSDS Monitoring and Maintenance	Air Sampling	Enter task description.	Enter task description.
Hazard Communication	☒	☒	☐	☐

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6. AIR MONITORING PLAN AND EQUIPMENT

Exposures to airborne substances shall be fully characterized throughout project operations to ensure that exposure controls are effectively selected and modified as needed.

Is air/exposure monitoring required at this work site for personal protection? Yes

Is perimeter monitoring required for community protection? Yes

Air monitoring plan not applicable Yes

Air Monitoring/Screening Equipment Requirements

Photo-Ionization Detector (PID) 10.6eV

Dust Monitor (RAM)

The required equipment listed above must be on site. Work shall not commence unless the equipment is present and in working order.

Monitoring Plans

Parameter/ Contaminant	Equipment	Action Level	Response Activity
VOCs	PID 10.6 eV	< 10 ppm	Continue work and monitoring.
		>10 ppm for 5 minutes	Clear Instrument and Re-Monitor the Area. Implement PPE upgrades
		>10 ppm for >5 minutes	Evacuate the area and call the FSM and/or PM for further guidance. Implement engineering controls.

Zone Location and Monitoring Interval
Breathing zone and edge of Exclusion Zone.

See RAWP for CAMP requirements and Special CAMP requirements.

***If chemical does not have an action level use TLV or REL, whichever is lowest, to be used as an action level. If TLV or REL are the same as PEL, cut the PEL in half for an action level.**

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7. DECONTAMINATION & DISPOSAL METHODS

All possible and necessary steps shall be taken to reduce or minimize contact with chemicals and contaminated/impacted materials while performing field activities (e.g., avoid sitting or leaning on, walking through, dragging equipment through or over, tracking, or splashing potential or known contaminated/impacted materials.)

Personal Hygiene Safeguards

The following minimum personal hygiene safeguards shall be adhered to:

1. No smoking or tobacco products in any project work areas.
2. No eating or drinking in the exclusion zone.
3. It is required that personnel present on site wash hands before eating, smoking, taking medication, chewing gum/tobacco, using the restroom, or applying cosmetics and before leaving the site for the day.

It is recommended that personnel present on site shower or bathe at home at the end of each day of working on the site.

Decontamination Supplies

All decontamination should be conducted at the project site in designated zones or as dictated by Client requirements. Decontamination should not be performed on Haley & Aldrich owned or leased premises.

☐ Acetone	☒ Distilled Water	☐ Polyethylene Sheeting
☒ Alconox Soap	☐ Drums	☐ Pressure/Steam Cleaner
☒ Brushes	☐ Hexane	☒ Tap Water
☒ Disposal Bags	☐ Methanol	☐ Wash tubs
☐ 5 Gallon Buckets	☒ Paper Towels	☐ Other: Specify

Location of Decontamination Station

To be communicated during Site kick-off meeting.

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Standard Personal Decontamination Procedures

Outer gloves and boots should be decontaminated periodically as necessary and at the end of the day. Brush off solids with a hard brush and clean with soap and water or other appropriate cleaner whenever possible. Remove inner gloves carefully by turning them inside out during removal. Wash hands and forearms frequently. It is good practice to wear work-designated clothing while on-site which can be removed as soon as possible. Non-disposable overalls and outer work clothing should be bagged onsite prior to laundering. If gross contamination is encountered on-site contact the Project Manager and Field Safety Manager to discuss proper decontamination procedures.

The steps required for decontamination will depend upon the degree and type of contamination but will generally follow the sequence below.

1. Remove and wipe clean hard hat
2. Rinse boots and gloves of gross contamination
3. Scrub boots and gloves clean
4. Rinse boots and gloves
5. Remove outer boots (if applicable)
6. Remove outer gloves (if applicable)
7. Remove Tyvek coverall (if applicable)
8. Remove respirator, wipe clean and store (if applicable)
9. Remove inner gloves (if outer gloves were used)

PPE that is not grossly contaminated can be bagged and disposed in regular trash receptacles.

Small Equipment Decontamination

Pretreatment of heavily contaminated equipment may be conducted as necessary:

1. Remove gross contamination using a brush or wiping with a paper towel
2. Soak in a solution of Alconox and water (if possible)
3. Wipe off excess contamination with a paper towel

Standard decontamination procedure:

4. Wash using a solution of Alconox and water
5. Rinse with potable water
6. Rinse with methanol (or equivalent)
7. Rinse with distilled/deionized water

Inspect the equipment for any remaining contamination and repeat as necessary.

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Disposal Methods

Procedures for disposal of contaminated materials, decontamination waste, and single use personal protective equipment shall meet applicable client, locate, State, and Federal requirements.

Disposal of Single Use Personal Protective Equipment

PPE that is not grossly contaminated can be bagged and disposed in regular trash receptacles. PPE that is grossly contaminated must be bagged (sealed and field personnel should communicate with the Project Manager to determine proper disposal.

Standard Disposal Methods for Contaminated Materials

- Excess sample solids, decontamination materials, rags, brushes, poly-sheeting, etc. that are determined to be free of contamination through field screening can usually be disposed into client-approved, on-site trash receptacles.
- Uncontaminated wash water may be discarded onto the ground surface away from surface water bodies in areas where infiltration can occur.
- Contaminated materials must be segregated into liquids or solids and containerized separately for offsite disposal.

Disposal Method for Contaminated Soil

- Contaminated soil cuttings and spoils must be containerized for disposal off-site unless otherwise specifically directed.
- Soil cuttings and spoils determined to be free of contamination through field screening can usually be returned to the boreholes or excavations from which they came.

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8. SITE CONTROL

The overall purpose of site control is to minimize potential contamination of workers, protect the public from the site's hazards, and prevent vandalism. Site control is especially important in emergency situations. The degree of site control necessary depends on site characteristics, site size, and the surrounding community. The following information identifies the elements used to control the activities and movements of people and equipment at the project site.

Communication

Internal
Haley & Aldrich site personnel will communicate with other Haley & Aldrich staff member and/or subcontractors or contractors with:

Face to Face Communication

External
H&S site personnel will use the following means to communicate with off-site personnel or emergency services.

Cellular Phones

Visitors

Project Site
Will visitors be required to check-in prior to accessing the project site?

Yes

Visitor Access
Authorized visitors that require access to the project site need to be provided with known information with respect to the site operations and hazards as applicable to the purpose of their site visit. Authorized visitors must have the required PPE and appropriate training to access the project site.

Site Safety Officer is responsible for facilitating authorized visitor access.

Zoning

Work Zone
The work zone will be clearly delineated to ensure that the general public or unauthorized worker access is prevented. The following will be used:

Cones
Barricades
Temporary Fencing

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9. SITE SPECIFIC EMERGENCY RESPONSE PLAN

The Emergency Response Plan addresses potential emergencies at this site, procedures for responding to these emergencies, roles, responsibilities during emergency response, and training. This section also describes the provisions this project has made to coordinate its emergency response with other contractors onsite and with offsite emergency response organizations (as applicable).

During the development of this emergency response plan, local, state, and federal agency disaster, fire, and emergency response organizations were consulted (if required) to ensure that this plan is compatible and integrated with plans of those organizations. Documentation of the dates of these consultations are the names of individuals contacted is kept on file and available upon request.

The site has been evaluated for potential emergency occurrences, based on site hazards, and the major categories of emergencies that could occur during project work are:

- Fire(s)/Combustion
- Hazardous Material Event
- Medical Emergency
- Natural Disaster

A detailed list of emergency types and response actions are summarized in Table 9-2 below. Prior to the start of work, the SSO will update the table with any additional site-specific information regarding evacuations, muster points, or additional emergency procedures. The SSO will establish evacuation routes and assembly areas for the Site. All personnel entering the Site will be informed of these routes and assembly areas.

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Pre-Emergency Planning

Before the start of field activities, the Project Manager will ensure preparation has been made in anticipation of emergencies. Preparatory actions include the following:

Meeting with the subcontractor/and or client concerning the emergency procedures in the event a person is injured. Appropriate actions for specific scenarios will be reviewed. These scenarios will be discussed, and responses determined before the sampling event commences. A form of emergency communication (i.e.; Cell phone, Air horn, etc.) between the Project Manager and subcontractor and/or client will be agreed on before the work commences.

A training session (i.e., “safety meeting”) given by the Project Manager or their designee informing all field personnel of emergency procedures, locations of emergency equipment and their use, and proper evacuation procedures.

Ensuring field personnel are aware of the existence of the emergency response HASP and ensuring a copy of the HASP accompanies the field team(s).

Onsite Emergency Response Equipment

Emergency procedures may require specialized equipment to facilitate work rescue, contamination control and reduction or post-emergency cleanup. Emergency response equipment stocked

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Table 9.1 Emergency Equipment and Emergency PPE			
Emergency Equipment	**Specific Type**	**Quantity Stocked**	**Location Stored**
First Aid Kit	ANSI	1 Kit	With Haley & Aldrich staff
Emergency PPE	**Specific Type**	**Quantity Stocked**	**Location Stored**
Gloves	Nitrile	1 box	With Haley & Aldrich staff

EVACUATION ALARM
Will be communicated during the Onsite Kickoff Meeting
EVACUATION ROUTES
Will be given a map after site specific training
EVACUATION MUSTER POINT(S)/ SHELTER AREA(S)
Will be given a location after site specific training
EVACUTION RESPONSE DRILLS
The Site relies on outside emergency responders and a drill is not required.

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Table 9-2 – Emergency Planning

Emergency Type	Notification	Response Action	Evacuation Plan/Route
Chemical Exposure	Report event to SSO immediately	Refer to Safety Data Sheet for required actions	Remove personnel from work zone
Fire - Small	Notify SSO and contact 911	Use fire extinguisher if safe and qualified to do so	Mobilize to *Muster Point*
Fire – Large/Explosion	Notify SSO and contact 911	Evacuate immediately	Mobilize to *Muster Point*
Hazardous Material – Spill/Release	Notify SSO; SSO will contact PM to determine if additional agency notification is	If practicable don PPE and use spill kit and applicable procedures to contain the release	See Evacuation Map for route, move at least 100 ft upwind of spill location
Medical – Bloodborne Pathogen	Notify SSO	If qualified dispose in container or call client or city to notify for further instruction.	None Anticipated
Medical – First Aid	Notify SSO	If qualified perform first aid duties	None Anticipated
Medical – Trauma	If life threatening or transport is required call 911, immediately	Wait at site entrance for ambulance	Noe Anticipated
Security Threat	Notify SSO who will call 911 as warranted	Keep all valuables out of site and work zones delineated.	None Anticipated
Weather – Earthquake/Tsunami's	STOP WORK and evacuate Site upon any earthquake	Turn off equipment and evacuate as soon as is safe to do so	Mobilize to *Shelter Location*
Weather – Lightning Storm	STOP WORK	Work may resume 30 minutes after the last observed lightning.	None Anticipated
Weather – Tornadoes/Hurricanes	Monitor weather conditions STOP WORK and evacuate the site	Evacuate to shelter location or shelter in place immediately	Mobilize to *Shelter Location*
MUSTER POINT Will be communicated during the Onsite Kickoff Meeting		*SHELTER LOCATION* Will be communicated during the Onsite Kickoff Meeting	
In case of site emergencies, site personnel shall be evacuated per this table and will not participate in emergency response activities. Site emergencies shall be reported to local, state, and federal governmental agencies as required.			

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10. HASP ACKNOWLEDGEMENT FORM

All Haley & Aldrich employees onsite must sign this form prior to entering the site.

I hereby acknowledge receipt of, and briefing on, this HASP prior to the start of on-site work. I declare that I understand and agree to follow the provisions, processes, and procedures set forth herein at all times while working on this site.

Printed Name	Signature	Date

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ATTACHMENT A
HASP AMENDMENT FORM

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HASP AMENDMENT FORM

This form is to be used whenever there is an immediate change in the project scope that will require an amendment to the HASP. For project scope changes associated with "add-on" tasks, the changes must be made in the body of the HASP. Before changes can be made, a review of the potential hazards must be initiated by the Haley & Aldrich Project Manager.

This original form must remain on site with the original HASP. If additional copies of this HASP have been distributed, it is the Project Manager's responsibility to forward a signed copy of this amendment to those who have copies.

Amendment No.	
Site Name	
Work Assignment No.	
Date	
Type of Amendment	
Reason for Amendment	
Alternate Safeguard Procedures	
Required Changes in PPE	

Project Manager Name (Print)	Project Manager Signature	Date
Health & Safety Approver Name (Print)	Health & Safety Approver Signature	Date

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ATTACHMENT B
TRAINING REQUIREMENTS

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TRAINING REQUIREMENTS

Health and Safety Training Requirements

Personnel will not be permitted to supervise or participate in field activities until they have been trained to a level required by their job function and responsibility. Haley & Aldrich staff members, contractors, subcontractors, and consultants who have the potential to be exposed to contaminated materials or physical hazards must complete the training described in the following sections.

The Haley & Aldrich Project Manager/FSM will be responsible for maintaining and providing to the client/site manager documentation of Haley & Aldrich staff members' compliance with required training as requested. Records shall be maintained per OSHA requirements.

40-Hour Health and Safety Training

The 40-Hour Health and Safety Training course provides instruction on the nature of hazardous waste work, protective measures, proper use of personal protective equipment, recognition of signs and symptoms which might indicate exposure to hazardous substances, and decontamination procedures. It is required for all personnel working on-site, such as equipment operators, general laborers, and supervisors, who may be potentially exposed to hazardous substances, health hazards, or safety hazards consistent with 29 CFR 1910.120.

8-hour Annual Refresher Training

Personnel who complete the 40-hour health and safety training are subsequently required to attend an annual 8-hour refresher course to remain current in their training. When required, site personnel must be able to show proof of completion (i.e., certification) at an 8-hour refresher training course within the past 12 months.

8-Hour Supervisor Training

On-site managers and supervisors directly responsible for, or who supervise staff members engaged in hazardous waste operations, should have eight additional hours of Supervisor training in accordance with 29 CFR 1910.120. Supervisor Training includes, but is not limited to, accident reporting/investigation, regulatory compliance, work practice observations, auditing, and emergency response procedures.

Additional Training for Specific Projects

Haley & Aldrich personnel will ensure their personnel have received additional training on specific instrumentation, equipment, confined space entry, construction hazards, etc., as necessary to perform their duties. This specialized training will be provided to personnel before engaging in the specific work activities including:

- Client specific training or orientation
- Competent person excavations
- Confined space entry (entrant, supervisor, and attendant)
- Heavy equipment including aerial lifts and forklifts
- First aid/ CPR
- Use of fall protection
- Use of nuclear density gauges
- Asbestos awareness

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ATTACHMENT C
ROLES AND RESPONSIBILITIES

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SITE ROLES AND RESPONSIBILITIES

Haley & Aldrich Personnel

Field Safety Manager (FSM)

The Haley & Aldrich FSM is a full-time Haley & Aldrich staff member, trained as a safety and health professional, who is responsible for the interpretation and approval of this Safety Plan. Modifications to this Safety Plan cannot be undertaken by the PM or the SSO without the approval of the FSM.

Specific duties of the FSM include:

- Approving and amending the Safety Plan for this project
- Advising the PM and SHSOs on matter relating to health and safety
- Recommending appropriate personal protective equipment (PPE) and air monitoring instrumentation
- Maintaining regular contact with the PM and SSO to evaluate the conditions at the property and new information which might require modifications to the HASP and
- Reviewing and approving JSAs developed for the site-specific hazards.

Project Manager (PM)

The Haley & Aldrich PM is responsible for ensuring that the requirements of this HASP are implemented at that project location. Some of the PM´s specific responsibilities include:

- Assuring that all personnel to whom this HASP applies have received a copy of it;
- Providing the FSM with updated information regarding environmental conditions at the site and the scope of site work;
- Providing adequate authority and resources to the on-site SHSO to allow for the successful implementation of all necessary safety procedures;
- Supporting the decisions made by the SHSO;
- Maintaining regular communications with the SHSO and, if necessary, the FSM;
- Coordinating the activities of all subcontractors and ensuring that they are aware of the pertinent health and safety requirements for this project;
- Providing project scheduling and planning activities; and
- Providing guidance to field personnel in the development of appropriate Job Safety Analysis (JSA) relative to the site conditions and hazard assessment.

Site Health & Safety Officer (SHSO)

The SHSO is responsible for field implementation of this HASP and enforcement of safety rules and regulations. SHSO functions may include some or all of the following:

- Act as Haley & Aldrich´s liaison for health and safety issues with client, staff, subcontractors, and agencies.
- Verify that utility clearance has been performed by Haley & Aldrich subcontractors.
- Oversee day-to-day implementation of the Safety Plan by Haley & Aldrich personnel on site.

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- Interact with subcontractor project personnel on health and safety matters.
- Verify use of required PPE as outlined in the safety plan.
- Inspect and maintain Haley & Aldrich safety equipment, including calibration of air monitoring instrumentation used by Haley & Aldrich.
- Perform changes to HASP and document in Appendix A of the HASP as needed and notify appropriate persons of changes.
- Investigate and report on-site accidents and incidents involving Haley & Aldrich and its subcontractors.
- Verify that site personnel are familiar with site safety requirements (e.g., the hospital route and emergency contact numbers).
- Report accidents, injuries, and near misses to the Haley & Aldrich PM and FSM as needed.

The SHSO will conduct initial site safety orientations with site personnel (including subcontractors) and conduct toolbox and safety meetings thereafter with Haley & Aldrich employees and Haley & Aldrich subcontractors at regular intervals and in accordance with Haley & Aldrich policy and contractual obligations. The SHSO will track the attendance of site personnel at Haley & Aldrich orientations, toolbox talks, and safety meetings.

Field Personnel

Haley & Aldrich personnel are responsible for following the health and safety procedures specified in this HASP and for performing their work in a safe and responsible manner. Some of the specific responsibilities of the field personnel are as follows:

- Reading the HASP in its entirety prior to the start of on-site work;
- Submitting a completed Safety Plan Acceptance Form and documentation of medical surveillance and training to the SHSO prior to the start of work;
- Attending the pre-entry briefing prior to beginning on-site work;
- Bringing forth any questions or concerns regarding the content of the Safety Plan to the PM or the SHSO prior to the start of work;
- Stopping work when it is not believed it can be performed safely;
- Reporting all accidents, injuries and illnesses, regardless of their severity, to the SHSO;
- Complying with the requirements of this safety plan and the requests of the SHSO; and
- Reviewing the established JSAs for the site-specific hazards on a daily basis and prior to each shift change, if applicable.

Visitors

Authorized visitors (e.g., Client Representatives, Regulators, Haley & Aldrich management staff, etc.) requiring entry to any work location on the site will be briefed by the Site Supervisor on the hazards present at that location. Visitors will be escorted at all times at the work location and will be responsible for compliance with their employer´s health and safety policies. In addition, this safety plan specifies the minimum acceptable qualifications, training and personal protective equipment which are required for entry to any controlled work area; visitors must comply with these

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requirements at all times. Unauthorized visitors, and visitors not meeting the specified qualifications, will not be permitted within established controlled work areas.

SUBCONTRACTOR PERSONNEL

Subcontractor Site Representative

Each contractor and subcontractor shall designate a Contractor Site Representative. The Contractor Site Representative will interface directly with Insert Staff Name Here, the Subcontractor Site Safety Manager, with regards to all areas that relate to this safety plan and safety performance of work conducted by the contractor and/or subcontractor workforce. Contractor Site Representatives for this site are listed in the Contact Summary Table at the beginning of the Safety Plan.

Subcontractor Site Safety Manager

Each contractor / subcontractor will provide a qualified representative who will act as their Site Safety Manager (Sub-SSM). This person will be responsible for the planning, coordination, and safe execution of subcontractor tasks, including preparation of job hazard analyses (JHA), performing daily safety planning, and coordinating directly with the Haley & Aldrich SHSO for other site safety activities. This person will play a lead role in safety planning for Subcontractor tasks, and in ensuring that all their employees and lower tier subcontractors are in adherence with applicable local, state, and/or federal regulations, and/or industry and project specific safety standards or best management practices.

General contractors / subcontractors are responsible for preparing a site-specific HASP and/or other task specific safety documents (e.g., JHAs), which are, at a minimum, in compliance with local, state, and/or federal other regulations, and/or industry and project specific safety standards or best management practices. The contractor(s)/subcontractor(s) safety documentation will be at least as stringent as the health and safety requirements of the Haley & Aldrich Project specific HASP.

Safety requirements include, but are not limited to: legal requirements, contractual obligations and industry best practices. Contractors/subcontractors will identify a site safety representative during times when contractor/subcontractor personnel are on the Site. All contractor/subcontractor personnel will undergo a field safety orientation conducted by the Haley & Aldrich SHSO and/or PM prior to commencing site work activities. All contractors / subcontractors will participate in Haley & Aldrich site safety meetings and their personnel will be subject to training and monitoring requirements identified in this Safety Plan. If the contractors / subcontractors means and methods deviate from the scope of work described in Section 1 of this Safety Plan, the alternate means and methods must be submitted, reviewed and approved by the Haley & Aldrich SHSO and/or PM prior to the commencement of the work task. Once approved by the Haley & Aldrich SHSO and/or PM, the alternate means and methods submittal will be attached to this Safety Plan as an Addendum.

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ATTACHMENT D
JOB SAFETY ANALYSES

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Safety
in everything we do

860 FLUSHING AVENUE

KEY TASK Indoor Air Sampling **:**

Subtask Category	Potential Hazards	Controls
Site Walk	Slips, Trips, and Falls	• Take your time and pay attention to where you are going • Adjust your stride to a pace that is suitable for the walking surface and tasks you are doing • Check the work area to identify hazards – beware of trip hazards such as wet floors, slippery floors, and uneven surfaces or terrain • Establish and utilize a pathway free of slip and trip hazards • Choose a safer walking route · Carry loads you can see over • Keep work areas clean and free of clutter • Communicate hazards to on-site personnel – remove hazards as appropriate
Site Walk	Work site access and controls	• Observe all work site access and controls before entering work area • Use only routes that are designated for personnel • Do not change or alter established work site access or controls
Site Walk	General site hazards	• Be mindful of moving vehicles and where you are walking • Notify field team of any observed hazards • Complete tailgate and discuss site hazards
Site Walk	Vehicle traffic/safety	• Watch out for vehicular traffic in and around work area • Access work area along routes that are the least bus

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Air Sampling	Tool/Equipment Use	• Inspect any tools or equipment before you use them • Ensure that any cords or plugs are not frayed or damaged • Only use tools/equipment for the purpose they are meant to be used – tools/equipment are not toys to be played with • Think of the steps in which you will use the tools/equipment before using them • Handle all tools/equipment in a safe manner • If unsure how to use a tool/equipment, be sure to receive proper training or instruction prior to using them • Use tools/equipment at a safe pace • Do not force tools/equipment to work

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ATTACHMENT E
PROJECT SITE FORMS

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APPENDIX G
Site Management Forms

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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) and 6NYCRR Part 360.13. Use of this form is not a substitute for reading the applicable regulations and Technical Guidance document.

SECTION 1 – SITE BACKGROUND

The allowable site use is: Choose an item

Have Ecological Resources been identified? Choose an item

Is this soil originating from the site? Choose an item

How many cubic yards of soil will be imported/reused? Choose an item

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? Choose an item

Does it contain less than 10%, by weight, material that passes a size 100 sieve? Choose an item

Is this virgin material from a permitted mine or quarry? Choose an item

Is this material recycled concrete or brick from a DEC registered processing facility? Choose an item

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.

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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:

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The information provided on this form is accurate and complete.

_____ _____

Signature Date

_____

Print Name

_____

Firm

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Site-Wide Inspection Form

Overview of Site-Wide Inspection requirements:

1. General Site conditions at time of inspection;
2. Site Cover System Inspection;
3. Any Site activities currently being conducted (including active Engineering Controls);
4. Last SMP-related Site Activity conducted, upcoming SMP-related tasks;
5. Institutional Control (IC) Checklist (SMP, routine SMP tasks being conducted);
6. Evaluation of Engineering Controls (in office); and
7. Site Documentation.

---

1) General Site conditions at time of inspection:

NAME:	**DATE:**
TIME:	**WEATHER:**
Annual Inspection or Emergency Inspection (if emergency, specify nature)?	

Notes:_____

_____

_____

_____

2) Are any SMP-related site activities currently being conducted (passive SSDS operation)?

☐ YES ☐ NO

Notes/Details:

_____

_____

_____

_____

_____

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3) Last SMP-related Site Activity conducted; and next SMP-related task Scheduled?

Notes/Details:

_____

_____

_____

_____

_____

4) IC Checklist (SMP, routine SMP tasks being conducted)

Copy of SMP on-Site?	☐ YES ☐ NO
Building Use Still Consistent with SMP?	☐ YES ☐ NO

Have the required SMP tasks been conducted during the reporting period?

Annual passive SSDS monitoring ☐ YES ☐ NO

Annual Site conditions inspection ☐ YES ☐ NO

Site in compliance with all ICs ☐ YES ☐ NO

Notes:_____

_____

_____

_____

_____

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5) Evaluation of ECs

Environmental Control Type: Passive SSDS	
Are there any unusual odors, spills or leaks near the SSDS? If yes, describe source and plans for repair:	☐ YES ☐ NO
Are the above grade components of the SSDS clean?	☐ YES ☐ NO
Any evidence of SSDS piping tampering, vandalism or damage? If yes, describe:	☐ YES ☐ NO
Have any structural or HVAC system changes, or other changes that may affect the performance of the SSDS (e.g., new combustion appliances or deterioration of the concrete slab) been made? If yes, describe:	☐ YES ☐ NO
Any evidence of cracks and/or holes, and repair of cracks and/or holes in the floor slab and/or foundation walls? If yes, describe:	☐ YES ☐ NO

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Notes:_____

_____

_____

6) Site documentation

Including updates regarding notification to NYSDEC regarding any changes to Site conditions/operations, routine reporting to NYSDEC, etc.).

Notes:_____

_____

_____

INDOOR/AMBIENT AIR SAMPLING LOG

Project Name/Location: _____ Project Number: _____

Site: _____
Date Collected: _____
Personnel: _____
Weather: _____
Humidity: _____

Sample ID	Canister ID	Caniser Size	Flow Controller ID	Sample Start Time	Canister Start Pressure ("Hg)	Sample End Time	Canister End Pressure ("Hg)	Sample Start Date	Sample Type	Analyses Method

Notes:
Summas and flow regulators provided by <NAME OF LAB>
Analyses for VOCs by Method TO-15/TO-15SIM (circle one)

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ENGINEERING CONTROL INSPECTION FORM

860 Flushing Avenue

Brooklyn, NY

Sub-Slab Depressurization System Component	Condition	No	Yes	Describe Deficiency	Any Corrective Action Performed? If so, describe
Vapor Barrier	Holes, cracks, or other physical deficiencies? (only applicable if asphalt/foundation above is damaged)				
Active Sub-Slab Depressurization System	Holes, cracks, or other physical deficiencies?				
	Blockages in SSDS piping?				
	Monitoring Points Damaged?				
	SSDS accessories (listed in section 15880) damaged or not functioning properly?				
	Fan stack guy wires damaged?				
	Motor housing dusty or greasy? (If so, remove)				
	Is the spare fan unit missing?				
	Indicator lights on the Building Management System not functioning properly?				
	Bolts/set screws loose or rusty?				

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ENGINEERING CONTROL INSPECTION FORM

860 Flushing Avenue

Brooklyn, NY

Weather conditions:
Air Temperature:
Name of Inspector
Signature of Inspector
Date of Inspection

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Routine and Preventative Maintenance Checklist

SSDS Fans

Inspector's Name:

Inspection Date/Time:

Purpose: (circle one) **Biannual Inspection** **Fan Malfunction (describe)**

SSDS Fan Maintenance Checklist	Preform the steps below for every SSDS fan during a biannual inspection, or for any SSDS fan experiencing issues	Completed Y/N	List Any Issues or Unusual Behavior
	1. Disconnect, lock out, and tag fan electrical power source		
	2. Check all SSDS fan bearings		
	3. Inspect SSDS fan drive belt for tightness and wear. Adjust/replace if required		
	4. Clean/blow down centrifugal fan wheel, inlet, fan, and motor housing		
	5. Grease fan shaft bearing pillow blocks		
	6. Inspect fan inlet and outlet ductwork flex joints		
	7. Inspect damper for proper orientation		
	8. Inspect fan stack guy wires		
	9. Inspect fan mounting and vibration isolators		

*Notify the NYSDEC of any fan unit/component failure. In the event that a fan component fails, the component will be replaced by a qualified engineer. The engineer will make appropriate arrangements in advance with suppliers to provide SSDS replacement parts within 12 hours notice. In the event that a fan unit fails, the fan unit will be replaced by a qualified engineer. A spare fan will be available on-site for immediate replacement in case of fan failure.

Inspector's Signature:

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APPENDIX H
Operations and Maintenance Manual for Sub-Slab Depressurization System

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www.haleyaldrich.com

OPERATIONS AND MAINTENANCE PLAN
FORMER BP GASOLINE SERVICE STATION SITE
860 FLUSHING AVENUE
BROOKLYN, KINGS COUNTY, NEW YORK
NYSDEC SITE NUMBER: C224424

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by
H & A of New York Engineering and Geology, LLP
New York, New York

for
Flushing Holdings NY LLC
Brooklyn, New York

File No. 0203708
July 2026

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I	Site Contact List (*in text*; page 1)

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Figure No.	Title
1	Sub-Slab Depressurization System Layout As-Built ***(pending final)***
2	Sub-Slab Depressurization System Alarm and Fan Location ***(pending)***

List of Appendices

Appendix	Title
A	Sub-Slab Depressurization System Details ***(pending final)***
B	Sub-Slab Depressurization System and Monitoring Point Inspection Form
C	Fan Specifications ***(pending)***
D	Alarm Specifications ***(pending)***
E	Alarm Instructions ***(pending)***
F	Fan Installation and Maintenance Manual ***(pending)***

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1. Introduction

On behalf of Flushing Holdings NY LLC, H & A of New York Engineering and Geology, LLP (Haley & Aldrich of New York) has prepared this Operations and Maintenance (O&M) Plan for the sub-slab depressurization system (SSDS) at the Former BP Gasoline Service Station Site located at 860 Flushing Avenue in Brooklyn, New York (hereinafter referred to as the "Site").

The SSDS has been implemented as part of the remedial action to mitigate the potential for soil vapor intrusion (SVI) into the Site building. The SSDS has been designed and installed in accordance with the approved Remedial Action Work Plan (RAWP) dated May 11, 2026, and the Decision Document (DD) dated May 18, 2026. The SSDS was installed under the entire building footprint of approximately 9,816 square feet.

1.1 GENERAL PROCESS DESCRIPTION

The SSDS remedial technology involves using a fan to create a pressure gradient across the subgrade of a building to mitigate the potential for vapor intrusion from the subsurface into the building. Depressurizing the soils below the building slab creates low pressure that alters the direction of soil gas flow (via horizontal piping connected to a riser pipe extending above the roof of the building) to mitigate SVI.

1.2 SITE CONTACTS

A list of Site-related contact information is provided below in Table I.

Table I: Site Contact List

Company	Contract Name	Title	Contact Number	Contact Email
Haley & Aldrich of New York	James Bellew	Principal	646.277.5686	jbellew@haleyaldrich.com
	Zhan Shu, P.E.	Remedial Engineer	201.213.6178	zshu@haleyaldrich.com
	Mari Cate Conlon, P.G.	Senior Associate	646.277.5688	mconlon@haleyaldrich.com
	Luke J. McCartney, P.G.	Senior Project Manager	551.655.7720	LMcCartney@haleyaldrich.com
Flushing Holdings NY LLC	Jack Klein	Member	718.408.8778	jack@bmanage.com
Fox Rothschild LLP	George C.D. Duke	Attorney	212.450.9847	gduke@foxrothschild.com
456 Bushwick LLC	George Macchia	Site Owner	516.659.8018	george@themacchiagroup.net

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2. System Components

The SSDS includes:

- one continuous, horizontal, perforated 3-inch polyvinyl chloride (PVC) pipe network with eight termini, embedded within a permeable layer (minimum of 6 inches of ¾-inch stone) beneath the composite cover and overlain by a 20-mil-thick vapor barrier;
- seven sub-slab vapor monitoring points (MPs) installed in the permeable layer below the waterproofing/vapor barrier throughout the building slab;
- a vertical riser penetrating the cover system through a sealed penetration; and
- an exhaust stack consisting of 4-inch-diameter cast iron riser pipe extending through the roof and terminating with a rooftop fan, at least 24 inches above the highest roof surface and at least 10 feet away from any adjacent building or heating, ventilation, and air conditioning (HVAC) intake.

The SSDS as-built is provided in Figure 1, and the SSDS construction details are provided in Appendix A.

2.1 SSDS CONFIGURATION

An active SSDS was installed to mitigate the potential for SVI by providing a pathway for soil vapor to vent to the atmosphere. The major components of the active SSDS include:

- interconnected perforated 3-inch Schedule 40 PVC horizontal pipe, embedded within a 6-inch permeable layer (3/4-inch washed aggregate);
- an exhaust stack consisting of solid steel pipe risers, including a check valve and a rain cap, with a sample port assembly installed in the cellar for each riser, at least 12 inches above the highest roof surface and at least 10 feet away from any adjacent building or HVAC intakes;
- a pressure gauge and an alarm system installed to monitor riser pressure, which, in the event that the blower or the SSDS does not function properly and the vacuum drops below 0.1 inches of water column, will trigger the warning device, notifying the building superintendent, who in turn will notify Haley & Aldrich of New York; and
- seven permanent sub-slab vapor/vacuum MPs (MP-1 to MP-7) in the permeable layer 2 to 3 inches below the vapor barrier to allow for the collection of post-mitigation sub-slab vapor samples and additional system monitoring as needed.

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3. Standard Operating Procedures and Monitoring Plan

This Standard Operating Procedures and Monitoring Plan should be followed in all normal operating circumstances. If circumstances arise while operating the system that are not covered in this O&M Plan, the Remediation Engineer and Project Manager should be notified. This section discusses step-by-step procedures for operating and monitoring the system in a safe manner.

Following the startup, quarterly visits will be performed during the first year of operation and annual visits thereafter to confirm system operations.

The following tasks will be conducted during routine Site visits:

- Inspect the rooftop piping and fan for functionality and integrity.
- Inspect vacuum MPs for functionality and integrity.
- Inspect the alarm system for functionality and integrity.
- Log the vacuum gauge readings at the SSDS riser and MPs.
- Identify any maintenance or repair activity that could affect the lowest-level slabs-on-grade, SSDS piping, or rooftop components. Note that the New York State Department of Health (NYSDOH) and the New York State Department of Environmental Conservation (NYSDEC) must be notified of any maintenance required as a result of routine inspections.
- Corrective actions will be taken in the event that cracks, new utilities, pits, etc. are identified in the lowest-level slab.
- Log the information in the logbook and inspection form (Appendix B).

3.1 SSDS FAN

Model No.: ***TBD***
Year Installed: ***TBD***

The fan is installed on the bulkhead. Fan specifications are included in Appendix C. The location of the fan is shown on Figure 2.

3.2 SYSTEM READINGS

Collect a vacuum reading at the vacuum gauge in the SSDS riser. Record the reading on the SSDS Inspection Form provided in Appendix G of the Site Management Plan (SMP). The location of the vacuum gauge is shown on Figure 2.

3.3 FIELD READINGS

Record induced vacuum readings at each sub-slab MP. Record readings on the SSDS Inspection Form provided in Appendix B.

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1. For MPs:
    a. Open the sample port valve.
    b. Using 1/4-inch to 1/8-inch tubing, connect the low-pressure port of a manometer to the sample port. Record vacuum readings with the high-pressure port open to the atmosphere.

Manometers should be zeroed before use by using the "Zero" button. The instrument should read zero before connecting to either port. If the instrument is not calibrating to zero, relocate to an area blocked from the wind before performing the zero, as wind can affect the reading.

3.4 ROUTINE AND PREVENTATIVE MAINTENANCE

The SSDS fan requires routine and preventative maintenance for efficient operation, which includes the checks that are listed in the inspection forms in Appendix B. This maintenance shall be performed by the qualified building personnel and/or in accordance with manufacturer recommendations, as required, and annually, at a minimum. A copy of each completed checklist must be filed in this report for review by the independent Professional Engineer on an annual basis. Note that the NYSDOH and NYSDEC must be notified of any maintenance required as a result of the routine inspections. A maintenance checklist is presented in Appendix B of the SMP.

3.5 ALARM SYSTEM

The SSDS alarm is in the top-floor mechanical room near the SSDS riser sample ports. The alarm will be in a location that is easily accessible and will consist of a warning light and sound. Alarm conditions will be triggered if the vacuum falls below 90 percent of the baseline vacuum. Building personnel should check the alarm periodically to verify SSDS operating conditions. The alarm specifications are provided as Appendix D. The location of the alarm is shown on Figure 2.

3.5.1 Alarm Follow-Up

If the alarm is triggered, the following is to be performed by qualified building personnel:

1. Determine the cause of the alarm.
    a. A low vacuum alarm will blink red and beep in 60-second intervals.
    b. A low battery alarm will blink yellow and beep in five-minute intervals.
2. Clear the alarm by pressing the "Hush" button.
3. If it is a low vacuum alarm, investigate the cause and restart or repair the system. Once the system is restored, the alarm will reset and blink green. Notify NYSDEC and NYSDOH within 48 hours.
    a. If the alarm will not reset, remove and reinsert the battery. Once reinserted, the alarm will run a 20-second self-calibration and will flash green. A single beep will indicate that the calibration is complete, and the alarm is active.
4. If it is a low battery alarm, remove the existing battery, and press and hold the "Test" button for 15 seconds to ensure the alarm is de-energized. Install a new battery and allow the alarm to

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complete the 20-second self-calibration. A single beep will indicate that the calibration is complete, and the alarm is active.

Complete alarm instructions are provided in Appendix E.

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4. Equipment Maintenance Requirements

The system includes the following components, which will require routine maintenance:

- SSDS Fan (TBD)

4.1 SSDS FAN

The SSDS fan (TBD) does not require any maintenance outside of the regular inspection of the SSDS to ensure the fan is operating within the normal operating range and that all connections are tight and leak-free. Operation checks for the (TBD) are provided in Appendix F.

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5. Health and Safety Plan

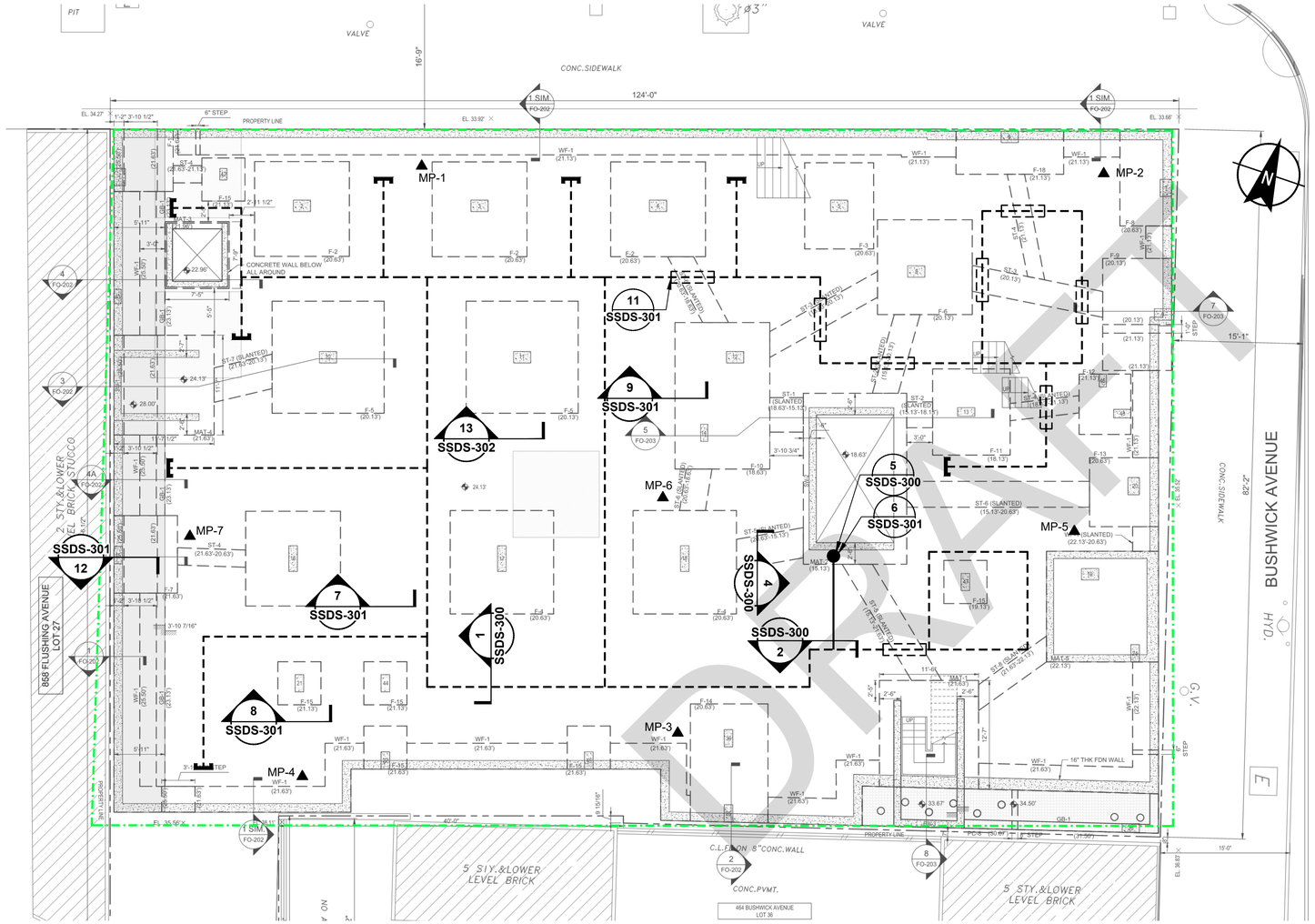
All field activities must be performed safely in accordance with the Haley & Aldrich of New York Site-wide Health and Safety Plan (HASP). The HASP is provided in Appendix I of the SMP.

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FIGURES

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WORK IN PROGRESS - V.5



LEGEND

- 4-INCH CAST IRON LEADER PIPE
- 3-INCH PERFORATED PVC SCH 40 PIPE
- PIPE END CAP
- PIPE SLEEVE
- APPROXIMATE EXTENT OF 20-MIL VAPOR BARRIER MEMBRANE
- 4-INCH CAST IRON VERTICAL RISER PIPE
- MP-1 ▲ SUB-SLAB MONITORING POINT
- 1 / SSDS-300 — DETAIL NUMBER / SHEET NUMBER (ie. SSDS-300)

NOTES

1. HORIZONTAL SOLID PIPES SHOULD HAVE A 1% SLOPE TOWARDS SOLID PIPES.
2. BACKGROUND ADAPTED FROM DRAWING FO-101.00 FOUNDATION PLAN, DATED ON APRIL 10, 2026 FROM STRUCTURAL ENGINEERING TECHNOLOGIES, P.C. OF LONG ISLAND CITY, NEW YORK.
3. RISER LOCATION SHALL BE DETERMINED BY ARCHITECT.
4. THE LOCATIONS OF DIFFERENTIAL PRESSURE MONITORING POINTS SHALL BE COORDINATED WITH ARCHITECT AND PENETRATIONS COORDINATED WITH STRUCTURAL ENGINEER. MONITORING POINTS MUST REMAIN ACCESSIBLE AFTER CONSTRUCTION
5. HALEY & ALDRICH OF NEW YORK WILL BE RESPONSIBLE FOR IMPLEMENTING THE OVERALL REMEDY AND SSDS INSTALLATION AT THE SITE AND WILL CERTIFY THE FINAL ENGINEERING REPORT.
6. ALL DIMENSIONS AND LOCATIONS ARE APPROXIMATE.

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Designed By:	MDF
Checked By:	ZS
Approved By:	ZS
Stamp:	

Rev.	Description	By	Date

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860 FLUSHING AVENUE
BROOKLYN, NEW YORK
ACTIVE SUB-SLAB DEPRESSURIZATION SYSTEM (SSDS) DESIGN

SUB-SLAB DEPRESSURIZATION SYSTEM - FOUNDATION PLAN

SSDS-200

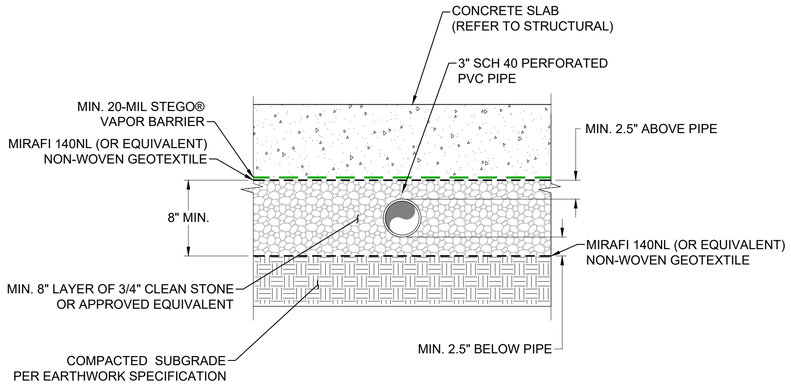
Sheet: 3 of 7

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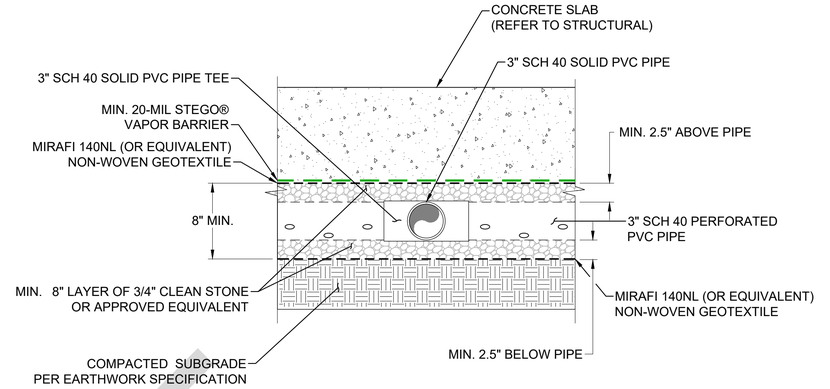
APPENDIX A
Sub-Slab Depressurization System Details (pending final)

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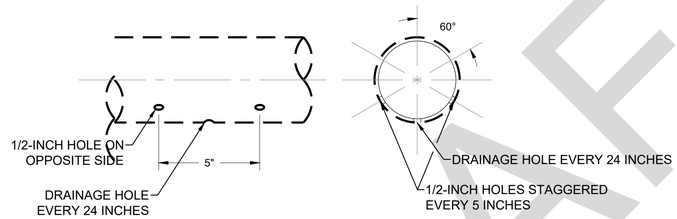
WORK IN PROGRESS - V.5



1 SSDS-200 NTS **TYPICAL SUB-SLAB 3" PERFORATED CONVEYANCE PIPING**



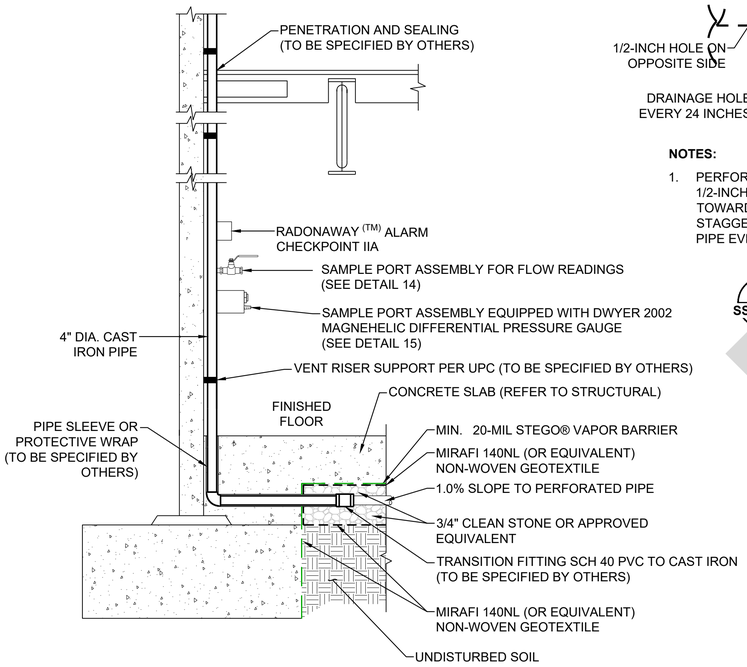
2 SSDS-200 NTS **TYPICAL SUB-SLAB 3" PERFORATED CONVEYANCE PIPING TEE CONNECTION**



NOTES:

1. PERFORATED PIPE SHALL BE 3" SCH 40 PVC WITH PERFORATION ARRANGEMENT OF TWO 1/2-INCH HOLES SEPARATED BY 120 DEGREES, 60 DEGREE FROM THE HORIZONTAL TOWARD THE BOTTOM OF THE PIPE, SPACED 5" CENTER-TO-CENTER WITH HOLES STAGGERED ON OPPOSITE SIDES AND ONE DRAINAGE HOLE ON THE BOTTOM OF THE PIPE EVERY 24 INCHES.

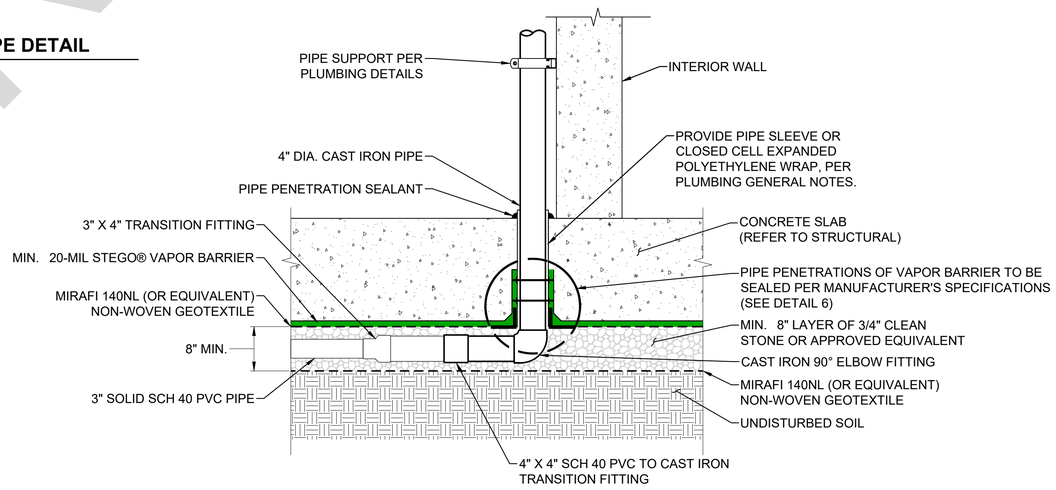
3 SSDS-200 NTS **3" PERFORATED PIPE DETAIL**



NOTE:

1. VENT RISER PIPING CAN FOLLOW UTILITY CHASES AND CAN BE VERIFIED IN THE FIELD.
2. ALTHOUGH NOT SHOWN, PIPE PENETRATIONS MUST COMPLY WITH ALL CODES FOR PENETRATIONS THROUGH FLOORS, WALLS AND ROOF.

4 SSDS-200 NTS **VERTICAL RISER PIPING (TYP.)**



NOTE:

1. PRODUCT SUBSTITUTIONS MUST BE APPROVED IN ADVANCE BY ENGINEER.

5 SSDS-200 NTS **PERFORATED PIPE TRANSITION TO VERTICAL RISER (TYP.)**

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ACTIVE SUB-SLAB DEPRESSURIZATION SYSTEM (SSDS) DESIGN

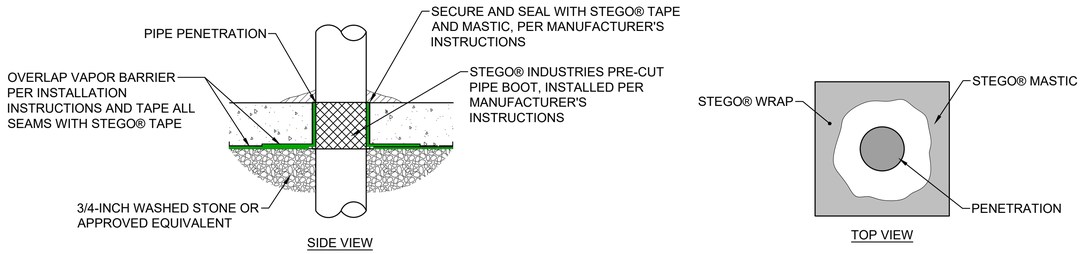
SUB-SLAB DEPRESSURIZATION SYSTEM DETAILS - 1

SSDS-300

Sheet: 4 of 7

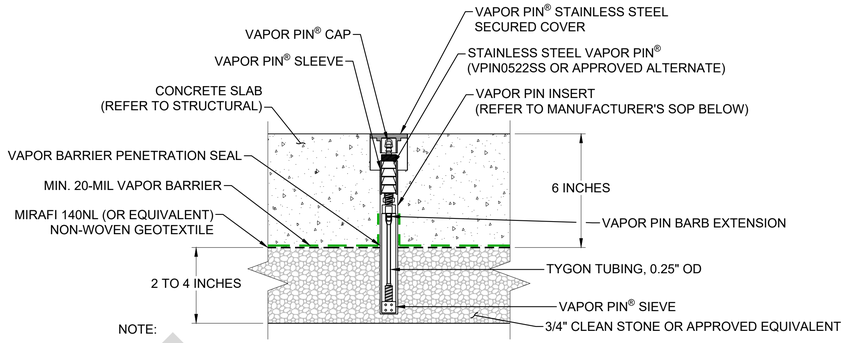
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6 SSDS-200 PIPE PENETRATION SEAL - STEGO® AND PIPE BOOT (TYP.)

NTS

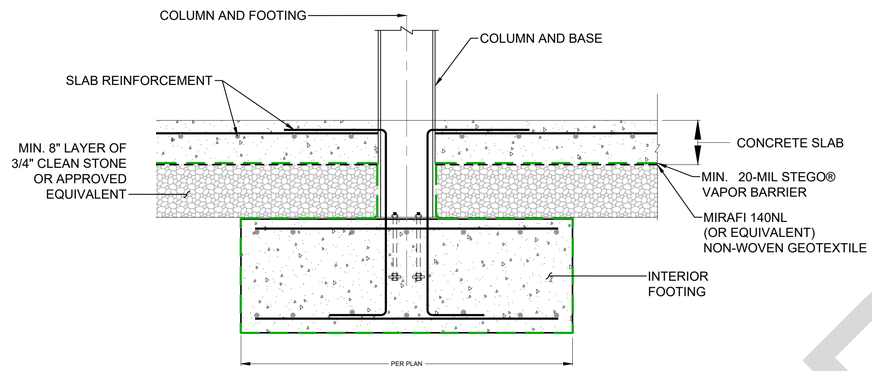


NOTE:

1. TYPICAL CONSTRUCTION SHOWN IN THE DETAIL. CONTRACTOR MUST FOLLOW MANUFACTURER INSTRUCTIONS/MANUALS FOR ACTUAL CONSTRUCTION.

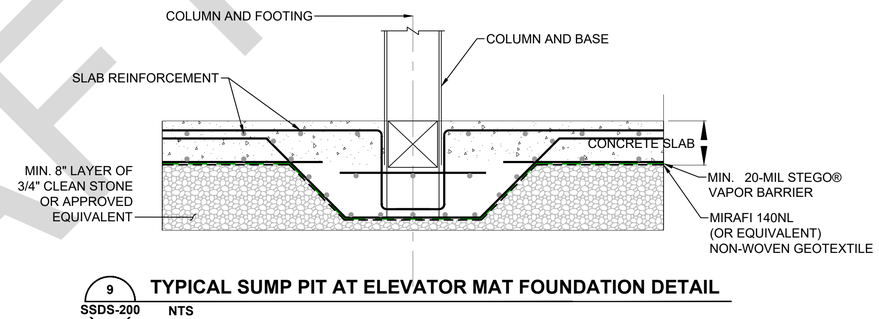
7 SSDS-200 TYPICAL SUB-SLAB VACUUM MONITORING POINT

NTS



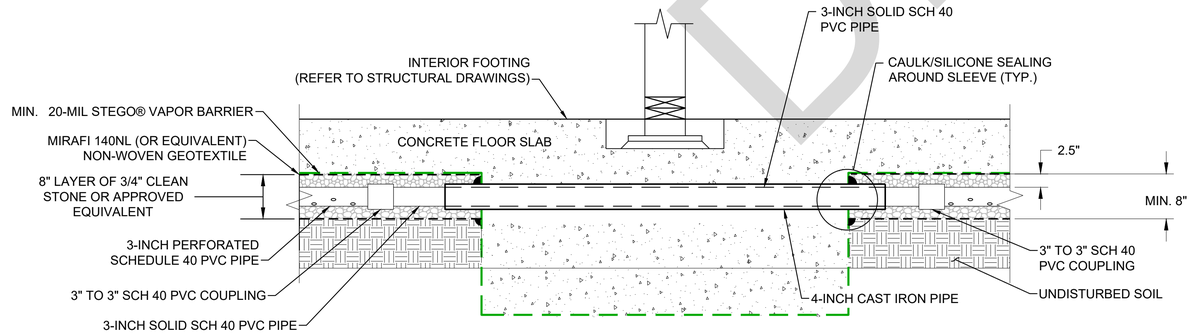
8 SSDS-200 TYPICAL SECTION FOR INTERIOR COLUMN FOOTINGS

NTS



9 SSDS-200 TYPICAL SUMP PIT AT ELEVATOR MAT FOUNDATION DETAIL

NTS

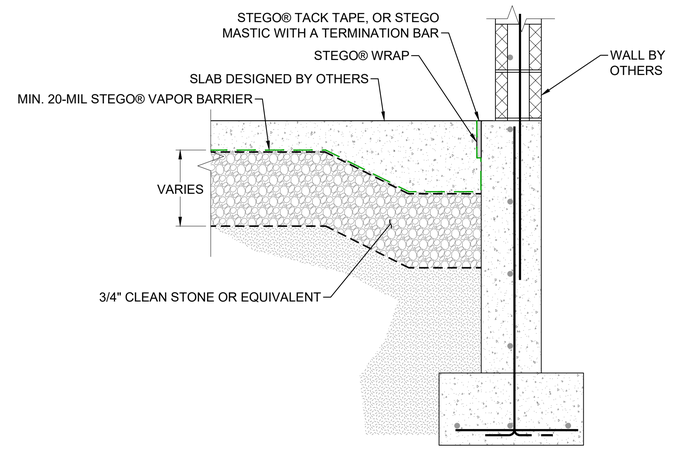


NOTE:

1. ANY SLEEVING THROUGH CONCRETE SLAB, GRADE BEAMS, PILES, OR FOOTINGS SHALL BE PERMITTED ONLY WITH REVIEW AND APPROVAL OF THE STRUCTURAL ENGINEER.

11 SSDS-100 PIPE SLEEVE THROUGH FOUNDATION (TYP.)

NTS



NOTES:

1. VAPOR BARRIER SHALL BE INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS AND TERMINATED AT SLAB ELEVATION.

12 SSDS-200 TYPICAL SECTION FOR TERMINATION OF VAPOR BARRIER

NTS

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SUB-SLAB DEPRESSURIZATION SYSTEM DETAILS - 2

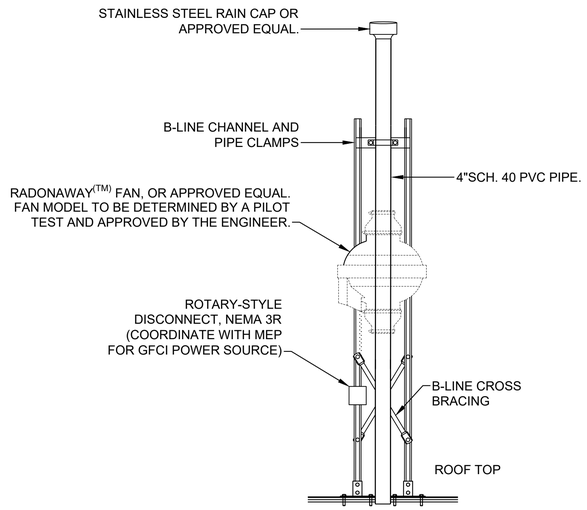
SSDS-301

Sheet: 5 of 7

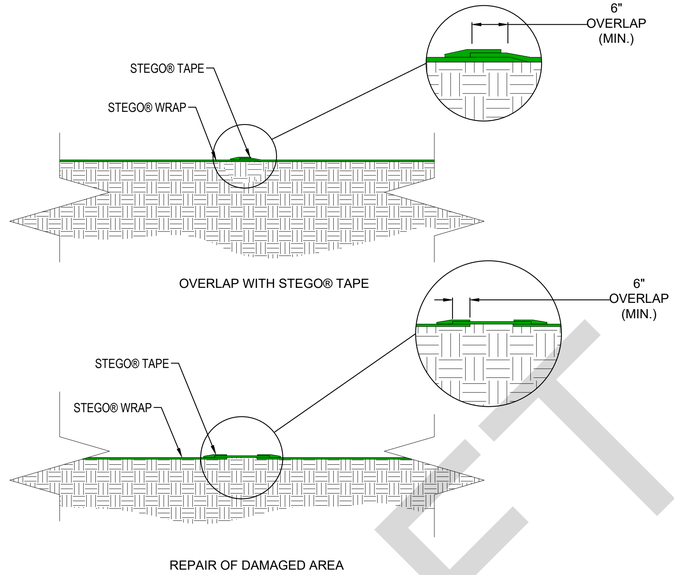
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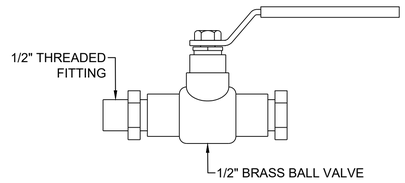
WORK IN PROGRESS - V.5



11 SSDS-200 **FAN AND SUPPORT STRUCTURE FOR ACTIVE SYSTEM** NTS

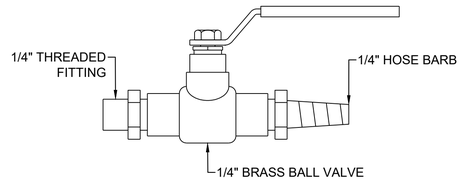


13 SSDS-200 **GENERAL - OVERLAP AND DAMAGED AREAS** NTS



NOTE: SAMPLE PORT SHALL BE DRILLED AND TAPPED IN THE 4" VERTICAL RISER PIPE.

14 SSDS-300 **SAMPLE PORT ASSEMBLY FOR FLOW READINGS** NTS



NOTE: SAMPLE PORT SHALL BE DRILLED AND TAPPED IN THE 4" VERTICAL RISER PIPE.

15 SSDS-300 **SAMPLE PORT ASSEMBLY FOR VACCUUM READINGS** NTS

SSDS EFFLUENT DISCHARGE POINTS SHALL BE:

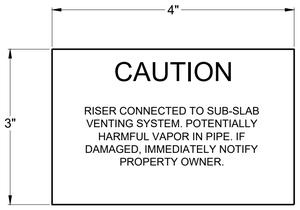
A. ABOVE THE EAVE OF THE ROOF (PREFERABLY, ABOVE THE HIGHEST EAVE OF THE BUILDING AND AT LEAST 24 INCHES ABOVE THE SURFACE OF THE ROOF);

B. AT LEAST 10 FEET ABOVE GROUND LEVEL;

C. AT LEAST 10 FEET AWAY FROM ANY OPERABLE AIR INTAKE THAT IS LESS THAN 2 FEET BELOW THE EXHAUST POINT; AND,

D. 10 FEET FROM ANY ADJOINING OR ADJACENT BUILDINGS, OR HVAC INTAKES OR SUPPLY REGISTERS

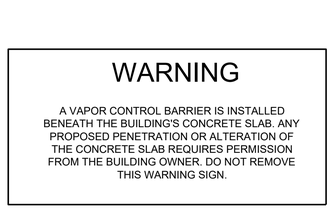
12 SSDS-200 **FAN AND SUPPORT STRUCTURE FOR ACTIVE SYSTEM** NTS



NOTES:

1. SIGNS: WEATHER AND FADE RESISTANT MATERIAL WITH ADHESIVE BACKING. LARGE LETTERS MIN. 1/4-INCH HEIGHT BLACK LETTERS ON WHITE BACKGROUND.
2. POST SIGN OR STENCIL ON EACH VENT RISER AT 5 FOOT INTERVALS ALONG PIPE.
3. VERBIAGE TO BE APPROVED BY OWNER.

ON RISER PIPE



NOTES:

1. LOCATION OF WARNING SIGN TO BE DETERMINED BY OWNER AND ENGINEER.
2. THE WORDING "WARNING" SHALL BE IN WHITE LETTERS, A MINIMUM OF 3/4-INCH HEIGHT, WITH THE REMAINING TEXT A MINIMUM OF 3/8-INCHES AND PLACED ON A RED BACKGROUND ON BUILDING INTERIOR WALL.

BUILDING INTERIOR

16 SSDS-201 **CAUTION SIGNAGE (TYP.)** NTS

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860 FLUSHING AVENUE
BROOKLYN, NEW YORK
ACTIVE SUB-SLAB DEPRESSURIZATION SYSTEM (SSDS) DESIGN

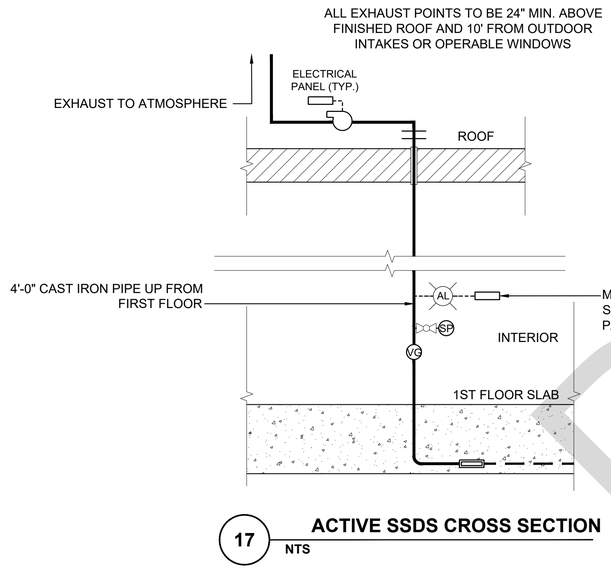
SUB-SLAB DEPRESSURIZATION SYSTEM DETAILS - 3

SSDS-302

Sheet: 6 of 7

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17 **ACTIVE SSDS CROSS SECTION**
NTS

LEGEND

- CAST IRON PIPE
- SCH 40 PVC PIPE
- BALL VALVE (NORMALLY CLOSED)
- ANACO/CREMCO COUPLING
- BLIND FLANGE
- SP — SAMPLE TAP ASSEMBLY
- VG — VACUUM GAUGE
- BLOWER
- AL — MITIGATION ALARM
- CONTROL PANEL

FAN SCHEDULE			
PIPE DIAMETER	**PROPOSED BLOWER**	**VACUUM POINT (IW)**	**FLOW RATE (SCFM)**
4-INCH	RADONAWAY GX5A (TO BE DETERMINED BY A PILOT TEST)	4	53

INSTRUMENT SCHEDULE					
ITEM	**DESCRIPTION**	**LOCATION**	**RANGE**	**REMARKS**	**MANUFACTURER/MODEL**
VI	VACUUM INDICATOR/GAUGE	INTERIOR OF FIRST FLOOR	0-5 INCHES OF WATER	FOR EACH RISER	DWYER 2002 MAGNEHELIC DIFFERENTIAL PRESSURE GAUAGE OR EQUIVALENT
ALARM	MITIGATION ALARM	INTERIOR OF FIRST FLOOR	N/A	FOR EACH RISER	RADONAWAY ALARM CHECKPOINT IIA OR EQUIVALENT

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ACTIVE SUB-SLAB DEPRESSURIZATION SYSTEM (SSDS) DESIGN

SUB-SLAB DEPRESSURIZATION SYSTEM DETAILS - 4

SSDS-303

Sheet: 7 of 7

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APPENDIX B
Sub-Slab Depressurization System and Monitoring Point Inspection Form

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ENGINEERING CONTROL INSPECTION FORM

860 FLUSHING AVENUE

Brooklyn, NY

Sub-Slab Depressurization System Component	Condition	No	Yes	Describe Deficiency	Any Corrective Action Performed? If so, describe
Vapor Barrier	Holes, cracks, or other physical deficiencies? (only applicable if asphalt/foundation above is damaged)				
Active Sub-Slab Depressurization System	Holes, cracks, or other physical deficiencies?				
	Blockages in SSDS piping?				
	Monitoring Points Damaged?				
	Alarm triggered?				

Monitoring Point ID - Location	Vacuum (Inches of H_2O)
MP-1	
MP-2	
MP-3	
MP-4	
MP-5	
MP-6	
MP-7	
SSDS Riser	

Name of Inspector

Signature of Inspector

Date of Inspection

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APPENDIX C
Fan Specifications (pending)

APPENDIX D
Alarm Specifications (pending)

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APPENDIX E
Alarm Instructions (pending)

DRAFT

APPENDIX F
Fan Installation and Maintenance Manual (pending)

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APPENDIX I
Green Remediation Metrics and Climate Screening Checklist

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Climate Screening Checklist

Background Information

- Project Manager:
- Site Name:
- Site Number:
- Site Location:
- Site Elevation (average above sea level):
- ClimAID Region (Responding Climate Change in New York State (ClimAID) - NYSERDA):
- Remedial Stage/site classification:

- Contamination - Media Impacted/ Contaminants of Concern:

- Proposed/Current Remedy:

- What is the predicted timeframe of the remedy? Will components of the remedy still be in place in 10+ years?

- Is the site in proximity to any sensitive receptors? (e.g. wetlands, waterbodies, residential properties, hospitals, schools, drinking water supplies, etc.)

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**

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Climate Screening Table*

Potential Climate Hazards	**Relevant to the Site Location** (Y/N/NA)[1]	**Projected Change** (Reference data source/Model)[3]	**Potential to Impact Remedy** (Y/N)	**Is remedy/site already resilient?** (Y/N)[4]
Precipitation				
Temperature[2] (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

[1] If the first column is N --> The rest of the columns will be N/A, the hazard is not applicable to the site.

[2] 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)

[3] List the projected change in specific terms or units e.g. inches of rain fall, feet of sea level rise, etc.

[4] If final column is Y, provide reasoning, if the final column is N --> Climate Vulnerability Assessment (CVA) required.

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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 Prepardness 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

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U.S. Geological Survey StreamStats

NYS Department of State- Assess | Department of State (ny.gov)

NYSERDA NY Costal Floodplain Mapper- Home Page (ny.gov)

NYSDEC Costal Erosion Hazards- Coastal Areas Regulated By The CEHA Permit Program - NYDEC

NYSDOH Heat Index- health.ny.gov/environmental/weather/vulnerability_index/county_maps.htm

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Climate Screening Checklist -- Example

Background

- Project Manager: Brianna Scharf
- Site Name: Kliegman Brothers, OU1 (on-site) and OU2 (off-site)
- Site Number: 241031
- Site Location: 76-01 77th Avenue Queens, NY
- Site Elevation (average above sea level): Approximately 86 feet above sea level (from google earth).



- ClimAID region: Region 4—New York City and Long Island



- Remedial Stage/Site Classification: Site Management- Class 4

- Contamination -- Media Impacted/Contaminants of Concern:

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- Soil, Vapor Intrusion/Indoor Air, Groundwater- COCs: TCE, PCE, Vinyl Chloride

- Proposed/Current Remedy: Remediation completed, use of ISCO off-site and off-site SSDs, on-site SVE system, Institutional Controls (Easement)

- What is the predicted timeframe of the remedy? Will components of the remedy still be in place in 10+ years?
  - ~20 years, yes, the remedy has remained in place for 10+ years, ROD issued in 2006 SVE system is still present on the site (2024)

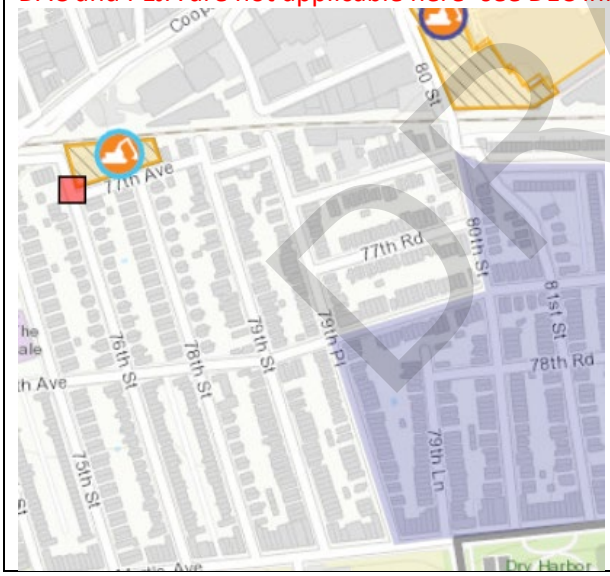
Is the site in a disadvantaged community (DAC) or potential environmental justice area (PEJA) (Use DECinfolocator: DECinfo Locator (ny.gov))?

☐ **Yes** **x No**

If the site is in a DAC or PEJA, will climate impacts be magnified? If yes, list how and why.

☐ **Yes** **x No**

DAC and PEJA are not applicable here- see DEC info Locator



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** **x No**

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Climate Screening Table*

Potential Climate Hazards	**Relevant to the Site Location (Y/N/NA)** [1]	**Projected Change (**Put the reference document/model used here) [3]	**Potential to Impact Remedy (Y/N)**	**Is remedy/site already resilient? (Y/N)** [4]
Precipitation	Potentially	N- Based upon (Resilience Analysis and Planning Tool (RAPT) (arcgis.com))	N/A	N/A
Temperature (Extreme Heat or Cold Weather Impacts) [2]	Y	Y	Y	Y – Following screening, modified remedy to include a telemetry system for any power shortages, telemetry system provides remote monitoring and notifications for system during periods of power supply outages
Sea Level Rise	N	N/A- If applicable use (NOAA Sea Level Rise tool)-	N/A	N/A
Flooding[5]	Potentially	N (FEMA National Flood Hazard Mapping - FEMA- National Flood Hazard Layer | FEMA.gov)	N	N- modified remedy to include a telemetry system for any power outages if flooding were to occur
Storm Surge	N	N/A (NOAA)	N/A	N/A
Wildfire	N	N/A ((Resilience Analysis and Planning Tool	N/A	N/A

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		(RAPT) (arcgis.com))		
Drought	N	N/A- If not N/A (Home | Drought.gov)- this was based upon regional information	N/A	N/A
Storm Severity (could include high winds, lightening, etc.)	Y	Y ((Resilience Analysis and Planning Tool (RAPT) (arcgis.com))	Y	Y – modified remedy to include a telemetry system for any power shortages
Landslides	N	N/A	N/A	N/A
Other Hazards:	Seismic Activity	(Resilience Analysis and Planning Tool (RAPT) (arcgis.com))	Y	Y—modified to include a telemetry system

*Links to potential data sources can be found on the following page

[1] If the first column is N --> The rest of the columns will be N/A, the hazard is not applicable to the site.

[2] Extreme Heat: periods of three or more days above 90°F- Extreme Cold: Individual days with minimum temperatures at or below 30 degrees F (NYSERDA ClimAID report), Note: this is important for sites with active remedial systems/sites where the remedy relies on the electrical grid

[3] List the projected change in specific terms or units e.g. inches of rain fall, feet of sea level rise, etc.

[4] If final column is Y, provide reasoning, if the final column is N --> Climate Vulnerability Assessment (CVA) required.

[5] For system sites- components (e.g. electrical wiring and panels) should be evaluated to determine if they would need to be raised to avoid flooding.

Required Next Steps (If no further action, provide justification):

No further actions at this time, severe weather storm inspection should continue to be conducted. The vulnerability that was assessed was the missing telemetry system on the SVE which has subsequently been installed.

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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)		
Of that Electric usage, provide quantity:		
Derived from renewable sources (e.g. solar, wind)		
Other energy sources (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)**
Total waste generated on-site		
OM&M generated waste		
Of that total amount, provide quantity:		
Transported off-site to landfills		
Transported off-site to other disposal facilities		
Transported off-site for recycling/reuse		
Reused on-site		

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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.

	Current Reporting Period (miles)	**Total to Date (miles)**
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.

	Current Reporting Period (gallons)	**Total to Date (gallons)**
Total quantity of water used on-site (not including treated water)		
Of that total amount, provide quantity:		
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).

	Current Reporting Period (acres)	**Total to Date (acres)**
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.

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Description of green remediation programs reported above (Attach additional sheets if needed)
Energy Usage:
Waste Generation:
Transportation/Shipping:
Water usage:
Land Use and Ecosystems:
Recommendations/Other:

CONTRACTOR CERTIFICATION
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. _____ **Date** **Contractor**

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APPENDIX J
Responsibilities of Owner and Remedial Party

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Responsibilities

The responsibilities for implementing the Site Management Plan ("SMP") for the Former BP Gasoline Service Station Site (the "site"), number C224424, are divided between the site owner(s) and a Remedial Party, as defined below. 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. 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 owner and Remedial Party is currently listed as:

Flushing Holdings NY LLC
670 Myrtle Avenue, Suite 222
Brooklyn, NY 11205

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.

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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.

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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 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.

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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.

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