STEVENSON COMMONS B3

1850 LAFAYETTE AVENUE

BRONX, NEW YORK

Remedial Action Work Plan

AKRF Project Number: 240663
NYSDEC BCP Project Number: C203189

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CERTIFICATIONS

I, Rebecca A. Kinal, certify that I am currently a NYS registered professional engineer and that this Remedial Action Work Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and Green Remediation (DER-31).



Rebecca A. Kinal	10/06/2026	
NYS Professional Engineer # 082046	Date	Signature

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LIST OF ACRONYMS

Acronym	Definition
AGV	Air Guidance Value
AKRF	AKRF, Inc.
AOC	Area of Concern
AWQSGV	Ambient Water Quality Standard and Guidance Value
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
BOA	Brownfield Opportunity Area
BTEX	VOCs associated with petroleum (benzene, toluene, ethylbenzene, and xylenes)
C&D	Construction and Demolition
CAMP	Construction Air Monitoring Plan
CEQR	City Environmental Quality Review
CFR	Code of Federal Regulations
CHASP	Construction Health and Safety Plan
COC	Certificate of Completion
CPP	Citizen Participation Plan
CQAP	Construction Quality Assurance Plan
CSOP	Contractors Site Operation Plan
DCR	Declaration of Covenants and Restrictions
ECL	Environmental Conservation Law
ECs/ICs	Engineering Controls and Institutional Controls
ELAP	NYS Environmental Laboratory Approval Program
ESA	Environmental Site Assessment
FER	Final Engineering Report
GPR	Ground Penetrating Radar
HASP	Health and Safety Plan
HAZWOPER	Hazardous Waste Operations Emergency Response
IRM	Interim Remedial Measure
LBP	Lead-Based Paint
MNA	Monitored Natural Attenuation
NOC	Notice of Completion
NYC DOHMH	New York State Department of Health and Mental Hygiene
NYC OER	New York City Office of Environmental Remediation
NYCDEP	New York City Department of Environmental Protection
NYCRR	New York Codes Rules and Regulations
NYSDEC DER	New York State Department of Environmental Conservation Division of Environmental Remediation
NYSDOT	New York State Department of Transportation
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Housing
OSHA	United States Occupational Health and Safety Administration

Acronym	Definition
PAH	Polycyclic Aromatic Hydrocarbon
PCB	Polychlorinated Biphenyl
PCE	Tetrachloroethene
PE	Professional Engineer
PID	Photo Ionization Detector
QAPP	Quality Assurance Project Plan
QEP	Qualified Environmental Professional
QHHEA	Qualitative Human Health Exposure Assessment
RAOs	Remedial Action Objectives
RAWP	Remedial Action Work Plan
RCA	Recycled Concrete Aggregate
RD	Remedial Design
RE	Remedial Engineer
RI	Remedial Investigation
RIR	Remedial Investigation Report
RMZ	Residual Management Zone
RRSCOs	Restricted Residential Soil Cleanup Objectives
SCG	Standards, Criteria and Guidance
SCOs	Soil Cleanup Objectives
SMP	Site Management Plan
SPDES	State Pollutant Discharge Elimination System
SSDS	Sub-Slab Depressurization System
SVE	Soil Vapor Extraction
SVOC	Semi-Volatile Organic Compound
SWPP	Storm Water Pollution Prevention
TAL	Target Analyte List
TCE	Trichloroethene
TCL	Target Compound List
USGS	United States Geological Survey
UST	Underground Storage Tank
UUSCOs	Unrestricted Use Soil Cleanup Objectives
VOC	Volatile Organic Compound

EXECUTIVE SUMMARY

Site Description/Physical Setting/Site History

The Site is an approximately 2.94-acre parcel located at 1850 Lafayette Avenue in the Clason Point section of the Bronx, New York, also identified as Borough of Bronx Tax Block 3600, portions of Lot 4, Lot 15, and Lot 25 on the New York City (NYC) Tax Map. On July 9, 2025, Stevenson B3 LLC entered into a Brownfield Cleanup Agreement (BCA) (Index No. C203189-06-25) with the New York State Department of Environmental Conservation (NYSDEC) as a Volunteer (the "Volunteer") to investigate and remediate the Site. A BCA Amendment to add the adjacent 0.51-acre fire lane to the Site (change in acreage from 2.43 to 2.94 acres) was executed on November 25, 2025.

The Site currently consists of a vacant field and asphalt-paved roadway used for emergency access (fire lane) and surrounding landscaped areas; with additional asphalt-paved areas in the northwestern portion and on the southern portion of the Site. The Site location is shown on a topographic background in Figure 1, and on an aerial photograph background in Figure 2A, and the Site layout is shown on Figure 2B.

The Site is bounded to the north by parking lots and tennis courts associated with the existing Stevenson Commons apartment complex, followed by Lafayette Avenue; to the east by the existing Stevenson Commons apartment complex, followed by White Plains Road; to the south by the Stevenson Commons Building B4 and B5 project sites, followed by Seward Avenue; and to the west by Thieriot Avenue, followed by residential buildings. The greater surrounding area is primarily residential with some commercial and institutional uses.

Based on a review of the historical Sanborn fire insurance maps, the Site has remained undeveloped since 1898. Filling of a tidal creek with material of unknown origin occurred between 1969 and 1977.

Summary of the Remedial Investigation

Soil, groundwater, and soil vapor were investigated as part of AKRF Inc.'s (AKRF) Remedial Investigation (RI) conducted between September 22 and December 31, 2025, and on January 30, 2026, and June 23, 2026. Soil sample analytical results were compared to NYSDEC Unrestricted Use Soil Cleanup Objectives (UUSCOs) and Restricted Residential Soil Cleanup Objectives (RRSCOs). Groundwater sample results were compared to NYSDEC Class GA Ambient Water Quality Standards and Guidance Values (AWQSGVs). Concentrations of perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) in soil and groundwater were compared to the guidance values presented in the April 2023 NYSDEC guidance document*, Sampling, Analysis and Assessment of PFAS Under NYSDEC's Part 375 Remedial Programs*. There are currently no regulatory or published guidance values for soil vapor.

The analytical results for soil, groundwater, and soil vapor data collected during the RI are presented in Tables 1 through 7, 8 through 14, and 15, respectively. Analytes detected in soil above applicable standards are shown on Figures 3A through 3D, Figures 4A and 4B, and Figure 5. Analytes detected in groundwater above applicable standards are shown on Figures 6. Analytes detected in soil vapor are shown on Figure 7. Below is a summary of the findings of the RI:

<u>*Soil*</u>

- The stratigraphy of the Site consisted of silt, sand, clay, gravel, brick, and organic matter with trace amounts of asphalt, wood, glass, metal, plastic, and ceramic down to between approximately 15 and 23 feet bgs. The fill material was underlain by apparent native silt and sand varying amounts of gravel, clay, and cobbles between approximately 15 and 30 feet bgs (boring terminus); weathered bedrock was encountered in RI-SB-01 at approximately 17 feet bgs, and at RI-SB-77 and RI-SB-78 at approximately 30 feet bgs. According to a geotechnical report prepared by Haley & Aldrich of New York (HANY) in January 2025, native soil beneath the fill materials at the Site consist of either glacial till or Estuarine deposits, above weathered bedrock. The report also indicated that bedrock beneath the Site ranged from

approximately 35 ft to 87 ft bgs (el. -15.5 ft to -70 ft); however, refusal on suspected bedrock was also encountered in select borings at depths ranging from approximately 25 to 62 ft bgs (el. -6 ft to -47.5 ft). The bedrock generally consisted of hard, fresh to slightly weathered, gray, fine to coarse-grained schist.

- One volatile organic compound (VOC), acetone, was detected in nine samples at concentrations ranging from 0.053 milligrams per kilogram (mg/kg) to 0.22 mg/kg (RI-SB-23_8-10_20251218), above UUSCOs, but below RRSCOs. No other VOCs were detected above applicable standards in the collected samples.
- Polycyclic aromatic hydrocarbons (PAHs), including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene were detected in 17 samples at concentrations ranging from 0.52 mg/kg to 3.7 mg/kg [benzo(a)anthracene at RI-SB-22_8-10_20251218] above UUSCOs and/or RRSCOs. PAHs up to 260 mg/kg (phenanthrene at SB-19_4-6_20250827) were identified in previous subsurface investigations.
- Pesticides, including 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, and dieldrin were detected in 21 samples at concentrations ranging from 0.0034 mg/kg to 0.12 mg/kg, above UUSCOs but below RRSCOs.
- Total polychlorinated biphenyls (PCBs) were detected in five samples at concentrations ranging from 0.11 mg/kg to 0.21 mg/kg, above the UUSCO but below the RRSCO.
- Metals, including arsenic (max. 178 mg/kg at RI-SB-24_6-8_20251222), barium (max. 3,170 mg/kg at RI-SB-13_8-10_20250925), cadmium (max. 30.6 mg/kg at RI-SB-04_6-8_20250924), copper (max. 2,660 mg/kg RI-SB-02_13-15_20250924), lead (max. 18,200 mg/kg at RI-SB-26_4-6_20251219), mercury (max. 62.8 mg/kg at RI-SB-23_6-8_20251218), nickel (max. 161 mg/kg at RI-SB-17_2-4_20250923), and zinc (max. 5,790 mg/kg at RI-SB-05_13-15_20250923) were detected in one or more samples at concentrations above the UUSCOS and/or RRSCOs. Lead up to 69,600 mg/kg (SB-05_8-10_20241217) was identified in previous subsurface investigations.
- Lead was detected at concentrations above the Toxicity Characteristic Leaching Procedure (TCLP) Environmental Protection Agency (EPA) Hazardous Waste Criteria of 5 milligrams per liter (mg/L) in 10 samples throughout the Site. TCLP lead up to 199 mg/L (SB-05_8-10_20241217) was identified in previous subsurface investigations.
- Per- and polyfluoroalkyl substances (PFAS) compounds were detected in multiple soil samples, with the concentrations of PFOS detected above its Unrestricted Use Guidance Value (UUGV) but below its Restricted Residential Guidance Value (RRGV) in nine samples (max. 4.20 parts per billion (ppb) at RI-SB-01_8-10_20250923) and PFOA detected above its UUGV but below its RRGV in 5 samples (max. 1.16 ppb at RI-SB-02_8-10_20250924). The compound 1,4-dioxane was not detected at or above the laboratory reporting limit in the samples analyzed.

Groundwater

- Groundwater beneath the Site was measured between approximately 6.98 and 12.64 feet bgs (el. +9.11 to +5.98 feet NAVD88). The groundwater flow direction as determined by the Site-specific groundwater depths and elevation survey is to the southeast towards the Bronx River (the nearest body of water); however, the groundwater flow direction appears to be influenced by the former tidal creek that was historically present at the Site.
- No VOCs or pesticides were detected at concentrations above AWQSGVs.
- Two semivolatile organic compounds (SVOCs), naphthalene and phenol, were detected in one sample. Naphthalene was detected in RI-MW-08_20251230 at a concentration of 18 micrograms per liter (µg/L), above its AWQSGV of 10 µg/L; and phenol was detected in RI-MW-05_20251007 at an estimated concentration of 4 µg/L, above its AWQSGV of 1 µg/L.
- Total PCBs were detected in one sample, RI-MW-07_20251230, at a concentration of 0.47 µg/L, above its AWQSGV of 0.09 ug/L.

- Fifteen metals [antimony, arsenic, barium, cadmium, chromium, copper, iron, lead, manganese, mercury, selenium, silver, sodium, thallium, and zinc] were detected in the total metals analysis at concentrations above the AWQSGVs, ranging from an estimated 0.73 µg/L to 7,100,000 µg/L (iron at RI-MW-01_20251008). Only four metals [iron, manganese, selenium, and sodium] were detected in the dissolved metals analysis at concentrations above the AWQSGVs, ranging from 436 µg/L to 234,000 µg/L.
- Several PFAS compounds were detected in one or more of the groundwater samples. PFOS (max. 24.8 ppt at RI-MW-06_20251007) and PFOA (max. 41.8 ppt at RI-MW-06_20251007) were both detected in all collected groundwater samples above their respective guidance values. The compound 1,4-dioxane was not detected in the groundwater samples collected.

Soil Vapor

- Several VOCs were detected in one or more soil vapor samples. Petroleum-related VOCs including benzene, toluene, ethylbenzene, xylenes (collectively referred to as "BTEX"), n-hexane, cyclohexane, n-heptane, 1,2,4-trimethylbenzene, and 2,2,4-trimethylpentane were detected in one or more samples at concentrations up to 10 micrograms per cubic meter (µg/m^3) [cyclohexane in sample RI-SV-06_20250929]. The chlorinated solvent tetrachloroethylene (PCE) was detected in eight samples up to 96 µg/m^3 (RI-SV-06_20250929). All exterior soil vapor samples were collected from a depth of approximately 8 feet below grade.

Qualitative Human Health Exposure Assessment

The Site currently consists of a vacant field and roadway used for emergency access use only. The Site is largely uncapped, although access is restricted via locked gate/perimeter fence. Currently, there is no potential exposure pathway from soil, groundwater, or soil vapor intrusion since the Site is vacant and access is restricted. Once redevelopment activities begin, there will be a potential exposure pathway from contaminated surface soil/fill to construction workers as these workers could potentially ingest, inhale, or have dermal contact with any exposed contaminated fill/soil. If future redevelopment plans require dewatering, there will be an additional potential exposure pathway as workers could potentially ingest or have dermal contact with the contaminated groundwater. Without remediation, once redevelopment of the Site has been completed, there will be a potential exposure pathway from ingestion, dermal contact, and/or inhalation of particulates from on-site soils that remain uncapped (i.e., landscaped areas) or inhalation of VOC vapors to adult and child residents, building support and maintenance staff, and visitors through cracks or openings in the foundation of the new building. In addition, there will be a potential exposure pathway from direct contact to soil that remains uncapped (i.e., landscaped areas) at the Site to off-site pedestrians, visitors, cyclists, and adult and child residents. All potential exposure pathways in the future condition will be prevented through implementation of this RAWP.

Fish And Wildlife Assessment

The Site was assessed against the Fish and Wildlife Resources Impact Analysis (FWRIA) Decision Key located within DER-10, Appendix 3C to determine if an FWRIA was required. It was determined that an FWRIA was not required because no water sources or habitats are being impacted by the Site.

Summary of the Remedy

Remedial activities will be performed at the Site in accordance with this Remedial Action Work Plan (RAWP) and the NYSDEC-issued Decision Document (DD). All deviations from this RAWP and/or the DD will be promptly reported to NYSDEC for approval and will be fully explained in the Final Engineering Report (FER).

The proposed remedy is a dual Track 4/Track 2 Restricted Residential cleanup. The selected Remedial Actions include:

1. A remedial program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows:

   - Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
   - Reducing direct and indirect greenhouse gases and other emissions;
   - Increasing energy efficiency and minimizing use of non-renewable energy;
   - Conserving and efficiently managing resources and materials;
   - Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
   - Maximizing habitat value and creating habitat when possible;
   - Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals;
   - Integrating the remedy with the end use where possible and encouraging green and sustainable re-development; and
   - Additionally, to incorporate green remediation principles and techniques to the extent feasible in the future development at this site, any future on-site buildings shall be constructed, at a minimum, to meet the 2020 Energy Conservation Construction Code of New York (or most recent edition) to improve energy efficiency as an element of construction.

   As part of the remedial program, to evaluate the remedy with respect to green and sustainable remediation principles, an environmental footprint analysis will be completed. The environmental footprint analysis will be completed using an accepted environmental footprint analysis calculator such as SEFA (Spreadsheets for Environmental Footprint Analysis, USEPA), SiteWiseTM (available in the Sustainable Remediation Forum [SURF] library) or similar Department accepted tool. Water consumption, greenhouse gas emissions, renewable and non-renewable energy use, waste reduction and material use will be estimated, and goals for the project related to these green and sustainable remediation metrics, as well as for minimizing community impacts, protecting habitats and natural and cultural resources, and promoting environmental justice, will be incorporated into the remedial program, as appropriate. The project will include detailed requirements to achieve the green and sustainable remediation goals. Further, progress with respect to green and sustainable remediation metrics will be tracked during implementation of the remedial action and reported in the FER, including a comparison to the goals established during the remedial program.

   Additionally, the remedial program will include a climate change vulnerability assessment, to evaluate the impact of climate change on the project site and the proposed remedy. Potential vulnerabilities associated with extreme weather events (e.g., hurricanes, lightning, heat stress and drought), flooding, and sea level rise will be identified, and the remedial program will incorporate measures to minimize the impact of climate change on potential identified vulnerabilities.

2. Excavation and off-site disposal of 1) approximately 12,855 tons of contaminated soil/fill exceeding Restricted Residential Soil Cleanup Objectives (RRSCOs) within the upper 2 feet bgs across the Site to attain a Track 4 cleanup; and, 2) approximately 6,876 tons of contaminated soil/fill exceeding RRSCOs within the upper 10 feet and approximately 252 tons of contaminated soil/fill exceeding

RRSCOs between 10 to 15 feet bgs within the cellar portion of the proposed new building to attain a Track 2 cleanup.

3. Any unknown/unregistered tanks and associated piping, other structures associated with a source of contamination, and/or grossly contaminated soil/fill, if encountered, will be removed in accordance with applicable regulations.
4. Decommissioning of existing groundwater monitoring wells in accordance with NYSDEC CP-43.
5. A Site-specific Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP) will be implemented during all ground-intrusive Site activities, which include soil disturbance and loading activities, to monitor levels of VOCs and airborne particulates within the active work zones and around the perimeter of the Site.
6. Screening for indications of contamination [by visual means, odor, and monitoring with a photoionization detector (PID)] of soil during all ground-intrusive Site work, including soil disturbance and loading activities.
7. Characterization and off-site disposal of all materials removed from the Site in accordance with all federal, state, and local rules and regulations for handling, transport, and disposal. Waste disposal facilities will be selected based on the data collected to date and the results of the planned waste classification sampling.
8. Installation of support of excavation (SOE) necessary to enable excavation of contaminated soil/fill within the Track 2 portion of the Site. SOE in the Track 2 area will consist of a combination of sloping (i.e., 1H:1V) and sheet piles around the perimeter of the excavation. No SOE is currently anticipated to facilitate remedial excavation in the Track 4 area. SOE installation will comply with applicable local and state-controlled inspections.
9. Dewatering to enable remedial excavation in the Track 2 area that extends below the water table (approximately 8 to 13 feet below grade). Dewatering system design plans have not yet been developed for the Site; however, based on preliminary information provided by the design team, the system will consist of multiple well points installed within the building cellar excavation (Track 2 area) that will pump on-site groundwater into a settling tank for ultimate discharge to an approved discharge location. Dewatering will be conducted in compliance with city, state, and federal laws and regulations. Extracted groundwater will be either containerized for off-site licensed and permitted disposal or will be treated under a permit from NYC Department of Environmental Protection (NYCDEP) to meet pre-treatment requirements prior to discharge to the sewer system.
10. Importation of clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) to raise the Site grade after remedial excavation, construct the Site cover, and as needed for use as backfill. Fill material that does not exceed RRSCOs for any compound may be used on-site to backfill the Site. Soil exceeding the UUSCO for 1,4-dioxane will not be imported, per DER-10: Appendix 5 - Allowable Constituent Levels for Imported Fill or Soil, Subdivision 5.4(e). If PFOA or PFOS are detected in any sample at or above the RRGV, it will also be tested by the Synthetic Precipitation Leaching Procedure (SPLP). If the SPLP concentrations of PFOA and PFOS are at or above 10 ppt, the soil will not be reused or imported. Analytical results will be compared to Table 375-6.8(b) of 6 NYCRR Part 375 and submitted to NYSDEC via a *Request to Import/Reuse Soil or Fill* form for review and approval prior to importation and placement on-site. All imported soil or soil proposed for reuse requires NYSDEC review prior to on-site placement.
11. Collection and laboratory analysis of post-excavation endpoint samples, at a frequency of one sample for every 900 sf of bottom area, and sidewall samples at a frequency of one sample for every 30 linear feet of sidewall, across the Site to document achievement of the remedy and/or remaining concentrations of contaminants in soil/fill after excavation is complete. Endpoint sampling will occur

around any hotspots and/or additional AOCs identified during the remedial action based on the sampling frequency outlined in Section 5.4 of DER-10. Bottom sample collection will be conducted starting at the remedial depths noted on Figure 9, and will continue in two-foot intervals until RRSCOs are reached or bedrock is encountered, unless the results of the PDI indicate exceedances of RRSCOs extend to 15 feet bgs. Excavation will not pause at the specified remedial depths for sample results, but analysis of deeper endpoint samples will only occur if RRSCOs are not achieved at the initial remedial depth; the final remedial depth will be at the depth of sample that meets the RRSCOs unless the results of the PDI indicate exceedances of RRSCOs extends to 15 feet bgs. In the event the PDI indicates exceedances of RRSCOs to 15 feet bgs, bottom endpoint samples will be collected from 15 feet bgs only.

12. Construction and maintenance of a Site cover within the Track 4 portion of the Site to prevent human exposure to residual contaminants in soil/fill remaining under the Site, which will consist of: (1) a minimum of 2 feet of clean fill material placed in landscaped and permeable areas underlain by a demarcation barrier; (2) a minimum 12-inch-thick concrete building foundation underlain by a minimum 20-mil vapor barrier membrane, which doubles as a demarcation barrier, in areas within the new building footprint; and (3) paved surfaces in roadway and sidewalk areas.
13. Recording of an Environmental Easement (EE) with the NYC Register to prevent future exposure to any residual contamination remaining at the Site within the Track 4 portion of the Site. The EE will: require the remedial parties/Site owners to complete and submit a periodic certification of Engineering Controls (ECs) and Institutional Controls (ICs) to the NYSDEC in accordance with Part 375-1.8 (h)(3); allow the use and development of the Site for restricted residential use as defined by Part 375-1.8(g), although land use is subject to local zoning laws; restrict the use of groundwater as a source of potable or process water without necessary water quality treatment, as determined by New York State Department of Health (NYSDOH); and require compliance with a Site-specific NYSDEC-approved Site Management Plan (SMP).
14. Publication of an SMP for long term management of residual contamination as required by the EE (in the Track 4 portion of the Site) including plans for: (1) ECs and ICs, (2) monitoring, (3) operation and maintenance, and (4) reporting. Inclusion of soil management provisions in the SMP, including an Excavation Work Plan (EWP).
15. All responsibilities associated with the RAWP, including permitting requirements and pretreatment requirements, will be addressed in accordance with all applicable Federal, State and local rules and regulations.

REMEDIAL ACTION WORK PLAN

1.0 INTRODUCTION

This Remedial Action Work Plan (RAWP) has been prepared by AKRF, Inc. (AKRF) on behalf of Stevenson B3 LLC (the "Volunteer") for the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) site identified as Stevenson Commons B3 (Site No. C203189), located at 1850 Lafayette Avenue in the Bronx, New York (hereafter referred to as the "Site"). The approximately 2.94-acre Site is also identified as Bronx Borough Block 3600, Portions of Lots 4, 15, and 25 on the New York City tax map. A NYSDEC Brownfield Cleanup Agreement (BCA) (BCA Index No. C203189-06-25) was executed on July 9, 2025 for the initial 2.43-acre Site. A BCA Amendment to add the adjacent 0.51-acre fire lane to the Site (change in acreage from 2.43 to 2.94 acres) was executed on November 25, 2025.

The Volunteer enrolled in the BCP to facilitate the investigation and remediation of Site contamination, as appropriate, to protect human health and the environment, as a component of the proposed redevelopment project. Restricted Residential use is proposed for the Site. When completed, the Site will be a new 9- to 13-story residential building that includes 100% affordable units, various community facility spaces, and recreational and landscaped areas outside of the building.

This RAWP summarizes the nature and extent of contamination, as determined by data gathered during AKRF's Remedial Investigation (RI) performed at the Site between September and December 2025, and in January 2026, along with previous subsurface investigations conducted at the Site by AKRF in December 2024 and August 2025. The data, which is summarized in AKRF's April 2026 RI Report (RIR) was used to prepare this RAWP, which provides an evaluation of Remedial Action alternatives, their associated costs, and the recommended and preferred remedy. The remedy described in this document is consistent with the procedures defined in the NYSDEC Division of Environmental Remediation (DER)-10 Technical Guidance for Site Investigation and Remediation and DER-31 Green Remediation, and complies with all applicable standards, criteria and guidance. The remedy described in this document also complies with all applicable Federal, State, and Local laws, regulations, and requirements. The NYSDEC and New York State Department of Health (NYSDOH) have determined the Site does not pose a significant threat to human health and the environment. The RI did not identify on-site fish and wildlife resources. A formal Remedial Design document will not be prepared.

1.1 Site Location and Description

The Site is located at 1850 Lafayette Avenue in the Clason Point neighborhood of the Bronx, New York, also known as Bronx Borough Block 3600, Portions of Lots 4, 15, and 25. The 2.94-acre Site is bounded to the north by parking lots and tennis courts associated with the existing Stevenson Commons apartment complex, followed by Lafayette Avenue; to the east by the existing Stevenson Commons apartment complex, followed by White Plains Road; to the south by the Stevenson Commons Building B4 and B5 project sites, followed by Seward Avenue; and to the west by Thieriot Avenue, followed by residential buildings. The greater surrounding area is primarily residential with some commercial and institutional uses. The Site location is shown on a topographic background in Figure 1, on an aerial photograph background in Figure 2A, and the Site layout is shown on Figure 2B.

The Site currently consists of a vacant, grass field on the central and western portions, and an asphalt-paved roadway used for emergency access (fire lane) and surrounding landscaped areas on the eastern portion; a portion of an asphalt-paved parking lot is present in the northwestern portion of the Site, and asphalt-paved areas (most recently used for material staging for the south-adjacent construction site) are present on the southern portion of the Site. A Site Plan is provided as Figure 2B. A boundary map is attached to the BCA, as required by Environmental Conservation Law

(ECL) Title 14 Section 27-1419. The approximately 2.94-acre property is fully described in the Metes and Bounds included as Appendix A; global positioning system coordinates for the point of beginning is included.

1.2 Contemplated Redevelopment Plan

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

The proposed redevelopment plan for the Site entails construction of a 9- to 13-story mixed-use, 100% affordable residential/community facility building, with a footprint of approximately 33,850 square feet (sf) and approximately 126,127 gross square feet (gsf), on the central-eastern portion of the Site. The proposed building will include community facility spaces (i.e., classrooms, offices, a community room, gym, and multi-purpose room) and utility/mechanical rooms on the first floor, a community basketball court in a partial basement that extends vertically through the first floor, and 297 affordable housing units and various resident amenities on the upper floors. Exterior areas will include fenced-in tennis courts on the northwestern portion of the Site, an asphalt-paved roadway for emergency access (fire lane) on the eastern portion of the Site, and landscaping/hardscaping on the southwestern portion of the Site and in remaining areas surrounding the building.

1.3 Description of Surrounding Property

The Site is bounded to the north by parking lots and tennis courts associated with the existing Stevenson Commons apartment complex, followed by Lafayette Avenue; to the east by the existing Stevenson Commons apartment complex, followed by White Plains Road; to the south by the Stevenson Commons Building B4 and B5 project sites, followed by Seward Avenue; and to the west by Thieriot Avenue, followed by residential buildings. The greater surrounding area is primarily residential with some commercial and institutional uses. The current zoning designation of the Site is R6 (residential district). The proposed use of the Site is residential and complies with the current zoning.

Sensitive receptors, such as schools, day care facilities, hospitals, community/religious centers, and/or playgrounds located within a ¼-mile (1,320-foot) radius of the Site include: Stevenson Family Healthcare Group, located at 731 White Plains Road, approximately 522 feet east of the Site; Grand Concourse Academy Charter School, located at 625 Bolton Avenue, approximately 677 feet southeast of the Site; Soundview Library, located at 660 Soundview Avenue, approximately 734 feet southwest of the Site; Taylor-Soundview Block Association Community Garden, located at 564 Soundview Avenue, approximately 761 feet southwest of the Site; Spacetime Playground, located at 880 Underhill Avenue, approximately 767 feet northeast of the Site; P.S. 100 Day Care and Pre-Kindergarten, located at 800 Taylor Avenue, approximately 771 feet northwest of the Site; J.H.S. 131 Albert Einstein/Success Academy Charter School, located 885 Bolton Avenue, approximately 897 feet northeast of the Site; Story Playground, located at 800 Lafayette Avenue, approximately 943 feet northwest of the Site; P.S. 182 Day Care and Pre-Kindergarten, located at 601 Stickball Boulevard located approximately 1,034 feet east of the Site; Claire Heureuse Community Center, located at 562 Soundview Avenue, approximately 1,200 feet south of the Site; Antonia Pantoja Preparatory Academy, located at 1980 Lafayette Avenue, approximately 1,234 feet east of the Site; and XABK Church of the Holy Cross located at 1846 Randall Avenue, approximately 1,144 feet south of the Site.

2.0 DESCRIPTION OF REMEDIAL INVESTIGATION FINDINGS

The Site was investigated during AKRF's RI, conducted between September 22 and December 31, 2025, and on January 30, 2026, and June 23, 2026. The RI was performed in accordance with the NYSDEC-approved Remedial Investigation Plan (RIWP) and RIWP Addendums, dated July 2025, December 2025, and June 2025, respectively. The RIR was submitted to NYSDEC in July 2026 and approved by NYSDEC on September 3, 2026.

2.1 Summary of Remedial Investigation Performed

The following scope of work was performed by AKRF during the RI:

1. Advancement of 69 soil borings (RI-SB-01 through RI-SB-20, RI-SB-22 through RI-SB-32, RI-SB-37 through RI-SB-44, RI-SB-46 through RI-SB-58, and RI-SB-61 through RI-SB-81) across the Site with the collection of 198 soil samples and associated quality assurance/quality control (QA/QC) samples for laboratory analysis.
2. Installation and development of nine permanent, two-inch-diameter groundwater monitoring wells (RI-MW-01 through RI-MW-09) across the Site with the collection of nine groundwater samples and associated QA/QC samples for laboratory analysis.
3. Installation of 10 temporary soil vapor points (RI-SV-01 through RI-SV-10) across the Site with the collection of 10 soil vapor samples over a two-hour period for laboratory analysis.
4. Performance of an elevation and location survey for all soil borings, groundwater monitoring wells, and soil vapor points advanced/installed during the RI. Accessible locations from AKRF's December 2024 and August 2025 subsurface investigations were also surveyed.

The locations of the soil borings, groundwater monitoring wells, and soil vapor points are included on Figure 2B.

2.1.1 Soil Boring, Groundwater Monitoring Well, and Soil Vapor Point Installation

Soil Borings

A total of 69 soil borings (RI-SB-01 through RI-SB-20, RI-SB-22 through RI-SB-32, RI-SB-37 through RI-SB-44, RI-SB-46 through RI-SB-58, and RI-SB-61 through RI-SB-81) were advanced across the Site by Coastal Environmental Services, Inc. of Holbrook, NY (Coastal) using either a Geoprobe® direct-push probe (DPP) or sonic drill rig. The soil borings were advanced to depths ranging between 10 and 30 feet bgs. At locations where monitoring well installation was proposed (RI-SB-01 through RI-SB-06), the borings were extended to depths between 17 and 20 feet bgs. Soil cores were continuously collected in either five-foot long, two-inch diameter, stainless steel macrocore piston rod samplers fitted with dedicated, internal acetate liners or 10-foot long, dedicated plastic bags. All sampling equipment (i.e., augers, drilling rods, split spoon samplers, and probe rods) were either dedicated or decontaminated between sampling locations. The soil cores at each boring were field-screened by AKRF using a photoionization detector (PID) equipped with a 10.6 electron volt (eV) lamp and logged using the modified Burmister soil classification system. AKRF field personnel recorded and documented subsurface conditions for each soil boring location. Field evidence of contamination, including petroleum-like odors, solvent-like odors, staining, and/or elevated PID readings, were encountered in up to 12 borings across the Site, all at depths between 5 and 15 feet bgs. Slight petroleum-like odors were detected at borings RI-SB-04, RI-SB-05, and RI-SB-06, and creosote odors were detected at borings RI-SB-02, RI-SB-03, RI-SB-19, RI-SB-24, and RI-SB-78 through RI-SB-80. PID readings were detected at RI-SB-06 [max. 2.1 parts per million (ppm)] RI-SB-23 (max. 1.4 ppm) RI-SB-78 (max 1.9), RI-SB-80 (max 8.7 ppm), and RI-SB-81 (max 5.6

ppm) at depths between 10 and 15 feet bgs. No other field evidence of contamination was detected in any of the other borings.

Groundwater Monitoring Wells

A total of nine permanent, two-inch diameter groundwater monitoring wells (RI-MW-01 through RI-MW-09) were installed across the Site by Coastal. Each monitoring well was installed to a total depth of 20 feet bgs, except for RI-MW-01, which was only installed to 17 feet bgs due to repeated refusals. Each monitoring well was constructed with 15 feet of 0.020-inch slotted polyvinyl chloride (PVC) well screen, except for RI-MW-01, which was only constructed with 13 feet of well screen. A No. 2 morie sand pack was installed from the bottom of the well to approximately two feet above the well screen, followed by two feet of hydrated bentonite. The remaining annular space around the well was filled with soil cuttings to approximately 0.5 feet bgs. All monitoring wells were subsequently finished with j-plugs, flush mount well caps, and a concrete pad.

Following installation, each groundwater monitoring well was developed by AKRF via an electric Waterra® Hydrolift pump affixed with dedicated high-density polyethylene (HPDE) tubing to remove any accumulated fines and establish a hydraulic connection with the surrounding aquifer. The goal of well development was to reduce turbidity within the well until less than 50 nephelometric turbidity units (NTUs) for three successive readings, and until water quality indicators (pH, temperature, oxidation reduction potential, dissolved oxygen, and specific conductivity) stabilized to within 10% for three successive readings. Each monitoring well was successfully developed to meet the abovementioned water quality stabilization parameters, except for RI-MW-01, due to limited water column and slow recharge within the well. All development water was containerized in New York State Department of Transportation (DOT)-approved 55-gallon drums.

An elevation and location survey was performed for all soil borings, groundwater monitoring wells, and soil vapor points advanced/installed during the RI. Elevation measurements were taken at the flush mount manhole cover and on the north side of the top of PVC casing at each of the groundwater monitoring wells, and location measurements were taken at the manhole cover. Horizontal and vertical datum were tied to the North American Vertical Datum of 1988 (NAVD88). Accessible locations from AKRF's December 2024 and August 2025 subsurface investigations were also surveyed.

Soil Vapor Points

A total of 10 temporary soil vapor points (RI-SV-01 through RI-SV-10) were installed across the Site by Coastal. Each soil vapor point was installed at a depth of approximately eight feet bgs using a Geoprobe® DPP drill rig. At each point, a six-inch stainless steel screen implant connected to Teflon™-lined polyethylene tubing was installed in the boring, and the sample tubing was extended from the bottom end of the screen to above grade. The borings were backfilled with No. 2 morie sand to six inches above the screen. Hydrated bentonite was used to fill the remaining void around the sampling tubing to the ground surface.

2.1.2 Geophysical Survey and Utility Markouts

Geophysical surveys comprising ground penetrating radar (GPR) and magnetometer surveys were performed by Coastal during previous subsurface investigations conducted by AKRF on December 17, 2024 and August 27, 2025. No potential USTs were identified at the Site during the geophysical surveys. Utility markouts identified in December 2024

and August 2025 Geophysical Investigation Reports were relied upon during the RI drilling activities.

2.1.3 Soil, Groundwater, and Soil Vapor Sampling

Soil Sampling for RI Site Characterization

At soil boring locations RI-SB-01 through RI-SB-20 and RI-SB-22 through RI-SB-24, grab samples were collected from the surface (i.e., 0 to 0.5 feet bgs) and from every 2-foot interval from just below surface grade to the groundwater table (i.e., 0.5 to 2 feet bgs, 2 to 4 feet bgs, 4 to 6 feet bgs, 6 to 8 feet bgs, and 8 to 10 feet bgs), except for at RI-SB-20, where grab samples were only collected from 0 to 0.5 feet bgs, 4 to 6 feet bgs, 6 to 8 feet bgs, and 8 to 10 feet bgs, in accordance with the NYSDEC-approved July 2025 RIWP and December 2025 RIWP Addendum. At locations, RI-SB-01, RI-SB-02, and RI-SB-09 through RI-SB-16, an additional grab sample was collected from 10 to 12 feet bgs, since groundwater was observed to be slightly deeper (12 feet bgs) on this portion of the Site. Additionally, no surface samples were collected at RI-SB-17, RI-SB-23, and RI-SB-24, since these borings were advanced within an asphalt-paved area, rather than a grassy area (exposed soils).

At locations, RI-SB-01 through RI-SB-06, where the borings were extended for installation of groundwater monitoring wells, a grab sample was also collected from 13 to 15 feet bgs (below the water table) to comply the NYSDEC-approved July 2025 RIWP, which stated that sample collection was required at "soil boring termination depth". However, NYSDEC later clarified in email correspondence dated December 18, 2025 that samples below the water table are not required to be collected. Based on this clarification from NYSDEC, proposed grab samples from 13 to 15 feet bgs at borings RI-SB-22 through RI-SB-24, which had not yet been collected upon receipt of the feedback, were omitted from the sampling scope.

The 0.5- to 2-foot and 8- to 10-foot bgs intervals at locations RI-SB-01 through RI-SB-20 and RI-SB-22 through RI-SB-24, along with the 10- to 12-foot bgs intervals at RI-SB-01, RI-SB-02, and RI-SB-09 through RI-SB-16, and 13- to 15-foot bgs intervals at RI-SB-01 through RI-SB-06 were analyzed for the target compound list (TCL) and Part 375 VOCs by EPA Method 8260D, SVOCs by EPA Method 8270E, PCBs by EPA Method 8082, and pesticides by EPA Method 8081; the total analyte list (TAL) of metals by EPA Method 6000/7000 series plus mercury by EPA Method 7471B and hexavalent chromium by EPA Method 7196A; and per- and polyfluoroalkyl substances (PFAS) by EPA Method 1633A (full NYSDEC Part 375 suite of analyses). The remaining samples were analyzed for a limited set of analyses, including PAHs by EPA Method 8270E, TAL metals by EPA Method 6000/7000 series plus mercury by EPA Method 7471B and hexavalent chromium by EPA Method 7196A. All samples were additionally collected for TCLP metals and placed on hold pending the analytical results for total metals.

Soil Sampling for RI Delineation of Hazardous Lead and Elevated PAHs

At locations, RI-SB-25 through RI-SB-32, RI-SB-46 through RI-SB-58, and RI-SB-61 through RI-SB-76 (advanced for hazardous lead delineation purposes) and at RI-SB-37 through RI-SB-44 (advanced for delineation of elevated PAHs), grab samples were collected from the depth interval corresponding to the specific TCLP lead or PAH concentration that required delineation, in accordance with the NYSDEC-approved December 2025 RIWP Addendum.

Specifically, at RI-SB-25 through RI-SB-27 and RI-SB-54 and RI-SB-55, a grab sample was collected from 4 to 6 feet bgs and 6 to 8 feet bgs; at RI-SB-28 through RI-SB-31 and RI-SB-56 and RI-SB-57, a grab sample was collected from 6 to 8 feet bgs; at RI-SB-32, a grab sample was collected from 2 to 4 feet bgs and 8 to 10 feet bgs; at RI-SB-37 through RI-SB-44, a grab sample was collected from 4 to 6 feet bgs; at RI-SB-46 through RI-SB-53, a grab sample was collected from 0.5 to 2 feet bgs, 4 to 6 feet bgs and 8 to 10 feet bgs; at RI-SB-61 through RI-SB-64 and RI-SB-69 through RI-SB-72, a grab sample was collected at 8 to 10 feet bgs; and at RI-SB-65 through RI-SB-68 and RI-SB-73 through RI-SB-76, a grab sample was collected at 8 to 10 feet bgs. Note, based on NYSDEC's feedback (via email correspondence on December 18, 2025), clarifying that samples below the water table were not required to be collected, proposed grab samples for delineation purposes from 13 to 15 feet bgs at borings RI-SB-33 through RI-SB-36, RI-SB-45, and RI-SB-58 through RI-SB-60, which had not yet been collected upon receipt of the feedback, were omitted from the sampling scope.

These samples were analyzed for total and TCLP lead, or PAHs and TCLP PAHs, only. Samples collected from borings designated as "contingency" were placed on hold pending the analytical results of the initial delineation samples.

Soil Sampling for RI Vertical Delineation of the Extent of Fill Material

At soil boring locations RI-SB-77 through RI-SB-81, grab samples were collected from directly below the vertical extent of fill material, within saturated soils, in accordance with the NYSDEC-approved June 2026 RIWP Addendum. Three soil samples were collected from each boring location. The first sample was collected from the two-foot interval directly below the observed fill layer, which was at approximately 20-22 feet bgs in RI-SB-77, 22-24 feet bgs in RI-SB-78, 23-25 feet bgs in RI-SB-79 and RI-SB-80, and 15-17 feet bgs in RI-SB-81. A second and third sample were collected from the subsequent two-foot intervals until the boring terminus and placed on hold pending the results of the first sample.

These samples were analyzed for VOCs by EPA Method 8260D, SVOCs by EPA Method 8270E, PCBs by EPA Method 8082, pesticides by EPA Method 8081; the total analyte list (TAL) of metals by EPA Method 6000/7000 series plus mercury by EPA Method 7471B and hexavalent chromium by EPA Method 7196A; and per- and polyfluoroalkyl substances (PFAS) by EPA Method 1633A (full NYSDEC Part 375 suite of analyses).

All soil samples collected during the RI and slated for laboratory analysis were placed in laboratory-supplied containers in accordance with EPA protocols. All soil samples were analyzed by Eurofins Environmental Testing (Eurofins) of Edison, New Jersey, a NYSDOH Environmental Laboratory Accreditation Program (ELAP)-certified laboratory using Category B deliverables.

Groundwater Sampling

The groundwater samples collected during the RI were collected in accordance with EPA's low-flow sampling methodology and the NYSDEC's June 2022 Draft Sampling, Analysis, and Assessment of PFAS guidance. Non-dedicated equipment was decontaminated before sampling activities at each monitoring well. Prior to collecting any samples, the depth to groundwater and the total well depths were measured at each monitoring well using a Horiba U-52 multi-parameter interface probe attached to a measuring tape accurate to 0.01 foot. Depth to groundwater measurements were used to calculate the groundwater elevations. No free phase product (NAPL) was detected during installation, purging, or sampling. Purging of the wells continued until the turbidity of the water decreased below

50 NTUs and groundwater quality parameters stabilized. Due to insufficient groundwater within the water column and slow recharge within RI-MW-01, a groundwater sample was collected using a peristaltic pump prior to stabilization of all water quality parameters for three consecutive readings. All purge water was containerized in New York State DOT-approved 55-gallon drums.

Groundwater samples slated for laboratory analysis were placed in laboratory-supplied containers and shipped in accordance with appropriate EPA protocols to a NYSDOH ELAP-certified laboratory. The samples were analyzed for the NYSDEC Part 375 list of VOCs by EPA Method 8260D, SVOCs by EPA Method 8270E, PCBs by EPA Method 8082, pesticides by EPA Method 8081, total and dissolved TAL metals by EPA Method 6000/7000 series plus mercury by EPA Method 7471B, and PFAS by EPA Method 1633A, using Category B deliverables. Due to limited sample volume at RI-MW-01, sample RI-MW-01_20251008 was not analyzed for PFAS.

Soil Vapor Sampling

Soil vapor samples collected were collected from temporary soil vapor points RI-SV-01 through RI-SV-10. Prior to collection, each temporary soil vapor sampling point was purged of approximately three sample volumes using a Gilian® GilAir Plus at a flow rate of approximately 0.2 liter per minute. During purging, a shroud was placed over each sampling point and helium gas was introduced to saturate the atmosphere around the sample port. Purged vapors were collected in a Tedlar® bag and field-screened for organic vapors using a 10.6 eV PID. The purged air was also monitored using a portable helium detector to check for short-circuiting of ambient air into the vapor sampling point.

After purging, each probe was connected via Teflon™-lined polyethylene tubing to a laboratory-supplied 6-Liter SUMMA® canister equipped with a flow regulator set to collect a sample over a two-hour sampling period. Immediately after opening the flow control valve, the initial SUMMA® canister vacuum (inches of mercury) was noted. After approximately two hours, the flow controller valve was closed, the final vacuum noted, and the canister placed in a shipping carton for delivery to the laboratory.

For two of the 10 soil vapor samples (RI-SV-01 and RI-SV-04), the flow controller valves were closed after the approximately two-hour sample period with a final vacuum at or below -0.50 inHg, which was notably lower than the other samples. To assure that these lower final vacuum readings would not impact the validity of the laboratory analytical results for these two samples, AKRF requested feedback on this matter from Eurofins, and the laboratory director indicated that once the SUMMA® canisters reach equilibrium (0 inHg), there is no significant transfer of air in or out of the canisters, and the air inside the canisters is expected to be representative of the samples collected. Based on this feedback from the laboratory, AKRF does not expect any impact on the validity of the laboratory analytical results for these two samples.

Sample containers were shipped to the laboratory via courier with appropriate chain of custody documentation. All samples were analyzed for VOCs by EPA Method TO-15 by Eurofins of Burlington, Vermont.

2.1.4 Chemical Analysis

Chemical analytical work was performed under a QA program, which is summarized in Table A.

Table A
Quality Assurance Program

Factor	Description
Quality Assurance Officer	The chemical analytical QA/QC was directed by Deborah Shapiro, QEP of AKRF.
Third Party Data Validator	The third-party data validation was performed by Lori Beyer of L.A.B. Validation Corp.
Chemical Analytical Laboratory	The chemical analytical laboratories used in the RI were Eurofins of Edison, New Jersey and Burlington, Vermont, both ELAP-certified laboratories.
Chemical Analytical Methods	Soil analytical methods: • TCL and Part 375 VOCs by EPA Method 8260D • SVOCs (including 1,4-dioxane) by EPA Method 8270E • Pesticides by EPA Method 8081 • PCBs by EPA Method 8082 • TAL Metals by EPA Method 6000/7000 series • Mercury by EPA Method 7471B • Hexavalent chromium by EPA Method 7196A (rev. 1992) • PFAS by EPA Method 1633A Groundwater analytical methods: • NYSDEC Part 375 VOCs by EPA Method 8260D • SVOCs by EPA Method 8270E • PCBs by EPA Method 8082 • Pesticides by EPA Method 8081 • Total and dissolved TAL metals by EPA Method 6000/7000 series • Mercury by EPA Method 7471B • 1,4-dioxane by EPA Method 8270 SIM • PFAS by EPA Method 1633A Soil vapor analytical method: • VOCs by EPA Method TO-15

2.2 Findings from the Remedial Investigation

Soil analytical results are presented in Tables 1 through 7; groundwater analytical results are presented in Tables 8 through 14; and soil vapor analytical results are presented in Table 15. Soil sample concentrations above UUSCOs and RRSCOs, and/or PFAS Guidance Values are shown on Figures 3A through 3D; and historical soil sample concentrations above UUSCOs and RRSCOs, and/or PFAS Guidance Values, from AKRF's December 2024 and August 2025 subsurface investigations, are shown on Figure 4A and 4B. Soil sample TCLP concentrations above the EPA Hazardous Waste Criteria are shown on Figure 5. Groundwater sample results above the NYSDEC Class GA AWQSGVs and PFAS Guidance Values are shown on Figure 6, and VOCs detected in soil vapor are shown on Figure 7.

The findings from the RI and previous investigations are summarized below.

Soil

- The stratigraphy of the Site consisted of silt, sand, clay, gravel, brick, and organic matter with trace amounts of asphalt, wood, glass, metal, plastic, and ceramic down to between approximately 15 and 23 feet bgs. The fill material was underlain by apparent native silt and sand varying amounts of gravel, clay, and cobbles between approximately 15 and 30 feet bgs

(boring terminus); bedrock was encountered in RI-SB-01 at approximately 17 feet bgs, and at RI-SB-77 and RI-SB-78 at approximately 30 feet bgs. According to a geotechnical report prepared by Haley & Aldrich of New York (HANY) in January 2025, native soil beneath the fill material at the Site consist of either glacial till or Estuarine deposits, above weathered bedrock. The report also indicated that bedrock beneath the Site ranged from approximately 35 ft to 87 ft bgs (el. -15.5 ft to -70 ft); however, refusal on suspected bedrock was also encountered in select borings at depths ranging from approximately 25 to 62 ft bgs (el. -6 ft to -47.5 ft). The bedrock generally consisted of hard, fresh to slightly weathered, gray, fine to coarse-grained schist.

- One volatile organic compound (VOC), acetone, was detected in nine samples at concentrations ranging from 0.053 milligrams per kilogram (mg/kg) to 0.22 mg/kg (RI-SB-23_8-10_20251218), above the Unrestricted Use Soil Cleanup Objectives (UUSCOs) and below the Restricted Residential Use Soil Cleanup Objectives (RRSCOs). No other VOCs were detected above applicable standards in the collected samples.
- Polycyclic aromatic hydrocarbons (PAHs), including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene, were detected in 17 samples at concentrations ranging from 0.52 mg/kg to 3.7 mg/kg [benzo(a)anthracene at RI-SB-22_8-10_20251218], above UUSCOs and/or RRSCOs. PAHs up to 260 mg/kg (phenanthrene at SB-19_4-6_20250827) were identified in previous subsurface investigations.
- Pesticides, including 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, and dieldrin were detected in 21 samples at concentrations ranging from 0.0034 mg/kg to 0.12 mg/kg, above UUSCOs but below RRSCOs.
- Total polychlorinated biphenyls (PCBs) were detected in five samples at concentrations ranging from 0.11 mg/kg to 0.21 mg/kg, above the UUSCO but below the RRSCO.
- Metals, including arsenic (max. 178 mg/kg at RI-SB-24_6-8_20251222), barium (max. 3,170 mg/kg at RI-SB-13_8-10_20250925), cadmium (max. 30.6 mg/kg at RI-SB-04_6-8_20250924), copper (max. 2,660 mg/kg RI-SB-02_13-15_20250924), lead (max. 18,200 mg/kg at RI-SB-26_4-6_20251219), mercury (max. 62.8 mg/kg at RI-SB-23_6-8_20251218), nickel (max. 161 mg/kg at RI-SB-17_2-4_20250923), and zinc (max. 5,790 mg/kg at RI-SB-05_13-15_20250923) were detected in one or more samples at concentrations above the UUSCOS and/or RRSCOs. Lead up to 69,600 mg/kg (SB-05_8-10_20241217) was identified in previous subsurface investigations.
- Lead was detected at concentrations above the Toxicity Characteristic Leaching Procedure (TCLP) Environmental Protection Agency (EPA) Hazardous Waste Criteria of 5 milligrams per liter (mg/L) in 10 samples throughout the Site. TCLP lead up to 199 mg/L (SB-05_8-10_20241217) was identified in previous subsurface investigations.
- Per- and polyfluoroalkyl substances (PFAS) compounds were detected in multiple soil samples, with the concentrations of perfluorooctanesulfonic acid (PFOS) detected above its Unrestricted Use Guidance Value (UUGV) but below its Restricted Residential Guidance Value (RRGV) in nine samples [max. 4.20 parts per billion (ppb)] at RI-SB-01_8-10_20250923) and perfluorooctanoic acid (PFOA) detected above its UUGV but below its RRGV in 5 samples (max. 1.16 ppb at RI-SB-02_8-10_20250924). The compound 1,4-dioxane was not detected at or above the laboratory reporting limit in the samples analyzed.

Groundwater

- Groundwater beneath the Site was measured between approximately 6.98 and 12.64 feet bgs (el. +9.11 to +5.98 feet NAVD88). The groundwater flow direction as determined by the Site-

specific groundwater depths and elevation survey is to the southeast towards the Bronx River (the nearest body of water); however, the groundwater flow direction appears to be influenced by the former tidal creek that was historically present at the Site.

- No VOCs or pesticides were detected at concentrations above their Ambient Water Quality Standards and Guidance Values (AWQSGVs).
- Two SVOCs, naphthalene and phenol, were each detected in one sample. Naphthalene was detected in RI-MW-08_20251230 at a concentration of 18 micrograms per liter (µg/L), above its AWQSGV of 10 µg/L; and phenol was detected in RI-MW-05_20251007 at an estimated concentration of 4 µg/L, above its AWQSGV of 1 µg/L.
- Total PCBs were detected in one sample, RI-MW-07_20251230, at a concentration of 0.47 µg/L, above its AWQSGV of 0.09 ug/L.
- Fifteen metals [antimony, arsenic, barium, cadmium, chromium, copper, iron, lead, manganese, mercury, selenium, silver, sodium, thallium, and zinc] were detected in the total metals analysis at concentrations above the AWQSGVs, ranging from an estimated 0.73 µg/L to 7,100,000 µg/L (iron at RI-MW-01_20251008). Only four metals [iron, manganese, selenium, and sodium] were detected in the dissolved metals analysis at concentrations above the AWQSGVs, ranging from 436 µg/L to 234,000 µg/L.
- Several PFAS compounds were detected in one or more of the groundwater samples. PFOS (max. 24.8 ppt at RI-MW-06_20251007) and PFOA (max. 41.8 ppt at RI-MW-06_20251007) were both detected in all collected groundwater samples above their respective guidance values. The compound 1,4-dioxane was not detected in the groundwater samples collected.

Soil Vapor

- The soil vapor analytical results identified several VOCs in one or more soil vapor samples. Petroleum-related VOCs including benzene, toluene, ethylbenzene, xylenes (collectively referred to as "BTEX"), n-hexane, cyclohexane, n-heptane, 1,2,4-trimethylbenzene, and 2,2,4-trimethylpentane were detected in one or more samples at concentrations up to 10 micrograms per cubic meter (µg/m^3) [cyclohexane in sample RI-SV-06_20250929]. The chlorinated solvent tetrachloroethylene (PCE) was detected up to 96 µg/m^3. All exterior soil vapor samples were collected from a depth of approximately 8 feet below grade.

2.3 Significant Threat

The NYSDEC and NYSDOH have determined that this site does not pose a significant threat to human health and the environment. Notice of that determination has been provided for public review. A copy of the notice is included in Appendix B.

2.4 Site History

2.4.1 Past Uses and Ownership

Historical records indicate that the Site has remained undeveloped since 1898. Filling of a tidal creek with material of unknown origin occurred between 1924 and 1951 (refer to Figure 2B). The Site was later used for recreational/baseball fields between approximately 1980 and 1994.

The current owner and operator of the Site is Stevenson Commons Housing Company Inc., as nominee for Stevenson Commons Affordable LLC. Previous owners included Lavanburg Community, Inc. between 1973 and 2017, and the City of New York prior to 1973.

2.4.2 Previous Environmental Reports

Previous environmental reports are provided as Appendix C which is submitted under separate cover.

Phase I Environmental Site Assessment, 1850 Lafayette Avenue, Bronx, NY, Impact Environmental Corporate Records, November 2020.

Impact Environmental Corporate Records (IEC) prepared a Phase I Environmental Site Assessment (ESA) for a larger area that included the Site in November 2020 in accordance with the American Society for Testing and Materials (ASTM) Standard 1527-13, the current standard at the time. The Phase I ESA included the findings of a Site reconnaissance and a review and evaluation of available historical records and regulatory database listings. The Phase I ESA did not identify any Recognized Environmental Conditions (RECs); however, it did document evidence of filling of a historical tidal creek with material of unknown origin. The historical creek was shown on a 1924 aerial photograph but was filled in by 1951.

Phase II Environmental Site Assessment, 1850 Lafayette Avenue, Bronx, NY, IEC, May 2021.

IEC prepared a Phase II ESA report in May 2021 following completion of an April 2021 Phase II subsurface investigation. The Phase II subsurface investigation was conducted in accordance with a Phase II Work Plan that was approved by the New York City Department of Environmental Protection (NYCDEP) to evaluate the subsurface environmental conditions within areas of proposed subsurface disturbance for a proposed redevelopment. The investigation included the following scope of work:

- Advancement of four soil borings and collection of eight soil samples for chemical analysis to evaluate soil quality;
- Installation of one temporary two-inch-diameter groundwater well and collection of one groundwater sample for chemical analysis to evaluate groundwater quality; and
- Installation of two temporary soil vapor points and collection of two soil vapor samples for chemical analysis to evaluate soil vapor quality, and collection of one ambient air sample.

The Phase II concluded that the primary contaminants of concern (COCs) in soil at the Site included PAHs, which are a subset of SVOCs, and metals (i.e., lead, cadmium, and mercury). The highest concentrations of metals detected in soil appeared to be distributed primarily across the eastern and western portions of the Site, with the greatest concentrations—specifically, total lead at concentrations up to 1,790 mg/kg—located in the eastern portion of the Site (boring B3SB-2) between 8 and 10 feet bgs. Elevated concentrations of SVOCs, PCBs, and metals were detected in groundwater above their respective AWQSGVs. VOCs were detected at low levels in the soil vapor samples.

Subsurface Conditions and Foundation Design Recommendations, Proposed 12-Story Mixed-Use Building, Stevenson Commons – Building B3, Bronx, NY, Haley & Aldrich of New York Engineering and Geology, LLP, January 2025

HANY prepared a geotechnical report dated January 2025 that documented subsurface exploration activities at the Site to obtain subsurface information in support of the development of geotechnical engineering recommendations for use in the design and construction of foundations for the proposed development of a 12-story mixed-use building. As part of the exploration activities, HANY advanced 12 test borings (HA-01

through HA-12) across the Site. The test borings identified fill material in all borings from surface grade to depths between 12 and 22.5 feet bgs. The fill generally consisted of black, dark brown, gray, and red very loose to very dense silty sands with varying amounts of gravel, gravels with varying amounts of sand and silt, and silts with varying amounts of sand and gravel. This stratum frequently contained fragments and particles of brick, concrete, glass, plaster, wood, and vegetation/roots. The fill material was underlain by either glacial till consisting of medium-dense to very dense, silty to poorly-graded sand with varying amounts of gravel, silt, clay, and rock fragments, or estuarine deposits consisting of primarily very soft to medium organic silt and clay with occasional pockets of or interlayered with peat extending to depths ranging from approximately 22.5 to 34 ft bgs and ranging from 3.5 to 13 ft in thickness. At select test borings, the estuarine deposits were underlain by alluvium deposits, which generally consisted of gray and olive gray, very loose to medium dense poorly-graded sands with variable amount of gravel and silts with variable amounts of sand and gravel.

Bedrock was encountered during the exploration activities, ranging drastically across the Site between approximately 35 ft to 87 feet bgs (el. -15.5 ft to -70 ft). HANY noted that refusal on suspected bedrock was also encountered in select borings at depths ranging from approximately 25 to 62 feet bgs (el. -6 ft to -47.5 ft). It was noted that bedrock in this region is mapped as the Hartland Formation. Bedrock generally consisted of hard, fresh to slightly weathered, gray, fine to coarse-grained schist. Lithological cross sections depicting the depth to bedrock are provided as Figures 3 through 5 of HANY's January 2025 geotechnical report, provided in Appendix C (also attached as Figures 8B through 8D of this RAWP).

Subsurface Investigation Results, Stevenson Commons Building B3, 1850 Lafayette Avenue, Bronx, NY, AKRF, Inc. January 2025.

AKRF performed a subsurface investigation in December 2024 to obtain additional soil, groundwater, and soil vapor data at the Site to support a NYSDEC BCP application. The subsurface investigation included the following scope of work:

- Performance of a geophysical survey to investigate the potential presence of underground storage tanks (USTs), and to clear boring locations of underground utilities. No potential USTs were identified during the geophysical survey;
- Advancement of 12 soil borings across the Site and collection of 36 soil samples for chemical analysis to evaluate soil quality;
- Installation of three permanent, two-inch-diameter groundwater monitoring wells across the Site and collection of three groundwater samples for chemical analysis to evaluate groundwater quality;
- Installation of three temporary soil vapor points across the Site and collection of three soil vapor samples for chemical analysis to evaluate soil vapor quality; and,
- Third-party data validation of the soil data and preparation of a Data Usability Summary Report (DUSR).

The subsurface investigation concluded that the primary COCs in soil at the Site included PAHs and metals (i.e., lead, arsenic, barium, and mercury), which appeared to be associated with historical filling of the tidal creek previously located on the Site. The concentrations of PAHs and metals detected in soil were distributed primarily across the northern, eastern, and southern portions of the Site, with the greatest concentrations of PAHs (up to 17 mg/kg) located in the southeastern corner, and the greatest concentrations

of metals—specifically, total lead at concentrations up to 69,600 mg/kg—located in the northern portion of the Site (borings SB-04 and SB-05) between 2 and 10 feet bgs. TCLP lead concentrations in select soil samples collected from soil borings SB-04 and SB-05 were detected at concentrations up to 199 mg/L, above the EPA Hazardous Waste Criteria of 5 mg/L. None of the heavy metals detected at elevated concentrations in soil (i.e., lead, arsenic, barium, and mercury) were detected in the dissolved (filtered) groundwater samples above their respective AWQSGVs. The only exceedances of AWQSGVs were iron, sodium, and manganese, which were likely indicative of regional groundwater conditions. In addition, while 40 VOCs were detected in one or more of the soil vapor samples analyzed, no detections were above the "mitigate" thresholds in the NYSDOH guidance.

NYSDEC Brownfield Cleanup Program Application, Stevenson Commons B3, 1850 Lafayette Avenue, Bronx, NY, AKRF, Inc., March 2025

AKRF prepared and submitted a BCP Application for the Site to NYSDEC in March 2025 The BCP Application was determined to be complete in April 2025. The BCP Application summarized the previous studies and environmental areas of concern associated with the Site. The Site was accepted into the BCP to facilitate the investigation and remediation of previously identified contamination, and a BCA (BCA Index No. C203189-06-25) was executed on July 9, 2025.

Subsurface Investigation Results, 1850 Lafayette Avenue, Bronx, NY – 0.51-Acre Parcel, Block 3600, Portions of Lot 4 and Lot 25, AKRF, Inc., August 2025

AKRF performed a subsurface investigation in August 2025 to obtain additional soil data to support the addition of an adjacent 0.51-acre parcel (fire lane) to the Stevenson Commons B3 BCP Site through execution of a minor BCA Amendment. The subsurface investigation included the following scope of work:

- Performance of a geophysical survey to investigate the potential presence of USTs, and to clear boring locations of underground utilities. No potential USTs were identified during the geophysical survey;
- Advancement of seven soil borings across the Site and collection of 38 soil samples for chemical analysis to evaluate soil quality; and,
- Third-party data validation of the soil data and preparation of a DUSR.

The subsurface investigation concluded that the primary COCs identified in soil at the Site include PAHs and metals (i.e., lead, barium and mercury), which appeared to be associated with historical filling of a tidal creek previously located on the Site. The concentrations of PAHs and metals in soil were distributed evenly across the Site, with the greatest concentrations of PAHs (up to 260 mg/kg) located in the central portion, and the greatest concentrations of metals—specifically, total lead at concentrations up to 3,440 mg/kg—located in the eastern corner of the Site (SB-21) from 0.5 to 10 feet bgs. TCLP lead concentrations in select soil samples collected from soil boring SB-21 were detected at concentrations above up to 101 mg/L, above the EPA Hazardous Waste Criteria of 5 mg/L.

Remedial Investigation Work Plan, Stevenson Commons B3, 1850 Lafayette Avenue, Bronx, NY, AKRF, Inc., September 2025

AKRF prepared a RIWP to properly characterize environmental conditions at the Site, and to support development of a remedial plan in accordance with BCP requirements. The RIWP proposed the following scope of work for the RI at the Site: the advancement of 24

soil borings across the Site with continuous soil sampling and laboratory analysis of a minimum of two soil samples per boring; installation of five permanent, two-inch-diameter groundwater monitoring wells across the Site with the collection and analysis of five groundwater samples; and installation of seven temporary soil vapor points across the Site with the collection and analysis of seven soil vapor samples. A Quality Assurance Project Plan (QAPP), Health and Safety Plan (HASP), and Community Air Monitoring Plan (CAMP) were included as appendices to the Work Plan. The RIWP was approved by the NYSDEC on September 10, 2025.

NYSDEC Brownfield Cleanup Amendment Application, Stevenson Commons B3, 1850 Lafayette Avenue, Bronx, NY, AKRF, Inc., September 2025

In September 2025, AKRF prepared and submitted a BCA Amendment Application to NYSDEC, which requested to expand the original 2.43-acre BCP Site boundary to include the east-adjacent 0.51-acre fire lane, defined as Block 3600, portions of Lot 4 (0.36 acres) and Lot 25 (0.15 acres), resulting in an updated final acreage of 2.94. This request to expand the BCP Site boundary was based on analytical results from AKRF's August 2025 subsurface investigation (summarized above). The BCA Amendment was executed on November 25, 2025.

Remedial Investigation Work Plan Addendum, Stevenson Commons B3, 1850 Lafayette Avenue, Bronx, NY, AKRF, Inc., October 2025

AKRF prepared a RIWP Addendum to properly characterize environmental conditions in the newly added 0.51-acre fire lane, and to perform delineation of elevated total lead/hazardous lead areas in soil across the expanded BCP Site. The RIWP Addendum proposed the following additional scope of work for the RI: the advancement of up to 39 soil borings across the Site with continuous soil sampling and laboratory analysis of a minimum of one soil sample per boring; installation of three permanent, two-inch-diameter groundwater monitoring wells across the Site with the collection and analysis of three groundwater samples; and installation of three temporary soil vapor points with the collection and analysis of three soil vapor samples. The scope of work specified that 15 of the 39 soil borings advanced would be "contingency" borings, where soil samples would be collected but placed on hold for future analysis if further delineation of elevated total lead/hazardous lead is necessary. The RIWP Addendum stated that the work would be performed in accordance with the QAPP, HASP, and CAMP provided in AKRF's July 2025 RIWP. The RIWP Addendum was approved by the NYSDEC on December 3, 2025.

Remedial Investigation Work Plan Addendum, Stevenson Commons B3, 1850 Lafayette Avenue, Bronx, NY, AKRF, Inc., June 2026

AKRF prepared a RIWP Addendum to vertically delineate the extent of fill material across the Site, as directed by NYSDEC during a virtual meeting on June 4, 2026. The RIWP Addendum proposed the advancement of five additional soil borings across the Site to at least five feet below the vertical extent of fill materials (approximately 25 feet bgs), and collection of up to three soil samples from each boring. The work specified that one soil sample will be collected from the two-foot interval directly below the observed fill layer (assumed between 15 and 22.5 feet bgs), with a second and third sample to be collected from the subsequent two-foot intervals until the boring terminus and placed on hold pending analysis of the first sample. The RIWP Addendum stated that work would be performed in accordance with the QAPP, HASP, and CAMP provided in AKRF's July 2025 RIWP. The RIWP Addendum was approved by NYSDEC on June 22, 2026.

Remedial Investigation Report (RIR) Stevenson Commons Building B3, 1850 Lafayette Avenue, Bronx, NY, AKRF, Inc., April 2026, Revised July 2026

An RI was conducted at the Site by AKRF between September 22 and December 31, 2025, on January 30, 2026, and June 23, 2026 pursuant to the July 2025 RIWP and December 2025 and June 2026 RIWP Addendums. A total of 198 soil samples, 9 groundwater samples, and 10 soil vapor samples, were collected for laboratory analysis. The sample collection and laboratory analysis adhered to NYSDEC's requirements for QA/QC, including Category B reporting. A detailed summary of the methodology and findings of the RI are provided in Sections 2.1 and 2.2 above. The RIR was submitted to NYSDEC in July 2026 and approved by NYSDEC on September 3, 2026.

2.4.3 Sanborn Maps

Sanborn (historical fire insurance) maps were reviewed for indications of past uses on or near the Site that may have resulted in the generation of hazardous waste. Specifically, maps from 1898, 1908, 1919, 1928, 1950, 1969, 1977, 1978, 1981, 1983, 1986, 1989, 1991-1993, 1995, 1996, 1998, and 2001-2007 were reviewed. The Sanborn maps indicated that the Site has remained undeveloped since 1898. Filling of a tidal creek with material of unknown origin occurred between 1969 and 1977. All Sanborn maps available for this Site were reviewed prior to the preparation of this RAWP and are included as Appendix D.

2.5 Geological Conditions

The stratigraphy of the Site consists of silt, sand, clay, gravel, brick, and organic matter with trace amounts of asphalt, wood, glass, metal, plastic, and ceramic to depths ranging between approximately 15 and 23 feet below bgs. The fill material is underlain by apparent native silt and sand varying amounts of gravel, clay, and rock fragments between approximately 15 and 30 feet bgs (boring terminus). According to a geotechnical report prepared by HANY in January 2025, the native soils beneath the fill material at the Site consist of either glacial till or Estuarine deposits, above weathered bedrock. The report also indicated that bedrock beneath the Site ranged from approximately 35 ft to 87 ft bgs (el. -15.5 ft to -70 ft); however, refusal on suspected bedrock was also encountered in select borings at depths ranging from approximately 25 to 62 ft bgs (el. -6 ft to -47.5 ft). The bedrock generally consisted of hard, fresh to slightly weathered, gray, fine to coarse-grained schist. A lithological cross section is provided as Figure 8A, and additional cross sections depicting the depth to bedrock, prepared by HANY as part of their January 2025 geotechnical report (refer to Appendix C), are provided as Figures 8B through 8D.

Groundwater beneath the Site was measured between approximately 6.98 and 12.64 feet bgs (el. +9.11 to +5.98 feet NAVD88). The groundwater flow direction as determined by the Site-specific groundwater depths and elevation survey is to the southeast towards the Bronx River (the nearest body of water); however, the groundwater flow direction appears to be influenced by the former tidal creek that was historically present at the Site.

2.6 Contamination Conditions

The data compiled during the RI and previous investigations was compared to the following Standards, Criteria, and Guidance (SCGs) to determine the nature and extent of the contamination area associated with the Site:

- **Soil** – NYSDEC Part 375 UUSCOs, RRSCOs, and the NYSDEC April 2023 guidance values for PFAS Compounds;
- **Groundwater** – NYSDEC Class GA AWQSGVs – TOGS 1.1.1, NYSDEC guidance values for human health for PFOS, PFOA, and 1,4-dioxane; and

- **Soil Vapor** – There are currently no regulatory or published guidance values for soil vapor; soil vapor data was used to assess the potential for exposure to receptors and to help define the nature and extent of contamination at the Site.

2.6.1 Conceptual Model of Site Contamination

The affected media for the existing or potential releases at the Site include soil, groundwater, and soil vapor. Based on an evaluation of the data from the RI and previous investigations, the Site is contaminated with VOCs, SVOCs, PCBs, pesticides, metals, PFOA, and PFOS in soil; SVOCs, PCBs, metals, PFOA, and PFOS in groundwater; and solvent- and petroleum-related VOCs in soil vapor.

Contaminants exceeding the UUSCOs and/or RRSCOs was documented in fill material from surface grade to the groundwater table, and within saturated fill/soil, to at least 10-to- 28 feet bgs across the entire Site. The primary COCs at the Site include PAHs, PCBs, pesticides, and metals (i.e., lead, arsenic, barium and mercury) detected in soil at concentrations above UUSCOs and/or RRSCOs. The concentrations of PAHs and metals in soil appear to be evenly distributed across the Site, with the greatest concentrations of PAHs (up to 260 mg/kg) located within the fill layer on the eastern portion of the Site (boring SB-19) between 4 and 6 feet bgs, and the greatest concentrations of metals [specifically, total lead at concentrations up to 69,600 mg/kg], located in the northern and southeastern portions of the Site (borings SB-04 and SB-05, and SB-21) between 2 and 10 feet bgs. In addition, lead exceeded the EPA Hazardous Waste Criteria (TCLP lead) in various samples within the fill layer throughout the Site at concentrations up to 199 mg/L. The primary COCs at the Site are attributable to the presence of fill material from filling of the historic tidal creek.

During the RI, fill material was observed to approximately 15 and 23 feet below bgs across the Site. The fill material was underlain by apparent native silt and sand varying amounts of gravel, clay, and cobbles between approximately 15 and 30 feet bgs (boring terminus). AKRF collected deeper soil samples within the saturated zone, as directed by NYSDEC, to determine the extent of fill material and to characterize the native soil below. Laboratory analytical results for the saturated samples collected from the boring terminus reported all COCs below their respective UUSCOs, except for nickel in one sample collected from apparent native material (RI-SB-78_26-28_20260623, detected at 68.7 mg/kg), which remained slightly above the UUSCOs of 30 mg/kg. Although nickel at this sample location remained above the UUSCO, the extent of this COC has been determined, as weathered bedrock was observed in the boring terminus, and based on HANY's geotechnical report, the top of bedrock on this portion of the Site is approximately 30 feet bgs.

The metals detected at elevated concentrations in fill/soil (i.e., lead, arsenic, barium, and mercury) were not detected in the dissolved (filtered) groundwater samples above their respective AWQSGVs; the only metals detected above AWQSGVs were iron, sodium, and manganese, which were likely indicative of regional groundwater conditions. However, the SVOCs, naphthalene (18 µg/L in RI-MW-08) and phenol (4 J µg/L in RI-MW-05), and total PCBs (0.47 µg/L in RI-MW-07) were detected above their respective AWQSGVs in one sample each; these exceedances may be attributable to the presence of fill material. Additionally, several PFAS compounds (PFOS up to 24.8 ppt and PFOA up to 41.8 ppt) were detected in one or more of the groundwater samples above their respective guidance values. While 40 VOCs were detected in one or more of the soil vapor samples analyzed, no detections were above the "mitigate" thresholds in the NYSDOH guidance Soil Vapor/Indoor Air matrices.

2.6.2 Description of Areas of Concern

The following environmental issues, summarized in Section 2.3, were considered areas of concern (AOCs) for the RI:

- Fill material, consisting of silt, sand, clay, gravel, brick, and organic matter with trace amounts of asphalt, wood, glass, metal, plastic, and ceramic ranging between approximately 15 and 23 feet bgs. This fill material appears to be associated with historical filling of a tidal creek previously located on Site.
- PAHs and metals in soil/fill above the UUSCOs and/or RRSCOs, and lead above the EPA Hazardous Waste Criteria. These primary COCs appear to be associated with historical filling of a tidal creek previously located on the Site.

2.6.3 Identification of Standards, Criteria and Guidance

The following remedial SCGs apply to the project and are the performance criteria used to determine whether the Remedial Action Objectives (RAOs) have been met:

- Soil – 6 New York Codes, Rules and Regulations (NYCRR) Part 375 – UUSCOs and RRSCOs (December 2025); 6 NYCRR Part 371 - Identification and Listing of Hazardous Wastes; 6 NYCRR Part 376 - Land Disposal Restrictions; 6 NYCRR Part 360 - Solid Waste Management Facilities; and Analysis and Assessment of PFAS Under NYSDEC's Part 375 Remedial Programs (issued in April 2023).
- Groundwater – 6 NYCRR Parts 700-706 - Water Quality Standards (June 1998); TOGS 1.1.1 AWQSGV; Groundwater Effluent Limitations; and NYSDEC April 2023 PFAS Guidance Values.

In addition, the following SCGs are applicable to the remedial program at the Site:

- NYSDEC DER-10 – Technical Guidance for Site Investigation and Remediation (May 2010);
- NYSDEC Draft Brownfield Cleanup Program Guide (May 2004);
- NYSDOH Generic Community Air Monitoring Plan;
- NYSDEC DER-23 – Citizens Participation Handbook for Remedial Programs (January 2010);
- 6 NYCRR Part 372 – Hazardous Waste Manifest System and Related Standards for Generators, Transporters and Facilities (November 1998);
- 6 NYCRR Subpart 374-1 – Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities (November 1998);
- 6 NYCRR Subpart 374-3 – Standards for Universal Waste (November 1998);
- 6 NYCRR Part 375 – Environmental Remediation Programs (December 2025);
- 6 NYCRR Part 612 – Registration of Petroleum Storage Facilities (February 1992);
- 6 NYCRR Part 613 – Handling and Storage of Petroleum (February 1992);
- 6 NYCRR Part 614 – Standards for New and Substantially Modified Petroleum Storage Tanks (February 1992);

- 40 Code of Federal Regulations (CFR) Part 280 – Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks;
- 29 CFR Part 1910.120 – Hazardous Waste Operations and Emergency Response;
- 40 CFR Part 144 – Underground Injection Control Program;
- NYSDEC Sampling, Analysis, and Assessment of PFAS (April 2023);
- NYSDEC DER-31 – Green Remediation (January 2011);
- NYSDOH – Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006, including the updates).

Additional regulations and guidance may be applicable, relevant, and appropriate to the remedial alternatives and will be complied with during implementation of the remedial program. However, the list above is intended to represent the principal SCGs that should be considered in evaluating the remedial alternatives for the Site. SCGs for the Site are provided in Appendix E.

2.6.4 Soil/Fill Contamination

Summary of Soil/Fill Data

One VOC, acetone, was detected in nine samples at concentrations ranging from 0.053 mg/kg to 0.22 mg/kg (RI-SB-23_8-10_20251218), above the UUSCOs. No other VOCs were detected above applicable standards in the collected samples.

PAHs, including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene, were detected in 17 samples at concentrations ranging from 0.52 mg/kg to 3.7 mg/kg [benzo(a)anthracene at RI-SB-22_8-10_20251218], above UUSCOs and/or RRSCOs. PAHs up to 260 mg/kg (phenanthrene at SB-19_4-6_20250827) were identified in the previous subsurface investigations.

Pesticides, including 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, and dieldrin were detected in 21 samples at concentrations ranging from 0.0034 mg/kg to 0.12 mg/kg, above UUSCOs but below RRSCOs.

Total PCBs were detected in five samples at concentrations ranging from 0.11 mg/kg to 0.21 mg/kg, above the UUSCO but below the RRSCO.

Metals, including arsenic (max. 178 mg/kg at RI-SB-24_6-8_20251222), barium (max. 3,170 mg/kg at RI-SB-13_8-10_20250925), cadmium (max. 30.6 mg/kg at RI-SB-04_6-8_20250924), copper (max. 2,660 mg/kg RI-SB-02_13-15_20250924), lead (max. 18,200 mg/kg at RI-SB-26_4-6_20251219), mercury (max. 62.8 mg/kg at RI-SB-23_6-8_20251218), nickel (max. 161 mg/kg at RI-SB-17_2-4_20250923), and zinc (max. 5,790 mg/kg at RI-SB-05_13-15_20250923) were detected in one or more samples at concentrations above the UUSCOS and/or RRSCOs. Lead up to 69,600 mg/kg (SB-05_8-10_20241217) was identified in previous subsurface investigations.

Lead was detected at concentrations above the TCLP EPA Hazardous Waste Criteria of 5 mg/L in 10 samples throughout the Site. TCLP lead up to 199 mg/L (SB-05_8-10_20241217) was identified in previous subsurface investigations.

PFAS compounds were detected in multiple soil samples, with the concentrations of PFOS detected above its UUGV but below its RRGV in nine samples (max. 4.20 ppb) at RI-SB-01_8-10_20250923) and PFOA detected above its UUGV but below its RRGV in 5

samples (max. 1.16 ppb at RI-SB-02_8-10_20250924). The compound 1,4-dioxane was not detected at or above the laboratory reporting limit in the samples analyzed.

Comparison of Soil/Fill with SCGs

The results of the laboratory data collected during the RI and previous investigations indicate that soil/fill is a media of concern. The following COCs were detected above the 6 NYCRR Part 375 UUSCOs in the on-site soil/fill:

- VOCs – acetone (acetone is a common laboratory agent and likely not be reflective of on-site contamination).
- SVOCs – 4-methylphenol, acenaphthene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, and fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, phenol, and pyrene were detected above their UUSCOs and/or RRSCOs.
- Metals – arsenic, barium, beryllium, cadmium, hexavalent chromium, copper, lead, mercury, nickel, selenium, silver, and zinc.
- PCBs – total PCBs.
- Pesticides – 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, and dieldrin.

In addition, PFOS and PFOA were detected above their respective UUGVs, but below their RRGVs.

The following COCs were also detected above the 6 NYCRR Part 375 RRSCOs in the onsite soil/fill:

- SVOCs – benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, and fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene were detected above their UUSCOs and/or RRSCOs.
- Metals – arsenic, barium, cadmium, hexavalent chromium, copper, lead, mercury, and zinc.

All soil laboratory results are presented in Tables 1 through 7. Exceedances of the applicable standards are shown on Figures 3A through 3D, Figures 4A and 4B, and Figure 5.

2.6.5 On-Site and Off-Site Groundwater Contamination

Summary of Groundwater Data

No VOCs or pesticides were detected at concentrations above their AWQSGVs.

Two SVOCs, naphthalene and phenol, were each detected in one sample. Naphthalene was detected in RI-MW-08_20251230 at a concentration of 18 µg/L, above its AWQSGV of 10 µg/L; and phenol was detected in RI-MW-05_20251007 at an estimated concentration of 4 µg/L, above its AWQSGV of 1 µg/L.

Total PCBs were detected in one sample, RI-MW-07_20251230, at a concentration of 0.47 µg/L, above its AWQSGV of 0.09 ug/L.

Fifteen metals [antimony, arsenic, barium, cadmium, chromium, copper, iron, lead, manganese, mercury, selenium, silver, sodium, thallium, and zinc] were detected in the

total metals analysis at concentrations above the AWQSGVs, ranging from an estimated 0.73 µg/L to 7,100,000 µg/L (iron at RI-MW-01_20251008). Only four metals [iron, manganese, selenium, and sodium] were detected in the dissolved metals analysis at concentrations above the AWQSGVs, ranging from 436 µg/L to 234,000 µg/L.

Several PFAS compounds were detected in one or more of the groundwater samples. PFOS (max. 24.8 ppt at RI-MW-06_20251007) and PFOA (max. 41.8 ppt at RI-MW-06_20251007) were both detected in all collected groundwater samples above their respective guidance values. The compound 1,4-dioxane was not detected in the groundwater samples collected.

Comparison of Groundwater with SCGs

The results of the laboratory data collected during the RI and previous investigations indicate that groundwater is a media of concern. The following COCs were detected above the TOGS 1.1.1 AWQSGV in the on-site groundwater:

- SVOCs – naphthalene and phenol.
- PCBs – total PCBs detected in one sample above its AWQSGV.
- Metals (total) – antimony, arsenic, barium, cadmium, chromium, copper, iron, lead, manganese, mercury, selenium, silver, and sodium.
- Metals (dissolved) – iron, manganese, selenium, and sodium.

In addition, PFOA and PFOS were detected above their respective NYSDEC PFAS guidance values; however, based upon historical Site uses and the lack of elevated PFAS concentrations in the soil samples, the detections are likely not related to a large on-site release or other on-site source area.

All groundwater results are presented in Tables 8 through 14. Exceedances of the applicable standards are shown on Figure 6.

2.6.6 On-Site Soil Vapor Contamination

There are currently no regulatory or published guidance values for soil vapor; soil vapor data was used to assess the potential for exposure to receptors and to help define the nature and extent of contamination at the Site.

Thirty-four VOCs were detected in one or more of the samples analyzed. Petroleum-related compounds including BTEX, cyclohexane, n-butane, n-hexane, n-heptane, n-propylbenzene, 1,3,5-trimethylbenzene, and 1,2,4-trimethylbenzene were detected at concentrations up to 2,300 µg/m^3 [butane at RI-SV-09_20251222]. Chlorinated solvent related compounds including PCE, TCE, cis-1,2-DCE, and methylene chloride were detected at concentrations up to 96 µg/m^3 [PCE at RI-SV-06_20250929].

Soil vapor concentrations are presented in Table 15, and VOC detections are shown on Figure 7.

2.7 Environmental and Public Health Assessments

2.7.1 Qualitative Human Health Exposure Assessment

The objective of the Qualitative Human Health Exposure Assessment (QHHEA) is to identify potential receptors and pathways for human exposure to the COCs that are present at, or migrating from, the Site. The identification of exposure pathways describes the route that the COC takes to travel from the source within different environmental media to the

receptor. An identified pathway indicates that the potential for exposure exists; it does not imply that exposures actually occur.

The findings of the RI, as described in the RIR, are sufficient to complete a QHHEA. The QHHEA was performed to determine whether the Site poses an existing or future health hazard to the Site's exposed or potentially exposed population. The sampling data were evaluated to determine whether there is any health risk by characterizing the exposure setting, identifying exposure pathways, and evaluating contaminant fate and transport. This QHHEA was prepared in accordance with Appendix 3B and Section 3.3 (b) 8 of the NYSDEC Draft DER-10 Technical Guidance for Site Investigation and Remediation. The full QHHEA, which describes the environmental media, contaminants of concern, potential routes of exposure, potential receptors, and existence of human health exposure pathways, is included in Section 6.0 of the RIR, which is provided in Appendix C.

The Site currently consists of a vacant field and roadway used for emergency access use only. The Site is largely uncapped, and although access is restricted via locked gate/perimeter fence. Currently, there is no potential exposure pathway from soil, groundwater, or soil vapor intrusion since the Site is vacant and access is restricted. Once redevelopment activities begin, there will be a potential exposure pathway from contaminated surface soil/fill to construction workers as these workers could potentially ingest, inhale, or have dermal contact with any exposed contaminated fill/soil. If future redevelopment plans require dewatering, there will be an additional potential exposure pathway as workers could potentially ingest or have dermal contact with the contaminated groundwater. Without remediation, once redevelopment of the Site has been completed, there will be a potential exposure pathway from ingestion, dermal contact, and/or inhalation of particulates from on-site soils that remain uncapped (i.e., landscaped areas) or inhalation of VOC vapors to adult and child residents, building support and maintenance staff, and visitors through cracks or openings in the foundation of the new building. In addition, there will be a potential exposure pathway from direct contact to soil that remains uncapped (i.e., landscaped areas) at the Site to off-site pedestrians, visitors, cyclists, and adult and child residents. All potential exposure pathways in the future condition will be prevented through implementation of this RAWP.

2.7.2 Fish & Wildlife Remedial Impact Analysis

A Fish and Wildlife Remedial Impact Analysis (FWRIA) was performed during the RI, and no on-site fish and wildlife resources were identified. A copy of the completed Fish and Wildlife Resources Impact Analysis Decision Key is provided as Appendix F.

2.8 Interim Remedial Action

No interim remedial measures (IRMs) are proposed for the Site.

2.9 Remedial Action Objectives

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

2.9.1 Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.

RAOs for Environmental Protection

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

2.9.2 Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater containing contaminant levels exceeding drinking water standards.

2.9.3 Soil Vapor

RAOs for Public Health Protection

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

3.0 WASTE CHARACTERIZATION AND PRE-DESIGN INVESTIGATION

All work in this section will include implementation of the QAPP, provided in Appendix G, and the site-specific HASP and CAMP, provided in Appendix H and Appendix I, respectively, which include on-site and community air monitoring procedures.

3.1 Soil Waste Characterization Sampling

It is estimated that approximately 19,983 tons (or 13,322 cubic yards) of soil/fill will be excavated for remedial purposes, and up to an additional 22,098 tons (or 14,732 cubic yards) of soil/fill will be excavated to support construction of the proposed development. All soil/fill will be disposed of at a facility(ies) licensed to accept such material. Soil pre-characterization sampling will be conducted to characterize the soil for acceptance at properly permitted disposal facilities. The proposed testing will include sampling and laboratory analyses intended to satisfy the analytical requirements of numerous soil disposal/receiving facilities in New Jersey, New York, and Pennsylvania. Typical facilities require one sample per 800 cubic yards of material, consisting of a grab and five-point composite, collected from test pits or borings advanced to varying depths across the Site to characterize the material in place prior to the start of excavation.

In accordance with the typical requirements of disposal facilities permitted to receive historic fill/soil, the grab soil samples will be analyzed for VOCs plus 10 tentatively identified compounds (TICs) by EPA Method 8260 and total petroleum hydrocarbons (TPH) gasoline range organics (GRO) by EPA method 8015D. The five-point composite samples will be analyzed, at a minimum, for SVOCs plus 20 TICs by EPA Method 8270D, diesel range organics (DRO) by EPA Method 8015D, pesticides by EPA Method 8081B, PCBs by EPA Method 8082A, herbicides by EPA 8151A, TAL metals by EPA Methods 6010D and 7471B, trivalent chromium by EPA Method 7196A, hexavalent chromium by EPA Method 7196A, RCRA list of TCLP metals plus copper, nickel, and zinc by EPA Methods 6010D and 7470, New Jersey Extractable Petroleum Hydrocarbons (EPH) non-fractionated by Method NJDEP EPH, total cyanide by EPA Method 9012B, ignitability, corrosivity, and reactivity, and paint filter by EPA Method 9095B (one sample only).

Depending on the acceptance criteria of potential disposal facilities at the time of the excavation, these tests may be modified. Additionally, it is possible that once a specific facility is selected, additional testing and/or laboratory analysis may become necessary.

3.2 Soil Waste Characterization Report

A report will be prepared following completion of the waste characterization sampling event and receipt of the laboratory data. The report will be presented to potential disposal facilities and will include a summary of the Site's environmental history and the sampling methodologies, a sample location map, and copies of the analytical results. Disposal facility acceptance letters will be provided to NYSDEC prior to the start of excavation. A copy of the Soil Pre-characterization Report will be included in the Final Engineering Report (FER).

3.3 Pre-Design Investigation

A Pre-Design Investigation (PDI) will be conducted to further refine the extent of remedial excavation required to achieve a Track 2 remedy within the proposed new building's cellar. As soil samples within a majority of the proposed Track 2 remedy were not collected beneath the water table during the RI, exceedances of RRSCOs were not documented, except for the 900-sf area (metals hotspot) where lead was detected above RRSCOs between 13-15 feet bgs (RI-SB-04_13-15_20250924). As such, additional soil sampling will be conducted to gather the necessary data to

confirm the need for remedial excavation down to 15 feet bgs across the entire proposed Track 2 area. The proposed PDI scope of work (Work Plan) is presented in the sections below:

3.3.1 PDI Soil Sampling Rationale

Four soil borings (PDI-SB-01 through PDI-SB-04) will be advanced within the proposed Track 2 footprint. The rationale for each of the proposed boring locations is described in Table B below.

Table B
PDI Soil Sample Locations and Rationale

Sampling Location	Sampling Intervals (feet bgs)	Location	Rationale For Sampling Location
PDI-SB-01	10-12’	Proposed Track 2 Area northeastern portion	To assess soil quality within the northeastern portion of the proposed Track 2 area to further refine the extent of remedial excavation required to achieve a Track 2 remedy.
	12-14’		
	14-15’		
PDI-SB-02	10-12’	Proposed Track 2 Area western portion	To assess soil quality within the western portion of the proposed Track 2 area to further refine the extent of remedial excavation required to achieve a Track 2 remedy.
	12-14’		
	14-15’		
PDI-SB-03	10-12’	Proposed Track 2 Area eastern portion	To assess soil quality within the eastern portion of the proposed Track 2 area to further refine the extent of remedial excavation required to achieve a Track 2 remedy.
	12-14’		
	14-15’		
PDI-SB-04	10-12’	Proposed Track 2 Area southwestern portion	To assess soil quality within the southwestern portion of the proposed Track 2 area to further refine the extent of remedial excavation required to achieve a Track 2 remedy.
	12-14’		
	14-15’		

3.3.2 PDI Soil Sampling Methodology

Soil borings will be advanced across the proposed Track 2 area of the Site using a Geoprobe® direct-push probe (DPP). The PDI soil boring locations are depicted on Figure 9. At all boring locations, continuous soil cores will be collected in 5-foot long, 2-inch diameter, stainless steel macrocore piston rod samplers fitted within internal, dedicated acetate liners. Soil samples will be inspected by AKRF field personnel for evidence of contamination (e.g., odors, staining, etc.), screened for the presence of VOCs with a calibrated PID, and logged using the modified Burmister soil classification system.

Soil samples will be collected from PDI-SB-01 through PDI-SB-04 every 2 feet between 10 and 15 feet bgs (i.e., 10 to 12 feet, 12 to 14 feet, and 14 to 15 feet bgs). Samples collected from PDI-SB-01 through PDI-SB-04 from 14 to 15 feet will be submitted for laboratory

analysis and the remaining deeper samples (10 to 12 feet and 12 to 14 feet) will be submitted to the laboratory and placed on hold, pending the results of the 14 to 15-foot samples. Soil samples will be submitted to a NYSDOH ELAP-certified laboratory for analysis of PAHs by EPA Method 8270 and RCRA metals by EPA Method 6000/7000 series with Category B deliverables. In addition, one trip blank, field blank, blind duplicate, and MS/MSD samples will be submitted to the laboratory for every 20 parent samples submitted in accordance with the QAPP. Samples will be shipped to the laboratory with appropriate COC documentation.

After each boring is completed, the boreholes will be filled with on-site materials (if not noticeably contaminated) in accordance with Section 3.3(e) of DER-10. Soil cuttings displaying field evidence of contamination will be containerized in properly labeled Department of Transportation (DOT)-approved 55-gallon drums for off-site disposal at a permitted facility. Boreholes that require drill cutting disposal will be filled with bentonite chips (hydrated). Disposable sampling equipment that comes in contact with environmental media will be double bagged and disposed of as municipal trash as non-hazardous refuse.

3.4 Pre-Design Investigation Report

The findings from the PDI will be provided as part of a separate Pre-Design Investigation Report, which will be submitted to NYSDEC and NYSDOH for review and approval.

4.0 DESCRIPTION OF REMEDIAL ACTION PLAN

4.1 Evaluation of Remedial Alternatives

This section includes a review of three remediation alternatives that were considered for the remedy for this Site:

1. *Remedial Alternative 1 - No Further Action* – The Site would remain in its current condition, and no remedial activities would occur.
2. *Remedial Alternative 2 - Track 1 Unrestricted-Use Soil Cleanup Objectives* – The remedy would include soil excavation to depths between 19 and 28 feet bgs, well beyond the depth required for construction/redevelopment, to remove all contaminated soil/fill within the Site boundary to comply with UUSCOs. To facilitate the remedial excavation, site-wide SOE and dewatering would be required.
3. *Remedial Alternative 3 - Dual Track 4/Track 2 Restricted Residential Use Soil Cleanup Objectives* – The remedy would include soil excavation to remove contaminated soil/fill and off-site disposal of 1) approximately 12,855 tons of contaminated soil/fill exceeding RRSCOs within the upper 2 feet bgs across the Site to attain a Track 4 cleanup; and, 2) approximately 6,876 tons of contaminated soil/fill exceeding RRSCOs within the upper 10 feet and approximately 252 tons of contaminated soil/fill exceeding RRSCOs between 10 to 15 feet bgs within the cellar portion of the proposed new building to attain a Track 2 cleanup. Additional excavation to 20 feet bgs in the proposed new building cellar footprint, and up to 4 feet bgs (with localized deeper excavations up to 8 feet bgs for stormwater detention tanks) across remaining portions of the Site would occur as necessary for construction/redevelopment. To facilitate the remedial excavation in the Track 2 area, localized SOE and dewatering would be required. No SOE is anticipated for remedial excavation in the Track 4 area. The dual Track 4/Track 2 cleanup would also include construction of a site cover system, consisting of both landscaped and hardscaped areas, and Engineering Controls (ECs) and Institutional Controls (ICs) would be implemented for long-term management of the Site and to prevent future exposure to residual contamination.

Further details regarding each alternative are included later in this Section.

The purpose of completing the alternatives analysis is to identify, evaluate, and select a remedy to address the contamination identified. The RAOs for soil and groundwater include source removal and treatment to prevent the potential for exposure and contaminant migration. The RAOs for soil vapor include preventing soil vapor from entering the proposed new Site building. The following performance measures were used to complete the evaluation of remedial alternatives:

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

The following remedial SCGs apply to the project and are the performance criteria used to determine if the RAOs have been met.

- Soil – 6 New York Codes, Rules and Regulations (NYCRR) Part 375 – UUSCOs and RRSCOs (December 2025); 6 NYCRR Part 371 - Identification and Listing of Hazardous Wastes; 6 NYCRR Part 376 - Land Disposal Restrictions; 6 NYCRR Part 360 - Solid Waste Management Facilities; and Analysis and Assessment of PFAS Under NYSDEC's Part 375 Remedial Programs (issued in April 2023).
- Groundwater – 6 NYCRR Parts 700-706 - Water Quality Standards (June 1998); TOGS 1.1.1 AWQSGV; Groundwater Effluent Limitations; and NYSDEC April 2023 PFAS Guidance Values.

In addition, the following SCGs are applicable to the remedial program at the Site:

- NYSDEC DER-10 – Technical Guidance for Site Investigation and Remediation (May 2010);
- NYSDEC Draft Brownfield Cleanup Program Guide (May 2004);
- NYSDOH Generic Community Air Monitoring Plan;
- NYSDEC DER-23 – Citizens Participation Handbook for Remedial Programs (January 2010);
- 6 NYCRR Part 372 – Hazardous Waste Manifest System and Related Standards for Generators, Transporters and Facilities (November 1998);
- 6 NYCRR Subpart 374-1 – Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities (November 1998);
- 6 NYCRR Subpart 374-3 – Standards for Universal Waste (November 1998);
- 6 NYCRR Part 375 – Environmental Remediation Programs (December 2025);
- 6 NYCRR Part 612 – Registration of Petroleum Storage Facilities (February 1992);
- 6 NYCRR Part 613 – Handling and Storage of Petroleum (February 1992);
- 6 NYCRR Part 614 – Standards for New and Substantially Modified Petroleum Storage Tanks (February 1992);
- 40 Code of Federal Regulations (CFR) Part 280 – Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks;
- 29 CFR Part 1910.120 – Hazardous Waste Operations and Emergency Response;
- 40 CFR Part 144 – Underground Injection Control Program;
- NYSDEC Sampling, Analysis, and Assessment of PFAS (April 2023);
- NYSDEC DER-31 – Green Remediation (January 2011);
- NYSDOH – Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006, including the updates).

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

Remedial Alternative 1 – No Further Action

This alternative consists of allowing the Site to remain in its current condition. No remedial activities would occur under this remedy.

1. Protection of Human Health and the Environment – Not satisfied; as the on-site soil contamination would not be remediated, and the potential on-site exposure pathways would not be addressed.
2. Compliance with SCGs – Not satisfied; as contaminants would remain in soil (at concentrations that exceed NYSDEC Part 375 UUSCOs and RRSCOs, and NYSDEC UUGVs for PFAS), potentially impacting groundwater.
3. Short-term Effectiveness and Impacts – Not satisfied; as there would be no measures in place to protect workers or the surrounding community from potential exposure during construction as part of Site redevelopment.
4. Long-term Effectiveness and Permanence – Not satisfied; as potential exposure pathways identified in the QHHEA would remain after Site redevelopment are completed.
5. Reduction of Toxicity, Mobility, or Volume of Contaminated Material – Not satisfied; as the contaminated material would remain in place.
6. Implementability – Very feasible, as no personnel or regulatory approvals would be needed.
7. Cost Effectiveness – Very cost effective to proceed with no further action; however, this criterion is not satisfied, as it requires a comparison of cost to long- and short-term effectiveness and toxicity reduction, which would not be achieved.
8. Community Acceptance – Not satisfied, as this alternative will allow the contamination to remain in place.
9. Land Use – Not satisfied. The Site is currently vacant. In its current state, the Site does not contribute to expanding affordable housing in the Bronx, which is a land use goal for the community.
10. Environmental Footprint Analysis – Satisfied; this alternative would be the most green and sustainable option, as it does not require any remediation, therefore, no heavy machinery or trucks would be used.
11. Climate Change Vulnerability Assessment – Satisfied, as this alternative would not require any remediation, therefore, the impact of climate change on the Site and the proposed remedy under this alternative would not change.

Remedial Alternative 2 – Track 1 Unrestricted-Use Soil Cleanup Objectives

Remedial Alternative 2 would include excavation and off-site disposal of all soil/fill above UUSCOs to achieve the RAOs for the Site. Based on the results of the RI, the deepest exceedances of UUSCOs were detected between 19 and 28 feet bgs. Using an average depth of 25 feet bgs to represent the extent of contamination for a Track 1 cleanup at the Site, approximately 118,580 cubic yards or 177,869 tons of soil would need to be excavated and disposed of off-site as part of the remedial action. An excavation of this magnitude would require site-wide perimeter SOE (e.g., soldier piles/lagging or sheet piles) and underpinning of east-adjacent structures, as well as a site-wide dewatering system consisting of numerous well points that would pump on-site groundwater into a settling tank for ultimate discharge to an approved discharge location, to achieve the target excavation depths. Additionally, any tanks discovered during remediation or construction would be properly closed in accordance with applicable regulations.

1. Protection of Human Health and the Environment – Satisfied; soil/fill above UUSCOs would be removed. Removal of all contaminated soil/fill would remove the potential source(s) contributing to any on-site groundwater and soil vapor contamination.
2. Compliance with SCGs – Satisfied; as all soil/fill above UUSCOs would be removed, which should reduce the similar compounds in groundwater such that either the AWQSGVs would be achieved over a longer period of time (to the extent feasible) or asymptotic levels will be achieved over a longer period of time.
3. Short-term Effectiveness and Impacts – Satisfied; this alternative would be effective in reducing soil/fill contamination in the short-term since all contaminated material will be removed from the Site to comply with the UUSCOs. Mitigation measures included in the RAWP, including the HASP and CAMP, would protect and limit exposure of workers and the surrounding community to contaminated soil, dust, and/or soil vapor during the remedial action.
4. Long-term Effectiveness and Permanence – Satisfied; as this alternative would be effective in reducing contamination in the long term by removal of all contaminated soil/fill above the UUSCOs. Removal of the contaminated soil/fill above UUSCOs would reduce contaminant mobility into groundwater and soil vapor.
5. Reduction of Toxicity, Mobility, or Volume of Contaminated Material – Satisfied; as the volume of contaminants at the Site would be significantly reduced. Removal of the contaminated soil/fill above UUSCOs would reduce residual contaminant mobility into groundwater and soil vapor.
6. Implementability – Somewhat feasible; Under this alternative, all soil/fill with concentrations of contaminants detected above UUSCOs would need to be excavated and disposed of off-site to achieve a Track 1 Cleanup. Based on the results of the RI, the deepest exceedances of UUSCOs were between 19 and 28 feet bgs. Using an average depth of 25 feet bgs to represent the extent of contamination for a Track 1 cleanup at the Site, approximately 118,580 cubic yards or 177,869 tons of soil would need to be excavated and disposed of off-site as part of the remedial action. The equipment and personnel needed to perform the proposed remedial action are readily available; however, excavation at this large of a scale would require additional considerations, including large-scale dewatering and shoring, sheeting, and underpinning for the existing roadway and neighboring properties. Successful implementation of the remedial action would require extremely careful planning and coordination amongst the project team, and the excavation would likely not be performed in a reasonable timeframe.
7. Cost Effectiveness – Not cost effective. Under this alternative, all soil/fill with concentrations of contaminants detected above UUSCOs would need to be excavated and disposed of off-site to achieve a Track 1 cleanup. During the RI, the deepest exceedances of UUSCOs were detected across the Site between 19 and 28 feet bgs. Using an average depth of 25 feet bgs to represent the extent of contamination for a Track 1 cleanup at the Site, approximately 118,580 cubic yards or 177,869 tons of soil would need to be excavated and disposed of off-site as part of the remedial action. Using an estimated rate of $70 per ton, soil disposal is estimated to cost $12,450,830. Approximately 111,704 cubic yards of clean fill would then need to be imported to establish Site grades. Using a market rate of $50 per cubic yard, this equals approximately $5,585,200. Inspection, oversight, and reporting associated with this alternative are estimated at $1,800,000 (approximately 10% of total costs). To perform an excavation of this magnitude, large-scale dewatering and shoring, sheeting, and underpinning would have to be performed for the existing roadway and neighboring properties, with SOE costs estimated at $2,650,000 and dewatering costs estimated at $1,300,000. The cost for this alternative was estimated by

combining these figures for an approximate total of between $23,786,030. This assumes the remedial work would be performed concurrently with the planned Site development.

8. Community Acceptance – Satisfied; this alternative would be protective of human health and the environment.
9. Land use – Satisfied; this alternative would result in the cleanup of the Site for unrestricted use, which would allow for redevelopment of the Site.
10. Environmental Footprint Analysis – Partially satisfied; this alternative would incorporate green and sustainable remediation principles; however, since a substantial volume of soil/fill would need to be removed from the Site, numerous truck trips would be required for soil disposal and import, and there would be a very long period during which heavy equipment would be used to complete the work. The environmental footprint of a Track 1 cleanup was evaluated, and it is assumed that this alternative would result in substantial fuel usage, and very high energy consumption and co-pollutant emissions during the extended construction duration.
11. Climate Change Vulnerability Assessment – Satisfied, the impact of climate change on the Site and the proposed remedy under this alternative was evaluated. Potential vulnerabilities associated with extreme weather events (e.g., hurricanes, lightning, heat stress and drought), flooding, and sea level rise were identified, and this alternative would incorporate measures to minimize the impact of climate change on potential identified vulnerabilities. The remedy is not expected to be affected by the projected increase in temperature, precipitation levels, or sea level rise. Additionally, erosion and sediment controls that will be implemented during construction will be resilient to the current rainfall levels.

Remedial Alternative 3 – Dual Track 4/Track 2 Restricted Residential Use Soil Cleanup Objectives

Remedial Alternative 3 would include excavation and off-site disposal 1) approximately 12,855 tons of contaminated soil/fill exceeding RRSCOs within the upper 2 feet bgs across the Site (minus proposed new building cellar footprint) to attain a Track 4 cleanup; and, 2) approximately 6,876 tons of contaminated soil/fill exceeding RRSCOs within the upper 10 feet and approximately 252 tons of contaminated soil/fill exceeding RRSCOs between 10 to 15 feet bgs within the cellar portion of the proposed new building to attain a Track 2 cleanup. Additional excavation to 20 feet bgs in the proposed new building cellar footprint, and up to 4 feet bgs (with localized deeper excavations up to 8 feet bgs for stormwater detention tanks) across remaining portions of the Site would occur as necessary for construction/redevelopment. The excavation would require localized SOE in the Track 2 area, consisting of a combination of sloping (i.e., 1H:1V) and installation of sheet piles. No SOE is currently anticipated to facilitate remedial excavation in the Track 4 area. The dewatering system would include multiple well points installed within the building cellar excavation (Track 2 area) that would pump on-site groundwater into a settling tank for ultimate discharge to an approved discharge location. Additionally, any tanks discovered during remediation or construction would be properly closed in accordance with applicable regulations.

This alternative would also include construction of a site cover system within the Track 4 portion of the Site. The site cover system would include a minimum of 2 feet of clean fill material placed in landscaped and permeable areas underlain by a demarcation barrier; (2) a minimum 12-inch-thick concrete building foundation underlain by a minimum 20-mil vapor barrier membrane, which doubles as a demarcation barrier, in areas within the new building footprint; and (3) paved surfaces in roadway and sidewalk areas with necessary structural supports to reduce settlement.

The dual Track 4/Track 2 remedy would allow for Engineering Controls (ECs) and Institutional Controls (ICs) to be implemented for long-term management of the Site and to prevent future

exposure to residual contamination. As such, an Environmental Easement (EE) would be recorded for the Site to implement appropriate ECs and ICs, and a Site-specific Site Management Plan (SMP) would be prepared to specify future soil handling requirements, include management and inspection of the ECs that may be necessary, maintenance of Site access controls, Department notification, and land use restrictions. Periodic inspection and reporting would be required to verify that the restrictions and requirements included in the EE remain in place and continue to be effective.

1. Protection of Human Health and the Environment – Satisfied; as any residual contamination would be covered by a site cover system. Additionally, ECs and ICs would be implemented to prevent future exposure to any residual contamination.
2. Compliance with SCGs – Satisfied; as RAOs would be achieved by removing or preventing the potential for human and environmental exposures to chemical constituents above Track 4/2 RRSCOs.
3. Short-term Effectiveness and Impacts – Satisfied; as this alternative would be effective in reducing soil/fill contamination in the short-term since some contaminated material will be removed from the Site to comply with the Track 4/2 RRSCOs. Mitigation measures included in this RAWP, including the HASP and CAMP, would protect and limit exposure of workers and the surrounding community to contaminated soil, dust, and/or soil vapor during the remedial action.
4. Long-term Effectiveness and Permanence – Satisfied; as contaminated material would be removed from the Site to comply with the Track 4/2 RRSCOs, and the implementation of ECs (Site cover system) and Institutional Controls (ICs) would address residual contamination and limit the exposure of future occupants to contaminated soil in the long term, thus achieving the RAOs.
5. Reduction of Toxicity, Mobility, or Volume of Contaminated Material – Satisfied; as the volume of contaminants at the Site would be reduced. Removal of the contaminated soil/fill above the Track 4/2 RRSCOs would reduce contaminant mobility into groundwater and soil vapor, and the site cover system would prevent contaminated soil vapor from migrating into the proposed building.
6. Implementability – Feasible; as excavation and off-site disposal of contaminated soil/fill above the Track 4/2 RRSCOs could be completed in a relatively short timeframe. The equipment and personnel needed to perform the proposed remedial actions are readily available, and the excavation could be performed concurrently with the proposed redevelopment.
7. Cost Effectiveness – Cost effective; this alternative is cost-effective. Based on data gathered to date, it is estimated that approximately 19,983 tons (or 13,322 cubic yards) of soil will be excavated and disposed of off-site as part of the remedial action. Using an estimated range from $57 to $651 per ton (based on preliminary costs for disposal of multiple hazardous and non-hazardous waste streams, provided by the soil broker), soil disposal (including contractor markups) is estimated to cost approximately $2,733,118, and associated excavation contractor and mobilization costs are estimated to be $1,375,363. Approximately 8,569 cubic yards of clean fill will be needed to install the Site cover system. Using a market rate of $50 per cubic yard of clean fill, backfill import costs (including contractor markups) would equal approximately $471,295. SOE for remedial excavation is estimated to cost $103,860 and localized dewatering is estimated to be $219,950. Although there are no known registered tanks at the Site, an allowance of $15,000 is included to account for any unknown/unregistered tanks encountered during excavation. The concrete building slab as part of the Site cover is estimated to cost $1,007,250, and the exterior hardscaping cover system (and supporting load transfer platforms/rigid inclusions) is estimated to cost $2,476,425. This alternative assumes the

remedial work would be performed concurrently with the planned redevelopment of the Site. Inspection, oversight, reporting, and engineering design services is estimated to be $588,500, and laboratory analysis and third-party data validation for waste characterization samples, endpoint samples, and import/reuse samples is estimated to cost $258,500. Finally, Site Management inspection/reporting for a minimum duration of five years is estimated to cost $60,000. The total estimated cost for Remedial Alternative 3 is $9,309,261.

8. Community Acceptance – Satisfied; this alternative would be protective of human health and the environment.
9. Land use – Satisfied; this alternative would result in the cleanup of the Site for restricted-residential use, which would allow for redevelopment of the Site.
10. Environmental Footprint Analysis – Satisfied; as this alternative would incorporate more green and sustainable remediation principles compared to a Track 1 cleanup, by requiring fewer truck trips for soil disposal and import, and a shorter period during which heavy equipment is used to complete the work. An environmental footprint analysis for this alternative was performed in accordance with the NYSDEC guidelines, the methodologies used in the EPA SEFA tool, and the requirements of the CLCPA, and is provided in Appendix J. Water consumption, greenhouse gas emissions, renewable and non-renewable energy use, waste reduction, and material use were estimated, and goals for the project related to these green and sustainable remediation metrics, as well as for minimizing community impacts, protecting habitats and natural and cultural resources, and promoting environmental justice, were incorporated. A dual Track 4/2 cleanup would result in less fuel usage and waste, in comparison to the Track 1 alternative; however, there would be additional (minimal) fuel usage/waste associated with Site Management activities (i.e., inspections) for a minimum of five years following remediation. Additionally, the shorter construction duration for dual Track 4/2 indicates that there would be less energy consumption and fewer co-pollutant emissions.
11. Climate Change Vulnerability Assessment – Satisfied, the impact of climate change on the Site and the proposed remedy under this alternative was evaluated. Potential vulnerabilities associated with extreme weather events (e.g., hurricanes, lightning, heat stress and drought), flooding, and sea level rise were identified, and this alternative would incorporate measures to minimize the impact of climate change on potential identified vulnerabilities. The remedy is not expected to be affected by the projected increase in temperature, precipitation levels, or sea level rise. Additionally, erosion and sediment controls that will be implemented during construction will be resilient to the current rainfall levels. The climate vulnerability assessment for this alternative is included in Appendix K.

4.2 Selection of the Preferred Remedy

Remedial Alternative 1 (no action) allows the Site to remain in its current condition. This remedial alternative was reviewed and found to be unacceptable, since it would not achieve the RAOs. Therefore, this remedial alternative is not considered a feasible solution.

Remedial Alternative 2 (Track 1) was reviewed and found to be unacceptable, since it is not cost-effective, and would be very difficult to implement. Therefore, this remedial alternative is not considered a feasible solution.

Remedial Alternative 3 (Dual Track 4/Track 2) achieves the RAOs while being cost-effective. After careful consideration with respect to the evaluation criteria listed, Remedial Alternative 3 is determined to be the preferred remedy, since it adequately addresses the subsurface contamination with the most cost-effective and implementable approach, and would have a much lower environmental footprint compared to Alternative 2.

4.2.1 Zoning

The current zoning for the Site is R6 (residential). The proposed use of the Site is consistent with the objectives of the zoning district.

4.2.2 Applicable Comprehensive Community Master Plans or Land Use Plans

The proposed redevelopment plan is consistent with existing zoning and land use patterns in the surrounding area, and there are no existing neighborhood plans or policies in effect that would preclude the proposed redevelopment.

4.2.3 Surrounding Property Uses

The Site is bounded to the north by parking lots and tennis courts associated with the existing Stevenson Commons apartment complex, followed by Lafayette Avenue; to the east by the existing Stevenson Commons apartment complex, followed by White Plains Road; to the south by the Stevenson Commons Building B4 and B5 project sites, followed by Seward Avenue; and to the west by Thieriot Avenue, followed by residential buildings. The greater surrounding area is primarily residential with some commercial and institutional uses.

4.2.4 Citizen Participation

A Citizen Participation Plan (CPP) was prepared by AKRF in July 2025 as part of the BCP process, and the CPP was approved by NYSDEC in September 2025. The CPP provides for ongoing updates to the public regarding the investigation and remediation and allows for involvement regarding the environmental investigation and cleanup of the Site; the contemplated remedy complies with the CPP. The NYSDEC-approved CPP is included as Appendix L.

4.2.5 Environmental Justice Concerns

The Site is located in an Environmental Justice Area. Environmental justice is defined as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

Environmental justice efforts focus on improving the environment in communities, specifically minority and low-income communities, and addressing disproportionate adverse environmental impacts that may exist in those communities. The selected remedy would address any environmental justice concerns.

4.2.6 Land Use Designations

There are no federal or state land use designations.

4.2.7 Population Growth Patterns

The population in this neighborhood is expected to increase in the future. This project will provide necessary affordable housing units to help meet that need.

4.2.8 Accessibility to Existing Infrastructure

The Site is located within walking distance of the Bx5, Bx36, and Bx39 public bus stops. The Bruckner Expressway (I-278) located three blocks north of the Site. The surrounding area is supplied with municipal sewers and water, electricity, telephone, natural gas, and fiber-optic lines.

4.2.9 Proximity to Cultural Resources

There are no cultural resources located adjacent to the Site.

4.2.10 Proximity to Natural Resources

Nearby parks and natural resources include Soundview Park, located to the southwest, approximately 0.5 miles from the Site.

4.2.11 Off-Site Groundwater Impacts

Regional groundwater flows in a southeasterly direction towards the Bronx River (the nearest body of water). The results of the RI documented minimal impacts to groundwater [i.e., two PAHs and total PCBs each in one sample, and PFAS compounds]. Groundwater is not used as a source of drinking water in the Bronx.

4.2.12 Proximity to Floodplains

The Site is not located within the 100- or 500-year floodplain.

4.2.13 Geography and Geology of the Site

Based on the RI and previous investigations performed for the Site, stratigraphy of the Site consisted of silt, sand, clay, gravel, brick, and organic matter with trace amounts of asphalt, wood, glass, metal, plastic, and ceramic down to between approximately 15 and 23 feet bgs. The fill material was underlain by apparent native silt and sand varying amounts of gravel, clay, and cobbles between approximately 15 and 30 feet bgs (boring terminus). According to a geotechnical report prepared by Haley & Aldrich of New York (HANY) in January 2025, native soil beneath the fill material at the Site consist of either glacial till or Estuarine deposits, above weathered bedrock. The report also indicated that bedrock beneath the Site ranged from approximately 35 ft to 87 ft bgs (el. -15.5 ft to -70 ft); however, refusal on suspected bedrock was also encountered in select borings at depths ranging from approximately 25 to 62 ft bgs (el. -6 ft to -47.5 ft). The bedrock generally consisted of hard, fresh to slightly weathered, gray, fine to coarse-grained schist. A lithological cross section is provided as Figure 8A, and additional cross sections depicting the depth to bedrock, prepared by HANY as part of their January 2025 geotechnical report (refer to Appendix C) are provided as Figures 8B through 8D.

4.2.14 Current Institutional Controls

Currently, there are no easements or ICs on the Site that would impact remediation.

4.3 Summary of Selected Remedial Actions

Remedial activities will be performed at the Site in accordance with this RAWP and the Department-issued Decision Document (DD). All deviations from this RAWP and/or the DD will be promptly reported to NYSDEC for approval and will be fully explained in the Final Engineering Report (FER). The proposed remedy is a dual Track 4/Track 2 Restricted Residential cleanup. The selected remedial actions include:

1. A remedial program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows:

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals;
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development; and
- Additionally, to incorporate green remediation principles and techniques to the extent feasible in the future development at this site, any future on-site buildings shall be constructed, at a minimum, to meet the 2020 Energy Conservation Construction Code of New York (or most recent edition) to improve energy efficiency as an element of construction.

As part of the remedial program, to evaluate the remedy with respect to green and sustainable remediation principles, an environmental footprint analysis will be completed. The environmental footprint analysis will be completed using an accepted environmental footprint analysis calculator such as SEFA (Spreadsheets for Environmental Footprint Analysis, USEPA), SiteWiseTM (available in the Sustainable Remediation Forum [SURF] library) or similar Department accepted tool. Water consumption, greenhouse gas emissions, renewable and non-renewable energy use, waste reduction and material use will be estimated, and goals for the project related to these green and sustainable remediation metrics, as well as for minimizing community impacts, protecting habitats and natural and cultural resources, and promoting environmental justice, will be incorporated into the remedial program, as appropriate. The project will include detailed requirements to achieve the green and sustainable remediation goals. Further, progress with respect to green and sustainable remediation metrics will be tracked during implementation of the remedial action and reported in the FER, including a comparison to the goals established during the remedial program.

Additionally, the remedial program will include a climate change vulnerability assessment, to evaluate the impact of climate change on the project site and the proposed remedy. Potential vulnerabilities associated with extreme weather events (e.g., hurricanes, lightning, heat stress and drought), flooding, and sea level rise will be identified, and the remedial program will incorporate measures to minimize the impact of climate change on potential identified vulnerabilities.

2. Excavation and off-site disposal of 1) approximately 12,855 tons of contaminated soil/fill exceeding Restricted Residential Soil Cleanup Objectives (RRSCOs) within the upper 2 feet bgs across the Site (minus proposed new building cellar footprint) to attain a Track 4 cleanup; and, 2) approximately 6,876 tons of contaminated soil/fill exceeding RRSCOs within the upper 10 feet and approximately 252 tons of contaminated soil/fill exceeding RRSCOs between 10 to 15 feet bgs within the cellar portion of the proposed new building to attain a Track 2 cleanup.

3. Any unknown/unregistered tanks and associated piping, other structures associated with a source of contamination, and/or grossly contaminated soil/fill, if encountered, will be removed in accordance with applicable regulations.
4. Decommissioning of existing groundwater monitoring wells in accordance with NYSDEC CP-43.
5. A Site-specific HASP and CAMP will be implemented during all ground-intrusive Site activities, which includes soil disturbance and loading activities, to monitor levels of VOCs and airborne particulates within the active work zones and around the perimeter of the Site.
6. Screening for indications of contamination (by visual means, odor, and monitoring with a PID) of soil during all ground-intrusive Site work, including soil disturbance and loading activities.
7. Characterization and off-site disposal of all materials removed from the Site in accordance with all federal, state, and local rules and regulations for handling, transport, and disposal. Waste disposal facilities will be selected based on the data collected to date and the results of the planned waste classification sampling.
8. Installation of SOE necessary to enable excavation of contaminated soil/fill within the Track 2 portion of the Site. SOE in the Track 2 area will consist of a combination of sloping (i.e., 1H:1V) and sheet piles around the perimeter of the excavation. No SOE is currently anticipated to facilitate remedial excavation in the Track 4 area. SOE installation will comply with applicable local and state-controlled inspections.
9. Dewatering to enable remedial excavation in the Track 2 area that extends below the water table (approximately 8 to 13 feet below grade). Dewatering system design plans have not yet been developed for the Site; however, based on preliminary information provided by the contractor, the system will consist of multiple well points installed within the building cellar excavation (Track 2 area) that will pump on-site groundwater into a settling tank for ultimate discharge to an approved discharge location. Dewatering will be conducted in compliance with city, state, and federal laws and regulations. Extracted groundwater will be either containerized for off-site licensed and permitted disposal or will be treated under a permit from New York City Department of Environmental Protection (NYCDEP) to meet pre-treatment requirements prior to discharge to the sewer system.
10. Importation of clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) to raise the Site grade after remedial excavation, construct the Site cover, and as needed for use as backfill. Fill material that does not exceed RRSCOs for any compound may be used on-site to backfill the Site. Soil exceeding the UUSCO for 1,4-dioxane will not be imported, per DER-10: Appendix 5 - Allowable Constituent Levels for Imported Fill or Soil, Subdivision 5.4(e). If PFOA or PFOS are detected in any sample at or above the RRGV, it will also be tested by the Synthetic Precipitation Leaching Procedure (SPLP). If the SPLP concentrations of PFOA and PFOS are at or above 10 ppt, the soil will not be reused or imported. Analytical results will be compared to Table 375-6.8(b) of 6 NYCRR Part 375 and submitted to NYSDEC via a *Request to Import/Reuse Soil or Fill* form for review and approval prior to importation and placement on-site. All imported soil or soil proposed for reuse requires NYSDEC review prior to on-site placement.
11. Collection and laboratory analysis of post-excavation endpoint samples at a frequency of one sample for every 900 sf of bottom area, and sidewall samples at a frequency of one sample for every 30 linear feet of sidewall across the Site to document achievement of the remedy and/or remaining concentrations of contaminants in soil/fill after excavation is complete. Endpoint sampling will occur around any hotspots and/or additional AOCs identified during the remedial

action based on the sampling frequency outlined in Section 5.4 of DER-10. Bottom sample collection will be conducted starting at the remedial depths noted on Figure 9, and will continue in two-foot intervals until RRSCOs are reached or bedrock is encountered unless the results of the PDI indicate exceedances of RRSCOs extend to 15 feet bgs. Excavation will not pause at the specified remedial depths for sample results, but analysis of deeper endpoint samples will only occur if RRSCOs are not achieved at the initial remedial depth; the final remedial depth will be at the depth of sample that meets the RRSCOs unless the results of the PDI indicate exceedances of RRSCOs extends to 15 feet bgs. In the event the PDI indicates exceedances of RRSCOs to 15 feet bgs, bottom endpoint samples will be collected from 15 feet bgs only.

12. Construction and maintenance of a Site cover within the Track 4 portion of the Site to prevent human exposure to residual contaminants in soil/fill remaining under the Site, which will consist of: (1) a minimum of 2 feet of clean fill material placed in landscaped and permeable areas underlain by a demarcation barrier; (2) a minimum 12-inch-thick concrete building foundation underlain by a minimum 20-mil vapor barrier membrane, which doubles as a demarcation barrier, in areas within the new building footprint; and (3) paved surfaces in roadway and sidewalk areas with necessary structural supports (i.e., rigid inclusions) to reduce settlement.
13. Recording of an Environmental Easement (EE) with the New York City Register to prevent future exposure to any residual contamination remaining at the Site. The EE will: require the remedial parties/Site owners to complete and submit a periodic certification of ECs and ICs to the Department in accordance with Part 375-1.8 (h)(3); allow the use and development of the Site for restricted residential use as defined by Part 375-1.8(g), although land use is subject to local zoning laws; restrict the use of groundwater as a source of potable or process water without necessary water quality treatment, as determined by NYSDOH; and require compliance with a Site-specific NYSDEC-approved SMP.
14. Publication of an SMP for long term management of residual contamination as required by the EE including plans for: (1) ECs and ICs, (2) monitoring, (3) operation and maintenance, and (4) reporting. Inclusion of soil management provisions in the SMP, including an Excavation Work Plan.
15. All responsibilities associated with the RAWP, including permitting requirements and pretreatment requirements, will be addressed in accordance with all applicable Federal, State and local rules and regulations

5.0 REMEDIAL ACTION PROGRAM

5.1 Governing Documents

5.1.1 Standards, Criteria, and Guidance (SCGs)

The SCGs, summarized in Section 2.6.3 and provided in Appendix E, that apply to the project and will be used to determine whether the RAOs have been met.

5.1.2 Green and Sustainable Remediation and Climate Resiliency

As part of the remedial design program, the remedy was evaluated with respect to green and sustainable remediation principles via an environmental footprint analysis. After the remedial program is completed, the environmental footprint analysis will be updated using a NYSDEC-accepted environmental footprint analysis calculator EPA Spreadsheets for Environmental Footprint Analysis (SEFA), SiteWise™ or similar NYSDEC-accepted tool. Water consumption, greenhouse gas emissions, renewable and non-renewable energy use, waste reduction and material use were estimated, and goals for the project related to these green and sustainable remediation metrics, as well as for minimizing community impacts, protecting habitats and natural and cultural resources, and promoting environmental justice, were incorporated into the remedial design program, as appropriate. The project design specifications include detailed requirements to achieve the green and sustainable remediation goals. An environmental footprint analysis of the proposed remedy is provided as Appendix J.

Further, progress with respect to green and sustainable remediation metrics will be tracked during implementation of the remedial action and reported in the FER, including a comparison to the goals established during the remedial design program. Additionally, the remedial design program included a climate change vulnerability assessment to evaluate the impact of climate change on the project site and the proposed remedy. Any potential vulnerabilities associated with extreme weather events (e.g., hurricanes, lightning, heat stress and drought), flooding, and sea level rise were identified, and the remedial design program will incorporate measures to minimize the impact of climate change on potential identified vulnerabilities. A climate vulnerability assessment is provided as Attachment J.

5.1.3 Site Specific Health & Safety Plan (HASP)

A Site-specific HASP has been prepared for the Site and is included as Appendix H. All remedial work performed under this RAWP will be in compliance with governmental requirements, including Site and worker safety requirements mandated by the federal Occupational Health and Safety Administration (OSHA). Community air monitoring will be conducted during all intrusive Site activities in compliance with the NYSDOH Generic CAMP and the Site-Specific CAMP (included in Appendix I). Work zone monitoring will be performed for the health and safety of workers in accordance with action levels and guidance outlined in the HASP.

The Volunteer and associated parties preparing the remedial documents submitted to the State and those performing the construction work, are completely responsible for the preparation of an appropriate HASP and for the appropriate performance of work according to that plan and applicable laws.

The HASP and requirements defined in this RAWP pertain to all remedial and invasive work performed at the Site until the issuance of a Certificate of Completion (CoC).

Resumes of key AKRF personnel involved in the RA are included in Appendix M.

Confined space entry will comply with all OSHA requirements to address the potential risk posed by combustible and toxic gases.

5.1.4 Quality Assurance Project Plan (QAPP)

Any sampling associated with this project will be conducted in accordance with the QAPP included in Appendix G, which details field screening and sampling methodologies, and sample submittal and reporting requirements. The QAPP includes the project team responsible for implementing the remediation requirements and provisions set forth in this RAWP.

5.1.5 Construction Quality Assurance Plan (CQAP)

The CQAP, provided as Appendix N, provides a detailed description of the observation and testing activities that will be used to monitor construction quality and confirm that remedial construction is in conformance with the remediation objectives and specifications.

5.1.6 Soil/Materials Management Plan (SMMP)

An SMMP is included in Section 6.4 of this document. The SMMP includes detailed plans for managing all soils/materials that are disturbed at the Site, including excavation, handling, storage, transport, and disposal. It also includes all procedures that will be applied to ensure effective, nuisance-free performance in compliance with all applicable federal, state, and local laws and regulations.

5.1.7 Storm-Water Pollution Prevention Plan (SWPPP)

Based on the size of disturbance required as part of the proposed redevelopment plan, a SWPPP is required and will be submitted to the New York City Department of Environmental Protection (NYCDEP) in accordance with New York City Stormwater regulations. Erosion and sediment controls implemented at the Site will conform to requirements presented in the New York State Guidelines for Urban Erosion and Sediment Control Erosion. Sediment control measures will be installed at the Site prior to conducting any ground-intrusive work. These measures will be installed according to all applicable or relevant and appropriate federal, state, and local laws. The measures will provide for abatement and control of environmental pollution arising from proposed remediation and construction activities. The control measures will include procedures for perimeter Site controls, stabilized construction pads at each construction entrance, equipment decontamination, drainage inlet protection, and dust suppression. The Remedial Engineer (RE), or her representative, will conduct routine inspections; any repairs and/or maintenance of control measures will be completed in a timely fashion to maintain the controls in proper working order. All vehicles will be inspected to ensure that no soil adheres to their wheels or undercarriage prior to leaving the Site. Any situations involving material spilled in transit or mud and dust tracked offsite will be remedied. The access routes will be inspected for road conditions, overhead clearance, and weight restrictions.

Upon approval of the SWPPP by NYCDEP, it will be reviewed by the RE, and a copy will be submitted to NYSDEC prior to start of remedial excavation.

5.1.8 Community Air Monitoring Plan (CAMP)

Community air monitoring will be conducted during all intrusive Site activities in compliance with the NYSDOH Generic CAMP and the Site-Specific CAMP, provided in Appendix I. A minimum of two CAMP stations (upwind and downwind) will be utilized

during all remedial activities. The proposed CAMP station locations are shown on Figure 12.

Additionally, Special Requirements CAMP (SRCAMP) will be implemented during all ground-intrusive Site activities within 20 feet of occupied structures and/or potentially exposed populations. SRCAMP will be performed via fixed stations placed at the location of the nearest potentially exposed individuals (e.g., public walkway, building wall, etc.) and/or ventilation system intakes of the occupied structures. Further information is provided in Appendix I. The location and number of fixed stations will be determined in consultation with NYSDEC and NYSDOH prior to the start of work; however, it is estimated that one SRCAMP fix station will be located on the eastern boundary of the Site, adjacent to the east-adjacent residential building.

CAMP data summarized will be provided to NYSDEC and NYSDOH in the daily reports, and CAMP action level exceedances will be reported to NYSDEC and NYSDOH within 24 hours.

5.1.9 Contractors Site Operations Plan (SOP)

The Remedial Engineer (RE), or her designated representative, has or will review all plans and submittals for this remedial project (including those listed above and contractor and sub-contractor document submittals) to confirm that they are in compliance with this RAWP. The RE is responsible to ensure that all later document submittals for this remedial project, including contractor and sub-contractor document submittals, are in compliance with this RAWP. All remedial documents will be submitted to NYSDEC and NYSDOH in a timely manner and prior to the start of work.

5.1.10 Citizen Participation Plan

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

No changes will be made to approved Fact Sheets authorized for release by NYSDEC without written consent of the NYSDEC. No other information, such as brochures and flyers, will be included with the Fact Sheet mailing.

The approved CPP for this project is attached in Appendix L. Document repositories have been established at the following locations listed in Table B and contain all applicable project documents:

Table C
Document Repositories

Document Repository	Hours of Operation
Soundview Library 660 Soundview Library Bronx, NY 10473 **Phone:** (718) 589-0880	Monday through Thursday: 10 AM–6 PM Friday & Saturday: 10 AM–5 PM Sunday: Closed
Bronx Community Board District 9 1967 Turnbull Avenue, Room 201 Bronx, NY 10473 **Attn:** Mohammed Mujumder, Chairperson Land, Zoning, Planning & Economic Development Committee Chairperson: Mitchell Halpern District Manager: William Rivera **Phone:** (718) 823-3034 **Email:** bx09@cb.nyc.gov	Constituent Hours: Monday-Friday, 9 AM–2 PM Monday through Friday: 9 AM–5 PM
NYSDEC 47-40 21st Street Long Island City, NY 11101 DECInfo Locator Site: https://extapps.dec.ny.gov/data/DecDocs/C203189/ **Attn:** Marlen Salazar **Phone:** (718) 482-7129	Monday-Friday: 9 AM–5 PM (call for appointment)

5.2 General Remedial Construction Information

5.2.1 Project Organization

A list of the personnel responsible for implementation of the RAWP is presented in Table C.

Table D
Project Organization

Organization	Responsibility	Name
NYSDEC	Project Manager	Marlen Salazar
NYSDOH	Project Manager	Ryan Minzloff
Stevenson B3 LLC	Volunteer Representatives	Sarah Pizer Alejandra Ramos
AKRF	Remedial Engineer	Rebecca A. Kinal, P.E.
	QA/QC Manager	Deborah Shapiro, QEP
	Project Manager	Tim Larigan
	Project Manager Alternate	Mark Jepsen
	Site Safety Officer	Jonas Peters

Resumes of key AKRF personnel involved in the RA are included in Attachment K.

5.2.2 Remedial Engineer

The RE for this project will be Rebecca Kinal. The RE is a registered professional engineer licensed by the State of New York. The RE will have primary direct responsibility for implementation of the remedial program for the Stevenson Commons B3 Site (NYSDEC

BCA Index No. C203189-06-25, Site No. C203189). The RE will certify in the FER that the remedial activities were observed by qualified environmental professionals under her supervision and that the remediation requirements set forth in the RAWP and any other relevant provisions of ECL 27-1419 have been achieved in full conformance with that Plan. Other RE certification requirements are listed later in this RAWP.

The RE, or designated personnel under her supervision, will coordinate the work of other contractors and subcontractors involved in all aspects of remedial construction, including soil excavation, stockpiling, characterization, removal and disposal, air monitoring, emergency spill response services, import of backfill material, and management of waste transport and disposal. The RE will be responsible for all appropriate communication with NYSDEC and NYSDOH.

The RE, or designated personnel under her supervision, will review all pre-remedial plans submitted by contractors for compliance with this RAWP and will certify compliance in the FER.

The RE will provide the certifications listed in Section 11.1 in the FER.

5.2.3 Remedial Action Construction Schedule

A schedule for performance of the remedial work is included in Section 12.0.

5.2.4 Work Hours

The hours for operation of remedial construction will conform to the New York City Department of Buildings (NYCDOB) construction code requirements, construction permits, or according to specific variances issued by the NYCDOB. NYSDEC will be notified by the Volunteer of any variances issued by the NYCDOB. NYSDEC reserves the right to deny alternate remedial construction hours.

5.2.5 Site Security and Traffic Control

The Site will be completely closed from public access by using secured construction fencing. No unauthorized personnel will be able to access the Site. During off hours, the Site will be completely enclosed within a locked gate.

It is not anticipated that traffic will be disrupted beyond normal contractor vehicle traffic going to and from the Site during construction. Any sidewalk closures that are required during the course of construction/remediation activities will be conducted in accordance with NYCDOT permits.

5.2.6 Contingency Plan

A contingency plan has been developed to describe the procedures to be followed upon discovery of an unknown source of contamination or AOC that may require remediation (USTs, stained soil, drums, etc.). The identification of an unknown source structure or unexpected contaminated media discovered by waste characterization sampling and/or screening during invasive Site work will be promptly communicated by phone to NYSDEC's Project Manager. These findings will also be included in daily and periodic reports. Any unknown/unregistered USTs discovered during the course of remedial activities will be managed in accordance with requirements of NYCRR 375-1.12(e). The NYSDEC project manager will be notified immediately before any action is taken. Any sampling will be performed on product, sediment and surrounding soil, etc. Chemical analytical work will be for TCL VOCs, SVOCs, TCL pesticides, PCBs, and TAL metals.

These analyses will not be limited to the Commissioner's Policy (CP)-51 parameters where tanks are identified without prior approval by NYSDEC.

5.2.7 Worker Training and Monitoring

All those who enter the work area while intrusive activities are being performed must recognize and understand the potential hazards to health and safety. All construction personnel upon entering the Site must attend a brief training meeting, its purpose being to:

- Make workers aware of the potential hazards they may encounter;
- Instruct workers on how to identify potential hazards;
- Provide the knowledge and skills necessary for them to perform the work with minimal risk to health and safety;
- Make workers aware of the purpose and limitations of safety equipment; and
- Ensure that they can safely avoid or escape from emergencies.

Construction personnel will be responsible for identifying potential hazards in the work zone. The project manager will be responsible for ensuring that the training is conducted. Others who enter the Site must be accompanied by a suitably-trained construction worker. In addition, any site workers within the remediation "work zone" will have received the OSHA 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training and will be under a medical monitoring program. Current certifications for key personnel are included in Attachment K.

5.2.8 Agency Approvals

The Volunteer will comply with all City Environmental Quality Review (CEQR) and State Environmental Quality Review Act (SEQRA) requirements for this Site. All permits or government approvals required for remedial construction have been, or will be, obtained prior to the start of remedial construction.

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

A complete list of all local, regional and federal governmental permits, certificates or other approvals or authorizations required to perform the remedial and development work will be provided in the FER. This list includes a citation of the law, statute or code to be complied with, the originating agency, and a contact name and phone number in that agency.

Although not anticipated, all planned remedial or construction work in regulated wetlands and adjacent areas will be specifically approved by the NYSDEC Division of Natural Resources to ensure that it meets the requirements for substantive compliance with those regulations prior to the start of construction. Nothing in the approved RAWP or its approval by NYSDEC should be construed as an approval for this purpose.

5.2.9 NYSDEC BCP Signage

Signs are optional for BCP sites and will be discussed with the NYSDEC Project Manager. If a sign is displayed, it will follow NYSDEC specifications for design and content, provided by the NYSDEC Project Manager.

5.2.10 Pre-Construction Meeting with NYSDEC

A pre-construction meeting with NYSDEC will be scheduled prior to the start of major construction activities. Representative members of the Volunteer and their foundation contractor, AKRF, NYSDEC, and NYSDOH, will be invited to attend.

5.2.11 Emergency Contact Information

An emergency contact sheet with names and phone numbers is included in the Site-specific HASP, provided in Appendix H. That document will define the specific project contacts for use by NYSDEC and NYSDOH in the case of a day or night emergency.

5.2.12 Remedial Action Costs

The total estimated cost of the Remedial Action is $9,309,261. An itemized and detailed summary of estimated costs for all remedial activity is included in Table 16. This will be revised based on actual costs and submitted as an Appendix to the FER.

5.3 Site Preparation

Prior to conducting any intrusive activities for Site remediation activities, the work zone(s), designated entry points, soil stockpile staging areas, decontamination zones, and truck routes will be established, as applicable. A truck route map is included as Figure 13. The Site Plan will be updated as necessary to reflect any changes in operations during the course of the intrusive work. Particulate control measures, if necessary, will be implemented. Additional details of Site preparation activities are provided in the following sections.

5.3.1 Mobilization

Site mobilization involving Site security setup, fencing, equipment mobilization, utility mark outs and marking and staking excavation areas will be performed prior to undertaking any Site remediation activities.

5.3.2 Monitoring Well/Vapor Probe Decommissioning

Existing groundwater monitoring wells will either be protected during remediation, if required, or will be properly decommissioned in accordance with NYSDEC Commissioners Policy CP-43. The only exception to this is if the full length of the well is to be excavated during remediation.

There are no permanent soil vapor probes installed at the Site.

5.3.3 Erosion and Sedimentation Controls

Erosion and sedimentation control measures will be installed at the Site prior to conducting any ground-intrusive work. These measures will be installed according to all applicable or relevant and appropriate federal, state, and local laws and the NYCDEP-approved SWPPP. The measures will provide for abatement and control of environmental pollution arising from proposed remediation and construction activities. The control measures will include procedures for perimeter Site controls, stabilized construction pads at each construction entrance, equipment decontamination, drainage inlet protection, and particulate suppression. The RE, or her representative, will conduct routine inspections, and any repairs and/or maintenance of control measures required will be completed in a timely fashion to maintain the controls in proper working order. All vehicles leaving the project Site will be inspected to ensure that no soil adheres to the wheels or undercarriage of the vehicle leaving the Site. Any situations involving material spilled in transit or mud and

particulate tracked off-site will be remedied. The access routes will be inspected for road conditions, overhead clearance, and weight restrictions.

Upon approval of the SWPPP by NYCDEP, it will be reviewed by the RE, and a copy will be submitted to NYSDEC prior to start of remedial excavation.

5.3.4 Stabilized Construction Entrance(s)

A crushed stone path will be constructed by the general contractor at all truck entrances for the Site. All trucks will drive over this path prior to leaving so that they do not get re-contaminated prior to departure from the Site. A laborer with a broom and a hose connected to a NYC fire hydrant will check the trucks as they leave. The broom and/or hose will be used to remove soil/fill from the truck tires and body as prior to leaving the Site, as necessary.

5.3.5 Utility Marker and Easements Layout

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

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

5.3.6 Sheeting and Shoring

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

5.3.7 Equipment and Material Staging

Staging and storage of equipment and materials will be contained within the secured Site or within a secured area on the street/sidewalk in accordance with a NYCDOT permit. By the nature of the work involved in the project, equipment and materials will be moved to different areas within the secured Site as work progresses. Materials will be stored in accordance with applicable federal, state, and local regulations.

5.3.8 Decontamination Area

A decontamination area will be established adjacent to the work areas, as required. The base of the decontamination area will be covered with 6-millimeter plastic sheeting as necessary and bermed to prevent spreading of decontamination fluids or potential discharge to the ground surface.

All equipment in direct contact with known or potentially contaminated material will be either dedicated or decontaminated prior to handling less contaminated material or removal from the Site. All liquids used in the decontamination procedure will be collected, stored, and disposed of in accordance with federal, state, and local regulations. Personnel performing this task will wear the proper personal protective equipment (PPE) as prescribed in the Site-specific HASP, provided in Appendix H.

5.3.9 Site Fencing

The Site will be secured with a locking, wooden construction fence meeting all applicable NYCDOB requirements, that will be placed around the entire perimeter. Entrance gates will be chain link with silt fencing. Both types of fencing will help contain dust and debris generated during demolition and ground intrusive activities from migrating off-site. During all remedial activities, access to the Site will be limited and all persons entering the Site will be required to sign a log book and meet all applicable health and safety requirements. The Site will be secured during non-working hours.

5.3.10 Demobilization

Restoration of the excavation work will include general earthwork and/or backfilling to prepare for construction of the proposed foundation elements, and roadways/pathways/sidewalks. Upon completion of the remedial excavation work, any waste materials (i.e., plastic sheet, absorbent pads, etc.) and the decontamination pad will be removed from the Site for proper disposal.

5.4 Reporting

All daily and monthly Reports will be included in the FER.

5.4.1 Daily Reports

Daily reports will be submitted to NYSDEC and NYSDOH Project Managers by noon of each day following the reporting period and will include:

- An update of progress made during the reporting day;
- Locations of work and quantities of material imported and exported from the Site;
- References to alpha-numeric map for Site activities;
- A summary of any and all complaints with relevant details (names, phone numbers);
- A summary of CAMP findings, including excursions;
- Photographs of Site activities; and,
- An explanation of notable Site conditions.

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

Daily Reports will include a description of daily activities keyed to an alpha-numeric map for the Site that identifies work areas. These reports will include a summary of sampling results (i.e., all samples collected during the workday), odor and dust problems and corrective actions, and all complaints received from the public.

A Site map that shows a predefined alpha-numeric grid for use in identifying locations described in reports submitted to NYSDEC will be provided in the daily reports and is included as Figure 10.

The NYSDEC assigned project number will appear on all reports.

5.4.2 Monthly Reports

Monthly reports prepared in accordance with DER-10 Section 5.7(b) will be submitted to NYSDEC and NYSDOH Project Managers by the tenth day following the end of the month of the reporting period and will include, at a minimum:

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

5.4.3 Other Reporting

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

Green and sustainable remediation metrics will be tracked during implementation of the remedial action and reported in the FER, including a comparison to any goals established during the remedial program. Regular updates to the metrics used (SEFA, SiteWise^{TM} or otherwise approved method) should be included.

The Climate Screening process and results will be documented in the form of a completed checklist and brief letter report. If the Climate Screening results indicate that a CVA is necessary, a complete CVA Report will be developed. The CVA Report will be included as an Appendix or Attachment in relevant documents and/or submitted as a standalone report.

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

5.4.4 Complaint Management Plan

A log of any complaints from the public regarding nuisance or other Site conditions will be compiled by a member of the AKRF project team, as applicable. All complaints will be documented in the daily reports.

5.4.5 Deviations from the Remedial Action Work Plan

Any deviations from this RAWP will require prior approval from NYSDEC. The deviations will be recorded in both the monthly progress reports and in the FER. At a minimum, the report of the deviations will include the following:

- Reasons for deviating from the approved RAWP;
- Approval process to be followed for changes/editions to the RAWP;
- Effect of the deviations on overall remedy.

6.0 REMEDIAL ACTION: MATERIAL REMOVAL FROM SITE

Removal of materials from the Site will include: (1) removal of any paved surfaces and/or debris; (2) decommissioning of existing groundwater monitoring wells in accordance with NYSDEC CP-43; (3) excavation and off-site disposal of approximately 12,855 tons contaminated soil/fill exceeding RRSCOs within the upper 2 feet bgs across the Site (minus proposed new building cellar footprint) to attain a Track 4 cleanup; and approximately 6,876 tons of contaminated soil/fill exceeding RRSCOs within the upper 10 feet and approximately 252 tons of contaminated soil/fill exceeding RRSCOs between 10 to 15 feet bgs within the cellar portion of the proposed new building to attain a Track 2 cleanup (4) removal of any unknown petroleum storage tanks, fill ports, vent pipes, and other associated structures, if encountered during excavation; and (5) installation of SOE and implementation of dewatering to facilitate soil excavation below the water table (approximately 8 to 13 feet below grade).

Based on the information obtained from the RI and previous investigations, approximately 19,983 tons (13,322 cubic yards) of soil is estimated to be removed as part of the remedy and bedrock is not anticipated to be encountered. The proposed areas of remedial excavation are shown on Figure 9.

Any excavated contaminated soil will be removed from the Site and disposed of at a facility(ies) licensed to accept the material. Proposed disposal facilities will be selected after completing the waste characterization sampling. The proposed disposal facilities will be submitted to NYSDEC for review and approval prior to off-site disposal.

6.1 Soil Cleanup Objectives

The applicable SCOs for this Site are the Track 4/Track 2 RRSCOs for VOCs, SVOCs, PCBs, pesticides, and metals. Soil and materials management on-site and off-site will be conducted in accordance with the SMMP as described below. Any underground storage tank closures will, at a minimum, conform to the criteria defined in DER-10.

All soil samples that exceed the UUSCOs and RRSCOs are presented in Tables 1 through 7. Exceedances of the applicable standards are shown on Figures 3A through 3D, Figures 4A and 4B, and Figure 5.

6.2 Remedial Performance Evaluation (Post Excavation End-Point Sampling)

Excavation endpoint samples will be collected at the proposed locations shown on Figure 11. Additional post-excavation soil samples will be collected around any USTs encountered at the Site during waste characterization sampling or remedial excavation.

6.2.1 Endpoint Sampling Frequency

Based on the sampling frequency outlined in Section 5.4 of DER-10, documentation sampling for the remedial excavation will include one bottom soil sample for every 900 sf across the Site and one sidewall sample for every 30 linear feet around the perimeter of the Site, except where SOE (except soil berming) is located. Based on the size of the proposed remedial excavation area at the Site, approximately 198 post-excavation endpoint samples, including 142 bottom samples and 56 sidewall samples, will be collected for laboratory analysis at the approximate locations shown on Figure 11.

Endpoint sampling will occur around any additional AOCs identified during the RA based on the sampling frequency outlined in Section 5.4 of DER-10.

6.2.2 Methodology

Documentation samples will be collected using a decontaminated stainless steel sampling trowel or hand auger, or a dedicated wooden tongue depressor and placed directly into pre-sterilized, laboratory-issued containers.

The sample containers will be properly labeled and immediately placed on ice within a cooler. Sample time, date, and location will be recorded on a chain of custody. The samples will be submitted to an ELAP-certified laboratory for analysis of TCL VOCs by EPA Method 8260, TCL SVOCs by EPA Method 8270, pesticides by EPA Method 8081, PCBs by EPA Method 8082, TAL metals by EPA Method 6000/7000 series, 1,4-dioxane by EPA Method 8270, and PFAS compounds by EPA Method 1633A. The laboratory will follow the NYSDEC Analytical Services Protocol (ASP) dated 1995 using NYSDEC ASP Category B deliverables. Further details regarding the specific sampling methodology and analytical procedures are presented in the QAPP, included as Appendix G.

6.2.3 Reporting of Results

The analytical results of documentation samples will be tabulated and compared to the UUSCOs and RRSCOs. The tabulated data and the laboratory reports will be included in the FER. All analytical data will be submitted to NYSDEC in electronic data deliverable (EDD) format via the Environmental Quality Information System (EQuIS™).

6.2.4 QA/QC

The QA objective with respect to accuracy, precision, and sensitivity of analysis for laboratory analytical data is to achieve the QC acceptance of the analytical protocol. The accuracy, precision, and completeness requirements will be addressed by the laboratory for all data generated. Collected samples will be appropriately packaged, placed in coolers, and shipped or delivered directly to the analytical laboratory by the laboratory's courier service. Samples will be containerized in appropriate laboratory provided glassware and shipped in plastic coolers. Samples will be preserved to maintain a temperature of 4° C. Decontamination of non-dedicated sampling equipment will consist of the following: gently tap or scrape to remove adhered soil; rinse with tap water; wash with Alconox® detergent solution and scrub; rinse with tap water; rinse with distilled or deionized water; prepare field blanks by pouring distilled or deionized water in laboratory provided containers.

One trip blank, one field blank, one blind duplicate sample, and one MS/MSD will be collected per every 20 samples per media and submitted for analysis during the documentation sampling event. The field blank(s), blind duplicate(s), and MS/MSD(s) will include all parameters included in the sample analysis while the trip blank will be analyzed for VOCs only. Additional QA/QC information is provided in the QAPP, included as Appendix G.

6.2.5 DUSR and EDDs

Lori A. Beyer of L.A.B. Validation Corp., a qualified, third-party data validator, will review the documentation sample laboratory reports and prepare a DUSR, for all samples collected under this RAWP. The DUSR will be discussed and included as an appendix to the FER. The validator's resume is included in the QAPP provided as Appendix G.

Validated EDDs will be submitted to NYSDEC via EQuIS™.

6.2.6 Reporting of Endpoint Data in FER

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

Endpoint sampling, including bottom and side-wall sampling, will be performed in accordance with DER-10 sample frequency requirements. Side-wall samples will be collected a minimum of every 30 linear feet. Bottom samples will be collected at a rate of one for every 900 sf. The FER will provide a tabular and map summary of all end-point sample results and exceedances of SCOs.

6.3 Estimated Material Removal Quantities

The estimated quantity of soil/fill to be removed from the Site based on the proposed dual Track 4/Track 2 remedial excavation is 19,983 tons (13,322 cubic yards). The estimated quantity of soil to be imported into the Site for backfill and cover soil is 8,569 cubic yards. Soil/fill reuse is not anticipated as part of the remedial action. The proposed remedial excavation is shown on Figure 9 and summarized below in Table D.

Table E
Remedial Excavation Location Summary

Location On-Site	Approximate Minimum Excavation Depth (feet bgs)	Approximate Excavation Volume (tons)	Approximate Excavation Volume (cubic yards)
Partial Cellar (Track 2 Area)	10	6,876	4,584
900-sf Metals Hotspot (Track 2 Area)	5 (10-15 feet)	252	167
Site-Wide (excluding Track 2 portion)	2	12,855	8,570
	Total =	**19,983 tons**	**13,322 cubic yards**

6.4 Soil/Materials Management Plan (SMMP)

The SMMP describes the procedures to be performed during the handling of soil/fill materials on-site during all intrusive work.

6.4.1 Soil Screening Methods

Visual, olfactory and PID soil screening and assessment will be performed by a qualified environmental professional or experienced field geologist or other scientist under the direction of the RE during all remedial and development excavations into known or potentially contaminated material. Soil screening will be performed regardless of when the invasive work is done and will include all excavation and invasive work performed during the remedy and during development phase, such as excavations for foundations and utility work, prior to issuance of the COC.

All primary contaminant sources (including but not limited to tanks and hotspots) identified during waste characterization, previous subsurface investigations, and Remedial Action will be surveyed by a surveyor licensed to practice in the State of New York or located with a GPS survey to obtain exact coordinates on the Site. This information will be provided on maps in the Final Engineering Report.

Screening will be performed by qualified environmental professionals, an experienced field geologist, or other scientist. Resumes for all anticipated personnel responsible for

field screening (i.e., those representing the Remedial Engineer) of invasive work for unknown contaminant sources during remediation and development work are provided in the QAPP included as Appendix G.

6.4.2 Stockpile Methods

Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by NYSDEC. At a minimum, a storm event should be considered a rainfall of three inches or greater in 12 hours. Judgement should be used to evaluate water infiltration, nearby waterbodies where runoff is likely, and engineering controls that may be affected.

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. Potentially contaminated stockpiles (e.g., Site soils) will be lined underneath by impermeable sheeting to prevent potential leaching and recontamination.

Soil stockpiles will be continuously encircled with silt fences. Hay bales will be used as needed near catch basins, surface waters and other discharge points.

Water will be available on-site at suitable supply and pressure for use in dust control.

6.4.3 Materials Excavation and Load Out

The RE or a qualified environmental professional, field geologist, or other scientist under her supervision will oversee all invasive work and the excavation and load-out of all excavated material.

The Volunteer and its contractors are solely responsible for safe execution of all invasive and other work performed under this RAWP.

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

Loaded vehicles leaving the Site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate federal, state, local, and NYSDOT requirements (and all other applicable transportation requirements). Vehicles leaving the Site will not be overloaded. The Remedial Engineer's representative will make reasonable efforts to ensure that vehicles are not loaded beyond their NYSDOT weight rating and that all material is secured beneath the truck bed cover.

A truck wash will be operated on-site. The RE will be responsible for ensuring that all outbound trucks will be washed at the truck wash before leaving the Site until the remedial construction is complete. Locations where vehicles enter or exit the Site shall be inspected daily for evidence of off-Site sediment tracking.

The RE or designated personnel under her supervision will be responsible for ensuring that all egress points for truck and equipment transport from the Site will be clean of dirt and other materials derived from the Site during Site remediation and development. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to Site-derived materials.

The Volunteer and associated parties preparing the remedial documents submitted to the State, and parties performing this work, are completely responsible for the safe

performance of all invasive work, the structural integrity of excavations, and for structures that may be affected by excavations (such as building foundations and bridge footings).

The RE will ensure that Site development activities will not interfere with, or otherwise impair or compromise, remedial activities proposed in this RAWP.

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

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

Mechanical processing of historical fill and contaminated soil on-site is prohibited.

All primary contaminant sources (including but not limited to tanks and hotspots) identified during waste characterization, subsurface investigations, and Remedial Action will be surveyed by a surveyor licensed to practice in the State of New York or located with a GPS survey to obtain exact coordinates on the Site. The survey information will be shown on maps to be reported in the FER.

6.4.4 Materials Transport Off-Site

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

Proposed truck transport routes are shown in Figure 13 and are as follows:

- Trucks entering the Site will take I-95 North to Exit 5A toward White Plains Road/Westchester Avenue; merge onto White Plains Road; turn right onto Seward Avenue; turn right onto Thieriot Avenue and continue to the Site.
- Trucks exiting the Site will continue north on Thieriot Avenue; turn right onto Lafayette Avenue; turn left onto White Plains Road; turn right towards Hugh J. Grant Circle roundabout via Westchester Avenue; exit the roundabout onto the Cross Bronx Expressway; and take the ramp on the left to merge onto I-95 South.

All trucks loaded with Site materials will exit the vicinity of the Site using only these approved truck routes; however, the truck routes may vary depending on local street closures and/or approved truck route changes made into effect during implementation of the RAWP. Proposed in-bound and out-bound truck routes to the Site are shown on Figure 13. 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.

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 to minimize off-Site disturbance. Off-Site queuing will be prohibited.

Material transported by trucks exiting the Site will be secured with tight-fitting covers. Loose-fitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.

All trucks will be washed prior to leaving the Site. Truck wash waters will be collected and disposed of off-site in an appropriate manner.

6.4.5 Materials Disposal Off-Site

For any materials to be disposed of off-site, based on the waste characterization results, a properly permitted waste disposal facility will be selected for off-site disposal. The disposal information will be reported to the NYSDEC Project Manager prior to commencing the disposal activities. The total quantity of material expected to be disposed of off-Site is 19,983 tons (13,322 cubic yards), and specific waste streams will be determined based on the waste characterization results.

All soil/fill/solid waste excavated and removed from the Site will be treated as contaminated and regulated material and will be disposed in accordance with all local, State (including 6 NYCRR Part 360) and federal regulations. If disposal of soil/fill from this Site is proposed for unregulated disposal (i.e., clean soil removed for development purposes), a formal request with an associated plan will be made to NYSDEC's Project Manager. Unregulated off-site management of materials from this Site is prohibited without formal NYSDEC approval. Material that does not meet Track 1 UUSCOs is prohibited from being taken to a New York State recycling facility (6 NYCRR Part 360-15 Registration Facility).

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

Non-hazardous fill material and contaminated soils taken off-site will be handled, at minimum, as a Municipal Solid Waste per 6 NYCRR Part 360.2. The RE is responsible for assuring material is properly characterized and determining the appropriate disposal methods based on the characterization results. Fill material and contaminated soils from the Site are prohibited from being disposed at Part 360-15 Registration Facilities (also known as Soil Recycling Facilities).

Soils that are contaminated but non-hazardous and are being removed from the Site are considered by the Division of Materials Management (DMM) in NYSDEC to be Construction and Demolition (C&D) materials with contamination not typical of virgin soils. These soils may be sent to a permitted Part 360 landfill. They may be sent to a permitted C&D processing facility without permit modifications only upon prior notification of NYSDEC Region 2 DMM. This material is prohibited from being sent or redirected to a Part 360-15 Registration Facility. In this case, as dictated by DMM, special procedures will include, at a minimum, a letter to the C&D facility that provides a detailed explanation that the material is derived from a DER remediation Site, that the soil material is contaminated and that it must not be redirected to on-site or off-site Soil Recycling

Facilities. The letter will provide the project identity and the name and phone number of the RE. The letter will include as an attachment a summary of all chemical data for the material being transported.

The FER will include an accounting of the destination of all material removed from the Site during this Remedial Action, including excavated soil, contaminated soil, historic fill, solid waste, and hazardous waste, non-regulated material, and fluids. Documentation associated with disposal of all material must also include records and approvals for receipt of the material. This information will also be presented in a tabular form in the FER. Bill of Lading system or equivalent will be used for off-site movement of non-hazardous wastes and contaminated soils. This information will be reported in the FER.

Hazardous wastes derived from on-site will be stored, transported, and disposed of in full compliance with applicable local, state, and federal regulations.

Appropriately licensed haulers will be used for material removed from this Site and will be in full compliance with all applicable local, state, and federal regulations.

Waste characterization will be performed for off-site disposal in a manner suitable to the receiving facility and in conformance with applicable permits. Sampling and analytical methods, sampling frequency, analytical results and QA/QC will be reported in the FER. All data available for soil/material to be disposed at a given facility must be submitted to the disposal facility with suitable explanation prior to shipment and receipt. Waste characterization sampling cannot be utilized for:

- Delineating the extent of contamination required for remediation at a Site.
- Replacing or substituting data collected as part of Site Characterization and/or Remedial Investigation.
- Replacing or substituting confirmation or documentation sampling as described in NYSDEC DER-10, Section 5.4.
- To modify remedial decisions as formalized in a NYSDEC approved Decision Document or Record of Decision.

6.4.6 Materials Reuse On-Site

Material reuse is not anticipated as part of the remedial action. However, if material reuse is planned, chemical criteria for on-site reuse of material must be approved by NYSDEC prior to reuse. Materials planned for reuse (if any) will be segregated and stockpiled from materials slated for off-site disposal. Stockpiles will be placed on and covered with polyethylene sheeting. The stockpiled soil will be sampled and analyzed in accordance with Table 5.4(e)10 on page 161 of DER-10 Technical Guidance for Investigation and Remediation. All materials to be reused on the Site will comply with the RRSCOs and PGWSCOs. The RE will ensure that procedures defined for materials reuse in this RAWP are followed and that unacceptable material will not remain on-site.

A "Request to Import/Reuse Fill Material" form will be filed with the NYSDEC project manager for review and approval prior to material reuse on the Site. A copy of the form is presented in Appendix O.

Demolition material (C&D) will not be reused on-site. Concrete crushing or processing on-site is prohibited. Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the Site is prohibited for reuse on-site. Contaminated on-site material, including historic fill and contaminated soil, removed for grading or other

purposes will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines. This will be expressed in the final Site Management Plan (SMP).

6.4.7 Fluids Management

All liquids to be removed from the Site, including dewatering fluids, will be handled, transported and disposed in accordance with applicable local, state, and federal regulations. Liquids discharged into the New York City sewer system will be addressed through approval by NYCDEP.

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

6.4.8 Demarcation

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

6.4.9 Backfill from Off-Site Sources

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

The FER will include the following certification by the RE: "I certify that all import of soils from off-site, including source evaluation, approval and sampling, has been performed in a manner that is consistent with the methodology defined in the Remedial Action Work Plan". Prior to import, soil will be segregated and tested at the source facility for analysis of VOCs, SVOCs, PCBs, pesticides, TAL Metals, 1,4-dioxane, and PFAS compounds at the frequency outlined in Table 5.4(e)10 in DER-10 on page 161 of the DER-10 Technical Guidance for Investigation and Remediation. The analytical results will be compared to Table 375-6.8(b) of 6 NYCRR Part 375 for VOC, SVOCs, PCBs, pesticides, and TAL Metals and to the April 2023 Guidance Values for PFOA and PFOS and submitted to NYSDEC for review and approval prior to importation and placement on-site. In accordance with DER-10, gravel, rock or stone consisting of virgin material from a permitted mine or quarry with less than 10% fines passing a size 100 sieve will not require testing.

All imported soils will meet NYSDEC approved backfill or cover soil quality objectives for this Site. These NYSDEC approved backfill or cover soil quality objectives are the

RRSCOs and PGWSCOs as set forth in Table 375-6.8(b) of 6 NYCRR Part 375 and listed in Table 17. Non-compliant soils will not be imported onto the Site without prior approval by NYSDEC. Nothing in the approved RAWP or its approval by NYSDEC should be construed as an approval for this purpose.

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 NYSDEC. Nothing in this RAWP should be construed as an approval for this purpose. Solid waste will not be imported onto the Site.

Trucks entering the Site with imported soils will be securely covered with tight fitting covers.

A "Request to Import/Reuse Fill Material" form will be filed with the NYSDEC project manager for review and approval prior to import to the site. A copy of the form is presented in Appendix O.

6.4.10 Stormwater Pollution Prevention

A SWPPP will be prepared and approved by NYCDEP. Soil and erosion sediment controls including 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 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 SWPPP and RAWP 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 remedial construction area.

6.4.11 Contingency Plan

If USTs or other previously unidentified contaminant sources are found during on-site remedial excavation or development related construction, sampling will be performed on product, sediment and surrounding soils, etc. Chemical analytical work will be for full scan parameters (TAL metals, TCL VOCs, TCL SVOCs, TCL pesticides, and PCBs). These analyses will not be limited to the NYSDEC Commissioner's Policy (CP)-51 parameters where tanks are identified without prior approval by NYSDEC. Analyses will not be otherwise limited without NYSDEC approval.

Identification of unknown or unexpected contaminated media identified by screening during invasive Site work will be promptly communicated by phone to NYSDEC's Project Manager. These findings will be also included in daily and periodic electronic media reports.

6.4.11.1 Extreme Storm Preparedness and Response Contingency Plan

Damage from flooding or storm surge can include dislocation of soil and stockpiled materials, dislocation of site structures and construction materials and equipment, and dislocation of support of excavation structures. Damage from wind during an extreme storm event can create unsafe or unstable structures, damage safety structures and cause downed power lines creating dangerous site conditions and loss of power. In the event of emergency conditions caused by an extreme storm event, the Volunteer will undertake the following steps for Site preparedness prior to the event and response after the event.

Storm Preparedness

Preparations in advance of an extreme storm event will include the following: containerized hazardous materials and fuels will be removed from the Site; loose materials will be secured to prevent dislocation and blowing by wind or water; heavy equipment such as excavators and generators will be removed from excavated areas, trenches and depressions on the Site to high ground or removed from the Site; an inventory of the Site with photographs will be performed to establish conditions and equipment prior to the event; stockpile covers for soil and fill will be secured by adding weights such as sandbags for added security and worn or ripped stockpile covers will be replaced with competent covers; stockpiled hazardous wastes will be removed from the Site; stormwater management systems will be inspected and fortified, including, as necessary: clean and reposition silt fences, hay bales; clean storm sewer filters and traps; and secure and protect pumps and hosing.

Storm Response

At the conclusion of an extreme storm event, as soon as it is safe to access the Site, a complete inspection of the Site will be performed. A site inspection report will be submitted to NYSDEC at the completion of site inspection and after the site security is assessed. Site conditions will be compared to the inventory of site conditions and material performed prior to the storm event and significant differences will be noted. Damage from storm conditions that result in acute public safety threats, such as downed power lines or imminent collapse of buildings, structures or equipment will be reported to public safety authorities via appropriate means such as calling 911.

Petroleum spills will be reported to NYSDEC within 2 hours of identification and consistent with state regulations. Public safety structures, such as construction security fences will be repaired promptly to eliminate public safety threats. Debris will be collected and removed.

Dewatering will be performed in compliance with existing laws and regulations and consistent with emergency notifications, if any, from proper authorities. Eroded areas of soil including unsafe slopes will be stabilized and fortified. Dislocated materials will be collected and appropriately managed. Support of excavation structure will be inspected and fortified as necessary. Impacted stockpiles will be contained and damaged stockpile covers will be replaced. Stormwater control systems and structures will be inspected and maintained as necessary.

If soil or fill materials are discharged off-site to adjacent properties, property owners and NYSDEC will be notified, and corrective measure plan designed to remove and clean dislocated material will be submitted to NYSDEC and implemented following approval by NYSDEC and granting of site access by the property owner. Impacted

offsite areas may require characterization based on site conditions, at the discretion of NYSDEC.

If on-site petroleum spills are identified, a qualified environmental professional will determine the nature and extent of the spill and report to NYSDEC's spill hotline at (800) 457-7362 within statutory defined timelines. If the source of the spill is ongoing and can be identified, it should be stopped if this can be done safely. Potential hazards will be addressed immediately, consistent with guidance issued by NYSDEC.

Storm Response Reporting

A site inspection report will be submitted to NYSDEC at the completion of the Site inspection. An inspection report will be used for this purpose. Site conditions will be compared to the inventory of site conditions and material performed prior to the storm event and significant differences will be noted. The site inspection report will be sent to the NYSDEC project manager and will include the site name, address, tax block and lot, site primary and alternate contact name and phone number.

Damage and soil release assessment will include: whether the project had stockpiles; whether stockpiles were damaged; photographs of damage and notice of plan for repair; report of whether soil from the Site was dislocated and whether any of the soil left the Site; estimates of the volume of soil that left the Site, nature of impact, and photographs; description of erosion damage; description of equipment damage; description of damage to the remedial program or the construction program, such as damage to the support of excavation; presence of onsite or offsite exposure pathways caused by the storm; presence of petroleum or other spills and status of spill reporting to NYSDEC; description of corrective actions; and schedule for corrective actions.

This report should be completed and submitted to NYSDEC project manager with photographs within 24 hours of the time of safe entry to the Site after the storm event.

6.4.12 Community Air Monitoring Plan

A Site-specific HASP and a CAMP have been prepared for this Site and are enclosed as Appendix H and Appendix I, respectively. Community air monitoring and real-time air monitoring at the perimeter of the exclusion zone will be conducted during all intrusive Site activities in accordance with the NYSDOH Generic CAMP and as described in Appendix I. The CAMP requirements may be modified in consultation with NYSDEC and NYSDOH for activities involving minimal soil disturbance (e.g., site preparation, pile installation, etc.). All readings will be recorded and available for NYSDEC and NYSDOH personnel to review. The CAMP station locations may vary depending on wind direction and location of work activities. A map showing the proposed locations of CAMP stations is shown on Figure 12. Mobile air monitoring using handheld equipment will be conducted around workers and locations will vary based on the work zone(s).

Exceedances observed in the CAMP will be reported to NYSDEC and NYSDOH Project Managers and included in the Daily Report.

6.4.13 Odor, Dust, and Nuisance Control Plan

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

Odor Control Plan

This odor control plan is capable of controlling emissions of nuisance odors off-site. Specific odor control methods to be used on a routine basis will include the use of a PID to screen for VOCs and olfactory observations by a field technician. If nuisance odors are identified, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified within 24 hours of all odor events and of all other complaints about the project. Implementation of all odor controls, including the halt of work, will be the responsibility of the Volunteer's RE, who is responsible for certifying the FER.

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

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

Dust Control Plan

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

- Water will be available on-site at suitable supply and pressure for use in dust control.
- 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 spraying.

Other Nuisances

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

A plan will be developed and utilized by the contractor for all remedial work and will conform, at a minimum, to NYCDEP noise control standards.

7.0 RESIDUAL CONTAMINATION TO REMAIN ON-SITE

Since residual contaminated soil and soil vapor will exist beneath the Site after the remedy is complete, Engineering and Institutional Controls (ECs and ICs) are required to protect human health and the environment. These ECs and ICs are described hereafter. Long-term management of EC/ICs and of residual contamination will be executed under a Site-specific SMP that will be developed and included in the FER.

An EC will be implemented to protect public health and the environment by appropriately managing residual contamination. The Controlled Property (the Site) will have a composite cover system consisting of asphalt covered roads, concrete covered sidewalks, concrete building slabs, and a minimum of 2 feet of clean fill in landscaped areas.

The FER will report residual contamination on the Site in tabular and map form, with comparison to the UUSCOs and RRSCOs.

8.0 ENGINEERING CONTROL: SITE COVER SYSTEM

A site cover system will be installed and/or maintained in the Track 4 portion of the Site to prevent direct contact with any residual contaminated soil. The proposed site cover system will be composed of: (1) a minimum of 2 feet of clean fill material placed in landscaped and permeable areas underlain by a demarcation barrier; (2) a minimum 12-inch-thick concrete building foundation underlain by a minimum 20-mil vapor barrier membrane, which doubles as a demarcation barrier, in areas within the new building footprint; and (3) paved surfaces in roadway and sidewalk areas with necessary structural supports to mitigate the potential for secondary consolidation settlement. To construct these portions of the site cover system, ground improvements consisting of a load transfer platform (LTP), supported by "rigid inclusions" are required to be installed beneath the paved surfaces (i.e., curbs with fences, ramps, stairs, retaining walls adjacent to the ramps and stairs, utility vaults/manholes, utilities, roadways, and pavements, including any asphalt, concrete, brick pavers, or stamped concrete paver type surfaces). The site cover system is a permanent control, and the quality and integrity of the system will be inspected at defined, regular intervals. Inspections of the site cover system will be detailed in the SMP. The proposed site cover system plan is provided as Figure 14.

The vapor barrier will be installed as part of the Site Cover System in accordance with the manufacturer's installation procedures. Prior to pouring the concrete slab, the installed vapor barrier will be inspected and photographed. A set of the installation photos in addition to the "as built" drawings will be included in the FER. An Excavation Plan will be included in the SMP and will outline the procedures to be followed in the event that the site cover system and any underlying residual contamination are disturbed after the RA is complete. Maintenance of the site cover system will be described in the SMP in the FER.

Green remediation BMPs for designing and installing a conventional cover system include:

- Design in ways that mimic rather than alter the site's natural setting, to improve the cover's long-term performance and protect ecosystem services such as wildlife habitat and carbon storage;
- Design a cover accounting for potential effects of climate change, which could involve changes in onsite soil development or increased vulnerability to flooding;
- Use uncontaminated soil or sediment from onsite excavation instead of imported soil/sediment for the cover's frost prevention and erosion control layers; similarly, uncontaminated sand, gravel, and rocks from onsite instead of offsite areas may be used for drainage;
- Apply low impact development strategies;
- Choose geotextile fabric or drainage tubing composed of 100% recycled materials rather than virgin materials for lining, erosion control, and drainage;
- Select materials with biobased content for daily activities during cover construction;
- Use clean fuel and emission control technologies for routine field vehicles and machinery such as backhoes and bulldozers to reduce fuel consumption and emission of air pollutants such as GHGs and particulate matter; and
- Investigate onsite solar and wind resources to power equipment such as CAMP stations.

For alternative cover designs

- Consider using asphalt rubber (containing recycled tires) where the cover system includes a layer of asphalt;
- Substitute concrete with high albedo pavement, which reflects sunlight and heat away from the cover surface and may aid growth of nearby vegetation; and

- Consider using concrete containing a high percentage of industrial waste by-products as a substitute for cement, if tests show no contaminant leaching.

In addition to BMPs that apply to conventional covers, BMPs for designing and installing an ET cover include:

- Choose recycled (crushed) concrete for biobarriers or capillary breaks instead of natural rock;
- Select native drought-resistant plants for the upper vegetative layer to reduce maintenance needs;
- Preserve biodiversity and related ecosystem services by installing a suitable mix of native shrubs, grasses, and forbs; and
- Use non-synthetic amendments such as compost instead of chemical fertilizers if the soil or vegetation is found to need supplementation over time.

9.0 CRITERIA FOR COMPLETION OF REMEDIATION/ TERMINATION OF REMEDIAL SYSTEMS

9.1 Site Cover System

The site cover system is a permanent control and the quality and integrity of this system will be inspected at defined, regular intervals in perpetuity.

10.0 INSTITUTIONAL CONTROLS

After the remedy is complete, the Site will have residual contamination remaining in place. ECs for the residual contamination have been incorporated into the remedy to render the overall Site remedy protective of public health and the environment. Two elements have been designed to ensure continual and proper management of residual contamination in perpetuity: an Environmental Easement and a SMP.

All as-built drawings, diagrams, calculations, and manufacturer documentation for treatment systems will be presented in the FER. A Site-specific Environmental Easement will be recorded with the New York City Department of Finance Office of the City Register to provide an enforceable means of ensuring the continual and proper management of residual contamination and protection of public health and the environment in perpetuity or until released in writing by NYSDEC. It requires that the grantor of the Environmental Easement and the grantor's successors and assigns adhere to all ECs/ICs placed on this Site by this NYSDEC-approved remedy. ICs provide restrictions on Site usage and mandate operation, maintenance, monitoring and reporting measures for all ECs and ICs. The SMP describes appropriate methods and procedures to ensure compliance with all ECs and ICs that are required by the Environmental Easement. Once the SMP has been approved by NYSDEC, compliance with the SMP is required by the grantor of the Environmental Easement and grantor's successors and assigns.

10.1 Environmental Easement

An Environmental Easement, as defined in Article 71 Title 36 of the Environmental Conservation Law, is required when residual contamination is left on-site after the Remedial Action is complete. As part of this remedy, an Environmental Easement approved by NYSDEC will be filed and recorded with the New York City Department of Finance Office of the City Register. The Environmental Easement will be submitted as part of the FER.

The Environmental Easement renders the Site a Controlled Property. The Environmental Easement must be recorded with the New York City Department of Finance Office of the City Register before the Certificate of Completion can be issued by NYSDEC. A series of ICs are required under this remedy to implement, maintain and monitor these EC systems, prevent future exposure to residual contamination by controlling disturbances of the subsurface soil and restricting the use of the Site to restricted residential, commercial, or industrial use(s) only. These ICs are requirements or restrictions placed on the Site that are listed in, and required by, the Environmental Easement. ICs can, generally, be subdivided between controls that support ECs, and those that place general restrictions on Site usage or other requirements. ICs in both of these groups are closely integrated with the SMP, which provides all of the methods and procedures to be followed to comply with this remedy.

The ICs that support ECs are:

- Compliance with the Environmental Easement by the Grantee and the Grantee's successors and adherence of all elements of the SMP is required;
- All ECs must be operated and maintained as specified in this SMP;
- A site cover system consisting of a minimum of 2 feet of clean fill material in landscaped and pervious areas, concrete or impervious paved walkways, and 12-inch concrete building slabs must be inspected, certified and maintained as required in the SMP;
- All ECs on the Controlled Property must be inspected and certified at a frequency and in a manner defined in the SMP;
- Data and information pertinent to Site Management for the Controlled Property must be reported at the frequency and in a manner defined in the SMP;

- ECs may not be discontinued without an amendment or extinguishment of the Environmental Easement.

Adherence to these ICs for the Site is mandated by the Environmental Easement and will be implemented under the SMP (discussed in the next section). The Controlled Property (the Site) will also have a series of ICs in the form of Site restrictions and requirements. The Site restrictions that apply to the Controlled Property are:

- In-ground vegetable gardens and farming on the Controlled Property are prohibited;
- Use of groundwater underlying the Controlled Property is prohibited without treatment rendering it safe for intended purpose;
- All future activities on the Controlled Property that will disturb residual contaminated material are prohibited unless they are conducted in accordance with the soil management provisions in the SMP;
- The Controlled Property may be used for restricted residential, commercial, or industrial use(s) only, provided the long-term ECs and ICs included in the SMP are employed;
- The Controlled Property may not be used for a higher level of use, such as unrestricted or residential use without an amendment or extinguishment of this Environmental Easement; and
- Grantor agrees to submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow. This annual statement must be certified by an expert that the NYSDEC finds acceptable.

10.2 Site Management Plan

Site Management is the last phase of remediation and begins with the approval of the FER and issuance of the Certificate of Completion (COC) for the Remedial Action. The SMP is submitted as part of the FER but will be written in a manner that allows its removal and use as a complete and independent document. Site Management continues in perpetuity or until released in writing by NYSDEC. The property owner is responsible to ensure that all Site Management responsibilities defined in the Environmental Easement and the Site Management Plan are performed.

The SMP should include methods to incorporate and track GSR. Measures should be taken to maintain a cost-effective, protective remedy that remains conscientious of the Site's environmental footprint. At a minimum, the following should be assessed: waste generation, energy usage, emissions, and water usage.

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

of inspections and certification of results, and demonstration of proper communication of Site information to NYSDEC; and (5) defining criteria for termination of treatment system operation.

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

Site management activities, reporting, and EC/IC certification will be scheduled on a certification period basis. The certification period will be annually. The SMP will be based on the certifying period relative to the date of issuance of the COC. The first submission will be due 16 months after the issuance of the COC, and annually (or at another frequency as approved by NYSDEC) thereafter.

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

11.0 FINAL ENGINEERING REPORT

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

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

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

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

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

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

The FER must include a discussion of the green remediation practices/technologies employed throughout the remedial program. A final footprint analysis using a DER accepted model, and any tracking methods used through the construction including restoration activities. Before approval of a FER and issuance of a Certificate of Completion, all project reports must be submitted in digital form on electronic media (PDF).

11.1 Certifications

The following certification will appear in front of the Executive Summary of the FER. The FER will be prepared, stamped and the following certification signed by an individual licensed or otherwise authorized in accordance with article 145 of the education law to practice the profession of engineering. The certification will include the following statements:

I, Rebecca Kinal, am currently a registered Professional Engineer licensed by the State of New York, I had primary direct responsibility for implementation of the remedial program activities, and I certify that the RAWP was implemented and that all construction activities were completed in substantial conformance with the Department-approved RAWP.

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

I certify that all use restrictions, Institutional Controls, Engineering Controls, and/or any operation and maintenance requirements applicable to the Site are contained in an environmental easement created and recorded pursuant ECL 71-3605 and that all affected local governments, as defined in ECL 71-3603, have been notified that such easement has been recorded.

I certify that a Site Management Plan has been submitted for the continual and proper operation, maintenance, and monitoring of all Engineering Controls employed at the Site, including the proper maintenance of all remaining monitoring wells, and that such plan has been approved by Department.

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

I certify that all information and statements in this certification are true. I understand that a false statement made herein is punishable as Class “A” misdemeanor, pursuant to Section 210.45 of the Penal Law. I, Rebecca Kinal, of AKRF, Inc. at 440 Park Avenue South, New York, NY 10016, am certifying as Owner’s Designated Site Representative or the Site.

It is a violation of Article 145 of New York State Education Law for any person to alter this document in any way without the express written verification of adoption by any New York State licensed engineer in accordance with Section 7209(2), Article 145, New York State Education Law.

12.0 SCHEDULE

Table F
Proposed Project Schedule

Activity	Time To Complete
Submittal of Revised RIR and Draft RAWP	July-August 2026
45-day Public Comment Period for RAWP	September-October 2026
Submittal of Final RAWP	By end of October 2026
Decision Document	November 2026
Conduct Pre-Design Investigation	November-December 2026
Issuance of Remedial/Construction Notice Fact Sheet	December 2026
Construction Financing Closing with Housing Preservation Department (HPD)	December 2026
Submittal of Pre-Design Investigation Report	By end of December 2026
Begin RAWP implementation	January 2027
Execution of Environmental Easement	June 2027
Submittal of Draft Site Management Plan (SMP)	By August 1, 2027
Submittal of Draft Final Engineering Report (FER)	October 2027
Final SMP and FER	November 2027
Certificate of Completion	December 2027

TABLES

Table 1
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Volatile Organic Compounds (VOCs)

		AKRF Sample ID	RI-SB-01_0.5-2_20250923		RI-SB-01_8-10_20250923		RI-SB-01_10-12_20250926		RI-SB-01_13-15_20250923		RI-SB-02_0.5-2_20250924		RI-SB-02_8-10_20250924		RI-SB-02_10-12_20250926	
		Lab Sample ID	460-335525-7		460-335536-4		460-335823-1		460-335536-5		460-335652-2		460-335652-6		460-335823-2	
		Sample Date	9/23/2025		9/23/2025		9/26/2025		9/23/2025		9/24/2025		9/24/2025		9/26/2025	
		Dilution Factor	1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,1,1-Trichloroethane	0.68	100	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	U	0.00096	U
1,1,2,2-Tetrachloroethane	NS	NS	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	U	0.00096	U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	U	0.00096	U
1,1,2-Trichloroethane	NS	NS	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	U	0.00096	U
1,1-Dichloroethane	0.27	47	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	U	0.00096	U
1,1-Dichloroethene	0.24	0.98	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	U	0.00096	U
1,2,3-Trichlorobenzene	NS	NS	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	UJ	0.00096	U
1,2,4-Trichlorobenzene	NS	NS	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	UJ	0.00096	U
1,2,4-Trimethylbenzene	5.9	100	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	U	0.0004	J
1,2-Dibromo-3-Chloropropane	NS	NS	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	UJ	0.00096	U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	U	0.00096	U
1,2-Dichlorobenzene	1.1	100	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	UJ	0.00096	U
1,2-Dichloroethane	0.02	5.8	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	U	0.00096	U
1,2-Dichloropropane	NS	NS	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	U	0.00096	U
1,3,5-Trimethylbenzene (Mesitylene)	3.1	100	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	U	0.00096	U
1,3-Dichlorobenzene	2.6	38	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	UJ	0.00096	U
1,4-Dichlorobenzene	1.8	24	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	UJ	0.00096	U
2-Hexanone	NS	NS	0.0044	U	0.0058	U	0.0053	U	0.0052	U	0.0051	U	0.0055	U	0.0048	U
Acetone	**0.03**	100	0.013	U	0.007	U	0.029		0.014	U	0.0061	U	0.011		0.019	
Benzene	0.06	3.7	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	U	0.00096	U
Bromochloromethane	NS	NS	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	U	0.00096	U
Bromodichloromethane	NS	NS	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	U	0.00096	U
Bromoform	NS	NS	0.00088	UJ	0.0012	UJ	0.0011	UJ	0.001	UJ	0.001	UJ	0.0011	UJ	0.00096	UJ
Bromomethane	NS	NS	0.0018	U	0.0023	U	0.0021	U	0.0021	U	0.002	U	0.0022	U	0.0019	U
Carbon Disulfide	NS	NS	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	U	0.00096	U
Carbon Tetrachloride	0.76	7.1	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	UJ	0.0011	UJ	0.00096	U
Chlorobenzene	4.5	100	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	UJ	0.00096	U
Chloroethane	NS	NS	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	U	0.00096	U
Chloroform	0.37	24	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	U	0.00096	U
Chloromethane	NS	NS	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	U	0.00096	U
Cis-1,2-Dichloroethylene	0.19	41	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	U	0.00096	U
Cis-1,3-Dichloropropene	NS	NS	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	U	0.00096	U
Cyclohexane	NS	NS	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	U	0.00096	U
Dibromochloromethane	NS	NS	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	U	0.00096	U
Dichlorodifluoromethane	NS	NS	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	U	0.00096	U
Ethylbenzene	1	76	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	UJ	0.00096	U
Isopropylbenzene (Cumene)	NS	NS	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	UJ	0.00096	U
M,P-Xylenes	NS	NS	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	U	0.00055	J
Methyl Acetate	NS	NS	0.0044	U	0.0058	U	0.0053	U	0.0052	U	0.0051	U	0.0055	U	0.0048	U
Methyl Ethyl Ketone (2-Butanone)	0.1	100	0.0044	U	0.0058	U	0.0027	J	0.0052	U	0.0051	U	0.0055	U	0.0048	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	0.0044	U	0.0058	U	0.0053	U	0.0052	U	0.0051	U	0.0055	U	0.0048	U
Methylcyclohexane	NS	NS	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	UJ	0.00096	U
Methylene Chloride	0.05	81	0.0018	U	0.0013	J	0.0021	U	0.0021	U	0.002	U	0.0022	U	0.0019	U
N-Butylbenzene	18	100	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	UJ	0.00096	U
N-Propylbenzene	5	100	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	UJ	0.00096	U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	U	0.00051	J
Sec-Butylbenzene	25	100	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	UJ	0.00096	U
Styrene	NS	NS	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	UJ	0.00096	U
T-Butylbenzene	11	100	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	UJ	0.00096	U
Tert-Butyl Methyl Ether	0.1	100	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	U	0.00096	U
Tetrachloroethylene (PCE)	1.3	18	0.00088	U	0.00051	J	0.0027		0.001	U	0.001	U	0.0011	UJ	0.00096	U
Toluene	0.7	100	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	U	0.00096	U
Trans-1,2-Dichloroethene	0.19	100	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	U	0.00096	U
Trans-1,3-Dichloropropene	NS	NS	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	U	0.00096	U
Trichloroethylene (TCE)	0.47	6.4	0.00088	U	0.0012	U	0.00095	J	0.001	U	0.001	U	0.0011	U	0.00096	U
Trichlorofluoromethane	NS	NS	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	U	0.00096	U
Vinyl Chloride	0.03	0.48	0.00088	U	0.0012	U	0.0011	U	0.001	U	0.001	U	0.0011	U	0.00096	U
Xylenes, Total	0.26	100	0.0018	U	0.0023	U	0.0021	U	0.0021	U	0.002	U	0.0022	U	0.0011	J

Table 1
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Volatile Organic Compounds (VOCs)

		AKRF Sample ID	RI-SB-02_13-15_20250924		RI-SB-03_0.5-2_20250924		RI-SB-03_8-10_20250924		RI-SB-03_13-15_20250924		RI-SB-04_0.5-2_20250924		RI-SB-04_8-10_20250924		RI-SB-04_13-15_20250924	
		Lab Sample ID	460-335652-7		460-335652-23		460-335651-11		460-335652-28		460-335652-9		460-335652-14		460-335652-15	
		Sample Date	9/24/2025		9/24/2025		9/24/2025		9/24/2025		9/24/2025		9/24/2025		9/24/2025	
		Dilution Factor	1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,1,1-Trichloroethane	0.68	100	0.0024	U	0.0013	U	0.0012	U	0.0016	U	0.0012	U	0.001	U	0.0014	U
1,1,2,2-Tetrachloroethane	NS	NS	0.0024	U	0.0013	U	0.0012	R	0.0016	U	0.0012	U	0.001	U	0.0014	U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	0.0024	U	0.0013	U	0.0012	U	0.0016	U	0.0012	U	0.001	U	0.0014	U
1,1,2-Trichloroethane	NS	NS	0.0024	U	0.0013	U	0.0012	U	0.0016	U	0.0012	U	0.001	U	0.0014	U
1,1-Dichloroethane	0.27	47	0.0024	U	0.0013	U	0.0012	U	0.0016	U	0.0012	U	0.001	U	0.0014	U
1,1-Dichloroethene	0.24	0.98	0.0024	U	0.0013	U	0.0012	U	0.0016	U	0.0012	U	0.001	U	0.0014	U
1,2,3-Trichlorobenzene	NS	NS	0.0024	U	0.0013	U	0.0012	UJ	0.0016	U	0.0012	U	0.001	U	0.0014	U
1,2,4-Trichlorobenzene	NS	NS	0.0024	U	0.0013	U	0.0012	UJ	0.0016	U	0.0012	U	0.001	U	0.0014	U
1,2,4-Trimethylbenzene	5.9	100	0.0024	U	0.0013	U	0.0012	UJ	0.0016	U	0.0012	U	0.0017		0.0014	U
1,2-Dibromo-3-Chloropropane	NS	NS	0.0024	U	0.0013	U	0.0012	UJ	0.0016	U	0.0012	U	0.001	U	0.0014	U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	0.0024	U	0.0013	U	0.0012	U	0.0016	U	0.0012	U	0.001	U	0.0014	U
1,2-Dichlorobenzene	1.1	100	0.0024	U	0.0013	U	0.0012	UJ	0.0016	U	0.0012	U	0.001	U	0.0014	U
1,2-Dichloroethane	0.02	5.8	0.0022	J	0.0013	U	0.0012	U	0.0016	U	0.0012	U	0.001	U	0.0014	U
1,2-Dichloropropane	NS	NS	0.0024	U	0.0013	U	0.0012	U	0.0016	U	0.0012	U	0.001	U	0.0014	U
1,3,5-Trimethylbenzene (Mesitylene)	3.1	100	0.0024	U	0.0013	U	0.0012	U	0.0016	U	0.0012	U	0.00085	J	0.0014	U
1,3-Dichlorobenzene	2.6	38	0.0024	U	0.0013	U	0.0012	UJ	0.0016	U	0.0012	U	0.001	U	0.0014	U
1,4-Dichlorobenzene	1.8	24	0.0024	U	0.0013	U	0.0012	UJ	0.0016	U	0.0012	U	0.001	U	0.0014	U
2-Hexanone	NS	NS	0.012	U	0.0065	U	0.006	U	0.0078	U	0.0062	U	0.0052	U	0.007	U
Acetone	**0.03**	100	0.03		0.0078	U	**0.055**		**0.053**		0.015		**0.06**		**0.18**	
Benzene	0.06	3.7	0.0024	U	0.0013	U	0.0012	U	0.0075		0.0012	U	0.001	U	0.0012	J
Bromochloromethane	NS	NS	0.0024	U	0.0013	U	0.0012	U	0.0016	U	0.0012	U	0.001	U	0.0014	U
Bromodichloromethane	NS	NS	0.0024	U	0.0013	U	0.0012	U	0.0016	U	0.0012	U	0.001	U	0.0014	U
Bromoform	NS	NS	0.0024	UJ	0.0013	UJ	0.0012	UJ	0.0016	UJ	0.0012	UJ	0.001	UJ	0.0014	UJ
Bromomethane	NS	NS	0.0048	U	0.0026	U	0.0024	U	0.0031	U	0.0025	U	0.0021	U	0.0028	U
Carbon Disulfide	NS	NS	0.0019	J	0.0013	U	0.0012	U	0.0031		0.0012	U	0.00077	J	0.0055	
Carbon Tetrachloride	0.76	7.1	0.0024	UJ	0.0013	UJ	0.0012	UJ	0.0016	U	0.0012	UJ	0.001	UJ	0.0014	UJ
Chlorobenzene	4.5	100	0.0024	U	0.0013	U	0.0012	UJ	0.0016	U	0.0012	U	0.001	U	0.0014	U
Chloroethane	NS	NS	0.0024	U	0.0013	U	0.0012	U	0.0016	U	0.0012	U	0.001	U	0.0014	U
Chloroform	0.37	24	0.0024	U	0.0013	U	0.0012	U	0.0016	U	0.0012	U	0.001	U	0.0014	U
Chloromethane	NS	NS	0.0024	U	0.0013	U	0.0012	U	0.0016	U	0.0012	U	0.001	U	0.0014	U
Cis-1,2-Dichloroethylene	0.19	41	0.0024	U	0.0013	U	0.0012	U	0.0016	U	0.0012	U	0.001	U	0.0014	U
Cis-1,3-Dichloropropene	NS	NS	0.0024	U	0.0013	U	0.0012	U	0.0016	U	0.0012	U	0.001	U	0.0014	U
Cyclohexane	NS	NS	0.0024	U	0.0013	U	0.0012	U	0.0016	U	0.0012	U	0.001	U	0.0014	U
Dibromochloromethane	NS	NS	0.0024	U	0.0013	U	0.0012	U	0.0016	U	0.0012	U	0.001	U	0.0014	U
Dichlorodifluoromethane	NS	NS	0.0024	U	0.0013	U	0.0012	U	0.0016	U	0.0012	U	0.001	U	0.0014	U
Ethylbenzene	1	76	0.0024	U	0.0013	U	0.0012	UJ	0.0016	U	0.0012	U	0.00062	J	0.0014	U
Isopropylbenzene (Cumene)	NS	NS	0.0024	U	0.0013	U	0.0012	UJ	0.0016	U	0.0012	U	0.001	U	0.0014	U
M,P-Xylenes	NS	NS	0.0024	U	0.0013	U	0.0012	UJ	0.0016	U	0.0012	U	0.0019		0.0014	U
Methyl Acetate	NS	NS	0.012	U	0.0065	U	0.006	R	0.0078	U	0.0062	U	0.0052	U	0.007	U
Methyl Ethyl Ketone (2-Butanone)	0.1	100	0.012	U	0.0065	U	0.006	U	0.0077	J	0.0062	U	0.0032	J	0.024	
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	0.012	U	0.0065	U	0.006	U	0.0025	J	0.0062	U	0.0052	U	0.007	U
Methylcyclohexane	NS	NS	0.0024	U	0.0013	U	0.0012	UJ	0.0016	U	0.0012	U	0.00059	J	0.0014	U
Methylene Chloride	0.05	81	0.0048	U	0.0026	U	0.0024	U	0.0031	U	0.0025	U	0.0021	U	0.0028	U
N-Butylbenzene	18	100	0.0024	U	0.0013	U	0.0012	UJ	0.0016	U	0.0012	U	0.001	U	0.0014	U
N-Propylbenzene	5	100	0.0024	U	0.0013	U	0.0012	U	0.0016	U	0.0012	U	0.001	U	0.0014	U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	0.0024	U	0.0013	U	0.0012	UJ	0.0016	U	0.0012	U	0.0015		0.0014	U
Sec-Butylbenzene	25	100	0.0024	U	0.0013	U	0.0012	UJ	0.0016	U	0.0012	U	0.001	U	0.0014	U
Styrene	NS	NS	0.0024	U	0.0013	U	0.0012	UJ	0.0016	U	0.0012	U	0.001	U	0.0014	U
T-Butylbenzene	11	100	0.0024	U	0.0013	U	0.0012	UJ	0.0016	U	0.0012	U	0.001	U	0.00048	J
Tert-Butyl Methyl Ether	0.1	100	0.0024	U	0.0013	U	0.0012	U	0.0016	U	0.0012	U	0.001	U	0.0014	U
Tetrachloroethylene (PCE)	1.3	18	0.0024	U	0.0013	U	0.0012	UJ	0.0016	U	0.0004	J	0.001	U	0.0014	U
Toluene	0.7	100	0.001	J	0.0013	U	0.0012	U	0.0016	U	0.0012	U	0.00081	J	0.0014	U
Trans-1,2-Dichloroethene	0.19	100	0.0024	U	0.0013	U	0.0012	U	0.0016	U	0.0012	U	0.001	U	0.0014	U
Trans-1,3-Dichloropropene	NS	NS	0.0024	U	0.0013	U	0.0012	U	0.0016	U	0.0012	U	0.001	U	0.0014	U
Trichloroethylene (TCE)	0.47	6.4	0.0024	U	0.0013	U	0.0012	U	0.0016	U	0.0012	U	0.001	U	0.0014	U
Trichlorofluoromethane	NS	NS	0.0024	U	0.0013	U	0.0012	U	0.0016	U	0.0012	U	0.001	U	0.0014	U
Vinyl Chloride	0.03	0.48	0.0024	U	0.0013	U	0.0012	U	0.0016	U	0.0012	U	0.001	U	0.0014	U
Xylenes, Total	0.26	100	0.00083	J	0.0026	U	0.0024	UJ	0.0031	U	0.0025	U	0.0035		0.0028	U

Table 1
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Volatile Organic Compounds (VOCs)

		AKRF Sample ID	RI-SB-05_0.5-2_20250923		RI-SB-05_8-10_20250923		RI-SB-05_13-15_20250923		RI-SB-06_0.5-2_20250922		RI-SB-06_8-10_20250922		RI-SB-06_13-15_20250922		RI-SB-07_0.5-2_20250924	
		Lab Sample ID	460-335525-22		460-335525-26		460-335536-10		460-335428-16		460-335428-20		460-335428-21		460-335652-17	
		Sample Date	9/23/2025		9/23/2025		9/23/2025		9/22/2025		9/22/2025		9/22/2025		9/24/2025	
		Dilution Factor	1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,1,1-Trichloroethane	0.68	100	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0016	U	0.0012	U
1,1,2,2-Tetrachloroethane	NS	NS	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0016	U	0.0012	U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0016	U	0.0012	U
1,1,2-Trichloroethane	NS	NS	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0016	U	0.0012	U
1,1-Dichloroethane	0.27	47	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0016	U	0.0012	U
1,1-Dichloroethene	0.24	0.98	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0016	U	0.0012	U
1,2,3-Trichlorobenzene	NS	NS	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0016	U	0.0012	U
1,2,4-Trichlorobenzene	NS	NS	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0016	U	0.0012	U
1,2,4-Trimethylbenzene	5.9	100	0.0012	U	0.0013	U	0.0071		0.001	U	0.0014	U	0.0008	J	0.0012	U
1,2-Dibromo-3-Chloropropane	NS	NS	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0016	U	0.0012	U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0016	U	0.0012	U
1,2-Dichlorobenzene	1.1	100	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0016	U	0.0012	U
1,2-Dichloroethane	0.02	5.8	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0016	U	0.0012	U
1,2-Dichloropropane	NS	NS	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0014	J	0.0012	U
1,3,5-Trimethylbenzene (Mesitylene)	3.1	100	0.0012	U	0.0013	U	0.0026		0.001	U	0.0014	U	0.00057	J	0.0012	U
1,3-Dichlorobenzene	2.6	38	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0016	U	0.0012	U
1,4-Dichlorobenzene	1.8	24	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0016	U	0.0012	U
2-Hexanone	NS	NS	0.006	U	0.0067	U	0.0051	U	0.005	U	0.0072	U	0.0081	U	0.0062	U
Acetone	**0.03**	100	0.016	U	0.018	U	**0.073**	**JK**	0.017	U	0.025	U	**0.095**	**JK**	0.0074	U
Benzene	0.06	3.7	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0016	U	0.0012	U
Bromochloromethane	NS	NS	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0016	U	0.0012	U
Bromodichloromethane	NS	NS	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0016	U	0.0012	U
Bromoform	NS	NS	0.0012	UJ	0.0013	UJ	0.001	UJ	0.001	UJ	0.0014	UJ	0.0016	UJ	0.0012	UJ
Bromomethane	NS	NS	0.0024	U	0.0027	U	0.002	U	0.002	U	0.0029	U	0.0033	U	0.0025	U
Carbon Disulfide	NS	NS	0.0012	U	0.0013	U	0.0032		0.001	U	0.0014	U	0.0016	U	0.0012	U
Carbon Tetrachloride	0.76	7.1	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0016	U	0.0012	UJ
Chlorobenzene	4.5	100	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0016	U	0.0012	U
Chloroethane	NS	NS	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0016	U	0.0012	U
Chloroform	0.37	24	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0016	U	0.0012	U
Chloromethane	NS	NS	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0016	U	0.0012	U
Cis-1,2-Dichloroethylene	0.19	41	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0018		0.0012	U
Cis-1,3-Dichloropropene	NS	NS	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0016	U	0.0012	U
Cyclohexane	NS	NS	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0016	U	0.0012	U
Dibromochloromethane	NS	NS	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0016	U	0.0012	U
Dichlorodifluoromethane	NS	NS	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0016	U	0.0012	U
Ethylbenzene	1	76	0.0012	U	0.0013	U	0.00063	J	0.001	U	0.0014	U	0.0016	U	0.0012	U
Isopropylbenzene (Cumene)	NS	NS	0.0012	U	0.0013	U	0.00065	J	0.001	U	0.0014	U	0.0016	U	0.0012	U
M,P-Xylenes	NS	NS	0.0012	U	0.0013	U	0.0017		0.001	U	0.0014	U	0.0016	U	0.0012	U
Methyl Acetate	NS	NS	0.006	U	0.0067	U	0.0051	U	0.005	U	0.0072	U	0.0081	U	0.0062	U
Methyl Ethyl Ketone (2-Butanone)	0.1	100	0.006	U	0.0067	U	0.0067		0.005	U	0.0072	U	0.01		0.0062	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	0.006	U	0.0067	U	0.0051	U	0.005	U	0.0072	U	0.0081	U	0.0062	U
Methylcyclohexane	NS	NS	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0016	U	0.0012	U
Methylene Chloride	0.05	81	0.0015	J	0.0027	U	0.002	U	0.002	U	0.0022	J	0.0033	U	0.0025	U
N-Butylbenzene	18	100	0.0012	U	0.0013	U	0.00096	J	0.001	U	0.0014	U	0.0016	U	0.0012	U
N-Propylbenzene	5	100	0.0012	U	0.0013	U	0.0008	J	0.001	U	0.0014	U	0.0016	U	0.0012	U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	0.0012	U	0.0013	U	0.0014		0.001	U	0.0014	U	0.0016	U	0.0012	U
Sec-Butylbenzene	25	100	0.0012	U	0.0013	U	0.00092	J	0.001	U	0.0014	U	0.00097	J	0.0012	U
Styrene	NS	NS	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0016	U	0.0012	U
T-Butylbenzene	11	100	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0016	U	0.0012	U
Tert-Butyl Methyl Ether	0.1	100	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0016	U	0.0012	U
Tetrachloroethylene (PCE)	1.3	18	0.0012	U	0.0025		0.001	U	0.001	U	0.01		0.0015	J	0.0012	U
Toluene	0.7	100	0.0012	U	0.0013	U	0.00088	J	0.001	U	0.0014	U	0.0016	U	0.0012	U
Trans-1,2-Dichloroethene	0.19	100	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0016	U	0.0012	U
Trans-1,3-Dichloropropene	NS	NS	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0016	U	0.0012	U
Trichloroethylene (TCE)	0.47	6.4	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0011	J	0.0012	U
Trichlorofluoromethane	NS	NS	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0016	U	0.0012	U
Vinyl Chloride	0.03	0.48	0.0012	U	0.0013	U	0.001	U	0.001	U	0.0014	U	0.0016	U	0.0012	U
Xylenes, Total	0.26	100	0.0024	U	0.0027	U	0.0031		0.002	U	0.0029	U	0.0033	U	0.0025	U

Table 1
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Volatile Organic Compounds (VOCs)

		AKRF Sample ID	RI-SB-07_8-10_20250924		RI-SB-08_0.5-2_20250922		RI-SB-08_8-10_20250922		RI-SB-08_10-12_20250926		RI-SB-09_0.5-2_20250923		RI-SB-09_8-10_20250923		RI-SB-09_10-12_20250926	
		Lab Sample ID	460-335652-21		460-335429-3		460-335428-12		460-335823-3		460-335525-15		460-335525-19		460-335823-4	
		Sample Date	9/24/2025		9/22/2025		9/22/2025		9/26/2025		9/23/2025		9/23/2025		9/26/2025	
		Dilution Factor	1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,1,1-Trichloroethane	0.68	100	0.0013	U	0.00092	U	0.00091	U	0.0014	U	0.0011	U	0.0013	U	0.0013	U
1,1,2,2-Tetrachloroethane	NS	NS	0.0013	U	0.00092	U	0.00091	U	0.0014	U	0.0011	U	0.0013	U	0.0013	U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	0.0013	U	0.00092	U	0.00091	U	0.0014	U	0.0011	U	0.0013	U	0.0013	U
1,1,2-Trichloroethane	NS	NS	0.0013	U	0.00092	U	0.00091	U	0.0014	U	0.0011	U	0.0013	U	0.0013	U
1,1-Dichloroethane	0.27	47	0.0013	U	0.00092	U	0.00091	U	0.0014	U	0.0011	U	0.0013	U	0.0013	U
1,1-Dichloroethene	0.24	0.98	0.0013	U	0.00092	U	0.00091	U	0.0014	U	0.0011	U	0.0013	U	0.0013	U
1,2,3-Trichlorobenzene	NS	NS	0.0013	U	0.00092	U	0.00091	UJ	0.0014	U	0.0011	U	0.0013	U	0.0013	U
1,2,4-Trichlorobenzene	NS	NS	0.0013	U	0.00092	U	0.00091	UJ	0.0014	U	0.0011	U	0.0013	U	0.0013	U
1,2,4-Trimethylbenzene	5.9	100	0.0013	U	0.00092	U	0.00091	UJ	0.0014	U	0.0011	U	0.0013	U	0.0013	U
1,2-Dibromo-3-Chloropropane	NS	NS	0.0013	U	0.00092	U	0.00091	UJ	0.0014	U	0.0011	U	0.0013	U	0.0013	U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	0.0013	U	0.00092	U	0.00091	UJ	0.0014	U	0.0011	U	0.0013	U	0.0013	U
1,2-Dichlorobenzene	1.1	100	0.0013	U	0.00092	U	0.00091	UJ	0.0014	U	0.0011	U	0.0013	U	0.0013	U
1,2-Dichloroethane	0.02	5.8	0.0013	U	0.00092	U	0.00091	U	0.0014	U	0.0011	U	0.0013	U	0.0013	U
1,2-Dichloropropane	NS	NS	0.0013	U	0.00092	U	0.00091	U	0.0014	U	0.0011	U	0.0013	U	0.0013	U
1,3,5-Trimethylbenzene (Mesitylene)	3.1	100	0.0013	U	0.00092	U	0.00091	U	0.0014	U	0.0011	U	0.0013	U	0.0013	U
1,3-Dichlorobenzene	2.6	38	0.0013	U	0.00092	U	0.00091	UJ	0.0014	U	0.0011	U	0.0013	U	0.0013	U
1,4-Dichlorobenzene	1.8	24	0.0013	U	0.00092	U	0.00091	UJ	0.0014	U	0.0011	U	0.0013	U	0.0013	U
2-Hexanone	NS	NS	0.0063	U	0.0046	U	0.0046	U	0.007	U	0.0056	U	0.0065	U	0.0066	U
Acetone	**0.03**	100	0.0075	U	0.0055	U	0.01	U	**0.069**		0.0067	U	0.0078	U	0.028	
Benzene	0.06	3.7	0.0013	U	0.00092	U	0.00091	U	0.0014	U	0.0011	U	0.0013	U	0.0013	U
Bromochloromethane	NS	NS	0.0013	U	0.00092	U	0.00091	UJ	0.0014	U	0.0011	U	0.0013	U	0.0013	U
Bromodichloromethane	NS	NS	0.0013	U	0.00092	U	0.00091	U	0.0014	U	0.0011	U	0.0013	U	0.0013	U
Bromoform	NS	NS	0.0013	UJ	0.00092	UJ	0.00091	UJ	0.0014	UJ	0.0011	UJ	0.0013	UJ	0.0013	UJ
Bromomethane	NS	NS	0.0025	U	0.0018	U	0.0018	U	0.0028	U	0.0022	U	0.0026	U	0.0027	U
Carbon Disulfide	NS	NS	0.0013	U	0.00092	U	0.00091	U	0.0022		0.0011	U	0.0013	U	0.0013	U
Carbon Tetrachloride	0.76	7.1	0.0013	UJ	0.00092	U	0.00091	U	0.0014	U	0.0011	U	0.0013	U	0.0013	U
Chlorobenzene	4.5	100	0.0013	U	0.00092	U	0.00091	UJ	0.0014	U	0.0011	U	0.0013	U	0.0013	U
Chloroethane	NS	NS	0.0013	U	0.00092	U	0.00091	U	0.0014	U	0.0011	U	0.0013	U	0.0013	U
Chloroform	0.37	24	0.0013	U	0.00092	U	0.00091	U	0.0014	U	0.0011	U	0.0013	U	0.0013	U
Chloromethane	NS	NS	0.0013	U	0.00092	U	0.00091	U	0.0014	U	0.0011	U	0.0013	U	0.0013	U
Cis-1,2-Dichloroethylene	0.19	41	0.0013	U	0.00092	U	0.00091	U	0.0014	U	0.0011	U	0.0013	U	0.0013	U
Cis-1,3-Dichloropropene	NS	NS	0.0013	U	0.00092	U	0.00091	U	0.0014	U	0.0011	U	0.0013	U	0.0013	U
Cyclohexane	NS	NS	0.0013	U	0.00092	U	0.00091	U	0.0014	U	0.0011	U	0.0013	U	0.0013	U
Dibromochloromethane	NS	NS	0.0013	U	0.00092	U	0.00091	U	0.0014	U	0.0011	U	0.0013	U	0.0013	U
Dichlorodifluoromethane	NS	NS	0.0013	U	0.00092	U	0.00091	U	0.0014	U	0.0011	U	0.0013	U	0.0013	U
Ethylbenzene	1	76	0.0013	U	0.00092	U	0.00091	U	0.0014	U	0.0011	U	0.0013	U	0.0013	U
Isopropylbenzene (Cumene)	NS	NS	0.0013	U	0.00092	U	0.00091	U	0.0014	U	0.0011	U	0.0013	U	0.0013	U
M,P-Xylenes	NS	NS	0.0013	U	0.00092	U	0.00091	UJ	0.0014	U	0.0011	U	0.0013	U	0.0013	U
Methyl Acetate	NS	NS	0.0063	U	0.0046	U	0.0046	U	0.007	U	0.0056	U	0.0065	U	0.0066	U
Methyl Ethyl Ketone (2-Butanone)	0.1	100	0.0063	U	0.0046	U	0.0046	U	0.0052	J	0.0056	U	0.0065	U	0.0028	J
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	0.0063	U	0.0046	U	0.0046	U	0.007	U	0.0056	U	0.0065	U	0.0066	U
Methylcyclohexane	NS	NS	0.0013	U	0.00092	U	0.00091	U	0.0014	U	0.0011	U	0.0013	U	0.0013	U
Methylene Chloride	0.05	81	0.0025	U	0.0018	U	0.0018	U	0.0028	U	0.0022	U	0.0026	U	0.0027	U
N-Butylbenzene	18	100	0.0013	U	0.00092	U	0.00091	UJ	0.0014	U	0.0011	U	0.0013	U	0.0013	U
N-Propylbenzene	5	100	0.0013	U	0.00092	U	0.00091	U	0.0014	U	0.0011	U	0.0013	U	0.0013	U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	0.0013	U	0.00092	U	0.00091	UJ	0.0014	U	0.0011	U	0.0013	U	0.0013	U
Sec-Butylbenzene	25	100	0.0013	U	0.00092	U	0.00091	UJ	0.0014	U	0.0011	U	0.0013	U	0.0013	U
Styrene	NS	NS	0.0013	U	0.00092	U	0.00091	UJ	0.0014	U	0.0011	U	0.0013	U	0.0013	U
T-Butylbenzene	11	100	0.0013	U	0.00092	U	0.00091	UJ	0.0014	U	0.0011	U	0.0013	U	0.0013	U
Tert-Butyl Methyl Ether	0.1	100	0.0013	U	0.00092	U	0.00091	U	0.0014	U	0.0011	U	0.0013	U	0.0013	U
Tetrachloroethylene (PCE)	1.3	18	0.0013	U	0.00092	U	0.00091	U	0.0014	U	0.0011	U	0.0013	U	0.0046	
Toluene	0.7	100	0.0013	U	0.00092	U	0.00091	U	0.00078	J	0.0011	U	0.0013	U	0.0013	U
Trans-1,2-Dichloroethene	0.19	100	0.0013	U	0.00092	U	0.00091	U	0.0014	U	0.0011	U	0.0013	U	0.0013	U
Trans-1,3-Dichloropropene	NS	NS	0.0013	U	0.00092	U	0.00091	U	0.0014	U	0.0011	U	0.0013	U	0.0013	U
Trichloroethylene (TCE)	0.47	6.4	0.0013	U	0.00092	U	0.00091	U	0.0014	U	0.0011	U	0.0013	U	0.00088	J
Trichlorofluoromethane	NS	NS	0.0013	U	0.00092	U	0.00091	U	0.0014	U	0.0011	U	0.0013	U	0.0013	U
Vinyl Chloride	0.03	0.48	0.0013	U	0.00092	U	0.00091	U	0.0014	U	0.0011	U	0.0013	U	0.0013	U
Xylenes, Total	0.26	100	0.0025	U	0.0018	U	0.0018	UJ	0.0028	U	0.0022	U	0.0026	U	0.0027	U

Table 1
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Volatile Organic Compounds (VOCs)

		AKRF Sample ID	RI-SB-11_0.5-2_20250924		RI-SB-11_8-10_20250924		RI-SB-14_0.5-2_20250922		RI-SB-14_8-10_20250922		RI-SB-14_10-12_20250926		RI-SB-15_0.5-2_20250922		RI-SB-15_8-10_20250922	
		Lab Sample ID	460-335652-34		460-335652-38		460-335428-24		460-335428-28		460-335823-9		460-335428-30		460-335428-34	
		Sample Date	9/24/2025		9/24/2025		9/22/2025		9/22/2025		9/26/2025		9/22/2025		9/22/2025	
		Dilution Factor	1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,1,1-Trichloroethane	0.68	100	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
1,1,2,2-Tetrachloroethane	NS	NS	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
1,1,2-Trichloroethane	NS	NS	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
1,1-Dichloroethane	0.27	47	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
1,1-Dichloroethene	0.24	0.98	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
1,2,3-Trichlorobenzene	NS	NS	0.0011	U	0.0011	UJ	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
1,2,4-Trichlorobenzene	NS	NS	0.0011	U	0.0011	UJ	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
1,2,4-Trimethylbenzene	5.9	100	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
1,2-Dibromo-3-Chloropropane	NS	NS	0.0011	U	0.0011	UJ	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
1,2-Dichlorobenzene	1.1	100	0.0011	U	0.0011	UJ	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
1,2-Dichloroethane	0.02	5.8	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
1,2-Dichloropropane	NS	NS	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
1,3,5-Trimethylbenzene (Mesitylene)	3.1	100	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
1,3-Dichlorobenzene	2.6	38	0.0011	U	0.0011	UJ	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
1,4-Dichlorobenzene	1.8	24	0.0011	U	0.0011	UJ	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
2-Hexanone	NS	NS	0.0056	U	0.0056	U	0.0051	U	0.0057	U	0.0068	U	0.0064	U	0.008	U
Acetone	**0.03**	100	0.0067	U	0.019		0.017	U	0.033	U	0.01		0.0076	U	0.013	U
Benzene	0.06	3.7	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
Bromochloromethane	NS	NS	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
Bromodichloromethane	NS	NS	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
Bromoform	NS	NS	0.0011	UJ	0.0011	UJ	0.001	UJ	0.0011	UJ	0.0014	UJ	0.0013	UJ	0.0016	UJ
Bromomethane	NS	NS	0.0022	U	0.0022	U	0.002	U	0.0023	U	0.0027	U	0.0025	U	0.0032	U
Carbon Disulfide	NS	NS	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.00059	J	0.0013	U	0.0016	U
Carbon Tetrachloride	0.76	7.1	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
Chlorobenzene	4.5	100	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
Chloroethane	NS	NS	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
Chloroform	0.37	24	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
Chloromethane	NS	NS	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
Cis-1,2-Dichloroethylene	0.19	41	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
Cis-1,3-Dichloropropene	NS	NS	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
Cyclohexane	NS	NS	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
Dibromochloromethane	NS	NS	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
Dichlorodifluoromethane	NS	NS	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
Ethylbenzene	1	76	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
Isopropylbenzene (Cumene)	NS	NS	0.0011	U	0.0011	UJ	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
M,P-Xylenes	NS	NS	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
Methyl Acetate	NS	NS	0.0056	U	0.0056	U	0.0051	U	0.0057	U	0.0068	U	0.0064	U	0.008	U
Methyl Ethyl Ketone (2-Butanone)	0.1	100	0.0056	U	0.0056	U	0.0051	U	0.0027	J	0.0068	U	0.0064	U	0.008	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	0.0056	U	0.0056	U	0.0051	U	0.0057	U	0.0068	U	0.0064	U	0.008	U
Methylcyclohexane	NS	NS	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
Methylene Chloride	0.05	81	0.0022	U	0.0022	U	0.002	U	0.0023	U	0.0027	U	0.0025	U	0.0032	U
N-Butylbenzene	18	100	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
N-Propylbenzene	5	100	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
Sec-Butylbenzene	25	100	0.0011	U	0.0011	UJ	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
Styrene	NS	NS	0.0011	U	0.0011	UJ	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
T-Butylbenzene	11	100	0.0011	U	0.0011	UJ	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
Tert-Butyl Methyl Ether	0.1	100	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
Tetrachloroethylene (PCE)	1.3	18	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0088	
Toluene	0.7	100	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
Trans-1,2-Dichloroethene	0.19	100	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
Trans-1,3-Dichloropropene	NS	NS	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
Trichloroethylene (TCE)	0.47	6.4	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0013	J
Trichlorofluoromethane	NS	NS	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
Vinyl Chloride	0.03	0.48	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.0014	U	0.0013	U	0.0016	U
Xylenes, Total	0.26	100	0.0022	U	0.0022	U	0.002	U	0.0023	U	0.0027	U	0.0025	U	0.0032	U

Table 1
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Volatile Organic Compounds (VOCs)

		AKRF Sample ID	RI-SB-15_10-12_20250926		RI-SB-16_0.5-2_20250922		RI-SB-16_8-10_20250922		RI-SB-16_10-12_20250926		RI-SB-17_0-2_20250923		RI-SB-17_8-10_20250923		RI-SB-22_0.5-2_20251218	
		Lab Sample ID	460-335823-10		460-335428-2		460-335428-6		460-335827-7		460-335536-1		460-335525-5		460-341877-2	
		Sample Date	9/26/2025		9/22/2025		9/22/2025		9/26/2025		9/23/2025		9/23/2025		12/18/2025	
		Dilution Factor	1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,1,1-Trichloroethane	0.68	100	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	UJ	0.0014	U
1,1,2,2-Tetrachloroethane	NS	NS	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	U	0.0014	U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	UJ	0.0014	U
1,1,2-Trichloroethane	NS	NS	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	U	0.0014	U
1,1-Dichloroethane	0.27	47	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	U	0.0014	U
1,1-Dichloroethene	0.24	0.98	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	UJ	0.0014	U
1,2,3-Trichlorobenzene	NS	NS	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	UJ	0.0014	U
1,2,4-Trichlorobenzene	NS	NS	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	UJ	0.0014	U
1,2,4-Trimethylbenzene	5.9	100	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	UJ	0.0014	U
1,2-Dibromo-3-Chloropropane	NS	NS	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	UJ	0.0014	U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	UJ	0.0014	U
1,2-Dichlorobenzene	1.1	100	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	UJ	0.0014	U
1,2-Dichloroethane	0.02	5.8	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	UJ	0.0014	U
1,2-Dichloropropane	NS	NS	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	U	0.0014	U
1,3,5-Trimethylbenzene (Mesitylene)	3.1	100	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	U	0.0014	U
1,3-Dichlorobenzene	2.6	38	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	UJ	0.0014	U
1,4-Dichlorobenzene	1.8	24	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	UJ	0.0014	U
2-Hexanone	NS	NS	0.0051	U	0.0051	U	0.0059	U	0.0052	U	0.0051	U	0.0052	U	0.0068	U
Acetone	**0.03**	100	**0.038**		0.0097	U	0.0071	U	**0.04**		0.031	U	0.016	U	0.016	U
Benzene	0.06	3.7	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	U	0.0014	U
Bromochloromethane	NS	NS	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	UJ	0.0014	U
Bromodichloromethane	NS	NS	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	U	0.0014	U
Bromoform	NS	NS	0.001	UJ	0.001	UJ	0.0012	UJ	0.001	UJ	0.001	UJ	0.001	UJ	0.0014	UJ
Bromomethane	NS	NS	0.002	U	0.002	U	0.0024	U	0.0021	U	0.002	U	0.0021	U	0.0027	U
Carbon Disulfide	NS	NS	0.00055	J	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	U	0.0014	U
Carbon Tetrachloride	0.76	7.1	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	U	0.0014	UJ
Chlorobenzene	4.5	100	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	UJ	0.0014	U
Chloroethane	NS	NS	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	UJ	0.0014	U
Chloroform	0.37	24	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	U	0.0014	U
Chloromethane	NS	NS	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	U	0.0014	U
Cis-1,2-Dichloroethylene	0.19	41	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	UJ	0.0014	U
Cis-1,3-Dichloropropene	NS	NS	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	U	0.0014	U
Cyclohexane	NS	NS	0.0023		0.001	U	0.0012	U	0.001	U	0.001	U	0.001	U	0.0014	U
Dibromochloromethane	NS	NS	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	U	0.0014	U
Dichlorodifluoromethane	NS	NS	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	U	0.0014	U
Ethylbenzene	1	76	0.0007	J	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	UJ	0.0014	U
Isopropylbenzene (Cumene)	NS	NS	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	UJ	0.0014	U
M,P-Xylenes	NS	NS	0.0049		0.001	U	0.0012	U	0.001	U	0.001	U	0.001	UJ	0.0014	U
Methyl Acetate	NS	NS	0.0051	U	0.0051	U	0.0059	U	0.0052	U	0.0051	U	0.0052	U	0.0068	U
Methyl Ethyl Ketone (2-Butanone)	0.1	100	0.0029	J	0.0051	U	0.0059	U	0.0053		0.0016	J	0.0052	U	0.0068	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	0.0043	J	0.0051	U	0.0059	U	0.0052	U	0.0051	U	0.0052	UJ	0.0068	U
Methylcyclohexane	NS	NS	0.0014		0.001	U	0.0012	U	0.001	U	0.001	U	0.001	UJ	0.0014	U
Methylene Chloride	0.05	81	0.002	U	0.002	U	0.0024	U	0.0021	U	0.002	U	0.0021	UJ	0.0027	U
N-Butylbenzene	18	100	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	UJ	0.0014	U
N-Propylbenzene	5	100	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	UJ	0.0014	U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	0.0064		0.001	U	0.0012	U	0.001	U	0.001	U	0.001	UJ	0.0014	U
Sec-Butylbenzene	25	100	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	UJ	0.0014	U
Styrene	NS	NS	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	UJ	0.0014	U
T-Butylbenzene	11	100	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	UJ	0.0014	U
Tert-Butyl Methyl Ether	0.1	100	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	U	0.0014	U
Tetrachloroethylene (PCE)	1.3	18	0.004		0.001	U	0.0012	U	0.001	U	0.001	U	0.001	UJ	0.0014	U
Toluene	0.7	100	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	UJ	0.0014	U
Trans-1,2-Dichloroethene	0.19	100	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	UJ	0.0014	U
Trans-1,3-Dichloropropene	NS	NS	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	UJ	0.0014	U
Trichloroethylene (TCE)	0.47	6.4	0.00047	J	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	U	0.0014	U
Trichlorofluoromethane	NS	NS	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	U	0.0014	U
Vinyl Chloride	0.03	0.48	0.001	U	0.001	U	0.0012	U	0.001	U	0.001	U	0.001	U	0.0014	U
Xylenes, Total	0.26	100	0.011		0.002	U	0.0024	U	0.0021	U	0.002	U	0.0021	UJ	0.0027	U

Table 1
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Volatile Organic Compounds (VOCs)

		AKRF Sample ID	RI-SB-X8_0.5-2_20251218		RI-SB-22_2-4_20251218		RI-SB-22_8-10_20251218		RI-SB-23_0-2_20251218		RI-SB-23_2-4_20251218		RI-SB-X13_2-4_20251218		RI-SB-23_8-10_20251218	
		Lab Sample ID	460-341877-8		460-341877-3		460-341877-6		460-341877-9		460-341877-10		460-341877-15		460-341877-13	
		Sample Date	12/18/2025		12/18/2025		12/18/2025		12/18/2025		12/18/2025		12/18/2025		12/18/2025	
		Dilution Factor	1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,1,1-Trichloroethane	0.68	100	0.0014	U	0.001	U	0.0015	U	0.00093	U	0.0011	U	0.0011	U	0.0014	U
1,1,2,2-Tetrachloroethane	NS	NS	0.0014	U	0.001	U	0.0015	UJ	0.00093	U	0.0011	U	0.0011	U	0.0014	U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	0.0014	U	0.001	U	0.0015	U	0.00093	U	0.0011	U	0.0011	U	0.0014	U
1,1,2-Trichloroethane	NS	NS	0.0014	U	0.001	U	0.0015	UJ	0.00093	U	0.0011	U	0.0011	U	0.0014	U
1,1-Dichloroethane	0.27	47	0.0014	U	0.001	U	0.0015	U	0.00093	U	0.0011	U	0.0011	U	0.0014	U
1,1-Dichloroethene	0.24	0.98	0.0014	U	0.001	U	0.0015	U	0.00093	U	0.0011	U	0.0011	U	0.0014	U
1,2,3-Trichlorobenzene	NS	NS	0.0014	U	0.001	U	0.0015	UJ	0.00093	U	0.0011	U	0.0011	U	0.0014	U
1,2,4-Trichlorobenzene	NS	NS	0.0014	U	0.001	U	0.0015	UJ	0.00093	U	0.0011	U	0.0011	U	0.0014	U
1,2,4-Trimethylbenzene	5.9	100	0.0014	U	0.001	U	0.0015	UJ	0.00093	U	0.0011	U	0.0011	U	0.0014	U
1,2-Dibromo-3-Chloropropane	NS	NS	0.0014	U	0.001	U	0.0015	UJ	0.00093	U	0.0011	U	0.0011	U	0.0014	U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	0.0014	U	0.001	U	0.0015	UJ	0.00093	U	0.0011	U	0.0011	U	0.0014	U
1,2-Dichlorobenzene	1.1	100	0.0014	U	0.001	U	0.0015	UJ	0.00093	U	0.0011	U	0.0011	U	0.0014	U
1,2-Dichloroethane	0.02	5.8	0.0014	U	0.001	U	0.0015	U	0.00093	U	0.0011	U	0.0011	U	0.0014	U
1,2-Dichloropropane	NS	NS	0.0014	U	0.001	U	0.0015	U	0.00093	U	0.0011	U	0.0011	U	0.0014	U
1,3,5-Trimethylbenzene (Mesitylene)	3.1	100	0.0014	U	0.001	U	0.0015	UJ	0.00093	U	0.0011	U	0.0011	U	0.0014	U
1,3-Dichlorobenzene	2.6	38	0.0014	U	0.001	U	0.0015	UJ	0.00093	U	0.0011	U	0.0011	U	0.0014	U
1,4-Dichlorobenzene	1.8	24	0.0014	U	0.001	U	0.0015	UJ	0.00093	U	0.0011	U	0.0011	U	0.0014	U
2-Hexanone	NS	NS	0.0068	U	0.0052	U	0.0073	U	0.0046	U	0.0055	U	0.0054	U	0.0072	U
Acetone	**0.03**	100	0.0082	U	0.0062	U	0.0087	U	0.006	U	0.0066	U	0.0065	U	**0.22**	
Benzene	0.06	3.7	0.0014	U	0.001	U	0.0015	U	0.00093	U	0.0011	U	0.0011	U	0.0014	U
Bromochloromethane	NS	NS	0.0014	U	0.001	U	0.0015	U	0.00093	U	0.0011	U	0.0011	UJ	0.0014	U
Bromodichloromethane	NS	NS	0.0014	U	0.001	U	0.0015	U	0.00093	U	0.0011	U	0.0011	U	0.0014	U
Bromoform	NS	NS	0.0014	UJ	0.001	UJ	0.0015	UJ	0.00093	UJ	0.0011	UJ	0.0011	UJ	0.0014	U
Bromomethane	NS	NS	0.0027	U	0.0021	U	0.0029	U	0.0019	U	0.0022	U	0.0022	U	0.0029	U
Carbon Disulfide	NS	NS	0.0014	U	0.001	U	0.0015	U	0.00093	U	0.0011	U	0.0011	U	0.0019	
Carbon Tetrachloride	0.76	7.1	0.0014	UJ	0.001	UJ	0.0015	UJ	0.00093	UJ	0.0011	UJ	0.0011	UJ	0.0014	U
Chlorobenzene	4.5	100	0.0014	U	0.001	U	0.0015	UJ	0.00093	U	0.0011	U	0.0011	U	0.0014	U
Chloroethane	NS	NS	0.0014	U	0.001	U	0.0015	U	0.00093	U	0.0011	U	0.0011	U	0.0014	U
Chloroform	0.37	24	0.0014	U	0.001	U	0.0015	U	0.00093	U	0.0011	U	0.0011	U	0.0014	U
Chloromethane	NS	NS	0.0014	U	0.001	U	0.0015	U	0.00093	U	0.0011	U	0.0011	U	0.0014	U
Cis-1,2-Dichloroethylene	0.19	41	0.0014	U	0.001	U	0.0015	U	0.00093	U	0.0011	U	0.0011	U	0.0014	U
Cis-1,3-Dichloropropene	NS	NS	0.0014	U	0.001	U	0.0015	UJ	0.00093	U	0.0011	U	0.0011	U	0.0014	U
Cyclohexane	NS	NS	0.0014	U	0.001	U	0.0015	U	0.00093	U	0.0011	U	0.0011	U	0.0014	U
Dibromochloromethane	NS	NS	0.0014	U	0.001	U	0.0015	U	0.00093	U	0.0011	U	0.0011	U	0.0014	U
Dichlorodifluoromethane	NS	NS	0.0014	U	0.001	U	0.0015	U	0.00093	U	0.0011	U	0.0011	U	0.0014	U
Ethylbenzene	1	76	0.0014	U	0.001	U	0.0015	UJ	0.00093	U	0.0011	U	0.0011	U	0.0014	U
Isopropylbenzene (Cumene)	NS	NS	0.0014	U	0.001	U	0.0015	UJ	0.00093	U	0.0011	U	0.0011	U	0.0014	U
M,P-Xylenes	NS	NS	0.0014	U	0.001	U	0.0015	UJ	0.00093	U	0.0011	U	0.0011	U	0.0014	U
Methyl Acetate	NS	NS	0.0068	U	0.0052	U	0.0073	U	0.0046	U	0.0055	U	0.0054	U	0.0072	U
Methyl Ethyl Ketone (2-Butanone)	0.1	100	0.0068	U	0.0052	U	0.0073	U	0.0046	U	0.0055	U	0.0054	U	0.047	
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	0.0068	U	0.0052	U	0.0073	U	0.0046	U	0.0055	U	0.0054	U	0.0072	U
Methylcyclohexane	NS	NS	0.0014	U	0.001	U	0.0015	U	0.00093	U	0.0011	U	0.0011	U	0.0014	U
Methylene Chloride	0.05	81	0.0027	U	0.0021	U	0.0029	U	0.0019	U	0.0022	U	0.0022	U	0.0029	U
N-Butylbenzene	18	100	0.0014	U	0.001	U	0.0015	UJ	0.00093	U	0.0011	U	0.0011	U	0.0014	U
N-Propylbenzene	5	100	0.0014	U	0.001	U	0.0015	UJ	0.00093	U	0.0011	U	0.0011	U	0.0014	U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	0.0014	U	0.001	U	0.0015	UJ	0.00093	U	0.0011	U	0.0011	U	0.0014	U
Sec-Butylbenzene	25	100	0.0014	U	0.001	U	0.0015	UJ	0.00093	U	0.0011	U	0.0011	U	0.0014	U
Styrene	NS	NS	0.0014	U	0.001	U	0.0015	UJ	0.00093	U	0.0011	U	0.0011	U	0.0014	U
T-Butylbenzene	11	100	0.0014	U	0.001	U	0.0015	UJ	0.00093	U	0.0011	U	0.0011	U	0.0014	U
Tert-Butyl Methyl Ether	0.1	100	0.0014	U	0.001	U	0.0015	U	0.00093	U	0.0011	U	0.0011	U	0.0014	U
Tetrachloroethylene (PCE)	1.3	18	0.0014	U	0.001	U	0.0015	U	0.00093	U	0.0011	U	0.0011	U	0.0014	U
Toluene	0.7	100	0.0014	U	0.0004	J	0.0015	UJ	0.00036	J	0.0011	U	0.0011	U	0.0014	U
Trans-1,2-Dichloroethene	0.19	100	0.0014	U	0.001	U	0.0015	U	0.00093	U	0.0011	U	0.0011	U	0.0014	U
Trans-1,3-Dichloropropene	NS	NS	0.0014	U	0.001	U	0.0015	UJ	0.00093	U	0.0011	U	0.0011	U	0.0014	U
Trichloroethylene (TCE)	0.47	6.4	0.0014	U	0.001	U	0.0015	U	0.00093	U	0.0011	U	0.0011	U	0.0014	U
Trichlorofluoromethane	NS	NS	0.0014	U	0.001	U	0.0015	U	0.00093	U	0.0011	U	0.0011	U	0.0014	U
Vinyl Chloride	0.03	0.48	0.0014	U	0.001	U	0.0015	U	0.00093	U	0.0011	U	0.0011	U	0.0014	U
Xylenes, Total	0.26	100	0.0027	U	0.0021	U	0.0029	UJ	0.0019	U	0.0022	U	0.0022	U	0.0029	U

Table 1
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Volatile Organic Compounds (VOCs)

		AKRF Sample ID	RI-SB-24_0-2_20251222		RI-SB-24_2-4_20251222		RI-SB-X14_2-4_20251222		RI-SB-24_8-10_20251222		RI-SB-77_20-22_20260623		RI-SB-78_22-24_20260623		RI-SB-79_23-25_20260623	
		Lab Sample ID	460-342125-1		460-342125-2		460-342124-4		460-342125-5		460-353884-3		460-353884-6		460-353884-9	
		Sample Date	12/22/2025		12/22/2025		12/22/2025		12/22/2025		6/23/2026		6/23/2026		6/23/2026	
		Dilution Factor	1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,1,1-Trichloroethane	0.68	100	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
1,1,2,2-Tetrachloroethane	NS	NS	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
1,1,2-Trichloroethane	NS	NS	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
1,1-Dichloroethane	0.27	47	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
1,1-Dichloroethene	0.24	0.98	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
1,2,3-Trichlorobenzene	NS	NS	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
1,2,4-Trichlorobenzene	NS	NS	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
1,2,4-Trimethylbenzene	5.9	100	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
1,2-Dibromo-3-Chloropropane	NS	NS	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
1,2-Dichlorobenzene	1.1	100	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
1,2-Dichloroethane	0.02	5.8	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
1,2-Dichloropropane	NS	NS	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
1,3,5-Trimethylbenzene (Mesitylene)	3.1	100	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
1,3-Dichlorobenzene	2.6	38	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
1,4-Dichlorobenzene	1.8	24	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
2-Hexanone	NS	NS	0.0059	UJ	0.0059	UJ	0.0061	UJ	0.0061	U	0.0052	U	0.0057	U	0.0052	U
Acetone	**0.03**	100	0.018	JL	**0.048**	**JL**	**0.065**	**JL**	0.0074	U	0.021		0.011		0.023	
Benzene	0.06	3.7	0.00071	JL	0.0015	JL	0.0034	JL	0.0012	U	0.001	U	0.0011	U	0.001	U
Bromochloromethane	NS	NS	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
Bromodichloromethane	NS	NS	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.00047	J	0.001	U	0.0011	U	0.001	U
Bromoform	NS	NS	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
Bromomethane	NS	NS	0.0024	UJ	0.0024	UJ	0.0024	UJ	0.0025	U	0.0021	U	0.0023	U	0.0021	U
Carbon Disulfide	NS	NS	0.00054	JL	0.00061	JL	0.001	JL	0.0012	U	0.0019		0.0011	U	0.001	U
Carbon Tetrachloride	0.76	7.1	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
Chlorobenzene	4.5	100	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
Chloroethane	NS	NS	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
Chloroform	0.37	24	0.0012	UJ	0.0083	JL	0.0014	JL	0.0097		0.001	U	0.0011	U	0.001	U
Chloromethane	NS	NS	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
Cis-1,2-Dichloroethylene	0.19	41	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
Cis-1,3-Dichloropropene	NS	NS	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
Cyclohexane	NS	NS	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
Dibromochloromethane	NS	NS	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
Dichlorodifluoromethane	NS	NS	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
Ethylbenzene	1	76	0.0012	UJ	0.0012	UJ	0.00073	JL	0.0012	U	0.001	U	0.0011	U	0.001	U
Isopropylbenzene (Cumene)	NS	NS	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
M,P-Xylenes	NS	NS	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
Methyl Acetate	NS	NS	0.0059	UJ	0.0059	UJ	0.0061	UJ	0.0061	U	0.0052	U	0.0057	U	0.0052	U
Methyl Ethyl Ketone (2-Butanone)	0.1	100	0.0059	UJ	0.0059	UJ	0.0061	UJ	0.0061	U	0.0027	J	0.0057	U	0.0034	J
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	0.0059	UJ	0.0059	UJ	0.0061	UJ	0.0061	U	0.0052	U	0.0057	U	0.0052	U
Methylcyclohexane	NS	NS	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
Methylene Chloride	0.05	81	0.0024	UJ	0.0024	UJ	0.0024	UJ	0.0025	U	0.0021	U	0.0023	U	0.0021	U
N-Butylbenzene	18	100	0.0012	UJ	0.0012	UJ	0.00048	JL	0.0012	U	0.001	U	0.0011	U	0.001	U
N-Propylbenzene	5	100	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
Sec-Butylbenzene	25	100	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
Styrene	NS	NS	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
T-Butylbenzene	11	100	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
Tert-Butyl Methyl Ether	0.1	100	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
Tetrachloroethylene (PCE)	1.3	18	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.00082	J	0.001	U	0.0011	U	0.001	U
Toluene	0.7	100	0.0009	JL	0.0015	JL	0.002	JL	0.0012	U	0.001	U	0.0011	U	0.001	U
Trans-1,2-Dichloroethene	0.19	100	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
Trans-1,3-Dichloropropene	NS	NS	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
Trichloroethylene (TCE)	0.47	6.4	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
Trichlorofluoromethane	NS	NS	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
Vinyl Chloride	0.03	0.48	0.0012	UJ	0.0012	UJ	0.0012	UJ	0.0012	U	0.001	U	0.0011	U	0.001	U
Xylenes, Total	0.26	100	0.0024	UJ	0.00031	JL	0.0024	UJ	0.0025	U	0.0021	U	0.0023	U	0.0021	U

Table 1
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Volatile Organic Compounds (VOCs)

		AKRF Sample ID	RI-SB-80_23-25_20260623		RI-SB-X_23-25_20260623		RI-SB-81_15-17_20260623		FB-01_20250922		FB-01_20251218		FB-02_20250922		FB-03_20250923	
		Lab Sample ID	460-353884-12		460-353884-15		460-353884-16		460-335429-12		460-341877-16		460-335428-35		460-335525-28	
		Sample Date	6/23/2026		6/23/2026		6/23/2026		9/22/2025		12/18/2025		9/22/2025		9/23/2025	
		Dilution Factor	1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		µg/L		µg/L		µg/L		µg/L	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,1,1-Trichloroethane	0.68	100	0.002	U	0.0022	U	0.0022	U	1	U	1	U	1	U	1	U
1,1,2,2-Tetrachloroethane	NS	NS	0.002	U	0.0022	U	0.0022	U	0.2	U	0.2	UJ	0.2	U	0.2	U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	0.002	U	0.0022	U	0.0022	U	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	NS	NS	0.002	U	0.0022	U	0.0022	U	0.58	U	0.58	U	0.58	U	0.58	U
1,1-Dichloroethane	0.27	47	0.002	U	0.0022	U	0.0022	U	1	U	1	U	1	U	1	U
1,1-Dichloroethene	0.24	0.98	0.002	U	0.0022	U	0.0022	U	1	U	1	U	1	U	1	U
1,2,3-Trichlorobenzene	NS	NS	0.002	UJ	0.0022	UJ	0.0022	U	1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	NS	NS	0.002	UJ	0.0022	UJ	0.0022	U	1	U	1	U	1	U	1	U
1,2,4-Trimethylbenzene	5.9	100	0.002	UJ	0.0022	UJ	0.0022	U	1	U	1	U	1	U	1	U
1,2-Dibromo-3-Chloropropane	NS	NS	0.002	UJ	0.0022	UJ	0.0022	U	1	U	1	U	1	U	1	U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	0.002	UJ	0.0022	UJ	0.0022	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene	1.1	100	0.002	UJ	0.0022	UJ	0.0022	U	1	U	1	U	1	U	1	U
1,2-Dichloroethane	0.02	5.8	0.002	U	0.0022	U	0.0022	U	0.3	U	0.3	U	0.3	U	0.3	U
1,2-Dichloropropane	NS	NS	0.002	U	0.0022	U	0.0022	U	0.92	U	0.92	U	0.92	U	0.92	U
1,3,5-Trimethylbenzene (Mesitylene)	3.1	100	0.002	UJ	0.0022	UJ	0.0022	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	2.6	38	0.002	UJ	0.0022	UJ	0.0022	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	1.8	24	0.002	UJ	0.0022	UJ	0.0022	U	1	U	1	U	1	U	1	U
2-Hexanone	NS	NS	0.0098	U	0.011	U	0.011	U	5	U	5	U	5	U	5	U
Acetone	**0.03**	100	0.021		0.029		0.016		5	U	8.3		5	U	5	U
Benzene	0.06	3.7	0.002	U	0.0022	U	0.0022	U	0.45	U	0.45	U	0.45	U	0.45	U
Bromochloromethane	NS	NS	0.002	U	0.0022	U	0.0022	U	1	U	1	U	1	U	1	U
Bromodichloromethane	NS	NS	0.002	UJ	0.0022	UJ	0.0022	U	0.98	U	0.98	U	0.98	U	0.98	U
Bromoform	NS	NS	0.002	UJ	0.0022	UJ	0.0022	U	1	U	1	UJ	1	U	1	U
Bromomethane	NS	NS	0.0039	U	0.0045	U	0.0043	U	1	U	1	U	1	U	1	U
Carbon Disulfide	NS	NS	0.0028		0.0028		0.005		1	U	1	U	1	U	1	U
Carbon Tetrachloride	0.76	7.1	0.002	U	0.0022	U	0.0022	U	1	U	1	U	1	U	1	U
Chlorobenzene	4.5	100	0.002	UJ	0.0022	UJ	0.0022	U	1	U	1	U	1	U	1	U
Chloroethane	NS	NS	0.002	U	0.0022	U	0.0022	U	1	U	1	U	1	U	1	U
Chloroform	0.37	24	0.002	U	0.0022	U	0.0022	U	1	U	1	U	1	U	1	U
Chloromethane	NS	NS	0.002	U	0.0022	U	0.0022	U	1	U	1	U	1	U	1	UJ
Cis-1,2-Dichloroethylene	0.19	41	0.002	UJ	0.0022	UJ	0.0022	U	1	U	1	U	1	U	1	U
Cis-1,3-Dichloropropene	NS	NS	0.002	UJ	0.0022	UJ	0.0022	U	0.45	U	0.45	U	0.45	U	0.45	U
Cyclohexane	NS	NS	0.002	U	0.0022	U	0.0022	U	1	U	1	U	1	U	1	U
Dibromochloromethane	NS	NS	0.002	UJ	0.0022	UJ	0.0022	U	0.78	U	0.78	U	0.78	U	0.78	U
Dichlorodifluoromethane	NS	NS	0.002	U	0.0022	U	0.0022	U	1	U	1	UJ	1	U	1	U
Ethylbenzene	1	76	0.002	UJ	0.0022	UJ	0.0022	U	1	U	3		1	U	1	U
Isopropylbenzene (Cumene)	NS	NS	0.002	UJ	0.0022	UJ	0.0022	U	1	U	1	U	1	U	1	U
M,P-Xylenes	NS	NS	0.002	UJ	0.0022	UJ	0.0022	U	1	U	11		1	U	1	U
Methyl Acetate	NS	NS	0.0098	U	0.011	U	0.011	U	5	U	13		5	U	5	U
Methyl Ethyl Ketone (2-Butanone)	0.1	100	0.0047	J	0.0058	J	0.011	U	5	U	5	U	5	U	5	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	0.0098	U	0.011	U	0.011	U	5	U	5	U	5	U	5	U
Methylcyclohexane	NS	NS	0.002	U	0.0022	U	0.0022	U	1	U	1	U	1	U	1	U
Methylene Chloride	0.05	81	0.0039	U	0.0045	U	0.0043	U	1	U	1	U	1	U	1	U
N-Butylbenzene	18	100	0.002	UJ	0.0022	UJ	0.0022	U	1	U	1	U	1	U	1	U
N-Propylbenzene	5	100	0.002	UJ	0.0022	UJ	0.0022	U	1	U	1	U	1	U	1	U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	0.002	UJ	0.0022	UJ	0.0022	U	1	U	4		1	U	1	U
Sec-Butylbenzene	25	100	0.002	UJ	0.0022	UJ	0.0022	U	1	UJ	1	U	1	UJ	1	U
Styrene	NS	NS	0.002	UJ	0.0022	UJ	0.0022	U	1	U	1	U	1	U	1	U
T-Butylbenzene	11	100	0.002	U	0.0022	U	0.0022	U	1	UJ	1	U	1	UJ	1	U
Tert-Butyl Methyl Ether	0.1	100	0.002	U	0.0022	U	0.0022	U	1	U	1	U	1	U	1	U
Tetrachloroethylene (PCE)	1.3	18	0.002	U	0.0022	U	0.0022	U	0.4	U	0.4	U	0.4	U	0.4	U
Toluene	0.7	100	0.002	U	0.0022	U	0.0022	U	1	U	1	U	1	U	1	U
Trans-1,2-Dichloroethene	0.19	100	0.002	U	0.0022	U	0.0022	U	1	U	1	U	1	U	1	U
Trans-1,3-Dichloropropene	NS	NS	0.002	UJ	0.0022	UJ	0.0022	U	0.45	U	0.45	U	0.45	U	0.45	U
Trichloroethylene (TCE)	0.47	6.4	0.002	U	0.0022	U	0.0022	U	0.28	U	0.28	U	0.28	U	0.28	U
Trichlorofluoromethane	NS	NS	0.002	U	0.0022	U	0.0022	U	1	U	1	U	1	U	1	U
Vinyl Chloride	0.03	0.48	0.002	U	0.0022	U	0.0022	U	1	U	1	U	1	U	1	U
Xylenes, Total	0.26	100	0.0039	UJ	0.0045	UJ	0.0043	U	2	U	15		2	U	2	U

Table 1
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Volatile Organic Compounds (VOCs)

		AKRF Sample ID	FB-04_20250924		FB-05_20250924		RI-FB-01_20260623		TB-01_20250922		TB-01_20251218		TB-02_20250922		TB-03_20250923	
		Lab Sample ID	460-335652-29		460-335652-31		460-353884-2		460-335428-15		460-341877-17		460-335428-36		460-335525-29	
		Sample Date	9/24/2025		9/24/2025		6/23/2026		9/22/2025		12/18/2025		9/22/2025		9/23/2025	
		Dilution Factor	1		1		1		1		1		1		1	
		Unit	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,1,1-Trichloroethane	0.68	100	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2,2-Tetrachloroethane	NS	NS	0.2	U	0.2	U	0.2	U	0.2	U	0.2	UJ	0.2	U	0.2	U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	NS	NS	0.58	U	0.58	U	0.58	U	0.58	U	0.58	U	0.58	U	0.58	U
1,1-Dichloroethane	0.27	47	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethene	0.24	0.98	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2,3-Trichlorobenzene	NS	NS	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	NS	NS	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2,4-Trimethylbenzene	5.9	100	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dibromo-3-Chloropropane	NS	NS	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene	1.1	100	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethane	0.02	5.8	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
1,2-Dichloropropane	NS	NS	0.92	U	0.92	U	0.92	U	0.92	U	0.92	U	0.92	U	0.92	U
1,3,5-Trimethylbenzene (Mesitylene)	3.1	100	1	UJ	1	UJ	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	2.6	38	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	1.8	24	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Hexanone	NS	NS	5	UJ	5	UJ	5	U	5	U	5	U	5	U	5	U
Acetone	**0.03**	100	5	U	5	U	5	U	19		5	U	17		15	
Benzene	0.06	3.7	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U
Bromochloromethane	NS	NS	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromodichloromethane	NS	NS	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U
Bromoform	NS	NS	1	UJ	1	UJ	1	U	1	U	1	UJ	1	U	1	U
Bromomethane	NS	NS	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Carbon Disulfide	NS	NS	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Carbon Tetrachloride	0.76	7.1	1	UJ	1	UJ	1	U	1	U	1	U	1	U	1	U
Chlorobenzene	4.5	100	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroethane	NS	NS	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroform	0.37	24	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloromethane	NS	NS	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Cis-1,2-Dichloroethylene	0.19	41	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Cis-1,3-Dichloropropene	NS	NS	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U
Cyclohexane	NS	NS	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Dibromochloromethane	NS	NS	0.78	U	0.78	U	0.78	U	0.78	U	0.78	U	0.78	U	0.78	U
Dichlorodifluoromethane	NS	NS	1	U	1	U	1	UJ	1	U	1	UJ	1	U	1	U
Ethylbenzene	1	76	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Isopropylbenzene (Cumene)	NS	NS	1	U	1	U	1	U	1	U	1	U	1	U	1	U
M,P-Xylenes	NS	NS	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Methyl Acetate	NS	NS	5	U	5	U	5	U	5	U	3	J	5	U	5	U
Methyl Ethyl Ketone (2-Butanone)	0.1	100	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	5	UJ	5	UJ	5	U	5	U	5	U	5	U	5	U
Methylcyclohexane	NS	NS	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Methylene Chloride	0.05	81	1	U	1	U	1	U	1	U	1	U	1	U	1	U
N-Butylbenzene	18	100	1	U	1	U	1	U	1	U	1	U	1	U	1	U
N-Propylbenzene	5	100	1	U	1	U	1	U	1	U	1	U	1	U	1	U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Sec-Butylbenzene	25	100	1	U	1	U	1	U	1	UJ	1	U	1	UJ	1	U
Styrene	NS	NS	1	U	1	U	1	U	1	U	1	U	1	U	1	U
T-Butylbenzene	11	100	1	U	1	U	1	U	1	UJ	1	U	1	UJ	1	U
Tert-Butyl Methyl Ether	0.1	100	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Tetrachloroethylene (PCE)	1.3	18	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
Toluene	0.7	100	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trans-1,2-Dichloroethene	0.19	100	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trans-1,3-Dichloropropene	NS	NS	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U
Trichloroethylene (TCE)	0.47	6.4	0.28	U	0.28	U	0.28	U	0.28	U	0.28	U	0.28	U	0.28	U
Trichlorofluoromethane	NS	NS	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Vinyl Chloride	0.03	0.48	1	U	1	U	1	UJ	1	U	1	U	1	U	1	U
Xylenes, Total	0.26	100	2	U	2	U	2	U	2	U	2	U	2	U	2	U

Table 1
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Volatile Organic Compounds (VOCs)

		AKRF Sample ID	TB-04_20250924		TB-05_20250924		TB-06_20250925		TB-07_20250925		RI-TB-01_20260623	
		Lab Sample ID	460-335652-30		460-335652-32		460-335757-14		460-335757-37		460-353884-1	
		Sample Date	9/24/2025		9/24/2025		9/25/2025		9/25/2025		6/23/2026	
		Dilution Factor	1		1		1		1		1	
		Unit	µg/L		µg/L		µg/L		µg/L		µg/L	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,1,1-Trichloroethane	0.68	100	1	U	1	U	1	U	1	U	1	U
1,1,2,2-Tetrachloroethane	NS	NS	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	1	U	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	NS	NS	0.58	U	0.58	U	0.58	U	0.58	U	0.58	U
1,1-Dichloroethane	0.27	47	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethene	0.24	0.98	1	U	1	U	1	U	1	U	1	U
1,2,3-Trichlorobenzene	NS	NS	1	U	1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	NS	NS	1	U	1	U	1	U	1	U	1	U
1,2,4-Trimethylbenzene	5.9	100	1	U	1	U	1	U	1	U	1	U
1,2-Dibromo-3-Chloropropane	NS	NS	1	U	1	U	1	U	1	U	1	U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	1	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene	1.1	100	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethane	0.02	5.8	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
1,2-Dichloropropane	NS	NS	0.92	U	0.92	U	0.92	UJ	0.92	UJ	0.92	U
1,3,5-Trimethylbenzene (Mesitylene)	3.1	100	1	UJ	1	UJ	1	U	1	U	1	U
1,3-Dichlorobenzene	2.6	38	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	1.8	24	1	U	1	U	1	U	1	U	1	U
2-Hexanone	NS	NS	5	UJ	5	UJ	5	U	5	U	5	U
Acetone	**0.03**	100	5	U	5	U	5	U	5	U	5	U
Benzene	0.06	3.7	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U
Bromochloromethane	NS	NS	1	U	1	U	1	U	1	U	1	U
Bromodichloromethane	NS	NS	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U
Bromoform	NS	NS	1	UJ	1	UJ	1	U	1	U	1	U
Bromomethane	NS	NS	1	U	1	U	1	U	1	U	1	U
Carbon Disulfide	NS	NS	1	U	1	U	1	U	1	U	1	U
Carbon Tetrachloride	0.76	7.1	1	UJ	1	UJ	1	U	1	U	1	U
Chlorobenzene	4.5	100	1	U	1	U	1	U	1	U	1	U
Chloroethane	NS	NS	1	U	1	U	1	U	1	U	1	U
Chloroform	0.37	24	1	U	1	U	1	U	1	U	1	U
Chloromethane	NS	NS	1	U	1	U	1	UJ	1	UJ	1	U
Cis-1,2-Dichloroethylene	0.19	41	1	U	1	U	1	U	1	U	1	U
Cis-1,3-Dichloropropene	NS	NS	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U
Cyclohexane	NS	NS	1	U	1	U	1	U	1	U	1	U
Dibromochloromethane	NS	NS	0.78	U	0.78	U	0.78	U	0.78	U	0.78	U
Dichlorodifluoromethane	NS	NS	1	U	1	U	1	U	1	U	1	UJ
Ethylbenzene	1	76	1	U	1	U	1	U	1	U	1	U
Isopropylbenzene (Cumene)	NS	NS	1	U	1	U	1	U	1	U	1	U
M,P-Xylenes	NS	NS	1	U	1	U	1	U	1	U	1	U
Methyl Acetate	NS	NS	5	U	5	U	5	U	5	U	5	U
Methyl Ethyl Ketone (2-Butanone)	0.1	100	5	U	5	U	5	U	5	U	5	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	5	UJ	5	UJ	5	U	5	U	5	U
Methylcyclohexane	NS	NS	1	U	1	U	1	U	1	U	1	U
Methylene Chloride	0.05	81	1	U	1	U	1	U	1	U	1	U
N-Butylbenzene	18	100	1	U	1	U	1	U	1	U	1	U
N-Propylbenzene	5	100	1	U	1	U	1	U	1	U	1	U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	1	U	1	U	1	U	1	U	1	U
Sec-Butylbenzene	25	100	1	U	1	U	1	U	1	U	1	U
Styrene	NS	NS	1	U	1	U	1	U	1	U	1	U
T-Butylbenzene	11	100	1	U	1	U	1	U	1	U	1	U
Tert-Butyl Methyl Ether	0.1	100	1	U	1	U	1	U	1	U	1	U
Tetrachloroethylene (PCE)	1.3	18	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
Toluene	0.7	100	1	U	1	U	1	U	1	U	1	U
Trans-1,2-Dichloroethene	0.19	100	1	U	1	U	1	U	1	U	1	U
Trans-1,3-Dichloropropene	NS	NS	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U
Trichloroethylene (TCE)	0.47	6.4	0.28	U	0.28	U	0.28	U	0.28	U	0.28	U
Trichlorofluoromethane	NS	NS	1	U	1	U	1	U	1	U	1	U
Vinyl Chloride	0.03	0.48	1	U	1	U	1	UJ	1	UJ	1	UJ
Xylenes, Total	0.26	100	2	U	2	U	2	U	2	U	2	U

Table 2
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Semivolatile Organic Compounds (SVOCs)

		AKRF Sample ID	RI-SB-01_0-0.5_20250923		RI-SB-01_0.5-2_20250923		RI-SB-01_2-4_20250923		RI-SB-X1_2-4_20250923		RI-SB-01_4-6_20250923		RI-SB-01_6-8_20250923		RI-SB-01_8-10_20250923		RI-SB-01_10-12_20250926	
		Lab Sample ID	460-335525-6		460-335525-7		460-335525-8		460-335525-13		460-335525-9		460-335525-10		460-335536-4		460-335823-1	
		Sample Date	9/23/2025		9/23/2025		9/23/2025		9/23/2025		9/23/2025		9/23/2025		9/23/2025		9/26/2025	
		Dilution Factor	1		1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,2,4,5-Tetrachlorobenzene	NS	NS	NR		0.33	U	NR		NR		NR		NR		0.34	U	0.4	U
1,4-Dioxane (P-Dioxane)	NS	5.7	NR		0.033	U	NR		NR		NR		NR		0.034	U	0.04	U
2,3,4,6-Tetrachlorophenol	NS	NS	NR		0.33	U	NR		NR		NR		NR		0.34	U	0.4	U
2,4,5-Trichlorophenol	NS	NS	NR		0.33	U	NR		NR		NR		NR		0.34	U	0.4	U
2,4,6-Trichlorophenol	NS	NS	NR		0.13	U	NR		NR		NR		NR		0.14	U	0.16	U
2,4-Dichlorophenol	NS	NS	NR		0.13	U	NR		NR		NR		NR		0.14	U	0.16	U
2,4-Dimethylphenol	NS	NS	NR		0.33	U	NR		NR		NR		NR		0.34	U	0.4	U
2,4-Dinitrophenol	NS	NS	NR		0.27	U	NR		NR		NR		NR		0.27	U	0.32	U
2,4-Dinitrotoluene	NS	NS	NR		0.067	U	NR		NR		NR		NR		0.068	U	0.08	U
2,6-Dinitrotoluene	NS	NS	NR		0.067	U	NR		NR		NR		NR		0.068	U	0.08	U
2-Chloronaphthalene	NS	NS	NR		0.33	U	NR		NR		NR		NR		0.34	U	0.4	U
2-Chlorophenol	NS	NS	NR		0.33	U	NR		NR		NR		NR		0.34	U	0.4	U
2-Methylnaphthalene	NS	NS	NR		0.038	J	NR		NR		NR		NR		0.054	J	0.4	U
2-Methylphenol (O-Cresol)	0.33	100	NR		0.33	U	NR		NR		NR		NR		0.34	U	0.4	U
2-Nitroaniline	NS	NS	NR		0.33	U	NR		NR		NR		NR		0.34	U	0.4	U
2-Nitrophenol	NS	NS	NR		0.33	U	NR		NR		NR		NR		0.34	U	0.4	U
3- And 4- Methylphenol (Total)	NS	NS	NR		0.33	U	NR		NR		NR		NR		0.34	U	0.4	U
3,3'-Dichlorobenzidine	NS	NS	NR		0.13	U	NR		NR		NR		NR		0.14	U	0.16	U
3-Nitroaniline	NS	NS	NR		0.33	U	NR		NR		NR		NR		0.34	U	0.4	U
4,6-Dinitro-2-Methylphenol	NS	NS	NR		0.27	U	NR		NR		NR		NR		0.27	U	0.32	U
4-Bromophenyl Phenyl Ether	NS	NS	NR		0.33	U	NR		NR		NR		NR		0.34	U	0.4	U
4-Chloro-3-Methylphenol	NS	NS	NR		0.33	U	NR		NR		NR		NR		0.34	U	0.4	U
4-Chloroaniline	NS	NS	NR		0.33	U	NR		NR		NR		NR		0.34	U	0.4	U
4-Chlorophenyl Phenyl Ether	NS	NS	NR		0.33	U	NR		NR		NR		NR		0.34	U	0.4	U
4-Methylphenol (P-Cresol)	0.33	100	NR		0.33	U	NR		NR		NR		NR		0.34	U	0.4	U
4-Nitroaniline	NS	NS	NR		0.33	U	NR		NR		NR		NR		0.34	U	0.4	U
4-Nitrophenol	NS	NS	NR		0.67	U	NR		NR		NR		NR		0.68	U	0.8	U
Acenaphthene	20	100	0.032	J	0.072	J	0.33	U	0.014	J	0.024	J	0.014	J	0.11	J	0.4	U
Acenaphthylene	100	100	0.047	J	0.04	J	0.012	J	0.33	U	0.025	J	0.012	J	0.041	J	0.4	U
Acetophenone	NS	NS	NR		0.33	U	NR		NR		NR		NR		0.34	U	0.4	U
Anthracene	100	100	0.11	J	0.23	J	0.027	J	0.045	J	0.069	J	0.035	J	0.24	J	0.4	U
Atrazine	NS	NS	NR		0.13	U	NR		NR		NR		NR		0.14	U	0.16	U
Benzaldehyde	NS	NS	NR		0.33	UJ	NR		NR		NR		NR		0.34	UJ	0.4	UJ
Benzo(a)Anthracene	**1**	1.4	0.46		0.55		0.12		0.12		0.28		0.15		0.52		0.04	U
Benzo(a)Pyrene	**1**	1	0.46		0.48		0.12		0.1		0.27		0.14		0.48		0.04	U
Benzo(b)Fluoranthene	**1**	1.4	0.6		0.61		0.16		0.14		0.35		0.18		0.6		0.04	U
Benzo(g,h,i)Perylene	**0.64**	4.9	0.31	J	0.3	J	0.08	J	0.063	J	0.18	J	0.087	J	0.27	J	0.4	U
Benzo(k)Fluoranthene	**0.8**	4.9	0.24		0.24		0.062		0.055		0.14		0.071		0.21		0.04	U
Benzyl Butyl Phthalate	NS	NS	NR		0.33	U	NR		NR		NR		NR		0.34	U	0.4	U
Biphenyl (Diphenyl)	NS	NS	NR		0.33	U	NR		NR		NR		NR		0.34	U	0.4	U
Bis(2-Chloroethoxy) Methane	NS	NS	NR		0.33	U	NR		NR		NR		NR		0.34	U	0.4	U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	NR		0.033	U	NR		NR		NR		NR		0.034	U	0.04	U
Bis(2-Chloroisopropyl) Ether	NS	NS	NR		0.33	U	NR		NR		NR		NR		0.34	U	0.4	U
Bis(2-Ethylhexyl) Phthalate	NS	NS	NR		0.027	J	NR		NR		NR		NR		0.027	J	0.4	U
Caprolactam	NS	NS	NR		0.33	U	NR		NR		NR		NR		0.34	U	0.4	U
Carbazole	NS	NS	NR		0.071	J	NR		NR		NR		NR		0.097	J	0.4	U
Chrysene	**1**	4.9	0.49		0.54		0.13	J	0.12	J	0.31	J	0.16	J	0.54		0.4	U
Dibenz(a,h)Anthracene	**0.33**	0.33	0.069		0.071		0.019	J	0.016	J	0.04		0.024	J	0.068		0.04	U
Dibenzofuran	NS	18	NR		0.05	J	NR		NR		NR		NR		0.063	J	0.4	U
Diethyl Phthalate	NS	NS	NR		0.33	U	NR		NR		NR		NR		0.34	U	0.4	U
Dimethyl Phthalate	NS	NS	NR		0.33	U	NR		NR		NR		NR		0.34	U	0.4	U
Di-N-Butyl Phthalate	NS	NS	NR		0.028	J	NR		NR		NR		NR		0.028	J	0.4	U
Di-N-Octylphthalate	NS	NS	NR		0.33	U	NR		NR		NR		NR		0.34	U	0.4	U
Fluoranthene	85	100	0.88		1.2		0.23	J	0.25	J	0.57		0.28	J	1.1		0.4	U
Fluorene	30	100	0.03	J	0.075	J	0.33	U	0.017	J	0.023	J	0.012	J	0.11	J	0.4	U
Hexachlorobenzene	0.33	0.33	NR		0.033	U	NR		NR		NR		NR		0.034	U	0.04	U
Hexachlorobutadiene	NS	NS	NR		0.067	U	NR		NR		NR		NR		0.068	U	0.08	U
Hexachlorocyclopentadiene	NS	NS	NR		0.33	U	NR		NR		NR		NR		0.34	U	0.4	UJ
Hexachloroethane	NS	NS	NR		0.033	U	NR		NR		NR		NR		0.034	U	0.04	U
Indeno(1,2,3-c,d)Pyrene	**0.5**	1.4	0.32		0.31		0.084		0.066		0.18		0.094		0.3		0.04	U
Isophorone	NS	NS	NR		0.13	U	NR		NR		NR		NR		0.14	U	0.16	U
Naphthalene	12	100	0.34	U	0.048	J	0.33	U	0.007	J	0.34	U	0.33	U	0.098	J	0.4	U
Nitrobenzene	0.08	1.8	NR		0.033	U	NR		NR		NR		NR		0.034	U	0.04	U
N-Nitrosodi-N-Propylamine	NS	NS	NR		0.033	U	NR		NR		NR		NR		0.034	U	0.04	U
N-Nitrosodiphenylamine	NS	NS	NR		0.33	U	NR		NR		NR		NR		0.34	U	0.4	U
Pentachlorophenol	0.8	1.3	NR		0.27	U	NR		NR		NR		NR		0.27	U	0.32	U
Phenanthrene	**1.1**	4.9	0.49		1		0.12	J	0.18	J	0.32	J	0.17	J	0.88		0.4	U
Phenol	0.33	100	NR		0.33	U	NR		NR		NR		NR		0.34	U	0.4	U
Pyrene	64	100	0.86		1.1		0.22	J	0.21	J	0.5		0.27	J	0.94		0.4	U

Table 2
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Semivolatile Organic Compounds (SVOCs)

		AKRF Sample ID	RI-SB-01_13-15_20250923		RI-SB-02_0-0.5_20250924		RI-SB-02_0.5-2_20250924		RI-SB-02_2-4_20250924		RI-SB-02_4-6_20250924		RI-SB-02_6-8_20250924		RI-SB-02_8-10_20250924		RI-SB-02_10-12_20250926	
		Lab Sample ID	460-335536-5		460-335652-1		460-335652-2		460-335652-3		460-335652-4		460-335652-5		460-335652-6		460-335823-2	
		Sample Date	9/23/2025		9/24/2025		9/24/2025		9/24/2025		9/24/2025		9/24/2025		9/24/2025		9/26/2025	
		Dilution Factor	1		1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,2,4,5-Tetrachlorobenzene	NS	NS	0.34	U	NR		0.36	U	NR		NR		NR		0.36	U	0.37	U
1,4-Dioxane (P-Dioxane)	NS	5.7	0.034	U	NR		0.036	U	NR		NR		NR		0.036	U	0.037	U
2,3,4,6-Tetrachlorophenol	NS	NS	0.34	U	NR		0.36	U	NR		NR		NR		0.36	UJ	0.37	U
2,4,5-Trichlorophenol	NS	NS	0.34	U	NR		0.36	U	NR		NR		NR		0.36	UJ	0.37	U
2,4,6-Trichlorophenol	NS	NS	0.14	U	NR		0.15	U	NR		NR		NR		0.14	UJ	0.15	U
2,4-Dichlorophenol	NS	NS	0.14	U	NR		0.15	U	NR		NR		NR		0.14	UJ	0.15	U
2,4-Dimethylphenol	NS	NS	0.34	U	NR		0.36	U	NR		NR		NR		0.36	UJ	0.37	U
2,4-Dinitrophenol	NS	NS	0.27	U	NR		0.29	U	NR		NR		NR		0.29	UJ	0.3	U
2,4-Dinitrotoluene	NS	NS	0.068	U	NR		0.073	U	NR		NR		NR		0.073	UJ	0.075	U
2,6-Dinitrotoluene	NS	NS	0.068	U	NR		0.073	U	NR		NR		NR		0.073	UJ	0.075	R
2-Chloronaphthalene	NS	NS	0.34	U	NR		0.36	U	NR		NR		NR		0.36	UJ	0.37	U
2-Chlorophenol	NS	NS	0.34	U	NR		0.36	U	NR		NR		NR		0.36	UJ	0.37	U
2-Methylnaphthalene	NS	NS	0.018	J	NR		0.36	U	NR		NR		NR		0.36	U	0.011	J
2-Methylphenol (O-Cresol)	0.33	100	0.34	U	NR		0.36	U	NR		NR		NR		0.36	UJ	0.37	U
2-Nitroaniline	NS	NS	0.34	U	NR		0.36	U	NR		NR		NR		0.36	U	0.37	U
2-Nitrophenol	NS	NS	0.34	U	NR		0.36	U	NR		NR		NR		0.36	UJ	0.37	U
3- And 4- Methylphenol (Total)	NS	NS	0.34	U	NR		0.36	U	NR		NR		NR		0.36	UJ	0.37	U
3,3'-Dichlorobenzidine	NS	NS	0.14	U	NR		0.15	U	NR		NR		NR		0.14	U	0.15	U
3-Nitroaniline	NS	NS	0.34	U	NR		0.36	U	NR		NR		NR		0.36	U	0.37	U
4,6-Dinitro-2-Methylphenol	NS	NS	0.27	U	NR		0.29	UJ	NR		NR		NR		0.29	UJ	0.3	U
4-Bromophenyl Phenyl Ether	NS	NS	0.34	U	NR		0.36	U	NR		NR		NR		0.36	U	0.37	U
4-Chloro-3-Methylphenol	NS	NS	0.34	U	NR		0.36	U	NR		NR		NR		0.36	U	0.37	U
4-Chloroaniline	NS	NS	0.34	U	NR		0.36	U	NR		NR		NR		0.36	U	0.37	U
4-Chlorophenyl Phenyl Ether	NS	NS	0.34	U	NR		0.36	U	NR		NR		NR		0.36	UJ	0.37	U
4-Methylphenol (P-Cresol)	0.33	100	0.34	U	NR		0.36	U	NR		NR		NR		0.36	UJ	0.37	U
4-Nitroaniline	NS	NS	0.34	U	NR		0.36	U	NR		NR		NR		0.36	U	0.37	U
4-Nitrophenol	NS	NS	0.68	U	NR		0.73	U	NR		NR		NR		0.73	U	0.75	U
Acenaphthene	20	100	0.03	J	0.026	J	0.36	U	0.02	J	0.41	U	0.011	J	0.023	JL	0.024	J
Acenaphthylene	100	100	0.047	J	0.012	J	0.36	U	0.015	J	0.41	U	0.34	U	0.029	JL	0.37	U
Acetophenone	NS	NS	0.34	U	NR		0.36	U	NR		NR		NR		0.36	UJ	0.37	U
Anthracene	100	100	0.094	J	0.075	J	0.36	U	0.058	J	0.41	U	0.024	J	0.067	J	0.045	J
Atrazine	NS	NS	0.14	U	NR		0.15	U	NR		NR		NR		0.14	U	0.15	U
Benzaldehyde	NS	NS	0.34	UJ	NR		0.36	UJ	NR		NR		NR		0.36	UJ	0.37	UJ
Benzo(a)Anthracene	**1**	1.4	0.33		0.22		0.036	U	0.23		0.036	J	0.079		0.32		0.082	
Benzo(a)Pyrene	**1**	1	0.33		0.21		0.036	U	0.21		0.024	J	0.076		0.33		0.06	
Benzo(b)Fluoranthene	**1**	1.4	0.44		0.28		0.036	U	0.27		0.029	J	0.093		0.42		0.063	
Benzo(g,h,i)Perylene	**0.64**	4.9	0.21	J	0.13	J	0.36	U	0.13	J	0.016	J	0.046	J	0.2	JL	0.031	J
Benzo(k)Fluoranthene	**0.8**	4.9	0.13		0.11		0.036	U	0.1		0.015	J	0.035		0.16		0.029	J
Benzyl Butyl Phthalate	NS	NS	0.34	U	NR		0.36	U	NR		NR		NR		0.36	U	0.37	U
Biphenyl (Diphenyl)	NS	NS	0.34	U	NR		0.36	U	NR		NR		NR		0.36	UJ	0.37	U
Bis(2-Chloroethoxy) Methane	NS	NS	0.34	U	NR		0.36	U	NR		NR		NR		0.36	UJ	0.37	U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	0.034	U	NR		0.036	U	NR		NR		NR		0.036	UJ	0.037	U
Bis(2-Chloroisopropyl) Ether	NS	NS	0.34	U	NR		0.36	U	NR		NR		NR		0.36	U	0.37	U
Bis(2-Ethylhexyl) Phthalate	NS	NS	0.34	U	NR		0.36	U	NR		NR		NR		0.026	J	0.37	U
Caprolactam	NS	NS	0.34	U	NR		0.36	U	NR		NR		NR		0.36	U	0.37	U
Carbazole	NS	NS	0.047	J	NR		0.36	U	NR		NR		NR		0.029	J	0.37	U
Chrysene	**1**	4.9	0.34		0.22	J	0.36	U	0.23	J	0.029	J	0.077	J	0.34	J	0.093	J
Dibenz(a,h)Anthracene	**0.33**	0.33	0.05		0.024	J	0.036	U	0.026	J	0.041	U	0.034	U	0.049	JL	0.037	U
Dibenzofuran	NS	18	0.016	J	NR		0.36	U	NR		NR		NR		0.36	U	0.37	U
Diethyl Phthalate	NS	NS	0.34	U	NR		0.36	U	NR		NR		NR		0.36	UJ	0.37	U
Dimethyl Phthalate	NS	NS	0.34	U	NR		0.36	U	NR		NR		NR		0.36	UJ	0.37	U
Di-N-Butyl Phthalate	NS	NS	0.021	J	NR		0.36	U	NR		NR		NR		0.36	U	0.37	U
Di-N-Octylphthalate	NS	NS	0.34	U	NR		0.36	U	NR		NR		NR		0.36	U	0.37	U
Fluoranthene	85	100	0.71		0.49		0.014	J	0.46		0.055	J	0.16	J	0.63		0.16	J
Fluorene	30	100	0.034	J	0.023	J	0.36	U	0.017	J	0.41	U	0.011	J	0.019	JL	0.024	J
Hexachlorobenzene	0.33	0.33	0.034	U	NR		0.036	U	NR		NR		NR		0.036	UJ	0.037	U
Hexachlorobutadiene	NS	NS	0.068	U	NR		0.073	U	NR		NR		NR		0.073	UJ	0.075	U
Hexachlorocyclopentadiene	NS	NS	0.34	U	NR		0.36	U	NR		NR		NR		0.36	UJ	0.37	UJ
Hexachloroethane	NS	NS	0.034	U	NR		0.036	U	NR		NR		NR		0.036	UJ	0.037	U
Indeno(1,2,3-c,d)Pyrene	**0.5**	1.4	0.22		0.15		0.022	J	0.15		0.035	J	0.065		0.21	JL	0.049	
Isophorone	NS	NS	0.14	U	NR		0.15	U	NR		NR		NR		0.14	UJ	0.15	U
Naphthalene	12	100	0.026	J	0.34	U	0.36	U	0.35	U	0.41	U	0.0089	J	0.0086	JL	0.0092	J
Nitrobenzene	0.08	1.8	0.034	U	NR		0.036	U	NR		NR		NR		0.036	UJ	0.037	U
N-Nitrosodi-N-Propylamine	NS	NS	0.034	U	NR		0.036	U	NR		NR		NR		0.036	UJ	0.037	U
N-Nitrosodiphenylamine	NS	NS	0.34	U	NR		0.36	U	NR		NR		NR		0.36	U	0.37	U
Pentachlorophenol	0.8	1.3	0.27	U	NR		0.29	U	NR		NR		NR		0.29	U	0.3	U
Phenanthrene	**1.1**	4.9	0.39		0.29	J	0.36	U	0.25	J	0.036	J	0.096	J	0.3	J	0.19	J
Phenol	0.33	100	0.34	U	NR		0.36	U	NR		NR		NR		0.36	UJ	0.37	U
Pyrene	64	100	0.61		0.4		0.011	J	0.4		0.049	J	0.13	J	0.54		0.17	J

Table 2
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Semivolatile Organic Compounds (SVOCs)

		AKRF Sample ID	RI-SB-02_13-15_20250924		RI-SB-03_0-0.5_20250924		RI-SB-03_0.5-2_20250924		RI-SB-03_2-4_20250924		RI-SB-03_4-6_20250924		RI-SB-03_6-8_20250924		RI-SB-03_8-10_20250924		RI-SB-03_13-15_20250924	
		Lab Sample ID	460-335652-7		460-335652-22		460-335652-23		460-335652-24		460-335652-25		460-335652-26		460-335651-11		460-335652-28	
		Sample Date	9/24/2025		9/24/2025		9/24/2025		9/24/2025		9/24/2025		9/24/2025		9/24/2025		9/24/2025	
		Dilution Factor	1		1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,2,4,5-Tetrachlorobenzene	NS	NS	0.38	U	NR		0.35	U	NR		NR		NR		0.38	U	0.4	U
1,4-Dioxane (P-Dioxane)	NS	5.7	0.038	U	NR		0.035	U	NR		NR		NR		0.038	U	0.04	U
2,3,4,6-Tetrachlorophenol	NS	NS	0.38	U	NR		0.35	U	NR		NR		NR		0.38	U	0.4	U
2,4,5-Trichlorophenol	NS	NS	0.38	U	NR		0.35	U	NR		NR		NR		0.38	U	0.4	U
2,4,6-Trichlorophenol	NS	NS	0.15	U	NR		0.14	U	NR		NR		NR		0.15	U	0.16	U
2,4-Dichlorophenol	NS	NS	0.15	U	NR		0.14	U	NR		NR		NR		0.15	U	0.16	U
2,4-Dimethylphenol	NS	NS	0.38	U	NR		0.35	U	NR		NR		NR		0.38	UJ	0.4	U
2,4-Dinitrophenol	NS	NS	0.31	U	NR		0.28	UJ	NR		NR		NR		0.31	UJ	0.32	UJ
2,4-Dinitrotoluene	NS	NS	0.078	U	NR		0.072	U	NR		NR		NR		0.077	U	0.08	U
2,6-Dinitrotoluene	NS	NS	0.078	U	NR		0.072	U	NR		NR		NR		0.077	U	0.08	U
2-Chloronaphthalene	NS	NS	0.38	U	NR		0.35	U	NR		NR		NR		0.38	U	0.4	U
2-Chlorophenol	NS	NS	0.38	U	NR		0.35	U	NR		NR		NR		0.38	U	0.4	U
2-Methylnaphthalene	NS	NS	0.05	J	NR		0.35	U	NR		NR		NR		0.38	U	0.4	U
2-Methylphenol (O-Cresol)	0.33	100	0.38	U	NR		0.35	U	NR		NR		NR		0.38	U	0.4	U
2-Nitroaniline	NS	NS	0.38	U	NR		0.35	U	NR		NR		NR		0.38	U	0.4	U
2-Nitrophenol	NS	NS	0.38	U	NR		0.35	U	NR		NR		NR		0.38	U	0.4	U
3- And 4- Methylphenol (Total)	NS	NS	0.38	U	NR		0.35	U	NR		NR		NR		0.38	U	0.4	U
3,3'-Dichlorobenzidine	NS	NS	0.15	U	NR		0.14	U	NR		NR		NR		0.15	U	0.16	U
3-Nitroaniline	NS	NS	0.38	U	NR		0.35	U	NR		NR		NR		0.38	U	0.4	U
4,6-Dinitro-2-Methylphenol	NS	NS	0.31	UJ	NR		0.28	U	NR		NR		NR		0.31	U	0.32	U
4-Bromophenyl Phenyl Ether	NS	NS	0.38	U	NR		0.35	U	NR		NR		NR		0.38	U	0.4	U
4-Chloro-3-Methylphenol	NS	NS	0.38	U	NR		0.35	U	NR		NR		NR		0.38	U	0.4	U
4-Chloroaniline	NS	NS	0.38	U	NR		0.35	U	NR		NR		NR		0.38	U	0.4	U
4-Chlorophenyl Phenyl Ether	NS	NS	0.38	U	NR		0.35	U	NR		NR		NR		0.38	U	0.4	U
4-Methylphenol (P-Cresol)	0.33	100	0.38	U	NR		0.35	U	NR		NR		NR		0.38	U	0.4	U
4-Nitroaniline	NS	NS	0.38	U	NR		0.35	U	NR		NR		NR		0.38	U	0.4	U
4-Nitrophenol	NS	NS	0.78	U	NR		0.72	U	NR		NR		NR		0.77	U	0.8	U
Acenaphthene	20	100	0.12	J	0.054	J	0.35	U	0.018	J	0.35	U	0.37	U	0.38	U	0.4	U
Acenaphthylene	100	100	0.38	U	0.046	J	0.041	J	0.034	J	0.048	J	0.37	U	0.014	J	0.4	U
Acetophenone	NS	NS	0.38	U	NR		0.35	U	NR		NR		NR		0.38	U	0.4	U
Anthracene	100	100	0.24	J	0.14	J	0.053	J	0.059	J	0.06	J	0.37	U	0.032	J	0.4	U
Atrazine	NS	NS	0.15	U	NR		0.14	U	NR		NR		NR		0.15	U	0.16	U
Benzaldehyde	NS	NS	0.38	UJ	NR		0.35	UJ	NR		NR		NR		0.38	UJ	0.4	UJ
Benzo(a)Anthracene	**1**	1.4	0.27		0.49		0.2		0.3		0.29		0.04		0.13		0.032	J
Benzo(a)Pyrene	**1**	1	0.23		0.51		0.29		0.31		0.21		0.042		0.12		0.026	J
Benzo(b)Fluoranthene	**1**	1.4	0.27		0.65		0.39		0.39		0.26		0.062		0.15		0.033	J
Benzo(g,h,i)Perylene	**0.64**	4.9	0.12	J	0.26	J	0.19	J	0.22	J	0.19	J	0.042	J	0.079	J	0.02	J
Benzo(k)Fluoranthene	**0.8**	4.9	0.12		0.24		0.14		0.13		0.092		0.02	J	0.053		0.014	J
Benzyl Butyl Phthalate	NS	NS	0.38	U	NR		0.35	U	NR		NR		NR		0.023	J	0.4	U
Biphenyl (Diphenyl)	NS	NS	0.38	U	NR		0.35	U	NR		NR		NR		0.38	U	0.4	U
Bis(2-Chloroethoxy) Methane	NS	NS	0.38	U	NR		0.35	U	NR		NR		NR		0.38	U	0.4	U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	0.038	U	NR		0.035	U	NR		NR		NR		0.038	U	0.04	U
Bis(2-Chloroisopropyl) Ether	NS	NS	0.38	U	NR		0.35	U	NR		NR		NR		0.38	U	0.4	U
Bis(2-Ethylhexyl) Phthalate	NS	NS	0.38	U	NR		0.35	U	NR		NR		NR		0.38	U	0.4	U
Caprolactam	NS	NS	0.38	U	NR		0.35	UJ	NR		NR		NR		0.38	UJ	0.4	UJ
Carbazole	NS	NS	0.1	J	NR		0.031	J	NR		NR		NR		0.38	U	0.4	U
Chrysene	**1**	4.9	0.26	J	0.5		0.25	J	0.31	J	0.31	J	0.037	J	0.12	J	0.031	J
Dibenz(a,h)Anthracene	**0.33**	0.33	0.025	J	0.07		0.044		0.052		0.035		0.037	U	0.024	J	0.04	U
Dibenzofuran	NS	18	0.085	J	NR		0.35	U	NR		NR		NR		0.38	U	0.4	U
Diethyl Phthalate	NS	NS	0.38	U	NR		0.35	U	NR		NR		NR		0.38	U	0.4	U
Dimethyl Phthalate	NS	NS	0.38	U	NR		0.35	U	NR		NR		NR		0.38	U	0.4	U
Di-N-Butyl Phthalate	NS	NS	0.04	J	NR		0.35	U	NR		NR		NR		0.38	U	0.4	U
Di-N-Octylphthalate	NS	NS	0.38	U	NR		0.35	U	NR		NR		NR		0.38	U	0.4	U
Fluoranthene	85	100	0.7		0.97		0.42		0.54		0.59		0.057	J	0.25	J	0.057	J
Fluorene	30	100	0.13	J	0.063	J	0.016	J	0.017	J	0.022	J	0.37	U	0.38	U	0.4	U
Hexachlorobenzene	0.33	0.33	0.038	U	NR		0.035	U	NR		NR		NR		0.038	U	0.04	U
Hexachlorobutadiene	NS	NS	0.078	U	NR		0.072	U	NR		NR		NR		0.077	U	0.08	U
Hexachlorocyclopentadiene	NS	NS	0.38	U	NR		0.35	U	NR		NR		NR		0.38	U	0.4	U
Hexachloroethane	NS	NS	0.038	U	NR		0.035	U	NR		NR		NR		0.038	UJ	0.04	U
Indeno(1,2,3-c,d)Pyrene	**0.5**	1.4	0.15		0.28		0.21		0.23		0.16		0.038		0.082		0.04	U
Isophorone	NS	NS	0.15	U	NR		0.14	U	NR		NR		NR		0.15	U	0.16	U
Naphthalene	12	100	0.13	J	0.019	J	0.35	U	0.34	U	0.0071	J	0.37	U	0.38	U	0.4	U
Nitrobenzene	0.08	1.8	0.038	U	NR		0.035	U	NR		NR		NR		0.038	U	0.04	U
N-Nitrosodi-N-Propylamine	NS	NS	0.038	U	NR		0.035	U	NR		NR		NR		0.038	U	0.04	U
N-Nitrosodiphenylamine	NS	NS	0.38	U	NR		0.35	U	NR		NR		NR		0.38	U	0.4	U
Pentachlorophenol	0.8	1.3	0.31	U	NR		0.28	U	NR		NR		NR		0.31	UJ	0.32	U
Phenanthrene	**1.1**	4.9	0.81		0.56		0.22	J	0.27	J	0.87		0.03	J	0.14	J	0.033	J
Phenol	0.33	100	0.38	U	NR		0.35	U	NR		NR		NR		0.38	U	0.4	U
Pyrene	64	100	0.52		0.85		0.37		0.54		0.79		0.058	J	0.23	J	0.054	J

Table 2
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Semivolatile Organic Compounds (SVOCs)

		AKRF Sample ID	RI-SB-04_0-0.5_20250924		RI-SB-04_0.5-2_20250924		RI-SB-04_2-4_20250924		RI-SB-X4_2-4_20250924		RI-SB-04_4-6_20250924		RI-SB-04_6-8_20250924		RI-SB-04_8-10_20250924		RI-SB-04_13-15_20250924	
		Lab Sample ID	460-335652-8		460-335652-9		460-335651-4		460-335652-11		460-335652-12		460-335652-13		460-335652-14		460-335652-15	
		Sample Date	9/24/2025		9/24/2025		9/24/2025		9/24/2025		9/24/2025		9/24/2025		9/24/2025		9/24/2025	
		Dilution Factor	1		1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,2,4,5-Tetrachlorobenzene	NS	NS	NR		0.37	U	NR		NR		NR		NR		0.39	U	0.39	U
1,4-Dioxane (P-Dioxane)	NS	5.7	NR		0.037	U	NR		NR		NR		NR		0.039	U	0.039	U
2,3,4,6-Tetrachlorophenol	NS	NS	NR		0.37	U	NR		NR		NR		NR		0.39	U	0.39	U
2,4,5-Trichlorophenol	NS	NS	NR		0.37	U	NR		NR		NR		NR		0.39	U	0.39	U
2,4,6-Trichlorophenol	NS	NS	NR		0.15	U	NR		NR		NR		NR		0.16	U	0.16	U
2,4-Dichlorophenol	NS	NS	NR		0.15	U	NR		NR		NR		NR		0.16	U	0.16	U
2,4-Dimethylphenol	NS	NS	NR		0.37	U	NR		NR		NR		NR		0.39	U	0.39	U
2,4-Dinitrophenol	NS	NS	NR		0.3	U	NR		NR		NR		NR		0.31	U	0.32	U
2,4-Dinitrotoluene	NS	NS	NR		0.076	U	NR		NR		NR		NR		0.078	U	0.08	U
2,6-Dinitrotoluene	NS	NS	NR		0.076	U	NR		NR		NR		NR		0.078	U	0.08	U
2-Chloronaphthalene	NS	NS	NR		0.37	U	NR		NR		NR		NR		0.39	U	0.39	U
2-Chlorophenol	NS	NS	NR		0.37	U	NR		NR		NR		NR		0.39	U	0.39	U
2-Methylnaphthalene	NS	NS	NR		0.14	J	NR		NR		NR		NR		0.034	J	0.39	U
2-Methylphenol (O-Cresol)	0.33	100	NR		0.37	U	NR		NR		NR		NR		0.39	U	0.39	U
2-Nitroaniline	NS	NS	NR		0.37	U	NR		NR		NR		NR		0.39	U	0.39	U
2-Nitrophenol	NS	NS	NR		0.37	U	NR		NR		NR		NR		0.39	U	0.39	U
3- And 4- Methylphenol (Total)	NS	NS	NR		0.37	U	NR		NR		NR		NR		0.39	U	0.39	U
3,3'-Dichlorobenzidine	NS	NS	NR		0.15	U	NR		NR		NR		NR		0.16	U	0.16	U
3-Nitroaniline	NS	NS	NR		0.37	U	NR		NR		NR		NR		0.39	U	0.39	U
4,6-Dinitro-2-Methylphenol	NS	NS	NR		0.3	UJ	NR		NR		NR		NR		0.31	UJ	0.32	UJ
4-Bromophenyl Phenyl Ether	NS	NS	NR		0.37	U	NR		NR		NR		NR		0.39	U	0.39	U
4-Chloro-3-Methylphenol	NS	NS	NR		0.37	U	NR		NR		NR		NR		0.39	U	0.39	U
4-Chloroaniline	NS	NS	NR		0.37	U	NR		NR		NR		NR		0.39	U	0.39	U
4-Chlorophenyl Phenyl Ether	NS	NS	NR		0.37	U	NR		NR		NR		NR		0.39	U	0.39	U
4-Methylphenol (P-Cresol)	0.33	100	NR		0.37	U	NR		NR		NR		NR		0.39	U	0.39	U
4-Nitroaniline	NS	NS	NR		0.37	U	NR		NR		NR		NR		0.39	U	0.39	U
4-Nitrophenol	NS	NS	NR		0.76	U	NR		NR		NR		NR		0.78	U	0.8	U
Acenaphthene	20	100	0.22	J	0.21	J	0.07	J	0.041	J	0.05	J	0.017	J	0.16	J	0.028	J
Acenaphthylene	100	100	0.043	J	0.11	J	0.024	J	0.38	U	0.011	J	0.4	U	0.035	J	0.39	U
Acetophenone	NS	NS	NR		0.37	U	NR		NR		NR		NR		0.39	U	0.39	U
Anthracene	100	100	0.4		0.55		0.17	J	0.075	J	0.13	J	0.034	J	0.35	J	0.075	J
Atrazine	NS	NS	NR		0.15	U	NR		NR		NR		NR		0.16	U	0.16	U
Benzaldehyde	NS	NS	NR		0.37	UJ	NR		NR		NR		NR		0.39	UJ	0.39	UJ
Benzo(a)Anthracene	**1**	1.4	**1.2**		**1.1**		0.51	J	0.14	J	0.48		0.1		0.99		0.19	
Benzo(a)Pyrene	**1**	1	**1.1**		0.98		0.48	J	0.11	J	0.49		0.1		0.93		0.17	
Benzo(b)Fluoranthene	**1**	1.4	**1.4**		**1.2**		0.6	J	0.14	J	0.67		0.13		**1.3**		0.2	
Benzo(g,h,i)Perylene	**0.64**	4.9	**0.75**		0.62		0.28	J	0.061	J	0.25	J	0.047	J	0.49		0.1	J
Benzo(k)Fluoranthene	**0.8**	4.9	0.62		0.54		0.22	J	0.056	J	0.26		0.062		0.55		0.077	
Benzyl Butyl Phthalate	NS	NS	NR		0.37	U	NR		NR		NR		NR		0.39	U	0.39	U
Biphenyl (Diphenyl)	NS	NS	NR		0.026	J	NR		NR		NR		NR		0.39	U	0.39	U
Bis(2-Chloroethoxy) Methane	NS	NS	NR		0.37	U	NR		NR		NR		NR		0.39	U	0.39	U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	NR		0.037	U	NR		NR		NR		NR		0.039	U	0.039	U
Bis(2-Chloroisopropyl) Ether	NS	NS	NR		0.37	U	NR		NR		NR		NR		0.39	U	0.39	U
Bis(2-Ethylhexyl) Phthalate	NS	NS	NR		0.044	J	NR		NR		NR		NR		0.19	J	0.39	U
Caprolactam	NS	NS	NR		0.37	U	NR		NR		NR		NR		0.39	U	0.39	U
Carbazole	NS	NS	NR		0.21	J	NR		NR		NR		NR		0.23	J	0.019	J
Chrysene	**1**	4.9	**1.2**		**1.2**		0.51	J	0.14	J	0.56		0.11	J	1		0.18	J
Dibenz(a,h)Anthracene	**0.33**	0.33	0.2		0.17		0.078	J	0.038	U	0.055		0.04	U	0.15		0.018	J
Dibenzofuran	NS	18	NR		0.14	J	NR		NR		NR		NR		0.088	J	0.014	J
Diethyl Phthalate	NS	NS	NR		0.37	U	NR		NR		NR		NR		0.39	U	0.39	U
Dimethyl Phthalate	NS	NS	NR		0.37	U	NR		NR		NR		NR		0.39	U	0.39	U
Di-N-Butyl Phthalate	NS	NS	NR		0.37	U	NR		NR		NR		NR		0.055	J	0.39	U
Di-N-Octylphthalate	NS	NS	NR		0.37	U	NR		NR		NR		NR		0.39	U	0.39	U
Fluoranthene	85	100	2.6		2.5		1.1	J	0.33	J	0.93		0.19	J	2.4		0.42	
Fluorene	30	100	0.14	J	0.25	J	0.055	J	0.038	J	0.043	J	0.013	J	0.13	J	0.032	J
Hexachlorobenzene	0.33	0.33	NR		0.037	U	NR		NR		NR		NR		0.039	U	0.039	U
Hexachlorobutadiene	NS	NS	NR		0.076	U	NR		NR		NR		NR		0.078	U	0.08	U
Hexachlorocyclopentadiene	NS	NS	NR		0.37	U	NR		NR		NR		NR		0.39	U	0.39	U
Hexachloroethane	NS	NS	NR		0.037	U	NR		NR		NR		NR		0.039	U	0.039	U
Indeno(1,2,3-c,d)Pyrene	**0.5**	1.4	**0.75**		**0.66**		0.3	J	0.09		0.3		0.058		**0.55**		0.12	
Isophorone	NS	NS	NR		0.15	U	NR		NR		NR		NR		0.16	U	0.16	U
Naphthalene	12	100	0.041	J	0.24	J	0.023	J	0.03	J	0.02	J	0.14	J	0.095	J	0.0075	J
Nitrobenzene	0.08	1.8	NR		0.037	U	NR		NR		NR		NR		0.039	U	0.039	U
N-Nitrosodi-N-Propylamine	NS	NS	NR		0.037	U	NR		NR		NR		NR		0.039	U	0.039	U
N-Nitrosodiphenylamine	NS	NS	NR		0.37	U	NR		NR		NR		NR		0.39	U	0.39	U
Pentachlorophenol	0.8	1.3	NR		0.3	U	NR		NR		NR		NR		0.31	U	0.32	U
Phenanthrene	**1.1**	4.9	**1.6**		**2.4**		0.8	J	0.33	J	0.48		0.12	J	**1.8**		0.26	J
Phenol	0.33	100	NR		0.37	U	NR		NR		NR		NR		0.39	U	0.39	U
Pyrene	64	100	2.1		2.3		0.97	J	0.26	J	0.74		0.17	J	1.9		0.34	J

Table 2
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Semivolatile Organic Compounds (SVOCs)

		AKRF Sample ID	RI-SB-05_0-0.5_20250923		RI-SB-05_0.5-2_20250923		RI-SB-05_2-4_20250923		RI-SB-05_4-6_20250923		RI-SB-05_6-8_20250923		RI-SB-05_8-10_20250923		RI-SB-05_13-15_20250923		RI-SB-06_0-0.5_20250922	
		Lab Sample ID	460-335525-21		460-335525-22		460-335525-23		460-335525-24		460-335525-25		460-335525-26		460-335536-10		460-335428-13	
		Sample Date	9/23/2025		9/23/2025		9/23/2025		9/23/2025		9/23/2025		9/23/2025		9/23/2025		9/22/2025	
		Dilution Factor	1		1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,2,4,5-Tetrachlorobenzene	NS	NS	NR		0.33	U	NR		NR		NR		0.46	U	0.33	U	NR	
1,4-Dioxane (P-Dioxane)	NS	5.7	NR		0.033	U	NR		NR		NR		0.046	U	0.033	U	NR	
2,3,4,6-Tetrachlorophenol	NS	NS	NR		0.33	U	NR		NR		NR		0.46	U	0.33	U	NR	
2,4,5-Trichlorophenol	NS	NS	NR		0.33	U	NR		NR		NR		0.46	U	0.33	U	NR	
2,4,6-Trichlorophenol	NS	NS	NR		0.13	U	NR		NR		NR		0.19	U	0.13	U	NR	
2,4-Dichlorophenol	NS	NS	NR		0.13	U	NR		NR		NR		0.19	U	0.13	U	NR	
2,4-Dimethylphenol	NS	NS	NR		0.33	U	NR		NR		NR		0.46	U	0.33	U	NR	
2,4-Dinitrophenol	NS	NS	NR		0.27	U	NR		NR		NR		0.37	U	0.27	U	NR	
2,4-Dinitrotoluene	NS	NS	NR		0.067	U	NR		NR		NR		0.093	U	0.067	U	NR	
2,6-Dinitrotoluene	NS	NS	NR		0.067	U	NR		NR		NR		0.093	U	0.067	U	NR	
2-Chloronaphthalene	NS	NS	NR		0.33	U	NR		NR		NR		0.46	U	0.33	U	NR	
2-Chlorophenol	NS	NS	NR		0.33	U	NR		NR		NR		0.46	U	0.33	U	NR	
2-Methylnaphthalene	NS	NS	NR		0.024	J	NR		NR		NR		0.36	J	0.1	J	NR	
2-Methylphenol (O-Cresol)	0.33	100	NR		0.33	U	NR		NR		NR		0.46	U	0.33	U	NR	
2-Nitroaniline	NS	NS	NR		0.33	U	NR		NR		NR		0.46	U	0.33	U	NR	
2-Nitrophenol	NS	NS	NR		0.33	U	NR		NR		NR		0.46	U	0.33	U	NR	
3- And 4- Methylphenol (Total)	NS	NS	NR		0.33	U	NR		NR		NR		0.46	U	0.33	U	NR	
3,3'-Dichlorobenzidine	NS	NS	NR		0.13	U	NR		NR		NR		0.19	U	0.13	U	NR	
3-Nitroaniline	NS	NS	NR		0.33	U	NR		NR		NR		0.46	U	0.33	U	NR	
4,6-Dinitro-2-Methylphenol	NS	NS	NR		0.27	U	NR		NR		NR		0.37	U	0.27	U	NR	
4-Bromophenyl Phenyl Ether	NS	NS	NR		0.33	U	NR		NR		NR		0.46	U	0.33	U	NR	
4-Chloro-3-Methylphenol	NS	NS	NR		0.33	U	NR		NR		NR		0.46	U	0.33	U	NR	
4-Chloroaniline	NS	NS	NR		0.33	U	NR		NR		NR		0.46	U	0.33	U	NR	
4-Chlorophenyl Phenyl Ether	NS	NS	NR		0.33	U	NR		NR		NR		0.46	U	0.33	U	NR	
4-Methylphenol (P-Cresol)	0.33	100	NR		0.33	U	NR		NR		NR		0.46	U	0.33	U	NR	
4-Nitroaniline	NS	NS	NR		0.33	U	NR		NR		NR		0.46	U	0.33	U	NR	
4-Nitrophenol	NS	NS	NR		0.67	U	NR		NR		NR		0.93	U	0.67	U	NR	
Acenaphthene	20	100	0.0098	J	0.072	J	0.51		0.36	U	0.52		0.59		0.22	J	0.011	J
Acenaphthylene	100	100	0.011	J	0.029	J	0.022	J	0.36	U	0.42	U	0.29	J	0.059	J	0.36	U
Acetophenone	NS	NS	NR		0.33	U	NR		NR		NR		0.46	U	0.33	U	NR	
Anthracene	100	100	0.038	J	0.22	J	1.2		0.36	U	0.98		1.3		0.57		0.028	J
Atrazine	NS	NS	NR		0.13	U	NR		NR		NR		0.19	U	0.13	U	NR	
Benzaldehyde	NS	NS	NR		0.33	UJ	NR		NR		NR		0.46	UJ	0.33	UJ	NR	
Benzo(a)Anthracene	**1**	1.4	0.17		0.61		**2.2**		0.036	U	**1.2**		**2.3**		**1.4**		0.084	
Benzo(a)Pyrene	**1**	1	0.15		0.56		**1.8**		0.036	U	0.95		**1.9**		**1.3**		0.069	
Benzo(b)Fluoranthene	**1**	1.4	0.2		0.71		**2.2**		0.036	U	**1.2**		**2.5**		**1.5**		0.095	
Benzo(g,h,i)Perylene	**0.64**	4.9	0.1	J	0.37		**1**		0.36	U	0.52		**1**		**0.71**		0.04	J
Benzo(k)Fluoranthene	**0.8**	4.9	0.075		0.25		**0.82**		0.036	U	0.42		**0.86**		0.53		0.033	J
Benzyl Butyl Phthalate	NS	NS	NR		0.33	U	NR		NR		NR		0.46	U	0.33	U	NR	
Biphenyl (Diphenyl)	NS	NS	NR		0.33	U	NR		NR		NR		0.11	J	0.026	J	NR	
Bis(2-Chloroethoxy) Methane	NS	NS	NR		0.33	U	NR		NR		NR		0.46	U	0.33	U	NR	
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	NR		0.033	U	NR		NR		NR		0.046	U	0.033	U	NR	
Bis(2-Chloroisopropyl) Ether	NS	NS	NR		0.33	U	NR		NR		NR		0.46	U	0.33	U	NR	
Bis(2-Ethylhexyl) Phthalate	NS	NS	NR		0.33	U	NR		NR		NR		0.46	U	0.33	U	NR	
Caprolactam	NS	NS	NR		0.33	UJ	NR		NR		NR		0.46	UJ	0.33	UJ	NR	
Carbazole	NS	NS	NR		0.087	J	NR		NR		NR		0.66		0.17	J	NR	
Chrysene	**1**	4.9	0.16	J	0.62		**2**		0.36	U	**1.1**		**2.3**		**1.5**		0.076	J
Dibenz(a,h)Anthracene	**0.33**	0.33	0.03	J	0.082		0.28		0.036	U	0.15		0.29		0.19		0.036	U
Dibenzofuran	NS	18	NR		0.049	J	NR		NR		NR		0.6		0.15	J	NR	
Diethyl Phthalate	NS	NS	NR		0.33	U	NR		NR		NR		0.46	U	0.33	U	NR	
Dimethyl Phthalate	NS	NS	NR		0.33	U	NR		NR		NR		0.46	U	0.33	U	NR	
Di-N-Butyl Phthalate	NS	NS	NR		0.016	J	NR		NR		NR		0.021	J	0.018	J	NR	
Di-N-Octylphthalate	NS	NS	NR		0.33	U	NR		NR		NR		0.46	U	0.33	U	NR	
Fluoranthene	85	100	0.31	J	1.4		4.7		0.36	U	3		5.5		3.1		0.17	J
Fluorene	30	100	0.012	J	0.071	J	0.54		0.36	U	0.58		0.96		0.25	J	0.012	J
Hexachlorobenzene	0.33	0.33	NR		0.033	U	NR		NR		NR		0.046	U	0.033	U	NR	
Hexachlorobutadiene	NS	NS	NR		0.067	U	NR		NR		NR		0.093	U	0.067	U	NR	
Hexachlorocyclopentadiene	NS	NS	NR		0.33	U	NR		NR		NR		0.46	U	0.33	U	NR	
Hexachloroethane	NS	NS	NR		0.033	U	NR		NR		NR		0.046	U	0.033	U	NR	
Indeno(1,2,3-c,d)Pyrene	**0.5**	1.4	0.11		0.4		**1.1**		0.036	U	**0.59**		**1.2**		**0.78**		0.037	
Isophorone	NS	NS	NR		0.13	U	NR		NR		NR		0.19	U	0.13	U	NR	
Naphthalene	12	100	0.34	U	0.033	J	0.26	J	0.36	U	0.73		1.1		0.16	J	0.36	U
Nitrobenzene	0.08	1.8	NR		0.033	U	NR		NR		NR		0.046	U	0.033	U	NR	
N-Nitrosodi-N-Propylamine	NS	NS	NR		0.033	U	NR		NR		NR		0.046	U	0.033	U	NR	
N-Nitrosodiphenylamine	NS	NS	NR		0.33	U	NR		NR		NR		0.46	U	0.33	U	NR	
Pentachlorophenol	0.8	1.3	NR		0.27	U	NR		NR		NR		0.37	U	0.27	U	NR	
Phenanthrene	**1.1**	4.9	0.17	J	1		**4.5**		0.36	U	**3.9**		**6.4**		**2.7**		0.13	J
Phenol	0.33	100	NR		0.33	U	NR		NR		NR		0.46	U	0.33	U	NR	
Pyrene	64	100	0.27	J	1.2		3.8		0.36	U	2.5		4.8		3.1		0.15	J

Table 2
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Semivolatile Organic Compounds (SVOCs)

		AKRF Sample ID	RI-SB-06_0.5-2_20250922		RI-SB-06_2-4_20250922		RI-SB-X2_2-4_20250922		RI-SB-06_4-6_20250922		RI-SB-06_6-8_20250922		RI-SB-06_8-10_20250922		RI-SB-06_13-15_20250922		RI-SB-07_0-0.5_20250924	
		Lab Sample ID	460-335428-16		460-335428-17		460-335428-22		460-335428-18		460-335428-19		460-335428-20		460-335428-21		460-335652-16	
		Sample Date	9/22/2025		9/22/2025		9/22/2025		9/22/2025		9/22/2025		9/22/2025		9/22/2025		9/24/2025	
		Dilution Factor	1		1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,2,4,5-Tetrachlorobenzene	NS	NS	0.34	U	NR		NR		NR		NR		0.36	U	0.4	U	NR	
1,4-Dioxane (P-Dioxane)	NS	5.7	0.034	U	NR		NR		NR		NR		0.036	U	0.04	U	NR	
2,3,4,6-Tetrachlorophenol	NS	NS	0.34	U	NR		NR		NR		NR		0.36	U	0.4	U	NR	
2,4,5-Trichlorophenol	NS	NS	0.34	U	NR		NR		NR		NR		0.36	U	0.4	U	NR	
2,4,6-Trichlorophenol	NS	NS	0.14	U	NR		NR		NR		NR		0.14	U	0.16	U	NR	
2,4-Dichlorophenol	NS	NS	0.14	U	NR		NR		NR		NR		0.14	U	0.16	U	NR	
2,4-Dimethylphenol	NS	NS	0.34	UJ	NR		NR		NR		NR		0.36	UJ	0.4	U	NR	
2,4-Dinitrophenol	NS	NS	0.27	U	NR		NR		NR		NR		0.29	U	0.32	U	NR	
2,4-Dinitrotoluene	NS	NS	0.069	U	NR		NR		NR		NR		0.072	U	0.081	U	NR	
2,6-Dinitrotoluene	NS	NS	0.069	U	NR		NR		NR		NR		0.072	U	0.081	U	NR	
2-Chloronaphthalene	NS	NS	0.34	U	NR		NR		NR		NR		0.36	U	0.4	U	NR	
2-Chlorophenol	NS	NS	0.34	U	NR		NR		NR		NR		0.36	U	0.4	U	NR	
2-Methylnaphthalene	NS	NS	0.34	U	NR		NR		NR		NR		0.19	J	0.012	J	NR	
2-Methylphenol (O-Cresol)	0.33	100	0.34	U	NR		NR		NR		NR		0.36	U	0.4	U	NR	
2-Nitroaniline	NS	NS	0.34	U	NR		NR		NR		NR		0.36	U	0.4	U	NR	
2-Nitrophenol	NS	NS	0.34	U	NR		NR		NR		NR		0.36	U	0.4	U	NR	
3- And 4- Methylphenol (Total)	NS	NS	0.34	U	NR		NR		NR		NR		0.36	U	0.4	U	NR	
3,3'-Dichlorobenzidine	NS	NS	0.14	U	NR		NR		NR		NR		0.14	U	0.16	U	NR	
3-Nitroaniline	NS	NS	0.34	U	NR		NR		NR		NR		0.36	U	0.4	U	NR	
4,6-Dinitro-2-Methylphenol	NS	NS	0.27	U	NR		NR		NR		NR		0.29	U	0.32	U	NR	
4-Bromophenyl Phenyl Ether	NS	NS	0.34	U	NR		NR		NR		NR		0.36	U	0.4	U	NR	
4-Chloro-3-Methylphenol	NS	NS	0.34	U	NR		NR		NR		NR		0.36	U	0.4	U	NR	
4-Chloroaniline	NS	NS	0.34	U	NR		NR		NR		NR		0.36	U	0.4	U	NR	
4-Chlorophenyl Phenyl Ether	NS	NS	0.34	U	NR		NR		NR		NR		0.36	U	0.4	U	NR	
4-Methylphenol (P-Cresol)	0.33	100	0.34	U	NR		NR		NR		NR		0.36	U	0.4	U	NR	
4-Nitroaniline	NS	NS	0.34	U	NR		NR		NR		NR		0.36	U	0.4	U	NR	
4-Nitrophenol	NS	NS	0.69	U	NR		NR		NR		NR		0.72	U	0.81	U	NR	
Acenaphthene	20	100	0.017	J	0.34	U	0.34	U	0.08	J	0.15	J	0.25	J	0.019	J	0.061	J
Acenaphthylene	100	100	0.34	U	0.34	U	0.34	U	0.082	J	0.079	J	0.052	J	0.4	U	0.031	J
Acetophenone	NS	NS	0.34	U	NR		NR		NR		NR		0.36	U	0.4	U	NR	
Anthracene	100	100	0.03	J	0.34	U	0.027	J	0.28	J	0.76		0.76		0.06	J	0.18	J
Atrazine	NS	NS	0.14	U	NR		NR		NR		NR		0.14	U	0.16	U	NR	
Benzaldehyde	NS	NS	0.34	UJ	NR		NR		NR		NR		0.36	UJ	0.4	UJ	NR	
Benzo(a)Anthracene	**1**	1.4	0.081		0.034	U	0.055		0.79		1		0.95		0.12		0.48	
Benzo(a)Pyrene	**1**	1	0.069		0.012	J	0.041	J	0.69		0.85		0.75		0.098		0.45	
Benzo(b)Fluoranthene	**1**	1.4	0.09		0.015	J	0.053	J	0.91		**1.1**		0.95		0.13		0.59	
Benzo(g,h,i)Perylene	**0.64**	4.9	0.04	J	0.34	U	0.022	J	0.41		0.46		0.39		0.071	J	0.24	J
Benzo(k)Fluoranthene	**0.8**	4.9	0.032	J	0.007	J	0.026	J	0.32		0.42		0.36		0.06		0.23	
Benzyl Butyl Phthalate	NS	NS	0.24	J	NR		NR		NR		NR		0.36	U	0.4	U	NR	
Biphenyl (Diphenyl)	NS	NS	0.34	U	NR		NR		NR		NR		0.041	J	0.4	U	NR	
Bis(2-Chloroethoxy) Methane	NS	NS	0.34	U	NR		NR		NR		NR		0.36	U	0.4	U	NR	
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	0.034	U	NR		NR		NR		NR		0.036	U	0.04	U	NR	
Bis(2-Chloroisopropyl) Ether	NS	NS	0.34	U	NR		NR		NR		NR		0.36	U	0.4	U	NR	
Bis(2-Ethylhexyl) Phthalate	NS	NS	0.34	U	NR		NR		NR		NR		0.36	U	0.4	U	NR	
Caprolactam	NS	NS	0.34	U	NR		NR		NR		NR		0.36	U	0.4	U	NR	
Carbazole	NS	NS	0.34	U	NR		NR		NR		NR		0.25	J	0.025	J	NR	
Chrysene	**1**	4.9	0.071	J	0.34	U	0.049	J	0.85		0.98		0.87		0.13	J	0.47	
Dibenz(a,h)Anthracene	**0.33**	0.33	0.034	U	0.034	U	0.034	U	0.11		0.12		0.12		0.018	J	0.052	
Dibenzofuran	NS	18	0.011	J	NR		NR		NR		NR		0.32	J	0.024	J	NR	
Diethyl Phthalate	NS	NS	0.34	U	NR		NR		NR		NR		0.36	U	0.4	U	NR	
Dimethyl Phthalate	NS	NS	0.34	U	NR		NR		NR		NR		0.36	U	0.4	U	NR	
Di-N-Butyl Phthalate	NS	NS	0.34	U	NR		NR		NR		NR		0.015	J	0.4	U	NR	
Di-N-Octylphthalate	NS	NS	0.34	U	NR		NR		NR		NR		0.36	U	0.4	U	NR	
Fluoranthene	85	100	0.16	J	0.022	J	0.12	J	1.7		2.5		2.6		0.3	J	1.1	
Fluorene	30	100	0.017	J	0.34	U	0.021	J	0.13	J	0.34	J	0.51		0.029	J	0.055	J
Hexachlorobenzene	0.33	0.33	0.034	U	NR		0.034	U	NR		NR		0.036	U	0.04	U	NR	
Hexachlorobutadiene	NS	NS	0.069	U	NR		NR		NR		NR		0.072	U	0.081	U	NR	
Hexachlorocyclopentadiene	NS	NS	0.34	U	NR		NR		NR		NR		0.36	U	0.4	U	NR	
Hexachloroethane	NS	NS	0.034	U	NR		NR		NR		NR		0.036	U	0.04	U	NR	
Indeno(1,2,3-c,d)Pyrene	**0.5**	1.4	0.043		0.034	U	0.023	J	0.44		**0.52**		0.45		0.07		0.28	
Isophorone	NS	NS	0.14	U	NR		NR		NR		NR		0.14	U	0.16	U	NR	
Naphthalene	12	100	0.0078	J	0.34	U	0.013	J	0.046	J	0.12	J	0.26	J	0.016	J	0.023	J
Nitrobenzene	0.08	1.8	0.034	U	NR		NR		NR		NR		0.036	U	0.04	U	NR	
N-Nitrosodi-N-Propylamine	NS	NS	0.034	U	NR		NR		NR		NR		0.036	U	0.04	U	NR	
N-Nitrosodiphenylamine	NS	NS	0.34	U	NR		NR		NR		NR		0.36	U	0.4	U	NR	
Pentachlorophenol	0.8	1.3	0.27	U	NR		NR		NR		NR		0.29	U	0.32	U	NR	
Phenanthrene	**1.1**	4.9	0.12	J	0.34	U	0.13	J	**1.4**		**2.4**		**3**		0.33	J	0.72	
Phenol	0.33	100	0.34	U	NR		NR		NR		NR		0.36	U	0.4	U	NR	
Pyrene	64	100	0.15	J	0.023	J	0.12	J	1.6		2		1.9		0.28	J	0.84	

Table 2
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Semivolatile Organic Compounds (SVOCs)

		AKRF Sample ID	RI-SB-07_0.5-2_20250924		RI-SB-07_2-4_20250924		RI-SB-07_4-6_20250924		RI-SB-07_6-8_20250924		RI-SB-07_8-10_20250924		RI-SB-08_0-0.5_20250922		RI-SB-08_0.5-2_20250922		RI-SB-08_2-4_20250922	
		Lab Sample ID	460-335652-17		460-335652-18		460-335652-19		460-335652-20		460-335652-21		460-335428-7		460-335429-3		460-335428-9	
		Sample Date	9/24/2025		9/24/2025		9/24/2025		9/24/2025		9/24/2025		9/22/2025		9/22/2025		9/22/2025	
		Dilution Factor	1		1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,2,4,5-Tetrachlorobenzene	NS	NS	0.36	U	NR		NR		NR		0.4	U	NR		0.34	U	NR	
1,4-Dioxane (P-Dioxane)	NS	5.7	0.036	U	NR		NR		NR		0.04	U	NR		0.034	U	NR	
2,3,4,6-Tetrachlorophenol	NS	NS	0.36	U	NR		NR		NR		0.4	U	NR		0.34	U	NR	
2,4,5-Trichlorophenol	NS	NS	0.36	U	NR		NR		NR		0.4	U	NR		0.34	U	NR	
2,4,6-Trichlorophenol	NS	NS	0.15	U	NR		NR		NR		0.16	U	NR		0.14	U	NR	
2,4-Dichlorophenol	NS	NS	0.15	U	NR		NR		NR		0.16	U	NR		0.14	U	NR	
2,4-Dimethylphenol	NS	NS	0.36	U	NR		NR		NR		0.4	U	NR		0.34	UJ	NR	
2,4-Dinitrophenol	NS	NS	0.29	U	NR		NR		NR		0.32	UJ	NR		0.27	U	NR	
2,4-Dinitrotoluene	NS	NS	0.074	U	NR		NR		NR		0.082	U	NR		0.068	U	NR	
2,6-Dinitrotoluene	NS	NS	0.074	U	NR		NR		NR		0.082	U	NR		0.068	U	NR	
2-Chloronaphthalene	NS	NS	0.36	U	NR		NR		NR		0.4	U	NR		0.34	U	NR	
2-Chlorophenol	NS	NS	0.36	U	NR		NR		NR		0.4	U	NR		0.34	U	NR	
2-Methylnaphthalene	NS	NS	0.36	U	NR		NR		NR		0.4	U	NR		0.34	U	NR	
2-Methylphenol (O-Cresol)	0.33	100	0.36	U	NR		NR		NR		0.4	U	NR		0.34	U	NR	
2-Nitroaniline	NS	NS	0.36	U	NR		NR		NR		0.4	U	NR		0.34	U	NR	
2-Nitrophenol	NS	NS	0.36	U	NR		NR		NR		0.4	U	NR		0.34	U	NR	
3- And 4- Methylphenol (Total)	NS	NS	0.36	U	NR		NR		NR		0.4	U	NR		0.34	U	NR	
3,3'-Dichlorobenzidine	NS	NS	0.15	U	NR		NR		NR		0.16	U	NR		0.14	U	NR	
3-Nitroaniline	NS	NS	0.36	U	NR		NR		NR		0.4	U	NR		0.34	U	NR	
4,6-Dinitro-2-Methylphenol	NS	NS	0.29	UJ	NR		NR		NR		0.32	U	NR		0.27	U	NR	
4-Bromophenyl Phenyl Ether	NS	NS	0.36	U	NR		NR		NR		0.4	U	NR		0.34	U	NR	
4-Chloro-3-Methylphenol	NS	NS	0.36	U	NR		NR		NR		0.4	U	NR		0.34	U	NR	
4-Chloroaniline	NS	NS	0.36	U	NR		NR		NR		0.4	U	NR		0.34	U	NR	
4-Chlorophenyl Phenyl Ether	NS	NS	0.36	U	NR		NR		NR		0.4	U	NR		0.34	U	NR	
4-Methylphenol (P-Cresol)	0.33	100	0.36	U	NR		NR		NR		0.4	U	NR		0.34	U	NR	
4-Nitroaniline	NS	NS	0.36	U	NR		NR		NR		0.4	U	NR		0.34	U	NR	
4-Nitrophenol	NS	NS	0.74	U	NR		NR		NR		0.82	U	NR		0.68	U	NR	
Acenaphthene	20	100	0.019	J	0.13	J	0.043	J	0.13	J	0.013	J	0.34	U	0.34	U	0.34	U
Acenaphthylene	100	100	0.024	J	0.047	J	0.021	J	0.032	J	0.4	U	0.34	U	0.34	U	0.34	U
Acetophenone	NS	NS	0.36	U	NR		NR		NR		0.4	U	NR		0.34	U	NR	
Anthracene	100	100	0.063	J	0.36		0.11	J	0.32	J	0.036	J	0.34	U	0.34	U	0.34	U
Atrazine	NS	NS	0.15	U	NR		NR		NR		0.16	U	NR		0.14	U	NR	
Benzaldehyde	NS	NS	0.36	UJ	NR		NR		NR		0.4	UJ	NR		0.34	UJ	NR	
Benzo(a)Anthracene	**1**	1.4	0.26		0.76		0.36		0.99		0.12		0.045		0.034	U	0.034	U
Benzo(a)Pyrene	**1**	1	0.26		0.67		0.34		0.89		0.11		0.039		0.015	J	0.034	U
Benzo(b)Fluoranthene	**1**	1.4	0.34		0.86		0.43		**1.2**		0.14		0.051		0.019	J	0.01	J
Benzo(g,h,i)Perylene	**0.64**	4.9	0.14	J	0.3	J	0.18	J	0.38		0.066	J	0.021	J	0.34	U	0.34	U
Benzo(k)Fluoranthene	**0.8**	4.9	0.13		0.35		0.16		0.51		0.044		0.019	J	0.0081	J	0.034	U
Benzyl Butyl Phthalate	NS	NS	0.36	U	NR		NR		NR		0.4	U	NR		0.34	U	NR	
Biphenyl (Diphenyl)	NS	NS	0.36	U	NR		NR		NR		0.4	U	NR		0.34	U	NR	
Bis(2-Chloroethoxy) Methane	NS	NS	0.36	U	NR		NR		NR		0.4	U	NR		0.34	U	NR	
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	0.036	U	NR		NR		NR		0.04	U	NR		0.034	U	NR	
Bis(2-Chloroisopropyl) Ether	NS	NS	0.36	U	NR		NR		NR		0.4	U	NR		0.34	U	NR	
Bis(2-Ethylhexyl) Phthalate	NS	NS	0.36	U	NR		NR		NR		0.4	U	NR		0.34	U	NR	
Caprolactam	NS	NS	0.36	U	NR		NR		NR		0.4	UJ	NR		0.34	U	NR	
Carbazole	NS	NS	0.027	J	NR		NR		NR		0.016	J	NR		0.34	U	NR	
Chrysene	**1**	4.9	0.26	J	0.72		0.37		0.95		0.12	J	0.044	J	0.015	J	0.34	U
Dibenz(a,h)Anthracene	**0.33**	0.33	0.028	J	0.11		0.052		0.12		0.017	J	0.034	U	0.034	U	0.034	U
Dibenzofuran	NS	18	0.36	U	NR		NR		NR		0.4	U	NR		0.34	U	NR	
Diethyl Phthalate	NS	NS	0.36	U	NR		NR		NR		0.4	U	NR		0.34	U	NR	
Dimethyl Phthalate	NS	NS	0.36	U	NR		NR		NR		0.4	U	NR		0.34	U	NR	
Di-N-Butyl Phthalate	NS	NS	0.36	U	NR		NR		NR		0.18	J	NR		0.34	U	NR	
Di-N-Octylphthalate	NS	NS	0.36	U	NR		NR		NR		0.4	U	NR		0.34	U	NR	
Fluoranthene	85	100	0.53		1.6		0.71		2.1		0.23	J	0.082	J	0.029	J	0.019	J
Fluorene	30	100	0.018	J	0.15	J	0.033	J	0.11	J	0.4	U	0.34	U	0.34	U	0.34	U
Hexachlorobenzene	0.33	0.33	0.036	U	NR		NR		NR		0.04	U	NR		0.034	U	NR	
Hexachlorobutadiene	NS	NS	0.074	U	NR		NR		NR		0.082	U	NR		0.068	U	NR	
Hexachlorocyclopentadiene	NS	NS	0.36	U	NR		NR		NR		0.4	U	NR		0.34	U	NR	
Hexachloroethane	NS	NS	0.036	U	NR		NR		NR		0.04	U	NR		0.034	U	NR	
Indeno(1,2,3-c,d)Pyrene	**0.5**	1.4	0.17		0.36		0.2		0.45		0.063		0.024	J	0.034	U	0.034	U
Isophorone	NS	NS	0.15	U	NR		NR		NR		0.16	U	NR		0.14	U	NR	
Naphthalene	12	100	0.36	U	0.022	J	0.014	J	0.039	J	0.4	U	0.34	U	0.34	U	0.34	U
Nitrobenzene	0.08	1.8	0.036	U	NR		NR		NR		0.04	U	NR		0.034	U	NR	
N-Nitrosodi-N-Propylamine	NS	NS	0.036	U	NR		NR		NR		0.04	U	NR		0.034	U	NR	
N-Nitrosodiphenylamine	NS	NS	0.36	U	NR		NR		NR		0.4	U	NR		0.34	U	NR	
Pentachlorophenol	0.8	1.3	0.29	U	NR		NR		NR		0.32	U	NR		0.27	U	NR	
Phenanthrene	**1.1**	4.9	0.29	J	**1.2**		0.41		**1.3**		0.15	J	0.05	J	0.016	J	0.34	U
Phenol	0.33	100	0.36	U	NR		NR		NR		0.4	U	NR		0.34	U	NR	
Pyrene	64	100	0.45		1.3		0.62		1.7		0.21	J	0.076	J	0.029	J	0.017	J

Table 2
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Semivolatile Organic Compounds (SVOCs)

		AKRF Sample ID	RI-SB-08_4-6_20250922		RI-SB-08_6-8_20250922		RI-SB-08_8-10_20250922		RI-SB-08_10-12_20250926		RI-SB-09_0-0.5_20250923		RI-SB-09_0.5-2_20250923		RI-SB-09_2-4_20250923		RI-SB-X5_2-4_20250923	
		Lab Sample ID	460-335428-10		460-335428-11		460-335428-12		460-335823-3		460-335525-14		460-335525-15		460-335525-16		460-335536-12	
		Sample Date	9/22/2025		9/22/2025		9/22/2025		9/26/2025		9/23/2025		9/23/2025		9/23/2025		9/23/2025	
		Dilution Factor	1		1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,2,4,5-Tetrachlorobenzene	NS	NS	NR		NR		0.34	U	0.37	U	NR		0.33	U	NR		NR	
1,4-Dioxane (P-Dioxane)	NS	5.7	NR		NR		0.034	U	0.037	U	NR		0.033	U	NR		NR	
2,3,4,6-Tetrachlorophenol	NS	NS	NR		NR		0.34	U	0.37	U	NR		0.33	U	NR		NR	
2,4,5-Trichlorophenol	NS	NS	NR		NR		0.34	U	0.37	U	NR		0.33	U	NR		NR	
2,4,6-Trichlorophenol	NS	NS	NR		NR		0.14	U	0.15	U	NR		0.13	U	NR		NR	
2,4-Dichlorophenol	NS	NS	NR		NR		0.14	U	0.15	U	NR		0.13	U	NR		NR	
2,4-Dimethylphenol	NS	NS	NR		NR		0.34	UJ	0.37	U	NR		0.33	U	NR		NR	
2,4-Dinitrophenol	NS	NS	NR		NR		0.28	UJ	0.3	U	NR		0.26	U	NR		NR	
2,4-Dinitrotoluene	NS	NS	NR		NR		0.07	U	0.076	U	NR		0.067	U	NR		NR	
2,6-Dinitrotoluene	NS	NS	NR		NR		0.07	U	0.076	U	NR		0.067	U	NR		NR	
2-Chloronaphthalene	NS	NS	NR		NR		0.34	UJ	0.37	U	NR		0.33	U	NR		NR	
2-Chlorophenol	NS	NS	NR		NR		0.34	UJ	0.37	U	NR		0.33	U	NR		NR	
2-Methylnaphthalene	NS	NS	NR		NR		0.34	U	0.056	J	NR		0.039	J	NR		NR	
2-Methylphenol (O-Cresol)	0.33	100	NR		NR		0.34	UJ	0.37	U	NR		0.33	U	NR		NR	
2-Nitroaniline	NS	NS	NR		NR		0.34	U	0.37	U	NR		0.33	U	NR		NR	
2-Nitrophenol	NS	NS	NR		NR		0.34	UJ	0.37	U	NR		0.33	U	NR		NR	
3- And 4- Methylphenol (Total)	NS	NS	NR		NR		0.34	U	0.37	U	NR		0.33	U	NR		NR	
3,3'-Dichlorobenzidine	NS	NS	NR		NR		0.14	U	0.15	U	NR		0.13	U	NR		NR	
3-Nitroaniline	NS	NS	NR		NR		0.34	U	0.37	U	NR		0.33	U	NR		NR	
4,6-Dinitro-2-Methylphenol	NS	NS	NR		NR		0.28	UJ	0.3	U	NR		0.26	U	NR		NR	
4-Bromophenyl Phenyl Ether	NS	NS	NR		NR		0.34	U	0.37	U	NR		0.33	U	NR		NR	
4-Chloro-3-Methylphenol	NS	NS	NR		NR		0.34	U	0.37	U	NR		0.33	U	NR		NR	
4-Chloroaniline	NS	NS	NR		NR		0.34	U	0.37	U	NR		0.33	U	NR		NR	
4-Chlorophenyl Phenyl Ether	NS	NS	NR		NR		0.34	U	0.37	U	NR		0.33	U	NR		NR	
4-Methylphenol (P-Cresol)	0.33	100	NR		NR		0.34	U	0.37	U	NR		0.33	U	NR		NR	
4-Nitroaniline	NS	NS	NR		NR		0.34	U	0.37	U	NR		0.33	U	NR		NR	
4-Nitrophenol	NS	NS	NR		NR		0.7	U	0.76	U	NR		0.67	U	NR		NR	
Acenaphthene	20	100	0.14	J	0.34	U	0.014	J	0.099	J	0.35	U	0.12	J	0.014	J	0.33	U
Acenaphthylene	100	100	0.07	J	0.34	U	0.34	UJ	0.21	J	0.35	U	0.071	J	0.034	J	0.33	U
Acetophenone	NS	NS	NR		NR		0.34	UJ	0.37	U	NR		0.33	U	NR		NR	
Anthracene	100	100	0.34	J	0.021	J	0.038	J	0.35	J	0.014	J	0.28	J	0.047	J	0.019	J
Atrazine	NS	NS	NR		NR		0.14	U	0.15	U	NR		0.13	U	NR		NR	
Benzaldehyde	NS	NS	NR		NR		0.34	UJ	0.37	UJ	NR		0.33	UJ	NR		NR	
Benzo(a)Anthracene	**1**	1.4	0.96		0.09		0.1		0.83		0.067		0.71		0.19	J	0.089	J
Benzo(a)Pyrene	**1**	1	0.87		0.082		0.094		0.82		0.071		0.61		0.19	J	0.077	J
Benzo(b)Fluoranthene	**1**	1.4	**1.1**		0.1		0.13		**1.1**		0.089		0.65		0.25	J	0.11	J
Benzo(g,h,i)Perylene	**0.64**	4.9	0.51		0.053	J	0.055	J	0.56		0.057	J	0.33		0.15	J	0.049	J
Benzo(k)Fluoranthene	**0.8**	4.9	0.39		0.04		0.041		0.49		0.032	J	0.23		0.073	J	0.036	J
Benzyl Butyl Phthalate	NS	NS	NR		NR		0.34	U	0.37	U	NR		0.33	U	NR		NR	
Biphenyl (Diphenyl)	NS	NS	NR		NR		0.34	UJ	0.37	U	NR		0.33	U	NR		NR	
Bis(2-Chloroethoxy) Methane	NS	NS	NR		NR		0.34	UJ	0.37	U	NR		0.33	U	NR		NR	
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	NR		NR		0.034	UJ	0.037	U	NR		0.033	U	NR		NR	
Bis(2-Chloroisopropyl) Ether	NS	NS	NR		NR		0.34	U	0.37	U	NR		0.33	U	NR		NR	
Bis(2-Ethylhexyl) Phthalate	NS	NS	NR		NR		0.34	U	0.37	U	NR		0.33	U	NR		NR	
Caprolactam	NS	NS	NR		NR		0.34	U	0.37	U	NR		0.33	U	NR		NR	
Carbazole	NS	NS	NR		NR		0.013	J	0.17	J	NR		0.028	J	NR		NR	
Chrysene	**1**	4.9	0.94		0.083	J	0.1	J	0.94		0.079	J	0.74		0.21	J	0.081	J
Dibenz(a,h)Anthracene	**0.33**	0.33	0.12		0.034	U	0.034	U	0.13		0.035	U	0.074		0.033	J	0.033	U
Dibenzofuran	NS	18	NR		NR		0.34	U	0.097	J	NR		0.022	J	NR		NR	
Diethyl Phthalate	NS	NS	NR		NR		0.34	U	0.37	U	NR		0.33	U	NR		NR	
Dimethyl Phthalate	NS	NS	NR		NR		0.34	U	0.37	U	NR		0.33	U	NR		NR	
Di-N-Butyl Phthalate	NS	NS	NR		NR		0.34	U	0.37	U	NR		0.33	U	NR		NR	
Di-N-Octylphthalate	NS	NS	NR		NR		0.34	U	0.37	U	NR		0.33	U	NR		NR	
Fluoranthene	85	100	2		0.17	J	0.22	J	2		0.12	J	1.3		0.35	J	0.16	J
Fluorene	30	100	0.16	J	0.34	U	0.017	J	0.17	J	0.35	U	0.12	J	0.014	J	0.33	U
Hexachlorobenzene	0.33	0.33	NR		NR		0.034	U	0.037	U	NR		0.033	U	NR		NR	
Hexachlorobutadiene	NS	NS	NR		NR		0.07	UJ	0.076	U	NR		0.067	U	NR		NR	
Hexachlorocyclopentadiene	NS	NS	NR		NR		0.34	U	0.37	UJ	NR		0.33	U	NR		NR	
Hexachloroethane	NS	NS	NR		NR		0.034	UJ	0.037	U	NR		0.033	U	NR		NR	
Indeno(1,2,3-c,d)Pyrene	**0.5**	1.4	**0.55**		0.055		0.063		**0.62**		0.055		0.33		0.13	J	0.049	J
Isophorone	NS	NS	NR		NR		0.14	UJ	0.15	U	NR		0.13	U	NR		NR	
Naphthalene	12	100	0.032	J	0.34	U	0.01	JL	0.053	J	0.35	U	0.03	J	0.34	U	0.33	U
Nitrobenzene	0.08	1.8	NR		NR		0.034	UJ	0.037	U	NR		0.033	U	NR		NR	
N-Nitrosodi-N-Propylamine	NS	NS	NR		NR		0.034	UJ	0.037	U	NR		0.033	U	NR		NR	
N-Nitrosodiphenylamine	NS	NS	NR		NR		0.34	U	0.37	U	NR		0.33	U	NR		NR	
Pentachlorophenol	0.8	1.3	NR		NR		0.28	U	0.3	U	NR		0.26	U	NR		NR	
Phenanthrene	**1.1**	4.9	**1.4**		0.094	J	0.16	J	**1.5**		0.062	J	**1.8**		0.22	J	0.077	J
Phenol	0.33	100	NR		NR		0.34	UJ	0.37	U	NR		0.33	U	NR		NR	
Pyrene	64	100	1.8		0.15	J	0.19	J	1.6		0.12	J	2		0.38	J	0.14	J

Table 2
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Semivolatile Organic Compounds (SVOCs)

		AKRF Sample ID	RI-SB-09_4-6_20250923	RI-SB-09_6-8_20250923	RI-SB-09_8-10_20250923	RI-SB-09_10-12_20250926	RI-SB-10_0-0.5_20250925	RI-SB-10_0.5-2_20250925	RI-SB-10_2-4_20250925	RI-SB-10_4-6_20250925
		Lab Sample ID	460-335525-17	460-335525-18	460-335525-19	460-335823-4	460-335757-26	460-335757-27	460-335757-28	460-335757-29
		Sample Date	9/23/2025	9/23/2025	9/23/2025	9/26/2025	9/25/2025	9/25/2025	9/25/2025	9/25/2025
		Dilution Factor	1	1	1	1	1	1	1	1
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Compound	**UUSCO**	**RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS	NR	NR	0.33 U	0.4 U	NR	NR	NR	NR
1,4-Dioxane (P-Dioxane)	NS	5.7	NR	NR	0.033 U	0.04 U	NR	NR	NR	NR
2,3,4,6-Tetrachlorophenol	NS	NS	NR	NR	0.33 U	0.4 U	NR	NR	NR	NR
2,4,5-Trichlorophenol	NS	NS	NR	NR	0.33 U	0.4 U	NR	NR	NR	NR
2,4,6-Trichlorophenol	NS	NS	NR	NR	0.13 U	0.16 U	NR	NR	NR	NR
2,4-Dichlorophenol	NS	NS	NR	NR	0.13 U	0.16 U	NR	NR	NR	NR
2,4-Dimethylphenol	NS	NS	NR	NR	0.33 U	0.4 U	NR	NR	NR	NR
2,4-Dinitrophenol	NS	NS	NR	NR	0.27 U	0.32 U	NR	NR	NR	NR
2,4-Dinitrotoluene	NS	NS	NR	NR	0.067 U	0.08 U	NR	NR	NR	NR
2,6-Dinitrotoluene	NS	NS	NR	NR	0.067 U	0.08 U	NR	NR	NR	NR
2-Chloronaphthalene	NS	NS	NR	NR	0.33 U	0.4 U	NR	NR	NR	NR
2-Chlorophenol	NS	NS	NR	NR	0.33 U	0.4 U	NR	NR	NR	NR
2-Methylnaphthalene	NS	NS	NR	NR	0.33 U	0.4 U	NR	NR	NR	NR
2-Methylphenol (O-Cresol)	0.33	100	NR	NR	0.33 U	0.4 U	NR	NR	NR	NR
2-Nitroaniline	NS	NS	NR	NR	0.33 U	0.4 U	NR	NR	NR	NR
2-Nitrophenol	NS	NS	NR	NR	0.33 U	0.4 U	NR	NR	NR	NR
3- And 4- Methylphenol (Total)	NS	NS	NR	NR	0.33 U	0.4 U	NR	NR	NR	NR
3,3'-Dichlorobenzidine	NS	NS	NR	NR	0.13 U	0.16 U	NR	NR	NR	NR
3-Nitroaniline	NS	NS	NR	NR	0.33 U	0.4 U	NR	NR	NR	NR
4,6-Dinitro-2-Methylphenol	NS	NS	NR	NR	0.27 U	0.32 U	NR	NR	NR	NR
4-Bromophenyl Phenyl Ether	NS	NS	NR	NR	0.33 U	0.4 U	NR	NR	NR	NR
4-Chloro-3-Methylphenol	NS	NS	NR	NR	0.33 U	0.4 U	NR	NR	NR	NR
4-Chloroaniline	NS	NS	NR	NR	0.33 U	0.4 U	NR	NR	NR	NR
4-Chlorophenyl Phenyl Ether	NS	NS	NR	NR	0.33 U	0.4 U	NR	NR	NR	NR
4-Methylphenol (P-Cresol)	0.33	100	NR	NR	0.33 U	0.4 U	NR	NR	NR	NR
4-Nitroaniline	NS	NS	NR	NR	0.33 U	0.4 U	NR	NR	NR	NR
4-Nitrophenol	NS	NS	NR	NR	0.67 U	0.8 U	NR	NR	NR	NR
Acenaphthene	20	100	0.34 U	0.34 U	0.33 U	0.4 U	0.34 U	0.34 U	0.036 J	0.35 U
Acenaphthylene	100	100	0.015 J	0.013 J	0.33 U	0.4 U	0.34 U	0.34 U	0.045 J	0.35 U
Acetophenone	NS	NS	NR	NR	0.33 U	0.4 U	NR	NR	NR	NR
Anthracene	100	100	0.019 J	0.018 J	0.33 U	0.4 U	0.34 U	0.012 J	0.26 J	0.35 U
Atrazine	NS	NS	NR	NR	0.13 U	0.16 U	NR	NR	NR	NR
Benzaldehyde	NS	NS	NR	NR	0.33 UJ	0.4 UJ	NR	NR	NR	NR
Benzo(a)Anthracene	**1**	1.4	0.084	0.071	0.033 U	0.04 U	0.034 U	0.062	0.92	0.045
Benzo(a)Pyrene	**1**	1	0.088	0.07	0.017 J	0.012 J	0.034 U	0.052	0.75	0.037
Benzo(b)Fluoranthene	**1**	1.4	0.13	0.085	0.018 J	0.016 J	0.034 U	0.07	0.99	0.045
Benzo(g,h,i)Perylene	**0.64**	4.9	0.079 J	0.055 J	0.014 J	0.4 U	0.34 U	0.04 J	0.44	0.025 J
Benzo(k)Fluoranthene	**0.8**	4.9	0.033 J	0.03 J	0.0082 J	0.04 U	0.034 U	0.024 J	0.35	0.022 J
Benzyl Butyl Phthalate	NS	NS	NR	NR	0.33 U	0.4 U	NR	NR	NR	NR
Biphenyl (Diphenyl)	NS	NS	NR	NR	0.33 U	0.4 U	NR	NR	NR	NR
Bis(2-Chloroethoxy) Methane	NS	NS	NR	NR	0.33 U	0.4 U	NR	NR	NR	NR
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	NR	NR	0.033 U	0.04 U	NR	NR	NR	NR
Bis(2-Chloroisopropyl) Ether	NS	NS	NR	NR	0.33 U	0.4 U	NR	NR	NR	NR
Bis(2-Ethylhexyl) Phthalate	NS	NS	NR	NR	0.33 U	0.4 U	NR	NR	NR	NR
Caprolactam	NS	NS	NR	NR	0.33 U	0.4 U	NR	NR	NR	NR
Carbazole	NS	NS	NR	NR	0.33 U	0.4 U	NR	NR	NR	NR
Chrysene	**1**	4.9	0.089 J	0.077 J	0.015 J	0.4 U	0.34 U	0.065 J	0.91	0.042 J
Dibenz(a,h)Anthracene	**0.33**	0.33	0.021 J	0.034 U	0.033 U	0.04 U	0.034 U	0.034 U	0.13	0.035 U
Dibenzofuran	NS	18	NR	NR	0.33 U	0.4 U	NR	NR	NR	NR
Diethyl Phthalate	NS	NS	NR	NR	0.33 U	0.4 U	NR	NR	NR	NR
Dimethyl Phthalate	NS	NS	NR	NR	0.33 U	0.4 U	NR	NR	NR	NR
Di-N-Butyl Phthalate	NS	NS	NR	NR	0.33 U	0.4 U	NR	NR	NR	NR
Di-N-Octylphthalate	NS	NS	NR	NR	0.33 U	0.4 U	NR	NR	NR	NR
Fluoranthene	85	100	0.15 J	0.12 J	0.021 J	0.02 J	0.34 U	0.11 J	1.9	0.067 J
Fluorene	30	100	0.34 U	0.34 U	0.33 U	0.4 U	0.34 U	0.34 U	0.05 J	0.35 U
Hexachlorobenzene	0.33	0.33	NR	NR	0.033 U	0.04 U	NR	NR	NR	NR
Hexachlorobutadiene	NS	NS	NR	NR	0.067 U	0.08 U	NR	NR	NR	NR
Hexachlorocyclopentadiene	NS	NS	NR	NR	0.33 U	0.4 UJ	NR	NR	NR	NR
Hexachloroethane	NS	NS	NR	NR	0.033 U	0.04 U	NR	NR	NR	NR
Indeno(1,2,3-c,d)Pyrene	**0.5**	1.4	0.078	0.053	0.014 J	0.031 J	0.034 UJ	0.037 J	0.46 J	0.022 J
Isophorone	NS	NS	NR	NR	0.13 U	0.16 U	NR	NR	NR	NR
Naphthalene	12	100	0.34 U	0.34 U	0.33 U	0.4 U	0.34 U	0.34 U	0.0098 J	0.35 U
Nitrobenzene	0.08	1.8	NR	NR	0.033 U	0.04 U	NR	NR	NR	NR
N-Nitrosodi-N-Propylamine	NS	NS	NR	NR	0.033 U	0.04 U	NR	NR	NR	NR
N-Nitrosodiphenylamine	NS	NS	NR	NR	0.33 U	0.4 U	NR	NR	NR	NR
Pentachlorophenol	0.8	1.3	NR	NR	0.27 U	0.32 U	NR	NR	NR	NR
Phenanthrene	**1.1**	4.9	0.071 J	0.091 J	0.33 U	0.4 U	0.34 U	0.066 J	0.76	0.04 J
Phenol	0.33	100	NR	NR	0.33 U	0.4 U	NR	NR	NR	NR
Pyrene	64	100	0.16 J	0.14 J	0.023 J	0.019 J	0.012 J	0.11 J	1.6	0.076 J

Table 2
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Semivolatile Organic Compounds (SVOCs)

		AKRF Sample ID	RI-SB-10_6-8_20250925	RI-SB-10_8-10_20250925	RI-SB-10_10-12_20250926	RI-SB-11_0-0.5_20250924	RI-SB-11_0.5-2_20250924	RI-SB-11_2-4_20250924	RI-SB-11_4-6_20250924	RI-SB-11_6-8_20250924
		Lab Sample ID	460-335757-30	460-335757-31	460-335823-5	460-335652-33	460-335652-34	460-335652-35	460-335652-36	460-335652-37
		Sample Date	9/25/2025	9/25/2025	9/26/2025	9/24/2025	9/24/2025	9/24/2025	9/24/2025	9/24/2025
		Dilution Factor	1	1	1	1	1	1	1	1
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Compound	**UUSCO**	**RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS	NR	NR	NR	NR	0.38 U	NR	NR	NR
1,4-Dioxane (P-Dioxane)	NS	5.7	NR	NR	NR	NR	0.038 U	NR	NR	NR
2,3,4,6-Tetrachlorophenol	NS	NS	NR	NR	NR	NR	0.38 U	NR	NR	NR
2,4,5-Trichlorophenol	NS	NS	NR	NR	NR	NR	0.38 U	NR	NR	NR
2,4,6-Trichlorophenol	NS	NS	NR	NR	NR	NR	0.15 U	NR	NR	NR
2,4-Dichlorophenol	NS	NS	NR	NR	NR	NR	0.15 U	NR	NR	NR
2,4-Dimethylphenol	NS	NS	NR	NR	NR	NR	0.38 U	NR	NR	NR
2,4-Dinitrophenol	NS	NS	NR	NR	NR	NR	0.3 UJ	NR	NR	NR
2,4-Dinitrotoluene	NS	NS	NR	NR	NR	NR	0.076 U	NR	NR	NR
2,6-Dinitrotoluene	NS	NS	NR	NR	NR	NR	0.076 U	NR	NR	NR
2-Chloronaphthalene	NS	NS	NR	NR	NR	NR	0.38 U	NR	NR	NR
2-Chlorophenol	NS	NS	NR	NR	NR	NR	0.38 U	NR	NR	NR
2-Methylnaphthalene	NS	NS	NR	NR	NR	NR	0.38 U	NR	NR	NR
2-Methylphenol (O-Cresol)	0.33	100	NR	NR	NR	NR	0.38 U	NR	NR	NR
2-Nitroaniline	NS	NS	NR	NR	NR	NR	0.38 U	NR	NR	NR
2-Nitrophenol	NS	NS	NR	NR	NR	NR	0.38 U	NR	NR	NR
3- And 4- Methylphenol (Total)	NS	NS	NR	NR	NR	NR	0.38 U	NR	NR	NR
3,3'-Dichlorobenzidine	NS	NS	NR	NR	NR	NR	0.15 U	NR	NR	NR
3-Nitroaniline	NS	NS	NR	NR	NR	NR	0.38 U	NR	NR	NR
4,6-Dinitro-2-Methylphenol	NS	NS	NR	NR	NR	NR	0.3 U	NR	NR	NR
4-Bromophenyl Phenyl Ether	NS	NS	NR	NR	NR	NR	0.38 U	NR	NR	NR
4-Chloro-3-Methylphenol	NS	NS	NR	NR	NR	NR	0.38 U	NR	NR	NR
4-Chloroaniline	NS	NS	NR	NR	NR	NR	0.38 U	NR	NR	NR
4-Chlorophenyl Phenyl Ether	NS	NS	NR	NR	NR	NR	0.38 U	NR	NR	NR
4-Methylphenol (P-Cresol)	0.33	100	NR	NR	NR	NR	0.38 U	NR	NR	NR
4-Nitroaniline	NS	NS	NR	NR	NR	NR	0.38 U	NR	NR	NR
4-Nitrophenol	NS	NS	NR	NR	NR	NR	0.76 U	NR	NR	NR
Acenaphthene	20	100	0.011 J	0.44 U	0.44 U	0.39 U	0.013 J	0.41 U	0.22 J	0.022 J
Acenaphthylene	100	100	0.34 U	0.44 U	0.44 U	0.39 U	0.38 U	0.41 U	0.059 J	0.014 J
Acetophenone	NS	NS	NR	NR	NR	NR	0.38 U	NR	NR	NR
Anthracene	100	100	0.023 J	0.44 U	0.44 U	0.39 U	0.017 J	0.41 U	0.48	0.051 J
Atrazine	NS	NS	NR	NR	NR	NR	0.15 U	NR	NR	NR
Benzaldehyde	NS	NS	NR	NR	NR	NR	0.38 UJ	NR	NR	NR
Benzo(a)Anthracene	**1**	1.4	0.088	0.044 U	0.044 U	0.039 U	0.06	0.041 U	**1.2**	0.2
Benzo(a)Pyrene	**1**	1	0.079	0.044 U	0.044 U	0.039 U	0.057	0.041 U	**1.1**	0.18
Benzo(b)Fluoranthene	**1**	1.4	0.11	0.044 U	0.044 U	0.012 J	0.074	0.041 U	**1.5**	0.24
Benzo(g,h,i)Perylene	**0.64**	4.9	0.059 J	0.44 U	0.44 U	0.39 U	0.038 J	0.41 U	0.46	0.076 J
Benzo(k)Fluoranthene	**0.8**	4.9	0.038	0.044 U	0.044 U	0.039 U	0.03 J	0.041 U	0.57	0.079
Benzyl Butyl Phthalate	NS	NS	NR	NR	NR	NR	0.38 U	NR	NR	NR
Biphenyl (Diphenyl)	NS	NS	NR	NR	NR	NR	0.38 U	NR	NR	NR
Bis(2-Chloroethoxy) Methane	NS	NS	NR	NR	NR	NR	0.38 U	NR	NR	NR
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	NR	NR	NR	NR	0.038 U	NR	NR	NR
Bis(2-Chloroisopropyl) Ether	NS	NS	NR	NR	NR	NR	0.38 U	NR	NR	NR
Bis(2-Ethylhexyl) Phthalate	NS	NS	NR	NR	NR	NR	0.38 U	NR	NR	NR
Caprolactam	NS	NS	NR	NR	NR	NR	0.38 UJ	NR	NR	NR
Carbazole	NS	NS	NR	NR	NR	NR	0.38 U	NR	NR	NR
Chrysene	**1**	4.9	0.093 J	0.44 U	0.44 U	0.39 U	0.062 J	0.41 U	**1.2**	0.2 J
Dibenz(a,h)Anthracene	**0.33**	0.33	0.015 J	0.044 U	0.044 U	0.039 U	0.038 U	0.041 U	0.13	0.023 J
Dibenzofuran	NS	18	NR	NR	NR	NR	0.38 U	NR	NR	NR
Diethyl Phthalate	NS	NS	NR	NR	NR	NR	0.38 U	NR	NR	NR
Dimethyl Phthalate	NS	NS	NR	NR	NR	NR	0.38 U	NR	NR	NR
Di-N-Butyl Phthalate	NS	NS	NR	NR	NR	NR	0.38 U	NR	NR	NR
Di-N-Octylphthalate	NS	NS	NR	NR	NR	NR	0.38 U	NR	NR	NR
Fluoranthene	85	100	0.16 J	0.44 U	0.44 U	0.02 J	0.13 J	0.41 U	2.9	0.41
Fluorene	30	100	0.34 U	0.44 U	0.44 U	0.39 U	0.38 U	0.41 U	0.23 J	0.021 J
Hexachlorobenzene	0.33	0.33	NR	NR	NR	NR	0.038 U	NR	NR	NR
Hexachlorobutadiene	NS	NS	NR	NR	NR	NR	0.076 U	NR	NR	NR
Hexachlorocyclopentadiene	NS	NS	NR	NR	NR	NR	0.38 U	NR	NR	NR
Hexachloroethane	NS	NS	NR	NR	NR	NR	0.038 U	NR	NR	NR
Indeno(1,2,3-c,d)Pyrene	**0.5**	1.4	0.052 J	0.044 UJ	0.026 J	0.039 U	0.04	0.041 U	**0.57**	0.086
Isophorone	NS	NS	NR	NR	NR	NR	0.15 U	NR	NR	NR
Naphthalene	12	100	0.34 U	0.44 U	0.44 U	0.39 U	0.014 J	0.41 U	0.1 J	0.35 U
Nitrobenzene	0.08	1.8	NR	NR	NR	NR	0.038 U	NR	NR	NR
N-Nitrosodi-N-Propylamine	NS	NS	NR	NR	NR	NR	0.038 U	NR	NR	NR
N-Nitrosodiphenylamine	NS	NS	NR	NR	NR	NR	0.38 U	NR	NR	NR
Pentachlorophenol	0.8	1.3	NR	NR	NR	NR	0.3 U	NR	NR	NR
Phenanthrene	**1.1**	4.9	0.13 J	0.44 U	0.44 U	0.39 U	0.091 J	0.41 U	**2.3**	0.26 J
Phenol	0.33	100	NR	NR	NR	NR	0.38 U	NR	NR	NR
Pyrene	64	100	0.19 J	0.44 U	0.44 U	0.018 J	0.11 J	0.41 U	2.3	0.36

Table 2
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Semivolatile Organic Compounds (SVOCs)

		AKRF Sample ID	RI-SB-11_8-10_20250924		RI-SB-11_10-12_20250926		RI-SB-12_0-0.5_20250925		RI-SB-12_0.5-2_20250925		RI-SB-12_2-4_20250925		RI-SB-12_4-6_20250925		RI-SB-12_6-8_20250925		RI-SB-12_8-10_20250925	
		Lab Sample ID	460-335652-38		460-335823-6		460-335757-20		460-335757-21		460-335757-22		460-335757-23		460-335757-24		460-335757-25	
		Sample Date	9/24/2025		9/26/2025		9/25/2025		9/25/2025		9/25/2025		9/25/2025		9/25/2025		9/25/2025	
		Dilution Factor	1		1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,2,4,5-Tetrachlorobenzene	NS	NS	0.36	U	NR		NR		NR		NR		NR		NR		NR	
1,4-Dioxane (P-Dioxane)	NS	5.7	0.036	U	NR		NR		NR		NR		NR		NR		NR	
2,3,4,6-Tetrachlorophenol	NS	NS	0.36	U	NR		NR		NR		NR		NR		NR		NR	
2,4,5-Trichlorophenol	NS	NS	0.36	U	NR		NR		NR		NR		NR		NR		NR	
2,4,6-Trichlorophenol	NS	NS	0.15	U	NR		NR		NR		NR		NR		NR		NR	
2,4-Dichlorophenol	NS	NS	0.15	U	NR		NR		NR		NR		NR		NR		NR	
2,4-Dimethylphenol	NS	NS	0.36	U	NR		NR		NR		NR		NR		NR		NR	
2,4-Dinitrophenol	NS	NS	0.29	U	NR		NR		NR		NR		NR		NR		NR	
2,4-Dinitrotoluene	NS	NS	0.074	U	NR		NR		NR		NR		NR		NR		NR	
2,6-Dinitrotoluene	NS	NS	0.074	U	NR		NR		NR		NR		NR		NR		NR	
2-Chloronaphthalene	NS	NS	0.36	U	NR		NR		NR		NR		NR		NR		NR	
2-Chlorophenol	NS	NS	0.36	U	NR		NR		NR		NR		NR		NR		NR	
2-Methylnaphthalene	NS	NS	0.36	U	NR		NR		NR		NR		NR		NR		NR	
2-Methylphenol (O-Cresol)	0.33	100	0.36	U	NR		NR		NR		NR		NR		NR		NR	
2-Nitroaniline	NS	NS	0.36	U	NR		NR		NR		NR		NR		NR		NR	
2-Nitrophenol	NS	NS	0.36	U	NR		NR		NR		NR		NR		NR		NR	
3- And 4- Methylphenol (Total)	NS	NS	0.36	U	NR		NR		NR		NR		NR		NR		NR	
3,3'-Dichlorobenzidine	NS	NS	0.15	U	NR		NR		NR		NR		NR		NR		NR	
3-Nitroaniline	NS	NS	0.36	U	NR		NR		NR		NR		NR		NR		NR	
4,6-Dinitro-2-Methylphenol	NS	NS	0.29	U	NR		NR		NR		NR		NR		NR		NR	
4-Bromophenyl Phenyl Ether	NS	NS	0.36	U	NR		NR		NR		NR		NR		NR		NR	
4-Chloro-3-Methylphenol	NS	NS	0.36	U	NR		NR		NR		NR		NR		NR		NR	
4-Chloroaniline	NS	NS	0.36	U	NR		NR		NR		NR		NR		NR		NR	
4-Chlorophenyl Phenyl Ether	NS	NS	0.36	U	NR		NR		NR		NR		NR		NR		NR	
4-Methylphenol (P-Cresol)	0.33	100	0.36	U	NR		NR		NR		NR		NR		NR		NR	
4-Nitroaniline	NS	NS	0.36	U	NR		NR		NR		NR		NR		NR		NR	
4-Nitrophenol	NS	NS	0.74	U	NR		NR		NR		NR		NR		NR		NR	
Acenaphthene	20	100	0.024	J	0.25	J	0.37	U	0.34	U	0.36	U	0.34	U	0.012	J	0.34	U
Acenaphthylene	100	100	0.011	J	0.047	J	0.37	U	0.34	U	0.36	U	0.34	U	0.034	J	0.34	U
Acetophenone	NS	NS	0.36	U	NR		NR		NR		NR		NR		NR		NR	
Anthracene	100	100	0.061	J	0.5		0.016	J	0.34	U	0.36	U	0.34	U	0.044	J	0.016	J
Atrazine	NS	NS	0.15	U	NR		NR		NR		NR		NR		NR		NR	
Benzaldehyde	NS	NS	0.36	UJ	NR		NR		NR		NR		NR		NR		NR	
Benzo(a)Anthracene	**1**	1.4	0.19		1		0.062		0.034	U	0.059		0.062		0.2		0.059	
Benzo(a)Pyrene	**1**	1	0.16		0.9		0.054		0.013	J	0.053		0.055		0.21		0.057	
Benzo(b)Fluoranthene	**1**	1.4	0.21		**1.1**		0.072		0.018	J	0.077		0.064		0.26		0.072	
Benzo(g,h,i)Perylene	**0.64**	4.9	0.083	JL	0.56		0.036	J	0.34	U	0.038	J	0.042	J	0.18	J	0.05	J
Benzo(k)Fluoranthene	**0.8**	4.9	0.077		0.48		0.027	J	0.034	U	0.029	J	0.025	J	0.094		0.024	J
Benzyl Butyl Phthalate	NS	NS	0.36	U	NR		NR		NR		NR		NR		NR		NR	
Biphenyl (Diphenyl)	NS	NS	0.36	U	NR		NR		NR		NR		NR		NR		NR	
Bis(2-Chloroethoxy) Methane	NS	NS	0.36	U	NR		NR		NR		NR		NR		NR		NR	
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	0.036	U	NR		NR		NR		NR		NR		NR		NR	
Bis(2-Chloroisopropyl) Ether	NS	NS	0.36	UJ	NR		NR		NR		NR		NR		NR		NR	
Bis(2-Ethylhexyl) Phthalate	NS	NS	0.36	U	NR		NR		NR		NR		NR		NR		NR	
Caprolactam	NS	NS	0.36	UJ	NR		NR		NR		NR		NR		NR		NR	
Carbazole	NS	NS	0.022	J	NR		NR		NR		NR		NR		NR		NR	
Chrysene	**1**	4.9	0.18	J	0.95		0.066	J	0.014	J	0.056	J	0.068	J	0.22	J	0.065	J
Dibenz(a,h)Anthracene	**0.33**	0.33	0.023	J	0.13		0.037	U	0.034	U	0.036	U	0.034	U	0.043		0.034	U
Dibenzofuran	NS	18	0.36	U	NR		NR		NR		NR		NR		NR		NR	
Diethyl Phthalate	NS	NS	0.36	U	NR		NR		NR		NR		NR		NR		NR	
Dimethyl Phthalate	NS	NS	0.36	U	NR		NR		NR		NR		NR		NR		NR	
Di-N-Butyl Phthalate	NS	NS	0.36	U	NR		NR		NR		NR		NR		NR		NR	
Di-N-Octylphthalate	NS	NS	0.36	U	NR		NR		NR		NR		NR		NR		NR	
Fluoranthene	85	100	0.34	J	2.2		0.13	J	0.027	J	0.098	J	0.084	J	0.36		0.11	J
Fluorene	30	100	0.021	J	0.2	J	0.37	U	0.34	U	0.36	U	0.34	U	0.012	J	0.34	U
Hexachlorobenzene	0.33	0.33	0.036	U	NR		NR		NR		NR		NR		NR		NR	
Hexachlorobutadiene	NS	NS	0.074	U	NR		NR		NR		NR		NR		NR		NR	
Hexachlorocyclopentadiene	NS	NS	0.36	U	NR		NR		NR		NR		NR		NR		NR	
Hexachloroethane	NS	NS	0.036	U	NR		NR		NR		NR		NR		NR		NR	
Indeno(1,2,3-c,d)Pyrene	**0.5**	1.4	0.099		**0.58**		0.037		0.034	U	0.037	J	0.034	J	0.16	J	0.04	J
Isophorone	NS	NS	0.15	U	NR		NR		NR		NR		NR		NR		NR	
Naphthalene	12	100	0.36	U	0.11	J	0.37	U	0.34	U	0.36	U	0.34	U	0.34	U	0.34	U
Nitrobenzene	0.08	1.8	0.036	U	NR		NR		NR		NR		NR		NR		NR	
N-Nitrosodi-N-Propylamine	NS	NS	0.036	U	NR		NR		NR		NR		NR		NR		NR	
N-Nitrosodiphenylamine	NS	NS	0.36	U	NR		NR		NR		NR		NR		NR		NR	
Pentachlorophenol	0.8	1.3	0.29	U	NR		NR		NR		NR		NR		NR		NR	
Phenanthrene	**1.1**	4.9	0.25	J	**1.8**		0.074	J	0.023	J	0.04	J	0.051	J	0.24	J	0.087	J
Phenol	0.33	100	0.36	U	NR		NR		NR		NR		NR		NR		NR	
Pyrene	64	100	0.33	J	1.8		0.11	J	0.025	J	0.098	J	0.12	J	0.4		0.13	J

Table 2
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Semivolatile Organic Compounds (SVOCs)

		AKRF Sample ID	RI-SB-12_10-12_20250926		RI-SB-13_0-0.5_20250925		RI-SB-13_0.5-2_20250925		RI-SB-13_2-4_20250925		RI-SB-X6_2-4_20250925		RI-SB-13_4-6_20250925		RI-SB-13_6-8_20250925		RI-SB-13_8-10_20250925	
		Lab Sample ID	460-335823-7		460-335757-11		460-335757-12		460-335757-15		460-335757-19		460-335757-16		460-335757-17		460-335757-18	
		Sample Date	9/26/2025		9/25/2025		9/25/2025		9/25/2025		9/25/2025		9/25/2025		9/25/2025		9/25/2025	
		Dilution Factor	1		1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,2,4,5-Tetrachlorobenzene	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
1,4-Dioxane (P-Dioxane)	NS	5.7	NR		NR		NR		NR		NR		NR		NR		NR	
2,3,4,6-Tetrachlorophenol	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
2,4,5-Trichlorophenol	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
2,4,6-Trichlorophenol	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
2,4-Dichlorophenol	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
2,4-Dimethylphenol	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
2,4-Dinitrophenol	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
2,4-Dinitrotoluene	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
2,6-Dinitrotoluene	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
2-Chloronaphthalene	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
2-Chlorophenol	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
2-Methylnaphthalene	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
2-Methylphenol (O-Cresol)	0.33	100	NR		NR		NR		NR		NR		NR		NR		NR	
2-Nitroaniline	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
2-Nitrophenol	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
3- And 4- Methylphenol (Total)	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
3,3'-Dichlorobenzidine	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
3-Nitroaniline	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
4,6-Dinitro-2-Methylphenol	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
4-Bromophenyl Phenyl Ether	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
4-Chloro-3-Methylphenol	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
4-Chloroaniline	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
4-Chlorophenyl Phenyl Ether	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
4-Methylphenol (P-Cresol)	0.33	100	NR		NR		NR		NR		NR		NR		NR		NR	
4-Nitroaniline	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
4-Nitrophenol	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Acenaphthene	20	100	0.012	J	0.34	U	0.35	U	0.36	U	0.58	U	0.39	U	0.36	U	0.39	U
Acenaphthylene	100	100	0.031	J	0.34	U	0.021	J	0.36	U	0.58	U	0.39	U	0.36	U	0.39	U
Acetophenone	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Anthracene	100	100	0.057	J	0.03	J	0.027	J	0.014	J	0.58	U	0.39	U	0.36	U	0.39	U
Atrazine	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Benzaldehyde	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Benzo(a)Anthracene	**1**	1.4	0.18		0.073		0.11		0.048	J	0.058	U	0.039	U	0.04		0.039	U
Benzo(a)Pyrene	**1**	1	0.19		0.059		0.094		0.043	J	0.058	U	0.012	J	0.037		0.039	U
Benzo(b)Fluoranthene	**1**	1.4	0.25		0.076		0.13		0.053	J	0.018	J	0.013	J	0.047		0.039	U
Benzo(g,h,i)Perylene	**0.64**	4.9	0.16	J	0.034	J	0.067	J	0.034	J	0.58	U	0.39	U	0.022	J	0.39	U
Benzo(k)Fluoranthene	**0.8**	4.9	0.09		0.031	J	0.048		0.017	J	0.058	U	0.039	U	0.021	J	0.039	U
Benzyl Butyl Phthalate	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Biphenyl (Diphenyl)	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Bis(2-Chloroethoxy) Methane	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Bis(2-Chloroisopropyl) Ether	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Bis(2-Ethylhexyl) Phthalate	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Caprolactam	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Carbazole	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Chrysene	**1**	4.9	0.21	J	0.076	J	0.12	J	0.048	J	0.58	U	0.39	U	0.041	J	0.39	U
Dibenz(a,h)Anthracene	**0.33**	0.33	0.028	J	0.034	U	0.016	J	0.036	U	0.058	U	0.039	U	0.036	U	0.039	U
Dibenzofuran	NS	18	NR		NR		NR		NR		NR		NR		NR		NR	
Diethyl Phthalate	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Dimethyl Phthalate	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Di-N-Butyl Phthalate	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Di-N-Octylphthalate	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Fluoranthene	85	100	0.33	J	0.14	J	0.28	J	0.086	J	0.58	U	0.015	J	0.077	J	0.39	U
Fluorene	30	100	0.012	J	0.34	U	0.35	U	0.36	U	0.58	U	0.39	U	0.36	U	0.39	U
Hexachlorobenzene	0.33	0.33	NR		NR		NR		NR		NR		NR		NR		NR	
Hexachlorobutadiene	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Hexachlorocyclopentadiene	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Hexachloroethane	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Indeno(1,2,3-c,d)Pyrene	**0.5**	1.4	0.17		0.037		0.064		0.036	J	0.058	U	0.039	U	0.022	J	0.039	U
Isophorone	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Naphthalene	12	100	0.011	J	0.34	U	0.35	U	0.36	U	0.58	U	0.39	U	0.36	U	0.39	U
Nitrobenzene	0.08	1.8	NR		NR		NR		NR		NR		NR		NR		NR	
N-Nitrosodi-N-Propylamine	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
N-Nitrosodiphenylamine	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Pentachlorophenol	0.8	1.3	NR		NR		NR		NR		NR		NR		NR		NR	
Phenanthrene	**1.1**	4.9	0.2	J	0.077	J	0.28	J	0.063	J	0.58	U	0.39	U	0.048	J	0.39	U
Phenol	0.33	100	NR		NR		NR		NR		NR		NR		NR		NR	
Pyrene	64	100	0.35		0.13	J	0.24	J	0.088	J	0.017	J	0.016	J	0.071	J	0.39	U

Table 2
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Semivolatile Organic Compounds (SVOCs)

		AKRF Sample ID	RI-SB-13_10-12_20250926		RI-SB-14_0-0.5_20250922		RI-SB-14_0.5-2_20250922		RI-SB-14_2-4_20250922		RI-SB-14_4-6_20250922		RI-SB-14_6-8_20250922		RI-SB-14_8-10_20250922		RI-SB-14_10-12_20250926	
		Lab Sample ID	460-335823-8		460-335428-23		460-335428-24		460-335428-25		460-335428-26		460-335428-27		460-335428-28		460-335823-9	
		Sample Date	9/26/2025		9/22/2025		9/22/2025		9/22/2025		9/22/2025		9/22/2025		9/22/2025		9/26/2025	
		Dilution Factor	1		1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,2,4,5-Tetrachlorobenzene	NS	NS	NR		NR		0.35	U	NR		NR		NR		0.4	U	0.38	U
1,4-Dioxane (P-Dioxane)	NS	5.7	NR		NR		0.035	U	NR		NR		NR		0.04	U	0.038	U
2,3,4,6-Tetrachlorophenol	NS	NS	NR		NR		0.35	U	NR		NR		NR		0.4	U	0.38	U
2,4,5-Trichlorophenol	NS	NS	NR		NR		0.35	U	NR		NR		NR		0.4	U	0.38	U
2,4,6-Trichlorophenol	NS	NS	NR		NR		0.14	U	NR		NR		NR		0.16	U	0.15	U
2,4-Dichlorophenol	NS	NS	NR		NR		0.14	U	NR		NR		NR		0.16	U	0.15	U
2,4-Dimethylphenol	NS	NS	NR		NR		0.35	U	NR		NR		NR		0.4	U	0.38	U
2,4-Dinitrophenol	NS	NS	NR		NR		0.28	U	NR		NR		NR		0.32	U	0.3	U
2,4-Dinitrotoluene	NS	NS	NR		NR		0.07	U	NR		NR		NR		0.082	U	0.076	U
2,6-Dinitrotoluene	NS	NS	NR		NR		0.07	U	NR		NR		NR		0.082	U	0.076	U
2-Chloronaphthalene	NS	NS	NR		NR		0.35	U	NR		NR		NR		0.4	U	0.38	U
2-Chlorophenol	NS	NS	NR		NR		0.35	U	NR		NR		NR		0.4	U	0.38	U
2-Methylnaphthalene	NS	NS	NR		NR		0.35	U	NR		NR		NR		0.4	U	0.021	J
2-Methylphenol (O-Cresol)	0.33	100	NR		NR		0.35	U	NR		NR		NR		0.4	U	0.38	U
2-Nitroaniline	NS	NS	NR		NR		0.35	U	NR		NR		NR		0.4	U	0.38	U
2-Nitrophenol	NS	NS	NR		NR		0.35	U	NR		NR		NR		0.4	U	0.38	U
3- And 4- Methylphenol (Total)	NS	NS	NR		NR		0.35	U	NR		NR		NR		0.4	U	0.38	U
3,3'-Dichlorobenzidine	NS	NS	NR		NR		0.14	U	NR		NR		NR		0.16	U	0.15	U
3-Nitroaniline	NS	NS	NR		NR		0.35	U	NR		NR		NR		0.4	U	0.38	U
4,6-Dinitro-2-Methylphenol	NS	NS	NR		NR		0.28	U	NR		NR		NR		0.32	U	0.3	U
4-Bromophenyl Phenyl Ether	NS	NS	NR		NR		0.35	U	NR		NR		NR		0.4	U	0.38	U
4-Chloro-3-Methylphenol	NS	NS	NR		NR		0.35	U	NR		NR		NR		0.4	U	0.38	U
4-Chloroaniline	NS	NS	NR		NR		0.35	U	NR		NR		NR		0.4	U	0.38	U
4-Chlorophenyl Phenyl Ether	NS	NS	NR		NR		0.35	U	NR		NR		NR		0.4	U	0.38	U
4-Methylphenol (P-Cresol)	0.33	100	NR		NR		0.35	U	NR		NR		NR		0.4	U	0.38	U
4-Nitroaniline	NS	NS	NR		NR		0.35	U	NR		NR		NR		0.4	U	0.38	U
4-Nitrophenol	NS	NS	NR		NR		0.7	U	NR		NR		NR		0.82	U	0.76	U
Acenaphthene	20	100	0.015	J	0.021	J	0.35	U	0.36	U	0.048	J	0.37	U	0.4	U	0.062	J
Acenaphthylene	100	100	0.023	J	0.018	J	0.018	J	0.36	U	0.022	J	0.025	J	0.4	U	0.036	J
Acetophenone	NS	NS	NR		NR		0.35	U	NR		NR		NR		0.4	U	0.38	U
Anthracene	100	100	0.077	J	0.063	J	0.026	J	0.015	J	0.13	J	0.023	J	0.4	U	0.18	J
Atrazine	NS	NS	NR		NR		0.14	U	NR		NR		NR		0.16	U	0.15	U
Benzaldehyde	NS	NS	NR		NR		0.35	UJ	NR		NR		NR		0.4	UJ	0.38	UJ
Benzo(a)Anthracene	**1**	1.4	0.3		0.23		0.12		0.086		0.46		0.12		0.04	U	0.42	
Benzo(a)Pyrene	**1**	1	0.32		0.22		0.11		0.091		0.47		0.13		0.04	U	0.41	
Benzo(b)Fluoranthene	**1**	1.4	0.46		0.27		0.15		0.12		0.56		0.15		0.04	U	0.52	
Benzo(g,h,i)Perylene	**0.64**	4.9	0.24	J	0.15	J	0.092	J	0.084	J	0.33	J	0.092	J	0.4	U	0.3	J
Benzo(k)Fluoranthene	**0.8**	4.9	0.18		0.1		0.053		0.039		0.22		0.052		0.04	U	0.21	
Benzyl Butyl Phthalate	NS	NS	NR		NR		0.35	U	NR		NR		NR		0.4	U	0.38	U
Biphenyl (Diphenyl)	NS	NS	NR		NR		0.35	U	NR		NR		NR		0.4	U	0.38	U
Bis(2-Chloroethoxy) Methane	NS	NS	NR		NR		0.35	U	NR		NR		NR		0.4	U	0.38	U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	NR		NR		0.035	U	NR		NR		NR		0.04	U	0.038	U
Bis(2-Chloroisopropyl) Ether	NS	NS	NR		NR		0.35	U	NR		NR		NR		0.4	U	0.38	U
Bis(2-Ethylhexyl) Phthalate	NS	NS	NR		NR		0.35	U	NR		NR		NR		0.4	U	0.38	U
Caprolactam	NS	NS	NR		NR		0.35	U	NR		NR		NR		0.4	U	0.38	U
Carbazole	NS	NS	NR		NR		0.35	U	NR		NR		NR		0.4	U	0.071	J
Chrysene	**1**	4.9	0.35	J	0.25	J	0.12	J	0.093	J	0.48		0.12	J	0.4	U	0.42	
Dibenz(a,h)Anthracene	**0.33**	0.33	0.053		0.035	J	0.019	J	0.016	J	0.07		0.026	J	0.04	U	0.059	
Dibenzofuran	NS	18	NR		NR		0.35	U	NR		NR		NR		0.4	U	0.036	J
Diethyl Phthalate	NS	NS	NR		NR		0.35	U	NR		NR		NR		0.4	U	0.38	U
Dimethyl Phthalate	NS	NS	NR		NR		0.35	U	NR		NR		NR		0.4	U	0.38	U
Di-N-Butyl Phthalate	NS	NS	NR		NR		0.35	U	NR		NR		NR		0.4	U	0.38	U
Di-N-Octylphthalate	NS	NS	NR		NR		0.35	U	NR		NR		NR		0.4	U	0.38	U
Fluoranthene	85	100	0.66		0.46		0.21	J	0.15	J	0.93		0.2	J	0.016	J	0.95	
Fluorene	30	100	0.018	J	0.018	J	0.35	U	0.36	U	0.034	J	0.37	U	0.4	U	0.05	J
Hexachlorobenzene	0.33	0.33	NR		NR		0.035	U	NR		NR		NR		0.04	U	0.038	U
Hexachlorobutadiene	NS	NS	NR		NR		0.07	U	NR		NR		NR		0.082	U	0.076	U
Hexachlorocyclopentadiene	NS	NS	NR		NR		0.35	U	NR		NR		NR		0.4	U	0.38	UJ
Hexachloroethane	NS	NS	NR		NR		0.035	U	NR		NR		NR		0.04	U	0.038	U
Indeno(1,2,3-c,d)Pyrene	**0.5**	1.4	0.26		0.14		0.083		0.07		0.3		0.093		0.04	U	0.31	
Isophorone	NS	NS	NR		NR		0.14	U	NR		NR		NR		0.16	U	0.15	U
Naphthalene	12	100	0.03	J	0.0093	J	0.35	U	0.36	U	0.014	J	0.37	U	0.4	U	0.03	J
Nitrobenzene	0.08	1.8	NR		NR		0.035	U	NR		NR		NR		0.04	U	0.038	U
N-Nitrosodi-N-Propylamine	NS	NS	NR		NR		0.035	U	NR		NR		NR		0.04	U	0.038	U
N-Nitrosodiphenylamine	NS	NS	NR		NR		0.35	U	NR		NR		NR		0.4	U	0.38	U
Pentachlorophenol	0.8	1.3	NR		NR		0.28	U	NR		NR		NR		0.32	U	0.3	U
Phenanthrene	**1.1**	4.9	0.36	J	0.32	J	0.14	J	0.083	J	0.55		0.11	J	0.4	U	0.68	
Phenol	0.33	100	NR		NR		0.35	U	NR		NR		NR		0.4	U	0.38	U
Pyrene	64	100	0.56		0.51		0.23	J	0.18	J	0.95		0.19	J	0.019	J	0.82	

Table 2
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Semivolatile Organic Compounds (SVOCs)

		AKRF Sample ID	RI-SB-15_0-0.5_20250922		RI-SB-15_0.5-2_20250922		RI-SB-15_2-4_20250922		RI-SB-X3_2-4_20250922		RI-SB-15_4-6_20250922		RI-SB-15_6-8_20250922		RI-SB-15_8-10_20250922		RI-SB-15_10-12_20250926	
		Lab Sample ID	460-335428-29		460-335428-30		460-335428-31		460-335429-15		460-335428-32		460-335428-33		460-335428-34		460-335823-10	
		Sample Date	9/22/2025		9/22/2025		9/22/2025		9/22/2025		9/22/2025		9/22/2025		9/22/2025		9/26/2025	
		Dilution Factor	1		1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,2,4,5-Tetrachlorobenzene	NS	NS	NR		0.34	U	NR		NR		NR		NR		0.54	U	0.39	U
1,4-Dioxane (P-Dioxane)	NS	5.7	NR		0.034	U	NR		NR		NR		NR		0.054	U	0.039	U
2,3,4,6-Tetrachlorophenol	NS	NS	NR		0.34	U	NR		NR		NR		NR		0.54	U	0.39	U
2,4,5-Trichlorophenol	NS	NS	NR		0.34	U	NR		NR		NR		NR		0.54	U	0.39	U
2,4,6-Trichlorophenol	NS	NS	NR		0.14	U	NR		NR		NR		NR		0.22	U	0.16	U
2,4-Dichlorophenol	NS	NS	NR		0.14	U	NR		NR		NR		NR		0.22	U	0.16	U
2,4-Dimethylphenol	NS	NS	NR		0.34	U	NR		NR		NR		NR		0.54	UJ	0.39	U
2,4-Dinitrophenol	NS	NS	NR		0.28	U	NR		NR		NR		NR		0.44	U	0.31	U
2,4-Dinitrotoluene	NS	NS	NR		0.069	U	NR		NR		NR		NR		0.11	U	0.078	U
2,6-Dinitrotoluene	NS	NS	NR		0.069	U	NR		NR		NR		NR		0.11	U	0.078	U
2-Chloronaphthalene	NS	NS	NR		0.34	U	NR		NR		NR		NR		0.54	U	0.39	U
2-Chlorophenol	NS	NS	NR		0.34	U	NR		NR		NR		NR		0.54	U	0.39	U
2-Methylnaphthalene	NS	NS	NR		0.34	U	NR		NR		NR		NR		0.54	U	0.39	U
2-Methylphenol (O-Cresol)	0.33	100	NR		0.34	U	NR		NR		NR		NR		0.54	U	0.39	U
2-Nitroaniline	NS	NS	NR		0.34	U	NR		NR		NR		NR		0.54	U	0.39	U
2-Nitrophenol	NS	NS	NR		0.34	U	NR		NR		NR		NR		0.54	U	0.39	U
3- And 4- Methylphenol (Total)	NS	NS	NR		0.34	U	NR		NR		NR		NR		0.54	U	0.39	U
3,3'-Dichlorobenzidine	NS	NS	NR		0.14	U	NR		NR		NR		NR		0.22	U	0.16	U
3-Nitroaniline	NS	NS	NR		0.34	U	NR		NR		NR		NR		0.54	U	0.39	U
4,6-Dinitro-2-Methylphenol	NS	NS	NR		0.28	U	NR		NR		NR		NR		0.44	U	0.31	U
4-Bromophenyl Phenyl Ether	NS	NS	NR		0.34	U	NR		NR		NR		NR		0.54	U	0.39	U
4-Chloro-3-Methylphenol	NS	NS	NR		0.34	U	NR		NR		NR		NR		0.54	U	0.39	U
4-Chloroaniline	NS	NS	NR		0.34	U	NR		NR		NR		NR		0.54	U	0.39	U
4-Chlorophenyl Phenyl Ether	NS	NS	NR		0.34	U	NR		NR		NR		NR		0.54	U	0.39	U
4-Methylphenol (P-Cresol)	0.33	100	NR		0.34	U	NR		NR		NR		NR		0.54	U	0.39	U
4-Nitroaniline	NS	NS	NR		0.34	U	NR		NR		NR		NR		0.54	U	0.39	U
4-Nitrophenol	NS	NS	NR		0.69	U	NR		NR		NR		NR		1.1	U	0.78	U
Acenaphthene	20	100	0.076	J	0.34	U	0.35	U	NR		0.031	J	0.077	J	0.54	U	0.39	U
Acenaphthylene	100	100	0.059	J	0.34	U	0.35	U	0.032	J	0.012	J	0.048	J	0.54	U	0.39	U
Acetophenone	NS	NS	NR		0.34	U	NR		NR		NR		NR		0.54	U	0.39	U
Anthracene	100	100	0.22	J	0.34	U	0.02	J	0.19	J	0.077	J	0.17	J	0.021	J	0.016	J
Atrazine	NS	NS	NR		0.14	U	NR		NR		NR		NR		0.22	U	0.16	U
Benzaldehyde	NS	NS	NR		0.34	UJ	NR		NR		NR		NR		0.54	UJ	0.39	UJ
Benzo(a)Anthracene	**1**	1.4	0.71		0.034	U	0.098	J	0.47	J	0.19		0.63		0.064		0.034	J
Benzo(a)Pyrene	**1**	1	0.71		0.034	U	0.086	J	0.43	J	0.18		0.63		0.057		0.02	J
Benzo(b)Fluoranthene	**1**	1.4	0.91		0.034	U	0.11	J	0.58	J	0.22		0.8		0.067		0.025	J
Benzo(g,h,i)Perylene	**0.64**	4.9	0.49		0.34	U	0.056	J	0.27	J	0.12	J	0.42		0.033	J	0.012	J
Benzo(k)Fluoranthene	**0.8**	4.9	0.3		0.034	U	0.045	J	0.21	J	0.087		0.3		0.026	J	0.012	J
Benzyl Butyl Phthalate	NS	NS	NR		0.34	U	NR		NR		NR		NR		0.54	U	0.39	U
Biphenyl (Diphenyl)	NS	NS	NR		0.34	U	NR		NR		NR		NR		0.54	U	0.39	U
Bis(2-Chloroethoxy) Methane	NS	NS	NR		0.34	U	NR		NR		NR		NR		0.54	U	0.39	U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	NR		0.034	U	NR		NR		NR		NR		0.054	U	0.039	U
Bis(2-Chloroisopropyl) Ether	NS	NS	NR		0.34	U	NR		NR		NR		NR		0.54	U	0.39	U
Bis(2-Ethylhexyl) Phthalate	NS	NS	NR		0.34	U	NR		NR		NR		NR		0.54	U	0.39	U
Caprolactam	NS	NS	NR		0.34	U	NR		NR		NR		NR		0.54	U	0.39	U
Carbazole	NS	NS	NR		0.34	U	NR		NR		NR		NR		0.54	U	0.39	U
Chrysene	**1**	4.9	0.76		0.34	U	0.099	J	0.48	J	0.2	J	0.68		0.062	J	0.035	J
Dibenz(a,h)Anthracene	**0.33**	0.33	0.11		0.034	U	0.015	J	0.077	J	0.03	J	0.11		0.054	U	0.039	U
Dibenzofuran	NS	18	NR		0.34	U	NR		NR		NR		NR		0.54	U	0.39	U
Diethyl Phthalate	NS	NS	NR		0.34	U	NR		NR		NR		NR		0.54	U	0.39	U
Dimethyl Phthalate	NS	NS	NR		0.34	U	NR		NR		NR		NR		0.54	U	0.39	U
Di-N-Butyl Phthalate	NS	NS	NR		0.34	U	NR		NR		NR		NR		0.54	U	0.39	U
Di-N-Octylphthalate	NS	NS	NR		0.34	U	NR		NR		NR		NR		0.54	U	0.39	U
Fluoranthene	85	100	1.5		0.34	U	0.18	J	1	J	0.4		1.2		0.12	J	0.062	J
Fluorene	30	100	0.074	J	0.34	U	0.35	U	0.073	J	0.032	J	0.06	J	0.54	U	0.39	U
Hexachlorobenzene	0.33	0.33	NR		0.034	U	NR		0.034	U	NR		NR		0.054	U	0.039	U
Hexachlorobutadiene	NS	NS	NR		0.069	U	NR		NR		NR		NR		0.11	U	0.078	U
Hexachlorocyclopentadiene	NS	NS	NR		0.34	U	NR		NR		NR		NR		0.54	U	0.39	UJ
Hexachloroethane	NS	NS	NR		0.034	U	NR		NR		NR		NR		0.054	U	0.039	U
Indeno(1,2,3-c,d)Pyrene	**0.5**	1.4	0.5		0.034	U	0.059	J	0.29	J	0.13		0.44		0.035	J	0.032	J
Isophorone	NS	NS	NR		0.14	U	NR		NR		NR		NR		0.22	U	0.16	U
Naphthalene	12	100	0.031	J	0.34	U	0.35	U	0.021	J	0.02	J	0.023	J	0.02	J	0.39	U
Nitrobenzene	0.08	1.8	NR		0.034	U	NR		NR		NR		NR		0.054	U	0.039	U
N-Nitrosodi-N-Propylamine	NS	NS	NR		0.034	U	NR		NR		NR		NR		0.054	U	0.039	U
N-Nitrosodiphenylamine	NS	NS	NR		0.34	U	NR		NR		NR		NR		0.54	U	0.39	U
Pentachlorophenol	0.8	1.3	NR		0.28	U	NR		NR		NR		NR		0.44	U	0.31	U
Phenanthrene	**1.1**	4.9	0.95		0.34	U	0.11	J	0.69	J	0.31	J	0.74		0.1	J	0.069	J
Phenol	0.33	100	NR		0.34	U	NR		NR		NR		NR		0.54	U	0.39	U
Pyrene	64	100	1.4		0.01	J	0.18	J	0.86	J	0.39		1.2		0.1	J	0.062	J

Table 2
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Semivolatile Organic Compounds (SVOCs)

		AKRF Sample ID	RI-SB-16_0-0.5_20250922		RI-SB-16_0.5-2_20250922		RI-SB-16_2-4_20250922		RI-SB-16_4-6_20250922		RI-SB-16_6-8_20250922		RI-SB-16_8-10_20250922		RI-SB-16_10-12_20250926		RI-SB-17_0-2_20250923	
		Lab Sample ID	460-335428-1		460-335428-2		460-335428-3		460-335428-4		460-335428-5		460-335428-6		460-335827-7		460-335536-1	
		Sample Date	9/22/2025		9/22/2025		9/22/2025		9/22/2025		9/22/2025		9/22/2025		9/26/2025		9/23/2025	
		Dilution Factor	1		1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,2,4,5-Tetrachlorobenzene	NS	NS	NR		0.34	U	NR		NR		NR		0.34	U	0.39	U	0.34	U
1,4-Dioxane (P-Dioxane)	NS	5.7	NR		0.034	U	NR		NR		NR		0.034	U	0.039	U	0.034	U
2,3,4,6-Tetrachlorophenol	NS	NS	NR		0.34	U	NR		NR		NR		0.34	U	0.39	U	0.34	U
2,4,5-Trichlorophenol	NS	NS	NR		0.34	U	NR		NR		NR		0.34	U	0.39	U	0.34	U
2,4,6-Trichlorophenol	NS	NS	NR		0.14	U	NR		NR		NR		0.14	U	0.16	U	0.14	U
2,4-Dichlorophenol	NS	NS	NR		0.14	U	NR		NR		NR		0.14	U	0.16	U	0.14	U
2,4-Dimethylphenol	NS	NS	NR		0.34	UJ	NR		NR		NR		0.34	UJ	0.39	U	0.34	U
2,4-Dinitrophenol	NS	NS	NR		0.27	U	NR		NR		NR		0.27	U	0.31	U	0.28	U
2,4-Dinitrotoluene	NS	NS	NR		0.068	U	NR		NR		NR		0.069	U	0.079	U	0.07	U
2,6-Dinitrotoluene	NS	NS	NR		0.068	U	NR		NR		NR		0.069	U	0.079	U	0.07	U
2-Chloronaphthalene	NS	NS	NR		0.34	U	NR		NR		NR		0.34	U	0.39	U	0.34	U
2-Chlorophenol	NS	NS	NR		0.34	U	NR		NR		NR		0.34	U	0.39	U	0.34	U
2-Methylnaphthalene	NS	NS	NR		0.34	U	NR		NR		NR		0.34	U	0.046	J	0.34	U
2-Methylphenol (O-Cresol)	0.33	100	NR		0.34	U	NR		NR		NR		0.34	U	0.39	U	0.34	U
2-Nitroaniline	NS	NS	NR		0.34	U	NR		NR		NR		0.34	U	0.39	U	0.34	U
2-Nitrophenol	NS	NS	NR		0.34	U	NR		NR		NR		0.34	U	0.39	U	0.34	U
3- And 4- Methylphenol (Total)	NS	NS	NR		0.34	U	NR		NR		NR		0.34	U	0.39	U	0.34	U
3,3'-Dichlorobenzidine	NS	NS	NR		0.14	U	NR		NR		NR		0.14	U	0.16	U	0.14	U
3-Nitroaniline	NS	NS	NR		0.34	U	NR		NR		NR		0.34	U	0.39	U	0.34	U
4,6-Dinitro-2-Methylphenol	NS	NS	NR		0.27	U	NR		NR		NR		0.27	U	0.31	U	0.28	U
4-Bromophenyl Phenyl Ether	NS	NS	NR		0.34	U	NR		NR		NR		0.34	U	0.39	U	0.34	U
4-Chloro-3-Methylphenol	NS	NS	NR		0.34	U	NR		NR		NR		0.34	U	0.39	U	0.34	U
4-Chloroaniline	NS	NS	NR		0.34	U	NR		NR		NR		0.34	U	0.39	U	0.34	U
4-Chlorophenyl Phenyl Ether	NS	NS	NR		0.34	U	NR		NR		NR		0.34	U	0.39	U	0.34	U
4-Methylphenol (P-Cresol)	0.33	100	NR		0.34	U	NR		NR		NR		0.34	U	0.39	U	0.34	U
4-Nitroaniline	NS	NS	NR		0.34	U	NR		NR		NR		0.34	U	0.39	U	0.34	U
4-Nitrophenol	NS	NS	NR		0.68	U	NR		NR		NR		0.69	U	0.79	U	0.7	U
Acenaphthene	20	100	0.024	J	0.34	U	0.021	J	0.07	J	0.02	J	0.34	U	0.03	J	0.34	U
Acenaphthylene	100	100	0.013	J	0.34	U	0.018	J	0.023	J	0.017	J	0.34	U	0.035	J	0.02	J
Acetophenone	NS	NS	NR		0.34	U	NR		NR		NR		0.34	U	0.39	U	0.34	U
Anthracene	100	100	0.052	J	0.34	U	0.065	J	0.17	J	0.062	J	0.34	U	0.13	J	0.039	J
Atrazine	NS	NS	NR		0.14	U	NR		NR		NR		0.14	U	0.16	U	0.14	U
Benzaldehyde	NS	NS	NR		0.34	UJ	NR		NR		NR		0.34	UJ	0.39	UJ	0.34	UJ
Benzo(a)Anthracene	**1**	1.4	0.23		0.034	U	0.19		0.48		0.23		0.034	U	0.32		0.19	
Benzo(a)Pyrene	**1**	1	0.21		0.034	U	0.17		0.45		0.22		0.034	U	0.3		0.18	
Benzo(b)Fluoranthene	**1**	1.4	0.28		0.034	U	0.22		0.58		0.29		0.034	U	0.39		0.24	
Benzo(g,h,i)Perylene	**0.64**	4.9	0.12	J	0.34	U	0.11	J	0.28	J	0.14	J	0.34	U	0.19	J	0.11	J
Benzo(k)Fluoranthene	**0.8**	4.9	0.12		0.034	U	0.092		0.2		0.1		0.034	U	0.16		0.09	
Benzyl Butyl Phthalate	NS	NS	NR		0.34	U	NR		NR		NR		0.34	U	0.39	U	0.34	U
Biphenyl (Diphenyl)	NS	NS	NR		0.34	U	NR		NR		NR		0.34	U	0.024	J	0.34	U
Bis(2-Chloroethoxy) Methane	NS	NS	NR		0.34	U	NR		NR		NR		0.34	U	0.39	U	0.34	U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	NR		0.034	U	NR		NR		NR		0.034	U	0.039	U	0.034	U
Bis(2-Chloroisopropyl) Ether	NS	NS	NR		0.34	U	NR		NR		NR		0.34	U	0.39	U	0.34	U
Bis(2-Ethylhexyl) Phthalate	NS	NS	NR		0.34	U	NR		NR		NR		0.34	U	0.064	J	0.34	U
Caprolactam	NS	NS	NR		0.34	U	NR		NR		NR		0.34	U	0.39	U	0.34	U
Carbazole	NS	NS	NR		0.34	U	NR		NR		NR		0.34	U	0.032	J	0.019	J
Chrysene	**1**	4.9	0.23	J	0.34	U	0.19	J	0.49		0.23	J	0.34	U	0.36	J	0.22	J
Dibenz(a,h)Anthracene	**0.33**	0.33	0.031	J	0.034	U	0.026	J	0.064		0.032	J	0.034	U	0.055		0.031	J
Dibenzofuran	NS	18	NR		0.34	U	NR		NR		NR		0.34	U	0.027	J	0.34	U
Diethyl Phthalate	NS	NS	NR		0.34	U	NR		NR		NR		0.34	U	0.39	U	0.34	U
Dimethyl Phthalate	NS	NS	NR		0.34	U	NR		NR		NR		0.34	U	0.39	U	0.34	U
Di-N-Butyl Phthalate	NS	NS	NR		0.34	U	NR		NR		NR		0.34	U	0.39	U	0.34	U
Di-N-Octylphthalate	NS	NS	NR		0.34	U	NR		NR		NR		0.34	U	0.39	U	0.34	U
Fluoranthene	85	100	0.44		0.34	U	0.41		1		0.47		0.34	U	0.67		0.39	
Fluorene	30	100	0.02	J	0.34	U	0.038	J	0.069	J	0.02	J	0.34	U	0.043	J	0.011	J
Hexachlorobenzene	0.33	0.33	NR		0.034	U	NR		NR		NR		0.034	U	0.039	U	0.034	U
Hexachlorobutadiene	NS	NS	NR		0.068	U	NR		NR		NR		0.069	U	0.079	U	0.07	U
Hexachlorocyclopentadiene	NS	NS	NR		0.34	U	NR		NR		NR		0.34	U	0.39	UJ	0.34	U
Hexachloroethane	NS	NS	NR		0.034	U	NR		NR		NR		0.034	U	0.039	U	0.034	U
Indeno(1,2,3-c,d)Pyrene	**0.5**	1.4	0.14		0.034	U	0.11		0.3		0.15		0.034	U	0.21		0.12	
Isophorone	NS	NS	NR		0.14	U	NR		NR		NR		0.14	U	0.16	U	0.14	U
Naphthalene	12	100	0.35	U	0.34	U	0.0064	J	0.02	J	0.34	U	0.34	U	0.071	J	0.0062	J
Nitrobenzene	0.08	1.8	NR		0.034	U	NR		NR		NR		0.034	U	0.039	U	0.034	U
N-Nitrosodi-N-Propylamine	NS	NS	NR		0.034	U	NR		NR		NR		0.034	U	0.039	U	0.034	U
N-Nitrosodiphenylamine	NS	NS	NR		0.34	U	NR		NR		NR		0.34	U	0.39	U	0.34	U
Pentachlorophenol	0.8	1.3	NR		0.27	U	NR		NR		NR		0.27	U	0.31	U	0.28	U
Phenanthrene	**1.1**	4.9	0.23	J	0.34	U	0.32	J	0.73		0.27	J	0.34	U	0.41		0.25	J
Phenol	0.33	100	NR		0.34	U	NR		NR		NR		0.34	U	0.39	U	0.34	U
Pyrene	64	100	0.4		0.34	U	0.37		0.89		0.43		0.34	U	0.6		0.35	

Table 2
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Semivolatile Organic Compounds (SVOCs)

		AKRF Sample ID	RI-SB-17_2-4_20250923		RI-SB-17_4-6_20250923		RI-SB-17_6-8_20250923		RI-SB-17_8-10_20250923		RI-SB-18_0-0.5_20250925		RI-SB-18_0.5-2_20250925		RI-SB-18_2-4_20250925		RI-SB-18_4-6_20250925	
		Lab Sample ID	460-335525-2		460-335525-3		460-335525-4		460-335525-5		460-335757-32		460-335757-33		460-335757-34		460-335757-35	
		Sample Date	9/23/2025		9/23/2025		9/23/2025		9/23/2025		9/25/2025		9/25/2025		9/25/2025		9/25/2025	
		Dilution Factor	1		1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,2,4,5-Tetrachlorobenzene	NS	NS	NR		NR		NR		0.35	U	NR		NR		NR		NR	
1,4-Dioxane (P-Dioxane)	NS	5.7	NR		NR		NR		0.035	U	NR		NR		NR		NR	
2,3,4,6-Tetrachlorophenol	NS	NS	NR		NR		NR		0.35	U	NR		NR		NR		NR	
2,4,5-Trichlorophenol	NS	NS	NR		NR		NR		0.35	U	NR		NR		NR		NR	
2,4,6-Trichlorophenol	NS	NS	NR		NR		NR		0.14	U	NR		NR		NR		NR	
2,4-Dichlorophenol	NS	NS	NR		NR		NR		0.14	U	NR		NR		NR		NR	
2,4-Dimethylphenol	NS	NS	NR		NR		NR		0.35	UJ	NR		NR		NR		NR	
2,4-Dinitrophenol	NS	NS	NR		NR		NR		0.28	U	NR		NR		NR		NR	
2,4-Dinitrotoluene	NS	NS	NR		NR		NR		0.071	U	NR		NR		NR		NR	
2,6-Dinitrotoluene	NS	NS	NR		NR		NR		0.071	U	NR		NR		NR		NR	
2-Chloronaphthalene	NS	NS	NR		NR		NR		0.35	UJ	NR		NR		NR		NR	
2-Chlorophenol	NS	NS	NR		NR		NR		0.35	UJ	NR		NR		NR		NR	
2-Methylnaphthalene	NS	NS	NR		NR		NR		0.35	U	NR		NR		NR		NR	
2-Methylphenol (O-Cresol)	0.33	100	NR		NR		NR		0.35	UJ	NR		NR		NR		NR	
2-Nitroaniline	NS	NS	NR		NR		NR		0.35	U	NR		NR		NR		NR	
2-Nitrophenol	NS	NS	NR		NR		NR		0.35	U	NR		NR		NR		NR	
3- And 4- Methylphenol (Total)	NS	NS	NR		NR		NR		0.35	U	NR		NR		NR		NR	
3,3'-Dichlorobenzidine	NS	NS	NR		NR		NR		0.14	U	NR		NR		NR		NR	
3-Nitroaniline	NS	NS	NR		NR		NR		0.35	U	NR		NR		NR		NR	
4,6-Dinitro-2-Methylphenol	NS	NS	NR		NR		NR		0.28	U	NR		NR		NR		NR	
4-Bromophenyl Phenyl Ether	NS	NS	NR		NR		NR		0.35	U	NR		NR		NR		NR	
4-Chloro-3-Methylphenol	NS	NS	NR		NR		NR		0.35	U	NR		NR		NR		NR	
4-Chloroaniline	NS	NS	NR		NR		NR		0.35	U	NR		NR		NR		NR	
4-Chlorophenyl Phenyl Ether	NS	NS	NR		NR		NR		0.35	U	NR		NR		NR		NR	
4-Methylphenol (P-Cresol)	0.33	100	NR		NR		NR		0.35	U	NR		NR		NR		NR	
4-Nitroaniline	NS	NS	NR		NR		NR		0.35	U	NR		NR		NR		NR	
4-Nitrophenol	NS	NS	NR		NR		NR		0.71	U	NR		NR		NR		NR	
Acenaphthene	20	100	0.43	U	0.41	U	0.38	U	0.35	UJ	0.34	U	0.023	J	0.018	J	0.024	J
Acenaphthylene	100	100	0.43	U	0.41	U	0.012	J	0.35	UJ	0.029	J	0.019	J	0.019	J	0.013	J
Acetophenone	NS	NS	NR		NR		NR		0.35	UJ	NR		NR		NR		NR	
Anthracene	100	100	0.43	U	0.41	U	0.02	J	0.017	J	0.048	J	0.07	J	0.044	J	0.053	J
Atrazine	NS	NS	NR		NR		NR		0.14	U	NR		NR		NR		NR	
Benzaldehyde	NS	NS	NR		NR		NR		0.35	UJ	NR		NR		NR		NR	
Benzo(a)Anthracene	**1**	1.4	0.043	U	0.041	U	0.15		0.057		0.22		0.25		0.19		0.21	
Benzo(a)Pyrene	**1**	1	0.043	U	0.041	U	0.2		0.05	JL	0.19		0.23		0.19		0.21	
Benzo(b)Fluoranthene	**1**	1.4	0.012	J	0.041	U	0.22		0.058		0.28		0.3		0.24		0.24	
Benzo(g,h,i)Perylene	**0.64**	4.9	0.43	U	0.41	U	0.15	J	0.03	JL	0.14	J	0.17	J	0.14	J	0.15	J
Benzo(k)Fluoranthene	**0.8**	4.9	0.043	U	0.041	U	0.072		0.03	JL	0.1		0.099		0.095		0.09	
Benzyl Butyl Phthalate	NS	NS	NR		NR		NR		0.35	U	NR		NR		NR		NR	
Biphenyl (Diphenyl)	NS	NS	NR		NR		NR		0.35	U	NR		NR		NR		NR	
Bis(2-Chloroethoxy) Methane	NS	NS	NR		NR		NR		0.35	UJ	NR		NR		NR		NR	
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	NR		NR		NR		0.035	UJ	NR		NR		NR		NR	
Bis(2-Chloroisopropyl) Ether	NS	NS	NR		NR		NR		0.35	U	NR		NR		NR		NR	
Bis(2-Ethylhexyl) Phthalate	NS	NS	NR		NR		NR		0.35	U	NR		NR		NR		NR	
Caprolactam	NS	NS	NR		NR		NR		0.35	U	NR		NR		NR		NR	
Carbazole	NS	NS	NR		NR		NR		0.35	U	NR		NR		NR		NR	
Chrysene	**1**	4.9	0.43	U	0.41	U	0.17	J	0.058	J	0.25	J	0.27	J	0.19	J	0.22	J
Dibenz(a,h)Anthracene	**0.33**	0.33	0.043	U	0.041	U	0.036	J	0.035	U	0.038		0.044		0.039		0.039	
Dibenzofuran	NS	18	NR		NR		NR		0.35	U	NR		NR		NR		NR	
Diethyl Phthalate	NS	NS	NR		NR		NR		0.35	U	NR		NR		NR		NR	
Dimethyl Phthalate	NS	NS	NR		NR		NR		0.35	U	NR		NR		NR		NR	
Di-N-Butyl Phthalate	NS	NS	NR		NR		NR		0.35	U	NR		NR		NR		NR	
Di-N-Octylphthalate	NS	NS	NR		NR		NR		0.35	U	NR		NR		NR		NR	
Fluoranthene	85	100	0.022	J	0.41	U	0.13	J	0.11	J	0.58		0.48		0.34	J	0.39	
Fluorene	30	100	0.43	U	0.41	U	0.38	U	0.35	U	0.015	J	0.016	J	0.016	J	0.012	J
Hexachlorobenzene	0.33	0.33	NR		NR		NR		0.035	U	NR		NR		NR		NR	
Hexachlorobutadiene	NS	NS	NR		NR		NR		0.071	UJ	NR		NR		NR		NR	
Hexachlorocyclopentadiene	NS	NS	NR		NR		NR		0.35	U	NR		NR		NR		NR	
Hexachloroethane	NS	NS	NR		NR		NR		0.035	UJ	NR		NR		NR		NR	
Indeno(1,2,3-c,d)Pyrene	**0.5**	1.4	0.043	U	0.041	U	0.12		0.031	J	0.14	J	0.17	J	0.13	J	0.14	J
Isophorone	NS	NS	NR		NR		NR		0.14	UJ	NR		NR		NR		NR	
Naphthalene	12	100	0.43	U	0.41	U	0.38	U	0.35	UJ	0.018	J	0.34	U	0.35	U	0.37	U
Nitrobenzene	0.08	1.8	NR		NR		NR		0.035	UJ	NR		NR		NR		NR	
N-Nitrosodi-N-Propylamine	NS	NS	NR		NR		NR		0.035	UJ	NR		NR		NR		NR	
N-Nitrosodiphenylamine	NS	NS	NR		NR		NR		0.35	U	NR		NR		NR		NR	
Pentachlorophenol	0.8	1.3	NR		NR		NR		0.28	U	NR		NR		NR		NR	
Phenanthrene	**1.1**	4.9	0.017	J	0.41	U	0.056	J	0.083	J	0.45		0.28	J	0.19	J	0.24	J
Phenol	0.33	100	NR		NR		NR		0.35	UJ	NR		NR		NR		NR	
Pyrene	64	100	0.019	J	0.41	U	0.2	J	0.096	J	0.47		0.47		0.33	J	0.45	

Table 2
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Semivolatile Organic Compounds (SVOCs)

		AKRF Sample ID	RI-SB-18_6-8_20250925		RI-SB-18_8-10_20250925		RI-SB-19_0-0.5_20250925		RI-SB-19_2-4_20250925		RI-SB-19_4-6_20250925		RI-SB-19_6-8_20250925		RI-SB-19_8-10_20250925		RI-SB-20_0-0.5_20250925	
		Lab Sample ID	460-335757-38		460-335757-39		460-335757-1		460-335757-2		460-335757-3		460-335757-4		460-335757-5		460-335757-6	
		Sample Date	9/25/2025		9/25/2025		9/25/2025		9/25/2025		9/25/2025		9/25/2025		9/25/2025		9/25/2025	
		Dilution Factor	1		1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,2,4,5-Tetrachlorobenzene	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
1,4-Dioxane (P-Dioxane)	NS	5.7	NR		NR		NR		NR		NR		NR		NR		NR	
2,3,4,6-Tetrachlorophenol	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
2,4,5-Trichlorophenol	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
2,4,6-Trichlorophenol	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
2,4-Dichlorophenol	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
2,4-Dimethylphenol	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
2,4-Dinitrophenol	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
2,4-Dinitrotoluene	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
2,6-Dinitrotoluene	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
2-Chloronaphthalene	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
2-Chlorophenol	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
2-Methylnaphthalene	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
2-Methylphenol (O-Cresol)	0.33	100	NR		NR		NR		NR		NR		NR		NR		NR	
2-Nitroaniline	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
2-Nitrophenol	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
3- And 4- Methylphenol (Total)	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
3,3'-Dichlorobenzidine	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
3-Nitroaniline	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
4,6-Dinitro-2-Methylphenol	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
4-Bromophenyl Phenyl Ether	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
4-Chloro-3-Methylphenol	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
4-Chloroaniline	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
4-Chlorophenyl Phenyl Ether	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
4-Methylphenol (P-Cresol)	0.33	100	NR		NR		NR		NR		NR		NR		NR		NR	
4-Nitroaniline	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
4-Nitrophenol	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Acenaphthene	20	100	0.34	U	1.1		0.35	U	0.35	U	0.012	J	0.41	U	0.029	J	0.041	J
Acenaphthylene	100	100	0.032	J	0.016	J	0.35	U	0.35	U	0.011	J	0.41	U	0.055	J	0.025	J
Acetophenone	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Anthracene	100	100	0.041	J	2.3		0.014	J	0.011	J	0.038	J	0.41	U	0.11	J	0.099	J
Atrazine	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Benzaldehyde	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Benzo(a)Anthracene	**1**	1.4	0.34		**3.7**		0.061		0.051		0.15		0.047		0.7		0.27	
Benzo(a)Pyrene	**1**	1	0.31		**3**		0.057		0.048		0.13		0.038	J	0.63		0.25	
Benzo(b)Fluoranthene	**1**	1.4	0.4		**3.7**		0.08		0.058		0.18		0.055		0.94		0.33	
Benzo(g,h,i)Perylene	**0.64**	4.9	0.2	J	**1.7**		0.038	J	0.035	J	0.092	J	0.026	J	0.39		0.16	J
Benzo(k)Fluoranthene	**0.8**	4.9	0.15		**1.4**		0.027	J	0.021	J	0.064		0.023	J	0.35		0.12	
Benzyl Butyl Phthalate	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Biphenyl (Diphenyl)	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Bis(2-Chloroethoxy) Methane	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Bis(2-Chloroisopropyl) Ether	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Bis(2-Ethylhexyl) Phthalate	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Caprolactam	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Carbazole	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Chrysene	**1**	4.9	0.3	J	**3.4**		0.062	J	0.045	J	0.15	J	0.045	J	0.71		0.28	J
Dibenz(a,h)Anthracene	**0.33**	0.33	0.064		**0.49**		0.035	U	0.035	U	0.018	J	0.041	U	0.1		0.039	
Dibenzofuran	NS	18	NR		NR		NR		NR		NR		NR		NR		NR	
Diethyl Phthalate	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Dimethyl Phthalate	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Di-N-Butyl Phthalate	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Di-N-Octylphthalate	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Fluoranthene	85	100	0.56		8.3		0.12	J	0.085	J	0.3	J	0.061	J	1.4		0.66	
Fluorene	30	100	0.011	J	1		0.35	U	0.35	U	0.011	J	0.41	U	0.031	J	0.048	J
Hexachlorobenzene	0.33	0.33	NR		NR		NR		NR		NR		NR		NR		NR	
Hexachlorobutadiene	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Hexachlorocyclopentadiene	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Hexachloroethane	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Indeno(1,2,3-c,d)Pyrene	**0.5**	1.4	0.21	J	**1.8 J**		0.038		0.034	J	0.092		0.027	J	0.45		0.17	
Isophorone	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Naphthalene	12	100	0.34	U	0.45		0.35	U	0.35	U	0.36	U	0.41	U	0.38	U	0.025	J
Nitrobenzene	0.08	1.8	NR		NR		NR		NR		NR		NR		NR		NR	
N-Nitrosodi-N-Propylamine	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
N-Nitrosodiphenylamine	NS	NS	NR		NR		NR		NR		NR		NR		NR		NR	
Pentachlorophenol	0.8	1.3	NR		NR		NR		NR		NR		NR		NR		NR	
Phenanthrene	**1.1**	4.9	0.13	J	**7.7**		0.076	J	0.058	J	0.18	J	0.021	J	0.48		0.57	
Phenol	0.33	100	NR		NR		NR		NR		NR		NR		NR		NR	
Pyrene	64	100	0.51		6.6		0.11	J	0.089	J	0.27	J	0.059	J	1.3		0.57	

Table 2
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Semivolatile Organic Compounds (SVOCs)

		AKRF Sample ID	RI-SB-20_4-6_20250925	RI-SB-X7_4-6_20250925	RI-SB-20_6-8_20250925	RI-SB-20_8-10_20250925	RI-SB-22_0-0.5_20251218	RI-SB-22_0.5-2_20251218	RI-SB-X8_0.5-2_20251218	RI-SB-22_2-4_20251218
		Lab Sample ID	460-335757-7	460-335757-10	460-335757-8	460-335757-9	460-341877-1	460-341877-2	460-341877-8	460-341877-3
		Sample Date	9/25/2025	9/25/2025	9/25/2025	9/25/2025	12/18/2025	12/18/2025	12/18/2025	12/18/2025
		Dilution Factor	1	1	1	1	1	1	1	1
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Compound	**UUSCO**	**RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS	NR	NR	NR	NR	NR	0.33 U	0.33 U	0.34 U
1,4-Dioxane (P-Dioxane)	NS	5.7	NR	NR	NR	NR	NR	0.033 U	0.033 U	0.034 U
2,3,4,6-Tetrachlorophenol	NS	NS	NR	NR	NR	NR	NR	0.33 U	0.33 U	0.34 U
2,4,5-Trichlorophenol	NS	NS	NR	NR	NR	NR	NR	0.33 U	0.33 U	0.34 U
2,4,6-Trichlorophenol	NS	NS	NR	NR	NR	NR	NR	0.13 U	0.13 U	0.14 U
2,4-Dichlorophenol	NS	NS	NR	NR	NR	NR	NR	0.13 U	0.13 U	0.14 U
2,4-Dimethylphenol	NS	NS	NR	NR	NR	NR	NR	0.33 U	0.33 U	0.34 U
2,4-Dinitrophenol	NS	NS	NR	NR	NR	NR	NR	0.27 U	0.27 U	0.27 U
2,4-Dinitrotoluene	NS	NS	NR	NR	NR	NR	NR	0.068 U	0.067 U	0.068 U
2,6-Dinitrotoluene	NS	NS	NR	NR	NR	NR	NR	0.068 U	0.067 U	0.068 U
2-Chloronaphthalene	NS	NS	NR	NR	NR	NR	NR	0.33 U	0.33 U	0.34 U
2-Chlorophenol	NS	NS	NR	NR	NR	NR	NR	0.33 U	0.33 U	0.34 U
2-Methylnaphthalene	NS	NS	NR	NR	NR	NR	NR	0.33 U	0.33 U	0.065 J
2-Methylphenol (O-Cresol)	0.33	100	NR	NR	NR	NR	NR	0.33 U	0.33 U	0.34 U
2-Nitroaniline	NS	NS	NR	NR	NR	NR	NR	0.33 U	0.33 U	0.34 U
2-Nitrophenol	NS	NS	NR	NR	NR	NR	NR	0.33 U	0.33 U	0.34 U
3- And 4- Methylphenol (Total)	NS	NS	NR	NR	NR	NR	NR	0.33 U	0.33 U	0.34 U
3,3'-Dichlorobenzidine	NS	NS	NR	NR	NR	NR	NR	0.13 U	0.13 U	0.14 U
3-Nitroaniline	NS	NS	NR	NR	NR	NR	NR	0.33 U	0.33 U	0.34 U
4,6-Dinitro-2-Methylphenol	NS	NS	NR	NR	NR	NR	NR	0.27 U	0.27 U	0.27 U
4-Bromophenyl Phenyl Ether	NS	NS	NR	NR	NR	NR	NR	0.33 U	0.33 U	0.34 U
4-Chloro-3-Methylphenol	NS	NS	NR	NR	NR	NR	NR	0.33 U	0.33 U	0.34 U
4-Chloroaniline	NS	NS	NR	NR	NR	NR	NR	0.33 U	0.33 U	0.34 U
4-Chlorophenyl Phenyl Ether	NS	NS	NR	NR	NR	NR	NR	0.33 U	0.33 U	0.34 U
4-Methylphenol (P-Cresol)	0.33	100	NR	NR	NR	NR	NR	0.33 U	0.33 U	0.34 U
4-Nitroaniline	NS	NS	NR	NR	NR	NR	NR	0.33 U	0.33 U	0.34 U
4-Nitrophenol	NS	NS	NR	NR	NR	NR	NR	0.68 U	0.67 U	0.68 U
Acenaphthene	20	100	0.35 U	0.35 U	0.34 U	0.11 J	0.42 U	0.02 J	0.33 U	0.32 J
Acenaphthylene	100	100	0.35 U	0.35 U	0.027 J	0.05 J	0.42 U	0.022 J	0.33 U	0.024 J
Acetophenone	NS	NS	NR	NR	NR	NR	NR	0.33 U	0.33 U	0.34 U
Anthracene	100	100	0.013 J	0.35 U	0.031 J	0.27 J	0.42 U	0.064 J	0.33 U	0.52
Atrazine	NS	NS	NR	NR	NR	NR	NR	0.13 U	0.13 U	0.14 U
Benzaldehyde	NS	NS	NR	NR	NR	NR	NR	0.33 UJ	0.33 UJ	0.34 UJ
Benzo(a)Anthracene	**1**	1.4	0.047	0.035	0.18	0.55	0.042 U	0.26	0.033 U	**1.2**
Benzo(a)Pyrene	**1**	1	0.032 J	0.034 J	0.19	0.47	0.016 J	0.22	0.033 U	**1.1**
Benzo(b)Fluoranthene	**1**	1.4	0.04	0.045	0.24	0.57	0.02 J	0.27	0.033 U	**1.3**
Benzo(g,h,i)Perylene	**0.64**	4.9	0.019 J	0.027 J	0.17 J	0.28 J	0.016 J	0.11 J	0.33 U	0.53
Benzo(k)Fluoranthene	**0.8**	4.9	0.016 J	0.015 J	0.088	0.22	0.042 U	0.094	0.033 U	0.44
Benzyl Butyl Phthalate	NS	NS	NR	NR	NR	NR	NR	0.33 U	0.33 U	0.34 U
Biphenyl (Diphenyl)	NS	NS	NR	NR	NR	NR	NR	0.33 U	0.33 U	0.017 J
Bis(2-Chloroethoxy) Methane	NS	NS	NR	NR	NR	NR	NR	0.33 U	0.33 U	0.34 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	NR	NR	NR	NR	NR	0.033 U	0.033 U	0.034 U
Bis(2-Chloroisopropyl) Ether	NS	NS	NR	NR	NR	NR	NR	0.33 U	0.33 U	0.34 U
Bis(2-Ethylhexyl) Phthalate	NS	NS	NR	NR	NR	NR	NR	0.33 U	0.33 U	0.34 U
Caprolactam	NS	NS	NR	NR	NR	NR	NR	0.33 U	0.33 U	0.34 U
Carbazole	NS	NS	NR	NR	NR	NR	NR	0.023 J	0.33 U	0.23 J
Chrysene	**1**	4.9	0.049 J	0.034 J	0.2 J	0.52	0.42 U	0.26 J	0.33 U	**1.2**
Dibenz(a,h)Anthracene	**0.33**	0.33	0.035 U	0.035 U	0.039	0.07	0.042 U	0.034	0.033 U	0.14
Dibenzofuran	NS	18	NR	NR	NR	NR	NR	0.33 U	0.33 U	0.13 J
Diethyl Phthalate	NS	NS	NR	NR	NR	NR	NR	0.33 U	0.33 U	0.34 U
Dimethyl Phthalate	NS	NS	NR	NR	NR	NR	NR	0.33 U	0.33 U	0.34 U
Di-N-Butyl Phthalate	NS	NS	NR	NR	NR	NR	NR	0.015 J	0.33 U	0.34 U
Di-N-Octylphthalate	NS	NS	NR	NR	NR	NR	NR	0.33 U	0.33 U	0.34 U
Fluoranthene	85	100	0.088 J	0.053 J	0.3 J	1.1	0.028 J	0.45	0.33 U	2.5
Fluorene	30	100	0.35 U	0.35 U	0.34 U	0.11 J	0.42 U	0.02 J	0.33 U	0.23 J
Hexachlorobenzene	0.33	0.33	NR	NR	NR	NR	NR	0.033 U	0.033 U	0.034 U
Hexachlorobutadiene	NS	NS	NR	NR	NR	NR	NR	0.068 U	0.067 U	0.068 U
Hexachlorocyclopentadiene	NS	NS	NR	NR	NR	NR	NR	0.33 U	0.33 U	0.34 U
Hexachloroethane	NS	NS	NR	NR	NR	NR	NR	0.033 U	0.033 U	0.034 U
Indeno(1,2,3-c,d)Pyrene	**0.5**	1.4	0.019 J	0.025 J	0.15 J	0.29	0.016 J	0.12	0.033 U	**0.59**
Isophorone	NS	NS	NR	NR	NR	NR	NR	0.13 U	0.13 U	0.14 U
Naphthalene	12	100	0.35 U	0.35 U	0.34 U	0.14 J	0.42 U	0.33 U	0.33 U	0.086 J
Nitrobenzene	0.08	1.8	NR	NR	NR	NR	NR	0.033 U	0.033 U	0.034 U
N-Nitrosodi-N-Propylamine	NS	NS	NR	NR	NR	NR	NR	0.033 U	0.033 U	0.034 U
N-Nitrosodiphenylamine	NS	NS	NR	NR	NR	NR	NR	0.33 U	0.33 U	0.34 U
Pentachlorophenol	0.8	1.3	NR	NR	NR	NR	NR	0.27 U	0.27 U	0.27 U
Phenanthrene	**1.1**	4.9	0.087 J	0.027 J	0.14 J	0.92	0.017 J	0.29 J	0.33 U	**2.2**
Phenol	0.33	100	NR	NR	NR	NR	NR	0.33 U	0.33 U	0.34 U
Pyrene	64	100	0.099 J	0.056 J	0.32 J	1	0.028 J	0.44	0.33 U	2.1

Table 2
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Semivolatile Organic Compounds (SVOCs)

		AKRF Sample ID	RI-SB-22_4-6_20251218		RI-SB-22_6-8_20251218		RI-SB-22_8-10_20251218		RI-SB-23_0-2_20251218		RI-SB-23_2-4_20251218		RI-SB-X13_2-4_20251218		RI-SB-23_4-6_20251218		RI-SB-23_6-8_20251218	
		Lab Sample ID	460-341877-4		460-341877-5		460-341877-6		460-341877-9		460-341877-10		460-341877-15		460-341877-11		460-341877-12	
		Sample Date	12/18/2025		12/18/2025		12/18/2025		12/18/2025		12/18/2025		12/18/2025		12/18/2025		12/18/2025	
		Dilution Factor	1		1		5		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,2,4,5-Tetrachlorobenzene	NS	NS	NR		NR		2	U	0.33	U	0.39	U	0.37	U	NR		NR	
1,4-Dioxane (P-Dioxane)	NS	5.7	NR		NR		0.2	U	0.033	U	0.039	U	0.037	U	NR		NR	
2,3,4,6-Tetrachlorophenol	NS	NS	NR		NR		2	U	0.33	U	0.39	U	0.37	U	NR		NR	
2,4,5-Trichlorophenol	NS	NS	NR		NR		2	U	0.33	U	0.39	U	0.37	U	NR		NR	
2,4,6-Trichlorophenol	NS	NS	NR		NR		0.81	U	0.13	U	0.16	U	0.15	U	NR		NR	
2,4-Dichlorophenol	NS	NS	NR		NR		0.81	U	0.13	U	0.16	U	0.15	U	NR		NR	
2,4-Dimethylphenol	NS	NS	NR		NR		2	U	0.33	U	0.39	U	0.37	U	NR		NR	
2,4-Dinitrophenol	NS	NS	NR		NR		1.6	U	0.27	U	0.31	U	0.3	U	NR		NR	
2,4-Dinitrotoluene	NS	NS	NR		NR		0.41	U	0.068	U	0.079	U	0.075	U	NR		NR	
2,6-Dinitrotoluene	NS	NS	NR		NR		0.41	U	0.068	U	0.079	U	0.075	U	NR		NR	
2-Chloronaphthalene	NS	NS	NR		NR		2	U	0.33	U	0.39	U	0.37	U	NR		NR	
2-Chlorophenol	NS	NS	NR		NR		2	U	0.33	U	0.39	U	0.37	U	NR		NR	
2-Methylnaphthalene	NS	NS	NR		NR		0.32	J	0.33	U	0.39	U	0.37	U	NR		NR	
2-Methylphenol (O-Cresol)	0.33	100	NR		NR		2	U	0.33	U	0.39	U	0.37	U	NR		NR	
2-Nitroaniline	NS	NS	NR		NR		2	U	0.33	U	0.39	U	0.37	U	NR		NR	
2-Nitrophenol	NS	NS	NR		NR		2	U	0.33	U	0.39	U	0.37	U	NR		NR	
3- And 4- Methylphenol (Total)	NS	NS	NR		NR		2	U	0.33	U	0.39	U	0.37	U	NR		NR	
3,3'-Dichlorobenzidine	NS	NS	NR		NR		0.81	U	0.13	U	0.16	U	0.15	U	NR		NR	
3-Nitroaniline	NS	NS	NR		NR		2	U	0.33	U	0.39	U	0.37	U	NR		NR	
4,6-Dinitro-2-Methylphenol	NS	NS	NR		NR		1.6	UJ	0.27	U	0.31	U	0.3	U	NR		NR	
4-Bromophenyl Phenyl Ether	NS	NS	NR		NR		2	U	0.33	U	0.39	U	0.37	U	NR		NR	
4-Chloro-3-Methylphenol	NS	NS	NR		NR		2	U	0.33	U	0.39	U	0.37	U	NR		NR	
4-Chloroaniline	NS	NS	NR		NR		2	U	0.33	U	0.39	U	0.37	U	NR		NR	
4-Chlorophenyl Phenyl Ether	NS	NS	NR		NR		2	U	0.33	U	0.39	U	0.37	U	NR		NR	
4-Methylphenol (P-Cresol)	0.33	100	NR		NR		2	U	0.33	U	0.39	U	0.37	U	NR		NR	
4-Nitroaniline	NS	NS	NR		NR		2	U	0.33	U	0.39	U	0.37	U	NR		NR	
4-Nitrophenol	NS	NS	NR		NR		4.1	U	0.68	U	0.79	U	0.75	U	NR		NR	
Acenaphthene	20	100	0.48	U	0.46	U	1.2	J	0.33	U	0.042	J	0.023	J	0.41	U	0.042	J
Acenaphthylene	100	100	0.48	U	0.46	U	2	U	0.33	U	0.02	J	0.37	U	0.41	U	0.39	U
Acetophenone	NS	NS	NR		NR		2	U	0.33	U	0.39	U	0.37	U	NR		NR	
Anthracene	100	100	0.48	U	0.014	J	2	J	0.017	J	0.14	J	0.041	J	0.41	U	0.15	J
Atrazine	NS	NS	NR		NR		0.81	U	0.13	U	0.16	U	0.15	U	NR		NR	
Benzaldehyde	NS	NS	NR		NR		2	UJ	0.33	UJ	0.39	UJ	0.37	UJ	NR		NR	
Benzo(a)Anthracene	**1**	1.4	0.048	U	0.048		**3.7**	**J**	0.075		0.46	J	0.13	J	0.041	U	0.33	
Benzo(a)Pyrene	**1**	1	0.048	U	0.034	J	**3.2**	**J**	0.078		0.41	J	0.098	J	0.02	J	0.25	
Benzo(b)Fluoranthene	**1**	1.4	0.048	U	0.044	J	**4.1**	**J**	0.11		0.48	J	0.13	J	0.022	J	0.3	
Benzo(g,h,i)Perylene	**0.64**	4.9	0.48	U	0.022	J	**1.3**	**J**	0.037	J	0.26	J	0.068	J	0.016	J	0.13	J
Benzo(k)Fluoranthene	**0.8**	4.9	0.048	U	0.015	J	**1.5**	**J**	0.03	J	0.17	J	0.048	J	0.041	U	0.11	
Benzyl Butyl Phthalate	NS	NS	NR		NR		0.14	J	0.33	U	0.39	U	0.37	U	NR		NR	
Biphenyl (Diphenyl)	NS	NS	NR		NR		0.083	J	0.33	U	0.39	U	0.37	U	NR		NR	
Bis(2-Chloroethoxy) Methane	NS	NS	NR		NR		2	U	0.33	U	0.39	U	0.37	U	NR		NR	
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	NR		NR		0.2	U	0.033	U	0.039	U	0.037	U	NR		NR	
Bis(2-Chloroisopropyl) Ether	NS	NS	NR		NR		2	U	0.33	U	0.39	U	0.37	U	NR		NR	
Bis(2-Ethylhexyl) Phthalate	NS	NS	NR		NR		0.49	J	0.33	U	0.39	U	0.37	U	NR		NR	
Caprolactam	NS	NS	NR		NR		2	U	0.33	U	0.39	U	0.37	U	NR		NR	
Carbazole	NS	NS	NR		NR		0.94	J	0.33	U	0.032	J	0.37	U	NR		NR	
Chrysene	**1**	4.9	0.48	U	0.039	J	**3.5**	**J**	0.085	J	0.44	J	0.12	J	0.021	J	0.29	J
Dibenz(a,h)Anthracene	**0.33**	0.33	0.048	U	0.046	U	**0.34**	**J**	0.033	U	0.064	J	0.016	J	0.041	U	0.039	
Dibenzofuran	NS	18	NR		NR		0.61	J	0.33	U	0.016	J	0.37	U	NR		NR	
Diethyl Phthalate	NS	NS	NR		NR		2	U	0.33	U	0.39	U	0.37	U	NR		NR	
Dimethyl Phthalate	NS	NS	NR		NR		2	U	0.33	U	0.39	U	0.37	U	NR		NR	
Di-N-Butyl Phthalate	NS	NS	NR		NR		2	U	0.33	U	0.39	U	0.37	U	NR		NR	
Di-N-Octylphthalate	NS	NS	NR		NR		2	U	0.33	U	0.39	U	0.37	U	NR		NR	
Fluoranthene	85	100	0.48	U	0.077	J	8.8	J	0.14	J	0.8	J	0.24	J	0.033	J	0.7	
Fluorene	30	100	0.48	U	0.46	U	0.91	J	0.33	U	0.039	J	0.016	J	0.41	U	0.059	J
Hexachlorobenzene	0.33	0.33	NR		NR		0.2	U	0.033	U	0.039	U	0.037	U	NR		NR	
Hexachlorobutadiene	NS	NS	NR		NR		0.41	U	0.068	U	0.079	U	0.075	U	NR		NR	
Hexachlorocyclopentadiene	NS	NS	NR		NR		2	U	0.33	U	0.39	U	0.37	U	NR		NR	
Hexachloroethane	NS	NS	NR		NR		0.2	U	0.033	U	0.039	U	0.037	U	NR		NR	
Indeno(1,2,3-c,d)Pyrene	**0.5**	1.4	0.048	U	0.022	J	**1.3**	**J**	0.034		0.28	J	0.071	J	0.041	U	0.15	
Isophorone	NS	NS	NR		NR		0.81	U	0.13	U	0.16	U	0.15	U	NR		NR	
Naphthalene	12	100	0.48	U	0.46	U	0.72	J	0.33	U	0.39	U	0.37	U	0.41	U	0.39	U
Nitrobenzene	0.08	1.8	NR		NR		0.2	U	0.033	U	0.039	U	0.037	U	NR		NR	
N-Nitrosodi-N-Propylamine	NS	NS	NR		NR		0.2	U	0.033	U	0.039	U	0.037	U	NR		NR	
N-Nitrosodiphenylamine	NS	NS	NR		NR		2	U	0.33	U	0.39	U	0.37	U	NR		NR	
Pentachlorophenol	0.8	1.3	NR		NR		1.6	U	0.27	U	0.31	U	0.3	U	NR		NR	
Phenanthrene	**1.1**	4.9	0.48	U	0.058	J	**8.1**	**J**	0.071	J	0.43	J	0.18	J	0.02	J	0.48	
Phenol	0.33	100	NR		NR		2	U	0.33	U	0.39	U	0.37	U	NR		NR	
Pyrene	64	100	0.48	U	0.074	J	6.9	J	0.12	J	0.82	J	0.23	J	0.035	J	0.62	

Table 2
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Semivolatile Organic Compounds (SVOCs)

		AKRF Sample ID	RI-SB-23_8-10_20251218	RI-SB-24_0-2_20251222	RI-SB-24_2-4_20251222	RI-SB-X14_2-4_20251222	RI-SB-24_4-6_20251222	RI-SB-24_6-8_20251222	RI-SB-24_8-10_20251222	RI-SB-37_4-6_20251219
		Lab Sample ID	460-341877-13	460-342125-1	460-342125-2	460-342124-4	460-342125-3	460-342125-4	460-342125-5	460-342035-40
		Sample Date	12/18/2025	12/22/2025	12/22/2025	12/22/2025	12/22/2025	12/22/2025	12/22/2025	12/19/2025
		Dilution Factor	1	1	1	1	1	1	1	1
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Compound	**UUSCO**	**RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS	0.35 U	0.35 U	0.36 U	0.34 U	NR	NR	0.43 U	NR
1,4-Dioxane (P-Dioxane)	NS	5.7	0.035 U	0.035 U	0.036 U	0.034 U	NR	NR	0.043 U	NR
2,3,4,6-Tetrachlorophenol	NS	NS	0.35 U	0.35 U	0.36 U	0.34 U	NR	NR	0.43 U	NR
2,4,5-Trichlorophenol	NS	NS	0.35 U	0.35 U	0.36 U	0.34 U	NR	NR	0.43 U	NR
2,4,6-Trichlorophenol	NS	NS	0.14 U	0.14 U	0.14 U	0.14 U	NR	NR	0.17 U	NR
2,4-Dichlorophenol	NS	NS	0.14 U	0.14 U	0.14 U	0.14 U	NR	NR	0.17 U	NR
2,4-Dimethylphenol	NS	NS	0.35 U	0.35 U	0.36 U	0.34 U	NR	NR	0.43 U	NR
2,4-Dinitrophenol	NS	NS	0.28 U	0.28 U	0.29 U	0.28 U	NR	NR	0.34 U	NR
2,4-Dinitrotoluene	NS	NS	0.071 U	0.071 U	0.072 U	0.07 U	NR	NR	0.086 U	NR
2,6-Dinitrotoluene	NS	NS	0.071 U	0.071 U	0.072 U	0.07 U	NR	NR	0.086 U	NR
2-Chloronaphthalene	NS	NS	0.35 U	0.35 U	0.36 U	0.34 U	NR	NR	0.43 U	NR
2-Chlorophenol	NS	NS	0.35 U	0.35 U	0.36 U	0.34 U	NR	NR	0.43 U	NR
2-Methylnaphthalene	NS	NS	0.35 U	0.031 J	0.03 J	0.011 J	NR	NR	0.43 U	NR
2-Methylphenol (O-Cresol)	0.33	100	0.35 U	0.35 U	0.36 U	0.34 U	NR	NR	0.43 U	NR
2-Nitroaniline	NS	NS	0.35 U	0.35 U	0.36 U	0.34 U	NR	NR	0.43 U	NR
2-Nitrophenol	NS	NS	0.35 U	0.35 U	0.36 U	0.34 U	NR	NR	0.43 U	NR
3- And 4- Methylphenol (Total)	NS	NS	0.35 U	0.35 U	0.36 U	0.34 U	NR	NR	0.43 U	NR
3,3'-Dichlorobenzidine	NS	NS	0.14 U	0.14 U	0.14 U	0.14 U	NR	NR	0.17 U	NR
3-Nitroaniline	NS	NS	0.35 U	0.35 U	0.36 U	0.34 U	NR	NR	0.43 U	NR
4,6-Dinitro-2-Methylphenol	NS	NS	0.28 U	0.28 U	0.29 U	0.28 U	NR	NR	0.34 U	NR
4-Bromophenyl Phenyl Ether	NS	NS	0.35 U	0.35 U	0.36 U	0.34 U	NR	NR	0.43 U	NR
4-Chloro-3-Methylphenol	NS	NS	0.35 U	0.35 U	0.36 U	0.34 U	NR	NR	0.43 U	NR
4-Chloroaniline	NS	NS	0.35 U	0.35 U	0.36 U	0.34 U	NR	NR	0.43 U	NR
4-Chlorophenyl Phenyl Ether	NS	NS	0.35 U	0.35 U	0.36 U	0.34 U	NR	NR	0.43 U	NR
4-Methylphenol (P-Cresol)	0.33	100	0.35 U	0.35 U	0.36 U	0.34 U	NR	NR	0.43 U	NR
4-Nitroaniline	NS	NS	0.35 U	0.35 U	0.36 U	0.34 U	NR	NR	0.43 U	NR
4-Nitrophenol	NS	NS	0.71 U	0.71 U	0.72 U	0.7 U	NR	NR	0.86 U	NR
Acenaphthene	20	100	0.35 U	0.078 J	0.091 J	0.024 J	0.43 U	0.46 U	0.43 U	0.37 U
Acenaphthylene	100	100	0.35 U	0.026 J	0.032 J	0.34 U	0.43 U	0.46 U	0.43 U	0.37 U
Acetophenone	NS	NS	0.35 U	0.35 U	0.36 U	0.34 U	NR	NR	0.43 U	NR
Anthracene	100	100	0.35 U	0.23 J	0.25 J	0.054 J	0.43 U	0.46 U	0.025 J	0.37 U
Atrazine	NS	NS	0.14 U	0.14 U	0.14 U	0.14 U	NR	NR	0.17 U	NR
Benzaldehyde	NS	NS	0.35 UJ	0.35 UJ	0.36 UJ	0.34 UJ	NR	NR	0.43 UJ	NR
Benzo(a)Anthracene	**1**	1.4	0.035 U	0.58	0.63 J	0.13 J	0.043 U	0.046 U	0.073	0.04
Benzo(a)Pyrene	**1**	1	0.035 U	0.53	0.57 J	0.1 J	0.015 J	0.046 U	0.061	0.056
Benzo(b)Fluoranthene	**1**	1.4	0.035 U	0.62	0.76 J	0.13 J	0.019 J	0.046 U	0.068	0.058
Benzo(g,h,i)Perylene	**0.64**	4.9	0.35 U	0.3 J	0.28 J	0.066 J	0.43 U	0.46 U	0.041 J	0.1 J
Benzo(k)Fluoranthene	**0.8**	4.9	0.035 U	0.29	0.27 J	0.055 J	0.043 U	0.046 U	0.029 J	0.019 J
Benzyl Butyl Phthalate	NS	NS	0.35 U	0.35 U	0.36 U	0.34 U	NR	NR	0.43 U	NR
Biphenyl (Diphenyl)	NS	NS	0.35 U	0.35 U	0.36 U	0.34 U	NR	NR	0.43 U	NR
Bis(2-Chloroethoxy) Methane	NS	NS	0.35 U	0.35 U	0.36 U	0.34 U	NR	NR	0.43 U	NR
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	0.035 U	0.035 U	0.036 U	0.034 U	NR	NR	0.043 U	NR
Bis(2-Chloroisopropyl) Ether	NS	NS	0.35 U	0.35 U	0.36 U	0.34 U	NR	NR	0.43 U	NR
Bis(2-Ethylhexyl) Phthalate	NS	NS	0.35 U	0.022 J	0.034 J	0.34 U	NR	NR	0.43 U	NR
Caprolactam	NS	NS	0.35 U	0.35 U	0.36 U	0.34 U	NR	NR	0.43 U	NR
Carbazole	NS	NS	0.35 U	0.069 J	0.067 J	0.019 J	NR	NR	0.43 U	NR
Chrysene	**1**	4.9	0.35 U	0.6	0.66 J	0.13 J	0.43 U	0.46 U	0.074 J	0.039 J
Dibenz(a,h)Anthracene	**0.33**	0.33	0.035 U	0.093	0.082 J	0.034 U	0.043 U	0.046 U	0.043 U	0.033 J
Dibenzofuran	NS	18	0.35 U	0.047 J	0.052 J	0.014 J	NR	NR	0.43 U	NR
Diethyl Phthalate	NS	NS	0.35 U	0.35 U	0.36 U	0.34 U	NR	NR	0.43 U	NR
Dimethyl Phthalate	NS	NS	0.35 U	0.35 U	0.36 U	0.34 U	NR	NR	0.43 U	NR
Di-N-Butyl Phthalate	NS	NS	0.35 U	0.35 U	0.013 J	0.34 U	NR	NR	0.43 U	NR
Di-N-Octylphthalate	NS	NS	0.35 U	0.35 U	0.36 U	0.34 U	NR	NR	0.43 U	NR
Fluoranthene	85	100	0.35 U	1.3	1.4 J	0.27 J	0.028 J	0.46 U	0.15 J	0.059 J
Fluorene	30	100	0.35 U	0.073 J	0.089 J	0.024 J	0.43 U	0.46 U	0.43 U	0.37 U
Hexachlorobenzene	0.33	0.33	0.035 U	0.035 U	0.036 U	0.034 U	NR	NR	0.043 U	NR
Hexachlorobutadiene	NS	NS	0.071 U	0.071 U	0.072 U	0.07 U	NR	NR	0.086 U	NR
Hexachlorocyclopentadiene	NS	NS	0.35 U	0.35 U	0.36 U	0.34 U	NR	NR	0.43 U	NR
Hexachloroethane	NS	NS	0.035 U	0.035 U	0.036 U	0.034 U	NR	NR	0.043 U	NR
Indeno(1,2,3-c,d)Pyrene	**0.5**	1.4	0.035 U	0.32	0.33 J	0.085	0.037 J	0.046 U	0.066	0.052
Isophorone	NS	NS	0.14 U	0.14 U	0.14 U	0.14 U	NR	NR	0.17 U	NR
Naphthalene	12	100	0.35 U	0.034 J	0.032 J	0.015 J	0.43 U	0.46 U	0.43 U	0.37 U
Nitrobenzene	0.08	1.8	0.035 U	0.035 U	0.036 U	0.034 U	NR	NR	0.043 U	NR
N-Nitrosodi-N-Propylamine	NS	NS	0.035 U	0.035 U	0.036 U	0.034 U	NR	NR	0.043 U	NR
N-Nitrosodiphenylamine	NS	NS	0.35 U	0.35 U	0.36 U	0.34 U	NR	NR	0.43 U	NR
Pentachlorophenol	0.8	1.3	0.28 U	0.28 U	0.29 U	0.28 U	NR	NR	0.34 U	NR
Phenanthrene	**1.1**	4.9	0.35 U	1.1	1.1 J	0.26 J	0.43 U	0.46 U	0.13 J	0.046 J
Phenol	0.33	100	0.35 U	0.35 U	0.36 U	0.34 U	NR	NR	0.43 U	NR
Pyrene	64	100	0.35 U	1.1	1.2 J	0.24 J	0.029 J	0.46 U	0.14 J	0.058 J

Table 2
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1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Semivolatile Organic Compounds (SVOCs)

		AKRF Sample ID	RI-SB-X9_4-6_20251219		RI-SB-38_4-6_20251219		RI-SB-39_4-6_20251219		RI-SB-40_4-6_20251219		RI-SB-77_20-22_20260623		RI-SB-78_22-24_20260623		RI-SB-79_23-25_20260623		RI-SB-80_23-25_20260623	
		Lab Sample ID	460-342035-41		460-342035-42		460-342035-43		460-342035-44		460-353884-3		460-353884-6		460-353884-9		460-353884-12	
		Sample Date	12/19/2025		12/19/2025		12/19/2025		12/19/2025		6/23/2026		6/23/2026		6/23/2026		6/23/2026	
		Dilution Factor	1		1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,2,4,5-Tetrachlorobenzene	NS	NS	NR		NR		NR		NR		0.38	U	0.37	U	0.42	U	0.6	U
1,4-Dioxane (P-Dioxane)	NS	5.7	NR		NR		NR		NR		0.038	U	0.037	U	0.042	U	0.06	U
2,3,4,6-Tetrachlorophenol	NS	NS	NR		NR		NR		NR		0.38	U	0.37	U	0.42	U	0.6	U
2,4,5-Trichlorophenol	NS	NS	NR		NR		NR		NR		0.38	U	0.37	U	0.42	U	0.6	U
2,4,6-Trichlorophenol	NS	NS	NR		NR		NR		NR		0.15	U	0.15	U	0.17	U	0.24	U
2,4-Dichlorophenol	NS	NS	NR		NR		NR		NR		0.15	U	0.15	U	0.17	U	0.24	U
2,4-Dimethylphenol	NS	NS	NR		NR		NR		NR		0.38	U	0.37	U	0.42	U	0.6	UJ
2,4-Dinitrophenol	NS	NS	NR		NR		NR		NR		0.31	UJ	0.3	UJ	0.34	UJ	0.48	UJ
2,4-Dinitrotoluene	NS	NS	NR		NR		NR		NR		0.077	U	0.075	U	0.086	U	0.12	U
2,6-Dinitrotoluene	NS	NS	NR		NR		NR		NR		0.077	U	0.075	U	0.086	U	0.12	U
2-Chloronaphthalene	NS	NS	NR		NR		NR		NR		0.38	U	0.37	U	0.42	U	0.6	U
2-Chlorophenol	NS	NS	NR		NR		NR		NR		0.38	U	0.37	U	0.42	U	0.6	U
2-Methylnaphthalene	NS	NS	NR		NR		NR		NR		0.38	U	0.37	U	0.42	U	0.6	U
2-Methylphenol (O-Cresol)	0.33	100	NR		NR		NR		NR		0.23	U	0.22	U	0.26	U	0.36	U
2-Nitroaniline	NS	NS	NR		NR		NR		NR		0.38	U	0.37	U	0.42	U	0.6	U
2-Nitrophenol	NS	NS	NR		NR		NR		NR		0.38	UJ	0.37	UJ	0.42	UJ	0.6	UJ
3- And 4- Methylphenol (Total)	NS	NS	NR		NR		NR		NR		0.23	U	0.22	U	0.26	U	0.36	U
3,3'-Dichlorobenzidine	NS	NS	NR		NR		NR		NR		0.15	U	0.15	U	0.17	U	0.24	U
3-Nitroaniline	NS	NS	NR		NR		NR		NR		0.38	U	0.37	U	0.42	U	0.6	U
4,6-Dinitro-2-Methylphenol	NS	NS	NR		NR		NR		NR		0.31	U	0.3	U	0.34	U	0.48	U
4-Bromophenyl Phenyl Ether	NS	NS	NR		NR		NR		NR		0.38	U	0.37	U	0.42	U	0.6	U
4-Chloro-3-Methylphenol	NS	NS	NR		NR		NR		NR		0.38	U	0.37	U	0.42	U	0.6	U
4-Chloroaniline	NS	NS	NR		NR		NR		NR		0.38	U	0.37	U	0.42	U	0.6	U
4-Chlorophenyl Phenyl Ether	NS	NS	NR		NR		NR		NR		0.38	U	0.37	U	0.42	U	0.6	U
4-Methylphenol (P-Cresol)	0.33	100	NR		NR		NR		NR		0.38	U	0.37	U	0.42	U	0.6	U
4-Nitroaniline	NS	NS	NR		NR		NR		NR		0.38	U	0.37	U	0.42	U	0.6	U
4-Nitrophenol	NS	NS	NR		NR		NR		NR		0.77	U	0.75	U	0.86	U	1.2	U
Acenaphthene	20	100	0.36	U	0.046	J	0.25	J	0.37	U	0.38	U	0.37	U	0.42	U	0.6	U
Acenaphthylene	100	100	0.36	U	0.052	J	0.2	J	0.024	J	0.38	U	0.37	U	0.42	U	0.6	U
Acetophenone	NS	NS	NR		NR		NR		NR		0.38	U	0.37	U	0.42	U	0.6	U
Anthracene	100	100	0.36	U	0.21	J	0.72		0.031	J	0.38	U	0.37	U	0.42	U	0.6	U
Atrazine	NS	NS	NR		NR		NR		NR		0.15	U	0.15	U	0.17	U	0.24	U
Benzaldehyde	NS	NS	NR		NR		NR		NR		0.38	UJ	0.37	UJ	0.42	UJ	0.6	UJ
Benzo(a)Anthracene	**1**	1.4	0.046		0.89		**2.1**		0.13		0.038	U	0.037	U	0.042	U	0.06	U
Benzo(a)Pyrene	**1**	1	0.047		0.7		**1.8**		0.16		0.038	U	0.037	U	0.042	U	0.06	U
Benzo(b)Fluoranthene	**1**	1.4	0.061		0.89		**2.4**		0.22		0.038	U	0.037	U	0.042	U	0.06	U
Benzo(g,h,i)Perylene	**0.64**	4.9	0.039	J	0.41		**1.3**		0.16	J	0.38	U	0.37	U	0.42	U	0.6	U
Benzo(k)Fluoranthene	**0.8**	4.9	0.025	J	0.42		**0.98**		0.078		0.038	U	0.037	U	0.042	U	0.06	U
Benzyl Butyl Phthalate	NS	NS	NR		NR		NR		NR		0.38	U	0.37	U	0.42	U	0.6	U
Biphenyl (Diphenyl)	NS	NS	NR		NR		NR		NR		0.38	U	0.37	U	0.42	U	0.6	U
Bis(2-Chloroethoxy) Methane	NS	NS	NR		NR		NR		NR		0.38	U	0.37	U	0.42	U	0.6	U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	NR		NR		NR		NR		0.038	U	0.037	U	0.042	U	0.06	U
Bis(2-Chloroisopropyl) Ether	NS	NS	NR		NR		NR		NR		0.38	U	0.37	U	0.42	U	0.6	U
Bis(2-Ethylhexyl) Phthalate	NS	NS	NR		NR		NR		NR		0.38	U	0.37	U	0.42	U	0.6	U
Caprolactam	NS	NS	NR		NR		NR		NR		0.38	U	0.37	U	0.42	U	0.6	U
Carbazole	NS	NS	NR		NR		NR		NR		0.38	U	0.37	U	0.42	U	0.6	U
Chrysene	**1**	4.9	0.052	J	0.83		**2.1**		0.15	J	0.38	U	0.37	U	0.42	U	0.6	U
Dibenz(a,h)Anthracene	**0.33**	0.33	0.036	U	0.13		0.32		0.03	J	0.038	U	0.037	U	0.042	U	0.06	U
Dibenzofuran	NS	18	NR		NR		NR		NR		0.38	U	0.37	U	0.42	U	0.6	U
Diethyl Phthalate	NS	NS	NR		NR		NR		NR		0.38	U	0.37	U	0.42	U	0.6	U
Dimethyl Phthalate	NS	NS	NR		NR		NR		NR		0.38	U	0.37	U	0.42	U	0.6	U
Di-N-Butyl Phthalate	NS	NS	NR		NR		NR		NR		0.38	U	0.37	U	0.42	U	0.6	U
Di-N-Octylphthalate	NS	NS	NR		NR		NR		NR		0.38	U	0.37	U	0.42	U	0.6	U
Fluoranthene	85	100	0.077	J	1.2		4.4		0.24	J	0.38	U	0.37	U	0.42	U	0.6	U
Fluorene	30	100	0.36	U	0.054	J	0.28	J	0.37	U	0.38	U	0.37	U	0.42	U	0.6	U
Hexachlorobenzene	0.33	0.33	NR		NR		NR		NR		0.038	U	0.037	U	0.042	U	0.06	U
Hexachlorobutadiene	NS	NS	NR		NR		NR		NR		0.077	U	0.075	U	0.086	U	0.12	U
Hexachlorocyclopentadiene	NS	NS	NR		NR		NR		NR		0.38	U	0.37	U	0.42	U	0.6	U
Hexachloroethane	NS	NS	NR		NR		NR		NR		0.038	U	0.037	U	0.042	U	0.06	U
Indeno(1,2,3-c,d)Pyrene	**0.5**	1.4	0.039		0.44		**1.4**		0.18		0.038	U	0.037	U	0.042	U	0.06	U
Isophorone	NS	NS	NR		NR		NR		NR		0.15	U	0.15	U	0.17	U	0.24	U
Naphthalene	12	100	0.36	U	0.048	J	0.14	J	0.0087	J	0.38	U	0.37	U	0.42	U	0.6	U
Nitrobenzene	0.08	1.8	NR		NR		NR		NR		0.038	U	0.037	U	0.042	U	0.06	U
N-Nitrosodi-N-Propylamine	NS	NS	NR		NR		NR		NR		0.038	U	0.037	U	0.042	U	0.06	U
N-Nitrosodiphenylamine	NS	NS	NR		NR		NR		NR		0.38	U	0.37	U	0.42	U	0.6	U
Pentachlorophenol	0.8	1.3	NR		NR		NR		NR		0.31	U	0.3	U	0.34	U	0.48	U
Phenanthrene	**1.1**	4.9	0.037	J	0.66		**3.3**		0.12	J	0.38	U	0.37	U	0.42	U	0.6	U
Phenol	0.33	100	NR		NR		NR		NR		0.23	U	0.22	U	0.26	U	0.36	U
Pyrene	64	100	0.075	J	1.2		4.1		0.27	J	0.38	U	0.37	U	0.42	U	0.6	U

Table 2
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Semivolatile Organic Compounds (SVOCs)

		AKRF Sample ID	RI-SB-X_23-25_20260623		RI-SB-81_15-17_20260623		FB-01_20250922		FB-02_20250922		FB-03_20250923		FB-04_20250924		FB-05_20250924		FB-06_20250925	
		Lab Sample ID	460-353884-15		460-353884-16		460-335429-12		460-335428-35		460-335525-28		460-335652-29		460-335652-31		460-335757-13	
		Sample Date	6/23/2026		6/23/2026		9/22/2025		9/22/2025		9/23/2025		9/24/2025		9/24/2025		9/25/2025	
		Dilution Factor	1		1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,2,4,5-Tetrachlorobenzene	NS	NS	0.61	U	0.61	U	10	U	10	U	10	U	10	U	10	U	NR	
1,4-Dioxane (P-Dioxane)	NS	5.7	0.061	U	0.061	U	10	U	10	U	NR		NR		NR		NR	
2,3,4,6-Tetrachlorophenol	NS	NS	0.61	U	0.61	U	10	U	10	U	10	U	10	U	10	U	NR	
2,4,5-Trichlorophenol	NS	NS	0.61	U	0.61	U	10	U	10	U	10	U	10	U	10	U	NR	
2,4,6-Trichlorophenol	NS	NS	0.24	U	0.24	U	3	U	3	U	3	U	3	U	3	U	NR	
2,4-Dichlorophenol	NS	NS	0.24	U	0.24	U	10	U	10	U	10	U	10	U	10	U	NR	
2,4-Dimethylphenol	NS	NS	0.61	UJ	0.61	U	10	U	10	U	10	U	10	U	10	U	NR	
2,4-Dinitrophenol	NS	NS	0.49	UJ	0.49	UJ	12	U	12	U	12	U	12	U	12	U	NR	
2,4-Dinitrotoluene	NS	NS	0.12	U	0.12	U	10	U	10	U	10	U	10	U	10	U	NR	
2,6-Dinitrotoluene	NS	NS	0.12	U	0.12	U	2	U	2	U	2	U	2	U	2	U	NR	
2-Chloronaphthalene	NS	NS	0.61	U	0.61	U	10	U	10	U	10	U	10	U	10	U	NR	
2-Chlorophenol	NS	NS	0.61	U	0.61	U	10	U	10	U	10	U	10	U	10	U	NR	
2-Methylnaphthalene	NS	NS	0.61	U	0.61	U	10	U	10	U	10	U	10	U	10	U	NR	
2-Methylphenol (O-Cresol)	0.33	100	0.37	U	0.37	U	10	U	10	U	10	U	10	U	10	U	NR	
2-Nitroaniline	NS	NS	0.61	U	0.61	U	10	U	10	U	10	U	10	U	10	U	NR	
2-Nitrophenol	NS	NS	0.61	UJ	0.61	UJ	10	U	10	U	10	U	10	U	10	U	NR	
3- And 4- Methylphenol (Total)	NS	NS	0.37	U	0.37	U	10	U	10	U	10	U	10	U	10	U	NR	
3,3'-Dichlorobenzidine	NS	NS	0.24	U	0.24	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	NR	
3-Nitroaniline	NS	NS	0.61	U	0.61	U	10	U	10	U	10	U	10	U	10	U	NR	
4,6-Dinitro-2-Methylphenol	NS	NS	0.49	U	0.49	U	20	U	20	U	20	U	20	UJ	20	UJ	NR	
4-Bromophenyl Phenyl Ether	NS	NS	0.61	U	0.61	U	10	U	10	U	10	U	10	U	10	U	NR	
4-Chloro-3-Methylphenol	NS	NS	0.61	U	0.61	U	10	U	10	U	10	U	10	U	10	U	NR	
4-Chloroaniline	NS	NS	0.61	U	0.61	U	5	U	5	U	5	U	5	U	5	U	NR	
4-Chlorophenyl Phenyl Ether	NS	NS	0.61	U	0.61	U	10	U	10	U	10	U	10	U	10	U	NR	
4-Methylphenol (P-Cresol)	0.33	100	0.61	U	0.61	U	10	U	10	U	10	U	10	U	10	U	NR	
4-Nitroaniline	NS	NS	0.61	U	0.61	U	10	U	10	U	10	U	10	U	10	U	NR	
4-Nitrophenol	NS	NS	1.2	U	1.2	U	20	U	20	U	20	U	20	U	20	U	NR	
Acenaphthene	20	100	0.61	U	0.61	U	10	U	10	U	10	U	10	U	10	U	10	U
Acenaphthylene	100	100	0.61	U	0.61	U	10	U	10	U	10	U	10	U	10	U	10	U
Acetophenone	NS	NS	0.61	U	0.61	U	10	U	10	U	10	U	10	U	10	U	NR	
Anthracene	100	100	0.61	U	0.61	U	10	U	10	U	10	U	10	U	10	U	10	U
Atrazine	NS	NS	0.24	U	0.24	U	2	U	2	U	2	U	2	U	2	U	NR	
Benzaldehyde	NS	NS	0.61	UJ	0.61	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	NR	
Benzo(a)Anthracene	**1**	1.4	0.061	U	0.061	U	1	U	1	U	1	U	1	U	1	U	1	U
Benzo(a)Pyrene	**1**	1	0.061	U	0.061	U	1	U	1	U	1	U	1	U	1	U	1	U
Benzo(b)Fluoranthene	**1**	1.4	0.061	U	0.061	U	2	U	2	U	2	U	2	U	2	U	2	U
Benzo(g,h,i)Perylene	**0.64**	4.9	0.61	U	0.61	U	10	U	10	U	10	U	10	U	10	U	10	U
Benzo(k)Fluoranthene	**0.8**	4.9	0.061	U	0.061	U	1	U	1	U	1	U	1	U	1	U	1	U
Benzyl Butyl Phthalate	NS	NS	0.61	U	0.61	U	10	U	10	U	10	U	10	U	10	U	NR	
Biphenyl (Diphenyl)	NS	NS	0.61	U	0.61	U	5	U	5	U	5	U	5	U	5	U	NR	
Bis(2-Chloroethoxy) Methane	NS	NS	0.61	U	0.61	U	10	U	10	U	10	U	10	U	10	U	NR	
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	0.061	U	0.061	U	1	U	1	U	1	U	1	U	1	U	NR	
Bis(2-Chloroisopropyl) Ether	NS	NS	0.61	U	0.61	U	10	U	10	U	10	U	10	U	10	U	NR	
Bis(2-Ethylhexyl) Phthalate	NS	NS	0.61	U	0.61	U	2	U	2	U	2	U	2	U	2	U	NR	
Caprolactam	NS	NS	0.61	U	0.61	U	10	U	10	U	10	U	10	U	10	U	NR	
Carbazole	NS	NS	0.61	U	0.61	U	10	U	10	U	10	U	10	U	10	U	NR	
Chrysene	**1**	4.9	0.61	U	0.61	U	2	U	2	U	2	U	2	U	2	U	2	U
Dibenz(a,h)Anthracene	**0.33**	0.33	0.061	U	0.061	U	1	U	1	U	1	U	1	U	1	U	1	U
Dibenzofuran	NS	18	0.61	U	0.61	U	10	U	10	U	10	U	10	U	10	U	NR	
Diethyl Phthalate	NS	NS	0.61	U	0.61	U	10	U	10	U	10	U	10	U	10	U	NR	
Dimethyl Phthalate	NS	NS	0.61	U	0.61	U	10	U	10	U	10	U	10	U	10	U	NR	
Di-N-Butyl Phthalate	NS	NS	0.61	U	0.61	U	10	U	10	U	10	U	10	U	10	U	NR	
Di-N-Octylphthalate	NS	NS	0.61	U	0.61	U	10	U	10	U	10	U	10	U	10	U	NR	
Fluoranthene	85	100	0.61	U	0.61	U	10	U	10	U	10	U	10	U	10	U	10	U
Fluorene	30	100	0.61	U	0.61	U	10	U	10	U	10	U	10	U	10	U	10	U
Hexachlorobenzene	0.33	0.33	0.061	U	0.061	U	1	U	1	U	1	U	1	U	1	U	NR	
Hexachlorobutadiene	NS	NS	0.12	U	0.12	U	1	U	1	U	1	U	1	U	1	U	NR	
Hexachlorocyclopentadiene	NS	NS	0.61	U	0.61	U	10	U	10	U	10	U	10	U	10	U	NR	
Hexachloroethane	NS	NS	0.061	U	0.061	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	NR	
Indeno(1,2,3-c,d)Pyrene	**0.5**	1.4	0.061	U	0.061	U	2	U	2	U	2	U	2	U	2	U	2	U
Isophorone	NS	NS	0.24	U	0.24	U	10	U	10	U	10	U	10	U	10	U	NR	
Naphthalene	12	100	0.61	U	0.61	U	2	U	2	U	2	U	2	U	2	U	2	U
Nitrobenzene	0.08	1.8	0.061	U	0.061	U	1	U	1	U	1	U	1	U	1	U	NR	
N-Nitrosodi-N-Propylamine	NS	NS	0.061	U	0.061	U	1	U	1	U	1	U	1	U	1	U	NR	
N-Nitrosodiphenylamine	NS	NS	0.61	U	0.61	U	10	U	10	U	10	U	10	U	10	U	NR	
Pentachlorophenol	0.8	1.3	0.49	U	0.49	U	20	U	20	U	20	U	20	U	20	U	NR	
Phenanthrene	**1.1**	4.9	0.61	U	0.61	U	10	U	10	U	10	U	10	U	10	U	10	U
Phenol	0.33	100	0.37	U	0.37	U	10	U	10	U	10	U	10	U	10	U	NR	
Pyrene	64	100	0.61	U	0.61	U	10	U	10	U	10	U	10	U	10	U	10	U

Table 2
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Semivolatile Organic Compounds (SVOCs)

			AKRF Sample ID	FB-07_20250925		RI-FB-01_20260623
			Lab Sample ID	460-335757-36		460-353884-2
			Sample Date	9/25/2025		6/23/2026
			Dilution Factor	1		1
			Unit	µg/L		µg/L
Compound	**UUSCO**	**RRSCO**		CONC	Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS		NR		5 U
1,4-Dioxane (P-Dioxane)	NS	5.7		NR		10 U
2,3,4,6-Tetrachlorophenol	NS	NS		NR		10 U
2,4,5-Trichlorophenol	NS	NS		NR		10 U
2,4,6-Trichlorophenol	NS	NS		NR		3 U
2,4-Dichlorophenol	NS	NS		NR		5 U
2,4-Dimethylphenol	NS	NS		NR		1.6 U
2,4-Dinitrophenol	NS	NS		NR		1.6 UJ
2,4-Dinitrotoluene	NS	NS		NR		5 U
2,6-Dinitrotoluene	NS	NS		NR		2 U
2-Chloronaphthalene	NS	NS		NR		10 U
2-Chlorophenol	NS	NS		NR		10 U
2-Methylnaphthalene	NS	NS		NR		10 U
2-Methylphenol (O-Cresol)	0.33	100		NR		10 U
2-Nitroaniline	NS	NS		NR		5 U
2-Nitrophenol	NS	NS		NR		10 U
3- And 4- Methylphenol (Total)	NS	NS		NR		10 U
3,3'-Dichlorobenzidine	NS	NS		NR		5 U
3-Nitroaniline	NS	NS		NR		5 U
4,6-Dinitro-2-Methylphenol	NS	NS		NR		20 U
4-Bromophenyl Phenyl Ether	NS	NS		NR		10 U
4-Chloro-3-Methylphenol	NS	NS		NR		10 U
4-Chloroaniline	NS	NS		NR		5 U
4-Chlorophenyl Phenyl Ether	NS	NS		NR		10 U
4-Methylphenol (P-Cresol)	0.33	100		NR		10 U
4-Nitroaniline	NS	NS		NR		5 U
4-Nitrophenol	NS	NS		NR		20 U
Acenaphthene	20	100		10	U	10 U
Acenaphthylene	100	100		10	U	10 U
Acetophenone	NS	NS		NR		10 U
Anthracene	100	100		10	U	10 U
Atrazine	NS	NS		NR		2 U
Benzaldehyde	NS	NS		NR		10 UJ
Benzo(a)Anthracene	**1**	1.4		1	U	1 U
Benzo(a)Pyrene	**1**	1		1	U	1 U
Benzo(b)Fluoranthene	**1**	1.4		2	U	2 U
Benzo(g,h,i)Perylene	**0.64**	4.9		10	U	10 U
Benzo(k)Fluoranthene	**0.8**	4.9		1	U	1 U
Benzyl Butyl Phthalate	NS	NS		NR		10 U
Biphenyl (Diphenyl)	NS	NS		NR		5 U
Bis(2-Chloroethoxy) Methane	NS	NS		NR		5 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS		NR		1 U
Bis(2-Chloroisopropyl) Ether	NS	NS		NR		5 U
Bis(2-Ethylhexyl) Phthalate	NS	NS		NR		2 U
Caprolactam	NS	NS		NR		10 U
Carbazole	NS	NS		NR		10 U
Chrysene	**1**	4.9		2	U	2 U
Dibenz(a,h)Anthracene	**0.33**	0.33		1	U	1 U
Dibenzofuran	NS	18		NR		10 U
Diethyl Phthalate	NS	NS		NR		10 U
Dimethyl Phthalate	NS	NS		NR		10 U
Di-N-Butyl Phthalate	NS	NS		NR		10 U
Di-N-Octylphthalate	NS	NS		NR		10 U
Fluoranthene	85	100		10	U	10 U
Fluorene	30	100		10	U	10 U
Hexachlorobenzene	0.33	0.33		NR		1 U
Hexachlorobutadiene	NS	NS		NR		0.5 U
Hexachlorocyclopentadiene	NS	NS		NR		5 U
Hexachloroethane	NS	NS		NR		0.8 U
Indeno(1,2,3-c,d)Pyrene	**0.5**	1.4		2	U	2 U
Isophorone	NS	NS		NR		10 U
Naphthalene	12	100		2	U	2 U
Nitrobenzene	0.08	1.8		NR		0.4 U
N-Nitrosodi-N-Propylamine	NS	NS		NR		1 U
N-Nitrosodiphenylamine	NS	NS		NR		10 U
Pentachlorophenol	0.8	1.3		NR		20 U
Phenanthrene	**1.1**	4.9		10	U	10 U
Phenol	0.33	100		NR		10 U
Pyrene	64	100		10	U	10 U

Table 3
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Metals

		AKRF Sample ID	RI-SB-01_0-0.5_20250923		RI-SB-01_0.5-2_20250923	RI-SB-01_2-4_20250923		RI-SB-X1_2-4_20250923	RI-SB-01_4-6_20250923
		Lab Sample ID	460-335525-6		460-335525-7	460-335525-8		460-335525-13	460-335525-9
		Sample Date	9/23/2025		9/23/2025	9/23/2025		9/23/2025	9/23/2025
		Dilution Factor	1	2	1	1	5	1	1
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Compound	**UUSCO**	**RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	11,100	NR	10,100	13,500	NR	9,450	14,700
Antimony	NS	NS	3.7	NR	3.3	2	NR	1.2	1.6
Arsenic	**13**	16	6.2	NR	7.6	6.7	NR	5.5	4.5
Barium	**410**	410	**467**	NR	**534**	230	NR	217	333
Beryllium	**4.4**	43	0.45	NR	0.42	0.36	NR	0.37	0.4
Cadmium	**2.5**	2.5	**4.8**	NR	2	1.6	NR	1.2	2
Calcium	NS	NS	19,900	NR	21,100	9,020	NR	4,830 J	33,700
Chromium, Hexavalent	**1**	1	1 U	NR	1 U	1 U	NR	0.99 U	1 U
Chromium, Total	NS	NS	30.5	NR	32	34.5	NR	23.7	37.1
Cobalt	NS	NS	9.5	NR	8.7	17.6 J	NR	5.9 J	10.8
Copper	**50**	280	**97.8**	NR	**129**	**63.3**	NR	38.2	**57.8**
Iron	NS	NS	25,600	NR	26,400	NR	50,200 JD	19,600 J	27,900
Lead	**63**	400	**526**	NR	**655**	**174**	NR	**193**	**285**
Magnesium	NS	NS	6,470	NR	6,010	6,650 J	NR	3,160 J	7,580
Manganese	1,600	2,000	302	NR	285	267	NR	312	456
Mercury	**0.18**	0.3	NR	**1 D**	**0.54**	**0.31**	NR	0.18	**0.2**
Nickel	**30**	320	**30.3**	NR	**31.8**	29.8	NR	16.2	26.6
Potassium	NS	NS	3,450	NR	2,950	7,210 J	NR	1,600 J	6,840
Selenium	**4**	110	0.36 J	NR	0.44 J	0.29 J	NR	0.37 J	0.3 J
Silver	**2**	110	0.56	NR	0.63	0.16 J	NR	0.2 J	0.34
Sodium	NS	NS	180	NR	173	194 J	NR	93.3 J	192
Thallium	NS	NS	0.22 J	NR	0.21 J	0.34 J	NR	0.13 J	0.35
Vanadium	NS	NS	76	NR	102	57.2	NR	44.9	67.7
Zinc	**109**	6,600	**593**	NR	**499**	**198**	NR	**194**	**271**

Table 3
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Metals

		AKRF Sample ID	RI-SB-01_6-8_20250923		RI-SB-01_8-10_20250923		RI-SB-01_10-12_20250926		RI-SB-01_13-15_20250923		RI-SB-02_0-0.5_20250924		RI-SB-02_0.5-2_20250924		RI-SB-02_2-4_20250924	
		Lab Sample ID	460-335525-10		460-335536-4		460-335823-1		460-335536-5		460-335652-1		460-335652-2		460-335652-3	
		Sample Date	9/23/2025		9/23/2025		9/26/2025		9/23/2025		9/24/2025		9/24/2025		9/24/2025	
		Dilution Factor	1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aluminum	NS	NS	16,300		12,200		15,800		16,100		10,200		8,370		10,600	
Antimony	NS	NS	1.1		0.76		1.1	U	1		1.1		2.3		2.5	
Arsenic	**13**	16	3.2		2.8		3.3		4		6.8		11.5		10.9	
Barium	**410**	410	341		303		108		360		156		216		352	
Beryllium	**4.4**	43	0.4		0.26	J	0.71		0.29	J	0.49		0.47		0.6	
Cadmium	**2.5**	2.5	1.2		0.97		1.1	U	0.52	J	0.62	J	0.91		1.3	
Calcium	NS	NS	8,640		8,470		1,650		9,010		12,800		3,640		10,300	
Chromium, Hexavalent	**1**	1	0.99	U	0.98	U	1.2	U	1	U	1.1	U	1.1	U	1.1	U
Chromium, Total	NS	NS	52.8		30.7		23.5		44.3		21.4		26		36.4	
Cobalt	NS	NS	13		10.7		8.2		14.3		6.7		6.8		8.5	
Copper	**50**	280	**62.4**		48		19.7		**62**		**66**		**95.7**		**81.8**	
Iron	NS	NS	29,000		23,600		22,300		36,400		18,500		22,600		24,200	
Lead	**63**	400	**239**		**161**		**79.1**		**147**		**218**		**290**		**406**	
Magnesium	NS	NS	8,680		6,260		3,630		8,140		8,080		2,590		3,840	
Manganese	1,600	2,000	266		287		213		389		362		315		337	
Mercury	**0.18**	0.3	**0.25**		**0.22**		0.032		**0.2**		**0.22**		**0.23**		**0.23**	
Nickel	**30**	320	**37.8**		22.4		17.3		**42.6**		18.1		29.5		29.8	
Potassium	NS	NS	9,910		6,420		1,180		9,380		2,050		1,630		2,080	
Selenium	**4**	110	0.51	J	0.21	J	0.32	J	0.21	J	0.34	J	0.48	J	0.45	J
Silver	**2**	110	0.31	J	0.21	J	0.46	U	0.27	J	0.28	J	0.42		0.77	
Sodium	NS	NS	145		202		162		309		296		91.2		141	
Thallium	NS	NS	0.47		0.28	J	0.16	J	0.41		0.22	J	0.18	J	0.25	J
Vanadium	NS	NS	85.2		49.9		33.2		61.7		69.9		66.1		86.9	
Zinc	**109**	6,600	**249**		**182**		65.3		**188**		**204**		**353**		**1,390**	

Table 3
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		AKRF Sample ID	RI-SB-02_4-6_20250924		RI-SB-02_6-8_20250924		RI-SB-02_8-10_20250924				RI-SB-02_10-12_20250926			
		Lab Sample ID	460-335652-4		460-335652-5		460-335652-6				460-335823-2			
		Sample Date	9/24/2025		9/24/2025		9/24/2025				9/26/2025			
		Dilution Factor	1		1		1		5		1		2	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aluminum	NS	NS	15,200		15,800		8,510		NR		11,800		NR	
Antimony	NS	NS	0.95	J	0.65	J	0.91		NR		0.38	J	NR	
Arsenic	**13**	16	4.6		4.3		5.6		NR		5.3		NR	
Barium	**410**	410	353		329		98.3		NR		55.2		NR	
Beryllium	**4.4**	43	1.2		0.44		0.41		NR		0.5		NR	
Cadmium	**2.5**	2.5	0.42	J	0.49	J	0.36	J	NR		**2.7**		NR	
Calcium	NS	NS	9,640		12,700		1,920		NR		4,400		NR	
Chromium, Hexavalent	**1**	1	1.2	U	1	U	1.1	UJ	NR		1.1	U	NR	
Chromium, Total	NS	NS	42.8		38.2		16.7		NR		22.2		NR	
Cobalt	NS	NS	13.7		13		5		NR		6.7		NR	
Copper	**50**	280	**51.8**		45		31.5		NR		36.1		NR	
Iron	NS	NS	33,800		30,800		13,800		NR		32,000		NR	
Lead	**63**	400	**201**		**145**		**158**		NR		36.7		NR	
Magnesium	NS	NS	7,730		8,540		1,870		NR		2,960		NR	
Manganese	1,600	2,000	447		440		268		NR		166		NR	
Mercury	**0.18**	0.3	**0.41**		0.1		NR		**1.4**	**D**	NR		**0.96**	**D**
Nickel	**30**	320	29.7		26.9		13.6		NR		20		NR	
Potassium	NS	NS	9,030		8,310		850	JK	NR		857		NR	
Selenium	**4**	110	0.29	J	0.31	J	0.37	J	NR		0.31	J	NR	
Silver	**2**	110	0.16	J	0.16	J	0.22	J	NR		0.41	U	NR	
Sodium	NS	NS	220		235		70.4	J	NR		165		NR	
Thallium	NS	NS	0.43		0.43		0.12	J	NR		0.12	J	NR	
Vanadium	NS	NS	74.6		70		35.4		NR		29.3		NR	
Zinc	**109**	6,600	**258**		**211**		**124**		NR		**1,250**		NR	

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Soil Analytical Results of Metals

		AKRF Sample ID	RI-SB-02_13-15_20250924			RI-SB-03_0-0.5_20250924	RI-SB-03_0.5-2_20250924	RI-SB-03_2-4_20250924	RI-SB-03_4-6_20250924
		Lab Sample ID	460-335652-7			460-335652-22	460-335652-23	460-335652-24	460-335652-25
		Sample Date	9/24/2025			9/24/2025	9/24/2025	9/24/2025	9/24/2025
		Dilution Factor	1	5	25	1	1	1	1
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Compound	**UUSCO**	**RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	NR	2,600 D	NR	8,760	8,220	7,120	5,850
Antimony	NS	NS	NR	30.2 D	NR	1.3	2.9	2.2	1.2
Arsenic	**13**	16	NR	**33.3 D**	NR	8.3	9.4	6.1	7.7
Barium	**410**	410	NR	209 D	NR	363	**776**	**490**	**757**
Beryllium	**4.4**	43	NR	0.16 D	NR	0.51	0.39	0.33	0.29 J
Cadmium	**2.5**	2.5	NR	**5.7 D**	NR	1.4	1.6	1.5	0.66 J
Calcium	NS	NS	NR	19,500 D	NR	20,900	45,500	38,700	41,800
Chromium, Hexavalent	**1**	1	1.2 U	NR	NR	1 U	1.1 U	1 U	0.67 J
Chromium, Total	NS	NS	NR	140 D	NR	30.7	37.2	28.3	12.9
Cobalt	NS	NS	NR	11.4 D	NR	10.7	7.4	6.6	3.9
Copper	**50**	280	NR	**2,660 D**	NR	43.2	**79**	**54.3**	18.6
Iron	NS	NS	NR	109,000 D	NR	21,200	20,200	18,700	12,900
Lead	**63**	400	NR	**841 D**	NR	**239**	**498**	**376**	**301**
Magnesium	NS	NS	NR	2,070 D	NR	7,330	6,890	11,000	3,210
Manganese	1,600	2,000	NR	657 D	NR	233	265	222	226
Mercury	**0.18**	0.3	NR	NR	**16.1 D**	**0.34**	**0.48**	**0.43**	**0.41**
Nickel	**30**	320	NR	**128 D**	NR	27.5	21.3	18.8	7.5
Potassium	NS	NS	NR	366 JD	NR	2,080	2,120	1,960	687
Selenium	**4**	110	NR	0.95 JD	NR	0.32 J	0.39 J	0.31 J	0.41 J
Silver	**2**	110	NR	1.3 JD	NR	0.24 J	0.28 J	0.53	0.079 J
Sodium	NS	NS	NR	302 JD	NR	155	199	252	678
Thallium	NS	NS	NR	1.9 U	NR	0.15 J	0.19 J	0.15 J	0.12 J
Vanadium	NS	NS	NR	149 D	NR	40.9	45.1	42.3	13.8
Zinc	**109**	6,600	NR	**1,910 D**	NR	**325**	**666**	**441**	**377**

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Soil Analytical Results of Metals

		AKRF Sample ID	RI-SB-03_6-8_20250924		RI-SB-03_8-10_20250924	RI-SB-03_13-15_20250924		RI-SB-04_0-0.5_20250924	RI-SB-04_0.5-2_20250924
		Lab Sample ID	460-335652-26		460-335651-11	460-335652-28		460-335652-8	460-335652-9
		Sample Date	9/24/2025		9/24/2025	9/24/2025		9/24/2025	9/24/2025
		Dilution Factor	1	2	1	1	5	1	1
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Compound	**UUSCO**	**RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	9,140	NR	6,170	3,620	NR	8,600	6,870
Antimony	NS	NS	3.4	NR	3 JK	2.2	NR	3.6	2.6
Arsenic	**13**	16	**34.2**	NR	4.8 JK	**16.1**	NR	**13.4**	7.5
Barium	**410**	410	317	NR	**838**	**623**	NR	**711**	**536**
Beryllium	**4.4**	43	0.72	NR	0.3 J	0.19 J	NR	0.46	0.36
Cadmium	**2.5**	2.5	1.4	NR	1.1	**11.2**	NR	**3.4**	**2.6**
Calcium	NS	NS	23,300	NR	67,400	20,500	NR	31,700	29,700
Chromium, Hexavalent	**1**	1	1.1 U	NR	1.2 UJ	1.2 U	NR	1.1 U	1.1 U
Chromium, Total	NS	NS	25.5	NR	29.4 J	30	NR	28.4	33.3
Cobalt	NS	NS	7.5	NR	5.1 JK	3.2	NR	6.4	5.3
Copper	**50**	280	**198**	NR	**231 J**	**781**	NR	**77.6**	**73.9**
Iron	NS	NS	26,400	NR	12,500	30,800	NR	30,700	19,800
Lead	**63**	400	**1,130**	NR	**353**	**805**	NR	**1,620**	**600**
Magnesium	NS	NS	5,540	NR	6,210 J	2,410	NR	4,260	4,930
Manganese	1,600	2,000	265	NR	209	162	NR	306	266
Mercury	**0.18**	0.3	NR	**1.2 D**	**0.88 J**	**0.72**	NR	**0.74**	**0.49**
Nickel	**30**	320	28	NR	17.7 JK	10.9	NR	**43**	26.4
Potassium	NS	NS	1,120	NR	816 JL	347	NR	1,340	1,320
Selenium	**4**	110	**4.6**	NR	0.91 J	1.2	NR	0.62 J	0.57 J
Silver	**2**	110	0.43	NR	0.56	0.13 J	NR	0.99	0.92
Sodium	NS	NS	329	NR	196	112	NR	500	186
Thallium	NS	NS	0.64	NR	0.068 J	0.14 J	NR	0.2 J	0.16 J
Vanadium	NS	NS	64.8	NR	36.5	26.8	NR	133	72
Zinc	**109**	6,600	**727**	NR	**1,030**	NR	**2,430**	**574**	**553**

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		AKRF Sample ID	RI-SB-04_2-4_20250924		RI-SB-X4_2-4_20250924	RI-SB-04_4-6_20250924		RI-SB-04_6-8_20250924
		Lab Sample ID	460-335651-4		460-335652-11	460-335652-12		460-335652-13
		Sample Date	9/24/2025		9/24/2025	9/24/2025		9/24/2025
		Dilution Factor	1	5	1	1	5	1
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Compound	**UUSCO**	**RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	7,050	NR	5,180	23,600	NR	4,700
Antimony	NS	NS	1.4	NR	2	3.4	NR	36.7
Arsenic	**13**	16	6.4	NR	6.2	**14.6**	NR	**18.1**
Barium	**410**	410	273	NR	266	**471**	NR	173
Beryllium	**4.4**	43	0.39	NR	0.25 J	**4.5**	NR	0.25 J
Cadmium	**2.5**	2.5	0.83 J	NR	1.4	1.1	NR	**30.6**
Calcium	NS	NS	53,300	NR	59,700	NR	101,000 D	30,600
Chromium, Hexavalent	**1**	1	1.1 U	NR	1.1 U	1.1 U	NR	1.2 U
Chromium, Total	NS	NS	15.5	NR	14.8	21.9	NR	36.9
Cobalt	NS	NS	4.4	NR	3.9	4.9	NR	7.2
Copper	**50**	280	**51.6**	NR	39.2	**254**	NR	**158**
Iron	NS	NS	10,700	NR	18,700	25,500	NR	22,200
Lead	**63**	400	**310 J**	NR	**879 J**	**543**	NR	**498**
Magnesium	NS	NS	5,240	NR	4,110	22,900	NR	2,480
Manganese	1,600	2,000	139	NR	242	1,220	NR	286
Mercury	**0.18**	0.3	NR	**2.1 JD**	0.17 JL	**0.3**	NR	**0.48**
Nickel	**30**	320	17.7	NR	15.4	17.4	NR	**52.2**
Potassium	NS	NS	884	NR	670	5,380	NR	846
Selenium	**4**	110	0.3 J	NR	0.25 J	2.9	NR	**6.2**
Silver	**2**	110	0.34 J	NR	0.23 J	0.77	NR	1.3
Sodium	NS	NS	371 J	NR	178 J	820	NR	120
Thallium	NS	NS	0.099 J	NR	0.071 J	0.19 J	NR	0.1 J
Vanadium	NS	NS	54.4	NR	46.3	31.9	NR	37.3
Zinc	**109**	6,600	**217 J**	NR	**607 J**	**530**	NR	**531**

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		AKRF Sample ID	RI-SB-04_8-10_20250924		RI-SB-04_13-15_20250924		RI-SB-05_0-0.5_20250923		RI-SB-05_0.5-2_20250923
		Lab Sample ID	460-335652-14		460-335652-15		460-335525-21		460-335525-22
		Sample Date	9/24/2025		9/24/2025		9/23/2025		9/23/2025
		Dilution Factor	1	2	1	50	1	10	1
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Compound	**UUSCO**	**RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	7,990	NR	7,900	NR	6,310	NR	8,740
Antimony	NS	NS	4	NR	25.4	NR	0.99	NR	0.46 J
Arsenic	**13**	16	11.7	NR	3.4	NR	4.8	NR	5.6
Barium	**410**	410	**762**	NR	341	NR	212	NR	406
Beryllium	**4.4**	43	0.5	NR	0.21 J	NR	0.3 J	NR	0.28 J
Cadmium	**2.5**	2.5	**5.6**	NR	0.51 J	NR	0.74 J	NR	0.99
Calcium	NS	NS	47,100	NR	58,700	NR	7,130	NR	22,600
Chromium, Hexavalent	**1**	1	1.2 U	NR	1.2 U	NR	1 U	NR	0.99 U
Chromium, Total	NS	NS	30.7	NR	804	NR	18.2	NR	35.4
Cobalt	NS	NS	6.7	NR	4.7	NR	5.1	NR	6.1
Copper	**50**	280	**143**	NR	**74.3**	NR	**54.1**	NR	49.9
Iron	NS	NS	NR	55,400 D	9,900	NR	15,000	NR	18,800
Lead	**63**	400	**740**	NR	NR	**16,700 D**	NR	**2,370 D**	**447**
Magnesium	NS	NS	3,780	NR	2,380	NR	2,860	NR	6,750
Manganese	1,600	2,000	329	NR	151	NR	170	NR	245
Mercury	**0.18**	0.3	**0.62**	NR	**0.26**	NR	**0.2**	NR	**0.35**
Nickel	**30**	320	**41.2**	NR	7.6	NR	16.4	NR	23.4
Potassium	NS	NS	911	NR	613	NR	1,250	NR	3,240
Selenium	**4**	110	NR	0.6 JD	0.51 J	NR	0.27 J	NR	0.32 J
Silver	**2**	110	1.8	NR	2	NR	0.25 J	NR	0.38
Sodium	NS	NS	309	NR	851	NR	119	NR	217
Thallium	NS	NS	0.12 J	NR	0.04 J	NR	0.12 J	NR	0.16 J
Vanadium	NS	NS	179	NR	19.4	NR	40.6	NR	72.5
Zinc	**109**	6,600	**989**	NR	**673**	NR	**199**	NR	**298**

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		AKRF Sample ID	RI-SB-05_2-4_20250923		RI-SB-05_4-6_20250923			RI-SB-05_6-8_20250923		RI-SB-05_8-10_20250923	
		Lab Sample ID	460-335525-23		460-335525-24			460-335525-25		460-335525-26	
		Sample Date	9/23/2025		9/23/2025			9/23/2025		9/23/2025	
		Dilution Factor	1		1		10	1		1	
		Unit	mg/kg		mg/kg		mg/kg	mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC Q	CONC	Q	CONC	Q
Aluminum	NS	NS	10,600		2,790		NR	14,300		12,100	
Antimony	NS	NS	0.94	JL	0.3	J	NR	0.28	J	0.32	J
Arsenic	**13**	16	4.4		1.9		NR	2.9		3.5	
Barium	**410**	410	**554**		30.7		NR	**648**		**615**	
Beryllium	**4.4**	43	0.31	J	0.12	J	NR	0.28	J	0.3	J
Cadmium	**2.5**	2.5	1.2		0.18	J	NR	0.66	J	0.79	J
Calcium	NS	NS	39,000		NR		153,000 D	13,700		23,300	
Chromium, Hexavalent	**1**	1	1.2	U	1.1	U	NR	1.2	U	1.4	U
Chromium, Total	NS	NS	28.9		3.7		NR	72.4		70.6	
Cobalt	NS	NS	7.8		1.5		NR	10.5		9.8	
Copper	**50**	280	**101**		6.5		NR	**353**		**99.5**	
Iron	NS	NS	20,200		4,420		NR	26,300		25,000	
Lead	**63**	400	**333**		**122**		NR	**844**		**642**	
Magnesium	NS	NS	7,930		3,320		NR	9,200		7,180	
Manganese	1,600	2,000	268		71.3		NR	246		239	
Mercury	**0.18**	0.3	**0.28**		**0.2**		NR	**0.25**		0.11	
Nickel	**30**	320	25.8		5.3		NR	**39**		**35.3**	
Potassium	NS	NS	4,160		634		NR	8,700		6,380	
Selenium	**4**	110	0.32	J	0.19	J	NR	0.25	J	0.5	J
Silver	**2**	110	0.32	J	0.4	U	NR	0.14	J	0.67	
Sodium	NS	NS	190		55.6	J	NR	276		310	
Thallium	NS	NS	0.2	J	0.4	U	NR	0.29	J	0.25	J
Vanadium	NS	NS	98.1		9		NR	123		119	
Zinc	**109**	6,600	**414**		**241**		NR	**316**		**349**	

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		AKRF Sample ID	RI-SB-05_13-15_20250923			RI-SB-06_0-0.5_20250922	RI-SB-06_0.5-2_20250922	RI-SB-06_2-4_20250922	RI-SB-X2_2-4_20250922
		Lab Sample ID	460-335536-10			460-335428-13	460-335428-16	460-335428-17	460-335428-22
		Sample Date	9/23/2025			9/22/2025	9/22/2025	9/22/2025	9/22/2025
		Dilution Factor	1	5	50	1	1	1	1
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Compound	**UUSCO**	**RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	5,350	NR	NR	6,840	5,740	4,880	5,100
Antimony	NS	NS	1	NR	NR	0.56 J	0.51 J	0.12 J	0.34 J
Arsenic	**13**	16	9.7	NR	NR	3.1	2	1.4	1.4
Barium	**410**	410	NR	NR	**2,720 D**	70.3	69.8	35.6	43.1
Beryllium	**4.4**	43	0.37	NR	NR	0.35	0.31 J	0.3 J	0.31 J
Cadmium	**2.5**	2.5	**4.6**	NR	NR	0.38 J	0.41 J	0.77 U	0.22 J
Calcium	NS	NS	59,300	NR	NR	5,580	4,600	2,170 J	7,230 J
Chromium, Hexavalent	**1**	1	1 U	NR	NR	1.1 U	1 U	1 U	1 U
Chromium, Total	NS	NS	27.4	NR	NR	17	19.4	12.5	12.6
Cobalt	NS	NS	6.1	NR	NR	5.1	5.4	4.6	4.8
Copper	**50**	280	**51**	NR	NR	23.2	19.8	14.3	15.1
Iron	NS	NS	10,500	NR	NR	13,000	13,500	11,600	12,300
Lead	**63**	400	NR	NR	**5,460 D**	**90.4**	61.1	20.9	21.2
Magnesium	NS	NS	4,100	NR	NR	2,810	2,860	1,810 J	3,880
Manganese	1,600	2,000	179	NR	NR	239	223	230	240
Mercury	**0.18**	0.3	NR	**2.1 D**	NR	0.15	0.085	0.054 J	0.12 J
Nickel	**30**	320	12.1	NR	NR	13	13.7	10.1	10.8
Potassium	NS	NS	749	NR	NR	1,280	1,650	1,230	1,400
Selenium	**4**	110	1 J	NR	NR	0.18 J	0.11 J	0.96 U	0.99 U
Silver	**2**	110	0.45	NR	NR	0.084 J	0.32 U	0.31 U	0.32 U
Sodium	NS	NS	127	NR	NR	129	144	130	117
Thallium	NS	NS	0.15 J	NR	NR	0.11 J	0.11 J	0.08 J	0.084 J
Vanadium	NS	NS	19.2	NR	NR	25.9	29.6	20.6	20.8
Zinc	**109**	6,600	NR	NR	**5,790 D**	72.9	58.7	28.8	44.2

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Soil Analytical Results of Metals

		AKRF Sample ID	RI-SB-06_4-6_20250922				RI-SB-06_6-8_20250922				RI-SB-06_8-10_20250922			
		Lab Sample ID	460-335428-18				460-335428-19				460-335428-20			
		Sample Date	9/22/2025				9/22/2025				9/22/2025			
		Dilution Factor	1		3		1		3		1		5	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aluminum	NS	NS	11,100		NR		6,230		NR		3,360		NR	
Antimony	NS	NS	2.3		NR		2.7		NR		3.5		NR	
Arsenic	**13**	16	5.4		NR		6.7		NR		12.4		NR	
Barium	**410**	410	**643**		NR		**902**		NR		**1,010**		NR	
Beryllium	**4.4**	43	0.38		NR		0.32	J	NR		0.26	J	NR	
Cadmium	**2.5**	2.5	0.8		NR		1		NR		1.8		NR	
Calcium	NS	NS	25,500		NR		31,700		NR		23,400		NR	
Chromium, Hexavalent	**1**	1	1	U	NR		1.1	U	NR		1.1	U	NR	
Chromium, Total	NS	NS	28.6		NR		21.2		NR		26.6		NR	
Cobalt	NS	NS	9.2		NR		5.3		NR		4.8		NR	
Copper	**50**	280	36.2		NR		41.1		NR		**92.9**		NR	
Iron	NS	NS	20,500		NR		13,300		NR		30,400		NR	
Lead	**63**	400	**811**		NR		**1,660**		NR		**1,180**		NR	
Magnesium	NS	NS	6,290		NR		3,970		NR		2,260		NR	
Manganese	1,600	2,000	243		NR		225		NR		211		NR	
Mercury	**0.18**	0.3	NR		**0.99**	**D**	NR		**0.89**	**D**	NR		**1.9**	**D**
Nickel	**30**	320	21.2		NR		28.9		NR		22		NR	
Potassium	NS	NS	5,150		NR		1,470		NR		551		NR	
Selenium	**4**	110	0.45	J	NR		0.63	J	NR		0.83	J	NR	
Silver	**2**	110	0.22	J	NR		0.31	J	NR		0.67		NR	
Sodium	NS	NS	337		NR		271		NR		130		NR	
Thallium	NS	NS	0.24	J	NR		0.15	J	NR		0.11	J	NR	
Vanadium	NS	NS	68		NR		188		NR		85.6		NR	
Zinc	**109**	6,600	**361**		NR		**659**		NR		**1,450**		NR	

Table 3
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		AKRF Sample ID	RI-SB-06_13-15_20250922			RI-SB-07_0-0.5_20250924	RI-SB-07_0.5-2_20250924		RI-SB-07_2-4_20250924
		Lab Sample ID	460-335428-21			460-335652-16	460-335652-17		460-335652-18
		Sample Date	9/22/2025			9/24/2025	9/24/2025		9/24/2025
		Dilution Factor	1	3	5	1	1	5	1
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Compound	**UUSCO**	**RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	4,660	NR	NR	7,880	7,580	NR	10,200
Antimony	NS	NS	NR	NR	91.9 D	1.9	10.1	NR	3.9
Arsenic	**13**	16	**17.5**	NR	NR	7.8	11.5	NR	9.3
Barium	**410**	410	**1,070**	NR	NR	317	**413**	NR	**541**
Beryllium	**4.4**	43	0.23 J	NR	NR	0.34	0.57	NR	0.5
Cadmium	**2.5**	2.5	**6.9**	NR	NR	0.79 J	2.3	NR	**7.3**
Calcium	NS	NS	43,400	NR	NR	12,200	31,300	NR	27,200
Chromium, Hexavalent	**1**	1	1.2 U	NR	NR	1.1 U	0.84 J	NR	1.1 U
Chromium, Total	NS	NS	35.2	NR	NR	25	35.2	NR	37.7
Cobalt	NS	NS	8.4	NR	NR	6.2	13.7	NR	9.8
Copper	**50**	280	**111**	NR	NR	46.2	**180**	NR	**249**
Iron	NS	NS	NR	NR	79,100	22,300	NR	59,600 D	26,900
Lead	**63**	400	**1,180**	NR	NR	**250**	**622**	NR	**1,090**
Magnesium	NS	NS	6,020	NR	NR	4,350	5,990	NR	5,630
Manganese	1,600	2,000	465	NR	NR	299	382	NR	280
Mercury	**0.18**	0.3	NR	**1.5 D**	NR	**0.25**	**0.3**	NR	**0.74**
Nickel	**30**	320	**41.5**	NR	NR	19.9	**61**	NR	**39.1**
Potassium	NS	NS	1,200	NR	NR	1,410	1,560	NR	3,570
Selenium	**4**	110	1.4	NR	NR	0.5 J	NR	0.65 JD	0.54 J
Silver	**2**	110	0.78	NR	NR	0.36	0.73	NR	1.4
Sodium	NS	NS	240	NR	NR	131	259	NR	245
Thallium	NS	NS	0.15 J	NR	NR	0.14 J	0.16 J	NR	0.25 J
Vanadium	NS	NS	175	NR	NR	40.5	73.6	NR	212
Zinc	**109**	6,600	NR	NR	**5,510**	**276**	**649**	NR	**733**

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Soil Analytical Results of Metals

		AKRF Sample ID	RI-SB-07_4-6_20250924		RI-SB-07_6-8_20250924	RI-SB-07_8-10_20250924	RI-SB-08_0-0.5_20250922	RI-SB-08_0.5-2_20250922	RI-SB-08_2-4_20250922
		Lab Sample ID	460-335652-19		460-335652-20	460-335652-21	460-335428-7	460-335429-3	460-335428-9
		Sample Date	9/24/2025		9/24/2025	9/24/2025	9/22/2025	9/22/2025	9/22/2025
		Dilution Factor	1	10	1	1	1	1	1
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Compound	**UUSCO**	**RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	7,680	NR	7,440	5,900	6,380	5,510	12,300
Antimony	NS	NS	5.2	NR	4.5	1.8	0.52 J	0.21 J	0.85
Arsenic	**13**	16	10.6	NR	7.5	**20**	3.1	1.6	4.3
Barium	**410**	410	**506**	NR	**544**	**641**	62.3	76.3	237
Beryllium	**4.4**	43	0.32 J	NR	0.41	0.32 J	0.41	0.36	0.58
Cadmium	**2.5**	2.5	2.1	NR	**3.1**	0.77 J	0.57 J	0.24 J	**5.3**
Calcium	NS	NS	73,700	NR	37,600	67,300	2,960	3,670	19,100
Chromium, Hexavalent	**1**	1	0.88 J	NR	1 U	1.2 U	1 U	1 U	1 U
Chromium, Total	NS	NS	53.9	NR	31.7	16.2	20	14	27
Cobalt	NS	NS	10.1	NR	6.8	4.5	5.5	5.2	9.1
Copper	**50**	280	**196**	NR	**119**	44.7	21.2	16.6	34.2
Iron	NS	NS	24,100	NR	25,900	12,300	15,100	13,400	17,600
Lead	**63**	400	**1,070**	NR	**913**	**476**	**106**	**71.5**	**265**
Magnesium	NS	NS	6,040	NR	7,150	7,780	2,680	2,280	15,100
Manganese	1,600	2,000	341	NR	236	216	274	270	356
Mercury	**0.18**	0.3	**0.76**	NR	**0.46**	**0.34**	0.07	0.082	0.15
Nickel	**30**	320	**159**	NR	**32.5**	26.8	13	10.8	21
Potassium	NS	NS	946	NR	1,800	999	1,590	1,430	2,290
Selenium	**4**	110	0.88 J	NR	0.55 J	1.9	0.15 J	0.11 J	0.17 J
Silver	**2**	110	**4.4**	NR	**4.1**	0.49	0.31 U	0.32 U	0.11 J
Sodium	NS	NS	472	NR	200	203	117	173	149
Thallium	NS	NS	0.11 J	NR	0.15 J	0.23 J	0.12 J	0.1 J	0.23 J
Vanadium	NS	NS	NR	176 D	161	158	26.7	24.7	35.8
Zinc	**109**	6,600	**853**	NR	**634**	**522**	69.3	57.3	**211**

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		AKRF Sample ID	RI-SB-08_4-6_20250922		RI-SB-08_6-8_20250922		RI-SB-08_8-10_20250922		RI-SB-08_10-12_20250926		RI-SB-09_0-0.5_20250923		RI-SB-09_0.5-2_20250923		RI-SB-09_2-4_20250923	
		Lab Sample ID	460-335428-10		460-335428-11		460-335428-12		460-335823-3		460-335525-14		460-335525-15		460-335525-16	
		Sample Date	9/22/2025		9/22/2025		9/22/2025		9/26/2025		9/23/2025		9/23/2025		9/23/2025	
		Dilution Factor	1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aluminum	NS	NS	7,040		7,530		7,120		7,820		7,880		15,900		15,400	
Antimony	NS	NS	4.9		1.5		7.1	JL	0.35	J	0.45	J	0.72	J	1.9	J
Arsenic	**13**	16	6.3		1.8		5.8		4		2.4		2.6		**13.5**	**J**
Barium	**410**	410	**666**		118		**1,380**		166		172		**455**		**421**	
Beryllium	**4.4**	43	0.35		0.59		0.42		0.39	J	0.24	J	0.24	J	0.6	
Cadmium	**2.5**	2.5	**3.4**		0.44	J	0.95		0.33	J	0.63	J	0.53	J	**10.4**	**J**
Calcium	NS	NS	33,700		33,100		38,800		8,680		48,300		6,750		12,200	
Chromium, Hexavalent	**1**	1	1.1	U	1	U	1.1	U	1.1	U	1.1	U	0.99	U	1	U
Chromium, Total	NS	NS	31.1		14.1		26.3	JL	16.6		32.8		112		80.9	
Cobalt	NS	NS	8		3.6		5.6		4.6		5.6		11.2		12.2	
Copper	**50**	280	**89.1**		14.7		**53.5**		25		**61.3**		39.6		**86.1**	
Iron	NS	NS	21,600		8,450		15,100		16,800		13,300		24,900		33,700	
Lead	**63**	400	**792**		54.2		**384**		**151**		**91.6**		**158**		**1,220**	**J**
Magnesium	NS	NS	3,950		7,330		12,900		2,600		7,260		11,500		12,200	
Manganese	1,600	2,000	222		367		249		109		269		246		314	
Mercury	**0.18**	0.3	**0.73**		0.046		**0.26**		**0.19**		0.14		0.14		**0.74**	
Nickel	**30**	320	**36.2**		9		**57.2**		12.5		19		**57.1**		**49.1**	
Potassium	NS	NS	2,480		1,360		1,420	JL	1,520		2,730		9,440		7,670	
Selenium	**4**	110	0.71	J	0.31	J	0.51	J	0.27	J	0.15	J	0.16	J	0.43	J
Silver	**2**	110	0.48		0.32	U	0.19	J	0.13	J	0.087	J	0.39		0.39	
Sodium	NS	NS	168		164		170		109		129		277		319	
Thallium	NS	NS	0.18	J	0.082	J	0.21	J	0.085	J	0.13	J	0.36		0.46	
Vanadium	NS	NS	149		20.6		389		31.2		28		67.1		72.7	
Zinc	**109**	6,600	**619**		81.4		**347**		**175**		94.7		**153**		**228**	**J**

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		AKRF Sample ID	RI-SB-X5_2-4_20250923		RI-SB-09_4-6_20250923		RI-SB-09_6-8_20250923		RI-SB-09_8-10_20250923		RI-SB-09_10-12_20250926		RI-SB-10_0-0.5_20250925		RI-SB-10_0.5-2_20250925	
		Lab Sample ID	460-335536-12		460-335525-17		460-335525-18		460-335525-19		460-335823-4		460-335757-26		460-335757-27	
		Sample Date	9/23/2025		9/23/2025		9/23/2025		9/23/2025		9/26/2025		9/25/2025		9/25/2025	
		Dilution Factor	1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aluminum	NS	NS	16,900		21,100		20,600		11,200		13,600		4,280		7,560	
Antimony	NS	NS	0.36	J	0.72	J	0.34	J	0.15	J	1.1	U	0.98	U	0.14	J
Arsenic	**13**	16	2.8	J	7.7		2.2		0.71	J	2.9		1.1		3.5	
Barium	**410**	410	**608**		**615**		**595**		286		28.4		37.7		125	
Beryllium	**4.4**	43	0.63		0.47		0.25	J	0.092	J	0.47		0.29	J	0.35	J
Cadmium	**2.5**	2.5	1.5	J	**4.8**		**16.4**		2.2		1.1	U	0.98	U	**2.9**	
Calcium	NS	NS	8,390		5,230		3,870		5,020		654		2,190		7,680	
Chromium, Hexavalent	**1**	1	0.99	U	1	U	1	U	0.99	U	1.2	U	1	U	1.1	U
Chromium, Total	NS	NS	63.2		107		93.4		60.8		20.1		10.6		29.8	
Cobalt	NS	NS	17.4		14.4		13.6		11.1		5		4.5		6.2	
Copper	**50**	280	**126**		36.8		27.6		23.4		33.1		14.1		24.7	
Iron	NS	NS	32,400		37,300		35,600		18,200		19,700		11,000		15,500	
Lead	**63**	400	**212**	**J**	**464**		**134**		18.9		30.2		36.1		**321**	
Magnesium	NS	NS	10,300		13,800		12,600		9,870		2,560		1,800		3,910	
Manganese	1,600	2,000	334		275		409		185		68.7		200		229	
Mercury	**0.18**	0.3	0.17		**0.21**		0.094		0.052		0.023		0.12		0.068	
Nickel	**30**	320	**43.5**		**60.3**		**44.4**		**32.9**		13		9.3		18.6	
Potassium	NS	NS	9,720		11,900		14,300		6,580		759		1,330		2,640	
Selenium	**4**	110	0.22	J	0.24	J	0.21	J	0.15	J	0.31	J	1.2	U	0.15	J
Silver	**2**	110	0.5		0.12	J	0.12	J	0.32	U	0.43	U	0.39	U	0.38	U
Sodium	NS	NS	322		366		248		506		260		528		219	
Thallium	NS	NS	0.42		0.52		0.6		0.22	J	0.13	J	0.068	J	0.15	J
Vanadium	NS	NS	79.5		79		75.7		42.3		27.9		17.5		29.4	
Zinc	**109**	6,600	**531**	**J**	**169**		**120**		46.2		36.5		28.4		105	

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		AKRF Sample ID	RI-SB-10_2-4_20250925		RI-SB-10_4-6_20250925		RI-SB-10_6-8_20250925		RI-SB-10_8-10_20250925		RI-SB-10_10-12_20250926		RI-SB-11_0-0.5_20250924		RI-SB-11_0.5-2_20250924	
		Lab Sample ID	460-335757-28		460-335757-29		460-335757-30		460-335757-31		460-335823-5		460-335652-33		460-335652-34	
		Sample Date	9/25/2025		9/25/2025		9/25/2025		9/25/2025		9/26/2025		9/24/2025		9/24/2025	
		Dilution Factor	1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aluminum	NS	NS	11,600		12,000		8,900		17,700		20,500		6,190		7,790	
Antimony	NS	NS	0.74	J	0.96	U	0.96	U	0.23	J	0.29	J	0.71	J	0.66	J
Arsenic	**13**	16	7.4		1.9		3		11.6		7.7		7.5		6.6	
Barium	**410**	410	373		233		177		211		159		70.9		75.1	
Beryllium	**4.4**	43	0.55		0.3	J	0.32	J	0.72		0.8		0.47		0.44	
Cadmium	**2.5**	2.5	0.71	J	0.89	J	**3.5**		0.15	J	1.2	U	0.62	J	0.65	J
Calcium	NS	NS	15,100		5,710		4,660		1,800		1,620		1,980		1,410	
Chromium, Hexavalent	**1**	1	1.1	U	1.1	U	1	U	1.3	U	1.3	U	1.2	U	1.1	U
Chromium, Total	NS	NS	30.5		81.1		39.1		30.1		31.3		24.3		20.5	
Cobalt	NS	NS	10.2		10.2		7.9		8.5		10.3		5		5.7	
Copper	**50**	280	**69.8**		34.2		**339**		40.8		37.5		42		27.1	
Iron	NS	NS	30,200		22,400		18,300		23,800		25,100		20,200		17,400	
Lead	**63**	400	**464**		**76.6**		**162**		**307**		**209**		**111**		**129**	
Magnesium	NS	NS	5,500		7,030		5,270		4,730		4,920		1,530		1,860	
Manganese	1,600	2,000	264		225		218		248		237		201		288	
Mercury	**0.18**	0.3	0.17		0.068		0.14		**0.19**		0.05		0.082		0.11	
Nickel	**30**	320	24.7		**31.8**		25		20.6		22.4		12.1		14.5	
Potassium	NS	NS	4,200		6,570		4,200		1,930		1,890		881		973	
Selenium	**4**	110	0.63	J	0.2	J	0.14	J	0.95	J	0.99	J	0.28	J	0.29	J
Silver	**2**	110	0.28	J	0.38	U	0.098	J	0.23	J	0.17	J	0.16	J	0.15	J
Sodium	NS	NS	455		647		313		279		203		56.6	J	72.3	J
Thallium	NS	NS	0.29	J	0.24	J	0.19	J	0.28	J	0.34	J	0.092	J	0.12	J
Vanadium	NS	NS	48.6		51.7		34.6		44.8		47.8		48.6		36.4	
Zinc	**109**	6,600	**289**		79.4		**301**		102		101		94.6		93.8	

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		AKRF Sample ID	RI-SB-11_2-4_20250924		RI-SB-11_4-6_20250924		RI-SB-11_6-8_20250924		RI-SB-11_8-10_20250924		RI-SB-11_10-12_20250926		RI-SB-12_0-0.5_20250925		RI-SB-12_0.5-2_20250925	
		Lab Sample ID	460-335652-35		460-335652-36		460-335652-37		460-335652-38		460-335823-6		460-335757-20		460-335757-21	
		Sample Date	9/24/2025		9/24/2025		9/24/2025		9/24/2025		9/26/2025		9/25/2025		9/25/2025	
		Dilution Factor	1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aluminum	NS	NS	10,300		6,810		8,140		14,700	JK	8,700		7,590		8,750	
Antimony	NS	NS	0.97		0.73	J	1.2		4.8	JK	0.29	J	0.31	J	0.97	U
Arsenic	**13**	16	4.5		4.6		4.9		6	JK	5.7		8.3		1.5	
Barium	**410**	410	299		96.6		205		**539**		238		71		122	
Beryllium	**4.4**	43	0.47		0.39		0.37		0.34		0.41		0.38	J	0.23	J
Cadmium	**2.5**	2.5	1.4		**5.1**		**6.7**		1.4	JK	0.34	J	0.37	J	0.17	J
Calcium	NS	NS	8,330		7,520		29,800		25,900		24,600		2,510		3,180	
Chromium, Hexavalent	**1**	1	1.2	U	1	U	1.1	U	0.45	J	1.1	U	1.1	U	1	U
Chromium, Total	NS	NS	46.2		22.9		29.3		76.5	JK	21.5		17		17.3	
Cobalt	NS	NS	7.8		5.8		6.1		10.6	JK	8.4		4.6		7.4	
Copper	**50**	280	39.1		32.4		**51.8**		**66.2**	**JK**	**65.2**		29		9.2	
Iron	NS	NS	18,500		16,500		15,200		29,400		23,700		15,700		18,100	
Lead	**63**	400	**382**		**213**		**731**		**435**		**274**		**87.1**		39.7	
Magnesium	NS	NS	4,040		4,270		8,250		10,300	JK	4,230		1,790		4,060	
Manganese	1,600	2,000	316		247		373		330	JK	225		231		406	
Mercury	**0.18**	0.3	0.16		0.14		0.13		**0.78**	**JK**	**0.21**		0.17		0.18	
Nickel	**30**	320	25.4		15.1		21.3		**44.1**	**JK**	22.2		11.8		14.5	
Potassium	NS	NS	1,630		1,420		1,990		6,340	JK	3,520		1,040		6,120	
Selenium	**4**	110	0.27	J	0.2	J	0.16	J	0.25	J	0.27	J	0.37	J	1.2	U
Silver	**2**	110	0.12	J	0.17	J	0.2	J	0.31	J	0.096	J	0.12	J	0.39	U
Sodium	NS	NS	117		102		143		257	JK	176		203		103	
Thallium	NS	NS	0.16	J	0.12	J	0.15	J	0.27	J	0.28	J	0.097	J	0.27	J
Vanadium	NS	NS	37.5		34.1		47.1		60.3	JK	82.2		24.2		23.7	
Zinc	**109**	6,600	**187**		**134**		**252**		**321**	**JK**	**222**		98		73	

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Soil Analytical Results of Metals

		AKRF Sample ID	RI-SB-12_2-4_20250925		RI-SB-12_4-6_20250925		RI-SB-12_6-8_20250925		RI-SB-12_8-10_20250925		RI-SB-12_10-12_20250926		RI-SB-13_0-0.5_20250925		RI-SB-13_0.5-2_20250925	
		Lab Sample ID	460-335757-22		460-335757-23		460-335757-24		460-335757-25		460-335823-7		460-335757-11		460-335757-12	
		Sample Date	9/25/2025		9/25/2025		9/25/2025		9/25/2025		9/26/2025		9/25/2025		9/25/2025	
		Dilution Factor	1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aluminum	NS	NS	8,670		6,340		16,900		8,130		16,300		4,510		18,800	
Antimony	NS	NS	0.28	J	0.39	J	0.98	U	0.21	J	0.28	J	0.99	U	0.98	U
Arsenic	**13**	16	9.1		3		4.4		2.1		4.1		2.1		2.1	
Barium	**410**	410	71.5		226		**598**		156		396		48.2		**539**	
Beryllium	**4.4**	43	0.41		0.32	J	0.33	J	0.28	J	0.36	J	0.29	J	0.24	J
Cadmium	**2.5**	2.5	0.36	J	0.88	J	**7.2**		2.4		0.64	J	0.24	J	0.26	J
Calcium	NS	NS	1,870		5,670		7,600		13,800		6,550		2,830		9,780	
Chromium, Hexavalent	**1**	1	1.1	U	1	U	1.1	U	1	U	1	U	1	U	1.1	U
Chromium, Total	NS	NS	17.8		25.5		96.2		35.1		78.9		12.6		121	
Cobalt	NS	NS	4.7		6.4		13.9		7.3		12.3		4.3		12.6	
Copper	**50**	280	32.1		42.1		**52.2**		24		**50.9**		18.6		23	
Iron	NS	NS	12,200		17,600		26,900		17,000		29,100		14,600		32,200	
Lead	**63**	400	**98.9**		**176**		**184**		**668**		**151**		43.6		**73**	
Magnesium	NS	NS	1,810		3,410		11,600		4,960		9,700		1,860		14,500	
Manganese	1,600	2,000	240		274		254		227		303		228		254	
Mercury	**0.18**	0.3	**0.28**		0.088		0.11		0.044		0.16		0.15		0.059	
Nickel	**30**	320	12.5		18.7		**57.2**		20.9		**42.1**		9.5		**61.8**	
Potassium	NS	NS	817		2,260		8,090		3,090		7,200		1,220		11,600	
Selenium	**4**	110	0.35	J	0.2	J	0.27	J	0.15	J	0.23	J	1.2	U	0.2	J
Silver	**2**	110	0.13	J	0.14	J	0.13	J	0.14	J	0.11	J	0.4	U	0.39	U
Sodium	NS	NS	414		402		368		202		248		168		431	
Thallium	NS	NS	0.1	J	0.12	J	0.34	J	0.14	J	0.32	J	0.096	J	0.45	
Vanadium	NS	NS	24.5		32.8		55.5		31.7		51.5		22.2		80.4	
Zinc	**109**	6,600	84.2		**209**		**156**		94.5		**287**		55.2		**114**	

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		AKRF Sample ID	RI-SB-13_2-4_20250925		RI-SB-X6_2-4_20250925		RI-SB-13_4-6_20250925		RI-SB-13_6-8_20250925		RI-SB-13_8-10_20250925				RI-SB-13_10-12_20250926	
		Lab Sample ID	460-335757-15		460-335757-19		460-335757-16		460-335757-17		460-335757-18				460-335823-8	
		Sample Date	9/25/2025		9/25/2025		9/25/2025		9/25/2025		9/25/2025				9/26/2025	
		Dilution Factor	1		1		1		1		1		10		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aluminum	NS	NS	16,300		18,700		15,700		11,700		2,780		NR		11,800	
Antimony	NS	NS	1	U	0.57	J	0.21	J	1	U	0.3	J	NR		1.1	U
Arsenic	**13**	16	1.7	J	**70.4**	**J**	5.2		3.1		10.9		NR		3.5	
Barium	**410**	410	283		**498**		125		147		NR		**3,170**	**D**	156	
Beryllium	**4.4**	43	0.53	J	2.1	J	0.56		0.41		0.15	J	NR		0.58	
Cadmium	**2.5**	2.5	0.13	J	0.5	J	0.16	J	0.16	J	**2.9**		NR		0.44	J
Calcium	NS	NS	11,300	J	28,700	J	12,300		22,700		101,000		NR		27,400	
Chromium, Hexavalent	**1**	1	1.1	U	1.7	U	1.2	U	1.1	U	1.2	U	NR		1.1	U
Chromium, Total	NS	NS	79		54.7		39.7		25.6		154		NR		24.8	
Cobalt	NS	NS	14		8.5		9.5		8.6		8.7		NR		12	
Copper	**50**	280	24.9		31.6		32.6		27.8		19.1		NR		40.6	
Iron	NS	NS	32,900		52,200		26,400		19,200		13,100		NR		22,000	
Lead	**63**	400	50.6		30		**204**		**177**		**1,980**		NR		**180**	
Magnesium	NS	NS	11,500		5,520		6,560		7,190		19,200		NR		7,870	
Manganese	1,600	2,000	353		200		239		238		174		NR		560	
Mercury	**0.18**	0.3	**0.19**		**0.26**		0.11		0.13		**0.22**		NR		0.15	
Nickel	**30**	320	**39.8**		**50.2**		**37**		17.3		**149**		NR		21.5	
Potassium	NS	NS	8,680	J	1,680	J	2,780		3,750		233		NR		3,670	
Selenium	**4**	110	0.29	J	0.84	J	0.3	J	0.17	J	0.16	J	NR		0.23	J
Silver	**2**	110	0.41	U	0.22	J	0.13	J	0.41	U	0.31	J	NR		0.15	J
Sodium	NS	NS	282	J	786	J	127		1,230		122		NR		149	
Thallium	NS	NS	0.37	J	0.79	J	0.21	J	0.23	J	0.44	U	NR		0.24	J
Vanadium	NS	NS	56.7	J	259	J	35.9		28.9		10.3		NR		35	
Zinc	**109**	6,600	88.4		**163**		**122**		101		**1,160**		NR		**205**	

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		AKRF Sample ID	RI-SB-14_0-0.5_20250922		RI-SB-14_0.5-2_20250922		RI-SB-14_2-4_20250922		RI-SB-14_4-6_20250922		RI-SB-14_6-8_20250922		RI-SB-14_8-10_20250922		RI-SB-14_10-12_20250926	
		Lab Sample ID	460-335428-23		460-335428-24		460-335428-25		460-335428-26		460-335428-27		460-335428-28		460-335823-9	
		Sample Date	9/22/2025		9/22/2025		9/22/2025		9/22/2025		9/22/2025		9/22/2025		9/26/2025	
		Dilution Factor	1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aluminum	NS	NS	16,000		11,500		11,400		12,200		9,980		7,370		10,700	
Antimony	NS	NS	1.1		1.8		1.6		2		1.6		0.61	J	0.6	J
Arsenic	**13**	16	3.1		3.6		8.6		5.7		3.5		2.8		4.3	
Barium	**410**	410	382		167		160		236		312		72.2		177	
Beryllium	**4.4**	43	0.32		0.31		0.4		0.44		0.32	J	0.34	J	0.37	J
Cadmium	**2.5**	2.5	0.36	J	0.37	J	0.37	J	0.62	J	0.42	J	0.15	J	0.63	J
Calcium	NS	NS	8,540		23,600		19,100		26,200		18,300		42,100		18,600	
Chromium, Hexavalent	**1**	1	1.1	U	1	U	1.1	U	1.1	U	1.1	U	1.2	U	1.1	U
Chromium, Total	NS	NS	90.1		37.5		38		51		38.6		20.7		44.8	
Cobalt	NS	NS	12.1		8.2		9.2		8.7		7.6		4.4		8.8	
Copper	**50**	280	31.2		23.4		35.9		38.1		23.9		17		32.8	
Iron	NS	NS	25,000		17,900		41,700		22,300		19,200		37,200		19,000	
Lead	**63**	400	**166**		**213**		**124**		**252**		**347**		**86**		**396**	
Magnesium	NS	NS	10,900		5,540		4,360		6,600		5,570		3,040		8,190	
Manganese	1,600	2,000	325		405		410		359		275		300		280	
Mercury	**0.18**	0.3	**0.24**		0.12		0.089		**0.2**		0.15		0.067		0.12	
Nickel	**30**	320	**45.9**		21.7		23		**30.5**		22.4		10.4		**32.5**	
Potassium	NS	NS	6,940		2,990		3,630		3,340		3,540		1,700		3,480	
Selenium	**4**	110	0.24	J	0.21	J	0.41	J	0.35	J	0.24	J	0.14	J	0.29	J
Silver	**2**	110	0.15	J	0.31	U	0.35	U	0.4		0.093	J	0.095	J	0.11	J
Sodium	NS	NS	189		107		223		197		174		216		152	
Thallium	NS	NS	0.29	J	0.17	J	0.18	J	0.2	J	0.17	J	0.081	J	0.21	J
Vanadium	NS	NS	53.9		37.7		33.9		45.5		32.2		18.8		36.7	
Zinc	**109**	6,600	**132**		102		**545**		**213**		**152**		87.5		**142**	

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		AKRF Sample ID	RI-SB-15_0-0.5_20250922		RI-SB-15_0.5-2_20250922		RI-SB-15_2-4_20250922		RI-SB-X3_2-4_20250922
		Lab Sample ID	460-335428-29		460-335428-30		460-335428-31		460-335429-15
		Sample Date	9/22/2025		9/22/2025		9/22/2025		9/22/2025
		Dilution Factor	1	5	1	5	1	60	1
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Compound	**UUSCO**	**RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	8,780	NR	7,530	NR	8,150	NR	10,900
Antimony	NS	NS	3.1	NR	1	NR	1.4	NR	1.9
Arsenic	**13**	16	10.4	NR	4.4	NR	4.4	NR	4
Barium	**410**	410	342	NR	116	NR	193	NR	346
Beryllium	**4.4**	43	0.56	NR	0.37	NR	0.45	NR	0.34
Cadmium	**2.5**	2.5	**7.6**	NR	0.59 J	NR	0.81 J	NR	1.1
Calcium	NS	NS	16,900	NR	4,210	NR	22,500	NR	23,100
Chromium, Hexavalent	**1**	1	**1.1**	NR	1 U	NR	1 U	NR	1 U
Chromium, Total	NS	NS	29.9	NR	16.7	NR	22.3	NR	26.9
Cobalt	NS	NS	8.8	NR	4.4	NR	6.1	NR	8.9
Copper	**50**	280	**98.6**	NR	31.3	NR	40.2	NR	**73.8**
Iron	NS	NS	NR	52,200 D	11,600	NR	15,300	NR	28,800
Lead	**63**	400	**433**	NR	**157**	NR	**222**	NR	**309**
Magnesium	NS	NS	4,980	NR	2,840	NR	4,250	NR	5,610
Manganese	1,600	2,000	340	NR	249	NR	251	NR	324
Mercury	**0.18**	0.3	**0.86**	NR	NR	**1.9 D**	NR	**24.4 D**	**0.48 JL**
Nickel	**30**	320	28.2	NR	13	NR	18.1	NR	24.3
Potassium	NS	NS	1,860	NR	1,100	NR	1,860 J	NR	4,510 J
Selenium	**4**	110	0.33 J	NR	0.33 J	NR	0.29 J	NR	0.33 J
Silver	**2**	110	0.62	NR	0.2 J	NR	0.21 J	NR	0.37
Sodium	NS	NS	147	NR	90.1	NR	165 J	NR	331 J
Thallium	NS	NS	0.17 J	NR	0.11 J	NR	0.14 J	NR	0.23 J
Vanadium	NS	NS	83	NR	29.8	NR	38.7	NR	62.6
Zinc	**109**	6,600	**1,200**	NR	**143**	NR	**218**	NR	**308**

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Soil Analytical Results of Metals

		AKRF Sample ID	RI-SB-15_4-6_20250922		RI-SB-15_6-8_20250922	RI-SB-15_8-10_20250922	RI-SB-15_10-12_20250926	RI-SB-16_0-0.5_20250922	RI-SB-16_0.5-2_20250922
		Lab Sample ID	460-335428-32		460-335428-33	460-335428-34	460-335823-10	460-335428-1	460-335428-2
		Sample Date	9/22/2025		9/22/2025	9/22/2025	9/26/2025	9/22/2025	9/22/2025
		Dilution Factor	1	5	1	1	1	1	1
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Compound	**UUSCO**	**RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	11,100	NR	9,810	12,800	14,300	7,680	4,650
Antimony	NS	NS	1.2	NR	3.3	1.1 J	1.1 U	0.74 J	0.35 J
Arsenic	**13**	16	5.5	NR	7.6	4.3	4.1	4.1	1.5
Barium	**410**	410	231	NR	**540**	195	57.5	91.4	58.6
Beryllium	**4.4**	43	0.33	NR	0.48	0.51	0.57	0.38	0.28 J
Cadmium	**2.5**	2.5	0.79	NR	1.5	0.68 J	0.13 J	0.77 J	0.91
Calcium	NS	NS	47,400	NR	36,200	47,200	1,170	2,660	2,800
Chromium, Hexavalent	**1**	1	1 U	NR	1.1 U	1.6 U	1.2 U	1 U	1 U
Chromium, Total	NS	NS	28.7	NR	29.9	59.9	26.3	16.6	13.1
Cobalt	NS	NS	10.8	NR	7.2	9.7	6.7	5.1	4.2
Copper	**50**	280	**57**	NR	**112**	47.5	27.4	28.5	19
Iron	NS	NS	NR	52,600 D	22,700	24,200	20,700	13,800	11,600
Lead	**63**	400	**135**	NR	**537**	**263**	26.8	**132**	57.6
Magnesium	NS	NS	7,370	NR	6,880	11,900	3,690	2,790	2,190
Manganese	1,600	2,000	432	NR	297	451	108	253	168
Mercury	**0.18**	0.3	0.15	NR	**0.82**	**0.22**	0.051	0.17	0.049
Nickel	**30**	320	24.7	NR	**30.2**	**32.8**	16.8	12.9	10
Potassium	NS	NS	5,930	NR	2,140	3,520	1,370	1,350	1,410
Selenium	**4**	110	0.34 J	NR	0.46 J	0.21 J	0.39 J	0.25 J	0.13 J
Silver	**2**	110	0.12 J	NR	0.74	0.13 J	0.43 U	0.13 J	0.3 U
Sodium	NS	NS	202	NR	251	233	195	117	126
Thallium	NS	NS	0.27 J	NR	0.19 J	0.21 J	0.14 J	0.12 J	0.097 J
Vanadium	NS	NS	47.7	NR	81	49.6	36	28.6	25.1
Zinc	**109**	6,600	**796**	NR	**581**	**183**	77.7	**113**	69.2

Table 3
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1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Metals

		AKRF Sample ID	RI-SB-16_2-4_20250922		RI-SB-16_4-6_20250922		RI-SB-16_4-6_20250922		RI-SB-16_6-8_20250922		RI-SB-16_8-10_20250922		RI-SB-16_10-12_20250926		RI-SB-17_0-2_20250923	
		Lab Sample ID	460-335428-3		460-335428-4		460-335428-4		460-335428-5		460-335428-6		460-335827-7		460-335536-1	
		Sample Date	9/22/2025		9/22/2025		9/22/2025		9/22/2025		9/22/2025		9/26/2025		9/23/2025	
		Dilution Factor	1		1		5		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aluminum	NS	NS	7,170		21,200		NR		6,410		17,400		11,600		6,600	
Antimony	NS	NS	1.3		2.4		NR		3		0.16	J	0.21	J	1.5	
Arsenic	**13**	16	2.9		4.8		NR		3.7		1		4.7		3.3	
Barium	**410**	410	172		**747**		NR		227		**508**		172		169	
Beryllium	**4.4**	43	0.37		0.4		NR		0.42		0.22	J	0.43		4.4	
Cadmium	**2.5**	2.5	2.1		**26.1**		NR		**11.5**		1.8		1.3		0.53	J
Calcium	NS	NS	7,730		11,600		NR		6,370		4,830		3,430		29,400	
Chromium, Hexavalent	**1**	1	1	U	1	U	NR		1	U	**2.1**		1.2	U	1	U
Chromium, Total	NS	NS	20.9		129		NR		24		110		40.1		42.4	
Cobalt	NS	NS	6.2		16.8		NR		6		12.8		5.6		21	
Copper	**50**	280	**50.7**		**75**		NR		**66.4**		23.3		17		**187**	
Iron	NS	NS	17,800		NR		49,200	D	19,700		27,200		18,300		15,400	
Lead	**63**	400	**329**		**848**		NR		**689**		23		**112**		**238**	
Magnesium	NS	NS	4,660		16,100		NR		3,070		13,300		2,520		4,430	
Manganese	1,600	2,000	208		338		NR		254		279		184		212	
Mercury	**0.18**	0.3	0.17		**0.26**		NR		**0.25**		0.041		0.15		0.15	
Nickel	**30**	320	18.3		**75.6**		NR		22		**54.1**		12.5		**38.1**	
Potassium	NS	NS	2,270		12,400		NR		1,620		10,100		889		1,570	
Selenium	**4**	110	0.23	J	0.44	J	NR		0.25	J	0.11	J	0.38	J	0.26	J
Silver	**2**	110	0.14	J	0.22	J	NR		0.26	J	0.3	U	0.42	U	0.11	J
Sodium	NS	NS	196		377		NR		157		253		138		742	
Thallium	NS	NS	0.14	J	0.49		NR		0.12	J	0.37		0.13	J	0.068	J
Vanadium	NS	NS	41.6		145		NR		63.9		62.3		35		22.5	
Zinc	**109**	6,600	**243**		**464**		NR		**380**		91		**355**		**1,210**	

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Soil Analytical Results of Metals

		AKRF Sample ID	RI-SB-17_2-4_20250923		RI-SB-17_4-6_20250923		RI-SB-17_6-8_20250923			RI-SB-17_8-10_20250923			RI-SB-18_0-0.5_20250925	
		Lab Sample ID	460-335525-2		460-335525-3		460-335525-4			460-335525-5			460-335757-32	
		Sample Date	9/23/2025		9/23/2025		9/23/2025			9/23/2025			9/25/2025	
		Dilution Factor	1		1		1	10		1	5		1	
		Unit	mg/kg		mg/kg		mg/kg	mg/kg		mg/kg	mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC Q	CONC	Q	CONC Q	CONC	Q	CONC	Q
Aluminum	NS	NS	5,520		6,700		5,350	NR		7,050	NR		7,890	
Antimony	NS	NS	1.2		11.2		9.8	NR		5 JL	NR		0.2 J	
Arsenic	**13**	16	3.1		**23.7**		7.2	NR		7.2	NR		2.3	
Barium	**410**	410	178		**1,200**		NR	**1,800 D**		227	NR		122	
Beryllium	**4.4**	43	3.8		0.52		0.26 J	NR		**5.2 J**	NR		0.23 J	
Cadmium	**2.5**	2.5	1.1		1.3		**5.1**	NR		2.4	NR		0.32 J	
Calcium	NS	NS	69,300		27,700		77,200	NR		37,800 J	NR		18,800	
Chromium, Hexavalent	**1**	1	1.3	U	1.2	U	1.1 U	NR		1.1 U	NR		1 U	
Chromium, Total	NS	NS	34.3		30.4		18.8	NR		46.4	NR		19.5	
Cobalt	NS	NS	19.3		7.5		4.3	NR		21.1 J	NR		5.9	
Copper	**50**	280	**158**		**136**		23.8	NR		**209**	NR		25	
Iron	NS	NS	15,200		44,000		10,600	NR		30,800	NR		15,100	
Lead	**63**	400	**223**		**992**		NR	**3,050 D**		**407**	NR		**70.6**	
Magnesium	NS	NS	3,490		1,700		3,870	NR		5,170	NR		5,180	
Manganese	1,600	2,000	161		250		224	NR		306	NR		192	
Mercury	**0.18**	0.3	**0.35**		**0.62**		**0.35**	NR		0.085 JL	NR		**0.35**	
Nickel	**30**	320	**161**		23.4		12.1	NR		**45.8**	NR		13.5	
Potassium	NS	NS	2,370		698		779	NR		1,120	NR		3,360	
Selenium	**4**	110	0.36	J	1.7		1.8	NR		0.47 J	NR		0.13 J	
Silver	**2**	110	0.48		0.52		0.18 J	NR		0.24 J	NR		0.4 U	
Sodium	NS	NS	364		361		366	NR		462	NR		352	
Thallium	NS	NS	0.09	J	0.34	J	0.11 J	NR		0.072 J	NR		0.14 J	
Vanadium	NS	NS	175		27.9		31.3	NR		25.9	NR		30.1	
Zinc	**109**	6,600	**1,200**		**773**		**1,610**	NR		NR	**2,540 D**		92.2	

Table 3
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		AKRF Sample ID	RI-SB-18_0.5-2_20250925		RI-SB-18_2-4_20250925		RI-SB-18_4-6_20250925		RI-SB-18_6-8_20250925		RI-SB-18_8-10_20250925		RI-SB-19_0-0.5_20250925		RI-SB-19_2-4_20250925	
		Lab Sample ID	460-335757-33		460-335757-34		460-335757-35		460-335757-38		460-335757-39		460-335757-1		460-335757-2	
		Sample Date	9/25/2025		9/25/2025		9/25/2025		9/25/2025		9/25/2025		9/25/2025		9/25/2025	
		Dilution Factor	1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aluminum	NS	NS	9,790		11,600		13,300		11,500		6,530		8,360		13,800	
Antimony	NS	NS	0.39	J	0.31	J	0.24	J	1.2		0.81	J	0.29	J	0.46	J
Arsenic	**13**	16	4.8		4.7		3		3		5.7		3.8		2.3	
Barium	**410**	410	299		282		**439**		170		202		148		189	
Beryllium	**4.4**	43	0.41		0.45		0.3	J	0.44		0.39	J	0.34	J	0.48	
Cadmium	**2.5**	2.5	1		1.8		0.91	J	0.34	J	1.4		1.3		0.9	J
Calcium	NS	NS	14,300		20,900		16,900		12,900		51,900		8,750		11,700	
Chromium, Hexavalent	**1**	1	1	U	1.1	U	1.1	U	1	U	1.3	U	1.1	U	1.1	U
Chromium, Total	NS	NS	22.6		41.3		74.8		28.5		72.7		16.8		27.6	
Cobalt	NS	NS	8.1		9.3		10.6		8.4		4.4		9.1		13.9	
Copper	**50**	280	44.5		**60.9**		38.9		**138**		**69.3**		33.2		**73**	
Iron	NS	NS	19,200		23,400		24,600		20,800		20,700		14,900		29,900	
Lead	**63**	400	**311**		**231**		**233**		**154**		**591**		**170**		**124**	
Magnesium	NS	NS	6,740		7,940		9,450		5,590		5,360		3,380		6,730	
Manganese	1,600	2,000	215		245		243		247		215		231		235	
Mercury	**0.18**	0.3	0.11		**0.3**		**0.25**		0.12		**0.27**		0.16		0.024	
Nickel	**30**	320	21.3		**55.1**		**44.7**		**30.3**		19.5		13.7		28.7	
Potassium	NS	NS	3,940		4,130		6,470		4,680		1,250		2,050		7,290	
Selenium	**4**	110	0.23	J	0.28	J	0.49	J	0.16	J	0.69	J	0.26	J	0.22	J
Silver	**2**	110	0.2	J	0.23	J	0.14	J	0.18	J	0.54		0.15	J	0.11	J
Sodium	NS	NS	287		218		213		852		300		378		196	
Thallium	NS	NS	0.23	J	0.23	J	0.25	J	0.2	J	0.084	J	0.14	J	0.35	J
Vanadium	NS	NS	43.6		139		62.5		93.6		18.6		27.3		41.6	
Zinc	**109**	6,600	**251**		**287**		**440**		**149**		**384**		**155**		**660**	

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		AKRF Sample ID	RI-SB-19_4-6_20250925		RI-SB-19_6-8_20250925	RI-SB-19_8-10_20250925			RI-SB-20_0-0.5_20250925
		Lab Sample ID	460-335757-3		460-335757-4	460-335757-5			460-335757-6
		Sample Date	9/25/2025		9/25/2025	9/25/2025			9/25/2025
		Dilution Factor	1	5	1	1	2	10	1
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Compound	**UUSCO**	**RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	10,800	NR	6,380	8,940	NR	NR	11,200
Antimony	NS	NS	2.3	NR	1.2	9.3 J	NR	NR	0.44 J
Arsenic	**13**	16	5.9	NR	4.9	8	NR	NR	4.2
Barium	**410**	410	**419**	NR	**1,130**	**1,030 J**	NR	NR	276
Beryllium	**4.4**	43	0.74	NR	0.28 J	0.35 J	NR	NR	0.37 J
Cadmium	**2.5**	2.5	**3.8**	NR	**10.6**	**27.5 J**	NR	NR	1.2
Calcium	NS	NS	25,400	NR	14,600	21,700	NR	NR	41,800
Chromium, Hexavalent	**1**	1	1.1 U	NR	1.2 U	1.2 UJ	NR	NR	1.1 U
Chromium, Total	NS	NS	37.2	NR	12.9	44.1 JL	NR	NR	42.1
Cobalt	NS	NS	45.5	NR	4.6	8.9 JL	NR	NR	6.4
Copper	**50**	280	**430**	NR	**166**	**1,150 J**	NR	NR	**53.8**
Iron	NS	NS	24,300	NR	13,500	41,000	NR	NR	16,900
Lead	**63**	400	**585**	NR	**2,280**	**1,210**	NR	NR	**423**
Magnesium	NS	NS	4,380	NR	2,950	5,900	NR	NR	5,790
Manganese	1,600	2,000	322	NR	168	325	NR	NR	194
Mercury	**0.18**	0.3	**0.19**	NR	**0.22**	NR	**0.87 D**	NR	**0.58**
Nickel	**30**	320	**67**	NR	15	**91.6**	NR	NR	22.9
Potassium	NS	NS	2,010	NR	845	1,230	NR	NR	3,340
Selenium	**4**	110	0.51 J	NR	0.28 J	2.3	NR	NR	0.36 J
Silver	**2**	110	0.26 J	NR	0.25 J	0.59	NR	NR	0.4 J
Sodium	NS	NS	295	NR	262	249	NR	NR	271
Thallium	NS	NS	0.11 J	NR	0.08 J	0.1 J	NR	NR	0.18 J
Vanadium	NS	NS	71.8	NR	38	33.1	NR	NR	39
Zinc	**109**	6,600	NR	**2,850**	**342**	NR	NR	**10,800 D**	**188**

Table 3
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Metals

		AKRF Sample ID	RI-SB-20_4-6_20250925		RI-SB-X7_4-6_20250925		RI-SB-20_6-8_20250925		RI-SB-20_8-10_20250925		RI-SB-22_0-0.5_20251218		RI-SB-22_0.5-2_20251218		RI-SB-X8_0.5-2_20251218	
		Lab Sample ID	460-335757-7		460-335757-10		460-335757-8		460-335757-9		460-341877-1		460-341877-2		460-341877-8	
		Sample Date	9/25/2025		9/25/2025		9/25/2025		9/25/2025		12/18/2025		12/18/2025		12/18/2025	
		Dilution Factor	1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aluminum	NS	NS	3,540	J	22,100	J	12,900		16,900		12,900		10,700		11,500	
Antimony	NS	NS	0.9	J	0.14	J	0.25	JL	0.3	J	0.68	J	4.6	J	0.51	J
Arsenic	**13**	16	2.3		1.9		2.3		2.7		5.5		7.8		4.8	
Barium	**410**	410	32.2	J	**543**	**J**	386		**504**		98.9		**644**	**J**	100	J
Beryllium	**4.4**	43	0.14	J	0.24	J	0.21	J	0.21	J	0.46		0.54		0.45	
Cadmium	**2.5**	2.5	0.15	J	0.2	J	0.43	J	0.53	J	0.72		**10.1**	**J**	0.65	J
Calcium	NS	NS	3,300	J	6,750	J	9,880		12,200		1,930		24,000	J	1,370	J
Chromium, Hexavalent	**1**	1	1	U	1.1	U	1	U	0.47	U	0.77	J	0.98	U	1	U
Chromium, Total	NS	NS	7.6	J	151	J	75.2		105		22.7		33.6		19.3	
Cobalt	NS	NS	2.3	J	16	J	10.1		12.2		5.5		10.1		5.4	
Copper	**50**	280	**87.6**	**J**	35.1	J	39.8	JK	38.3		24.4		**354**	**J**	17.8	J
Iron	NS	NS	8,220	J	33,400	J	20,400		28,700		16,800		26,900		14,900	
Lead	**63**	400	**80.4**		**144**		**172**	**J**	**169**		**95**		**1,260**	**J**	**108**	**J**
Magnesium	NS	NS	903	J	17,100	J	9,540		11,900		2,610		5,730	J	2,540	J
Manganese	1,600	2,000	103	J	267	J	198		201		358		218	J	447	J
Mercury	**0.18**	0.3	**0.44**	**J**	0.15	J	0.12	J	**0.33**		0.094		**0.51**	**J**	0.089	J
Nickel	**30**	320	12.5	J	**69.9**	**J**	**44.8**		**53.8**		15.3		**36.7**	**J**	12.8	J
Potassium	NS	NS	573	J	12,800	J	7,170		9,900		1,230		4,700	J	1,050	J
Selenium	**4**	110	0.13	J	0.15	J	0.15	J	0.17	J	0.52	J	0.49	J	0.45	J
Silver	**2**	110	0.38	U	0.39	U	0.21	J	0.18	J	0.15	J	0.69		0.12	J
Sodium	NS	NS	73.8	J	441	J	294	JK	455		72.7	J	211	J	54.6	J
Thallium	NS	NS	0.053	J	0.45	J	0.24	J	0.37	J	0.15	J	0.29	J	0.14	J
Vanadium	NS	NS	10.1	J	69.1		49.3		67.8		33.2		102	J	31.4	J
Zinc	**109**	6,600	76.1		**118**	**J**	**129**	**JK**	**150**		**112**		**769**	**J**	86.8	J

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		AKRF Sample ID	RI-SB-22_2-4_20251218		RI-SB-22_4-6_20251218		RI-SB-22_4-6_20251218		RI-SB-22_6-8_20251218		RI-SB-22_6-8_20251218		RI-SB-22_8-10_20251218		RI-SB-23_0-2_20251218	
		Lab Sample ID	460-341877-3		460-341877-4		460-341877-4		460-341877-5		460-341877-5		460-341877-6		460-341877-9	
		Sample Date	12/18/2025		12/18/2025		12/18/2025		12/18/2025		12/18/2025		12/18/2025		12/18/2025	
		Dilution Factor	1		1		5		1		5		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aluminum	NS	NS	11,100		3,460		NR		2,330		NR		6,810		7,830	
Antimony	NS	NS	2.3		0.7	J	NR		0.17	J	NR		1.9		1.9	
Arsenic	**13**	16	7.8		2.8		NR		1.9		NR		**15.5**		6.7	
Barium	**410**	410	**506**		38.1		NR		11.8		NR		358		345	
Beryllium	**4.4**	43	0.48		0.13	J	NR		0.076	J	NR		0.32	J	0.46	
Cadmium	**2.5**	2.5	**4.2**		0.49	J	NR		0.56	U	NR		0.95		**3.3**	
Calcium	NS	NS	30,300		NR		184,000		NR		174,000		73,700		61,400	
Chromium, Hexavalent	**1**	1	1	U	1.5	U	NR		1.4	U	NR		**15.7**		1	U
Chromium, Total	NS	NS	40.8		7.1		NR		7.3		NR		65.8		24.3	
Cobalt	NS	NS	10.1		2.7		NR		1.6		NR		5.7		5.9	
Copper	**50**	280	**76**		NR		**2,750**		8.3		NR		**72.9**		**63.7**	
Iron	NS	NS	29,100		3,900		NR		2,070		NR		20,300		23,100	
Lead	**63**	400	**963**		**87.2**		NR		**96.1**		NR		**1,240**	**J**	**795**	
Magnesium	NS	NS	5,340		3,630		NR		3,000		NR		3,360	J	22,600	
Manganese	1,600	2,000	233		68.7		NR		39.3		NR		181	JK	167	
Mercury	**0.18**	0.3	**0.52**		**0.2**		NR		0.1		NR		**0.38**		**0.32**	
Nickel	**30**	320	**32.1**		12.2		NR		22.2		NR		**33.3**	**JK**	22.3	
Potassium	NS	NS	5,210		524		NR		322		NR		733	JL	2,080	
Selenium	**4**	110	0.36	J	0.21	J	NR		0.26	J	NR		0.41	J	0.37	J
Silver	**2**	110	1.6		0.2	J	NR		0.44	U	NR		0.42		0.56	
Sodium	NS	NS	223		189		NR		55.8	J	NR		176		293	
Thallium	NS	NS	0.29	J	0.46	U	NR		0.047	J	NR		0.17	J	0.16	J
Vanadium	NS	NS	110		130		NR		193		NR		301		78.5	
Zinc	**109**	6,600	**456**		69.2		NR		18.1		NR		**391**		**299**	

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		AKRF Sample ID	RI-SB-23_2-4_20251218		RI-SB-X13_2-4_20251218		RI-SB-23_4-6_20251218		RI-SB-23_6-8_20251218			RI-SB-23_8-10_20251218	
		Lab Sample ID	460-341877-10		460-341877-15		460-341877-11		460-341877-12			460-341877-13	
		Sample Date	12/18/2025		12/18/2025		12/18/2025		12/18/2025			12/18/2025	
		Dilution Factor	1		1	3	1		1	200		1	
		Unit	mg/kg		mg/kg	mg/kg	mg/kg		mg/kg	mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aluminum	NS	NS	11,600		6,120		NR		7,690		3,180		NR		6,740	
Antimony	NS	NS	2.6		4		NR		1.3		0.83	J	NR		1.4	
Arsenic	**13**	16	8		**14**		NR		5.1		2		NR		7.3	
Barium	**410**	410	**498**		**525**		NR		**701**		186		NR		**579**	
Beryllium	**4.4**	43	0.54		0.5		NR		0.35	J	0.17	J	NR		0.25	J
Cadmium	**2.5**	2.5	**3.1**		**3.2**		NR		1.2		0.8		NR		1.5	
Calcium	NS	NS	51,400		53,300		NR		52,400		9,710		NR		37,800	
Chromium, Hexavalent	**1**	1	1.2	U	1.1	U	NR		1.2	U	1.2	U	NR		1.1	U
Chromium, Total	NS	NS	30.9		29.5		NR		30.4		10.9		NR		681	
Cobalt	NS	NS	11.2		6.4		NR		6.6		4.7		NR		9.2	
Copper	**50**	280	**77.6**	**J**	**235**	**J**	NR		**83.9**		46.2		NR		**57.8**	
Iron	NS	NS	26,800		23,500		NR		14,900		9,760		NR		23,600	
Lead	**63**	400	**552**	**J**	**1,170**	**J**	NR		**962**		**69.6**		NR		**649**	
Magnesium	NS	NS	9,720		10,700		NR		5,750		2,210		NR		5,010	
Manganese	1,600	2,000	371		217		NR		197		88.8		NR		263	
Mercury	**0.18**	0.3	**0.47**	**J**	NR		**1.6**	**J**	**0.42**		NR		**62.8**		**0.56**	
Nickel	**30**	320	**31.9**		**50.7**		NR		28.8		**65.4**		NR		**39.1**	
Potassium	NS	NS	4,620	J	1,030	J	NR		2,190		909		NR		3,370	
Selenium	**4**	110	0.57	J	0.8	J	NR		0.36	J	0.33	J	NR		0.4	J
Silver	**2**	110	0.5		1.9		NR		0.74		0.16	J	NR		0.33	
Sodium	NS	NS	312		273		NR		245		84.9	J	NR		171	
Thallium	NS	NS	0.28	J	0.22	J	NR		0.15	J	0.08	J	NR		0.24	J
Vanadium	NS	NS	61.8	J	191	J	NR		46.7		86		NR		147	
Zinc	**109**	6,600	**605**		**726**		NR		**458**		**517**		NR		**1,260**	

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		AKRF Sample ID	RI-SB-24_0-2_20251222		RI-SB-24_2-4_20251222		RI-SB-X14_2-4_20251222		RI-SB-24_4-6_20251222		RI-SB-24_6-8_20251222		RI-SB-24_8-10_20251222		RI-SB-25_4-6_20251219	
		Lab Sample ID	460-342125-1		460-342125-2		460-342124-4		460-342125-3		460-342125-4		460-342125-5		460-342035-26	
		Sample Date	12/22/2025		12/22/2025		12/22/2025		12/22/2025		12/22/2025		12/22/2025		12/19/2025	
		Dilution Factor	1		1		1		1		1		1		5	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aluminum	NS	NS	5,530		5,730		4,300		10,400		19,300		5,090		NR	
Antimony	NS	NS	0.26	J	0.42	J	0.33	J	0.58	J	1	J	0.28	J	NR	
Arsenic	**13**	16	3.9		5.4		3.8		10.8		**178**		3.9		NR	
Barium	**410**	410	291		348		185		**596**		267		187		NR	
Beryllium	**4.4**	43	0.27	J	0.3	J	0.19	J	0.38	J	4.2		0.25	J	NR	
Cadmium	**2.5**	2.5	0.87		1.3		0.87		**4**		0.53	J	0.86		NR	
Calcium	NS	NS	25,700		26,600		22,700		39,800		3,640		44,900		NR	
Chromium, Hexavalent	**1**	1	1	U	1.1	U	1	U	1.3	U	1.4	U	1.3	U	NR	
Chromium, Total	NS	NS	17.1		23.1		11.7		41.2		48.3		16.6		NR	
Cobalt	NS	NS	5.9		5.5		3.9		7.9		10.6		5.5		NR	
Copper	**50**	280	**69.5**		**64.7**		44.2		**292**		**61.9**		**52.8**		NR	
Iron	NS	NS	13,600		19,900		11,500		20,000		34,600		13,900		NR	
Lead	**63**	400	**498**		**482**		**337**		**781**		48.4		**326**		50.2	
Magnesium	NS	NS	7,080		5,560		5,260		5,030		696		20,700		NR	
Manganese	1,600	2,000	184		189		151		272		64.5		190		NR	
Mercury	**0.18**	0.3	**0.44**		**0.29**	**JL**	**0.27**		**0.93**		**0.28**		**0.23**		NR	
Nickel	**30**	320	19.5		24.8		14.3		**35**		**34.3**		16.9		NR	
Potassium	NS	NS	1,130		1,250		855		1,410		1,590		990		NR	
Selenium	**4**	110	0.24	J	0.33	J	0.18	J	1.3	J	1.6		0.25	J	NR	
Silver	**2**	110	0.29	J	0.38	J	0.24	J	1.1		0.16	J	0.25	J	NR	
Sodium	NS	NS	366		326		234		309		334		284		NR	
Thallium	NS	NS	0.1	J	0.12	J	0.079	J	0.39	J	2.1		0.091	J	NR	
Vanadium	NS	NS	55.8		69.1		50.1		104		100		63.1		NR	
Zinc	**109**	6,600	**274**		**316**		**188**		**571**		**124**		**182**		NR	

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		AKRF Sample ID	RI-SB-25_6-8_20251219		RI-SB-26_4-6_20251219		RI-SB-26_6-8_20251219		RI-SB-27_4-6_20251219		RI-SB-27_6-8_20251219		RI-SB-28_6-8_20251222		RI-SB-29_6-8_20251222	
		Lab Sample ID	460-342035-27		460-342035-28		460-342035-29		460-342035-30		460-342035-31		460-342125-7		460-342125-8	
		Sample Date	12/19/2025		12/19/2025		12/19/2025		12/19/2025		12/19/2025		12/22/2025		12/22/2025	
		Dilution Factor	5		20		5		5		5		10		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aluminum	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Antimony	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Arsenic	**13**	16	NR		NR		NR		NR		NR		NR		NR	
Barium	**410**	410	NR		NR		NR		NR		NR		NR		NR	
Beryllium	**4.4**	43	NR		NR		NR		NR		NR		NR		NR	
Cadmium	**2.5**	2.5	NR		NR		NR		NR		NR		NR		NR	
Calcium	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Chromium, Hexavalent	**1**	1	NR		NR		NR		NR		NR		NR		NR	
Chromium, Total	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Cobalt	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Copper	**50**	280	NR		NR		NR		NR		NR		NR		NR	
Iron	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Lead	**63**	400	**238**		**18,200**		**109**		**2,410**		**2,230**		**3,220**		**248**	
Magnesium	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Manganese	1,600	2,000	NR		NR		NR		NR		NR		NR		NR	
Mercury	**0.18**	0.3	NR		NR		NR		NR		NR		NR		NR	
Nickel	**30**	320	NR		NR		NR		NR		NR		NR		NR	
Potassium	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Selenium	**4**	110	NR		NR		NR		NR		NR		NR		NR	
Silver	**2**	110	NR		NR		NR		NR		NR		NR		NR	
Sodium	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Thallium	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Vanadium	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Zinc	**109**	6,600	NR		NR		NR		NR		NR		NR		NR	

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		AKRF Sample ID	RI-SB-30_6-8_20251222		RI-SB-X11_6-8_20251222		RI-SB-31_6-8_20251222		RI-SB-32_2-4_20251219		RI-SB-X12_2-4_20251219		RI-SB-32_8-10_20251219		RI-SB-46_0.5-2_20251219	
		Lab Sample ID	460-342125-9		460-342125-10		460-342125-11		460-342035-36		460-342035-37		460-342035-38		460-342035-1	
		Sample Date	12/22/2025		12/22/2025		12/22/2025		12/19/2025		12/19/2025		12/19/2025		12/19/2025	
		Dilution Factor	5		1		1		5		5		5		5	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aluminum	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Antimony	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Arsenic	**13**	16	NR		NR		NR		NR		NR		NR		NR	
Barium	**410**	410	NR		NR		NR		NR		NR		NR		NR	
Beryllium	**4.4**	43	NR		NR		NR		NR		NR		NR		NR	
Cadmium	**2.5**	2.5	NR		NR		NR		NR		NR		NR		NR	
Calcium	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Chromium, Hexavalent	**1**	1	NR		NR		NR		NR		NR		NR		NR	
Chromium, Total	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Cobalt	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Copper	**50**	280	NR		NR		NR		NR		NR		NR		NR	
Iron	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Lead	**63**	400	**2,010**	**J**	**375**	**J**	**134**		**588**		**709**		**1,260**		**449**	
Magnesium	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Manganese	1,600	2,000	NR		NR		NR		NR		NR		NR		NR	
Mercury	**0.18**	0.3	NR		NR		NR		NR		NR		NR		NR	
Nickel	**30**	320	NR		NR		NR		NR		NR		NR		NR	
Potassium	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Selenium	**4**	110	NR		NR		NR		NR		NR		NR		NR	
Silver	**2**	110	NR		NR		NR		NR		NR		NR		NR	
Sodium	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Thallium	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Vanadium	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Zinc	**109**	6,600	NR		NR		NR		NR		NR		NR		NR	

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		AKRF Sample ID	RI-SB-46_4-6_20251219		RI-SB-46_8-10_20251219		RI-SB-47_0.5-2_20251219		RI-SB-47_4-6_20251219		RI-SB-47_8-10_20251219		RI-SB-48_0.5-2_20251219		RI-SB-48_4-6_20251219	
		Lab Sample ID	460-342035-2		460-342035-3		460-342035-4		460-342035-5		460-342035-6		460-342035-7		460-342035-8	
		Sample Date	12/19/2025		12/19/2025		12/19/2025		12/19/2025		12/19/2025		12/19/2025		12/19/2025	
		Dilution Factor	5		5		5		5		5		5		5	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aluminum	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Antimony	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Arsenic	**13**	16	NR		NR		NR		NR		NR		NR		NR	
Barium	**410**	410	NR		NR		NR		NR		NR		NR		NR	
Beryllium	**4.4**	43	NR		NR		NR		NR		NR		NR		NR	
Cadmium	**2.5**	2.5	NR		NR		NR		NR		NR		NR		NR	
Calcium	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Chromium, Hexavalent	**1**	1	NR		NR		NR		NR		NR		NR		NR	
Chromium, Total	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Cobalt	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Copper	**50**	280	NR		NR		NR		NR		NR		NR		NR	
Iron	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Lead	**63**	400	**4,280**		**100**		**759**		**810**		**452**		**261**		**683**	
Magnesium	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Manganese	1,600	2,000	NR		NR		NR		NR		NR		NR		NR	
Mercury	**0.18**	0.3	NR		NR		NR		NR		NR		NR		NR	
Nickel	**30**	320	NR		NR		NR		NR		NR		NR		NR	
Potassium	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Selenium	**4**	110	NR		NR		NR		NR		NR		NR		NR	
Silver	**2**	110	NR		NR		NR		NR		NR		NR		NR	
Sodium	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Thallium	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Vanadium	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Zinc	**109**	6,600	NR		NR		NR		NR		NR		NR		NR	

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		AKRF Sample ID	RI-SB-48_8-10_20251219		RI-SB-49_0.5-2_20251219		RI-SB-49_4-6_20251219		RI-SB-49_8-10_20251219		RI-SB-52_8-10_20251219		RI-SB-55_4-6_20251219		RI-SB-61_8-10_20260130	
		Lab Sample ID	460-342035-9		460-342035-10		460-342035-11		460-342035-12		460-342035-22		460-342035-34		460-344108-1	
		Sample Date	12/19/2025		12/19/2025		12/19/2025		12/19/2025		12/19/2025		12/19/2025		1/30/2026	
		Dilution Factor	5		5		5		5		1		1		10	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aluminum	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Antimony	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Arsenic	**13**	16	NR		NR		NR		NR		NR		NR		NR	
Barium	**410**	410	NR		NR		NR		NR		NR		NR		NR	
Beryllium	**4.4**	43	NR		NR		NR		NR		NR		NR		NR	
Cadmium	**2.5**	2.5	NR		NR		NR		NR		NR		NR		NR	
Calcium	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Chromium, Hexavalent	**1**	1	NR		NR		NR		NR		NR		NR		NR	
Chromium, Total	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Cobalt	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Copper	**50**	280	NR		NR		NR		NR		NR		NR		NR	
Iron	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Lead	**63**	400	**5,790**		**3,780**		**1,980**		**6,360**		**169**		**73**		**383**	**J**
Magnesium	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Manganese	1,600	2,000	NR		NR		NR		NR		NR		NR		NR	
Mercury	**0.18**	0.3	NR		NR		NR		NR		NR		NR		NR	
Nickel	**30**	320	NR		NR		NR		NR		NR		NR		NR	
Potassium	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Selenium	**4**	110	NR		NR		NR		NR		NR		NR		NR	
Silver	**2**	110	NR		NR		NR		NR		NR		NR		NR	
Sodium	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Thallium	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Vanadium	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Zinc	**109**	6,600	NR		NR		NR		NR		NR		NR		NR	

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		AKRF Sample ID	RI-SB-X15_8-10_20260130		RI-SB-62_8-10_20260130		RI-SB-63_8-10_20260130		RI-SB-64_8-10_20260130		RI-SB-65_4-6_20260130		RI-SB-66_4-6_20260130		RI-SB-67_4-6_20260130	
		Lab Sample ID	460-344108-2		460-344108-3		460-344108-4		460-344108-5		460-344108-6		460-344108-7		460-344108-8	
		Sample Date	1/30/2026		1/30/2026		1/30/2026		1/30/2026		1/30/2026		1/30/2026		1/30/2026	
		Dilution Factor	10		10		10		10		10		10		10	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aluminum	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Antimony	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Arsenic	**13**	16	NR		NR		NR		NR		NR		NR		NR	
Barium	**410**	410	NR		NR		NR		NR		NR		NR		NR	
Beryllium	**4.4**	43	NR		NR		NR		NR		NR		NR		NR	
Cadmium	**2.5**	2.5	NR		NR		NR		NR		NR		NR		NR	
Calcium	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Chromium, Hexavalent	**1**	1	NR		NR		NR		NR		NR		NR		NR	
Chromium, Total	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Cobalt	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Copper	**50**	280	NR		NR		NR		NR		NR		NR		NR	
Iron	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Lead	**63**	400	**1,640**	**J**	**13,600**		**387**		**235**		**285**		**1,100**		**1,920**	
Magnesium	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Manganese	1,600	2,000	NR		NR		NR		NR		NR		NR		NR	
Mercury	**0.18**	0.3	NR		NR		NR		NR		NR		NR		NR	
Nickel	**30**	320	NR		NR		NR		NR		NR		NR		NR	
Potassium	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Selenium	**4**	110	NR		NR		NR		NR		NR		NR		NR	
Silver	**2**	110	NR		NR		NR		NR		NR		NR		NR	
Sodium	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Thallium	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Vanadium	NS	NS	NR		NR		NR		NR		NR		NR		NR	
Zinc	**109**	6,600	NR		NR		NR		NR		NR		NR		NR	

Table 3
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Metals

		AKRF Sample ID	RI-SB-68_4-6_20260130		RI-SB-77_20-22_20260623		RI-SB-78_22-24_20260623		RI-SB-78_24-26_20260623		RI-SB-78_26-28_20260623		RI-SB-79_23-25_20260623		RI-SB-80_23-25_20260623	
		Lab Sample ID	460-344108-9		460-353884-3		460-353884-6		460-353884-7		460-353884-8		460-353884-9		460-353884-12	
		Sample Date	1/30/2026		6/23/2026		6/23/2026		6/23/2026		6/23/2026		6/23/2026		6/23/2026	
		Dilution Factor	10		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aluminum	NS	NS	NR		11,500		33,700		NR		NR		16,500		17,800	
Antimony	NS	NS	NR		1	U	2.5		NR		NR		1.1	U	0.13	JL
Arsenic	**13**	16	NR		0.92	J	2		NR		NR		2.3		**15.4**	
Barium	**410**	410	NR		126		406		NR		NR		47.2		87.9	
Beryllium	**4.4**	43	NR		0.32	J	0.55		NR		NR		0.58		0.88	
Cadmium	**2.5**	2.5	NR		0.51	U	0.51	U	NR		NR		0.54	U	0.24	JK
Calcium	NS	NS	NR		5,250		1,610		NR		NR		665		3,640	JK
Chromium, Hexavalent	**1**	1	NR		1.1	U	1.1	U	NR		NR		1.3	U	1.8	U
Chromium, Total	NS	NS	NR		28.8		154		NR		NR		32.8		41.5	
Cobalt	NS	NS	NR		8.9		20.6		NR		NR		9.7		12	
Copper	**50**	280	NR		21.2		22.3		NR		NR		18.4		34.6	
Iron	NS	NS	NR		19,800		42,400		NR		NR		28,400		34,300	
Lead	**63**	400	**798**		10		6.6		NR		NR		9		**119**	
Magnesium	NS	NS	NR		6,730		25,700		NR		NR		5,330		8,480	
Manganese	1,600	2,000	NR		295		727		NR		NR		156		427	
Mercury	**0.18**	0.3	NR		0.013	J	0.11		NR		NR		0.029		0.14	
Nickel	**30**	320	NR		18.7		**87.9**		**50**		**68.7**		21.6		28.6	
Potassium	NS	NS	NR		3,790		14,800		NR		NR		2,110		4,510	
Selenium	**4**	110	NR		1.3	U	0.15	J	NR		NR		0.27	J	0.61	J
Silver	**2**	110	NR		0.41	U	0.41	U	NR		NR		0.43	U	0.26	J
Sodium	NS	NS	NR		184		1,620		NR		NR		704		4,970	
Thallium	NS	NS	NR		0.18	J	0.85		NR		NR		0.17	J	0.22	J
Vanadium	NS	NS	NR		35.1		94.4		NR		NR		41.7		54.3	J
Zinc	**109**	6,600	NR		42.4		82.6		NR		NR		43.7		**130**	

Table 3
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1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Metals

		AKRF Sample ID	RI-SB-X_23-25_20260623		RI-SB-80_25-27_20260623		RI-SB-80_27-29_20260623		RI-SB-81_15-17_20260623		RI-SB-81_17-19_20260623		FB-01_20250922		FB-02_20250922	
		Lab Sample ID	460-353884-15		460-353884-13		460-353884-14		460-353884-16		460-353884-17		460-335429-12		460-335428-35	
		Sample Date	6/23/2026		6/23/2026		6/23/2026		6/23/2026		6/23/2026		9/22/2025		9/22/2025	
		Dilution Factor	1		1		1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		µg/L		µg/L	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aluminum	NS	NS	17,400		NR		NR		17,100		NR		40	U	40	U
Antimony	NS	NS	0.21	JL	NR		NR		1.7	U	NR		2	U	2	U
Arsenic	**13**	16	**21.6**		10.2		NR		11.2		NR		2	U	2	U
Barium	**410**	410	121		NR		NR		55.7		NR		4	U	4	U
Beryllium	**4.4**	43	0.87		NR		NR		0.78		NR		0.8	U	0.8	U
Cadmium	**2.5**	2.5	0.29	JK	NR		NR		0.3	J	NR		0.92	U	0.92	U
Calcium	NS	NS	9,430	JK	NR		NR		2,720		NR		500	U	500	U
Chromium, Hexavalent	**1**	1	1.8	U	NR		NR		1.8	U	NR		10	U	10	U
Chromium, Total	NS	NS	42.8		NR		NR		35.8		NR		4	U	4	U
Cobalt	NS	NS	12.4		NR		NR		14.9		NR		2	U	2	U
Copper	**50**	280	44.2		NR		NR		14.1		NR		4	U	4	U
Iron	NS	NS	36,500		NR		NR		31,200		NR		120	U	120	U
Lead	**63**	400	**204**		**75.9**		24.6		31.8		NR		1.2	U	1.2	U
Magnesium	NS	NS	8,390		NR		NR		8,000		NR		200	U	200	U
Manganese	1,600	2,000	466		NR		NR		368		NR		8	U	8	U
Mercury	**0.18**	0.3	**0.23**		0.094		NR		0.036		NR		0.2	U	0.2	U
Nickel	**30**	320	**31.2**		24.9		NR		**30.6**		25.4		4	U	4	U
Potassium	NS	NS	4,390		NR		NR		4,210		NR		200	U	200	U
Selenium	**4**	110	0.67	J	NR		NR		0.47	J	NR		2.5	U	2.5	U
Silver	**2**	110	0.33	J	NR		NR		0.67	U	NR		2	U	2	U
Sodium	NS	NS	4,590		NR		NR		4,050		NR		500	U	500	U
Thallium	NS	NS	0.24	J	NR		NR		0.19	J	NR		0.5	U	0.5	U
Vanadium	NS	NS	173	J	NR		NR		46.3		NR		4	U	4	U
Zinc	**109**	6,600	**171**		**119**		88.9		90.8		NR		16	U	16	U

Table 3
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
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Soil Analytical Results of Metals

		AKRF Sample ID	FB-03_20250923		FB-04_20250924		FB-05_20250924		FB-06_20250925		FB-07_20250925		RI-FB-01_20260623	
		Lab Sample ID	460-335525-28		460-335652-29		460-335652-31		460-335757-13		460-335757-36		460-353884-2	
		Sample Date	9/23/2025		9/24/2025		9/24/2025		9/25/2025		9/25/2025		6/23/2026	
		Dilution Factor	1		1		1		1		1		1	
		Unit	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aluminum	NS	NS	40	U	40	U	40	U	40	U	40	U	40	U
Antimony	NS	NS	2	U	2	U	2	U	2	U	2	U	2	U
Arsenic	**13**	16	2	U	2	U	2	U	2	U	2	U	2	U
Barium	**410**	410	4	U	4	U	4	U	4	U	4	U	4	U
Beryllium	**4.4**	43	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Cadmium	**2.5**	2.5	0.92	U	0.92	U	0.92	U	0.92	U	0.92	U	0.92	U
Calcium	NS	NS	41	J	500	U	500	U	500	U	500	U	500	U
Chromium, Hexavalent	**1**	1	10	U	10	U	10	U	10	U	10	U	10	U
Chromium, Total	NS	NS	4	U	4	U	4	U	4	U	4	U	4	U
Cobalt	NS	NS	2	U	2	U	2	U	2	U	2	U	2	U
Copper	**50**	280	4	U	4	U	4	U	2.3	J	4	U	4	U
Iron	NS	NS	120	U	120	U	120	U	120	U	120	U	120	U
Lead	**63**	400	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U
Magnesium	NS	NS	200	U	200	U	200	U	200	U	200	U	200	U
Manganese	1,600	2,000	8	U	0.96	J	8	U	2.9	J	2.6	J	8	U
Mercury	**0.18**	0.3	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Nickel	**30**	320	4	U	4	U	4	U	4	U	4	U	4	U
Potassium	NS	NS	200	U	200	U	200	U	200	U	200	U	200	U
Selenium	**4**	110	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Silver	**2**	110	2	U	2	U	2	U	2	U	2	U	2	U
Sodium	NS	NS	500	U	500	U	500	U	500	U	500	U	500	U
Thallium	NS	NS	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vanadium	NS	NS	4	U	4	U	4	U	4	U	4	U	4	U
Zinc	**109**	6,600	16	U	16	U	16	U	16	U	16	U	16	U

Table 4
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Toxicity Characteristic Leaching Procedure (TCLP) Metals

	AKRF Sample ID	RI-SB-02_13-15_20250924		RI-SB-03_13-15_20250924	RI-SB-03_6-8_20250924	RI-SB-04_0-0.5_20250924	RI-SB-04_13-15_20250924
	Lab Sample ID	460-335652-7		460-335652-28	460-335652-26	460-335652-8	460-335652-15
	Sample Date	9/24/2025		9/24/2025	9/24/2025	9/24/2025	9/24/2025
	Dilution Factor	1	10	10	10	10	10
	Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Compound	**EPA Hazardous Waster Criteria**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Barium	100	NR	NR	NR	NR	NR	NR
Lead	**5**	NR	0.697 D	2.7	2.59	4.35	**45.2**
Mercury	0.2	0.00012 J	NR	NR	NR	NR	NR

Table 4
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1850 Lafayette Avenue, Bronx, NY
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Soil Analytical Results of Toxicity Characteristic Leaching Procedure (TCLP) Metals

	AKRF Sample ID	RI-SB-04_2-4_20250924		RI-SB-X4_2-4_20250924		RI-SB-05_0-0.5_20250923		RI-SB-05_13-15_20250923				RI-SB-05_6-8_20250923	
	Lab Sample ID	460-335652-10		460-335652-11		460-335525-21		460-335525-27				460-335525-25	
	Sample Date	9/24/2025		9/24/2025		9/23/2025		9/23/2025				9/23/2025	
	Dilution Factor	1		10		10		1		10		10	
	Unit	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Compound	**EPA Hazardous Waster Criteria**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Barium	100	NR		NR		NR		NR		0.249		NR	
Lead	**5**	NR		0.0235		0.563		NR		4.01		**8.96**	
Mercury	0.2	0.0002	U	NR		NR		0.0002	U	NR		NR	

Table 4
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Toxicity Characteristic Leaching Procedure (TCLP) Metals

	AKRF Sample ID	RI-SB-05_8-10_20250923		RI-SB-06_13-15_20250922		RI-SB-06_4-6_20250922		RI-SB-06_6-8_20250922		RI-SB-06_8-10_20250922		RI-SB-07_2-4_20250924	
	Lab Sample ID	460-335525-26		460-335428-21		460-335428-18		460-335428-19		460-335428-20		460-335652-18	
	Sample Date	9/23/2025		9/22/2025		9/22/2025		9/22/2025		9/22/2025		9/24/2025	
	Dilution Factor	10		10		10		10		10		10	
	Unit	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Compound	**EPA Hazardous Waster Criteria**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Barium	100	0.609		NR		NR		NR		NR		NR	
Lead	**5**	1.63		2.49		0.187		0.377		0.234		1.43	
Mercury	0.2	NR		NR		NR		NR		NR		NR	

Table 4
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Toxicity Characteristic Leaching Procedure (TCLP) Metals

	AKRF Sample ID	RI-SB-07_4-6_20250924		RI-SB-07_6-8_20250924		RI-SB-09_2-4_20250923		RI-SB-09_4-6_20250923		RI-SB-09_6-8_20250923		RI-SB-09_8-10_20250923	
	Lab Sample ID	460-335652-19		460-335652-20		460-335525-16		460-335525-17		460-335525-18		460-335525-19	
	Sample Date	9/24/2025		9/24/2025		9/23/2025		9/23/2025		9/23/2025		9/23/2025	
	Dilution Factor	10		10		10		10		10		10	
	Unit	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Compound	**EPA Hazardous Waster Criteria**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Barium	100	NR		NR		NR		NR		NR		NR	
Lead	**5**	0.297		0.68		**15.6**		**5.12**		0.871		0.179	
Mercury	0.2	NR		NR		NR		NR		NR		NR	

Table 4
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Remedial Investigation
Soil Analytical Results of Toxicity Characteristic Leaching Procedure (TCLP) Metals

	AKRF Sample ID	RI-SB-10_2-4_20250925		RI-SB-10_8-10_20250925		RI-SB-12_2-4_20250925		RI-SB-12_8-10_20250925		RI-SB-13_2-4_20250925		RI-SB-13_8-10_20250925	
	Lab Sample ID	460-335757-28		460-335757-31		460-335757-22		460-335757-25		460-335757-15		460-335757-18	
	Sample Date	9/25/2025		9/25/2025		9/25/2025		9/25/2025		9/25/2025		9/25/2025	
	Dilution Factor	10		10		10		10		10		10	
	Unit	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Compound	**EPA Hazardous Waster Criteria**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Barium	100	NR		NR		NR		NR		NR		1.3	
Lead	**5**	1.75		1.67		1.32		0.135		0.125		0.132	
Mercury	0.2	NR		NR		NR		NR		NR		NR	

Table 4
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Toxicity Characteristic Leaching Procedure (TCLP) Metals

	AKRF Sample ID	RI-SB-15_2-4_20250922		RI-SB-16_4-6_20250922		RI-SB-16_6-8_20250922		RI-SB-16_8-10_20250922		RI-SB-17_4-6_20250923		RI-SB-17_6-8_20250923	
	Lab Sample ID	460-335428-31		460-335428-4		460-335428-5		460-335428-6		460-335525-3		460-335525-4	
	Sample Date	9/22/2025		9/22/2025		9/22/2025		9/22/2025		9/23/2025		9/23/2025	
	Dilution Factor	1		10		10		10		10		10	
	Unit	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Compound	**EPA Hazardous Waster Criteria**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Barium	100	NR		NR		NR		NR		0.346		0.798	
Lead	**5**	NR		**16.7**		**23.1**		0.58		0.819		0.467	
Mercury	0.2	0.00021		NR		NR		NR		NR		NR	

Table 4
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Toxicity Characteristic Leaching Procedure (TCLP) Metals

	AKRF Sample ID	RI-SB-19_6-8_20250925		RI-SB-19_8-10_20250925		RI-SB-20_4-6_20250925		RI-SB-20_6-8_20250925		RI-SB-22_0.5-2_20251218		RI-SB-22_2-4_20251218	
	Lab Sample ID	460-335757-4		460-335757-5		460-335757-7		460-335757-8		460-341877-2		460-341877-3	
	Sample Date	9/25/2025		9/25/2025		9/25/2025		9/25/2025		12/18/2025		12/18/2025	
	Dilution Factor	10		10		10		10		10		10	
	Unit	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Compound	**EPA Hazardous Waster Criteria**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Barium	100	0.689		0.789		NR		NR		NR		NR	
Lead	**5**	1.26		0.218		0.118		0.403		0.269		1.94	
Mercury	0.2	NR		NR		NR		NR		NR		NR	

Table 4
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Toxicity Characteristic Leaching Procedure (TCLP) Metals

	AKRF Sample ID	RI-SB-22_8-10_20251218		RI-SB-X13_2-4_20251218		RI-SB-23_4-6_20251218		RI-SB-23_6-8_20251218		RI-SB-23_6-8_20251218		RI-SB-24_6-8_20251222	
	Lab Sample ID	460-341877-6		460-341877-15		460-341877-11		460-341877-12		460-341877-12		460-342125-4	
	Sample Date	12/18/2025		12/18/2025		12/18/2025		12/18/2025		12/18/2025		12/22/2025	
	Dilution Factor	10		10		10		1		10		10	
	Unit	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Compound	**EPA Hazardous Waster Criteria**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Barium	100	NR		NR		NR		NR		NR		NR	
Lead	**5**	**16.8**		4.26		**5.83**		NR		0.0136		0.0191	
Mercury	0.2	NR		NR		NR		0.0002	UHT	NR		NR	

Table 4
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Soil Analytical Results of Toxicity Characteristic Leaching Procedure (TCLP) Metals

	AKRF Sample ID	RI-SB-25_4-6_20251219		RI-SB-25_6-8_20251219		RI-SB-26_4-6_20251219		RI-SB-26_6-8_20251219		RI-SB-27_4-6_20251219		RI-SB-27_6-8_20251219	
	Lab Sample ID	460-342035-26		460-342035-27		460-342035-28		460-342035-29		460-342035-30		460-342035-31	
	Sample Date	12/19/2025		12/19/2025		12/19/2025		12/19/2025		12/19/2025		12/19/2025	
	Dilution Factor	10		10		10		10		10		10	
	Unit	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Compound	**EPA Hazardous Waster Criteria**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Barium	100	NR		NR		NR		NR		NR		NR	
Lead	**5**	0.213		0.451		**15.1**		0.0233		2.34		1.58	
Mercury	0.2	NR		NR		NR		NR		NR		NR	

Table 4
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Soil Analytical Results of Toxicity Characteristic Leaching Procedure (TCLP) Metals

	AKRF Sample ID	RI-SB-28_6-8_20251222		RI-SB-29_6-8_20251222		RI-SB-30_6-8_20251222		RI-SB-X11_6-8_20251222		RI-SB-31_6-8_20251222		RI-SB-32_2-4_20251219	
	Lab Sample ID	460-342125-7		460-342125-8		460-342125-9		460-342125-10		460-342125-11		460-342035-36	
	Sample Date	12/22/2025		12/22/2025		12/22/2025		12/22/2025		12/22/2025		12/19/2025	
	Dilution Factor	10		10		10		10		10		10	
	Unit	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Compound	**EPA Hazardous Waster Criteria**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Barium	100	NR		NR		NR		NR		NR		NR	
Lead	**5**	0.381		0.096		0.579	J	0.183	J	0.0221		0.327	J
Mercury	0.2	NR		NR		NR		NR		NR		NR	

Table 4
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Remedial Investigation
Soil Analytical Results of Toxicity Characteristic Leaching Procedure (TCLP) Metals

	AKRF Sample ID	RI-SB-X12_2-4_20251219		RI-SB-32_8-10_20251219		RI-SB-46_0.5-2_20251219		RI-SB-46_4-6_20251219		RI-SB-46_8-10_20251219		RI-SB-47_0.5-2_20251219	
	Lab Sample ID	460-342035-37		460-342035-38		460-342035-1		460-342035-2		460-342035-3		460-342035-4	
	Sample Date	12/19/2025		12/19/2025		12/19/2025		12/19/2025		12/19/2025		12/19/2025	
	Dilution Factor	10		10		10		10		10		10	
	Unit	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Compound	**EPA Hazardous Waster Criteria**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Barium	100	NR		NR		NR		NR		NR		NR	
Lead	**5**	2.99	J	0.586		0.467		3.78		0.0759		0.201	
Mercury	0.2	NR		NR		NR		NR		NR		NR	

Table 4
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1850 Lafayette Avenue, Bronx, NY
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Soil Analytical Results of Toxicity Characteristic Leaching Procedure (TCLP) Metals

	AKRF Sample ID	RI-SB-47_4-6_20251219		RI-SB-47_8-10_20251219		RI-SB-48_0.5-2_20251219		RI-SB-48_4-6_20251219		RI-SB-48_8-10_20251219		RI-SB-49_0.5-2_20251219	
	Lab Sample ID	460-342035-5		460-342035-6		460-342035-7		460-342035-8		460-342035-9		460-342035-10	
	Sample Date	12/19/2025		12/19/2025		12/19/2025		12/19/2025		12/19/2025		12/19/2025	
	Dilution Factor	10		10		10		10		10		10	
	Unit	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Compound	**EPA Hazardous Waster Criteria**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Barium	100	NR		NR		NR		NR		NR		NR	
Lead	**5**	4.75		0.226		0.835		0.343		**6.98**		3.39	
Mercury	0.2	NR		NR		NR		NR		NR		NR	

Table 4
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1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Toxicity Characteristic Leaching Procedure (TCLP) Metals

	AKRF Sample ID	RI-SB-49_4-6_20251219		RI-SB-49_8-10_20251219		RI-SB-52_8-10_20251219		RI-SB-55_4-6_20251219		RI-SB-61_8-10_20260130		RI-SB-X15_8-10_20260130	
	Lab Sample ID	460-342035-11		460-342035-12		460-342035-22		460-342035-34		460-344108-1		460-344108-2	
	Sample Date	12/19/2025		12/19/2025		12/19/2025		12/19/2025		1/30/2026		1/30/2026	
	Dilution Factor	10		10		10		10		10		10	
	Unit	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Compound	**EPA Hazardous Waster Criteria**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Barium	100	NR		NR		NR		NR		NR		NR	
Lead	**5**	4.11		1.08		0.183		0.164		0.475	J	0.0816	J
Mercury	0.2	NR		NR		NR		NR		NR		NR	

Table 4
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1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Toxicity Characteristic Leaching Procedure (TCLP) Metals

	AKRF Sample ID	RI-SB-62_8-10_20260130		RI-SB-63_8-10_20260130		RI-SB-64_8-10_20260130		RI-SB-65_4-6_20260130		RI-SB-66_4-6_20260130		RI-SB-67_4-6_20260130	
	Lab Sample ID	460-344108-3		460-344108-4		460-344108-5		460-344108-6		460-344108-7		460-344108-8	
	Sample Date	1/30/2026		1/30/2026		1/30/2026		1/30/2026		1/30/2026		1/30/2026	
	Dilution Factor	10		10		10		10		10		10	
	Unit	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Compound	**EPA Hazardous Waster Criteria**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Barium	100	NR		NR		NR		NR		NR		NR	
Lead	**5**	1.64	J	0.0447		0.165		0.148		0.125		0.644	
Mercury	0.2	NR		NR		NR		NR		NR		NR	

Table 4
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1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Toxicity Characteristic Leaching Procedure (TCLP) Metals

	AKRF Sample ID	RI-SB-68_4-6_20260130		FB-02_20250922	
	Lab Sample ID	460-344108-9		460-335428-35	
	Sample Date	1/30/2026		9/22/2025	
	Dilution Factor	10		10	
	Unit	mg/L		µg/L	
Compound	**EPA Hazardous Waster Criteria**	CONC	Q	CONC	Q
Barium	100	NR		NR	
Lead	**5**	0.195		0.0141	
Mercury	0.2	NR		NR	

Table 5
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

		AKRF Sample ID	RI-SB-01_0.5-2_20250923		RI-SB-01_8-10_20250923		RI-SB-01_10-12_20250926		RI-SB-01_13-15_20250923		RI-SB-02_0.5-2_20250924	
		Lab Sample ID	460-335525-7		460-335536-4		460-335823-1		460-335536-5		460-335652-2	
		Sample Date	9/23/2025		9/23/2025		9/26/2025		9/23/2025		9/24/2025	
		Dilution Factor	1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
PCB-1016 (Aroclor 1016)	NS	NS	0.067	U	0.068	U	0.08	U	0.068	U	0.073	U
PCB-1221 (Aroclor 1221)	NS	NS	0.067	U	0.068	U	0.08	U	0.068	U	0.073	U
PCB-1232 (Aroclor 1232)	NS	NS	0.067	U	0.068	U	0.08	U	0.068	U	0.073	U
PCB-1242 (Aroclor 1242)	NS	NS	0.067	U	0.068	U	0.08	U	0.068	U	0.073	U
PCB-1248 (Aroclor 1248)	NS	NS	0.067	U	0.068	U	0.08	U	0.068	U	0.073	U
PCB-1254 (Aroclor 1254)	NS	NS	0.067	U	0.068	U	0.08	U	0.068	U	0.073	U
PCB-1260 (Aroclor 1260)	NS	NS	0.13		0.068	U	0.08	U	0.068	U	0.073	U
PCB-1262 (Aroclor 1262)	NS	NS	0.067	U	0.068	U	0.08	U	0.068	U	0.073	U
PCB-1268 (Aroclor 1268)	NS	NS	0.067	U	0.068	U	0.08	U	0.068	U	0.073	U
Total PCBs	**0.1**	1	**0.13**		0.068	U	0.08	U	0.068	U	0.073	U

Table 5
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

		AKRF Sample ID	RI-SB-02_8-10_20250924		RI-SB-02_10-12_20250926		RI-SB-02_13-15_20250924		RI-SB-03_0.5-2_20250924		RI-SB-03_8-10_20250924	
		Lab Sample ID	460-335652-6		460-335823-2		460-335652-7		460-335652-23		460-335651-11	
		Sample Date	9/24/2025		9/26/2025		9/24/2025		9/24/2025		9/24/2025	
		Dilution Factor	1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
PCB-1016 (Aroclor 1016)	NS	NS	0.073	U	0.075	U	0.079	U	0.072	U	0.077	U
PCB-1221 (Aroclor 1221)	NS	NS	0.073	U	0.075	U	0.079	U	0.072	U	0.077	U
PCB-1232 (Aroclor 1232)	NS	NS	0.073	U	0.075	U	0.079	U	0.072	U	0.077	U
PCB-1242 (Aroclor 1242)	NS	NS	0.073	U	0.075	U	0.079	U	0.072	U	0.077	U
PCB-1248 (Aroclor 1248)	NS	NS	0.073	U	0.075	U	0.079	U	0.072	U	0.077	U
PCB-1254 (Aroclor 1254)	NS	NS	0.073	U	0.075	U	0.079	U	0.072	U	0.077	U
PCB-1260 (Aroclor 1260)	NS	NS	0.073	U	0.075	U	0.079	U	0.072	U	0.077	U
PCB-1262 (Aroclor 1262)	NS	NS	0.073	U	0.075	U	0.079	U	0.072	U	0.077	U
PCB-1268 (Aroclor 1268)	NS	NS	0.073	U	0.075	U	0.079	U	0.072	U	0.077	U
Total PCBs	**0.1**	1	0.073	U	0.075	U	0.079	U	0.072	U	0.077	U

Table 5
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

		AKRF Sample ID	RI-SB-03_13-15_20250924		RI-SB-04_0.5-2_20250924		RI-SB-04_8-10_20250924		RI-SB-04_13-15_20250924		RI-SB-05_0.5-2_20250923	
		Lab Sample ID	460-335652-28		460-335652-9		460-335652-14		460-335652-15		460-335525-22	
		Sample Date	9/24/2025		9/24/2025		9/24/2025		9/24/2025		9/23/2025	
		Dilution Factor	1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
PCB-1016 (Aroclor 1016)	NS	NS	0.081	U	0.076	U	0.079	U	0.08	U	0.067	U
PCB-1221 (Aroclor 1221)	NS	NS	0.081	U	0.076	U	0.079	U	0.08	U	0.067	U
PCB-1232 (Aroclor 1232)	NS	NS	0.081	U	0.076	U	0.079	U	0.08	U	0.067	U
PCB-1242 (Aroclor 1242)	NS	NS	0.081	U	0.076	U	0.079	U	0.08	U	0.067	U
PCB-1248 (Aroclor 1248)	NS	NS	0.081	U	0.076	U	0.079	U	0.08	U	0.067	U
PCB-1254 (Aroclor 1254)	NS	NS	0.081	U	0.076	U	0.11	J	0.08	U	0.067	U
PCB-1260 (Aroclor 1260)	NS	NS	0.081	U	0.076	U	0.079	U	0.08	U	0.14	
PCB-1262 (Aroclor 1262)	NS	NS	0.081	U	0.076	U	0.079	U	0.08	U	0.067	U
PCB-1268 (Aroclor 1268)	NS	NS	0.081	U	0.076	U	0.079	U	0.08	U	0.067	U
Total PCBs	**0.1**	1	0.081	U	0.076	U	**0.11**	**J**	0.08	U	**0.14**	

Table 5
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1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

		AKRF Sample ID	RI-SB-05_8-10_20250923		RI-SB-05_13-15_20250923		RI-SB-06_0.5-2_20250922		RI-SB-06_8-10_20250922		RI-SB-06_13-15_20250922	
		Lab Sample ID	460-335525-26		460-335536-10		460-335428-16		460-335428-20		460-335428-21	
		Sample Date	9/23/2025		9/23/2025		9/22/2025		9/22/2025		9/22/2025	
		Dilution Factor	1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
PCB-1016 (Aroclor 1016)	NS	NS	0.093	U	0.067	U	0.069	U	0.073	U	0.081	U
PCB-1221 (Aroclor 1221)	NS	NS	0.093	U	0.067	U	0.069	U	0.073	U	0.081	U
PCB-1232 (Aroclor 1232)	NS	NS	0.093	U	0.067	U	0.069	U	0.073	U	0.081	U
PCB-1242 (Aroclor 1242)	NS	NS	0.093	U	0.067	U	0.069	U	0.073	U	0.081	U
PCB-1248 (Aroclor 1248)	NS	NS	0.093	U	0.067	U	0.069	U	0.073	U	0.21	
PCB-1254 (Aroclor 1254)	NS	NS	0.093	U	0.067	U	0.069	U	0.073	U	0.081	U
PCB-1260 (Aroclor 1260)	NS	NS	0.093	U	0.067	U	0.069	U	0.073	U	0.081	U
PCB-1262 (Aroclor 1262)	NS	NS	0.093	U	0.067	U	0.069	U	0.073	U	0.081	U
PCB-1268 (Aroclor 1268)	NS	NS	0.093	U	0.067	U	0.069	U	0.073	U	0.081	U
Total PCBs	**0.1**	1	0.093	U	0.067	U	0.069	U	0.073	U	**0.21**	

Table 5
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1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

		AKRF Sample ID	RI-SB-07_0.5-2_20250924		RI-SB-07_8-10_20250924		RI-SB-08_0.5-2_20250922		RI-SB-08_8-10_20250922		RI-SB-08_10-12_20250926	
		Lab Sample ID	460-335652-17		460-335652-21		460-335429-3		460-335428-12		460-335823-3	
		Sample Date	9/24/2025		9/24/2025		9/22/2025		9/22/2025		9/26/2025	
		Dilution Factor	1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
PCB-1016 (Aroclor 1016)	NS	NS	0.074	U	0.082	U	0.069	U	0.07	U	0.076	U
PCB-1221 (Aroclor 1221)	NS	NS	0.074	U	0.082	U	0.069	U	0.07	U	0.076	U
PCB-1232 (Aroclor 1232)	NS	NS	0.074	U	0.082	U	0.069	U	0.07	U	0.076	U
PCB-1242 (Aroclor 1242)	NS	NS	0.074	U	0.082	U	0.069	U	0.07	U	0.076	U
PCB-1248 (Aroclor 1248)	NS	NS	0.074	U	0.082	U	0.069	U	0.07	U	0.076	U
PCB-1254 (Aroclor 1254)	NS	NS	0.074	U	0.082	U	0.069	U	0.07	U	0.076	U
PCB-1260 (Aroclor 1260)	NS	NS	0.074	U	0.082	U	0.069	U	0.19		0.076	U
PCB-1262 (Aroclor 1262)	NS	NS	0.074	U	0.082	U	0.069	U	0.07	U	0.076	U
PCB-1268 (Aroclor 1268)	NS	NS	0.074	U	0.082	U	0.069	U	0.07	U	0.076	U
Total PCBs	**0.1**	1	0.074	U	0.082	U	0.069	U	**0.19**		0.076	U

Table 5
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1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

		AKRF Sample ID	RI-SB-09_0.5-2_20250923		RI-SB-09_8-10_20250923		RI-SB-09_10-12_20250926		RI-SB-11_0.5-2_20250924		RI-SB-11_8-10_20250924	
		Lab Sample ID	460-335525-15		460-335525-19		460-335823-4		460-335652-34		460-335652-38	
		Sample Date	9/23/2025		9/23/2025		9/26/2025		9/24/2025		9/24/2025	
		Dilution Factor	1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
PCB-1016 (Aroclor 1016)	NS	NS	0.067	U	0.067	U	0.081	U	0.077	U	0.074	U
PCB-1221 (Aroclor 1221)	NS	NS	0.067	U	0.067	U	0.081	U	0.077	U	0.074	U
PCB-1232 (Aroclor 1232)	NS	NS	0.067	U	0.067	U	0.081	U	0.077	U	0.074	U
PCB-1242 (Aroclor 1242)	NS	NS	0.067	U	0.067	U	0.081	U	0.077	U	0.074	U
PCB-1248 (Aroclor 1248)	NS	NS	0.067	U	0.067	U	0.081	U	0.077	U	0.074	U
PCB-1254 (Aroclor 1254)	NS	NS	0.067	U	0.067	U	0.081	U	0.077	U	0.074	U
PCB-1260 (Aroclor 1260)	NS	NS	0.063	J	0.067	U	0.081	U	0.077	U	0.074	U
PCB-1262 (Aroclor 1262)	NS	NS	0.067	U	0.067	U	0.081	U	0.077	U	0.074	U
PCB-1268 (Aroclor 1268)	NS	NS	0.067	U	0.067	U	0.081	U	0.077	U	0.074	U
Total PCBs	**0.1**	1	0.063	J	0.067	U	0.081	U	0.077	U	0.074	U

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Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

		AKRF Sample ID	RI-SB-14_0.5-2_20250922		RI-SB-14_8-10_20250922		RI-SB-14_10-12_20250926		RI-SB-15_0.5-2_20250922		RI-SB-15_8-10_20250922	
		Lab Sample ID	460-335428-24		460-335428-28		460-335823-9		460-335428-30		460-335428-34	
		Sample Date	9/22/2025		9/22/2025		9/26/2025		9/22/2025		9/22/2025	
		Dilution Factor	1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
PCB-1016 (Aroclor 1016)	NS	NS	0.07	U	0.082	U	0.077	U	0.07	U	0.11	U
PCB-1221 (Aroclor 1221)	NS	NS	0.07	U	0.082	U	0.077	U	0.07	U	0.11	U
PCB-1232 (Aroclor 1232)	NS	NS	0.07	U	0.082	U	0.077	U	0.07	U	0.11	U
PCB-1242 (Aroclor 1242)	NS	NS	0.07	U	0.082	U	0.077	U	0.07	U	0.11	U
PCB-1248 (Aroclor 1248)	NS	NS	0.07	U	0.082	U	0.077	U	0.07	U	0.11	U
PCB-1254 (Aroclor 1254)	NS	NS	0.07	U	0.082	U	0.077	U	0.07	U	0.11	U
PCB-1260 (Aroclor 1260)	NS	NS	0.07	U	0.082	U	0.077	U	0.07	U	0.11	U
PCB-1262 (Aroclor 1262)	NS	NS	0.07	U	0.082	U	0.077	U	0.07	U	0.11	U
PCB-1268 (Aroclor 1268)	NS	NS	0.07	U	0.082	U	0.077	U	0.07	U	0.11	U
Total PCBs	**0.1**	1	0.07	U	0.082	U	0.077	U	0.07	U	0.11	U

Table 5
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1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

		AKRF Sample ID	RI-SB-15_10-12_20250926		RI-SB-16_0.5-2_20250922		RI-SB-16_8-10_20250922		RI-SB-16_10-12_20250926		RI-SB-17_0-2_20250923	
		Lab Sample ID	460-335823-10		460-335428-2		460-335428-6		460-335827-7		460-335536-1	
		Sample Date	9/26/2025		9/22/2025		9/22/2025		9/26/2025		9/23/2025	
		Dilution Factor	1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
PCB-1016 (Aroclor 1016)	NS	NS	0.078	U	0.068	U	0.068	U	0.079	U	0.07	U
PCB-1221 (Aroclor 1221)	NS	NS	0.078	U	0.068	U	0.068	U	0.079	U	0.07	U
PCB-1232 (Aroclor 1232)	NS	NS	0.078	U	0.068	U	0.068	U	0.079	U	0.07	U
PCB-1242 (Aroclor 1242)	NS	NS	0.078	U	0.068	U	0.068	U	0.079	U	0.07	U
PCB-1248 (Aroclor 1248)	NS	NS	0.078	U	0.068	U	0.068	U	0.079	U	0.07	U
PCB-1254 (Aroclor 1254)	NS	NS	0.078	U	0.068	U	0.068	U	0.079	U	0.07	U
PCB-1260 (Aroclor 1260)	NS	NS	0.078	U	0.068	U	0.068	U	0.079	U	0.06	J
PCB-1262 (Aroclor 1262)	NS	NS	0.078	U	0.068	U	0.068	U	0.079	U	0.07	U
PCB-1268 (Aroclor 1268)	NS	NS	0.078	U	0.068	U	0.068	U	0.079	U	0.07	U
Total PCBs	**0.1**	1	0.078	U	0.068	U	0.068	U	0.079	U	0.06	J

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Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

		AKRF Sample ID	RI-SB-17_8-10_20250923		RI-SB-22_0.5-2_20251218		RI-SB-X8_0.5-2_20251218		RI-SB-22_2-4_20251218		RI-SB-22_8-10_20251218	
		Lab Sample ID	460-335525-5		460-341877-2		460-341877-8		460-341877-3		460-341877-6	
		Sample Date	9/23/2025		12/18/2025		12/18/2025		12/18/2025		12/18/2025	
		Dilution Factor	1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
PCB-1016 (Aroclor 1016)	NS	NS	0.071	U	0.068	U	0.067	U	0.068	U	0.082	U
PCB-1221 (Aroclor 1221)	NS	NS	0.071	U	0.068	U	0.067	U	0.068	U	0.082	U
PCB-1232 (Aroclor 1232)	NS	NS	0.071	U	0.068	U	0.067	U	0.068	U	0.082	U
PCB-1242 (Aroclor 1242)	NS	NS	0.071	U	0.068	U	0.067	U	0.068	U	0.082	U
PCB-1248 (Aroclor 1248)	NS	NS	0.071	U	0.068	U	0.067	U	0.068	U	0.082	U
PCB-1254 (Aroclor 1254)	NS	NS	0.071	U	0.068	U	0.067	U	0.068	U	0.082	U
PCB-1260 (Aroclor 1260)	NS	NS	0.071	U	0.068	U	0.067	U	0.068	U	0.082	U
PCB-1262 (Aroclor 1262)	NS	NS	0.071	U	0.068	U	0.067	U	0.068	U	0.082	U
PCB-1268 (Aroclor 1268)	NS	NS	0.071	U	0.068	U	0.067	U	0.068	U	0.082	U
Total PCBs	**0.1**	1	0.071	U	0.068	U	0.067	U	0.068	U	0.082	U

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Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

		AKRF Sample ID	RI-SB-23_0-2_20251218		RI-SB-23_2-4_20251218		RI-SB-X13_2-4_20251218		RI-SB-23_8-10_20251218		RI-SB-24_0-2_20251222	
		Lab Sample ID	460-341877-9		460-341877-10		460-341877-15		460-341877-13		460-342125-1	
		Sample Date	12/18/2025		12/18/2025		12/18/2025		12/18/2025		12/22/2025	
		Dilution Factor	1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
PCB-1016 (Aroclor 1016)	NS	NS	0.068	U	0.08	U	0.075	U	0.071	U	0.072	U
PCB-1221 (Aroclor 1221)	NS	NS	0.068	U	0.08	U	0.075	U	0.071	U	0.072	U
PCB-1232 (Aroclor 1232)	NS	NS	0.068	U	0.08	U	0.075	U	0.071	U	0.072	U
PCB-1242 (Aroclor 1242)	NS	NS	0.068	U	0.08	U	0.075	U	0.071	U	0.072	U
PCB-1248 (Aroclor 1248)	NS	NS	0.068	U	0.08	U	0.075	U	0.071	U	0.072	U
PCB-1254 (Aroclor 1254)	NS	NS	0.068	U	0.08	U	0.075	U	0.071	U	0.072	U
PCB-1260 (Aroclor 1260)	NS	NS	0.068	U	0.08	U	0.075	U	0.071	U	0.072	U
PCB-1262 (Aroclor 1262)	NS	NS	0.068	U	0.08	U	0.075	U	0.071	U	0.072	U
PCB-1268 (Aroclor 1268)	NS	NS	0.068	U	0.08	U	0.075	U	0.071	U	0.072	U
Total PCBs	**0.1**	1	0.068	U	0.08	U	0.075	U	0.071	U	0.072	U

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Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

		AKRF Sample ID	RI-SB-24_2-4_20251222		RI-SB-X14_2-4_20251222		RI-SB-24_8-10_20251222		RI-SB-77_20-22_20260623		RI-SB-78_22-24_20260623	
		Lab Sample ID	460-342125-2		460-342124-4		460-342125-5		460-353884-3		460-353884-6	
		Sample Date	12/22/2025		12/22/2025		12/22/2025		6/23/2026		6/23/2026	
		Dilution Factor	1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
PCB-1016 (Aroclor 1016)	NS	NS	0.072	U	0.07	U	0.086	U	0.077	U	0.076	U
PCB-1221 (Aroclor 1221)	NS	NS	0.072	U	0.07	U	0.086	U	0.077	U	0.076	U
PCB-1232 (Aroclor 1232)	NS	NS	0.072	U	0.07	U	0.086	U	0.077	U	0.076	U
PCB-1242 (Aroclor 1242)	NS	NS	0.072	U	0.07	U	0.086	U	0.077	U	0.076	U
PCB-1248 (Aroclor 1248)	NS	NS	0.072	U	0.07	U	0.086	U	0.077	U	0.076	U
PCB-1254 (Aroclor 1254)	NS	NS	0.072	U	0.07	U	0.086	U	0.077	U	0.076	U
PCB-1260 (Aroclor 1260)	NS	NS	0.072	U	0.07	U	0.086	U	0.077	U	0.076	U
PCB-1262 (Aroclor 1262)	NS	NS	0.072	U	0.07	U	0.086	U	0.077	U	0.076	U
PCB-1268 (Aroclor 1268)	NS	NS	0.072	U	0.07	U	0.086	U	0.077	U	0.076	U
Total PCBs	**0.1**	1	0.072	U	0.07	U	0.086	U	0.077	U	0.076	U

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Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

		AKRF Sample ID	RI-SB-79_23-25_20260623		RI-SB-80_23-25_20260623		RI-SB-X_23-25_20260623		RI-SB-81_15-17_20260623		FB-01_20250922	
		Lab Sample ID	460-353884-9		460-353884-12		460-353884-15		460-353884-16		460-335429-12	
		Sample Date	6/23/2026		6/23/2026		6/23/2026		6/23/2026		9/22/2025	
		Dilution Factor	1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		µg/L	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
PCB-1016 (Aroclor 1016)	NS	NS	0.086	U	0.12	U	0.12	U	0.12	U	0.2	U
PCB-1221 (Aroclor 1221)	NS	NS	0.086	U	0.12	U	0.12	U	0.12	U	0.2	U
PCB-1232 (Aroclor 1232)	NS	NS	0.086	U	0.12	U	0.12	U	0.12	U	0.2	U
PCB-1242 (Aroclor 1242)	NS	NS	0.086	U	0.12	U	0.12	U	0.12	U	0.2	U
PCB-1248 (Aroclor 1248)	NS	NS	0.086	U	0.12	U	0.12	U	0.12	U	0.2	U
PCB-1254 (Aroclor 1254)	NS	NS	0.086	U	0.12	U	0.12	U	0.12	U	0.2	U
PCB-1260 (Aroclor 1260)	NS	NS	0.086	U	0.12	U	0.12	U	0.12	U	0.2	U
PCB-1262 (Aroclor 1262)	NS	NS	0.086	U	0.12	U	0.12	U	0.12	U	0.2	U
PCB-1268 (Aroclor 1268)	NS	NS	0.086	U	0.12	U	0.12	U	0.12	U	0.2	U
Total PCBs	**0.1**	1	0.086	U	0.12	U	0.12	U	0.12	U	0.2	U

Table 5
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Remedial Investigation
Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

		AKRF Sample ID	FB-02_20250922		FB-03_20250923		FB-04_20250924		FB-05_20250924		RI-FB-01_20260623	
		Lab Sample ID	460-335428-35		460-335525-28		460-335652-29		460-335652-31		460-353884-2	
		Sample Date	9/22/2025		9/23/2025		9/24/2025		9/24/2025		6/23/2026	
		Dilution Factor	1		1		1		1		1	
		Unit	µg/L		µg/L		µg/L		µg/L		µg/L	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
PCB-1016 (Aroclor 1016)	NS	NS	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
PCB-1221 (Aroclor 1221)	NS	NS	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
PCB-1232 (Aroclor 1232)	NS	NS	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
PCB-1242 (Aroclor 1242)	NS	NS	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
PCB-1248 (Aroclor 1248)	NS	NS	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
PCB-1254 (Aroclor 1254)	NS	NS	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
PCB-1260 (Aroclor 1260)	NS	NS	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
PCB-1262 (Aroclor 1262)	NS	NS	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
PCB-1268 (Aroclor 1268)	NS	NS	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Total PCBs	**0.1**	1	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U

Table 6
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Pesticides

		AKRF Sample ID	RI-SB-01_0.5-2_20250923		RI-SB-01_8-10_20250923		RI-SB-01_10-12_20250926		RI-SB-01_13-15_20250923		RI-SB-02_0.5-2_20250924	
		Lab Sample ID	460-335525-7		460-335536-4		460-335823-1		460-335536-5		460-335652-2	
		Sample Date	9/23/2025		9/23/2025		9/26/2025		9/23/2025		9/24/2025	
		Dilution Factor	1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aldrin	0.0048	0.044	0.0067	U	0.0068	U	0.008	U	0.0068	U	0.0073	U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.18	0.002	U	0.002	U	0.0024	U	0.002	U	0.0022	U
Beta Bhc (Beta Hexachlorocyclohexane)	0.021	0.18	0.002	U	0.002	U	0.0024	U	0.002	U	0.0022	U
Chlordane (Technical)	NS	NS	0.067	U	0.068	U	0.08	U	0.068	U	0.073	U
Chlordane, cis-	**0.014**	0.65	0.0061	JK	0.0068	U	0.008	U	0.0048	J	0.0073	U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.002	U	0.002	U	0.0024	U	0.002	U	0.0022	U
Dieldrin	**0.005**	0.075	**0.0058**	**JK**	0.002	U	0.0024	U	0.002	U	0.0022	U
Endosulfan I	NS	NS	0.0067	U	0.0068	U	0.008	U	0.0068	U	0.0073	U
Endosulfan II	NS	NS	0.0067	U	0.0068	U	0.008	U	0.0068	U	0.0073	U
Endosulfan Sulfate	NS	NS	0.0067	U	0.0068	U	0.008	U	0.0068	U	0.0073	U
Endosulfans ABS	4.3	35	0	U	0	U	0	U	0	U	0	U
Endrin	0.014	5.3	0.0067	U	0.0068	U	0.008	U	0.0068	U	0.0073	U
Endrin Aldehyde	NS	NS	0.0067	U	0.0068	U	0.008	U	0.0068	U	0.0073	U
Endrin Ketone	NS	NS	0.0067	U	0.0068	U	0.008	U	0.0068	U	0.0073	U
Gamma Bhc (Lindane)	0.025	0.21	0.002	U	0.002	U	0.0024	U	0.002	U	0.0022	U
Heptachlor	0.013	0.53	0.0067	U	0.0068	U	0.008	U	0.0068	U	0.0073	U
Heptachlor Epoxide	NS	NS	0.0067	U	0.0068	U	0.008	U	0.0068	U	0.0073	U
Methoxychlor	NS	NS	0.0067	U	0.0068	U	0.008	U	0.0068	U	0.0073	U
P,P'-DDD	**0.0033**	5	0.0067	U	0.0068	U	0.008	U	**0.025**		0.0073	U
P,P'-DDE	**0.0033**	3.4	**0.0038**	**JK**	0.0068	U	0.008	U	**0.032**		0.0073	U
P,P'-DDT	**0.0033**	3.8	**0.038**		**0.006**	**J**	0.008	U	**0.26**		0.0073	U
Toxaphene	NS	NS	0.067	U	0.068	U	0.08	U	0.068	U	0.073	U

Table 6
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Pesticides

		AKRF Sample ID	RI-SB-02_8-10_20250924		RI-SB-02_10-12_20250926		RI-SB-02_13-15_20250924		RI-SB-03_0.5-2_20250924		RI-SB-03_8-10_20250924	
		Lab Sample ID	460-335652-6		460-335823-2		460-335652-7		460-335652-23		460-335651-11	
		Sample Date	9/24/2025		9/26/2025		9/24/2025		9/24/2025		9/24/2025	
		Dilution Factor	1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aldrin	0.0048	0.044	0.0073	U	0.0075	U	0.0079	U	0.0072	U	0.0077	U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.18	0.0022	U	0.0023	U	0.0024	U	0.0022	U	0.0023	U
Beta Bhc (Beta Hexachlorocyclohexane)	0.021	0.18	0.0022	U	0.0023	U	0.0024	U	0.0022	U	0.0023	U
Chlordane (Technical)	NS	NS	0.073	U	0.075	U	0.079	U	0.072	U	0.077	U
Chlordane, cis-	**0.014**	0.65	0.0073	U	0.0075	U	0.0079	U	0.0024	J	0.0077	U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.0022	U	0.0023	U	0.0024	U	0.0022	U	0.0023	U
Dieldrin	**0.005**	0.075	0.0022	U	0.0023	U	0.0024	U	0.0022	U	0.0023	U
Endosulfan I	NS	NS	0.0073	U	0.0075	U	0.0079	U	0.0072	U	0.0077	U
Endosulfan II	NS	NS	0.0073	U	0.0075	U	0.0079	U	0.0072	U	0.0077	U
Endosulfan Sulfate	NS	NS	0.0073	U	0.0075	U	0.0079	U	0.0072	U	0.0077	U
Endosulfans ABS	4.3	35	0	U	0	U	0	U	0	U	0	U
Endrin	0.014	5.3	0.0073	U	0.0075	U	0.0079	U	0.0072	U	0.0077	U
Endrin Aldehyde	NS	NS	0.0073	U	0.0075	U	0.0079	U	0.0072	U	0.0077	U
Endrin Ketone	NS	NS	0.0073	U	0.0075	U	0.0079	U	0.0072	U	0.0077	U
Gamma Bhc (Lindane)	0.025	0.21	0.0022	U	0.0023	U	0.0024	U	0.0022	U	0.0023	U
Heptachlor	0.013	0.53	0.0073	U	0.0075	U	0.0079	U	0.0072	U	0.0077	U
Heptachlor Epoxide	NS	NS	0.0073	U	0.0075	U	0.0079	U	0.0072	U	0.0077	U
Methoxychlor	NS	NS	0.0073	U	0.0075	U	0.0079	U	0.0072	U	0.0077	U
P,P'-DDD	**0.0033**	5	0.0073	U	0.0075	U	0.0079	U	0.0072	U	0.0077	U
P,P'-DDE	**0.0033**	3.4	0.0073	U	0.0075	U	0.0079	U	**0.0045**	**J**	0.0077	U
P,P'-DDT	**0.0033**	3.8	0.0073	U	0.0075	U	0.0079	U	**0.011**		0.0077	U
Toxaphene	NS	NS	0.073	U	0.075	U	0.079	U	0.072	U	0.077	U

Table 6
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		AKRF Sample ID	RI-SB-03_13-15_20250924		RI-SB-04_0.5-2_20250924		RI-SB-04_8-10_20250924		RI-SB-04_13-15_20250924		RI-SB-05_0.5-2_20250923	
		Lab Sample ID	460-335652-28		460-335652-9		460-335652-14		460-335652-15		460-335525-22	
		Sample Date	9/24/2025		9/24/2025		9/24/2025		9/24/2025		9/23/2025	
		Dilution Factor	1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aldrin	0.0048	0.044	0.0081	U	0.0076	U	0.0079	U	0.008	U	0.0067	U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.18	0.0024	U	0.0023	U	0.0023	U	0.0024	U	0.002	U
Beta Bhc (Beta Hexachlorocyclohexane)	0.021	0.18	0.0024	U	0.0023	U	0.0023	U	0.0024	U	0.002	U
Chlordane (Technical)	NS	NS	0.081	U	0.076	U	0.079	U	0.08	U	0.067	U
Chlordane, cis-	**0.014**	0.65	0.0081	U	0.0076	U	0.0079	U	0.008	U	0.0067	U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.0024	U	0.0023	U	0.0023	U	0.0024	U	0.002	U
Dieldrin	**0.005**	0.075	0.0024	U	0.0023	U	0.0023	U	0.0024	U	0.002	U
Endosulfan I	NS	NS	0.0081	U	0.0076	U	0.0079	U	0.008	U	0.0067	U
Endosulfan II	NS	NS	0.0081	U	0.0076	U	0.0079	U	0.008	U	0.0067	U
Endosulfan Sulfate	NS	NS	0.0081	U	0.0076	U	0.0079	U	0.008	U	0.0067	U
Endosulfans ABS	4.3	35	0	U	0	U	0	U	0	U	0	U
Endrin	0.014	5.3	0.0081	U	0.0076	U	0.0079	U	0.008	U	0.0067	U
Endrin Aldehyde	NS	NS	0.0081	U	0.0076	U	0.0079	U	0.008	U	0.0067	U
Endrin Ketone	NS	NS	0.0081	U	0.0076	U	0.0079	U	0.008	U	0.0067	U
Gamma Bhc (Lindane)	0.025	0.21	0.0024	U	0.0023	U	0.0023	U	0.0024	U	0.002	U
Heptachlor	0.013	0.53	0.0081	U	0.0076	U	0.0079	U	0.008	U	0.0067	U
Heptachlor Epoxide	NS	NS	0.0081	U	0.0076	U	0.0079	U	0.008	U	0.0067	U
Methoxychlor	NS	NS	0.0081	U	0.0076	U	0.0079	U	0.008	U	0.0067	U
P,P'-DDD	**0.0033**	5	**0.0076**	**J**	0.0076	U	0.0079	U	0.008	U	0.0067	U
P,P'-DDE	**0.0033**	3.4	0.0027	J	0.0076	U	**0.0075**	**J**	0.008	U	0.0067	U
P,P'-DDT	**0.0033**	3.8	0.0081	U	**0.0052**	**J**	**0.012**		0.008	U	**0.057**	
Toxaphene	NS	NS	0.081	U	0.076	U	0.079	U	0.08	U	0.067	U

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		AKRF Sample ID	RI-SB-05_8-10_20250923		RI-SB-05_13-15_20250923		RI-SB-06_0.5-2_20250922		RI-SB-06_8-10_20250922		RI-SB-06_13-15_20250922	
		Lab Sample ID	460-335525-26		460-335536-10		460-335428-16		460-335428-20		460-335428-21	
		Sample Date	9/23/2025		9/23/2025		9/22/2025		9/22/2025		9/22/2025	
		Dilution Factor	1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aldrin	0.0048	0.044	0.0093	U	0.0067	U	0.0069	U	0.0073	U	0.0081	U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.18	0.0028	U	0.002	U	0.0021	U	0.0022	U	0.0024	U
Beta Bhc (Beta Hexachlorocyclohexane)	0.021	0.18	0.0028	U	0.002	U	0.0021	U	0.0022	U	0.0024	U
Chlordane (Technical)	NS	NS	0.093	U	0.067	U	0.069	U	0.15	J	0.081	U
Chlordane, cis-	**0.014**	0.65	0.0093	U	0.0067	U	0.0069	U	**0.039**	**JK**	0.0069	J
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.0028	U	0.002	U	0.0021	U	0.0022	U	0.0024	U
Dieldrin	**0.005**	0.075	0.0028	U	0.002	U	0.0021	U	0.0022	U	0.0024	U
Endosulfan I	NS	NS	0.0093	U	0.0067	U	0.0069	U	0.0073	U	0.0081	U
Endosulfan II	NS	NS	0.0093	U	0.0067	U	0.0069	U	0.0073	U	0.0081	U
Endosulfan Sulfate	NS	NS	0.0093	U	0.0067	U	0.0069	U	0.0073	U	0.0081	U
Endosulfans ABS	4.3	35	0	U	0	U	0	U	0	U	0	U
Endrin	0.014	5.3	0.0093	U	0.0067	U	0.0069	U	0.0073	U	0.0081	U
Endrin Aldehyde	NS	NS	0.0093	U	0.0067	U	0.0069	U	0.0073	U	0.0081	U
Endrin Ketone	NS	NS	0.0093	U	0.0067	U	0.0069	U	0.0073	U	0.0081	U
Gamma Bhc (Lindane)	0.025	0.21	0.0028	U	0.002	U	0.0021	U	0.0022	U	0.0024	U
Heptachlor	0.013	0.53	0.0093	U	0.0067	U	0.0069	U	0.0073	U	0.0081	U
Heptachlor Epoxide	NS	NS	0.0093	U	0.0067	U	0.0069	U	0.0073	U	0.0047	J
Methoxychlor	NS	NS	0.0093	U	0.0067	U	0.0069	U	0.0073	U	0.0081	U
P,P'-DDD	**0.0033**	5	0.0093	U	**0.031**		0.0069	U	**0.082**	**JK**	**0.037**	
P,P'-DDE	**0.0033**	3.4	0.0093	U	0.0067	U	0.0069	U	**0.082**	**JK**	0.0081	U
P,P'-DDT	**0.0033**	3.8	**0.0035**	**J**	0.0067	U	0.0069	U	**0.27**	**JK**	**0.1**	
Toxaphene	NS	NS	0.093	U	0.067	U	0.069	U	0.073	U	0.081	U

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		AKRF Sample ID	RI-SB-07_0.5-2_20250924		RI-SB-07_8-10_20250924		RI-SB-08_0.5-2_20250922		RI-SB-08_8-10_20250922		RI-SB-08_10-12_20250926	
		Lab Sample ID	460-335652-17		460-335652-21		460-335429-3		460-335428-12		460-335823-3	
		Sample Date	9/24/2025		9/24/2025		9/22/2025		9/22/2025		9/26/2025	
		Dilution Factor	1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aldrin	0.0048	0.044	0.0074	U	0.0082	U	0.0069	U	0.007	U	0.0076	U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.18	0.0022	U	0.0024	U	0.002	U	0.0021	U	0.0023	U
Beta Bhc (Beta Hexachlorocyclohexane)	0.021	0.18	0.0022	U	0.0024	U	0.002	U	0.0021	U	0.0023	U
Chlordane (Technical)	NS	NS	0.074	U	0.082	U	0.069	U	0.07	U	0.076	U
Chlordane, cis-	**0.014**	0.65	0.0074	U	0.0082	U	0.0069	U	0.007	U	0.0076	U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.0022	U	0.0024	U	0.002	U	0.0021	U	0.0023	U
Dieldrin	**0.005**	0.075	0.0022	U	0.0024	U	0.002	U	0.0021	U	0.0023	U
Endosulfan I	NS	NS	0.0074	U	0.0082	U	0.0069	U	0.007	U	0.0076	U
Endosulfan II	NS	NS	0.0074	U	0.0082	U	0.0069	U	0.007	U	0.0076	U
Endosulfan Sulfate	NS	NS	0.0074	U	0.0082	U	0.0069	U	0.007	U	0.0076	U
Endosulfans ABS	4.3	35	0	U	0	U	0	U	0	U	0	U
Endrin	0.014	5.3	0.0074	U	0.0082	U	0.0069	U	0.007	U	0.0076	U
Endrin Aldehyde	NS	NS	0.0074	U	0.0082	U	0.0069	U	0.007	U	0.0076	U
Endrin Ketone	NS	NS	0.0074	U	0.0082	U	0.0069	U	0.007	U	0.0076	U
Gamma Bhc (Lindane)	0.025	0.21	0.0022	U	0.0024	U	0.002	U	0.0021	U	0.0023	U
Heptachlor	0.013	0.53	0.0074	U	0.0082	U	0.0069	U	0.007	U	0.0076	U
Heptachlor Epoxide	NS	NS	0.0074	U	0.0082	U	0.0069	U	0.007	U	0.0076	U
Methoxychlor	NS	NS	0.0074	U	0.0082	U	0.0069	U	0.007	U	0.0076	U
P,P'-DDD	**0.0033**	5	0.0074	U	0.0082	U	0.0069	U	0.007	U	0.0076	U
P,P'-DDE	**0.0033**	3.4	**0.0034**	**J**	**0.011**		0.0069	U	0.007	U	0.0076	U
P,P'-DDT	**0.0033**	3.8	**0.0062**	**J**	**0.0088**		0.0069	U	**0.033**	**J**	**0.0054**	**J**
Toxaphene	NS	NS	0.074	U	0.082	U	0.069	U	0.07	U	0.076	U

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		AKRF Sample ID	RI-SB-09_0.5-2_20250923		RI-SB-09_8-10_20250923		RI-SB-09_10-12_20250926		RI-SB-11_0.5-2_20250924		RI-SB-11_8-10_20250924	
		Lab Sample ID	460-335525-15		460-335525-19		460-335823-4		460-335652-34		460-335652-38	
		Sample Date	9/23/2025		9/23/2025		9/26/2025		9/24/2025		9/24/2025	
		Dilution Factor	1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aldrin	0.0048	0.044	0.0067	U	0.0067	U	0.0081	U	0.0077	U	0.0074	U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.18	0.002	U	0.002	U	0.0024	U	0.0023	U	0.0022	U
Beta Bhc (Beta Hexachlorocyclohexane)	0.021	0.18	0.002	U	0.002	U	0.0024	U	0.0023	U	0.0022	U
Chlordane (Technical)	NS	NS	0.067	U	0.067	U	0.081	U	0.077	U	0.074	U
Chlordane, cis-	**0.014**	0.65	0.0067	U	0.0067	U	0.0081	U	0.0077	U	0.0074	U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.002	U	0.002	U	0.0024	U	0.0023	U	0.0022	U
Dieldrin	**0.005**	0.075	0.002	U	0.002	U	0.0024	U	0.0023	U	0.0022	U
Endosulfan I	NS	NS	0.0067	U	0.0067	U	0.0081	U	0.0077	U	0.0074	U
Endosulfan II	NS	NS	0.0067	U	0.0067	U	0.0081	U	0.0077	U	0.0074	U
Endosulfan Sulfate	NS	NS	0.0067	U	0.0067	U	0.0081	U	0.0077	U	0.0074	U
Endosulfans ABS	4.3	35	0	U	0	U	0	U	0	U	0	U
Endrin	0.014	5.3	0.0067	U	0.0067	U	0.0081	U	0.0077	U	0.0074	U
Endrin Aldehyde	NS	NS	0.0067	U	0.0067	U	0.0081	U	0.0077	U	0.0074	U
Endrin Ketone	NS	NS	0.0067	U	0.0067	U	0.0081	U	0.0077	U	0.0074	U
Gamma Bhc (Lindane)	0.025	0.21	0.002	U	0.002	U	0.0024	U	0.0023	U	0.0022	U
Heptachlor	0.013	0.53	0.0067	U	0.0067	U	0.0081	U	0.0077	U	0.0074	U
Heptachlor Epoxide	NS	NS	0.0067	U	0.0067	U	0.0081	U	0.0077	U	0.0074	U
Methoxychlor	NS	NS	0.0067	U	0.0067	U	0.0081	U	0.0077	U	0.0074	U
P,P'-DDD	**0.0033**	5	0.0067	U	0.0067	U	0.0081	U	0.0077	U	0.0074	U
P,P'-DDE	**0.0033**	3.4	0.0067	U	0.0067	U	0.0081	U	0.0077	U	0.0074	U
P,P'-DDT	**0.0033**	3.8	0.0067	U	**0.0059**	**J**	0.0081	U	0.0077	U	0.0074	U
Toxaphene	NS	NS	0.067	U	0.067	U	0.081	U	0.077	U	0.074	U

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Soil Analytical Results of Pesticides

		AKRF Sample ID	RI-SB-14_0.5-2_20250922		RI-SB-14_8-10_20250922		RI-SB-14_10-12_20250926		RI-SB-15_0.5-2_20250922		RI-SB-15_8-10_20250922	
		Lab Sample ID	460-335428-24		460-335428-28		460-335823-9		460-335428-30		460-335428-34	
		Sample Date	9/22/2025		9/22/2025		9/26/2025		9/22/2025		9/22/2025	
		Dilution Factor	1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aldrin	0.0048	0.044	0.007	U	0.0082	U	0.0077	U	0.007	U	0.011	U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.18	0.0021	U	0.0025	U	0.0023	U	0.0021	U	0.0033	U
Beta Bhc (Beta Hexachlorocyclohexane)	0.021	0.18	0.0021	U	0.0025	U	0.0023	U	0.0021	U	0.0033	U
Chlordane (Technical)	NS	NS	0.07	U	0.082	U	0.077	U	0.07	U	0.11	U
Chlordane, cis-	**0.014**	0.65	0.007	U	0.0082	U	0.0077	U	0.007	U	0.011	U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.0021	U	0.0025	U	0.0023	U	0.0021	U	0.0033	U
Dieldrin	**0.005**	0.075	0.0021	U	0.0025	U	0.0023	U	0.0021	U	0.0033	U
Endosulfan I	NS	NS	0.007	U	0.0082	U	0.0077	U	0.007	U	0.011	U
Endosulfan II	NS	NS	0.007	U	0.0082	U	0.0077	U	0.007	U	0.011	U
Endosulfan Sulfate	NS	NS	0.007	U	0.0082	U	0.0077	U	0.007	U	0.011	U
Endosulfans ABS	4.3	35	0	U	0	U	0	U	0	U	0	U
Endrin	0.014	5.3	0.007	U	0.0082	U	0.0077	U	0.007	U	0.011	U
Endrin Aldehyde	NS	NS	0.007	U	0.0082	U	0.0077	U	0.007	U	0.011	U
Endrin Ketone	NS	NS	0.007	U	0.0082	U	0.0077	U	0.007	U	0.011	U
Gamma Bhc (Lindane)	0.025	0.21	0.0021	U	0.0025	U	0.0023	U	0.0021	U	0.0033	U
Heptachlor	0.013	0.53	0.007	U	0.0082	U	0.0077	U	0.007	U	0.011	U
Heptachlor Epoxide	NS	NS	0.007	U	0.0082	U	0.0077	U	0.007	U	0.011	U
Methoxychlor	NS	NS	0.007	U	0.0082	U	0.0077	U	0.007	U	0.011	U
P,P'-DDD	**0.0033**	5	**0.0038**	**J**	0.0082	U	0.0077	U	0.007	U	0.011	U
P,P'-DDE	**0.0033**	3.4	**0.0056**	**J**	0.0082	U	0.0077	U	0.007	U	0.011	U
P,P'-DDT	**0.0033**	3.8	**0.034**		0.0082	U	0.0077	U	0.007	U	0.011	U
Toxaphene	NS	NS	0.07	U	0.082	U	0.077	U	0.07	U	0.11	U

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		AKRF Sample ID	RI-SB-15_10-12_20250926		RI-SB-16_0.5-2_20250922		RI-SB-16_8-10_20250922		RI-SB-16_10-12_20250926		RI-SB-17_0-2_20250923	
		Lab Sample ID	460-335823-10		460-335428-2		460-335428-6		460-335827-7		460-335536-1	
		Sample Date	9/26/2025		9/22/2025		9/22/2025		9/26/2025		9/23/2025	
		Dilution Factor	1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aldrin	0.0048	0.044	0.0078	U	0.0068	U	0.0068	U	0.0079	U	0.007	U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.18	0.0023	U	0.002	U	0.002	U	0.0024	U	0.0021	U
Beta Bhc (Beta Hexachlorocyclohexane)	0.021	0.18	0.0023	U	0.002	U	0.002	U	0.0024	U	0.0021	U
Chlordane (Technical)	NS	NS	0.078	U	0.068	U	0.068	U	0.079	U	0.07	U
Chlordane, cis-	**0.014**	0.65	0.0078	U	0.0068	U	0.0068	U	0.0079	U	0.0069	J
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.0023	U	0.002	U	0.002	U	0.0024	U	0.0021	U
Dieldrin	**0.005**	0.075	0.0023	U	0.002	U	0.002	U	0.0024	U	0.0021	U
Endosulfan I	NS	NS	0.0078	U	0.0068	U	0.0068	U	0.0079	U	0.007	U
Endosulfan II	NS	NS	0.0078	U	0.0068	U	0.0068	U	0.0079	U	0.007	U
Endosulfan Sulfate	NS	NS	0.0078	U	0.0068	U	0.0068	U	0.0079	U	0.007	U
Endosulfans ABS	4.3	35	0	U	0	U	0	U	0	U	0	U
Endrin	0.014	5.3	0.0078	U	0.0068	U	0.0068	U	0.0079	U	0.007	U
Endrin Aldehyde	NS	NS	0.0078	U	0.0068	U	0.0068	U	0.0079	U	0.007	U
Endrin Ketone	NS	NS	0.0078	U	0.0068	U	0.0068	U	0.0079	U	0.007	U
Gamma Bhc (Lindane)	0.025	0.21	0.0023	U	0.002	U	0.002	U	0.0024	U	0.0021	U
Heptachlor	0.013	0.53	0.0078	U	0.0068	U	0.0068	U	0.0079	U	0.007	U
Heptachlor Epoxide	NS	NS	0.0078	U	0.0068	U	0.0068	U	0.0079	U	0.007	U
Methoxychlor	NS	NS	0.0078	U	0.0068	U	0.0068	U	0.0079	U	0.007	U
P,P'-DDD	**0.0033**	5	0.0078	U	0.0068	U	0.0068	U	0.0079	U	**0.0054**	**J**
P,P'-DDE	**0.0033**	3.4	0.0078	U	0.0068	U	0.0068	U	0.0079	U	0.007	U
P,P'-DDT	**0.0033**	3.8	0.0078	U	0.0068	U	0.0068	U	0.0079	U	**0.011**	
Toxaphene	NS	NS	0.078	U	0.068	U	0.068	U	0.079	U	0.07	U

Table 6
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Soil Analytical Results of Pesticides

		AKRF Sample ID	RI-SB-17_8-10_20250923		RI-SB-22_0.5-2_20251218		RI-SB-X8_0.5-2_20251218		RI-SB-22_2-4_20251218		RI-SB-22_8-10_20251218	
		Lab Sample ID	460-335525-5		460-341877-2		460-341877-8		460-341877-3		460-341877-6	
		Sample Date	9/23/2025		12/18/2025		12/18/2025		12/18/2025		12/18/2025	
		Dilution Factor	1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aldrin	0.0048	0.044	0.0071	U	0.0068	U	0.0067	U	0.0068	U	0.0082	U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.18	0.0021	U	0.002	U	0.002	U	0.002	U	0.0024	U
Beta Bhc (Beta Hexachlorocyclohexane)	0.021	0.18	0.0021	U	0.002	U	0.002	U	0.002	U	0.0024	U
Chlordane (Technical)	NS	NS	0.071	U	0.068	U	0.067	U	0.068	U	0.082	U
Chlordane, cis-	**0.014**	0.65	0.0071	U	0.0068	U	0.0067	U	0.0068	U	0.0082	U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.0021	U	0.002	U	0.002	U	0.002	U	0.0024	U
Dieldrin	**0.005**	0.075	0.0021	U	0.002	U	0.002	U	0.002	U	0.0024	U
Endosulfan I	NS	NS	0.0071	U	0.0068	U	0.0067	U	0.0068	U	0.0082	U
Endosulfan II	NS	NS	0.0071	U	0.0068	U	0.0067	U	0.0068	U	0.0082	U
Endosulfan Sulfate	NS	NS	0.0071	U	0.0068	U	0.0067	U	0.0068	U	0.0082	U
Endosulfans ABS	4.3	35	0	U	0	U	0	U	0	U	0	U
Endrin	0.014	5.3	0.0071	U	0.0068	U	0.0067	U	0.0068	U	0.0082	U
Endrin Aldehyde	NS	NS	0.0071	U	0.0068	U	0.0067	U	0.0068	U	0.0082	U
Endrin Ketone	NS	NS	0.0071	U	0.0068	U	0.0067	U	0.0068	U	0.0082	U
Gamma Bhc (Lindane)	0.025	0.21	0.0021	U	0.002	U	0.002	U	0.002	U	0.0024	U
Heptachlor	0.013	0.53	0.0071	U	0.0068	U	0.0067	U	0.0068	U	0.0082	U
Heptachlor Epoxide	NS	NS	0.0071	U	0.0068	U	0.0067	U	0.0068	U	0.0082	U
Methoxychlor	NS	NS	0.0071	U	0.0068	U	0.0067	U	0.0068	U	0.0082	U
P,P'-DDD	**0.0033**	5	**0.072**		0.0068	U	0.0067	U	0.0068	U	0.0082	U
P,P'-DDE	**0.0033**	3.4	**0.029**		0.0068	U	0.0067	U	0.0068	U	0.0082	U
P,P'-DDT	**0.0033**	3.8	**0.12**		0.0068	U	0.0067	U	0.0068	U	0.0082	U
Toxaphene	NS	NS	0.071	U	0.068	U	0.067	U	0.068	U	0.082	U

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Soil Analytical Results of Pesticides

		AKRF Sample ID	RI-SB-23_0-2_20251218		RI-SB-23_2-4_20251218		RI-SB-X13_2-4_20251218		RI-SB-23_8-10_20251218		RI-SB-24_0-2_20251222	
		Lab Sample ID	460-341877-9		460-341877-10		460-341877-15		460-341877-13		460-342125-1	
		Sample Date	12/18/2025		12/18/2025		12/18/2025		12/18/2025		12/22/2025	
		Dilution Factor	1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aldrin	0.0048	0.044	0.0068	U	0.008	U	0.0075	U	0.0071	U	0.0072	U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.18	0.002	U	0.0024	U	0.0022	U	0.0021	U	0.0021	U
Beta Bhc (Beta Hexachlorocyclohexane)	0.021	0.18	0.002	U	0.0024	U	0.0022	U	0.0021	U	0.0021	U
Chlordane (Technical)	NS	NS	0.068	U	0.08	U	0.075	U	0.071	U	0.072	U
Chlordane, cis-	**0.014**	0.65	0.0068	U	0.008	U	0.0075	U	0.0071	U	0.0072	U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.002	U	0.0024	U	0.0022	U	0.0021	U	0.0021	U
Dieldrin	**0.005**	0.075	0.002	U	0.0024	U	0.0022	U	0.0021	U	0.0021	U
Endosulfan I	NS	NS	0.0068	U	0.008	U	0.0075	U	0.0071	U	0.0072	U
Endosulfan II	NS	NS	0.0068	U	0.008	U	0.0075	U	0.0071	U	0.0072	U
Endosulfan Sulfate	NS	NS	0.0068	U	0.008	U	0.0075	U	0.0071	U	0.0072	U
Endosulfans ABS	4.3	35	0	U	0	U	0	U	0	U	0	U
Endrin	0.014	5.3	0.0068	U	0.008	U	0.0075	U	0.0071	U	0.0072	U
Endrin Aldehyde	NS	NS	0.0068	U	0.008	U	0.0075	U	0.0071	U	0.0072	U
Endrin Ketone	NS	NS	0.0068	U	0.008	U	0.0075	U	0.0071	U	0.0072	U
Gamma Bhc (Lindane)	0.025	0.21	0.002	U	0.0024	U	0.0022	U	0.0021	U	0.0021	U
Heptachlor	0.013	0.53	0.0068	U	0.008	U	0.0075	U	0.0071	U	0.0072	U
Heptachlor Epoxide	NS	NS	0.0068	U	0.008	U	0.0075	U	0.0071	U	0.0072	U
Methoxychlor	NS	NS	0.0068	U	0.008	U	0.0075	U	0.0071	U	0.0072	U
P,P'-DDD	**0.0033**	5	0.0068	U	0.008	U	0.0075	U	0.0071	U	0.0072	U
P,P'-DDE	**0.0033**	3.4	0.0068	U	0.008	U	0.0075	U	0.0071	U	0.0072	U
P,P'-DDT	**0.0033**	3.8	0.0068	U	0.008	U	0.0075	U	0.0071	U	0.0028	J
Toxaphene	NS	NS	0.068	U	0.08	U	0.075	U	0.071	U	0.072	U

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Soil Analytical Results of Pesticides

		AKRF Sample ID	RI-SB-24_2-4_20251222		RI-SB-X14_2-4_20251222		RI-SB-24_8-10_20251222		RI-SB-77_20-22_20260623		RI-SB-78_22-24_20260623	
		Lab Sample ID	460-342125-2		460-342124-4		460-342125-5		460-353884-3		460-353884-6	
		Sample Date	12/22/2025		12/22/2025		12/22/2025		6/23/2026		6/23/2026	
		Dilution Factor	1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aldrin	0.0048	0.044	0.0072	U	0.007	U	0.0086	U	0.0023	U	0.0023	U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.18	0.0022	U	0.0021	U	0.0026	U	0.0023	U	0.0023	U
Beta Bhc (Beta Hexachlorocyclohexane)	0.021	0.18	0.0022	U	0.0021	U	0.0026	U	0.0023	U	0.0023	U
Chlordane (Technical)	NS	NS	0.072	U	0.07	U	0.086	U	0.077	U	0.076	U
Chlordane, cis-	**0.014**	0.65	0.0072	U	0.007	U	0.0086	U	0.0023	U	0.0023	U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.0022	U	0.0021	U	0.0026	U	0.0023	U	0.0023	U
Dieldrin	**0.005**	0.075	0.0022	U	0.0021	U	0.0026	U	0.0023	U	0.0023	U
Endosulfan I	NS	NS	0.0072	U	0.007	U	0.0086	U	0.0023	U	0.0023	U
Endosulfan II	NS	NS	0.0072	U	0.007	U	0.0086	U	0.0023	U	0.0023	U
Endosulfan Sulfate	NS	NS	0.0072	U	0.007	U	0.0086	U	0.0023	U	0.0023	U
Endosulfans ABS	4.3	35	0	U	0	U	0	U	0	U	0	U
Endrin	0.014	5.3	0.0072	U	0.007	U	0.0086	U	0.0023	U	0.0023	U
Endrin Aldehyde	NS	NS	0.0072	U	0.007	U	0.0086	U	0.0023	U	0.0023	U
Endrin Ketone	NS	NS	0.0072	U	0.007	U	0.0086	U	0.0023	U	0.0023	U
Gamma Bhc (Lindane)	0.025	0.21	0.0022	U	0.0021	U	0.0026	U	0.0023	U	0.0023	U
Heptachlor	0.013	0.53	0.0072	U	0.007	U	0.0086	U	0.0023	U	0.0023	U
Heptachlor Epoxide	NS	NS	0.0072	U	0.007	U	0.0086	U	0.0023	U	0.0023	U
Methoxychlor	NS	NS	0.0072	U	0.007	U	0.0086	U	0.0023	U	0.0023	U
P,P'-DDD	**0.0033**	5	0.0072	U	0.007	U	0.0086	U	0.0023	U	0.0023	U
P,P'-DDE	**0.0033**	3.4	0.0072	U	0.007	U	0.0086	U	0.0023	U	0.0023	U
P,P'-DDT	**0.0033**	3.8	**0.0036**	**J**	0.0025	J	0.0086	U	0.0023	U	0.0023	U
Toxaphene	NS	NS	0.072	U	0.07	U	0.086	U	0.077	U	0.076	U

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Soil Analytical Results of Pesticides

		AKRF Sample ID	RI-SB-79_23-25_20260623		RI-SB-80_23-25_20260623		RI-SB-X_23-25_20260623		RI-SB-81_15-17_20260623		FB-01_20250922	
		Lab Sample ID	460-353884-9		460-353884-12		460-353884-15		460-353884-16		460-335429-12	
		Sample Date	6/23/2026		6/23/2026		6/23/2026		6/23/2026		9/22/2025	
		Dilution Factor	1		1		1		1		1	
		Unit	mg/kg		mg/kg		mg/kg		mg/kg		µg/L	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aldrin	0.0048	0.044	0.0026	U	0.0037	U	0.0037	U	0.0037	U	0.02	U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.18	0.0026	U	0.0037	U	0.0037	U	0.0037	U	0.02	U
Beta Bhc (Beta Hexachlorocyclohexane)	0.021	0.18	0.0026	U	0.0037	U	0.0037	U	0.0037	U	0.02	U
Chlordane (Technical)	NS	NS	0.086	U	0.12	U	0.12	U	0.12	U	0.2	U
Chlordane, cis-	**0.014**	0.65	0.0026	U	0.0037	U	0.0037	U	0.0037	U	0.02	U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.0026	U	0.0037	U	0.0037	U	0.0037	U	0.02	U
Dieldrin	**0.005**	0.075	0.0026	U	0.0037	U	0.0037	U	0.0037	U	0.02	U
Endosulfan I	NS	NS	0.0026	U	0.0037	U	0.0037	U	0.0037	U	0.02	U
Endosulfan II	NS	NS	0.0026	U	0.0037	U	0.0037	U	0.0037	U	0.02	U
Endosulfan Sulfate	NS	NS	0.0026	U	0.0037	U	0.0037	U	0.0037	U	0.02	U
Endosulfans ABS	4.3	35	0	U	0	U	0	U	0	U	0	U
Endrin	0.014	5.3	0.0026	U	0.0037	U	0.0037	U	0.0037	U	0.02	U
Endrin Aldehyde	NS	NS	0.0026	U	0.0037	U	0.0037	U	0.0037	U	0.02	U
Endrin Ketone	NS	NS	0.0026	U	0.0037	U	0.0037	U	0.0037	U	0.02	U
Gamma Bhc (Lindane)	0.025	0.21	0.0026	U	0.0037	U	0.0037	U	0.0037	U	0.02	U
Heptachlor	0.013	0.53	0.0026	U	0.0037	U	0.0037	U	0.0037	U	0.02	U
Heptachlor Epoxide	NS	NS	0.0026	U	0.0037	U	0.0037	U	0.0037	U	0.02	U
Methoxychlor	NS	NS	0.0026	U	0.0037	U	0.0037	U	0.0037	U	0.02	U
P,P'-DDD	**0.0033**	5	0.0026	U	0.0037	U	0.0037	U	0.0037	U	0.02	U
P,P'-DDE	**0.0033**	3.4	0.0026	U	0.0037	U	0.0037	U	0.0037	U	0.02	U
P,P'-DDT	**0.0033**	3.8	0.0026	U	0.0037	U	0.0037	U	0.0037	U	0.02	U
Toxaphene	NS	NS	0.086	U	0.12	U	0.12	U	0.12	U	0.5	U

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Soil Analytical Results of Pesticides

		AKRF Sample ID	FB-02_20250922		FB-03_20250923		FB-04_20250924		FB-05_20250924		RI-FB-01_20260623	
		Lab Sample ID	460-335428-35		460-335525-28		460-335652-29		460-335652-31		460-353884-2	
		Sample Date	9/22/2025		9/23/2025		9/24/2025		9/24/2025		6/23/2026	
		Dilution Factor	1		1		1		1		1	
		Unit	µg/L		µg/L		µg/L		µg/L		µg/L	
Compound	**UUSCO**	**RRSCO**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aldrin	0.0048	0.044	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.18	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Beta Bhc (Beta Hexachlorocyclohexane)	0.021	0.18	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Chlordane (Technical)	NS	NS	0.2	U	0.2	U	0.2	U	0.2	U	0.05	U
Chlordane, cis-	**0.014**	0.65	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Dieldrin	**0.005**	0.075	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Endosulfan I	NS	NS	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Endosulfan II	NS	NS	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Endosulfan Sulfate	NS	NS	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Endosulfans ABS	4.3	35	0	U	0	U	0	U	0	U	0	U
Endrin	0.014	5.3	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Endrin Aldehyde	NS	NS	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Endrin Ketone	NS	NS	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Gamma Bhc (Lindane)	0.025	0.21	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Heptachlor	0.013	0.53	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Heptachlor Epoxide	NS	NS	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Methoxychlor	NS	NS	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
P,P'-DDD	**0.0033**	5	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
P,P'-DDE	**0.0033**	3.4	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
P,P'-DDT	**0.0033**	3.8	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Toxaphene	NS	NS	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

Table 7
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Per- and Polyfluoroalkyl Substances (PFAS)

		AKRF Sample ID	RI-SB-01_2-4_20250923		RI-SB-X1_2-4_20250923		RI-SB-01_8-10_20250923		RI-SB-01_10-12_20250926		RI-SB-01_13-15_20250923	
		Lab Sample ID	460-335525-8		460-335525-13		460-335525-11		460-335823-1		460-335525-12	
		Sample Date	9/23/2025		9/23/2025		9/23/2025		9/26/2025		9/23/2025	
		Dilution Factor	1		1		1		1		1	
		Unit	ppb		ppb		ppb		ppb		ppb	
Compound	**UUGV**	**RRGV**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid	NS	NS	0.21	U	0.21	U	0.22	U	0.26	U	0.22	U
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	NS	NS	1.05	U	1.06	U	1.62		1.31	U	1.1	U
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	NS	NS	1.05	U	1.06	U	1.11	U	1.31	U	1.1	U
2H,2H,3H,3H-Perfluorooctanoic acid	NS	NS	1.05	U	1.06	U	1.11	U	1.31	U	1.1	U
3-Perfluoroheptyl propanoic acid	NS	NS	1.05	U	1.06	U	1.11	U	1.31	U	1.1	U
3-Perfluoropropyl propanoic acid	NS	NS	0.42	U	0.42	U	0.45	U	0.52	U	0.44	U
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NS	NS	0.21	U	0.21	U	0.22	U	0.26	U	0.22	U
6:2 Fluorotelomer sulfonate	NS	NS	0.42	U	0.42	U	0.45	U	0.52	U	0.44	U
8:2 Fluorotelomer sulfonate	NS	NS	0.42	U	0.42	U	0.45	U	0.52	U	0.44	U
9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid	NS	NS	0.21	U	0.21	U	0.22	U	0.26	U	0.22	U
N-ethyl perfluoro-1-octanesulfonamide	NS	NS	0.21	U	0.21	U	0.22	U	0.26	U	0.22	U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	0.21	U	0.21	U	0.16	J	0.26	U	0.22	U
N-methyl perfluoro-1-octanesulfonamide	NS	NS	0.21	U	0.21	U	0.22	U	0.26	U	0.22	U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	0.21	U	0.21	U	0.22	U	0.26	U	0.22	U
Nonafluoro-3,6-dioxaheptanoic acid	NS	NS	0.21	U	0.21	U	0.22	U	0.26	U	0.22	U
Perfluoro(2-ethoxyethane)sulfonic acid	NS	NS	0.21	U	0.21	U	0.22	U	0.26	U	0.22	U
Perfluoro(2-Propoxypropanoic) Acid	NS	NS	0.21	U	0.21	U	0.22	U	0.26	U	0.22	U
Perfluoro-3-methoxypropanoic acid	NS	NS	0.21	U	0.21	U	0.22	U	0.26	U	0.22	U
Perfluoro-4-methoxybutanoic acid	NS	NS	0.21	U	0.21	U	0.22	U	0.26	U	0.22	U
Perfluorobutanesulfonic acid (PFBS)	NS	NS	0.21	U	0.21	U	0.22	U	0.26	U	0.22	U
Perfluorobutanoic acid	NS	NS	0.13	J	0.18	J	0.2	J	0.52	U	0.44	U
Perfluorodecanesulfonic acid	NS	NS	0.21	U	0.055	J	0.22	U	0.26	U	0.22	U
Perfluorodecanoic acid	NS	NS	0.21	U	0.2	J	0.22	U	0.26	U	0.22	U
Perfluorododecane sulfonate (PFDoDS)	NS	NS	0.21	U	0.21	U	0.22	U	0.26	U	0.22	U
Perfluorododecanoic acid	NS	NS	0.21	U	0.12	J	0.22	U	0.26	U	0.22	U
Perfluoroheptanesulfonic acid	NS	NS	0.21	U	0.21	U	0.22	U	0.26	U	0.22	U
Perfluoroheptanoic acid	NS	NS	0.052	J	0.079	J	0.16	J	0.26	U	0.22	U
Perfluorohexanesulfonic acid	NS	NS	0.21	U	0.21	U	0.22	U	0.26	U	0.22	U
Perfluorohexanoic acid	NS	NS	0.1	J	0.11	J	0.19	J	0.26	U	0.22	U
Perfluorononanesulfonic Acid (Pfns)	NS	NS	0.21	U	0.21	U	0.22	U	0.26	U	0.22	U
Perfluorononanoic acid	NS	NS	0.14	J	0.26		0.22	U	0.26	U	0.22	U
Perfluorooctanesulfonamide	NS	NS	0.21	U	0.21	U	0.22	U	0.26	U	0.22	U
Perfluorooctanesulfonic acid (PFOS)	**0.88**	44	0.56		**1.2**		**4.2**		**1.22**		0.27	
Perfluorooctanoic acid (PFOA)	**0.66**	33	0.31		0.47		**1.03**		0.26	U	0.22	U
Perfluoropentanesulfonic Acid (Pfpes)	NS	NS	0.21	U	0.21	U	0.22	U	0.26	U	0.22	U
Perfluoropentanoic acid	NS	NS	0.12	J	0.17	J	0.13	J	0.26	U	0.22	U
Perfluorotetradecanoic acid	NS	NS	0.21	U	0.21	U	0.22	U	0.26	U	0.22	U
Perfluorotridecanoic acid	NS	NS	0.21	U	0.059	J	0.22	U	0.26	U	0.22	U
Perfluoroundecanoic acid	NS	NS	0.21	U	0.16	J	0.22	U	0.26	U	0.22	U
Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2)	NS	NS	0.42	U	0.42	U	0.45	U	0.52	U	0.44	U

Table 7
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Per- and Polyfluoroalkyl Substances (PFAS)

		AKRF Sample ID	RI-SB-02_0.5-2_20250924		RI-SB-02_8-10_20250924		RI-SB-02_10-12_20250926		RI-SB-02_13-15_20250924		RI-SB-03_0.5-2_20250924	
		Lab Sample ID	460-335652-2		460-335652-6		460-335823-2		460-335652-7		460-335651-10	
		Sample Date	9/24/2025		9/24/2025		9/26/2025		9/24/2025		9/24/2025	
		Dilution Factor	1		1		1		1		1	
		Unit	ppb		ppb		ppb		ppb		ppb	
Compound	**UUGV**	**RRGV**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid	NS	NS	0.27	U	0.28	UJ	0.26	U	0.28	U	0.21	U
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	NS	NS	1.35	U	1.41	U	1.28	U	1.39	U	1.04	U
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	NS	NS	1.35	U	1.41	U	1.28	U	1.39	U	1.04	U
2H,2H,3H,3H-Perfluorooctanoic acid	NS	NS	1.35	U	1.41	U	1.28	U	1.39	U	1.04	U
3-Perfluoroheptyl propanoic acid	NS	NS	1.35	U	1.41	U	1.28	U	1.39	U	1.04	U
3-Perfluoropropyl propanoic acid	NS	NS	0.54	U	0.57	U	0.51	U	0.55	U	0.42	U
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NS	NS	0.27	U	0.28	U	0.26	U	0.28	U	0.21	U
6:2 Fluorotelomer sulfonate	NS	NS	0.54	U	0.57	U	0.51	U	0.55	U	0.42	U
8:2 Fluorotelomer sulfonate	NS	NS	0.54	U	0.57	U	0.51	U	0.55	U	0.42	U
9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid	NS	NS	0.27	U	0.28	U	0.26	U	0.28	U	0.21	U
N-ethyl perfluoro-1-octanesulfonamide	NS	NS	0.27	U	0.28	U	0.26	U	0.28	U	0.21	U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	0.27	U	0.28	U	0.26	U	0.28	U	0.21	U
N-methyl perfluoro-1-octanesulfonamide	NS	NS	0.27	U	0.28	U	0.26	U	0.28	U	0.21	U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	0.27	U	0.28	U	0.26	U	0.28	U	0.21	U
Nonafluoro-3,6-dioxaheptanoic acid	NS	NS	0.27	U	0.28	U	0.26	U	0.28	U	0.21	U
Perfluoro(2-ethoxyethane)sulfonic acid	NS	NS	0.27	U	0.28	U	0.26	U	0.28	U	0.21	U
Perfluoro(2-Propoxypropanoic) Acid	NS	NS	0.27	U	0.28	U	0.26	U	0.28	U	0.21	U
Perfluoro-3-methoxypropanoic acid	NS	NS	0.27	U	0.28	U	0.26	U	0.28	U	0.21	U
Perfluoro-4-methoxybutanoic acid	NS	NS	0.27	U	0.28	U	0.26	U	0.28	U	0.21	U
Perfluorobutanesulfonic acid (PFBS)	NS	NS	0.27	U	0.28	U	0.26	U	0.28	U	0.21	U
Perfluorobutanoic acid	NS	NS	0.54	U	0.57	U	0.51	U	0.55	U	0.42	U
Perfluorodecanesulfonic acid	NS	NS	0.27	U	0.28	U	0.26	U	0.28	U	0.21	U
Perfluorodecanoic acid	NS	NS	0.27	U	0.28	U	0.26	U	0.28	U	0.096	J
Perfluorododecane sulfonate (PFDoDS)	NS	NS	0.27	U	0.28	UJ	0.26	U	0.28	U	0.21	U
Perfluorododecanoic acid	NS	NS	0.27	U	0.28	U	0.26	U	0.28	U	0.054	J
Perfluoroheptanesulfonic acid	NS	NS	0.27	U	0.28	U	0.26	U	0.28	U	0.21	U
Perfluoroheptanoic acid	NS	NS	0.27	U	0.15	J	0.26	U	0.28	U	0.068	J
Perfluorohexanesulfonic acid	NS	NS	0.27	U	0.28	U	0.064	J	0.28	U	0.21	U
Perfluorohexanoic acid	NS	NS	0.27	U	0.098	J	0.26	U	0.28	U	0.1	J
Perfluorononanesulfonic Acid (Pfns)	NS	NS	0.27	U	0.28	U	0.26	U	0.28	U	0.21	U
Perfluorononanoic acid	NS	NS	0.27	U	0.28	U	0.26	U	0.28	U	0.12	J
Perfluorooctanesulfonamide	NS	NS	0.27	U	0.28	U	0.26	U	0.28	U	0.21	U
Perfluorooctanesulfonic acid (PFOS)	**0.88**	44	0.27		**1.05**		0.11	J	0.4		0.81	
Perfluorooctanoic acid (PFOA)	**0.66**	33	0.3		**1.16**		0.26	U	0.25	J	0.23	
Perfluoropentanesulfonic Acid (Pfpes)	NS	NS	0.27	U	0.28	U	0.26	U	0.28	U	0.21	U
Perfluoropentanoic acid	NS	NS	0.27	U	0.11	J	0.26	U	0.28	U	0.11	J
Perfluorotetradecanoic acid	NS	NS	0.27	U	0.28	U	0.26	U	0.28	U	0.21	U
Perfluorotridecanoic acid	NS	NS	0.27	U	0.28	U	0.26	U	0.28	U	0.21	U
Perfluoroundecanoic acid	NS	NS	0.27	U	0.28	U	0.26	U	0.28	U	0.21	U
Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2)	NS	NS	0.54	U	0.57	U	0.51	U	0.55	U	0.42	U

Table 7
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Per- and Polyfluoroalkyl Substances (PFAS)

		AKRF Sample ID	RI-SB-03_8-10_20250924		RI-SB-03_13-15_20250924		RI-SB-04_2-4_20250924		RI-SB-X4_2-4_20250924		RI-SB-04_8-10_20250924	
		Lab Sample ID	460-335652-27		460-335652-28		460-335651-4		460-335652-11		460-335652-14	
		Sample Date	9/24/2025		9/24/2025		9/24/2025		9/24/2025		9/24/2025	
		Dilution Factor	1		1		1		1		1	
		Unit	ppb		ppb		ppb		ppb		ppb	
Compound	**UUGV**	**RRGV**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid	NS	NS	0.22	U	0.27	U	0.25	U	0.23	U	0.22	U
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	NS	NS	1.09	U	1.34	U	1.23	U	1.13	U	1.09	U
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	NS	NS	1.09	U	1.34	U	1.23	U	1.13	U	1.09	U
2H,2H,3H,3H-Perfluorooctanoic acid	NS	NS	1.09	U	1.34	U	1.23	U	1.13	U	1.09	U
3-Perfluoroheptyl propanoic acid	NS	NS	1.09	U	1.34	U	1.23	U	1.13	U	1.09	U
3-Perfluoropropyl propanoic acid	NS	NS	0.44	U	0.54	U	0.49	U	0.45	U	0.44	U
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NS	NS	0.22	U	0.27	U	0.25	U	0.23	U	0.22	U
6:2 Fluorotelomer sulfonate	NS	NS	0.44	U	0.54	U	0.49	U	0.45	U	0.44	U
8:2 Fluorotelomer sulfonate	NS	NS	0.44	U	0.54	U	0.49	U	0.45	U	0.44	U
9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid	NS	NS	0.22	U	0.27	U	0.25	U	0.23	U	0.22	U
N-ethyl perfluoro-1-octanesulfonamide	NS	NS	0.22	U	0.27	U	0.25	U	0.23	U	0.22	U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	0.22	U	0.27	U	0.25	U	0.23	U	0.22	U
N-methyl perfluoro-1-octanesulfonamide	NS	NS	0.22	U	0.27	U	0.25	U	0.23	U	0.22	U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	0.22	U	0.27	U	0.25	U	0.23	U	0.22	U
Nonafluoro-3,6-dioxaheptanoic acid	NS	NS	0.22	U	0.27	U	0.25	U	0.23	U	0.22	U
Perfluoro(2-ethoxyethane)sulfonic acid	NS	NS	0.22	U	0.27	U	0.25	U	0.23	U	0.22	U
Perfluoro(2-Propoxypropanoic) Acid	NS	NS	0.22	U	0.27	U	0.25	U	0.23	U	0.22	U
Perfluoro-3-methoxypropanoic acid	NS	NS	0.22	U	0.27	U	0.25	U	0.23	U	0.22	U
Perfluoro-4-methoxybutanoic acid	NS	NS	0.22	U	0.27	U	0.25	U	0.23	U	0.22	U
Perfluorobutanesulfonic acid (PFBS)	NS	NS	0.22	U	0.27	U	0.25	U	0.23	U	0.22	U
Perfluorobutanoic acid	NS	NS	0.44	U	0.54	U	0.15	J	0.12	J	0.12	J
Perfluorodecanesulfonic acid	NS	NS	0.22	U	0.27	U	0.25	U	0.23	U	0.22	U
Perfluorodecanoic acid	NS	NS	0.22	U	0.27	U	0.25	U	0.23	U	0.22	U
Perfluorododecane sulfonate (PFDoDS)	NS	NS	0.22	U	0.27	U	0.25	U	0.23	U	0.22	U
Perfluorododecanoic acid	NS	NS	0.22	U	0.27	U	0.25	U	0.23	U	0.22	U
Perfluoroheptanesulfonic acid	NS	NS	0.22	U	0.27	U	0.25	U	0.23	U	0.22	U
Perfluoroheptanoic acid	NS	NS	0.22	U	0.27	U	0.13	J	0.1	J	0.11	J
Perfluorohexanesulfonic acid	NS	NS	0.22	U	0.27	U	0.25	U	0.23	U	0.22	U
Perfluorohexanoic acid	NS	NS	0.064	J	0.27	U	0.22	J	0.18	J	0.17	J
Perfluorononanesulfonic Acid (Pfns)	NS	NS	0.22	U	0.27	U	0.25	U	0.23	U	0.22	U
Perfluorononanoic acid	NS	NS	0.22	U	0.27	U	0.19	J	0.099	J	0.1	J
Perfluorooctanesulfonamide	NS	NS	0.22	U	0.27	U	0.25	U	0.23	U	0.22	U
Perfluorooctanesulfonic acid (PFOS)	**0.88**	44	0.47		0.27	U	**2.27**	**J**	**1.63**		**1.15**	
Perfluorooctanoic acid (PFOA)	**0.66**	33	0.21	J	0.27	U	0.57		**0.67**		**0.73**	
Perfluoropentanesulfonic Acid (Pfpes)	NS	NS	0.22	U	0.27	U	0.25	U	0.23	U	0.22	U
Perfluoropentanoic acid	NS	NS	0.22	U	0.27	U	0.21	J	0.2	J	0.21	J
Perfluorotetradecanoic acid	NS	NS	0.22	U	0.27	U	0.25	U	0.23	U	0.22	U
Perfluorotridecanoic acid	NS	NS	0.22	U	0.27	U	0.25	U	0.23	U	0.22	U
Perfluoroundecanoic acid	NS	NS	0.22	U	0.27	U	0.25	U	0.23	U	0.22	U
Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2)	NS	NS	0.44	U	0.54	U	0.49	U	0.45	U	0.44	U

Table 7
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Per- and Polyfluoroalkyl Substances (PFAS)

		AKRF Sample ID	RI-SB-04_13-15_20250924		RI-SB-05_0.5-2_20250923		RI-SB-05_8-10_20250923		RI-SB-05_13-15_20250923		RI-SB-06_2-4_20250922	
		Lab Sample ID	460-335652-15		460-335525-22		460-335525-26		460-335525-27		460-335428-17	
		Sample Date	9/24/2025		9/23/2025		9/23/2025		9/23/2025		9/22/2025	
		Dilution Factor	1		1		1		1		1	
		Unit	ppb		ppb		ppb		ppb		ppb	
Compound	**UUGV**	**RRGV**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid	NS	NS	0.27	U	0.34	U	0.33	U	0.27	U	0.22	U
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	NS	NS	1.36	U	1.69	U	1.66	U	1.37	U	1.09	U
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	NS	NS	1.36	U	1.69	U	1.66	U	1.37	U	1.09	U
2H,2H,3H,3H-Perfluorooctanoic acid	NS	NS	1.36	U	1.69	U	1.66	U	1.37	U	1.09	U
3-Perfluoroheptyl propanoic acid	NS	NS	1.36	U	1.69	U	1.66	U	1.37	U	1.09	U
3-Perfluoropropyl propanoic acid	NS	NS	0.55	U	0.67	U	0.67	U	0.55	U	0.43	U
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NS	NS	0.27	U	0.34	U	0.33	U	0.27	U	0.22	U
6:2 Fluorotelomer sulfonate	NS	NS	0.55	U	0.67	U	0.67	U	0.55	U	0.43	U
8:2 Fluorotelomer sulfonate	NS	NS	0.55	U	0.67	U	0.67	U	0.55	U	0.43	U
9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid	NS	NS	0.27	U	0.34	U	0.33	U	0.27	U	0.22	U
N-ethyl perfluoro-1-octanesulfonamide	NS	NS	0.27	U	0.34	U	0.33	U	0.27	U	0.22	U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	0.27	U	0.34	U	0.33	U	0.27	U	0.22	U
N-methyl perfluoro-1-octanesulfonamide	NS	NS	0.27	U	0.34	U	0.33	U	0.27	U	0.22	U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	0.27	U	0.34	U	0.33	U	0.27	U	0.22	U
Nonafluoro-3,6-dioxaheptanoic acid	NS	NS	0.27	U	0.34	U	0.33	U	0.27	U	0.22	U
Perfluoro(2-ethoxyethane)sulfonic acid	NS	NS	0.27	U	0.34	U	0.33	U	0.27	U	0.22	U
Perfluoro(2-Propoxypropanoic) Acid	NS	NS	0.27	U	0.34	U	0.33	U	0.27	U	0.22	U
Perfluoro-3-methoxypropanoic acid	NS	NS	0.27	U	0.34	U	0.33	U	0.27	U	0.22	U
Perfluoro-4-methoxybutanoic acid	NS	NS	0.27	U	0.34	U	0.33	U	0.27	U	0.22	U
Perfluorobutanesulfonic acid (PFBS)	NS	NS	0.27	U	0.34	U	0.33	U	0.27	U	0.22	U
Perfluorobutanoic acid	NS	NS	0.55	U	0.67	U	0.22	J	0.55	U	0.2	J
Perfluorodecanesulfonic acid	NS	NS	0.27	U	0.34	U	0.33	U	0.27	U	0.22	U
Perfluorodecanoic acid	NS	NS	0.27	U	0.34	U	0.33	U	0.27	U	0.11	J
Perfluorododecane sulfonate (PFDoDS)	NS	NS	0.27	U	0.34	U	0.33	U	0.27	U	0.22	U
Perfluorododecanoic acid	NS	NS	0.27	U	0.34	U	0.33	U	0.27	U	0.22	U
Perfluoroheptanesulfonic acid	NS	NS	0.27	U	0.34	U	0.33	U	0.27	U	0.22	U
Perfluoroheptanoic acid	NS	NS	0.27	U	0.34	U	0.33	U	0.27	U	0.1	J
Perfluorohexanesulfonic acid	NS	NS	0.27	U	0.34	U	0.33	U	0.27	U	0.22	U
Perfluorohexanoic acid	NS	NS	0.27	U	0.34	U	0.33	U	0.27	U	0.13	J
Perfluorononanesulfonic Acid (Pfns)	NS	NS	0.27	U	0.34	U	0.33	U	0.27	U	0.22	U
Perfluorononanoic acid	NS	NS	0.27	U	0.34	U	0.33	U	0.27	U	0.22	
Perfluorooctanesulfonamide	NS	NS	0.27	U	0.34	U	0.33	U	0.27	U	0.22	U
Perfluorooctanesulfonic acid (PFOS)	**0.88**	44	0.092	J	0.16	J	0.33	U	0.27	U	0.67	J
Perfluorooctanoic acid (PFOA)	**0.66**	33	0.27	U	0.34	U	0.19	J	0.17	J	0.63	J
Perfluoropentanesulfonic Acid (Pfpes)	NS	NS	0.27	U	0.34	U	0.33	U	0.27	U	0.22	U
Perfluoropentanoic acid	NS	NS	0.27	U	0.34	U	0.33	U	0.27	U	0.17	J
Perfluorotetradecanoic acid	NS	NS	0.27	U	0.34	U	0.33	U	0.27	U	0.22	U
Perfluorotridecanoic acid	NS	NS	0.27	U	0.34	U	0.33	U	0.27	U	0.22	U
Perfluoroundecanoic acid	NS	NS	0.27	U	0.34	U	0.33	U	0.27	U	0.1	J
Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2)	NS	NS	0.55	U	0.67	U	0.67	U	0.55	U	0.43	U

Table 7
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Per- and Polyfluoroalkyl Substances (PFAS)

		AKRF Sample ID	RI-SB-X2_2-4_20250922		RI-SB-06_8-10_20250922		RI-SB-06_13-15_20250922		RI-SB-07_0.5-2_20250924		RI-SB-07_8-10_20250924	
		Lab Sample ID	460-335428-22		460-335428-20		460-335428-21		460-335652-17		460-335652-21	
		Sample Date	9/22/2025		9/22/2025		9/22/2025		9/24/2025		9/24/2025	
		Dilution Factor	1		1		1		1		1	
		Unit	ppb		ppb		ppb		ppb		ppb	
Compound	**UUGV**	**RRGV**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid	NS	NS	0.22	U	0.23	U	0.26	U	0.21	U	0.29	U
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	NS	NS	1.09	U	1.16	U	1.3	U	1.07	U	1.43	U
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	NS	NS	1.09	U	1.16	U	1.3	U	1.07	U	1.43	U
2H,2H,3H,3H-Perfluorooctanoic acid	NS	NS	1.09	U	1.16	U	1.3	U	1.07	U	1.43	U
3-Perfluoroheptyl propanoic acid	NS	NS	1.09	U	1.16	U	1.3	U	1.07	U	1.43	U
3-Perfluoropropyl propanoic acid	NS	NS	0.44	U	0.46	U	0.52	U	0.43	U	0.57	U
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NS	NS	0.22	U	0.23	U	0.26	U	0.21	U	0.29	U
6:2 Fluorotelomer sulfonate	NS	NS	0.44	U	0.46	U	0.52	U	0.43	U	0.57	U
8:2 Fluorotelomer sulfonate	NS	NS	0.44	U	0.46	U	0.52	U	0.43	U	0.57	U
9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid	NS	NS	0.22	U	0.23	U	0.26	U	0.21	U	0.29	U
N-ethyl perfluoro-1-octanesulfonamide	NS	NS	0.22	U	0.23	U	0.26	U	0.21	U	0.29	U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	0.22	U	0.23	U	0.26	U	0.21	U	0.29	U
N-methyl perfluoro-1-octanesulfonamide	NS	NS	0.22	U	0.23	U	0.26	U	0.21	U	0.29	U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	0.22	U	0.23	U	0.26	U	0.21	U	0.29	U
Nonafluoro-3,6-dioxaheptanoic acid	NS	NS	0.22	U	0.23	U	0.26	U	0.21	U	0.29	U
Perfluoro(2-ethoxyethane)sulfonic acid	NS	NS	0.22	U	0.23	U	0.26	U	0.21	U	0.29	U
Perfluoro(2-Propoxypropanoic) Acid	NS	NS	0.22	U	0.23	U	0.26	U	0.21	U	0.29	U
Perfluoro-3-methoxypropanoic acid	NS	NS	0.22	U	0.23	U	0.26	U	0.21	U	0.29	U
Perfluoro-4-methoxybutanoic acid	NS	NS	0.22	U	0.23	U	0.26	U	0.21	U	0.29	U
Perfluorobutanesulfonic acid (PFBS)	NS	NS	0.22	U	0.23	U	0.26	U	0.21	U	0.29	U
Perfluorobutanoic acid	NS	NS	0.44	U	0.46	U	0.52	U	0.43	U	0.57	U
Perfluorodecanesulfonic acid	NS	NS	0.22	U	0.23	U	0.26	U	0.21	U	0.29	U
Perfluorodecanoic acid	NS	NS	0.22	U	0.23	U	0.26	U	0.21	U	0.29	U
Perfluorododecane sulfonate (PFDoDS)	NS	NS	0.22	U	0.23	U	0.26	U	0.21	U	0.29	U
Perfluorododecanoic acid	NS	NS	0.22	U	0.23	U	0.26	U	0.21	U	0.29	U
Perfluoroheptanesulfonic acid	NS	NS	0.22	U	0.23	U	0.26	U	0.21	U	0.29	U
Perfluoroheptanoic acid	NS	NS	0.22	U	0.23	U	0.26	U	0.21	U	0.29	U
Perfluorohexanesulfonic acid	NS	NS	0.22	U	0.23	U	0.26	U	0.21	U	0.29	U
Perfluorohexanoic acid	NS	NS	0.22	U	0.23	U	0.26	U	0.21	U	0.29	U
Perfluorononanesulfonic Acid (Pfns)	NS	NS	0.22	U	0.23	U	0.26	U	0.21	U	0.29	U
Perfluorononanoic acid	NS	NS	0.22	U	0.23	U	0.26	U	0.21	U	0.29	U
Perfluorooctanesulfonamide	NS	NS	0.22	U	0.23	U	0.26	U	0.21	U	0.29	U
Perfluorooctanesulfonic acid (PFOS)	**0.88**	44	0.062	J	0.23	U	0.34		**1.37**		0.073	J
Perfluorooctanoic acid (PFOA)	**0.66**	33	0.22	U	0.31		0.14	J	0.41		0.29	U
Perfluoropentanesulfonic Acid (Pfpes)	NS	NS	0.22	U	0.23	U	0.26	U	0.21	U	0.29	U
Perfluoropentanoic acid	NS	NS	0.22	U	0.23	U	0.26	U	0.21	U	0.29	U
Perfluorotetradecanoic acid	NS	NS	0.22	U	0.23	U	0.26	U	0.21	U	0.29	U
Perfluorotridecanoic acid	NS	NS	0.22	U	0.23	U	0.26	U	0.21	U	0.29	U
Perfluoroundecanoic acid	NS	NS	0.22	U	0.23	U	0.26	U	0.21	U	0.29	U
Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2)	NS	NS	0.44	U	0.46	U	0.52	U	0.43	U	0.57	U

Table 7
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Per- and Polyfluoroalkyl Substances (PFAS)

		AKRF Sample ID	RI-SB-08_0.5-2_20250922		RI-SB-08_8-10_20250922		RI-SB-08_10-12_20250926		RI-SB-09_2-4_20250923		RI-SB-X5_2-4_20250923	
		Lab Sample ID	460-335429-3		460-335428-12		460-335823-3		460-335525-16		460-335525-20	
		Sample Date	9/22/2025		9/22/2025		9/26/2025		9/23/2025		9/23/2025	
		Dilution Factor	1		1		1		1		1	
		Unit	ppb		ppb		ppb		ppb		ppb	
Compound	**UUGV**	**RRGV**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid	NS	NS	0.2	U	0.23	U	0.24	U	0.29	U	0.21	U
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	NS	NS	1.02	U	1.15	U	1.21	U	1.45	U	1.05	U
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	NS	NS	1.02	U	1.15	U	1.21	U	1.45	U	1.05	U
2H,2H,3H,3H-Perfluorooctanoic acid	NS	NS	1.02	U	1.15	UJ	1.21	U	1.45	U	1.05	U
3-Perfluoroheptyl propanoic acid	NS	NS	1.02	U	1.15	UJ	1.21	U	1.45	U	1.05	U
3-Perfluoropropyl propanoic acid	NS	NS	0.41	U	0.46	UJ	0.48	U	0.58	U	0.42	U
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NS	NS	0.2	U	0.23	U	0.24	U	0.29	U	0.21	U
6:2 Fluorotelomer sulfonate	NS	NS	0.41	U	0.46	U	0.48	U	0.58	U	0.42	U
8:2 Fluorotelomer sulfonate	NS	NS	0.41	U	0.46	U	0.48	U	0.58	U	0.42	U
9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid	NS	NS	0.2	U	0.23	U	0.24	U	0.29	U	0.21	U
N-ethyl perfluoro-1-octanesulfonamide	NS	NS	0.2	U	0.23	U	0.24	U	0.29	U	0.21	U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	0.2	U	0.23	U	0.24	U	0.29	U	0.21	U
N-methyl perfluoro-1-octanesulfonamide	NS	NS	0.2	U	0.23	U	0.24	U	0.29	U	0.21	U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	0.2	U	0.23	U	0.24	U	0.29	U	0.21	U
Nonafluoro-3,6-dioxaheptanoic acid	NS	NS	0.2	U	0.23	U	0.24	U	0.29	U	0.21	U
Perfluoro(2-ethoxyethane)sulfonic acid	NS	NS	0.2	U	0.23	U	0.24	U	0.29	U	0.21	U
Perfluoro(2-Propoxypropanoic) Acid	NS	NS	0.2	U	0.23	U	0.24	U	0.29	U	0.21	U
Perfluoro-3-methoxypropanoic acid	NS	NS	0.2	U	0.23	U	0.24	U	0.29	U	0.21	U
Perfluoro-4-methoxybutanoic acid	NS	NS	0.2	U	0.23	U	0.24	U	0.29	U	0.21	U
Perfluorobutanesulfonic acid (PFBS)	NS	NS	0.2	U	0.23	U	0.24	U	0.29	U	0.21	U
Perfluorobutanoic acid	NS	NS	0.41	U	0.46	U	0.48	U	0.58	U	0.42	U
Perfluorodecanesulfonic acid	NS	NS	0.2	U	0.23	U	0.24	U	0.085	J	0.21	U
Perfluorodecanoic acid	NS	NS	0.2	U	0.23	U	0.24	U	0.28	J	0.64	
Perfluorododecane sulfonate (PFDoDS)	NS	NS	0.2	U	0.23	U	0.24	U	0.29	U	0.21	U
Perfluorododecanoic acid	NS	NS	0.2	U	0.23	U	0.24	U	0.16	J	0.23	
Perfluoroheptanesulfonic acid	NS	NS	0.2	U	0.23	U	0.24	U	0.29	U	0.21	U
Perfluoroheptanoic acid	NS	NS	0.2	U	0.14	J	0.24	U	0.076	J	0.15	J
Perfluorohexanesulfonic acid	NS	NS	0.2	U	0.23	U	0.24	U	0.29	U	0.21	U
Perfluorohexanoic acid	NS	NS	0.07	J	0.17	J	0.24	U	0.13	J	0.12	J
Perfluorononanesulfonic Acid (Pfns)	NS	NS	0.2	U	0.23	U	0.24	U	0.29	U	0.21	U
Perfluorononanoic acid	NS	NS	0.11	J	0.081	J	0.24	U	0.21	J	0.35	
Perfluorooctanesulfonamide	NS	NS	0.2	U	0.23	U	0.24	U	0.29	U	0.21	U
Perfluorooctanesulfonic acid (PFOS)	**0.88**	44	0.33		0.62		0.34		0.85	J	0.59	
Perfluorooctanoic acid (PFOA)	**0.66**	33	0.31		**0.75**		0.24	U	0.27	J	0.35	
Perfluoropentanesulfonic Acid (Pfpes)	NS	NS	0.2	U	0.23	U	0.24	U	0.29	U	0.21	U
Perfluoropentanoic acid	NS	NS	0.085	J	0.38		0.24	U	0.18	J	0.24	
Perfluorotetradecanoic acid	NS	NS	0.2	U	0.23	U	0.24	U	0.082	J	0.083	J
Perfluorotridecanoic acid	NS	NS	0.2	U	0.23	U	0.24	U	0.29	U	0.21	U
Perfluoroundecanoic acid	NS	NS	0.2	U	0.23	U	0.24	U	0.13	J	0.14	J
Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2)	NS	NS	0.41	U	0.46	U	0.48	U	0.58	U	0.42	U

Table 7
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Per- and Polyfluoroalkyl Substances (PFAS)

		AKRF Sample ID	RI-SB-09_8-10_20250923		RI-SB-09_10-12_20250926		SB-11_8-10_20250924		RI-SB-14_0.5-2_20250922		RI-SB-14_8-10_20250922	
		Lab Sample ID	460-335525-19		460-335823-4		460-335651-14		460-335428-24		460-335428-28	
		Sample Date	9/23/2025		9/26/2025		9/23/2025		9/22/2025		9/22/2025	
		Dilution Factor	1		1		1		1		1	
		Unit	ppb		ppb		ppb		ppb		ppb	
Compound	**UUGV**	**RRGV**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid	NS	NS	0.21	U	0.29	U	0.22	U	0.22	U	0.25	U
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	NS	NS	1.06	U	1.45	U	1.08	U	1.11	U	1.23	U
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	NS	NS	1.06	U	1.45	U	1.08	U	1.11	U	1.23	U
2H,2H,3H,3H-Perfluorooctanoic acid	NS	NS	1.06	U	1.45	U	1.08	U	1.11	U	1.23	U
3-Perfluoroheptyl propanoic acid	NS	NS	1.06	U	1.45	U	1.08	U	1.11	U	1.23	U
3-Perfluoropropyl propanoic acid	NS	NS	0.42	U	0.58	U	0.43	U	0.44	U	0.49	U
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NS	NS	0.21	U	0.29	U	0.22	U	0.22	U	0.25	U
6:2 Fluorotelomer sulfonate	NS	NS	0.42	U	0.58	U	0.43	U	0.44	U	0.49	U
8:2 Fluorotelomer sulfonate	NS	NS	0.42	U	0.58	U	0.43	U	0.44	U	0.49	U
9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid	NS	NS	0.21	U	0.29	U	0.22	U	0.22	U	0.25	U
N-ethyl perfluoro-1-octanesulfonamide	NS	NS	0.21	U	0.29	U	0.22	U	0.22	U	0.25	U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	0.21	U	0.29	U	0.22	U	0.22	U	0.25	U
N-methyl perfluoro-1-octanesulfonamide	NS	NS	0.21	U	0.29	U	0.22	U	0.22	U	0.25	U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	0.21	U	0.29	U	0.22	U	0.22	U	0.25	U
Nonafluoro-3,6-dioxaheptanoic acid	NS	NS	0.21	U	0.29	U	0.22	U	0.22	U	0.25	U
Perfluoro(2-ethoxyethane)sulfonic acid	NS	NS	0.21	U	0.29	U	0.22	U	0.22	U	0.25	U
Perfluoro(2-Propoxypropanoic) Acid	NS	NS	0.21	U	0.29	U	0.22	U	0.22	U	0.25	U
Perfluoro-3-methoxypropanoic acid	NS	NS	0.21	U	0.29	U	0.22	U	0.22	U	0.25	U
Perfluoro-4-methoxybutanoic acid	NS	NS	0.21	U	0.29	U	0.22	U	0.22	U	0.25	U
Perfluorobutanesulfonic acid (PFBS)	NS	NS	0.21	U	0.29	U	0.22	U	0.22	U	0.25	U
Perfluorobutanoic acid	NS	NS	0.42	U	0.58	U	0.43	U	0.11	J	0.49	U
Perfluorodecanesulfonic acid	NS	NS	0.21	U	0.29	U	0.22	U	0.22	U	0.25	U
Perfluorodecanoic acid	NS	NS	0.39		0.29	U	0.22	U	0.13	J	0.25	U
Perfluorododecane sulfonate (PFDoDS)	NS	NS	0.21	U	0.29	U	0.22	U	0.22	U	0.25	U
Perfluorododecanoic acid	NS	NS	0.21	U	0.29	U	0.22	U	0.074	J	0.25	U
Perfluoroheptanesulfonic acid	NS	NS	0.21	U	0.29	U	0.22	U	0.22	U	0.25	U
Perfluoroheptanoic acid	NS	NS	0.15	J	0.29	U	0.22	U	0.083	J	0.25	U
Perfluorohexanesulfonic acid	NS	NS	0.21	U	0.29	U	0.22	U	0.22	U	0.25	U
Perfluorohexanoic acid	NS	NS	0.19	J	0.29	U	0.22	U	0.073	J	0.25	U
Perfluorononanesulfonic Acid (Pfns)	NS	NS	0.21	U	0.29	U	0.22	U	0.22	U	0.25	U
Perfluorononanoic acid	NS	NS	0.45		0.29	U	0.22	U	0.26		0.25	U
Perfluorooctanesulfonamide	NS	NS	0.21	U	0.29	U	0.22	U	0.22	U	0.25	U
Perfluorooctanesulfonic acid (PFOS)	**0.88**	44	0.75		0.18	J	0.22		0.73		0.53	
Perfluorooctanoic acid (PFOA)	**0.66**	33	0.33		0.16	J	0.25		0.61		0.25	U
Perfluoropentanesulfonic Acid (Pfpes)	NS	NS	0.21	U	0.29	U	0.22	U	0.22	U	0.25	U
Perfluoropentanoic acid	NS	NS	0.31		0.29	U	0.22	U	0.11	J	0.25	U
Perfluorotetradecanoic acid	NS	NS	0.21	U	0.29	U	0.22	U	0.22	U	0.25	U
Perfluorotridecanoic acid	NS	NS	0.21	U	0.29	U	0.22	U	0.056	J	0.25	U
Perfluoroundecanoic acid	NS	NS	0.21	U	0.29	U	0.22	U	0.13	J	0.25	U
Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2)	NS	NS	0.42	U	0.58	U	0.43	U	0.44	U	0.49	U

Table 7
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Per- and Polyfluoroalkyl Substances (PFAS)

		AKRF Sample ID	RI-SB-14_10-12_20250926		RI-SB-15_2-4_20250922		RI-SB-X3_2-4_20250922		RI-SB-15_8-10_20250922		RI-SB-15_10-12_20250926	
		Lab Sample ID	460-335823-9		460-335428-31		460-335428-37		460-335428-34		460-335823-10	
		Sample Date	9/26/2025		9/22/2025		9/22/2025		9/22/2025		9/26/2025	
		Dilution Factor	1		1		1		1		1	
		Unit	ppb		ppb		ppb		ppb		ppb	
Compound	**UUGV**	**RRGV**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid	NS	NS	0.22	U	0.21	U	0.21	U	0.25	U	0.28	U
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	NS	NS	1.09	U	1.03	U	1.06	U	1.24	U	1.41	U
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	NS	NS	1.09	U	1.03	U	1.06	U	1.24	U	1.41	U
2H,2H,3H,3H-Perfluorooctanoic acid	NS	NS	1.09	U	1.03	U	1.06	U	1.24	U	1.41	U
3-Perfluoroheptyl propanoic acid	NS	NS	1.09	U	1.03	U	1.06	U	1.24	U	1.41	U
3-Perfluoropropyl propanoic acid	NS	NS	0.44	U	0.41	U	0.43	U	0.49	U	0.56	U
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NS	NS	0.22	U	0.21	U	0.21	U	0.25	U	0.28	U
6:2 Fluorotelomer sulfonate	NS	NS	0.44	U	0.41	U	0.43	U	0.49	U	0.56	U
8:2 Fluorotelomer sulfonate	NS	NS	0.44	U	0.41	U	0.43	U	0.49	U	0.56	U
9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid	NS	NS	0.22	U	0.21	U	0.21	U	0.25	U	0.28	U
N-ethyl perfluoro-1-octanesulfonamide	NS	NS	0.22	U	0.21	U	0.21	U	0.25	U	0.28	U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	0.22	U	0.21	U	0.057	J	0.25	U	0.28	U
N-methyl perfluoro-1-octanesulfonamide	NS	NS	0.22	U	0.21	U	0.21	U	0.25	U	0.28	U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	0.22	U	0.21	U	0.21	U	0.25	U	0.28	U
Nonafluoro-3,6-dioxaheptanoic acid	NS	NS	0.22	U	0.21	U	0.21	U	0.25	U	0.28	U
Perfluoro(2-ethoxyethane)sulfonic acid	NS	NS	0.22	U	0.21	U	0.21	U	0.25	U	0.28	U
Perfluoro(2-Propoxypropanoic) Acid	NS	NS	0.22	U	0.21	U	0.21	U	0.25	U	0.28	U
Perfluoro-3-methoxypropanoic acid	NS	NS	0.22	U	0.21	U	0.21	U	0.25	U	0.28	U
Perfluoro-4-methoxybutanoic acid	NS	NS	0.22	U	0.21	U	0.21	U	0.25	U	0.28	U
Perfluorobutanesulfonic acid (PFBS)	NS	NS	0.22	U	0.21	U	0.21	U	0.25	U	0.28	U
Perfluorobutanoic acid	NS	NS	0.44	U	0.41	U	0.43	U	0.49	U	0.56	U
Perfluorodecanesulfonic acid	NS	NS	0.22	U	0.21	U	0.21	U	0.25	U	0.28	U
Perfluorodecanoic acid	NS	NS	0.22	U	0.053	J	0.21	U	0.25	U	0.28	U
Perfluorododecane sulfonate (PFDoDS)	NS	NS	0.22	U	0.21	U	0.21	U	0.25	U	0.28	U
Perfluorododecanoic acid	NS	NS	0.22	U	0.21	U	0.21	U	0.25	U	0.28	U
Perfluoroheptanesulfonic acid	NS	NS	0.22	U	0.21	U	0.21	U	0.25	U	0.28	U
Perfluoroheptanoic acid	NS	NS	0.22	U	0.052	J	0.21	U	0.25	U	0.28	U
Perfluorohexanesulfonic acid	NS	NS	0.22	U	0.21	U	0.21	U	0.25	U	0.28	U
Perfluorohexanoic acid	NS	NS	0.22	U	0.063	J	0.21	U	0.25	U	0.28	U
Perfluorononanesulfonic Acid (Pfns)	NS	NS	0.22	U	0.21	U	0.21	U	0.25	U	0.28	U
Perfluorononanoic acid	NS	NS	0.22	U	0.12	J	0.21	U	0.25	U	0.28	U
Perfluorooctanesulfonamide	NS	NS	0.22	U	0.21	U	0.055	J	0.25	U	0.28	U
Perfluorooctanesulfonic acid (PFOS)	**0.88**	44	0.26		0.42		0.62		0.11	J	0.2	J
Perfluorooctanoic acid (PFOA)	**0.66**	33	0.27		0.32		0.13	J	0.22	J	0.28	U
Perfluoropentanesulfonic Acid (Pfpes)	NS	NS	0.22	U	0.21	U	0.21	U	0.25	U	0.28	U
Perfluoropentanoic acid	NS	NS	0.22	U	0.21	U	0.21	U	0.25	U	0.28	U
Perfluorotetradecanoic acid	NS	NS	0.22	U	0.21	U	0.21	U	0.25	U	0.28	U
Perfluorotridecanoic acid	NS	NS	0.22	U	0.21	U	0.21	U	0.25	U	0.28	U
Perfluoroundecanoic acid	NS	NS	0.22	U	0.21	U	0.21	U	0.25	U	0.28	U
Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2)	NS	NS	0.44	U	0.41	U	0.43	U	0.49	U	0.56	U

Table 7
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Per- and Polyfluoroalkyl Substances (PFAS)

		AKRF Sample ID	RI-SB-16_0.5-2_20250922		RI-SB-16_8-10_20250922		RI-SB-16_10-12_20250926		RI-SB-17_0-2_20250923		RI-SB-17_8-10_20250923	
		Lab Sample ID	460-335428-2		460-335428-6		460-335823-11		460-335525-1		460-335525-5	
		Sample Date	9/22/2025		9/22/2025		9/26/2025		9/23/2025		9/23/2025	
		Dilution Factor	1		1		1		1		1	
		Unit	ppb		ppb		ppb		ppb		ppb	
Compound	**UUGV**	**RRGV**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid	NS	NS	0.21	U	0.2	U	1.01	U	0.23	U	0.21	U
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	NS	NS	1.03	U	1	U	1.7	J	1.15	U	1.07	U
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	NS	NS	1.03	U	1	U	5.07	U	1.15	U	1.07	U
2H,2H,3H,3H-Perfluorooctanoic acid	NS	NS	1.03	U	1	U	1.42	U	1.15	U	1.07	U
3-Perfluoroheptyl propanoic acid	NS	NS	1.03	U	1	U	1.42	U	1.15	U	1.07	U
3-Perfluoropropyl propanoic acid	NS	NS	0.41	U	0.4	U	0.57	U	0.46	U	0.43	U
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NS	NS	0.21	U	0.2	U	0.28	U	0.23	U	0.21	U
6:2 Fluorotelomer sulfonate	NS	NS	0.41	U	0.4	U	2.03	U	0.13	J	0.43	U
8:2 Fluorotelomer sulfonate	NS	NS	0.41	U	0.4	U	2.03	U	0.46	U	0.43	U
9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid	NS	NS	0.21	U	0.2	U	1.01	U	0.23	U	0.21	U
N-ethyl perfluoro-1-octanesulfonamide	NS	NS	0.21	U	0.2	U	1.01	U	0.23	U	0.21	U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	0.21	U	0.2	U	1.01	U	0.23	U	0.21	U
N-methyl perfluoro-1-octanesulfonamide	NS	NS	0.21	U	0.2	U	1.01	U	0.23	U	0.21	U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	0.21	U	0.2	U	1.01	U	0.23	U	0.21	U
Nonafluoro-3,6-dioxaheptanoic acid	NS	NS	0.21	U	0.2	U	0.28	U	0.23	U	0.21	U
Perfluoro(2-ethoxyethane)sulfonic acid	NS	NS	0.21	U	0.2	U	0.28	U	0.23	U	0.21	U
Perfluoro(2-Propoxypropanoic) Acid	NS	NS	0.21	U	0.2	U	0.28	U	0.23	U	0.21	U
Perfluoro-3-methoxypropanoic acid	NS	NS	0.21	U	0.2	U	0.28	U	0.23	U	0.21	U
Perfluoro-4-methoxybutanoic acid	NS	NS	0.21	U	0.2	U	0.28	U	0.23	U	0.21	U
Perfluorobutanesulfonic acid (PFBS)	NS	NS	0.21	U	0.2	U	0.28	U	0.23	U	0.21	U
Perfluorobutanoic acid	NS	NS	0.41	U	0.4	U	0.57	U	0.46	U	0.43	U
Perfluorodecanesulfonic acid	NS	NS	0.21	U	0.2	U	1.01	U	0.23	U	0.21	U
Perfluorodecanoic acid	NS	NS	0.21	U	0.2	U	1.01	U	0.23	U	0.21	U
Perfluorododecane sulfonate (PFDoDS)	NS	NS	0.21	U	0.2	U	1.01	U	0.23	U	0.21	U
Perfluorododecanoic acid	NS	NS	0.21	U	0.2	U	1.01	U	0.23	U	0.21	U
Perfluoroheptanesulfonic acid	NS	NS	0.21	U	0.2	U	1.01	U	0.23	U	0.21	U
Perfluoroheptanoic acid	NS	NS	0.21	U	0.2	U	1.01	U	0.23	U	0.21	U
Perfluorohexanesulfonic acid	NS	NS	0.21	U	0.2	U	1.01	U	0.23	U	0.21	U
Perfluorohexanoic acid	NS	NS	0.21	U	0.2	U	0.28	U	0.23	U	0.21	U
Perfluorononanesulfonic Acid (Pfns)	NS	NS	0.21	U	0.2	U	1.01	U	0.23	U	0.21	U
Perfluorononanoic acid	NS	NS	0.21	U	0.2	U	1.01	U	0.23	U	0.21	U
Perfluorooctanesulfonamide	NS	NS	0.21	U	0.2	U	1.01	U	0.23	U	0.21	U
Perfluorooctanesulfonic acid (PFOS)	**0.88**	44	0.091	J	0.098	J	**3.12**		0.28		0.11	J
Perfluorooctanoic acid (PFOA)	**0.66**	33	0.12	J	0.12	J	1.01	U	0.23	U	0.21	U
Perfluoropentanesulfonic Acid (Pfpes)	NS	NS	0.21	U	0.2	U	1.01	U	0.23	U	0.21	U
Perfluoropentanoic acid	NS	NS	0.21	U	0.2	U	0.28	U	0.23	U	0.21	U
Perfluorotetradecanoic acid	NS	NS	0.21	U	0.2	U	1.01	U	0.23	U	0.21	U
Perfluorotridecanoic acid	NS	NS	0.21	U	0.2	U	1.01	U	0.23	U	0.21	U
Perfluoroundecanoic acid	NS	NS	0.21	U	0.2	U	1.01	U	0.23	U	0.21	U
Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2)	NS	NS	0.41	U	0.4	U	0.57	U	0.46	U	0.43	U

Table 7
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Per- and Polyfluoroalkyl Substances (PFAS)

		AKRF Sample ID	RI-SB-22_0.5-2_20251218		RI-SB-X8_0.5-2_20251218		RI-SB-22_2-4_20251218		RI-SB-22_8-10_20251218		RI-SB-23_0-2_20251218	
		Lab Sample ID	460-341877-2		460-341877-8		460-341877-3		460-341877-6		460-341877-9	
		Sample Date	12/18/2025		12/18/2025		12/18/2025		12/18/2025		12/18/2025	
		Dilution Factor	1		1		1		1		1	
		Unit	ppb		ppb		ppb		ppb		ppb	
Compound	**UUGV**	**RRGV**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid	NS	NS	0.22	U	0.23	U	0.23	U	0.32	U	0.22	U
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	NS	NS	1.12	U	0.29	J	1.16	U	1.61	U	1.11	U
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	NS	NS	1.12	U	1.16	U	1.16	U	1.61	U	1.11	U
2H,2H,3H,3H-Perfluorooctanoic acid	NS	NS	1.12	U	1.16	U	1.16	U	1.61	U	1.11	U
3-Perfluoroheptyl propanoic acid	NS	NS	1.12	U	1.16	U	1.16	U	1.61	U	1.11	U
3-Perfluoropropyl propanoic acid	NS	NS	0.45	U	0.46	U	0.46	U	0.65	U	0.44	U
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NS	NS	0.22	U	0.23	U	0.23	U	0.32	U	0.22	U
6:2 Fluorotelomer sulfonate	NS	NS	0.45	U	0.46	U	0.46	U	0.65	U	0.44	U
8:2 Fluorotelomer sulfonate	NS	NS	0.11	J	0.46	U	0.46	U	0.65	U	0.44	U
9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid	NS	NS	0.22	U	0.23	U	0.23	U	0.32	U	0.22	U
N-ethyl perfluoro-1-octanesulfonamide	NS	NS	0.22	U	0.23	U	0.23	U	0.32	U	0.22	U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	0.22	U	0.23	U	0.23	U	0.32	U	0.22	U
N-methyl perfluoro-1-octanesulfonamide	NS	NS	0.22	U	0.23	U	0.23	U	0.32	U	0.22	U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	0.22	U	0.23	U	0.23	U	0.32	U	0.22	U
Nonafluoro-3,6-dioxaheptanoic acid	NS	NS	0.22	U	0.23	U	0.23	U	0.32	U	0.22	U
Perfluoro(2-ethoxyethane)sulfonic acid	NS	NS	0.22	U	0.23	U	0.23	U	0.32	U	0.22	U
Perfluoro(2-Propoxypropanoic) Acid	NS	NS	0.22	U	0.23	U	0.23	U	0.32	U	0.22	U
Perfluoro-3-methoxypropanoic acid	NS	NS	0.22	U	0.23	U	0.23	U	0.32	U	0.22	U
Perfluoro-4-methoxybutanoic acid	NS	NS	0.22	U	0.23	U	0.23	U	0.32	U	0.22	U
Perfluorobutanesulfonic acid (PFBS)	NS	NS	0.22	U	0.23	U	0.23	U	0.32	U	0.22	U
Perfluorobutanoic acid	NS	NS	0.45	U	0.46	U	0.46	U	0.65	U	0.44	U
Perfluorodecanesulfonic acid	NS	NS	0.22	U	0.23	U	0.23	U	0.32	U	0.22	U
Perfluorodecanoic acid	NS	NS	0.11	J	0.23	U	0.23	U	0.32	U	0.22	U
Perfluorododecane sulfonate (PFDoDS)	NS	NS	0.22	U	0.23	U	0.23	U	0.32	U	0.22	U
Perfluorododecanoic acid	NS	NS	0.22	U	0.23	U	0.23	U	0.32	U	0.22	U
Perfluoroheptanesulfonic acid	NS	NS	0.22	U	0.23	U	0.23	U	0.32	U	0.22	U
Perfluoroheptanoic acid	NS	NS	0.061	J	0.069	J	0.23	U	0.15	J	0.22	U
Perfluorohexanesulfonic acid	NS	NS	0.22	U	0.23	U	0.23	U	0.15	J	0.22	U
Perfluorohexanoic acid	NS	NS	0.11	J	0.13	J	0.13	J	0.18	J	0.22	U
Perfluorononanesulfonic Acid (Pfns)	NS	NS	0.22	U	0.23	U	0.23	U	0.32	U	0.22	U
Perfluorononanoic acid	NS	NS	0.2	J	0.21	J	0.16	J	0.32	U	0.22	U
Perfluorooctanesulfonamide	NS	NS	0.22	U	0.23	U	0.23	U	0.32	U	0.22	U
Perfluorooctanesulfonic acid (PFOS)	**0.88**	44	**0.99**		**0.9**		0.69		0.2	J	0.49	
Perfluorooctanoic acid (PFOA)	**0.66**	33	0.37		0.45		0.4		**1.26**		0.22	U
Perfluoropentanesulfonic Acid (Pfpes)	NS	NS	0.22	U	0.23	U	0.23	U	0.32	U	0.22	U
Perfluoropentanoic acid	NS	NS	0.16	J	0.2	J	0.11	J	0.15	J	0.22	U
Perfluorotetradecanoic acid	NS	NS	0.22	U	0.23	U	0.23	U	0.32	U	0.22	U
Perfluorotridecanoic acid	NS	NS	0.22	U	0.23	U	0.23	U	0.32	U	0.22	U
Perfluoroundecanoic acid	NS	NS	0.22	U	0.23	U	0.23	U	0.32	U	0.22	U
Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2)	NS	NS	0.45	U	0.46	U	0.46	U	0.65	U	0.44	U

Table 7
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Per- and Polyfluoroalkyl Substances (PFAS)

		AKRF Sample ID	RI-SB-23_2-4_20251218		RI-SB-X13_2-4_20251218		RI-SB-23_8-10_20251218		RI-SB-23_8-10_20251218		RI-SB-24_0-2_20251222	
		Lab Sample ID	460-341877-10		460-341877-15		460-341877-13		460-341877-13		460-342125-1	
		Sample Date	12/18/2025		12/18/2025		12/18/2025		12/18/2025		12/22/2025	
		Dilution Factor	1		1		1		10		1	
		Unit	ppb		ppb		ppb		ppb		ppb	
Compound	**UUGV**	**RRGV**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid	NS	NS	0.25	U	0.24	U	NR		2.58	U	0.25	U
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	NS	NS	1.23	U	1.18	U	NR		12.9	U	1.27	U
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	NS	NS	1.23	U	1.18	U	NR		12.9	U	1.27	U
2H,2H,3H,3H-Perfluorooctanoic acid	NS	NS	1.23	U	1.18	U	1.29	U	NR		1.27	U
3-Perfluoroheptyl propanoic acid	NS	NS	1.23	U	1.18	U	1.29	U	NR		1.27	U
3-Perfluoropropyl propanoic acid	NS	NS	0.49	U	0.47	U	0.52	U	NR		0.51	U
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NS	NS	0.25	U	0.24	U	0.26	U	NR		0.25	U
6:2 Fluorotelomer sulfonate	NS	NS	0.49	U	0.47	U	0.52	U	NR		0.21	J
8:2 Fluorotelomer sulfonate	NS	NS	0.49	U	0.47	U	0.52	U	NR		0.51	U
9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid	NS	NS	0.25	U	0.24	U	NR		2.58	U	0.25	U
N-ethyl perfluoro-1-octanesulfonamide	NS	NS	0.25	U	0.24	U	NR		2.58	U	0.25	U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	0.25	U	0.24	U	NR		2.58	U	0.25	U
N-methyl perfluoro-1-octanesulfonamide	NS	NS	0.25	U	0.24	U	NR		2.58	U	0.25	U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	0.25	U	0.24	U	NR		2.58	U	0.25	U
Nonafluoro-3,6-dioxaheptanoic acid	NS	NS	0.25	U	0.24	U	0.26	U	NR		0.25	U
Perfluoro(2-ethoxyethane)sulfonic acid	NS	NS	0.25	U	0.24	U	0.26	U	NR		0.25	U
Perfluoro(2-Propoxypropanoic) Acid	NS	NS	0.25	U	0.24	U	0.26	U	NR		0.25	U
Perfluoro-3-methoxypropanoic acid	NS	NS	0.25	U	0.24	U	0.26	U	NR		0.25	U
Perfluoro-4-methoxybutanoic acid	NS	NS	0.25	U	0.24	U	0.26	U	NR		0.25	U
Perfluorobutanesulfonic acid (PFBS)	NS	NS	0.25	U	0.24	U	0.26	U	NR		0.25	U
Perfluorobutanoic acid	NS	NS	0.49	U	0.47	U	0.52	U	NR		0.51	U
Perfluorodecanesulfonic acid	NS	NS	0.25	U	0.24	U	NR		2.58	U	0.25	U
Perfluorodecanoic acid	NS	NS	0.25	U	0.24	U	0.26	U	NR		0.25	U
Perfluorododecane sulfonate (PFDoDS)	NS	NS	0.25	U	0.24	U	NR		2.58	U	0.25	U
Perfluorododecanoic acid	NS	NS	0.25	U	0.24	U	0.076	J	NR		0.25	U
Perfluoroheptanesulfonic acid	NS	NS	0.25	U	0.24	U	NR		2.58	U	0.25	U
Perfluoroheptanoic acid	NS	NS	0.25	U	0.24	U	0.083	J	NR		0.071	J
Perfluorohexanesulfonic acid	NS	NS	0.25	U	0.24	U	0.26	U	NR		0.069	J
Perfluorohexanoic acid	NS	NS	0.25	U	0.24	U	0.25	J	NR		0.18	J
Perfluorononanesulfonic Acid (Pfns)	NS	NS	0.25	U	0.24	U	NR		2.58	U	0.25	U
Perfluorononanoic acid	NS	NS	0.25	U	0.24	U	0.26	U	NR		0.25	U
Perfluorooctanesulfonamide	NS	NS	0.25	U	0.24	U	NR		2.58	U	0.25	U
Perfluorooctanesulfonic acid (PFOS)	**0.88**	44	0.66	J	0.17	J	NR		2.58	U	0.43	
Perfluorooctanoic acid (PFOA)	**0.66**	33	0.17	J	0.25		0.26	UJ	NR		**1.59**	
Perfluoropentanesulfonic Acid (Pfpes)	NS	NS	0.25	U	0.24	U	0.26	U	NR		0.25	U
Perfluoropentanoic acid	NS	NS	0.25	U	0.24	U	0.24	J	NR		0.21	J
Perfluorotetradecanoic acid	NS	NS	0.25	U	0.24	U	0.26	U	NR		0.25	U
Perfluorotridecanoic acid	NS	NS	0.25	U	0.24	U	0.26	U	NR		0.25	U
Perfluoroundecanoic acid	NS	NS	0.25	U	0.24	U	0.26	U	NR		0.25	U
Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2)	NS	NS	0.49	U	0.47	U	0.52	U	NR		0.51	U

Table 7
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Per- and Polyfluoroalkyl Substances (PFAS)

		AKRF Sample ID	RI-SB-24_2-4_20251222		RI-SB-X14_2-4_20251222		RI-SB-24_8-10_20251222		RI-SB-77_20-22_20260623		RI-SB-78_22-24_20260623	
		Lab Sample ID	460-342125-2		460-342125-6		460-342125-5		460-353946-2		460-353946-5	
		Sample Date	12/22/2025		12/22/2025		12/22/2025		6/23/2026		6/23/2026	
		Dilution Factor	1		1		1		1		1	
		Unit	ppb		ppb		ppb		ppb		ppb	
Compound	**UUGV**	**RRGV**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid	NS	NS	0.21	U	0.24	U	0.26	U	0.24	U	0.24	U
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	NS	NS	1.06	U	1.21	U	1.28	U	1.22	U	1.2	U
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	NS	NS	1.06	U	1.21	U	1.28	U	1.22	U	1.2	U
2H,2H,3H,3H-Perfluorooctanoic acid	NS	NS	1.06	U	1.21	U	1.28	U	1.22	U	1.2	U
3-Perfluoroheptyl propanoic acid	NS	NS	1.06	U	1.21	U	1.28	U	1.22	U	1.2	U
3-Perfluoropropyl propanoic acid	NS	NS	0.43	U	0.49	U	0.51	U	0.49	U	0.48	U
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NS	NS	0.21	U	0.24	U	0.26	U	0.24	U	0.24	U
6:2 Fluorotelomer sulfonate	NS	NS	0.46		0.49	U	0.51	U	0.75		0.48	U
8:2 Fluorotelomer sulfonate	NS	NS	0.43	U	0.49	U	0.51	U	0.49	U	0.48	U
9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid	NS	NS	0.21	U	0.24	U	0.26	U	0.24	U	0.24	U
N-ethyl perfluoro-1-octanesulfonamide	NS	NS	0.21	U	0.24	U	0.26	U	0.24	U	0.24	U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	0.21	U	0.24	U	0.26	U	0.24	U	0.24	U
N-methyl perfluoro-1-octanesulfonamide	NS	NS	0.21	U	0.24	U	0.26	U	0.24	U	0.24	U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	0.21	U	0.24	U	0.26	U	0.24	U	0.24	U
Nonafluoro-3,6-dioxaheptanoic acid	NS	NS	0.21	U	0.24	U	0.26	U	0.24	U	0.24	U
Perfluoro(2-ethoxyethane)sulfonic acid	NS	NS	0.21	U	0.24	U	0.26	U	0.24	U	0.24	U
Perfluoro(2-Propoxypropanoic) Acid	NS	NS	0.21	U	0.24	U	0.26	U	0.24	U	0.24	U
Perfluoro-3-methoxypropanoic acid	NS	NS	0.21	U	0.24	U	0.26	U	0.24	U	0.24	U
Perfluoro-4-methoxybutanoic acid	NS	NS	0.21	U	0.24	U	0.26	U	0.24	U	0.24	U
Perfluorobutanesulfonic acid (PFBS)	NS	NS	0.21	U	0.24	U	0.26	U	0.24	U	0.24	U
Perfluorobutanoic acid	NS	NS	0.43	U	0.49	U	0.51	U	0.49	U	0.48	U
Perfluorodecanesulfonic acid	NS	NS	0.21	U	0.24	U	0.26	U	0.24	U	0.24	U
Perfluorodecanoic acid	NS	NS	0.21	U	0.24	U	0.26	U	0.24	U	0.24	U
Perfluorododecane sulfonate (PFDoDS)	NS	NS	0.21	U	0.24	U	0.26	U	0.24	U	0.24	U
Perfluorododecanoic acid	NS	NS	0.21	U	0.24	U	0.26	U	0.24	U	0.24	U
Perfluoroheptanesulfonic acid	NS	NS	0.21	U	0.24	U	0.26	U	0.24	U	0.24	U
Perfluoroheptanoic acid	NS	NS	0.21	U	0.24	U	0.26	U	0.24	U	0.24	U
Perfluorohexanesulfonic acid	NS	NS	0.21	U	0.24	U	0.26	U	0.24	U	0.24	U
Perfluorohexanoic acid	NS	NS	0.33		0.24	U	0.067	J	0.24	U	0.24	U
Perfluorononanesulfonic Acid (Pfns)	NS	NS	0.21	U	0.24	U	0.26	U	0.24	U	0.24	U
Perfluorononanoic acid	NS	NS	0.21	U	0.24	U	0.26	U	0.24	U	0.24	U
Perfluorooctanesulfonamide	NS	NS	0.21	U	0.24	U	0.26	U	0.24	U	0.24	U
Perfluorooctanesulfonic acid (PFOS)	**0.88**	44	0.3		0.2	J	0.26		0.24	U	0.24	U
Perfluorooctanoic acid (PFOA)	**0.66**	33	0.14	J	0.13	J	0.26	U	0.24	U	0.24	U
Perfluoropentanesulfonic Acid (Pfpes)	NS	NS	0.21	U	0.24	U	0.26	U	0.24	U	0.24	U
Perfluoropentanoic acid	NS	NS	0.12	J	0.24	U	0.26	U	0.24	U	0.24	U
Perfluorotetradecanoic acid	NS	NS	0.21	U	0.24	U	0.26	U	0.24	U	0.24	U
Perfluorotridecanoic acid	NS	NS	0.21	U	0.24	U	0.26	U	0.24	U	0.24	U
Perfluoroundecanoic acid	NS	NS	0.21	U	0.24	U	0.26	U	0.24	U	0.24	U
Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2)	NS	NS	0.43	U	0.49	U	0.51	U	0.49	U	0.48	U

Table 7
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Per- and Polyfluoroalkyl Substances (PFAS)

		AKRF Sample ID	RI-SB-79_23-25_20260623		RI-SB-80_23-25_20260623		RI-SB-X_23-25_20260623		RI-SB-81_15-17_20260623		FB-01_20250922	
		Lab Sample ID	460-353946-8		460-353946-11		460-353946-14		460-353946-15		460-335429-12	
		Sample Date	6/23/2026		6/23/2026		6/23/2026		6/23/2026		9/22/2025	
		Dilution Factor	1		1		1		1		1	
		Unit	ppb		ppb		ppb		ppb		ppt	
Compound	**UUGV**	**RRGV**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid	NS	NS	0.26	U	0.39	U	0.37	U	0.38	U	0.00155	U
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	NS	NS	1.29	U	1.95	U	1.84	U	1.89	U	0.00776	U
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	NS	NS	1.29	U	1.95	U	1.84	U	1.89	U	0.00776	U
2H,2H,3H,3H-Perfluorooctanoic acid	NS	NS	1.29	U	1.95	U	1.84	U	1.89	U	0.00776	U
3-Perfluoroheptyl propanoic acid	NS	NS	1.29	U	1.95	U	1.84	U	1.89	U	0.00776	U
3-Perfluoropropyl propanoic acid	NS	NS	0.52	U	0.78	U	0.73	U	0.76	U	0.00311	U
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NS	NS	0.26	U	0.39	U	0.37	U	0.38	U	0.00155	U
6:2 Fluorotelomer sulfonate	NS	NS	0.52	U	0.3	J	0.43	J	0.76	U	0.00311	U
8:2 Fluorotelomer sulfonate	NS	NS	0.52	U	0.78	U	0.73	U	0.76	U	0.00311	U
9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid	NS	NS	0.26	U	0.39	U	0.37	U	0.38	U	0.00155	U
N-ethyl perfluoro-1-octanesulfonamide	NS	NS	0.26	U	0.39	U	0.37	U	0.38	U	0.00155	U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	0.26	U	0.39	U	0.37	U	0.38	U	0.00155	U
N-methyl perfluoro-1-octanesulfonamide	NS	NS	0.26	U	0.39	U	0.37	U	0.38	U	0.00155	U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	0.26	U	0.39	U	0.37	U	0.38	U	0.00155	U
Nonafluoro-3,6-dioxaheptanoic acid	NS	NS	0.26	U	0.39	U	0.37	U	0.38	U	0.00155	U
Perfluoro(2-ethoxyethane)sulfonic acid	NS	NS	0.26	U	0.39	U	0.37	U	0.38	U	0.00155	U
Perfluoro(2-Propoxypropanoic) Acid	NS	NS	0.26	U	0.39	U	0.37	U	0.38	U	0.00116	U
Perfluoro-3-methoxypropanoic acid	NS	NS	0.26	U	0.39	U	0.37	U	0.38	U	0.00155	U
Perfluoro-4-methoxybutanoic acid	NS	NS	0.26	U	0.39	U	0.37	U	0.38	U	0.00155	U
Perfluorobutanesulfonic acid (PFBS)	NS	NS	0.26	U	0.39	U	0.37	U	0.38	U	0.00155	U
Perfluorobutanoic acid	NS	NS	0.52	U	0.78	U	0.73	U	0.76	U	0.00311	U
Perfluorodecanesulfonic acid	NS	NS	0.26	U	0.39	U	0.37	U	0.38	U	0.00155	U
Perfluorodecanoic acid	NS	NS	0.26	U	0.39	U	0.37	U	0.38	U	0.00155	U
Perfluorododecane sulfonate (PFDoDS)	NS	NS	0.26	U	0.39	U	0.37	U	0.38	U	0.00155	U
Perfluorododecanoic acid	NS	NS	0.26	U	0.39	U	0.37	U	0.38	U	0.00155	U
Perfluoroheptanesulfonic acid	NS	NS	0.26	U	0.39	U	0.37	U	0.38	U	0.00155	U
Perfluoroheptanoic acid	NS	NS	0.26	U	0.39	U	0.37	U	0.38	U	0.00155	U
Perfluorohexanesulfonic acid	NS	NS	0.26	U	0.39	U	0.37	U	0.38	U	0.00155	U
Perfluorohexanoic acid	NS	NS	0.26	U	0.39	U	0.37	U	0.38	U	0.00155	U
Perfluorononanesulfonic Acid (Pfns)	NS	NS	0.26	U	0.39	U	0.37	U	0.38	U	0.00155	U
Perfluorononanoic acid	NS	NS	0.26	U	0.39	U	0.37	U	0.38	U	0.00155	U
Perfluorooctanesulfonamide	NS	NS	0.26	U	0.39	U	0.37	U	0.38	U	0.00155	U
Perfluorooctanesulfonic acid (PFOS)	**0.88**	44	0.26	U	0.39	U	0.37	U	0.38	U	0.00155	U
Perfluorooctanoic acid (PFOA)	**0.66**	33	0.26	U	0.39	U	0.37	U	0.38	U	0.00155	U
Perfluoropentanesulfonic Acid (Pfpes)	NS	NS	0.26	U	0.39	U	0.37	U	0.38	U	0.00155	U
Perfluoropentanoic acid	NS	NS	0.26	U	0.39	U	0.37	U	0.38	U	0.00155	U
Perfluorotetradecanoic acid	NS	NS	0.26	U	0.39	U	0.37	U	0.38	U	0.00155	U
Perfluorotridecanoic acid	NS	NS	0.26	U	0.39	U	0.37	U	0.38	U	0.00155	U
Perfluoroundecanoic acid	NS	NS	0.26	U	0.39	U	0.37	U	0.38	U	0.00155	U
Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2)	NS	NS	0.52	U	0.78	U	0.73	U	0.76	U	0.00311	U

Table 7
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Analytical Results of Per- and Polyfluoroalkyl Substances (PFAS)

		AKRF Sample ID	FB-02_20250922		FB-03_20250923		FB-04_20250924		FB-05_20250924		RI-FB-01_20260623	
		Lab Sample ID	460-335428-35		460-335525-28		460-335652-29		460-335652-31		460-353946-1	
		Sample Date	9/22/2025		9/23/2025		9/24/2025		9/24/2025		6/23/2026	
		Dilution Factor	1		1		1		1		1	
		Unit	ppt		ppt		ppt		ppt		ppt	
Compound	**UUGV**	**RRGV**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid	NS	NS	0.00159	U	0.00156	U	0.0015	U	0.00156	U	1.58	U
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	NS	NS	0.00795	U	0.0078	U	0.00749	U	0.00781	U	7.88	U
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	NS	NS	0.00795	U	0.0078	U	0.00749	U	0.00781	U	7.88	U
2H,2H,3H,3H-Perfluorooctanoic acid	NS	NS	0.00795	U	0.0078	U	0.00749	U	0.00781	U	7.88	U
3-Perfluoroheptyl propanoic acid	NS	NS	0.00795	U	0.0078	U	0.00749	U	0.00781	U	7.88	U
3-Perfluoropropyl propanoic acid	NS	NS	0.00318	U	0.00312	U	0.003	U	0.00313	U	3.15	U
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NS	NS	0.00159	U	0.00156	U	0.0015	U	0.00156	U	1.58	U
6:2 Fluorotelomer sulfonate	NS	NS	0.00318	U	0.00312	U	0.003	U	0.00313	U	3.15	U
8:2 Fluorotelomer sulfonate	NS	NS	0.00318	U	0.00312	U	0.003	U	0.00313	U	3.15	U
9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid	NS	NS	0.00159	U	0.00156	U	0.0015	U	0.00156	U	1.58	U
N-ethyl perfluoro-1-octanesulfonamide	NS	NS	0.00159	U	0.00156	U	0.0015	U	0.00156	U	1.58	U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	0.00159	U	0.00156	U	0.0015	U	0.00156	U	1.58	U
N-methyl perfluoro-1-octanesulfonamide	NS	NS	0.00159	U	0.00156	U	0.0015	U	0.00156	U	1.58	U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	0.00159	U	0.00156	U	0.0015	U	0.00156	U	1.58	U
Nonafluoro-3,6-dioxaheptanoic acid	NS	NS	0.00159	U	0.00156	U	0.0015	U	0.00156	U	1.58	U
Perfluoro(2-ethoxyethane)sulfonic acid	NS	NS	0.00159	U	0.00156	U	0.0015	U	0.00156	U	1.58	U
Perfluoro(2-Propoxypropanoic) Acid	NS	NS	0.00119	U	0.00117	U	0.00112	U	0.00117	U	1.18	U
Perfluoro-3-methoxypropanoic acid	NS	NS	0.00159	U	0.00156	U	0.0015	U	0.00156	U	1.58	U
Perfluoro-4-methoxybutanoic acid	NS	NS	0.00159	U	0.00156	U	0.0015	U	0.00156	U	1.58	U
Perfluorobutanesulfonic acid (PFBS)	NS	NS	0.00159	U	0.00156	U	0.0015	U	0.00156	U	1.58	U
Perfluorobutanoic acid	NS	NS	0.00318	U	0.00312	U	0.003	U	0.00313	U	3.15	U
Perfluorodecanesulfonic acid	NS	NS	0.00159	U	0.00156	U	0.0015	U	0.00156	U	1.58	U
Perfluorodecanoic acid	NS	NS	0.00159	U	0.00156	U	0.0015	U	0.00156	U	1.58	U
Perfluorododecane sulfonate (PFDoDS)	NS	NS	0.00159	U	0.00156	U	0.0015	U	0.00156	U	1.58	U
Perfluorododecanoic acid	NS	NS	0.00159	U	0.00156	U	0.0015	U	0.00156	U	1.58	U
Perfluoroheptanesulfonic acid	NS	NS	0.00159	U	0.00156	U	0.0015	U	0.00156	U	1.58	U
Perfluoroheptanoic acid	NS	NS	0.00159	U	0.00156	U	0.0015	U	0.00156	U	1.58	U
Perfluorohexanesulfonic acid	NS	NS	0.00159	U	0.00156	U	0.0015	U	0.00156	U	1.58	U
Perfluorohexanoic acid	NS	NS	0.00159	U	0.00156	U	0.0015	U	0.00156	U	1.58	U
Perfluorononanesulfonic Acid (Pfns)	NS	NS	0.00159	U	0.00156	U	0.0015	U	0.00156	U	1.58	U
Perfluorononanoic acid	NS	NS	0.00159	U	0.00156	U	0.0015	U	0.00156	U	1.58	U
Perfluorooctanesulfonamide	NS	NS	0.00159	U	0.00156	U	0.0015	U	0.00156	U	1.58	U
Perfluorooctanesulfonic acid (PFOS)	**0.88**	44	0.00159	U	0.00156	U	0.0015	U	0.00156	U	1.58	U
Perfluorooctanoic acid (PFOA)	**0.66**	33	0.00159	U	0.00156	U	0.0015	U	0.00156	U	1.58	U
Perfluoropentanesulfonic Acid (Pfpes)	NS	NS	0.00159	U	0.00156	U	0.0015	U	0.00156	U	1.58	U
Perfluoropentanoic acid	NS	NS	0.00159	U	0.00156	U	0.0015	U	0.00156	U	1.58	U
Perfluorotetradecanoic acid	NS	NS	0.00159	U	0.00156	U	0.0015	U	0.00156	U	1.58	U
Perfluorotridecanoic acid	NS	NS	0.00159	U	0.00156	U	0.0015	U	0.00156	U	1.58	U
Perfluoroundecanoic acid	NS	NS	0.00159	U	0.00156	U	0.0015	U	0.00156	U	1.58	U
Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2)	NS	NS	0.00318	U	0.00312	U	0.003	U	0.00313	U	3.15	U

Table 8
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Groundwater Analytical Results of VOCs

	AKRF Sample ID	RI-MW-01_20251008		RI-MW-02_20251007		RI-MW-03_20251007		RI-MW-04_20251007		RI-MW-05_20251007		RI-MW-X_20251007		RI-MW-06_20251007	
	Lab Sample ID	460-336960-1		460-336666-1		460-336666-2		460-336666-3		460-336666-4		460-336665-7		460-336666-5	
	Sample Date	10/8/2025		10/7/2025		10/7/2025		10/7/2025		10/7/2025		10/7/2025		10/7/2025	
	Dilution Factor	1		1		1		1		1		1		1	
	Unit	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Compound	**AWQSGVs**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,1,1-Trichloroethane	5	1	U	1	UJ	1	UJ	1	UJ	1	UJ	1	UJ	1	UJ
1,1,2,2-Tetrachloroethane	5	0.2	U	0.2	UJ	0.2	UJ	0.2	UJ	0.2	UJ	0.2	UJ	0.2	UJ
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	5	1	UJ	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	1	0.58	U	0.58	U	0.58	U	0.58	U	0.58	U	0.58	U	0.58	U
1,1-Dichloroethane	5	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethene	5	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2,3-Trichlorobenzene	5	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	5	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2,4-Trimethylbenzene	5	1	U	1	U	1	U	1	U	0.41	J	0.41	J	1	U
1,2-Dibromo-3-Chloropropane	0.04	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dibromoethane (Ethylene Dibromide)	0.0006	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene	3	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethane	0.6	0.3	U	0.49		0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
1,2-Dichloropropane	1	0.92	U	0.92	U	0.92	U	0.92	U	0.92	U	0.92	U	0.92	U
1,3,5-Trimethylbenzene (Mesitylene)	5	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	3	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	3	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Hexanone	50	5	UJ	5	U	5	U	5	U	5	U	5	U	5	U
Acetone	50	9.7		5	U	5	U	5	U	5	U	5	U	5	U
Benzene	1	0.1	J	0.45	U	0.23	J	0.45	U	0.46		0.46		0.45	U
Bromochloromethane	5	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromodichloromethane	50	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U
Bromoform	50	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromomethane	5	1	U	1	UJ	1	UJ	1	UJ	1	UJ	1	UJ	1	UJ
Carbon Disulfide	60	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Carbon Tetrachloride	5	1	U	1	UJ	1	UJ	1	UJ	1	UJ	1	UJ	1	UJ
Chlorobenzene	5	1	U	0.58	J	1	U	1	U	1	U	1	U	1	U
Chloroethane	5	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroform	7	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloromethane	5	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Cis-1,2-Dichloroethylene	5	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Cis-1,3-Dichloropropene	NS	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U
Cyclohexane	NS	1	U	1	U	1	U	1	U	0.35	J	0.37	J	1	U
Dibromochloromethane	50	0.78	U	0.78	U	0.78	UJ	0.78	U	0.78	U	0.78	U	0.78	U
Dichlorodifluoromethane	5	1	UJ	1	U	1	U	1	U	1	U	1	U	1	U
Ethylbenzene	5	1	U	1	U	1	U	1	U	0.84	J	0.87	J	1	U
Isopropylbenzene (Cumene)	5	1	U	1	U	0.4	J	1	U	1	U	1	U	1	U
M,P-Xylenes	5	1	U	1	U	0.67	J	1	U	2.7		2.6		1	U
Methyl Acetate	NS	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Methyl Ethyl Ketone (2-Butanone)	50	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	5	UJ	5	U	5	U	5	U	5	U	5	U	5	U
Methylcyclohexane	NS	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Methylene Chloride	5	1	U	1	U	1	U	1	U	1	U	1	U	1	U
N-Butylbenzene	5	1	U	1	U	0.8	J	1	U	1	U	1	U	1	U
N-Propylbenzene	5	1	U	1	U	0.54	J	1	U	1	U	1	U	1	U
O-Xylene (1,2-Dimethylbenzene)	5	1	U	1	U	1	U	1	U	1.3		1.3		1	U
Sec-Butylbenzene	5	1	U	1	U	2.5		1	U	1	U	1	U	1	U
Styrene	5	1	U	1	U	1	U	1	U	1	U	1	U	1	U
T-Butylbenzene	5	1	U	1	U	0.99	J	1	U	1	U	1	U	1	U
Tert-Butyl Methyl Ether	10	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Tetrachloroethylene (PCE)	5	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
Toluene	5	1	U	1	U	2.5		1	U	1.6		1.6		1	U
Trans-1,2-Dichloroethene	5	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trans-1,3-Dichloropropene	NS	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U
Trichloroethylene (TCE)	5	0.28	U	0.28	U	0.28	U	0.28	U	0.28	U	0.28	U	0.28	U
Trichlorofluoromethane	5	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Vinyl Chloride	2	1	U	0.79	J	1	UJ	1	UJ	0.61	J	0.66	J	0.51	J
Xylenes, Total	NS	2	U	2	U	0.67	J	2	U	4		3.9		2	U

Table 8
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Groundwater Analytical Results of VOCs

	AKRF Sample ID	RI-MW-07_20251230		RI-MW-08_20251230		RI-MW-09_20251230		RI-MW-0X_20251230		FB_20251007		FIELD BLANK_20251230	
	Lab Sample ID	460-342378-1		460-342385-2		460-342378-3		460-342385-4		460-336666-6		460-342378-5	
	Sample Date	12/30/2025		12/30/2025		12/30/2025		12/30/2025		10/7/2025		12/30/2025	
	Dilution Factor	1		1		1		1		1		1	
	Unit	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Compound	**AWQSGVs**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,1,1-Trichloroethane	5	1	U	1	U	1	U	1	U	1	UJ	1	U
1,1,2,2-Tetrachloroethane	5	0.2	UJ	0.2	U	0.2	U	0.2	U	0.2	UJ	0.2	U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	5	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	1	0.58	U	0.58	U	0.58	U	0.58	U	0.58	U	0.58	U
1,1-Dichloroethane	5	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethene	5	1	U	1	U	1	U	1	U	1	U	1	U
1,2,3-Trichlorobenzene	5	1	U	1	U	1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	5	1	U	1	U	1	U	1	U	1	U	1	U
1,2,4-Trimethylbenzene	5	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dibromo-3-Chloropropane	0.04	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dibromoethane (Ethylene Dibromide)	0.0006	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene	3	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethane	0.6	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
1,2-Dichloropropane	1	0.92	U	0.92	U	0.92	U	0.92	U	0.92	U	0.92	U
1,3,5-Trimethylbenzene (Mesitylene)	5	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	3	1	U	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	3	1	U	1	U	1	U	1	U	1	U	1	U
2-Hexanone	50	5	U	5	U	5	U	5	U	5	U	5	U
Acetone	50	5	U	5	U	5	U	5	U	5	U	5	U
Benzene	1	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U
Bromochloromethane	5	1	U	1	U	1	U	1	U	1	U	1	U
Bromodichloromethane	50	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U
Bromoform	50	1	U	1	U	1	U	1	U	1	U	1	U
Bromomethane	5	1	U	1	U	1	U	1	U	1	UJ	1	U
Carbon Disulfide	60	1	U	1	U	1	U	1	U	1	U	1	U
Carbon Tetrachloride	5	1	U	1	U	1	U	1	U	1	UJ	1	U
Chlorobenzene	5	1	U	1	U	1	U	1	U	1	U	1	U
Chloroethane	5	1	U	1	U	1	U	1	U	1	U	1	U
Chloroform	7	1	U	1	U	1	U	1	U	1	U	1	U
Chloromethane	5	1	U	1	U	1	U	1	U	1	U	1	U
Cis-1,2-Dichloroethylene	5	1	U	1	U	1	U	1	U	1	U	1	U
Cis-1,3-Dichloropropene	NS	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U
Cyclohexane	NS	1	U	1	U	1	U	1	U	1	U	1	U
Dibromochloromethane	50	0.78	U	0.78	U	0.78	U	0.78	U	0.78	U	0.78	U
Dichlorodifluoromethane	5	1	U	1	U	1	U	1	U	1	U	1	U
Ethylbenzene	5	1	U	1	U	1	U	1	U	1	U	1	U
Isopropylbenzene (Cumene)	5	1	U	1	U	1	U	1	U	1	U	1	U
M,P-Xylenes	5	0.69	J	1	U	1	U	1	U	1	U	1	U
Methyl Acetate	NS	5	U	5	U	5	U	5	U	5	U	5	U
Methyl Ethyl Ketone (2-Butanone)	50	5	U	5	U	5	U	5	U	5	U	5	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	5	U	5	U	5	U	5	U	5	U	5	U
Methylcyclohexane	NS	1	U	1	U	1	U	1	U	1	U	1	U
Methylene Chloride	5	1	U	1	U	1	U	1	U	1	U	1	U
N-Butylbenzene	5	1	U	1	U	1	U	1	U	1	U	1	U
N-Propylbenzene	5	1	U	1	U	1	U	1	U	1	U	1	U
O-Xylene (1,2-Dimethylbenzene)	5	1	U	1	U	1	U	1	U	1	U	1	U
Sec-Butylbenzene	5	1	U	1	U	1	U	1	U	1	U	1	U
Styrene	5	1	U	1	U	1	U	1	U	1	U	1	U
T-Butylbenzene	5	1	U	1	U	1	U	1	U	1	U	1	U
Tert-Butyl Methyl Ether	10	1	U	1	U	1	U	1	U	1	U	1	U
Tetrachloroethylene (PCE)	5	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
Toluene	5	1	U	1	U	1	U	1	U	1	U	1	U
Trans-1,2-Dichloroethene	5	1	U	1	U	1	U	1	U	1	U	1	U
Trans-1,3-Dichloropropene	NS	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U
Trichloroethylene (TCE)	5	0.28	U	0.28	U	0.28	U	0.28	U	0.28	U	0.28	U
Trichlorofluoromethane	5	1	U	1	U	1	U	1	U	1	U	1	U
Vinyl Chloride	2	1	U	1	U	1	U	1	U	1	UJ	1	U
Xylenes, Total	NS	0.69	J	2	U	2	U	2	U	2	U	2	U

Table 8
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Groundwater Analytical Results of VOCs

	AKRF Sample ID	TB_20251008		TRIP BLANK_20251230	
	Lab Sample ID	460-336960-2		460-342378-6	
	Sample Date	10/8/2025		12/30/2025	
	Dilution Factor	1		1	
	Unit	µg/L		µg/L	
Compound	**AWQSGVs**	CONC	Q	CONC	Q
1,1,1-Trichloroethane	5	1	U	1	U
1,1,2,2-Tetrachloroethane	5	0.2	U	0.2	U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	5	1	UJ	1	U
1,1,2-Trichloroethane	1	0.58	U	0.58	U
1,1-Dichloroethane	5	1	U	1	U
1,1-Dichloroethene	5	1	U	1	U
1,2,3-Trichlorobenzene	5	1	U	1	U
1,2,4-Trichlorobenzene	5	1	U	1	U
1,2,4-Trimethylbenzene	5	1	U	1	U
1,2-Dibromo-3-Chloropropane	0.04	1	U	1	U
1,2-Dibromoethane (Ethylene Dibromide)	0.0006	1	U	1	U
1,2-Dichlorobenzene	3	1	U	1	U
1,2-Dichloroethane	0.6	0.3	U	0.3	U
1,2-Dichloropropane	1	0.92	U	0.92	U
1,3,5-Trimethylbenzene (Mesitylene)	5	1	U	1	U
1,3-Dichlorobenzene	3	1	U	1	U
1,4-Dichlorobenzene	3	1	U	1	U
2-Hexanone	50	5	UJ	5	U
Acetone	50	5	U	9.9	
Benzene	1	0.45	U	0.45	U
Bromochloromethane	5	1	U	1	U
Bromodichloromethane	50	0.98	U	0.98	U
Bromoform	50	1	U	1	U
Bromomethane	5	1	U	1	U
Carbon Disulfide	60	1	U	1	U
Carbon Tetrachloride	5	1	U	1	U
Chlorobenzene	5	1	U	1	U
Chloroethane	5	1	U	1	U
Chloroform	7	1	U	1	U
Chloromethane	5	1	U	1	U
Cis-1,2-Dichloroethylene	5	1	U	1	U
Cis-1,3-Dichloropropene	NS	0.45	U	0.45	U
Cyclohexane	NS	1	U	1	U
Dibromochloromethane	50	0.78	U	0.78	U
Dichlorodifluoromethane	5	1	UJ	1	U
Ethylbenzene	5	1	U	1	U
Isopropylbenzene (Cumene)	5	1	U	1	U
M,P-Xylenes	5	1	U	1	U
Methyl Acetate	NS	5	U	5	U
Methyl Ethyl Ketone (2-Butanone)	50	5	U	5	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	5	UJ	5	U
Methylcyclohexane	NS	1	U	1	U
Methylene Chloride	5	1	U	1	U
N-Butylbenzene	5	1	U	1	U
N-Propylbenzene	5	1	U	1	U
O-Xylene (1,2-Dimethylbenzene)	5	1	U	1	U
Sec-Butylbenzene	5	1	U	1	U
Styrene	5	1	U	1	U
T-Butylbenzene	5	1	U	1	U
Tert-Butyl Methyl Ether	10	1	U	1	U
Tetrachloroethylene (PCE)	5	0.4	U	0.4	U
Toluene	5	1	U	1	U
Trans-1,2-Dichloroethene	5	1	U	1	U
Trans-1,3-Dichloropropene	NS	0.45	U	0.45	U
Trichloroethylene (TCE)	5	0.28	U	0.28	U
Trichlorofluoromethane	5	1	U	1	U
Vinyl Chloride	2	1	U	1	U
Xylenes, Total	NS	2	U	2	U

Table 9
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Groundwater Analytical Results of SVOCs

	AKRF Sample ID	RI-MW-01_20251008		RI-MW-02_20251007		RI-MW-03_20251007		RI-MW-04_20251007		RI-MW-05_20251007		RI-MW-X_20251007		RI-MW-06_20251007		RI-MW-07_20251230	
	Lab Sample ID	460-336960-1		460-336666-1		460-336666-2		460-336666-3		460-336666-4		460-336665-7		460-336666-5		460-342378-1	
	Sample Date	10/8/2025		10/7/2025		10/7/2025		10/7/2025		10/7/2025		10/7/2025		10/7/2025		12/30/2025	
	Dilution Factor	1		1		1		1		1		1		1		1	
	Unit	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Compound	**AWQSGVs**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,2,4,5-Tetrachlorobenzene	5	10	U	10	U	10	UJ	10	U	10	U	10	U	10	U	10	U
1,4-Dioxane (P-Dioxane)	0.35	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
2,3,4,6-Tetrachlorophenol	NS	10	U	10	U	10	UJ	10	U	10	U	10	U	10	U	10	U
2,4,5-Trichlorophenol	NS	10	U	10	U	10	UJ	10	U	10	U	10	U	10	U	10	U
2,4,6-Trichlorophenol	NS	3	U	3	U	3	UJ	3	U	3	U	3	U	3	U	3	U
2,4-Dichlorophenol	5	10	U	10	U	10	UJ	10	U	10	U	10	U	10	U	10	U
2,4-Dimethylphenol	50	10	U	10	U	10	UJ	10	U	2.9	J	1.9	J	10	U	10	U
2,4-Dinitrophenol	10	12	U	12	U	12	UJ	12	U	12	U	12	U	12	U	12	U
2,4-Dinitrotoluene	5	10	U	10	U	10	UJ	10	U	10	U	10	U	10	U	10	U
2,6-Dinitrotoluene	5	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U
2-Chloronaphthalene	10	10	U	10	U	10	UJ	10	U	10	U	10	U	10	U	10	U
2-Chlorophenol	NS	10	U	10	U	10	UJ	10	U	10	U	10	U	10	U	10	U
2-Methylnaphthalene	NS	10	U	10	U	10	U	10	U	1.5	J	10	U	10	U	10	U
2-Methylphenol (O-Cresol)	NS	10	U	10	U	10	UJ	10	U	4.8	J	10	U	10	U	10	U
2-Nitroaniline	5	10	U	10	U	10	UJ	10	U	10	U	10	U	10	U	10	U
2-Nitrophenol	NS	10	U	10	U	10	UJ	10	U	10	U	10	U	10	U	10	U
3- And 4- Methylphenol (Total)	NS	10	U	10	U	10	UJ	10	U	8.1	J	10	U	10	U	10	U
3,3'-Dichlorobenzidine	5	5.2	U	5.2	U	5.2	UJ	5.2	U	5.2	U	5.2	U	5.2	U	5.2	R
3-Nitroaniline	5	10	U	10	U	10	R	10	U	10	U	10	U	10	U	10	U
4,6-Dinitro-2-Methylphenol	NS	20	U	20	U	20	UJ	20	U	20	U	20	U	20	U	20	U
4-Bromophenyl Phenyl Ether	NS	10	U	10	U	10	UJ	10	U	10	U	10	U	10	U	10	U
4-Chloro-3-Methylphenol	NS	10	U	10	U	10	UJ	10	U	10	U	10	U	10	U	10	U
4-Chloroaniline	5	5	U	5	U	5	R	5	U	5	U	5	U	5	U	5	R
4-Chlorophenyl Phenyl Ether	NS	10	U	10	U	10	UJ	10	U	10	U	10	U	10	U	10	U
4-Methylphenol (P-Cresol)	NS	10	U	10	U	10	UJ	10	U	8.1	J	10	U	10	U	10	U
4-Nitroaniline	5	10	U	10	U	10	UJ	10	U	10	U	10	U	10	U	10	U
4-Nitrophenol	NS	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	UJ
Acenaphthene	20	10	U	10	U	10	UJ	10	U	2.1	J	1.3	J	10	U	10	U
Acenaphthylene	NS	10	U	10	U	10	UJ	10	U	10	U	10	U	10	U	10	U
Acetophenone	NS	10	U	10	U	10	UJ	10	U	10	U	10	U	10	U	10	U
Anthracene	50	10	U	10	U	10	UJ	10	U	10	U	10	U	10	U	10	U
Atrazine	7.5	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Benzaldehyde	NS	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
Benzo(a)Anthracene	0.002	1	U	1	U	1	UJ	1	U	1	U	1	U	1	U	1	U
Benzo(a)Pyrene	ND	1	U	1	U	1	UJ	1	U	1	U	1	U	1	U	1	U
Benzo(b)Fluoranthene	0.002	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U
Benzo(g,h,i)Perylene	NS	10	U	10	U	10	UJ	10	U	10	U	10	U	10	U	10	U
Benzo(k)Fluoranthene	0.002	1	U	1	U	1	UJ	1	U	1	U	1	U	1	U	1	U
Benzyl Butyl Phthalate	50	10	U	10	U	10	UJ	10	U	10	U	10	U	10	U	10	U
Biphenyl (Diphenyl)	5	5	U	5	U	5	UJ	5	U	5	U	5	U	5	U	5	U
Bis(2-Chloroethoxy) Methane	5	10	U	10	U	10	UJ	10	U	10	U	10	U	10	U	10	U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	1	1	U	1	U	1	UJ	1	U	1	U	1	U	1	U	1	U
Bis(2-Chloroisopropyl) Ether	5	10	U	10	U	10	UJ	10	U	10	U	10	U	10	U	10	UJ
Bis(2-Ethylhexyl) Phthalate	5	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U
Caprolactam	NS	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Carbazole	NS	10	U	0.85	J	10	UJ	10	U	4	J	1.1	J	10	U	10	U
Chrysene	0.002	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U
Dibenz(a,h)Anthracene	NS	1	U	1	U	1	UJ	1	U	1	U	1	U	1	U	1	U
Dibenzofuran	NS	10	U	10	U	10	UJ	10	U	1.3	J	10	U	10	U	10	U
Diethyl Phthalate	50	10	U	10	U	10	UJ	10	U	10	U	10	U	10	U	10	U
Dimethyl Phthalate	50	10	U	10	U	10	UJ	10	U	10	U	10	U	10	U	10	U
Di-N-Butyl Phthalate	50	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Di-N-Octylphthalate	50	10	U	10	U	10	UJ	10	U	10	U	10	U	10	U	10	UJ
Fluoranthene	50	10	U	10	U	10	UJ	10	U	1	J	1.4	J	10	U	10	U
Fluorene	50	10	U	1	J	10	UJ	10	U	1.6	J	1.7	J	10	U	10	U
Hexachlorobenzene	0.04	1	U	1	U	1	UJ	1	U	1	U	1	U	1	U	1	U
Hexachlorobutadiene	0.5	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Hexachlorocyclopentadiene	5	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Hexachloroethane	5	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Indeno(1,2,3-c,d)Pyrene	0.002	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U
Isophorone	50	10	U	10	U	10	UJ	10	U	10	U	10	U	10	U	10	U
Naphthalene	**10**	2	U	2	U	2	U	2	U	1.3	J	2	U	2	U	2	U
Nitrobenzene	0.4	1	U	1	U	1	UJ	1	U	1	U	1	U	1	U	1	U
N-Nitrosodi-N-Propylamine	NS	1	U	1	U	1	UJ	1	U	1	U	1	U	1	U	1	U
N-Nitrosodiphenylamine	50	10	U	10	U	10	UJ	10	U	10	U	10	U	10	U	10	U
Pentachlorophenol	NS	20	U	20	U	20	UJ	20	U	20	U	20	U	20	U	20	U
Phenanthrene	50	10	U	1.4	J	10	UJ	10	U	3.1	J	3	J	10	U	10	U
Phenol	**1**	10	U	10	U	10	U	10	U	**4**	**J**	10	U	10	U	10	U
Pyrene	50	10	U	10	U	10	UJ	10	U	10	U	10	U	10	U	10	U

Table 9
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Groundwater Analytical Results of SVOCs

	AKRF Sample ID	RI-MW-08_20251230		RI-MW-09_20251230		RI-MW-0X_20251230		FB_20251007		FB-01_20251218		FB-02_20251219		FIELD BLANK_20251230	
	Lab Sample ID	460-342385-2		460-342378-3		460-342385-4		460-336666-6		460-341877-16		460-342035-49		460-342378-5	
	Sample Date	12/30/2025		12/30/2025		12/30/2025		10/7/2025		12/18/2025		12/19/2025		12/30/2025	
	Dilution Factor	1		1		1		1		1		1		1	
	Unit	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Compound	**AWQSGVs**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,2,4,5-Tetrachlorobenzene	5	10	U	10	U	10	U	10	U	10	U	NR		10	U
1,4-Dioxane (P-Dioxane)	0.35	0.2	U	0.2	U	0.2	U	0.2	U	NR		NR		0.2	U
2,3,4,6-Tetrachlorophenol	NS	10	U	10	U	10	U	10	U	10	U	NR		10	U
2,4,5-Trichlorophenol	NS	10	U	10	U	10	U	10	U	10	U	NR		10	U
2,4,6-Trichlorophenol	NS	3	U	3	U	3	U	3	U	3	U	NR		3	U
2,4-Dichlorophenol	5	10	U	10	U	10	U	10	U	10	U	NR		10	U
2,4-Dimethylphenol	50	10	U	10	U	10	U	10	U	10	U	NR		10	U
2,4-Dinitrophenol	10	12	U	12	U	12	U	12	U	12	U	NR		12	U
2,4-Dinitrotoluene	5	10	U	10	U	10	U	10	U	10	U	NR		10	U
2,6-Dinitrotoluene	5	2	U	2	U	2	U	2	U	2	U	NR		2	U
2-Chloronaphthalene	10	10	U	10	U	10	U	10	U	10	U	NR		10	U
2-Chlorophenol	NS	10	U	10	U	10	U	10	U	10	U	NR		10	U
2-Methylnaphthalene	NS	10	U	10	U	10	U	10	U	10	U	NR		10	U
2-Methylphenol (O-Cresol)	NS	10	U	10	U	10	U	10	U	10	U	NR		10	U
2-Nitroaniline	5	10	U	10	U	10	U	10	U	10	U	NR		10	U
2-Nitrophenol	NS	10	U	10	U	10	U	10	U	10	U	NR		10	U
3- And 4- Methylphenol (Total)	NS	10	U	10	U	10	U	10	U	10	U	NR		10	U
3,3'-Dichlorobenzidine	5	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	NR		5.2	U
3-Nitroaniline	5	10	U	10	U	10	U	10	U	10	U	NR		10	U
4,6-Dinitro-2-Methylphenol	NS	20	U	20	U	20	U	20	U	20	U	NR		20	U
4-Bromophenyl Phenyl Ether	NS	10	U	10	U	10	U	10	U	10	U	NR		10	U
4-Chloro-3-Methylphenol	NS	10	U	10	U	10	U	10	U	10	U	NR		10	U
4-Chloroaniline	5	5	U	5	U	5	U	5	U	5	U	NR		5	U
4-Chlorophenyl Phenyl Ether	NS	10	U	10	U	10	U	10	U	10	U	NR		10	U
4-Methylphenol (P-Cresol)	NS	10	U	10	U	10	U	10	U	10	U	NR		10	U
4-Nitroaniline	5	10	U	10	U	10	U	10	U	10	U	NR		10	U
4-Nitrophenol	NS	20	UJ	20	UJ	20	UJ	20	U	20	U	NR		20	UJ
Acenaphthene	20	13		10	U	10	U	10	U	10	U	10	U	10	U
Acenaphthylene	NS	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Acetophenone	NS	10	U	10	U	10	U	10	U	10	U	NR		10	U
Anthracene	50	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Atrazine	7.5	2	U	2	U	2	U	2	U	2	U	NR		2	U
Benzaldehyde	NS	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	NR		10	UJ
Benzo(a)Anthracene	0.002	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Benzo(a)Pyrene	ND	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Benzo(b)Fluoranthene	0.002	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Benzo(g,h,i)Perylene	NS	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Benzo(k)Fluoranthene	0.002	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Benzyl Butyl Phthalate	50	10	U	10	U	10	U	10	U	10	U	NR		10	U
Biphenyl (Diphenyl)	5	5	U	5	U	5	U	5	U	5	U	NR		5	U
Bis(2-Chloroethoxy) Methane	5	10	U	10	U	10	U	10	U	10	U	NR		10	U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	1	1	U	1	U	1	U	1	U	1	U	NR		1	U
Bis(2-Chloroisopropyl) Ether	5	10	UJ	10	UJ	10	UJ	10	U	10	U	NR		10	UJ
Bis(2-Ethylhexyl) Phthalate	5	2	U	2	U	2	U	2	U	2	U	NR		2	U
Caprolactam	NS	10	U	10	U	10	U	10	U	10	UJ	NR		10	U
Carbazole	NS	10	U	10	U	10	U	10	U	10	U	NR		10	U
Chrysene	0.002	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Dibenz(a,h)Anthracene	NS	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Dibenzofuran	NS	2.4	J	10	U	10	U	10	U	10	U	NR		10	U
Diethyl Phthalate	50	10	U	10	U	10	U	10	U	10	U	NR		10	U
Dimethyl Phthalate	50	10	U	10	U	10	U	10	U	10	U	NR		10	U
Di-N-Butyl Phthalate	50	10	U	10	U	10	U	10	U	10	U	NR		10	U
Di-N-Octylphthalate	50	10	UJ	10	UJ	10	UJ	10	U	10	U	NR		10	UJ
Fluoranthene	50	1.7	J	10	U	10	U	10	U	10	U	10	U	10	U
Fluorene	50	1.4	J	10	U	10	U	10	U	10	U	10	U	10	U
Hexachlorobenzene	0.04	1	U	1	U	1	U	1	U	1	U	NR		1	U
Hexachlorobutadiene	0.5	1	U	1	U	1	U	1	U	1	U	NR		1	U
Hexachlorocyclopentadiene	5	10	U	10	U	10	U	10	U	10	U	NR		10	U
Hexachloroethane	5	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	NR		0.8	U
Indeno(1,2,3-c,d)Pyrene	0.002	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U
Isophorone	50	10	U	10	U	10	U	10	U	10	U	NR		10	U
Naphthalene	**10**	**18**		2	U	2	U	2	U	2	U	2	U	2	U
Nitrobenzene	0.4	1	U	1	U	1	U	1	U	1	U	NR		1	U
N-Nitrosodi-N-Propylamine	NS	1	U	1	U	1	U	1	U	1	U	NR		1	U
N-Nitrosodiphenylamine	50	10	U	10	U	10	U	10	U	10	U	NR		10	U
Pentachlorophenol	NS	20	U	20	U	20	U	20	U	20	U	NR		20	U
Phenanthrene	50	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Phenol	**1**	10	U	10	U	10	U	10	U	10	U	NR		10	U
Pyrene	50	10	U	10	U	10	U	10	U	10	U	10	U	10	U

Table 10
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Groundwater Analytical Results of Total Metals

AKRF Sample ID		RI-MW-01_20251008				RI-MW-02_20251007		RI-MW-03_20251007		RI-MW-04_20251007		RI-MW-05_20251007	
Lab Sample ID		460-336960-1				460-336666-1		460-336666-2		460-336666-3		460-336666-4	
Sample Date		10/8/2025				10/7/2025		10/7/2025		10/7/2025		10/7/2025	
Dilution Factor		1		5		1		1		1		1	
Unit		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Compound	**AWQSGVs**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aluminum	NS	NR		4,510,000		84.8		1,450		69.5		89.2	
Antimony	**3**	NR		**30.6**	**J**	0.73	J	1.3	J	2	U	2	U
Arsenic	**25**	NR		**875**		0.74	J	6.5		2	U	2	U
Barium	**1,000**	NR		**98,900**		654		947		690		395	
Beryllium	**3**	NR		**207**		0.8	U	0.8	U	0.8	U	0.8	U
Cadmium	**5**	NR		**741**		0.92	U	0.74	J	0.92	U	0.92	U
Calcium	NS	NR		2,290,000		195,000		237,000		226,000		186,000	
Chromium, Total	**50**	NR		**13,600**		1.7	J	8.9		1.7	J	4	U
Cobalt	NS	NR		3,770		0.34	J	1.8	J	2	U	2	U
Copper	**200**	NR		**23,100**		7.2		33.7		4	U	4	U
Iron	**300**	NR		**7,100,000**		**9,390**		**5,330**		**328**		**2,210**	
Lead	**25**	NR		**105,000**		14.9		**219**		14.2		**25.6**	
Magnesium	**35,000**	NR		**1,590,000**		26,400		15,100		22,800		26,100	
Manganese	**300**	NR		**123,000**		**555**		159		107		204	
Mercury	**0.7**	**109**	**JL**	NR		0.14	J	0.2	U	0.098	J	0.2	U
Nickel	**100**	NR		**9,260**		2.1	J	6.9		4	U	4	U
Potassium	NS	NR		790,000		11,600		8,370		10,600		10,500	
Selenium	**10**	NR		**49**	**J**	2.5	U	2.5	U	2.5	U	2.5	U
Silver	**50**	NR		**140**		2	U	0.23	J	2	U	2	U
Sodium	**20,000**	NR		**237,000**		**68,600**		**65,200**		**90,000**		**66,900**	
Thallium	**0.5**	NR		**23.1**		0.5	U	0.5	U	0.5	U	0.5	U
Vanadium	NS	NR		15,700		4.2		13.4		2.8	J	1.5	J
Zinc	**2,000**	NR		**92,600**		16.4		274		16	U	54.9	

Table 10
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Groundwater Analytical Results of Total Metals

	AKRF Sample ID	RI-MW-X_20251007		RI-MW-06_20251007		RI-MW-07_20251230		RI-MW-08_20251230		RI-MW-09_20251230		RI-MW-0X_20251230	
	Lab Sample ID	460-336665-7		460-336666-5		460-342378-1		460-342385-2		460-342378-3		460-342385-4	
	Sample Date	10/7/2025		10/7/2025		12/30/2025		12/30/2025		12/30/2025		12/30/2025	
	Dilution Factor	1		1		1		1		1		1	
	Unit	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Compound	**AWQSGVs**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aluminum	NS	96.3		534		40	U	40	U	40	U	40	U
Antimony	**3**	2	U	2	U	2	U	2	U	2	U	2	U
Arsenic	**25**	2	U	2.1		0.86	J	3.4		2	U	2	U
Barium	**1,000**	391		623		247		491		517		506	
Beryllium	**3**	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Cadmium	**5**	0.92	U	0.26	J	0.92	U	0.92	U	0.92	U	0.92	U
Calcium	NS	185,000		187,000		183,000		184,000		206,000		201,000	
Chromium, Total	**50**	4	U	2.7	J	4	U	4	U	4	U	4	U
Cobalt	NS	2	U	0.75	J	0.27	J	2	U	2	U	2	U
Copper	**200**	4	U	7.9		4	U	4	U	4	U	4	U
Iron	**300**	**2,240**		**6,150**		**2,120**		42.4	J	**803**		**731**	
Lead	**25**	**26.4**		**90.9**		1.2	U	1.2	U	1.2	U	1.2	U
Magnesium	**35,000**	26,200		31,100		11,200		16,900		16,000		15,500	
Manganese	**300**	206		**650**		204		128		253		243	
Mercury	**0.7**	0.2	U	0.11	J	0.2	U	0.2	U	0.16	J	0.16	J
Nickel	**100**	4	U	2.4	J	2.5	J	4	U	4	U	4	U
Potassium	NS	10,400		8,700		5,980		10,300		7,580		7,410	
Selenium	**10**	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Silver	**50**	2	U	2	U	2	U	2	U	2	U	2	U
Sodium	**20,000**	**67,100**		**58,200**		**52,700**		**84,200**		**68,100**		**66,100**	
Thallium	**0.5**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vanadium	NS	1.6	J	4.1		13.7		3.1	J	6.4		5.8	
Zinc	**2,000**	54.8		103		16	U	16	U	16	U	16	U

Table 10
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Groundwater Analytical Results of Total Metals

	AKRF Sample ID	FB_20251007		FB-01_20251218		FB-03_20251219		FB-04_20251222		FIELD BLANK_20251230	
	Lab Sample ID	460-336666-6		460-341877-16		460-342035-39		460-342125-12		460-342378-5	
	Sample Date	10/7/2025		12/18/2025		12/19/2025		12/22/2025		12/30/2025	
	Dilution Factor	1		1		1		1		1	
	Unit	µg/L		µg/L		µg/L		µg/L		µg/L	
Compound	**AWQSGVs**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aluminum	NS	40	U	40	U	NR		NR		40	U
Antimony	**3**	2	U	2	U	NR		NR		2	U
Arsenic	**25**	2	U	2	U	NR		NR		2	U
Barium	**1,000**	4	U	4	U	NR		NR		4	U
Beryllium	**3**	0.8	U	0.8	U	NR		NR		0.8	U
Cadmium	**5**	0.92	U	0.92	U	NR		NR		0.92	U
Calcium	NS	38.3	J	500	U	NR		NR		500	U
Chromium, Total	**50**	4	U	4	U	NR		NR		4	U
Cobalt	NS	2	U	2	U	NR		NR		2	U
Copper	**200**	4	U	4	U	NR		NR		4	U
Iron	**300**	120	U	120	U	NR		NR		120	U
Lead	**25**	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U
Magnesium	**35,000**	200	U	200	U	NR		NR		200	U
Manganese	**300**	8	U	8	U	NR		NR		8	U
Mercury	**0.7**	0.2	U	0.2	U	NR		NR		0.2	U
Nickel	**100**	4	U	4	U	NR		NR		4	U
Potassium	NS	200	U	200	U	NR		NR		200	U
Selenium	**10**	2.5	U	2.5	U	NR		NR		2.5	U
Silver	**50**	2	U	2	U	NR		NR		2	U
Sodium	**20,000**	500	U	500	U	NR		NR		500	U
Thallium	**0.5**	0.5	U	0.5	U	NR		NR		0.5	U
Vanadium	NS	4	U	4	U	NR		NR		4	U
Zinc	**2,000**	16	U	16	U	NR		NR		16	U

Table 11
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Groundwater Analytical Results of Dissolved Metals

	AKRF Sample ID	RI-MW-01_20251008		RI-MW-02_20251007		RI-MW-03_20251007		RI-MW-04_20251007		RI-MW-05_20251007		RI-MW-X_20251007	
	Lab Sample ID	460-336960-1		460-336666-1		460-336666-2		460-336666-3		460-336666-4		460-336665-7	
	Sample Date	10/8/2025		10/7/2025		10/7/2025		10/7/2025		10/7/2025		10/7/2025	
	Dilution Factor	1		1		1		1		1		1	
	Unit	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Compound	**AWQSGVs**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aluminum	NS	140		40	U	40	U	15.6	J	40	U	40	U
Antimony	3	0.72	J	2	U	2	U	2	U	2	U	2	U
Arsenic	25	3.5		2	U	2	U	2	U	2	U	2	U
Barium	1,000	178		588		721		632		340		337	
Beryllium	3	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Cadmium	5	0.27	J	0.92	U	0.92	U	0.92	U	0.92	U	0.92	U
Calcium	NS	213,000		181,000		221,000		212,000		177,000		177,000	
Chromium, Total	50	4	U	4	U	4	U	4	U	4	U	4	U
Cobalt	NS	4.4		0.23	J	2	U	2	U	2	U	2	U
Copper	200	4	U	4	U	4	U	4	U	4	U	4	U
Iron	**300**	**792**		**8,570**		**436**		137		**1,740**		**1,740**	
Lead	25	5.1		1.2	U	1.2	U	3		1.2	U	1.2	U
Magnesium	35,000	24,900		25,000		14,800		21,800		24,400		24,800	
Manganese	**300**	**4,170**		**519**		106		98.9		188		191	
Mercury	0.7	0.2	R	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Nickel	100	5.9		4	U	4	U	4	U	4	U	4	U
Potassium	NS	17,700		10,800		8,040		9,920		9,820		9,820	
Selenium	**10**	0.56	J	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Silver	50	2	U	2	U	2	U	2	U	2	U	2	U
Sodium	**20,000**	**234,000**		**65,100**		**62,900**		**88,800**		**63,200**		**63,900**	
Thallium	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vanadium	NS	6.1		2.7	J	1.8	J	3.2	J	1.2	J	1.3	J
Zinc	2,000	11.6	J	16	U	16	U	16	U	16	U	16	U

Table 11
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Groundwater Analytical Results of Dissolved Metals

	AKRF Sample ID	RI-MW-06_20251007		RI-MW-07_20251230		RI-MW-08_20251230		RI-MW-09_20251230		RI-MW-0X_20251230	
	Lab Sample ID	460-336666-5		460-342378-1		460-342385-2		460-342378-3		460-342385-4	
	Sample Date	10/7/2025		12/30/2025		12/30/2025		12/30/2025		12/30/2025	
	Dilution Factor	1		1		1		1		1	
	Unit	µg/L		µg/L		µg/L		µg/L		µg/L	
Compound	**AWQSGVs**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aluminum	NS	40	U	40	U	40	U	40	U	40	U
Antimony	3	2	U	2	UJ	2	U	2	U	2	U
Arsenic	25	0.98	J	2	U	3.2		2	U	2	U
Barium	1,000	469		270		536		542		548	
Beryllium	3	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Cadmium	5	0.92	U	0.92	U	0.92	U	0.92	U	0.92	U
Calcium	NS	170,000		196,000		197,000		219,000		219,000	
Chromium, Total	50	4	U	4	U	4	U	4	U	4	U
Cobalt	NS	0.37	J	0.27	J	2	U	2	U	2	U
Copper	200	4	U	4	U	4	U	4	U	4	U
Iron	**300**	**4,580**		**2,320**		43.8	J	**890**		**826**	
Lead	25	1.2	U	0.42	J	1.2	U	1.2	U	1.2	U
Magnesium	35,000	29,000		11,900		18,300		16,700		17,000	
Manganese	**300**	**598**		223		142		266		263	
Mercury	0.7	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Nickel	100	4	U	2.8	J	4	U	4	U	4	U
Potassium	NS	8,070		6,150		11,000		7,820		7,850	
Selenium	**10**	2.5	U	0.9	J	**20.6**	**J**	3.6	J	2.6	J
Silver	50	2	U	2	UJ	2	U	2	U	2	U
Sodium	**20,000**	**54,800**		**54,800**		**88,500**		**69,700**		**70,300**	
Thallium	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vanadium	NS	4	U	14.7		2.9	J	6.5		6.2	
Zinc	2,000	16	U	4.3	J	16	U	16	U	16	U

Table 11
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Groundwater Analytical Results of Dissolved Metals

	AKRF Sample ID	FB_20251007		FIELD BLANK_20251230	
	Lab Sample ID	460-336666-6		460-342378-5	
	Sample Date	10/7/2025		12/30/2025	
	Dilution Factor	1		1	
	Unit	µg/L		µg/L	
Compound	**AWQSGVs**	CONC	Q	CONC	Q
Aluminum	NS	40	U	40	U
Antimony	3	2	U	2	U
Arsenic	25	2	U	2	U
Barium	1,000	4	U	4	U
Beryllium	3	0.8	U	0.8	U
Cadmium	5	0.92	U	0.92	U
Calcium	NS	500	U	500	U
Chromium, Total	50	4	U	4	U
Cobalt	NS	2	U	2	U
Copper	200	4	U	4	U
Iron	**300**	120	U	120	U
Lead	25	1.2	U	1.2	U
Magnesium	35,000	200	U	200	U
Manganese	**300**	8	U	8	U
Mercury	0.7	0.2	U	0.2	U
Nickel	100	4	U	4	U
Potassium	NS	200	U	200	U
Selenium	**10**	2.5	U	2.5	U
Silver	50	2	U	2	U
Sodium	**20,000**	500	U	500	U
Thallium	0.5	0.5	U	0.5	U
Vanadium	NS	4	U	4	U
Zinc	2,000	6.1	J	16	U

Table 12
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Groundwater Analytical Results of PCBs

AKRF Sample ID		RI-MW-01_20251008	RI-MW-02_20251007	RI-MW-03_20251007	RI-MW-04_20251007	RI-MW-05_20251007
Lab Sample ID		460-336960-1	460-336666-1	460-336666-2	460-336666-3	460-336666-4
Sample Date		10/8/2025	10/7/2025	10/7/2025	10/7/2025	10/7/2025
Dilution Factor		1	1	1	1	1
Unit		µg/L	µg/L	µg/L	µg/L	µg/L
Compound	**AWQSGVs**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
PCB-1221 (Aroclor 1221)	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
PCB-1232 (Aroclor 1232)	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
PCB-1242 (Aroclor 1242)	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
PCB-1248 (Aroclor 1248)	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
PCB-1254 (Aroclor 1254)	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
PCB-1260 (Aroclor 1260)	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
PCB-1262 (Aroclor 1262)	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
PCB-1268 (Aroclor 1268)	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Total PCBs	**0.09**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U

Table 12
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Groundwater Analytical Results of PCBs

AKRF Sample ID		RI-MW-X_20251007	RI-MW-06_20251007	RI-MW-07_20251230	RI-MW-08_20251230	RI-MW-09_20251230
Lab Sample ID		460-336665-7	460-336666-5	460-342378-1	460-342385-2	460-342378-3
Sample Date		10/7/2025	10/7/2025	12/30/2025	12/30/2025	12/30/2025
Dilution Factor		1	1	1	1	1
Unit		µg/L	µg/L	µg/L	µg/L	µg/L
Compound	**AWQSGVs**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
PCB-1221 (Aroclor 1221)	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
PCB-1232 (Aroclor 1232)	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
PCB-1242 (Aroclor 1242)	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
PCB-1248 (Aroclor 1248)	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
PCB-1254 (Aroclor 1254)	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
PCB-1260 (Aroclor 1260)	NS	0.2 U	0.2 U	0.47	0.2 U	0.2 U
PCB-1262 (Aroclor 1262)	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
PCB-1268 (Aroclor 1268)	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Total PCBs	**0.09**	0.2 U	0.2 U	**0.47**	0.2 U	0.2 U

Table 12
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Groundwater Analytical Results of PCBs

AKRF Sample ID		RI-MW-0X_20251230		FB_20251007		FB-01_20251218		FIELD BLANK_20251230	
Lab Sample ID		460-342385-4		460-336666-6		460-341877-16		460-342378-5	
Sample Date		12/30/2025		10/7/2025		12/18/2025		12/30/2025	
Dilution Factor		1		1		1		1	
Unit		µg/L		µg/L		µg/L		µg/L	
Compound	**AWQSGVs**	CONC	Q	CONC	Q	CONC	Q	CONC	Q
PCB-1016 (Aroclor 1016)	NS	0.2	U	0.2	U	0.2	U	0.2	U
PCB-1221 (Aroclor 1221)	NS	0.2	U	0.2	U	0.2	U	0.2	U
PCB-1232 (Aroclor 1232)	NS	0.2	U	0.2	U	0.2	U	0.2	U
PCB-1242 (Aroclor 1242)	NS	0.2	U	0.2	U	0.2	U	0.2	U
PCB-1248 (Aroclor 1248)	NS	0.2	U	0.2	U	0.2	U	0.2	U
PCB-1254 (Aroclor 1254)	NS	0.2	U	0.2	U	0.2	U	0.2	U
PCB-1260 (Aroclor 1260)	NS	0.2	U	0.2	U	0.2	U	0.2	U
PCB-1262 (Aroclor 1262)	NS	0.2	U	0.2	U	0.2	U	0.2	U
PCB-1268 (Aroclor 1268)	NS	0.2	U	0.2	U	0.2	U	0.2	U
Total PCBs	**0.09**	0.2	U	0.2	U	0.2	U	0.2	U

Table 13
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Groundwater Analytical Results of Pesticides

	AKRF Sample ID	RI-MW-01_20251008		RI-MW-02_20251007		RI-MW-03_20251007		RI-MW-04_20251007		RI-MW-05_20251007	
	Lab Sample ID	460-336960-1		460-336666-1		460-336666-2		460-336666-3		460-336666-4	
	Sample Date	10/8/2025		10/7/2025		10/7/2025		10/7/2025		10/7/2025	
	Dilution Factor	1		1		1		1		1	
	Unit	µg/L		µg/L		µg/L		µg/L		µg/L	
Compound	**AWQSGVs**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aldrin	ND	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.01	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Beta Bhc (Beta Hexachlorocyclohexane)	0.04	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Chlordane (Technical)	NS	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Chlordane, cis-	NS	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Dieldrin	0.004	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Endosulfan I	NS	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Endosulfan II	NS	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Endosulfan Sulfate	NS	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Endosulfans ABS	NS	0	U	0	U	0	U	0	U	0	U
Endrin	ND	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Endrin Aldehyde	5	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Endrin Ketone	5	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Gamma Bhc (Lindane)	0.05	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Heptachlor	0.04	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Heptachlor Epoxide	0.03	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Methoxychlor	35	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
P,P'-DDD	0.3	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
P,P'-DDE	0.2	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
P,P'-DDT	0.2	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Toxaphene	0.06	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

Table 13
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Groundwater Analytical Results of Pesticides

	AKRF Sample ID	RI-MW-X_20251007		RI-MW-06_20251007		RI-MW-07_20251230		RI-MW-08_20251230		RI-MW-09_20251230	
	Lab Sample ID	460-336665-7		460-336666-5		460-342378-1		460-342385-2		460-342378-3	
	Sample Date	10/7/2025		10/7/2025		12/30/2025		12/30/2025		12/30/2025	
	Dilution Factor	1		1		1		1		1	
	Unit	µg/L		µg/L		µg/L		µg/L		µg/L	
Compound	**AWQSGVs**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aldrin	ND	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.01	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Beta Bhc (Beta Hexachlorocyclohexane)	0.04	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Chlordane (Technical)	NS	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Chlordane, cis-	NS	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Dieldrin	0.004	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Endosulfan I	NS	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Endosulfan II	NS	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Endosulfan Sulfate	NS	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Endosulfans ABS	NS	0	U	0	U	0	U	0	U	0	U
Endrin	ND	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Endrin Aldehyde	5	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Endrin Ketone	5	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Gamma Bhc (Lindane)	0.05	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Heptachlor	0.04	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Heptachlor Epoxide	0.03	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Methoxychlor	35	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
P,P'-DDD	0.3	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
P,P'-DDE	0.2	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
P,P'-DDT	0.2	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Toxaphene	0.06	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

Table 13
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Groundwater Analytical Results of Pesticides

	AKRF Sample ID	RI-MW-0X_20251230		FB_20251007		FB-01_20251218		FIELD BLANK_20251230	
	Lab Sample ID	460-342385-4		460-336666-6		460-341877-16		460-342378-5	
	Sample Date	12/30/2025		10/7/2025		12/18/2025		12/30/2025	
	Dilution Factor	1		1		1		1	
	Unit	µg/L		µg/L		µg/L		µg/L	
Compound	**AWQSGVs**	CONC	Q	CONC	Q	CONC	Q	CONC	Q
Aldrin	ND	0.02	U	0.02	U	0.02	U	0.02	U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.01	0.02	U	0.02	U	0.02	U	0.02	U
Beta Bhc (Beta Hexachlorocyclohexane)	0.04	0.02	U	0.02	U	0.02	U	0.02	U
Chlordane (Technical)	NS	0.2	U	0.2	U	0.2	U	0.2	U
Chlordane, cis-	NS	0.02	U	0.02	U	0.02	U	0.02	U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	0.02	U	0.02	U	0.02	U	0.02	U
Dieldrin	0.004	0.02	U	0.02	U	0.02	U	0.02	U
Endosulfan I	NS	0.02	U	0.02	U	0.02	U	0.02	U
Endosulfan II	NS	0.02	U	0.02	U	0.02	U	0.02	U
Endosulfan Sulfate	NS	0.02	U	0.02	U	0.02	U	0.02	U
Endosulfans ABS	NS	0	U	0	U	0	U	0	U
Endrin	ND	0.02	U	0.02	U	0.02	U	0.02	U
Endrin Aldehyde	5	0.02	U	0.02	U	0.02	U	0.02	U
Endrin Ketone	5	0.02	U	0.02	U	0.02	U	0.02	U
Gamma Bhc (Lindane)	0.05	0.02	U	0.02	U	0.02	U	0.02	U
Heptachlor	0.04	0.02	U	0.02	U	0.02	U	0.02	U
Heptachlor Epoxide	0.03	0.02	U	0.02	U	0.02	U	0.02	U
Methoxychlor	35	0.02	U	0.02	U	0.02	U	0.02	U
P,P'-DDD	0.3	0.02	U	0.02	U	0.02	U	0.02	U
P,P'-DDE	0.2	0.02	U	0.02	U	0.02	U	0.02	U
P,P'-DDT	0.2	0.02	U	0.02	U	0.02	U	0.02	U
Toxaphene	0.06	0.5	U	0.5	U	0.5	U	0.5	U

Table 14
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Groundwater Analytical Results of PFAS

	AKRF Sample ID	RI-MW-02_20251007		RI-MW-03_20251007		RI-MW-04_20251007		RI-MW-05_20251007		RI-MW-X_20251007	
	Lab Sample ID	460-336666-1		460-336666-2		460-336666-3		460-336666-4		460-336665-7	
	Sample Date	10/7/2025		10/7/2025		10/7/2025		10/7/2025		10/7/2025	
	Dilution Factor	1		1		1		1		1	
	Unit	ppt		ppt		ppt		ppt		ppt	
Compound	**AWQSGVs**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid	NS	1.49	U	1.46	U	1.51	U	1.53	U	1.54	U
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	NS	7.47	U	7.31	U	7.54	U	7.64	U	7.71	U
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	NS	7.47	U	7.31	U	7.54	U	7.64	U	7.71	U
2H,2H,3H,3H-Perfluorooctanoic acid	NS	7.47	U	7.31	U	7.54	U	7.64	U	7.71	U
3-Perfluoroheptyl propanoic acid	NS	7.47	U	7.31	U	7.54	U	7.64	U	7.71	U
3-Perfluoropropyl propanoic acid	NS	2.99	U	2.92	UJ	3.02	U	3.06	U	3.08	U
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NS	1.49	U	1.46	U	1.51	U	1.53	U	1.54	U
6:2 Fluorotelomer sulfonate	NS	2.99	U	2.92	UJ	3.02	U	3.06	U	3.08	U
8:2 Fluorotelomer sulfonate	NS	2.99	U	2.92	U	3.02	U	3.06	U	3.08	U
9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid	NS	1.49	U	1.46	U	1.51	U	1.53	U	1.54	U
N-ethyl perfluoro-1-octanesulfonamide	NS	1.49	U	1.46	U	1.51	U	1.53	U	1.54	U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	1.49	U	1.46	U	0.73	J	1.53	U	1.54	U
N-methyl perfluoro-1-octanesulfonamide	NS	1.49	U	1.46	U	1.51	U	1.53	U	1.54	U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	1.49	U	1.46	U	1.51	U	1.53	U	1.54	U
Nonafluoro-3,6-dioxaheptanoic acid	NS	1.49	U	1.46	UJ	1.51	U	1.53	U	1.54	U
Perfluoro(2-ethoxyethane)sulfonic acid	NS	1.49	U	1.46	U	1.51	U	1.53	U	1.54	U
Perfluoro(2-Propoxypropanoic) Acid	NS	1.12	U	1.1	U	1.13	U	1.15	U	1.16	U
Perfluoro-3-methoxypropanoic acid	NS	1.49	U	1.46	U	1.51	U	1.53	U	1.54	U
Perfluoro-4-methoxybutanoic acid	NS	1.49	U	1.46	U	1.51	U	1.53	U	1.54	U
Perfluorobutanesulfonic acid (PFBS)	NS	15.2		1.93		2.41		15.6		15.1	
Perfluorobutanoic acid	NS	22.7		5.08	J	6.97		25.7		25	
Perfluorodecanesulfonic acid	NS	1.49	U	1.46	U	1.51	U	1.53	U	1.54	U
Perfluorodecanoic acid	NS	1.49	U	0.46	J	0.54	J	1.53	U	1.54	U
Perfluorododecane sulfonate (PFDoDS)	NS	1.49	U	1.46	U	1.51	U	1.53	U	1.54	U
Perfluorododecanoic acid	NS	1.49	U	1.46	U	1.51	U	1.53	U	1.54	U
Perfluoroheptanesulfonic acid	NS	1.49	U	1.46	U	1.51	U	0.57	J	0.56	J
Perfluoroheptanoic acid	NS	7.57		2.75		3.27		8.02		8.31	
Perfluorohexanesulfonic acid	NS	8.28		1.27	J	2.64		8.07		7.84	
Perfluorohexanoic acid	NS	18.9		6.84	J	8.58		22.8		21.7	
Perfluorononanesulfonic Acid (Pfns)	NS	1.49	U	1.46	U	1.51	U	1.53	U	1.54	U
Perfluorononanoic acid	NS	2.82		1.45	J	1.36	J	2.87		2.86	
Perfluorooctanesulfonamide	NS	1.49	U	1.46	U	1.51	U	1.53	U	1.54	U
Perfluorooctanesulfonic acid (PFOS)	**2.7**	**17.8**		**6.76**		**8.8**		**17.2**		**18.3**	
Perfluorooctanoic acid (PFOA)	**6.7**	**40.2**		**9.2**		**12.6**		**41**		**39**	
Perfluoropentanesulfonic Acid (Pfpes)	NS	0.65	J	1.46	U	1.51	U	0.54	J	0.58	J
Perfluoropentanoic acid	NS	23		7.82		11.1		27.4		26.9	
Perfluorotetradecanoic acid	NS	1.49	U	1.46	U	1.51	U	1.53	U	1.54	U
Perfluorotridecanoic acid	NS	1.49	U	1.46	U	1.51	U	1.53	U	1.54	U
Perfluoroundecanoic acid	NS	1.49	U	1.46	U	1.51	U	1.53	U	1.54	U
Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2)	NS	2.99	U	2.92	U	3.02	U	3.06	U	3.08	U

Table 14
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Groundwater Analytical Results of PFAS

AKRF Sample ID		RI-MW-06_20251007		RI-MW-07_20251230			RI-MW-08_20251230		RI-MW-09_20251230	
Lab Sample ID		460-336666-5		460-342378-1			460-342385-2		460-342378-3	
Sample Date		10/7/2025		12/30/2025			12/30/2025		12/30/2025	
Dilution Factor		1		1		2	1		1	
Unit		ppt		ppt		ppt	ppt		ppt	
Compound	**AWQSGVs**	CONC	Q	CONC	Q	CONC Q	CONC	Q	CONC	Q
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid	NS	1.51	U	1.53	U	NR	1.6	U	1.65	U
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	NS	7.55	U	7.63	U	NR	7.98	U	8.24	U
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	NS	7.55	U	7.63	U	NR	7.98	U	8.24	U
2H,2H,3H,3H-Perfluorooctanoic acid	NS	7.55	U	7.63	U	NR	7.98	U	8.24	U
3-Perfluoroheptyl propanoic acid	NS	7.55	U	7.63	U	NR	7.98	U	8.24	U
3-Perfluoropropyl propanoic acid	NS	3.02	U	3.05	U	NR	3.19	U	3.3	U
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NS	1.51	U	1.53	U	NR	1.6	U	1.65	U
6:2 Fluorotelomer sulfonate	NS	3.02	U	3.05	U	NR	3.19	U	3.3	U
8:2 Fluorotelomer sulfonate	NS	3.02	U	3.05	U	NR	3.19	U	3.3	U
9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid	NS	1.51	U	1.53	U	NR	1.6	U	1.65	U
N-ethyl perfluoro-1-octanesulfonamide	NS	1.51	U	1.53	U	NR	1.6	U	1.65	U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	1.51	U	0.49	J	NR	0.71	J	0.59	J
N-methyl perfluoro-1-octanesulfonamide	NS	1.51	U	1.53	U	NR	1.6	U	1.65	U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	1.51	U	1.53	U	NR	1.6	U	1.65	U
Nonafluoro-3,6-dioxaheptanoic acid	NS	1.51	U	1.53	U	NR	1.6	U	1.65	U
Perfluoro(2-ethoxyethane)sulfonic acid	NS	1.51	U	1.53	U	NR	1.6	U	1.65	U
Perfluoro(2-Propoxypropanoic) Acid	NS	1.13	U	1.14	U	NR	1.2	U	1.24	U
Perfluoro-3-methoxypropanoic acid	NS	1.51	U	1.53	U	NR	1.6	U	1.65	U
Perfluoro-4-methoxybutanoic acid	NS	1.51	U	1.53	U	NR	1.6	U	1.65	U
Perfluorobutanesulfonic acid (PFBS)	NS	8.83		2.19		NR	3.69		2.41	
Perfluorobutanoic acid	NS	20.4		NR		9.68	10.6		9.23	
Perfluorodecanesulfonic acid	NS	1.51	U	1.53	U	NR	1.6	U	1.65	U
Perfluorodecanoic acid	NS	1.51	U	0.55	J	NR	0.5	J	0.6	J
Perfluorododecane sulfonate (PFDoDS)	NS	1.51	U	1.53	U	NR	1.6	U	1.65	U
Perfluorododecanoic acid	NS	1.51	U	1.48	J	NR	1.57	U	1.65	U
Perfluoroheptanesulfonic acid	NS	0.68	J	1.53	U	NR	1.6	U	1.65	U
Perfluoroheptanoic acid	NS	7.95		3.86		NR	5.17		4.12	
Perfluorohexanesulfonic acid	NS	6.97		1.85		NR	4.02		2	
Perfluorohexanoic acid	NS	23.8		16.4		NR	13		17.8	
Perfluorononanesulfonic Acid (Pfns)	NS	1.51	U	1.53	U	NR	1.6	U	1.65	U
Perfluorononanoic acid	NS	3.49		0.99	J	NR	1.7		1.21	J
Perfluorooctanesulfonamide	NS	1.51	U	1.53	U	NR	1.6	U	1.65	U
Perfluorooctanesulfonic acid (PFOS)	**2.7**	**24.8**		**5.79**		NR	**11.4**		**6.51**	
Perfluorooctanoic acid (PFOA)	**6.7**	**41.8**		**10.6**	**JK**	NR	**16.3**		**9.07**	**JK**
Perfluoropentanesulfonic Acid (Pfpes)	NS	0.62	J	1.53	U	NR	1.6	U	1.65	U
Perfluoropentanoic acid	NS	25.9		17.2		NR	13.4		20.2	
Perfluorotetradecanoic acid	NS	1.51	U	1.53	U	NR	1.6	U	1.65	U
Perfluorotridecanoic acid	NS	1.51	U	1.53	U	NR	1.6	U	1.65	U
Perfluoroundecanoic acid	NS	1.51	U	1.53	U	NR	1.6	U	1.65	U
Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2)	NS	3.02	U	3.05	U	NR	3.19	U	3.3	U

Table 14
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Groundwater Analytical Results of PFAS

	AKRF Sample ID	RI-MW-0X_20251230		FB_20251007		FB_20251218		FIELD BLANK_20251230	
	Lab Sample ID	460-342385-4		460-336666-6		460-341921-9		460-342378-5	
	Sample Date	12/30/2025		10/7/2025		12/18/2025		12/30/2025	
	Dilution Factor	1		1		1		1	
	Unit	ppt		ppt		ppt		ppt	
Compound	**AWQSGVs**	CONC	Q	CONC	Q	CONC	Q	CONC	Q
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid	NS	1.7	U	1.58	U	1.6	U	1.58	U
2-(N-ethyl perfluoro-1-octanesulfonamido)-ethanol	NS	8.49	U	7.89	U	8	U	7.88	U
2-(N-methyl perfluoro-1-octanesulfonamido)-ethanol	NS	8.49	U	7.89	U	8	U	7.88	U
2H,2H,3H,3H-Perfluorooctanoic acid	NS	8.49	U	7.89	U	8	U	7.88	U
3-Perfluoroheptyl propanoic acid	NS	8.49	U	7.89	U	8	U	7.88	U
3-Perfluoropropyl propanoic acid	NS	3.4	U	3.16	U	3.2	U	3.15	U
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NS	1.7	U	1.58	U	1.6	U	1.58	U
6:2 Fluorotelomer sulfonate	NS	3.4	U	3.16	U	3.2	U	3.15	U
8:2 Fluorotelomer sulfonate	NS	3.4	U	3.16	U	3.2	U	3.15	U
9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid	NS	1.7	U	1.58	U	1.6	U	1.58	U
N-ethyl perfluoro-1-octanesulfonamide	NS	1.7	U	1.58	U	1.6	U	1.58	U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	0.63	J	1.58	U	1.6	U	1.58	U
N-methyl perfluoro-1-octanesulfonamide	NS	1.7	U	1.58	U	1.6	U	1.58	U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	1.7	U	1.58	U	1.6	U	1.58	U
Nonafluoro-3,6-dioxaheptanoic acid	NS	1.7	U	1.58	U	1.6	U	1.58	U
Perfluoro(2-ethoxyethane)sulfonic acid	NS	1.7	U	1.58	U	1.6	U	1.58	U
Perfluoro(2-Propoxypropanoic) Acid	NS	1.27	U	1.18	U	1.2	U	1.18	U
Perfluoro-3-methoxypropanoic acid	NS	1.7	U	1.58	U	1.6	U	1.58	U
Perfluoro-4-methoxybutanoic acid	NS	1.7	U	1.58	U	1.6	U	1.58	U
Perfluorobutanesulfonic acid (PFBS)	NS	2.8		1.58	U	1.6	U	1.58	U
Perfluorobutanoic acid	NS	9.03		3.16	U	3.2	U	3.15	U
Perfluorodecanesulfonic acid	NS	1.7	U	1.58	U	1.6	U	1.58	U
Perfluorodecanoic acid	NS	0.53	J	1.58	U	1.6	U	1.58	U
Perfluorododecane sulfonate (PFDoDS)	NS	1.7	U	1.58	U	1.6	U	1.58	U
Perfluorododecanoic acid	NS	1.7	U	1.58	U	1.6	UJ	1.58	U
Perfluoroheptanesulfonic acid	NS	1.7	U	1.58	U	1.6	U	1.58	U
Perfluoroheptanoic acid	NS	4.47		1.58	U	1.6	U	1.58	U
Perfluorohexanesulfonic acid	NS	1.98		1.58	U	1.6	U	1.58	U
Perfluorohexanoic acid	NS	17.8		1.58	U	1.6	U	0.42	J
Perfluorononanesulfonic Acid (Pfns)	NS	1.7	U	1.58	U	1.6	U	1.58	U
Perfluorononanoic acid	NS	1.17	J	1.58	U	1.6	U	1.58	U
Perfluorooctanesulfonamide	NS	1.7	U	1.58	U	1.6	U	1.58	U
Perfluorooctanesulfonic acid (PFOS)	**2.7**	**6.35**		1.58	U	1.6	U	1.58	U
Perfluorooctanoic acid (PFOA)	**6.7**	**8.83**	**JK**	1.58	U	1.6	U	1.58	U
Perfluoropentanesulfonic Acid (Pfpes)	NS	1.7	U	1.58	U	1.6	U	1.58	U
Perfluoropentanoic acid	NS	20.8		1.58	U	1.6	U	1.58	U
Perfluorotetradecanoic acid	NS	1.7	U	1.58	U	1.6	U	1.58	U
Perfluorotridecanoic acid	NS	1.7	U	1.58	U	1.6	U	1.58	U
Perfluoroundecanoic acid	NS	1.7	U	1.58	U	1.6	U	1.58	U
Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2)	NS	3.4	U	3.16	U	3.2	U	3.15	U

Table 15
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Vapor Analytical Results of VOCs

AKRF Sample ID	RI-SV-01_20250929	RI-SV-02_20250929		RI-SV-03_20250929		RI-SV-04_20250929		RI-SV-05_20250929
Lab Sample ID	460-336010-1	460-336010-2		460-336010-3		460-336010-4		460-336010-5
Sample Date	9/29/2025	9/29/2025		9/29/2025		9/29/2025		9/29/2025
Dilution Factor	1	1	4	1	4	1	2	1
Unit	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³
Compound	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.7 J	1.1 U	NR	1.1 U	NR	1.1 U	NR	1.1 U
1,1,2,2-Tetrachloroethane	1.4 U	1.4 U	NR	1.4 U	NR	1.4 U	NR	1.4 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	1.5 U	1.5 U	NR	1.5 U	NR	1.5 U	NR	1.5 U
1,1,2-Trichloroethane	1.1 U	1.1 U	NR	1.1 U	NR	1.1 U	NR	1.1 U
1,1-Dichloroethane	0.81 U	0.81 U	NR	0.81 U	NR	0.81 U	NR	0.81 U
1,1-Dichloroethene	0.2 U	0.2 U	NR	0.2 U	NR	0.2 U	NR	0.2 U
1,2,4-Trichlorobenzene	3.7 U	3.7 U	NR	3.7 U	NR	3.7 U	NR	3.7 U
1,2,4-Trimethylbenzene	3	3.5	NR	2	NR	3.3	NR	4.9
1,2-Dibromoethane (Ethylene Dibromide)	1.5 U	1.5 U	NR	1.5 U	NR	1.5 U	NR	1.5 U
1,2-Dichlorobenzene	1.2 U	1.2 U	NR	1.2 U	NR	1.2 U	NR	1.2 U
1,2-Dichloroethane	0.81 U	0.81 U	NR	0.81 U	NR	0.81 U	NR	0.81 U
1,2-Dichloropropane	0.92 U	0.92 U	NR	0.92 U	NR	0.92 U	NR	0.92 U
1,2-Dichlorotetrafluoroethane	1.4 U	1.4 U	NR	1.4 U	NR	1.4 U	NR	1.4 U
1,3,5-Trimethylbenzene (Mesitylene)	0.66 J	0.98 U	NR	0.42 J	NR	0.96 J	NR	2.4
1,3-Butadiene	0.44 U	0.25 J	NR	0.44 U	NR	0.44 U	NR	0.44 U
1,3-Dichlorobenzene	15	4.3	NR	1.9	NR	2.4	NR	9.2
1,4-Dichlorobenzene	1.2 U	1.2 U	NR	1.2 U	NR	1.2 U	NR	1.2 U
1,4-Dioxane (P-Dioxane)	18 U	18 U	NR	18 U	NR	18 U	NR	18 U
2,2,4-Trimethylpentane	0.93 U	0.93 U	NR	0.31 J	NR	0.6 J	NR	2.3
2-Chlorotoluene	1 U	1 U	NR	1 U	NR	1 U	NR	1 U
2-Hexanone	3.1	6.1	NR	4.5	NR	3.8	NR	3
4-Ethyltoluene	0.98 U	0.98 U	NR	0.98 U	NR	0.98 U	NR	0.98 U
Acetone	91	NR	200 D	NR	180 D	NR	120 D	79
Allyl Chloride (3-Chloropropene)	1.6 U	1.6 U	NR	1.6 U	NR	1.6 U	NR	1.6 U
Benzene	1	1.8	NR	0.79	NR	4.4	NR	1.2
Benzyl Chloride	1 U	1 U	NR	1 U	NR	1 U	NR	1 U
Bromodichloromethane	1.3 U	1.3 U	NR	1.3 U	NR	1.3 U	NR	1.3 U
Bromoform	2.1 U	2.1 U	NR	2.1 U	NR	2.1 U	NR	2.1 U
Bromomethane	0.78 U	0.78 U	NR	0.78 U	NR	0.78 U	NR	0.78 U
Butane	0.73 J	2	NR	1.7	NR	3	NR	1.3
Carbon Disulfide	0.73 J	1.6	NR	1.3 J	NR	3.8	NR	2.4
Carbon Tetrachloride	0.37	0.35	NR	0.48	NR	0.42	NR	0.3
Chlorobenzene	0.92 U	0.92 U	NR	0.92 U	NR	0.92 U	NR	0.92 U
Chlorodifluoromethane	0.62 J	8.1	NR	0.88 J	NR	2	NR	0.67 J
Chloroethane	1.3 U	1.3 U	NR	1.3 U	NR	1.3 U	NR	1.3 U
Chloroform	2.2	1.1	NR	0.7 J	NR	3.9	NR	1.7
Chloromethane	0.32 J	1.5	NR	0.82 J	NR	0.62 J	NR	0.44 J
Cis-1,2-Dichloroethylene	0.2 U	0.2 U	NR	0.2 U	NR	0.2 U	NR	0.2 U
Cis-1,3-Dichloropropene	0.91 U	0.91 U	NR	0.91 U	NR	0.91 U	NR	0.91 U
Cyclohexane	0.62 J	0.55 J	NR	0.6 J	NR	1.4	NR	2.4
Cymene	1.1 U	1.1 U	NR	1.1 U	NR	1.1 U	NR	1.1 U
Dibromochloromethane	1.7 U	1.7 U	NR	1.7 U	NR	1.7 U	NR	1.7 U
Dichlorodifluoromethane	3.4	4	NR	2 J	NR	15	NR	3
Ethylbenzene	0.76 J	0.93	NR	0.55 J	NR	0.97	NR	1.1
Hexachlorobutadiene	2.1 U	2.1 U	NR	2.1 U	NR	2.1 U	NR	2.1 U
Isopropanol	12 U	7.6 J	NR	14	NR	6.2 J	NR	12 U
Isopropylbenzene (Cumene)	0.98 U	0.98 U	NR	0.98 U	NR	0.98 U	NR	0.98 U
M,P-Xylenes	2.9	3.4	NR	1.8 J	NR	3.3	NR	3.7
Methyl Ethyl Ketone (2-Butanone)	7.1	24	NR	22	NR	12	NR	9.7
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	9.6	12	NR	2.2	NR	12	NR	8.2
Methyl Methacrylate	2.1 U	2.1 U	NR	2.1 U	NR	2.1 U	NR	2.1 U
Methylene Chloride	1.7 U	1.7 U	NR	1.7 U	NR	1.7 U	NR	0.86 J
Naphthalene	2 U	2 U	NR	2 U	NR	2 U	NR	2 U
N-Butylbenzene	1.1 U	1.1 U	NR	1.1 U	NR	1.1 U	NR	1.1 U
N-Heptane	0.65 J	1.7	NR	1.1	NR	2.1	NR	3.6
N-Hexane	1.8 U	1 J	NR	0.7 J	NR	2.5	NR	4.5
N-Propylbenzene	0.98 U	0.98 U	NR	0.98 U	NR	0.98 U	NR	0.81 J
O-Xylene (1,2-Dimethylbenzene)	1.4	1.6	NR	0.92	NR	1.6	NR	1.5
Sec-Butylbenzene	1.1 U	1.1 U	NR	1.1 U	NR	1.1 U	NR	1.1 U
Styrene	0.85 U	0.85 U	NR	0.85 U	NR	0.85 U	NR	0.85 U
T-Butylbenzene	1.1 U	1.1 U	NR	1.1 U	NR	1.1 U	NR	1.1 U
Tert-Butyl Alcohol	34	71	NR	71	NR	33	NR	43
Tert-Butyl Methyl Ether	0.72 U	0.72 U	NR	0.72 U	NR	0.72 U	NR	0.72 U
Tetrachloroethylene (PCE)	29	5.4	NR	1.1 J	NR	24	NR	12
Tetrahydrofuran	15 U	15 U	NR	15 U	NR	15 U	NR	15 U
Toluene	1.5	3	NR	2.5	NR	3	NR	1.9
Trans-1,2-Dichloroethene	0.79 U	0.79 U	NR	0.79 U	NR	0.79 U	NR	0.79 U
Trans-1,3-Dichloropropene	0.91 U	0.91 U	NR	0.91 U	NR	0.91 U	NR	0.91 U
Trichloroethylene (TCE)	0.2 U	0.2 U	NR	0.2 U	NR	0.2 U	NR	0.72
Trichlorofluoromethane	1.9	2.5	NR	1.2	NR	7.2	NR	1.5
Vinyl Bromide	0.88 U	0.88 U	NR	0.88 U	NR	0.88 U	NR	0.88 U
Vinyl Chloride	0.2 U	0.2 U	NR	0.2 U	NR	0.2 U	NR	0.2 U

Table 15
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Soil Vapor Analytical Results of VOCs

AKRF Sample ID	RI-SV-06_20250929	RI-SV-07_20250929		RI-SV-08_20251222	RI-SV-09_20251222	RI-SV-10_20251222
Lab Sample ID	460-336010-6	460-336010-7		460-342262-1	460-342262-2	460-342262-3
Sample Date	9/29/2025	9/29/2025		12/22/2025	12/22/2025	12/22/2025
Dilution Factor	1	1	10	1	40	1
Unit	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³
Compound	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.75 J	1.1 U	NR	1.1 U	44 U	1.1 U
1,1,2,2-Tetrachloroethane	1.4 U	1.4 U	NR	1.4 U	55 U	1.4 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	1.5 U	1.5 U	NR	1.5 U	61 U	1.5 U
1,1,2-Trichloroethane	1.1 U	1.1 U	NR	1.1 U	44 U	1.1 U
1,1-Dichloroethane	0.81 U	0.81 U	NR	0.81 U	32 U	0.81 U
1,1-Dichloroethene	0.2 U	0.2 U	NR	0.2 U	8 U	0.2 U
1,2,4-Trichlorobenzene	3.7 U	3.7 U	NR	3.7 U	150 U	3.7 U
1,2,4-Trimethylbenzene	2.9	3.3	NR	8	39 U	1.2
1,2-Dibromoethane (Ethylene Dibromide)	1.5 U	1.5 U	NR	1.5 U	62 U	1.5 U
1,2-Dichlorobenzene	1.2 U	1.2 U	NR	1.2 U	48 U	1.2 U
1,2-Dichloroethane	0.81 U	0.81 U	NR	0.81 U	32 U	0.81 U
1,2-Dichloropropane	0.92 U	0.92 U	NR	0.92 U	37 U	0.92 U
1,2-Dichlorotetrafluoroethane	1.4 U	1.4 U	NR	1.4 U	56 U	1.4 U
1,3,5-Trimethylbenzene (Mesitylene)	0.98 U	0.98 U	NR	3.9	39 U	0.98 U
1,3-Butadiene	0.44 U	0.17 J	NR	0.44 U	18 U	0.44 U
1,3-Dichlorobenzene	16	5.6	NR	1.2 U	48 U	1.2 U
1,4-Dichlorobenzene	1.2 U	1.2 U	NR	1.2 U	48 U	1.2 U
1,4-Dioxane (P-Dioxane)	18 U	18 U	NR	18 U	720 U	18 U
2,2,4-Trimethylpentane	0.7 J	1	NR	3	110	1.4
2-Chlorotoluene	1 U	1 U	NR	1 U	42 U	1 U
2-Hexanone	9.7	6.8	NR	2.1 U	82 U	2.1 U
4-Ethyltoluene	0.98 U	0.98 U	NR	2.9	39 U	0.64 J
Acetone	91	NR	460 D	14	190 J	29
Allyl Chloride (3-Chloropropene)	1.6 U	1.6 U	NR	1.6 U	63 U	1.6 U
Benzene	2.3	1.3	NR	0.98	24 J	0.85
Benzyl Chloride	1 U	1 U	NR	1 U	42 U	1 U
Bromodichloromethane	1.3 U	1.3 U	NR	1.3 U	54 U	1.3 U
Bromoform	2.1 U	2.1 U	NR	2.1 U	83 U	2.1 U
Bromomethane	0.78 U	0.78 U	NR	0.78 U	31 U	0.78 U
Butane	12	3.4	NR	1.7	2,300	3.5
Carbon Disulfide	5.9	3.5	NR	1.3 J	62 U	5.1
Carbon Tetrachloride	0.16 J	0.39	NR	0.22 U	8.8 U	0.22 U
Chlorobenzene	0.92 U	0.92 U	NR	0.92 U	37 U	0.92 U
Chlorodifluoromethane	1.8 U	13	NR	0.61 J	71 U	1.8 U
Chloroethane	1.3 U	1.3 U	NR	1.3 U	53 U	1.3 U
Chloroform	11	4.9	NR	0.41 J	27 J	0.41 J
Chloromethane	1 U	0.95 J	NR	1 U	41 U	1 U
Cis-1,2-Dichloroethylene	0.2 U	0.2 U	NR	0.2 U	8 U	0.2 U
Cis-1,3-Dichloropropene	0.91 U	0.91 U	NR	0.91 U	36 U	0.91 U
Cyclohexane	10	5.9	NR	0.69 U	76	1.4
Cymene	1.1 U	1.1 U	NR	1.1 U	44 U	1.1 U
Dibromochloromethane	1.7 U	1.7 U	NR	1.7 U	68 U	1.7 U
Dichlorodifluoromethane	10	4	NR	1.9 J	99 U	1.3 J
Ethylbenzene	0.92	1	NR	1.5	35 U	0.65 J
Hexachlorobutadiene	2.1 U	2.1 U	NR	2.1 U	85 U	2.1 U
Isopropanol	12 U	11 J	NR	12 U	490 U	12 U
Isopropylbenzene (Cumene)	0.98 U	0.98 U	NR	0.88 J	39 U	0.98 U
M,P-Xylenes	3.4	3.5	NR	6.1	87 U	2.6
Methyl Ethyl Ketone (2-Butanone)	11	40	NR	1.5	87	3
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	11	15	NR	0.71 J	82 U	1.2 J
Methyl Methacrylate	2.1 U	2.1 U	NR	2.1 U	82 U	2.1 U
Methylene Chloride	1.7 U	1.7 U	NR	1.7 U	70 U	1.7 U
Naphthalene	2 U	2 U	NR	2 U	80 U	2 U
N-Butylbenzene	1.1 U	1.1 U	NR	1.1 U	44 U	1.1 U
N-Heptane	9.5	1.9	NR	0.48 J	55	1.3
N-Hexane	9.3	1.7 J	NR	1.8 U	140	1.3 J
N-Propylbenzene	0.98 U	0.98 U	NR	1.9	39 U	0.98 U
O-Xylene (1,2-Dimethylbenzene)	1.7	1.4	NR	3.7	35 U	0.6 J
Sec-Butylbenzene	1.1 U	1.1 U	NR	1.1 U	44 U	1.1 U
Styrene	0.85 U	0.85 U	NR	0.85 U	34 U	0.85 U
T-Butylbenzene	1.1 U	1.1 U	NR	1.1 U	44 U	1.1 U
Tert-Butyl Alcohol	47	NR	150 D	15 U	610 U	15 U
Tert-Butyl Methyl Ether	0.72 U	0.72 U	NR	0.72 U	29 U	0.72 U
Tetrachloroethylene (PCE)	96	2.2	NR	1.4 U	54 U	0.88 J
Tetrahydrofuran	15 U	15 U	NR	15 U	590 U	15 U
Toluene	2.3	3.5	NR	11	21 J	1.9
Trans-1,2-Dichloroethene	0.79 U	0.79 U	NR	0.79 U	32 U	0.79 U
Trans-1,3-Dichloropropene	0.91 U	0.91 U	NR	0.91 U	36 U	0.91 U
Trichloroethylene (TCE)	3	0.2 U	NR	0.2 U	8 U	0.2 U
Trichlorofluoromethane	1.9	1.1	NR	1.1	45 U	0.72 J
Vinyl Bromide	0.88 U	0.88 U	NR	0.88 U	35 U	0.88 U
Vinyl Chloride	0.2 U	0.2 U	NR	0.2 U	8 U	0.2 U

Tables 1-15
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY
Remedial Investigation
Notes

DEFINITIONS

D	:	Indicates an identified compound in an analysis that has been diluted. This flag alerts the data user to any differences between the concentrations reported in the two analyses.
H	:	Sample result is estimated and biased high.
J	:	The concentration given is an estimated value.
K	:	Reported concentration value is proportional to dilution factor and may be exaggerated
L	:	Sample result is estimated and biased low.
ND	:	The standard is a non-detectable concentration by the approved analytical method.
NR	:	Not reported.
NS	:	No standard.
R	:	Indicates the reported result is unusable (note: the analyte may or may not be present).
T	:	Indicates that a quality control parameter has exceeded laboratory limits.
U	:	The analyte was not detected at the indicated concentration.
UJ	:	The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise
mg/kg	:	milligrams per kilogram
mg/L	:	milligrams per liter
ppb	:	parts per billion
ppt	:	parts per trillion
µg/L	:	micrograms per liter
µg/m^3	:	micrograms per cubic meter of air

STANDARDS

Part 375 Soil Cleanup Objectives	:	Soil Cleanup Objectives listed in New York State Department of Environmental Conservation (NYSDEC) "Part 375" Regulations [6 New York Codes, Rules and Regulations (NYCRR) Part 375].

Note: Endosulfans ABS represents the detected sum of Endosulfan I, Endosulfan II, and Endosulfan Sulfate.

Exceedances of Part 375 Unrestricted Use Soil Cleanup Objectives (UUSCOs) are highlighted in bold font.
Exceedances of Part 375 Restricted Residential Soil Cleanup Objectives (RRSCOs) are highlighted in gray shading.

EPA Hazardous Waste Criteria by TCLP	:	Code of Federal Regulations (CFR) Title 40 - Protection of the Environment, Chapter I - United States Environmental Protection Agency (EPA), Subchapter I - Solid Wastes, Part 261 - Identification And Listing Of Hazardous Waste, Subpart C - Characteristics Of Hazardous Waste. § 261.24 (b). Table 1—Maximum Concentration of Contaminants for the Toxicity Characteristic.

Exceedances of the EPA Hazardous Waste Criteria are highlighted in bold font.

NYSDEC Part 375 PFAS Guidance Values	:	New York State Department of Environmental Conservation (NYSDEC) Sampling, Analysis and Assessment Of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs Issued April 2023.

Exceedances of NYSDEC PFAS Unrestricted Use Guidance Values (UUGVs) are highlighted in bold font.
Exceedances of NYSDEC PFAS Restricted Residential Guidance Values (RRGVs) are highlighted in gray shading.

NYSDEC Class GA AWQSGVs	:	New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (1.1.1): Class GA Ambient Water Quality Standards and Guidance Values (AWQSGVs).

Exceedances of NYSDEC Class GA AWQSGVs are highlighted in bold font.

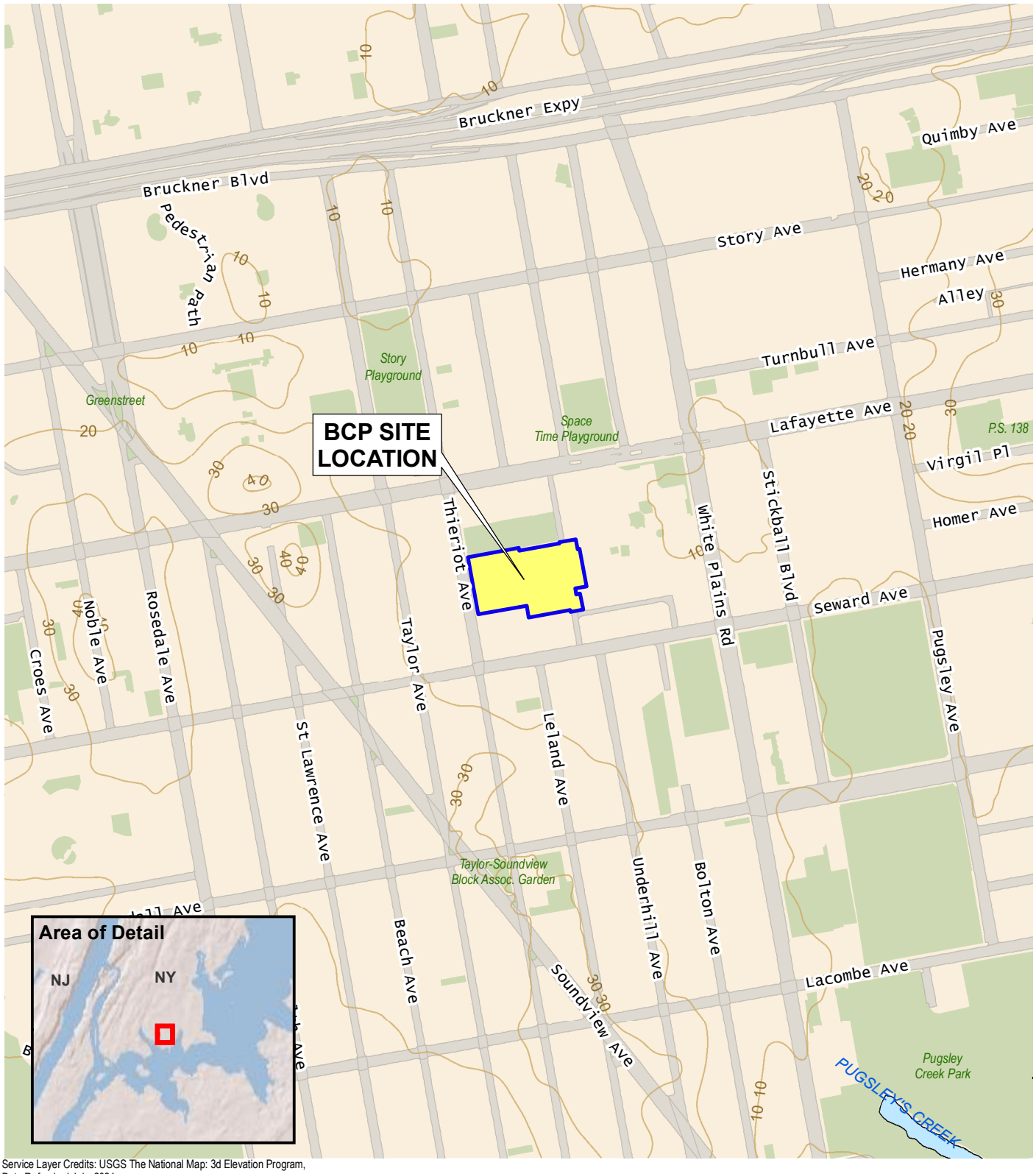
DUPLICATES

RI-SB-X1_2-4_20250923 is a blind duplicate of sample RI-SB-01_2-4_20250923.
RI-SB-X11_6-8_20251222 is a blind duplicate of sample RI-SB-30_6-8_20251222.
RI-SB-X12_2-4_20251219 is a blind duplicate of sample RI-SB-32_2-4_20251219.
RI-SB-X13_2-4_20251218 is a blind duplicate of sample RI-SB-23_2-4_20251218.
RI-SB-X14_2-4_20251222 is a blind duplicate of sample RI-SB-24_2-4_20251222.
RI-SB-X15_8-10_20260130 is a blind duplicate of sample RI-SB-61_8-10_20260130.
RI-SB-X2_2-4_20250922 is a blind duplicate of sample RI-SB-06_2-4_20250922.
RI-SB-X3_2-4_20250922 is a blind duplicate of sample RI-SB-15_2-4_20250922.
RI-SB-X4_2-4_20250924 is a blind duplicate of sample RI-SB-04_2-4_20250924.
RI-SB-X5_2-4_20250923 is a blind duplicate of sample RI-SB-09_2-4_20250923.
RI-SB-X6_2-4_20250925 is a blind duplicate of sample RI-SB-13_2-4_20250925.
RI-SB-X7_4-6_20250925 is a blind duplicate of sample RI-SB-20_4-6_20250925.
RI-SB-X8_0.5-2_20251218 is a blind duplicate of sample RI-SB-22_0.5-2_20251218.
RI-SB-X9_4-6_20251219 is a blind duplicate of sample RI-SB-37_4-6_20251219.
RI-MW-0X_20251230 is a blind duplicate of sample RI-MW-09_20251230.
RI-MW-X_20251007 is a blind duplicate of sample RI-MW-05_20251007.
RI-SB-X_23-25_20260623 is a blind duplicate of sample RI-SB-80_23-25_20260623.

Table 16
Estimated Remedial Costs
Stevenson Commons B3
1850 Lafayette Avenue, Bronx, NY

	Cost Estimate			Total Estimated
Preparation/Mobilization Costs	**Quantity**	**Units**	**Unit Rate**	**Cost**
Fencing (regular and silt)	857	linear feet	$21.95	$18,811
Truck Tracking Pad	1	LS	$22,000	$22,000
Subtotal				**$40,811**
Environmental Engineering Costs				
Reporting, Oversight, Project Management	1	LS	$10,000	$497,500
Soil Pre-Characterization Sampling, Analysis, and Reporting	1	LS	$100,500	$46,000
Allowance for Import and Reuse Sampling (lab costs and associated reporting to NYSDEC)	1	LS	$68,000	$27,500
Fixed Air Monitoring Stations (Excavation - assumes 3 CAMP stations)	12	months	$5,500	$66,000
Allowance for Endpoint Sampling (lab costs) and survey of endpoint samples (includes QA/QC)	1	allowance	$185,000	$185,000
Alta Survey (BCP - Others)	1	LS	$10,000	$10,000
Environmental Easement (BCP - Legal)	1	LS	$15,000	$15,000
Site Management - Inspection and Reporting (minimum of 5-year duration)	1	LS	$60,000	$60,000
Subtotal				**$907,000**
Remedial - Contractor Costs				
- Excavation Contractor (Track 4 - 2' cut site-wide minus Track 2 area) REMEDIAL ONLY	12,855	tons	$67	$857,043
- Excavation Contractor (Track 2 Area from 0 to 10' plus metals hotspot from 10-15') REMEDIAL ONLY	7,127	tons	$67	$477,509
- Support of Excavation (Track 2 area)	1	LS	$346,200	$103,860
REMEDIAL - Materials Management During Construction [1]				
- Cost for transport & disposal of soil - hazardous soil (Purple Area 0-2' - TCLP Lead <25)	18	tons	$301	$5,418
- Cost for transport & disposal of soil - hazardous soil (Yellow Area 10-15' - TCLP Lead <100)	29	tons	$651	$18,879
- Cost for transport & disposal of soil - non-hazardous soil with elevated metals	14,213	tons	$139	$1,975,607
- Cost for transport & disposal of soil - non-hazardous soil	5,722	tons	$57	$326,154
- Contractor mark-up for disposal	$2,326,058	%	17.5%	$407,060
Fuel Oil Tank Removals				
- Contingency Removal of Unknown Underground Storage Tank(s)	1	LS	$15,000	$15,000
Site Cap Construction				
- Cost for import of two feet of topsoil for landscaped areas	8,569	yards	$50	$428,450
- Contractor mark-up for imported soil	428,450	%	10%	$42,845
- Exterior Hardscaping Cover	79,057	square feet	$25	$1,976,425
- Load transfer platfrom/rigid inclusions to support exterior hardscapes	1	LS	$500,000	$500,000
- Concrete Slab Cover (building foundation slab only) - Track 4 Area	790	CY	$1,275	$1,007,250
- Concrete Slab Cover (building foundation slab only) - Track 2 Area	460	CY	$1,275	--
- Dewatering (Track 2 area only)	1	LS	$879,800	$219,950
Subtotal				**$8,361,450**
Total Estimated Remedial Costs Under a Dual Track 4/Track 2 Cleanup through Certificate of Completion				***$9,309,261***

FIGURES



Service Layer Credits: USGS The National Map: 3d Elevation Program, Data Refreshed July, 2021

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SCALE IN FEET

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BCP SITE LOCATION

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2/26/2026

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FIGURE
1

©2026 AKRF Q:\Projects\240663 - STEVENSON COMMONS B3\Technical\GIS and Graphics\SAR\240663 Fig 1 Site Location.mxd 2/26/2026 11:34:53 AM mvelleux



LEGEND

PROJECT SITE BOUNDARY

15 LOT BOUNDARY AND TAX LOT NUMBER

3600 BLOCK NUMBER

Map Source:
NYCDCP (NYC Dept. of City Planning) GIS database

Aerial Source:
2020 New York State ITS GIS Orthoimagery

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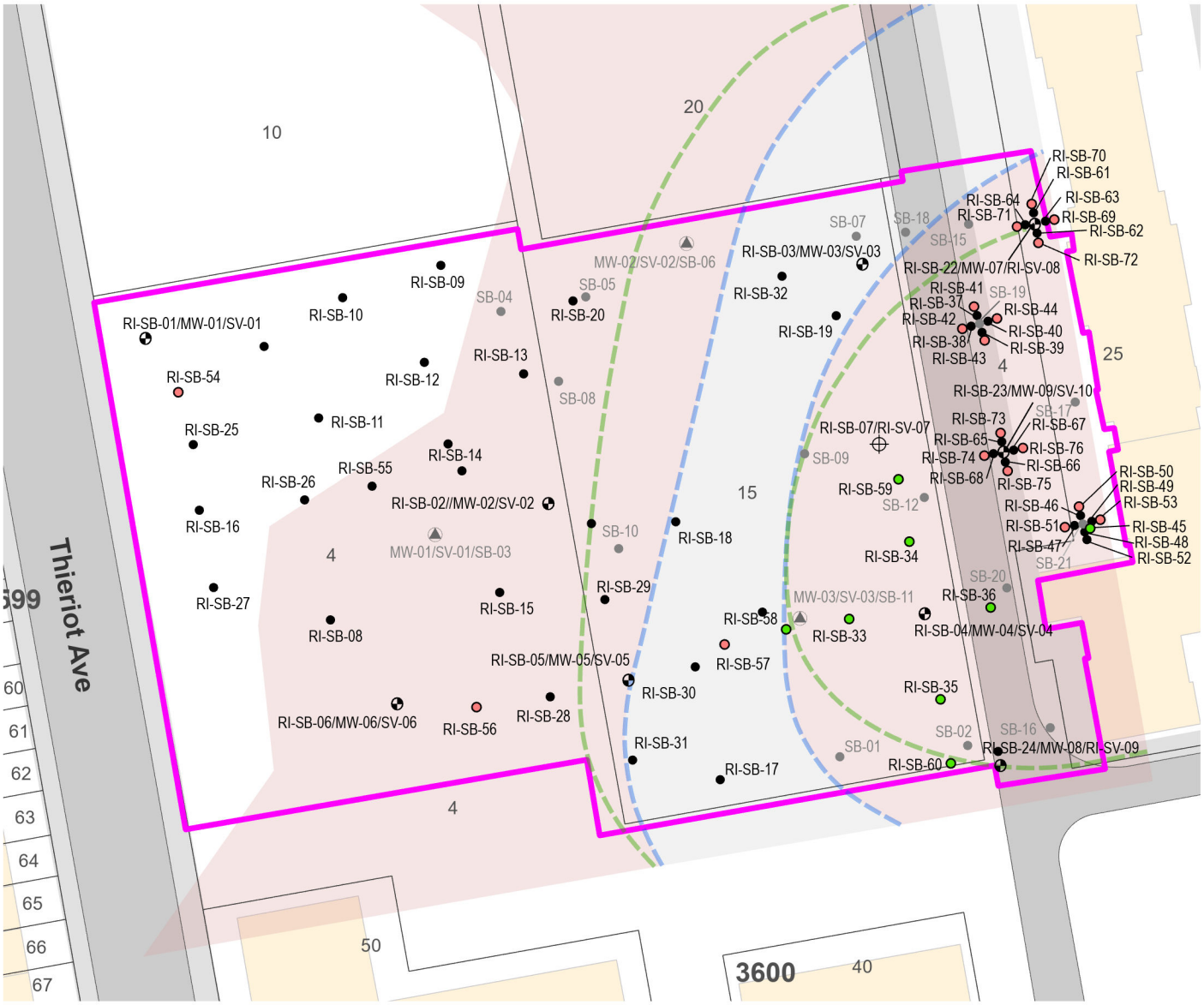
SITE OVERVIEW

DATE
7/27/2026

PROJECT NO.
240663

FIGURE
2A

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LEGEND

- BCP SITE BOUNDARY
- BUILDING
- 15 LOT BOUNDARY AND TAX LOT NUMBER
- 3600 BLOCK NUMBER
- RI SOIL BORING LOCATION
- RI SOIL BORING/SOIL VAPOR POINT LOCATION
- RI SOIL BORING/MONITORING WELL/ SOIL VAPOR SAMPLE LOCATION
- AKRF SUBSURFACE INVESTIGATION SOIL BORING LOCATION
- AKRF SUBSURFACE INVESTIGATION MONITORING WELL/SOIL VAPOR POINT/ SOIL BORING LOCATION
- RI SOIL BORING *
- RI SOIL BORING **
- HISTORIC CREEK LIMITS BASKERVILLE MAPS 1992 (APPROX.)
- HISTORIC CREEK LIMITS SANBORN MAP (APPROX.)
- HISTORIC WETLANDS LIMITS BASKERVILLE MAPS 1992 (APPROX.)

Map Source:
NYCDCP (NYC Dept. of City Planning) GIS database

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* Samples collected from these borings were placed on hold pending results of initial delineation samples

** Borings were never advanced based on a change in scope directed by DEC

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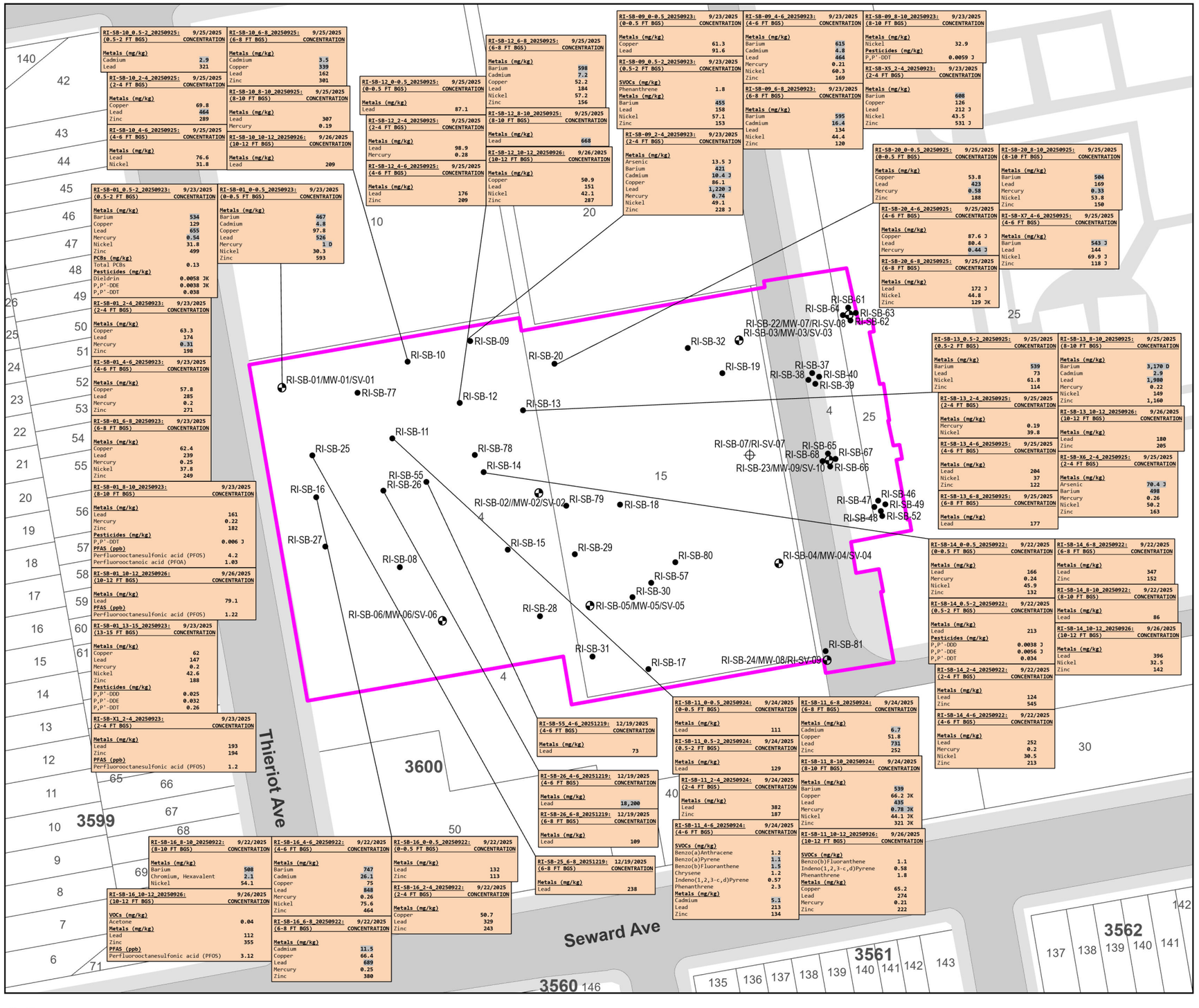
BCP SITE PLAN AND SAMPLE LOCATIONS

DATE
9/25/2026

PROJECT NO.
240663

FIGURE
2B

AKRF O:\Projects\240663 - STEVENSON COMMONS B3\SAR\RIR and RAWP Figures\240663 RAWP Figures.aprx9/25/2026 10:26 AM240663 Fig 2 Site Plan and Sample Locationsmveilleux



Map Source:
NYCDCP (NYC Dept. of City Planning) GIS database

LEGEND

- SITE BOUNDARY
- 15 LOT BOUNDARY AND TAX LOT NUMBER
- 3600 BLOCK NUMBER
- RI SOIL BORING LOCATION
- RI SOIL BORING/SOIL VAPOR POINT LOCATION
- RI SOIL BORING/MONITORING WELL/SOIL VAPOR SAMPLE LOCATION

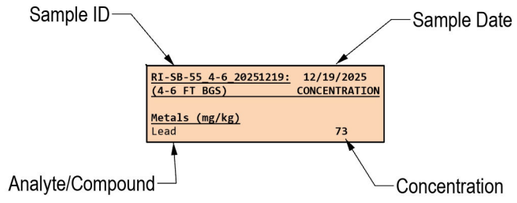
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	UUGV (ppb)	RRSCO (mg/kg)	UUSCO (mg/kg)
VOCs			
Acetone		100	0.05
SVOCs			
Acenaphthene		100	20
Benzo(a)Anthracene		1	1
Benzo(a)Pyrene		1	1
Benzo(b)Fluoranthene		1	1
Benzo(g,h,i)Perylene		100	100
Benzo(k)Fluoranthene		3.9	0.8
Chrysene		3.9	1
Dibenz(a,h)Anthracene		0.33	0.33
Fluoranthene		100	100
Fluorene		100	30
Indeno(1,2,3-c,d)Pyrene		0.5	0.5
Naphthalene		100	12
Phenanthrene		100	100
Pyrene		100	100
PCBs			
Total PCBs		1	0.1
Metals			
Arsenic		16	13
Barium		400	350
Cadmium		4.3	2.5
Copper		270	50
Lead		400	63
Mercury		0.81	0.18
Nickel		310	30
Selenium		180	3.9
Silver		180	2
Zinc		10000	109
PFAS			
Perfluorooctanesulfonic acid (PFOS)	0.88		

Soil Samples above NYSDEC UUSCOs, RRSCOs and/or PGWSCOs **Part 375 Soil Cleanup Objectives (SCOs):** SCOs listed in the New York State Department of Environmental Conservation (NYSDEC) "Part 375" Regulations (6 NYCRR Part 375).

Exceedances of NYSDEC Unrestricted Use Soil Cleanup Objectives (UUSCOs) are presented in bold font.

Exceedances of NYSDEC Restricted Residential Soil Cleanup Objectives (RRSCOs) are presented in grey shading.



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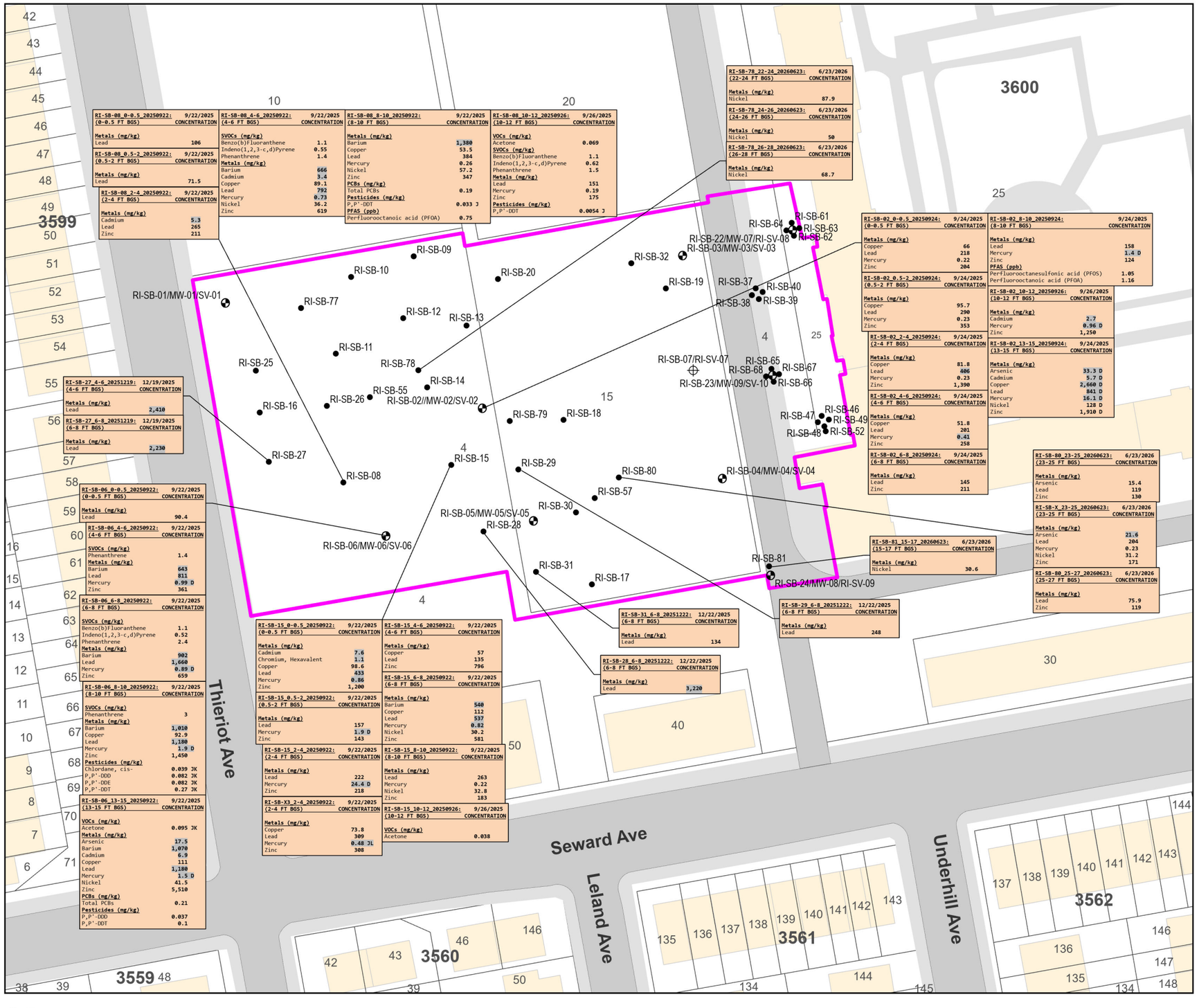
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Bronx, New York

SOIL CONCENTRATIONS ABOVE NYSDEC UUSCOS, RRSCOS, AND PFAS GUIDANCE VALUES

DATE
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FIGURE
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Map Source:
NYCDCP (NYC Dept. of City Planning) GIS database

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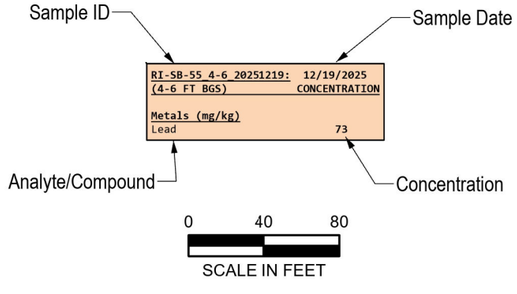
- SITE BOUNDARY
- 15 — LOT BOUNDARY AND TAX LOT NUMBER
- 3600 — BLOCK NUMBER
- RI SOIL BORING LOCATION
- RI SOIL BORING/SOIL VAPOR POINT LOCATION
- RI SOIL BORING/MONITORING WELL/SOIL VAPOR SAMPLE LOCATION

	UUGV (ppb)	RRSCO (mg/kg)	UUSCO (mg/kg
VOCs			
Acetone		100	0.05
SVOCs			
Acenaphthene		100	20
Benzo(a)Anthracene		1	1
Benzo(a)Pyrene		1	1
Benzo(b)Fluoranthene		1	1
Benzo(g,h,i)Perylene		100	100
Benzo(k)Fluoranthene		3.9	0.8
Chrysene		3.9	1
Dibenz(a,h)Anthracene		0.33	0.33
Fluoranthene		100	100
Fluorene		100	30
Indeno(1,2,3-c,d)Pyrene		0.5	0.5
Naphthalene		100	12
Phenanthrene		100	100
Pyrene		100	100
PCBs			
Total PCBs		1	0.1
Metals			
Arsenic		16	13
Barium		400	350
Cadmium		4.3	2.5
Copper		270	50
Lead		400	63
Mercury		0.81	0.18
Nickel		310	30
Selenium		180	3.9
Silver		180	2
Zinc		10000	109
PFAS			
Perfluorooctanesulfonic acid (PFOS)	0.88		

Soil Samples above NYSDEC UUSCOs, RRSCOs and/or PGWSCOs **Part 375 Soil Cleanup Objectives (SCOs):** SCOs listed in the New York State Department of Environmental Conservation (NYSDEC) "Part 375" Regulations (6 NYCRR Part 375).

Exceedances of NYSDEC Unrestricted Use Soil Cleanup Objectives (UUSCOs) are presented in bold font.

Exceedances of NYSDEC Restricted Residential Soil Cleanup Objectives (RRSCOs) are presented in grey shading.



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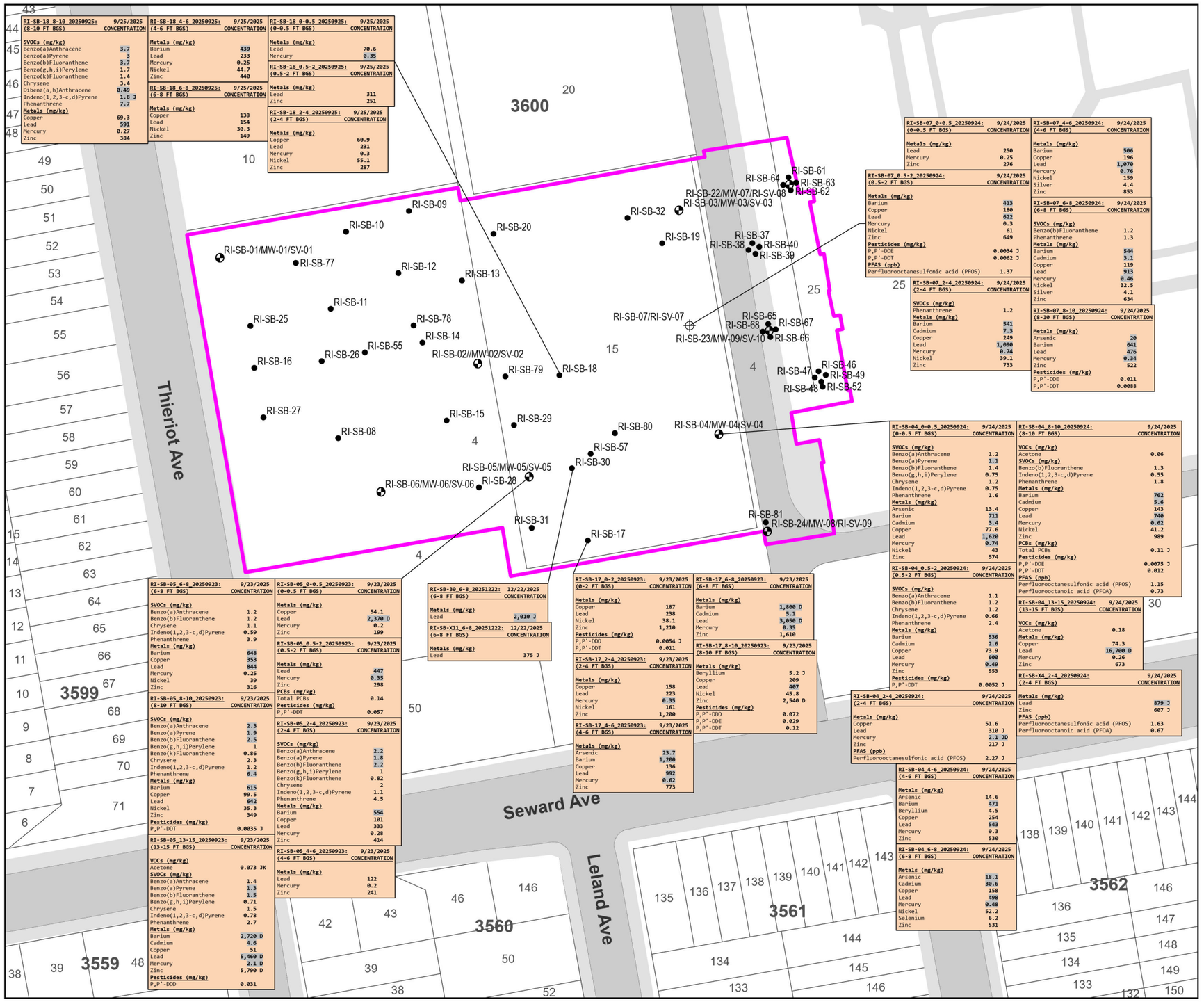
SOIL CONCENTRATIONS ABOVE NYSDEC UUSCOS, RRSCOS, AND PFAS GUIDANCE VALUES

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FIGURE
3B

AKRF O:\Projects\240663 - STEVENSON COMMONS B3\SAR\RIR and RAWP Figures\240663 RIR Figures.aprx 7/27/2026 4:00 PM240663 Fig 6b Soil Sam



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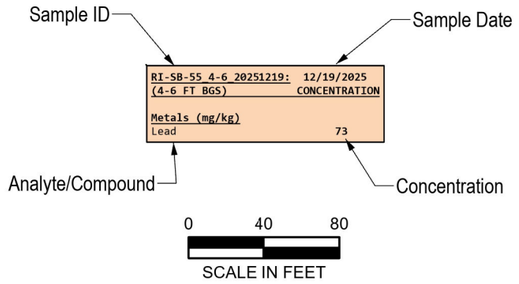
- SITE BOUNDARY
- 15 — LOT BOUNDARY AND TAX LOT NUMBER
- 3600 — BLOCK NUMBER
- RI SOIL BORING LOCATION
- RI SOIL BORING/SOIL VAPOR POINT LOCATION
- RI SOIL BORING/MONITORING WELL/SOIL VAPOR SAMPLE LOCATION

	UUGV (ppb)	RRSCO (mg/kg)	UUSCO (mg/kg
VOCs			
Acetone		100	0.05
SVOCs			
Acenaphthene		100	20
Benzo(a)Anthracene		1	1
Benzo(a)Pyrene		1	1
Benzo(b)Fluoranthene		1	1
Benzo(g,h,i)Perylene		100	100
Benzo(k)Fluoranthene		3.9	0.8
Chrysene		3.9	1
Dibenz(a,h)Anthracene		0.33	0.33
Fluoranthene		100	100
Fluorene		100	30
Indeno(1,2,3-c,d)Pyrene		0.5	0.5
Naphthalene		100	12
Phenanthrene		100	100
Pyrene		100	100
PCBs			
Total PCBs		1	0.1
Metals			
Arsenic		16	13
Barium		400	350
Cadmium		4.3	2.5
Copper		270	50
Lead		400	63
Mercury		0.81	0.18
Nickel		310	30
Selenium		180	3.9
Silver		180	2
Zinc		10000	109
PFAS			
Perfluorooctanesulfonic acid (PFOS)	0.88		

Soil Samples above NYSDEC UUSCOs, RRSCOs and/or PGWSCOs **Part 375 Soil Cleanup Objectives (SCOs):** SCOs listed in the New York State Department of Environmental Conservation (NYSDEC) "Part 375" Regulations (6 NYCRR Part 375).

Exceedances of NYSDEC Unrestricted Use Soil Cleanup Objectives (UUSCOs) are presented in bold font.

Exceedances of NYSDEC Restricted Residential Soil Cleanup Objectives (RRSCOs) are presented in grey shading.



Map Source:
NYCDCP (NYC Dept. of City Planning) GIS database

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SOIL CONCENTRATIONS ABOVE NYSDEC UUSCOS, RRSCOS, AND PFAS GUIDANCE VALUES

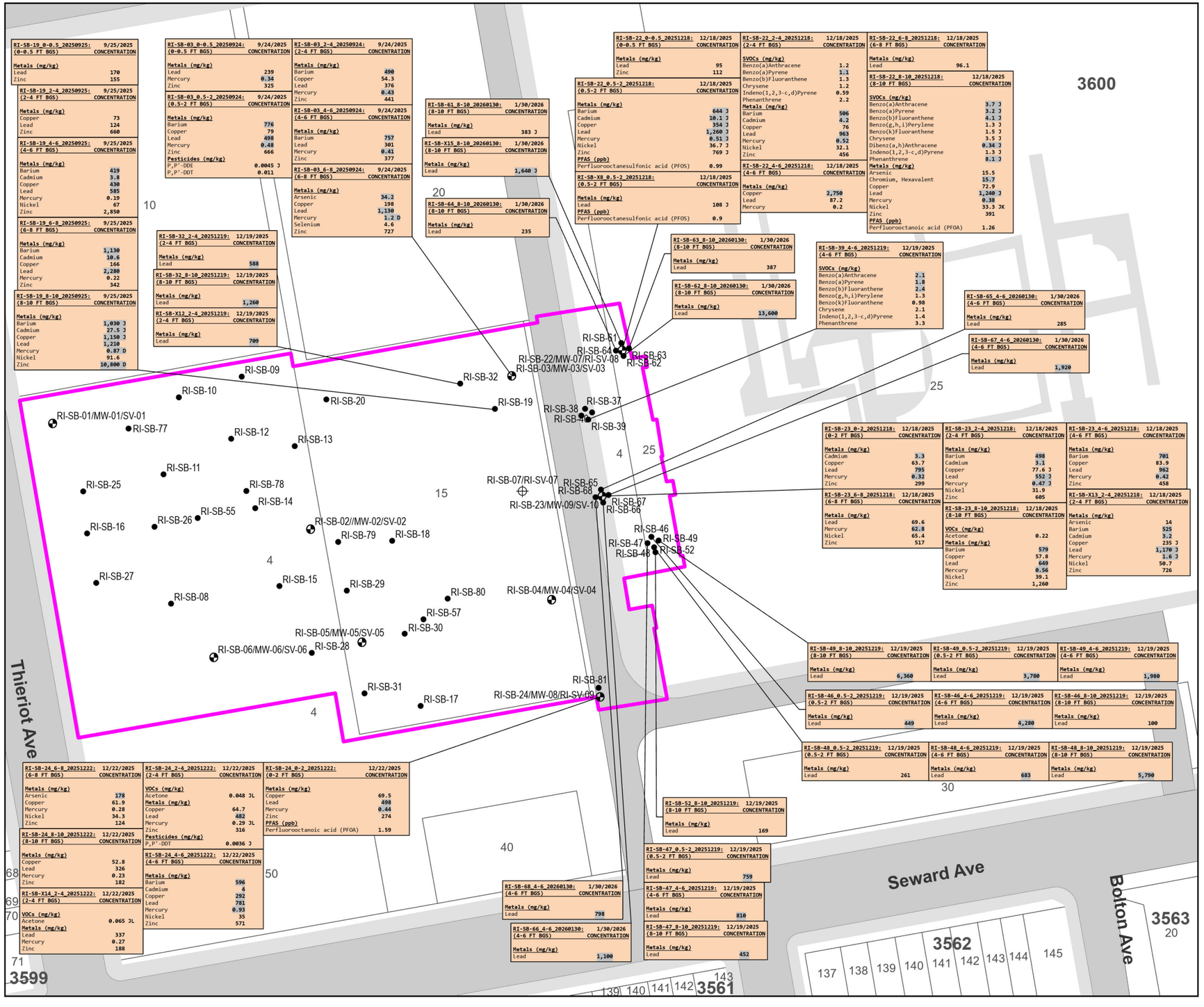
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DATE
7/27/2026

PROJECT NO.
240663

FIGURE
3C

AKRF O:\Projects\240663 - STEVENSON COMMONS B3\SAR\RIR and RAWP Figures\240663 RIR Figures.aprx 7/27/2026 4:02 PM240663 Fig 6c Soil Sample Above NYSDEC and UUSCOs and_RRSCOSs11 mveilleux



Map Source:
NYCDCP (NYC Dept. of City Planning) GIS database

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- SITE BOUNDARY
- 15 — LOT BOUNDARY AND TAX LOT NUMBER
- 3600 — BLOCK NUMBER
- RI SOIL BORING LOCATION
- RI SOIL BORING/SOIL VAPOR POINT LOCATION
- RI SOIL BORING/MONITORING WELL/SOIL VAPOR SAMPLE LOCATION

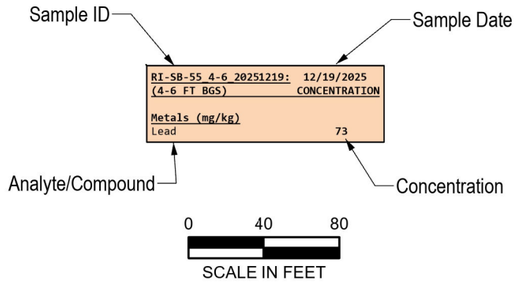
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	UUGV (ppb)	RRSCO (mg/kg)	UUSCO (mg/kg)
VOCs			
Acetone		100	0.05
SVOCs			
Acenaphthene		100	20
Benzo(a)Anthracene		1	1
Benzo(a)Pyrene		1	1
Benzo(b)Fluoranthene		1	1
Benzo(g,h,i)Perylene		100	100
Benzo(k)Fluoranthene		3.9	0.8
Chrysene		3.9	1
Dibenz(a,h)Anthracene		0.33	0.33
Fluoranthene		100	100
Fluorene		100	30
Indeno(1,2,3-c,d)Pyrene		0.5	0.5
Naphthalene		100	12
Phenanthrene		100	100
Pyrene		100	100
PCBs			
Total PCBs		1	0.1
Metals			
Arsenic		16	13
Barium		400	350
Cadmium		4.3	2.5
Copper		270	50
Lead		400	63
Mercury		0.81	0.18
Nickel		310	30
Selenium		180	3.9
Silver		180	2
Zinc		10000	109
PFAS			
Perfluorooctanesulfonic acid (PFOS)	0.88		

Soil Samples above NYSDEC UUSCOs, RRSCOs and/or PGWSCOs **Part 375 Soil Cleanup Objectives (SCOs):** SCOs listed in the New York State Department of Environmental Conservation (NYSDEC) "Part 375" Regulations (6 NYCRR Part 375).

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Exceedances of NYSDEC Restricted Residential Soil Cleanup Objectives (RRSCOs) are presented in grey shading.



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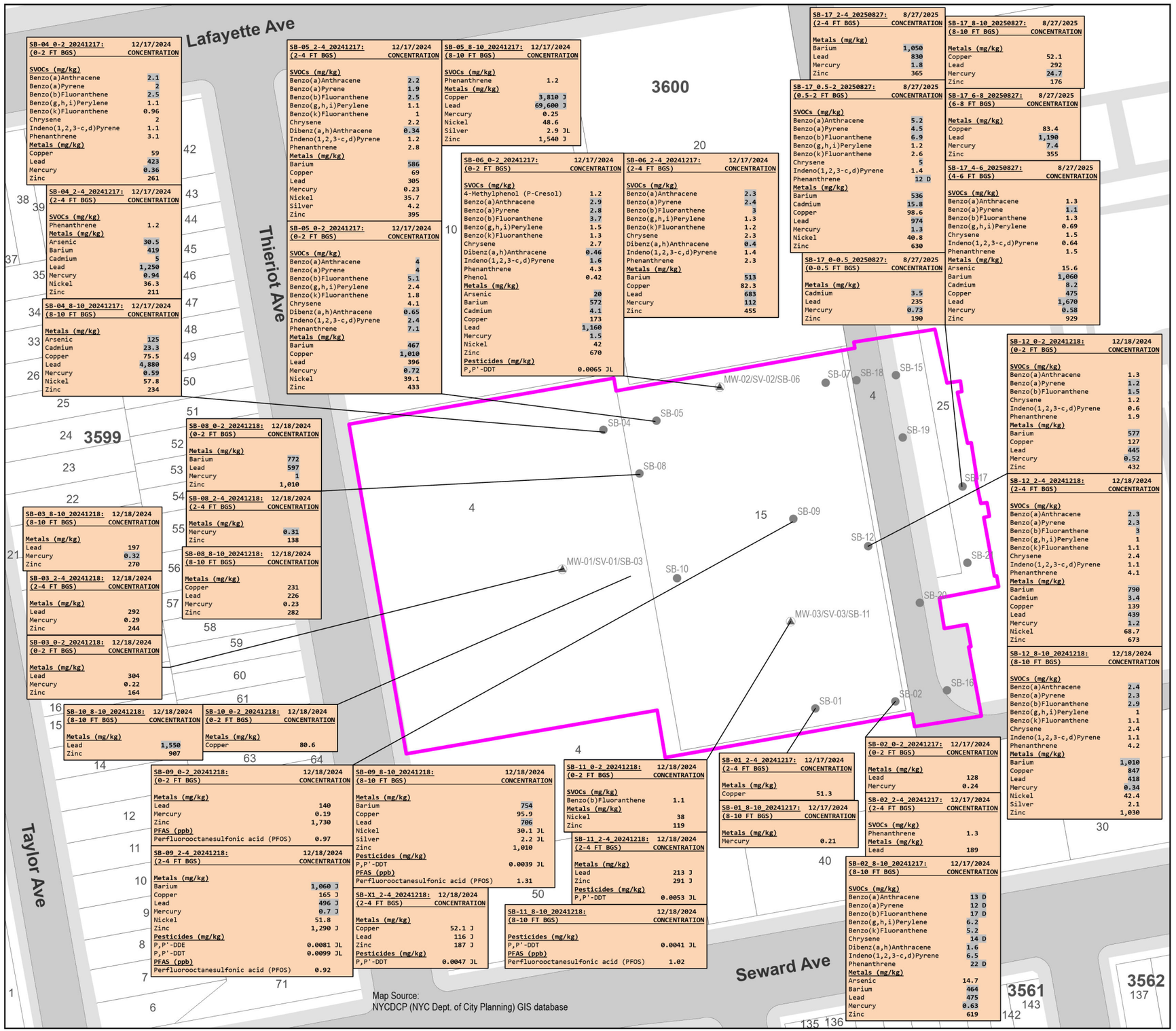
SOIL CONCENTRATIONS ABOVE NYSDEC UUSCOS, RRSCOS, AND PFAS GUIDANCE VALUES

DATE
7/27/2026

PROJECT NO.
240663

FIGURE
3D

AKRF O:\Projects\240663 - STEVENSON COMMONS B3\SAR\RIR and RAWP Figures\240663 RIR Figures.aprx 7/27/2026 4:03 PM 240663 Fig 6d Soil Sample Above NYSDEC and UUSCOs and_RRSCOSs111 mveilleux



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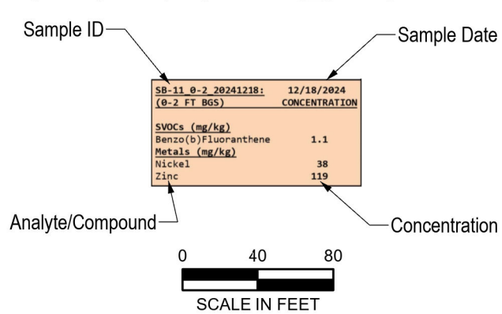
- SITE BOUNDARY
- 15 LOT BOUNDARY AND TAX LOT NUMBER
- 3600 BLOCK NUMBER
- AKRF SUBSURFACE INVESTIGATION SOIL BORING LOCATION
- SOIL BORING/SOIL VAPOR POINT LOCATION
- AKRF SUBSURFACE INVESTIGATION MONITORING WELL/SOIL VAPOR POINT/SOIL BORING LOCATION

chemical name	NYSDEC_PFAS_GUIDANCE_VALUES_Unrestricted (ppt)	PART 375 RESTRICTED RESIDENTIAL (mg/kg)	PART 375 UNRESTRICTED (mg/kg)
VOCs			
Acetone		100	0.03
SVOCs			
4-Methylphenol (P-Cresol)		100	0.33
Acenaphthene		100	20
Benzo(a)Anthracene		1.4	1
Benzo(a)Pyrene		1	1
Benzo(b)Fluoranthene		1.4	1
Benzo(g,h,i)Perylene		4.9	0.64
Benzo(k)Fluoranthene		4.9	0.8
Chrysene		4.9	1
Dibenz(a,h)Anthracene		0.33	0.33
Fluoranthene		100	85
Fluorene		100	30
Indeno(1,2,3-c,d)Pyrene		1.4	0.5
Naphthalene		100	12
Phenanthrene		4.9	1.1
Phenol		100	0.33
Pyrene		100	64
PCBs			
Total PCBs		1	0.1
Metals			
Arsenic		16	13
Barium		410	410
Beryllium		43	4.4
Cadmium		2.5	2.5
Copper		280	50
Lead		400	63
Mercury		0.3	0.18
Nickel		320	30
Selenium		110	3.9
Silver		110	2
Zinc		6600	109
PFAS			
Perfluorooctanesulfonic a	0.88		

Soil Samples above NYSDEC UUSCOs, RRSCOs and/or PGWSCOs **Part 375 Soil Cleanup Objectives (SCOs):** SCOs listed in the New York State Department of Environmental Conservation (NYSDEC) "Part 375" Regulations (6 NYCRR Part 375).

Exceedances of NYSDEC Unrestricted Use Soil Cleanup Objectives (UUSCOs) are presented in bold font.

Exceedances of NYSDEC Restricted Residential Soil Cleanup Objectives (RRSCOs) are presented in grey shading.



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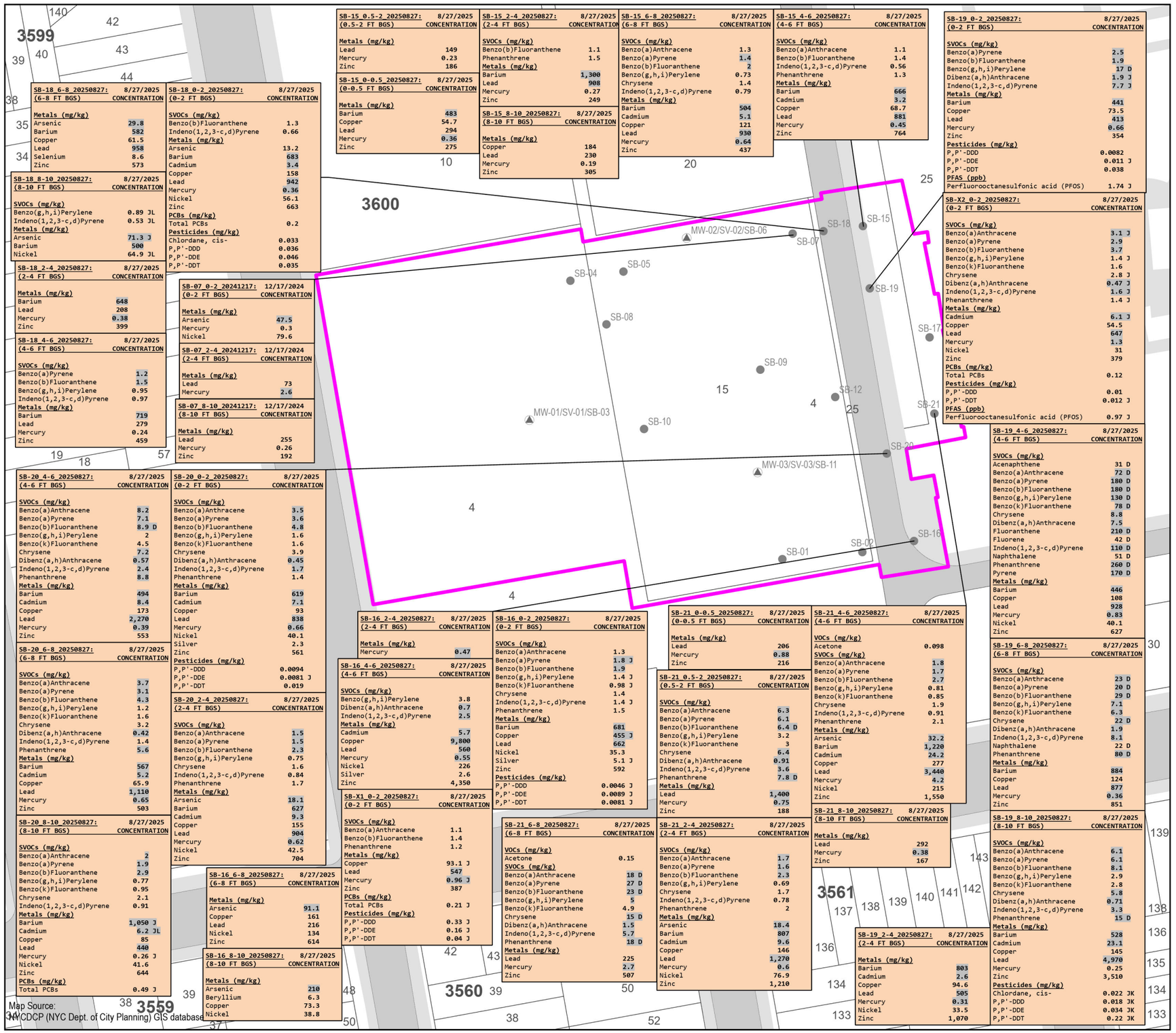
HISTORICAL SOIL CONCENTRATIONS ABOVE NYSDEC UUSCOS, RRSCOS, AND PFAS GUIDANCE VALUES

DATE
7/27/2026

PROJECT NO.
240663

FIGURE
4A

AKRF O:\Projects\240663 - STEVENSON COMMONS B3\SAR\RIR and RAWP Figures\240663 RIR Figures.aprx 7/27/2026 3:54 PM240663 Fig 7A Historical Soil



SB-18_6-8_20250827: 8/27/2025
(6-8 FT BGS) CONCENTRATION

Metals (mg/kg)	
Arsenic	29.8
Barium	582
Copper	61.5
Lead	958
Selenium	8.6
Zinc	573

SB-18_8-10_20250827: 8/27/2025
(8-10 FT BGS) CONCENTRATION

SVOCs (mg/kg)	
Benzo(g,h,i)Perylene	0.89 JL
Indeno(1,2,3-c,d)Pyrene	0.53 JL
Metals (mg/kg)	
Arsenic	71.3 J
Barium	500
Nickel	64.9 JL

SB-18_2-4_20250827: 8/27/2025
(2-4 FT BGS) CONCENTRATION

Metals (mg/kg)	
Barium	648
Lead	208
Mercury	0.38
Zinc	399

SB-18_4-6_20250827: 8/27/2025
(4-6 FT BGS) CONCENTRATION

SVOCs (mg/kg)	
Benzo(a)Pyrene	1.2
Benzo(b)Fluoranthene	1.5
Benzo(g,h,i)Perylene	0.95
Indeno(1,2,3-c,d)Pyrene	0.97
Metals (mg/kg)	
Barium	719
Lead	279
Mercury	0.24
Zinc	459

SB-18_0-2_20250827: 8/27/2025
(0-2 FT BGS) CONCENTRATION

SVOCs (mg/kg)	
Benzo(b)Fluoranthene	1.3
Indeno(1,2,3-c,d)Pyrene	0.66
Metals (mg/kg)	
Arsenic	13.2
Barium	683
Cadmium	3.4
Copper	158
Lead	942
Mercury	0.36
Nickel	56.1
Zinc	663
PCBs (mg/kg)	
Total PCBs	0.2
Pesticides (mg/kg)	
Chlordane, cis-	0.033
P,P'-DDD	0.036
P,P'-DDE	0.046
P,P'-DDT	0.035

SB-07_0-2_20241217: 12/17/2024
(0-2 FT BGS) CONCENTRATION

Metals (mg/kg)	
Arsenic	47.5
Mercury	0.3
Nickel	79.6

SB-07_2-4_20241217: 12/17/2024
(2-4 FT BGS) CONCENTRATION

Metals (mg/kg)	
Lead	73
Mercury	2.6

SB-07_8-10_20241217: 12/17/2024
(8-10 FT BGS) CONCENTRATION

Metals (mg/kg)	
Lead	255
Mercury	0.26
Zinc	192

SB-20_4-6_20250827: 8/27/2025
(4-6 FT BGS) CONCENTRATION

SVOCs (mg/kg)	
Benzo(a)Anthracene	8.2
Benzo(a)Pyrene	7.1
Benzo(b)Fluoranthene	8.9 D
Benzo(g,h,i)Perylene	2
Benzo(k)Fluoranthene	4.5
Chrysene	7.2
Dibenz(a,h)Anthracene	0.57
Indeno(1,2,3-c,d)Pyrene	2.4
Phenanthrene	8.8
Metals (mg/kg)	
Barium	494
Cadmium	8.4
Copper	173
Lead	2,270
Mercury	0.39
Zinc	553

SB-20_6-8_20250827: 8/27/2025
(6-8 FT BGS) CONCENTRATION

SVOCs (mg/kg)	
Benzo(a)Anthracene	3.7
Benzo(a)Pyrene	3.1
Benzo(b)Fluoranthene	4.3
Benzo(g,h,i)Perylene	1.2
Benzo(k)Fluoranthene	1.6
Chrysene	3.2
Dibenz(a,h)Anthracene	0.42
Indeno(1,2,3-c,d)Pyrene	1.4
Phenanthrene	5.6
Metals (mg/kg)	
Barium	567
Cadmium	5.2
Copper	65.9
Lead	1,110
Mercury	0.65
Zinc	503

SB-20_8-10_20250827: 8/27/2025
(8-10 FT BGS) CONCENTRATION

SVOCs (mg/kg)	
Benzo(a)Anthracene	2
Benzo(a)Pyrene	1.9
Benzo(b)Fluoranthene	2.9
Benzo(g,h,i)Perylene	0.77
Benzo(k)Fluoranthene	0.95
Chrysene	2.1
Indeno(1,2,3-c,d)Pyrene	0.91
Metals (mg/kg)	
Barium	1,050 J
Cadmium	6.2 JL
Copper	85
Lead	440
Mercury	0.26 J
Nickel	41.6
Zinc	644
PCBs (mg/kg)	
Total PCBs	0.49 J

SB-20_0-2_20250827: 8/27/2025
(0-2 FT BGS) CONCENTRATION

SVOCs (mg/kg)	
Benzo(a)Anthracene	3.5
Benzo(a)Pyrene	3.6
Benzo(b)Fluoranthene	4.8
Benzo(g,h,i)Perylene	1.6
Benzo(k)Fluoranthene	1.6
Chrysene	3.9
Dibenz(a,h)Anthracene	0.45
Indeno(1,2,3-c,d)Pyrene	1.7
Phenanthrene	1.4
Metals (mg/kg)	
Barium	619
Cadmium	7.1
Copper	93
Lead	838
Mercury	0.66
Nickel	40.1
Silver	2.3
Zinc	561
Pesticides (mg/kg)	
P,P'-DDD	0.0094
P,P'-DDE	0.0081 J
P,P'-DDT	0.019

SB-20_2-4_20250827: 8/27/2025
(2-4 FT BGS) CONCENTRATION

SVOCs (mg/kg)	
Benzo(a)Anthracene	1.5
Benzo(a)Pyrene	1.5
Benzo(b)Fluoranthene	2.3
Benzo(g,h,i)Perylene	0.75
Chrysene	1.6
Indeno(1,2,3-c,d)Pyrene	0.84
Phenanthrene	1.7
Metals (mg/kg)	
Arsenic	18.1
Barium	627
Cadmium	9.3
Copper	155
Lead	904
Mercury	0.62
Nickel	42.5
Zinc	704

SB-16_6-8_20250827: 8/27/2025
(6-8 FT BGS) CONCENTRATION

Metals (mg/kg)	
Arsenic	91.1
Copper	161
Lead	216
Nickel	134
Zinc	614

SB-16_8-10_20250827: 8/27/2025
(8-10 FT BGS) CONCENTRATION

Metals (mg/kg)	
Arsenic	210
Beryllium	6.3
Copper	73.3
Nickel	38.8

SB-15_0.5-2_20250827: 8/27/2025
(0.5-2 FT BGS) CONCENTRATION

Metals (mg/kg)	
Lead	149
Mercury	0.23
Zinc	186

SB-15_0-0.5_20250827: 8/27/2025
(0-0.5 FT BGS) CONCENTRATION

Metals (mg/kg)	
Barium	483
Copper	54.7
Lead	294
Mercury	0.36
Zinc	275

SB-15_2-4_20250827: 8/27/2025
(2-4 FT BGS) CONCENTRATION

SVOCs (mg/kg)	
Benzo(b)Fluoranthene	1.1
Phenanthrene	1.5
Metals (mg/kg)	
Barium	1,300
Lead	908
Mercury	0.27
Zinc	249

SB-15_8-10_20250827: 8/27/2025
(8-10 FT BGS) CONCENTRATION

Metals (mg/kg)	
Copper	184
Lead	230
Mercury	0.19
Zinc	305

SB-15_6-8_20250827: 8/27/2025
(6-8 FT BGS) CONCENTRATION

SVOCs (mg/kg)	
Benzo(a)Anthracene	1.3
Benzo(a)Pyrene	1.4
Benzo(b)Fluoranthene	2
Benzo(g,h,i)Perylene	0.73
Chrysene	1.4
Indeno(1,2,3-c,d)Pyrene	0.79
Metals (mg/kg)	
Barium	504
Cadmium	5.1
Copper	121
Lead	930
Mercury	0.64
Zinc	437

SB-15_4-6_20250827: 8/27/2025
(4-6 FT BGS) CONCENTRATION

SVOCs (mg/kg)	
Benzo(a)Anthracene	1.1
Benzo(b)Fluoranthene	1.4
Indeno(1,2,3-c,d)Pyrene	0.56
Phenanthrene	1.3
Metals (mg/kg)	
Barium	666
Cadmium	3.2
Copper	68.7
Lead	881
Mercury	0.45
Zinc	764

SB-16_2-4_20250827: 8/27/2025
(2-4 FT BGS) CONCENTRATION

Metals (mg/kg)	
Mercury	0.47

SB-16_4-6_20250827: 8/27/2025
(4-6 FT BGS) CONCENTRATION

SVOCs (mg/kg)	
Benzo(g,h,i)Perylene	3.8
Dibenz(a,h)Anthracene	0.7
Indeno(1,2,3-c,d)Pyrene	2.5
Metals (mg/kg)	
Cadmium	5.7
Copper	9,800
Lead	560
Mercury	0.55
Nickel	226
Silver	2.6
Zinc	4,350

SB-X1_0-2_20250827: 8/27/2025
(0-2 FT BGS) CONCENTRATION

SVOCs (mg/kg)	
Benzo(a)Anthracene	1.1
Benzo(b)Fluoranthene	1.4
Phenanthrene	1.2
Metals (mg/kg)	
Copper	93.1 J
Lead	547
Mercury	0.96 J
Zinc	387
PCBs (mg/kg)	
Total PCBs	0.21 J
Pesticides (mg/kg)	
P,P'-DDD	0.33 J
P,P'-DDE	0.16 J
P,P'-DDT	0.04 J

SB-16_0-2_20250827: 8/27/2025
(0-2 FT BGS) CONCENTRATION

SVOCs (mg/kg)	
Benzo(a)Anthracene	1.3
Benzo(a)Pyrene	1.8 J
Benzo(b)Fluoranthene	1.9
Benzo(g,h,i)Perylene	1.4 J
Benzo(k)Fluoranthene	0.98 J
Chrysene	1.4
Indeno(1,2,3-c,d)Pyrene	1.4 J
Phenanthrene	1.5
Metals (mg/kg)	
Barium	681
Copper	455 J
Lead	662
Nickel	35.3
Silver	5.1 J
Zinc	592
Pesticides (mg/kg)	
P,P'-DDD	0.0046 J
P,P'-DDE	0.0089 J
P,P'-DDT	0.0081 J

SB-21_6-8_20250827: 8/27/2025
(6-8 FT BGS) CONCENTRATION

VOCs (mg/kg)	
Acetone	0.15
SVOCs (mg/kg)	
Benzo(a)Anthracene	18 D
Benzo(a)Pyrene	27 D
Benzo(b)Fluoranthene	23 D
Benzo(g,h,i)Perylene	5
Benzo(k)Fluoranthene	4.9
Chrysene	15 D
Dibenz(a,h)Anthracene	1.5
Indeno(1,2,3-c,d)Pyrene	5.7
Phenanthrene	18 D
Metals (mg/kg)	
Lead	225
Mercury	2.7
Zinc	507

SB-21_0-0.5_20250827: 8/27/2025
(0-0.5 FT BGS) CONCENTRATION

Metals (mg/kg)	
Lead	206
Mercury	0.88
Zinc	216

SB-21_0.5-2_20250827: 8/27/2025
(0.5-2 FT BGS) CONCENTRATION

SVOCs (mg/kg)	
Benzo(a)Anthracene	6.3
Benzo(a)Pyrene	6.1
Benzo(b)Fluoranthene	6.4 D
Benzo(g,h,i)Perylene	3.2
Benzo(k)Fluoranthene	3
Chrysene	6.4
Dibenz(a,h)Anthracene	0.91
Indeno(1,2,3-c,d)Pyrene	3.6
Phenanthrene	7.8 D
Metals (mg/kg)	
Lead	1,400
Mercury	0.75
Zinc	188

SB-21_2-4_20250827: 8/27/2025
(2-4 FT BGS) CONCENTRATION

SVOCs (mg/kg)	
Benzo(a)Anthracene	1.7
Benzo(a)Pyrene	1.6
Benzo(b)Fluoranthene	2.3
Benzo(g,h,i)Perylene	0.69
Chrysene	1.7
Indeno(1,2,3-c,d)Pyrene	0.78
Phenanthrene	2
Metals (mg/kg)	
Arsenic	18.4
Barium	807
Cadmium	9.6
Copper	146
Lead	1,270
Mercury	0.6
Nickel	76.9
Zinc	1,210

SB-21_4-6_20250827: 8/27/2025
(4-6 FT BGS) CONCENTRATION

VOCs (mg/kg)	
Acetone	0.098
SVOCs (mg/kg)	
Benzo(a)Anthracene	1.8
Benzo(a)Pyrene	1.7
Benzo(b)Fluoranthene	2.7
Benzo(g,h,i)Perylene	0.81
Benzo(k)Fluoranthene	0.85
Chrysene	1.9
Indeno(1,2,3-c,d)Pyrene	0.91
Phenanthrene	2.1
Metals (mg/kg)	
Arsenic	32.2
Barium	1,220
Cadmium	24.2
Copper	277
Lead	3,440
Mercury	4.2
Nickel	215
Zinc	1,550

SB-21_8-10_20250827: 8/27/2025
(8-10 FT BGS) CONCENTRATION

Metals (mg/kg)	
Lead	292
Mercury	0.38
Zinc	167

SB-19_2-4_20250827: 8/27/2025
(2-4 FT BGS) CONCENTRATION

Metals (mg/kg)	
Barium	803
Cadmium	2.6
Copper	94.6
Lead	505
Mercury	0.31
Nickel	33.5
Zinc	1,070

SB-19_0-2_20250827: 8/27/2025
(0-2 FT BGS) CONCENTRATION

SVOCs (mg/kg)	
Benzo(a)Pyrene	2.5
Benzo(b)Fluoranthene	1.9
Benzo(g,h,i)Perylene	17 D
Dibenz(a,h)Anthracene	1.9 J
Indeno(1,2,3-c,d)Pyrene	7.7 J
Metals (mg/kg)	
Barium	441
Copper	73.5
Lead	413
Mercury	0.66
Zinc	354
Pesticides (mg/kg)	
P,P'-DDD	0.0082
P,P'-DDE	0.011 J
P,P'-DDT	0.038
PFAS (ppb)	
Perfluorooctanesulfonic acid (PFOS)	1.74 J

SB-X2_0-2_20250827: 8/27/2025
(0-2 FT BGS) CONCENTRATION

SVOCs (mg/kg)	
Benzo(a)Anthracene	3.1 J
Benzo(a)Pyrene	2.9
Benzo(b)Fluoranthene	3.7
Benzo(g,h,i)Perylene	1.4 J
Benzo(k)Fluoranthene	1.6
Chrysene	2.8 J
Dibenz(a,h)Anthracene	0.47 J
Indeno(1,2,3-c,d)Pyrene	1.6 J
Phenanthrene	1.4 J
Metals (mg/kg)	
Cadmium	6.1 J
Copper	54.5
Lead	647
Mercury	1.3
Nickel	31
Zinc	379
PCBs (mg/kg)	
Total PCBs	0.12
Pesticides (mg/kg)	
P,P'-DDD	0.01
P,P'-DDT	0.012 J
PFAS (ppb)	
Perfluorooctanesulfonic acid (PFOS)	0.97 J

SB-19_4-6_20250827: 8/27/2025
(4-6 FT BGS) CONCENTRATION

SVOCs (mg/kg)	
Acenaphthene	31 D
Benzo(a)Anthracene	72 D
Benzo(a)Pyrene	180 D
Benzo(b)Fluoranthene	180 D
Benzo(g,h,i)Perylene	130 D
Benzo(k)Fluoranthene	78 D
Chrysene	8.8
Dibenz(a,h)Anthracene	7.5
Fluoranthene	210 D
Fluorene	42 D
Indeno(1,2,3-c,d)Pyrene	110 D
Naphthalene	51 D
Phenanthrene	260 D
Pyrene	170 D
Metals (mg/kg)	
Barium	446
Copper	108
Lead	928
Mercury	0.83
Nickel	40.1
Zinc	627

SB-19_6-8_20250827: 8/27/2025
(6-8 FT BGS) CONCENTRATION

SVOCs (mg/kg)	
Benzo(a)Anthracene	23 D
Benzo(a)Pyrene	20 D
Benzo(b)Fluoranthene	29 D
Benzo(g,h,i)Perylene	7.1
Benzo(k)Fluoranthene	6.3
Chrysene	22 D
Dibenz(a,h)Anthracene	1.9
Indeno(1,2,3-c,d)Pyrene	8.1
Naphthalene	22 D
Phenanthrene	80 D
Metals (mg/kg)	
Barium	884
Copper	124
Lead	877
Mercury	0.36
Zinc	851

SB-19_8-10_20250827: 8/27/2025
(8-10 FT BGS) CONCENTRATION

SVOCs (mg/kg)	
Benzo(a)Anthracene	6.1
Benzo(a)Pyrene	6.1
Benzo(b)Fluoranthene	8.1
Benzo(g,h,i)Perylene	2.9
Benzo(k)Fluoranthene	2.8
Chrysene	5.8
Dibenz(a,h)Anthracene	0.71
Indeno(1,2,3-c,d)Pyrene	3.3
Phenanthrene	15 D
Metals (mg/kg)	
Barium	528
Cadmium	23.1
Copper	145
Lead	4,970
Mercury	0.25
Zinc	3,510
Pesticides (mg/kg)	
Chlordane, cis-	0.022 JK
P,P'-DDD	0.018 JK
P,P'-DDE	0.034 JK
P,P'-DDT	0.22 JK

Map Source:
NYCDCP (NYC Dept. of City Planning) GIS database

LEGEND

- SITE BOUNDARY
- 15 — LOT BOUNDARY AND TAX LOT NUMBER
- 3600 — BLOCK NUMBER
- AKRF SUBSURFACE INVESTIGATION SOIL BORING LOCATION
- SOIL BORING/SOIL VAPOR POINT LOCATION
- AKRF SUBSURFACE INVESTIGATION MONITORING WELL/SOIL VAPOR POINT/SOIL BORING LOCATION

N

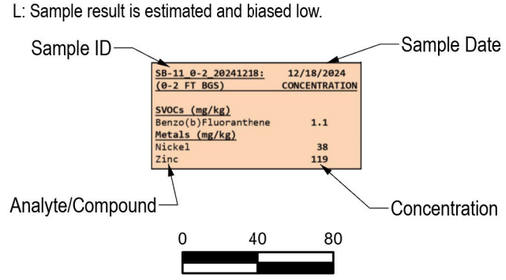
chemical name	NYSDEC_PFAS_GUIDANCE_VALUES_Unrestricted (ppb)	PART 375 RESTRICTED RESIDENTIAL (mg/kg)	PART 375 UNRESTRICTED (mg/kg)
VOCs			
Acetone		100	0.03
SVOCs			
4-Methylphenol (P-Cresol)		100	0.33
Acenaphthene		100	20
Benzo(a)Anthracene		1.4	1
Benzo(a)Pyrene		1	1
Benzo(b)Fluoranthene		1.4	1
Benzo(g,h,i)Perylene		4.9	0.64
Benzo(k)Fluoranthene		4.9	0.8
Chrysene		4.9	1
Dibenz(a,h)Anthracene		0.33	0.33
Fluoranthene		100	85
Fluorene		100	30
Indeno(1,2,3-c,d)Pyrene		1.4	0.5
Naphthalene		100	12
Phenanthrene		4.9	1.1
Phenol		100	0.33
Pyrene		100	64
PCBs			
Total PCBs		1	0.1
Metals			
Arsenic		16	13
Barium		410	410
Beryllium		43	4.4
Cadmium		2.5	2.5
Copper		280	50
Lead		400	63
Mercury		0.3	0.18
Nickel		320	30
Selenium		110	3.9
Silver		110	2
Zinc		6600	109
PFAS			
Perfluorooctanesulfonic a	0.88		

Soil Samples above NYSDEC UUSCOs, RRSCOs and/or PGWSCOs **Part 375 Soil Cleanup Objectives (SCOs):** SCOs listed in the New York State Department of Environmental Conservation (NYSDEC) "Part 375" Regulations (6 NYCRR Part 375).

Exceedances of NYSDEC Unrestricted Use Soil Cleanup Objectives (UUSCOs) are presented in bold font.

Exceedances of NYSDEC Restricted Residential Soil Cleanup Objectives (RRSCOs) are presented in grey shading.

D: Analyte concentration obtained from dilution.
J: The concentration given is an estimated value.
L: Sample result is estimated and biased low.



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HISTORICAL SOIL CONCENTRATIONS ABOVE NYSDEC UUSCOS, RRSCOS, AND PFAS GUIDANCE VALUES

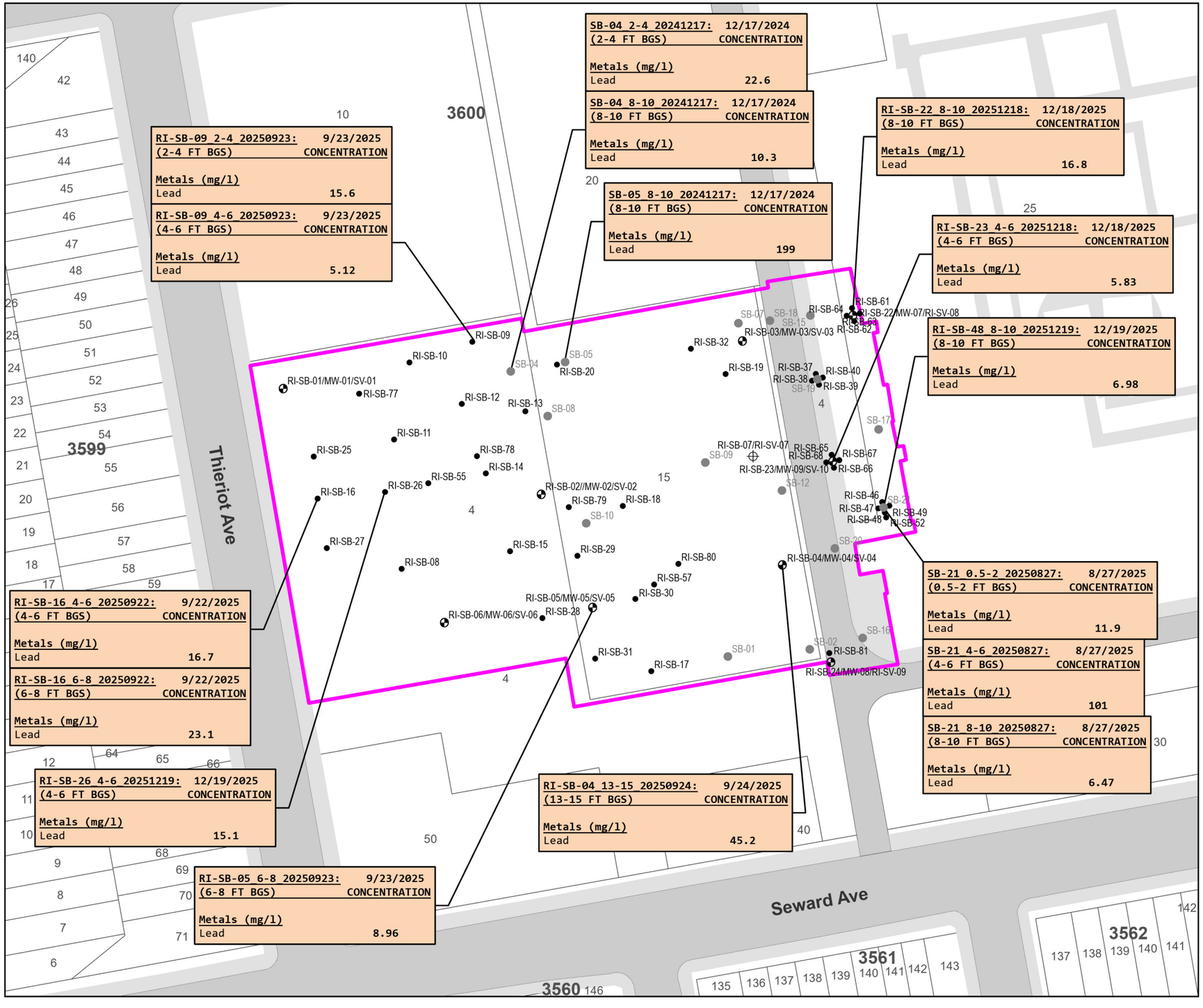
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Bronx, New York

DATE
7/27/2026

PROJECT NO.
240663

FIGURE
4B

AKRF O:\Projects\240663 - STEVENSON COMMONS B3\SAR\RIR and RAWP Figures\240663 RIR Figures.aprx 7/27/2026 3:55 PM240663 Fig 7B Historical Soil Concentrations Above NYSDEC UUSCOs, RRSCOs, and PFAS Guidance Values1 mvelleux



Map Source:
NYCDCP (NYC Dept. of City Planning) GIS database

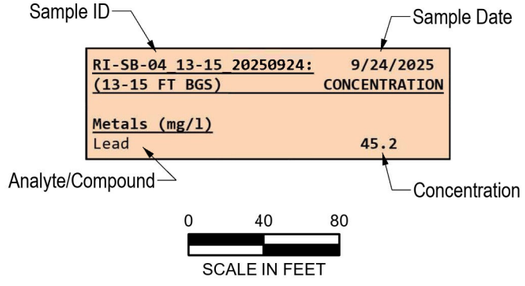
LEGEND

- SITE BOUNDARY
- 15 LOT BOUNDARY AND TAX LOT NUMBER
- 3600 BLOCK NUMBER
- RI SOIL BORING LOCATION
- RI SOIL BORING/SOIL VAPOR POINT LOCATION
- RI SOIL BORING/MONITORING WELL/SOIL VAPOR SAMPLE LOCATION
- AKRF SUBSURFACE INVESTIGATION SOIL BORING LOCATION

	EPA Hazardous Waste Criteria (mg/L)
Metals	
Lead	5

Soil Samples above USEPA Hazardous Waste Criteria, as listed in Code of Federal Regulations (CFR) Title 40 - Protection of the Environment, Chapter 1 - USEPA, Subchapter I - Solid Wastes, Part 261 - Identification And Listing Of Hazardous Waste, Subpart C - Characteristics Of Hazardous Waste. § 261.24 (b). Table 1—Maximum Concentration of Contaminants for the Toxicity Characteristic.

Exceedances of USEPA Hazardous Waste Criteria are presented in bold font.



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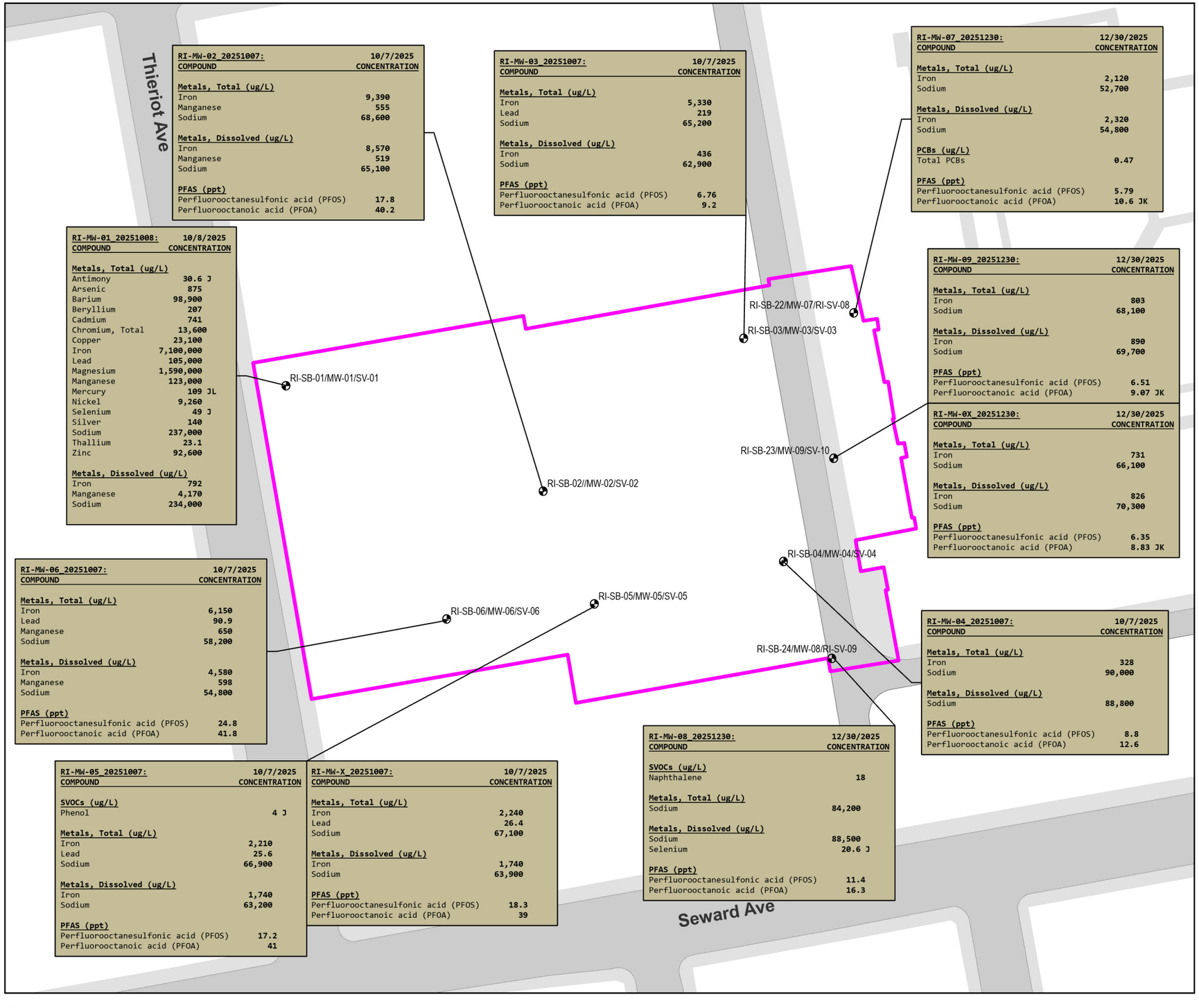
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TCLP LEAD IN SOIL ABOVE THE USEPA HAZARDOUS WASTE CRITERIA

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PROJECT NO. 240663
FIGURE 5

AKRF O:\Projects\240663 - STEVENSON COMMONS B3\SAR\RIR and RAWP Figures\240663 RIR Figures.aprx 7/27/2026 4:06 PM240663 Fig 8 TCLP Lead in Soil mvelleux



RI-MW-02_20251007: 10/7/2025

COMPOUND	CONCENTRATION
Metals, Total (ug/L)	
Iron	9,390
Manganese	555
Sodium	68,600
Metals, Dissolved (ug/L)	
Iron	8,570
Manganese	519
Sodium	65,100
PFAS (ppt)	
Perfluorooctanesulfonic acid (PFOS)	17.8
Perfluorooctanoic acid (PFOA)	40.2

RI-MW-03_20251007: 10/7/2025

COMPOUND	CONCENTRATION
Metals, Total (ug/L)	
Iron	5,330
Lead	219
Sodium	65,200
Metals, Dissolved (ug/L)	
Iron	436
Sodium	62,900
PFAS (ppt)	
Perfluorooctanesulfonic acid (PFOS)	6.76
Perfluorooctanoic acid (PFOA)	9.2

RI-MW-07_20251230: 12/30/2025

COMPOUND	CONCENTRATION
Metals, Total (ug/L)	
Iron	2,120
Sodium	52,700
Metals, Dissolved (ug/L)	
Iron	2,320
Sodium	54,800
PCBs (ug/L)	
Total PCBs	0.47
PFAS (ppt)	
Perfluorooctanesulfonic acid (PFOS)	5.79
Perfluorooctanoic acid (PFOA)	10.6 JK

RI-MW-01_20251008: 10/8/2025

COMPOUND	CONCENTRATION
Metals, Total (ug/L)	
Antimony	30.6 J
Arsenic	875
Barium	98,900
Beryllium	207
Cadmium	741
Chromium, Total	13,600
Copper	23,100
Iron	7,100,000
Lead	105,000
Magnesium	1,590,000
Manganese	123,000
Mercury	109 JL
Nickel	9,260
Selenium	49 J
Silver	140
Sodium	237,000
Thallium	23.1
Zinc	92,600
Metals, Dissolved (ug/L)	
Iron	792
Manganese	4,170
Sodium	234,000

RI-MW-09_20251230: 12/30/2025

COMPOUND	CONCENTRATION
Metals, Total (ug/L)	
Iron	803
Sodium	68,100
Metals, Dissolved (ug/L)	
Iron	890
Sodium	69,700
PFAS (ppt)	
Perfluorooctanesulfonic acid (PFOS)	6.51
Perfluorooctanoic acid (PFOA)	9.07 JK

RI-MW-0X_20251230: 12/30/2025

COMPOUND	CONCENTRATION
Metals, Total (ug/L)	
Iron	731
Sodium	66,100
Metals, Dissolved (ug/L)	
Iron	826
Sodium	70,300
PFAS (ppt)	
Perfluorooctanesulfonic acid (PFOS)	6.35
Perfluorooctanoic acid (PFOA)	8.83 JK

RI-MW-06_20251007: 10/7/2025

COMPOUND	CONCENTRATION
Metals, Total (ug/L)	
Iron	6,150
Lead	90.9
Manganese	650
Sodium	58,200
Metals, Dissolved (ug/L)	
Iron	4,580
Manganese	598
Sodium	54,800
PFAS (ppt)	
Perfluorooctanesulfonic acid (PFOS)	24.8
Perfluorooctanoic acid (PFOA)	41.8

RI-MW-04_20251007: 10/7/2025

COMPOUND	CONCENTRATION
Metals, Total (ug/L)	
Iron	328
Sodium	90,000
Metals, Dissolved (ug/L)	
Sodium	88,800
PFAS (ppt)	
Perfluorooctanesulfonic acid (PFOS)	8.8
Perfluorooctanoic acid (PFOA)	12.6

RI-MW-05_20251007: 10/7/2025

COMPOUND	CONCENTRATION
SVOCs (ug/L)	
Phenol	4 J
Metals, Total (ug/L)	
Iron	2,210
Lead	25.6
Sodium	66,900
Metals, Dissolved (ug/L)	
Iron	1,740
Sodium	63,200
PFAS (ppt)	
Perfluorooctanesulfonic acid (PFOS)	17.2
Perfluorooctanoic acid (PFOA)	41

RI-MW-X_20251007: 10/7/2025

COMPOUND	CONCENTRATION
Metals, Total (ug/L)	
Iron	2,240
Lead	26.4
Sodium	67,100
Metals, Dissolved (ug/L)	
Iron	1,740
Sodium	63,900
PFAS (ppt)	
Perfluorooctanesulfonic acid (PFOS)	18.3
Perfluorooctanoic acid (PFOA)	39

RI-MW-08_20251230: 12/30/2025

COMPOUND	CONCENTRATION
SVOCs (ug/L)	
Naphthalene	18
Metals, Total (ug/L)	
Sodium	84,200
Metals, Dissolved (ug/L)	
Sodium	88,500
Selenium	20.6 J
PFAS (ppt)	
Perfluorooctanesulfonic acid (PFOS)	11.4
Perfluorooctanoic acid (PFOA)	16.3

Map Source:
NYCDCP (NYC Dept. of City Planning) GIS database

LEGEND

- SITE BOUNDARY
- 15 LOT BOUNDARY AND TAX LOT NUMBER
- 3600 BLOCK NUMBER
- RI SOIL BORING/MONITORING WELL/SOIL VAPOR SAMPLE LOCATION

N

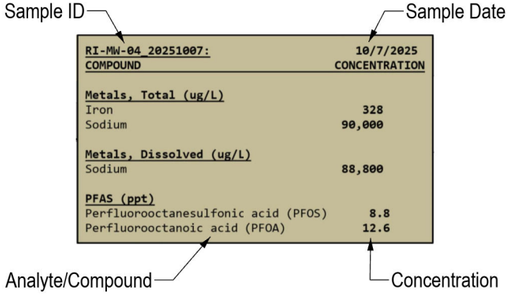
chemical name	NYSDEC AWQSGVs (ppt)	NYSDEC AWQSGVs (ug/l)
SVOCs		
Naphthalene		10
Phenol		1
PCBs		
Total PCBs		0.09
Metals, Total		
Antimony		3
Arsenic		25
Barium		1000
Beryllium		3
Cadmium		5
Chromium, Total		50
Copper		200
Iron		300
Lead		25
Magnesium		35000
Manganese		300
Mercury		0.7
Nickel		100
Selenium		10
Silver		50
Sodium		20000
Thallium		0.5
Zinc		2000
Metals, Dissolved		
Iron		300
Manganese		300
Selenium		10
Sodium		20000
PFAS		
Perfluorooctanesulfonic acid (PFOS)	2.7	
Perfluorooctanoic acid (PFOA)	6.7	

NYSDEC TOGS Class GA Ambient Water Quality Standard and Guidance Values (AWQSGVs):
New York State Department of Environmental Conservation (NYSDEC)
Technical and Operational Guidance Series (TOGS) (1.1.1):

µg/L: micrograms per Liter = parts per billion (ppb)

Only Exceedances of NYSDEC AWQSGVs are shown in bold font.

J: The reported value is estimated.
K: Reported concentration value is proportional to dilution factor and may be exaggerated.
L: Sample result is estimated and biased low.



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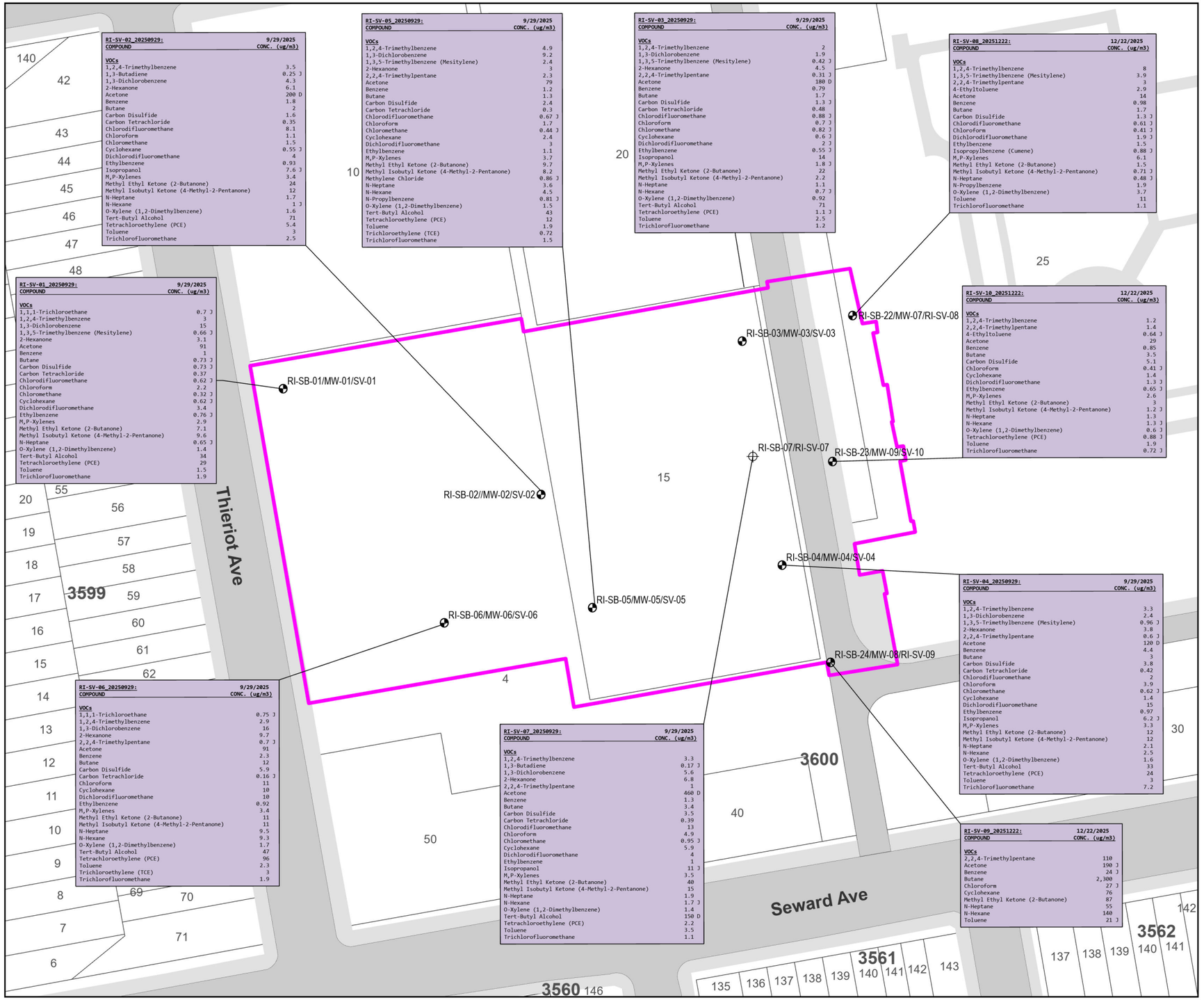
GROUNDWATER SAMPLE CONCENTRATIONS ABOVE AWQSGVS AND PFAS GUIDANCE LEVELS

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FIGURE
6

AKRF O:\Projects\240663 - STEVENSON COMMONS B3\SAR\RIR and RAWP Figures\240663 RIR Figures.aprx 7/27/2026 3:52 PM240663 Fig 9 Groundwater Sample Concentrations mveilleux



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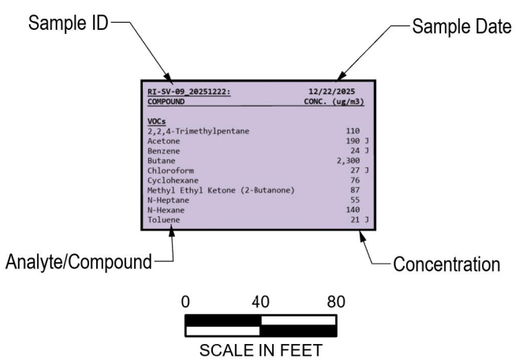
- SITE BOUNDARY
- 15 LOT BOUNDARY AND TAX LOT NUMBER
- 3600 BLOCK NUMBER
- RI SOIL BORING/SOIL VAPOR POINT LOCATION
- RI SOIL BORING/MONITORING WELL/SOIL VAPOR SAMPLE LOCATION

SOIL VAPOR

µg/m^3- micrograms per cubic meter

D: Analyte concentration obtained from dilution.

J - The reported concentration is a value above the method detection limit, but is estimated and may be imprecise.



Map Source:
NYCDCP (NYC Dept. of City Planning) GIS database

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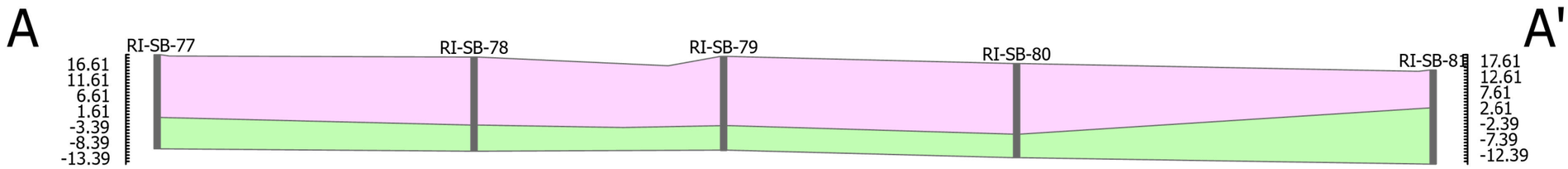
SOIL VAPOR CONCENTRATIONS

DATE
7/27/2026

PROJECT NO.
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FIGURE
7

AKRF O:\Projects\240663 - STEVENSON COMMONS B3\SAR\RIR and RAWP Figures\240663 RIR Figures.aprx 7/27/2026 3:49 PM240663 Fig 10 Soil Vapor Concentrations mvelleux





Key Plan

LEGEND

- FILL
- NATIVE
- BOREHOLE

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NOTES
Elevations are shown in reference to NAVD88

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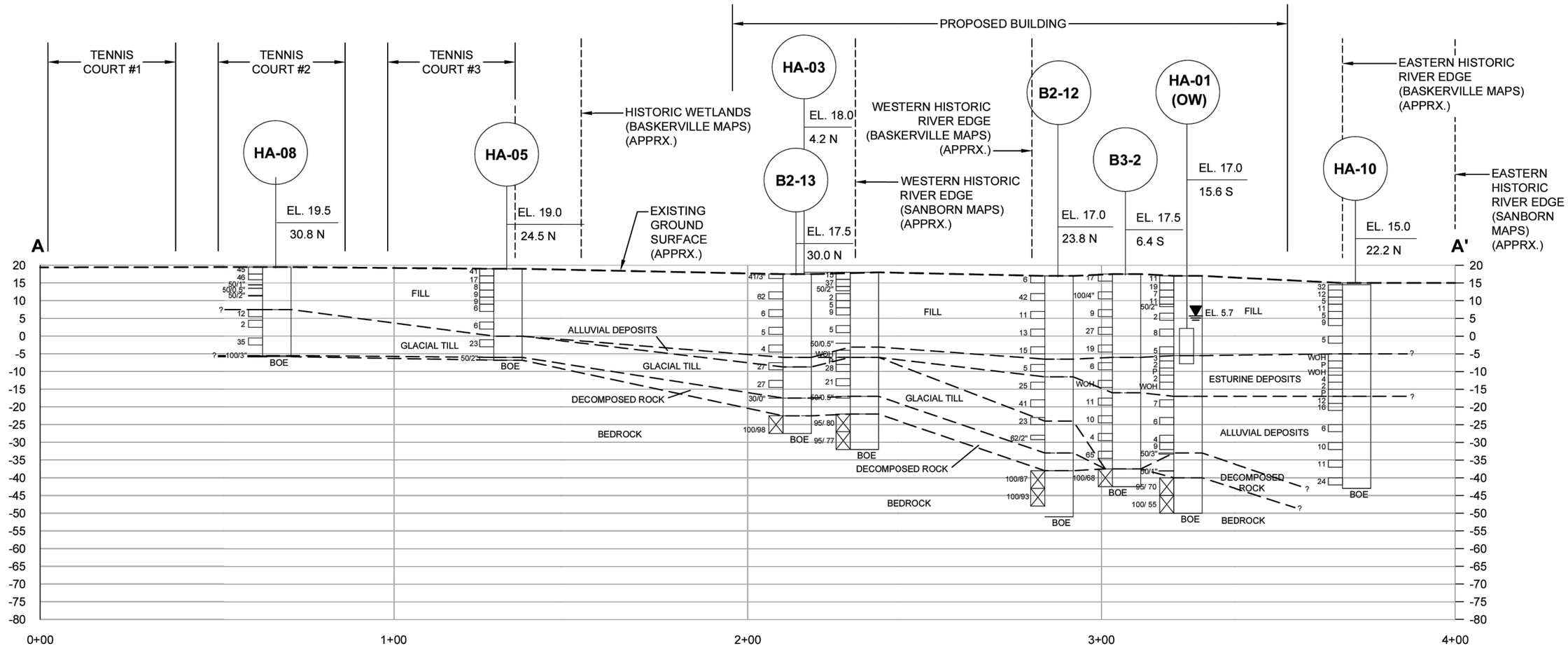
LITHOLOGICAL CROSS SECTION NORTHWEST - SOUTHEAST

DATE
9/1/2026

PROJECT NO.
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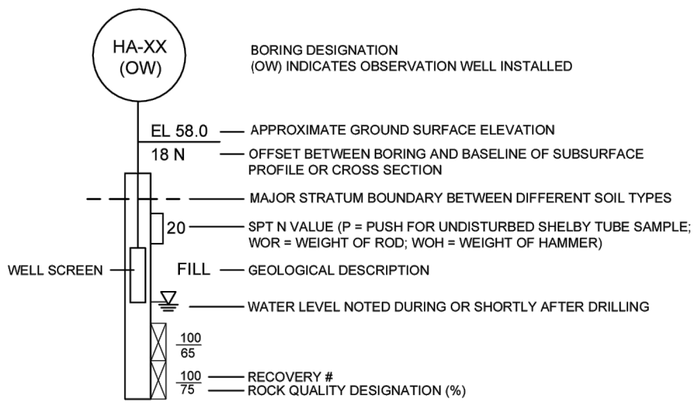
FIGURE
8A

AKRF O:\Projects\240663 - STEVENSON COMMONS B3\SAR\RICrossSections\A-ACrossSection.aprx 9/1/2026 10:21 AM Fig x Lithological Cross Section – North_South mveilleux



PROFILE A-A'

BORING LEGEND



Source:
Haley Aldrich "Stevenson Commons - Building B3, Stevenson B3 LLC, Bronx NY - Subsurface Geologic Profile A-A'", Figure 3, Dated January 2025.

NOTES:

1. REFER TO FIGURE 2 FOR LOCATION AND ORIENTATION OF THE SUBSURFACE PROFILES.
2. EXISTING GROUND SURFACE IS APPROIXMATE.
3. HISTORIC WETLANDS AND RIVER LIMITS FROM BEDROCK AND EENGINEERING GEOLOGIC MAPS OF BRONX COUNTY AND PARTS OF NEW YORK AND QUEENS COUNTIES, NEW YORK BY CHANRLES A. BASKERVILLE, 1992 AND 1919 SANBORN MAP #81.
4. LINES REPRESENTING INTERFACES BETWEEN OR CHANGES WITHIN STRATA ON THE PROFILE ARE BASED UPON INTERPOLATION BETWEEN BORINGS SHOWN ON THE PROFILE AND OTHER AVAILABLE SUBSURFACE INFORMATION. THE INTERFACE LINES ARE INTENDED TO SHOW THE GENERAL SEQUENCE OF STRATA AND MAY NOT REPRESENT ACTUAL SUBSURFACE CONDITIONS.
5. WATER LEVELS IN OBSERVATION WELLS WERE OBSERVED ON THE DATE INDICATED. WATER LEVELS IN TEST BORINGS MAY HAVE BEEN INFLUENCED BY DRILLING PROCEDURES. CONSEQUENTLY, WATER LEVELS IN COMPLETED BORINGS ARE NOT SHOWN. FLUCTUATIONS IN GROUNDWATER LEVELS CAN OCCUR DUE TO VARIATIONS IN SEASON, TEMPERATURE, PRECIPITATION, ADJACENT CONSTRUCTION ACTIVITY, LEAKAGE INTO/FROM UNDERGROUND UTILITIES, CONSTRUCTION DEWATERING ACTIVITIES, AND OTHER FACTORS.

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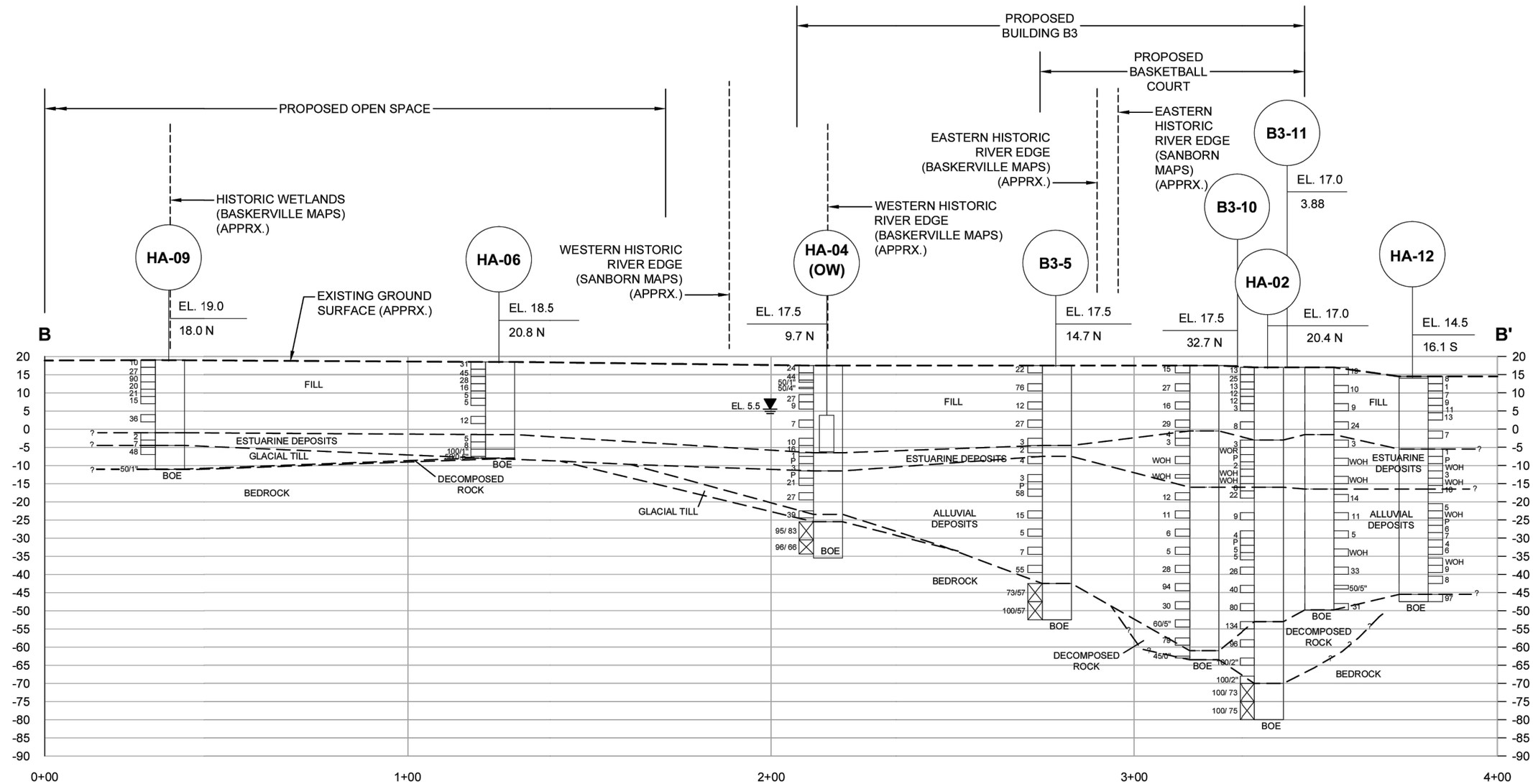
HANY SUBSURFACE GEOLOGIC PROFILES A-A'

DATE
9/1/2026

PROJECT NO.
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FIGURE
8B

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PROFILE B-B'

Source:
Haley Aldrich "Stevenson Commons - Building B3, Stevenson B3 LLC, Bronx NY - Subsurface Geologic Profile B-B'", Figure 4, Dated January 2025.

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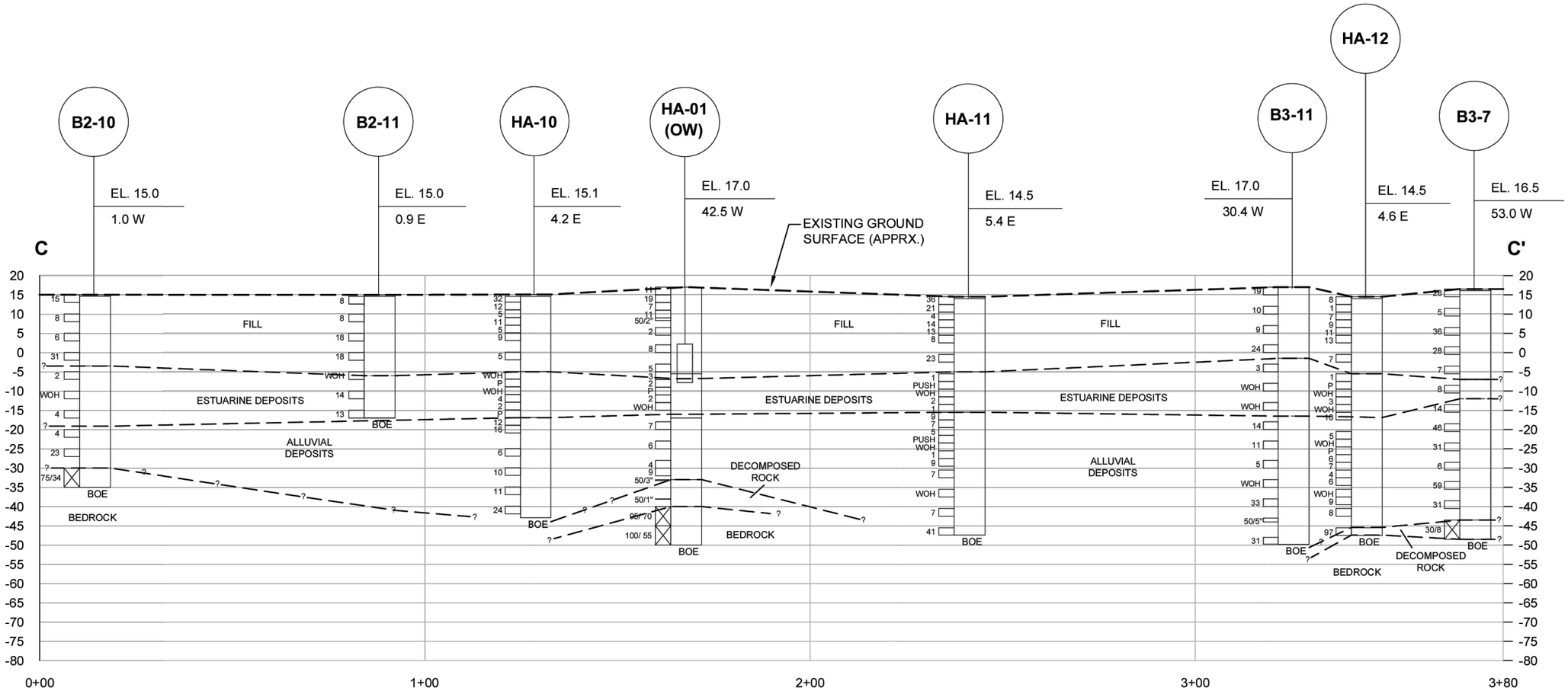
HANY SUBSURFACE GEOLOGIC PROFILES B-B'

DATE
9/1/2026

PROJECT NO.
240663

FIGURE
8C

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PROFILE C-C'

Source:
Haley Aldrich "Stevenson Commons - Building B3, Stevenson B3 LLC, Bronx NY - Subsurface Geologic Profile C-C'", Figure 5, Dated January 2025.

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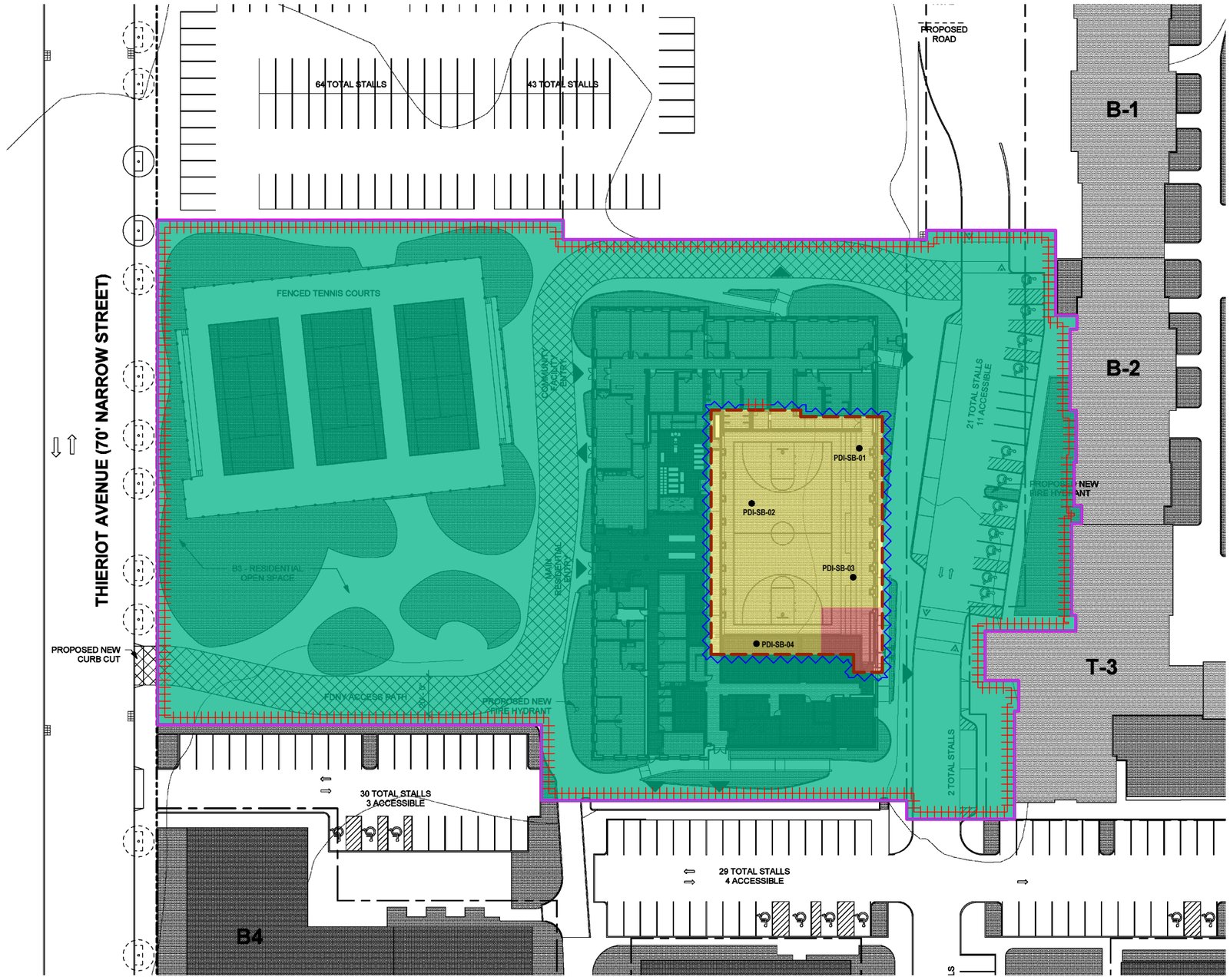
HANY SUBSURFACE GEOLOGIC PROFILES C-C'

DATE
9/1/2026

PROJECT NO.
240663

FIGURE
8D

©2026 AKRF, Inc Q:\Projects\240663 - STEVENSON COMMONS B3\Technical\Hazmat\CAD\R\R\240663 Fig 4B-D Cross Sections.dwg last save: mveilleux 9/1/2026 2:09 PM



LEGEND

- BCP SITE BOUNDARY
- PROPOSED NEW BUILDING CELLAR FOOTPRINT
- PROPOSED TRACK 2 AREA - EXCAVATION TO 10-FEET BELOW GROUND SURFACE
- PROPOSED TRACK 2 AREA (METALS HOTSPOT) - EXCAVATION TO 15-FEET BELOW GROUND SURFACE
- PROPOSED TRACK 4 AREA - EXCAVATION TO MINIMUM 2-FEET BELOW GROUND SURFACE
- PROPOSED PDI SOIL BORINGS TO SUPPORT REMEDIAL EXCAVATION DOWN TO 15-FEET BELOW GROUND SURFACE
- SOE (SLOPING) PRESENT AT PROPOSED REMEDIAL EXCAVATION DEPTH
- SOE (SHEET PILES) PRESENT AT PROPOSED REMEDIAL EXCAVATION DEPTH

0 30 60 120

SCALE IN FEET

Map Source:
1. Dattner Architects, "1st Floor Plan with Overall Site Plan", Sheet No. A-002.00, Dated July 2, 2025.

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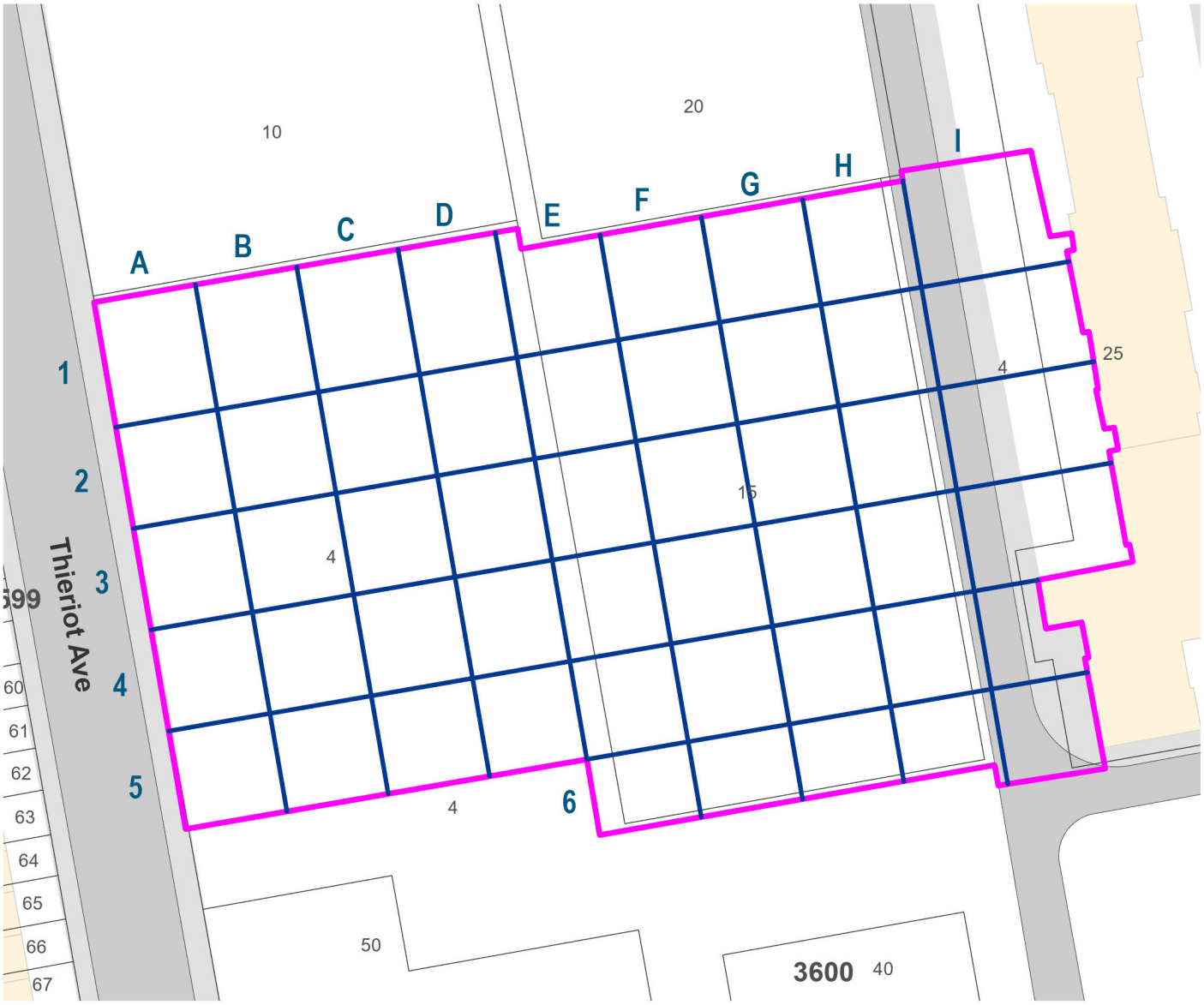
PROPOSED REMEDIAL EXCAVATION PLAN AND PDI SAMPLE LOCATIONS

DATE
10/6/2026

PROJECT NO.
240663

FIGURE
9

©2026 AKRF, Inc Q:\Projects\240663 - STEVENSON COMMONS B3\Technical\Hazmat\CAD\RAW\P240663 Fig 9 Proposed Remedial Excavation Plan.dwg last save: mvelleux 10/6/2026 11:01 AM



LEGEND

- BCP SITE BOUNDARY
- BUILDING
- 15 LOT BOUNDARY AND TAX LOT NUMBER
- 3600 BLOCK NUMBER
- ALPHANUMERIC GRID

Map Source:
NYCDCP (NYC Dept. of City Planning) GIS database

N

0 80 160

SCALE IN FEET

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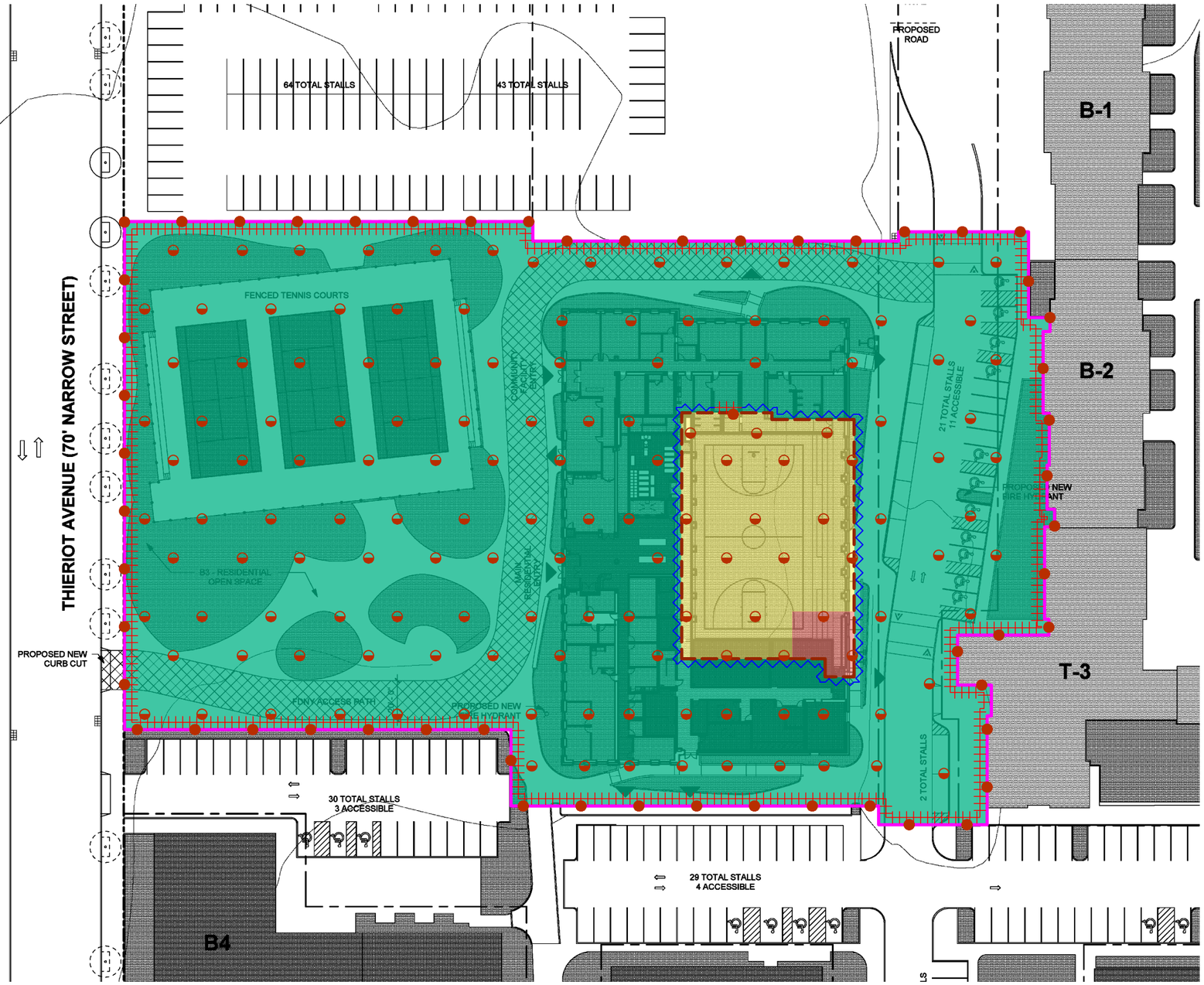
ALPHANUMERIC GRID

DATE
6/3/2026

PROJECT NO.
240663

FIGURE
10

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LEGEND

- BCP SITE BOUNDARY
- PROPOSED NEW BUILDING CELLAR FOOTPRINT
- PROPOSED TRACK 2 AREA - EXCAVATION TO 10-FEET BELOW GROUND SURFACE
- PROPOSED TRACK 2 AREA (METALS HOTSPOT) - EXCAVATION TO 15-FEET BELOW GROUND SURFACE
- PROPOSED TRACK 4 AREA - EXCAVATION TO MINIMUM 2-FEET BELOW GROUND SURFACE
- PROPOSED SIDEWALL ENDPOINT SAMPLE LOCATION
- PROPOSED BOTTOM ENDPOINT SAMPLE LOCATION
- SOE (SLOPING) PRESENT AT PROPOSED REMEDIAL EXCAVATION DEPTH
- SOE (SHEET PILES) PRESENT AT PROPOSED REMEDIAL EXCAVATION DEPTH

0 30 60 120

SCALE IN FEET

Map Source:
1. Dattner Architects, "1st Floor Plan with Overall Site Plan", Sheet No. A-002.00, Dated July 2, 2025.

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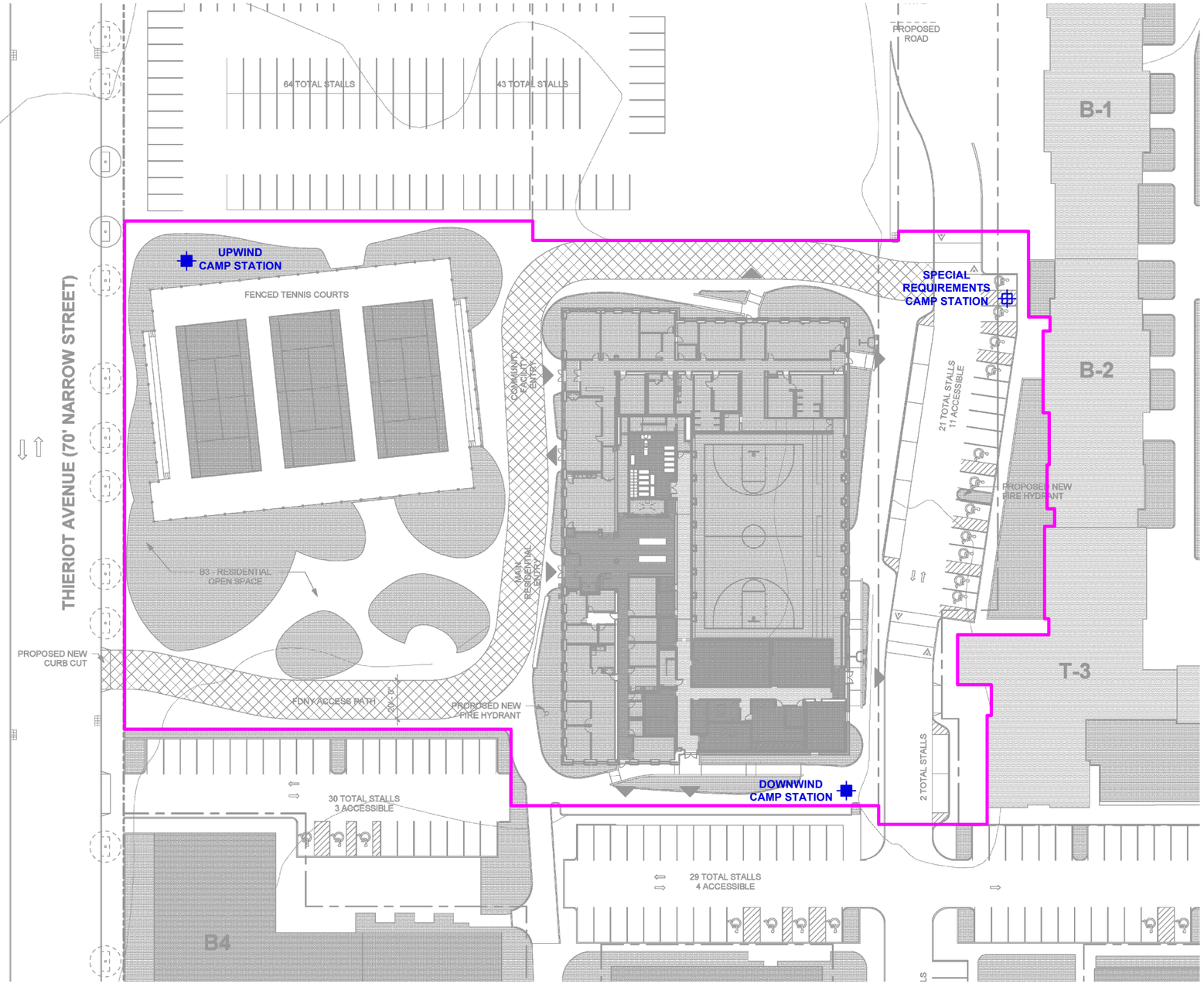
PROPOSED ENDPOINT SAMPLE PLAN

DATE
10/6/2026

PROJECT NO.
240663

FIGURE
11

©2026 AKRF, Inc Q:\Projects\240663 - STEVENSON COMMONS B3\Technical\Hazmat\CAD\RAW\P240663 Fig 11 Proposed Endpoint Sample Plan.dwg last save: mvelleux 10/6/2026 1:37 PM



LEGEND

- BCP SITE BOUNDARY
- UPWIND/DOWNWIND CAMP STATIONS - LOCATION WILL VARY BASED UPON WIND DIRECTION DURING REMEDIAL OVERSIGHT
- REQUIRED WHEN SOIL DISTURBANCE WORK IS WITHIN 20 FEET OF POTENTIALLY EXPOSED POPULATIONS OR OCCUPIED STRUCTURES

0 30 60 120

SCALE IN FEET

Map Source:
1. Dattner Architects, "1st Floor Plan with Overall Site Plan", Sheet No. A-002.00, Dated July 2, 2025.

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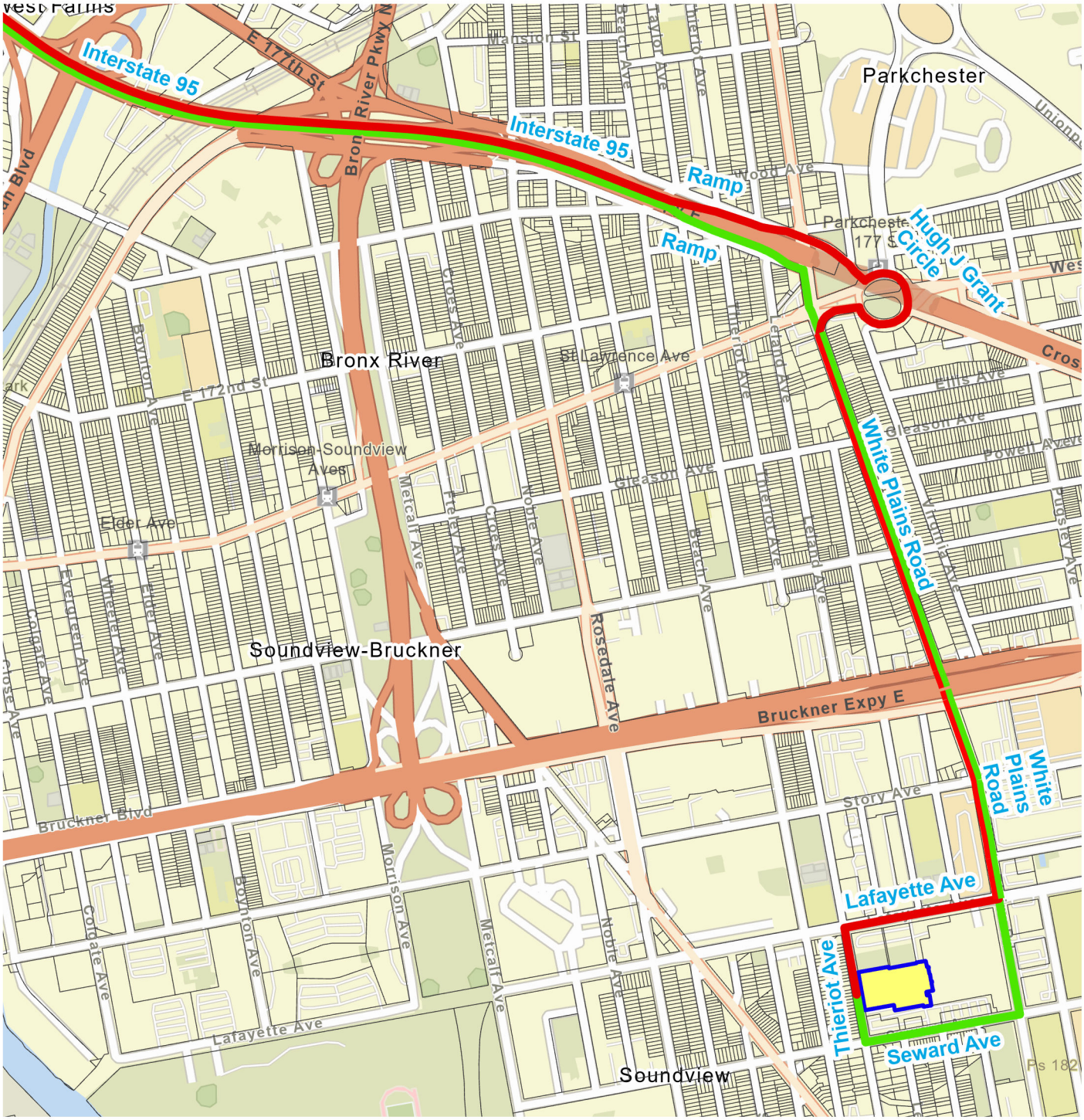
PROPOSED CAMP STATION LOCATIONS

DATE
6/1/2026

PROJECT NO.
240663

FIGURE
12

©2026 AKRF, Inc Q:\Projects\240663 - STEVENSON COMMONS B3\Technical\Hazmat\CAD\RAWP\240663 Fig 11 Proposed CAMP Station Locations.dwg last save: mvelleux 6/1/2026 1:51 PM



LEGEND

- BCP SITE BOUNDARY
- TRUCK ROUTE TO SITE FROM INTERSTATE 95
- TRUCK ROUTE FROM SITE TO INTERSTATE 95

Service Layer Credits:
ESRI World Street Map 2024
City of New York Department of Transportation, April, 2022,
New York City Truck Routes: New York City

0 1,000 2,000
Feet

N

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TRUCK TRANSPORTATION ROUTE

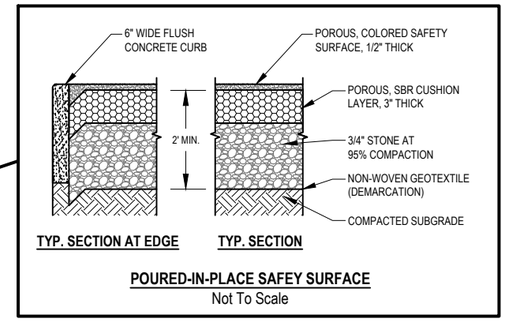
DATE
6/3/2026

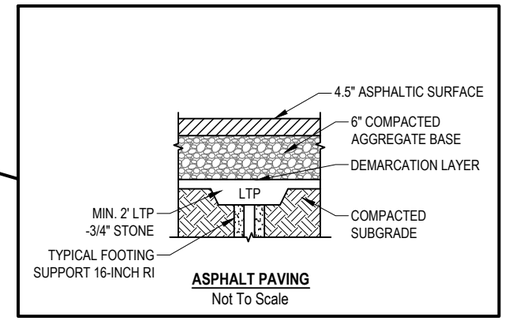
PROJECT NO.
240663

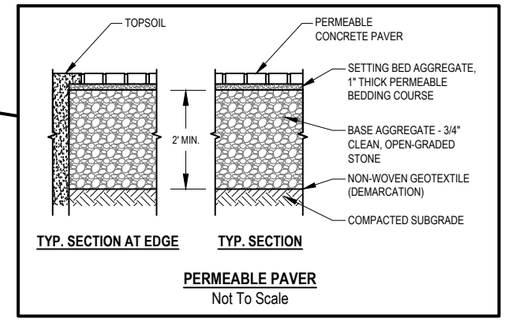
FIGURE
13

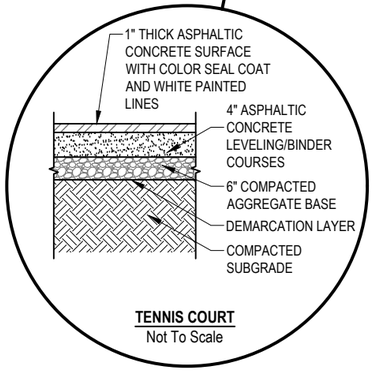
AKRF O:\Projects\240663 - STEVENSON COMMONS B3\SAR\240663 Figure Truck Route Map.aprx6/3/2026 11:26 AM240663 Figure 12 Truck Route Mapmvelleux

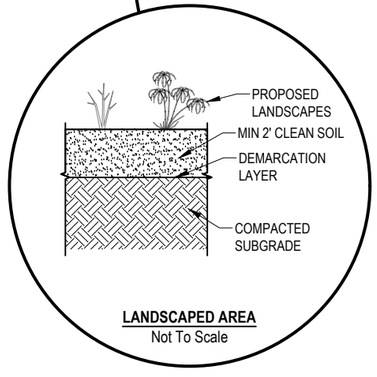


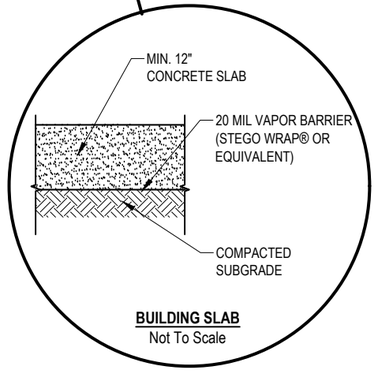


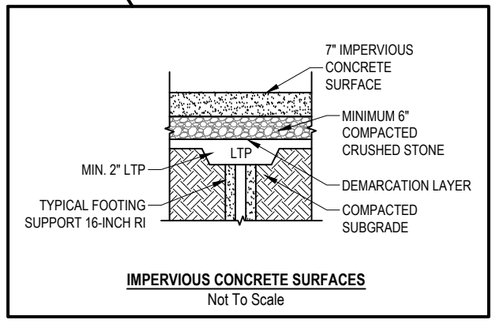












NOTE:
1. TO MITIGATE THE POTENTIAL FOR SETTLEMENT FOLLOWING COMPLETION OF THE COVER SYSTEM, GROUND IMPROVEMENTS CONSISTING OF A LOAD TRANSFER PLATFORM (LTP) SUPPORTED BY "RIGID INCLUSIONS" WILL BE INSTALLED BENEATH SELECT FEATURES (I.E., CURBS WITH FENCES), RAMPS, STAIRS, RETAINING WALLS ADJACENT TO THE RAMPS AND STAIRS, UTILITY VAULTS/ MANHOLES, SITE UTILITIES (GRAVITY SEWERS, GAS MAINS, FIRE/WATER MAINS, ELECTRIC CONDUIT), ROADWAYS, AND PAVEMENTS (INCLUDING ANY ASPHALT, CONCRETE, BRICK PAVER, OR STAMPED CONCRETE PAVER TYPE SURFACES).

0 30 60 120
SCALE IN FEET

Map Source:
Dattner Architects, "Site Materials Plan", Sheet No. L201, Dated 5/16/2025.

LEGEND

- BCP SITE BOUNDARY
- PROPOSED NEW BUILDING CELLAR FOOTPRINT
- MINIMUM 12" THICK CONCRETE SLAB
- ASPHALT PAVING
- PERMEABLE PAVER
- TENNIS COURT
- LANDSCAPING
- IMPERVIOUS CONCRETE SURFACES
- POURED-IN-PLACE SAFETY SURACE
- PROPOSED TRACK 2 AREA - NO COVER

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SITE COVER SYSTEM PLAN

DATE
10/6/2026

PROJECT NO.
240663

FIGURE
14

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APPENDIX A
METES AND BOUNDS DESCRIPTION

MSC 65808-11

Tax Block 3600

BCP SITE

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

BEGINNING at a point on the easterly side of Thieriot Avenue (70 feet wide), distant 175.00 feet northerly from the corner formed by the intersection of the northerly side of Seward Avenue (80 feet wide) with the easterly side of Thieriot Avenue;

RUNNING THENCE easterly, at right angles to the easterly side of Thieriot Avenue, 198.00 feet to a point;

RUNNING THENCE southerly, at right angles to the last mentioned course, 39.00 feet to a point;

RUNNING THENCE easterly, at right angles to the last mentioned course, 190.69 feet to a point;

RUNNING THENCE southerly, at right angles to the last mentioned course, 7.87 feet to a point;

RUNNING THENCE easterly, along a line forming an angle of 91 degrees 19 minutes 01 second on the northeast with the last mentioned course, 53.12 feet to a point;

RUNNING THENCE northerly, along a line forming an angle of 88 degrees 40 minutes 59 seconds on the northwest with the last mentioned course, 54.81 feet to a point;

RUNNING THENCE easterly, at right angles to the last mentioned course, 2.05 feet to a point;

RUNNING THENCE northerly, at right angles to the last mentioned course, 16.04 feet to a point;

RUNNING THENCE westerly, at right angles to the last mentioned course, 17.48 feet to a point;

RUNNING THENCE northerly, at right angles to the last mentioned course, 25.69 feet to a point;

RUNNING THENCE easterly, at right angles to the last mentioned course, 46.95 feet to a point;

RUNNING THENCE northerly, at right angles to the last mentioned course, 7.81 feet to a point;

RUNNING THENCE westerly, at right angles to the last mentioned course, 1.94 feet to a point;

RUNNING THENCE northerly, at right angles to the last mentioned course, 46.78 feet to a point;

RUNNING THENCE easterly, at right angles to the last mentioned course, 5.24 feet to a point;

RUNNING THENCE northerly, at right angles to the last mentioned course, 9.83 feet to a point;

RUNNING THENCE westerly, at right angles to the last mentioned course, 3.96 feet to a point;

RUNNING THENCE northerly, at right angles to the last mentioned course, 21.84 feet to a point;

RUNNING THENCE easterly, at right angles to the last mentioned course, 1.05 feet to a point;

RUNNING THENCE northerly, at right angles to the last mentioned course, 27.31 feet to a point;

RUNNING THENCE westerly, at right angles to the last mentioned course, 3.58 feet to a point;

RUNNING THENCE northerly, at right angles to the last mentioned course, 41.51 feet to a point;

RUNNING THENCE easterly, at right angles to the last mentioned course, 3.73 feet to a point;

RUNNING THENCE northerly, at right angles to the last mentioned course, 8.38 feet to a point;

RUNNING THENCE westerly, along a line forming an angle of 81 degrees 36 minutes 22 seconds on the southwest, with the last mentioned course, 10.23 feet to a point;

RUNNING THENCE northerly, along a line forming an angle of 275 degrees 22 minutes 17 seconds on the southwest, with the last mentioned course, 44.38 feet to a point;

RUNNING THENCE westerly, along a line forming an angle of 93 degrees 54 minutes 06 seconds on the southwest with the last mentioned course, 65.41 feet to a point;

RUNNING THENCE southerly, along a line forming an angle of 89 degrees 07 minutes 15 seconds on the southeast, with the last mentioned course, 5.74 feet to a point;

RUNNING THENCE westerly, at right angles to the last mentioned course, 187.00 feet to a point;

RUNNING THENCE northerly, at right angles to the last mentioned course, 10.06 feet to a point;

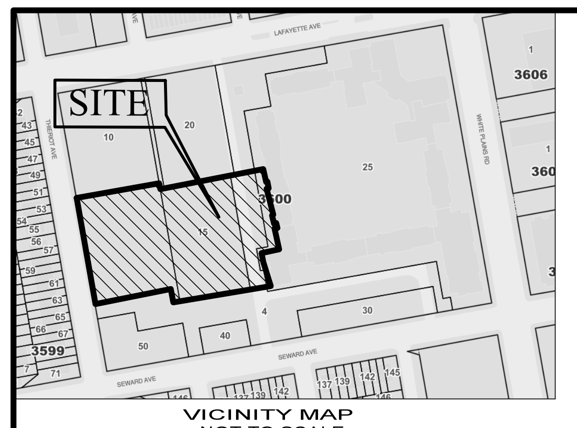
RUNNING THENCE westerly, at right angles to the last mentioned course, 209.00 feet to the easterly side of Thieriot Avenue;

RUNNING THENCE southerly, along the easterly side of Thieriot Avenue, 260.06 feet to the point or place of BEGINNING.

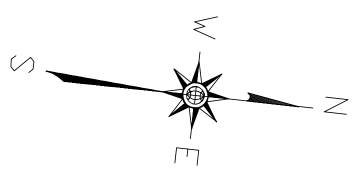
SURVEY NO. 65808–11

65808–11.DWG

TITLE NO.



VICINITY MAP
NOT TO SCALE



BCP SITE DESCRIPTION

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

BEGINNING at a point on the easterly side of Thieriot Avenue (70 feet wide), distant 175.00 feet northerly from the corner formed by the intersection of the northerly side of Seward Avenue (80 feet wide) with the easterly side of Thieriot Avenue;

RUNNING THENCE easterly, at right angles to the easterly side of Thieriot Avenue, 198.00 feet to a point;

RUNNING THENCE southerly, at right angles to the last mentioned course, 39.00 feet to a point;

RUNNING THENCE easterly, at right angles to the last mentioned course, 190.69 feet to a point;

RUNNING THENCE southerly, at right angles to the last mentioned course, 7.87 feet to a point;

RUNNING THENCE easterly, along a line forming an angle of 91 degrees 19 minutes 01 second on the northeast with the last mentioned course, 53.12 feet to a point;

RUNNING THENCE northerly, along a line forming an angle of 88 degrees 40 minutes 59 seconds on the northwest with the last mentioned course, 54.81 feet to a point;

RUNNING THENCE easterly, at right angles to the last mentioned course, 2.05 feet to a point;

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RUNNING THENCE northerly, at right angles to the last mentioned course, 25.69 feet to a point;

RUNNING THENCE easterly, at right angles to the last mentioned course, 46.95 feet to a point;

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RUNNING THENCE northerly, at right angles to the last mentioned course, 46.78 feet to a point;

RUNNING THENCE easterly, at right angles to the last mentioned course, 5.24 feet to a point;

RUNNING THENCE northerly, at right angles to the last mentioned course, 9.83 feet to a point;

RUNNING THENCE westerly, at right angles to the last mentioned course, 3.96 feet to a point;

RUNNING THENCE northerly, at right angles to the last mentioned course, 21.84 feet to a point;

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RUNNING THENCE westerly, at right angles to the last mentioned course, 3.58 feet to a point;

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RUNNING THENCE easterly, at right angles to the last mentioned course, 3.73 feet to a point;

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RUNNING THENCE southerly, along a line forming an angle of 89 degrees 07 minutes 15 seconds on the southeast, with the last mentioned course, 5.74 feet to a point;

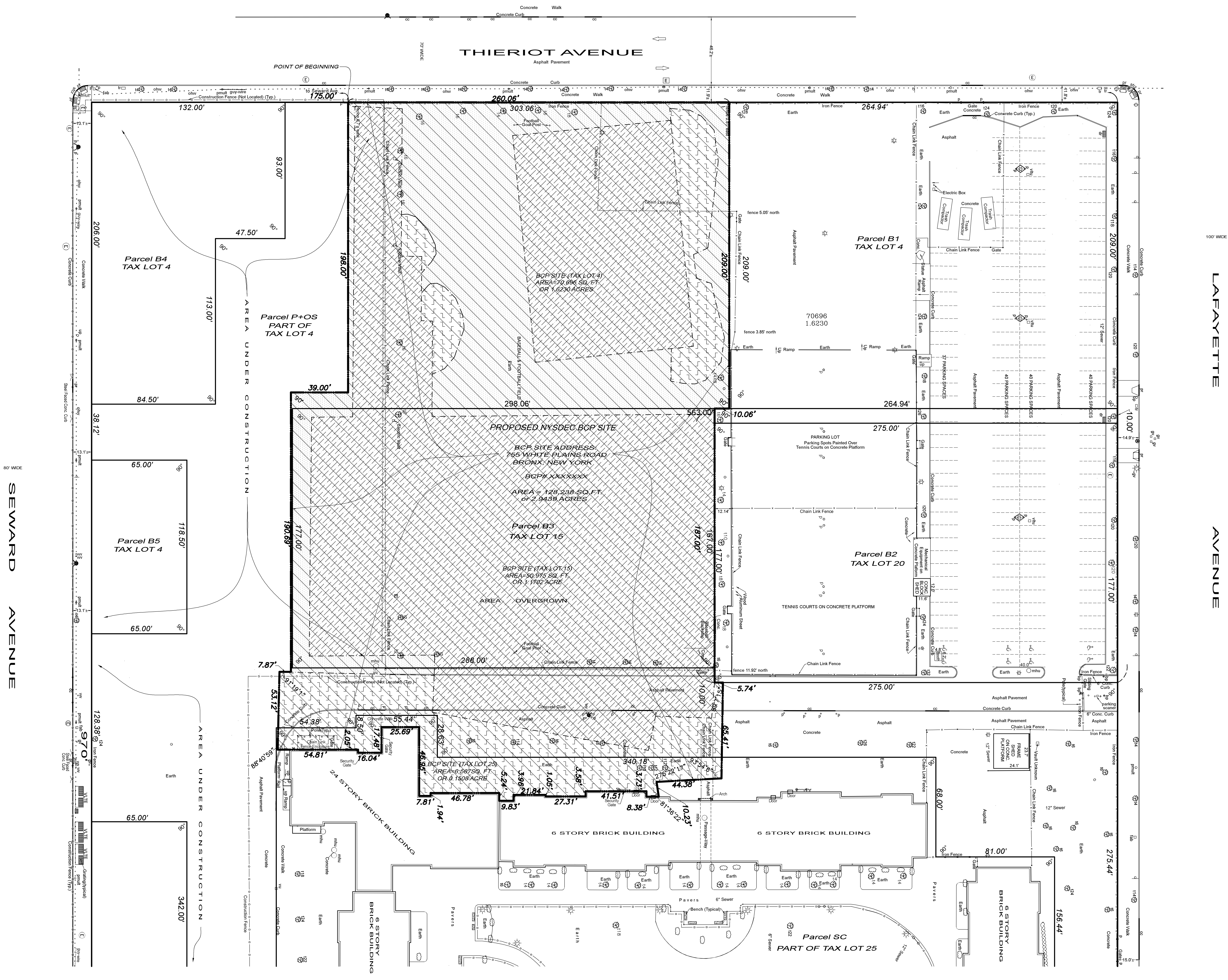
RUNNING THENCE westerly, at right angles to the last mentioned course, 187.00 feet to a point;

RUNNING THENCE northerly, at right angles to the last mentioned course, 10.06 feet to a point;

RUNNING THENCE westerly, at right angles to the last mentioned course, 209.00 feet to the easterly side of Thieriot Avenue;

RUNNING THENCE southerly, along the easterly side of Thieriot Avenue, 260.06 feet to the point or place of BEGINNING.

The above described parcel has an area of 128,238 sq. ft. or 2.9439 acres.





LEGEND

ASPH.......ASPHALT	RET.......RETAINING
BK...........BRICK	RIM.......RIM ELEVATION SEWER MANHOLE
BSMT.......BASEMENT	SFCR....STEEL FACED CURB ROUND
CC..........CURB CUT	Ⓢⓜ.......SUBWAY MANHOLE
CCR.........CONCRETE CURB ROUND	STY.......STORY
CD..........CELLAR DOOR	TB........TOP OF BANK ELEVATION
CLF..........CHAIN LINK FENCE	.........TRAFFIC LIGHT
CO...........CATCH BASIN CLEAN OUT	TCB......TRAFFIC CONTROL BOX
CONC......CONCRETE	TEL.......TELEPHONE
CRF.........CHAIN ROPE FENCE	TP........TREE PIT
CWA.........CELLAR WINDOW AREA	.........TRAFFIC SIGN
DR...........DRAIN	TW........ELEVATION AT TOP OF WALL
EL............ELEVATION	TC........ELEVATION AT TOP OF CURB
FAB.........FIRE ALARM BOX	UP........UTILITY POLE
FC...........FILL CAP	VU........VALVE UNKNOWN
FL EL.......FLOOR ELEVATION	VLTU....VAULT UNKNOWN
GP...........GUARD POLE	VP........VENT PIPE
GV...........GAS VALVE	WV........WATER VALVE
IF............IRON FENCE	12"G.....GAS MAIN WITH SIZE
INL...........CATCH BASIN INLET ELEVATION	12"S.....SEWER MAIN WITH SIZE
INV...........SEWER INVERT ELEVATION	12"W.....WATER MAIN WITH SIZE
..........LIGHT POLE	......CATCH BASIN
MB...........MAIL BOX	Ⓔ E...ELECTRIC MANHOLE / VAULT
MHU.......UNKNOWN MANHOLE	Ⓕ ....FIRE MANHOLE
OF..........OIL FILL	Ⓖ ....GAS MANHOLE
OHW.......OVERHEAD WIRES	Ⓢ ....SEWER MANHOLE
P.............POLE	Ⓣ ....TELEPHONE MANHOLE
PAVT.......PAVEMENT	Ⓦ ....WATER MANHOLE
PM...........PARKING METER	TR.......TRAFFIC VAULT
PMULT.....POLE, MULTIPLE USAGE	.......HYDRANT
17.0 ....ESTABLISHED/LEGAL GRADE	.........SIAMESE
PR...........PEDESTRIAN RAMP	.........STAND PIPE
.....HEDGE	T8....TREE WITH SIZE
T4 MT....TREE WITH MULTIPLE TRUNK	.......BUSH
.....TRAFFIC FLOW	.......STUMP
........HANDICAP	U.S.......UNITED STATES STANDARD
	L.S........LOCAL STANDARD
	L.I.C.......LONG ISLAND CITY STANDARD

FLOOD HAZARD NOTE
THE PARCEL SURVEYED IS COMPRISED OF AREAS DESIGNATED AS ZONE X (LESS THAN 0.2% CHANCE OF FLOODING)
FEDERAL EMERGENCY MANAGEMENT AGENCY
NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP
COMMUNITY PANEL NUMBERS 360497 0103 F
EFFECTIVE DATE SEPTEMBER 5, 2007

░	EXCAVATION ZONE 3
▨	EXCAVATION ZONE 2
▦	EXCAVATION ZONE 1
▧	PROPOSED BCP AREA

NOTE:
ALL ANGLES ARE 90° EXCEPT WHERE OTHERWISE NOTED

DRAWN: J.R.

ESTABLISHED 1876 * SUCCESSOR TO:
B.G. MEINIKHEIM C.S.*C.U. POWELL C.E.,C.S.*L.C.L. SMITH C.S.*NATHAN CAMPBELL C.E.,C.S.*A.U. WHITSON C.E.,C.S.*
WILLIAM L. SAVACOOL C.E.,L.S.,C.S.*A.U. WHITSON INC. C.E.,C.S.*G. WEBER L.S.,C.S.*C. STIDOLPH R.A.,L.S.*WHITSON &
POWELL INC. P.E.,L.S.,C.S.*KELLER & POWELL P.E.,L.S.,C.S.*LOUIS MONTROSE C.E.,L.S.,C.S.*FRED J. POWELL P.E.,L.S.,C.S.*

REV	DATE	DESCRIPTION	ck

REV	DATE	DESCRIPTION	ck
	02-24-25	PROPOSED BCP SITE SURVEY	

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CITY OF NEW YORK
COUNTY: THE BRONX
TAX BLOCK 3600
TENTATIVE TAX LOT 15

SCALE: 1" = 30'

APPENDIX B
REMEDIAL ACTION WORK PLAN FACT SHEET

(Fact Sheet Begins Next)

Act Now to Continue Receiving Information About This Site!

DEC's Division of Environmental Remediation (DER) now distributes information about contaminated sites *electronically by email*.

If you would like to continue to receive information about the contaminated site featured in this fact sheet:

You must sign up for the DER email listserv:

https://dec.ny.gov/environmental-protection/site-cleanup/regional-remediation-project-information/environmental-cleanup-email-newsletters

DER cannot register your email address - only the email address owner can do so. If you already have signed up for the listserv for the county in which the site is located, you need do nothing.



Why You Should Go "Paperless":

- ☑ Get site information faster and share it easily;
- ☑ Receive information about all sites in a chosen county - read what you want, delete the rest;
- ☑ It helps the environment and stretches your tax dollars.

If "paperless" is not an option for you, call or write to the DER project manager identified in this fact sheet. Indicate that you need to receive paper copies of fact sheets through the Postal Service. Include the site name in your correspondence. The option to receive paper is available to individuals only. Groups, organizations, businesses, and government entities are assumed to have email access.

Stevenson Commons B3

Brownfield Cleanup Program
Site No. C203189
Bronx County

August 2026

Cleanup Proposed for Brownfield Site Contamination
Public Comment Period Announced

The public is invited to comment on a proposed cleanup plan being reviewed by the New York State Department of Environmental Conservation (NYSDEC), in consultation with the New York State Department of Health (NYSDOH), to address contamination related to the Stevenson Commons B3 site ("site") located at 1850 Lafayette Avenue in Bronx, NY, 10473. Please see the map for the site location. Based on the findings of the investigation, DEC in consultation with the New York State Department of Health (NYSDOH) has determined that the site does not pose a significant threat to public health or the environment.

How to Comment

NYSDEC is accepting written comments about the proposed plan, called a "draft Remedial Action Work Plan (RAWP)," which includes a cleanup alternatives analysis (AA), for 45 days, from **August 27 through October 11, 2026.**

- Access the draft Remedial Investigation Report (RIR), RAWP with AA, and other project documents online through the DECinfo Locator: https://extapps.dec.ny.gov/data/DecDocs/C203189/.
- Documents also are available at the locations identified under "Where to Find Information."
- Please submit comments to the NYSDEC project manager listed under Project-Related Questions in the "Contact Information" area.

Draft Remedial Investigation Report and Draft Remedial Work Plan with Alternatives Analysis

The proposed Restricted Residential Use remedy plan consists of:

- Excavation and off-site disposal of contaminated soil to 15 feet below ground surface (bgs) across a portion of the site, and to 2 feet bgs across the remainder of the site;
- Removal of any underground storage tanks and associated piping, if encountered during excavation activities;
- Collection and analysis of post-cleanup soil samples to evaluate the effectiveness of the cleanup;
- Importation of clean material that meets the established Soil Cleanup Objectives for use as backfill, if needed;
- Implementation of a Health and Safety Plan and Community Air Monitoring Plan during all ground intrusive activities;
- Construction and maintenance of a cover system, including a demarcation layer over areas without hardscape (without buildings, asphalt, or concrete);
- Implementation of a Site Management Plan (SMP) for long-term management of residual contamination on the site; and,
- Recording of an Environmental Easement to ensure compliance with the SMP.

The proposed cleanup plan was developed by Stevenson B3 LLC (“applicant”) after performing a detailed investigation of the site under New York's Brownfield Cleanup Program (BCP).

Next Steps

NYSDEC will consider public comments, revise the remedy plan as necessary, and issue a final Decision Document. NYSDOH must concur with the proposed cleanup. After approval, the proposed cleanup becomes the selected cleanup. The applicant may then design and perform the cleanup action to address the site contamination, with oversight by NYSDEC and NYSDOH.

NYSDEC will keep the public informed throughout the investigation and cleanup of the site.

Site Description

The site is 2.94-acres is size and is bounded to the north by parking lots and tennis courts associated with the existing Stevenson Commons apartment complex, followed by Lafayette Avenue; to the east by the existing Stevenson Commons apartment complex, followed by White Plains Road; to the south by the Stevenson Commons Building B4 and B5 project sites, followed by Seward Avenue; and to the west by Thieriot Avenue, followed by residential buildings. The site currently consists of a vacant, grass covered field on the central and western portions; and an asphalt-paved roadway used for emergency access (fire lane) and access to surrounding landscaped areas on the eastern portion. The site has remained undeveloped since 1898. A tidal creek was filled in with material of unknown origin between 1924 and 1951. Later, the site was used for recreational/baseball fields, between approximately 1980 and 1994.

Following implementation of the Restricted Residential Use cleanup, the planned redevelopment for the site entails construction of an approximately 33,850 square feet (sf) 9 to 13-story mixed-use, 100% affordable residential building with a community facility, on the central-eastern portion of the site. Exterior areas will include fenced-in tennis courts on the northwestern portion of the site; an asphalt-paved roadway for emergency access (fire lane) on the eastern portion of the site; and landscaping/hardscaping on the southwestern portion of the site and in remaining areas surrounding the building. The site is identified as being located within a disadvantaged community.

Additional site details, including environmental and health assessment summaries, are available on DEC's Environmental Site Remediation Database (by entering the site ID, C203189) at:

https://appfactory.dec.ny.gov/DERExternalSearch/ERDSearch

Summary of the Investigation

The primary Contaminants of Concern (COCs) at the site include polycyclic aromatic hydrocarbon (PAHs) and metals (i.e., lead, arsenic, barium and mercury), which are present site-wide in soil.

Brownfield Cleanup Program

New York's Brownfield Cleanup Program (BCP) encourages the voluntary cleanup of contaminated properties known as "brownfields" so that they can be reused and redeveloped. These uses may include recreation, housing, business or other uses. A brownfield site is any real property where a contaminant is present at levels exceeding the soil cleanup objectives or other health-based or environmental standards, criteria or guidance adopted by NYSDEC that are applicable based on the reasonably anticipated use of the property, in accordance with applicable regulations.

For more information about the BCP, visit:

https://dec.ny.gov/environmental-protection/site-cleanup/brownfield-and-state-superfund-programs/brownfield

Stay Informed with DEC Delivers

We encourage you to share this fact sheet with neighbors and tenants, and/or post this fact sheet in a prominent area of your building for others to see.

Sign up to receive site updates by email:

https://dec.ny.gov/environmental-protection/site-cleanup/regional-remediation-project-information/environmental-cleanup-email-newsletters

Note: Please disregard if you already have signed up and received this fact sheet electronically.

DECinfo Locator

Interactive map to access DEC documents and public data about the environmental quality of specific sites: https://dec.ny.gov/maps/interactive-maps/decinfo-locator

CONTACT INFORMATION

Project-Related Questions

Marlen Salazar, Project Manager
NYSDEC, Division of Environmental Remediation
One Hunters Point Plaza
47-40 21st Street,
Long Island City, NY 11101
Tel.: (718) 482-7129
marlen.salazar@dec.ny.gov

Project-Related Health Questions

Ryan Minzloff
NYSDOH, Bureau of Environmental Exposure Investigation
Empire State Plaza
Corning Tower Room 1787
Albany, NY 12237
Tel.: (518) 408-5146
beei@health.ny.gov

WHERE TO FIND INFORMATION

Access project documents through the DECinfo Locator and at these locations:
https://extapps.dec.ny.gov/data/DecDocs/C203189/

Soundview Library
660 Soundview Avenue
Bronx, NY 10473
Tel.: (718) 589-0880

Bronx Community Board 9
1927 Turnbill Avenue, Suite 201
Bronx, NY 10473
Tel.: (718) 823-3034
bx09@cb.nyc.gov

Site Location



NEW YORK STATE | Department of Environmental Conservation

www.dec.ny.gov

Translation Available. Don't see your language? Ask!

English	To request to have this document translated into your preferred language, please contact the person below. There is no charge for the translation.
Español Spanish	Para solicitar la traducción de este documento al idioma que prefiera, comuníquese con la persona que aparece abajo. La traducción es gratis.
简体字 Simplified Chinese	如需将此文件翻译成您偏好的语言，请与以下人员联系。翻译服务免费。
Русский Russian	Чтобы запросить перевод этого документа на предпочитаемый вами язык, пожалуйста, свяжитесь с указанным ниже лицом. Перевод предоставляется бесплатно.
אידיש Yiddish	צו פארלאנגען צו האבן די דאקומענט איבערגעזעצט אין אייער שפראך, ביטע פארבינדט זיך מיט די מענטש אנגעוויזן אונטן. מען דארף נישט צאלן פארן איבערטייטשן.
বাঙালি Bengali	এই নথিটি আপনার পছন্দের ভাষায় অনুবাদ করার অনুরোধ করতে, অনুগ্রহ করে নীচে উল্লেখ করা ব্যক্তির সাথে যোগাযোগ করুন। অনুবাদের জন্য কোন অর্থ লাগবে না।
한국어 Korean	이 파일을 선호하는 언어로 번역하려면 아래 담당자에게 연락해 주세요. 번역 서비스는 무료입니다.
Kreyòl Ayisyen Haitian Creole	Pou w fè demann tradiksyon dokiman sa a nan lang ou prefere a, tanpri kontakte moun ki anba a. Ou p ap peye pou tradiksyon an.
Italiano Italian	Per richiedere la traduzione di questo documento nella tua lingua preferita, contatta la persona indicata qui sotto. La traduzione non prevede costi aggiuntivi.
العربية Arabic	لطلب ترجمة هذا المستند إلى لغتك المفضلة، يُرجى الاتصال بالشخص التالي. تقدم خدمات الترجمة مجانًا ودون تكلفة.
Polski Polish	Aby poprosić o przetłumaczenie tego dokumentu na preferowany język, skontaktuj się z osobą wskazaną poniżej. Tłumaczenie nie jest odpłatne.
Français French	Veuillez contacter la personne mentionnée ci-dessous afin de procéder à votre demande de traduction de document pour votre langage de préférence. La traduction est gratuite.
اردو Urdu	اس دستاویز کا ترجمہ آپ کی ترجیحی زبان میں کروانے کی درخواست کرنے کے لیے، براہ کرم ذیل کے فرد سے رابطہ کریں۔ اس ترجمہ کے لیے کوئی چارج نہیں ہے۔

Marlen Salazar | **Phone:** (718) 482-7129 | **Email:** marlen.salazar@dec.ny.gov

APPENDIX C
PREVIOUS ENVIRONMENTAL REPORTS

PROVIDED ELECTRONICALLY
VIA ZIPPED FOLDER

APPENDIX D
SANBORN MAPS

Stevenson Commons

1850 Lafayette Ave

Bronx, NY 10473

Inquiry Number: 6143661.3

August 05, 2020

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

08/05/20

Site Name:

Stevenson Commons
1850 Lafayette Ave
Bronx, NY 10473
EDR Inquiry # 6143661.3

Client Name:

Impact Environmental
170 Keyland Court
Bohemia, NY 11716
Contact: Jason Scalora

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Impact Environmental were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 25E3-466B-97AA

PO # 13453

Project Stevenson Commons

Maps Provided:

2007	1996	1981	1898
2006	1995	1978	
2005	1993	1977	
2004	1992	1969	
2003	1991	1950	
2002	1989	1928	
2001	1986	1919	
1998	1983	1908	

Sanborn® Library search results

Certification #: 25E3-466B-97AA

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

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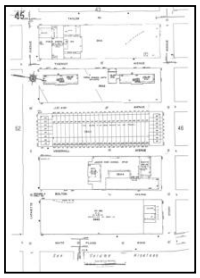
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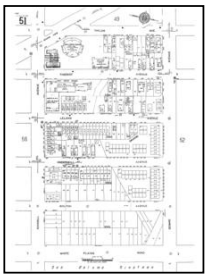
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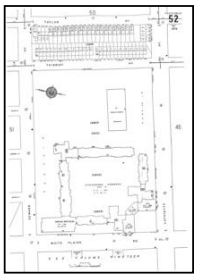
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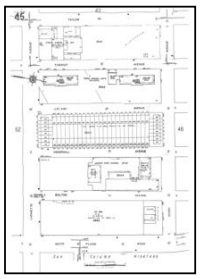
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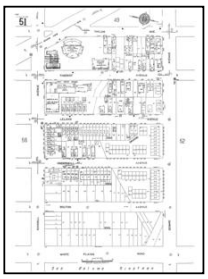

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2007

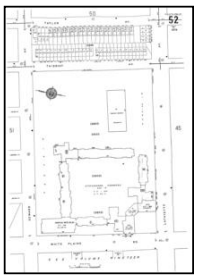

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2007


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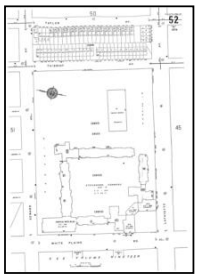
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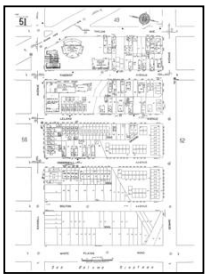

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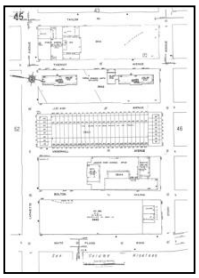

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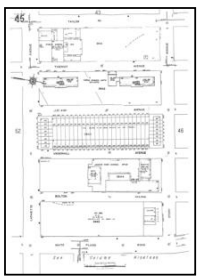
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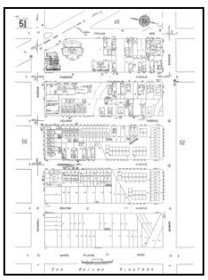

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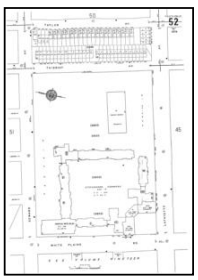

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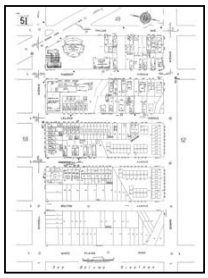

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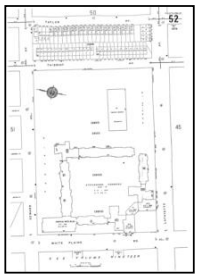

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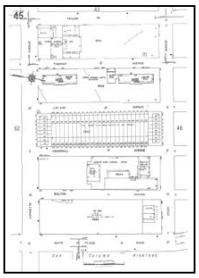
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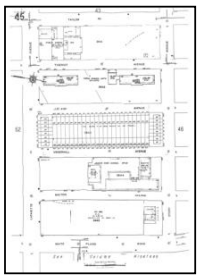
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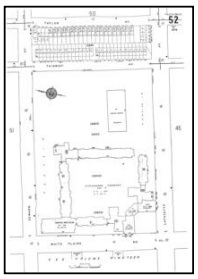

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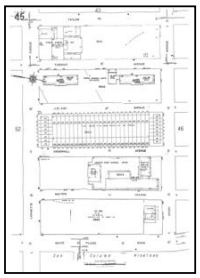
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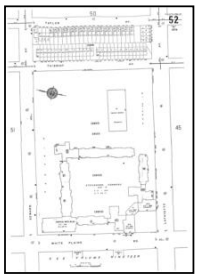

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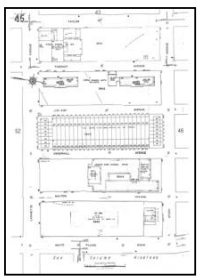

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2001


Volume 17, Sheet 50
2001

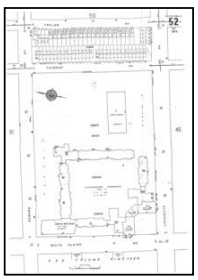

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2001


Volume 17, Sheet 52
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1998 Source Sheets


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1998


Volume 17, Sheet 51
1998


Volume 17, Sheet 52
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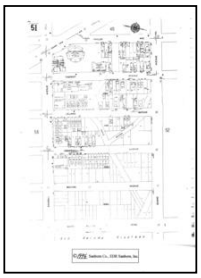
Sanborn Sheet Key

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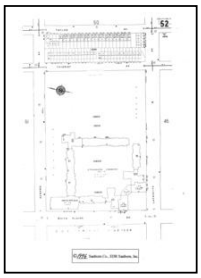
1996 Source Sheets



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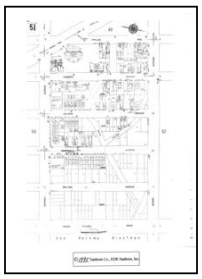


Volume 17, Sheet 51
1996

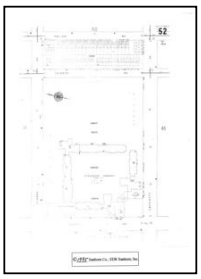


Volume 17, Sheet 52
1996

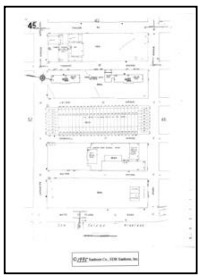
1995 Source Sheets



Volume 17, Sheet 51
1995

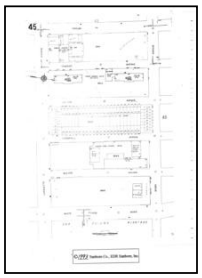


Volume 17, Sheet 52
1995



Volume 17, Sheet 45
1995

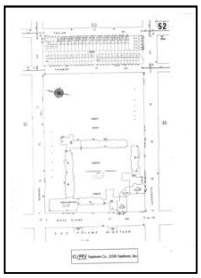
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Volume 17, Sheet 45
1993

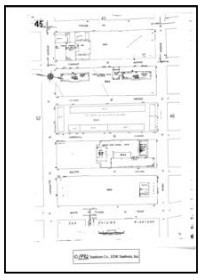


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1993



Volume 17, Sheet 52
1993

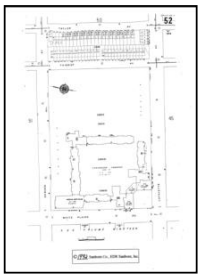
1992 Source Sheets



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1992



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1992



Volume 17, Sheet 52
1992

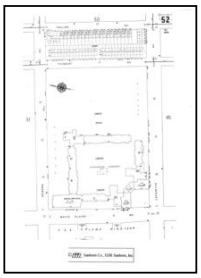
Sanborn Sheet Key

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

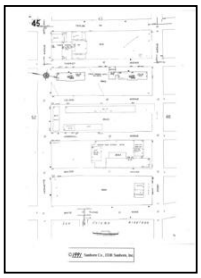
1991 Source Sheets



Volume 17, Sheet 51
1991

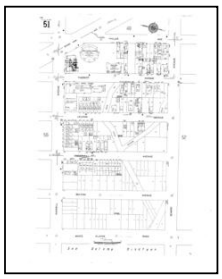


Volume 17, Sheet 52
1991

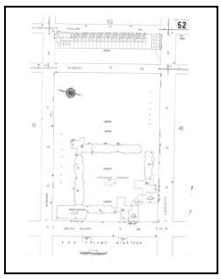


Volume 17, Sheet 45
1991

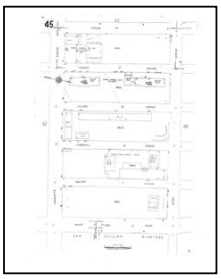
1989 Source Sheets



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1989



Volume 17, Sheet 52
1989

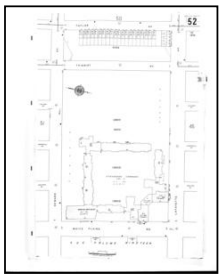


Volume 17, Sheet 45
1989

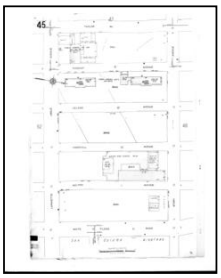
1986 Source Sheets



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1986



Volume 17, Sheet 52
1986

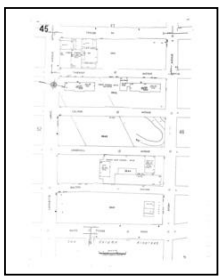


Volume 17, Sheet 45
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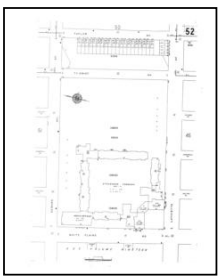
1983 Source Sheets



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1983



Volume 17, Sheet 45
1983

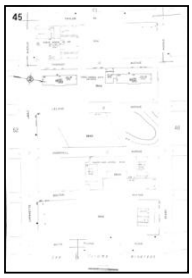


Volume 17, Sheet 52
1983

Sanborn Sheet Key

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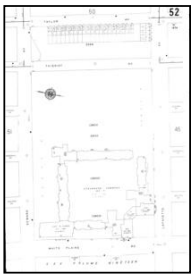
1981 Source Sheets



Volume 17, Sheet 45
1981

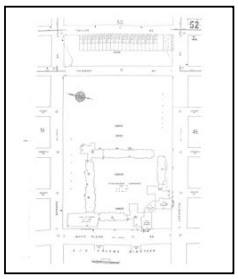


Volume 17, Sheet 51
1981

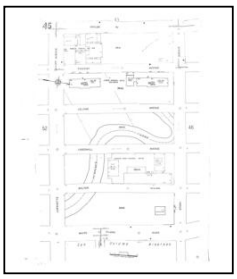


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1981

1978 Source Sheets



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1978

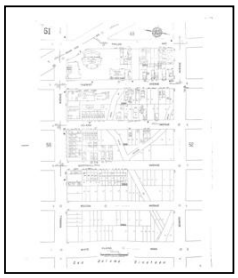


Volume 17, Sheet 45
1978

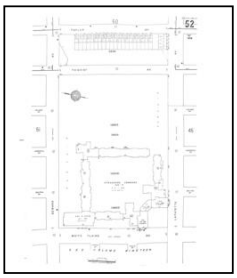


Volume 17, Sheet 51
1978

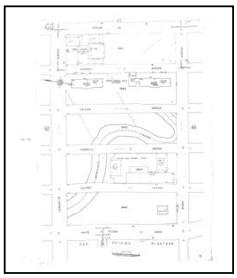
1977 Source Sheets



Volume 17, Sheet 51
1977

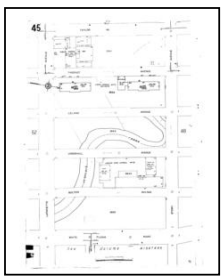


Volume 17, Sheet 52
1977

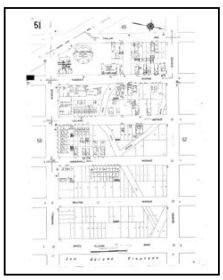


Volume 17, Sheet 45
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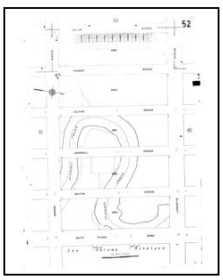
1969 Source Sheets



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1969



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1969

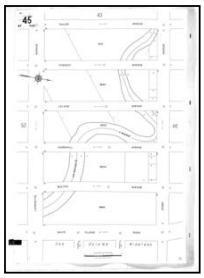


Volume 17, Sheet 52
1969

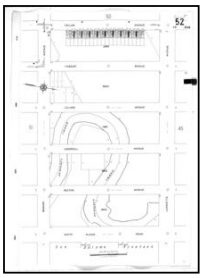
Sanborn Sheet Key

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

1950 Source Sheets

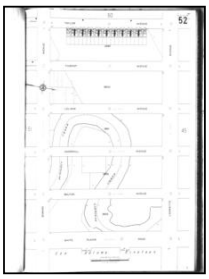

Volume 17, Sheet 45
1950

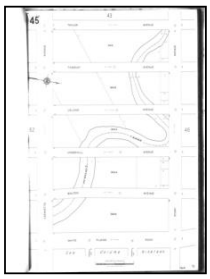

Volume 17, Sheet 51
1950


Volume 17, Sheet 52
1950

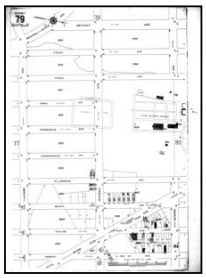
1928 Source Sheets

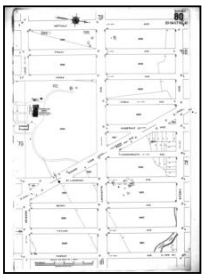

Volume 17, Sheet 51
1928

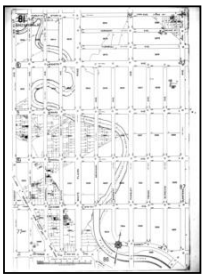

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1928


Volume 17, Sheet 45
1928

1919 Source Sheets


Volume 17, Sheet 79
1919


Volume 17, Sheet 80
1919


Volume 17, Sheet 81
1919

1908 Source Sheets


Volume A, Sheet 51
1908

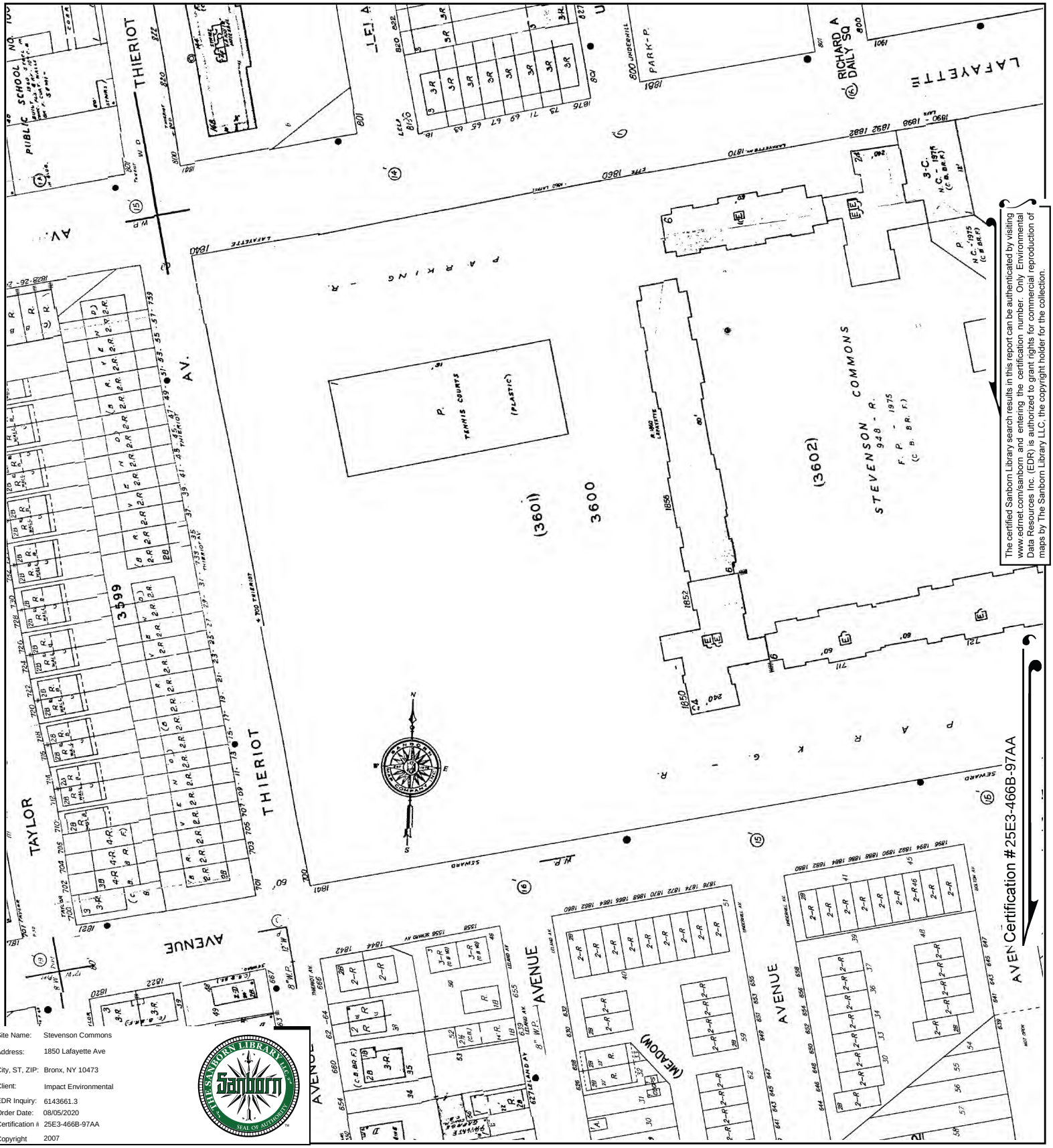
Sanborn Sheet Key

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1898 Source Sheets



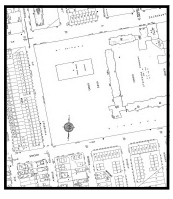
Volume A, Sheet 51
1898

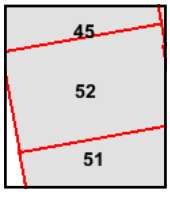


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EDR Inquiry:	6143661.3
Order Date:	08/05/2020
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Copyright	2007

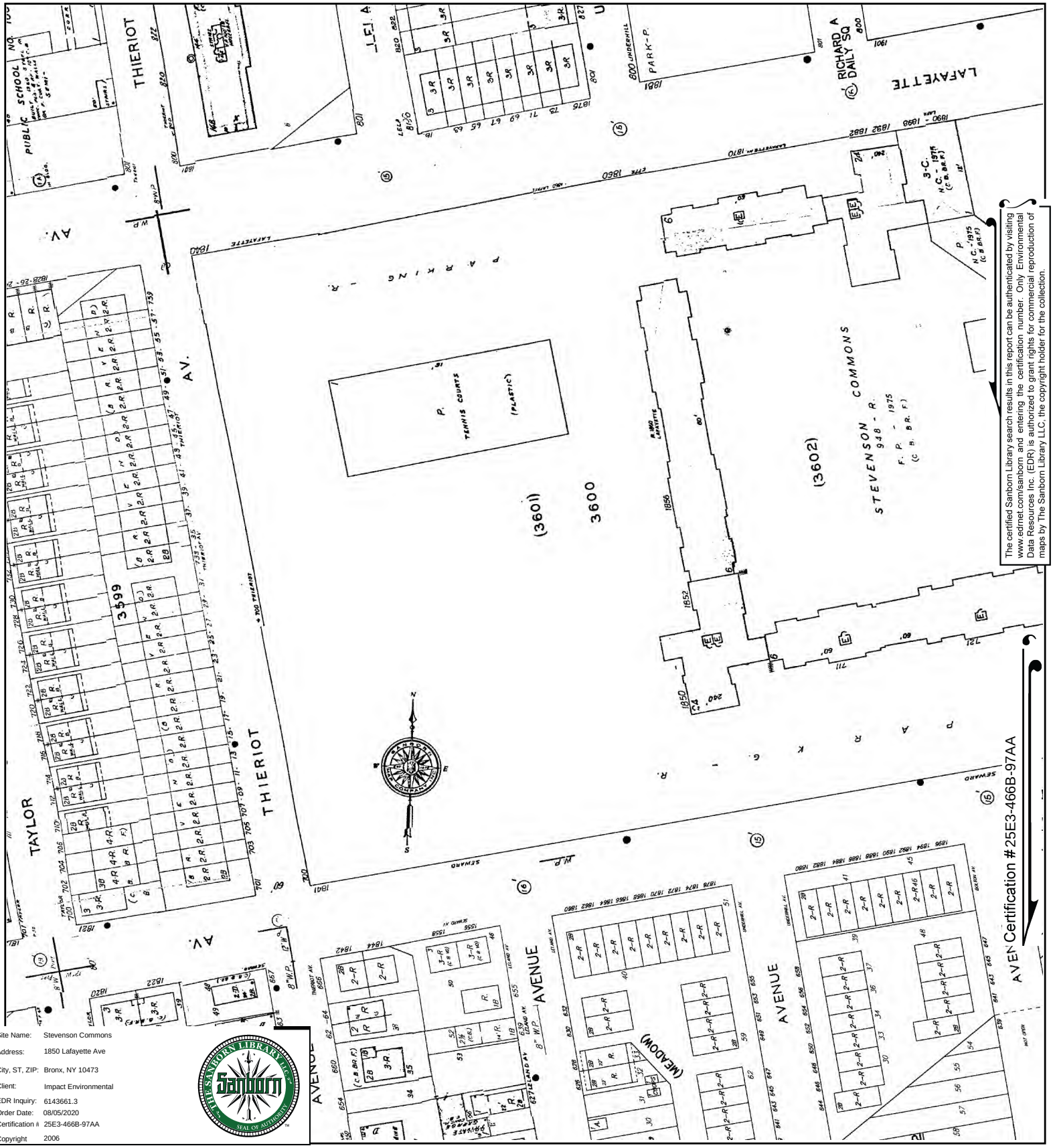
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0 Feet 150 300 600

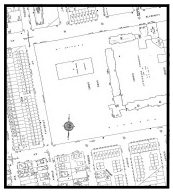


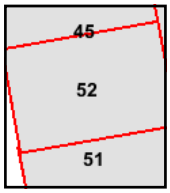
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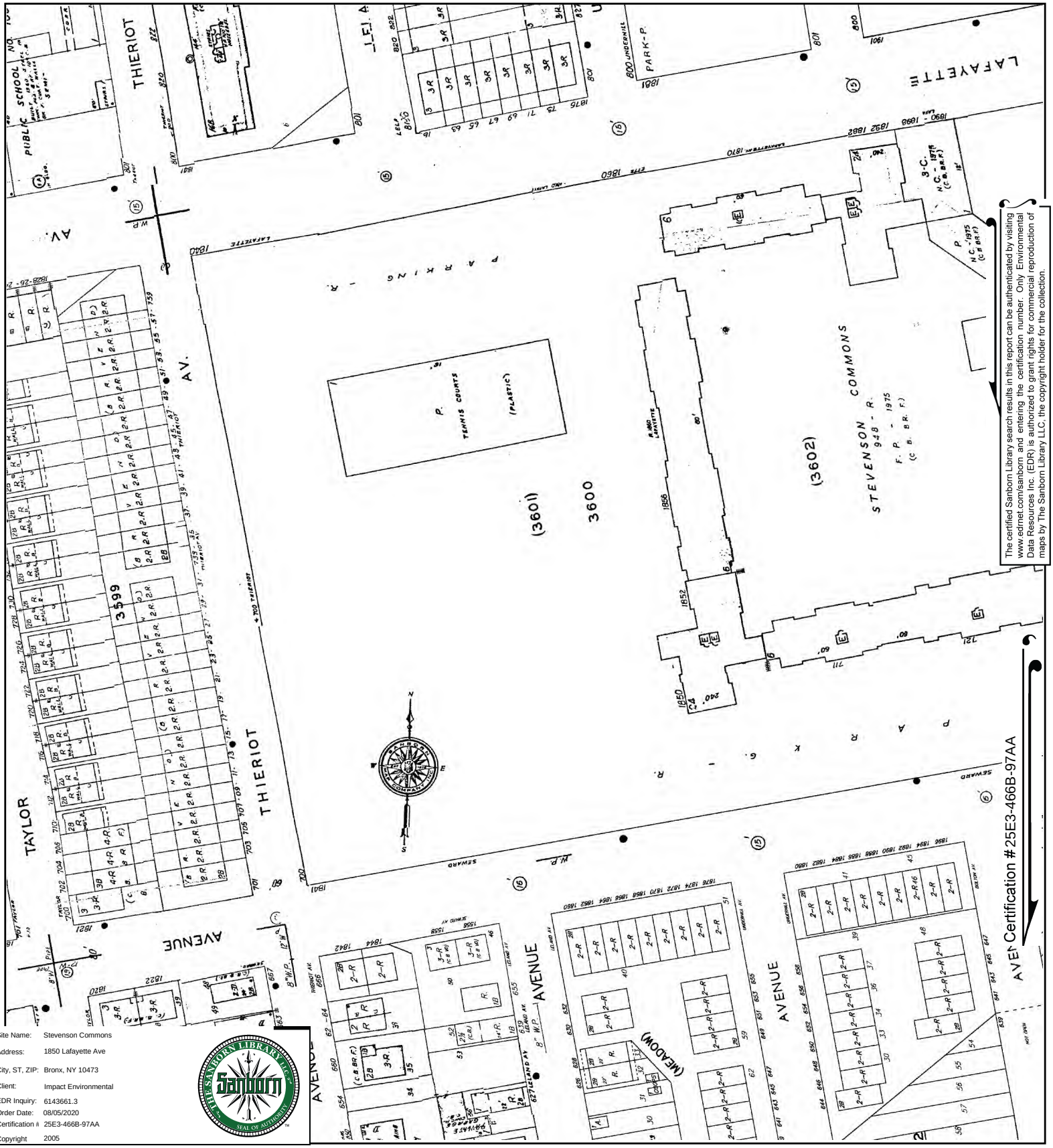
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Volume 17, Sheet 51
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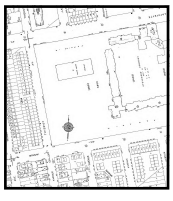
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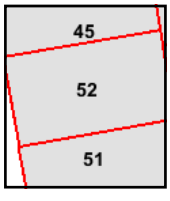


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Copyright	2005

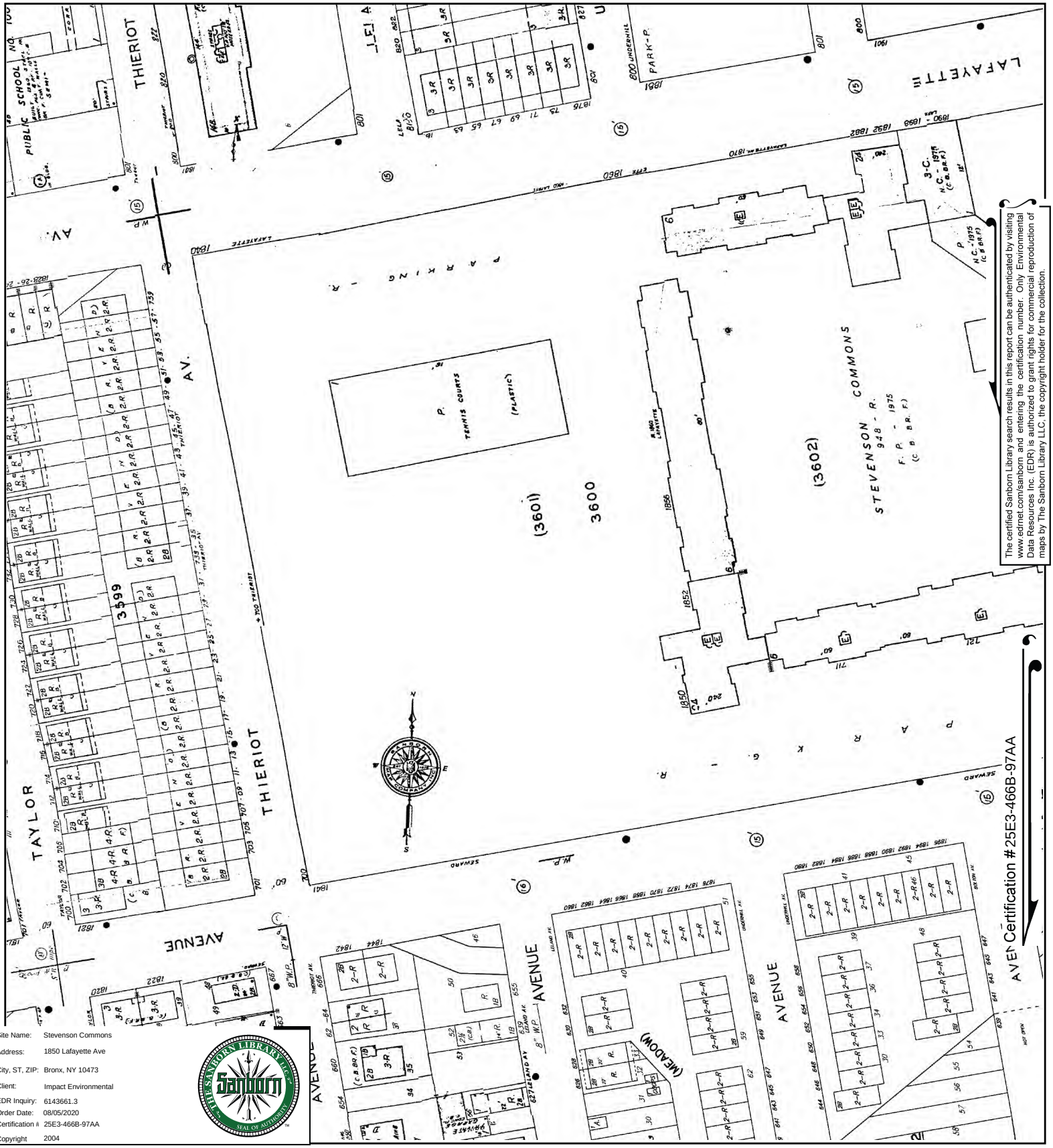
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Volume 17, Sheet 52

0 Feet 150 300 600

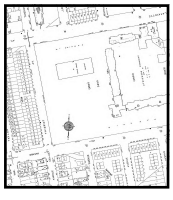


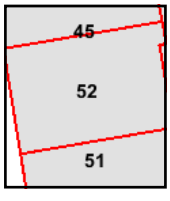
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Copyright	2004

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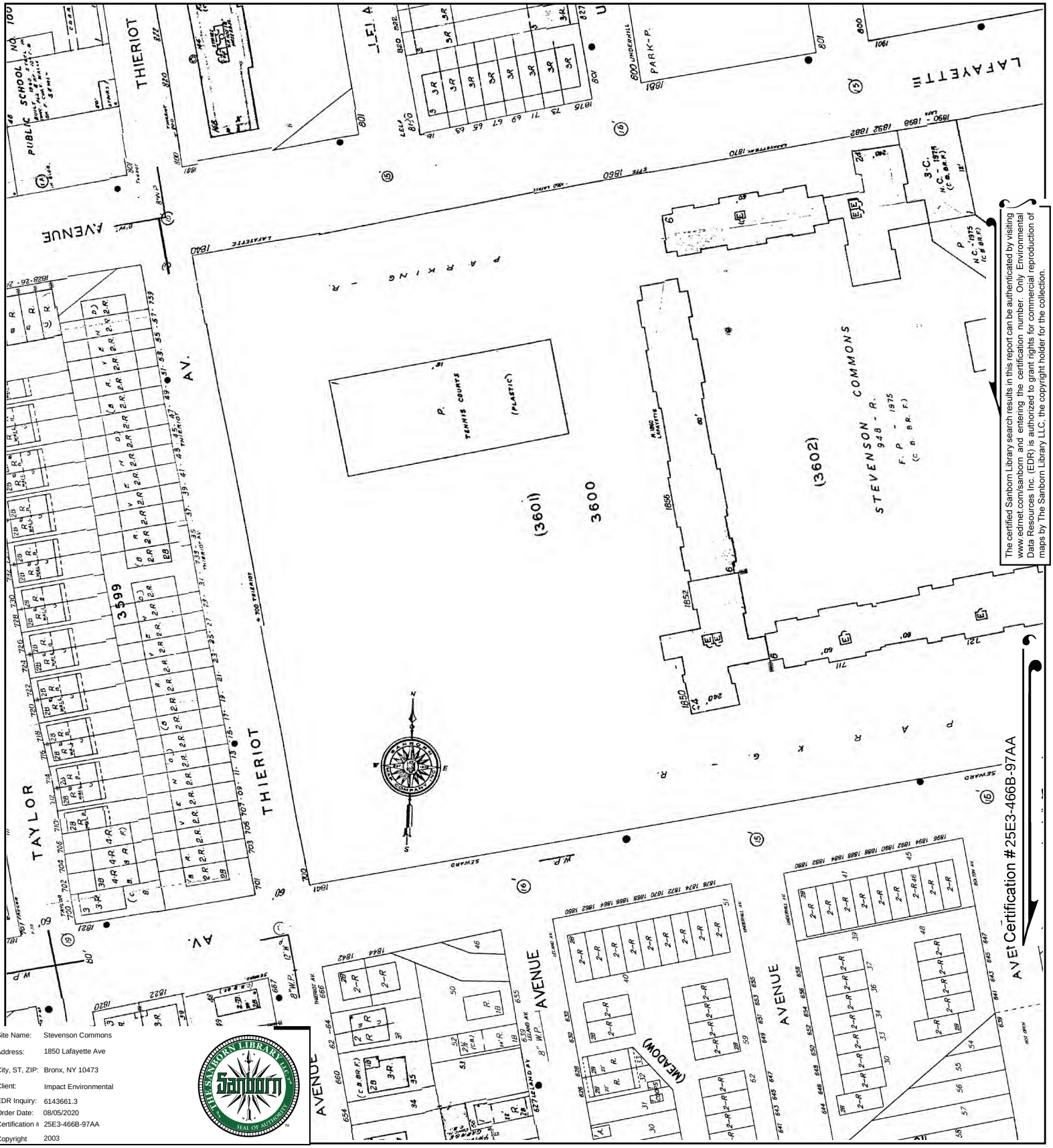
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Volume 17, Sheet 45

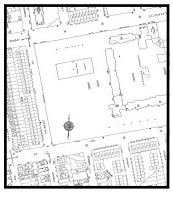
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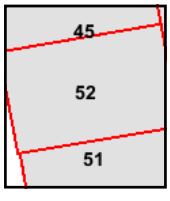


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Copyright	2003

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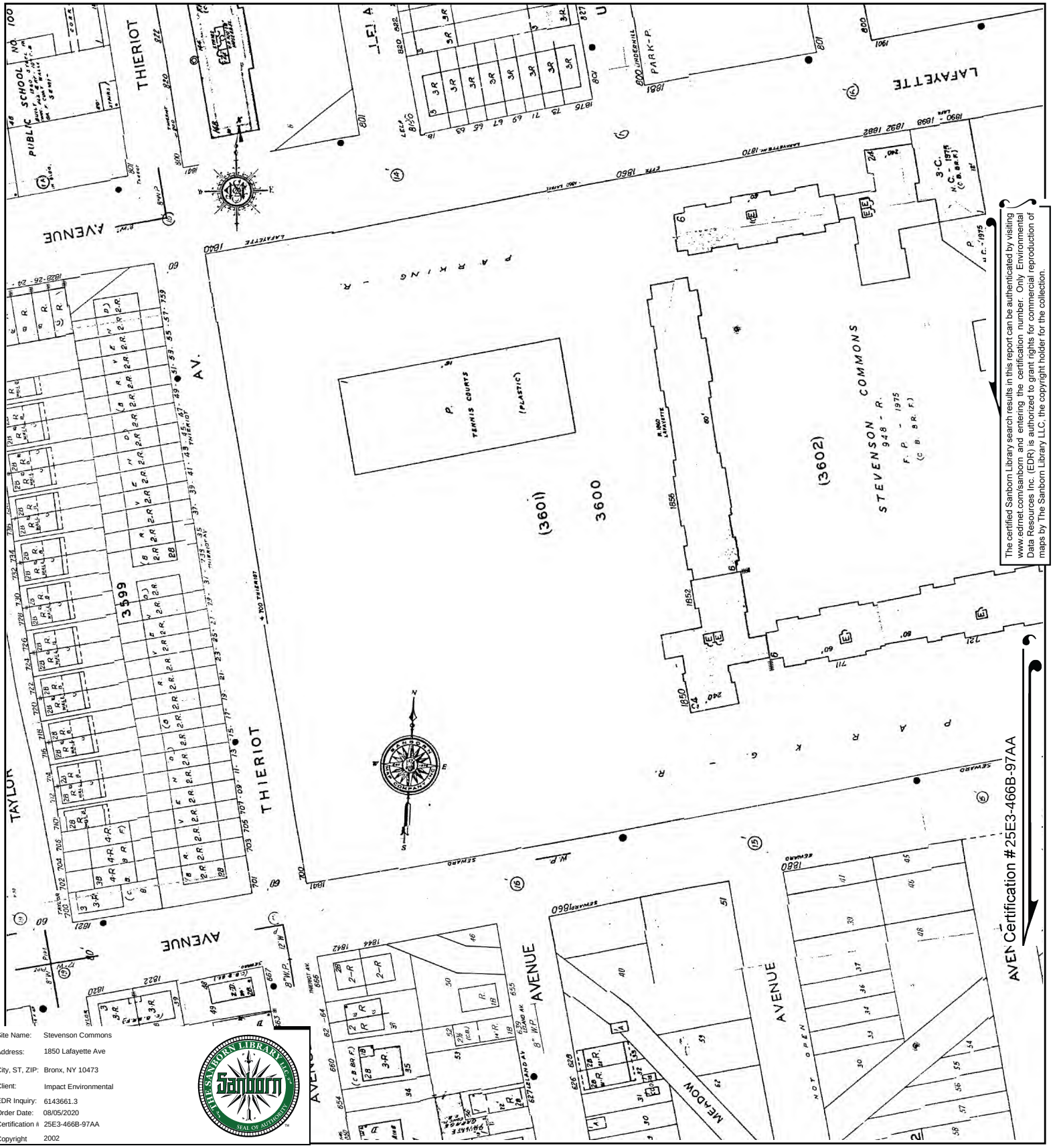




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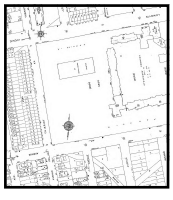


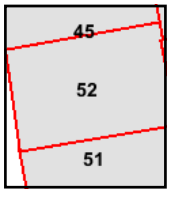
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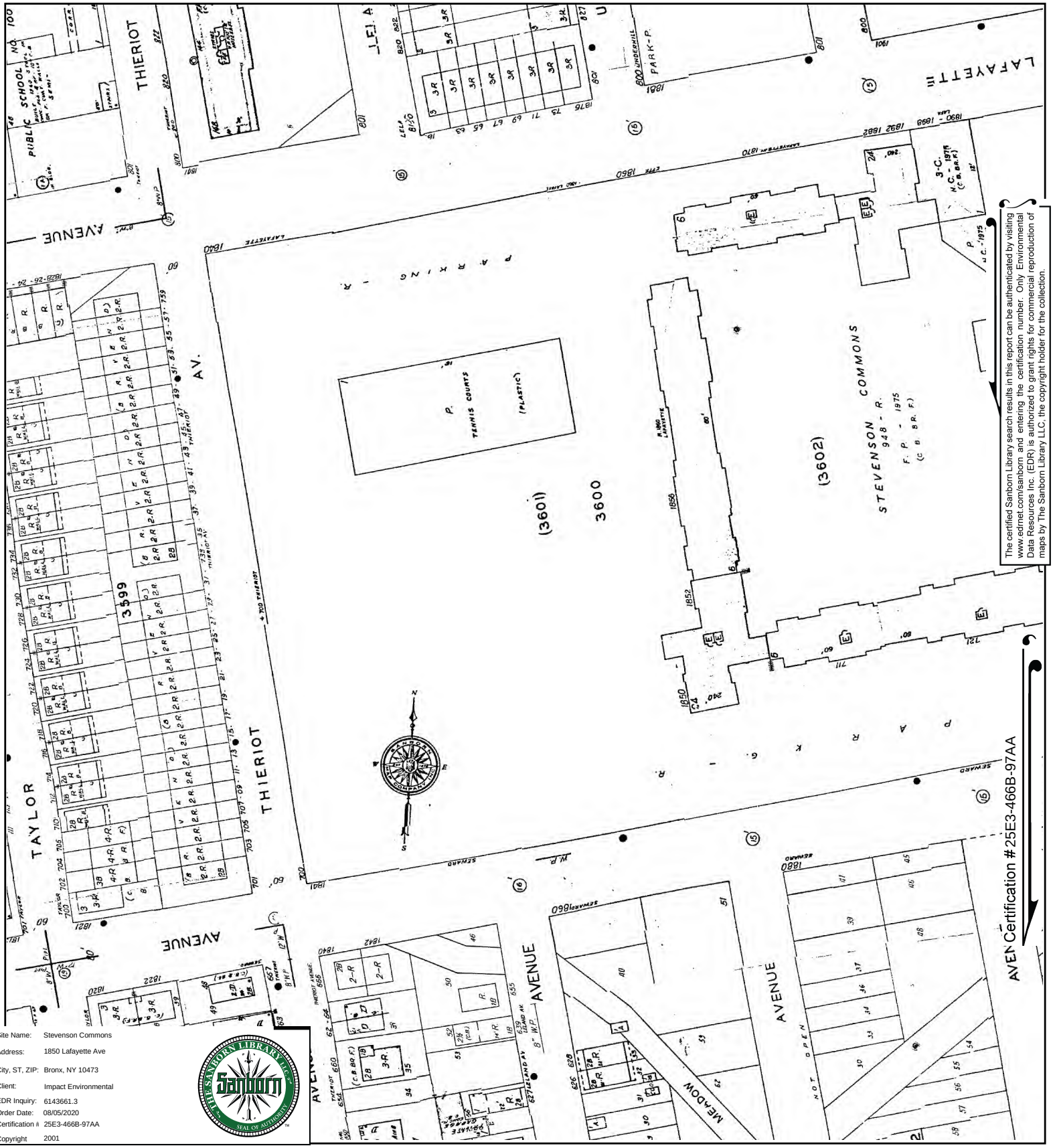
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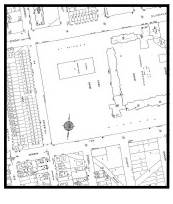


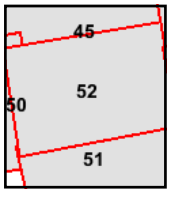
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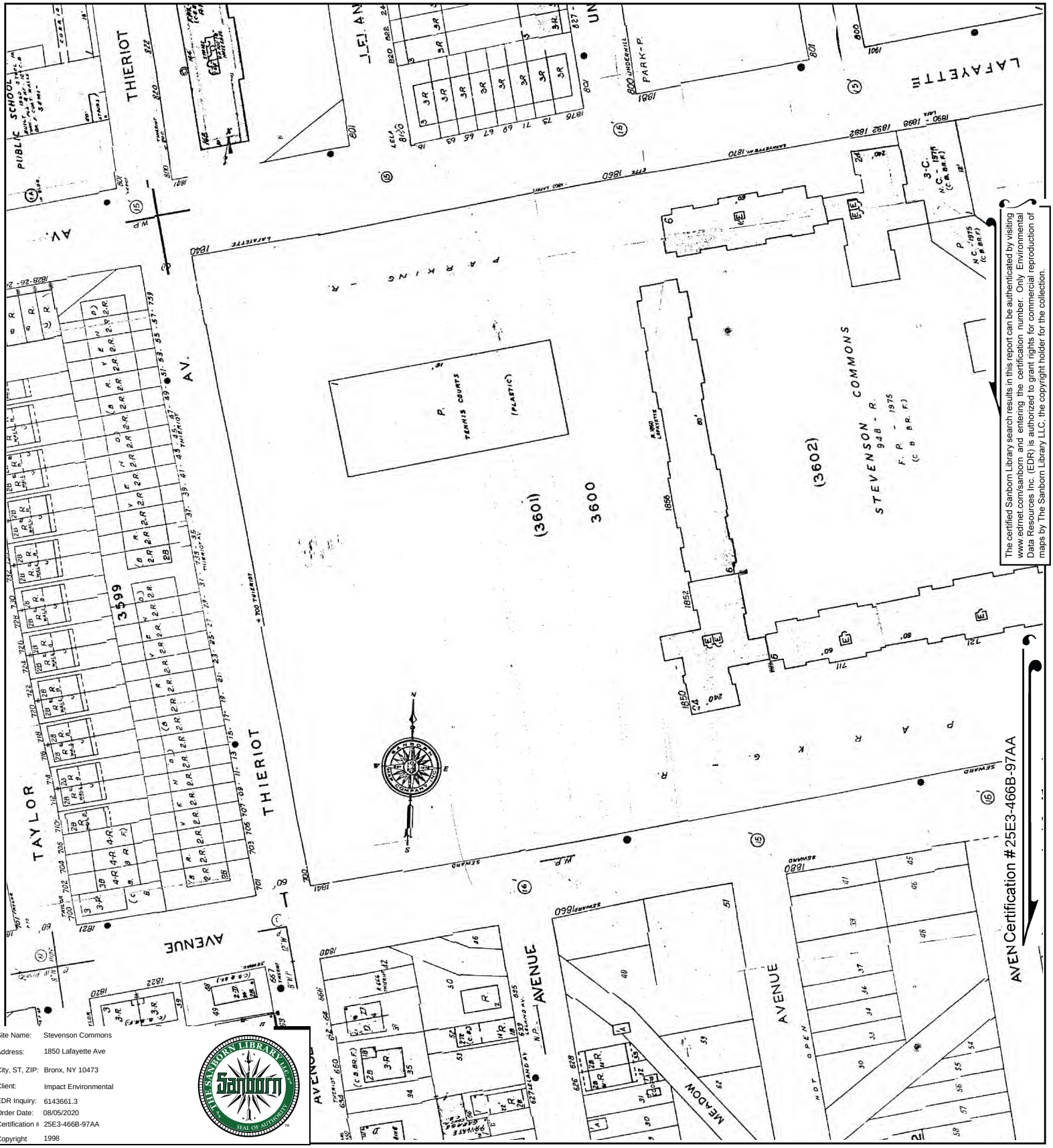
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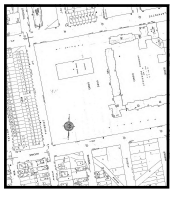
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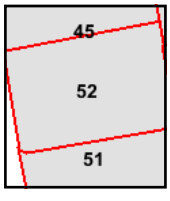


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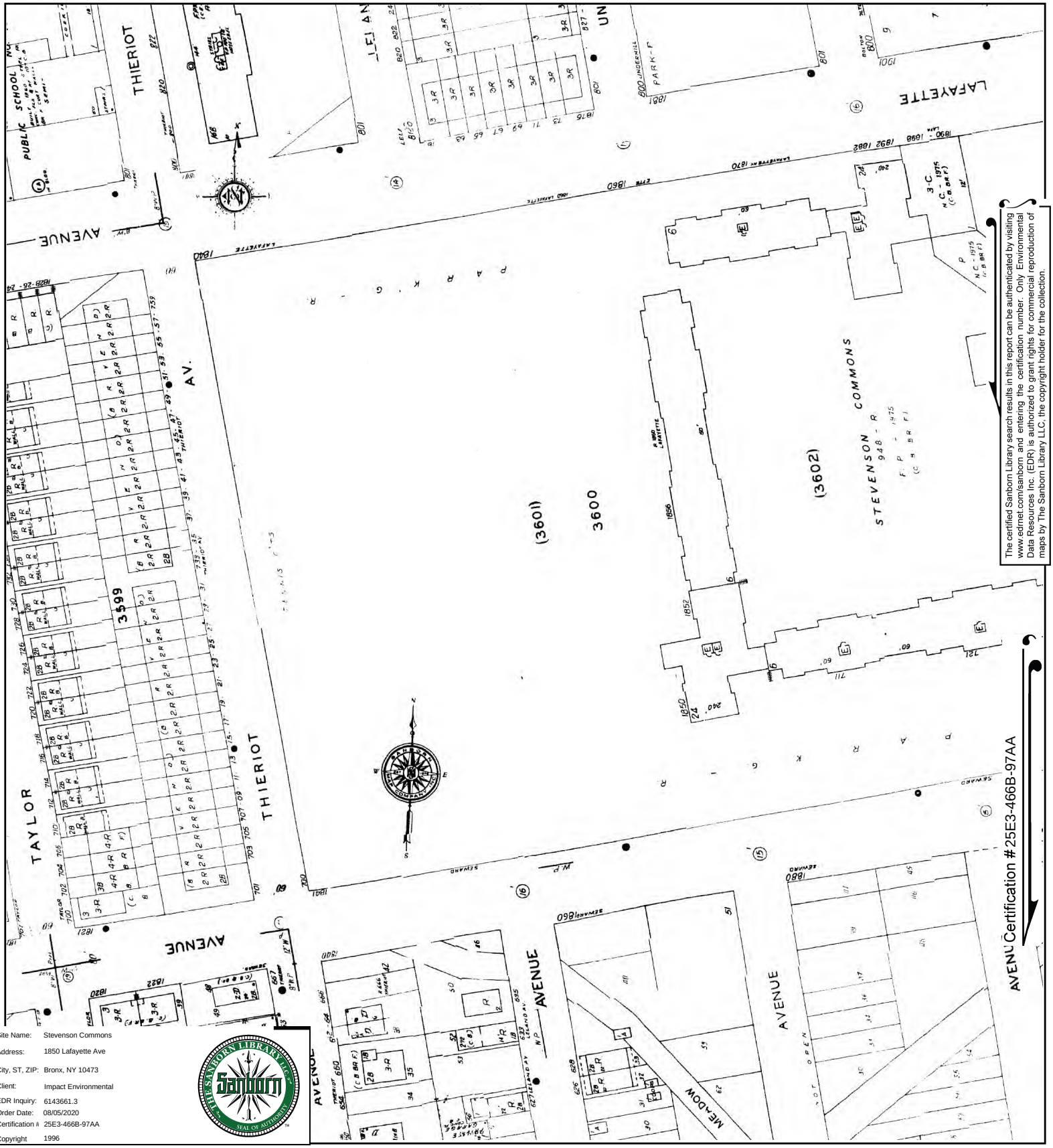




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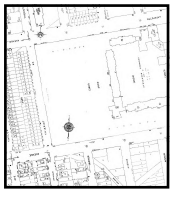
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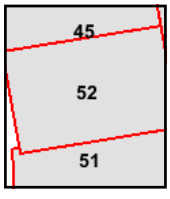


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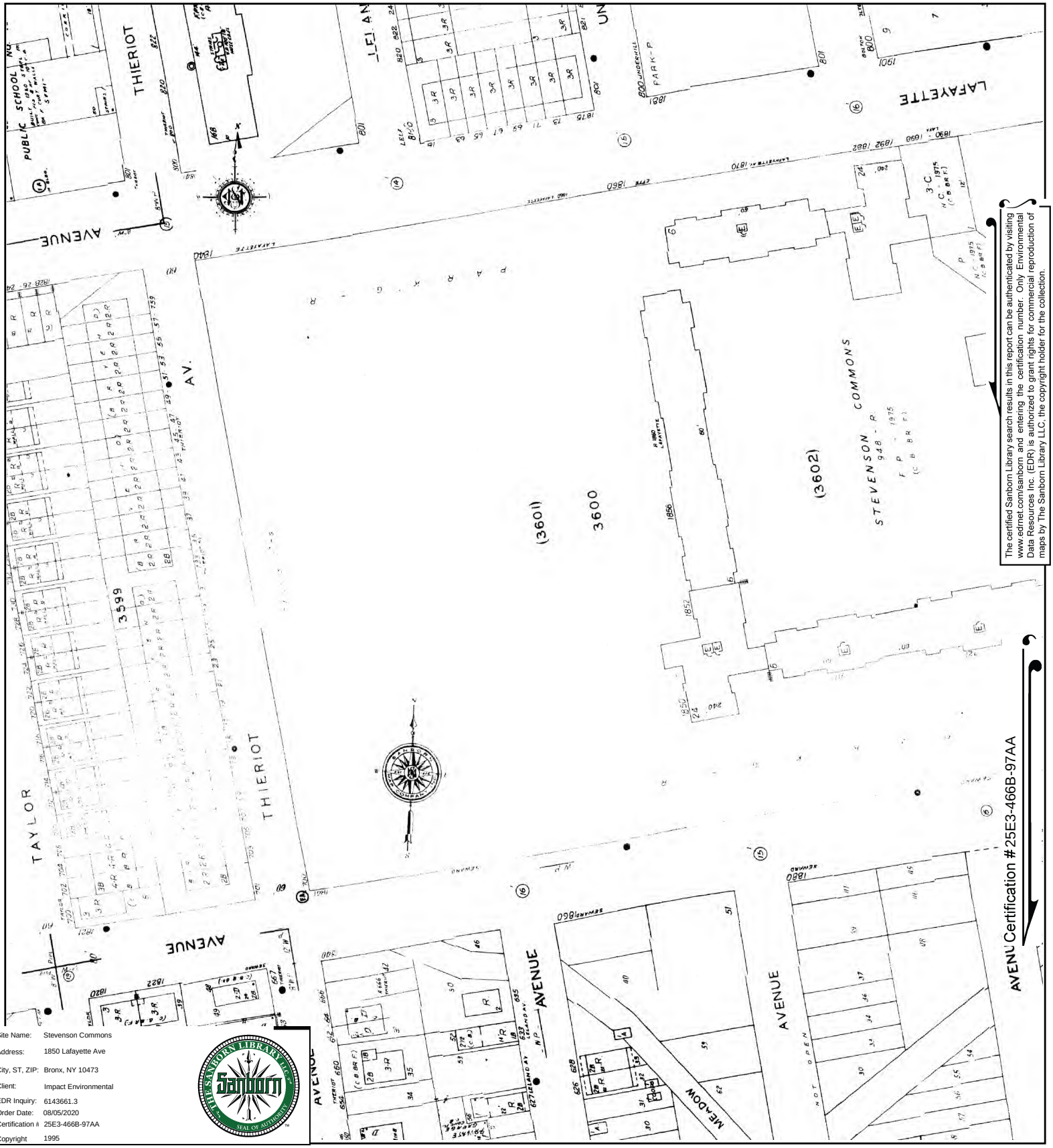




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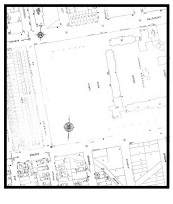
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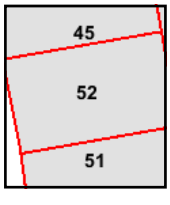


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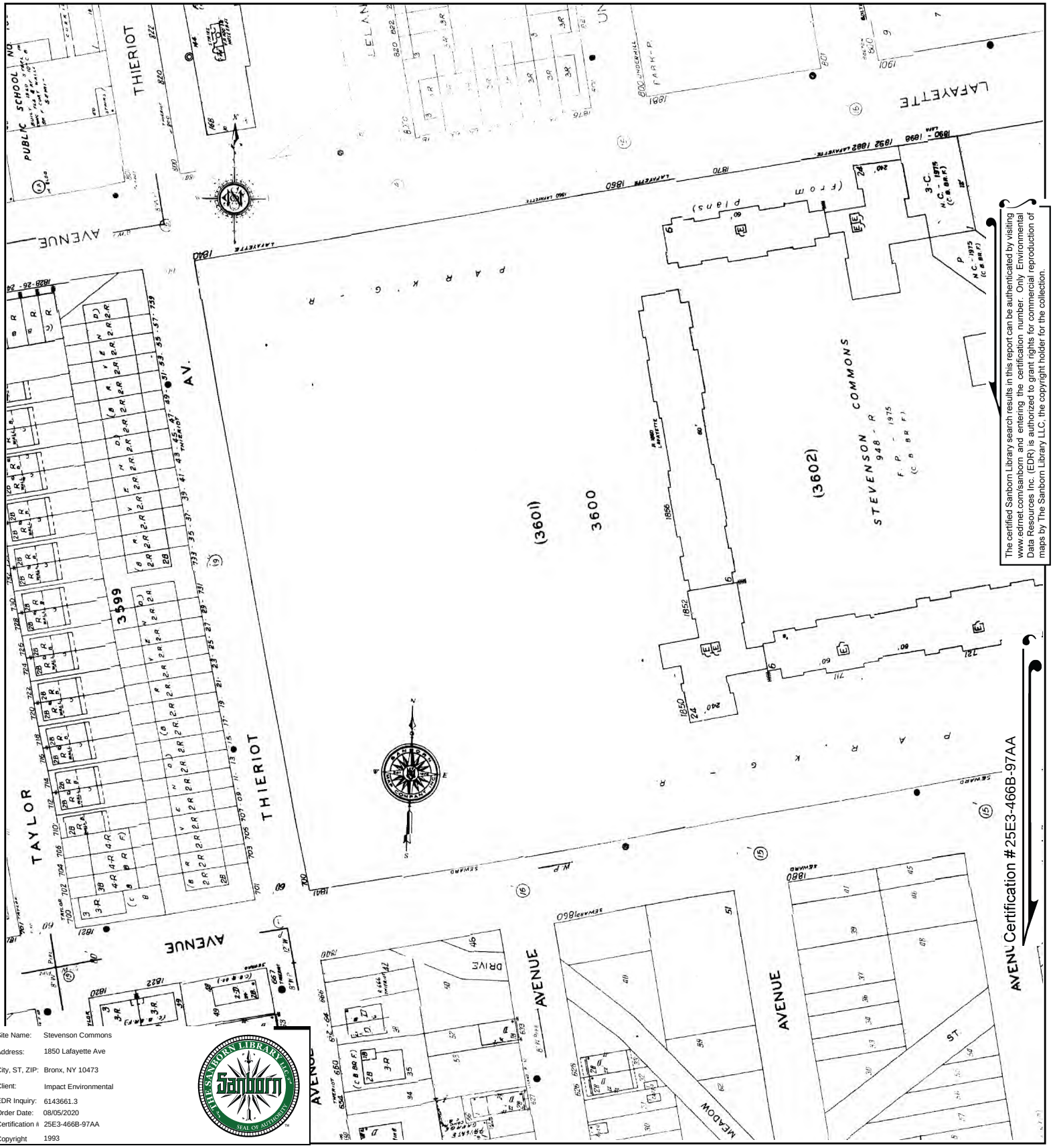




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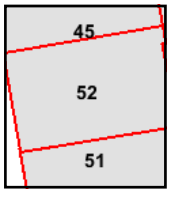
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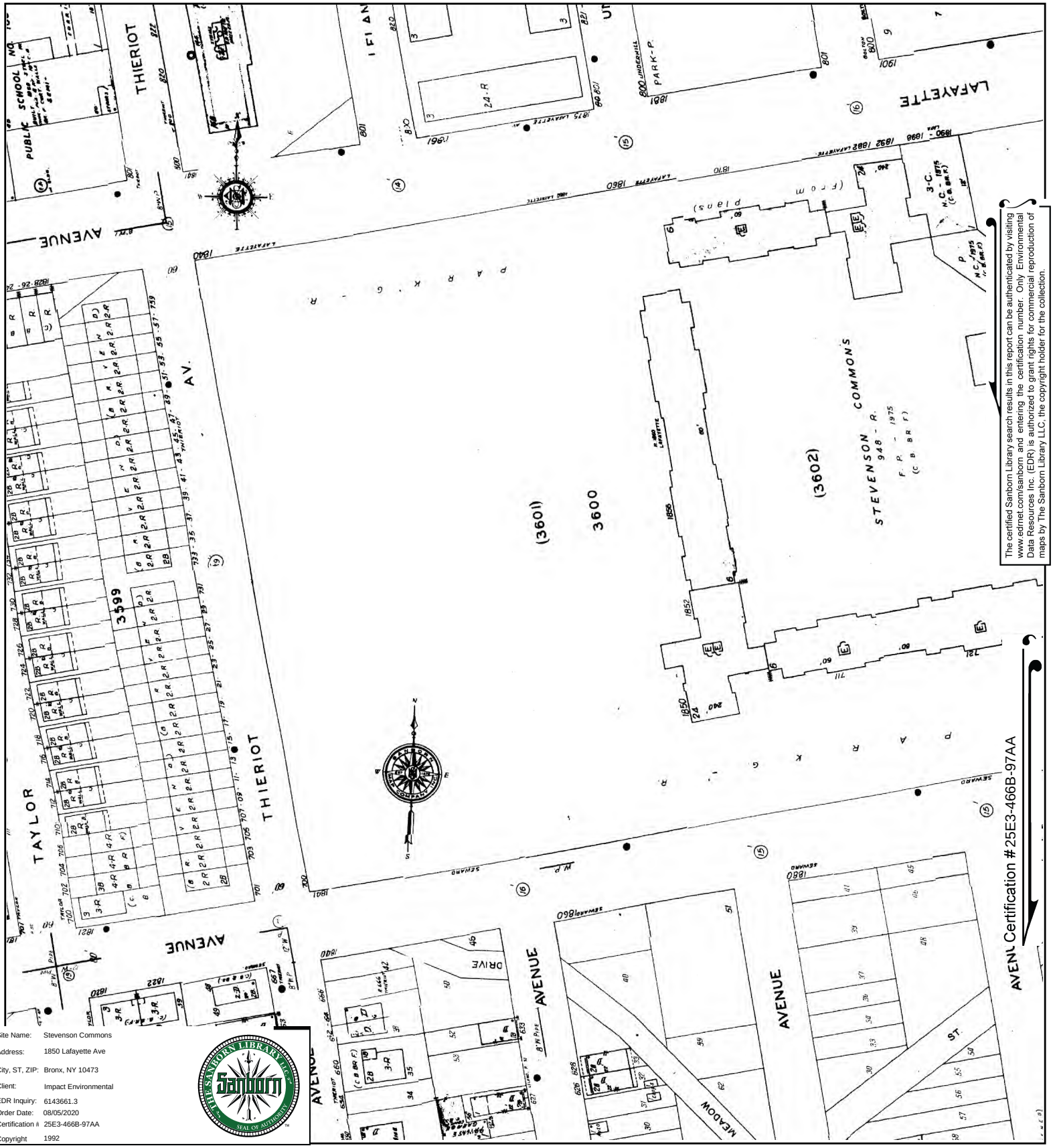
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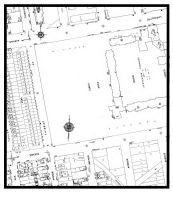
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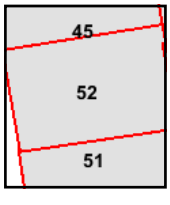


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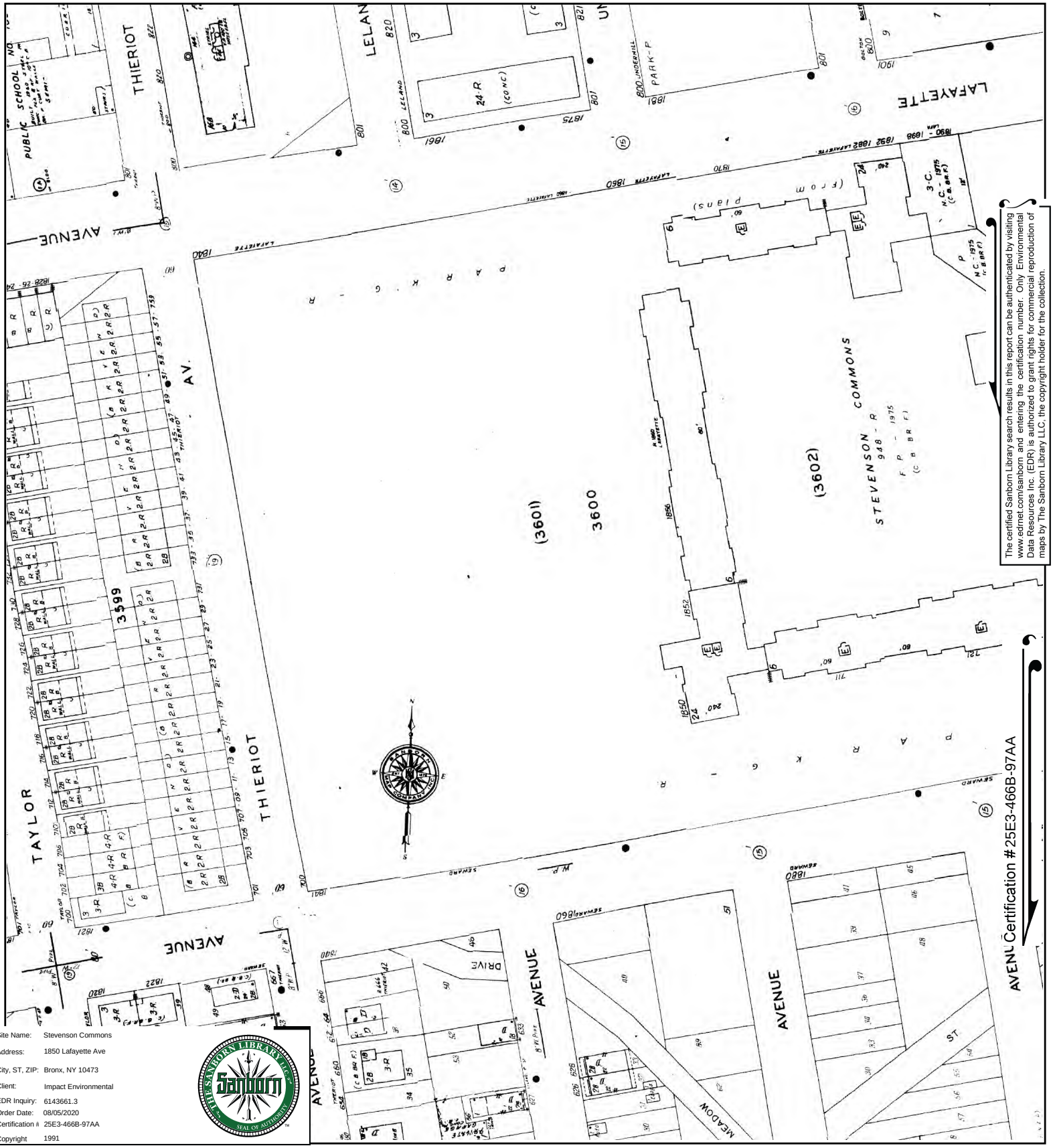




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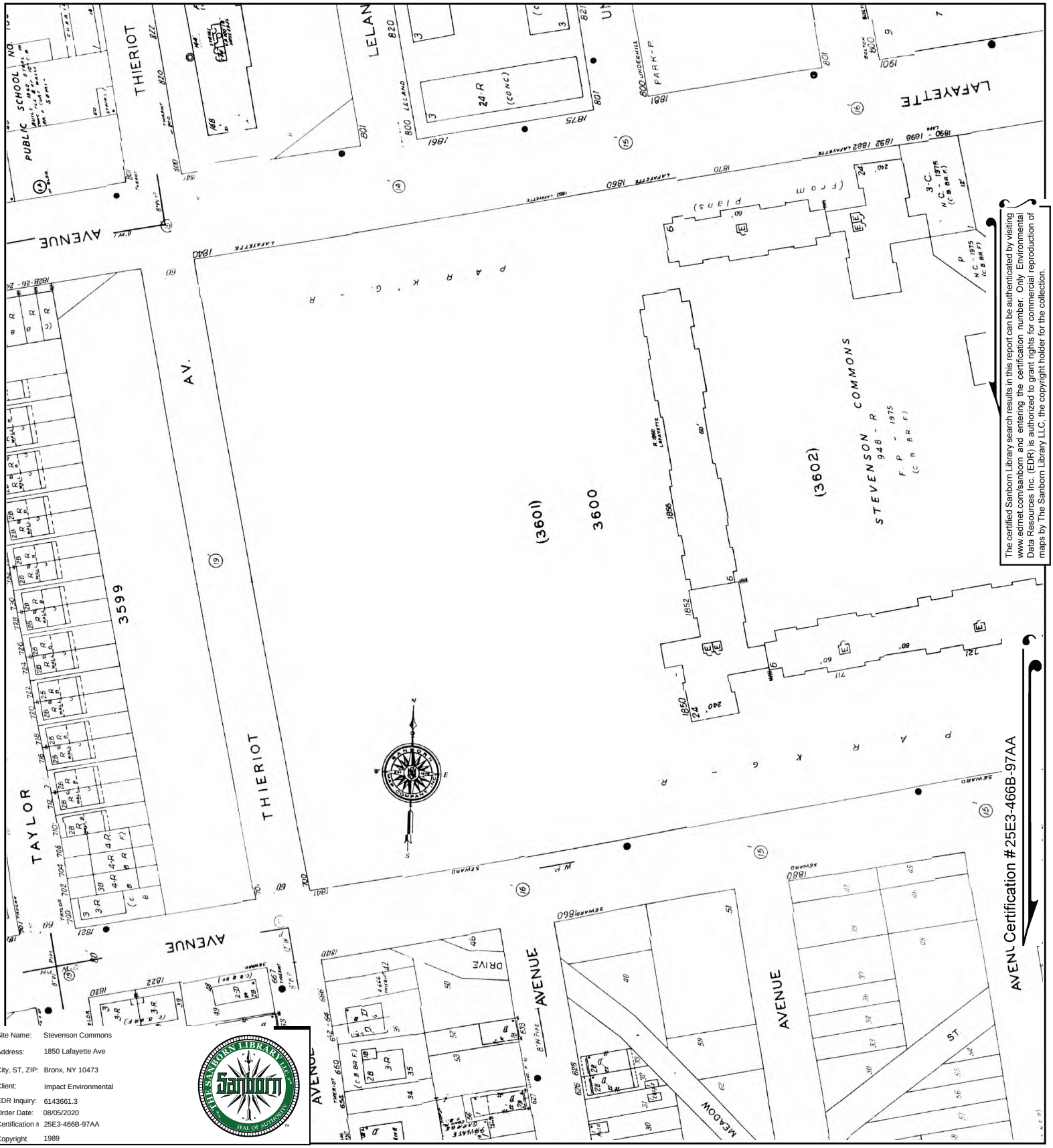




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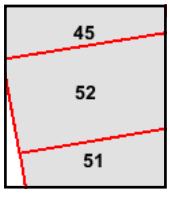


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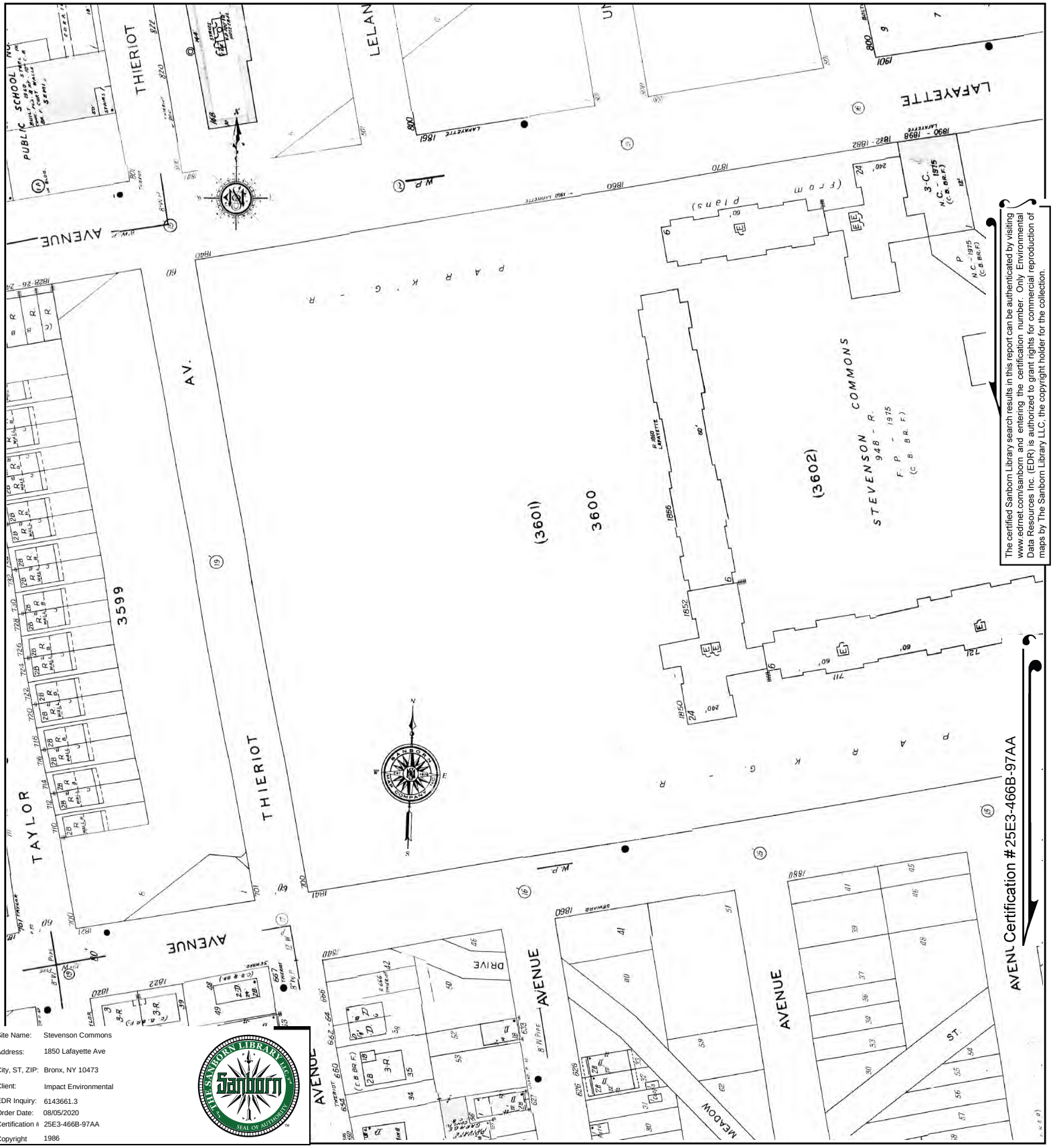




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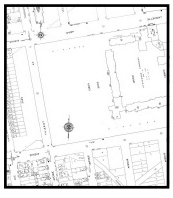


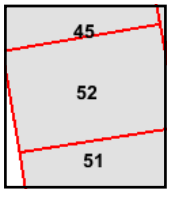
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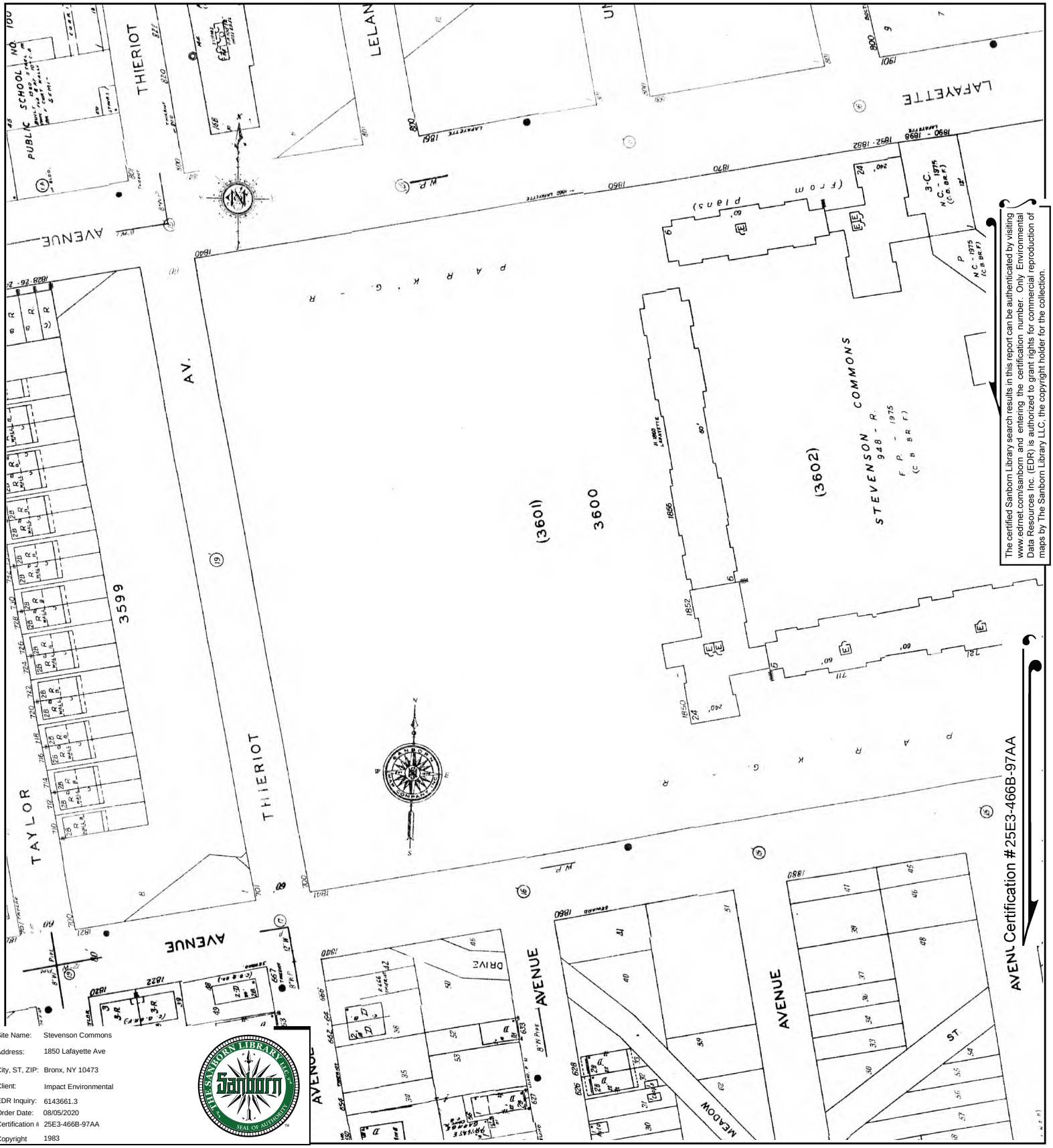
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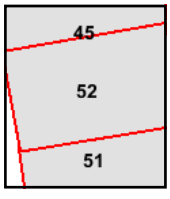


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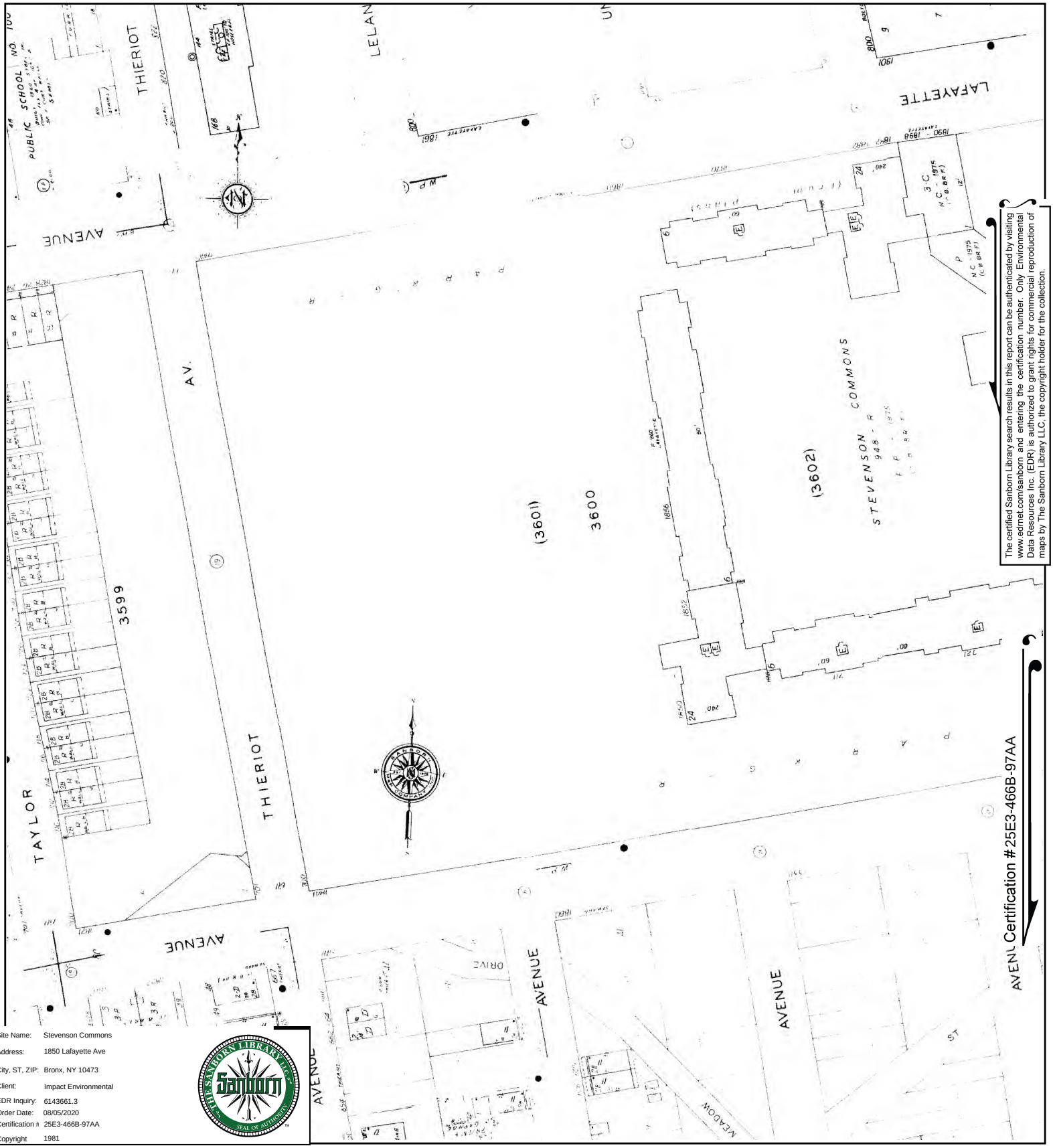




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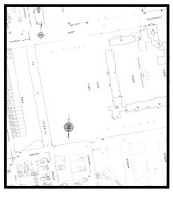
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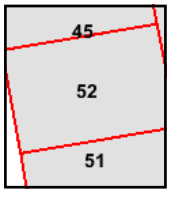


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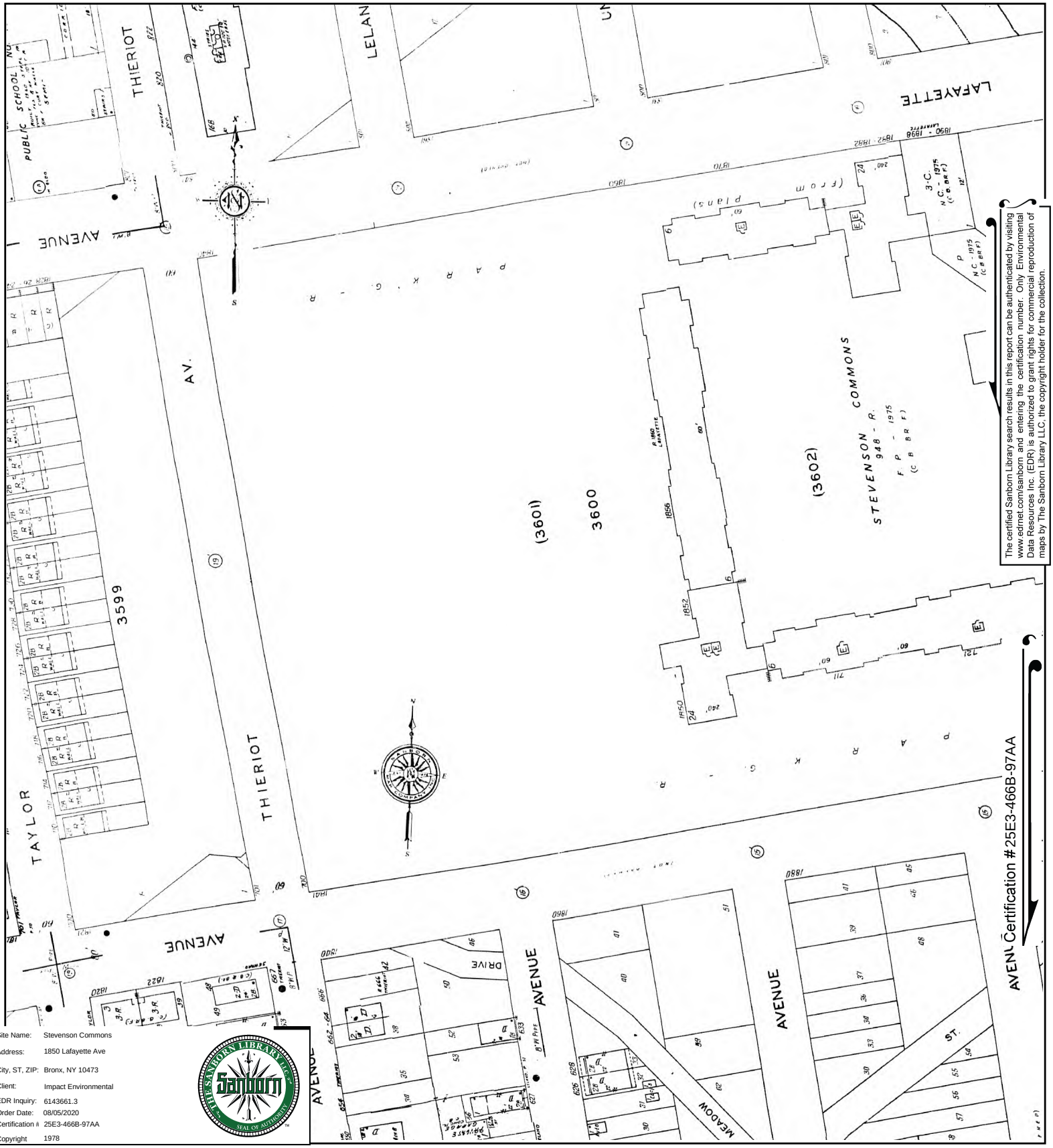




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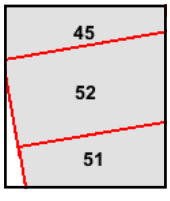
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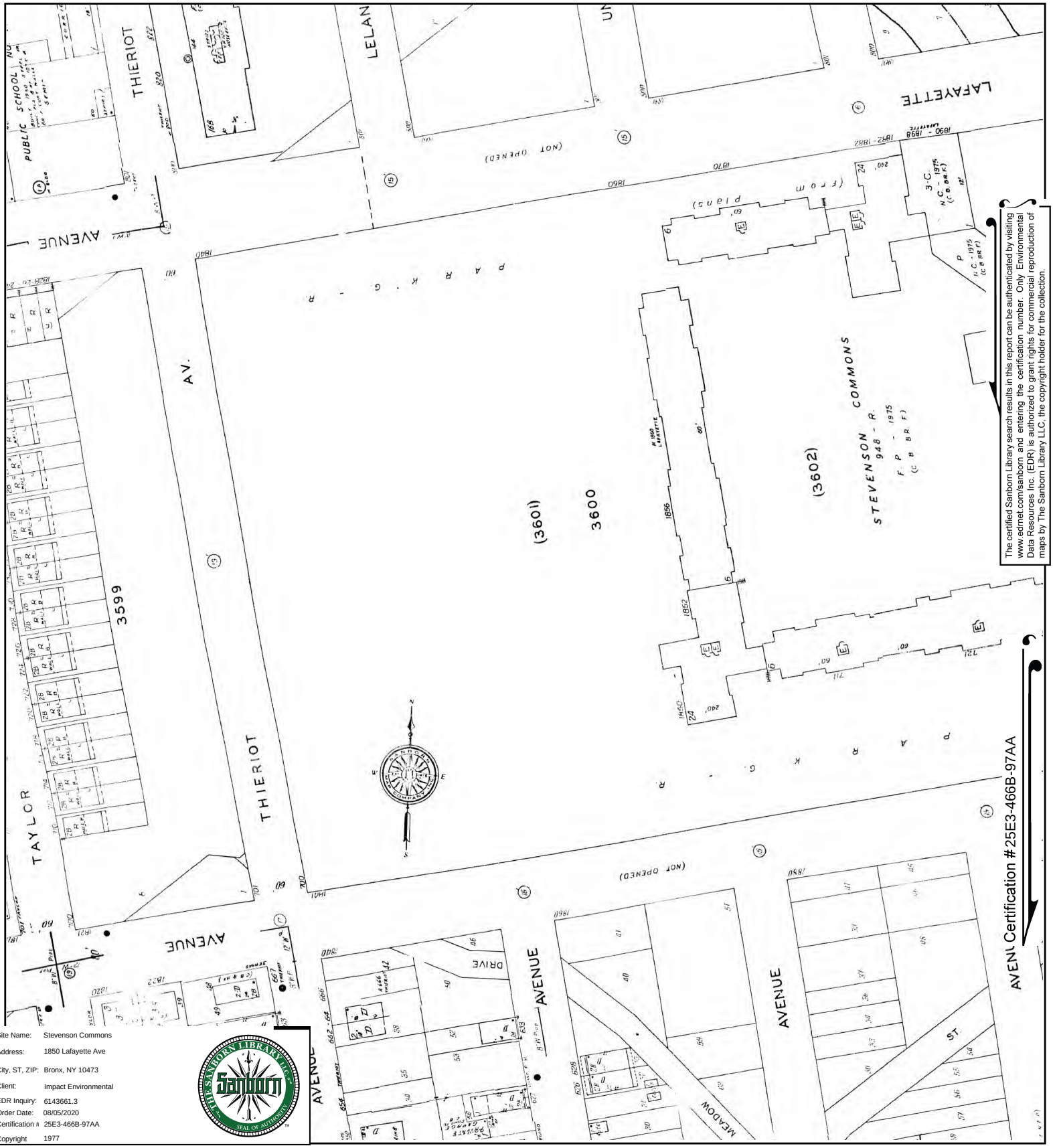




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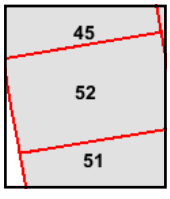


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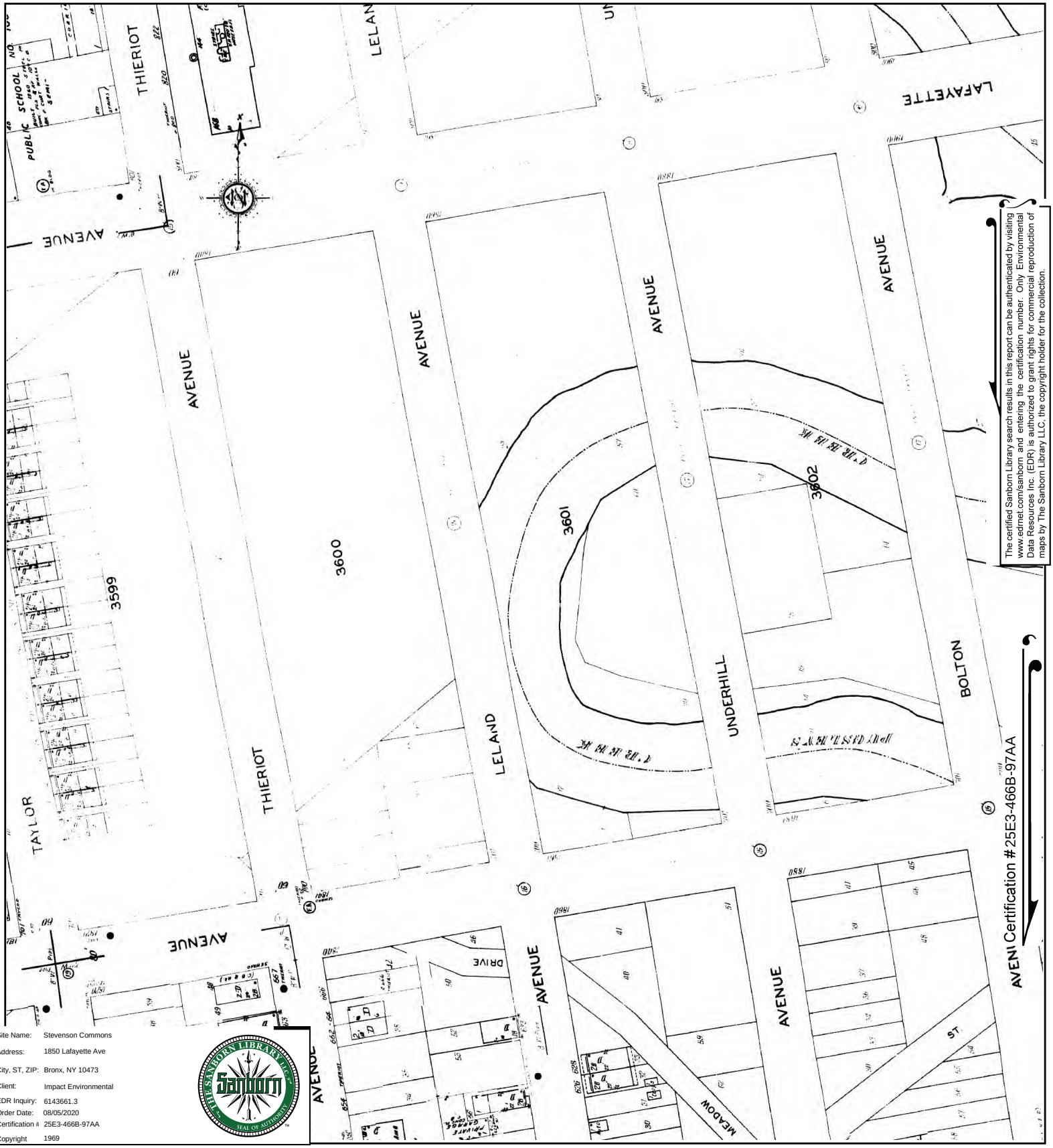




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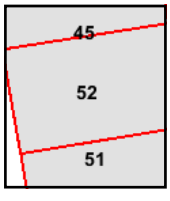
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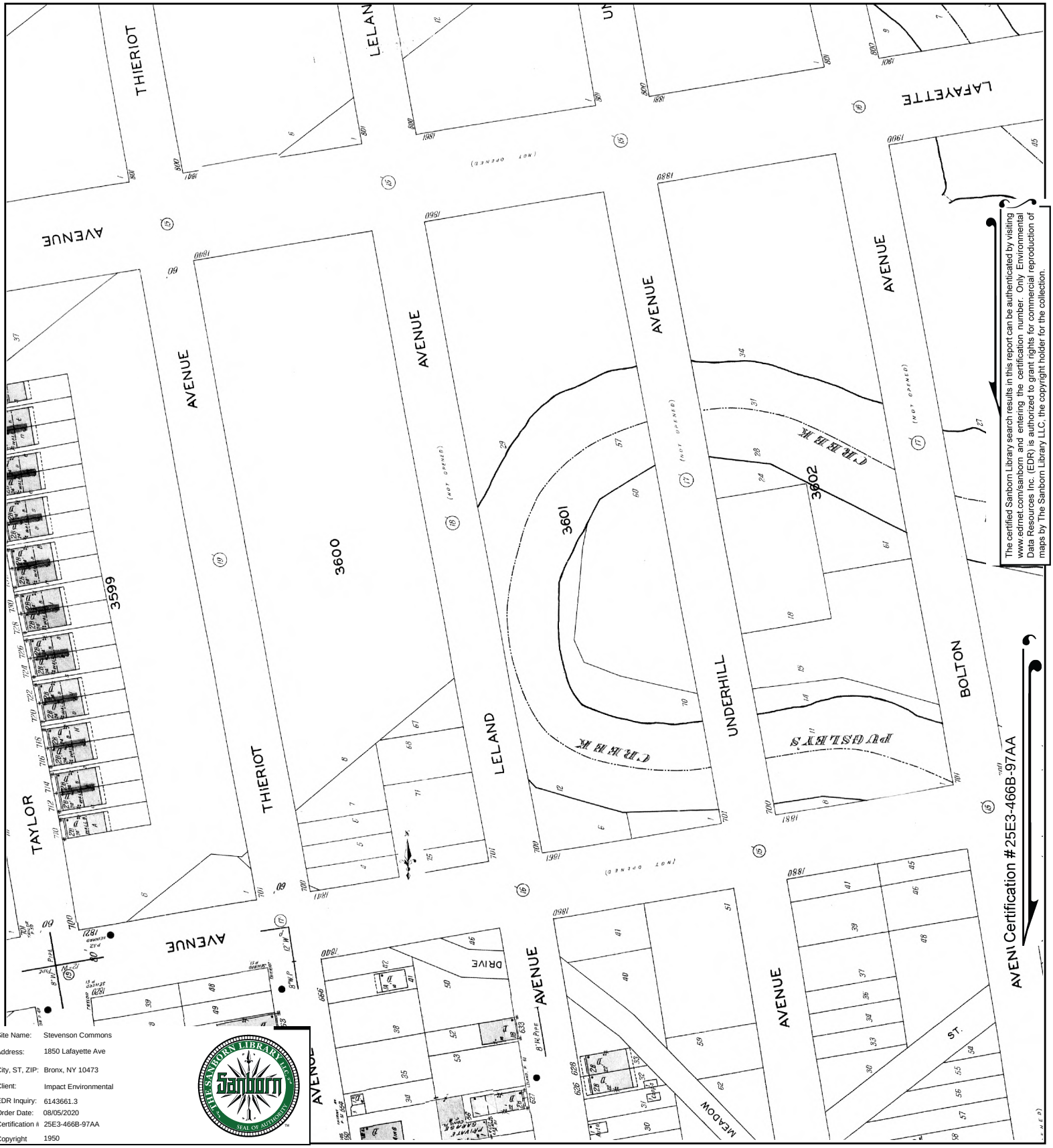




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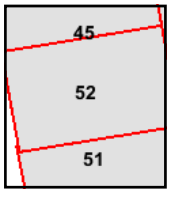
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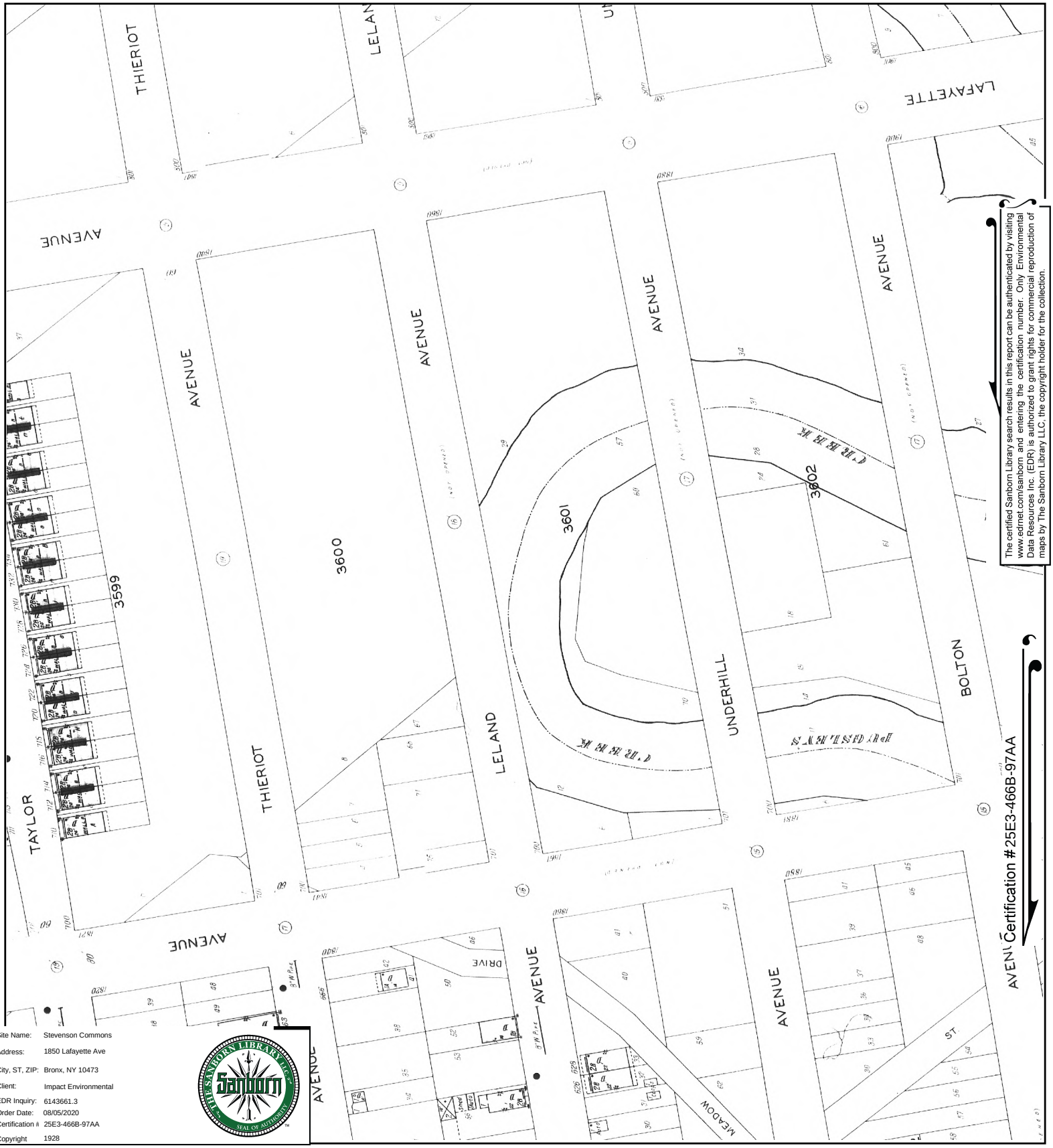
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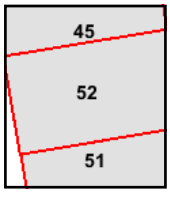
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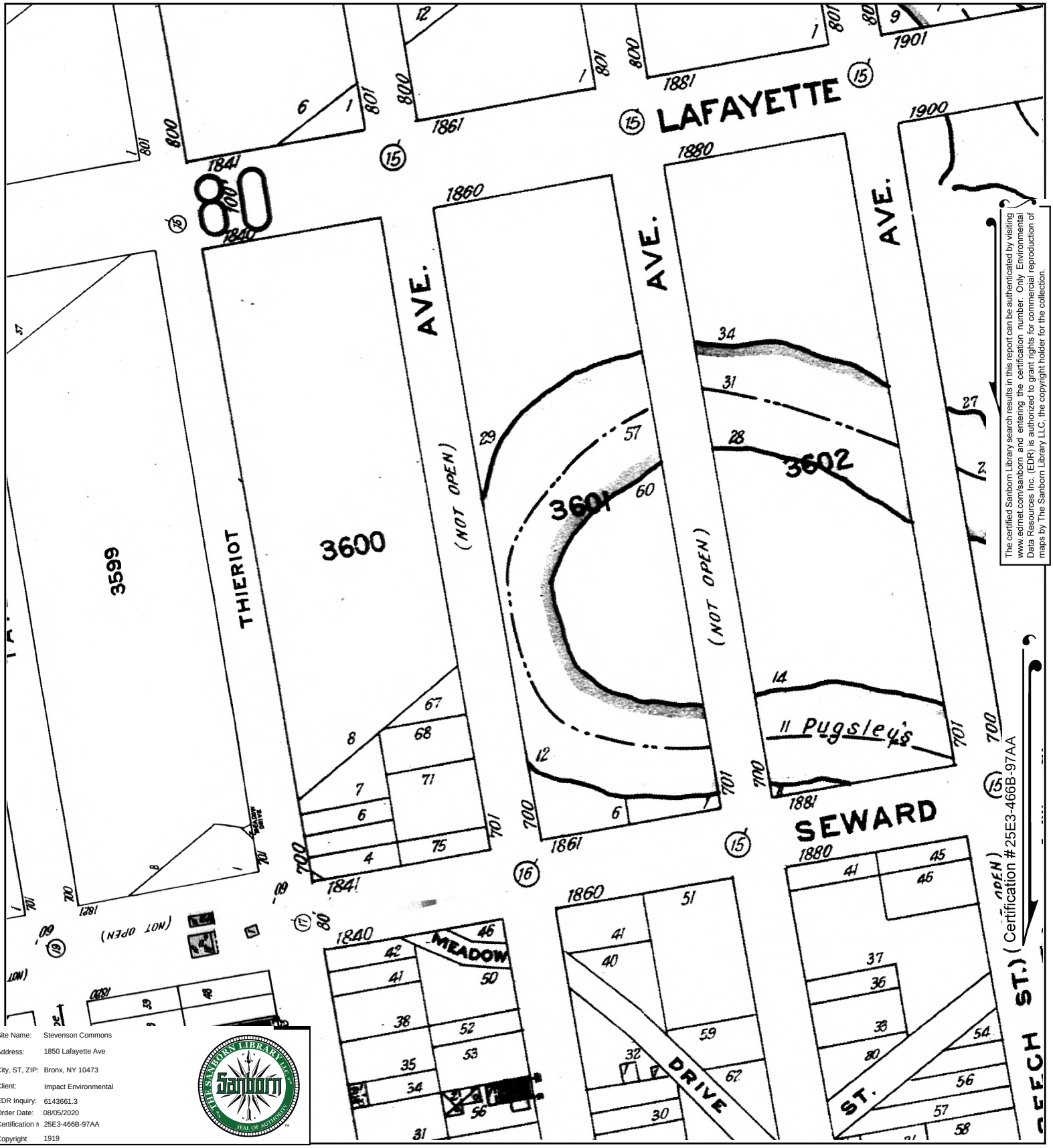




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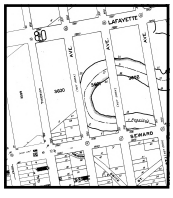
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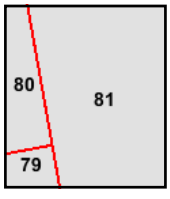
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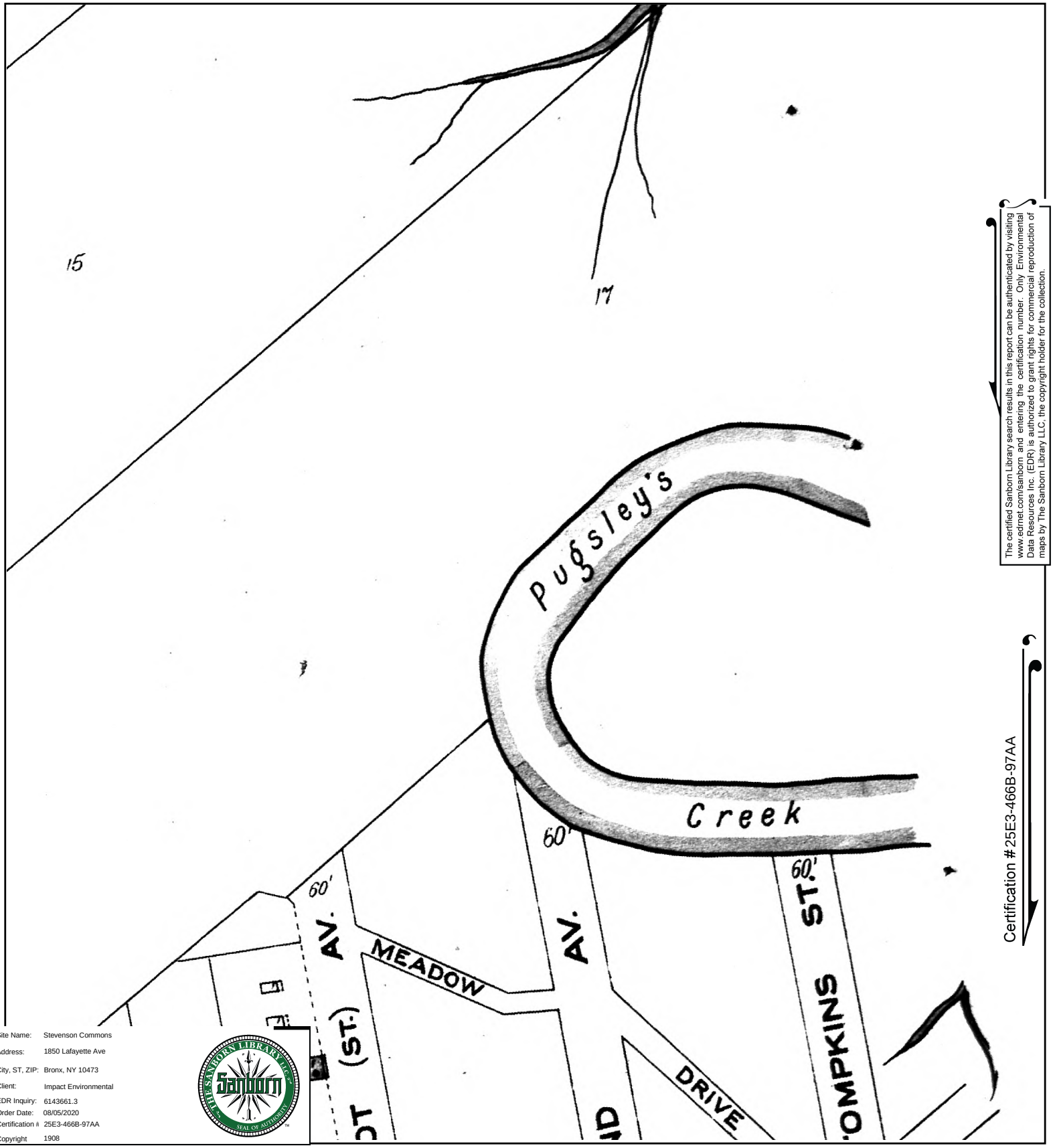
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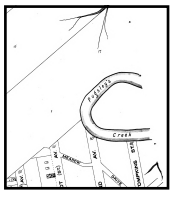


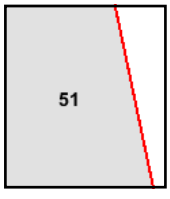
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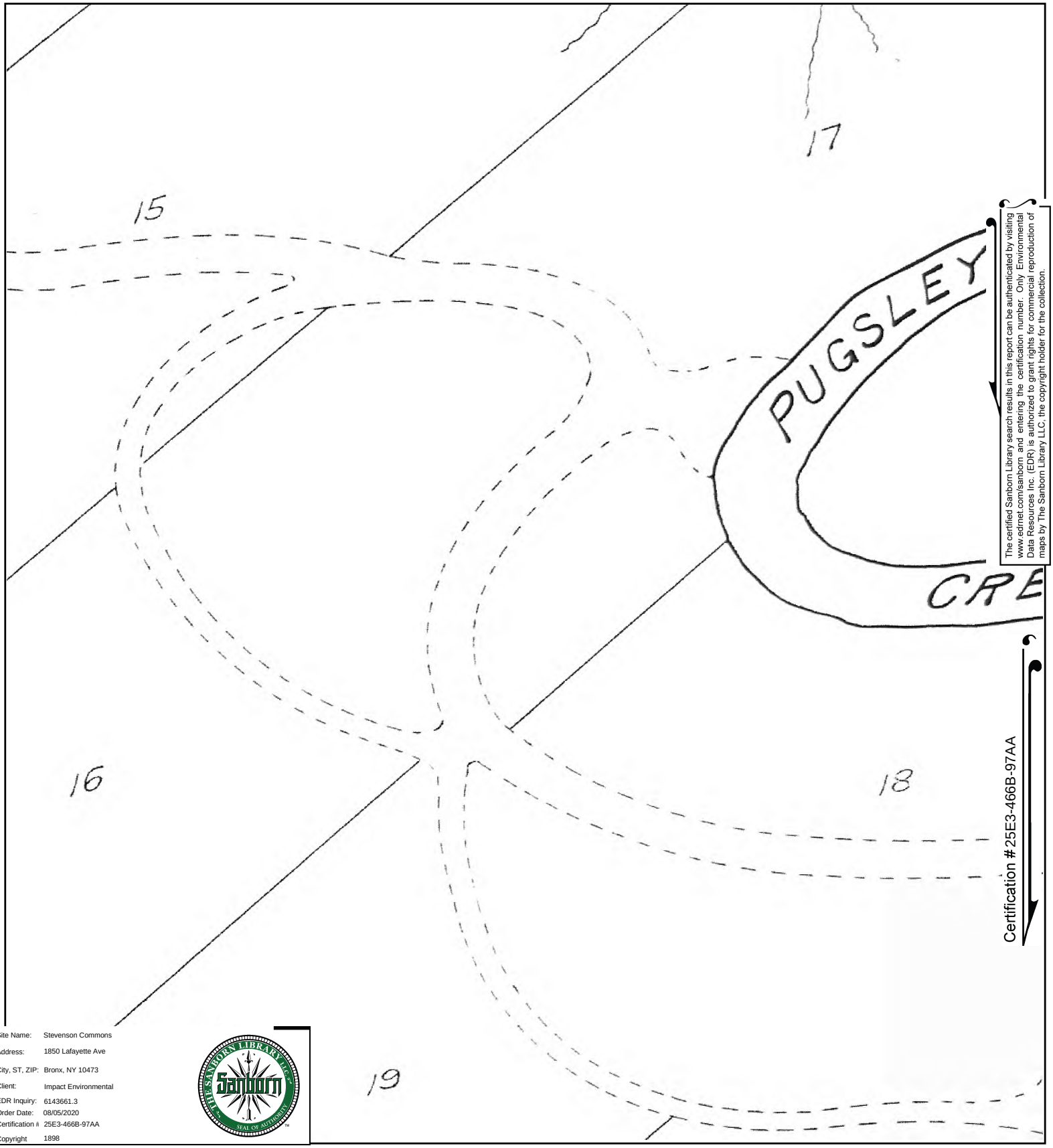




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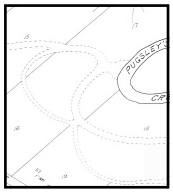


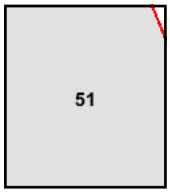
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APPENDIX E
STANDARDS, CRITERIA, AND GUIDANCE

STEVENSON COMMONS B3

1850 LAFAYETTE AVENUE

BRONX, NEW YORK

Standards, Criteria, and Guidance

AKRF Project Number: 240663
NYSDEC BCP Site Number: C203189

Prepared for:
New York State Department of Environmental Conservation
Division of Environmental Remediation
One Hunters Point Plaza
47-40 21st Street
Long Island City, NY 11101

On behalf of:
Stevenson B3 LLC
℅ Camber Property Group
116 East 27th Street, 11th Floor
New York, NY 10016

Prepared by:
AKRF, Inc.
440 Park Avenue South
New York, NY 10016
212-696-0670

SEPTEMBER 2026

1.0 SCGS FOR SITE CHARACTERIZATION AND REMEDIAL INVESTIGATION

The following standards and criteria typically will apply to Site Characterizations and Remedial Investigations conducted in New York State:

- 6 NYCRR Part 371 - Identification and Listing of Hazardous Wastes
- 6 NYCRR Part 375 – Environmental Remediation Programs
- 6 NYCRR Parts 700-706 - Water Quality Standards
- 6 NYCRR Part 182 - Endangered & Threatened Species of Fish & Wildlife
- 6 NYCRR Part 608 - Use and Protection of Waters
- 6 NYCRR Part 661 - Tidal Wetlands - Land Use Regulations
- 6 NYCRR Part 663 - Freshwater Wetlands Maps and Classification
- 6 NYCRR Part 257 - Air Quality Standards
- 10 NYCRR Part 5 of the State Sanitary Code - Drinking Water Supplies (May 1998)
- 29 CFR Part 1910.120 - Hazardous Waste Operations and Emergency Response
- 6 NYCRR Part 175 - Special Licenses and Permits--Definitions and Uniform Procedures

The following guidance typically applies to Site Characterizations and Remedial Investigations conducted in New York State:

- STARS #1 - Petroleum-Contaminated Soil Guidance Policy
- SPOTS #14 - Site Assessments at Bulk Storage Facilities (August 1994)
- TOGS 1.1.1 - Ambient Water Quality Standards & Guidance Values and Groundwater Effluent Limitations
- Fish and Wildlife Impact Analysis for Inactive Hazardous Waste Sites (October 1994)
- Technical Guidance for Screening Contaminated Sediments (January 1999)
- Niagara River Biota Contamination Project: Fish Flesh Criteria for Piscivorus Wildlife (July 1987)
- Wildlife Toxicity Assessment for Cadmium in Soils (May 1999)
- Air Guide 1 - Guidelines for the Control of Toxic Ambient Air Contaminants
- The 10 ppt Health Advisory Guideline for 2,3,7,8-TCDD in Sportfish Flesh
- The 1 ppm Health Advisory Guideline for Cadmium in Sportfish Flesh
- Criteria for the Development of Health Advisories for Sportfish Consumption
- NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006)
- DER Interim Strategy for Groundwater Remediation at Contaminated Sites in New York State

2.0 SCGS FOR REMEDY SELECTION

The following standards and criteria typically apply to the remedy selection process conducted in New York State:

- 6 NYCRR Part 375 – Environmental Remediation Programs
- 6 NYCRR Part 376 – Land Disposal Restrictions
- 6 NYCRR Part 608 – Use and Protection of Waters
- 6 NYCRR Part 661 – Tidal Wetlands - Land Use Regulations
- 6 NYCRR Part 663 – Freshwater Wetlands - Permit Requirements
- 6 NYCRR Parts 700-706 – Water Quality Standards
- 19 NYCRR Part 600 – Waterfront Revitalization and Coastal Resources

The following guidance typically applies to the remedy selection process conducted in New York State:

- TAGM 4044 – Accelerated Remedial Actions at Class 2, Non-RCRA Regulated Landfills (March 1992)
- TAGM 4051 – Early Design Strategy (August 1993)
- Citizen Participation in New York's Hazardous Waste Site Remediation Program: A Guidebook (June 1998)
- TAGM 3028 – "Contained In" Criteria for Environmental Media: Soil Action Levels (August 1997)
- Freshwater Wetlands Regulations – Guidelines on Compensatory Mitigation (October 1993)
- Air Guide 1 – Guidelines for the Control of Toxic Ambient Air Contaminants
- Technical Guidance for Screening Contaminated Sediments (January 1999)
- USEPA Office of Solid Waste and Emergency Response Directive 9355.047FS Presumptive Remedies: Policy and Procedures (September 1993)
- USEPA Office of Solid Waste and Emergency Response Directive 9355.048FS Presumptive Remedies:
- Site Characterization and Technology Selection for CERCLA sites with Volatile Organic Compounds in Soils (September 1993)
- USEPA Office of Solid Waste and Emergency Response Directive 9355.049FS Presumptive Remedy for CERCLA Municipal Landfills (September 1993)

3.0 SCGS FOR UNDERGROUND STORAGE TANK (UST) CLOSURE

The following standards and criteria typically apply to UST closures conducted in New York State:

- 6 NYCRR Part 612 – Registration of Petroleum Storage Facilities (February 1992)
- 6 NYCRR Part 613 – Handling and Storage of Petroleum (February 1992)
- 6 NYCRR Part 614 – Standards for New and Substantially Modified Petroleum Storage Tanks (February 1992)
- 6 NYCRR Part 371 – Identification and Listing of Hazardous Wastes (November 1998)
- 6 NYCRR Subpart 374-2 – Standards for the Management of Used Oil
- 6 NYCRR Parts 700-706 – Water Quality Standards
- 40 CFR Part 280 – Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks

The following guidance typically applies to UST closures conducted in New York State:

- STARS #1 – Petroleum-Contaminated Soil Guidance Policy
- STARS #2 – Biocell and Biopile Designs for Small-Scale Petroleum-Contaminated Soil Projects
- SPOTS #14 – Site Assessments at Bulk Storage Facilities (August 1994)
- Spill Response Guidance Manual
- Permanent Closure of Petroleum Storage Tanks
- TAGM 3028 – "Contained In" Criteria for Environmental Media: Soil Action Levels (August 1997)
- TOGS 1.1.1 – Ambient Water Quality Standards & Guidance Values and Groundwater Effluent Limitations
- Air Guide 1 – Guidelines for the Control of Toxic Ambient Air Contaminants
- NYSDOH Environmental Health Manual CSFP-530 – “Individual Water Supplies - Activated Carbon Treatment Systems”

4.0 SCGS FOR REMEDIAL ACTION

The following standards and criteria typically apply to Remedial Actions conducted in New York State:

- 29 CFR Part 1910.120 – Hazardous Waste Operations and Emergency Response
- 40 CFR Part 144 – Underground Injection Control Program
- 10 NYCRR Part 67 – Lead
- 12 NYCRR Part 56 – Industrial Code Rule 56 (Asbestos)
- 6 NYCRR Part 175 – Special Licenses and Permits - Definitions and Uniform Procedures
- 6 NYCRR Part 361 – Siting of Industrial Hazardous Waste Facilities
- 6 NYCRR Part 371 – Identification and Listing of Hazardous Wastes (November 1998)
- 6 NYCRR Part 372 – Hazardous Waste Manifest System and Related Standards for Generators, Transporters and Facilities (November 1998)
- 6 NYCRR Subpart 373-4 – Facility Standards for the Collection of Household Hazardous Waste and Hazardous Waste from Conditionally Exempt Small Quantity Generators (November 1998)
- 6 NYCRR Subpart 374-1 – Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities (November 1998)
- 6 NYCRR Subpart 374-3 – Standards for Universal Waste (November 1998)
- 6 NYCRR Part 375 – Inactive Hazardous Waste Disposal Sites (as amended January 1998)
- 6 NYCRR Part 376 – Land Disposal Restrictions
- 19 NYCRR Part 600 – Waterfront Revitalization and Coastal Resources
- 6 NYCRR Part 608 – Use and Protection of Waters
- 6 NYCRR Part 661 – Tidal Wetlands - Land Use Regulations
- 6 NYCRR Part 663 – Freshwater Wetlands - Permit Requirements
- 6 NYCRR Parts 700-706 – Water Quality Standards (June 1998)
- 6 NYCRR Part 750 through 758 – Implementation of NPDES Program in NYS ("SPDES Regulations")
- Technical Guidance for Screening Contaminated Sediments (January 1999)

The following guidance typically applies to Remedial Actions conducted in New York State:

- TAGM 4013 – Emergency Hazardous Waste Drum Removal/ Surficial Cleanup Procedures (March 1996)
- TAGM 4046 – Determination of Soil Cleanup Objectives and Cleanup Levels (January 1994)
- TAGM 4059 – Making Changes To Selected Remedies (May 1998)
- STARS #1 – Petroleum-Contaminated Soil Guidance Policy
- STARS #2 – Biocell and Biopile Designs for Small-Scale Petroleum-Contaminated Soil Projects
- TAGM 3028 – "Contained In" Criteria for Environmental Media: Soil Action Levels (August 1997)
- Citizen Participation in New York's Hazardous Waste Site Remediation Program: A Guidebook (June 1998)
- TOGS 1.1.1 – Ambient Water Quality Standards & Guidance Values and Groundwater Effluent Limitations
- TOGS 1.3.8 – New Discharges to Publicly Owned Treatment Works
- TOGS 2.1.2 – Underground Injection/Recirculation (UIR) at Groundwater Remediation Sites
- Air Guide 1 – Guidelines for the Control of Toxic Ambient Air Contaminants
- State Coastal Management Policies
- OSWER Directive 9200.4-17 – Use of Monitored Natural Attenuation at Superfund, RCRA Corrective Action, and Underground Storage Tank Sites (November 1997)

- NYSDOH Environmental Health Manual CSFP-530 – "Individual Water Supplies - Activated Carbon Treatment Systems"

5.0 SCGS FOR SITE MANAGEMENT

The following standards and criteria typically apply to Site Management activities conducted in New York State:

- 6 NYCRR Part 175 – Special Licenses and Permits--Definitions and Uniform Procedures

The following guidance typically applies to Site Management activities conducted in New York State:

- Groundwater Monitoring Well Decommissioning Procedures (May 1995)
- The activity is a component of a program selected by a process complying with the public participation requirements of section 1.10, to the extent applicable.
- NYSDOH Environmental Health Manual CSFP-530 – "Individual Water Supplies - Activated Carbon Treatment Systems"

APPENDIX F
FISH AND WILDLIFE REMEDIAL IMPACT ANALYSIS

Appendix 3C Fish and Wildlife Resources Impact Analysis Decision Key	If YES Go to:	If NO Go to:
1. Is the site or area of concern a discharge or spill event?	13	2
2. Is the site or area of concern a point source of contamination to the groundwater which will be prevented from discharging to surface water? Soil contamination is not widespread, or if widespread, is confined under buildings and paved areas.	13	3
3. Is the site and all adjacent property a developed area with buildings, paved surfaces and little or no vegetation?	4	9
4. Does the site contain habitat of an endangered, threatened or special concern species?	Section 3.10.1	5
5. Has the contamination gone off-site?	6	14
6. Is there any discharge or erosion of contamination to surface water or the potential for discharge or erosion of contamination?	7	14
7. Are the site contaminants PCBs, pesticides or other persistent, bioaccumulable substances?	Section 3.10.1	8
8. Does contamination exist at concentrations that could exceed ecological impact SCGs or be toxic to aquatic life if discharged to surface water?	Section 3.10.1	14
9. Does the site or any adjacent or downgradient property contain any of the following resources? i. Any endangered, threatened or special concern species or rare plants or their habitat ii. Any DEC designated significant habitats or rare NYS Ecological Communities iii. Tidal or freshwater wetlands iv. Stream, creek or river v. Pond, lake, lagoon vi. Drainage ditch or channel vii. Other surface water feature viii. Other marine or freshwater habitat ix. Forest x. Grassland or grassy field xi. Parkland or woodland xii. Shrubby area xiii. Urban wildlife habitat xiv. Other terrestrial habitat	11	10
10. Is the lack of resources due to the contamination?	3.10.1	14
11. Is the contamination a localized source which has not migrated and will not migrate from the source to impact any on-site or off-site resources?	14	12
12. Does the site have widespread surface soil contamination that is not confined under and around buildings or paved areas?	Section 3.10.1	12
13. Does the contamination at the site or area of concern have the potential to migrate to, erode into or otherwise impact any on-site or off-site habitat of endangered, threatened or special concern species or other fish and wildlife resource? (See #9 for list of potential resources. Contact DEC for information regarding endangered species.)	Section 3.10.1	14
14. No Fish and Wildlife Resources Impact Analysis needed.		

APPENDIX G
QUALITY ASSURANCE PROJECT PLAN

STEVENSONS COMMONS B3

1850 LAFAYETTE AVENUE

BRONX, NEW YORK

Quality Assurance Project Plan

AKRF Project Number: 240663
NYSDEC BCP Site Number: C203189

Prepared for:
New York State Department of Environmental Conservation
Division of Environmental Remediation
One Hunters Point Plaza
47-40 21st Street
Long Island City, NY 11101

On behalf of:
Stevenson B3 LLC
℅ Camber Property Group
116 East 27th Street, 11th Floor
New York, NY 10016

Prepared by:
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440 Park Avenue South
New York, NY 10016
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OCTOBER 2026

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FIGURE

Figure 1 – Proposed Endpoint Sample Plan

ATTACHMENTS

Attachment A – Resumes for Remedial Engineer, Quality Assurance/Quality Control (QA/QC) Officer, Project Manager, Alternate Project Manager, Site Safety Officer (SSO), Laboratory QA/QC Officer and Laboratory Data Validator
Attachment B – Laboratory Standard Operating Procedures (SOPs) for per- and polyfluorinated compounds (PFAS)
Attachment C – Sample Chain-of-Custody

1.0 INTRODUCTION

This Quality Assurance Project Plan (QAPP) describes the protocols and procedures that will be followed during implementation of all environmental sampling under the Remedial Action Work Plan (RAWP) at the Stevensons Commons B3 site located at 1850 Lafayette Avenue in the Clason Point neighborhood of the Bronx, New York (the Site). The Site, which is also defined as Bronx Borough Tax Block 3600, portions of Lots 4, 15, and 25, currently consists of a vacant field and asphalt-paved roadway used for emergency access (fire lane) and surrounding landscaped areas. A Site Location Plan is provided as Figure 1 in the RAWP.

The objective of this QAPP is to provide for Quality Assurance (QA) and maintain Quality Control (QC) of environmental investigative, sampling, and remedial activities conducted under the New York State Department of Environmental Conservation (NYSDEC) oversight in the Brownfield Cleanup Program (BCP) (BCP Site No. C203189). Adherence to the QAPP will ensure that defensible data will be obtained during all environmental work at the Site.

2.0 PROJECT TEAM

The project team will be drawn from AKRF professional and technical personnel, and AKRF's subcontractors. All field personnel and subcontractors will have completed a 40-hour training course and updated 8-hour refresher course that meet the Occupational Safety and Health Administration (OSHA) requirements of 29 Code of Federal Regulations (CFR) Part 1910. The following sections describe the key project personnel and their responsibilities.

2.1 Remedial Engineer

The remedial engineer will be responsible for oversight of the design of all Institutional Controls (ICs) and Engineering Controls (ECs) at the Site. Rebecca Kinal will serve as the remedial engineer for the RAWP. Ms. Kinal's resume is included in Attachment A.

2.2 Quality Assurance/ Quality Control (QA/QC) Officer

Deborah Shapiro will serve as the QA/QC officer and will be responsible for adherence to the QAPP. The QA/QC officer will review the procedures with all personnel prior to commencing any fieldwork and will conduct periodic Site visits to assess implementation of the procedures. The QA/QC officer will also be responsible for reviewing the Data Usability Summary Reports (DUSRs) for all analytical results. Ms. Shapiro's resume is included in Attachment A.

2.3 Project Manager

The project manager will be responsible for directing and coordinating all elements of the RAWP. The project manager will prepare reports and participate in meetings with the Site owner/Volunteer and/or NYSDEC. Tim Larigan will serve as the project manager for the RAWP. Mr. Larigan's resume is included in Attachment A.

2.4 Alternate Project Manager

The alternate project manager will be responsible for assisting the project manager. The alternate project manager will help manage tasks and prepare reports, and will participate in meetings with the Site owner/Volunteer and/or the NYSDEC, as needed. Mark Jepsen will serve as the alternate project manager for the RAWP. Mr. Jepsen's resume is included in Attachment A.

2.5 Site Safety Officer (SSO)

The SSO will be responsible for supervising the daily sampling and health and safety activities in the field and will ensure adherence to the work plan and Health and Safety Plan (HASP), included as Appendix H of the RAWP. They will report to the project manager or alternate project manager on a regular basis regarding daily progress and any deviations from the work plan. The SSO will be a qualified and responsible person able to act professionally and promptly during environmental work at the Site. Jonas Peters will act as the SSO. Mr. Peters' resume is included in Attachment A.

2.6 Laboratory QA/QC Officer

The laboratory QA/QC officer will be responsible for quality control procedures and checks in the laboratory and ensuring adherence to laboratory protocols. The QA/QC officer will track the movement of samples from the time they are checked in at the laboratory to the time that analytical results are issued, and will conduct a final check on the analytical calculations and sign off on the laboratory reports. The laboratory QA/QC officer will be Carl Armbruster of Eurofins Environmental Testing Laboratories (Eurofins), a New York State Department of Health (NYSDOH) Environmental Laboratory Accreditation Program (ELAP)-certified laboratory being employed for all environmental sampling at the Site. Mr. Armbruster's resume is included in Attachment A.

2.7 Laboratory Data Validator

The laboratory data validator will be responsible for third party data validation and preparation of DUSRs. The third-party laboratory data validator will be Lori Beyer of L.A.B. Validation Corp. Ms. Beyer's resume is included in Attachment A.

3.0 STANDARD OPERATING PROCEDURES (SOPS)

The following sections describe the standard operating procedures (SOPs) for the remedial activities included in the RAWP. During these operations, safety monitoring will be performed as described in the HASP, included as Appendix H of the RAWP.

3.1 Equipment

High density polyethylene (HDPE) materials are considered acceptable for collecting samples where PFAS is the contaminant of concern (COC). Sampling equipment should not come in contact with aluminum foil, low-density polyethylene (LDPE), glass, polytetrafluoroethylene (PTFE or Teflon™), including sample jars with a PTFE liner under the cap. Field personnel should avoid clothing that contains PTFE, including Gore-Tex®, and any PFAS-related materials used in waterproofing, bug spray, and sunscreen.

3.2 Decontamination of Sampling Equipment

All sampling equipment (augers, drilling rods, split spoon samplers, probe rods, pumps, etc.) will be either dedicated or decontaminated between sampling locations. Decontamination will be conducted on plastic sheeting (or equivalent) that is bermed to prevent discharge to the ground. The decontamination procedures (inclusive of PFAS-specific procedures) will be as follows:

1. Tap/scrape to remove adhered soil/fill.
2. Scrub using a PFC-free water/Alconox® mixture and bristle brush.
3. Rinse with PFC-free water.
4. Scrub again with a PFC-free water/Alconox® mixture and bristle brush.
5. Rinse with PFC-free water.
6. Rinse with distilled water.
7. Air-dry the equipment, if possible.

3.3 Excavation and Removal of Contaminated Material

Contaminated soil will be removed during remedial activities conducted under the RAWP. Soil excavation work will comprise the following activities:

1. Prior to soil excavation work, all existing groundwater monitoring wells will be decommissioned in accordance with NYSDEC CP-43.
2. Excavated soil will be removed using an excavator in accordance with the RAWP and Support of Excavation (SOE) Plan. Excavated soils will be managed in separate waste streams as indicated by future waste characterization sampling.
3. All excavated material requiring staging for overnight or longer will follow the procedures in Section 3.3.1.

3.3.1 Stockpiling/Staging Area

Prior to excavation and removal of contaminated material, the stockpiling/staging area will be selected and prepared prior to the commencement of excavation activities. Staging area(s) will be prepared for staging any contaminated material overnight or longer using the procedures described below:

The material staging area(s) will be prepared by placing 6-mil plastic on the ground and covered with additional 6-mil plastic sheeting. Sealable containers with tight-fitting covers may also be utilized for the staging of VOC-contaminated material overnight or longer.

3.4 Heavy Equipment Decontamination

Decontamination of chemically contaminated heavy equipment will be accomplished using high-pressure steam or dry decontamination with brushes and shovels. PFC-free water will be used in instances where PFAS is the COC. Decontamination will take place on a decontamination pad and all liquids used in the decontamination procedure will be collected. Vehicles or equipment brought into an exclusion zone will be treated as contaminated and will be decontaminated prior to removal. All liquids used in the decontamination procedure will be collected, stored and disposed of in accordance with Federal, State and local regulations. Personnel performing this task will wear the proper personal protective equipment (PPE) as prescribed in Table 2 of the Site-Specific HASP.

A decontamination area will be established around the planned excavation area, adjacent to the environmental enclosure. The floor of the decontamination area will be covered with 6-mil plastic sheeting, as necessary, and bermed to prevent spreading of decontamination fluids or potential discharge to the ground surface.

3.5 Management of Investigation Derived Waste (IDW)

IDW will be containerized in DOT-approved 55-gallon drums during remedial activities. The drums will be sealed at the end of each workday and labeled with the date, the boring location(s), the type of waste (i.e., drill cuttings), and the name and phone number of an AKRF point-of-contact; and will be stored with best management practices in mind (e.g., using secondary containment, covering with tarp to avoid exposure to elements, secure storage away from public). All IDW collected into drums will be sampled and disposed of or treated according to applicable local, state, and federal regulations.

4.0 SAMPLING AND LABORATORY PROCEDURES

4.1 Soil Sampling

Per NYSDEC DER-10 Section 5.4, side-wall samples will be collected a minimum one sample for every 30 linear feet and bottom samples will be collected at a frequency of one every 900-SF, except where SOE is present. The proposed endpoint sample locations are shown on Figure 1; and proposed excavation areas and number of endpoint samples, as well as soil boring samples are further detailed in the RAWP. Soil endpoint samples will be analyzed for the full suite of analyses, as listed in Section 4.2, Table 1.

Soil sampling for will be conducted according to the following procedures:

- Characterize the sample according to the modified Burmister soil classification system.
- While advancing soil borings and field screening for evidence of contamination (e.g. odors, staining, elevated PID measurements), collect an aliquot of soil from each sampling interval and place in labeled sealable plastic bags. The bag should be labeled with the soil boring number and the depth the sample was collected. Place the plastic bags in a chilled cooler to await selection of samples for laboratory analysis.
- After selecting which samples will be analyzed in the laboratory, fill the required laboratory-supplied sample jars with the soil from the selected sampling location or labeled sealable plastic bags. Seal and label the sample jars as described in Section 4.6.1 of this QAPP and place in an ice-filled cooler.
- Samples analyzed for the emerging contaminants, per- and polyfluorinated compounds (PFAS), should be HDPE containers labeled with a ballpoint pen, not permanent marker; and the sample containers should be placed in a separate cooler with real ice, as opposed to freezer packs or other ice alternatives.
- Complete the proper chain of custody (COC) paperwork and seal the cooler.
- Record boring number, sample depth and sample observations (evidence of contamination, PID readings, soil classification) in field log book and boring log data sheet, if applicable.
- Decontaminate any soil sampling equipment between sample locations as described in Section 3.2/3.4 of this QAPP.

4.2 Laboratory Methods

Table 1 summarizes the laboratory methods that will be used to analyze field samples and the sample container type, preservation, and applicable holding times. Eurofins of Edison, New Jersey, a NYSDOH ELAP-certified laboratory subcontracted to AKRF, will be used for all chemical analyses in accordance with the NYSDEC Division of Environmental Remediation (DER) Technical Guidance for Site Investigation and Remediation (DER-10) Sections 2.1(b) and 2.1(f) with Category B Deliverables. Eurofins will achieve a minimum detection limit of 0.28 microgram per liter (µg/L) for 1,4-dioxane and 2 nanograms per liter (ng/L) for the standard list of 40 PFAS compounds. The Laboratory Standard Operating Procedures (SOPs) for PFAS analysis are provided as Attachment B.

Table 1
Laboratory Analytical Methods for Analysis Groups

Matrix	Analysis	EPA Method	Bottle Type	Preservative	Hold Time
Soil and Soil QA/QC	VOCs	8260C	EnCore samplers (3) and 2 oz. plastic jar	≤ 6 ºC	48 hours to extract, 14 days to analyze
	SVOCs	8270D	8 oz. Glass Jar	≤ 6 ºC	14 days to extract, 40 days to analyze
	TAL metals, mercury, and hexavalent chromium	6000/7000 Series, 7470A, and 7196A	8 oz. Glass Jar	≤ 6 ºC	6 months holding time; mercury 28 days holding time; hexavalent chromium 30 days to extract, 7 days to analyze
	Pesticides	8081B	8 oz. Glass Jar	≤ 6 ºC	14 days to extract, 40 days to analyze
	Herbicides	8151A	2,000 mL Amber Jar	≤ 6 ºC	7 days to extract; 40 days to analyze
	PCBs	8082A	8 oz. Glass Jar	≤ 6º C	14 days to extract, 40 days to analyze
	1,4-Dioxane	8270D	4 oz. Glass Jar	≤ 6º C	14 days to extract, 40 days to analyze
	PFAS	1633A	4 oz. HDPE Plastic Jar	≤ 6º C	14 days to extract, 40 days to analyze
	TCLP Metals	6020B and 7196B	8 oz. Glass Jar	≤ 6º C	14 days to analyze

Notes:
EPA - Environmental Protection Agency
RCRA – Resource Conservation and Recovery Act
HDPE – High Density Polyethylene

4.3 Quality Control (QC) Sampling

In addition to the laboratory analysis of the soil samples, additional analysis will be included for QC measures, as required by the Category B sampling techniques, including field blank, trip blank, matrix spike/matrix spike duplicate (MS/MSD), and blind duplicate samples at a frequency of one sample per 20 field samples collected or per sample delivery group (SDG). QC samples will be analyzed for the same parameters as the accompanying samples, except for trip blanks, which will be analyzed for the VOC list only.

4.4 Sample Handling

4.4.1 Sample Identification

All samples will be consistently identified in all field documentation, chain of custody documents, and laboratory reports. All samples will be amended with a collection date at the end of the sample in a year, month, day (YYYYMMDD) format. Blind duplicate sample nomenclature will consist of the sample type, followed by an "X"; MS/MSD samples nomenclature will consist of the parent sample name, followed by "MS/MSD"; and trip and field blanks will consist of "TB-" and "FB-", respectively, followed by a sequential number of the trip/field blanks collected within the SDG. Special characters, including primes/apostrophes (’), will not be used for sample nomenclature.

Soil samples will be identified with "SB-" for soil borings, followed by the soil boring number. Soil samples will also be amended with the sample collection depth interval in parentheses.

Endpoint Soil Sampling

Soil endpoint samples will be identified with "EP-" and the endpoint sample number in sequential order that the endpoint sample was collected, and the depth below grade the sample was collected from in parentheses. Table 2 provides examples of the sampling identification scheme for the post-excavation endpoint samples.

Table 2
Endpoint Sample Nomenclature

Sample Description	Sample Designation
Post-excavation endpoint soil sample EP-01 collected from 15 feet below grade on June 1, 2027	EP-01_15_20270601
Matrix spike/matrix spike duplicate sample of post-excavation endpoint soil sample EP-01 collected from 15 feet below grade on June 1, 2027	EP-01_15_20270601
Duplicate of post-excavation endpoint soil sample EP-01 collected from 15 feet below grade on June 1, 2027	EP-X_15_20270601
Trip blank sample collected during an endpoint soil sampling event on June 1, 2027	EP-TB-20270601
Field blank sample collected during an endpoint sampling event on June 1, 2027	EP-FB-20270601

Waste Classification/ Tank Excavation Soil Sampling

In addition to the nomenclature detailed above, any confirmatory endpoint samples collected from a tank excavation will be identified by the tank number and the cardinal direction of the sidewalls. The sample(s) collected from the bottom of the excavation will be amended with a "B-", followed by the number of bottom samples collected from the excavation in sequential order. Waste classification samples will be amended with "WC-" and the alphanumeric grid identification. Additionally, samples will be amended with the depth the sample was collected in feet below grade in parentheses. Table 3 below provides examples of the sampling identification scheme for proposed waste classification samples and any hotspot or tank excavation samples.

Table 3
Waste Classification/Hotspot/Tank Excavation Sample Nomenclature

Sample Description	Sample Designation
Waste classification composite sample collected between grade and 2 feet below grade in grid 08 on May 5, 2027	WC-08-C_0-2_20270501
Waste classification grab sample collected between grade and 2 feet below grade in grid 08 on May 5, 2027	WC-08-G_0-2_20270501
Soil sample collected from the northern sidewall of a tank grave encountered at 4 feet below grade on June 1, 2027	UST-N_4_20270601
Third soil sample collected at 10 feet below grade from the base of the tank grave on June 1, 2027	UST-B3_10_20270601

Import Soil Sampling

Soil import samples will be identified with "ISP-" and the import sample number in sequential order that the import sample was collected. Table 4 provides examples of the sampling identification scheme for import soil samples.

Table 4
Import Soil Sample Nomenclature

Sample Description	Sample Designation
Import soil sample ISP-1 collected on July 1, 2027	ISP-01_20270701
Matrix spike/matrix spike duplicate sample of import soil sample ISP-1 collected on July 1, 2027	ISP-01_20270701
Blind duplicate of import soil sample ISP-1 collected on July 1, 2027	ISP-X01_20270701

Reuse Soil Sampling

Soil reuse samples will be identified with "RSP-" and the reuse sample number in sequential order that the reuse sample was collected. Table 5 provides examples of the sampling identification scheme for reuse soil samples.

Table 5
Reuse Soil Sample Nomenclature

Sample Description	Sample Designation
Reuse soil sample RSP-1 collected on July 1, 2027	RSP-01_20270701
Matrix spike/matrix spike duplicate sample of reuse soil sample RSP-1 collected on July 1, 2027	RSP-01 _20270701
Blind duplicate of reuse soil sample RSP-1 collected on July 1, 2027	RSP-X01_20270701

Sample Labeling and Shipping

All sample containers will be provided with labels containing the following information:

- Project identification, including Site name, BCP Site number, Site address
- Sample identification
- Date and time of collection
- Analysis(es) to be performed
- Sampler's initials

Once the samples are collected and labeled, they will be placed in chilled coolers and stored in a cool area away from direct sunlight to await shipment to the laboratory. All samples will be shipped to the laboratory at least twice per week. At the start and end of each workday, field personnel will add ice to the cooler(s) as needed.

The samples will be prepared for shipment by placing each sample in laboratory-supplied glassware, then wrapping each container in bubble wrap to prevent breakage, and adding freezer packs and/or fresh ice in sealable plastic bags (only real ice will be used for PFAS samples). The COC form will be properly completed by the sampler in ink, and all sample

shipment transactions will be documented with signatures, and the date and time of custody transfer. Samples will be shipped overnight (e.g., Federal Express) or transported by a laboratory courier. All coolers shipped to the laboratory will be sealed with mailing tape and a COC seal to ensure that the samples remain under strict COC protocol.

Sample Custody

Field personnel will be responsible for maintaining the sample coolers in a secured location until they are picked up and/or sent to the laboratory. The record of possession of samples from the time they are obtained in the field to the time they are delivered to the laboratory or shipped off-site will be documented on COC forms. The COC forms will contain the following information: project name; names of sampling personnel; sample number; date and time of collection and matrix; and signatures of individuals involved in sample transfer, and the dates and times of transfers. Laboratory personnel will note the condition of the custody seal and sample containers at sample check-in. A sample chain-of-custody is included in Attachment C.

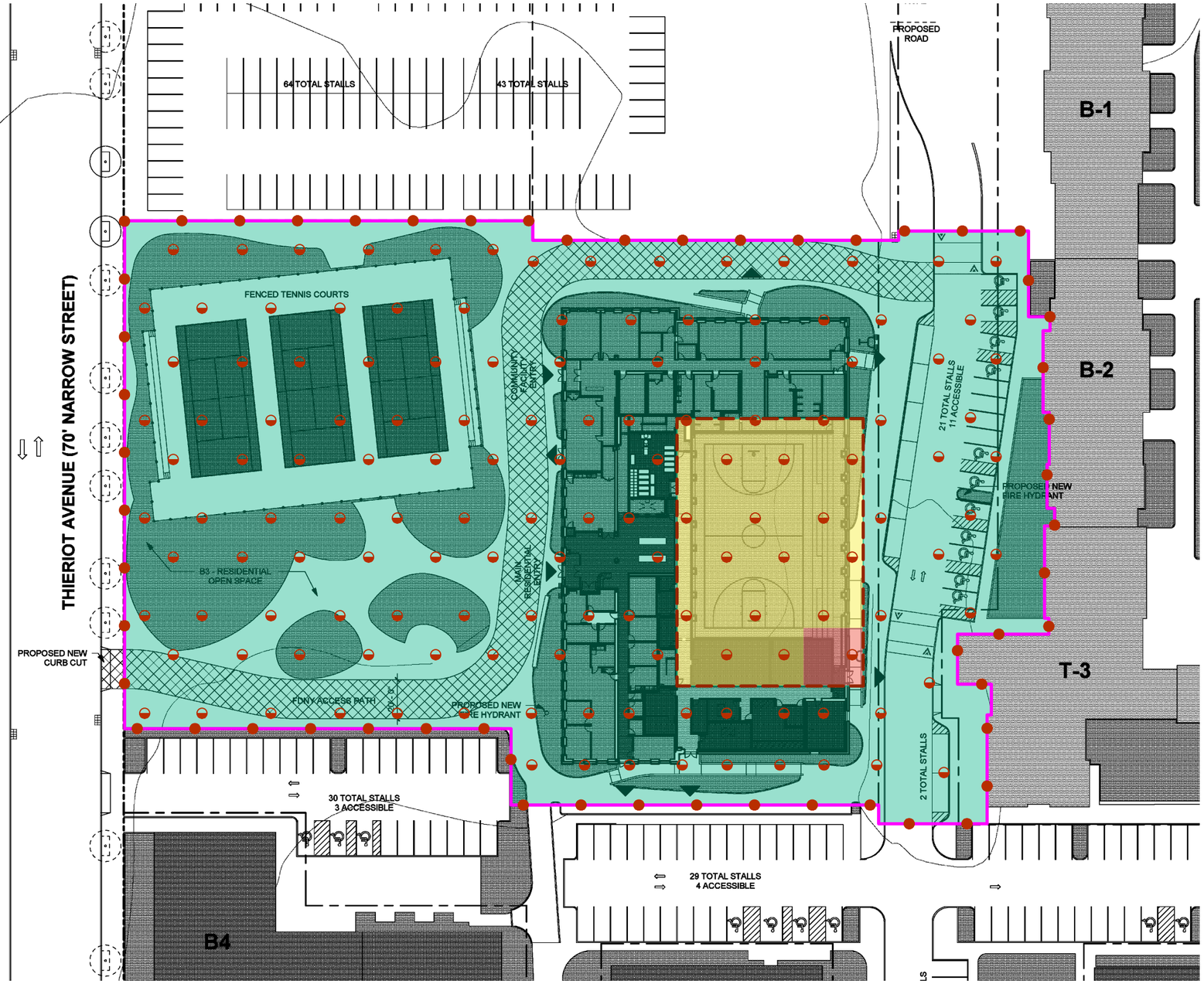
4.5 Field Instrumentation

Field personnel will be trained in the proper operation of all field instruments at the start of the field program. Instruction manuals for the equipment will be on file at the Site for referencing proper operation, maintenance, and calibration procedures. The equipment will be calibrated according to manufacturer specifications at the start of each day of fieldwork. If an instrument fails calibration, the project manager or QA/QC officer will be contacted immediately to obtain a replacement instrument. A calibration log will be maintained to record the date of each calibration, any failure to calibrate, and corrective actions taken. The PID will be equipped with a 10.6 electron volt (eV) lamp and will be calibrated each day using 100 parts per million (ppm) isobutylene standard gas in accordance with the manufacturer's standards.

4.6 Quality Assurance (QA)

All soil laboratory analytical data will be reviewed by a third-party validator and a DUSR will be prepared to document the usability and validity of the data. All sample laboratory analytical data will be reviewed by a third-party validator and a DUSR will be prepared to document the usability and validity of the data. The Final Engineering Report will include a detailed description of endpoint sampling activities, data summary tables, concentration maps showing endpoint sample locations and concentrations, DUSRs, and laboratory reports.

FIGURE



LEGEND

- BCP SITE BOUNDARY
- PROPOSED NEW BUILDING CELLAR FOOTPRINT
- PROPOSED TRACK 2 AREA - EXCAVATION TO 10-FEET BELOW GROUND SURFACE
- PROPOSED TRACK 2 AREA (METALS HOTSPOT) - EXCAVATION TO 15-FEET BELOW GROUND SURFACE
- PROPOSED TRACK 4 AREA - EXCAVATION TO MINIMUM 2-FEET BELOW GROUND SURFACE
- PROPOSED SIDEWALL ENDPOINT SAMPLE LOCATION
- PROPOSED BOTTOM ENDPOINT SAMPLE LOCATION

0 30 60 120

SCALE IN FEET

Map Source:
1. Dattner Architects, "1st Floor Plan with Overall Site Plan", Sheet No. A-002.00, Dated July 2, 2025.

akrf
440 Park Avenue South
7th Floor
New York, NY 10016
(212) 696-0670 | www.akrf.com

Stevenson Commons B3
Bronx, New York

PROPOSED ENDPOINT SAMPLE PLAN

DATE
9/25/2026

PROJECT NO.
240663

FIGURE
1

©2026 AKRF, Inc Q:\Projects\240663 - STEVENSON COMMONS B3\Technical\Hazmat\CAD\RAWP\240663 Fig 10 Proposed Endpoint Sample Plan.dwg last save: mvelleux 9/25/2026 12:58 PM

ATTACHMENT A
RESUMES FOR REMEDIAL ENGINEER, QUALITY ASSURANCE/QUALITY CONTROL (QA/QC) OFFICER, PROJECT MANAGER, ALTERNATE PROJECT MANAGER, SITE SAFETY OFFICER (SSO), LABORATORY QA/QC OFFICER, AND LABORATORY DATA VALIDATOR



BACKGROUND

Education

MS, Hydrogeology, Rensselaer Polytechnic Institute

BS, Civil Engineering, Lafayette College

Licenses/Certifications

Professional Engineer, NY - 082046-1

OSHA 40 Hour HAZWOPER

OSHA 8 Hour Refresher

REBECCA KINAL, PE

Senior Vice President

Rebecca Kinal has extensive experience in the assessment and remediation of soil and groundwater contamination and other hazardous/non-hazardous waste problems. Her experience includes environmental due diligence, soil and groundwater investigations, leaking underground storage tank studies, soil gas/vapor intrusion surveys, and oversight of small- and large-scale remediation programs. Rebecca has directed numerous Phase I and Phase II investigations and remediation programs, many of them in conjunction with commercial/ residential developers, law firms, lending institutions, and public agencies. She is experienced in the cleanup of contaminated properties under New York State Brownfield Cleanup Program (BCP) regulations and the NYC E-designation program. As a part of this work, Rebecca's duties have included technical and report review, proposal writing, scheduling, budgeting, and acting as liaison between clients and regulatory agencies, and project coordination with federal, state, and local authorities.

RELEVANT EXPERIENCE

Mott Haven Remediation, Bronx, NY

Rebecca provided environmental consulting services to the selected environmental remediation contractor for this former manufactured gas plant in Mott Haven the Bronx, which was remediated under the NYSDEC BCP.

Avalon Yonkers PCW, Yonkers, NY

Rebecca served as the Engineer of Record for remediation of the former Polychrome research and development site, a NYSDEC Brownfield redevelopment project along the Hudson River. The remediation included hot spot excavation, LNAPL collection, in-situ soil stabilization, soil management, groundwater treatment, dewatering, shoreline permitting, groundwater discharge permitting, and a site-wide engineered cover systems, including a vapor barrier and sub-slab depressurization system. Rebecca reviewed the design documents, supervised field inspections, provided support to the project team regarding contractor submittals and field changes, and certified the Final Engineering Report and Site Management Plan. The site received its Certificate of Completion in December 2019.

Hamilton Green (200 Hamilton Avenue), White Plains, NY

Rebecca managed environmental due diligence and remediation planning for the project, which included Phase I and II environmental assessments, a petroleum Spill investigation, preparation of remediation cost estimates, and application to the NYSDEC BCP.

Montefiore Medical Center, Bronx and Westchester County, NY

Rebecca provided environmental due diligence assistance to MMC for the ongoing expansion of their facilities. She conducted and managed environmental due diligence tasks related to their property transactions, including Phase I ESAs, Phase II investigations, indoor air quality surveys/vapor intrusion assessments, and remediation cost estimates. She also assisted MMC in making decisions with respect to environmental risk issues. Projects ranged from small, single-lot properties to large hospital campuses.



BACKGROUND

Education

MS, Environmental Science, American University

BA, Environmental Studies, American University

Licenses/Certifications

Qualified Environmental Professional, NY - 4120008

OSHA 10 Hour Construction Safety & Health Course

OSHA 40 Hour HAZWOPER

OSHA 8 Hour Refresher

OSHA 8 Hour Supervisor

DEBORAH G. SHAPIRO, QEP

Senior Vice President

Deborah Shapiro, QEP is a Senior Vice President with experience in the assessment and remediation of hazardous waste issues. She supervises project teams and manages all aspects of assessment and remediation projects. Deborah works with developers, non-profit organizations, architects, local community groups, local businesses, and government agencies. Her projects fall under the regulatory oversight of NYSDEC, NYCDEP, and NYCOER including the NYSBCP, NYCVCP, NYSDEC petroleum spills program, Resource Conservation and Recovery Act/Underground Injection Control closures, and NYCOER's E-designation program. She has also assisted commercial and industrial property owners with maintaining the integrity of their portfolios by providing compliance related cleanup and chemical storage management services. Deborah manages all aspects of redevelopment projects from the initial Phase I ESA, Phase II, and remediation through post-remedial site management. Her experience also includes groundwater investigations, monitoring, and sampling programs; Brownfield and hazardous waste site investigations; In-Situ Chemical Oxidation; underground storage tank studies; waste characterization sampling; exposure assessments; on-going remedial action, and permitting.

RELEVANT EXPERIENCE

Brook 156, Bronx, NY

Deborah served as Project Manager for site assessment/remediation services for Brook 156, a new affordable housing project in the Bronx. She managed all technical, schedule, and budgetary components of the project and communicated with NYSDEC and the client team. Brook 156 received its Certificate of Completion under the NYSBCP in 2021.

OER On-Call Contract, Various Locations, NY

Deborah Shapiro is managing an on-call contract with the OER for brownfields environmental assessment and remediation.

Atlantic Chestnut, Brooklyn, NY

Deborah serves as Project Manager for site assessment/remediation services at Atlantic Chestnut, a 4.5-acre affordable housing project in the East New York, Brooklyn. Services have included a Phase I ESA and Phase II Subsurface Investigations at each site; accepted applications for the NYSBPC; preparation of Remedial Investigation Work Plans and implementation of remediation investigations and associated reporting; and Interim Remedial Work Plans for each site, including three soil vapor extraction systems.

US EPA Multi-Purpose Grant and NYSDOS BOA Predevelopment Grant

Deborah is the Principal-in-Charge of a North Hempstead on-call contract to conduct brownfields assessment, investigation, identification, market analysis, marketing, clean-up planning and analysis, and remediation, wayfinding, connectivity planning and analysis, and other activities supporting redevelopment and revitalization services for New Cassel under an EPA Multi-purpose Grant and NYSDOS BOA Predevelopment Grant. Tasks under the on-call to date have included conducting Phase IIs and reuse planning including preparation of ABCAs.

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BACKGROUND

Education

BS, Environmental Science, Stockton University

Licenses/Certifications

Confined Space Entry Training for Construction, 360 Training

Regulatory Training in Underground Storage Tanks (UST) Certification, Rutgers University

Wetland Delineation Series Certificate,

OSHA 40 Hour HAZWOPER,

TIMOTHY G. LARIGAN

Senior Environmental Scientist

Timothy Larigan is an environmental scientist with experience in environmental remediation/compliance, Phase I/Phase II Environmental Assessments; project management; technical reporting; data analysis; field sampling; contractor oversight; wetlands delineation and permitting. He has directed environmental remediation, due diligence, asbestos, and wetlands projects and completed them within the proposed timeframe and budget. Tim has also managed client and regulatory agency interactions. He has performed various field activities such as soil, groundwater, and vapor sampling and wetlands delineation. Timothy has a working knowledge of GIS software and SAS statistical software.

RELEVANT EXPERIENCE

Starhill at 1600 Macombs Road, Bronx, NY

Starhill JV Associates LLC enrolled in the New York City Voluntary Cleanup Program (VCP) to investigate and remediate the property located at 1600 Macombs Road. The property was previously developed with a three-story, former medical facility building last used as a transitional housing and drug/alcohol rehabilitation center, and was being redeveloped with two new two 14-story affordable/sustainable housing residential buildings connected by a one-story structure. Tim prepared a Phase I ESA for the property, as well as coordinated and conducted field sampling during subsequent subsurface investigations. He went on to provide project management and field oversight during site remediation for Phase I of the project under the NYCOER-approved Remedial Action Work Plan (RAWP), which included construction oversight during soil excavation, UST removal, spill remediation, confirmatory endpoint sampling and data analysis/interpretation, implementation of on-site air monitoring program, and preparation of the final closure report.

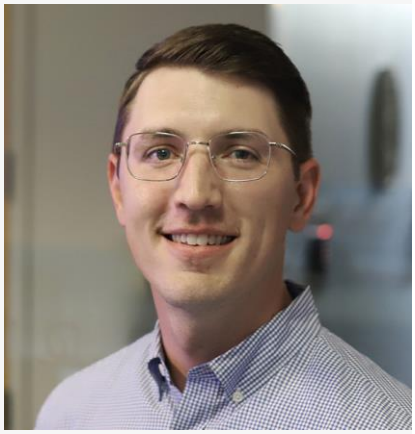
1760 and 1768 Jerome Avenue, Bronx, NY

ACMH, Inc. enrolled in the NYC VCP to investigate and remediate the property located at 1760 and 1768 Jerome Avenue. The property is currently developed with a one and two-story commercial/industrial building that most recently operated as a manufacturer and wholesale distributor of aluminum, glass, and plexiglass storefronts. Tim prepared a Phase I ESA and coordinated/ provided deputy project management during a subsurface investigation as part of environmental due diligence and acceptance into the VCP.

380 4th Avenue, Brooklyn, NY

380 4th Avenue Owner LLC enrolled in the NYS Brownfield Cleanup Program (BCP) to investigate and remediate the property located at 380 4th Avenue. The property was previously developed with a single-story building that operated as a taxi business, and was being redeveloped with a new 17-story, mixed residential and commercial building. Tim coordinated and conducted field sampling during subsurface investigations, and provided project management during site remediation under a NYSDEC-approved RAWP, which included construction oversight during soil excavation, underground storage tank (UST) removal, spill remediation, confirmatory endpoint sampling and data analysis/interpretation, implementation of on-site air monitoring program, and preparation of the final closure report.

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BACKGROUND

Education

BS, Environmental Science, The Ohio State University

Licenses/Certifications

OSHA 10 Hour Construction Safety & Health Course

OSHA 30 Hour Construction

OSHA 40 Hour HAZWOPER

OSHA 8 Hour Refresher

MARK F. JEPSEN

Senior Technical Director

Mark Jepsen is an Environmental Scientist in AKRF's Hazardous Materials group. He has a great deal of experience in both environmental science and natural resources, including environmental remediation and consulting, groundwater quality and soil science, hydrology, and geology. Since joining AKRF, Mark has overseen a wide variety of environmental investigations. He has performed oversight at large scale construction sites dealing with underground storage tanks closure and removal. Mark has performed various Phase I site visits and reports; and followed up these Phase I investigations by performing Phase II remedial investigations including soil, groundwater, and soil vapor sampling. Mark has also had a great deal of experience creating environmental reports discussion results found during the preliminary investigations.

RELEVANT EXPERIENCE

3200 Jerome Avenue, Bronx, NY

Mark conducted groundwater and soil vapor requirements sampling set by the NYSDEC as part of the Brownfield Cleanup Agreement for the project site. Mark is also supporting the ongoing operations and maintenance of an active sub-slab depressurization and soil vapor extraction system installed beneath the building slab. He has also overseen in-situ chemical oxidation groundwater treatment injection activities performed on-site.

1559 Boone Avenue, Bronx, NY

Mark is supporting AKRF's environmental planning, site assessment/remediation services, and geotechnical engineering for a new eight-story, 66-unit supportive housing building. The project received a Certificate of Completion from the New NYSDEC under the Brownfield Cleanup Program (BCP) in 2024.

1769 Jerome Avenue E-Designation, Bronx, NY

Mark provided project management for the remedial investigation phase and assisting the client with enrollment into OER's Voluntary Cleanup Program.

2264 Morris Avenue, Bronx, NY

Mark supported AKRF's environmental consulting services for this site including, Phase I ESA, Phase II remedial site investigations and subsurface sampling, ongoing construction oversight and vapor barrier inspections.

11 Greene Street, Environmental Consulting Services, New York, NY

Investigation and remediation being conducted to satisfy NYCOER requirements under VCP and CEQR. As an Environmental Scientist, Mark is supporting AKRF's environmental consulting services for this site including Waste Classification testing and delineation, preparation of a Remedial Investigation (Phase II) Work Plan; Remedial Investigation (RI) and Report; Preparation of a NYCDEP Dewatering Application and Permit; Preparation of a Remedial Action Work Plan (RAWP) and Construction Health and Safety Plan (CHASP); Pre-Characterization of Soil for Off-site Disposal; Environmental Monitoring; and Environmental Bid Specifications and Design Coordination.

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BACKGROUND

Education

BS, Environmental Science, University of Vermont

Licenses/Certifications

NYC SST - 8-Hour Fall Prevention for Construction Certification

NYSDEC Erosion and Sediment Control Certificate

OSHA 30 Hour Construction

OSHA 40 Hour HAZWOPER

JONAS PETERS

Environmental Scientist

Jonas Peters is an Environmental Scientist at AKRF. He has experience in a laboratory setting, as well as participating in scientific field work and analysis. His environmental consulting experience includes implementing Phase II Environmental Site Investigations; and overseeing remedial action programs under the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP), including soil excavation, community air monitoring, and collection of environmental samples. Jonas has also had multiple years of experience using geographic information systems (GIS) software for various projects.

RELEVANT EXPERIENCE

New York-Presbyterian Cancer Center, New York, NY

Jonas provided air monitoring in accordance with the site-specific Community Air Monitoring Plan (CAMP) during excavation activities, overseeing soil export manifests, collecting waste class samples, and documenting general construction and remedial activities on-site.

Marcy Houses CAMP, Brooklyn, NY

Jonas provided air monitoring in accordance with the site-specific Community Air Monitoring Plan (CAMP) during excavation activities. He is also documenting general construction and remedial activities.

New York Historical Tang Wing for American Democracy, New York, NY

Jonas provided air monitoring in accordance with the site-specific Community Air Monitoring Plan (CAMP) during excavation activities, oversaw soil export manifests, and documented general construction and remedial activities on-site, including soil treatment.

NYCHA PACT Williamsburg Houses, Brooklyn, NY

Jonas provided air monitoring in accordance with the site-specific Community Air Monitoring Plan (CAMP) during soil export, oversaw soil export manifests, and documented activities approved under a NYCDEP-approved Remedial Action Work Plan (RAWP).

Las Raices East Harlem, New York, NY

Jonas provided air monitoring in accordance with the site-specific Community Air Monitoring Plan (CAMP) during excavation activities, oversaw soil export manifests, and documented general construction and remedial activities on-site.

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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Personnel Resume

Carl Armbruster
QA Manager

Qualifications Summary

Mr. Armbruster has over 30 years of experience in the environmental laboratory and engineering industry that includes extensive technical, management/leadership experience in all aspects of the laboratory business. He is an action-oriented manager dedicated to ensuring the laboratory maintains a quality program that holds the highest credentials in PT scores, accreditations and customer satisfaction. His unique experience lends itself to working successfully with employees, managers and clients at all levels.

Professional Experience

Quality Assurance Manager – TestAmerica Edison - 2005 to Present

Mr. Armbruster is responsible for establishing and implementing the quality assurance program at the Edison facility; and for interfacing with the corporate Quality Assurance Director to ensure adherence with the overall Quality Management Plan. He is also responsible for monitoring implementation and compliance with NELAC and TestAmerica's QMP, conducting annual management system audits and data audits, as well as providing regulatory updates and technical support to the Laboratory Director, Operations Manager, Client Services and Sales department.

Project Manager/Assistant Technical Director – STL Edison --2000 to 2005

Laboratory Director − STL Whippany − 1998 to 2000

Account Manager − Clean Harbors Environmental Services − 1997 to 1998

Laboratory Manager − Waste Management Inc., and Chemical Waste Management Inc − 1988 to 1997

Environmental Scientist − ICF Technology − 1987 to 1988

Analytical Chemist − IT Corporation – 1985 to 1987

Analytical Chemist − Hess Environmental Laboratories – 1983 to 1985

Education

- MS in Biology – East Stroudsburg University, 1984
- BS in Environmental Studies - East Stroudsburg University, 1980

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

Lori A. Beyer

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

EXPERIENCE:

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

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

1998-Present American Analytical Laboratories, LLC. 56 Toledo Street, Farmingdale, NY
Laboratory Director/Technical Director

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

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

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

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

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

1995-1996 Nytest Environmental, Inc. (NEI) Port Washington, New York
Corporate QA/QC Officer

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

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

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

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

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

1986-1987 Nytest Environmental, Inc (NEI) Port Washington, New York
GC/MS VOA Analyst

EDUCATION:

1982-1985 State University of New York at Stony Brook, New York; BS Biology/Biochemistry
1981-1982 University of Delaware; Biology/Chemistry
5/91 Rutgers University; Mass Spectral Data Interpretation Course, GC/MS Training
8/92 Westchester Community College; Organic Data Validation Course
9/93 Westchester Community College; Inorganic Data Validation Course

Form **W-9**
(Rev. December 2011)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

Give Form to the requester. Do not send to the IRS.

Print or type
See Specific Instructions on page 2.

Name (as shown on your income tax return)
L.A.B VALIOATION CORP

Business name/disregarded entity name, if different from above

Check appropriate box for federal tax classification:
☐ Individual/sole proprietor ☐ C Corporation ☒ S Corporation ☐ Partnership ☐ Trust/estate

☐ Limited liabilty company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶

☐ Other (see instructions) ▶

☐ Exempt payee

Address (number, street, and apt. or suite no.)
14 WEST POINT DRIVE

Requester's name and address (optional)

City, state, and ZIP code
EAST NORTHPORT, New York 11731

List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on the "Name" line to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Note. If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

Social security number
[ ][ ][ ] - [ ][ ] - [ ][ ][ ][ ]

Employer identification number
5 8 - 2 3 8 1 7 1 4

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
3. I am a U.S. citizen or other U.S. person (defined below).

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 4.

Sign Here Signature of U.S. person ▶ Lou A. Bey Date ▶ 01/18/13

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

Note. If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.

Westchester Community College

Professional Development Center

Awards this Certificate of Achievement To

LORI BEYER

for Successfully Completing

ORGANIC DATA VALIDATION COURSE (35 HOURS)

Dr. John Samuelian

Date AUGUST 1992

Assistant Dean
Professional Development Center

President

The Professional
Development Center

SUNY
WESTCHESTER COMMUNITY COLLEGE
Valhalla, New York 10595

Westchester Community College

Professional Development Center

Awards this Certificate of Achievement To

LORI BEYER

for Successfully Completing

INORGANIC DATA VALIDATION

Instructor: Dale Boshart

Date MARCH 1993

Assistant Dean
Professional Development Center

President

The Professional
Development Center

SUNY
WESTCHESTER COMMUNITY COLLEGE
Valhalla, New York 10595

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

Thomas C. Jorling
Commissioner

July 8, 1992

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

Dear Elaine,

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

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

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

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

Sincerely,

Maureen P. Serafini

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

The Professional
Development Center
AT
WESTCHESTER COMMUNITY COLLEGE

914 285-6619

October 2, 1992

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

Dear Ms. Beyer:

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

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

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

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

Very truly yours,

Passing Grade is 70%
Your Grade is 99%

Elaine Sall
Program Coordinator

ES/bf

SUNY
WESTCHESTER COMMUNITY COLLEGE
Valhalla, New York 10595

The Professional
Development Center
AT
WESTCHESTER COMMUNITY COLLEGE

914 285-6619

June 21, 1993

Dear Ms. Beyer:

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

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

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

Very truly yours,

Elaine Sall

Elaine Sall
Program Coordinator

ES/bf

Enclosures

SUNY
WESTCHESTER COMMUNITY COLLEGE
Valhalla, New York 10595

ATTACHMENT B
LABORATORY SOP FOR PFAS

The information contained herein is of a highly confidential and proprietary nature. Eurofins Environment Testing North Central, LLC specifically prohibits the dissemination, copy, disclosure, transfer, or modification of this information without the express written approval of Eurofins Environment Testing North Central, LLC.

Revision Log
Reference
Cross Reference
Scope
Basic Principles
Interferences
Precaution to Minimize Method Interference
Safety Precautions and Waste Handling
Personnel Training and Qualifications
Sample Collection, Preservation, and Handling
Apparatus and Equipment
Reagents and Standards
Calibration
Procedure
Calculations
Statistical Information/Method Performance
Quality Assurance/Quality Control
Method Modifications
) QC Paradigm

Revision Log

Revision: 4	**Effective date:**	This version
Section	**Justification**	**Changes**
		Update to EPA Method 1633 January 2024

Reference

1. US EPA Method 1633, *Analysis of Per and Polyfluoroalkyl Substances(PFAS) in Aqueous, Solid, Biosolids, and Tissue Samples by LC-MS/MS*, January 2024.
2. US EPA Method 1633, Revision A, *Analysis of Per and Polyfluoroalkyl Substances(PFAS) in Aqueous, Solid, Biosolids, and Tissue Samples by LC-MS/MS*, December 2024.

Cross Reference

Document	Document Title
NC-WC-092	Determination of Solids in Waters and Wastes (Total Suspended Solids)
NDSC-QA-SOP42091	Detection and Quantitation Limits
NDSC-QA-SOP43862	Manual Integrations
NC-QA-015	Support Equipment Calibration and Verification
NC-QA-018	Statistical Evaluation of Data and Development of Control Charts
QA-003	Quality Control Program
NC-QA-017	Standards and Reagents
NDSC-QA-QP44940	Calibration Curves and the Selection of Calibration Points
NDSC-US-EHS QP46060	NDSC EH&S Manual
NC-QAM-001	QA Manual

Scope

This method is applicable for the determination of selected per- and polyfluorinated alkyl substances (PFAS) in aqueous samples to include non-potable waters and non-regulatory potable water, solids, biosolids and tissue samples when directed by the client. The compounds analyzed in this method are listed in the table below. The most current MDLs and LOQs are listed in the LIMS. Compounds other than those listed may be analyzed by client request.

Analyte	Acronym	CAS#
Perfluorobutanesulfonic acid	PFBS	375-73-5
Perfluorodecanoic acid	PFDA	335-76-2
Perfluorododecanoic acid	PFDoA	307-55-1
Perfluoroheptanoic acid	PFHpA	375-85-9
Perfluorohexanesulfonic acid	PFHxS	355-46-4
Perfluorohexanoic acid	PFHxA	307-24-4
Perfluorononanoic acid	PFNA	375-95-1
Perfluorooctanesulfonic acid	PFOS	1763-23-1
Perfluorooctanoic acid	PFOA	335-67-1

Analyte	Acronym	CAS#
Perfluorotetradecanoic acid	PFTeDA	376-06-7
Perfluorotridecanoic acid	PFTrDA	72629-94-8
Perfluoroundecanoic acid	PFUnA	2058-94-8
Perfluoro-n-butanoic acid	PFBA	375-22-4
Perfluoro-n-pentanoic acid	PFPeA	2706-90-3
8:2 - Fluorotelomersulfonic acid	8:2FTS	39108-34-4
N-methylperfluoro-1-octanesulfonamidoacetic acid	NMeFOSAA	2355-31-9
N-ethylperfluoro-1-octanesulfonamidoacetic acid	NEtFOSAA	2991-50-6
4:2-Fluorotelomersulfonic acid	4:2-FTS	757124-72-4
Perfluoropentanesulfonic acid	PFPeS	2706-91-4
6:2-Fluorotelomersulfonic acid	6:2-FTS	27619-97-2
Perfluoroheptanesulfonic acid	PFHpS	375-92-8
Perfluorononanesulfonic acid	PFNS	68259-12-1
Perfluorodecanesulfonic acid	PFDS	335-77-3
Perfluorododecanesulfonic acid	PFDoS	79780-39-5
Perfluorooctanesulfonamide	PFOSA	754-91-6
2-(N-methylperfluoro-1-octanesulfonamido)-ethanol	NMeFOSE	24448-09-7
N-methylperfluoro-1-octanesulfonamide	NMeFOSA	31506-32-8
2-(N-ethylperfluoro-1-octanesulfonamido)-ethanol	NEtFOSE	1691-99-2
N-ethylperfluoro-1-octanesulfonamide	NEtFOSA	4151-50-2
2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid; (Hexafluoropropylene oxide dimer acid)	HFPODA	13252-13-6
Ammonium 4,8-dioxa-3H-perfluorononanoic acid	ADONA **	919005-14-4 *
Potassium 9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	9Cl-PF3ONS, F53B major	756426-58-1 *
Potassium 11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	11Cl-PF3OUdS, F53B minor	763051-92-9 *
3-Perfluoropropylpropanoic acid	3:3 FTCA	356-02-5
3-Perfluoropentylpropanoic acid	5:3 FTCA	914637-49-3

Analyte	Acronym	CAS#
3-Perfluoroheptylpropanoic acid	7:3 FTCA	812-70-4
Perfluoro-3-methoxypropanoic acid	PFMPA, PFECA F	377-73-1
Perfluoro-4-methoxybutanoic acid	PFMBA, PFECA A	863090-89-5
Nonafluoro-3,6-dioxaheptanoic acid	NFDHA, PFECA B	151772-58-6
Perfluoro(2-ethoxyethane)sulfonic acid	PFEESA, PES	113507-82-7

Additional compounds available upon client request

Analyte	Acronym	CAS#
Perfluoro-1-butanesulfonamide	FBSA	30334-69-1
Perfluoro-1-hexanesulfonamide	FHxSA	41997-13-1
Perfluoro-4-ethylcyclohexanesulfonate	PFECHS	133201-07-7
10:2-Fluorotelomersulfonic acid	10:2-FTS	108026-35-3
Perfluoropropanoic acid	PFPrA	422-64-0
Perfluoro-n-octadecanoic acid	PFODA	16517-11-6
Perfluoro-n-hexadecanoic acid	PFHxDA	67905-19-5
Bis(trifluoromethane)sulfonimide	TFSI	82113-65-3
Perfluoropropanesulfonic acid	PFPrS	423-41-6
Bis[2-(perfluorohexyl)ethyl] phosphate	6:2 diPAP	57677-95-9
Bis[2-(perfluorooctyl)ethyl] phosphate	8:2 diPAP	678-41-1
(Perfluorohexyl)ethyl (perfluorooctyl)ethyl hydrogen phosphate	6:2/8:2 diPAP	943913-15-3

*CAS# for the free acid form of the analyte

**Acronym for the free acid form of the analyte

Basic Principles

A solid or tissue sample is fortified with isotopically-labeled extraction standards. The sample extract is shaken, centrifuged, and the supernatant decanted. Sample extract is diluted to volume and then concentrated and follows procedure of aqueous samples. An aqueous sample is fortified with isotopically-labeled extraction standards and is passed through a solid phase extraction (SPE) cartridge to extract the analytes. The compounds are eluted from the solid phase with a combination of solvents. Carbon cleanup is performed on each sample extract. The extract is filtered, if needed, and fortified with Isotopically-labeled injection internal standards. It is then analyzed by LC/MS/MS operated in negative electrospray ionization (ESI) mode for detection and quantification of the analytes. Quantitative analysis is performed using isotope dilution.

Interferences

Compounds which have similar structures to the compounds of interest and similar molecular weights would potentially interfere. Method interferences may be caused by contaminants in solvents, reagents (including reagent water), sample bottles and caps, and other sample processing hardware that lead to discrete artifacts and/or elevated baselines in the chromatograms. The analytes in this method can also be found in many common laboratory supplies and equipment, such as PTFE (polytetrafluoroethylene) products, LC solvent lines, methanol, aluminum foil, etc. A laboratory blank is performed with each batch of samples to demonstrate that the extraction system is free of contaminants.

Precaution to Minimize Method Interference

1. LC system components contain many of the target analytes. To minimize the background PFAS peaks, PTFE solvent frits and tubing are replaced by PEEK™ solvent frits and tubing where possible.

2. A precolumn, Phenomenex Gemini, 100 x 3 mm, 3µm C18 column (or equivalent), is installed before the injection valve to separate PFAS in standards/samples from those from the LC system and mobile phases.

3. Promochrom systems must be cleaned before and after each use. Cleaning of Promochrom systems with 1% methanolic ammonium hydroxide must be done at least once a week or more depending on usage.

Safety Precautions and Waste Handling

See NDSC EH&S Manual, the Facility Addendum to the NDSC EH&S Manual, and this document for general information regarding employee safety, waste management, and pollution prevention.

The toxicity or carcinogenicity of each reagent used in this method has not been precisely defined. PFOA has been described as "likely to be carcinogenic to humans". Each chemical should be treated as a potential health hazard and exposure to these chemicals should be minimized.

Exposure to these chemicals must be reduced to the lowest possible level by whatever means available, such as fume hoods, lab coats, safety glasses, and gloves. Gloves, lab coats, and safety glasses should be worn when preparing standards and handling samples. Avoid inhaling solvents and chemicals and getting them on the skin. Wear gloves when handling neat materials. When working with acids and bases, take care not to come in contact and to wipe any spills. Always add acid to water when preparing reagents containing concentrated acids.

All laboratory waste is accumulated, managed, and disposed of in accordance with all Federal, State, and local laws and regulations. All solvent waste and extracts are collected in approved solvent waste containers in the laboratory and subsequently emptied by personnel trained in hazardous waste disposal into the lab-wide disposal facility. HPLC vials are disposed of in the lab container for waste vials, and subsequently lab packed. Any solid waste material (disposable pipettes and broken glassware, etc.) may be disposed of in the normal solid waste collection containers.

Personnel Training and Qualifications

All personnel performing this procedure must have documentation of reading, understanding, and agreeing to follow the current version of this SOP and an annual documented Demonstration of Capability (DOC).

Each chemist performing the extraction must work with an experienced employee for a period of time until they can independently perform the extraction. Also, several batches of sample extractions must be performed under the direct observation of another experienced chemist to assure the trainee is capable of independent preparation. Proficiency is measured through a documented Initial Demonstration of Capability (IDOC).

Each LC/MS/MS analyst must work with an experienced employee for a period of time until they can independently calibrate the LC/MS/MS, review and process data, and perform maintenance procedures. Proficiency is measured through a documented Initial Demonstration of Capability (IDOC).

The IDOC and DOC consist of four laboratory control samples (or alternatively, one blind sample for the DOC) that is carried through all steps of the extraction and meets the defined acceptance criteria. The criteria include the calculation of mean accuracy and relative standard deviation. IDOC trials are spiked at the OPR Level. IDOC must meet the requirements for the IPR for target, EIS and NIS compounds as listed in Tables 5 and 6 of method 1633 for aqueous matrices and Tables 7 and 8 for non-aqueous matrices. See *Attachment 19*.

Sample Collection, Preservation, and Handling

A. Sample Collection

Aqueous samples are collected in 125-mL HDPE containers. Solid samples are collected in 4oz PP specimen containers, with polyethylene screw caps. All sample containers must have linerless HDPE or polypropylene caps. Keep the sample sealed from time of collection until extraction.

Fish samples may be received as a whole fish, fish fillets, or other tissues for analysis. For client homogenized tissues, the samples are collected in 4oz PP specimen containers, with polyethylene screw caps. If whole fish are collected it will be wrapped in aluminum foil or food-grade polyethylene tubing. Keep the sample sealed from time of collection until extraction.

NOTE: PFAS contamination during sampling can occur from a number of common sources, such as food packaging and certain foods and beverages. Proper hand washing and wearing nitrile gloves will aid in minimizing this type of accidental contamination of the samples.

Hold time exceptions, EPA 1633A section 8.5:
Hold times will remain as follows for aqueous, solid and tissue samples. Caveats for specific analytes are the responsibility of the end user to note when using their data.

B. Aqueous Sample Storage and Shipment

1. Samples must be chilled during shipment and must not exceed 6°C during the first 48 hours after collection. Sample temperature must be confirmed to be at or below 6°C when the samples are received at the laboratory.

2. Samples stored in the lab must be held at a temperature of 0° to 6°C, not frozen, and protected from light until extraction. Alternatively, to meet project requirements, samples may be stored at or below ≤ -20°C and protected from light until extraction.

3. Water samples must be extracted within 28 days when stored at a temperature of 0° to 6°C, not frozen, and protected from light. Water samples must be extracted within 90 days when stored at a temperature ≤ -20°C and protected from light. Extracts must be analyzed within 28 days after extraction. Extracts are stored at a temperature of 0° to 6°C and protected from light.

C. Solid Sample Storage and Shipment

1. Solid and Biosolid samples must be chilled during shipment and must not exceed 6°C during the first 48 hours after collection. Sample temperature must be confirmed to be at 0° to 6°C when the samples are received at the laboratory.

2. Solid and Biosolid samples stored in the lab must be protected from light and held at a temperature of 0° to 6°C, or ≤ -20°C, until extraction.

3. Solid and Biosolid samples must be extracted within 90 days. Extracts must be analyzed within 28 days after extraction. Extracts are stored at a temperature of 0° to 6°C and protected from light.

NOTE: Biosolid samples stored under refrigeration may produce gases that may cause sample to be expelled from the container when opened. This may produce noxious odors. It is recommended to store frozen if extraction will not occur for a few days.

D. Tissue Sample Storage and Shipment

1. Tissue samples are maintained at 0 to 6°C for a maximum of 24 hours. Sample temperature must be confirmed to be at or below 6°C when the samples are received at the laboratory.

2. Samples stored in the lab must be protected from light and held at a temperature of ≤-20°C until extraction.

3. Tissue samples must be extracted within 90 days, or as soon as possible if NFDHA is an analyte of interest. Extracts must be analyzed within 28 days after extraction. Extracts are stored in the refrigerator and protected from light.

Apparatus and Equipment

A. Apparatus

1. 125 mL HDPE bottles: Environmental Sampling Supply; #0125-1902-QC, or equivalent.

2. Centrifuge tubes – 15-mL conical polypropylene with polypropylene screw caps; Fisher Scientific, Cat. No. 14955237 or equivalent

3. 10-mL polypropylene volumetric flask, Class A – Fisher Scientific, Cat. No. S02288 or equivalent.
4. HDPE bottles for extraction fluid storage: L; Environmental Sampling Supply, Cat. No. 1000-1902-PC, or equivalent.
5. Analytical Balance – Capable of weighing to 0.0001 g
6. Top-Loading Balance – Capable of weighing to 0.01 g
7. Phenomenex Strata-X-AW 33um Polymeric Weak Anion 200mg/6mL (Part# 8B-S541-FCH) or equivalent.
8. Large-volume SPE Reservoir (25-mL) - Millipore-Sigma; Product # 54258-U.
9. SPE Tube Adapter - Millipore-Sigma; Product # 57020-U.
10. SPE vacuum extraction manifold –"Resprep" 24-port manifold; Restek Corp catalog # 26080, or equivalent.
11. Polypropylene SPE delivery needles – Agilent; Cat. No. 12234511.
12. Vacuum manifold for Solid Phase Extraction (SPE).
13. Centrifuge – "Thermo Sorvall ST4" with TX-750 rotor or equivalent, capable of a maximum rotational force of 3800 rcf.
14. Auto Pipettes – Eppendorf; capable of accurately dispensing 10- to 1000-µL. FisherScientific cat # 14-287-150, or equivalent.
15. Polypropylene pipette tips: 0-200µl. Fisher; Cat. No. 22491539
16. Polypropylene pipette tips: 101-1000µl. Fisher, Cat. No. 5414006
17. Pipettes – Disposable transfer. Fisher Scientific, Cat. No. 13-711-7M
18. Vortex mixer, variable speed, Fisher Scientific or equivalent.
19. N-Evap sample extract concentrator with N_2 supply and water bath for temperature control. Organomation, Inc. Cat. #11250-NT, or equivalent.
20. Thermo Target PP Polyspring inserts, catalog number C4010-630P, or equivalent
21. Thermo Target 9mm PP vials, catalog number C4000-14, or equivalent
22. Agilent 9mm vial caps, polypropylene/silicone septa, catalog 5191-8151, or equivalent
23. Centrifuge tubes – 50-mL conical polypropylene with polypropylene screw caps; Fisher Scientific, Cat. No. 05-539-9 or equivalent
24. Polypropylene bottles for standard storage - 4 mL; Fisher Scientific, Cat. No. 2006-9125
25. Stainless steel spatula/scoop set. Bel-Art SP Scienceware; Product # 11-865-130, or equivalent
26. pH paper, range 4.5-10, VWR BDH Chemicals, Cat. #BDH 35311.604 or equivalent

27. Syringe filter - Acrodisc, Syringe Filter, 25 mm, 0.2 µm, 50/pkg, Fisher part # 50786068.

28. Silanized glass wool, Supelco # 20411 or equivalent

29. Wheaton Bottle, 15ml, narrow mouth, HDPE, Leak resistant; DWK Life Sciences, Cat. No. 209044SP, or equivalent

30. Phenomenex Strata GCB, 25mg/1mL IC Cartridge (Part# 8B-S528-CAJ) or equivalent

31. Sonicator - Branson Ultrasonics M Series Ultrasonic Cleaning Bath, Model M88000, Fisher, or equivalent

32. Stainless steel bowl, 4 quart or equivalent

33. Stainless steel cutting board or equivalent

34. Stainless steel knife

35. Food Processor- "Robot Coupe Bliver 3" or equivalent, Stainless steel

36. Blender - Waring Commercial BB3005, 1 HP bar Blender, Part Number B071SF8419 or equivalent, stainless steel.

37. Wooden Tongue Depressors - Fisher; Cat. # 11-700-555, or equivalent

38. Phenomenex Strata PFAS WAX, 500mg/6mL (Part# 8B-S541-HCH), or equivalent.

39. 16oz HDPE Wide Mouth, Environmental Sampling Supply; #0500-1041-QC, or equivalent.

B. Equipment

1. AB Sciex Triple Quad 4500/5500/5500 Plus Turbo V Ion Source

   ExionLC Controller
   ExionLC AC Pump
   ExionLC AC Autosampler
   Exion AC Column Oven
   Data system –Analyst 1.6.3

2. PromoChrom automated extractor, model, SPE-03, or equivalent
   a. Promochrom Filters, Catalog Number F-HC-30

3. HPLC columns

   a. Analytical column: Gemini 3µm C18, 50 x 3 mm, Phenomenex Cat# 00B-4439-Y0, or equivalent

   b. Delay column: Gemini 3µm C18, 100 x 3 mm, Phenomenex Cat# 00D-4439-Y0 Cat# 00B-4252-Y0, or equivalent

Reagents and Standards

All solvents, acids, and bases are stored in glass bottles in flammable proof cabinets or pressure resistant steel drums. Solvents, acids, and bases are stored at ambient temperature for up to 1 year. All non-solvents are stored according to manufacturer's storage conditions. All reagents are verified before use by the associated Certificate of Analysis or by analysis of the Method Blank.

A. Reagents:

1. Methanol (MeOH) – Fisher Scientific, Cat. No. A456-4 or equivalent
2. Acetonitrile (ACN) – Fisher Scientific, Cat. No. A996-4 or equivalent
3. Water – Fisher Scientific, Optima, Cat. No. W6-4 or equivalent
3. Ammonium acetate – Fisher Scientific, Cat. No. A637-500 or equivalent
4. Ammonium hydroxide - Fisher Scientific, Cat. no. A669S-500 or equivalent
5. Methanolic ammonium hydroxide (3%) - add ammonium hydroxide (9.9 mL) to methanol (90.1 mL), store at room temperature, replace after 1 month
6. Methanolic ammonium hydroxide (2%) - add ammonium hydroxide (66 mL) to methanol (934 mL), store at room temperature, replace after 1 month
7. Methanolic ammonium hydroxide (1%) - add ammonium hydroxide (33 mL) to methanol (967 mL), store at room temperature, replace after 1 month
8. Methanolic ammonium hydroxide (0.3%) - add ammonium hydroxide (10mL) to methanol (990mL), store at room temperature, replace after 1 month
9. 30:70 Methanol:Water - add 300mL methanol to 700mL water
10. Formic acid-(greater than 96% purity or equivalent), store at room temperature.
    a. Formic acid (aqueous, 0.3 M) - dissolve formic acid (13.8 g) in reagent water (1 L), store at room temperature, replace after 2 years
    b. Formic acid (aqueous, 5% v/v) - mix 5 mL formic acid with 95 mL reagent water, store at room temperature, replace after 2 years
    c. Formic acid (aqueous, 50% v/v) - mix 50 mL formic acid with 50 mL reagent water, store at room temperature, replace after 2 years
11. Mobile Phase A: 10 mM ammonium acetate solution in 95:5(v/v) reagent water/acetonitrile- Weigh 1.55g ± 0.01g ammonium acetate into a 2-L glass mobile phase bottle. Add 1900 mL reagent water and mix well to dissolve the ammonium acetate. Add 100 mL acetonitrile and mix well. Store at room temperature for up to 2 months. Different volumes can be prepared as long as final concentrations are equivalent.
12. Mobile Phase B: Acetonitrile

13. Potassium Hydroxide - Certified ACS, Fisher P250-500 or equivalent

14. 0.4% KOH in Methanol - 4.7g Potassium hydroxide into 1L of MeOH, store at room temperature, replace after 3 months

B. Standards:

1. Standards are prepared using calibrated pipettes, polypropylene microcentrifuge tubes, polypropylene bottles, and 10 ml Class A PP volumetric flasks to create solutions at desired concentrations. The concentrated solution is injected below the surface of the diluting solvent. After preparation is completed, standards should be vortexed to ensure complete mixing. Measurement of volumes less than 10 µl should be avoided in routine production operations.

2. All stock, intermediate and spiking solutions are prepared using Methanol.

3. All initial calibration, initial calibration verification, and bile salt working standard solutions are prepared using Methanol.

4. All diluted solutions must be stored in HDPE containers that have been thoroughly rinsed with methanol.

5. While PFAS standards commercially purchased are supplied in glass ampoules, all subsequent transfers or dilutions performed by the analyst must be prepared and stored in polypropylene or HDPE containers. Vortex all standard solutions prior to removing aliquots. Stock standard and intermediate standard solutions are stored in the refrigerator in labeled polypropylene screw-top vials, PP bottles, or PP centrifuge tubes.

6. Expiration dates are managed through LIMS Reagent. Solutions transferred from sealed glass ampules to screw-capped vials are given expiration dates provided by the vendor or 1 year if there is none. Intermediate solutions are given an expiration date of 6 months from the preparation date, or the expiration date from the ampule provided by the vendor, whichever occurs sooner. The ampules and transferred solutions are stored in the refrigerator.

7. Working native and labeled (extraction surrogate and internal standard) compound spiking solutions are given an expiration date of 6 months, or the expiration date of the solutions used to prepare the working solution, whichever occurs sooner. The solutions are stored in labeled polypropylene screw-top vials in the refrigerator. When these solutions are prepared they must be tested prior to use in the PFAS extraction lab and verified monthly until they are consumed by operations or expire. Records of the standard verification are maintained by the laboratory. Prior to use, the working spiking solution should be evaluated against recovery windows of 85-115% for all compounds that will be analyzed using that solution. Should a standard fail to meet these criteria, the data must be reviewed by departmental management for acceptability and/or corrective action.

Working initial calibration solutions are given an expiration date of 6 months, or the expiration date of the solutions used to prepare the working initial calibration solution, whichever occurs sooner.

8. The primary/preferred standard vendor is Wellington Laboratories, Inc. Ontario, Canada. Listed catalog numbers are taken from Wellington product lists. Equivalent standards may be substituted, if the listed standards are unavailable. Standards are predominantly at a concentration of 50 ug/mL in basic methanol. In the case of the sulfonic compounds, the concentration is 50ug/mL of the alkali (potassium or sodium) salt. The laboratory uses the concentration of the acid form when determining the concentration of individual sulfonic acids in solution.

The solution concentration listed is as presented on the certificate of analysis and includes adjustment for purity and the salt form of the compound used.

Note: The concentrations referenced for the sulfonate salts, (for example PFBS, PFHxS and PFOS) have already been corrected to the acid form by the standards supplier as noted in the example Certificate of analysis (CofA). See *Attachment 04*.
If the compound purity is assayed to be 98% or greater, weight can be used without correction to calculate concentrations.

As stated above, PFBS, PFHxS, PFHpS, PFOS, PFDS, and many other PFAS are not available in the acid form, but rather as their corresponding salts, such as sodium or potassium. The standards are prepared and corrected for their salt content according to the equation below (if not already corrected by the supplier).

$$Mass_{acid} = Measured\ Mass_{salt} \times MW_{acid} / MW_{salt}$$

Where: MW_{acid} is the molecular weight of PFAA
MW_{salt} is the molecular weight of the purchased salt.

For example, the molecular weight of PFOS is 500.1295 and the molecular weight of NaPFOS is 523.1193. Therefore, the amount of NaPFOS used must be adjusted by a factor of 0.956.

9. Log purchased standards into LIMS Reagent. Select the solution category SOURCE for purchased mixes and/or single-compound ampules. LIMS Reagent system will assign formatted names to the purchased standard solutions. The automatically-generated name can be overwritten with a manually created name if desired. Use labels printed through the LIMS Reagent to identify and track standard solutions after transfer from original ampule to storage vial. The CofA for the ampulated stock standard is attached in LIMS Reagent for reference.

10. Standards are prepared by transferring a known quantity of Standard to a final volume of solvent. Standard Preparation is documented in LIMS Reagent. Solutions are stored by Type in LIMS Reagent, i.e., INTERMEDIATE=working solutions and intermediate standards and SOURCE=stocks (ampulated solutions). Each Standard is given a unique name.

Refer to the documentation in LIMS Reagent for standards preparation information.

Calibration

A. Initial Calibration

1. A minimum of six calibration standards are required when using an average or linear curve fit. A minimum of seven calibration standards are required for a second-order(quadratic) curve fit. In general, Cal 0 (half the RL), Cal1 (RL), Cal2, Cal3, Cal4, Cal5, Cal6, and Cal7 are included in the initial calibration. The calibration standards contain the branched isomers for PFHxS, PFOS, PFOA, PFNA, PFOSA, NMeFOSAA, NEtFOSAA, NMeFOSA, NEtFOSA, NMeFOSE, and NEtFOSE. S/N ratio must be greater than or equal to 3:1 for all ions used for quantification.

2. Analyze a standard (WDM) that contains EIS, NIS and Bile Salt retention time markers at a concentration of 100 ppb containing Taurodeoxycholic Acid (TDCA), Taurochenodeoxycholic acid (TCDCA), and Tauroursodeoxycholic acid (TUDCA). The analysis of this standard is used to evaluate the chromatographic program relative to the risk of an interference from bile salts in tissue samples. The laboratory must establish chromatographic conditions to ensure the bile salt (TDCA)

does not cause interference during the analysis of samples. To demonstrate successful separation the retention time of TDCA must be at least 1 minute outside the retention time window of PFOS. This is demonstrated as a comparison of the RT of TDCA (measured at the apex of the TCDA peak) separated by at least 1.4 minutes from the RT of the linear isomer of PFOS (measured at the apex of the peak of the linear isomer of PFOS). If the mobile phase does not contain acetonitrile, this check must include all three bile salts (TDCA, TCDCA, and TUDCA). If adequate separation is not achieved, adjust the chromatographic conditions and reevaluate the separation of TDCA from PFOS.

Example Initial Calibration Sequence:

1. Instrument Blank
2. Instrument Blank
3. Instrument Blank
4. 4. CAL 0
5. CAL 1
6. CAL 2
7. CAL 3
8. CAL 4
9. CAL 5
10. CAL 6
11. CAL 7
12. ICB (Instrument Blank)
13. ICV
14. 15. WDM (Bile Salts standard)

3. Isotopically-labeled compounds are not available for some compounds. See below for compounds and their referenced extraction standards. See *Attachment 02* for additional information about compound relationships.

NOTE: For better accuracy, PFTrDA is quantitated using the average of the areas of labeled compounds 13C2-PFTeDA and 13C2-PFDoDA.

Compound	Extraction Standard
PFBA	13C4-PFBA
PFPeA	13C5-PFPeA
3:3FTCA	
PFMPA	
PFMBA	
PFHxA	13C5-PFHxA
NFDHA	
5:3FTCA	
7:3FTCA	
PFEESA	
PFHpA	13C4-PFHpA

PFOA	13C8-PFOA
PFNA	13C9-PFNA
PFDA	13C6-PFDA
PFUnA	13C7-PFUnA
PFDoA	13C2-PFDoA
PFTrDA	Avg 13C2-PFTeDA and 13C2-PFDoA
PFTeDA	13C2-PFTeDA
PFBS	13C3-PFBS
PFPeS	13C3-PFHxS
PFHxS	
PFHpS	13C8-PFOS
PFOS	
PFNS	
PFDS	
PFDoS	
4:2-FTS	13C2-4:2-FTS
6:2-FTS	13C2-6:2-FTS
8:2-FTS	13C2-8:2-FTS
PFOSA	13C8-PFOSA
NMeFOSA	D3-NMeFOSA
NEtFOSA	D5-NEtFOSA
NMeFOSAA	D3-NMeFOSAA
NEtFOSAA	D5-N-EtFOSAA
NMeFOSE	D7-NMeFOSE
NEtFOSE	D9-NEtFOSE
HFPO-DA	13C3-HFPO-DA
DONA	
9Cl-PF3ONS	13C8-PFOS
11Cl-PF3OUdS	

Additional Compounds

Compound	Extraction Standard
FBSA	13C3-PFBS
FHxSA	13C3-PFHxS
PFECHS	
10:2-FTS	13C2-10:2-FTS
PFPrA	13C3-PFPrA
PFODA	13C2-PFHxDA
PFHxDA	
TFSI	13C3-PFHxS
PFPrS	13C3-PFPrS
6:2 diPAP	13C4-6:2 diPAP
6:2/8:2 diPAP	
8:2 diPAP	13C4-8:2 diPAP

4. Fit the curve

   a. If the %RSD for the response factors is less than or equal to 20%, the average response factor (Ave RRF) can be used to quantitate the data.

   b. If the %RSD is greater than 20%, a linear regression with a concentration weighing factor of 1/x is tried for compounds not meeting the criteria in 5.a. The RSE for all method analytes must be less than or equal to 20%.

   c. For all curve fits, each calibration point is calculated back against the curve. The back calculated concentration for each calibration point should be within ±30% of its true value.

   d. If the criteria are not met, the source of the problem must be determined and corrected. Situations may exist where the initial calibration can be used. In those cases, the data will be reported with a qualifying comment.

   NOTE: The concentrations referenced for the sulfonate salts, (for example PFBS, PFHxS and PFOS) have already been corrected to the acid form by the standards supplier as noted in the example Certificate of Analysis (CofA). See *Attachment 04*.

5. Initial Calibration Verification (ICV)

   A check standard prepared from a second source (ICV) is injected to confirm the validity of the calibration curve/standard. A second source of a different lot number or from a different vendor should be used. The calculated amount for each analyte must be within ±30% of the true value. If this criteria is not met, re-inject or remake the standard. If the criteria is still not met, recalibration is necessary. Instrument maintenance may be needed prior to recalibrating.

B. Continuing calibration

1. Once the calibration curve has been established, the continuing accuracy must be verified by analysis of a continuing calibration verification (CCV) standard every ten samples and at the end of the analysis sequence. Subsequent CCV standards should use the Cal4 level standard.

2. Acceptance criteria

   a. The calculated amount for each target compound in the CCV standard must be within ±30% of the true value. Samples that are not bracketed by acceptable CCV analyses must be reanalyzed. The exception to this would be if the CCV recoveries are high, indicating increased sensitivity, and there are no positive detections in the associated samples, the data may be reported with a qualifying comment. If two consecutive CCVs fail criteria for target analytes, two passing CCVs must be analyzed or the source of the problem determined and the system recalibrated before continuing sample analysis.

   b. The absolute areas of the injection internal standards should be greater than 30% of the average areas measured during the initial calibration.

Procedure

TSS for Aqueous Samples
All water samples are visually evaluated for Total Suspended Solids (TSS). Although the full container volume of the sample should be extracted, this method is applicable to aqueous samples containing up to 50 mg (400 mg/L) of suspended solids.

For samples with high TSS or biphasic samples, the client may indicate whether they would like to:

- Preserve their data quality and accept elevated RLs up to 5X by extracting at reduced volume if TSS value is between 400mg/L – 2,000mg/L [(if TSS > 2,000 mg/L, sample must be centrifuged)(if TSS > 10%, sample must be processed as a solid)]

or

- Preserve lowest RLs by centrifuging the sample and accept potentially compromised data quality from poor recoveries of EIS that may potentially sorb to particulates.

If the client chooses to centrifuge, EIS will be spiked into sample, the sample will be centrifuged in it's original container at 1500rcf (2200rpm) for 10min, the supernatant will be decanted into a new 125mL bottle, the bottle rinsed with 2 x 5mL of reagent water and the rinse added to the new 125mL bottle with the supernatant, and the weight of the supernatant 125mL bottle recorded in batchlog.

A. Aqueous Sample Preparation

1. Weigh sample container with contents on a calibrated top loading balance, and record the first reading in the automated prep entry system.

   a. For all samples, the full bottle must be extracted. The sample must remain in the original sample container until after spiking solutions have been added.
   b.

2. Use a 125 mL HDPE bottle for the method blank, the laboratory control sample (LCS), and the low level laboratory control sample (LLCS). Fill each bottle with 125 mL of reagent water. Record 125 mL as the volume for the batch QC samples on the batchlog.
3.
4. 3. Spike QC and all samples with 50 µl of Working labeled extraction standard spike solution (1633 EIS Mix). Spike LCS with 50 µl of native 1633 mid-level spike solution (1633 Mid Spike) (Optional: MS/MSD upon client request). Spike LLCS with 40µl of native 1633 low-level spike solution (1633 Low Spike). MDLs spiked with 20uL native 1633 low-level spike solution (1633 Low Spike). Vortex/Shake containers to mix thoroughly. Vortex all spike solutions prior to use.

5. Check that the pH is 6.0±0.5. If necessary, adjust the pH with 50% formic acid (or with 5% formic acid) or 3% methanolic ammonium hydroxide. **NOTE: Never put pH test strips into the sample. Use a disposable pipette to place a few drops of sample onto the pH paper.**

B. Solid and Tissue Sample Preparation

1. On a calibrated, top-loading balance:

   a. Solids: accurately weigh 2g ± 0.10g (dry weight; note: maximum 5g sample aliquot) (0.5 g for biosolids (dry weight; note: maximum 1g sample aliquot)) of solid sample into a tared, labeled 50-mL centrifuge tube using a stainless steal spatula. Record sample weight in the prep entry system. Vortex all spike solutions prior to use.

   For each batch - maximum 20 samples - include the following quality control samples:

   a. Method Blank: Weigh 2 ± 0.10g (0.5 g for biosolids) of sand

   b. LCS: Fortify 2g ± 0.10g (0.5 g for biosolids) of sand and spiked with 50 µl of native 1633 mid-level spike solution (1633 Mid Spike). Optional: MS/MSD upon client request.

   c. LLCS: Fortify 2g ± 0.10g (0.5 g for biosolids) of sand and spiked with 40µl of native 1633 low-level spike solution (1633 Low Spike). Note: MDLs spiked with 20uL native 1633 low-level spike solution (1633 Low Spike).

   b. Tissue: accurately weigh 1.0g ± 0.10g of tissue sample into a tared, labeled 50-mL centrifuge tube using a stainless steel spatula or tweezers. Record sample weight in the prep entry system. Vortex all spike solutions prior to use.

   For each batch - maximum 20 samples - include the following quality control samples:

   a. Method Blank: Weigh 1.0g ± 0.10g of tilapia

   b. LCS: Fortify 1.0g ± 0.10g of tilapia spiked with 50 µl of native 1633 mid-level spike solution (1633 Mid Spike). Optional: MS/MSD upon client request

   c. LLCS: Fortify 1.0g ± 0.10g of tilapia spiked with 40µl of native 1633 low-level spike solution (1633 Low Spike). Note: MDLs spiked with 20uL native 1633 low-level spike solution (1633 Low Spike).

NOTE: If a laboratory must dissect a whole fish to obtain appropriate tissue for analysis, the benchtop should be covered with clean aluminum foil, and use clean processing equipment to dissect each sample. Samples should be handled in a semi-thawed state for compositing and/or homogenization. Collect the tissue sample in a stainless steel bowl during grinding and mix using a stainless-steel spoon. Store samples in clean HDPE containers and store frozen until used for sample preparation.

If using a grinder, mix the ground tissue with a spoon after the entire sample has been processed, and transfer back to the grinder. Repeat this process at least two more times until the homogenized tissue has consistent color and texture.

2. Add 50 µl working labeled extraction standard spike solution (1633 EIS Mix) to each sample/QC tube.

3. Cap and vortex for approximately 30 seconds.

4. Allow samples/QC to equilibrate for at least 30 minutes.

5. Add 10 mL of 0.4% KOH in methanol (use 0.3% Methanolic Ammonium Hydroxide for tissue samples) to each centrifuge tube.

6. Cap and vortex.

7. Sonicate in ultrasonic bath for 1 hour.

8. Centrifuge at 3000 rcf (4500 rpm) for 5 minutes and decant the supernatant into a second 50mL extraction tube.

9. Add another 4 mL of 0.4% KOH in methanol (use 0.3% Methanolic Ammonium Hydroxide for tissue samples) to the remaining sample in each centrifuge tube.

10. Shake by hand to disperse.

11. Centrifuge at 3000 rcf (4500rpm) for 5 minutes and decant the supernatant into the second tube with the previous supernatant.

12. Centrifuge the combined supernatant at 3000 rcf (4500rpm) for 5 minutes.

13. Decant the extract from each tube into a clean, labeled, 125 mL HDPE bottle (use 250 mL HDPE bottle for tissue). Bring the 125-mL HDPE container up to 125 mL with Milli-Q water (or 250 mL with Mili-Q water for tissue) .

14. Check that the pH is 6.0±0.5. If necessary, adjust the pH with 50% formic acid (or with 5% formic acid) or 3% methanolic ammonium hydroxide (Tissue: adjust pH with acetic acid, ~20-25uL). Typically, add 80-85uL of 50% FA to each bottle then verify and further adjust if necessary. **NOTE: Never put pH test strips into the sample. Use a disposable pipette to place a few drops of sample onto the pH paper.**

15. Invert container to thoroughly mix.

C. Solid Phase Extraction (SPE) – Automated Sample Extraction using Promochrom

Note: all samples must be prescreened prior to use of the promochrom to avoid carryover and contamination.

1. Pack clean silanized glass wool to a quarter of the height of the SPE cartridge barrel if analyst determines necessary.
2. Label each SPE cartridge to correspond with each associated sample/QC piece and attach to a rinsed SPE port. Record the SPE port # for each sample/QC piece on the batchlog. Method blank should be rotated between Promochrom ports and instruments.
3. Check to make sure all reagent bottles are filled and that reagents are not expired. Reagents should be as follows:

Solvent 1: Methanol
Solvent 2: Reagent Water
Solvent 3: 0.3M Formic Acid in Water
Solvent 4: 30:70 Methanol:Water
Solvent 5: 0.3% Methanolic Ammonium Hydroxide
Solvent 6: 1% Methanolic Ammonium Hydroxide

4. Label each sample bottle and cap with the same number to ensure samples are not inadvertently switched during the extraction procedure (i.e.; 1,1,1; 2,2,2; 3,3,3; etc.).

5. Select "2% Wash" from the drop down menu to start the cleaning cycle prior to SPE. Make sure the "Clean" cartridges and bottles are attached for this cycle. After the "2% Wash" has finished, attach Promochrom filters to the bottles as necessary (all tissue samples use filters), select "Clean Filter" from the drop down menu to clean filters prior to SPE.

6. Remove "Clean" cartridges and attach the labeled cartridges that will be used when running the samples when the system cleaning is complete. Disconnect the "Clean" bottles. Attach the labeled sample bottles by twisting the bottles and not the cap. Place sample bottles upside down in corresponding numbered location on shaker. Poke two holes into the lip of each bottle. Load labeled centrifuge tubes in the moving tray beneath the cartridges. Ensure sample bottle lines are not crossed and leading to the correct port.

7. Select "EPA 1633 Final" from the drop down menu and press the green check mark to start the procedure. Cartridges for aqueous and solid samples should be Strata-X-AW 200mg (Part# 8B-5S41-FCH) Note: N2 dry down should be 13 minutes long. **For tissue samples:** Use the 500mg Strata-X-AW cartridges (Part# 8B-S541-HCH) and select method "EPA 1633 Final Tissue" on the promochrom. This method is set for the 250mL volume.

a. For aqueous samples, adjust the sample volume in the method to the highest bottle weight in the prep batch.
b. Promochrom method is briefed as follows:
1. Pre-wash:5 mL of 0.3% NH4OH/Methanol followed by 5.0 mL of 0.3 M Formic Acid/H2O
2. Load samples
3. Wash sample bottle with 2x5 mL of H20, add to cartridge
4. Pre-elution wash: rinse SPE Column with 2x 5mL 30:70 methanol:water
5. Nitrogen dry for 13 minutes (manual stop after this to add carbon cartridge)
6. Elute with 5 mL (2 x 2.5 mL elutions of 1% NH4OH/Methanol (0.3% NH4OH/MeOH for tissue), 1 mL/minute flow rate

Note: if the SPE cartridge clogs during extraction, terminate the clogged extraction and re-extract sample at a smaller aliquot.

9. Once the manual stop occurs before the final cartridge elution, attach the carbon filters to the bottom of each SPE cartridge and place back on promochrom, press start.

8. Once the cycle is complete, remove capped centrifuge tubes and discard the used cartridges and bottles. For aqueous samples, weigh empty sample bottles and record in prep batch before discarding. Reattach "Clean" bottles and cartridges, select "2% wash" from menu, select "start". This must be done between each batch and at the beginning and the end of the day.

9. Add 50 uL of Internal Standard Spike Solution (1633 NIS Mix) to each sample extract. For tissue samples only: also add 250uL of water to each sample extract.

11. Bring each sample extract to final volume 5mL using 95:5 methanol:water (or 0.3% NH4OH/MeOH for tissue).

Note: For all tissue samples or if there are noticeable particulates in extract and analyst deems necessary: Place a syringe filter rinsed with MeOH (25-mm filter, 0.2-µm nylon membrane) on a 5 mL polypropylene syringe. Take the plunger out and carefully decant the sample supernatant into the syringe barrel. Replace the plunger and filter the entire extract into the new collection tube.

12. Cap and vortex to mix.

13. Transfer a portion of the final extract to the corresponding labeled auto-sampler vial. Cap the auto-sampler vial. Samples are now ready for analysis.

14. Cap the centrifuge tube. The remaining extracts are stored in the refrigerator for reinjection if needed.

15. Update all prep batch info and record any necessary NCM's.

E. LC/MS/MS Analysis

1. Mass Calibration and Tuning

   a. At instrument set up and installation, after the performance of major maintenance, or annually, calibrate the mass scale of the MS with calibration compounds and procedures described by the manufacturer. The entire mass range must be calibrated.

   b. When masses fall outside of the +/- 0.5 amu of the true value, the instrument must be retuned using PPG according to the manufacturer's specifications. Mass assignments of the tuning standard must be within 0.5 amu of the true value. Refer to the instrument manufacturer's instructions for tuning and conditions. These values are stored in the tune file for future reference.

2. The mass spectral acquisition rate must include a minimum of 10 spectra scans across each chromatographic peak. See the AB Sciex (4500/5500/5500 Plus) Acquisition, Quantitation, Gradient, and detector condition files for the most up to date chromatographic conditions. Modifications to these conditions can be made at the discretion of the analyst to improve resolution or the chromatographic process.

3. Example acquisition method: See *Attachment 03*. Mass Transitions: See *Attachment 01*.
4.
5. Instrument Sensitivity Check (ISC) and Instrument Blanks

a. Prior to sample analysis, an instrument sensitivity check (ISC) must be performed. The ISC standard concentration must be at the LOQ. The CAL1 standard's concentration is at the LOQ. The CAL1 standard will be analyzed. All target analyte concentrations must be within ±30% of their true values. The signal-to-noise ratio must be greater than or equal to 3:1 for the quantitation ions and confirmation ions, and 10:1 for quantitation ions that have no confirmation ion. If the criteria is not met, correct problem and rerun ISC. If problem persists, repeat the ICAL. No samples can be analyzed until the ISC meets acceptance criteria.

b.

c. Instrument blanks need to be analyzed immediately following the highest standard analyzed and daily or at the start of a sequence. The concentration of all analytes must be less than or equal to the MDL. If acceptance criteria are not met, the calibration must be performed using a lower concentration standard for the high standard until the criteria are met.

d.

6. Load sample vials containing standards, quality control samples, and sample extracts into autosampler tray. Allow the instrument adequate time to equilibrate to ensure the mass spec and LC have reached operating conditions (approximately 1 minutes) before the first injection. Analyze several (at least 3) solvent blanks clean the instrument prior to sample acquisition.

7. After the initial calibration and when analyzing samples within the same tune, inject an instrument blank, followed by the ICV, bile salts marker (WDM), instrument sensitivity check, CCV standard using the CAL4, qualitative identification standard (includes Bile Salt RT marker), Instrument blank, extraction batch QC, and samples. Bracket each set of ten samples with a CCV standard at the CAL4 level, followed by an instrument blank.

   Example Sample Sequence:
   1. Instrument blank
   2. Instrument blank
   3. Instrument blank
   4. Instrument Sensitivity Check (CCV LOW_CAL1)
   5. CCV MID_CAL4
   6. Bile Salts marker (WDM)
   7. Instrument Blank (ICB)
   8. Method Blank (MB)
   9. Low Level LCS (LLCS)
   10. LCS
   11. Sample (10 or less)
   12. CCV MID_CAL4
   13. Instrument Blank

8. After injections are completed, check all CCV recoveries and absolute areas to make sure they are within method control limits. See Calibration section B.2 for acceptance criteria. Process each chromatogram and closely evaluate all integrations, baseline anomalies, and retention time differences. If manual integrations are performed, they must be documented and a reason given for the change in integrations. The manual integrations are documented during data processing and all original integrations are reported at the end of the sample PDF file with the reason for manual integration clearly listed.

9.

10. Most PFAS compounds are manufactured by one of two processes, ECF or fluorotelomerization. One gives rise to linear PFAS only while the other process produces both linear and branched isomers. Both branched and linear PFAS compounds can potentially be found in the environment.

11. All chromatographic peaks observed in the standard must be integrated and the areas totaled. Chromatographic peaks in the sample must be integrated in the same way as the calibration standard and concentrations reported as a total for each of these analytes. Any branched isomers in samples that elute before the branched isomers present in the calibration standards must not be included in the sample area response

12. Quantitate results for the extraction blank. No target analytes at or above the reporting limit, at or greater than one-third the regulatory compliance limit, at or greater than one-tenth the concentration in a sample in the extraction batch, whichever is greatest, may be found in the extraction blank for acceptable batch results. If this criteria is not met, the samples must be re-extracted.

13. Calculate the recoveries of spiked analytes for the LLCS, LCS, matrix spike and matrix spike duplicate (MS/MSD) by comparing concentrations observed to the true values.

    a. LLCS, LCS, MS, extraction standard recoveries and RPDs are calculated and compared to the limits stored on the LIMS.

    b. If LLCS and LCSD recoveries are acceptable, proceed to sample quantitation.

    c. If the LCS recoveries are above QC acceptance criteria and there are no detections for the compound(s) in the associated sample(s), the data can be reported with a qualifying comment. In all other cases, the samples associated with the LCS must be re-extracted.

    d. If MS/MSD recoveries are outside QC acceptance criteria, the associated data will be flagged or noted in the comments section of the report.

14. Calculate the relative percent difference (RPD) between the LCS and LCSD. The RPD must be less than or equal to 30%. If the criteria is not met, re-vial fresh aliquots and re-analyze, if still not met, re-prep and reanalyze LCS/LCSD, associated samples, and batch QC.
15.
16. Isotopically-labeled extraction standards are added to all samples, extraction blank, LLCS/LCS, and MS/MSD prior to extraction. The recovery of the extraction standards should be within QC acceptance criteria. (See Statistical Information/Method Performance section of this SOP.) If the extraction standard recovery(ies) is(are) outside the QC limit(s), re-vial a fresh aliquot and reanalyze. If the extraction standard recovery(ies) are still outside the QC limit(s), reanalyze the sample at a dilution. If the extraction standard recovery(ies) are still outside the QC limit(s), re-extract using a reduced sample volume (with client permission at the expense of the client). If the extraction standard recovery(ies) are still outside the QC limit(s), narrate with an NCM and report the data.

17. Isotopically-labeled injection standards are added to each QC and field sample extract prior to analysis. The absolute areas of the injection standards should be within 50-200% of the average areas measured during the initial calibration. If the internal standards are recovered outside 50-200%, re-analyze the sample at a dilution and consult a supervisor to determine the appropriate course of action based on batch and sample results.

18. Retention time windows are initially established by injecting solutions containing all compounds. The retention time is then set/updated for all compounds using the midpoint of the ICAL (cal 5) or at the beginning of the analytical sequence using the opening CCV mid. Compare the retention times of all of the analytes, surrogates, and internals standards to the retention time from the initial calibration or the opening CCV mid. The retention times should not vary from the expected retention time by more than

a. 0.4 minutes for native, EIS and NIS compounds

b. 0.1 minutes from their analog for native compounds with an exact isotopically-labeled compound

If the retention time is outside of the criteria, the compound is considered a false positive unless it is a compound with branched isomers. Compounds with branched isomers can vary in intensity of the individual isomers that are used for reporting and must be reviewed and compared to the preceding CCV to determine if it should be reported.

19. Two ion transitions and the ion transition ratio per analyte shall be monitored and documented with the exception of PFBA, PFPeA, PFECA F(PFMPA), PFECA A(PFMBA), NMeFOSE, and NEtFOSE because qualifier ions are either non detectable or have have inadequate S/N to be reliable for routine use. The expected ion ratio for each compound is compared to the midpoint of the calibration (cal 5). When an ion ratio for a compound differs from the expected ion ratio by more than 50%, a qualifier "I" is placed on the raw data and on the sample report. See QC Paradigm for corrective action in prepped samples. Ion ratios must be in control for target analytes in calibration solutions. If they are outside of limits, stop the analysis and correct the issues.

20. If the calculated concentration exceeds the calibration range of the system, the client may indicate their preference on either reporting E-flagged results, or diluting the extract to be brought within calibration range (re-extraction of a smaller aliquot may be necessary if an analyte exceeds 100x the upper calibration range, this re-extraction is billable). If a dilution is preferred, determine the appropriate dilution required and dilute the extract using 95:5 Methanol:water and adjust the amount of internal standard spike solution in the diluted extract. Select the dilution so that the expected EIS recoveries in the diluted extract are >5% (not to exceed 100x dilution).

Calculations

1. Peak Area Ratio

$$Peak\ Area\ Ratio = \frac{Analyte\ Response}{Labeled\ Analyte\ Response}$$

2. On-Column Analyte Concentration using average RRF

On-column Concentration = peak area ratio ÷ AVE RRF

3. On-Column Analyte Concentration using linear curve

On-column Concentration = (peak area ratio - intercept) ÷ slope

4. Sample Concentration

Sample concentration (ng/l) = (On-column concentration x Final Sample Volume x DF) ÷ Initial Sample Volume

5. Ion Ratio

ion ratio = (peak area or height of quantifier)/(peak area or height of qualifier)

6. See cross-referenced SOPs for additional calculations used to evaluate the calibrations and quality control samples.

Statistical Information/Method Performance

The LCS(OPR) and LLCS(LLOPR) should contain all compounds of interest. LCS, LLCS, MS, and extraction standard recoveries are compared to the limits stored on the LIMS. These limits are method defined. The LCS(OPR) and LLCS(LLOPR) and their respective EIS limits are from Table 6 and 8 of EPA 1633. See *Attachment 19*. The MS/MSD native recoveries are compared to the OPR limits listed in Table 5 and 7 of EPA Method 1633. See *Attachment 19*. The EIS limits for the MS/MSD, DUP, Method Blank, and samples are listed in Table 6 and 8 from EPA 1633. See *Attachment 19*.

QC parameter	Lower acceptance limit	High acceptance limit
Non-extracted Internal Standard (NIS)	>50% of the average NIS from the initial calibration	200%
Sample/DUP	</=30%	NA

Records of the standard deviation of the percent recovery (SR) of EIS and NIS compounds from samples must be maintained and should be assessed periodically. It is recommended that this assessment is done quarterly. The assessment should be expressed as the average percent recovery +/- 2SR for each isotopically labeled compound, and evaluated at least annually.

Historical data for MS/Ds, LCSs, EIS, is reviewed at least annually. Reporting limits including method detection limits (MDLs) and limits of quantitation (LOQs) are set according to EPA method requirements and are evaluated annually. Refer to the SOP for Determining Method Detection Limits and Limits of Quantitation for specific guidelines and procedures. Updates to the LIMS are made as needed by the QA Department and only as directed by the supervisor.

As MDL studies are run on clean laboratory matrices, statistically derived MDL values could be artificially lower than achievable limits in real world samples. Nominal MDL values, set at no lower than ¼ the calculated and verified Reporting Limit (or Limit of Quantitation) will be used as a method to avoid artificially low bias in MDL studies.

Quality Assurance/Quality Control

For each batch of samples extracted, a method blank, an LCS/LLCS (house DI water, sand or tilapia spiked with all compounds to be determined carried through the entire procedure) must be extracted and analyzed. MS/MSD and/or sample/DUP are extracted only if submitted by the client. A batch is defined as the samples to be extracted on any given day, but not to exceed 20 field samples. If more than 20 samples are prepared in a day, an additional batch must be prepared.

If any client, state, or agency has more stringent QC or batching requirements, these must be followed.

Method Modifications

For more detail and justifications for the method modifications, please refer to attachment 20 (Eurofins CLE 1633 Modification Document).

1. Water samples are extracted at 125mL.

2.Solid and tissue samples are extracted at 2g.

3. The SPE cartridge incorporates graphitized carbon. Column washing and elution procedures are modified accordingly. Loose carbon is no longer used.

4. The calibration scheme has been updated to align with the current Eurofins LC/MS-MS instrumentation and sensitivity.

5. Additional analytes have been added.

6. The analytical column, while still C18 based, has been changed.
7. Extraction solvents have been updated to improve method performance.

8. The solid extraction procedure was updated to improve method performance.

) QC Paradigm

Occurrence	Action
Sample recovering outside of method EIS/IDA limits as per Table 6 or 8 of the reference method, dependent upon matrix.	If EIS out check for errors and correct. Re-analyze sample if needed. If EIS out high: ND samples, report and narrate; if detections, but EIS<200% (FTS< 350%) report and narrate; if detections and EIS>200% (FTS> 350%), dilute 10X, re-analyze, report and narrate. If EIS low but > 5% and S/N> 20:1, narrate and report. If EIS <5% then contact client to re-extract at smaller aliquot (billable).
Sample recovering NIS outside of 50-200% of the average area of the initial calibration	If fails high, check for errors and report. If fails low, re-analyze fresh aliquot of sample and/or re-analyze at a dilution. If in control, report.

standard in undiluted sample extracts and sample extracts that require NIS to be added.	If the failure confirms report the initial analysis and narrate.
Method blank has target analytes > RL or > 1/10 the amount measured in any sample or 1/10 the regulatory limit (whichever is greater).	Verify instrument clean (evaluate calibration blank & samples prior to method blank), then reanalyze. Evaluate to determine if systematic issue within laboratory, correct, then re-prepare and reanalyze the method blank and all samples processed with the contaminated blank.
LLCS or LCS recover outside of method OPR limits as per Table 5 or 7 of the reference method, dependent upon matrix.	Reanalyze LLCS/LCS once. If acceptable, report. Evaluate samples for detections, and LLCS/LCS for high bias. If LLCS/LCS has high bias, and samples non-detect, report and narrate. If LLCS has low bias, or if there are detections for critical chemicals of concern, evaluate and reprep and reanalyze the LLCS and all samples in the associated prep batch for failed analytes, if sufficient sample material is available.
Sample has a compound detection with an ion ratio outside of acceptance window of 50-150% of the ratio in the mid-point calibration standard or daily CCV standard. Applicable for all detected analytes (except PFBA, PFPeA, NMeFOSE,	Check for error, if none found report as outlined below. 1) If outside limits and value <RL report as ND at RL. 2) If outside limits, but within 2X rule flag, report and narrate. 3) If ratio outside 2X rule then report as ND at elevated RL, apply G flag and narrate. 4) If ratio out due to branched isomer contribution report as positive with narration.

NEtFOSE, PFMPA & PFMBA)	5) If outside limits (and RT window) due to matrix report as ND at elevated RL, apply G flag and narrate.
Compound recovered above calibration curve	Evaluate for saturation. If present dilute and re-analyze. If not, flag and report.
OPTIONAL: MS/MSD recovery outside of method OPR limits as per Table 5 or 7 of the reference method, dependent upon matrix. RPD > 30%.	OPTIONAL: Evaluate the data, and re-prepare/reanalyze the native sample and MS/MSD pair if laboratory error is indicated. Otherwise, narrate and report.
OPTIONAL: Lab duplicate RPD > 30%	OPTIONAL: Evaluate the data, and re-prepare/reanalyze the native sample and DU pair if laboratory error is indicated. Otherwise narrate and report.

Attachment:
Attachment 01 - Mass Transitions (.docx)
Attachment 02 - Standard Relationships (.docx)
Attachment 03 - Acquisition Parameters (.pdf)
Attachment 04 - Example Certificate of Analysis (.pdf)
Attachment 05 - Native PFAS Intermediate A (.pdf)
Attachment 06 - Native PFAS Intermediate B (.pdf)
Attachment 07 - Native PFAS Intermediate M (.pdf)
Attachment 08 - Extraction Standard Mix (.pdf)
Attachment 09 - Internal Standard Mix (.pdf)
Attachment 10 - Initial Calibration Standards Preparation (.pdf)
Attachment 11 - Initial Calibration Standard Concentrations (.pdf)
Attachment 12 - Bile Salt Stock Solutions (.pdf)
Attachment 13 - Bile Salts Working Solution A (.pdf)
Attachment 14 - Bile Salts Working Solution B (.pdf)
Attachment 15 - PFAS Linear Branched Mix A (.pdf)
Attachment 16 - PFAS Linear Branched Mix B (.pdf)
Attachment 17 - Linear Branched Bile Salts Solution (.pdf)
Attachment 18 - ICV Working Standard (.pdf)
Attachment 19 - Tables 5-10 (1633) (.pdf)
Attachment 20 - Eurofins CLE 1633 Modification Document_2025 (.xlsx)

Attachment: Attachment 01 - Mass Transitions (docx)
Attachment: Attachment 02 - Standard Relationships (docx)

Attachment: Attachment 03 - Acquisition Parameters (pdf)
Attachment: Attachment 04 - Example Certificate of Analysis (pdf)
Attachment: Attachment 05 - Native PFAS Intermediate A (pdf)
Attachment: Attachment 06 - Native PFAS Intermediate B (pdf)
Attachment: Attachment 07 - Native PFAS Intermediate M (pdf)
Attachment: Attachment 08 - Extraction Standard Mix (pdf)
Attachment: Attachment 09 - Internal Standard Mix (pdf)
Attachment: Attachment 10 - Initial Calibration Standards Preparation (pdf)
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Attachment: Attachment 12 - Bile Salt Stock Solutions (pdf)
Attachment: Attachment 13 - Bile Salts Working Solution A (pdf)
Attachment: Attachment 14 - Bile Salts Working Solution B (pdf)
Attachment: Attachment 15 - PFAS Linear Branched Mix A (pdf)
Attachment: Attachment 16 - PFAS Linear Branched Mix B (pdf)
Attachment: Attachment 17 - Linear Branched Bile Salts Solution (pdf)
Attachment: Attachment 18 - ICV Working Standard (pdf)
Attachment: Attachment 19 - Tables 5-10 (1633) (pdf)

End of document

Version history

Version	Approval	Revision information
2	25.APR.2025	
4	11.AUG.2025	
5	08.DEC.2025	

Mass Transitions

ID	Q1	Q3
PFPrA	163	119
13C3_PFPrA	166	121
PFBA	212.8	168.9
13C3_PFBA	216	172
13C4_PFBA	216.8	171.9
PFMPA (PFECA F)	229	84.9
3:3 FTCA	241	177
3:3 FTCA_2	241	117
PFPeA	263	219
PFPeA_2	263	68.9
13C5_PFPeA	268.3	223
PFMBA (PFECA A)	279	85.1
HQ-115_1 (TFSI_1)	280.1	147.1
HQ-115_2 (TFSI_2)	280.1	77.9
HFPO-DA	284.9	168.9
HFPO-DA_2	284.9	184.9
13C3_HFPO-DA	286.9	168.9
13C3_HFPO-DA_2	286.9	184.9
NFDHA (PFECA B)	295	201
NFDHA_2 (PFECA B_2)	295	84.9
PFBS	298.7	79.9
PFBS_2	298.7	98.8
13C3_PFBS	302.1	79.9
13C3_PFBS_2	302.1	98.9
PFHxA	313	269
PFHxA_2	313	118.9
PFEESA (PES)	314.8	134.9
PFEESA_2 (PES_2)	314.8	82.9
13C2_PFHxA	315.1	270
13C2_PFHXA_2	315.1	119.4
13C5_PFHxA	318	273
13C5_PFHxA_2	318	120.3
4:2 FTS	327.1	307
4.2FTS_2	327.1	80.9
M2-4:2FTS	329.1	80.9
M2-4:2FTS_2	329.1	309
5:3 FTCA	341	237.1
5:3 FTCA_2	341	217
PFPeS	349.1	79.9

PFPeS_2	349.1	98.9
PFHpA	363.1	319
PFHpA_2	363.1	169
13C4_PFHpA	367.1	322
DONA	376.9	250.9
DONA_2	376.9	84.8
PFHxS	398.7	79.9
PFHxS_2	398.7	98.9
13C3_PFHxS	402.1	79.9
13C3_PFHxS_2	402.1	98.8
18O2_PFHxS	403	83.9
PFOA	413	369
PFOA_2	413	169
13C4_PFOA	417.1	372
13C4_PFOA_2	417.1	172
13C8_PFOA	421.1	376
6:2 FTS	427.1	407
6:2 FTS_2	427.1	80.9
M2-6:2FTS	429.1	80.9
M2-6:2FTS_2	429.1	409
7:3 FTCA	441	316.9
7:3 FTCA_2	441	336.9
PFHpS_1	449	79.9
PFHpS_2	449	98.8
PFNA	463	419
PFNA_2	463	219
TUDCA	464.2	126
TCDCA	464.21	126
13C5_PFNA	468	423
13C9_PFNA	472.1	427
PFOSA	498.1	77.9
PFOSA_2	498.1	478
TCDA_1	498.29	106.98
TCDA_2	498.29	123.9
PFOS	498.9	79.9
PFOS_2	498.9	98.8
TCDA_3	499.29	106.98
TCDA_4	499.29	123.9
13C4_PFOS	502.8	79.9
13C4_PFOS_2	502.8	98.9
13C8_PFOSA	506.1	77.8

13C8_PFOS	507.1	79.9
13C8_PFOS_2	507.1	98.9
MeFOSA	511.9	219
MeFOSA_2	511.9	169
PFDA	512.9	469
PFDA_2	512.9	219
d3MeFOSA	515	219
13C2_PFDA	515.1	470.1
13C6_PFDA	519.1	474.1
EtFOSA	526	219
EtFOSA_2	526	169
8:2 FTS	527.1	507
8:2 FTS_2	527.1	80.8
M2-8:2FTS	529.1	80.9
M2-8:2FTS_2	529.1	509
9Cl-PF3ONS	530.8	351
d5EtFOSA	531.1	219
9Cl-PF3ONS_2	532.8	353
PFNS	548.8	79.9
PFNS_2	548.8	98.8
PFUdA	563.1	519
PFUdA_2	563.1	269.1
13C7_PFUdA	570	525.1
N-MeFOSAA	570.1	419
N-MeFOSAA_2	570.1	483
d3-MeFOSAA	573.2	419
N-EtFOSAA	584.2	419.1
N-EtFOSAA_2	584.2	526
d5-EtFOSAA	589.2	419
PFDS	599	79.9
PFDS_2	599	98.8
PFDoA	613.1	569
PFDoA_2	613.1	319
13C2_PFDoA	615.1	570
N-MeFOSE	616.1	58.9
d7N-MeFOSE	623.2	58.9
10:2 FTS	627	81
10:2 FTS_2	627	607
N-EtFOSE	630	58.9
11Cl-PF3OUdS	630.9	450.9
11Cl-PF3OUdS_2	632.9	452.9

M2-10:2FTS	633	612
d9N-EtFOSE	639.2	58.9
PFTrDA	663	619
PFTrDA_2	663	168.9
PFDoS	699.1	79.9
PFDoS_2	699.1	98.8
PFTeDA	713.1	168.9
PFTeDA_2	713.1	219
13C2_PFTeDA	715.2	670
PFHxDA	813	769
PFHxDA_2	813	169
13C2_PFHxDA	815	770
PFODA	913	869
PFODA_2	913	169

Attachment 2

PFAS Injection Standards/Extraction Standards/Native Compounds

Injection Standards

Inj Std	Internal Standard/Injection Standard
I13C3-PFBA	13C3-PFBA
I13C2-PFHxA	13C2-PFHxA
I13C4-PFOA	13C4-PFOA
I13C5-PFNA	13C5-PFNA
I13C2-PFDA	13C2-PFDA
I18O2-PFHxS	18O2-PFHxS
I13C4-PFOS	13C4-PFOS

Extraction Standards

Extraction Standard	Internal Standard
E13C4-PFBA	13C3-PFBA
E13C5-PFPeA	13C2-PFHxA
E13C5-PFHxA	
E13C4-PFHpA	
E13C3-HFPO-DA	
E13C8-PFOA	13C4-PFOA
E13C9-PFNA	13C5-PFNA
E13C6-PFDA	13C2-PFDA
E13C7-PFUnA	
E13C2-PFDoA	
E13C2-PFTeDA	
E13C3-PFBS	18O2-PFHxS
E13C3-PFHxS	
E13C2-4:2-FTS	
E13C2-6:2-FTS	
E13C2-8:2-FTS	

Extraction Standard	Internal Standard
E13C8-PFOS	13C4-PFOS
E13C8-PFOSA	
Ed3-NMeFOSA	
Ed5-NEtFOSA	
Ed3-NMeFOSAA	
Ed5-NEtFOSAA	
Ed7-NMeFOSE	
Ed9-NEtFOSE	

Native PFAS Compounds

Native	Extraction Standard
PFBA	13C4-PFBA
PFPeA	13C5-PFPeA
3:3FTCA	
PFMPA	
PFMBA	
PFHxA	13C5-PFHxA
NFDHA	
5:3FTCA	
7:3FTCA	
PFEESA	
PFHpA	13C4-PFHpA
PFOA	13C8-PFOA
PFNA	13C9-PFNA
PFDA	13C6-PFDA
PFUnA	13C7-PFUnA
PFDoA	13C2-PFDoA
PFTrDA	Avg 13C2-PFTeDA and 13C2-PFDoA
PFTeDA	13C2-PFTeDA
PFBS	13C3-PFBS
PFPeS	13C3-PFHxS
PFHxS	
PFHpS	13C8-PFOS
PFOS	
PFNS	
PFDS	

Native	Extraction Standard
PFDoS	
4:2-FTS	13C2-4:2-FTS
6:2-FTS	13C2-6:2-FTS
8:2-FTS	13C2-8:2-FTS
PFOSA	13C8-PFOSA
NMeFOSA	D3-NMeFOSA
NEtFOSA	D5-NEtFOSA
NMeFOSAA	D3-NMeFOSAA
NEtFOSAA	D5-N-EtFOSAA
NMeFOSE	D7-NMeFOSE
NEtFOSE	D9-NEtFOSE
HFPO-DA	13C3-HFPO-DA
DONA	
9Cl-PF3ONS	
11Cl-PF3OUdS	

:quisition Method

33

ss Spec 12.500 min
Period 12.500 mi
-MRM
tegrated Valve
System
Equilibrate
Injection

Mass Spectrometer Method Properties

Period 1:

Scans in Period:	1250
Min. Dwell Time:	3 ms
Max. Dwell Time:	250 ms
Relative Start Time:	0.00 msec
Scheduled Ionization:	Off
Experiments in Period:	1
Use target Cycle Time:	No
Target Cycle Time:	N/A

Period 1 Experiment 1:

Scan Type:	MRM (MRM)
Scheduled MRM:	Yes
Polarity:	Negative
Scan Mode:	N/A
Ion Source:	Turbo Spray
sMRM Q1Q3 Resolution:	No
MRM detection window:	60 sec
Target Scan Time:	0.6000 sec
Resolution Q1:	Unit
Resolution Q3:	Unit
Intensity Thres.:	0.00 cps
Settling Time:	0.0000 msec
MR Pause:	5.0070 msec
MCA:	No
Step Size:	0.00 Da

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
212.800	168.900	2.71	DP	-40.00	-40.00	PFBA
			CE	-14.00	-14.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
229.000	84.900	2.94	DP	-40.00	-40.00	PFECA F
			CE	-25.00	-25.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
241.000	177.000	2.98	DP	-50.00	-50.00	3:3 FTCA
			CE	-12.00	-12.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
263.000	219.000	3.21	DP	-40.00	-40.00	PFPeA
			CE	-14.00	-14.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
298.700	79.900	3.67	DP	-90.00	-90.00	PFBS
			CE	-65.00	-65.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
279.000	85.100	3.32	DP	-40.00	-40.00	PFECA A
			CE	-20.00	-20.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
314.800	134.900	3.84	DP	-70.00	-70.00	PFEESA
			CE	-30.00	-30.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
295.000	201.000	3.52	DP	-30.00	-30.00	PFECA B
			CE	-25.00	-25.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
327.100	307.000	3.41	DP	-110.00	-110.00	4:2-FTS
			CE	-28.00	-28.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
313.000	269.000	3.55	DP	-30.00	-30.00	PFHxA
			CE	-15.00	-15.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID

349.100	79.900	4.00	DP		-90.00	-90.00	PFPeS
				CE	-70.00	-70.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
284.900	168.900	3.68	DP	-20.00	-20.00	HFPODA
			CE	-10.00	-10.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
363.100	319.000	3.85	DP	-40.00	-40.00	PFHpA
			CE	-15.00	-15.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
398.700	79.900	4.30	DP	-100.00	-100.00	PFHxS
			CE	-80.00	-80.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
376.900	250.900	3.96	DP	-40.00	-40.00	DONA
			CE	-20.00	-20.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
341.000	237.100	3.75	DP	-70.00	-70.00	5:3 FTCA
			CE	-20.00	-20.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
427.100	407.000	3.98	DP	-90.00	-90.00	6:2-FTS
			CE	-35.00	-35.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
449.000	79.900	4.68	DP	-110.00	-110.00	PFHpS
			CE	-90.00	-90.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
413.000	369.000	4.12	DP	-50.00	-50.00	PFOA
			CE	-16.00	-16.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
498.900	79.900	5.22	DP	-90.00	-90.00	PFOS
			CE	-110.00	-110.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
463.000	419.000	4.43	DP	-50.00	-50.00	PFNA
			CE	-18.00	-18.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
441.000	316.900	4.40	DP	-80.00	-80.00	7:3 FTCA
			CE	-20.00	-20.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
530.800	351.000	5.61	DP	-100.00	-100.00	9Cl-PF3ONS
			CE	-38.00	-38.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
548.800	79.900	5.72	DP	-100.00	-100.00	PFNS
			CE	-110.00	-110.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
512.900	469.000	4.85	DP	-60.00	-60.00	PFDA
			CE	-18.00	-18.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
527.100	507.000	4.58	DP	-100.00	-100.00	8:2-FTS
			CE	-42.00	-42.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
498.100	77.900	6.14	DP	-110.00	-110.00	PFOSA
			CE	-80.00	-80.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
570.100	419.000	4.79	DP	-80.00	-80.00	NMeFOSAA
			CE	-27.00	-27.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
599.000	79.900	6.16	DP	-90.00	-90.00	PFDS
			CE	-130.00	-130.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
563.100	519.000	5.39	DP	-70.00	-70.00	PFUnDA
			CE	-19.00	-19.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
584.200	419.100	5.04	DP	-90.00	-90.00	NEtFOSAA
			CE	-30.00	-30.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
630.900	450.900	6.49	DP	-90.00	-90.00	11Cl-PF3OUdS
			CE	-43.00	-43.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
613.100	569.000	5.87	DP	-60.00	-60.00	PFDoDA
			CE	-20.00	-20.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
616.100	58.900	6.94	DP	-50.00	-50.00	NMePFOSAE
			CE	-70.00	-70.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
511.900	219.000	7.08	DP	-90.00	-90.00	NMePFOSA
			CE	-37.00	-37.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
699.100	79.900	6.94	DP	-100.00	-100.00	PFDoS
			CE	-150.00	-150.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
630.000	58.900	7.24	DP	-45.00	-45.00	NEtPFOSAE
			CE	-70.00	-70.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
526.000	219.000	7.36	DP	-90.00	-90.00	NEtPFOSA
			CE	-38.00	-38.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
663.000	619.000	6.30	DP	-60.00	-60.00	PFTrDA
			CE	-21.00	-21.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
713.100	669.000	6.71	DP	-60.00	-60.00	PFTeDA
			CE	-22.00	-22.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
298.700	98.800	3.66	DP	-110.00	-110.00	PFBS_2
			CE	-35.00	-35.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
295.000	84.900	3.52	DP	-10.00	-10.00	PFECA B_2
			CE	-35.00	-35.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
327.100	80.900	3.41	DP	-100.00	-100.00	4:2 FTS_2
			CE	-50.00	-50.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
313.000	118.900	3.55	DP	-40.00	-40.00	PFHxA_2
			CE	-31.00	-31.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
349.100	98.900	4.00	DP	-110.00	-110.00	PFPeS_2
			CE	-40.00	-40.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
284.900	184.900	3.68	DP	-75.00	-75.00	HFPODA_2
			CE	-10.00	-10.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
363.100	169.000	3.85	DP	-50.00	-50.00	PFHpA_2
			CE	-25.00	-25.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
398.700	98.900	4.30	DP	-90.00	-90.00	PFHxS_2

			CE	-70.00	-70.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
341.000	217.000	3.75	DP	-80.00	-80.00	5:3 FTCA_2
			CE	-20.00	-20.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
427.100	80.900	3.98	DP	-120.00	-120.00	6:2 FTS_2
			CE	-70.00	-70.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
449.000	98.800	4.68	DP	-100.00	-100.00	PFHpS_2
			CE	-70.00	-70.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
413.000	169.000	4.12	DP	-50.00	-50.00	PFOA_2
			CE	-26.00	-26.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
498.900	98.800	5.21	DP	-110.00	-110.00	PFOS_2
			CE	-80.00	-80.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
463.000	219.000	4.43	DP	-50.00	-50.00	PFNA_2
			CE	-30.00	-30.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
548.800	98.800	5.72	DP	-100.00	-100.00	PFNS_2
			CE	-90.00	-90.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
512.900	219.000	4.85	DP	-60.00	-60.00	PFDA_2
			CE	-31.00	-31.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
527.100	80.800	4.58	DP	-100.00	-100.00	8:2 FTS_2
			CE	-90.00	-90.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
570.100	483.000	4.79	DP	-90.00	-90.00	NMeFOSAA_2
			CE	-24.00	-24.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
599.000	98.800	6.16	DP	-100.00	-100.00	PFDS_2
			CE	-100.00	-100.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
563.100	269.100	5.39	DP	-70.00	-70.00	PFUnDA_2
			CE	-35.00	-35.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
584.200	526.000	5.04	DP	-100.00	-100.00	NEtFOSAA_2
			CE	-30.00	-30.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
613.100	319.000	5.87	DP	-60.00	-60.00	PFDoDA_2
			CE	-38.00	-38.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID

663.000	168.900	6.30	DP	-60.00	-60.00	PFTrDA_2
			CE	-40.00	-40.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
713.100	168.900	6.71	DP	-60.00	-60.00	PFTeDA_2
			CE	-40.00	-40.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
263.000	68.900	3.21	DP	-40.00	-40.00	PFPeA_2
			CE	-55.00	-55.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
498.100	478.000	6.13	DP	-130.00	-130.00	PFOSA_2
			CE	-35.00	-35.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
511.900	169.000	7.08	DP	-110.00	-110.00	NMePFOSA_2
			CE	-37.00	-37.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
526.000	169.000	7.35	DP	-90.00	-90.00	NEtPFOSA_2
			CE	-40.00	-40.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
376.900	84.800	3.95	DP	-40.00	-40.00	DONA_2
			CE	-40.00	-40.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
532.800	353.000	5.60	DP	-100.00	-100.00	9Cl-PF3ONS_2
			CE	-38.00	-38.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
632.900	452.900	6.48	DP	-90.00	-90.00	11Cl-PF3OUdS_2
			CE	-40.00	-40.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
241.000	117.000	2.98	DP	-50.00	-50.00	3:3 FTCA_2
			CE	-45.00	-45.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
441.000	336.900	4.40	DP	-80.00	-80.00	7:3 FTCA_2
			CE	-20.00	-20.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
314.800	82.900	3.83	DP	-70.00	-70.00	PFEESA_2
			CE	-30.00	-30.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
699.100	98.800	6.94	DP	-90.00	-90.00	PFDoS_2
			CE	-140.00	-140.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
216.000	172.000	2.71	DP	-40.00	-40.00	13C3-PFBA
			CE	-14.00	-14.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
216.800	171.900	2.71	DP	-40.00	-40.00	13C4-PFBA
			CE	-14.00	-14.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
268.300	223.000	3.21	DP	-40.00	-40.00	13C5-PFPeA
			CE	-14.00	-14.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
302.100	79.900	3.66	DP	-90.00	-90.00	13C3-PFBS
			CE	-65.00	-65.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
329.100	80.900	3.41	DP	-100.00	-100.00	13C2-4:2-FTS
			CE	-28.00	-28.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
315.100	270.000	3.54	DP	-30.00	-30.00	13C2-PFHxA
			CE	-15.00	-15.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
318.000	273.000	3.54	DP	-30.00	-30.00	13C5-PFHxA
			CE	-15.00	-15.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
286.900	168.900	3.68	DP	-20.00	-20.00	13C3-HFPODA
			CE	-10.00	-10.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
367.100	322.000	3.85	DP	-40.00	-40.00	13C4-PFHpA
			CE	-15.00	-15.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
402.100	79.900	4.30	DP	-100.00	-100.00	13C3-PFHxS
			CE	-80.00	-80.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
403.000	83.900	4.30	DP	-100.00	-100.00	1802-PFHxS
			CE	-80.00	-80.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
429.100	80.900	3.97	DP	-90.00	-90.00	13C2-6:2-FTS
			CE	-35.00	-35.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
417.100	172.000	4.12	DP	-50.00	-50.00	13C4-PFOA
			CE	-16.00	-16.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
421.100	376.000	4.12	DP	-50.00	-50.00	13C8-PFOA
			CE	-16.00	-16.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
502.800	79.900	5.21	DP	-90.00	-90.00	13C4-PFOS
			CE	-110.00	-110.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
507.100	79.900	5.21	DP	-90.00	-90.00	13C8-PFOS
			CE	-110.00	-110.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
472.100	427.000	4.42	DP	-50.00	-50.00	13C9-PFNA
			CE	-18.00	-18.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
468.000	423.000	4.42	DP	-50.00	-50.00	13C5-PFNA
			CE	-18.00	-18.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
519.100	474.100	4.85	DP	-60.00	-60.00	13C6-PFDA
			CE	-18.00	-18.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
515.100	470.100	4.85	DP	-60.00	-60.00	13C2-PFDA
			CE	-18.00	-18.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
529.100	80.900	4.58	DP	-100.00	-100.00	13C2-8:2-FTS
			CE	-42.00	-42.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
506.100	77.800	6.13	DP	-110.00	-110.00	13C8-PFOSA
			CE	-80.00	-80.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
573.200	419.000	4.78	DP	-90.00	-90.00	d3-NMeFOSAA
			CE	-27.00	-27.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
570.000	525.100	5.38	DP	-70.00	-70.00	13C7-PFUnDA
			CE	-19.00	-19.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
589.200	419.000	5.02	DP	-90.00	-90.00	d5-NEtFOSAA

			CE	-30.00	-30.00	
Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
615.100	570.000	5.86	DP	-60.00	-60.00	13C2-PFDoDA
			CE	-20.00	-20.00	
Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
623.200	58.900	6.92	DP	-50.00	-50.00	d7-NMePFOSAE
			CE	-70.00	-70.00	
Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
515.000	219.000	7.07	DP	-90.00	-90.00	d3-NMePFOSA
			CE	-37.00	-37.00	
Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
639.200	58.900	7.21	DP	-45.00	-45.00	d9-NEtPFOSAE
			CE	-70.00	-70.00	
Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
531.100	219.000	7.34	DP	-90.00	-90.00	d5-NEtPFOSA
			CE	-38.00	-38.00	
Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
715.200	670.000	6.70	DP	-60.00	-60.00	13C2-PFTeDA
			CE	-22.00	-22.00	
Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
318.000	120.300	3.54	DP	-40.00	-40.00	13C5-PFHxA_2
			CE	-31.00	-31.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
302.100	98.900	3.66	DP	-110.00	-110.00	13C3-PFBS_2
			CE	-35.00	-35.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
402.100	98.800	4.29	DP	-90.00	-90.00	13C3-PFHxS_2
			CE	-70.00	-70.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
507.100	98.900	5.20	DP	-110.00	-110.00	13C8-PFOS_2
			CE	-80.00	-80.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
329.100	309.000	3.41	DP	-100.00	-100.00	13C2-4:2-FTS_2
			CE	-28.00	-28.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
429.100	409.000	3.97	DP	-100.00	-100.00	13C2-6:2-FTS_2
			CE	-35.00	-35.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
529.100	509.000	4.58	DP	-100.00	-100.00	13C2-8:2-FTS_2
			CE	-42.00	-42.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
286.900	184.900	3.68	DP	-75.00	-75.00	13C3-HFPODA_2
			CE	-10.00	-10.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID

315.100 119.400 3.54 DP -40.00 -40.00 13C2-PFHxA_2
CE -31.00 -31.00

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
502.800	98.900	5.21	DP	-110.00	-110.00	13C4-PFOS_2
			CE	-80.00	-80.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
498.000	80.000	3.78	DP	-100.00	-100.00	TDCA
			CE	-100.00	-100.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
498.100	80.000	3.70	DP	-100.00	-100.00	TCDCA
			CE	-100.00	-100.00	

Q1 Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
498.200	80.000	3.39	DP	-100.00	-100.00	TUDCA
			CE	-100.00	-100.00	

Parameter Table(Period 1 Experiment 1):

CUR:	35.00
IS:	-3000.00
TEM:	450.00
GS1:	40.00
GS2:	50.00
CAD:	10.00
EP	-10.00
CXP	-14.00

:quisition Method

33

ss Spec 12.500 min
 Period 12.500 min
    -MRM
:egrated Valve
 System
 Equilibrate
 Injection

:quisition Information:

quisition Method:	1633.dam
eated:	Wednesday May 24 2023 14:48:39 PM
st Modified:	Wednesday June 14 2023 11:54:50 AM
mment:	
nchronization Mode:	LC Sync
:o-Equilibration:	Off
quisition Duration:	12min30sec
nber Of Scans:	1250
riods In File:	1
quisition Module:	Acquisition Method
ftware version	Analyst 1.7.3

riod 1:

ans in Period:	1250
n. Dwell Time:	3 ms
x. Dwell Time:	250 ms
lative Start Time:	0.00 msec
neduled Ionization:	Off
periments in Period:	1
e target Cycle Time:	No
rget Cycle Time:	N/A

riod 1 Experiment 1:

an Type:	MRM (MRM)
neduled MRM:	Yes
larity:	Negative
an Mode:	N/A
n Source:	Turbo Spray
RM Q1Q3 Resolution:	No
M detection window:	60 sec
rget Scan Time:	0.6000 sec
solution Q1:	Unit
solution Q3:	Unit
:ensity Thres.:	0.00 cps
:tling Time:	0.0000 msec
Pause:	5.0070 msec
A:	No
ep Size:	0.00 Da

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
2.800	168.900	2.71	DP	-40.00	-40.00	PFBA
			CE	-14.00	-14.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
9.000	84.900	2.94	DP	-40.00	-40.00	PFECA F
			CE	-25.00	-25.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
1.000	177.000	2.98	DP	-50.00	-50.00	3:3 FTCA
			CE	-12.00	-12.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.000	219.000	3.21	DP	-40.00	-40.00	PFPeA
			CE	-14.00	-14.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.700	79.900	3.67	DP	-90.00	-90.00	PFBS
			CE	-65.00	-65.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
9.000	85.100	3.32	DP	-40.00	-40.00	PFECA A
			CE	-20.00	-20.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
4.800	134.900	3.84	DP	-70.00	-70.00	PFEESA
			CE	-30.00	-30.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
5.000	201.000	3.52	DP	-30.00	-30.00	PFECA B
			CE	-25.00	-25.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
7.100	307.000	3.41	DP	-110.00	-110.00	4:2-FTS
			CE	-28.00	-28.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.000	269.000	3.55	DP	-30.00	-30.00	PFHxA
			CE	-15.00	-15.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
9.100	79.900	4.00	DP	-90.00	-90.00	PFPeS
			CE	-70.00	-70.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
4.900	168.900	3.68	DP	-20.00	-20.00	HFPODA
			CE	-10.00	-10.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.100	319.000	3.85	DP	-40.00	-40.00	PFHpA
			CE	-15.00	-15.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.700	79.900	4.30	DP	-100.00	-100.00	PFHxS
			CE	-80.00	-80.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
5.900	250.900	3.96	DP	-40.00	-40.00	DONA
			CE	-20.00	-20.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
1.000	237.100	3.75	DP	-70.00	-70.00	5:3 FTCA
			CE	-20.00	-20.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
7.100	407.000	3.98	DP	-90.00	-90.00	6:2-FTS
			CE	-35.00	-35.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
9.000	79.900	4.68	DP	-110.00	-110.00	PFHpS
			CE	-90.00	-90.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.000	369.000	4.12	DP	-50.00	-50.00	PFOA
			CE	-16.00	-16.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.900	79.900	5.22	DP	-90.00	-90.00	PFOS
			CE	-110.00	-110.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.000	419.000	4.43	DP	-50.00	-50.00	PFNA
			CE	-18.00	-18.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
1.000	316.900	4.40	DP	-80.00	-80.00	7:3 FTCA
			CE	-20.00	-20.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
0.800	351.000	5.61	DP	-100.00	-100.00	9Cl-PF3ONS
			CE	-38.00	-38.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.800	79.900	5.72	DP	-100.00	-100.00	PFNS

			CE	-110.00	-110.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
2.900	469.000	4.85	DP	-60.00	-60.00	PFDA
			CE	-18.00	-18.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
7.100	507.000	4.58	DP	-100.00	-100.00	8:2-FTS
			CE	-42.00	-42.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.100	77.900	6.14	DP	-110.00	-110.00	PFOSA
			CE	-80.00	-80.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
0.100	419.000	4.79	DP	-80.00	-80.00	NMeFOSAA
			CE	-27.00	-27.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
9.000	79.900	6.16	DP	-90.00	-90.00	PFDS
			CE	-130.00	-130.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.100	519.000	5.39	DP	-70.00	-70.00	PFUnDA
			CE	-19.00	-19.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
4.200	419.100	5.04	DP	-90.00	-90.00	NEtFOSAA
			CE	-30.00	-30.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
0.900	450.900	6.49	DP	-90.00	-90.00	11Cl-PF3OUdS
			CE	-43.00	-43.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.100	569.000	5.87	DP	-60.00	-60.00	PFDoDA
			CE	-20.00	-20.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
5.100	58.900	6.94	DP	-50.00	-50.00	NMePFOSAE
			CE	-70.00	-70.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
1.900	219.000	7.08	DP	-90.00	-90.00	NMePFOSA
			CE	-37.00	-37.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
9.100	79.900	6.94	DP	-100.00	-100.00	PFDoS
			CE	-150.00	-150.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
0.000	58.900	7.24	DP	-45.00	-45.00	NEtPFOSAE
			CE	-70.00	-70.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
5.000	219.000	7.36	DP	-90.00	-90.00	NEtPFOSA
			CE	-38.00	-38.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID

3.000	619.000	6.30	DF	-60.00	-60.00	PFTrDA
			CE	-21.00	-21.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.100	669.000	6.71	DF	-60.00	-60.00	PFTeDA
			CE	-22.00	-22.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.700	98.800	3.66	DF	-110.00	-110.00	PFBS_2
			CE	-35.00	-35.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
5.000	84.900	3.52	DF	-10.00	-10.00	PFECA B_2
			CE	-35.00	-35.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
7.100	80.900	3.41	DF	-100.00	-100.00	4:2 FTS_2
			CE	-50.00	-50.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.000	118.900	3.55	DF	-40.00	-40.00	PFHxA_2
			CE	-31.00	-31.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
9.100	98.900	4.00	DF	-110.00	-110.00	PFPeS_2
			CE	-40.00	-40.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
4.900	184.900	3.68	DF	-75.00	-75.00	HFPODA_2
			CE	-10.00	-10.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.100	169.000	3.85	DP	-50.00	-50.00	PFHpA_2
			CE	-25.00	-25.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.700	98.900	4.30	DP	-90.00	-90.00	PFHxS_2
			CE	-70.00	-70.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
1.000	217.000	3.75	DP	-80.00	-80.00	5:3 FTCA_2
			CE	-20.00	-20.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
7.100	80.900	3.98	DP	-120.00	-120.00	6:2 FTS_2
			CE	-70.00	-70.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
9.000	98.800	4.68	DP	-100.00	-100.00	PFHpS_2
			CE	-70.00	-70.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.000	169.000	4.12	DP	-50.00	-50.00	PFOA_2
			CE	-26.00	-26.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.900	98.800	5.21	DP	-110.00	-110.00	PFOS_2
			CE	-80.00	-80.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.000	219.000	4.43	DP	-50.00	-50.00	PFNA_2
			CE	-30.00	-30.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.800	98.800	5.72	DP	-100.00	-100.00	PFNS_2
			CE	-90.00	-90.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
2.900	219.000	4.85	DP	-60.00	-60.00	PFDA_2
			CE	-31.00	-31.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
7.100	80.800	4.58	DP	-100.00	-100.00	8:2 FTS_2
			CE	-90.00	-90.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
0.100	483.000	4.79	DP	-90.00	-90.00	NMeFOSAA_2
			CE	-24.00	-24.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
9.000	98.800	6.16	DP	-100.00	-100.00	PFDS_2
			CE	-100.00	-100.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.100	269.100	5.39	DP	-70.00	-70.00	PFUnDA_2
			CE	-35.00	-35.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
4.200	526.000	5.04	DP	-100.00	-100.00	NEtFOSAA_2
			CE	-30.00	-30.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.100	319.000	5.87	DP	-60.00	-60.00	PFDoDA_2
			CE	-38.00	-38.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.000	168.900	6.30	DP	-60.00	-60.00	PFTrDA_2
			CE	-40.00	-40.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.100	168.900	6.71	DP	-60.00	-60.00	PFTeDA_2
			CE	-40.00	-40.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.000	68.900	3.21	DP	-40.00	-40.00	PFPeA_2
			CE	-55.00	-55.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.100	478.000	6.13	DP	-130.00	-130.00	PFOSA_2
			CE	-35.00	-35.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
1.900	169.000	7.08	DP	-110.00	-110.00	NMePFOSA_2
			CE	-37.00	-37.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
5.000	169.000	7.35	DP	-90.00	-90.00	NEtPFOSA_2
			CE	-40.00	-40.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
5.900	84.800	3.95	DP	-40.00	-40.00	DONA_2
			CE	-40.00	-40.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
2.800	353.000	5.60	DP	-100.00	-100.00	9Cl-PF3ONS_2
			CE	-38.00	-38.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
2.900	452.900	6.48	DP	-90.00	-90.00	11Cl-PF3OUdS_2
			CE	-40.00	-40.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
1.000	117.000	2.98	DP	-50.00	-50.00	3:3 FTCA_2
			CE	-45.00	-45.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
1.000	336.900	4.40	DP	-80.00	-80.00	7:3 FTCA_2
			CE	-20.00	-20.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
4.800	82.900	3.83	DP	-70.00	-70.00	PFEESA_2
			CE	-30.00	-30.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
9.100	98.800	6.94	DP	-90.00	-90.00	PFDoS_2
			CE	-140.00	-140.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
5.000	172.000	2.71	DP	-40.00	-40.00	13C3-PFBA

			CE	-14.00	-14.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
5.800	171.900	2.71	DP	-40.00	-40.00	13C4-PFBA
			CE	-14.00	-14.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.300	223.000	3.21	DP	-40.00	-40.00	13C5-PFPeA
			CE	-14.00	-14.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
2.100	79.900	3.66	DP	-90.00	-90.00	13C3-PFBS
			CE	-65.00	-65.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
9.100	80.900	3.41	DP	-100.00	-100.00	13C2-4:2-FTS
			CE	-28.00	-28.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
5.100	270.000	3.54	DP	-30.00	-30.00	13C2-PFHxA
			CE	-15.00	-15.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.000	273.000	3.54	DP	-30.00	-30.00	13C5-PFHxA
			CE	-15.00	-15.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
5.900	168.900	3.68	DP	-20.00	-20.00	13C3-HFPODA
			CE	-10.00	-10.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
7.100	322.000	3.85	DP	-40.00	-40.00	13C4-PFHpA
			CE	-15.00	-15.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
2.100	79.900	4.30	DP	-100.00	-100.00	13C3-PFHxS
			CE	-80.00	-80.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.000	83.900	4.30	DP	-100.00	-100.00	1802-PFHxS
			CE	-80.00	-80.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.100	80.900	3.97	DP	-90.00	-90.00	13C2-6:2-FTS
			CE	-35.00	-35.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
7.100	172.000	4.12	DP	-50.00	-50.00	13C4-PFOA
			CE	-16.00	-16.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
1.100	376.000	4.12	DP	-50.00	-50.00	13C8-PFOA
			CE	-16.00	-16.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
2.800	79.900	5.21	DP	-90.00	-90.00	13C4-PFOS
			CE	-110.00	-110.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID

7.100	79.900	5.21	DP		-90.00	-90.00	13C8-PFOS
				CE	-110.00	-110.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
2.100	427.000	4.42	DP	-50.00	-50.00	13C9-PFNA
			CE	-18.00	-18.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.000	423.000	4.42	DP	-50.00	-50.00	13C5-PFNA
			CE	-18.00	-18.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
9.100	474.100	4.85	DP	-60.00	-60.00	13C6-PFDA
			CE	-18.00	-18.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
5.100	470.100	4.85	DP	-60.00	-60.00	13C2-PFDA
			CE	-18.00	-18.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
9.100	80.900	4.58	DP	-100.00	-100.00	13C2-8:2-FTS
			CE	-42.00	-42.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
5.100	77.800	6.13	DP	-110.00	-110.00	13C8-PFOSA
			CE	-80.00	-80.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.200	419.000	4.78	DP	-90.00	-90.00	d3-NMeFOSAA
			CE	-27.00	-27.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
0.000	525.100	5.38	DP	-70.00	-70.00	13C7-PFUnDA
			CE	-19.00	-19.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
9.200	419.000	5.02	DP	-90.00	-90.00	d5-NEtFOSAA
			CE	-30.00	-30.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
5.100	570.000	5.86	DP	-60.00	-60.00	13C2-PFDoDA
			CE	-20.00	-20.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.200	58.900	6.92	DP	-50.00	-50.00	d7-NMePFOSAE
			CE	-70.00	-70.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
5.000	219.000	7.07	DP	-90.00	-90.00	d3-NMePFOSA
			CE	-37.00	-37.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
9.200	58.900	7.21	DP	-45.00	-45.00	d9-NEtPFOSAE
			CE	-70.00	-70.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
1.100	219.000	7.34	DP	-90.00	-90.00	d5-NEtPFOSA
			CE	-38.00	-38.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
5.200	670.000	6.70	DP	-60.00	-60.00	13C2-PFTeDA
			CE	-22.00	-22.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.000	120.300	3.54	DP	-40.00	-40.00	13C5-PFHxA_2
			CE	-31.00	-31.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
2.100	98.900	3.66	DP	-110.00	-110.00	13C3-PFBS_2
			CE	-35.00	-35.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
2.100	98.800	4.29	DP	-90.00	-90.00	13C3-PFHxS_2
			CE	-70.00	-70.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
7.100	98.900	5.20	DP	-110.00	-110.00	13C8-PFOS_2
			CE	-80.00	-80.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
9.100	309.000	3.41	DP	-100.00	-100.00	13C2-4:2-FTS_2
			CE	-28.00	-28.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
9.100	409.000	3.97	DP	-100.00	-100.00	13C2-6:2-FTS_2
			CE	-35.00	-35.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
9.100	509.000	4.58	DP	-100.00	-100.00	13C2-8:2-FTS_2
			CE	-42.00	-42.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
5.900	184.900	3.68	DP	-75.00	-75.00	13C3-HFPODA_2
			CE	-10.00	-10.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
5.100	119.400	3.54	DP	-40.00	-40.00	13C2-PFHxA_2
			CE	-31.00	-31.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
2.800	98.900	5.21	DP	-110.00	-110.00	13C4-PFOS_2
			CE	-80.00	-80.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.000	80.000	3.78	DP	-100.00	-100.00	TDCA
			CE	-100.00	-100.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.100	80.000	3.70	DP	-100.00	-100.00	TCDCA
			CE	-100.00	-100.00	

Mass (Da)	Q3 Mass (Da)	RT (min)	Param	Start	Stop	ID
3.200	80.000	3.39	DP	-100.00	-100.00	TUDCA
			CE	-100.00	-100.00	

rameter Table(Period 1 Experiment 1):

R:	35.00
:	-3000.00
M:	450.00
L:	40.00
2:	50.00
D:	10.00
	-10.00

: -14.00

:egrated Valve Method Properties
lve Diverter

Total Time (min)	Position
1.0	B
8.0	A

Method Properties

system Equlibration time = 0.00 min
system Injection Volume = 10.00 ul

np
=

del:	A: LC-40D XR B: LC-40D XR
np mode:	Binary gradient
op time:	12.50 min
radient start adjustment>	
Mode:	None

.GE1>
<General>

Flow/Pressure:	Flow
Flow:	0.5000 mL/min
Time to reach the flow:	0.00 min
B.Conc:	5.0 %
B.Curve:	0
Pressure limits Minimum:	0 psi
Pressure limits Maximum:	6500 psi

<Gradient>

Time min	Flow mL/min	B.Conc %	B.Curve
0.00	0.5000	5.0	0
0.20	0.5000	5.0	0
3.00	0.5000	60.0	0
3.80	0.5000	60.0	0
6.70	0.5000	98.0	0
8.50	0.5000	98.0	0
8.70	0.6500	5.0	0
12.50	0.5000	5.0	0

<PumpA>
<Mobile phase switching valve>

Selected mobile phase port:	A

<Mobile phase settings>

Set compressibility:	No

Port	Mobile phase name
A	Mobile phase A

<Advanced>

LPGE cycle:	Standard

<PumpB>

```
    <Mobile phase switching valve>
       Selected mobile phase port:                    A
    <Mobile phase settings>
       Set compressibility:                          No
    Port  Mobile phase name
    ----  -----------------
       A     Mobile phase A
    <Advanced>
       LPGE cycle:                             Standard
utopurge settings>
 Execute autopurge before analysis:                  No
 <Autosampler purge settings>
    Execute sampler purge:                           No
 <Init conc-replacement>
    Use Init conc-replacement:                       No
 <Warm up>
    Wait time:                                    0 min
    B.GE1 flow:                           0.0000 mL/min
 <Execute after autopurge>
    Turn oven on after autopurge:                    No
    Turn pump on after autopurge:                    No
ime program>
cosampler
=========
del:                                       SIL-40C XR
eneral>
 Use Autosampler:                                   Yes
mple plate settings>
 Specify plate:                                     No
 Specify needle stroke:                             No
jection settings>
 Sampling speed:                              1.0 µL/s
 Use cooler temperature:                            Yes
 Cooler temperature:                             15 °C
 Use air gap volume:                                No
 Use low dispersion injection:                      No
cquisition cycle time optimization>
 Pretreatment start timing:                        Off
ut off loop settings>
 Cut off loop:                                      No
inse settings>
 Rinse type:                              External only
 Rinse mode:                 Before and after aspiration
 Rinse dip time:                                 0 s
 Rinse method:                          Rinse port only
 Rinse time:                                   2.0 s
 Rinsing speed:                               35 µL/s
 Rinsing volume:                             500 µL
 Measuring line purge volume:                100 µL
etails>
 Wait for temperature equilibration before run (sample cooler):
                                                    No
```

retreatment>
 Mode: Standard
ime program>
en
=
del: A: CTO-40C
olumn Oven A>
 <General>
    Use Column Oven: Yes
    Oven temperature: 40 °C
    Temperature limit (Maximum): 90 °C
    Wait for temperature equilibration before run: Off
 <Advanced>
    Fan speed: Auto
    Cooler mode: Auto
ime program>
stem Controller
del: CBM-40
xternal output settings>
 Event 1: No
 Event 2: No
utdown settings>
 Power off after shutdown: No
ime program>
ne Command Value
in
-- -------- ------
01 Event 1

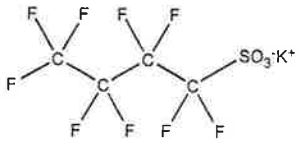
WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE: L-PFBS
COMPOUND: Potassium perfluoro-1-butanesulfonate
LOT NUMBER: LPFBS1022

STRUCTURE:

CAS #: 29420-49-3



MOLECULAR FORMULA: $C_4F_9SO_3K$
MOLECULAR WEIGHT: 338.19
CONCENTRATION: 50.0 ± 2.5 µg/mL (K salt)
44.4 ± 2.2 µg/mL (PFBS acid)
44.2 ± 2.2 µg/mL (PFBS anion)
SOLVENT(S): Methanol
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 10/04/2022
EXPIRY DATE: (mm/dd/yyyy) 10/04/2027
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (Full Scan and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim, General Manager **Date:** 10/14/2022 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

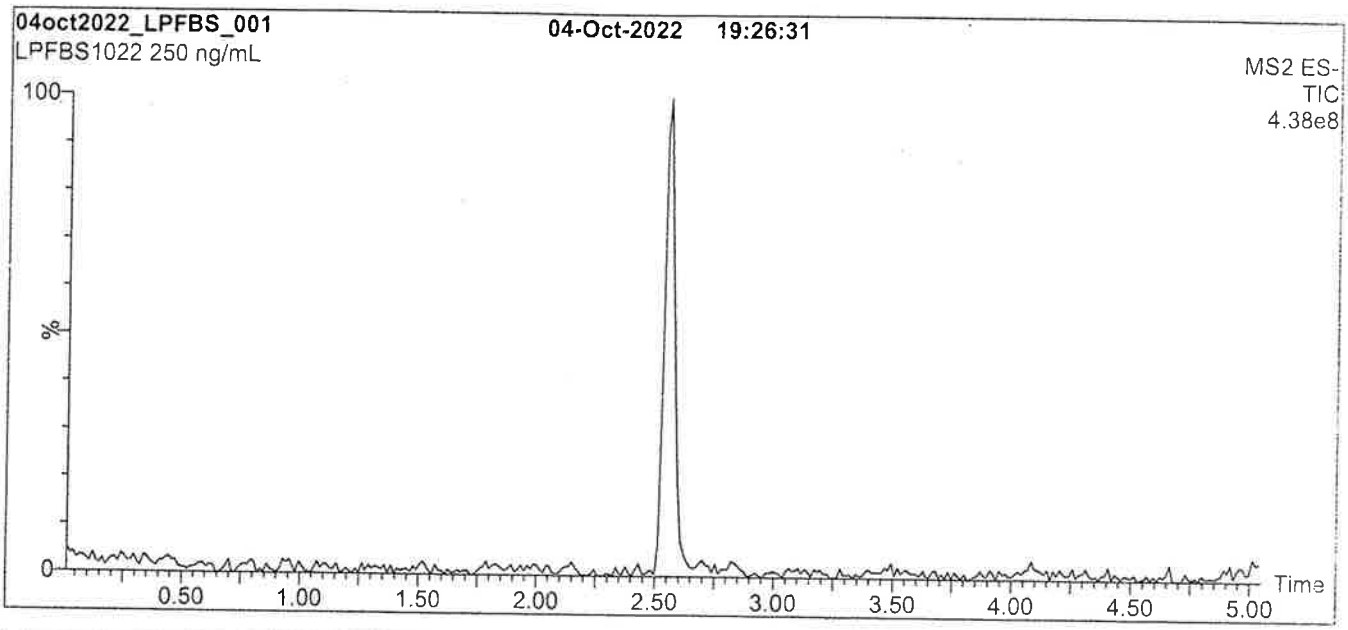
This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI National Accreditation Board (ANAB; AR-1523).

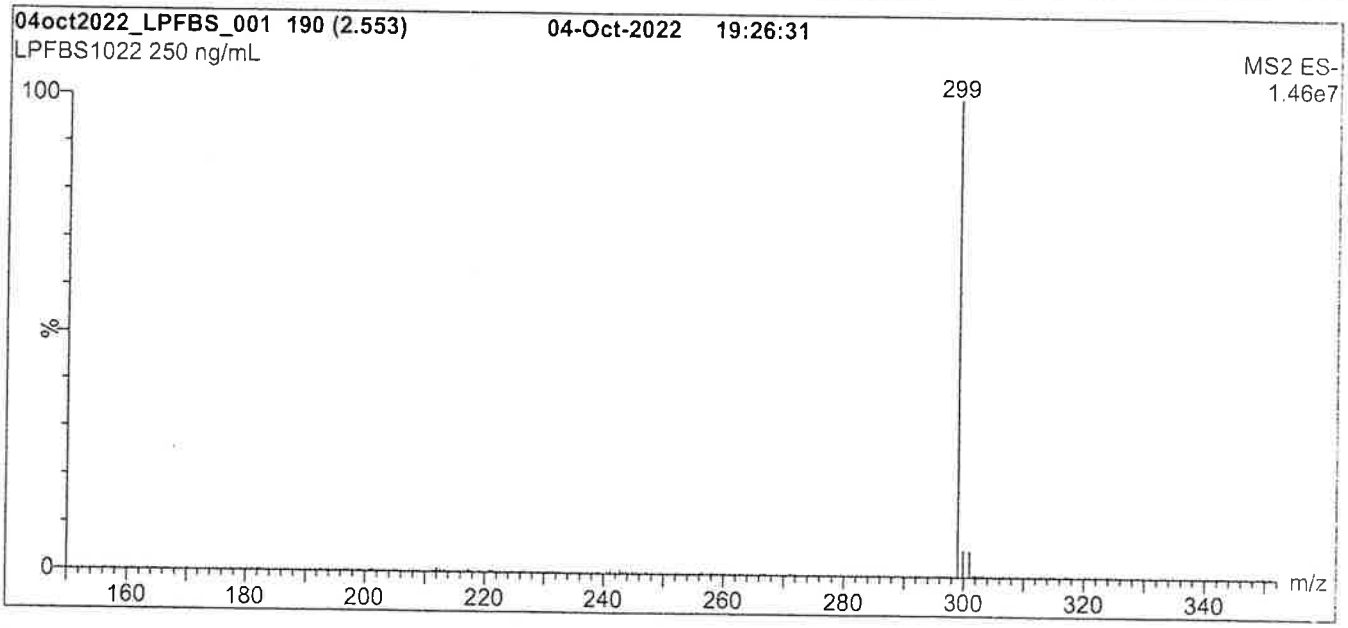
CALA Testing Accreditation No. A1226

ANAB ANSI National Accreditation Board ACCREDITED REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: **L-PFBS; LC/MS Data (Full Scan and Mass Spectrum)**





Conditions for Figure 1:

Waters Acquity Ultra Performance LC
Waters Xevo TQ-S micro MS

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 60% H_2O / 40% (80:20 MeOH:ACN)
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 8 min and hold for 2 min
before returning to initial conditions over 0.75 min.
Time: 12 min

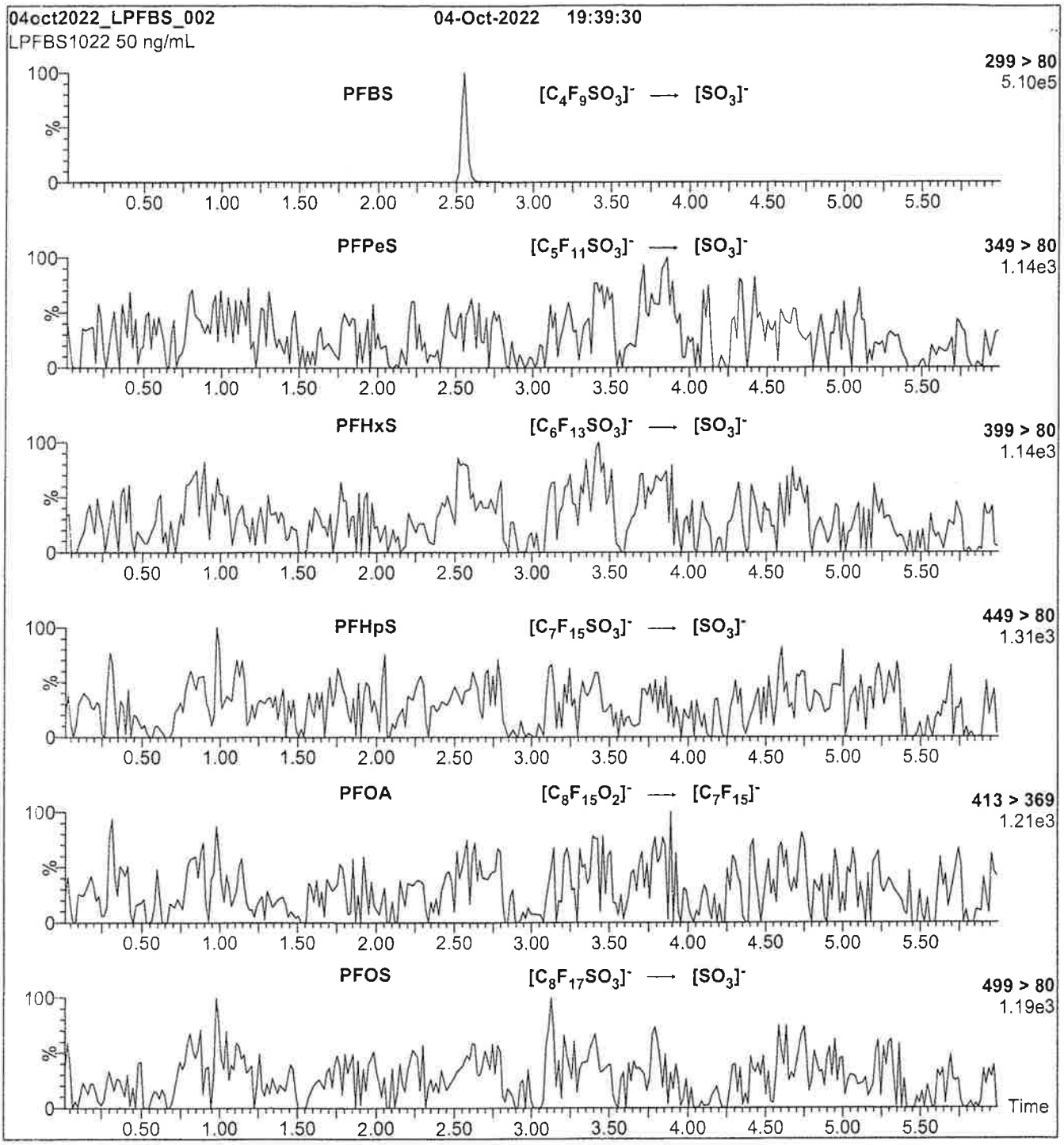
Flow: 300 µL/min

MS Parameters:

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 10.00
Desolvation Temperature (°C) = 500
Desolvation Gas Flow (L/hr) = 1000

Figure 2: **L-PFBS; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: On-column (L-PFBS)

Mobile phase: Same as Figure 1

Flow: 300 µL/min

MS Parameters:

Collision Gas (mbar) = 3.29e-3
Collision Energy (eV) = 30

Attachment 5

Native PFAS Intermediate A								
Vendor	Catalog Number	Analyte	CAS#	Acronym	Conc. (ng/ml)	Aliquot (ml)	Final Volume (ml) Methanol	Final Conc. Native PFAS Intermediate A (ng/ml)
Wellington	PFBA	Perfluorobutanoic acid	375-22-4	PFBA	50000	0.1		500
Wellington	PFPeA	Perfluoropentanoic acid	2706-90-3	PFPeA	50000	0.05		250
Wellington	PFHxA	Perfluorohexanoic acid	307-24-4	PFHxA	50000	0.025		125
Wellington	PFHpA	Perfluoroheptanoic acid	375-85-9	PFHpA	50000	0.025		125
Wellington	PFOA	Perfluorooctanoic acid	335-67-1	PFOA	50000	0.025		125
Wellington	PFNA	Perfluorononanoic acid	375-95-1	PFNA	50000	0.025		125
Wellington	PFDA	Perfluorodecanoic acid	335-76-2	PFDA	50000	0.025		125
Wellington	PFUdA	Perfluoroundecanoic acid	2058-94-8	PFUnA	50000	0.025		125
Wellington	PFDoA	Perfluorododecanoic acid	307-55-1	PFDoA	50000	0.025		125
Wellington	PFTrDA	Perfluorotridecanoic acid	72629-94-8	PFTrDA	50000	0.025		125
Wellington	PFTeDA	Perfluorotetradecanoic acid	376-06-7	PFTeDA	50000	0.025		125
Wellington	L-PFBS	Perfluorobutanesulfonic acid	375-73-5	PFBS	44200	0.025		111
Wellington	L-PFPeS	Perfluoropentansulfonic acid	2706-91-4	PFPeS	46900	0.025		117
Wellington	br-PFHxSK	Perfluorohexanesulfonic acid	355-46-4	PFHxS	45500	0.025		114
Wellington	L-PFHpS	Perfluoroheptanesulfonic acid	375-92-8	PFHpS	47600	0.025		119
Wellington	br-PFOSK	Perfluorooctanesulfonic acid	1763-23-1	PFOS	46600	0.025		117
Wellington	L-PFNS	Perfluorononanesulfonic acid	68259-12-1	PFNS	48000	0.025		120
Wellington	L-PFDS	Perfluorodecanesulfonic acid	335-77-3	PFDS	48200	0.025		121
Wellington	L-PFDoS	Perfluorododecanesulfonic acid	79780-39-5	PFDoS	48400	0.025		121
Wellington	4;2 FTS	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid	757124-72-4	4:2-FTS	46700	0.1		467
Wellington	6;2 FTS	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	27619-97-2	6:2-FTS	47400	0.1	10	474
Wellington	8;2 FTS	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	39108-34-4	8:2-FTS	47900	0.1		479
Wellington	FOSA-I	Perfluorooctanesulfonamide	754-91-6	PFOSA	50000	0.025		125
Wellington	N-MeFOSA-M	N-methyl perfluorooctanesulfonamide	31506-32-8	NMePFOSA	50000	0.025		125
Wellington	N-EtFOSA-M	N-ethyl perfluorooctanesulfonamide	4151-50-2	NEtPFOSA	50000	0.025		125
Wellington	br-NMeFOSAA	N-methyl perfluorooctanesulfonamidoacetic acid	2355-31-9	NMeFOSAA	50000	0.025		125
Wellington	br-NEtFOSAA	N-ethyl perfluorooctanesulfonamidoacetic acid	2991-50-6	NEtFOSAA	50000	0.025		125
Wellington	N-MeFOSE-M	N-methyl perfluorooctanesulfonamidoethanol	24448-09-7	NMePFOSAE	50000	0.25		1250
Wellington	N-EtFOSE-M	N-ethyl perfluorooctanesulfonamidoethanol	1691-99-2	NEtPFOSAE	50000	0.25		1250
Wellington	HFPO-DA	Hexafluoropropylene oxide dimer acid	13252-13-6	HFPODA	50000	0.1		500
Wellington	NaDONA	4,8-Dioxa-3H-perfluorononanoic acid	919005-14-4	DONA	47100	0.1		471
Wellington	PF4OPeA	Perfluoro-3-methoxypropanoic acid	377-73-1	PFMPA	50000	0.05		250
Wellington	PF5OHxA	Perfluoro-4-methoxybutanoic acid	863090-89-5	PFMBA	50000	0.05		250
Wellington	3,6-OPFHpA	Nonafluoro-3,6-dioxaheptanoic acid	151772-58-6	NFDHA	50000	0.05		250
Wellington	9Cl-PF3ONS	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	756426-58-1	9Cl-PF3ONS	46600	0.1		466
Wellington	11Cl-PF3OUdS	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	763051-92-9	11Cl-PF3OUdS	47100	0.1		471
Wellington	PFEESA	Perfluoro(2-ethoxyethane)sulfonic acid	113507-82-7	PFEESA	44500	0.05		223
Wellington	FPrPA	3-Perfluoropropyl propanoic acid	356-02-5	3:3 FTCA	50000	0.125		625
Wellington	FPePA	2H,2H,3H,3H-Perfluorooctanoic acid	914637-49-3	5:3 FTCA	50000	0.625		3125
Wellington	FHpPA	3-Perfluoroheptyl propanoic acid	812-70-4	7:3 FTCA	50000	0.625		3125

Attachment 6

Native PFAS Intermediate B							
Solution Name	**Analyte**	**CAS#**	**Acronym**	**Conc. (ng/ml)**	**Aliquot (ml)**	**Final Volume (ml) Methanol**	**Final Conc. Native PFAS Intermediate B (ng/ml)**
Native PFAS Intermediate A	Perfluorobutanoic acid	375-22-4	PFBA	500	0.1	10	5
	Perfluoropentanoic acid	2706-90-3	PFPeA	250			2.5
	Perfluorohexanoic acid	307-24-4	PFHxA	125			1.25
	Perfluoroheptanoic acid	375-85-9	PFHpA	125			1.25
	Perfluorooctanoic acid	335-67-1	PFOA	125			1.25
	Perfluorononanoic acid	375-95-1	PFNA	125			1.25
	Perfluorodecanoic acid	335-76-2	PFDA	125			1.25
	Perfluoroundecanoic acid	2058-94-8	PFUnA	125			1.25
	Perfluorododecanoic acid	307-55-1	PFDoA	125			1.25
	Perfluorotridecanoic acid	72629-94-8	PFTrDA	125			1.25
	Perfluorotetradecanoic acid	376-06-7	PFTeDA	125			1.25
	Perfluorobutanesulfonic acid	375-73-5	PFBS	110.5			1.11
	Perfluoropentansulfonic acid	2706-91-4	PFPeS	117.25			1.17
	Perfluorohexanesulfonic acid	355-46-4	PFHxS	113.75			1.14
	Perfluoroheptanesulfonic acid	375-92-8	PFHpS	119			1.19
	Perfluorooctanesulfonic acid	1763-23-1	PFOS	116.5			1.17
	Perfluorononanesulfonic acid	68259-12-1	PFNS	120			1.20
	Perfluorodecanesulfonic acid	335-77-3	PFDS	120.5			1.21
	Perfluorododecanesulfonic acid	79780-39-5	PFDoS	121			1.21
	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid	757124-72-4	4:2-FTS	467			4.67
	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	27619-97-2	6:2-FTS	474			4.74
	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	39108-34-4	8:2-FTS	479			4.79
	Perfluorooctanesulfonamide	754-91-6	PFOSA	125			1.25
	N-methyl perfluorooctanesulfonamide	31506-32-8	NMePFOSA	125			1.25
	N-ethyl perfluorooctanesulfonamide	4151-50-2	NEtPFOSA	125			1.25
	N-methyl perfluorooctanesulfonamidoacetic acid	2355-31-9	NMeFOSAA	125			1.25
	N-ethyl perfluorooctanesulfonamidoacetic acid	2991-50-6	NEtFOSAA	125			1.25
	N-methyl perfluorooctanesulfonamidoethanol	24448-09-7	NMePFOSAE	1250			12.5
	N-ethyl perfluorooctanesulfonamidoethanol	1691-99-2	NEtPFOSAE	1250			12.5
	Hexafluoropropylene oxide dimer acid	13252-13-6	HFPODA	500			5
	4,8-Dioxa-3H-perfluorononanoic acid	919005-14-4	DONA	471			4.71
	Perfluoro-3-methoxypropanoic acid	377-73-1	PFMPA	250			2.5
	Perfluoro-4-methoxybutanoic acid	863090-89-5	PFMBA	250			2.5
	Nonafluoro-3,6-dioxaheptanoic acid	151772-58-6	NFDHA	250			2.5
	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	756426-58-1	9Cl-PF3ONS	466			4.66
	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	763051-92-9	11Cl-PF3OUdS	471			4.71
	Perfluoro(2-ethoxyethane)sulfonic acid	113507-82-7	PFEESA	222.5			2.23
	3-Perfluoropropyl propanoic acid	356-02-5	3:3 FTCA	625			6.25
	2H,2H,3H,3H-Perfluorooctanoic acid	914637-49-3	5:3 FTCA	3125			31.3
	3-Perfluoroheptyl propanoic acid	812-70-4	7:3 FTCA	3125			31.3

Attachment 7

Native PFAS Intermediate M							
Solution Name	**Analyte**	**CAS#**	**Acronym**	**Concentration (ng/ml)**	**Aliquot (ml)**	**Final Volume (ml) Methanol**	**Final Conc. Native PFAS Intermediate M (ng/ml)**
Native PFAS Intermediate A	Perfluorobutanoic acid	375-22-4	PFBA	500	1.25	10	62.5
	Perfluoropentanoic acid	2706-90-3	PFPeA	250			31.3
	Perfluorohexanoic acid	307-24-4	PFHxA	125			15.6
	Perfluoroheptanoic acid	375-85-9	PFHpA	125			15.6
	Perfluorooctanoic acid	335-67-1	PFOA	125			15.6
	Perfluorononanoic acid	375-95-1	PFNA	125			15.6
	Perfluorodecanoic acid	335-76-2	PFDA	125			15.6
	Perfluoroundecanoic acid	2058-94-8	PFUnA	125			15.6
	Perfluorododecanoic acid	307-55-1	PFDoA	125			15.6
	Perfluorotridecanoic acid	72629-94-8	PFTrDA	125			15.6
	Perfluorotetradecanoic acid	376-06-7	PFTeDA	125			15.6
	Perfluorobutanesulfonic acid	375-73-5	PFBS	110.5			13.8
	Perfluoropentansulfonic acid	2706-91-4	PFPeS	117.25			14.7
	Perfluorohexanesulfonic acid	355-46-4	PFHxS	113.75			14.2
	Perfluoroheptanesulfonic acid	375-92-8	PFHpS	119			14.9
	Perfluorooctanesulfonic acid	1763-23-1	PFOS	116.5			14.6
	Perfluorononanesulfonic acid	68259-12-1	PFNS	120			15.0
	Perfluorodecanesulfonic acid	335-77-3	PFDS	120.5			15.1
	Perfluorododecanesulfonic acid	79780-39-5	PFDoS	121			15.1
	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid	757124-72-4	4:2-FTS	467			58.4
	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	27619-97-2	6:2-FTS	474			59.3
	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	39108-34-4	8:2-FTS	479			59.9
	Perfluorooctanesulfonamide	754-91-6	PFOSA	125			15.6
	N-methyl perfluorooctanesulfonamide	31506-32-8	NMePFOSA	125			15.6
	N-ethyl perfluorooctanesulfonamide	4151-50-2	NEtPFOSA	125			15.6
	N-methyl perfluorooctanesulfonamidoacetic acid	2355-31-9	NMeFOSAA	125			15.6
	N-ethyl perfluorooctanesulfonamidoacetic acid	2991-50-6	NEtFOSAA	125			15.6
	N-methyl perfluorooctanesulfonamidoethanol	24448-09-7	NMePFOSAE	1250			156
	N-ethyl perfluorooctanesulfonamidoethanol	1691-99-2	NEtPFOSAE	1250			156
	Hexafluoropropylene oxide dimer acid	13252-13-6	HFPODA	500			62.5
	4,8-Dioxa-3H-perfluorononanoic acid	919005-14-4	DONA	471			58.9
	Perfluoro-3-methoxypropanoic acid	377-73-1	PFMPA	250			31.3
	Perfluoro-4-methoxybutanoic acid	863090-89-5	PFMBA	250			31.3
	Nonafluoro-3,6-dioxaheptanoic acid	151772-58-6	NFDHA	250			31.3
	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	756426-58-1	9Cl-PF3ONS	466			58.3
	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	763051-92-9	11Cl-PF3OUdS	471			58.9
	Perfluoro(2-ethoxyethane)sulfonic acid	113507-82-7	PFEESA	222.5			27.8
	3-Perfluoropropyl propanoic acid	356-02-5	3:3 FTCA	625			78.1
	2H,2H,3H,3H-Perfluorooctanoic acid	914637-49-3	5:3 FTCA	3125			391
	3-Perfluoroheptyl propanoic acid	812-70-4	7:3 FTCA	3125			391

Attachment 8

Extraction Standard Mix								
Vendor	Catalog Number	Analyte	CAS#	Acronym	Concentration (ng/ml)	Aliquot (ml)	Final Volume (ml) Methanol	Final Conc. Extraction Standard Mix (ng/ml)
Wellington	MPFBA	Perfluoro-n-[13C4]butanoic acid	STL00992	13C4-PFBA	50000	0.1	10	500
Wellington	M5PFPeA	Perfluoro-n-[13C5]pentanoic acid	STL01893	13C5-PFPeA	50000	0.05		250
Wellington	M5PFHxA	Perfluoro-n-[1,2,3,4,6-13C5]hexanoic acid	STL02577	13C5-PFHxA	50000	0.025		125
Wellington	M4PFHpA	Perfluoro-n-[1,2,3,4-13C4]heptanoic acid	STL01892	13C4-PFHpA	50000	0.025		125
Wellington	M8PFOA	Perfluoro-n-[13C8]octanoic acid	STL01052	13C8-PFOA	50000	0.025		125
Wellington	M9PFNA	Perfluoro-n-[13C9]nonanoic acid	STL02578	13C9-PFNA	50000	0.0125		62.5
Wellington	M6PFDA	Perfluoro-n-[1,2,3,4,5,6-13C6]decanoic acid	STL02579	13C6-PFDA	50000	0.0125		62.5
Wellington	M7PFUdA	Perfluoro-n-[1,2,3,4,5,6,7-13C7]undecanoic acid	STL02580	13C7-PFUnA	50000	0.0125		62.5
Wellington	MPFDoA	Perfluoro-n-[1,2-13C2]dodecanoic acid	STL02703	13C2-PFDoA	50000	0.0125		62.5
Wellington	M2PFTeDA	Perfluoro-n-[1,2-13C2]tetradecanoic acid	STL02116	13C2-PFTeDA	50000	0.0125		62.5
Wellington	M3PFBS	Perfluoro-1-[2,3,4-13C3]butanesulfonic acid	STL02337	13C3-PFBS	46500	0.025		116
Wellington	M3PFHxS	Perfluoro-1-[1,2,3-13C3]hexanesulfonic acid	STL02581	13C3-PFHxS	47300	0.025		118
Wellington	M8PFOS	Perfluoro-1-[13C8]octanesulfonic acid	STL01054	13C8-PFOS	47800	0.025		120
Wellington	M8FOSA-I	Perfluoro-1-[13C8]octanesulfonamide	STL01056	13C8-PFOSA	50000	0.025		125
Wellington	d3-N-MeFOSAA	N-methyl-d3-perfluoro-1-octanesulfonamidoacetic acid	STL02118	D3-NMeFOSAA	50000	0.05		250
Wellington	d5-N-EtFOSAA	N-ethyl-d5-perfluoro-1-octanesulfonamidoacetic acid	STL02117	D5-NEtFOSAA	50000	0.05		250
Wellington	M2-4;2FTS	1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]hexane sulfonic acid	STL02395	13C2-4:2FTS	46700	0.05		234
Wellington	M2-6;2FTS	1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]octane sulfonic acid	STL02279	13C2-6:2FTS	47500	0.05		238
Wellington	M2-8;2FTS	1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]decane sulfonic acid	STL02280	13C2-8:2FTS	47900	0.05		240
Wellington	M3HFPO-DA	Tetrafluoro-2-heptafluoropropoxy-13C3-propanoic acid	STL02255	13C3-HFPO-DA	50000	0.1		500
Wellington	d7-N-MeFOSE-M	N-methyl-d7-perfluorooctanesulfonamidoethanol	STL02277	D7-NMeFOSE	50000	0.25		1250
Wellington	d9-N-EtFOSE-M	N-ethyl-d9-perfluorooctanesulfonamidoethanol	STL02278	D9-NEtFOSE	50000	0.25		1250
Wellington	d-N-MeFOSA-M	N-ethyl-d5-perfluoro-1-octanesulfonamide	STL02704	D5-NEtFOSA	50000	0.025		125
Wellington	d-N-EtFOSA-M	N-methyl-d3-perfluoro-1-octanesulfonamide	STL02705	D3-NMeFOSA	50000	0.025		125

Attachment 9

Internal Standard Mix								
Vendor	**Catalog Number**	**Analyte**	**CAS#**	**Acronym**	**Concentration (ng/ml)**	**Aliquot (ml)**	**Final Volume (ml) Methanol**	**Final Conc. Internal Standard Mix (ng/ml)**
Wellington	M3PFBA	Perfluoro-n-[2,3,4-13C3]butanoic acid	STL02680	13C3-PFBA	50000	50	10	250
Wellington	MPFOA	Perfluoro-n-[1,2,3,4-13C4]octanoic acid	STL00990	13C4-PFOA	50000	25		125
Wellington	MPFDA	Perfluoro-n-[1,2-13C2]decanoic acid	STL00996	13C2-PFDA	50000	12.5		62.5
Wellington	MPFOS	Perfluoro-n-[1,2,3,4-13C4]octanesulfonic acid	STL00991	13C4-PFOS	47800	25		120
Wellington	MPFNA	Perfluoro-n-[1,2,3,4,5-13C5] nonanoic acid	STL00995	13C5-PFNA	50000	12.5		62.5
Wellington	MPFHxA	Perfluoro-n-[1,2-13C2]hexanoic acid	STL00993	13C2-PFHxA	50000	25		125
Wellington	MPFHxS	Perfluoro-1-hexane[18O2]sulfonic acid	STL00994	18O2-PFHxS	47300	25		118

Attachment 10

1633 Initial Calibration Standards Preparation							
Solution Name	**CAL1**	**CAL2**	**CAL3**	**CAL4**	**CAL5**	**CAL6**	**CAL7**
Native PFAS Intermediate A (ml)	N/A	N/A	N/A	0.01	0.02	0.05	0.25
Native PFAS Intermediate B (ml)	0.08	0.2	0.5	N/A	N/A	N/A	N/A
Extraction Standard Mix (ml)	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Internal Standard Mix (ml)	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Final Volume (ml) (methanol with 4% water, 1% ammonium hydroxide, and 0.625% acetic acid)	2	2	2	2	2	2	2

Attachment 11

1633 Initial Calibration Standard Concentrations							
	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	CAL7
Compound Name	Conc. (ng/ml)	Conc. (ng/ml)	Conc. (ng/ml)	Conc. (ng/ml)	Conc. (ng/ml)	Conc. (ng/ml)	Conc. (ng/ml)
PFBA	0.200	0.500	1.25	2.50	5.00	12.5	62.5
PFpeA	0.100	0.250	0.625	1.25	2.50	6.25	31.3
PFHxA	0.050	0.125	0.313	0.625	1.25	3.13	15.6
PFHpA	0.050	0.125	0.313	0.625	1.25	3.13	15.6
PFOA	0.050	0.125	0.313	0.625	1.25	3.13	15.6
PFNA	0.050	0.125	0.313	0.625	1.25	3.13	15.6
PFDA	0.050	0.125	0.313	0.625	1.25	3.13	15.6
PFUnA	0.050	0.125	0.313	0.625	1.25	3.13	15.6
PFDoA	0.050	0.125	0.313	0.625	1.25	3.13	15.6
PFTrDA	0.050	0.125	0.313	0.625	1.25	3.13	15.6
PFTeDA	0.050	0.125	0.313	0.625	1.25	3.13	15.6
PFBS	0.044	0.111	0.276	0.553	1.11	2.76	13.8
PFPeS	0.047	0.117	0.293	0.586	1.17	2.93	14.7
PFHxS	0.046	0.114	0.284	0.569	1.14	2.84	14.2
PFHpS	0.048	0.119	0.298	0.595	1.19	2.98	14.9
PFOS	0.047	0.117	0.291	0.583	1.17	2.91	14.6
PFNS	0.048	0.120	0.300	0.600	1.20	3.00	15.0
PFDS	0.048	0.121	0.301	0.603	1.21	3.01	15.1
PFDoS	0.048	0.121	0.303	0.605	1.21	3.03	15.1
4:2 FTS	0.187	0.467	1.17	2.34	4.67	11.7	58.4
6:2 FTS	0.190	0.474	1.19	2.37	4.74	11.9	59.3
8:2 FTS	0.192	0.479	1.20	2.40	4.79	12.0	59.9
PFOSA	0.050	0.125	0.313	0.625	1.3	3.13	15.6
NMeFOSA	0.050	0.125	0.313	0.625	1.3	3.13	15.6
NEtFOSA	0.050	0.125	0.313	0.625	1.3	3.13	15.6
NMeFOSAA	0.050	0.125	0.313	0.625	1.3	3.13	15.6
NEtFOSAA	0.050	0.125	0.313	0.625	1.3	3.13	15.6
NMeFOSE	0.500	1.25	3.13	6.25	12.5	31.3	156
NEtFOSE	0.500	1.25	3.13	6.25	12.5	31.3	156
HFPO-DA	0.200	0.500	1.25	2.50	5.00	12.5	62.5
DONA	0.188	0.471	1.18	2.36	4.71	11.8	58.9
PFMPA	0.100	0.250	0.625	1.25	2.50	6.25	31.3
PFMBA	0.100	0.250	0.625	1.25	2.50	6.25	31.3
NFDHA	0.100	0.250	0.625	1.25	2.50	6.25	31.3
9Cl-PF3ONS	0.186	0.466	1.17	2.33	4.66	11.7	58.3
11Cl-PF3OUdS	0.188	0.471	1.18	2.36	4.71	11.8	58.9
PFEESA	0.089	0.223	0.56	1.11	2.23	5.56	27.8
3:3 FTCA	0.250	0.625	1.56	3.13	6.25	15.6	78.1
5:3 FTCA	1.25	3.13	7.81	15.6	31.3	78.1	391
7:3 FTCA	1.25	3.13	7.81	15.6	31.3	78.1	391
13C4-PFBA	2.50	2.50	2.50	2.50	2.50	2.50	2.50
13C5-PFPeA	1.25	1.25	1.25	1.25	1.25	1.25	1.25
13C5-PFHxA	0.625	0.625	0.625	0.625	0.625	0.625	0.625
13C4-PFHpA	0.625	0.625	0.625	0.625	0.625	0.625	0.625
13C8-PFOA	0.625	0.625	0.625	0.625	0.625	0.625	0.625
13C9-PFNA	0.313	0.313	0.313	0.313	0.313	0.313	0.313
13C6-PFDA	0.313	0.313	0.313	0.313	0.313	0.313	0.313
13C7-PFUnA	0.313	0.313	0.313	0.313	0.313	0.313	0.313
13C2-PFDoA	0.313	0.313	0.313	0.313	0.313	0.313	0.313
13C2-PFTeDA	0.313	0.313	0.313	0.313	0.313	0.313	0.313
13C3-PFBS	0.581	0.581	0.581	0.581	0.581	0.581	0.581
13C3-PFHxS	0.591	0.591	0.591	0.591	0.591	0.591	0.591
13C8-PFOS	0.598	0.598	0.598	0.598	0.598	0.598	0.598
13C8-PFOSA	0.625	0.625	0.625	0.625	0.625	0.625	0.625
D3-NMeFOSAA	1.25	1.25	1.25	1.25	1.25	1.25	1.25
D5-NEtFOSAA	1.25	1.25	1.25	1.25	1.25	1.25	1.25
13C2-4:2FTS	1.17	1.17	1.17	1.17	1.17	1.17	1.17
13C2-6:2FTS	1.19	1.19	1.19	1.19	1.19	1.19	1.19
13C2-8:2FTS	1.20	1.20	1.20	1.20	1.20	1.20	1.20
13C3-HFPO-DA	2.50	2.50	2.50	2.50	2.50	2.50	2.50
D7-NMeFOSE	6.25	6.25	6.25	6.25	6.25	6.25	6.25
D9-NEtFOSE	6.25	6.25	6.25	6.25	6.25	6.25	6.25
D5-NEtFOSA	0.625	0.625	0.625	0.625	0.625	0.625	0.625
D3-NMeFOSA	0.625	0.625	0.625	0.625	0.625	0.625	0.625
13C3-PFBA	1.25	1.25	1.25	1.25	1.25	1.25	1.25
13C4-PFOA	0.625	0.625	0.625	0.625	0.625	0.625	0.625
13C2-PFDA	0.313	0.313	0.313	0.313	0.313	0.313	0.313
13C4-PFOS	0.598	0.598	0.598	0.598	0.598	0.598	0.598
13C5-PFNA	0.313	0.313	0.313	0.313	0.313	0.313	0.313
13C2-PFHxA	0.625	0.625	0.625	0.625	0.625	0.625	0.625
18O2-PFHxS	0.591	0.591	0.591	0.591	0.591	0.591	0.591

Attachment 12

Bile Salts Stock Solutions								
Vendor	**Catalog Number**	**Analyte**	**CAS#**	**Acronym**	**Amount (mg)**	**Aliquot (g)**	**Final Volume (ml) Methanol**	**Final Conc. Bile Salts Stock Solutions (ng/ml)**
Sigma Aldrich	T0557-500MG	Taurodeoxycholic acid	516-50-7	TDCA	500	0.05	50	1000000
Sigma Aldrich	T6260-1G	Taurochenodeoxycholic acid	516-35-8	TCDCA	1000	0.05	50	1000000
Sigma Aldrich	580549-1GM	Tauroursodeoxycholic acid	14605-22-2	TUDCA	1000	0.05	50	1000000

Attachment 13

Bile Salts Working Solution A							
Solution Name	**Analyte**	**CAS#**	**Acronym**	**Conc. (ng/ml)**	**Aliquot (ml)**	**Final Volume (ml) Methanol**	**Final Conc. Bile Salts Working Solution A (ng/ml)**
TDCA Stock Solution	Taurodeoxycholic acid	516-50-7	TDCA	1000000	1	4	250000
TCDCA Stock Solution	Taurochenodeoxycholic acid	516-35-8	TCDCA	1000000			250000
TUDCA Stock Solution	Tauroursodeoxycholic acid	14605-22-2	TUDCA	1000000			250000

Attachment 14

Bile Salts Working Solution B							
Solution Name	**Analyte**	**CAS#**	**Acronym**	**Conc. (ng/ml)**	**Aliquot (ml)**	**Final Volume (ml) Methanol**	**Final Conc. Bile Salts Working Solution B (ng/ml)**
Bile Salts Working Solution A	Taurodeoxycholic acid	516-50-7	TDCA	250000	0.1	5	5000
	Taurochenodeoxycholic acid	516-35-8	TCDCA	250000			5000
	Tauroursodeoxycholic acid	14605-22-2	TUDCA	250000			5000

Attachment 15

PFAS Linear/Branched Mix A								
Vendor	**Catalog Number**	**Analyte**	**CAS#**	**Acronym**	**Conc. (ng/ml)**	**Aliquot (ml)**	**Final Volume (ml) Methanol**	**Final Conc. PFAS Linear/Branched Mix A (ng/ml)**
Wellington	T-PFOA	Technical Ammonium, Perfluorooctanoate (Technical Grade)	95328-99-7	T-PFOA	50000	0.02	2	500
		Perfluorooctanoic acid	335-67-1	PFOA	50000			500
Cambridge Isotope Laboratories	ULM-11036-S	2-(N-ethylperfluoro-1-octanesulfonamido) ethanol	1691-99-2	NEtPFOSAE	50000	0.02		500
Cambridge Isotope Laboratories	ULM-11034-S	2-(N-methylperfluoro-1-octanesulfonamido) ethanol	24448-09-7	NMePFOSAE	50000	0.01		500
Cambridge Isotope Laboratories	ULM-10780-S	N-ethylperfluoro-1-octanesulfonamide	4151-50-2	NEtPFOSA	100000	0.01		500
Cambridge Isotope Laboratories	ULM-10779-S	N-methylperfluoro-1-octanesulfonamide	31506-32-8	NMePFOSA	100000	0.02		500
Cambridge Isotope Laboratories	ULM-10977-S	Perfluorooctanesulfonamide	754-91-6	PFOSA	50000	0.02		500
Wellington	ipPFNA	Perfluoro-7-methylpoctanoic acid	15899-31-7	PF7MOA	50000	0.02		500
Wellington	PFNA	Perfluorononanoic acid	375-95-1	PFNA	50000	0.02		500

Attachment 16

PFAS Linear/Branched Mix B							
Solution Name	**Analyte**	**CAS#**	**Acronym**	**Conc. (ng/ml)**	**Aliquot (ml)**	**Final Volume (ml) Methanol**	**Final Conc. PFAS Linear/Branched Mix B (ng/ml)**
PFAS Linear/Branched Mix A	Technical Ammonium, Perfluorooctanoate (Technical Grade)	95328-99-7	T-PFOA	500	0.5	2	125
	Perfluorooctanoic acid	335-67-1	PFOA	500			125
	2-(N-ethylperfluoro-1-octanesulfonamido) ethanol	1691-99-2	NEtPFOSAE	500			125
	2-(N-methylperfluoro-1-octanesulfonamido) ethanol	24448-09-7	NMePFOSAE	500			125
	N-ethylperfluoro-1-octanesulfonamide	4151-50-2	NEtPFOSA	500			125
	N-methylperfluoro-1-octanesulfonamide	31506-32-8	NMePFOSA	500			125
	Perfluorooctanesulfonamide	754-91-6	PFOSA	500			125
	Perfluoro-7-methylpoctanoic acid	15899-31-7	PF7MOA	500			125
	Perfluorononanoic acid	375-95-1	PFNA	500			125

Attachment 17

1633 Linear/Branched Bile Salts Solution							
Solution Name	**Analyte**	**CAS#**	**Acronym**	**Conc. (ng/ml)**	**Aliquot (ml)**	**Final Volume* (ml)**	**Final Conc. 1633 Linear/Branched Bile Salts Solution (ng/ml)**
Bile Salts Working Solution B	Taurodeoxycholic acid	516-50-7	TDCA	5000	0.1	2	100
	Taurochenodeoxycholic acid	516-35-8	TCDCA	5000			100
	Tauroursodeoxycholic acid	14605-22-2	TUDCA	5000			100
PFAS Linear/Branched Mix B	Technical Ammonium, Perfluorooctanoate (Technical Grade)	95328-99-7	T-PFOA	125	0.02		1.25
	Perfluorooctanoic acid	335-67-1	PFOA	125			1.25
	2-(N-ethylperfluoro-1-octanesulfonamido) ethanol	1691-99-2	NEtPFOSAE	125			1.25
	2-(N-methylperfluoro-1-octanesulfonamido) ethanol	24448-09-7	NMePFOSAE	125			1.25
	N-ethylperfluoro-1-octanesulfonamide	4151-50-2	NEtPFOSA	125			1.25
	N-methylperfluoro-1-octanesulfonamide	31506-32-8	NMePFOSA	125			1.25
	Perfluorooctanesulfonamide	754-91-6	PFOSA	125			1.25
	Perfluoro-7-methylpoctanoic acid	15899-31-7	PF7MOA	125			1.25
	Perfluorononanoic acid	375-95-1	PFNA	125			1.25
Extraction Standard Mix	Perfluoro-n-[13C4]butanoic acid	STL00992	13C4-PFBA	500	0.01		2.5
	Perfluoro-n-[13C5]pentanoic acid	STL01893	13C5-PFPeA	250			1.25
	Perfluoro-n-[1,2,3,4,6-13C5]hexanoic acid	STL02577	13C5-PFHxA	125			0.625
	Perfluoro-n-[1,2,3,4-13C4]heptanoic acid	STL01892	13C4-PFHpA	125			0.625
	Perfluoro-n-[13C8]octanoic acid	STL01052	13C8-PFOA	125			0.625
	Perfluoro-n-[13C9]nonanoic acid	STL02578	13C9-PFNA	62.5			0.313
	Perfluoro-n-[1,2,3,4,5,6-13C6]decanoic acid	STL02579	13C6-PFDA	62.5			0.313
	Perfluoro-n-[1,2,3,4,5,6,7-13C7]undecanoic acid	STL02580	13C7-PFUnA	62.5			0.313
	Perfluoro-n-[1,2-13C2]dodecanoic acid	STL02703	13C2-PFDoA	62.5			0.313
	Perfluoro-n-[1,2-13C2]tetradecanoic acid	STL02116	13C2-PFTeDA	62.5			0.313
	Perfluoro-1-[2,3,4-13C3]butanesulfonic acid	STL02337	13C3-PFBS	116			0.581
	Perfluoro-1-[1,2,3-13C3]hexanesulfonic acid	STL02581	13C3-PFHxS	118			0.591
	Perfluoro-1-[13C8]octanesulfonic acid	STL01054	13C8-PFOS	120			0.598
	Perfluoro-1-[13C8]octanesulfonamide	STL01056	13C8-PFOSA	125			0.625
	N-methyl-d3-perfluoro-1-octanesulfonamidoacetic acid	STL02118	D3-NMeFOSAA	250			1.25
	N-ethyl-d5-perfluoro-1-octanesulfonamidoacetic acid	STL02117	D5-NEtFOSAA	250			1.25
	1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]hexane sulfonic acid	STL02395	13C2-4:2FTS	234			1.17
	1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]octane sulfonic acid	STL02279	13C2-6:2FTS	238			1.19
	1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]decane sulfonic acid	STL02280	13C2-8:2FTS	240			1.20
	Tetrafluoro-2-heptafluoropropoxy-13C3-propanoic acid	STL02255	13C3-HFPO-DA	500			2.5
	N-methyl-d7-perfluorooctanesulfonamidoethanol	STL02277	D7-NMeFOSE	1250			6.25
	N-ethyl-d9-perfluorooctanesulfonamidoethanol	STL02278	D9-NEtFOSE	1250			6.25
	N-ethyl-d5-perfluoro-1-octanesulfonamide	STL02704	D5-NEtFOSA	125			0.625
	N-methyl-d3-perfluoro-1-octanesulfonamide	STL02705	D3-NMeFOSA	125			0.625
Internal Standard Mix	Perfluoro-n-[2,3,4-13C3]butanoic acid	STL02680	13C3-PFBA	250	0.01		1.25
	Perfluoro-n-[1,2,3,4-13C4]octanoic acid	STL00990	13C4-PFOA	125			0.625
	Perfluoro-n-[1,2-13C2]decanoic acid	STL00996	13C2-PFDA	62.5			0.313
	Perfluoro-n-[1,2,3,4-13C4]octanesulfonic acid	STL00991	13C4-PFOS	120			0.598
	Perfluoro-n-[1,2,3,4,5-13C5] nonanoic acid	STL00995	13C5-PFNA	62.5			0.313
	Perfluoro-n-[1,2-13C2]hexanoic acid	STL00993	13C2-PFHxA	125			0.625
	Perfluoro-1-hexane[18O2]sulfonic acid	STL00994	18O2-PFHxS	118			0.591

*Bring to final volume using methanol with 4% water, 1% ammonium hydroxide, and 0.625% acetic acid

1633 ICV Working Standard							
Solution Name	Analyte	CAS#	Acronym	Conc. (ng/ml)	Aliquot (ml)	Final Volume* (ml)	Final Conc. 1633 ICV Working Standard (ng/ml)
Native PFAS Intermediate A	Perfluorobutanoic acid	375-22-4	PFBA	500	0.01	2	2.50
	Perfluoropentanoic acid	2706-90-3	PFPeA	250			1.25
	Perfluorohexanoic acid	307-24-4	PFHxA	125			0.625
	Perfluoroheptanoic acid	375-85-9	PFHpA	125			0.625
	Perfluorooctanoic acid	335-67-1	PFOA	125			0.625
	Perfluorononanoic acid	375-95-1	PFNA	125			0.625
	Perfluorodecanoic acid	335-76-2	PFDA	125			0.625
	Perfluoroundecanoic acid	2058-94-8	PFUnA	125			0.625
	Perfluorododecanoic acid	307-55-1	PFDoA	125			0.625
	Perfluorotridecanoic acid	72629-94-8	PFTrDA	125			0.625
	Perfluorotetradecanoic acid	376-06-7	PFTeDA	125			0.625
	Perfluorobutanesulfonic acid	375-73-5	PFBS	111			0.553
	Perfluoropentansulfonic acid	2706-91-4	PFPeS	117			0.586
	Perfluorohexanesulfonic acid	355-46-4	PFHxS	114			0.569
	Perfluoroheptanesulfonic acid	375-92-8	PFHpS	119			0.595
	Perfluorooctanesulfonic acid	1763-23-1	PFOS	117			0.583
	Perfluorononanesulfonic acid	68259-12-1	PFNS	120			0.600
	Perfluorodecanesulfonic acid	335-77-3	PFDS	121			0.603
	Perfluorododecanesulfonic acid	79780-39-5	PFDoS	121			0.605
	1H,1H, 2H, 2H-Perfluorohexane sulfonic acid	757124-72-4	4:2-FTS	467			2.34
	1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	27619-97-2	6:2-FTS	474			2.37
	1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	39108-34-4	8:2-FTS	479			2.40
	Perfluorooctanesulfonamide	754-91-6	PFOSA	125			0.625
	N-methyl perfluorooctanesulfonamide	31506-32-8	NMePFOSA	125			0.625
	N-ethyl perfluorooctanesulfonamide	4151-50-2	NEtPFOSA	125			0.625
	N-methyl perfluorooctanesulfonamidoacetic acid	2355-31-9	NMeFOSAA	125			0.625
	N-ethyl perfluorooctanesulfonamidoacetic acid	2991-50-6	NEtFOSAA	125			0.625
	N-methyl perfluorooctanesulfonamidoethanol	24448-09-7	NMePFOSAE	1250			6.25
	N-ethyl perfluorooctanesulfonamidoethanol	1691-99-2	NEtPFOSAE	1250			6.25
	Hexafluoropropylene oxide dimer acid	13252-13-6	HFPODA	500			2.50
	4,8-Dioxa-3H-perfluorononanoic acid	919005-14-4	DONA	471			2.36
	Perfluoro-3-methoxypropanoic acid	377-73-1	PFMPA	250			1.25
	Perfluoro-4-methoxybutanoic acid	863090-89-5	PFMBA	250			1.25
	Nonafluoro-3,6-dioxaheptanoic acid	151772-58-6	NFDHA	250			1.25
	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	756426-58-1	9Cl-PF3ONS	466			2.33
	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	763051-92-9	11Cl-PF3OUdS	471			2.36
	Perfluoro(2-ethoxyethane)sulfonic acid	113507-82-7	PFEESA	223			1.11
	3-Perfluoropropyl propanoic acid	356-02-5	3:3 FTCA	625			3.13
	2H,2H,3H,3H-Perfluorooctanoic acid	914637-49-3	5:3 FTCA	3125			15.6
	3-Perfluoroheptyl propanoic acid	812-70-4	7:3 FTCA	3125			15.6
Extraction Standard Mix	Perfluoro-n-[13C4]butanoic acid	STL00992	13C4-PFBA	500	0.01		2.5
	Perfluoro-n-[13C5]pentanoic acid	STL01893	13C5-PFPeA	250			1.25
	Perfluoro-n-[1,2,3,4,6-13C5]hexanoic acid	STL02577	13C5-PFHxA	125			0.625
	Perfluoro-n-[1,2,3,4-13C4]heptanoic acid	STL01892	13C4-PFHpA	125			0.625
	Perfluoro-n-[13C8]octanoic acid	STL01052	13C8-PFOA	125			0.625
	Perfluoro-n-[13C9]nonanoic acid	STL02578	13C9-PFNA	62.5			0.313
	Perfluoro-n-[1,2,3,4,5,6-13C6]decanoic acid	STL02579	13C6-PFDA	62.5			0.313
	Perfluoro-n-[1,2,3,4,5,6,7-13C7]undecanoic acid	STL02580	13C7-PFUnA	62.5			0.313
	Perfluoro-n-[1,2-13C2]dodecanoic acid	STL02703	13C2-PFDoA	62.5			0.313
	Perfluoro-n-[1,2-13C2]tetradecanoic acid	STL02116	13C2-PFTeDA	62.5			0.313
	Perfluoro-1-[2,3,4-13C3]butanesulfonic acid	STL02337	13C3-PFBS	116			0.581
	Perfluoro-1-[1,2,3-13C3]hexanesulfonic acid	STL02581	13C3-PFHxS	118			0.591
	Perfluoro-1-[13C8]octanesulfonic acid	STL01054	13C8-PFOS	120			0.598
	Perfluoro-1-[13C8]octanesulfonamide	STL01056	13C8-PFOSA	125			0.625
	N-methyl-d3-perfluoro-1-octanesulfonamidoacetic acid	STL02118	D3-NMeFOSAA	250			1.25
	N-ethyl-d5-perfluoro-1-octanesulfonamidoacetic acid	STL02117	D5-NEtFOSAA	250			1.25
	1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]hexane sulfonic acid	STL02395	13C2-4:2FTS	234			1.17
	1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]octane sulfonic acid	STL02279	13C2-6:2FTS	238			1.19
	1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]decane sulfonic acid	STL02280	13C2-8:2FTS	240			1.20
	Tetrafluoro-2-heptafluoropropoxy-13C3-propanoic acid	STL02255	13C3-HFPO-DA	500			2.5
	N-methyl-d7-perfluorooctanesulfonamidoethanol	STL02277	D7-NMeFOSE	1250			6.25
	N-ethyl-d9-perfluorooctanesulfonamidoethanol	STL02278	D9-NEtFOSE	1250			6.25
	N-ethyl-d5-perfluoro-1-octanesulfonamide	STL02704	D5-NEtFOSA	125			0.625
	N-methyl-d3-perfluoro-1-octanesulfonamide	STL02705	D3-NMeFOSA	125			0.625
Internal Standard Mix	Perfluoro-n-[2,3,4-13C3]butanoic acid	STL02680	13C3-PFBA	250	0.01		1.25
	Perfluoro-n-[1,2,3,4-13C4]octanoic acid	STL00990	13C4-PFOA	125			0.625
	Perfluoro-n-[1,2-13C2]decanoic acid	STL00996	13C2-PFDA	62.5			0.313
	Perfluoro-n-[1,2,3,4-13C4]octanesulfonic acid	STL00991	13C4-PFOS	120			0.598
	Perfluoro-n-[1,2,3,4,5-13C5] nonanoic acid	STL00995	13C5-PFNA	62.5			0.313
	Perfluoro-n-[1,2-13C2]hexanoic acid	STL00993	13C2-PFHxA	125			0.625
	Perfluoro-1-hexane[18O2]sulfonic acid	STL00994	18O2-PFHxS	118			0.591

*Bring to final volume using methanol with 4% water, 1% ammonium hydroxide, and 0.625% acetic acid

Table 5. IPR/OPR/LLOPR Acceptance Limits for Target Analytes in Aqueous Matrices[1]

	IPR[2]		
Target Analyte	Mean Recovery (%)	RSD (%)	OPR/LLOPR Recovery (%)[2]
PFBA	70 - 135	21	70 - 140
PFPeA	70 - 135	23	65 - 135
PFHxA	70 - 135	24	70 - 145
PFHpA	70 - 135	28	70 - 150
PFOA	65 - 155	27	70 - 150
PFNA	70 - 140	28	70 - 150
PFDA	65 - 140	26	70 - 140
PFUnA	70 - 135	29	70 - 145
PFDoA	70 - 130	21	70 - 140
PFTrDA	60 - 145	29	65 - 140
PFTeDA	70 - 145	27	60 - 140
PFBS	70 - 140	23	60 - 145
PFPeS	70 - 135	25	65 - 140
PFHxS	70 - 135	27	65 - 145
PFHpS	70 - 140	30	70 - 150
PFOS	70 - 140	29	55 - 150
PFNS	70 - 135	29	65 - 145
PFDS	70 - 135	30	60 - 145
PFDoS	45 - 135	35	50 - 145
4:2FTS	70 - 135	27	70 - 145
6:2FTS	70 - 135	32	65 - 155
8:2FTS	70 - 140	33	60 - 150
PFOSA	70 - 135	22	70 - 145
NMeFOSA	70 - 135	30	60 - 150
NEtFOSA	70 - 130	26	65 - 145
NMeFOSAA	65 - 140	32	50 - 140
NEtFOSAA	70 - 135	28	70 - 145
NMeFOSE	70 - 135	29	70 - 145
NEtFOSE	70 - 130	21	70 - 135
HFPO-DA	70 - 135	23	70 - 140
ADONA	70 - 135	23	65 - 145
PFMPA	60 - 140	23	55 - 140
PFMBA	65 - 145	27	60 - 150
NFDHA	65 - 140	37	50 - 150
9Cl-PF3ONS	70 - 145	30	70 - 155
11Cl-PF3OUdS	50 - 150	35	55 - 160
PFEESA	70 - 135	25	70 - 140
3:3FTCA	70 - 130	23	65 - 130
5:3FTCA	70 - 130	24	70 - 135
7:3FTCA	55 - 130	34	50 - 145

[1] Limits apply to the IPR, OPR, and LLOPR analyses associated with all aqueous matrices, including wastewater, surface water, groundwater, and landfill leachates.

[2] The recovery and RSD limits apply to the target analyte results for IPR, OPR, and LLOPR samples associated with all aqueous matrices. Data were derived from the multi-laboratory validation study and are therefore the limits required for this method.

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Table 6. Acceptance Limits for EIS and NIS Compounds in All Aqueous Matrices and Associated QC Samples		
	Aqueous Matrices Other Than Leachates[2]	Landfill Leachates[3]
EIS Compound[1]	Recovery (%)	Recovery (%)
$^{13}C_4$-PFBA	5[4] - 130	5[4] - 130
$^{13}C_5$-PFPeA	40 - 130	40 - 130
$^{13}C_5$-PFHxA	40 - 130	40 - 130
$^{13}C_4$-PFHpA	40 - 130	40 - 130
$^{13}C_8$-PFOA	40 - 130	40 - 130
$^{13}C_9$-PFNA	40 - 130	40 - 130
$^{13}C_6$-PFDA	40 - 130	40 - 130
$^{13}C_7$-PFUnA	30 - 130	40 - 130
$^{13}C_2$-PFDoA	10 - 130	35 – 130
$^{13}C_2$-PFTeDA	10 - 130	25 – 130
$^{13}C_3$-PFBS	40 - 135	40 - 130
$^{13}C_3$-PFHxS	40 - 130	40 - 130
$^{13}C_8$-PFOS	40 - 130	40 - 130
$^{13}C_2$-4:2FTS	40 - 200	40 – 220
$^{13}C_2$-6:2FTS	40 - 200	40 – 170
$^{13}C_2$-8:2FTS	40 - 300	40 – 145
$^{13}C_8$-PFOSA	40 - 130	40 – 130
D_3-NMeFOSA	10 - 130	40 – 130
D_5-NEtFOSA	10 - 130	35 - 130
D_3-NMeFOSAA	40 - 170	35 - 130
D_5-NEtFOSAA	25 - 135	30 - 130
D_7-NMeFOSE	10 - 130	20 - 130
D_9-NEtFOSE	10 - 130	20 - 130
$^{13}C_3$-HFPO-DA	40 - 130	40 - 130
$^{13}C_3$-PFBA	50 - 200	50 - 200
$^{13}C_2$-PFHxA		
$^{13}C_4$-PFOA		
$^{13}C_5$-PFNA		
$^{13}C_2$-PFDA		
$^{18}O_2$-PFHxS		
$^{13}C_4$-PFOS		

[1] The recovery limits for the EIS compounds were derived by EPA from the data from multi-laboratory validation study. To simplify laboratory operations, EPA has applied the same EIS recovery limits used for field sample analyses to the EIS recoveries in the method blank, IPR, OPR, and LLOPR samples. There are no IPR mean or RSD criteria for the EIS compounds.

[2] Limits apply to the EIS and NIS recoveries from samples of aqueous matrices, including wastewater, surface water, and groundwater, but **not** landfill leachates.

[3] Limits apply to the EIS and NIS recoveries from samples of landfill leachates, **not** other aqueous matrices.

[4] Recovery of $^{13}C_4$-PFBA can be problematic in some field samples. Although the lower limit for recovery for this EIS is set below 10%, laboratories should routinely track recovery of this EIS and take reasonable steps to ensure that recovery is at least 10% in the majority of samples.

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Table 7. IPR/OPR/LLOPR Acceptance Limits for Target Analytes in Solid, Biosolid, and Tissue Matrices

	Solid and Biosolid Matrices[1]			Tissue Matrix[1]		
	IPR			IPR		
Compound	Mean Recovery (%)	RSD (%)	OPR/LLOPR Recovery (%)	Mean Recovery (%)	RSD (%)	OPR/LLOPR Recovery (%)
PFBA	70 - 140	17	70 - 140	70 - 135	20	60 - 140
PFPeA	70 - 140	26	60 - 150	70 - 130	20	60 - 145
PFHxA	70 - 135	23	65 - 140	70 - 140	20	60 - 160
PFHpA	70 - 140	21	65 - 145	70 - 140	20	60 - 145
PFOA	70 - 140	23	70 - 150	70 - 130	25	60 - 150
PFNA	65 - 145	24	70 - 155	70 - 140	20	60 - 145
PFDA	70 - 145	26	70 - 155	70 - 135	20	60 - 150
PFUnA	70 - 145	26	70 - 155	70 - 135	20	60 - 155
PFDoA	70 - 145	25	70 - 150	70 - 135	20	60 - 140
PFTrDA	55 - 160	26	65 - 150	55 - 160	20	60 - 150
PFTeDA	70 - 145	24	65 - 150	70 - 140	25	60 - 140
PFBS	60 - 145	25	65 - 145	70 - 145	20	60 - 150
PFPeS	65 - 140	29	55 - 160	70 - 150	20	60 - 145
PFHxS	65 - 145	28	60 - 150	70 - 140	25	60 - 155
PFHpS	70 - 140	27	65 - 155	70 - 145	20	60 - 140
PFOS	70 - 135	27	65 - 160	70 - 135	30	60 - 160
PFNS	70 - 140	27	55 - 140	60 - 130	20	45 - 140
PFDS	50 - 150	31	40 - 155	55 - 135	20	50 - 140
PFDoS	40 - 140	40	25 - 160	25 - 145	45	25 - 140
4:2FTS	70 - 135	27	60 - 150	65 - 140	30	55 - 150
6:2FTS	60 - 160	50	55 - 200	70 - 140	25	60 - 150
8:2FTS	70 - 140	27	70 - 150	70 - 150	25	60 - 170
PFOSA	70 - 140	19	70 - 140	70 - 140	20	60 - 150
NMeFOSA	65 - 145	26	70 - 155	70 - 140	30	60 - 160
NEtFOSA	70 - 135	19	70 - 140	70 - 140	40	60 - 150
NMeFOSAA	65 - 145	31	65 - 155	70 - 140	20	60 - 145
NEtFOSAA	60 - 150	31	65 - 165	70 - 140	25	60 - 145
NMeFOSE	70 - 140	19	70 - 140	60 - 150	20	40 - 180
NEtFOSE	70 - 135	17	70 - 135	70 - 145	40	60 - 205
HFPO-DA	70 - 140	25	70 - 145	70 - 140	25	60 - 145
ADONA	70 - 155	26	70 - 160	70 - 145	20	55 - 165
PFMPA	70 - 140	25	30 - 140	70 - 145	40	25 - 145
PFMBA	55 - 145	33	60 - 150	70 - 140	20	60 - 150
NFDHA	45 - 145	27	60 - 155	70 - 155	30	60 - 180
9Cl-PF3ONS	65 - 135	23	70 - 150	70 - 140	20	60 - 170
11Cl-PF3OUdS	50 - 135	31	45 - 160	65 - 140	20	50 - 170
PFEESA	70 - 140	20	70 - 140	70 - 145	25	50 - 150
3:3FTCA	45 - 155	32	45 - 130	55 - 130	25	30 - 140
5:3FTCA	70 - 135	28	60 - 130	70 - 145	20	60 - 160
7:3FTCA	70 - 145	39	60 - 150	70 - 155	20	60 - 200

[1] The recovery limits apply to the target analyte results for IPR, OPR, and LLOPR samples for solid, biosolids, and tissue matrices. Data were derived from the multi-laboratory validation study and are therefore the limits required for this method.

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Table 8. Acceptance Limits for EIS and NIS Compounds in Soil-Sediment, Tissue, and Biosolid Matrices and Associated QC Samples			
	Soil/Sediment Samples[2]	Tissue Samples[2]	Biosolid Samples[2]
EIS Compound[1]	Recovery (%)	Recovery (%)	Recovery (%)
$^{13}C_4$-PFBA	8[3] - 130	5[3] - 130	5[3] - 130
$^{13}C_5$-PFPeA	35 - 130	10 - 185	35 - 130
$^{13}C_5$-PFHxA	40 - 130	25 - 170	40 – 130
$^{13}C_4$-PFHpA	40 - 130	25 - 150	40 – 130
$^{13}C_8$-PFOA	40 - 130	25 - 150	40 – 130
$^{13}C_9$-PFNA	40 - 130	35 - 185	40 – 145
$^{13}C_6$-PFDA	40 - 130	30 - 150	40 – 130
$^{13}C_7$-PFUnA	40 - 130	30 - 180	40 – 130
$^{13}C_2$-PFDoA	40 - 130	35 - 180	40 – 130
$^{13}C_2$-PFTeDA	20 - 130	20 - 160	10 - 160
$^{13}C_3$-PFBS	40 - 135	25 - 190	40 - 150
$^{13}C_3$-PFHxS	40 - 130	35 - 175	40 - 140
$^{13}C_8$-PFOS	40 - 130	40 - 160	40 - 130
$^{13}C_2$-4:2FTS	40 - 165	30 - 300	40 - 300
$^{13}C_2$-6:2FTS	40 - 215	35 - 300	40 - 300
$^{13}C_2$-8:2FTS	40 - 275	40 - 365	40 - 300
$^{13}C_8$-PFOSA	40 - 130	25 - 180	20 - 140
D_3-NMeFOSA	10 - 130	5[4] - 130	20 - 130
D_5-NEtFOSA	10 - 130	5[4]- 130	20 - 130
D_3-NMeFOSAA	40 - 135	30 - 250	30 – 150
D_5-NEtFOSAA	40 - 150	30 - 235	20 - 140
D_7-NMeFOSE	20 - 130	5[4] - 160	25 - 130
D_9-NEtFOSE	15 - 130	5[4] - 130	20 - 130
$^{13}C_3$-HFPO-DA	40 - 130	20 - 185	40 - 130
$^{13}C_3$-PFBA	50 - 200	50 - 200	50 - 200
$^{13}C_2$-PFHxA			
$^{13}C_4$-PFOA			
$^{13}C_5$-PFNA			
$^{13}C_2$-PFDA			
$^{18}O_2$-PFHxS			
$^{13}C_4$-PFOS			

[1] Limits apply to the EIS and NIS recoveries from samples of all solid, biosolid, and tissue matrices.

[2] The recovery limits for the EIS compounds were derived by EPA from the solid, tissue, and biosolids sample data from multi-laboratory validation study. To simplify laboratory operations, EPA has applied the same EIS recovery limits used for field sample analyses to the EIS recoveries in the method blank, IPR, OPR, and LLOPR samples. There are no IPR mean or RSD criteria for the EIS compounds.

[3] Recovery of $^{13}C_4$-PFBA, can be problematic in some soil, tissue, and biosolids samples. Although the lower limits for recovery for these EISs are set below 10%, laboratories should routinely track recoveries of these EISs and take reasonable steps to ensure that recoveries are at least 10% in the majority of samples.

[4] Recoveries of D_3-NMeFOSA, D_5-NEtFOSA, D_7-NMeFOSE, and D_9-NEtFOSE can be problematic in tissue samples. The 5% the lower limit for recovery for these EISs may not be achievable for all laboratories in tissue samples. Any result associated with an EIS recovery below 5% should be considered estimated.

Attachment "" to "US Eurofins Cleveland - Analysis of Per and Polyfluoroalkyl Substances (PFAS) in Aqueous, Solid , Biosolid, and Tissue Samples by LC- Page 95 of 119
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Table 10. Analyte Ions Monitored, Extracted Internal Standard, and Non-extracted Internal Standard Used for Quantification

Abbreviation	Example Retention Time [1]	Parent Ion Mass	Quantification Ion Mass	Confirmation Ion Mass[2]	Typical Ion Ratio	Quantification Reference Compound
Target Analytes						
PFBA	1.96	212.8	168.9	NA	NA	$^{13}C_4$-PFBA
PFPeA	4.18	263.0	219.0	68.9	NA	$^{13}C_5$-PFPeA
PFHxA	4.81	313.0	269.0	118.9	13	$^{13}C_5$-PFHxA
PFHpA	5.32	363.1	319.0	169.0	3.5	$^{13}C_4$-PFHpA
PFOA	6.16	413.0	369.0	169.0	3.0	$^{13}C_8$-PFOA
PFNA	6.99	463.0	419.0	219.0	4.9	$^{13}C_9$-PFNA
PFDA	7.47	512.9	469.0	219.0	5.5	$^{13}C_6$-PFDA
PFUnA	7.81	563.1	519.0	269.1	6.9	$^{13}C_7$-PFUnA
PFDoA	8.13	613.1	569.0	319.0	10	$^{13}C_2$-PFDoA
PFTrDA[3]	8.53	663.0	619.0	168.9	6.7	avg.$^{13}C_2$-PFTeDA and$^{13}C_2$-PFDoA
PFTeDA	8.96	713.1	669.0	168.9	6.0	$^{13}C_2$-PFTeDA
PFBS	4.79	298.7	79.9	98.8	2.1	$^{13}C_3$-PFBS
PFPeS	5.38	349.1	79.9	98.9	1.8	$^{13}C_3$-PFHxS
PFHxS	6.31	398.7	79.9	98.9	1.9	$^{13}C_3$-PFHxS
PFHpS	7.11	449.0	79.9	98.8	1.7	$^{13}C_8$-PFOS
PFOS	7.59	498.9	79.9	98.8	2.3	$^{13}C_8$-PFOS
PFNS	7.92	548.8	79.9	98.8	1.9	$^{13}C_8$-PFOS
PFDS	8.28	599.0	79.9	98.8	1.9	$^{13}C_8$-PFOS
PFDoS	9.14	699.1	79.9	98.8	1.9	$^{13}C_8$-PFOS
4:2FTS	4.67	327.1	307.0	80.9	1.7	$^{13}C_2$-4:2FTS
6:2FTS	5.81	427.1	407.0	80.9	1.9	$^{13}C_2$-6:2FTS
8:2FTS	7.28	527.1	507.0	80.8	3.0	$^{13}C_2$-8:2FTS
PFOSA	8.41	498.1	77.9	478.0	47	$^{13}C_8$-PFOSA
NMeFOSA	9.70	511.9	219.0	169.0	0.66	D_3-NMeFOSA
NEtFOSA	9.94	526.0	219.0	169.0	0.63	D_5-NEtFOSA
NMeFOSAA	7.51	570.1	419.0	483.0	2.0	D_3-NMeFOSAA
NEtFOSAA	7.65	584.2	419.1	526.0	1.2	D_5-N-EtFOSAA
NMeFOSE	9.57	616.1	58.9	NA	NA	D_7-NMeFOSE
NEtFOSE	9.85	630.0	58.9	NA	NA	D_9-NEtFOSE
HFPO-DA	4.97	284.9	168.9	184.9	1.95	$^{13}C_3$-HFPO-DA
ADONA	5.79	376.9	250.9	84.8	2.8	$^{13}C_3$-HFPO-DA
PFMPA	3.21	229.0	84.9	NA	NA	$^{13}C_5$-PFPeA
PFMBA	4.53	279.0	85.1	NA	NA	$^{13}C_5$-PFPeA
NFDHA	4.84	295.0	201.0	84.9	1.46	$^{13}C_5$-PFHxA
9Cl-PF3ONS	7.82	530.8	351.0	532.8→353.0	3.2	$^{13}C_3$-HFPO-DA
11Cl-PF3OUdS	8.62	630.9	450.9	632.9→452.9	3.0	$^{13}C_3$-HFPO-DA
PFEESA	5.08	314.8	134.9	82.9	9.22	$^{13}C_5$-PFHxA
3:3FTCA	3.89	241.0	177.0	117.0	1.70	$^{13}C_5$-PFPeA
5:3FTCA	5.14	341.0	237.1	217.0	1.16	$^{13}C_5$-PFHxA
7:3FTCA	6.76	441.0	316.9	336.9	0.69	$^{13}C_5$-PFHxA
EIS Compounds						
$^{13}C_4$-PFBA	1.95	216.8	171.9	NA		$^{13}C_3$-PFBA
$^{13}C_5$-PFPeA	4.18	268.3	223.0	NA		$^{13}C_2$-PFHxA
$^{13}C_5$-PFHxA	4.80	318.0	273.0	120.3		$^{13}C_2$-PFHxA
$^{13}C_4$-PFHpA	5.32	367.1	322.0	NA		$^{13}C_2$-PFHxA
$^{13}C_8$-PFOA	6.16	421.1	376.0	NA		$^{13}C_4$-PFOA
$^{13}C_9$-PFNA	6.99	472.1	427.0	NA		$^{13}C_5$-PFNA

Attachment "" to "US Eurofins Cleveland - Analysis of Per and Polyfluoroalkyl Substances (PFAS) in Aqueous, Solid , Biosolid, and Tissue Samples by LC- Page 96 of 119
MS/MS Using Final Method 1633 & 1633A"

Table 10. Analyte Ions Monitored, Extracted Internal Standard, and Non-extracted Internal Standard Used for Quantification

Abbreviation	Example Retention Time [1]	Parent Ion Mass	Quantification Ion Mass	Confirmation Ion Mass[2]	Typical Ion Ratio	Quantification Reference Compound
$^{13}C_6$-PFDA	7.47	519.1	474.1	NA		$^{13}C_2$-PFDA
$^{13}C_7$-PFUnA	7.81	570.0	525.1	NA		$^{13}C_2$-PFDA
$^{13}C_2$-PFDoA	8.13	615.1	570.0	NA		$^{13}C_2$-PFDA
$^{13}C_2$-PFTeDA	8.96	715.2	670.0	NA		$^{13}C_2$-PFDA
$^{13}C_3$-PFBS	4.78	302.1	79.9	98.9		$^{18}O_2$-PFHxS
$^{13}C_3$-PFHxS	6.30	402.1	79.9	98.9		$^{18}O_2$-PFHxS
$^{13}C_8$-PFOS	7.59	507.1	79.9	98.9		$^{13}C_4$-PFOS
$^{13}C_2$-4:2FTS	4.67	329.1	80.9	309.0		$^{18}O_2$-PFHxS
$^{13}C_2$-6:2FTS	5.82	429.1	80.9	409.0		$^{18}O_2$-PFHxS
$^{13}C_2$-8:2FTS	7.28	529.1	80.9	509.0		$^{18}O_2$-PFHxS
$^{13}C_8$-PFOSA	8.41	506.1	77.8	NA		$^{13}C_4$-PFOS
D_3-NMeFOSA	9.70	515.0	219.0	NA		$^{13}C_4$-PFOS
D_5-NEtFOSA	9.94	531.1	219.0	NA		$^{13}C_4$-PFOS
D_3-NMeFOSAA	7.51	573.2	419.0	NA		$^{13}C_4$-PFOS
D_5-NEtFOSAA	7.65	589.2	419.0	NA		$^{13}C_4$-PFOS
D_7-NMeFOSE	9.56	623.2	58.9	NA		$^{13}C_4$-PFOS
D_9-NEtFOSE	9.83	639.2	58.9	NA		$^{13}C_4$-PFOS
$^{13}C_3$-HFPO-DA	4.97	286.9	168.9	184.9		$^{13}C_2$-PFHxA
NIS Compounds						
$^{13}C_3$-PFBA	1.95	216.0	172.0	NA		NA
$^{13}C_2$-PFHxA	4.80	315.1	270.0	119.4		
$^{13}C_4$-PFOA	6.16	417.1	172.0	NA		
$^{13}C_5$-PFNA	6.99	468.0	423.0	NA		
$^{13}C_2$-PFDA	7.47	515.1	470.1	NA		
$^{18}O_2$-PFHxS	6.30	403.0	83.9	NA		
$^{13}C_4$-PFOS	7.59	502.8	79.9	98.9		

[1] Times shown are in decimal minute units. Example retention times are based on the instrument operating conditions and column specified in Section 10.2.

[2] Many of the EIS and NIS compounds do not produce useful confirmation ions under the instrumental operating parameters. Therefore, monitoring the confirmation ions for the EIS and NIS compounds is optional.

[3] For improved accuracy, PFTrDA is quantitated using the average areas of the labeled compounds $^{13}C_2$-PFTeDA and $^{13}C_2$-PFDoA. However, data systems from some LC/MS/MS vendors may not be able to utilize this approach at this time. In such cases, the laboratory should select the EIS with the stronger response to quantitate PFTrDA and use that EIS for all analyses.

NA = These analytes do not produce a confirmation ion mass or do not have a quantitation reference compound.

Attachment "" to "US Eurofins Cleveland - Analysis of Per and Polyfluoroalkyl Substances (PFAS) in Aqueous, Solid , Biosolid, and Tissue Samples by LC- Page 97 of 119
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Section 9.1.2.2
Subsection
a
b
c
d
d)i.
d)ii.
d)iii.
d)iv.
d)v.
d)vi.
e
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e)iv.
e)v.
e)vi.
e)vii.
e)viii.
e)ix.

e)x.
e)xi.
e)xii.
e)xiii.
e)xiv.
e)xv.

Item
The names, titles, business addresses, and telephone numbers of the analyst(s) that performed the analyses and modification, and of the quality control officer that witnessed and will verify the analyses and modifications
A listing of pollutant(s) measured, by name and CAS Registry number.
A narrative stating reason(s) for the modifications (see Section 1.5).
Results from all quality control (QC) tests comparing the modified method to this method, including:
Calibration (Section 10)
Calibration verification (Section 14.3)
Initial precision and recovery (Section 9.2.1)
Isotopically labeled compound recovery (Section 9.3)
Analysis of blanks (Section 9.5)
Accuracy assessment (Section 9.4)
Data that will allow an independent reviewer to validate each determination by tracing the instrument output (peak height, area, or other signal) to the final result. These data are to include:
Sample numbers and other identifiers
Extraction dates
Analysis dates and times
Analysis sequence/run chronology
Sample weight or volume (Section 11)
Extract volume prior to each cleanup step (Section 12)
Extract volume after each cleanup step (Section 12)
Injection volume (Section 13.3)
Dilution data, differentiating between dilution of a sample or an extract (Section 15.3)

Instrument
Column (dimensions, liquid phase, solid support, film thickness, etc.)
Operating conditions (temperatures, temperature program, flow rates)
Detector (type, operating conditions, etc.)
Chromatograms, printer tapes, and other recordings of raw data
Quantitation reports, data system outputs, and other data to link raw data to the results reported.

Reference Method Criteria	Eurofins CLE SOP Criteria
See method	Same
RSD ≤ 20% for target analytes and labeled compounds	RSD ≤ 20% for target analytes and labeled compounds
Target analytes within 70-130% from the calibration in Section 10	Target analytes within 70-130% from the calibration in Section 10
Target analytes within limits defined in Tables 5 or 7, dependent upon matrix	Target analytes within limits defined in Tables 5 or 7, dependent upon matrix
Within limits defined in Tables 6 or 8, dependent upon matrix	Within limits defined in Tables 6 or 8, dependent upon matrix
Blank < RL, < 1/3 compliance limit or <1/10 sample result	Blank < RL, < 1/3 compliance limit or <1/10 sample result
	Can be provided upon request
	Provided in all Eurofins reports
	Provided in all Eurofins reports
	Provided in all Eurofins reports
	Provided in all Eurofins L4 reports
500 mL/ 5 g	125 mL/ 2 g
None specified, but to be consistent with samples and QA samples as used for calibration	10 uL (instrument dependent) but must be consistent with samples and QA samples as used for calibration

	Same
	Same

Technical Justification
Can be provided upon request
See various comparison tables in this document
See provided PT sample results
Consistent with reference method: calibration solutions optimized for the suite of instrumentation used by the Eurofins network
Consistent with reference method
Consistent with reference method
Consistent with reference method
Consistent with reference method
See PFAS-SOP76651 and provided data
See water and solid extraction comparison tabs
See water and solid extraction comparison tabs
See water and solid extraction comparison tabs
See PFAS-SOP76651 pages 22,23&25

See Chromatography&Instrumentation tab
See Chromatography&Instrumentation tab
See Chromatography&Instrumentation tab
See Chromatography&Instrumentation tab

Water Extraction Procedure	
	Volume
	QC
	pH Check
SPE	Cartridge
	Pre-condition wash
	Sample loading
	Reservoir rinse
	Pre-elution wash
	Elution
	Filter
	Final Vol.

Reference Method Criteria
500 mL (100 mL for landfill leachate)
MB/LLCS/LCS
pH Check, adjust with 50% formic acid or 3% ammonium hydroxide to 6.5 +/-0.5, after fortification with EIS
Glass wool packed 150 mg WAX
Wash with 15 mL of 1% methanolic ammonium hydroxide, then wash with 5 mL of 0.3M formic acid
Load sample
5 mL water (twice) then 5 mL 1:1 0.1M formic acid/methanol
NA
Elute with 5 mL 1% methanolic ammonium hydroxide used to rinse sample container
Add 25 uL of concentrated acetic acid to each sample extract
Add loose carbon, shake, vortex, centrifuge
Filter extract
Add NIS
5 mL

Eurofins CLE SOP Criteria
125 mL (25 mL for landfill leachate)
MB/LLCS/LCS
pH Check, adjust with acetic acid or 1N sodium hydroxide to 6.5 +/-0.5
200 mg/10 mg Wax/GCB
Wash with 5.0 mL of 0.3% methanolic ammonium hydroxide, then wash with 5 mL of 0.3 M formic acid
Load sample
Rinse sample container with 5 mL of reagent water and add to reservoir (twice)
Rinse SPE Column with 5 mL 30:70 methanol:water (twice) & Nitrogen dry for 13 minutes
Elute with 5 mL 0.3% methanolic ammonium hydroxide used to rinse sample container
NA
NA
Add NIS
NA
Bring each sample extract to final volume 5mL using 95:5 methanol:water
5 mL

Technical Justification
Method RL supported with reduced volume. An added benefit to using a reduced sample volume is the reduction of sample matrix, minimizing matrix effects on isotope dilution analytes as compared to a 500mL volume.
Consistent with reference method
Consistent with other PFAS methods (such as 533) and employed universally by Eurofins for pH adjustments for PFAS methods.
Efficiency gains. Removal of loose carbon cleanup leads to better analyte recoveries, more consistent quality of extract and little to no carbon fines in the final extract.
Procedure optimized for SPE cartridge used. This modification is well-established, satisfying QA/QC guidelines and client requirements as well as routinely generating acceptable PT results.
Carbon incorporated into SPE column
Filtration can lead to analyte loss
Consistent with reference method

Solid Extraction Procedure	
	Volume
	QC
Pre-SPE Prep	Solvent
	Extraction
SPE	Cartridge
	Pre-condition wash
	Sample loading
	Reservoir rinse
	Pre-elution wash
	Elution
	Filter
	Final Vol.

Reference Method Criteria
5 grams (0.5 g for biosolids)
MB/LLCS/LCS
Wet QC reference material with 2.5g of reagent water.
Add 10 mL of 0.3% methanolic ammonium hydroxide
Vortex, then shake for 30 min.
Centrifuge @2800 rpm for 10 min., decant to another 50 mL tube
Add 15 mL of 0.3% methanolic ammonium hydroxide to the residue and vortex
Vortex, then shake again for 30 min.
Centrifuge @2800 rpm for 10 min., decant/combine with the first aliquot
Add 5 mL of 0.3% methanolic ammonium hydroxide to the residue and shake
Centrifuge @2800 rpm for 10 min., decant/combine with the first aliquot
Add 10 mg of carbon, shake for 5 min., centrifuge @2800 rpm for 10 min., decant to the new 60 mL tube.
Dilute to 35 mL with reagent water (optional)
Concentrate to 7-10 mL using Nitrogen at 55 C, adjust to 50 mL with reagent water, then check/adjust pH
Glass wool packed 150 mg WAX
Wash with 15 mL of 1% methanolic ammonium hydroxide, then wash with 5 mL of 0.3M formic acid
Load sample
5 mL water (twice) then 5 mL 1:1 0.1M formic acid/methanol
NA
Add NIS to tube and place in manifold
Elute with 5 mL of 1% methanolic ammonium hydroxide used to rinse extraction tube
Add 25 uL of concentrated acetic acid to each sample extract
Filter the final extract
5 mL

Eurofins CLE SOP Criteria
2 grams (0.5 g for biosolids)
MB/LLCS/LCS
NA
Add 10 mL of 0.4% methanolic potassium hydroxide
Sonicate in ultrasonic bath for 1 hour
Centrifuge @ 3500 rpm for 5 min., decant to 125 mL HDPE bottle
Add 4 mL of 0.4% methanolic potassium hydroxide to residue, vortex
NA
Centrifuge @ 3500 rpm for 5 min., decant/combine with the first aliquot
NA
NA
Adjust volume to 125 mL with water and check/adjust pH
200 mg/10 mg Wax/GCB
Wash with 5.0 mL of 0.3% methanolic ammonium hydroxide, then wash with 5 mL of 0.3 M formic acid
Load sample
Rinse sample container with 5 mL of reagent water and add to reservoir (twice)
Rinse SPE Column with 5 mL 30:70 methanol:water (twice) & Nitrogen dry for 13 minutes
Elute with 5 mL 0.3% methanolic ammonium hydroxide used to rinse extraction container
Add NIS
Bring each sample extract to final volume 5mL using 95:5 methanol:water
NA
5 mL

Technical Justification
Method RL supported with reduced mass.
Consistent with reference method
Potassium hydroxide is a stronger base than ammonium hydroxide. The extraction process is more aggressive; therefore, it can be performed as noted. Sonication and centrifugation steps have been updated to match the capabilities of the laboratory's equipment and to ensure optimal method performance. This modification is well-established, satisfying QA/QC guidelines and client requirements as well as routinely generating acceptable PT results. This also leads to a consistent and better quality extract. The soil procedure as written in the method is prone to analyst technique issues as evident in the multi-lab validation study.
Efficiency gains. Removal of loose carbon cleanup leads to better analyte recoveries, more consistent quality of extract and little to no carbon fines in the final extract.
Procedure optimized for SPE cartridge used. This modification is well-established, satisfying QA/QC guidelines and client requirements as well as routinely generating acceptable PT results.
Filtration can lead to analyte loss
Consistent with reference method

Instrument Comparison		Reference Method Criteria
	Instrument	Waters Xevo
Analytical column	Dimensions	50 X 2.1 mm
	Liquid phase	C18
	Film thickness	1.7 um
Guard column	Dimensions	50 X 2.1 mm
	Liquid phase	C18
	Film thickness	1.7 µm
Delay column	Dimensions	125 x 3 mm
	Liquid phase	RP-18
	Film thickness	3 µm
Operating Conditions	Source temperature	140 C
	Desolvation temperature	500 C
	Capillary voltage/Ion Spray Voltage	0.70 kV
	Cone gas	~70 L/h
	Desolvation gas	~800 L/h
	Collision Gas	NA
	Column temperature	40 C
Detector	Type	LC/MS/MS
	Ionization mode	Negative ESI

LC gradient program

Reference Method Criteria

Time (Min)	Eluent A (%)	Eluent B (%)
0	2	98
0.2	2	98
4	30	70
7	55	45
9	75	25
10	95	5
10.4	2	98
11.8	2	98
12	2	98
	Eluent A = Acetonitrile	Eluent B = 2mM Ammonium Acetate in 95:5 water/acetonitrile

Eurofins CLE SOP Criteria

Time (Min)	Eluent A (%)	Eluent B (%)
0	95	5
0.2	95	5
2	70	30
7.5	45	55

9.5	25	75
10.5	2	98
12.5	2	98
12.7	95	5
14.3	95	5
16	95	5
	Eluent A = 10mM Ammonium Acetate in 95:5 reagent water:Acetonitrile	Eluent B = Acetonitrile

Eurofins CLE SOP Criteria
SCIEX 5500
50 X 3 mm
C18
3 um
1.0 X 4.6 mm
No Phase
2.0 µm
50 x 3 mm
C18
3µm
500 C
450 C
4.5kV (negative mode)
35 psi
ion source gas 1 and 2: 35 and 60
10 psi
35 C
LC/MS/MS
Negative ESI

Flow Rate Program (mL/min)	Gradient Curve
0.35	Initial
0.35	2
0.4	7
0.4	8
0.4	8
0.4	6
0.4	10
0.4	7
0.35	1

Flow Rate Program (mL/min)	Gradient Curve
0.35	NA
0.35	NA
0.4	NA
0.4	NA

0.4	NA
0.4	NA
0.4	NA
0.4	NA
0.35	NA
0.35	NA

Technical Justification
Configuration optimized for the suite of instruments used by the Eurofins network, which provides better sensitivity, reproducibility and chromatographic performance.
Consistent with reference method
Configuration optimized for the suite of instruments used by the Eurofins network, which provides better sensitivity, reproducibility and chromatographic performance.
Configuration optimized for the suite of instruments used by the Eurofins network.
Configuration optimized for the suite of instruments used by the Eurofins network.
Configuration optimized for the suite of instruments used by the Eurofins network.
Consistent with reference method
Consistent with reference method

Technical Justification
Configuration optimized for the suite of instruments used by the Eurofins network, which provides better sensitivity, reproducibility and chromatographic performance.

ATTACHMENT C
SAMPLE CHAIN OF CUSTODY

>> Select a Laboratory or Service Center <<

#N/A
#N/A
#N/A
#N/A

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Regulatory Program: ☐DW ☐NPDES ☐RCRA ☐Other:

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

	Project Manager:		COC No:
Client Contact	**Email:**	**Site Contact:**	**Date:**	_____ of _____ COCs
Your Company Name here	**Tel/Fax:**	**Lab Contact:**	**Carrier:**	TALS Project #:
Address	**Analysis Turnaround Time**			Sampler:
City/State/Zip	☐ CALENDAR DAYS ☐ WORKING DAYS			**For Lab Use Only:**
(xxx) xxx-xxxx Phone	TAT if different from Below _____			Walk-in Client:
(xxx) xxx-xxxx FAX	☐ 2 weeks			Lab Sampling:
Project Name:	☐ 1 week			
Site:	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)															Sample Specific Notes:

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐Return to Client ☐Disposal by Lab ☐Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

APPENDIX H
HEALTH AND SAFETY PLAN

STEVENSONS COMMONS B3

1850 LAFAYETTE AVENUE

BRONX, NEW YORK

Health and Safety Plan

AKRF Project Number: 240663
NYSDEC BCP Project Number: C203189

Prepared for:
New York State Department of Environmental Conservation
Division of Environmental Remediation
One Hunters Point Plaza
47-40 21st Street
Long Island City, NY 11101

On behalf of:
Stevenson B3 LLC
℅ Camber Property Group
116 East 27th Street, 11th Floor
New York, NY 10016

Prepared by:

AKRF, Inc.
440 Park Avenue South
New York, NY 10016
212-696-0670

OCTOBER 2026

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FIGURES

Figure 1 – Hospital Route Map

APPENDICES

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Attachment C – Emergency Hand Signals

1.0 INTRODUCTION

This Health and Safety Plan (HASP) was prepared by AKRF, Inc. (AKRF) on behalf of Stevenson B3 LLC (the Volunteers) for the Stevenson Commons B3 site located at 1850 Lafayette Avenue in the Clason Point neighborhood of the Bronx, New York, hereafter referred to as "the Site". The approximately 2.94 Site is identified on the New York City Tax Map as Bronx Borough Tax Block 3600, portions of Lot 4, Lot 15, and Lot 25. On June 25, 2025, Stevenson B3 LLC entered into a Brownfield Cleanup Agreement (BCA) (Index No. C203189-06-25) with the New York State Department of Environmental Conservation (NYSDEC) as a Volunteer to investigate and remediate the Site.

The Site currently consists of a vacant field and asphalt-paved roadway used for emergency access (fire lane) and surrounding landscaped areas. The Site is bounded to the north by parking lots and tennis courts associated with the existing Stevenson Commons apartment complex, followed by Lafayette Avenue; to the east by the existing Stevenson Commons apartment complex, followed by White Plains Road; to the south by the Stevenson Commons Building B4 and B5 project sites, followed by Seward Avenue; and to the west by Thieriot Avenue, followed by residential buildings. The surrounding area is comprised of predominantly residential and commercial uses. The Site location is shown on Figure 1.

Based on an evaluation of the data and information from previous investigations, there is contaminated soil/fill at the Site likely attributable to the historic filling at the Site. Elevated concentrations of metals, including hazardous lead, and semivolatile organic compounds (SVOCs) were detected in soil/fill during the Remedial Investigation (RI). The metals detected in groundwater are consistent with regional background conditions typical of groundwater quality in the Bronx and are not related to historic operations at the Site. Per- and polyfluoroalkyl substances (PFAS) contamination within the groundwater may be indicative of area background PFAS groundwater contamination.

All AKRF employees are directed that all work must be performed in accordance with the Company's Generic HASP and all United States Occupational Safety and Health Administration (OSHA)-applicable regulations for the work activities required for the project. All project personnel are furthermore directed that they are not permitted to enter Permit Required Confined Spaces (as defined by OSHA). For issues unrelated to contaminated materials, all non-AKRF employees are to be bound by all applicable OSHA regulations as well as any more stringent requirements specified by their employer in their corporate HASP or otherwise. AKRF is not responsible for providing oversight for issues unrelated to contaminated materials for non-employees. This oversight shall be the responsibility of the employer of that worker or other official designated by that employer.

2.0 HEALTH AND SAFETY GUIDELINES AND PROCEDURES

2.1 Hazard Evaluation

2.1.1 Hazards of Concern

Check all that apply		
(**X**) Organic Chemicals	(**X**) Inorganic Chemicals	( ) Radiological
( ) Biological	( ) Explosive/Flammable	( ) Oxygen Deficient Atm
(**X**) Heat Stress	(**X**) Cold Stress	( ) Carbon Monoxide
Comments: No personnel are permitted to enter permit confined spaces.		

2.1.2 Physical Characteristics

Check all that apply		
(X) Liquid	(**X**) Solid	( ) Sludge
(X) Vapors	( ) Unknown	( ) Other
Comments:		

2.1.3 Hazardous Materials

Check all that apply					
Chemicals	**Solids**	**Sludges**	**Solvents**	**Oils**	**Other**
( ) Acids	( ) Ash	( ) Paints	( ) Halogens	( ) Transformer	( ) Lab
( ) Caustics	( ) Asbestos	( ) Metals	( ) Petroleum	( ) Other DF	( ) Pharm
( ) Pesticides	( ) Tailings	( ) POTW	( ) Other	( ) Motor or Hydraulic Oil	( ) Hospital
( ) Petroleum	(**X**) Other Fill material	( ) Other		( ) Gasoline	( ) Rad
( ) Inks				( ) Fuel Oil	( ) MGP
( ) PCBs					( ) Mold
(**X**) Metals					( ) Cyanide
(**X**)Other: VOCs & SVOCs					

2.1.4 Chemicals of Concern

Chemical	REL/PEL/STEL	Health Hazards
Arsenic	REL C: 0.002 mg/m^3 PEL: 0.010 mg/m^3	Ulceration of nasal septum, dermatitis, gastrointestinal disturbances, peripheral neuropathy, resp irritation, hyperpigmentation of skin, [potential occupational carcinogen].
Barium	PEL = 0.5 mg/m^3 REL = 0.5 mg/m^3	Irritation eyes, skin, upper respiratory system; skin burns; gastroenteritis; muscle spasm; slow pulse, extrasystoles; hypokalemia.
Benzene	REL: 0.1 ppm N STEL: 1 ppm PEL: 1 ppm O STEL: 5 ppm	Irritation eyes, skin, nose, respiratory system; dizziness; headache, nausea, staggered gait; anorexia, lassitude (weakness, exhaustion); dermatitis; bone marrow depression; [potential occupational carcinogen].
Beryllium	REL C: 0.0005 mg/m^3 PEL: 0.002 mg/m^3 PEL C: 0.005 mg/m^3; max peak: 0.025 mg/m^3	Berylliosis (chronic exposure): anorexia, weight loss, lassitude (weakness, exhaustion), chest pain, cough, clubbing of fingers, cyanosis, pulmonary insufficiency; irritation eyes; dermatitis; [potential occupational carcinogen].
Cadmium	PEL: 0.005 mg/m^3	Pulmonary edema, dyspnea (breathing difficulty), cough, chest tightness, substernal (occurring beneath the sternum) pain; headache; chills, muscle aches; nausea, vomiting, diarrhea; anosmia (loss of the sense of smell), emphysema, proteinuria, mild anemia; [potential occupational carcinogen].
Chloroform	N STEL: 2 ppm PEL C: 50 ppm	Irritation eyes, skin; dizziness, mental dullness, nausea, confusion; headache, lassitude (weakness, exhaustion); anesthesia; enlarged liver; [potential occupational carcinogen].
Chromium	REL: 0.5 mg/m^3 PEL: 1 mg/m^3	Irritation eyes, skin; lung fibrosis (histologic).
Copper	REL: 1 mg/m^3 PEL: 1 mg/m^3	Irritation eyes, nose, pharynx; nasal septum perforation; metallic taste; dermatitis; In Animals: lung, liver, kidney damage; anemia.
DDD, DDE, & DDT	REL: 0.5 mg/m^3 PEL: 1 mg/m^3	Irritation eyes, skin; paresthesia tongue, lips, face; tremor; anxiety, dizziness, confusion, malaise (vague feeling of discomfort), headache, lassitude (weakness, exhaustion); convulsions; paresis hands; vomiting; [potential occupational carcinogen].
Ethylbenzene	REL: 100 ppm N STEL: 125 ppm PEL: 100 ppm	Irritation eyes, nose, respiratory system; headache, lassitude (weakness, exhaustion), dizziness, confusion, malaise (vague feeling of discomfort), drowsiness, unsteady gait; narcosis; defatting dermatitis; possible liver injury; reproductive effects.

Fuel Oils	REL: 100 mg/m^3	Irritation eyes, skin, nose, throat; burning sensation in chest; headache, nausea, lassitude (weakness, exhaustion), restlessness, incoordination, confusion, drowsiness; vomiting, diarrhea; dermatitis; chemical pneumonitis (aspiration liquid).
Lead	REL: 0.050 mg/m^3 PEL:0.050 mg/m^3	Lassitude (weakness, exhaustion), insomnia; facial pallor; anorexia, weight loss, malnutrition; constipation, abdominal pain, colic; anemia; gingival lead line; tremor; paralysis wrist, ankles; encephalopathy; kidney disease; irritation eyes; hypertension.
Manganese	REL: 1 mg/m^3 N STEL: 3 mg/m^3 PEL C: 5 mg/m^3	Manganism; asthenia, insomnia, mental confusion; metal fume fever: dry throat, cough, chest tightness, dyspnea (breathing difficulty), rales, flu-like fever; low-back pain; vomiting; malaise (vague feeling of discomfort); lassitude (weakness, exhaustion); kidney damage.
Mercury	REL: 0.05 mg/m^3 REL C: 0.1 mg/m^3 PEL: 0.1 mg/m^3	Irritation eyes, skin; cough, chest pain, dyspnea (breathing difficulty), bronchitis, pneumonitis; tremor, insomnia, irritability, indecision, headache, lassitude (weakness, exhaustion); stomatitis, salivation; gastrointestinal disturbance, anorexia, weight loss; proteinuria.
Naphthalene	REL: 10 ppm N STEL: 15 ppm PEL: 10 ppm	Irritation eyes; headache, confusion, excitement, malaise (vague feeling of discomfort); nausea, vomiting, abdominal pain; irritation bladder; profuse sweating; jaundice; hematuria (blood in the urine), renal shutdown; dermatitis, optical neuritis, corneal damage.
Nickel	REL: 0.015 mg/m^3 PEL: 1 mg/m^3	Sensitization dermatitis, allergic asthma, pneumonitis; [potential occupational carcinogen].
PAHs	REL: 0.1 mg/m^3 PEL: 0.2 mg/m^3	Effects reported from occupational exposure to PAHs include chronic bronchitis, chronic cough irritation, bronchogenic cancer, dermatitis, cutaneous photosensitization, and pilosebaceous reactions. Reported health effects associated with chronic exposure to coal tar and its by-products (e.g., PAHs): Skin: erythema, burns, and warts on sun-exposed areas with progression to cancer. The toxic effects of coal tar are enhanced by exposure to ultraviolet light. Eyes: irritation and photosensitivity. Respiratory system: cough, bronchitis, and bronchogenic cancer. Gastrointestinal system: leukoplakia, buccal-pharyngeal cancer, and cancer of the lip. Hematopoietic system: leukemia (inconclusive) and lymphoma. Genitourinary system: hematuria and kidney and bladder cancers.

PCBs	REL: 0.001 mg/m^3 PEL: 0.5 mg/m^3	Irritation eyes, chloracne; liver damage; reproductive effects; [potential occupational carcinogen].
Phenol	REL: 5 ppm REL C: 15.6 ppm PEL: 5 ppm	Irritation eyes, nose, throat; anorexia, weight loss; lassitude (weakness, exhaustion), muscle ache, pain; dark urine; cyanosis; liver, kidney damage; skin burns; dermatitis; ochronosis; tremor, convulsions, twitching.
Selenium	REL: 0.2 mg/m^3 PEL: 0.2 mg/m^3	Irritation eyes, skin, nose, throat; visual disturbance; headache; chills, fever; dyspnea (breathing difficulty), bronchitis; metallic taste, garlic breath, gastrointestinal disturbance; dermatitis; eye, skin burns; In Animals: anemia; liver necrosis, cirrhosis; kidney, spleen damage.
Silver	REL: 0.01 mg/m^3 PEL: 0.01 mg/m^3	Blue-gray eyes, nasal septum, throat, skin; irritation, ulceration skin; gastrointestinal disturbance.
Tetrachloroethylene	PEL: 100 ppm PEL C: 200 ppm; max peak: 300 ppm	Irritation eyes, skin, nose, throat, respiratory system; nausea; flush face, neck; dizziness, incoordination; headache, drowsiness; skin erythema (skin redness); liver damage; [potential occupational carcinogen].
Thallium	REL: 0.1 mg/m^3 PEL: 0.1 mg/m^3	Nausea, diarrhea, abdominal pain, vomiting; ptosis, strabismus; peri neuritis, tremor; retrosternal (occurring behind the sternum) tightness, chest pain, pulmonary edema; convulsions, chorea, psychosis; liver, kidney damage; alopecia; paresthesia legs.
Toluene	REL: 100 ppm N STEL: 150 ppm PEL: 200 ppm PEL C: 300 ppm; 10-min max peak: 500 ppm	Irritation eyes, nose; lassitude (weakness, exhaustion), confusion, euphoria, dizziness, headache; dilated pupils, lacrimation (discharge of tears); anxiety, muscle fatigue, insomnia; paresthesia; dermatitis; liver, kidney damage.
Trichloroethylene	PEL: 100 ppm PEL C: 200 ppm; 5-min max peak: 300 ppm	Irritation eyes, skin; headache, visual disturbance, lassitude (weakness, exhaustion), dizziness, tremor, drowsiness, nausea, vomiting; dermatitis; cardiac arrhythmias, paresthesia; liver injury; [potential occupational carcinogen].
Xylene	REL: 100 ppm N STEL: 150 ppm PEL: 100 ppm	Irritation eyes, skin, nose, throat; dizziness, excitement, drowsiness, incoordination, staggering gait; corneal vacuolization; anorexia, nausea, vomiting, abdominal pain; dermatitis.
Zinc	REL: 5 mg/m^3 REL C: 15 mg/m^3 N STEL: 10 mg/m^3 PEL: 5 mg/m^3 (ZnO fume); 15 mg/m^3 (ZnO dust)	Chills, elevated body temperature, myalgia, cough, fatigue, chest pain, stomach cramps, nausea, anemia, changes in cholesterol levels, and vomiting.

Notes:
REL: Recommended exposure limit (NIOSH)
PEL: Permissable exposure limits (OSHA)
STEL: Short-term exposure limit
N: NIOSH
O: OSHA
C: Ceiling

2.2 Designated Personnel

AKRF will appoint one of its on-site personnel as the Site Safety Officer (SSO). This individual will be responsible for the implementation of the HASP. The SSO will have a 4-year college degree in occupational safety or a related science/engineering field, and experience in implementation of air monitoring and hazardous materials sampling programs. Health and safety training required for the SSO and all field personnel is outlined in Section 2.3 of this HASP.

2.3 Training

All personnel who enter the work area while intrusive activities are being performed will have completed a 40-hour training course that meets OSHA requirements of 29 Code of Federal Regulations (CFR) Part 1910, Occupational Safety and Health Standards. In addition, all personnel will have up-to-date 8-hour refresher training. The training will allow personnel to recognize and understand the potential hazards to health and safety. All field personnel must attend a training program, whose purpose is to:

- Make them aware of the potential hazards they may encounter;
- Provide the knowledge and skills necessary for them to perform the work with minimal risk to health and safety;
- Make them aware of the purpose and limitations of safety equipment; and
- Ensure that they can safely avoid or escape from emergencies.

Each member of the field crew will be instructed in these objectives before he/she goes onto the Site. A site safety meeting will be conducted at the start of the project. Additional meetings shall be conducted, as necessary, for new personnel working at the Site.

2.4 Medical Surveillance Program

All AKRF and subcontractor personnel performing field work involving subsurface disturbance at the Site are required to have passed a complete medical surveillance examination in accordance with 29 CFR 1910.120 (f). A physician's medical release for work will be confirmed by the SSO before an employee can begin activities at the Site. The medical release shall consider the type of work to be performed and the required personal protective equipment (PPE). The medical examination will, at a minimum, be provided annually and upon termination of hazardous waste site work.

2.5 Site Work Zones

During any activities involving subsurface disturbance, the work area must be divided into various zones to prevent the spread of contamination, ensure that proper protective equipment is donned, and provide an area for decontamination.

The Exclusion Zone is defined as the area where exposure to impacted media could be encountered. The Contamination Reduction Zone (CRZ) is the area where decontamination procedures take place and is located next to the Exclusion Zone. The Support Zone is the zone area where support facilities such as vehicles, a fire extinguisher, and first aid supplies are located. The emergency

staging area (part of the Support Zone) is the area where all workers on-site would assemble in the event of an emergency. A summary of these areas is provided below. These zones may be changed by the SSO, depending on that day's activities. All field personnel will be informed of the location of these zones before work begins.

Task	Exclusion Zone	CRZ	Support Zone
Soil Excavation	15 feet from excavation border and excavation equipment or vehicles	15 feet from excavation border and excavation equipment or vehicles	As Needed
Soil Borings	10 feet from drill rig	25 feet from drill rig	As Needed
Comments: Control measures such as "caution tape" and/or traffic cones will be placed around the perimeter of the work area when work is being done in a public area.			

2.6 Air Monitoring

The purpose of the air monitoring program is to identify any exposure of the field personnel to potential environmental hazards associated with the documented soil and groundwater contamination. Results of the air monitoring will be used to determine the appropriate response action, if needed.

2.6.1 Volatile Organic Compounds

A photoionization detector (PID) will be used to perform air monitoring during soil disturbance activities to determine airborne levels of total volatile organic compounds (VOCs). The PID will be calibrated at the start of the workday with a 100 parts per million (ppm) isobutylene standard.

2.6.2 Work Zone Air Monitoring

Real time air monitoring will be performed with the PID. Measurements will be taken prior to commencement of work and continuously during the work. Measurements will be made as close to the workers as practicable and at the breathing height of the workers. The SSO shall set up the equipment and confirm that it is working properly. His/her designee may oversee the air measurements during the day. The initial measurement for the day will be performed before the start of work and will establish the background level for that day. The final measurement for the day will be performed after the end of work. The action levels and required responses are listed in the following table.

Instrument	Action Level	Response Action
PID	Less than 10 ppm in breathing zone	Level D or D-Modified
	Between 10 ppm and 20 ppm	Level C
	More than 20 ppm	Stop work. Resume work when readings are less then 20 ppm.
Notes: ppm = parts per million		

2.6.3 Community Air Monitoring Plan

Community air monitoring will be conducted during all intrusive Site activities in compliance with the New York State Department of Health (NYSDOH) site-specific

Community Air Monitoring Plan (CAMP). Real-time air monitoring for VOCs at the perimeter of the Exclusion Zone will be performed as described below.

VOC Monitoring

Periodic monitoring for VOCs will be conducted during non-intrusive activities such as the collection of groundwater samples. Periodic monitoring may include obtaining measurements upon arrival at a location, while opening a monitoring well cap, when bailing/purging a well, and upon leaving the location. In some instances, depending on the proximity of exposed individuals, continuous monitoring may be conducted during these activities.

Continuous monitoring for VOCs will be conducted during all ground intrusive activities (i.e., soil boring installation). VOC concentrations will be measured in the work zone and at each selected monitoring station at the start of each workday, and periodically thereafter, to establish background concentrations.

Exclusion Zone Monitoring

VOCs will be monitored continuously within the Exclusion Zone. Monitoring will be conducted with a PID equipped with a 10.6 electron volt (eV) lamp capable of calculating 15-minute running average concentrations. The following actions will be taken based on organic vapor levels measured:

- If total organic vapor levels exceed 5 ppm above background for the 15-minute average at the Exclusion Zone perimeter, work activities will be temporarily halted and monitoring continued. If levels readily decrease (per instantaneous readings) below 5 ppm above background, work activities will resume with continued monitoring.
- If total organic vapor levels at the perimeter of the Exclusion Zone persist at levels in excess of 5 ppm above background but less than 25 ppm, work activities will be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities will resume provided that the total organic vapor level 200 feet downwind of the hot zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less, but in no case less than 20 feet, is below 5 ppm above background for the 15-minute average.
- If the total organic vapor level is above 25 ppm at the perimeter of the Exclusion Zone, activities will be shut down and the Major Vapor Emission Response Plan (described below) will be automatically implemented.

More frequent intervals of monitoring will be conducted if required as determined by the SSO. All 15-minute readings will be recorded and available for New York State Department of Environmental Conservation (NYSDEC) and NYSDOH personnel to review. Instantaneous readings, if any, will also be recorded.

Fixed Air Monitoring Stations

Fixed monitoring stations will be included outside of the Exclusion Zone. The fixed monitoring stations will be fully enclosed and equipped with the following:

- A PID equipped with a 10.6 eV lamp capable of calculating 15-minute running average VOC concentrations;
- A TSI 8530 DustTrak II or equivalent dust monitor capable of measuring the concentration of airborne respirable particulates less than 10 micrometers in size (PM10) and calculating 15-minute running average particulate concentrations; and

- A Netronix™ Thiamus™ ICU-820 or equivalent Global System for Mobile Communication (GSM)/Global Positioning System (GPS) device capable of recording air monitoring and location data.

All air monitoring data recorded at the fixed monitoring stations will be available for NYSDOH and/or NYSDEC review and will be included in the Final Engineering Report (FER).

If any organic levels greater than 1 ppm over background are identified at a fixed monitoring station, all work activities must be halted or vapor controls must be implemented.

If, following the cessation of the work activities, or as the result of an emergency, organic levels persist above 1 ppm above background at a monitoring station, then the following contingency measures will be implemented:

- If total organic vapor levels exceed 1 ppm above background for the 15-minute average at the monitoring station, work activities will be temporarily halted and monitoring continued. If levels readily decrease (per instantaneous readings) below 1 ppm above background, work activities will resume with continued monitoring.
- If total organic vapor levels at the perimeter of the Exclusion Zone persist at levels in excess of 1 ppm above background, work activities will be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities will resume provided that the total organic vapor level at the monitoring station is below 1 ppm above background for the 15-minute average.
- If the total organic vapor level remains above 1 ppm at the monitoring station, activities will be shut down, and the Major Vapor Emission Response Plan (described below) will be automatically implemented.

Major Vapor Emission Response Plan

Upon activation, the following activities shall be undertaken as part of the Major Vapor Emission Response Plan:

- NYSDEC, NYSDOH, and the local police will immediately be contacted by the SSO and advised of the situation;
- Frequent air monitoring will be conducted at 30-minute intervals at the monitoring stations. If two successive readings below action levels are measured, air monitoring may be halted or modified by the SSO; and
- All emergency contacts will go into effect as appropriate.

All readings will be recorded and be available for NYSDEC and NYSDOH personnel to review.

2.7 Personal Protective Equipment

The PPE required for various kinds of site investigation tasks are based on 29 CFR 1910.120, Hazardous Waste Operations and Emergency Response, Appendix B, "General Description and Discussion of the Levels of Protection and Protective Gear."

AKRF field personnel and other Site personnel shall wear, at a minimum, Level D PPE. The protection will be based on the air monitoring described in Section 2.6.

Level of Protection & PPE		Soil Boring/Water Sampling
Level D (**X**) Steel Toe Shoes (**X**) Hard Hat (within 25 ft of drill rig) (**X**) Work Gloves	(**X**) Safety Glasses ( ) Face Shield (**X**) Ear Plugs (within 25 ft of drill rig) (**X**) Nitrile Gloves (**X**) Tyvek for drill operator if NAPL present	Yes
Level C ***(in addition to Level D)*** (**X**) Half-Face Respirator OR (**X**) Full Face Respirator ( ) Full-Face PAPR	( ) Particulate Cartridge ( ) Organic Cartridge (**X**) Dual Organic/ Particulate Cartridge	If PID > 10 ppm (breathing zone)
Comments: Cartridges to be changed out at least once per shift unless warranted beforehand (e.g., more difficult to breathe or any odors detected).		

2.8 General Work Practices

To protect the health and safety of the field personnel, field personnel will adhere to the guidelines listed below during activities involving subsurface disturbance:

- Eating, drinking, chewing gum or tobacco, and smoking are prohibited, except in designated areas on the Site. These areas will be designated by the SSO.
- Workers must wash their hands thoroughly upon leaving the work area and before eating, drinking, or any other such activity.
- Workers should shower as soon as possible after leaving the Site. Contact with contaminated or suspected surfaces should be avoided.
- The buddy system should always be used; each buddy should watch for signs of fatigue, exposure, and heat/cold stress.

3.0 EMERGENCY PROCEDURES AND EMERGENCY RESPONSE PLAN

The field crew will be equipped with emergency equipment, such as a first aid kit and disposable eye washes. In the case of a medical emergency, the SSO will determine the nature of the emergency and he/she will have someone call for an ambulance, if needed. If the nature of the injury is not serious (i.e., the person can be moved without expert emergency medical personnel), he/she should be taken to a hospital by on-site personnel. Directions to the hospital are provided below, and a hospital route map is attached as Figure 1.

3.1 Hospital Directions

Hospital Name:	BronxCare Hospital Center
Phone Number:	(718) 590-1800
Address/Location:	1650 Grand Concourse Bronx, NY 10457 (The emergency department is accessible from E. Mt. Eden Avenue)
Directions:	1. Exit the Stevenson Commons parking lot and turn RIGHT onto *Seward Avenue* 2. Turn Right onto *Soundview Avenue* 3. Continue onto *Rosedale Avenue* 4. Turn LEFT onto Story Avenue 5. Turn RIGHT onto *Metcalf Avenue* 6. Turn LEFT onto the Bronx River Parkway ramp 7. Take Exit 4 toward *Cross Bronx Expressway toward I-95* and follow signs to get onto I-95 8. Continue on I-95 and take Exit 2A toward *Jerome Avenue* 9. Turn LEFT onto *Jerome Avenue* 10. Turn LEFT onto *E. 174th Avenue* 11. Turn RIGHT onto *Walton Avenue* 12. Turn LEFT onto *E. Mt Eden Avenue* The emergency department entrance will be accessible from *E. Mt Eden Avenue*.

3.2 Emergency Contacts

Company	Individual Name	Title	Contact Number
AKRF	Rebecca Kinal	Remedial Engineer	914-263-8730 (cell) 914-922-2362 (office)
	Deborah Shapiro	QA/QC Officer	646-388-9544 (office)
	Tim Larigan	Project Manager	646-388-9567 (office) 614-560-5425 (cell)
	Mark Jepsen	Alternate Project Manager	646-388-9508 (office) 862-368-8791 (cell)
	Jonas Peters	SSO	914-433-0672 (cell)
Stevenson B3 LLC	Sarah Pizer	Director	917-346-6443 (cell)
	Alejandro Ramos	Alternate Director	281-844-1271 (cell)
Ambulance, Fire Department & Police Department	-	-	911
NYSDEC Spill Hotline	-	-	800-457-7362

4.0 APPROVAL & ACKNOWLEDGMENTS OF HASP

APPROVAL

Signed: _____ Date: _____

AKRF Project Manager

Signed: _____ Date: _____

AKRF Health and Safety Officer

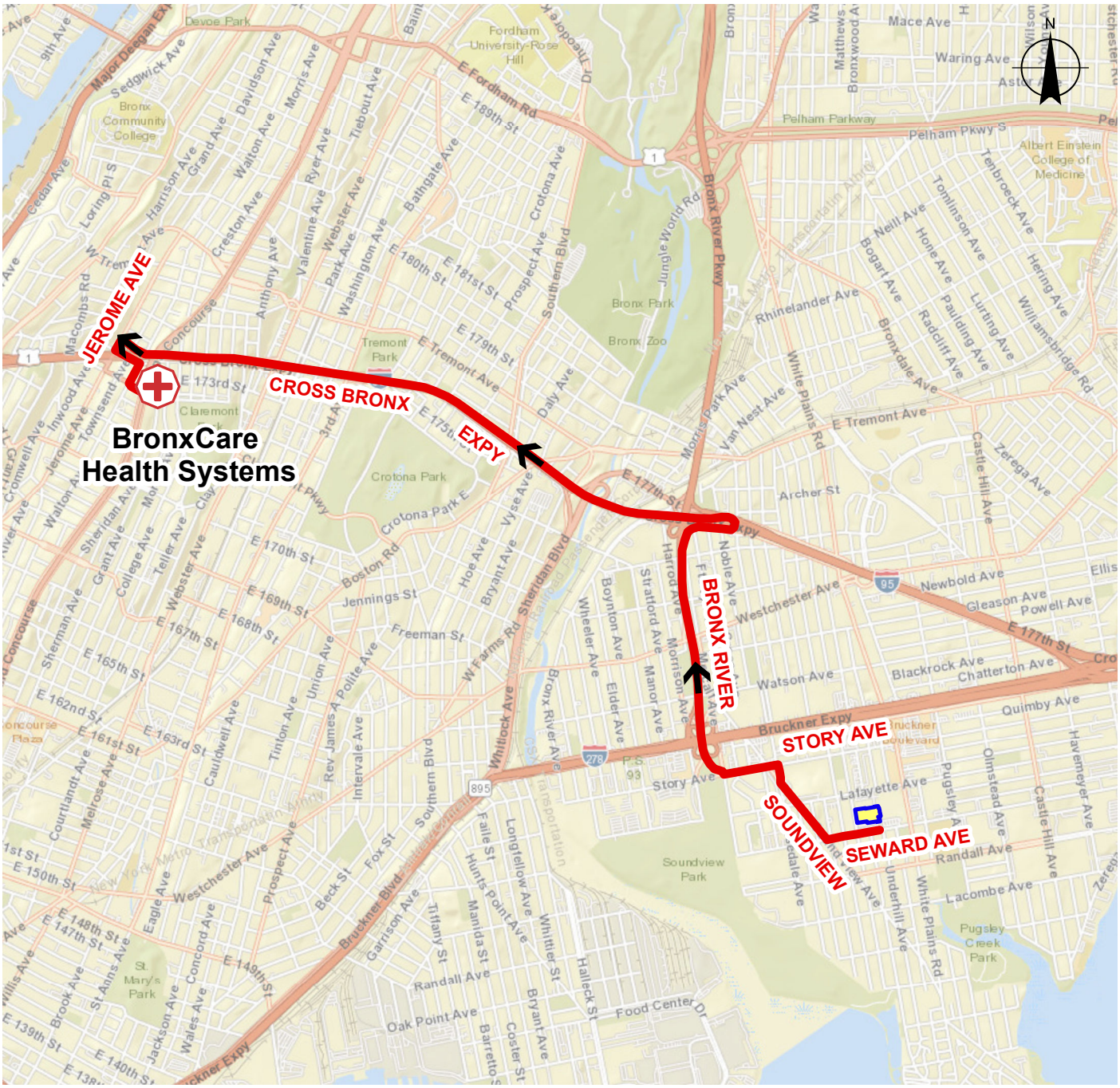
Below is an affidavit that must be signed by all workers who enter the Site. A copy of the HASP must be on-site at all times and will be kept by the SSO.

AFFIDAVIT

I,_____(name), of_____(company name), have read the Health and Safety Plan (HASP) for the Stevenson Commons B3 site. I agree to conduct all on-site work in accordance with the requirements set forth in this HASP and understand that failure to comply with this HASP could lead to my removal from the Site.

Signed: _____ Company: _____ Date: _____
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FIGURE 1
HOSPITAL ROUTE MAP



Service Layer Credits: ESRI World Street Map 2021

LEGEND

- BCP SITE BOUNDARY
- HOSPITAL LOCATION
- ROUTE TO HOSPITAL

BronxCare Health System
1650 Grand Concourse
Bronx, NY 10457
(718) 590-1800

0 3,000 6,000
SCALE IN FEET

akrf
440 Park Avenue South, New York, NY 10016

Stevenson Commons B3
Bronx, New York

HOSPITAL ROUTE MAP

DATE
3/6/2025

PROJECT NO.
240663

FIGURE
1

©2025 AKRF Q:\Projects\240663 - STEVENSON COMMONS B3\Technical\GIS and Graphics\SAR\240663 Hospital Route Map.mxd 3/6/2025 11:45:02 AM mveilleux

ATTACHMENT A
POTENTIAL HEALTH EFFECTS FROM ON-SITE CONTAMINANTS

ATSDR
AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

ARSENIC
CAS # 7440-38-2

Division of Toxicology ToxFAQs™ December 2003

This fact sheet answers the most frequently asked health questions (FAQs) about arsenic. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It's important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Exposure to higher than average levels of arsenic occurs mostly in the workplace, near hazardous waste sites, or in areas with high natural levels. At high levels, inorganic arsenic can cause death. Exposure to lower levels for a long time can cause a discoloration of the skin and the appearance of small corns or warts. Arsenic has been found at 1,014 of the 1,598 National Priority List sites identified by the Environmental Protection Agency (EPA).

What is arsenic?

Arsenic is a naturally occurring element widely distributed in the earth's crust. In the environment, arsenic is combined with oxygen, chlorine, and sulfur to form inorganic arsenic compounds. Arsenic in animals and plants combines with carbon and hydrogen to form organic arsenic compounds.

Inorganic arsenic compounds are mainly used to preserve wood. Organic arsenic compounds are used as pesticides, primarily on cotton plants.

What happens to arsenic when it enters the environment?

❑ Arsenic cannot be destroyed in the environment. It can only change its form.
❑ Arsenic in air will settle to the ground or is washed out of the air by rain.
❑ Many arsenic compounds can dissolve in water.
❑ Fish and shellfish can accumulate arsenic, but the arsenic in fish is mostly in a form that is not harmful.

How might I be exposed to arsenic?

❑ Eating food, drinking water, or breathing air containing arsenic.
❑ Breathing contaminated workplace air.
❑ Breathing sawdust or burning smoke from wood treated with arsenic.
❑ Living near uncontrolled hazardous waste sites containing arsenic.
❑ Living in areas with unusually high natural levels of arsenic in rock.

How can arsenic affect my health?

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.

Ingesting or breathing low levels of inorganic arsenic for a long time can cause a darkening of the skin and the

appearance of small "corns" or "warts" on the palms, soles, and torso.

Skin contact with inorganic arsenic may cause redness and swelling.

Organic arsenic compounds are less toxic than inorganic arsenic compounds. Exposure to high levels of some organic arsenic compounds may cause similar effects as inorganic arsenic.

How likely is arsenic to cause cancer?

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.

How can arsenic affect children?

We do not know if exposure to arsenic will result in birth defects or other developmental effects in people. Birth defects have been observed in animals exposed to inorganic arsenic.

It is likely that health effects seen in children exposed to high amounts of arsenic will be similar to the effects seen in adults.

How can families reduce the risk of exposure to arsenic?

❑ If you use arsenic-treated wood in home projects, you should wear dust masks, gloves, and protective clothing to decrease exposure to sawdust.
❑ If you live in an area with high levels of arsenic in water or soil, you should use cleaner sources of water and limit contact with soil.

Is there a medical test to show whether I've been exposed to arsenic?

There are tests to measure the level of arsenic in blood, urine, hair, or fingernails. The urine test is the most reliable test for arsenic exposure within the last few days. Tests on hair and fingernails can measure exposure to high levels or arsenic over the past 6-12 months. These tests can determine if you have been exposed to above-average levels of arsenic. They cannot predict how the arsenic levels in your body will affect your health.

Has the federal government made recommendations to protect human health?

EPA has set limits on the amount of arsenic that industrial sources can release to the environment and has restricted or canceled many uses of arsenic in pesticides. EPA has set a limit of 0.01 parts per million (ppm) for arsenic in drinking water.

The Occupational Safety and Health Administration has set limits of 10 μg arsenic per cubic meter of workplace air (10 $\mu g/m^3$) for 8 hour shifts and 40 hour work weeks.

Source of Information

Agency for Toxic Substances and Disease Registry (ATSDR). 2000. Toxicological Profile for Arsenic. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone: 1-888-422-8737, FAX: 770-488-4178. ToxFAQs™ Internet address is http://www.atsdr.cdc.gov/toxfaq.html . ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

ATSDR
AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

BARIUM AND COMPOUNDS

CAS # 7440-39-3

Division of Toxicology and Environmental Medicine ToxFAQs™ **August 2007**

This fact sheet answers the most frequently asked health questions (FAQs) about barium and barium compounds. For more information, call the ATSDR Information Center at 1-800-232-4636. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It is important you understand this information because these substances may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Exposure to barium occurs mostly in the workplace or from drinking contaminated water. Ingesting drinking water containing levels of barium above the EPA drinking water guidelines for relatively short periods of time can cause gastrointestinal disturbances and muscle weakness. Ingesting high levels for a long time can damage the kidneys. Barium and barium compounds have been found in at least 798 of the 1,684 National Priority List sites identified by the Environmental Protection Agency (EPA).

What is barium?

Barium is a silvery-white metal which exists in nature only in ores containing mixtures of elements. It combines with other chemicals such as sulfur or carbon and oxygen to form barium compounds.

Barium compounds are used by the oil and gas industries to make drilling muds. Drilling muds make it easier to drill through rock by keeping the drill bit lubricated. They are also used to make paint, bricks, ceramics, glass, and rubber.

Barium sulfate is sometimes used by doctors to perform medical tests and to take x-rays of the gastrointestinal tract.

What happens to barium when it enters the environment?

❏ Barium gets into the air during the mining, refining, and production of barium compounds, and from the burning of coal and oil.
❏ The length of time that barium will last in air, land, water, or sediments depends on the form of barium released.
❏ Barium compounds, such as barium sulfate and barium carbonate, which do not dissolve well in water, can last a long time in the environment.
❏ Barium compounds, such as barium chloride, barium nitrate, or barium hydroxide, that dissolve easily in water usually do not last in these forms for a long time in the environment. The barium in these compounds that is dissolved in water quickly combines with sulfate or carbonate that are naturally found in water and become the longer lasting forms (barium sulfate and barium carbonate).
❏ Fish and aquatic organisms can accumulate barium.

How might I be exposed to barium?

❏ Ingesting small amounts present in your food and water or breathing air containing very low levels of barium.
❏ Living in areas with unusually high natural levels of barium in the drinking water.
❏ Working in a job that involves barium production or use.
❏ Living or working near waste sites where barium has been disposed of.

How can barium affect my health?

The health effects of the different barium compounds depend on how well the compound dissolves in water or in the stomach contents. Barium compounds that do not dissolve well, such as barium sulfate, are not generally harmful.

BARIUM AND COMPOUNDS
CAS # 7440-39-3

Barium has been found to potentially cause gastrointestinal disturbances and muscular weakness when people are exposed to it at levels above the EPA drinking water standards for relatively short periods of time. Some people who eat or drink amounts of barium above background levels found in food and water for a short period may experience vomiting, abdominal cramps, diarrhea, difficulties in breathing, increased or decreased blood pressure, numbness around the face, and muscle weakness. Eating or drinking very large amounts of barium compounds that easily dissolve can cause changes in heart rhythm or paralysis and possibly death. Animals that drank barium over long periods had damage to the kidneys, decreases in body weight, and some died.

How likely is barium to cause cancer?

The Department of Health and Human Services (DHHS) and the International Agency for Research on Cancer (IARC) have not classified barium as to its carcinogenicity. The EPA has determined that barium is not likely to be carcinogenic to humans following ingestion and that there is insufficient information to determine whether it will be carcinogenic to humans following inhalation exposure.

How can barium affect children?

We do not know whether children will be more or less sensitive than adults to barium toxicity. A study in rats that swallowed barium found a decrease in newborn body weight; we do not know if a similar effect would be seen in humans.

How can families reduce the risks of exposure to barium?

The greatest potential source of barium exposure is through food and drinking water. However, the amount of barium in foods and drinking water are typically too low to be of concern.

Is there a medical test to determine whether I've been exposed to barium?

There is no routine medical test to determine whether you have been exposed to barium. Doctors can measure barium in body tissues and fluids, such as bones, blood, urine, and feces, using very complex instruments. These tests cannot be used to predict the extent of the exposure or potential health effects.

The geometric mean barium level measured in the U.S. general population aged 6 and older is reported by the Centers for Disease Control and Prevention (CDC) as 1.44 μg/g creatinine (measured in urine).

Has the federal government made recommendations to protect human health?

The EPA has set a limit of 2.0 milligrams of barium per liter of drinking water (2.0 mg/L), which is the same as 2 ppm.

The Occupational Safety and Health Administration (OSHA) has set Permissible Exposure Limits (PELs) of 0.5 milligrams of soluble barium compounds per cubic meter of workplace air (0.5 mg/m^3) for 8 hour shifts and 40 hour work weeks. The OSHA limits for barium sulfate dust are 15 mg/m^3 of total dust and 5 mg/m^3 for respirable fraction.

The National Institute for Occupational Safety and Health (NIOSH) has set Recommended Exposure Limits (RELs) of 0.5 mg/m^3 for soluble barium compounds. The NIOSH has set RELs of 10 mg/m^3 (total dust) for barium sulfate and 5 mg/m^3 (respirable fraction).

References

Agency for Toxic Substances and Disease Registry (ATSDR). 2007. Toxicological Profile for Barium and Compounds (Update). Atlanta, GA: U.S. Department of Public Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology and Environmental Medicine, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone: 1-800-232-4636, FAX: 770-488-4178. ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html. ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

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BENZENE
CAS # 71-43-2

This fact sheet answers the most frequently asked health questions (FAQs) about benzene. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. This information is important because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Benzene is a widely used chemical formed from both natural processes and human activities. Breathing benzene can cause drowsiness, dizziness, and unconsciousness; long-term benzene exposure causes effects on the bone marrow and can cause anemia and leukemia. Benzene has been found in at least 813 of the 1,430 National Priorities List sites identified by the Environmental Protection Agency (EPA).

What is benzene?

(Pronounced bĕn′zēn′)

Benzene is a colorless liquid with a sweet odor. It evaporates into the air very quickly and dissolves slightly in water. It is highly flammable and is formed from both natural processes and human activities.

Benzene is widely used in the United States; it ranks in the top 20 chemicals for production volume. Some industries use benzene to make other chemicals which are used to make plastics, resins, and nylon and synthetic fibers. Benzene is also used to make some types of rubbers, lubricants, dyes, detergents, drugs, and pesticides. Natural sources of benzene include volcanoes and forest fires. Benzene is also a natural part of crude oil, gasoline, and cigarette smoke.

What happens to benzene when it enters the environment?

- Industrial processes are the main source of benzene in the environment.
- Benzene can pass into the air from water and soil.
- It reacts with other chemicals in the air and breaks down within a few days.
- Benzene in the air can attach to rain or snow and be carried back down to the ground.
- It breaks down more slowly in water and soil, and can pass through the soil into underground water.
- Benzene does not build up in plants or animals.

How might I be exposed to benzene?

- Outdoor air contains low levels of benzene from tobacco smoke, automobile service stations, exhaust from motor vehicles, and industrial emissions.
- Indoor air generally contains higher levels of benzene from products that contain it such as glues, paints, furniture wax, and detergents.
- Air around hazardous waste sites or gas stations will contain higher levels of benzene.
- Leakage from underground storage tanks or from hazardous waste sites containing benzene can result in benzene contamination of well water.
- People working in industries that make or use benzene may be exposed to the highest levels of it.
- A major source of benzene exposures is tobacco smoke.

How can benzene affect my health?

Breathing very high levels of benzene can result in death, while high levels can cause drowsiness, dizziness, rapid heart rate, headaches, tremors, confusion, and unconsciousness. Eating or drinking foods containing high levels of benzene can cause vomiting, irritation of the stomach, dizziness, sleepiness, convulsions, rapid heart rate, and death.

ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html

The major effect of benzene from long-term (365 days or longer) exposure is on the blood. Benzene causes harmful effects on the bone marrow and can cause a decrease in red blood cells leading to anemia. It can also cause excessive bleeding and can affect the immune system, increasing the chance for infection.

Some women who breathed high levels of benzene for many months had irregular menstrual periods and a decrease in the size of their ovaries. It is not known whether benzene exposure affects the developing fetus in pregnant women or fertility in men.

Animal studies have shown low birth weights, delayed bone formation, and bone marrow damage when pregnant animals breathed benzene.

How likely is benzene to cause cancer?

The Department of Health and Human Services (DHHS) has determined that benzene is a known human carcinogen. Long-term exposure to high levels of benzene in the air can cause leukemia, cancer of the blood-forming organs.

Is there a medical test to show whether I've been exposed to benzene?

Several tests can show if you have been exposed to benzene. There is test for measuring benzene in the breath; this test must be done shortly after exposure. Benzene can also be measured in the blood, however, since benzene disappears rapidly from the blood, measurements are accurate only for recent exposures.

In the body, benzene is converted to products called metabolites. Certain metabolites can be measured in the urine. However, this test must be done shortly after exposure and is not a reliable indicator of how much benzene you have been exposed to, since the metabolites may be present in urine from other sources.

Has the federal government made recommendations to protect human health?

The EPA has set the maximum permissible level of benzene in drinking water at 0.005 milligrams per liter (0.005 mgL). The EPA requires that spills or accidental releases into the environment of 10 pounds or more of benzene be reported to the EPA.

The Occupational Safety and Health Administration (OSHA) has set a permissible exposure limit of 1 part of benzene per million parts of air (1 ppm) in the workplace during an 8-hour workday, 40-hour workweek.

Glossary

Anemia: A decreased ability of the blood to transport oxygen.

Carcinogen: A substance with the ability to cause cancer.

CAS: Chemical Abstracts Service.

Chromosomes: Parts of the cells responsible for the development of hereditary characteristics.

Metabolites: Breakdown products of chemicals.

Milligram (mg): One thousandth of a gram.

Pesticide: A substance that kills pests.

References

This ToxFAQs information is taken from the 1997 Toxicological Profile for Benzene (update) produced by the Agency for Toxic Substances and Disease Registry, Public Health Service, U.S. Department of Health and Human Services, Public Health Service in Atlanta, GA.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop E-29, Atlanta, GA 30333. Phone: 1-888-422-8737, FAX: 404-498-0093. ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

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BERYLLIUM

CAS #7440-41-7

Division of Toxicology ToxFAQs™ **September 2002**

This fact sheet answers the most frequently asked health questions (FAQs) about beryllium. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It is important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: People working or living near beryllium industries have the greatest potential for exposure to beryllium. Lung damage has been observed in people exposed to high levels of beryllium in the air. About 1-15% of all people occupationally-exposed to beryllium in air become sensitive to beryllium and may develop chronic beryllium disease (CBD), an irreversible and sometimes fatal scarring of the lungs. CBD may be completely asymptomatic or begin with coughing, chest pain, shortness of breath, weakness, and/or fatigue. Beryllium has been found in at least 535 of the 1,613 National Priorities List sites identified by the Environmental Protection Agency (EPA).

What is beryllium?

Beryllium is a hard, grayish metal naturally found in mineral rocks, coal, soil, and volcanic dust. Beryllium ore is mined, and the beryllium is purified for use in nuclear weapons and reactors, aircraft and space vehicle structures, instruments, x-ray machines, and mirrors. Beryllium oxide is used to make speciality ceramics for electrical and high-technology applications. Beryllium alloys are used in automobiles, computers, sports equipment (golf clubs), and dental bridges.

What happens to beryllium when it enters the environment?

❑ Beryllium dust enters the air from burning coal and oil. This beryllium dust will eventually settle over the land and water.
❑ It enters water from erosion of rocks and soil, and from industrial waste. Some beryllium compounds will dissolve in water, but most stick to particles and settle to the bottom.
❑ Most beryllium in soil does not dissolve in water and remains bound to soil.
❑ Beryllium does not accumulate in the food chain.

How might I be exposed to beryllium?

❑ The general population is normally exposed to low levels of beryllium in air, food, and water.
❑ People working in industries where beryllium is mined, processed, machined, or converted into metal, alloys, and other chemicals may be exposed to high levels of beryllium. People living near these industries may also be exposed to higher than normal levels of beryllium in air.
❑ People living near uncontrolled hazardous waste sites may be exposed to higher than normal levels of beryllium.

How can beryllium affect my health?

Beryllium can be harmful if you breathe it. The effects depend on how much you are exposed to, for how long, and individual susceptibility. If beryllium air levels are high enough (greater than 1000 ug/m^3), an acute condition can result. This condition resembles pneumonia and is called acute beryllium disease Occupational and community air standards are effective in preventing acute lung damage.

Some exposed workers (1-15%) become sensitive to beryllium. These individuals may develop an inflammatory reaction in the respiratory system. This condition is called chronic beryllium disease (CBD), and can occur years after exposure to higher than normal levels of beryllium (greater than 0.2 ug/m^3). This disease can make you feel weak and tired, and can cause difficulty in breathing. It can also result in anorexia, weight loss, and may also lead to right side heart

enlargement and heart disease in advanced cases. Some people who are sensitized to beryllium may not have any symptoms. The general population is unlikely to develop chronic beryllium disease because ambient air levels of beryllium are normally very low (0.00003-0.0002 ug/m^3).

Swallowing beryllium has not been reported to cause effects in humans because very little beryllium is absorbed from the stomach and intestines. Ulcers have been seen in dogs ingesting beryllium in the diet. Beryllium contact with skin that has been scraped or cut may cause rashes or ulcers.

How likely is beryllium to cause cancer?

Long term exposure to beryllium can increase the risk of developing lung cancer in people.

The Department of Health and Human Services (DHHS) and the International Agency for Research on Cancer (IARC) have determined that beryllium is a human carcinogen. The EPA has determined that beryllium is a probable human carcinogen. EPA has estimated that lifetime exposure to 0.04 ug/m^3 beryllium can result in a one in a thousand chance of developing cancer.

How can beryllium affect children?

It is likely that the health effects seen in children exposed to beryllium will be similar to the effects seen in adults. We do not know whether children differ from adults in their susceptibility to beryllium.

We do not know if exposure to beryllium will result in birth defects or other developmental effects in people. The studies on developmental effects in animals are not conclusive.

How can families reduce the risk of exposure to beryllium?

❑ Individuals working at facilities that use beryllium should make sure that contaminated clothing and objects are not brought home.

❑ Children should avoid playing in soils near uncontrolled hazardous waste sites where beryllium may have been discarded.

Is there a medical test to show whether I've been exposed to beryllium?

Beryllium can be measured in samples from your blood, urine, skin, or lungs. These tests are rarely done because they are not reliable measures of your exposure over time. Also, these tests do not show if you have become sensitized to beryllium.

Another test, the beryllium lymphocyte proliferation test (BeLPT), can help your doctor decide if you are sensitized to beryllium. This test is only done in a few specialized laboratories, but doctors familiar with the test can collect blood samples and send them for testing by overnight carrier. The BeLPT is most often done for people who work with beryllium. It is also useful for separating chronic beryllium disease from diagnoses that resemble it (for example, sarcoidosis). Depending on your exposure history, clinical findings, and test results, your doctor may also recommend additional specialized testing.

Has the federal government made recommendations to protect human health?

The EPA restricts the amount of beryllium that industries may release into the air to 0.01 ug/m^3, averaged over a 30-day period.

The Occupational Safety and Health Administration (OSHA) sets a limit of 2 ug/m^3 for an 8-hour work shift measured as a personal sample.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 2002. Toxicological Profile for Beryllium Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone: 1-888-422-8737, FAX: 770-488-4178. ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html. ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

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AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

CADMIUM
CAS # 7440-43-9

This fact sheet answers the most frequently asked health questions (FAQs) about cadmium. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It's important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Exposure to cadmium happens mostly in the workplace where cadmium products are made. The general population is exposed from breathing cigarette smoke or eating cadmium contaminated foods. Cadmium damages the lungs, can cause kidney disease, and may irritate the digestive tract. This substance has been found in at least 776 of the 1,467 National Priorities List sites identified by the Environmental Protection Agency (EPA).

What is cadmium?

(Pronounced kăd′mē-əm)

Cadmium is a natural element in the earth's crust. It is usually found as a mineral combined with other elements such as oxygen (cadmium oxide), chlorine (cadmium chloride), or sulfur (cadmium sulfate, cadmium sulfide).

All soils and rocks, including coal and mineral fertilizers, contain some cadmium. Most cadmium used in the United States is extracted during the production of other metals like zinc, lead, and copper. Cadmium does not corrode easily and has many uses, including batteries, pigments, metal coatings, and plastics.

What happens to cadmium when it enters the environment?

- Cadmium enters air from mining, industry, and burning coal and household wastes.
- Cadmium particles in air can travel long distances before falling to the ground or water.
- It enters water and soil from waste disposal and spills or leaks at hazardous waste sites.
- It binds strongly to soil particles.
- Some cadmium dissolves in water.
- It doesn't break down in the environment, but can change forms.
- Fish, plants, and animals take up cadmium from the environment.
- Cadmium stays in the body a very long time and can build up from many years of exposure to low levels.

How might I be exposed to cadmium?

- Breathing contaminated workplace air (battery manufacturing, metal soldering or welding).
- Eating foods containing it; low levels in all foods (highest in shellfish, liver, and kidney meats).
- Breathing cadmium in cigarette smoke (doubles the average daily intake).
- Drinking contaminated water.
- Breathing contaminated air near the burning of fossil fuels or municipal waste.

How can cadmium affect my health?

Breathing high levels of cadmium severely damages the lungs and can cause death. Eating food or drinking water with very high levels severely irritates the stomach, leading to vomiting and diarrhea. Long-term exposure to lower levels of cadmium in air, food, or water leads to a buildup of cadmium in the kidneys and possible kidney disease.

ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html

Other long-term effects are lung damage and fragile bones. Animals given cadmium in food or water had high blood pressure, iron-poor blood, liver disease, and nerve or brain damage.

We don't know if humans get any of these diseases from eating or drinking cadmium. Skin contact with cadmium is not known to cause health effects in humans or animals.

How likely is cadmium to cause cancer?

The Department of Health and Human Services (DHHS) has determined that cadmium and cadmium compounds may reasonably be anticipated to be carcinogens.

How can cadmium affect children?

The health effects in children are expected to be similar to those in adults (kidney, lung and intestinal damage).

We don't know if cadmium causes birth defects in people. Cadmium does not readily go from a pregnant woman's body into the developing child, but some portion can cross the placenta. It can also be found in breast milk. The babies of animals exposed to high levels of cadmium during pregnancy had changes in behavior and learning ability. Cadmium may also affect birth weight and the skeleton in developing animals.

Animal studies also indicate that more cadmium is absorbed into the body if the diet is low in calcium, protein, or iron, or is high in fat. A few studies show that younger animals absorb more cadmium and are more likely to lose bone and bone strength than adults.

How can families reduce the risk of exposure to cadmium?

In the home, store substances that contain cadmium safely, and keep nickel-cadmium batteries out of reach of young children. If you work with cadmium, use all safety precautions to avoid carrying cadmium-containing dust home from work on your clothing, skin, hair, or tools.

A balanced diet can reduce the amount of cadmium taken into the body from food and drink.

Is there a medical test to show whether I've been exposed to cadmium?

Tests are available in some medical laboratories that measure cadmium in blood, urine, hair, or nails. Blood levels show recent exposure to cadmium, and urine levels show both recent and earlier exposure. The reliability of tests for cadmium levels in hair or nails is unknown.

Has the federal government made recommendations to protect human health?

The EPA has set a limit of 5 parts of cadmium per billion parts of drinking water (5 ppb). EPA doesn't allow cadmium in pesticides.

The Food and Drug Administration (FDA) limits the amount of cadmium in food colors to 15 parts per million (15 ppm).

The Occupational Safety and Health Administration (OSHA) limits workplace air to 100 micrograms cadmium per cubic meter (100 µg/m^3) as cadmium fumes and 200 µg cadmium/m^3 as cadmium dust.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 1999. Toxicological profile for cadmium. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone: 1-888-422-8737, FAX: 770-488-4178. ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

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CHLOROFORM
CAS # 67-66-3

This fact sheet answers the most frequently asked health questions (FAQs) about chloroform. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It's important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Exposure to chloroform can occur when breathing contaminated air or when drinking or touching the substance or water containing it. Breathing chloroform can cause dizziness, fatigue, and headaches. Breathing chloroform or ingesting chloroform over long periods of time may damage your liver and kidneys. It can cause sores if large amounts touch your skin. This substance has been found in at least 717 of the 1,430 National Priorities List sites identified by the Environmental Protection Agency (EPA).

What is chloroform?

(Pronounced klôr′ə-fôrm′)

Chloroform is a colorless liquid with a pleasant, nonirritating odor and a slightly sweet taste. It will burn only when it reaches very high temperatures.

In the past, chloroform was used as an inhaled anesthetic during surgery, but it isn't used that way today. Today, chloroform is used to make other chemicals and can also be formed in small amounts when chlorine is added to water.

Other names for chloroform are trichloromethane and methyl trichloride.

What happens to chloroform when it enters the environment?

- Chloroform evaporates easily into the air.
- Most of the chloroform in air breaks down eventually, but it is a slow process.
- The breakdown products in air include phosgene and hydrogen chloride, which are both toxic.
- It doesn't stick to soil very well and can travel through soil to groundwater.
- Chloroform dissolves easily in water and some of it may break down to other chemicals.
- Chloroform lasts a long time in groundwater.
- Chloroform doesn't appear to build up in great amounts in plants and animals.

How might I be exposed to chloroform?

- Drinking water or beverages made using water containing chloroform.
- Breathing indoor or outdoor air containing it, especially in the workplace.
- Eating food that contains it.
- Skin contact with chloroform or water that contains it, such as in swimming pools.

How can chloroform affect my health?

Breathing about 900 parts of chloroform per million parts air (900 ppm) for a short time can cause dizziness, fatigue, and headache. Breathing air, eating food, or drinking water containing high levels of chloroform for long periods of time may damage your liver and kidneys. Large amounts of chloroform can cause sores when chloroform touches your skin.

ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html

It isn't known whether chloroform causes reproductive effects or birth defects in people.

Animal studies have shown that miscarriages occurred in rats and mice that breathed air containing 30 to 300 ppm chloroform during pregnancy and also in rats that ate chloroform during pregnancy. Offspring of rats and mice that breathed chloroform during pregnancy had birth defects. Abnormal sperm were found in mice that breathed air containing 400 ppm chloroform for a few days.

How likely is chloroform to cause cancer?

The Department of Health and Human Services (DHHS) has determined that chloroform may reasonably be anticipated to be a carcinogen.

Rats and mice that ate food or drank water with chloroform developed cancer of the liver and kidneys.

Is there a medical test to show whether I've been exposed to chloroform?

Although the amounts of chloroform in the air that you exhale and in blood, urine, and body tissues can be measured, there is no reliable test to determine how much chloroform you have been exposed to or whether you will experience any harmful effects.

The measurement of chloroform in body fluids and tissues may help to determine if you have come into contact with large amounts of chloroform, but these tests are useful for only a short time after you are exposed. Chloroform in your body might also indicate that you have come into contact with other chemicals.

Has the federal government made recommendations to protect human health?

The EPA drinking water limit for total trihalomethanes, a class of chemicals that includes chloroform, is 100 micrograms per liter of water (100 µg/L).

The EPA requires that spills or accidental releases of 10 pounds or more of chloroform into the environment be reported to the EPA.

The Occupational Safety and Health Administration (OSHA) has set the maximum allowable concentration of chloroform in workroom air during an 8-hour workday in a 40-hour workweek at 50 ppm.

Glossary

Carcinogenicity: A substance with the ability to cause cancer.

CAS: Chemical Abstracts Service.

Ingesting: Taking food or drink into your body.

Microgram (µg): One millionth of a gram.

Miscarriage: Pregnancy loss.

ppm: Parts per million.

References

This ToxFAQs information is taken from the 1997 Toxicological Profile for Chloroform (update) produced by the Agency for Toxic Substances and Disease Registry, Public Health Service, U.S. Department of Health and Human Services, Public Health Service in Atlanta, GA.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone:1-888-422-8737, FAX: 770-488-4178. ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

ATSDR
AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

CHROMIUM

CAS # 7440-47-3

Division of Toxicology and Environmental Medicine ToxFAQs™ September 2008

This fact sheet answers the most frequently asked health questions (FAQs) about chromium. For more information, call the ATSDR Information Center at 1-800-232-4636. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It is important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Exposure to chromium occurs from ingesting contaminated food or drinking water or breathing contaminated workplace air. Chromium(VI) at high levels can damage the nose and cause cancer. Ingesting high levels of chromium(VI) may result in anemia or damage to the stomach or intestines. Chromium(III) is an essential nutrient. Chromium has been found in at least 1,127 of the 1,669 National Priorities List sites identified by the Environmental Protection Agency (EPA).

What is chromium?

Chromium is a naturally occurring element found in rocks, animals, plants, and soil. It can exist in several different forms. Depending on the form it takes, it can be a liquid, solid, or gas. The most common forms are chromium(0), chromium(III), and chromium(VI). No taste or odor is associated with chromium compounds.

The metal chromium, which is the chromium(0) form, is used for making steel. Chromium(VI) and chromium(III) are used for chrome plating, dyes and pigments, leather tanning, and wood preserving.

What happens to chromium when it enters the environment?

❑ Chromium can be found in air, soil, and water after release from the manufacture, use, and disposal of chromium-based products, and during the manufacturing process.
❑ Chromium does not usually remain in the atmosphere, but is deposited into the soil and water .
❑ Chromium can easily change from one form to another in water and soil, depending on the conditions present.
❑ Fish do not accumulate much chromium in their bodies from water.

How might I be exposed to chromium?

❑ Eating food containing chromium(III).
❑ Breathing contaminated workplace air or skin contact during use in the workplace.
❑ Drinking contaminated well water.
❑ Living near uncontrolled hazardous waste sites containing chromium or industries that use chromium.

How can chromium affect my health?

Chromium(III) is an essential nutrient that helps the body use sugar, protein, and fat.

Breathing high levels of chromium(VI) can cause irritation to the lining of the nose, nose ulcers, runny nose, and breathing problems, such as asthma, cough, shortness of breath, or wheezing. The concentrations of chromium in air that can cause these effects may be different for different types of chromium compounds, with effects occurring at much lower concentrations for chromium(VI) compared to chromium(III).

The main health problems seen in animals following ingestion of chromium(VI) compounds are irritation and ulcers in the stomach and small intestine and anemia. Chromium(III) compounds are much less toxic and do not appear to cause these problems.

Sperm damage and damage to the male reproductive system have also been seen in laboratory animals exposed to chromium(VI).

Skin contact with certain chromium(VI) compounds can cause skin ulcers. Some people are extremely sensitive to chromium(VI) or chromium(III). Allergic reactions consisting of severe redness and swelling of the skin have been noted.

How likely is chromium to cause cancer?

The Department of Health and Human Services (DHHS), the International Agency for Reseach on Cancer (IARC), and the EPA have determined that chromium(VI) compounds are known human carcinogens. In workers, inhalation of chromium(VI) has been shown to cause lung cancer. Chromium(VI) also causes lung cancer in animals. An increase in stomach tumors was observed in humans and animals exposed to chromium(VI) in drinking water.

How can chromium affect children?

It is likely that health effects seen in children exposed to high amounts of chromium will be similar to the effects seen in adults.

We do not know if exposure to chromium will result in birth defects or other developmental effects in people. Some developmental effects have been observed in animals exposed to chromium(VI).

How can families reduce the risks of exposure to chromium?

❑ Children should avoid playing in soils near uncontrolled hazardous waste sites where chromium may have been discarded.

❑ Chromium is a component of tobacco smoke. Avoid smoking in enclosed spaces like inside the home or car in order to limit exposure to children and other family members.

❑ Although chromium(III) is an essential nutrient, you should avoid excessive use of dietary supplements containing chromium.

Is there a medical test to determine whether I've been exposed to chromium?

Since chromium(III) is an essential element and naturally occurs in food, there will always be some level of chromium in your body. Chromium can be measured in hair, urine, and blood.

Higher than normal levels of chromium in blood or urine may indicate that a person has been exposed to chromium. However , increases in blood and urine chromium levels cannot be used to predict the kind of health effects that might develop from that exposure.

Has the federal government made recommendations to protect human health?

The EPA has determined that exposure to chromium in drinking water at concentrations of 1 mg/L for up to 10 days is not expected to cause any adverse effects in a child.

The FDA has determined that the chromium concentration in bottled drinking water should not exceed 1 mg/L.

The Occupational Health and Safety Administration (OSHA) has limited workers' exposure to an average of 0.0005 mg/m^3 chromium(VI), 0.5 mg/m^3 chromium(III), and 1.0 mg/m^3 chromium(0) for an 8-hour workday, 40-hour workweek.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 2008. Toxicological Profile for Chromium (Draft for Public Comment). Atlanta, GA: U.S. Department of Public Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology and Environmental Medicine, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone: 1-800-232-4636, FAX: 770-488-4178. ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html. ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmenta l quality department if you have any more questions or concerns.

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COPPER

CAS # 7440-50-8

Division of Toxicology ToxFAQs™ September 2002

This fact sheet answers the most frequently asked health questions (FAQs) about copper. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It is important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Copper is a reddish metal that occurs naturally in the environment. It also occurs naturally in plants and animals. Low levels of copper are essential for maintaining good health. High levels can cause harmful effects such as irritation of the nose, mouth and eyes, vomiting, diarrhea, stomach crumps, and nausea. Copper has been found in at least 884 of the 1,613 National Priorities List sites identified by the Environmental Protection Agency (EPA).

What is copper?

Copper is a reddish metal that occurs naturally in rocks, soil, water, and air. Copper also occurs naturally in plants and animals.

Metallic copper can be easily molded or shaped. Metallic copper can be found in the U.S. penny, electrical wiring, and some water pipes. Metallic copper is also found in mixtures (called alloys) with other metals such as brass and bronze. Copper is also found as part of other compounds forming salts. Copper salts occur naturally, but are also manufactured. The most common copper salt is copper sulfate. Most copper compounds are blue-green in color. Copper compounds are commonly used in agriculture to treat plant diseases like mildew, for water treatment and, as preservatives for wood, leather, and fabrics.

What happens to copper when it enters the environment?

❑ Copper can enter the environment from the mining of copper and other metals and from factories that make or use metallic copper or copper compounds.

❑ It can also enter the environment through domestic waste water, combustion of fossil fuels and wastes, wood production, phosphate fertilizer production, and natural sources (e.g., windblown dust from soils, volcanoes, decaying vegetation, forest fires, and sea spray).

❑ Copper in soil strongly attaches to organic material and minerals.

❑ Copper that dissolves in water becomes rapidly bound to particles suspended in the water.

❑ Copper does not typically enter groundwater.

❑ Copper carried by particles emitted from smelters and ore processing plants is carried back to the ground by gravity or in rain or snow.

❑ Copper does not break down in the environment.

How might I be exposed to copper?

❑ Breathing air, drinking water, eating food, and by skin contact with soil, water, or other copper-containing substances.

❑ Some copper in the environment can be taken up by plants and animals.

❑ Higher exposure may occur if your water is corrosive and you have copper plumbing and brass water fixtures. ❑ You may be exposed to higher amounts of copper if you drink water or swim in lakes or reservoirs recently treated with copper to control algae or receive cooling water from a power plant that may have high amounts of dissolved copper.

❑ Using some garden products (e.g., fungicides) to control plant diseases.

❑ Living near bronze and brass production facilities may expose you to higher copper levels in soil.

❑ You may breathe copper-containing dust or have skin contact if you work in the industry of mining copper or

processing the ore. You may breathe high levels if you grind or weld copper metal.

How can copper affect my health?

Copper is essential for good health, but high amounts can be harmful. Long-term exposure to copper dust can irritate your nose, mouth, and eyes, and cause headaches, dizziness, nausea, and diarrhea.

Drinking water with higher than normal levels of copper may cause vomiting, diarrhea, stomach cramps, and nausea. Intentionally high intakes of copper can cause liver and kidney damage and even death.

How likely is copper to cause cancer?

We do not know whether copper can cause cancer in humans. The EPA has determined that copper is not classifiable as to carcinogenicity.

How can copper affect children?

Exposure to high levels of copper will result in the same type of effects in children and adults. Studies in animals suggest that the young children may have more severe effects than adults; we do not know if this would also be true in humans. There is a very small percentage of infants and children who are unusually sensitive to copper.

We do not know if copper can cause birth defects or other developmental effects in humans. Studies in animals suggest that ingestion of high levels of copper may cause a decrease in fetal growth.

How can families reduce the risk of exposure to copper?

❑ The greatest potential source of copper exposure is through drinking water, especially in water that is first drawn in the morning after sitting in copper pipes and brass faucets overnight.

❑ To reduce exposure, run the water for at least 15-30 seconds before using it.

❑ If you are exposed to copper at work, you may carry copper home on your skin, clothes, or tools. You can avoid this by showering, and changing clothing before leaving work, and your work clothes should be kept separate from other clothes and laundered separately.

Is there a medical test to show whether I've been exposed to copper?

Copper is normally found in all tissues of the body, blood, urine, feces, hair, and nails. High levels of copper in these samples can show that you have been exposed to higher than normal levels of copper. Tests to measure copper levels in the body are not routinely available at the doctor's office because they require special equipment. These tests cannot tell the extent of exposure or whether you will experience harmful effects.

Has the federal government made recommendations to protect human health?

The EPA has determined that drinking water should not contain more than 1.3 milligrams of copper per liter of water (1.3 mg/L).

The Occupational Safety and Health Administration (OSHA) has set a limit of 0.1 mg per cubic meter (0.1 mg/m^3) of copper fumes (vapor generated from heating copper) and 1 mg/m^3 of copper dusts (fine metallic copper particles) and mists (aerosol of soluble copper) in workroom air during an 8-hour work shift, 40-hour workweek.

The Food and Nutrition Board of the Institute of Medicine recommends dietary allowances (RDAs) of 340 micrograms (340 µg) of copper per day for children aged 1-3 years, 440 µg/day for children aged 4-8 years, 700 µg/day for children aged 9-13 years, 890 µg/day for children aged 14-18 years, and 900 µg/day for adults.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 2002. Toxicological Profile for Copper (Draft for Public Comment). Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone: 1-888-422-8737, FAX: 770-488-4178. ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html. ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

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AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

DDT, DDE, AND DDD

CAS # 50-29-3, 72-55-9, 72-54-8

Division of Toxicology ToxFAQs™ **September 2002**

This fact sheet answers the most frequently asked health questions (FAQs) about DDT, DDE, and DDD. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It is important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Exposure to DDT, DDE, and DDD occurs mostly from eating foods containing small amounts of these compounds, particularly meat, fish and poultry. High levels of DDT can affect the nervous system causing excitability, tremors and seizures. In women, DDE can cause a reduction in the duration of lactation and an increased chance of having a premature baby. DDT, DDE, and DDD have been found in at least 441 of the 1,613 National Priorities List sites identified by the Environmental Protection Agency (EPA).

What are DDT, DDE, and DDD?

DDT (dichlorodiphenyltrichloroethane) is a pesticide once widely used to control insects in agriculture and insects that carry diseases such as malaria. DDT is a white, crystalline solid with no odor or taste. Its use in the U.S. was banned in 1972 because of damage to wildlife, but is still used in some countries.

DDE (dichlorodiphenyldichloroethylene) and DDD (dichlorodiphenyldichloroethane) are chemicals similar to DDT that contaminate commercial DDT preparations. DDE has no commercial use. DDD was also used to kill pests, but its use has also been banned. One form of DDD has been used medically to treat cancer of the adrenal gland.

What happens to DDT, DDE, and DDD when they enter the environment?

❑ DDT entered the environment when it was used as a pesticide; it still enters the environment due to current use in other countries.

❑ DDE enters the environment as contaminant or breakdown product of DDT; DDD also enters the environment as a breakdown product of DDT.

❑ DDT, DDE, and DDD in air are rapidly broken down by sunlight. Half of what's in air breaks down within 2 days.

❑ They stick strongly to soil; most DDT in soil is broken down slowly to DDE and DDD by microorganisms; half the DDT in soil will break down in 2-15 years, depending on the type of soil.

❑ Only a small amount will go through the soil into groundwater; they do not dissolve easily in water.

❑ DDT, and especially DDE, build up in plants and in fatty tissues of fish, birds, and other animals.

How might I be exposed to DDT, DDE, and DDD?

❑ Eating contaminated foods, such as root and leafy vegetables, fatty meat, fish, and poultry, but levels are very low.

❑ Eating contaminated imported foods from countries that still allow the use of DDT to control pests.

❑ Breathing contaminated air or drinking contaminated water near waste sites and landfills that may contain higher levels of these chemicals.

❑ Infants fed on breast milk from mothers who have been exposed.

❑ Breathing or swallowing soil particles near waste sites or landfills that contain these chemicals.

How can DDT, DDE, and DDD affect my health?

DDT affects the nervous system. People who accidentally swallowed large amounts of DDT became excitable and had tremors and seizures. These effects went away after the exposure stopped. No effects were seen in people who took small daily doses of DDT by capsule for 18 months.

A study in humans showed that women who had high amounts of a form of DDE in their breast milk were unable to

breast feed their babies for as long as women who had little DDE in the breast milk. Another study in humans showed that women who had high amounts of DDE in breast milk had an increased chance of having premature babies.
In animals, short-term exposure to large amounts of DDT in food affected the nervous system, while long-term exposure to smaller amounts affected the liver. Also in animals, short-term oral exposure to small amounts of DDT or its breakdown products may also have harmful effects on reproduction.

How likely are DDT, DDE, and DDD to cause cancer?

Studies in DDT-exposed workers did not show increases in cancer. Studies in animals given DDT with the food have shown that DDT can cause liver cancer.
The Department of Health and Human Services (DHHS) determined that DDT may reasonable be anticipated to be a human carcinogen. The International Agency for Research on Cancer (IARC) determined that DDT may possibly cause cancer in humans. The EPA determined that DDT, DDE, and DDD are probable human carcinogens.

How can DDT, DDE, and DDD affect children?

There are no studies on the health effects of children exposed to DDT, DDE, or DDD. We can assume that children exposed to large amounts of DDT will have health effects similar to the effects seen in adults. However, we do not know whether children differ from adults in their susceptibility to these substances.
There is no evidence that DDT, DDE, or DDD cause birth defects in people. A study showed that teenage boys whose mothers had higher DDE amounts in the blood when they were pregnant were taller than those whose mothers had lower DDE levels. However, a different study found the opposite in preteen girls. The reason for the discrepancy between these studies is unknown.
Studies in rats have shown that DDT and DDE can mimic the action of natural hormones and in this way affect the development of the reproductive and nervous systems. Puberty was delayed in male rats given high amounts of DDE as juveniles. This could possibly happen in humans. A study in mice showed that exposure to DDT during the first weeks of life may cause neurobehavioral problems later in life.

How can families reduce the risk of exposure to DDT,DDE, and DDE?

❑ Most families will be exposed to DDT by eating food or drinking liquids contaminated with small amounts of DDT.
❑ Cooking will reduce the amount of DDT in fish.
❑ Washing fruit and vegetables will remove most DDT from their surface.
❑ Follow health advisories that tell you about consumption of fish and wildlife caught in contaminated areas.

Is there a medical test to show whether I've been exposed to DDT, DDE, and DDD?

Laboratory tests can detect DDT, DDE, and DDD in fat, blood, urine, semen, and breast milk. These tests may show low, moderate, or excessive exposure to these compounds, but cannot tell the exact amount you were exposed to, or whether you will experience adverse effects. These tests are not routinely available at the doctor's office because they require special equipment.

Has the federal government made recommendations to protect human health?

The Occupational Safety and Health Administration (OSHA) sets a limit of 1 milligram of DDT per cubic meter of air (1 mg/m^3) in the workplace for an 8-hour shift, 40-hour workweek.
The Food and Drug Administration (FDA) has set limits for DDT, DDE, and DDD in foodstuff at or above which the agency will take legal action to remove the products from the market.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 2002. Toxicological Profile for DDT/DDE/DDD (Update). Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone: 1-888-422-8737, FAX: 770-488-4178. ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html. ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

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AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

ETHYLBENZENE
CAS # 100-41-4

Agency for Toxic Substances and Disease Registry ToxFAQs **June 1999**

This fact sheet answers the most frequently asked health questions (FAQs) about ethylbenzene. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It's important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Ethylbenzene is a colorless liquid found in a number of products including gasoline and paints. Breathing very high levels can cause dizziness and throat and eye irritation. Ethylbenzene has been found in at least 731 of the 1,467 National Priorities List sites identified by the Environmental Protection Agency (EPA).

What is ethylbenzene?

(Pronounced ĕthʹ əl bĕnʹ zēnʹ)

Ethylbenzene is a colorless, flammable liquid that smells like gasoline. It is found in natural products such as coal tar and petroleum and is also found in manufactured products such as inks, insecticides, and paints.

Ethylbenzene is used primarily to make another chemical, styrene. Other uses include as a solvent, in fuels, and to make other chemicals.

What happens to ethylbenzene when it enters the environment?

- Ethylbenzene moves easily into the air from water and soil.
- It takes about 3 days for ethylbenzene to be broken down in air into other chemicals.
- Ethylbenzene may be released to water from industrial discharges or leaking underground storage tanks.
- In surface water, ethylbenzene breaks down by reacting with other chemicals found naturally in water.
- In soil, it is broken down by soil bacteria.

How might I be exposed to ethylbenzene?

- Breathing air containing ethylbenzene, particularly in areas near factories or highways.
- Drinking contaminated tap water.
- Working in an industry where ethylbenzene is used or made.
- Using products containing it, such as gasoline, carpet glues, varnishes, and paints.

How can ethylbenzene affect my health?

Limited information is available on the effects of ethylbenzene on people's health. The available information shows dizziness, throat and eye irritation, tightening of the chest, and a burning sensation in the eyes of people exposed to high levels of ethylbenzene in air.

Animals studies have shown effects on the nervous system, liver, kidneys, and eyes from breathing ethylbenzene in air.

How likely is ethylbenzene to cause cancer?

The EPA has determined that ethylbenzene is not classifiable as to human carcinogenicity.

ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html

No studies in people have shown that ethylbenzene exposure can result in cancer. Two available animal studies suggest that ethylbenzene may cause tumors.

How can ethylbenzene affect children?

Children may be exposed to ethylbenzene through inhalation of consumer products, including gasoline, paints, inks, pesticides, and carpet glue. We do not know whether children are more sensitive to the effects of ethylbenzene than adults.

It is not known whether ethylbenzene can affect the development of the human fetus. Animal studies have shown that when pregnant animals were exposed to ethylbenzene in air, their babies had an increased number of birth defects.

How can families reduce the risk of exposure to ethylbenzene?

Exposure to ethylbenzene vapors from household products and newly installed carpeting can be minimized by using adequate ventilation.

Household chemicals should be stored out of reach of children to prevent accidental poisoning. Always store household chemicals in their original containers; never store them in containers children would find attractive to eat or drink from, such as old soda bottles. Gasoline should be stored in a gasoline can with a locked cap.

Sometimes older children sniff household chemicals, including ethylbenzene, in an attempt to get high. Talk with your children about the dangers of sniffing chemicals.

Is there a medical test to show whether I've been exposed to ethylbenzene?

Ethylbenzene is found in the blood, urine, breath, and some body tissues of exposed people. The most common way to test for ethylbenzene is in the urine. This test measures substances formed by the breakdown of ethylbenzene. This test needs to be done within a few hours after exposure occurs, because the substances leave the body very quickly.

These tests can show you were exposed to ethylbenzene, but cannot predict the kind of health effects that might occur.

Has the federal government made recommendations to protect human health?

The EPA has set a maximum contaminant level of 0.7 milligrams of ethylbenzene per liter of drinking water (0.7 mg/L).

The EPA requires that spills or accidental releases into the environment of 1,000 pounds or more of ethylbenzene be reported to the EPA.

The Occupational Safety and Health Administration (OSHA) has set an occupational exposure limit of 100 parts of ethylbenzene per million parts of air (100 ppm) for an 8-hour workday, 40-hour workweek.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 1999. Toxicological profile for ethylbenzene. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone: 1-888-422-8737, FAX: 770-488-4178. ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

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FUEL OILS

CAS # 8008-20-6, 70892-10-3, 68476-30-2, 68476-34-6, 68476-31-3

This fact sheet answers the most frequently asked health questions (FAQs) about fuel oils. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It's important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

SUMMARY: Fuel oils are liquid mixtures produced from petroleum, and their use mostly involves burning them as fuels. Drinking or breathing fuel oils may cause nausea or nervous system effects. However, exposure under normal use conditions is not likely to be harmful. Fuel oils have been found in at least 26 of the 1,430 National Priorities List sites identified by the Environmental Protection Agency (EPA).

What are fuel oils?

(Pronounced fyo͞o′əl oilz)

Fuel oils are a variety of yellowish to light brown liquid mixtures that come from crude petroleum. Some chemicals found in fuel oils may evaporate easily, while others may more easily dissolve in water.

Fuel oils are produced by different petroleum refining processes, depending on their intended uses. Fuel oils may be used as fuel for engines, lamps, heaters, furnaces, and stoves, or as solvents.

Some commonly found fuel oils include kerosene, diesel fuel, jet fuel, range oil, and home heating oil. These fuel oils differ from one another by their hydrocarbon compositions, boiling point ranges, chemical additives, and uses.

What happens to fuel oils when they enter the environment?

- Some chemicals found in fuel oils may evaporate into the air from open containers or contaminated soil or water.
- Some chemicals found in fuel oils may dissolve in water after spills to surface waters or leaks from underground storage tanks.
- Some chemicals found in fuel oils may stick to particles in water, which will eventually cause them to settle to the bottom sediment.
- Some of the chemicals found in fuel oils may be broken down slowly in air, water, and soil by sunlight or small organisms.
- Some of the chemicals found in fuel oils may build up significantly in plants and animals.

How might I be exposed to fuel oils?

- Using a home kerosene heater or stove, or using fuel oils at work.
- Breathing air in home or building basements that has been contaminated with fuel oil vapors entering from the soil.
- Drinking or swimming in water that has been contaminated with fuel oils from a spill or a leaking underground storage tank.
- Touching soil contaminated with fuel oils.
- Using fuel oils to wash paint or grease from skin or equipment.

How can fuel oils affect my health?

Little information is available about the health effects that may be caused by fuel oils. People who use kerosene

stoves for cooking do not seem to have any health problems related to their exposure.

Breathing some fuel oils for short periods may cause nausea, eye irritation, increased blood pressure, headache, lightheadedness, loss of appetite, poor coordination, and difficulty concentrating. Breathing diesel fuel vapors for long periods may cause kidney damage and lower your blood's ability to clot.

Drinking small amounts of kerosene may cause vomiting, diarrhea, coughing, stomach swelling and cramps, drowsiness, restlessness, painful breathing, irritability, and unconsciousness. Drinking large amounts of kerosene may cause convulsions, coma, or death. Skin contact with kerosene for short periods may cause itchy, red, sore, or peeling skin.

How likely are fuel oils to cause cancer?

The International Agency for Research on Cancer (IARC) has determined that some fuel oils (heavy) may possibly cause cancer in humans, but for other fuel oils (light) there is not enough information to make a determination. IARC has also determined that occupational exposures to fuel oils during petroleum refining are probably carcinogenic in humans.

Some studies with mice have suggested that repeated contact with fuel oils may cause liver or skin cancer. However, other mouse studies have found this not to be the case. No studies are available in other animals or in people on the carcinogenic effects of fuel oils.

Is there a medical test to show whether I've been exposed to fuel oils?

There is no medical test that shows if you have been exposed to fuel oils. Tests are available to determine if some of the chemicals commonly found in fuel oils are in your blood. However, the presence of these chemicals in blood may not necessarily mean that you have been exposed to fuel oils.

Has the federal government made recommendations to protect human health?

The Occupational Safety and Health Administration (OSHA) and the Air Force Office of Safety and Health (AFOSH) have set a permissible exposure level (PEL) of 400 parts of petroleum distillates per million parts of air (400 ppm) for an 8-hour workday, 40-hour workweek.

The National Institute for Occupational Safety and Health (NIOSH) recommends that average workplace air levels not exceed 350 milligrams of petroleum distillates per cubic meter of air (350 mg/m^3) for a 40-hour workweek.

The Department of Transportation (DOT) lists fuel oils as hazardous materials and, therefore, regulates their transportation.

Glossary

Carcinogenic: Able to cause cancer.

CAS: Chemical Abstracts Service.

Evaporate: To change into a vapor or a gas.

Hydrocarbon: Any compound made up of hydrogen and carbon.

Milligram (mg): One thousandth of a gram.

ppm: Parts per million.

Sediment: Mud and debris that have settled to the bottom of a body of water.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 1995. Toxicological profile for fuel oils. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop E-29, Atlanta, GA 30333. Phone:1-888-422-8737, FAX: 404-498-0093. ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

ATSDR
AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

LEAD

CAS # 7439-92-1

Division of Toxicology and Environmental Medicine ToxFAQs™ **August 2007**

This fact sheet answers the most frequently asked health questions (FAQs) about lead. For more information, call the ATSDR Information Center at 1-800-232-4636. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It is important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Exposure to lead can happen from breathing workplace air or dust, eating contaminated foods, or drinking contaminated water. Children can be exposed from eating lead-based paint chips or playing in contaminated soil. Lead can damage the nervous system, kidneys, and reproductive system. Lead has been found in at least 1,272 of the 1,684 National Priority List sites identified by the Environmental Protection Agency (EPA).

What is lead?

Lead is a naturally occurring bluish-gray metal found in small amounts in the earth's crust. Lead can be found in all parts of our environment. Much of it comes from human activities including burning fossil fuels, mining, and manufacturing.

Lead has many different uses. It is used in the production of batteries, ammunition, metal products (solder and pipes), and devices to shield X-rays. Because of health concerns, lead from paints and ceramic products, caulking, and pipe solder has been dramatically reduced in recent years. The use of lead as an additive to gasoline was banned in 1996 in the United States.

What happens to lead when it enters the environment?

- ❏ Lead itself does not break down, but lead compounds are changed by sunlight, air, and water.
- ❏ When lead is released to the air, it may travel long distances before settling to the ground.
- ❏ Once lead falls onto soil, it usually sticks to soil particles.
- ❏ Movement of lead from soil into groundwater will depend on the type of lead compound and the characteristics of the soil.

How might I be exposed to lead?

- ❏ Eating food or drinking water that contains lead. Water pipes in some older homes may contain lead solder. Lead can leach out into the water.
- ❏ Spending time in areas where lead-based paints have been used and are deteriorating. Deteriorating lead paint can contribute to lead dust.
- ❏ Working in a job where lead is used or engaging in certain hobbies in which lead is used, such as making stained glass.
- ❏ Using health-care products or folk remedies that contain lead.

How can lead affect my health?

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, both in adults and children. Long-term exposure of adults can result in decreased performance in some tests that measure functions of the nervous system. 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 in adults or children and ultimately cause death. In pregnant women, high levels of exposure to lead may cause miscarriage. High-level exposure in men can damage the organs responsible for sperm production.

How likely is lead to cause cancer?

We have no conclusive proof that lead causes cancer in humans. Kidney tumors have developed in rats and mice that had been given large doses of some kind of lead compounds. The Department of Health and Human Services

(DHHS) has determined that lead and lead compounds are reasonably anticipated to be human carcinogens and the EPA has determined that lead is a probable human carcinogen. The International Agency for Research on Cancer (IARC) has determined that inorganic lead is probably carcinogenic to humans and that there is insufficient information to determine whether organic lead compounds will cause cancer in humans.

How can lead affect children?

Small children can be exposed by eating lead-based paint chips, chewing on objects painted with lead-based paint, or swallowing house dust or soil that contains lead.

Children are more vulnerable to lead poisoning than adults. A child who swallows large amounts of lead may develop blood anemia, severe stomachache, muscle weakness, and brain damage. If a child swallows smaller amounts of lead, much less severe effects on blood and brain function may occur. Even at much lower levels of exposure, lead can affect a child's mental and physical growth.

Exposure to lead is more dangerous for young and unborn children. Unborn children can be exposed to lead through their mothers. Harmful effects include premature births, smaller babies, decreased mental ability in the infant, learning difficulties, and reduced growth in young children. These effects are more common if the mother or baby was exposed to high levels of lead. Some of these effects may persist beyond childhood.

How can families reduce the risks of exposure to lead?

❑ Avoid exposure to sources of lead.

❑ Do not allow children to chew or mouth surfaces that may have been painted with lead-based paint.

❑ If you have a water lead problem, run or flush water that has been standing overnight before drinking or cooking with it.

❑ Some types of paints and pigments that are used as make-up or hair coloring contain lead. Keep these kinds of products away from children

❑ If your home contains lead-based paint or you live in an area contaminated with lead, wash children's hands and faces often to remove lead dusts and soil, and regularly clean the house of dust and tracked in soil.

Is there a medical test to determine whether I've been exposed to lead?

A blood test is available to measure the amount of lead in your blood and to estimate the amount of your recent exposure to lead. Blood tests are commonly used to screen children for lead poisoning. Lead in teeth or bones can be measured by X-ray techniques, but these methods are not widely available. Exposure to lead also can be evaluated by measuring erythrocyte protoporphyrin (EP) in blood samples. EP is a part of red blood cells known to increase when the amount of lead in the blood is high. However, the EP level is not sensitive enough to identify children with elevated blood lead levels below about 25 micrograms per deciliter (μg/dL). These tests usually require special analytical equipment that is not available in a doctor's office. However, your doctor can draw blood samples and send them to appropriate laboratories for analysis.

Has the federal government made recommendations to protect human health?

The Centers for Disease Control and Prevention (CDC) recommends that states test children at ages 1 and 2 years. Children should be tested at ages 3–6 years if they have never been tested for lead, if they receive services from public assistance programs for the poor such as Medicaid or the Supplemental Food Program for Women, Infants, and Children, if they live in a building or frequently visit a house built before 1950; if they visit a home (house or apartment) built before 1978 that has been recently remodeled; and/or if they have a brother, sister, or playmate who has had lead poisoning. CDC considers a blood lead level of 10 μg/dL to be a level of concern for children.

EPA limits lead in drinking water to 15 μg per liter.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 2007. Toxicological Profile for lead (Update). Atlanta, GA: U.S. Department of Public Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology and Environmental Medicine, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone: 1-800-232-4636, FAX: 770-488-4178. ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html. ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

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AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

MANGANESE

CAS # 7439-96-5

Division of Toxicology and Environmental Medicine ToxFAQs™ **September 2008**

This fact sheet answers the most frequently asked health questions (FAQs) about manganese. For more information, call the ATSDR Information Center at 1-800-232-4636. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It is important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Manganese is a trace element and eating a small amount from food or water is needed to stay healthy. Exposure to excess levels of manganese may occur from breathing air, particularly where manganese is used in manufacturing, and from drinking water and eating food. At high levels, it can cause damage to the brain. Manganese has been found in at least 869 of the 1,669 National Priorities List sites identified by the Environmental Protection Agency (EPA).

What is manganese?

Manganese is a naturally occurring metal that is found in many types of rocks. Pure manganese is silver-colored, but does not occur naturally. It combines with other substances such as oxygen, sulfur, or chlorine. Manganese occurs naturally in most foods and may be added to some foods.

Manganese is used principally in steel production to improve hardness, stiffness, and strength. It may also be used as an additive in gasoline to improve the octane rating of the gas.

What happens to manganese when it enters the environment?

❑ Manganese can be released to the air, soil, and water from the manufacture, use, and disposal of manganese-based products.

❑ Manganese cannot break down in the environment. It can only change its form or become attached to or separated from particles.

❑ In water, manganese tends to attach to particles in the water or settle into the sediment.

❑ The chemical state of manganese and the type of soil determine how fast it moves through the soil and how much is retained in the soil.

❑ The manganese-containing gasoline additive may degrade in the environment quickly when exposed to sunlight, releasing manganese.

How might I be exposed to manganese?

❑ The primary way you can be exposed to manganese is by eating food or manganese-containing nutritional supplements. Vegetarians who consume foods rich in manganese such as grains, beans and nuts, as well as heavy tea drinkers, may have a higher intake of manganese than the average person.

❑ Certain occupations like welding or working in a factory where steel is made may increase your chances of being exposed to high levels of manganese.

❑ Manganese is routinely contained in groundwater, drinking water, and soil at low levels. Drinking water containing manganese or swimming or bathing in water containing manganese may expose you to low levels of this chemical.

How can manganese affect my health?

Manganese is an essential nutrient, and eating a small amount of it each day is important to stay healthy.

The most common health problems in workers exposed to high levels of manganese involve the nervous system. These health effects include behavioral changes and other nervous system effects, which include movements that may become slow and clumsy. This combination of symptoms when sufficiently severe is referred to as "manganism". Other less severe nervous system effects such as slowed hand movements have been observed in

some workers exposed to lower concentrations in the work place.

Nervous system and reproductive effects have been observed in animals after high oral doses of manganese.

How likely is manganese to cause cancer?

The EPA concluded that existing scientific information cannot determine whether or not excess manganese can cause cancer.

How can manganese affect children?

Studies in children have suggested that extremely high levels of manganese exposure may produce undesirable effects on brain development, including changes in behavior and decreases in the ability to learn and remember. We do not know for certain that these changes were caused by manganese alone. We do not know if these changes are temporary or permanent. We do not know whether children are more sensitive than adults to the effects of manganese, but there is some indication from experiments in laboratory animals that they may be.

Studies of manganese workers have not found increases in birth defects or low birth weight in their offspring. No birth defects were observed in animals exposed to manganese.

How can families reduce the risks of exposure to manganese?

❏ Children are not likely to be exposed to harmful amounts of manganese in the diet. However, higher-than-usual amounts of manganese may be absorbed if their diet is low in iron. It is important to provide your child with a well-balanced diet.

❏ Workers exposed to high levels of airborne manganese in certain occupational settings may accumulate manganese dust on their work clothes. Manganese-contaminated work clothing should be removed before getting into your car or entering your home to help reduce the exposure hazard for yourself and your family.

Is there a medical test to determine whether I've been exposed to manganese?

Several tests are available to measure manganese in blood, urine, hair, or feces. Because manganese is normally present in our body, some is always found in tissues or fluids.

Because excess manganese is usually removed from the body within a few days, past exposures are difficult to measure with common laboratory tests.

Has the federal government made recommendations to protect human health?

The EPA has determined that exposure to manganese in drinking water at concentrations of 1 mg/L for up to 10 days is not expected to cause any adverse effects in a child.

The EPA has established that lifetime exposure to 0.3 mg/L manganese is not expected to cause any adverse effects.

The FDA has determined that the manganese concentration in bottled drinking water should not exceed 0.05 mg/L.

The Occupational Health and Safety Administration (OSHA) has established a ceiling limit (concentration that should not be exceeded at any time during exposure) of 5 mg/m^3 for manganese in workplace air.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 2008. Toxicological Profile for Manganese (Draft for Public Comment). Atlanta, GA: U.S. Department of Public Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology and Environmental Medicine, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone: 1-800-232-4636, FAX: 770-488-4178. ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html. ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

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MERCURY
CAS # 7439-97-6

This fact sheet answers the most frequently asked health questions (FAQs) about mercury. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It's important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Exposure to mercury occurs from breathing contaminated air, ingesting contaminated water and food, and having dental and medical treatments. Mercury, at high levels, may damage the brain, kidneys, and developing fetus. This chemical has been found in at least 714 of 1,467 National Priorities List sites identified by the Environmental Protection Agency.

What is mercury?

(Pronounced mŭr′kyə-rē)

Mercury is a naturally occurring metal which has several forms. The metallic mercury is a shiny, silver-white, odorless liquid. If heated, it is a colorless, odorless gas.

Mercury combines with other elements, such as chlorine, sulfur, or oxygen, to form inorganic mercury compounds or "salts," which are usually white powders or crystals. Mercury also combines with carbon to make organic mercury compounds. The most common one, methylmercury, is produced mainly by microscopic organisms in the water and soil. More mercury in the environment can increase the amounts of methylmercury that these small organisms make.

Metallic mercury is used to produce chlorine gas and caustic soda, and is also used in thermometers, dental fillings, and batteries. Mercury salts are sometimes used in skin lightening creams and as antiseptic creams and ointments.

What happens to mercury when it enters the environment?

- Inorganic mercury (metallic mercury and inorganic mercury compounds) enters the air from mining ore deposits, burning coal and waste, and from manufacturing plants.
- It enters the water or soil from natural deposits, disposal of wastes, and volcanic activity.
- Methylmercury may be formed in water and soil by small organisms called bacteria.
- Methylmercury builds up in the tissues of fish. Larger and older fish tend to have the highest levels of mercury.

How might I be exposed to mercury?

- Eating fish or shellfish contaminated with methylmercury.
- Breathing vapors in air from spills, incinerators, and industries that burn mercury-containing fuels.
- Release of mercury from dental work and medical treatments.
- Breathing contaminated workplace air or skin contact during use in the workplace (dental, health services, chemical, and other industries that use mercury).
- Practicing rituals that include mercury.

How can mercury affect my health?

The nervous system is very sensitive to all forms of mercury. Methylmercury and metallic mercury vapors are more harmful than other forms, because more mercury in these forms reaches the brain. Exposure to high levels of metallic, inorganic, or organic mercury can permanently damage the brain, kidneys, and developing fetus. Effects on brain functioning may result in irritability, shyness, tremors, changes in vision or hearing, and memory problems.

Short-term exposure to high levels of metallic mercury vapors may cause effects including lung damage, nausea,

vomiting, diarrhea, increases in blood pressure or heart rate, skin rashes, and eye irritation.

How likely is mercury to cause cancer?

There are inadequate human cancer data available for all forms of mercury. Mercuric chloride has caused increases in several types of tumors in rats and mice, and methylmercury has caused kidney tumors in male mice. The EPA has determined that mercuric chloride and methylmercury are possible human carcinogens.

How can mercury affect children?

Very young children are more sensitive to mercury than adults. Mercury in the mother's body passes to the fetus and may accumulate there. It can also can pass to a nursing infant through breast milk. However, the benefits of breast feeding may be greater than the possible adverse effects of mercury in breast milk.

Mercury's harmful effects that may be passed from the mother to the fetus include brain damage, mental retardation, incoordination, blindness, seizures, and inability to speak. Children poisoned by mercury may develop problems of their nervous and digestive systems, and kidney damage.

How can families reduce the risk of exposure to mercury?

Carefully handle and dispose of products that contain mercury, such as thermometers or fluorescent light bulbs. Do not vacuum up spilled mercury, because it will vaporize and increase exposure. If a large amount of mercury has been spilled, contact your health department. Teach children not to play with shiny, silver liquids.

Properly dispose of older medicines that contain mercury. Keep all mercury-containing medicines away from children.

Pregnant women and children should keep away from rooms where liquid mercury has been used.

Learn about wildlife and fish advisories in your area from your public health or natural resources department.

Is there a medical test to show whether I've been exposed to mercury?

Tests are available to measure mercury levels in the body. Blood or urine samples are used to test for exposure to metallic mercury and to inorganic forms of mercury. Mercury in whole blood or in scalp hair is measured to determine exposure to methylmercury. Your doctor can take samples and send them to a testing laboratory.

Has the federal government made recommendations to protect human health?

The EPA has set a limit of 2 parts of mercury per billion parts of drinking water (2 ppb).

The Food and Drug Administration (FDA) has set a maximum permissible level of 1 part of methylmercury in a million parts of seafood (1 ppm).

The Occupational Safety and Health Administration (OSHA) has set limits of 0.1 milligram of organic mercury per cubic meter of workplace air (0.1 mg/m^3) and 0.05 mg/m^3 of metallic mercury vapor for 8-hour shifts and 40-hour work weeks.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 1999. Toxicological profile for mercury. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone: 1-888-422-8737, FAX: 770-488-4178. ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

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NAPHTHALENE
CAS # 91-20-3

1-METHYLNAPHTHALENE
CAS # 90-12-0

2-METHYLNAPHTHALENE
CAS # 91-57-6

Division of Toxicology ToxFAQs™ **August 2005**

This fact sheet answers the most frequently asked health questions (FAQs) about naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It is important you understand this information because these substances may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Exposure to naphthalene, 1-methylnaphthalene, or 2-methylnaphthalene happens mostly from breathing air contaminated from the burning of wood, tobacco, or fossil fuels, industrial discharges, or moth repellents. Exposure to large amounts of naphthalene may damage or destroy some of your red blood cells. Naphthalene has caused cancer in animals. Naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene have been found in at least 687, 36, and 412, respectively, of the 1,662 National Priority List sites identified by the Environmental Protection Agency (EPA).

What are naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene?

Naphthalene is a white solid that evaporates easily. Fuels such as petroleum and coal contain naphthalene. It is also called white tar, and tar camphor, and has been used in mothballs and moth flakes. Burning tobacco or wood produces naphthalene. It has a strong, but not unpleasant smell. The major commercial use of naphthalene is in the manufacture of polyvinyl chloride (PVC) plastics. Its major consumer use is in moth repellents and toilet deodorant blocks.

1-Methylnaphthalene and 2-methylnaphthalene are naphthalene-related compounds. 1-Methylnaphthalene is a clear liquid and 2-methylnaphthalene is a solid; both can be smelled in air and in water at very low concentrations.

1-Methylnaphthalene and 2-methylnaphthalene are used to make other chemicals such as dyes and resins. 2-Methylnaphthalene is also used to make vitamin K.

What happens to naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene when they enter the environment?

- ❏ Naphthalene enters the environment from industrial and domestic sources, and from accidental spills.
- ❏ Naphthalene can dissolve in water to a limited degree and may be present in drinking water from wells close to hazardous waste sites and landfills.
- ❏ Naphthalene can become weakly attached to soil or pass through soil into underground water.
- ❏ In air, moisture and sunlight break it down within 1 day. In water, bacteria break it down or it evaporates into the air.
- ❏ Naphthalene does not accumulate in the flesh of animals or fish that you might eat.
- ❏ 1-Methylnaphthalene and 2-methylnaphthalene are expected to act like naphthalene in air, water, or soil because they have similar chemical and physical properties.

How might I be exposed to naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene?

- ❏ Breathing low levels in outdoor air.
- ❏ Breathing air contaminated from industrial discharges or smoke from burning wood, tobacco, or fossil fuels.
- ❏ Using or making moth repellents, coal tar products, dyes or inks could expose you to these chemicals in the air.
- ❏ Drinking water from contaminated wells.
- ❏ Touching fabrics that are treated with moth repellents containing naphthalene.
- ❏ Exposure to naphthalene, 1-methylnaphthalene and 2-methylnaphthalene from eating foods or drinking beverages is unlikely.

How can naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene affect my health?

Exposure to large amounts of naphthalene may damage or destroy some of your red blood cells. This could cause you to have too few red blood cells until your body replaces the destroyed cells. This condition is called hemolytic anemia. Some symptoms of hemolytic anemia are fatigue, lack of appetite, restlessness, and pale skin. Exposure to large amounts of naphthalene may also cause nausea, vomiting, diarrhea, blood in the urine, and a yellow color to the skin. Animals sometimes develop cloudiness in their eyes after swallowing high amounts of naphthalene. It is not clear whether this also develops in people. Rats and mice that breathed naphthalene vapors daily for a lifetime developed irritation and inflammation of their nose and lungs. It is unclear if naphthalene

causes reproductive effects in animals; most evidence says it does not.

There are no studies of humans exposed to 1-methylnaphthalene or 2-methylnaphthalene.

Mice fed food containing 1-methylnaphthalene and 2-methylnaphthalene for most of their lives had part of their lungs filled with an abnormal material.

How likely are naphthalene, 1-methylnaphthalene, or 2-methylnaphthalene to cause cancer?

There is no direct evidence in humans that naphthalene, 1-methylnaphthalene, or 2-methylnaphthalene cause cancer. However, cancer from naphthalene exposure has been seen in animal studies. Some female mice that breathed naphthalene vapors daily for a lifetime developed lung tumors. Some male and female rats exposed to naphthalene in a similar manner also developed nose tumors.

Based on the results from animal studies, the Department of Health and Humans Services (DHHS) concluded that naphthalene is reasonably anticipated to be a human carcinogen. The International Agency for Research on Cancer (IARC) concluded that naphthalene is possibly carcinogenic to humans. The EPA determined that naphthalene is a possible human carcinogen (Group C) and that the data are inadequate to assess the human carcinogenic potential of 2-methylnaphthalene.

How can naphthalene, 1-methylnaphthalene, or 2-methylnaphthalene affect children?

Hospitals have reported many cases of hemolytic anemia in children, including newborns and infants, who either ate naphthalene mothballs or deodorants cakes or who were in close contact with clothing or blankets stored in naphthalene mothballs. Naphthalene can move from a pregnant woman's blood to the unborn baby's blood. Naphthalene has been detected in some samples of breast milk from the general U.S. population, but not at levels that are expected to be of concern.

There is no information on whether naphthalene has affected development in humans. No developmental abnormalities were observed in the offspring from rats, mice, and rabbits fed naphthalene during pregnancy.

We do not have any information on possible health effects of 1-methylnaphthalene or 2-methylnaphthalene on children.

How can families reduce the risks of exposure to naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene?

❑ Families can reduce the risks of exposure to naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene by avoiding smoking tobacco, generating smoke during cooking, or using fireplaces or heating appliances in the their homes.

❑ If families use naphthalene-containing moth repellents, the material should be enclosed in containers that prevent vapors from escaping, and kept out of the reach from children.

❑ Blankets and clothing stored with naphthalene moth repellents should be aired outdoors to remove naphthalene odors and washed before they are used.

❑ Families should inform themselves of the contents of air deodorizers that are used in their homes and refrain from using deodorizers with naphthalene.

Is there a medical test to determine whether I've been exposed to naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene?

Tests are available that measure levels of these chemicals and their breakdown products in samples of urine, feces, blood, maternal milk, or body fat. These tests are not routinely available in a doctor's office because they require special equipment, but samples can be sent to special testing laboratories. These tests cannot determine exactly how much naphthalene, 1-methylnaphthalene, or 2-methylnaphthalene you were exposed to or predict whether harmful effects will occur. If the samples are collected within a day or two of exposure, then the tests can show if you were exposed to a large or small amount of naphthalene, 1-methylnaphthalene, or 2-methylnaphthalene.

Has the federal government made recommendations to protect human health?

The EPA recommends that children not drink water with over 0.5 parts per million (0.5 ppm) naphthalene for more than 10 days or over 0.4 ppm for any longer than 7 years. Adults should not drink water with more than 1 ppm for more than 7 years. For water consumed over a lifetime (70 years), the EPA suggests that it contain no more than 0.1 ppm naphthalene.

The Occupational Safety and Health Administration (OSHA) set a limit of 10 ppm for the level of naphthalene in workplace air during an 8-hour workday, 40-hour workweek. The National Institute for Occupational Safety and Health (NIOSH) considers more than 500 ppm of naphthalene in air to be immediately dangerous to life or health. This is the exposure level of a chemical that is likely to impair a worker's ability to leave a contaminate area and therefore, results in permanent health problems or death.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 2005. Toxicological Profile for Naphthalene, 1-Methylnaphthalene, and 2-Methylnaphthalene (Update). Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone: 1-888-422-8737, FAX: 770-488-4178. ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html. ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

ATSDR
AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

NICKEL

CAS # 7440-02-0

Division of Toxicology ToxFAQs™ **August 2005**

This fact sheet answers the most frequently asked health questions (FAQs) about nickel. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It is important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Nickel is a naturally occurring element. Pure nickel is a hard, silvery-white metal used to make stainless steel and other metal alloys. Skin effects are the most common effects in people who are sensitive to nickel. Workers who breathed very large amounts of nickel compounds developed chronic bronchitis and lung and nasal sinus cancers. Nickel has been found in at least 882 of the 1,662 National Priority List sites identified by the Environmental Protection Agency (EPA).

What is nickel?

Nickel is a very abundant natural element. Pure nickel is a hard, silvery-white metal. Nickel can be combined with other metals, such as iron, copper, chromium, and zinc, to form alloys. These alloys are used to make coins, jewelry, and items such as valves and heat exchangers. Most nickel is used to make stainless steel.

Nickel can combine with other elements such as chlorine, sulfur, and oxygen to form nickel compounds. Many nickel compounds dissolve fairly easy in water and have a green color. Nickel compounds are used for nickel plating, to color ceramics, to make some batteries, and as substances known as catalysts that increase the rate of chemical reactions. Nickel is found in all soil and is emitted from volcanoes. Nickel is also found in meteorites and on the ocean floor. Nickel and its compounds have no characteristic odor or taste.

What happens to nickel when it enters the environment?

❏ Nickel is released into the atmosphere by industries that make or use nickel, nickel alloys, or nickel compounds. It is also released into the atmosphere by oil-burning power plants, coal-burning power plants, and trash incinerators.

❏ In the air, it attaches to small particles of dust that settle to the ground or are taken out of the air in rain or snow; this usually takes many days.

❏ Nickel released in industrial waste water ends up in soil or sediment where it strongly attaches to particles containing iron or manganese.

❏ Nickel does not appear to accumulate in fish or in other animals used as food.

How might I be exposed to nickel?

❏ By eating food containing nickel, which is the major source of exposure for most people.

❏ By skin contact with soil, bath or shower water, or metals containing nickel, as well as by handling coins or touching jewelry containing nickel.

❏ By drinking water that contains small amounts of nickel.

❏ By breathing air or smoking tobacco containing nickel.

❏ Higher exposure may occur if you work in industries that process or use nickel.

How can nickel affect my health?

The most common harmful health effect of nickel in humans is an allergic reaction. Approximately 10-20% of the population is sensitive to nickel. People can become sensitive to nickel when jewelry or other things containing it are in direct contact with the skin for a long time. Once a person is sensitized to nickel, further contact with the metal may produce a reaction. The most common reaction is a skin rash at the site of contact. The skin rash may also

occur at a site away from the site of contact. Less frequently, some people who are sensitive to nickel have asthma attacks following exposure to nickel. Some sensitized people react when they consume food or water containing nickel or breathe dust containing it.

People working in nickel refineries or nickel-processing plants have experienced chronic bronchitis and reduced lung function. These persons breathed amounts of nickel much higher than levels found normally in the environment.

Workers who drank water containing high amounts of nickel had stomach ache and suffered adverse effects to their blood and kidneys.

Damage to the lung and nasal cavity has been observed in rats and mice breathing nickel compounds. Eating or drinking large amounts of nickel has caused lung disease in dogs and rats and has affected the stomach, blood, liver, kidneys, and immune system in rats and mice, as well as their reproduction and development.

How likely is nickel to cause cancer?

Cancers of the lung and nasal sinus have resulted when workers breathed dust containing high levels of nickel compounds while working in nickel refineries or nickel processing plants. The Department of Health and Human Services (DHHS) has determined that nickel metal may reasonably be anticipated to be a carcinogen and that nickel compounds are known human carcinogens. The International Agency for Research on Cancer (IARC) has determined that some nickel compounds are carcinogenic to humans and that metallic nickel may possibly be carcinogenic to humans. The EPA has determined that nickel refinery dust and nickel subsulfide are human carcinogens.

How can nickel affect children?

It is likely that the health effects seen in children exposed to nickel will be similar to those seen in adults. We do not know whether children differ from adults in their susceptibility to nickel. Human studies that examined whether nickel can harm the fetus are inconclusive. Animal studies have found increases in newborn deaths and decreased newborn weight after ingesting very high amounts of nickel. Nickel can be transferred from the mother to an infant in breast milk and can cross the placenta.

How can families reduce the risks of exposure to nickel?

❑ Avoiding jewelry containing nickel will eliminate risks of exposure to this source of the metal.

❑ Exposures of the general population from other sources, such as foods and drinking water, are almost always too low to be of concern.

Is there a medical test to determine whether I've been exposed to nickel?

There are tests available to measure nickel in your blood, feces, and urine. More nickel was measured in the urine of workers who were exposed to nickel compounds that dissolve easily in water than in the urine of workers exposed to nickel compounds that are hard to dissolve. This means that it is easier to tell if you have been exposed to soluble nickel compounds than less-soluble compounds. The nickel measurements do not accurately predict potential health effects from exposure to nickel.

Has the federal government made recommendations to protect human health?

The EPA recommends that drinking water should contain no more than 0.1 milligrams of nickel per liter of water (0.1 mg/L). To protect workers, the Occupational Safety and Health Administration (OSHA) has set a limit of 1 mg of nickel per cubic meter of air (1 mg/m^3) for metallic nickel and nickel compounds in workplace air during an 8-hour workday, 40-hour workweek.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 2005. Toxicological Profile for Nickel (Update). Atlanta, GA: U.S. Department of Public Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone: 1-888-422-8737, FAX: 770-488-4178. ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html. ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

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POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)

Agency for Toxic Substances and Disease Registry ToxFAQs **September 1996**

This fact sheet answers the most frequently asked health questions (FAQs) about polycyclic aromatic hydrocarbons (PAHs). For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. This information is important because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

SUMMARY: Exposure to polycyclic aromatic hydrocarbons usually occurs by breathing air contaminated by wild fires or coal tar, or by eating foods that have been grilled. PAHs have been found in at least 600 of the 1,430 National Priorities List sites identified by the Environmental Protection Agency (EPA).

What are polycyclic aromatic hydrocarbons?

(Pronounced pŏl′ĭ-sī′klĭk ăr′ə-măt′ĭk hī′drə-kar′bənz)

Polycyclic aromatic hydrocarbons (PAHs) are a group of over 100 different chemicals that are formed during the incomplete burning of coal, oil and gas, garbage, or other organic substances like tobacco or charbroiled meat. PAHs are usually found as a mixture containing two or more of these compounds, such as soot.

Some PAHs are manufactured. These pure PAHs usually exist as colorless, white, or pale yellow-green solids. PAHs are found in coal tar, crude oil, creosote, and roofing tar, but a few are used in medicines or to make dyes, plastics, and pesticides.

What happens to PAHs when they enter the environment?

- PAHs enter the air mostly as releases from volcanoes, forest fires, burning coal, and automobile exhaust.
- PAHs can occur in air attached to dust particles.
- Some PAH particles can readily evaporate into the air from soil or surface waters.
- PAHs can break down by reacting with sunlight and other chemicals in the air, over a period of days to weeks.
- PAHs enter water through discharges from industrial and wastewater treatment plants.
- Most PAHs do not dissolve easily in water. They stick to solid particles and settle to the bottoms of lakes or rivers.
- Microorganisms can break down PAHs in soil or water after a period of weeks to months.
- In soils, PAHs are most likely to stick tightly to particles; certain PAHs move through soil to contaminate underground water.
- PAH contents of plants and animals may be much higher than PAH contents of soil or water in which they live.

How might I be exposed to PAHs?

- Breathing air containing PAHs in the workplace of coking, coal-tar, and asphalt production plants; smokehouses; and municipal trash incineration facilities.
- Breathing air containing PAHs from cigarette smoke, wood smoke, vehicle exhausts, asphalt roads, or agricultural burn smoke.
- Coming in contact with air, water, or soil near hazardous waste sites.
- Eating grilled or charred meats; contaminated cereals, flour, bread, vegetables, fruits, meats; and processed or pickled foods.
- Drinking contaminated water or cow's milk.

- Nursing infants of mothers living near hazardous waste sites may be exposed to PAHs through their mother's milk.

How can PAHs affect my health?

Mice that were fed high levels of one PAH during pregnancy had difficulty reproducing and so did their offspring. These offspring also had higher rates of birth defects and lower body weights. It is not known whether these effects occur in people.

Animal studies have also shown that PAHs can cause harmful effects on the skin, body fluids, and ability to fight disease after both short- and long-term exposure. But these effects have not been seen in people.

How likely are PAHs to cause cancer?

The Department of Health and Human Services (DHHS) has determined that some PAHs may reasonably be expected to be carcinogens.

Some people who have breathed or touched mixtures of PAHs and other chemicals for long periods of time have developed cancer. Some PAHs have caused cancer in laboratory animals when they breathed air containing them (lung cancer), ingested them in food (stomach cancer), or had them applied to their skin (skin cancer).

Is there a medical test to show whether I've been exposed to PAHs?

In the body, PAHs are changed into chemicals that can attach to substances within the body. There are special tests that can detect PAHs attached to these substances in body tissues or blood. However, these tests cannot tell whether any health effects will occur or find out the extent or source of your exposure to the PAHs. The tests aren't usually available in your doctor's office because special equipment is needed to conduct them.

Has the federal government made recommendations to protect human health?

The Occupational Safety and Health Administration (OSHA) has set a limit of 0.2 milligrams of PAHs per cubic meter of air (0.2 mg/m^3). The OSHA Permissible Exposure Limit (PEL) for mineral oil mist that contains PAHs is 5 mg/m^3 averaged over an 8-hour exposure period.

The National Institute for Occupational Safety and Health (NIOSH) recommends that the average workplace air levels for coal tar products not exceed 0.1 mg/m^3 for a 10-hour workday, within a 40-hour workweek. There are other limits for workplace exposure for things that contain PAHs, such as coal, coal tar, and mineral oil.

Glossary

Carcinogen: A substance that can cause cancer.

Ingest: Take food or drink into your body.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 1995. Toxicological profile for polycyclic aromatic hydrocarbons. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone: 1-888-422-8737, FAX: 770-488-4178. ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

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PHENOL

CAS # 108-95-2

Division of Toxicology and Environmental Medicine ToxFAQs™ **September 2006**

This fact sheet answers the most frequently asked health questions (FAQs) about phenol. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It is important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Phenol is both a manufactured chemical and a natural substance. Phenol is used as a disinfectant and is found in a number of consumer products. Skin exposure to high amounts can produce skin burns, liver damage, dark urine, irregular heart beat, and even death. Ingestion of concentrated phenol can produce internal burns. Phenol has been found in at least 595 of the 1,678 National Priority List (NPL) sites identified by the Environmental Protection Agency (EPA).

What is phenol?

Phenol is both a manufactured chemical and a natural substance. It is a colorless-to-white solid when pure. The commercial product is a liquid. Phenol has a distinct odor that is sickeningly sweet and tarry.

You can taste and smell phenol at levels lower than those that are associated with harmful effects. Phenol evaporates more slowly than water, and a moderate amount can form a solution with water. Phenol can catch fire.

Phenol is used primarily in the production of phenolic resins and in the manufacture of nylon and other synthetic fibers. It is also used in slimicides (chemicals that kill bacteria and fungi in slimes), as a disinfectant and antiseptic, and in medicinal preparations such as mouthwash and sore throat lozenges.

What happens to phenol when it enters the environment?

❏ Following small, single releases, phenol is rapidly removed from the air (generally, half is removed in less than a day).
❏ Phenol generally remains in the soil only about 2 to 5 days.
❏ Phenol can remain in water for a week or more.
❏ Larger or repeated releases of phenol can remain in the air, water, and soil for much longer periods of time.
❏ Small amounts of phenol may be found in organisms that live in contaminated water.
❏ Phenol does not build up in fish, other animals, or plants.

How might I be exposed to phenol?

❏ You may be exposed to phenol if you live near landfills or hazardous waste sites that contain phenol or near facilities manufacturing phenol.
❏ You may be exposed to very low levels in your home because it is found in a number of consumer products, including mouthwashes, gargles, and throat lozenges.
❏ You may be exposed to phenol if you undergo “chemical peels” to remove skin lesions with phenol-containing products or are treated for chronic pain or spasticity with injections of phenol.
❏ Low levels of phenol are found in some foods, including smoked summer sausage, fried chicken, mountain cheese, and some species of fish.
❏ Smoking or inhaling second hand smoke will expose you to phenol.
❏ Low levels of phenol can be present in air and drinking water.

How can phenol affect my health?

Short-term exposure to phenol in the air can cause respiratory irritation, headaches, and burning eyes. People who had skin exposure to high amounts of phenol had skin burns, liver damage, dark urine, irregular heart beat, and

some died. Ingestion of high concentrations of phenol has resulted in internal burns and death. The effects of prolonged exposure to low levels of phenol in air or of ingestion of low levels of phenol are uncertain because almost always there has been simultaneous exposure to other chemicals.

In animals, breathing air with high levels of phenol resulted in irritation of the lungs. Repeated exposures induced muscle tremors and loss of coordination. Exposure to high concentrations of phenol in the air for several weeks caused paralysis and severe injury to the heart, liver, kidneys, and lungs, and in some cases, death. Some animals that drank water with very high concentrations of phenol suffered muscle tremors and loss of coordination.

Phenol can have beneficial effects when used medically as an antiseptic or anesthetic.

How likely is phenol to cause cancer?

It is not known if phenol causes cancer in humans. Cancer developed in mice when phenol was applied to the skin several times per week for the lifetime of the animal. Phenol did not cause cancer in mice or rats that drank water containing it for 2 years. The International Agency for Research on Cancer (IARC) and the EPA have determined that phenol is not classifiable as to its carcinogenicity to humans.

How can phenol affect children?

Children are exposed to phenol in the same way adults are, except for exposures of adults at work. However, children are at greater risk of accidentally ingesting or spilling on their skin home products that contain phenol. Vomiting and lethargy were the most frequent signs of toxicity observed in children who accidentally ingested phenol and were treated at a poison control center.

Phenol has caused minor birth defects and low birth weight in animals generally at exposure levels that also were toxic to the pregnant mothers.

How can families reduce the risks of exposure to phenol?

❑ Avoiding environmental tobacco smoke, which contains phenol, will reduce phenol exposures.
❑ Always store household products and over-the-counter medications that contain phenol in their original labeled containers out of the reach of children.

Is there a medical test to determine whether I've been exposed to phenol?

There is a urine test that can tell if you have been exposed to phenol recently (within 1 or 2 days). However, the test cannot tell if you were exposed only to phenol because many substances are converted to phenol in the body. The test also cannot tell whether adverse health effects might result from the exposure. The test for phenol is not routinely performed at your doctor's office, but your doctor can take samples and send them to a testing laboratory.

Has the federal government made recommendations to protect human health?

The EPA lifetime health advisory for phenol in water is 2 milligrams per liter (2 mg/L). EPA requires that spills of 1,000 pounds or more of phenol to the environment be reported to the Agency.

The Occupational Safety and Health Administration (OSHA) has set a limit of 5 parts per million (ppm) in air to protect workers during 8-hour work shifts.

The National Institute for Occupational Safety and Health (NIOSH) recommends a limit of 5 ppm for phenol in workroom air over a 10-hour workday and that the concentration of phenol should not exceed 16 ppm during a 15-minute period.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 2006. Toxicological Profile for Phenol (Draft for Public Comment). Atlanta, GA: U.S. Department of Public Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology and Environmental Medicine, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone: 1-800-232-4636, FAX: 770-488-4178. ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html. ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

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SELENIUM

CAS # 7782-49-2

Division of Toxicology ToxFAQs™ **September 2003**

This fact sheet answers the most frequently asked health questions (FAQs) about selenium. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It is important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: People may be exposed to low levels of selenium daily through food and water. Selenium is a trace mineral needed in small amounts for good health, but exposure to much higher levels can result in neurological effects and brittle hair and deformed nails. Occupational inhalation exposure to selenium vapors may cause dizziness, fatigue, irritation of mucous membranes, and respiratory effects. This substance has been found in at least 508 of the 1,636 National Priorities List sites identified by the Environmental Protection Agency (EPA).

What is selenium?

Selenium is a naturally occurring mineral element that is distributed widely in nature in most rocks and soils. In its pure form, it exists as metallic gray to black hexagonal crystals, but in nature it is usually combined with sulfide or with silver, copper, lead, and nickel minerals. Most processed selenium is used in the electronics industry, but it is also used: as a nutritional supplement; in the glass industry; as a component of pigments in plastics, paints, enamels, inks, and rubber; in the preparation of pharmaceuticals; as a nutritional feed additive for poultry and livestock; in pesticide formulations; in rubber production; as an ingredient in antidandruff shampoos; and as a constituent of fungicides. Radioactive selenium is used in diagnostic medicine.

What happens to selenium when it enters the environment?

❏ Selenium occurs naturally in the environment and can be released by both natural and manufacturing processes.
❏ Selenium dust can enter the air from burning coal and oil. This selenium dust will eventually settle over the land and water.
❏ It also enters water from rocks and soil, and from agricultural and industrial waste. Some selenium compounds will dissolve in water, and some will settle to the bottom as particles.
❏ Insoluble forms of selenium will remain in soil, but soluble forms are very mobile and may enter surface water from soils.
❏ Selenium may accumulate up the food chain.

How might I be exposed to selenium?

❏ The general population is exposed to very low levels of selenium in air, food, and water. The majority of the daily intake comes from food.
❏ People working in or living near industries where selenium is produced, processed, or converted into commercial products may be exposed to higher levels of selenium in the air.
❏ People living in the vicinity of hazardous waste sites or coal burning plants may also be exposed to higher levels of selenium.

How can selenium affect my health?

Selenium has both beneficial and harmful effects. Low doses of selenium are needed to maintain good health. However, exposure to high levels can cause adverse health effects. Short-term oral exposure to high concentrations of selenium may cause nausea, vomiting, and diarrhea. Chronic oral exposure to high concentrations of selenium compounds can produce a disease called selenosis. The major signs of selenosis are hair loss, nail brittleness, and neurological abnormalities (such as numbness and other odd sensations

in the extremities).
Brief exposures to high levels of elemental selenium or selenium dioxide in air can result in respiratory tract irritation, bronchitis, difficulty breathing, and stomach pains. Longer-term exposure to either of these air-borne forms can cause respiratory irritation, bronchial spasms, and coughing.
Levels of these forms of selenium that would be necessary to produce such effects are normally not seen outside of the workplace.
Animal studies have shown that very high amounts of selenium can affect sperm production and the female reproductive cycle. We do not know if similar effects would occur in humans.

How likely is selenium to cause cancer?

Studies of laboratory animals and people show that most selenium compounds probably do not cause cancer. In fact, studies in humans suggest that lower-than-normal selenium levels in the diet might increase the risk of cancer.
The International Agency for Research on Cancer (IARC) has determined that selenium and selenium compounds are not classifiable as to their carcinogenicity to humans.
The EPA has determined that one specific form of selenium, selenium sulfide, is a probable human carcinogen. Selenium sulfide is not present in foods and is a very different chemical from the organic and inorganic selenium compounds found in foods and in the environment.

How can selenium affect children?

It is likely that the health effects seen in children exposed to selenium will be similar to the effects seen in adults.
However, one study found that children may be less susceptible to the health effects of selenium than adults.
Selenium compounds have not been shown to cause birth defects in humans or in other mammals.

How can families reduce the risk of exposure to selenium?

❑ Certain dietary supplements and shampoos contain selenium; these should be used according to the manufacturer's directions.
❑ Children living near waste sites that contain selenium or coal burning plants should be encouraged to wash their hands before eating and to avoid putting their unwashed hands in their mouths.

Is there a medical test to show whether I've been exposed to selenium?

Low levels of selenium are normally found in body tissues and urine. Blood and urine tests for selenium are most useful for people who have recently been exposed to high levels. Toenail clippings can be used to determine longer-term exposure. These tests are not usually available at your doctor's office, but your doctor can send the samples to a laboratory that can perform the tests. None of these tests, however, can predict whether you will experience any health effects.

Has the federal government made recommendations to protect human health?

The EPA restricts the amount of selenium allowed in public water supplies to 50 parts total selenium per billion parts of water (50 ppb).
The Occupational Safety and Health Administration (OSHA) sets a limit of 0.2 mg selenium/m^3 of workroom air for an 8-hour work shift.
ATSDR and the EPA have determined that 5 micrograms of selenium per kilogram of body weight taken daily would not be expected to cause any adverse health effects over a lifetime of such intake.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 2003. Toxicological Profile for Selenium (Update) Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone: 1-888-422-8737, FAX: 770-488-4178. ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html. ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

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SILVER
CAS # 7440-22-4

This fact sheet answers the most frequently asked health questions (FAQs) about silver. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It's important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Silver is an element found naturally in the environment. At very high levels, it may cause argyria, a blue-gray discoloration of the skin and other organs. This chemical has been found in at least 27 of the 1,177 National Priorities List sites identified by the Environmental Protection Agency (EPA).

What is silver?

(Pronounced sĭl′vər)

Silver is a naturally occurring element. It is found in the environment combined with other elements such as sulfide, chloride, and nitrate. Pure silver is "silver" colored, but silver nitrate and silver chloride are powdery white and silver sulfide and silver oxide are dark-gray to black. Silver is often found as a by-product during the retrieval of copper, lead, zinc, and gold ores.

Silver is used to make jewelry, silverware, electronic equipment, and dental fillings. It is also used to make photographs, in brazing alloys and solders, to disinfect drinking water and water in swimming pools, and as an antibacterial agent. Silver has also been used in lozenges and chewing gum to help people stop smoking.

What happens to silver when is enters the environment?

- Silver may be released into the air and water through natural processes such as the weathering of rocks.
- Human activities such as the processing of ores, cement manufacture, and the burning of fossil fuel may release silver into the air.
- It may be released into water from photographic processing.
- Rain may wash silver out of soil into the groundwater.
- Silver does not appear to concentrate to a significant extent in aquatic animals.

How might I be exposed to silver?

- Breathing low levels in air.
- Swallowing it in food or drinking water.
- Carrying out activities such as jewelry-making, soldering, and photography.
- Using anti-smoking lozenges or other medicines containing it.

How can silver affect my health?

Exposure to high levels of silver for a long period of time may result in a condition called arygria, a blue-gray discoloration of the skin and other body tissues. Lower-level exposures to silver may also cause silver to be deposited in the skin and other parts of the body; however, this is not known to be harmful. Argyria is a permanent effect, but it appears to be a cosmetic problem that may not be otherwise harmful to health.

Exposure to high levels of silver in the air has resulted in breathing problems, lung and throat irritation, and stomach pains. Skin contact with silver can cause mild allergic reactions such as rash, swelling, and inflammation in some people.

Animal studies have shown that swallowing silver results in the deposit of silver in the skin. One study in mice found that the animals exposed to silver in drinking water were less active than unexposed animals.

No studies are available on whether silver affects reproduction or causes developmental problems in people.

How likely is silver to cause cancer?

No studies are available on whether silver may cause cancer in people. The only available animal studies showed both positive and negative results when silver was implanted under the skin.

The EPA has determined that silver is not classifiable as to human carcinogenicity.

Is there a medical test to show whether I've been exposed to silver?

Silver can be measured in the blood, urine, feces, and body tissues of exposed people. Silver builds up in the body, and the best way to learn if past exposure has occurred is to look for silver in samples of skin. Tests for silver are not commonly done at a doctor's office because they require special equipment. Although doctors can find out if a person has been exposed to silver by doing these tests, they cannot tell whether any health effects will occur.

Has the federal government made recommendations to protect human health?

The EPA recommends that the concentration of silver in drinking water not exceed 0.10 milligrams per liter of water (0.10 mg/L) because of the skin discoloration that may occur.

The EPA requires that spills or accidental releases of 1,000 pounds or more of silver be reported to the EPA.

The Occupational Safety and Health Administration (OSHA) limits silver in workplace air to 0.01 milligrams per cubic meter (0.01 mg/m^3) for an 8-hour workday, 40-hour workweek. The National Institute of Occupational Safety and Health (NIOSH) also recommends that workplace air contain no more that 0.01 mg/m^3 silver.

The American Conference of Governmental Industrial Hygienists (ACGIH) recommends that workplace air contain no more than 0.1 mg/m^3 silver metal and 0.01 mg/m^3 soluble silver compounds.

The federal recommendations have been updated as of July 1999.

Glossary

Carcinogenicity: Ability to cause cancer.

CAS: Chemcial Abstracts Service.

Milligram (mg): One thousandth of a gram.

National Priorities List: A list of the nation's worst hazardous waste sites.

Soluble: Capable of being dissolved in water.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 1990. Toxicological profile for silver. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone:1-888-422-8737, FAX: 770-488-4178. ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

ATSDR
AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

TETRACHLOROETHYLENE
CAS # 127-18-4

This fact sheet answers the most frequently asked health questions (FAQs) about tetrachloroethylene. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It's important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Tetrachloroethylene is a manufactured chemical used for dry cleaning and metal degreasing. Exposure to very high concentrations of tetrachloroethylene can cause dizziness, headaches, sleepiness, confusion, nausea, difficulty in speaking and walking, unconsciousness, and death. Tetrachloroethylene has been found in at least 771 of the 1,430 National Priorities List sites identified by the Environmental Protection Agency (EPA).

What is tetrachloroethylene?

(Pronounced tĕt′rə-klôr′ ō-ĕth′ə-lēn′)

Tetrachloroethylene is a manufactured chemical that is widely used for dry cleaning of fabrics and for metal-degreasing. It is also used to make other chemicals and is used in some consumer products.

Other names for tetrachloroethylene include perchloroethylene, PCE, and tetrachloroethene. It is a nonflammable liquid at room temperature. It evaporates easily into the air and has a sharp, sweet odor. Most people can smell tetrachloroethylene when it is present in the air at a level of 1 part tetrachloroethylene per million parts of air (1 ppm) or more, although some can smell it at even lower levels.

What happens to tetrachloroethylene when it enters the environment?

- Much of the tetrachloroethylene that gets into water or soil evaporates into the air.
- Microorganisms can break down some of the tetrachloroethylene in soil or underground water.
- In the air, it is broken down by sunlight into other chemicals or brought back to the soil and water by rain.
- It does not appear to collect in fish or other animals that live in water.

How might I be exposed to tetrachloroethylene?

- When you bring clothes from the dry cleaners, they will release small amounts of tetrachloroethylene into the air.
- When you drink water containing tetrachloroethylene, you are exposed to it.

How can tetrachloroethylene affect my health?

High concentrations of tetrachloroethylene (particularly in closed, poorly ventilated areas) can cause dizziness, headache, sleepiness, confusion, nausea, difficulty in speaking and walking, unconsciousness, and death.

Irritation may result from repeated or extended skin contact with it. These symptoms occur almost entirely in work (or hobby) environments when people have been accidentally exposed to high concentrations or have intentionally used tetrachloroethylene to get a "high."

In industry, most workers are exposed to levels lower than those causing obvious nervous system effects. The health effects of breathing in air or drinking water with low levels of tetrachloroethylene are not known.

Results from some studies suggest that women who work in dry cleaning industries where exposures to tetrachloroethyl-

ene can be quite high may have more menstrual problems and spontaneous abortions than women who are not exposed. However, it is not known if tetrachloroethylene was responsible for these problems because other possible causes were not considered.

Results of animal studies, conducted with amounts much higher than those that most people are exposed to, show that tetrachloroethylene can cause liver and kidney damage. Exposure to very high levels of tetrachloroethylene can be toxic to the unborn pups of pregnant rats and mice. Changes in behavior were observed in the offspring of rats that breathed high levels of the chemical while they were pregnant.

How likely is tetrachloroethylene to cause cancer?

The Department of Health and Human Services (DHHS) has determined that tetrachloroethylene may reasonably be anticipated to be a carcinogen. Tetrachloroethylene has been shown to cause liver tumors in mice and kidney tumors in male rats.

Is there a medical test to show whether I've been exposed to tetrachloroethylene?

One way of testing for tetrachloroethylene exposure is to measure the amount of the chemical in the breath, much the same way breath-alcohol measurements are used to determine the amount of alcohol in the blood.

Because it is stored in the body's fat and slowly released into the bloodstream, tetrachloroethylene can be detected in the breath for weeks following a heavy exposure.

Tetrachloroethylene and trichloroacetic acid (TCA), a breakdown product of tetrachloroethylene, can be detected in the blood. These tests are relatively simple to perform. These tests aren't available at most doctors' offices, but can be performed at special laboratories that have the right equipment.

Because exposure to other chemicals can produce the same breakdown products in the urine and blood, the tests for breakdown products cannot determine if you have been exposed to tetrachloroethylene or the other chemicals.

Has the federal government made recommendations to protect human health?

The EPA maximum contaminant level for the amount of tetrachloroethylene that can be in drinking water is 0.005 milligrams tetrachloroethylene per liter of water (0.005 mg/L).

The Occupational Safety and Health Administration (OSHA) has set a limit of 100 ppm for an 8-hour workday over a 40-hour workweek.

The National Institute for Occupational Safety and Health (NIOSH) recommends that tetrachloroethylene be handled as a potential carcinogen and recommends that levels in workplace air should be as low as possible.

Glossary

Carcinogen: A substance with the ability to cause cancer.

CAS: Chemical Abstracts Service.

Milligram (mg): One thousandth of a gram.

Nonflammable: Will not burn.

References

This ToxFAQs information is taken from the 1997 Toxicological Profile for Tetrachloroethylene (update) produced by the Agency for Toxic Substances and Disease Registry, Public Health Service, U.S. Department of Health and Human Services, Public Health Service in Atlanta, GA.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone:1-888-422-8737, FAX: 770-488-4178. ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

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AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

THALLIUM
CAS # 7440-28-0

Agency for Toxic Substances and Disease Registry ToxFAQs **September 1995**

This fact sheet answers the most frequently asked health questions (FAQs) about thallium. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. This information is important because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

SUMMARY: Exposure to thallium occurs mainly from eating food. Exposure to higher levels of thallium may occur in the workplace. Breathing high levels of thallium may result in effects on the nervous system, while ingesting high levels of it results in vomiting, diarrhea, temporary hair loss, and other effects. This chemical has been found in at least 210 of 1,416 National Priorities List sites identified by the Environmental Protection Agency.

What is thallium?

(Pronounced thăl′ē-əm)

Pure thallium is a bluish-white metal that is found in trace amounts in the earth's crust. In the past, thallium was obtained as a by-product from smelting other metals; however, it has not been produced in the United States since 1984. Currently, all the thallium is obtained from imports and from thallium reserves.

In its pure form, thallium is odorless and tasteless. It can also be found combined with other substances such as bromine, chlorine, fluorine, and iodine. When it's combined, it appears colorless-to-white or yellow.

Thallium is used mostly in manufacturing electronic devices, switches, and closures, primarily for the semiconductor industry. It also has limited use in the manufacture of special glass and for certain medical procedures.

What happens to thallium when it enters the environment?

- Thallium enters the environment primarily from coal-burning and smelting, in which it is a trace contaminant of the raw materials.
- It stays in the air, water, and soil for a long time and is not broken down.
- Some thallium compounds are removed from the atmosphere in rain and snow.
- It's absorbed by plants and enters the food chain.
- It builds up in fish and shellfish.

How might I be exposed to thallium?

- Eating food contaminated with thallium may be a major source of exposure for most people.
- Breathing workplace air in industries that use thallium
- Smoking cigarettes.
- Living near hazardous waste sites containing thallium (may result in higher than normal exposures).
- Touching or, for children, eating soil contaminated with thallium.
- Breathing low levels in air and water.

How can thallium affect my health?

Exposure to high levels of thallium can result in harmful health effects. A study on workers exposed on the job over several years reported nervous system effects, such as numbness of fingers and toes, from breathing thallium.

Studies in people who ingested large amounts of thallium over a short time have reported vomiting, diarrhea, temporary hair loss, and effects on the nervous system, lungs, heart, liver,

and kidneys. It has caused death. It is not known what the effects are from ingesting low levels of thallium over a long time.

Birth defects were not reported in the children of mothers exposed to low levels from eating vegetables and fruits contaminated with thallium. Studies in rats, however, exposed to high levels of thallium, showed adverse developmental effects.

It is not known if breathing or ingesting thallium affects human reproduction. Studies showed that rats that ingested thallium for several weeks had some adverse reproductive effects. Animal data suggest that the male reproductive system may be susceptible to damage by low levels of thallium.

There is no information available on the health effects of skin contact with thallium in people or animals.

How likely is thallium to cause cancer?

The Department of Health and Human Services, the International Agency for Research on Cancer, and the Environmental Protection Agency (EPA) have not classified thallium as to its human carcinogenicity.

No studies are available in people or animals on the carcinogenic effects of breathing, ingesting, or touching thallium.

Is there a medical test to show whether I've been exposed to thallium?

There are medical tests available to measure levels of thallium in urine and hair. In addition, thallium can also be measured in blood; however, this is not a good indicator of exposure since thallium only stays in blood a very short time.

These tests require special equipment that is not usually available in most doctor's offices. In addition, these tests cannot determine if adverse health effects will occur from the exposure to thallium.

Has the federal government made recommendations to protect human health?

The EPA requires that discharges or accidental spills into the environment of 1,000 pounds or more of thallium be reported.

The Occupational Safety and Health Administration (OSHA) has set an exposure limit of 0.1 milligrams per cubic meter (0.1 mg/m^3) for thallium in workplace air. The American Conference of Governmental Industrial Hygienists (ACGIH) has established the same guidelines as OSHA for the workplace.

The National Institute for Occupational Safety and Health (NIOSH) has recommended that 15 mg/m^3 of thallium be considered immediately dangerous to life and health. This is the exposure level of a chemical that is likely to cause permanent health problems or death.

Glossary

Carcinogenicity: Ability to cause cancer.

Ingesting: Taking food or drink into your body.

Milligram (mg): One thousandth of a gram.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 1992. Toxicological profile for thallium. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone: 1-888-422-8737, FAX: 770-488-4178. ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

ATSDR
AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

TOLUENE
CAS # 108-88-3

Division of Toxicology ToxFAQs™ **February 2001**

This fact sheet answers the most frequently asked health questions (FAQs) about toluene. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It's important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Exposure to toluene occurs from breathing contaminated workplace air, in automobile exhaust, some consumer products paints, paint thinners, fingernail polish, lacquers, and adhesives. Toluene affects the nervous system. Toluene has been found at 959 of the 1,591 National Priority List sites identified by the Environmental Protection Agency

What is toluene?

Toluene is a clear, colorless liquid with a distinctive smell. Toluene occurs naturally in crude oil and in the tolu tree. It is also produced in the process of making gasoline and other fuels from crude oil and making coke from coal.

Toluene is used in making paints, paint thinners, fingernail polish, lacquers, adhesives, and rubber and in some printing and leather tanning processes.

What happens to toluene when it enters the environment?

❑ Toluene enters the environment when you use materials that contain it. It can also enter surface water and groundwater from spills of solvents and petrolieum products as well as from leasking underground storage tanks at gasoline stations and other facilities.

❑ When toluene-containing products are placed in landfills or waste disposal sites, the toluene can enter the soil or water near the waste site.

❑ Toluene does not usually stay in the environment long.

❑ Toluene does not concentrate or buildup to high levels in animals.

How might I be exposed to toluene?

❑ Breathing contaminated workplace air or automobile exhaust.

❑ Working with gasoline, kerosene, heating oil, paints, and lacquers.

❑ Drinking contaminated well-water.

❑ Living near uncontrolled hazardous waste sites containing toluene products.

How can toluene affect my health?

Toluene may affect the nervous system. Low to moderate levles can cause tiredness, confusion, weakness, drunken-type actions, memory loss, nausea, loss of appetite, and

hearing and color vision loss. These symptoms usually disappear when exposure is stopped.

Inhaling High levels of toluene in a short time can make you feel light-headed, dizzy, or sleepy. It can also cause unconsciousness, and even death.

High levels of toluene may affect your kidneys.

How likely is toluene to cause cancer?

Studies in humans and animals generally indicate that toluene does not cause cancer.

The EPA has determined that the carcinogenicity of toluene can not be classified.

How can toluene affect children?

It is likely that health effects seen in children exposed to toluene will be similar to the effects seen in adults. Some studies in animals suggest that babies may be more sensitive than adults.

Breathing very high levels of toluene during pregnancy can result in children with birth defects and retard mental abilities, and growth. We do not know if toluene harms the unborn child if the mother is exposed to low levels of toluene during pregnancy.

How can families reduce the risk of exposure to toluene?

❑ Use toluene-containing products in well-ventilated areas.

❑ When not in use, toluene-containing products should be tightly covered to prevent evaporation into the air.

Is there a medical test to show whether I've been exposed to toluene?

There are tests to measure the level of toluene or its breakdown products in exhaled air, urine, and blood. To determine if you have been exposed to toluene, your urine or blood must be checked within 12 hours of exposure. Several other chemicals are also changed into the same breakdown products as toluene, so some of these tests are not specific for toluene.

Has the federal government made recommendations to protect human health?

EPA has set a limit of 1 milligram per liter of drinking water (1 mg/L).

Discharges, releases, or spills of more than 1,000 pounds of toluene must be reported to the National Response Center.

The Occupational Safety and Health Administration has set a limit of 200 parts toluene per million of workplace air (200 ppm).

References

Agency for Toxic Substances and Disease Registry (ATSDR). 2000. Toxicological Profile for Toluene. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone: 1-888-422-8737, FAX: 770-488-4178. ToxFAQs™ Internet address is http://www.atsdr.cdc.gov/toxfaq.html . ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

ATSDR
AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

TRICHLOROETHYLENE

CAS # 79-01-6

Division of Toxicology ToxFAQs™ **July 2003**

This fact sheet answers the most frequently asked health questions (FAQs) about trichloroethylene. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. This information is important because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Trichloroethylene is a colorless liquid which is used as a solvent for cleaning metal parts. Drinking or breathing high levels of trichloroethylene may cause nervous system effects, liver and lung damage, abnormal heartbeat, coma, and possibly death. Trichloroethylene has been found in at least 852 of the 1,430 National Priorities List sites identified by the Environmental Protection Agency (EPA).

What is trichloroethylene?

Trichloroethylene (TCE) is a nonflammable, colorless liquid with a somewhat sweet odor and a sweet, burning taste. It is used mainly as a solvent to remove grease from metal parts, but it is also an ingredient in adhesives, paint removers, typewriter correction fluids, and spot removers.

Trichloroethylene is not thought to occur naturally in the environment. However, it has been found in underground water sources and many surface waters as a result of the manufacture, use, and disposal of the chemical.

What happens to trichloroethylene when it enters the environment?

- Trichloroethylene dissolves a little in water, but it can remain in ground water for a long time.
- Trichloroethylene quickly evaporates from surface water, so it is commonly found as a vapor in the air.
- Trichloroethylene evaporates less easily from the soil than from surface water. It may stick to particles and remain for a long time.
- Trichloroethylene may stick to particles in water, which will cause it to eventually settle to the bottom sediment.
- Trichloroethylene does not build up significantly in plants and animals.

How might I be exposed to trichloroethylene?

- Breathing air in and around the home which has been contaminated with trichloroethylene vapors from shower water or household products such as spot removers and typewriter correction fluid.
- Drinking, swimming, or showering in water that has been contaminated with trichloroethylene.
- Contact with soil contaminated with trichloroethylene, such as near a hazardous waste site.
- Contact with the skin or breathing contaminated air while manufacturing trichloroethylene or using it at work to wash paint or grease from skin or equipment.

How can trichloroethylene affect my health?

Breathing small amounts may cause headaches, lung irritation, dizziness, poor coordination, and difficulty concentrating.

Breathing large amounts of trichloroethylene may cause impaired heart function, unconsciousness, and death. Breathing it for long periods may cause nerve, kidney, and liver damage.

ToxFAQs™ Internet address is http://www.atsdr.cdc.gov/toxfaq.html

Drinking large amounts of trichloroethylene may cause nausea, liver damage, unconsciousness, impaired heart function, or death.

Drinking small amounts of trichloroethylene for long periods may cause liver and kidney damage, impaired immune system function, and impaired fetal development in pregnant women, although the extent of some of these effects is not yet clear.

Skin contact with trichloroethylene for short periods may cause skin rashes.

How likely is trichloroethylene to cause cancer?

Some studies with mice and rats have suggested that high levels of trichloroethylene may cause liver, kidney, or lung cancer. Some studies of people exposed over long periods to high levels of trichloroethylene in drinking water or in workplace air have found evidence of increased cancer. Although, there are some concerns about the studies of people who were exposed to trichloroethylene, some of the effects found in people were similar to effects in animals.

In its 9th Report on Carcinogens, the National Toxicology Program (NTP) determined that trichloroethylene is "reasonably anticipated to be a human carcinogen." The International Agency for Research on Cancer (IARC) has determined that trichloroethylene is "probably carcinogenic to humans."

Is there a medical test to show whether I've been exposed to trichloroethylene?

If you have recently been exposed to trichloroethylene, it can be detected in your breath, blood, or urine. The breath test, if it is performed soon after exposure, can tell if you have been exposed to even a small amount of trichloroethylene.

Exposure to larger amounts is assessed by blood and urine tests, which can detect trichloroethylene and many of its breakdown products for up to a week after exposure. However, exposure to other similar chemicals can produce the same breakdown products, so their detection is not absolute proof of exposure to trichloroethylene. This test isn't available at most doctors' offices, but can be done at special laboratories that have the right equipment.

Has the federal government made recommendations to protect human health?

The EPA has set a maximum contaminant level for trichloroethylene in drinking water at 0.005 milligrams per liter (0.005 mg/L) or 5 parts of TCE per billion parts water.

The EPA has also developed regulations for the handling and disposal of trichloroethylene.

The Occupational Safety and Health Administration (OSHA) has set an exposure limit of 100 parts of trichloroethylene per million parts of air (100 ppm) for an 8-hour workday, 40-hour workweek.

Glossary

Carcinogenicity: The ability of a substance to cause cancer.
CAS: Chemical Abstracts Service.
Evaporate: To change into a vapor or gas.
Milligram (mg): One thousandth of a gram.
Nonflammable: Will not burn.
ppm: Parts per million.
Sediment: Mud and debris that have settled to the bottom of a body of water.
Solvent: A chemical that dissolves other substances.

References

This ToxFAQs information is taken from the 1997 Toxicological Profile for Trichloroethylene (update) produced by the Agency for Toxic Substances and Disease Registry, Public Health Service, U.S. Department of Health and Human Services, Public Health Service in Atlanta, GA.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone: 1-888-422-8737, FAX: 770-488-4178. ToxFAQs™ Internet address is http://www.atsdr.cdc.gov/toxfaq.html . ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

ATSDR
AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

XYLENE
CAS # 1330-20-7

This fact sheet answers the most frequently asked health questions (FAQs) about xylene. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It's important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

SUMMARY: Exposure to xylene occurs in the workplace and when you use paint, gasoline, paint thinners and other products that contain it. People who breathe high levels may have dizziness, confusion, and a change in their sense of balance. This substance has been found in at least 658 of the 1,430 National Priorities List sites identified by the Environmental Protection Agency (EPA).

What is xylene?

(Pronounced zī′lēn)

Xylene is a colorless, sweet-smelling liquid that catches on fire easily. It occurs naturally in petroleum and coal tar and is formed during forest fires. You can smell xylene in air at 0.08–3.7 parts of xylene per million parts of air (ppm) and begin to taste it in water at 0.53–1.8 ppm.

Chemical industries produce xylene from petroleum. It's one of the top 30 chemicals produced in the United States in terms of volume.

Xylene is used as a solvent and in the printing, rubber, and leather industries. It is also used as a cleaning agent, a thinner for paint, and in paints and varnishes. It is found in small amounts in airplane fuel and gasoline.

What happens to xylene when it enters the environment?

- Xylene has been found in waste sites and landfills when discarded as used solvent, or in varnish, paint, or paint thinners.
- It evaporates quickly from the soil and surface water into the air.
- In the air, it is broken down by sunlight into other less harmful chemicals.
- It is broken down by microorganisms in soil and water.
- Only a small amount of it builds up in fish, shellfish, plants, and animals living in xylene-contaminated water.

How might I be exposed to xylene?

- Breathing xylene in workplace air or in automobile exhaust.
- Breathing contaminated air.
- Touching gasoline, paint, paint removers, varnish, shellac, and rust preventatives that contain it.
- Breathing cigarette smoke that has small amounts of xylene in it.
- Drinking contaminated water or breathing air near waste sites and landfills that contain xylene.
- The amount of xylene in food is likely to be low.

How can xylene affect my health?

Xylene affects the brain. High levels from exposure for short periods (14 days or less) or long periods (more than 1 year) can cause headaches, lack of muscle coordination, dizziness, confusion, and changes in one's sense of balance. Exposure of

people to high levels of xylene for short periods can also cause irritation of the skin, eyes, nose, and throat; difficulty in breathing; problems with the lungs; delayed reaction time; memory difficulties; stomach discomfort; and possibly changes in the liver and kidneys. It can cause unconsciousness and even death at very high levels.

Studies of unborn animals indicate that high concentrations of xylene may cause increased numbers of deaths, and delayed growth and development. In many instances, these same concentrations also cause damage to the mothers. We do not know if xylene harms the unborn child if the mother is exposed to low levels of xylene during pregnancy.

How likely is xylene to cause cancer?

The International Agency for Research on Cancer (IARC) has determined that xylene is not classifiable as to its carcinogenicity in humans.

Human and animal studies have not shown xylene to be carcinogenic, but these studies are not conclusive and do not provide enough information to conclude that xylene does not cause cancer.

Is there a medical test to show whether I've been exposed to xylene?

Laboratory tests can detect xylene or its breakdown products in exhaled air, blood, or urine. There is a high degree of agreement between the levels of exposure to xylene and the levels of xylene breakdown products in the urine. However, a urine sample must be provided very soon after exposure ends because xylene quickly leaves the body. These tests are not routinely available at your doctor's office.

Has the federal government made recommendations to protect human health?

The EPA has set a limit of 10 ppm of xylene in drinking water.

The EPA requires that spills or accidental releases of xylenes into the environment of 1,000 pounds or more must be reported.

The Occupational Safety and Health Administration (OSHA) has set a maximum level of 100 ppm xylene in workplace air for an 8-hour workday, 40-hour workweek.

The National Institute for Occupational Safety and Health (NIOSH) and the American Conference of Governmental Industrial Hygienists (ACGIH) also recommend exposure limits of 100 ppm in workplace air.

NIOSH has recommended that 900 ppm of xylene be considered immediately dangerous to life or health. This is the exposure level of a chemical that is likely to cause permanent health problems or death.

Glossary

Evaporate: To change from a liquid into a vapor or a gas.

Carcinogenic: Having the ability to cause cancer.

CAS: Chemical Abstracts Service.

ppm: Parts per million.

Solvent: A liquid that can dissolve other substances.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 1995. Toxicological profile for xylenes (update). Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop E-29, Atlanta, GA 30333. Phone:1-888-422-8737, FAX: 404-498-0093. ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

ATSDR
AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

ZINC
CAS # 7440-66-6

Division of Toxicology ToxFAQs™ **August 2005**

This fact sheet answers the most frequently asked health questions (FAQs) about zinc. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It is important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Zinc is a naturally occurring element. Exposure to high levels of zinc occurs mostly from eating food, drinking water, or breathing workplace air that is contaminated. Low levels of zinc are essential for maintaining good health. Exposure to large amounts of zinc can be harmful. It can cause stomach cramps, anemia, and changes in cholesterol levels. Zinc has been found in at least 985 of the 1,662 National Priority List sites identified by the Environmental Protection Agency (EPA).

What is zinc?

Zinc is one of the most common elements in the earth's crust. It is found in air, soil, and water, and is present in all foods. Pure zinc is a bluish-white shiny metal.

Zinc has many commercial uses as coatings to prevent rust, in dry cell batteries, and mixed with other metals to make alloys like brass, and bronze. A zinc and copper alloy is used to make pennies in the United States.

Zinc combines with other elements to form zinc compounds. Common zinc compounds found at hazardous waste sites include zinc chloride, zinc oxide, zinc sulfate, and zinc sulfide. Zinc compounds are widely used in industry to make paint, rubber, dyes, wood preservatives, and ointments.

What happens to zinc when it enters the environment?

❏ Some is released into the environment by natural processes, but most comes from human activities like mining, steel production, coal burning, and burning of waste.
❏ It attaches to soil, sediments, and dust particles in the air.
❏ Rain and snow remove zinc dust particles from the air.
❏ Depending on the type of soil, some zinc compounds can move into the groundwater and into lakes, streams, and rivers.
❏ Most of the zinc in soil stays bound to soil particles and does not dissolve in water.
❏ It builds up in fish and other organisms, but it does not build up in plants.

How might I be exposed to zinc?

❏ Ingesting small amounts present in your food and water.
❏ Drinking contaminated water or a beverage that has been stored in metal containers or flows through pipes that have been coated with zinc to resist rust.
❏ Eating too many dietary supplements that contain zinc.
❏ Working on any of the following jobs: construction, painting, automobile mechanics, mining, smelting, and welding; manufacture of brass, bronze, or other zinc-containing alloys; manufacture of galvanized metals; and manufacture of machine parts, rubber, paint, linoleum, oilcloths, batteries, some kind of glass, ceramics, and dyes.

How can zinc affect my health?

Zinc is an essential element in our diet. Too little zinc can cause problems, but too much zinc is also harmful.

Harmful effects generally begin at levels 10-15 times higher than the amount needed for good health. Large doses taken by mouth even for a short time can cause stomach cramps, nausea, and vomiting. Taken longer, it can cause anemia and decrease the levels of your good cholesterol. We do not know if high levels of zinc affect reproduction in humans. Rats that were fed large amounts of zinc became infertile.

Inhaling large amounts of zinc (as dusts or fumes) can cause a specific short-term disease called metal fume fever. We do not know the long-term effects of breathing high levels of zinc.

Putting low levels of zinc acetate and zinc chloride on the skin of rabbits, guinea pigs, and mice caused skin irritation. Skin irritation will probably occur in people.

How likely is zinc to cause cancer?

The Department of Health and Human Services (DHHS) and the International Agency for Research on Cancer (IARC) have not classified zinc for carcinogenicity. Based on incomplete information from human and animal studies, the EPA has determined that zinc is not classifiable as to its human carcinogenicity.

How can zinc affect children?

Zinc is essential for proper growth and development of young children. It is likely that children exposed to very high levels of zinc will have similar effects as adults. We do not know whether children are more susceptible to the effects of excessive intake of zinc than the adults.

We do not know if excess zinc can cause developmental effects in humans. Animal studies have found decreased weight in the offspring of animals that ingested very high amounts of zinc.

How can families reduce the risks of exposure to zinc?

❑ Children living near waste sites that contain zinc may be exposed to higher levels of zinc through breathing contaminated air, drinking contaminated drinking water, touching or eating contaminated soil.

❑ Discourage your children from eating soil or putting their hands in their mouths and teach them to wash their hands frequently and before eating.

❑ If you use medicines or vitamin supplements containing zinc, make sure you use them appropriately and keep them out of the reach of children.

Is there a medical test to determine whether I've been exposed to zinc?

There are tests available to measure zinc in your blood, urine, hair, saliva, and feces. These tests are not usually done in the doctor's office because they require special equipment. High levels of zinc in the feces can mean high recent zinc exposure. High levels of zinc in the blood can mean high zinc consumption and/or high exposure. Tests to measure zinc in hair may provide information on long-term zinc exposure; however, the relationship between levels in your hair and the amount of zinc you were exposed to is not clear.

Has the federal government made recommendations to protect human health?

The EPA recommends that drinking water should contain no more than 5 milligrams per liter of water (5 mg/L) because of taste. The EPA requires that any release of 1,000 pounds (or in some cases 5,000 pounds) into the environment be reported to the agency.

To protect workers, the Occupational Safety and Health Administration (OSHA) has set an average limit of 1 mg/m^3 for zinc chloride fumes and 5 mg/m^3 for zinc oxide (dusts and fumes) in workplace air during an 8-hour workday, 40-hour workweek.

Similarly, the National Institute for Occupational Safety and Health (NIOSH) has set the same standards for up to a 10-hour workday over a 40-hour workweek.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 2005. Toxicological Profile for Zinc (Update). Atlanta, GA: U.S. Department of Public Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone: 1-888-422-8737, FAX: 770-488-4178. ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html. ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

ATTACHMENT B
REPORT FORMS

WEEKLY SAFETY REPORT FORM

Week Ending: _____ Project Name/Number: _____

Report Date: _____ Project Manager Name: _____

Summary of any violations of procedures occurring that week:

_____

_____

_____

Summary of any job related injuries, illnesses, or near misses that week:

_____

_____

_____

_____

Summary of air monitoring data that week (include and sample analyses, action levels exceeded, and actions taken):

_____

_____

_____

Comments:

_____

_____

_____

Name: _____ Company: _____

Signature: _____ Title: _____

INCIDENT REPORT FORM

Date of Report: _____

Injured: _____

Employer: _____

Site: _____ Site Location: _____

Report Prepared By: _____ _____
Signature Title

ACCIDENT/INCIDENT CATEGORY (check all that applies)

___Injury	___ Illness	___ Near Miss
__ Property Damage	___ Fire	___ Chemical Exposure
__ On-site Equipment	___ Motor Vehicle	___ Electrical
__ Mechanical	___ Spill	___ Other

DATE AND TIME OF ACCIDENT/INCIDENT: Narrative report of Accident/Incident: Identify: 1) actions leading to or contributing to the accident/incident; 2) the accident/incident occurrence; and 3) actions following the accident/incident.

_____

_____

_____

_____

_____

_____

_____

_____

_____

WITNESS TO ACCIDENT/INCIDENT:

Name:	_____	Company:	_____
Address:	_____	Address:	_____
Phone No.:	_____	Phone No.:	_____
Name:	_____	Company:	_____
Address:	_____	Address:	_____
Phone No.:	_____	Phone No.:	_____

INJURED - ILL:

Name: _____ SSN: _____

Address: _____ Age: _____

Length of Service: _____ Time on Present Job: _____

Time/Classification: _____

SEVERITY OF INJURY OR ILLNESS:

____ Disabling ___ Non-disabling ___ Fatality

____ Medical Treatment ___ First Aid Only

ESTIMATED NUMBER OF DAYS AWAY FROM JOB: _____

NATURE OF INJURY OR ILLNESS: _____

_____

_____

_____

CLASSIFICATION OF INJURY:

__ Abrasions _____ Dislocations ____ Punctures

__ Bites _____ Faint/Dizziness ____ Radiation Burns

__ Blisters _____ Fractures ____ Respiratory Allergy

__ Bruises _____ Frostbite ____ Sprains

__ Chemical Burns _____ Heat Burns ____ Toxic Resp. Exposure

__ Cold Exposure _____ Heat Exhaustion ____ Toxic Ingestion

__ Concussion _____ Heat Stroke ____ Dermal Allergy

__ Lacerations

Part of Body Affected: _____

Degree of Disability: _____

Date Medical Care was Received: _____

Where Medical Care was Received: _____

Address (if off-site): _____

(If two or more injuries, record on separate sheets)

PROPERTY DAMAGE:

Description of Damage: _____

_____

Cost of Damage: $ _____

ACCIDENT/INCIDENT LOCATION: _____

ACCIDENT/INCIDENT ANALYSIS: Causative agent most directly related to accident/incident (Object, substance, material, machinery, equipment, conditions)

_____

_____

_____

_____

Was weather a factor?:_____

_____

Unsafe mechanical/physical/environmental condition at time of accident/incident (Be specific):

_____

_____

_____

Personal factors (Attitude, knowledge or skill, reaction time, fatigue):

_____

_____

ON-SITE ACCIDENTS/INCIDENTS:

Level of personal protection equipment required in Site Safety Plan:

_____

_____

Modifications:

_____

Was injured using required equipment?:

_____

_____

If not, how did actual equipment use differ from plan?:

_____

_____

ACTION TAKEN TO PREVENT RECURRENCE: (Be specific. What has or will be done? When will it be done? Who is the responsible party to insure that the correction is made?

_____

_____

_____

_____

_____

ACCIDENT/INCIDENT REPORT REVIEWED BY:

_____ _____

SSO Name Printed SSO Signature

OTHERS PARTICIPATING IN INVESTIGATION:

_____ _____

Signature Title

_____ _____

Signature Title

_____ _____

Signature Title

ACCIDENT/INCIDENT FOLLOW-UP: Date: _____

Outcome of accident/incident: _____

_____

_____

_____

Physician's recommendations: _____

_____

_____

_____

Date injured returned to work: _____

Follow-up performed by:

_____ _____

Signature Title

ATTACH ANY ADDITIONAL INFORMATION TO THIS FORM

ATTACHMENT C
EMERGENCY HAND SIGNALS

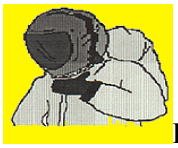
EMERGENCY SIGNALS

In most cases, field personnel will carry portable radios for communication. If this is the case, a transmission that indicates an emergency will take priority over all other transmissions. All other site radios will yield the frequency to the emergency transmissions.

Where radio communications is not available, the following air-horn and/or hand signals will be used:

EMERGENCY HAND SIGNALS

OUT OF AIR, CAN'T BREATHE!



Hand gripping throat

LEAVE AREA IMMEDIATELY, NO DEBATE!

(No Picture) Grip partner's wrist or place both hands around waist

NEED ASSISTANCE!



Hands on top of head

OKAY! – I'M ALL RIGHT!

- I UNDERSTAND!



Thumbs up

NO! - NEGATIVE!



Thumbs down

APPENDIX I
COMMUNITY AIR MONITORING PLAN

STEVENSONS COMMONS B3

1850 LAFAYETTE AVENUE

BRONX, NEW YORK

Community Air Monitoring Plan

AKRF Project Number: 240663
NYSDEC BCP Project Number: C203189

Prepared for:
New York State Department of Environmental Conservation
Division of Environmental Remediation
One Hunters Point Plaza
47-40 21st Street
Long Island City, NY 11101

On behalf of:
Stevenson B3 LLC
℅ Camber Property Group
116 East 27th Street, 11th Floor
New York, NY 10016

Prepared by:

AKRF, Inc.
440 Park Avenue South
New York, NY 10016
212-696-0670

OCTOBER 2026

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FIGURES

Figure 1 – Site Location

TABLES

Table 1 – CAMP Action Levels and Required Responses

ATTACHMENTS

Attachment A – New York State Department of Health Generic CAMP

1.0 INTRODUCTION

This Community Air Monitoring Plan (CAMP) has been developed for implementation of the Remedial Action Work Plan (RAWP) activities conducted by all personnel on-site, both AKRF employees and others, at the Stevensons Commons B3 site located at 1850 Lafayette Avenue in the Clason Point neighborhood of the Bronx, New York (the Site). The Site—which is also defined as Bronx Borough Tax Block 3600, portions of Lots 4, 15, and 25—currently consists of a vacant field with overgrown vegetation and a paved roadway enclosed by fencing. A Site Location map is provided as Figure 1.

A Remedial Investigation (RI) was conducted at the Site by AKRF between September 22 and December 31, 2025, and on January 30, 2026 pursuant to the July 2025 RIWP and December 2025 RIWP Addendum. A total of 197 soil samples, 9 groundwater samples, and 10 soil vapor samples, were collected for laboratory analysis. Based on the findings of the RI, contaminated soil was documented from surface grade to the groundwater table, and within saturated soils, at least 10- to- 15 feet bgs across the entire Site. The primary COCs at the Site include PAHs, PCBs, pesticides, and metals (i.e., lead, arsenic, barium and mercury) detected in soil at concentrations above UUSCOs and/or RRSCOs. The concentrations of PAHs and metals in soil appear to be evenly distributed across the Site, with the greatest concentrations of PAHs (up to 260 mg/kg) located on the eastern portion of the Site (boring SB-19) between 4 and 6 feet bgs, and the greatest concentrations of metals [specifically, total lead at concentrations up to 69,600 mg/kg], located in the northern and southeastern portions of the Site (borings SB-04 and SB-05, and SB-21) between 2 and 10 feet bgs. In addition, lead exceeded the EPA Hazardous Waste Criteria (TCLP lead) in various samples throughout the Site at concentrations up to 199 mg/L. The primary COCs at the Site are attributable to the presence of fill material from filling of the historic tidal creek.

The metals detected at elevated concentrations in soil (i.e., lead, arsenic, barium, and mercury) were not detected in the dissolved (filtered) groundwater samples above their respective AWQSGVs; the only metals detected above AWQSGVs were iron, sodium, and manganese, which were likely indicative of regional groundwater conditions. However, the SVOCs, naphthalene (18 µg/L in RI-MW-08) and phenol (4 J µg/L in RI-MW-05), and total PCBs (0.47 µg/L in RI-MW-07) were detected above their respective AWQSGVs in one sample each; these exceedances may be attributable to the presence of fill material. Additionally, several PFAS compounds (PFOS up to 24.8 ppt and PFOA up to 41.8 ppt) were detected in one or more of the groundwater samples above their respective guidance values. While 40 VOCs were detected in one or more of the soil vapor samples analyzed, no detections were above the “mitigate” thresholds in the NYSDOH guidance Soil Vapor/Indoor Air matrices.

2.0 COMMUNITY AIR MONITORING PROGRAM

The purpose of the Community Air Monitoring Plan (CAMP) is to outline appropriate monitoring, mitigation measures, and reporting requirements to ensure that the surrounding community is not affected during implementation of the Remedial Action Work Plan. Results of the air monitoring will be used to determine the appropriate response action, if needed.

Site-wide monitoring for particulates and VOCs will be conducted during remedial excavation in conformance with the New York State Department of Health (NYSDOH) Generic CAMP (Attachment A). Real-time continuous air monitoring for VOCs and particulate levels will be performed at the perimeter of the work area during ground intrusive activities, and during the handling of contaminated or potentially contaminated media. Ground intrusive activities include, but are not limited to, remedial excavation, site grading, stockpiling soil/fill, and/or loading trucks for off-site disposal.

When the remedial excavation work area is within 20 feet of potentially exposed populations or occupied structures, the continuous monitoring locations for VOCs and particulates will reflect the nearest potentially exposed individuals and the location of ventilation system intakes for nearby structures. Engineering controls such as temporary vapor/dust barriers, temporary negative-pressure enclosures, and/or special ventilation devices will be considered to prevent exposures related to the work activities and to control dust and odors, if necessary. Consideration will also 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 necessary.

2.1 Community Air Monitoring Plan

Community air monitoring will be conducted during all intrusive Site activities in compliance with the NYSDOH Generic CAMP and this Site-Specific CAMP. Real-time continuous air monitoring for VOCs and dust at the perimeter of the exclusion zone will be performed as described below. Exceedances of CAMP action levels will be immediately reported to the NYSDEC and NYSDOH project managers, and CAMP reports will be included in the daily reports submitted to NYSDEC and NYSDOH.

2.1.1 Roving Air Monitoring

VOC Monitoring

Continuous monitoring for VOCs will be conducted during all ground intrusive activities, including excavation and tank removal activities. Upwind concentrations will be measured at the start of each workday and periodically thereafter to establish background concentrations. VOCs will be monitored hourly at the downwind perimeter of the exclusion zone. Monitoring will be conducted with a PID equipped with a 10.6 or 11.7 electron Volt (eV) lamp capable of calculating 15-minute running average concentrations.

Periodic monitoring for VOCs will be conducted during non-intrusive activities such as the collection of excavation endpoint soil samples. Periodic monitoring may include obtaining measurements upon arrival at a location and upon leaving the location.

More frequent intervals of monitoring will be conducted if required, as determined by the SSO. All PID readings will be recorded and available for NYSDEC and NYSDOH personnel to review. Instantaneous readings, if any, will also be recorded.

Particulate Monitoring

Hourly monitoring for particulates will be conducted during all ground intrusive activities, which will involve the measurement of respirable dust. Community air monitoring for dust particulates will be conducted using a MIE 1000 Personal DataRam or equivalent to

measure the concentration of airborne respirable particulates less than 10 micrometers in size (PM10). The dust monitor will be capable of calculating 15-minute running average concentrations and equipped with an audible alarm to indicate exceedance of action levels. Background readings and any readings that trigger response actions will be recorded in the project logbook, which will be available on-site for NYSDOH and/or NYSDEC review.

2.1.2 Fixed Air Monitoring Stations

Two fixed air monitoring stations will be utilized at the Site during soil disturbing activities. The fixed monitoring stations will be set up at the upwind and downwind perimeters of the exclusion zone during all ground intrusive activities and will continuously log VOC and particulate levels. Each fixed monitoring station will be fully enclosed and equipped with the following:

- A PID equipped with a 10.6 eV lamp capable of calculating 15-minute running average VOC concentrations;
- A TSI 8530 DustTrak II or equivalent dust monitor capable of measuring the concentration of airborne respirable particulates less than 10 micrometers in size (PM_{10}) and calculating 15-minute running average particulate concentrations; and
- A Netronix™ Thiamus™ ICU-820 or equivalent Global System for Mobile Communication (GSM)/Global Positioning System (GPS) device capable of recording air monitoring and location data.

Each monitoring station will be capable of sending e-mail alerts to the SSO to indicate an exceedance of action levels. Additionally, the SSO will conduct an inspection of the monitoring stations on at least an hourly basis. Upon completion of Site activities, all air monitoring data will be available to download via the iEnvironet® website. All air monitoring data recorded at the fixed monitoring stations will be available for NYSDOH and/or NYSDEC review and will be included in the Final Engineering Report (FER).

Special Requirements for Work Within 20 Feet of Potentially Exposed Individuals or Structures

Since work areas at the Site may be within 20 feet of potentially exposed populations, additional Site-specific CAMP air monitoring provisions will be implemented (as necessary) to ensure that the surrounding community is not exposed to Site-related contaminants during construction activities. The additional CAMP provisions include the following:

1. Use of engineering controls such as vapor/dust barriers or special ventilation devices will be considered; and
2. Special consideration will be given to implementing planned activities when potentially exposed populations are at a minimum.
3. If total VOC concentrations opposite the walls of occupied structures or next to intake vents exceed 1 ppm, monitoring should occur within the occupied structure(s). 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.
4. If total particulate concentrations opposite the walls of occupied structures or next to intake vents exceed 150 $\mu g/m^3$, work activities should be suspended until controls are

implemented and are successful in reducing the total particulate concentration to 150 µg/m^3 or less at the monitoring point.

5. 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.

The NYSDOH list of Special Requirements for Work Within 20 Feet of Potentially Exposed Individuals or Structures are included in Attachment A.

2.1.3 Community Air Monitoring Levels

The action levels and required responses are listed in Table 1 below:

Table 1
CAMP Action Levels and Required Responses

Monitoring	Action Level[1]	Response Action
Particulates	15-minute average between 0.100 mg/m^3 and 0.150 mg/m^3 above background	Implement dust suppression measures and continue monitoring. Work may continue if levels remain below 0.150 mg/m^3 and no visible dust is migrating from the work area.
	15-minute average greater than 0.150 mg/m^3 above background	Stop work until dust suppression measures mitigate levels to below 0.150 mg/m^3.
VOCs	15-minute average between 5 and 25 ppm	Stop work, identify source of vapors and mitigate. Work may continue if instantons readings rapidly decrease below 5 ppm above background.
	15-minute average more than 25 ppm	Shutdown of work. Mitigate levels to below 5 ppm.

Notes:
[1] 15-minute time-weighted average
ppm = parts per million
mg/m^3 = milligrams per cubic meter

Major Vapor Emission Response Plan

If any organic levels greater than 5 ppm over background are identified 200 feet downwind from the work site, or half the distance to the nearest residential or commercial property, whichever is less, all work activities must be halted or vapor controls must be implemented.

If, following the cessation of the work activities, or as the result of an emergency, organic levels persist above 5 ppm above background 200 feet downwind or half the distance to the nearest residential or commercial property from the exclusion zone, then the air quality must be monitored within 20 feet of the perimeter of the nearest residential or commercial structure (20 Foot Zone).

If either of the following criteria is exceeded in the 20 Foot Zone, then the Major Vapor Emission Response Plan shall automatically be implemented:

- Sustained organic vapor levels approaching 1 ppm above background for a period of more than 30 minutes; or
- Organic vapor levels greater than 5 ppm above background for any time period.

Upon activation, the following activities shall be undertaken as part of the Major Vapor Emission Response Plan:

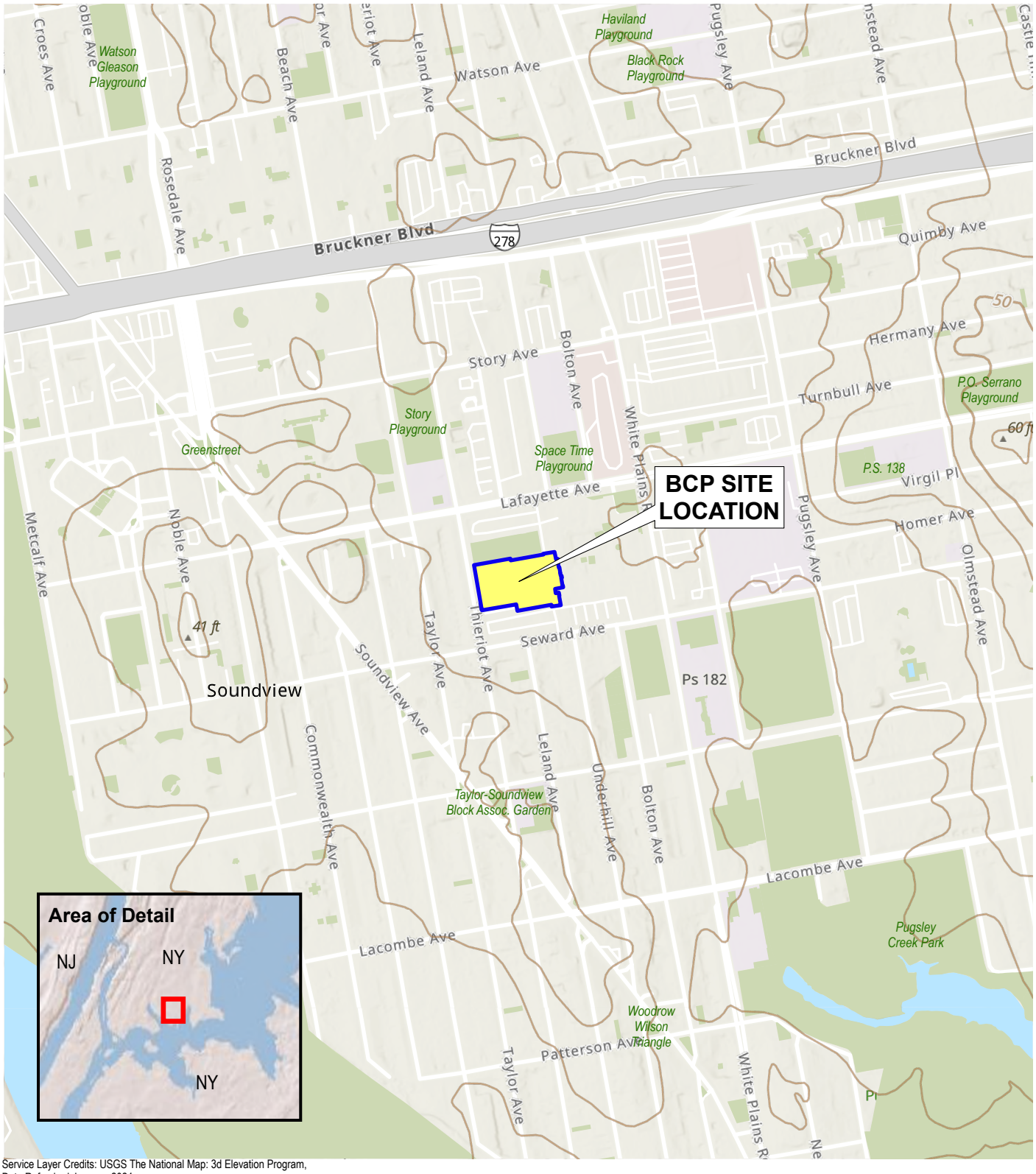
- NYSDEC, NYSDOH, and local police authorities will be immediately contacted by the SSO and advised of the situation;
- Frequent air monitoring will be conducted at 30-minute intervals within the 20 Foot Zone. If two successive readings below action levels are measured, air monitoring may be halted or modified by the SSO; and
- All Emergency contacts will go into effect, as appropriate.

All readings will be recorded and available for NYSDEC and NYSDOH personnel to review.

2.2 Reporting

CAMP summary reports will be prepared and submitted to NYSDEC and NYSDOH for review as part of the daily and monthly reports. In the event that there is an action level exceedance or complaint, NYSDEC and NYSDOH will be notified within 24 hours (same day to the extent possible). The notification will include a description of the exceedance or complaint, the cause of the exceedance or complaint, and any corrective actions taken. All recorded CAMP data will be included in the Final Engineering Report (FER).

FIGURE



AKRF O:\Projects\240663 - STEVENSON COMMONS B3\SAR\RIR and RAWP Figures\240663 RAWP Figures.aprx5/21/2026 10:09 AM240663 Fig 1 BCP Site Locationjpeters

akrf

440 Park Avenue South, New York, NY 10016

Stevenson Commons B3
Bronx, New York

BCP SITE LOCATION

DATE
5/21/2026

PROJECT NO.
240663

FIGURE
1

ATTACHMENT A
NEW YORK STATE DEPARTMENT OF HEALTH (NYSDOH) GENERIC CAMP

Appendix 1A
New York State Department of Health
Generic Community Air Monitoring Plan

Overview

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical- specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate DEC/NYSDOH staff.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. “Periodic” monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or

overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

2. If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

December 2009

Appendix 1B
Fugitive Dust and Particulate Monitoring

A program for suppressing fugitive dust and particulate matter monitoring at hazardous waste sites is a responsibility on the remedial party performing the work. These procedures must be incorporated into appropriate intrusive work plans. The following fugitive dust suppression and particulate monitoring program should be employed at sites during construction and other intrusive activities which warrant its use:

1. Reasonable fugitive dust suppression techniques must be employed during all site activities which may generate fugitive dust.

2. Particulate monitoring must be employed during the handling of waste or contaminated soil or when activities on site may generate fugitive dust from exposed waste or contaminated soil. Remedial activities may also include the excavation, grading, or placement of clean fill. These control measures should not be considered necessary for these activities.

3. Particulate monitoring must be performed using real-time particulate monitors and shall monitor particulate matter less than ten microns (PM10) with the following minimum performance standards:

(a) Objects to be measured: Dust, mists or aerosols;
(b) Measurement Ranges: 0.001 to 400 mg/m3 (1 to 400,000 :ug/m3);
(c) Precision (2-sigma) at constant temperature: +/- 10 :g/m3 for one second averaging; and +/- 1.5 g/m3 for sixty second averaging;
(d) Accuracy: +/- 5% of reading +/- precision (Referred to gravimetric calibration with SAE fine test dust (mmd= 2 to 3 :m, g= 2.5, as aerosolized);
(e) Resolution: 0.1% of reading or 1g/m3, whichever is larger;
(f) Particle Size Range of Maximum Response: 0.1-10;
(g) Total Number of Data Points in Memory: 10,000;
(h) Logged Data: Each data point with average concentration, time/date and data point number
(i) Run Summary: overall average, maximum concentrations, time/date of maximum, total number of logged points, start time/date, total elapsed time (run duration), STEL concentration and time/date occurrence, averaging (logging) period, calibration factor, and tag number;
(j) Alarm Averaging Time (user selectable): real-time (1-60 seconds) or STEL (15 minutes), alarms required;
(k) Operating Time: 48 hours (fully charged NiCd battery); continuously with charger;
(l) Operating Temperature: -10 to 50° C (14 to 122° F);
(m) Particulate levels will be monitored upwind and immediately downwind at the working site and integrated over a period not to exceed 15 minutes.

4. In order to ensure the validity of the fugitive dust measurements performed, there must be appropriate Quality Assurance/Quality Control (QA/QC). It is the responsibility of the remedial party to adequately supplement QA/QC Plans to include the following critical features: periodic instrument calibration, operator training, daily instrument performance (span) checks, and a record keeping plan.

5. The action level will be established at 150 ug/m3 (15 minutes average). While conservative,

this short-term interval will provide a real-time assessment of on-site air quality to assure both health and safety. If particulate levels are detected in excess of 150 ug/m3, the upwind background level must be confirmed immediately. If the working site particulate measurement is greater than 100 ug/m3 above the background level, additional dust suppression techniques must be implemented to reduce the generation of fugitive dust and corrective action taken to protect site personnel and reduce the potential for contaminant migration. Corrective measures may include increasing the level of personal protection for on-site personnel and implementing additional dust suppression techniques (see paragraph 7). Should the action level of 150 ug/m3 continue to be exceeded work must stop and DER must be notified as provided in the site design or remedial work plan. The notification shall include a description of the control measures implemented to prevent further exceedances.

6. It must be recognized that the generation of dust from waste or contaminated soil that migrates off-site, has the potential for transporting contaminants off-site. There may be situations when dust is being generated and leaving the site and the monitoring equipment does not measure PM10 at or above the action level. Since this situation has the potential to allow for the migration of contaminants off-site, it is unacceptable. While it is not practical to quantify total suspended particulates on a real-time basis, it is appropriate to rely on visual observation. If dust is observed leaving the working site, additional dust suppression techniques must be employed. Activities that have a high dusting potential--such as solidification and treatment involving materials like kiln dust and lime--will require the need for special measures to be considered.

7. The following techniques have been shown to be effective for the controlling of the generation and migration of dust during construction activities:

(a) Applying water on haul roads;
(b) Wetting equipment and excavation faces;
(c) Spraying water on buckets during excavation and dumping;
(d) Hauling materials in properly tarped or watertight containers;
(e) Restricting vehicle speeds to 10 mph;
(f) Covering excavated areas and material after excavation activity ceases; and
(g) Reducing the excavation size and/or number of excavations.

Experience has shown that the chance of exceeding the 150ug/m3 action level is remote when the above-mentioned techniques are used. When techniques involving water application are used, care must be taken not to use excess water, which can result in unacceptably wet conditions. Using atomizing sprays will prevent overly wet conditions, conserve water, and provide an effective means of suppressing the fugitive dust.

8. The evaluation of weather conditions is necessary for proper fugitive dust control. When extreme wind conditions make dust control ineffective, as a last resort remedial actions may need to be suspended. There may be situations that require fugitive dust suppression and particulate monitoring requirements with action levels more stringent than those provided above. Under some circumstances, the contaminant concentration and/or toxicity may require additional monitoring to protect site personnel and the public. Additional integrated sampling and chemical analysis of the dust may also be in order. This must be evaluated when a health and safety plan is developed and when appropriate suppression and monitoring requirements are established for protection of health and the environment.

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 VOCs and particulates must reflect the nearest potentially exposed individuals and the location of ventilation system intakes for nearby structures. The use of engineering controls 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 ppm, monitoring should occur within the occupied structure(s). 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 mcg/m3, work activities should be suspended until controls are implemented and are successful in reducing the total particulate concentration to 150 mcg/m3 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.

Special Requirements for Indoor Work with Co-Located Residences or Facilities

Unless a self-contained, negative-pressure enclosure with proper emission controls will encompass the work area, all individuals not directly involved with the planned work must be absent from the room in which the work will occur. Monitoring requirements shall be as stated above under “Special Requirements for Work Within 20 Feet of Potentially Exposed Individuals or Structures” except that in this instance “nearby/occupied structures” would be adjacent occupied rooms. Additionally, the location of all exhaust vents in the room and their discharge points, as well as potential vapor pathways (openings conduits, etc.) relative to adjoining rooms, should be understood and the monitoring locations established accordingly. In these situations, it is strongly recommended that exhaust fans or other engineering controls be used to create negative air pressure within the work area during remedial activities. Additionally, it is strongly recommended that the planned work be implemented during hours (e.g. weekends or evenings) when building occupancy is at a minimum.

APPENDIX J
ENVIRONMENTAL FOOTPRINT ANALYSIS

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Marlen Salazar
New York State Department of Environmental Conservation
Division of Environmental Remediation
One Hunters Point Plaza
Long Island City, NY, 11101

09.30.2026

Re: Environmental Footprint Analysis
1850 Lafayette Avenue, Bronx, NY
NYSDEC BCP Site No. C203189

Dear Ms. Salazar:

This Environmental Footprint Analysis (EFA) has been prepared by AKRF, Inc. (AKRF) on behalf of Stevenson B3 LLC (the "Volunteer") for the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) Site No. C203189 located at the above-referenced location, also identified as Borough of Bronx Tax Block 3600, portions of Lot 4, Lot 15, and Lot 25 on the New York City Tax Map (the "Site"). As further detailed in the November 2023 NYSDEC Memorandum, DER-31: Green and Sustainable Remediation Initiative, beginning January 1, 2024, all remedial work plans and reports submitted to NYSDEC pursuant to a remedial program under Part 375 are required to address green and sustainable remediation (GSR) in accordance with DER-31. The EFA was preemptively incorporated into the Remedial Action Work Plan (RAWP) and into the NYSDEC Decision Document as a requirement for the remedy alternatives.

This EFA focuses on the primary components of the remedy alternatives: excavation and disposal of contaminated soil and import of backfill materials.

This EFA was performed consistent with NYSDEC guidelines, the methodologies used in the Environmental Protection Agency (EPA) Spreadsheets for Environmental Footprint Analysis (SEFA) tool, and the requirements of the Climate Leadership and Community Protection Act (CLCPA).

A. GREENHOUSE GASES

Greenhouse gases (GHGs) are those gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and emit radiation at specific wavelengths within the spectrum of infrared radiation emitted by the Earth's surface, the atmosphere, and clouds. The general warming of the Earth's atmosphere caused by this phenomenon is known as the "greenhouse effect." The United States Environmental Protection Agency (EPA) identifies seven types of GHGs that are relevant for GHG inventory purposes: carbon dioxide (CO_2), nitrous oxide (N_2O), methane (CH_4), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), nitrogen trifluoride (NF_3), and sulfur hexafluoride (SF_6). There are no significant direct or indirect sources of HFCs, PFCs, NF_3, or SF_6 associated with the remedy alternatives; therefore, the GHG assessment focuses on CO_2, N_2O, and methane.

To present a complete inventory of all GHGs, component emissions are added together and presented as carbon dioxide equivalent (CO_2e) emissions—a unit representing the quantity of each GHG weighted by its effectiveness using CO_2 as a reference. This is achieved by multiplying the quantity of each GHG emitted

by a factor called global warming potential (GWP). GWPs account for the lifetime and the radiative forcing[1] of each chemical over a period of 20 years (e.g., CO_2 has a much shorter atmospheric lifetime than N_2O and therefore has a much lower GWP). The GWPs for the main GHGs discussed here are presented in **Table 1**.

Table 1
Global Warming Potential (GWP) for Major GHGs

Greenhouse Gas	20-Year Horizon GWP
Carbon Dioxide (CO_2)	1
Methane (CH_4)	84
Nitrous Oxide (N_2O)	264
Source: 6 NYCRR 496.5	

STATEWIDE GHG INVENTORY AND EMISSION LIMIT

In July 2019, New York State enacted the CLCPA establishing statewide GHG emission limits that represent a 40 percent reduction from 1990 levels by 2030, and an 85 percent reduction from 1990 levels by 2050. Among other requirements to meet the state's emission reduction goals, the CLCPA directs state agencies to determine if their decisions are consistent with the statewide GHG emission limits established by the CLCPA in the Environmental Conservation Law (ECL) Article 75[2].

As part of the regulations adopted at 6 NYCRR Part 496 in 2020, the New York State Energy Research and Development Authority (NYSERDA) developed the 1990 baseline GHG emissions for New York State consistent with the calculation requirements specified under the CLCPA. The statewide inventory is separated into four sectors—Energy Sector, Industrial Processes and Product Use, Agriculture Forestry and Other Land Use, and Waste. The GHG emissions associated with the remedy alternatives would fall within the Energy Sector (including emissions from the direct fuel combustion and electricity usage), the Industrial Processes and Product Use Sector (the embodied emissions from the manufacturing process of materials brought to the Site), and the Waste Sector (emissions associated with the end of life for materials removed from the Site for disposal).

The GHG inventory performed by NYSERDA determined a statewide 1990 annual baseline emission total of 409.78 million metric tons (MMT) of CO_2e. As established in 6 NYCRR Part 496, the statewide annual CO_2e emission limits for 2030 and 2050 as 245.87 MMT and 61.47 MMT, respectively.

B. METHODOLOGY

ON-SITE FUEL USAGE

Direct Emissions

Consistent with the SEFA tool, on-site fuel (i.e., direct) emissions were estimated based on the fuel consumption associated with construction equipment in operation during implementation of the remedy alternatives. On-site emissions were calculated for non-road construction engines based on specific estimates of construction activity and fuel consumption data from the NONROAD emissions module within model EPA's MOVES model. The detailed data, including the number, type, power rating, and hours of operation for all construction engines was coupled with fuel consumption rate data from EPA's MOVES model to estimate total fuel consumption throughout the duration of the construction activities.

Direct GHG emissions from Site work were calculated based on fuel consumption over the duration to complete the remedy—twelve months to complete Alternative 2 (Track 1) and six months to complete Alternative 3 (Track 4/2). The quantity of fuel was then multiplied by a unit-specific CO_2 emission factor of 10.21 kg per gallon of diesel—taken from EPA's Emission Factors for Greenhouse Gas Inventories. In order

[1] *Radiative forcing* is a measure of the influence a gas has in altering the balance of incoming and outgoing energy in the Earth-atmosphere system and is an index of the importance of the gas as a GHG.

[2] CLCPA Section 7(2).

to develop CO_2e emission factors, emission factors of N_2O and CH_4 for diesel construction equipment (1.01 g/gallon and 0.94 g/gallon, respectively) were also taken from EPA's Emission Factors Hub.

Upstream Emissions

Upstream GHG emissions were also projected based upon the estimated fuel consumption required for the remedy alternatives. Upstream emission factors for diesel have been specified by NYSDEC for upstream and out-of-state emissions.[3]

OFF-SITE FUEL USAGE

Consistent with the SEFA tool, GHG emissions associated with the truck and worker trips to the Site were estimated. The numbers of trucks (concrete trucks, dump trucks, and tractor trailers) and workers for each phase of construction activity were used to estimate truck and vehicle VMT. Distances for truck deliveries were developed based on estimates of the origin and destination of materials. Table 18-7 of the *CEQR Technical Manual* was used to determine the percentage of vehicle miles traveled by road type, and the most recent version of the EPA MOVES model provided an estimate of truck GHG emission factors, which were used to produce the associated emissions attributable to the remedy alternatives.

GHG emissions that would be generated by the remedy alternatives associated with the number of vehicle trips by mode (e.g., worker cars, delivery trucks) were calculated using the estimated number vehicles traveling to the Site to develop total vehicle miles traveled (VMT). VMT was calculated using an average round-trip commute distance of 25.3 miles for construction workers in the New York City Region (based on the average trip to work distance for the New York Metropolitan Area area)[4]; and round trip distances for truck deliveries was based on the identified origin and destination of materials and waste.

Based upon a duration of twelve months to complete the Alternative 2 remedy, 48,499 VMT were projected for construction worker travel. Construction/delivery truck trips were projected to result in 675,524 VMT. Based upon a duration of six months to complete the Alternative 3 remedy, 23,971 VMT were projected for construction worker travel and 62,404 VMT were projected for construction/delivery truck trips. GHG emissions were then estimated directly using CO_2e emission factors from the most recent version of the EPA MOVES model (MOVES5).

MATERIAL EMISSIONS

Emissions related to the production of construction materials (embodied emissions) were estimated based on the quantity of materials brought to the Site along with the appropriate CO_2e and co-pollutant emission factors used in the SEFA tool. Alternative 2 and 3 anticipate the import of 167,556 tons and 10,200 tons of clean soil, respectively.

WASTE EMISSIONS

Emissions associated with disposed materials exported from the Site were estimated based on the quantity of materials removed, the description of those materials, the destination, and the appropriate CO_2e and co-pollutant emission factors used in the SEFA tool. Excavation under Alternative 2 is anticipated to export approximately 177,869 tons of non-hazardous soil and an estimated 725 tons of hazardous soil. Excavation under Alternative 3 is anticipated to export approximately 19,982 tons of non-hazardous soil and an estimated 50 tons of hazardous soil. Emissions associated with both waste handling and transportation of the materials to the landfill were included in the off-site fuel usage estimates.

WATER DEMAND

Alternative 2 and 3 are not expected to have any water consumption, thus estimates of the associated emissions have been omitted.

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[3] NYSDEC. Appendix A of the *2025 Statewide GHG Emission Report*. December 2025.

[4] New York State Department of Transportation (NYSDOT). *2009 NHTS, New York State Add-On*. Key Tables. Table 3: Average Travel Day Person-Trip Length by Mode and Purpose, trip-to work distance for SOV in NYMTC 10-county area. 2011.

ELECTRICAL DEMAND

Alternative 2 and 3 are anticipating electricity consumption from the operation of an on-site mobile office. Based on an assumed 50 kWh/day demand, Alternative 2 would require a total of 13,050 kWh and Alternative 3 would require a total of 6,450 kWh. Indirect GHG emissions associated with grid electricity were estimated using the regional emission factor of 393 g CO_2e/kWh from the EPA electricity Emissions & Generation Resource Integrated Database (eGRID) database for the NPCC NYC/Westchester subregion. However, Indirect emissions of co-pollutant associated with electricity consumption would not occur in any one location. Therefore, these emission were not included.

C. PROJECTED CARBON FOOTPRINT

The estimated energy consumption and GHG emissions for the Alternative 2 (Track 1) and Alternative 3 (Track 4/2) remedies are presented in **Table 2** and **Table 3**, respectively. Detailed calculations can be found in Appendix A.

Table 2
Summary of GHG Emissions—Alt 2
(metric tons CO2e)

Core Element	Energy Consumption (MMBtu)	Direct Emissions	Indirect Emissions	*Total*
On-Site Fuel Usage	12,023	819	248	1,067
Off-Site Fuel Usage	18,986	0	1,681	1,681
Material	8,311	0	365	365
Waste	28,590	0	2,026	2,026
Total	**67,910**	**819**	**4,320**	**5,139**
Note: Totals may not sum due to rounding. See detailed calculations in Appendix A.				

Table 3
Summary of GHG Emissions—Alt 3
(metric tons CO2e)

Core Element	Energy Consumption (MMBtu)	Direct Emissions	Indirect Emissions	*Total*
On-Site Fuel Usage	6,621	451	137	588
Off-Site Fuel Usage	1,890	0	166	166
Material	506	0	22	22
Waste	3,206	0	227	227
Total	**12,224**	**451**	**552**	**1,003**
Note: Totals may not sum due to rounding. See detailed calculations in Appendix A.				

In addition to GHG emissions during construction for the remedies, Alternative 3 (Track 4/2) would include additional operational indirect emissions associated with visual inspections of the systems. The Alternative would require one inspection per year over a 5-year period. This is anticipated to result in less than 150 vehicle miles traveled over 5 years, and would increase the Alternative's total emissions by less than 1 metric ton of CO_2e. No additional operational emissions are anticipated during operation of either Alternative.

D. PROJECTED CO-POLLUTANTS

The estimated NO_x, SO_x, and PM_{10} emissions for Alternative 2 are presented in **Table 4**, **Table 5**, and **Table 6**, respectively. The estimated NO_x, SO_x, and PM_{10} emissions for Alternative 3 are presented in **Table 7**, **Table 8**, and **Table 9**, respectively.

Table 4
Summary of NO_x Emissions—Alt 2
(short ton)

Core Element	Direct Emissions	Indirect Emissions	*Total*
On-Site Fuel Usage	1.67	0.00 (1)	1.67
Off-Site Fuel Usage	0.00	3.73	3.73
Material	0.00	3.02	3.02
Waste	0.00	12.51	12.51
Total	**1.67**	**19.26**	**20.93**

Note: Totals may not sum due to rounding. See detailed calculations in Appendix A.

(1) Indirect emissions associated with electricity consumption were estimated for GHG emissions. Since emission would not occur in one location, emission of criteria pollutants were not included.

Table 5
Summary of SO_x Emissions—Alt 2
(short ton)

Core Element	Direct Emissions	Indirect Emissions	*Total*
On-Site Fuel Usage	0.0024	0.0000 (1)	0.0024
Off-Site Fuel Usage	0.0000	0.0045	0.0045
Material	0.0000	0.7574	0.7574
Waste	0.0000	6.7000	6.7000
Total	**0.0024**	**7.4618**	**7.4642**

Note: Totals may not sum due to rounding. See detailed calculations in Appendix A. Equipment and transportation emission factors for SO_x are based on SO_2.

(1) Indirect emissions associated with electricity consumption were estimated for GHG emissions. Since emission would not occur in one location, emission of criteria pollutants were not included.

Table 6
Summary of PM_{10} Emissions—Alt 2
(short ton)

Core Element	Direct Emissions	Indirect Emissions	*Total*
On-Site Fuel Usage	0.08	0.00 (1)	0.08
Off-Site Fuel Usage	0.00	0.91	0.91
Material	0.00	0.44	0.44
Waste	0.00	35.73	35.73
Total	**0.08**	**37.08**	**37.16**

Note: Totals may not sum due to rounding. See detailed calculations in Appendix A.

(1) Indirect emissions associated with electricity consumption were estimated for GHG emissions. Since emission would not occur in one location, emission of criteria pollutants were not included.

Table 7
Summary of NO_x Emissions—Alt 3
(short ton)

Core Element	Direct Emissions	Indirect Emissions	*Total*
On-Site Fuel Usage	1.17	0.00 (1)	1.17
Off-Site Fuel Usage	0.00	0.35	0.35
Material	0.00	0.18	0.18
Waste	0.00	1.40	1.40
Total	**1.17**	**1.93**	**3.10**

Note: Totals may not sum due to rounding. See detailed calculations in Appendix A.

(1) Indirect emissions associated with electricity consumption were estimated for GHG emissions. Since emission would not occur in one location, emission of criteria pollutants were not included.

Table 8
Summary of SO_x Emissions—Alt 3
(short ton)

Core Element	Direct Emissions	Indirect Emissions	*Total*
On-Site Fuel Usage	0.0013	0.0000 (1)	0.0013
Off-Site Fuel Usage	0.0000	0.0005	0.0005
Material	0.0000	0.0461	0.0461
Waste	0.0000	0.7514	0.7514
Total	**0.0013**	**0.7979**	**0.7993**

Note: Totals may not sum due to rounding. See detailed calculations in Appendix A. Equipment and transportation emission factors for SO_x are based on SO_2.

(1) Indirect emissions associated with electricity consumption were estimated for GHG emissions. Since emission would not occur in one location, emission of criteria pollutants were not included.

Table 9
Summary of PM_{10} Emissions—Alt 3
(short ton)

Core Element	Direct Emissions	Indirect Emissions	*Total*
On-Site Fuel Usage	0.05	0.00 (1)	0.05
Off-Site Fuel Usage	0.00	0.11	0.11
Material	0.00	0.03	0.03
Waste	0.00	4.01	4.01
Total	**0.05**	**4.15**	**4.19**

Note: Totals may not sum due to rounding. See detailed calculations in Appendix A.

(1) Indirect emissions associated with electricity consumption were estimated for GHG emissions. Since emission would not occur in one location, emission of criteria pollutants were not included.

If you have any questions or require additional information, please contact me at (646) 388-9846 or Tim Larigan at (646) 388-9508.

Sincerely,
AKRF, Inc.



Kevin Edwards
Senior Technical Director

Enc. Attachment A – GHG Emissions Detailed Calculations

APPENDIX A

GHG EMISSIONS DETAILED CALCULATIONS

GHG Emissions Detailed Calculations

Alternative 2

Track 1 UUSCOs

Stevenson Commons B3
Environmental Footprint Analysis
Construction Emissions Summary

Table 2
Summary of GHG Emissions--Alternative 2
(metric tons CO2e)

Core Element	Energy Consumption (MMBtu)	Direct Emissions	Indirect Emissions	*Total*
On-Site Fuel Usage	12,023	819	248	1,067
Off-Site Fuel Usage	18,986	0	1,681	1,681
Material	8,311	0	365	365
Waste	28,590	0	2,026	2,026
Total	**67,910**	**819**	**4,320**	**5,139**

Note: Totals may not sum due to rounding. See detailed calculations in Attachment A.

Table 4
Summary of NOx Emissions--Alternative 2
(short ton)

Core Element	Direct Emissions	Indirect Emissions	*Total*
On-Site Fuel Usage	1.67	0.00	1.67
Off-Site Fuel Usage	0.00	3.73	3.73
Material	0.00	3.02	3.02
Waste	0.00	12.51	12.51
Total	**1.67**	**19.26**	**20.93**

Note: Totals may not sum due to rounding. See detailed calculations in Attachment A.

Table 5
Summary of SOx Emissions--Alternative 2
(short ton)

Core Element	Direct Emissions	Indirect Emissions	*Total*
On-Site Fuel Usage	0.0024	0.0000	0.0024
Off-Site Fuel Usage	0.0000	0.0045	0.0045
Material	0.0000	0.7574	0.7574
Waste	0.0000	6.7000	6.7000
Total	**0.0024**	**7.4618**	**7.4642**

Note: Totals may not sum due to rounding. See detailed calculations in Attachment A.

Table 6
Summary of PM10 Emissions--Alternative 2
(short ton)

Core Element	Direct Emissions	Indirect Emissions	*Total*
On-Site Fuel Usage	0.08	0.00	0.08
Off-Site Fuel Usage	0.00	0.91	0.91
Material	0.00	0.44	0.44
Waste	0.00	35.73	35.73
Total	**0.08**	**37.08**	**37.16**

Note: Totals may not sum due to rounding. See detailed calculations in Attachment A.

Stevenson Commons B3
Environmental Footprint Analysis
Construction Task Schedule

Representative Start Date 1/1/2027

Site	Task	Duration		
		Days	Start	End
Stevenson Commons B3	Excavation	64	1/1/2027	3/31/2027
	Excavation/Exterior Work	197	4/1/2027	12/31/2027
	Total	261	1/1/2027	12/31/2027

Stevenson Commons B3

Excavated Soil		
Non-Hazardous	177,869	ton
Hazardous	725	ton
TOTAL	178,594	ton

Stevenson Commons B3
Environmental Footprint Analysis
Truck Schedule

Import/Export Material Type	Material Origin/Destination	Tonnage	Total Trucks	Travel Distance (mi)
SOIL DISPOSAL				
	TOTAL	178,594	7,938	
	Non-hazardous (SEFA Default)	*177,869*	7,905	25.0
	Hazardous (SEFA Default)	*725*	32	500.0
MATERIAL IMPORT				
	TOTAL	167,556	5,585	
	Clean Fill (SEFA Default)	*167,556*	5,585	25.0

Stevenson Commons B3
Environmental Footprint Analysis
Worker Projections

Site	Start Date	End Date	Task	Workers Per Day	Modal Split	Auto Occupancy	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																			
	Jan-27	Mar-27	Excavation	20	43%	1.17	154	147	169	0	0	0	0	0	0	0	0	0	
	Apr-27	Dec-27	Excavation/Exterior Work	20	43%	1.17	0	0	0	162	154	162	162	162	162	154	162	169	
						Monthly Auto Trips (trip/month)	**154**	**147**	**169**	**162**	**154**	**162**	**162**	**162**	**162**	**154**	**162**	**169**	

Total Trips
1,918 trips

Site	Start Date	End Date	Task	One Way Trip Distance (mi)	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																	
	Jan-27	Mar-27	Excavation	12.64	3902	3716	4274	0	0	0	0	0	0	0	0	0	
	Apr-27	Dec-27	Excavation/Exterior Work	12.64	0	0	0	4088	3902	4088	4088	4088	4088	3902	4088	4274	
				Monthly VMT (mi/month)	**3902**	**3716**	**4274**	**4088**	**3902**	**4088**	**4088**	**4088**	**4088**	**3902**	**4088**	**4274**	

Total VMT
48,499 mi

Site	Start Date	End Date	Task	Fuel Economy (mpg)	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																	
	Jan-27	Mar-27	Excavation	29.78	131	125	144	0	0	0	0	0	0	0	0	0	
	Apr-27	Dec-27	Excavation/Exterior Work	29.78	0	0	0	137	131	137	137	137	137	131	137	144	
				Monthly Fuel Consumption (gal/month)	**131**	**125**	**144**	**137**	**131**	**137**	**137**	**137**	**137**	**131**	**137**	**144**	

Fuel Consumption
1,629 gallons
203 MMBtu

Site	Start Date	End Date	Task	CO2e Emission Factor	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																	
	Jan-27	Mar-27	Excavation	296	1155	1100	1265	0	0	0	0	0	0	0	0	0	
	Apr-27	Dec-27	Excavation/Exterior Work	296	0	0	0	1210	1155	1210	1210	1210	1210	1155	1210	1265	
				Monthly Emissions (kg/month)	**1,155**	**1,100**	**1,265**	**1,210**	**1,155**	**1,210**	**1,210**	**1,210**	**1,210**	**1,155**	**1,210**	**1,265**	
				Monthly Emissions (MT/month)	**1.2**	**1.1**	**1.3**	**1.2**	**1.2**	**1.2**	**1.2**	**1.2**	**1.2**	**1.2**	**1.2**	**1.3**	

Total Emissions
14,351 kg
14 metric ton

Site	Start Date	End Date	Task	SEFA Default Factor Gasoline (MMBtu/gal)	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																	
	Jan-27	Mar-27	Excavation	0.03	4	4	5	0	0	0	0	0	0	0	0	0	
	Apr-27	Dec-27	Excavation/Exterior Work	0.03	0	0	0	5	4	5	5	5	5	4	5	5	
				Monthly Upstream Energy Consumption (MMBtu/month)	**4**	**4**	**5**	**5**	**4**	**5**	**5**	**5**	**5**	**4**	**5**	**5**	

-

Total Energy Consumption
49 MMBtu

Site	Start Date	End Date	Task	NYSDEC GHG Factor (kg CO2e/gal)	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																	
	Jan-27	Mar-27	Excavation	3.56	466	444	511	0	0	0	0	0	0	0	0	0	
	Apr-27	Dec-27	Excavation/Exterior Work	3.56	0	0	0	489	466	489	489	489	489	466	489	511	
				Monthly Upstream Emissions (kg/month)	**466**	**444**	**511**	**489**	**466**	**489**	**489**	**489**	**489**	**466**	**489**	**511**	
				Monthly Upstream Emissions (MT/month)	**0.5**	**0.4**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	

Total Emissions
5,797 kg
6 metric ton

Site	Start Date	End Date	Task	NOx Emission Factor	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																	
	Jan-27	Mar-27	Excavation	0.000223	1	1	1	0	0	0	0	0	0	0	0	0	
	Apr-27	Dec-27	Excavation/Exterior Work	0.000223	0	0	0	1	1	1	1	1	1	1	1	1	
				Monthly Emissions (lb/month)	**0.87**	**0.83**	**0.95**	**0.91**	**0.87**	**0.91**	**0.91**	**0.91**	**0.91**	**0.87**	**0.91**	**0.95**	
				Monthly Emissions (short ton/month)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	

Total Emissions
10.79 lb
0.01 short ton

Site	Start Date	End Date	Task	SO2 Emission Factor	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																	
	Jan-27	Mar-27	Excavation	0.000004	0	0	0	0	0	0	0	0	0	0	0	0	
	Apr-27	Dec-27	Excavation/Exterior Work	0.000004	0	0	0	0	0	0	0	0	0	0	0	0	
				Monthly Emissions (lb/month)	**0.0167**	**0.0159**	**0.0183**	**0.0175**	**0.0167**	**0.0175**	**0.0175**	**0.0175**	**0.0175**	**0.0167**	**0.0175**	**0.0183**	
				Monthly Emissions (short ton/month)	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	

Total Emissions
0.2071 lb
0.0001 short ton

Site	Start Date	End Date	Task	PM10 Emission Factor	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																	
	Jan-27	Mar-27	Excavation	0.002785	11	10	12	0	0	0	0	0	0	0	0	0	
	Apr-27	Dec-27	Excavation/Exterior Work	0.002785	0	0	0	11	11	11	11	11	11	11	11	12	
				Monthly Emissions (lb/month)	**10.87**	**10.35**	**11.90**	**11.38**	**10.87**	**11.38**	**11.38**	**11.38**	**11.38**	**10.87**	**11.38**	**11.90**	
				Monthly Emissions (short ton/month)	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	

Total Emissions
135.06 lb
0.07 short ton

Stevenson Commons B3
Environmental Footprint Analysis
Truck Emissions

Site	Start Date	End Date	Task	Truck Type	Total Trucks	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																		
	Jan-27	Mar-27	Export (Non-hazardous)	DT	7,905	2594	2470	2841	0	0	0	0	0	0	0	0	0	
	Jan-27	Mar-27	Export (Hazardous)	DT	32	1	0	0	0	0	0	0	0	0	0	0	0	
	Apr-27	Dec-27	Import	DT	5,585	0	0	0	624	595	624	624	624	624	595	624	652	
					Monthly trips (trip/month)	**2594.922917**	**2470.403**	**2840.963194**	**623.7279**	**595.3766**	**623.7279**	**623.7279**	**623.7279**	**623.7279**	**595.3766**	**623.7279**	**652.0792**	

Site	Start Date	End Date	Task	Truck Type	One Way Trip Distance	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																		
	Jan-27	Mar-27	Export (Non-hazardous)	DT	25	129696	123520	142048	0	0	0	0	0	0	0	0	0	
	Jan-27	Mar-27	Export (Hazardous)	DT	500	1000	0	0	0	0	0	0	0	0	0	0	0	
	Apr-27	Dec-27	Import	DT	25	0	0	0	31186	29769	31186	31186	31186	31186	29769	31186	32604	
					Monthly VMT (mi/month)	**130696**	**123520.1**	**142048.1597**	**31186.4**	**29768.83**	**31186.4**	**31186.4**	**31186.4**	**31186.4**	**29768.83**	**31186.4**	**32603.96**	

Total VMT
675,524 mi

Site	Start Date	End Date	Task	Truck Type	Fuel Economy (mpg)	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																		
	Jan-27	Mar-27	Export (Non-hazardous)	DT	5.58	23224	22118	25436	0	0	0	0	0	0	0	0	0	
	Jan-27	Mar-27	Export (Hazardous)	DT	5.58	179	0	0	0	0	0	0	0	0	0	0	0	
	Apr-27	Dec-27	Import	DT	5.58	0	0	0	5584	5331	5584	5584	5584	5584	5331	5584	5838	
					Monthly Fuel Consumption (gal/month)	**23403**	**22118**	**25436**	**5584**	**5331**	**5584**	**5584**	**5584**	**5584**	**5331**	**5584**	**5838**	

Total Fuel Consumption
120,962 gallon
16,596 MMBtu

Site	Start Date	End Date	Task	Truck Type	CO2e Emission Factor	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																		
	Jan-27	Mar-27	Export (Non-hazardous)	DT	1,878	243557	231959	266753	0	0	0	0	0	0	0	0	0	
	Jan-27	Mar-27	Export (Hazardous)	DT	1,878	1878	0	0	0	0	0	0	0	0	0	0	0	
	Apr-27	Dec-27	Import	DT	1,878	0	0	0	58565	55903	58565	58565	58565	58565	55903	58565	61227	
					Monthly Emissions (kg/month)	**245,435**	**231,959**	**266,753**	**58,565**	**55,903**	**58,565**	**58,565**	**58,565**	**58,565**	**55,903**	**58,565**	**61,227**	
					Monthly Emissions (MT/month)	**245.4**	**232.0**	**266.8**	**58.6**	**55.9**	**58.6**	**58.6**	**58.6**	**58.6**	**55.9**	**58.6**	**61.2**	

Total Emissions
1,268,571 kg
1,269 metric ton

Site	Start Date	End Date	Task	Truck Type	SEFA Default Factor Diesel (MMBtu/gal)	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																		
	Jan-27	Mar-27	Export (Non-hazardous)	DT	0.017	395	376	432	0	0	0	0	0	0	0	0	0	
	Jan-27	Mar-27	Export (Hazardous)	DT	0.017	3	0	0	0	0	0	0	0	0	0	0	0	
	Apr-27	Dec-27	Import	DT	0.017	0	0	0	95	91	95	95	95	95	91	95	99	
					Monthly Upstream Energy Consumption (MMBtu/month)	**398**	**376**	**432**	**95**	**91**	**95**	**95**	**95**	**95**	**91**	**95**	**99**	

Total Energy Consumption
2,056 MMBtu

Site	Start Date	End Date	Task	Truck Type	NYSDEC GHG Factor (kg CO2e/gal)	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																		
	Jan-27	Mar-27	Export (Non-hazardous)	DT	3.190	74078	70551	81134	0	0	0	0	0	0	0	0	0	
	Jan-27	Mar-27	Export (Hazardous)	DT	3.190	571	0	0	0	0	0	0	0	0	0	0	0	
	Apr-27	Dec-27	Import	DT	3.190	0	0	0	17813	17003	17813	17813	17813	17813	17003	17813	18622	
					Monthly Upstream Emissions (kg/month)	**74,650**	**70,551**	**81,134**	**17,813**	**17,003**	**17,813**	**17,813**	**17,813**	**17,813**	**17,003**	**17,813**	**18,622**	
					Monthly Upstream Emissions (MT/month)	**74.6**	**70.6**	**81.1**	**17.8**	**17.0**	**17.8**	**17.8**	**17.8**	**17.8**	**17.0**	**17.8**	**18.6**	

Total Emissions
385,839 kg
386 metric ton

Site	Start Date	End Date	Task	Truck Type	NOx Emission Factor	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																		
	Jan-27	Mar-27	Export (Non-hazardous)	DT	0.01104	1432	1363	1568	0	0	0	0	0	0	0	0	0	
	Jan-27	Mar-27	Export (Hazardous)	DT	0.01104	11	0	0	0	0	0	0	0	0	0	0	0	
	Apr-27	Dec-27	Import	DT	0.01104	0	0	0	344	329	344	344	344	344	329	344	360	
					Monthly Emissions (lb/month)	**1,443**	**1,363**	**1,568**	**344**	**329**	**344**	**344**	**344**	**344**	**329**	**344**	**360**	
					Monthly Emissions (short ton/month)	**0.7**	**0.7**	**0.8**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	

Total Emissions
7,457 lb
4 short ton

Site	Start Date	End Date	Task	Truck Type	SO2 Emission Factor	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																		
	Jan-27	Mar-27	Export (Non-hazardous)	DT	0.00001	2	2	2	0	0	0	0	0	0	0	0	0	
	Jan-27	Mar-27	Export (Hazardous)	DT	0.00001	0	0	0	0	0	0	0	0	0	0	0	0	
	Apr-27	Dec-27	Import	DT	0.00001	0	0	0	0	0	0	0	0	0	0	0	0	
					Monthly Emissions (lb/month)	**1.69**	**1.60**	**1.84**	**0.40**	**0.39**	**0.40**	**0.40**	**0.40**	**0.40**	**0.39**	**0.40**	**0.42**	
					Monthly Emissions (short ton/month)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	

Total Emissions
8.76 lb
0.00 short ton

Site	Start Date	End Date	Task	Truck Type	PM10 Emission Factor	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																		
	Jan-27	Mar-27	Export (Non-hazardous)	DT	0.00249	323	308	354	0	0	0	0	0	0	0	0	0	
	Jan-27	Mar-27	Export (Hazardous)	DT	0.00249	2	0	0	0	0	0	0	0	0	0	0	0	
	Apr-27	Dec-27	Import	DT	0.00249	0	0	0	78	74	78	78	78	78	74	78	81	
					Monthly Emissions (lb/month)	**326**	**308**	**354**	**78**	**74**	**78**	**78**	**78**	**78**	**74**	**78**	**81**	
					Monthly Emissions (short ton/month)	**0.2**	**0.2**	**0.2**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	

Total Emissions
1,683 lb
1 short ton

Stevenson Commons B3
Environmental Footprint Analysis
Equipment Schedule

Assumed

	Start Date	End Date	Equipment	Engine type	Size (hp)	Qty	Daily use	Average Use	Load	Fuel Consumption Factor (g/hp-hr)	Short-Term BSFC Factor (lb/day)	Fuel Consumption Factor (gal/hp-hr)	Short-Term BSFC Factor (gal/day)	NOx Factor (g/hp-hr)	Short-Term NOx Factor (lb/day)	SO2 Factor (g/hp-hr)	Short-Term SO2 Factor (lb/day)	PM10 Factor (g/hp-hr)	Short-Term PM10 Factor (lb/day)
										2027	2027	2027	2027	2027	2027	2027	2027	2027	2027
Excavation																			
	1/1/2027	3/31/2027	Excavator	Diesel	345	2	100%	100%	59%	168.2825	1208.2710	0.0529	172.3605	0.2037	1.4624	0.0014	0.0103	0.0153	0.1100
	1/1/2027	2/1/2027	Pile Rig	Diesel	755	1	100%	100%	43%	166.4682	953.1714	0.0524	135.9704	3.6884	21.1194	0.0016	0.0092	0.1238	0.7089
	1/1/2027	3/31/2027	Mini Excavator	Diesel	20.4	1	100%	100%	59%	186.8798	39.6706	0.0588	5.6590	3.7643	0.7991	0.0022	0.0005	0.1742	0.0370
	1/1/2027	3/31/2027	Forklift	Diesel	55	1	100%	100%	59%	186.8797	106.9550	0.0588	15.2572	2.5450	1.4565	0.0016	0.0009	0.0174	0.0100
	1/1/2027	3/31/2027	Skid steer loader (Bobcat)	Diesel	60	1	100%	100%	21%	218.1778	48.4848	0.0686	6.9164	3.8195	0.8488	0.0021	0.0005	0.3932	0.0874
	1/1/2027	3/31/2027	Welding Machine	Electric	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/1/2027	3/31/2027	Drill Rig	Diesel	120	1	100%	100%	43%	166.4682	151.4974	0.0524	21.6112	1.7527	1.5950	0.0016	0.0014	0.1174	0.1068
	1/1/2027	3/31/2027	Compactor	Diesel	130	1	100%	100%	59%	168.2826	227.6454	0.0529	32.4737	0.2413	0.3264	0.0014	0.0019	0.0211	0.0286
	1/1/2027	3/31/2027	Generator	Diesel	50	1	100%	100%	43%	185.0654	70.1759	0.0582	10.0106	2.9662	1.1248	0.0017	0.0006	0.0974	0.0369
Excavation/Exterior Work																			
	4/1/2027	12/31/2027	Excavator	Diesel	345	2	100%	100%	59%	168.2825	1208.2710	0.0529	172.3605	0.2037	1.4624	0.0014	0.0103	0.0153	0.1100
	4/1/2027	12/31/2027	Mini Excavator	Diesel	20.4	1	100%	100%	59%	186.8798	39.6706	0.0588	5.6590	3.7643	0.7991	0.0022	0.0005	0.1742	0.0370
	4/1/2027	12/31/2027	Forklift	Diesel	55	1	100%	100%	59%	186.8797	106.9550	0.0588	15.2572	2.5450	1.4565	0.0016	0.0009	0.0174	0.0100
	4/1/2027	12/31/2027	Skid steer loader (Bobcat)	Diesel	60	1	100%	100%	21%	218.1778	48.4848	0.0686	6.9164	3.8195	0.8488	0.0021	0.0005	0.3932	0.0874
	4/1/2027	12/31/2027	Welding Machine	Electric	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/1/2027	12/31/2027	Drill Rig	Diesel	120	1	100%	100%	43%	166.4682	151.4974	0.0524	21.6112	1.7527	1.5950	0.0016	0.0014	0.1174	0.1068
	4/1/2027	12/31/2027	Compactor	Diesel	130	1	100%	100%	59%	168.2826	227.6454	0.0529	32.4737	0.2413	0.3264	0.0014	0.0019	0.0211	0.0286
	4/1/2027	12/31/2027	Generator	Diesel	50	1	100%	100%	43%	185.0654	70.1759	0.0582	10.0106	2.9662	1.1248	0.0017	0.0006	0.0974	0.0369
										Excavation	2805.8716		400.2590		28.7324		0.0253		1.1257
										Excavation/Exterior Work	1852.7002		264.2886		7.6130		0.0161		0.4167

Stevenson Commons B3
Environmental Footprint Analysis
Equipment Emissions

Site	Start Date	End Date	Task	Annual BSFC Factor (lb/day)	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																	
	Jan-27	Mar-27	Excavation	2805.871595	58,923	56,117	64,535										
	Apr-27	Dec-27	Excavation/Exterior Work	1852.700153				40,759	38,907	40,759	40,759	40,759	40,759	38,907	40,759	42,612	

Site	Start Date	End Date	Task	Annual Fuel Consumption (gal/day)	2027 Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	Jan-26
Stevenson Commons B3																	
	Jan-27	Mar-27	Excavation	400.2590241	8,405	8,005	9,206										
	Apr-27	Dec-27	Excavation/Exterior Work	264.2886283				5,814	5,550	5,814	5,814	5,814	5,814	5,550	5,814	6,079	
			Monthly Fuel Consumption (gal/month)		8,405	8,005	9,206	5,814	5,550	5,814	5,814	5,814	5,814	5,550	5,814	6,079	

Total Fuel Consumption
77,681 gal
10,658 MMBtu

Annual CO2 Emissions (kg/month)

Site	Start Date	End Date	Task	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																
	Jan-27	Mar-27	Excavation	85,820	81,733	93,993										
	Apr-27	Dec-27	Excavation/Exterior Work				59,365	56,666	59,365	59,365	59,365	59,365	56,666	59,365	62,063	
			Monthly Emissions (kg/month)	85,820	81,733	93,993	59,365	56,666	59,365	59,365	59,365	59,365	56,666	59,365	62,063	

Annual CH4 Emissions (kg/month)

Site	Start Date	End Date	Task	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																
	Jan-27	Mar-27	Excavation	8	8	9										
	Apr-27	Dec-27	Excavation/Exterior Work				6	6	6	6	6	6	6	6	6	
			Monthly Emissions (kg/month)	8	8	9	6	6	6	6	6	6	6	6	6	

Annual N2O Emissions (kg/month)

Site	Start Date	End Date	Task	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																
	Jan-27	Mar-27	Excavation	8	8	9										
	Apr-27	Dec-27	Excavation/Exterior Work				5	5	5	5	5	5	5	5	6	
			Monthly Emissions (kg/month)	8	8	9	5	5	5	5	5	5	5	5	6	

Annual Direct CO2e Emissions (kg/month)

Site	Start Date	End Date	Task	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																
	Jan-27	Mar-27	Excavation	88,619	84,399	97,058										
	Apr-27	Dec-27	Excavation/Exterior Work				61,301	58,514	61,301	61,301	61,301	61,301	58,514	61,301	64,087	
			Monthly Emissions (kg/month)	88,619	84,399	97,058	61,301	58,514	61,301	61,301	61,301	61,301	58,514	61,301	64,087	
			Monthly Emissions (MT/month)	88.62	84.40	97.06	61.30	58.51	61.30	61.30	61.30	61.30	58.51	61.30	64.09	

818,995 kg
819 metric ton

Annual Upstream Energy Consumption (MMBtu/month)

Site	Start Date	End Date	Task	SEFA Default Factor Diesel (MMBtu/ton)	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																	
	Jan-27	Mar-27	Excavation	0.017	143	136	157										
	Apr-27	Dec-27	Excavation/Exterior Work	0.017				99	94	99	99	99	99	94	99	103	
			Monthly Fuel Consumption (MMBtu/month)		143	136	157	99	94	99	99	99	99	94	99	103	

Total Energy Consumption
1,321 MMBtu

Annual Upstream CO2e Emissions (kg/month)

Site	Start Date	End Date	Task	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																
	Jan-27	Mar-27	Excavation	26,811	25,535	29,365										
	Apr-27	Dec-27	Excavation/Exterior Work				18,546	17,703	18,546	18,546	18,546	18,546	17,703	18,546	19,389	
			Monthly Emissions (kg/month)	26,811	25,535	29,365	18,546	17,703	18,546	18,546	18,546	18,546	17,703	18,546	19,389	
			Monthly Emissions (MT/month)	26.81	25.53	29.36	18.55	17.70	18.55	18.55	18.55	18.55	17.70	18.55	19.39	

247,785 kg
248 metric ton

Annual Direct NOx Emissions (lb/month)

Site	Start Date	End Date	Task	Annual NOx Factor (lb/day)	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																	
	Jan-27	Mar-27	Excavation	28.73241475	603	575	661										
	Apr-27	Dec-27	Excavation/Exterior Work	7.61301902				167	160	167	167	167	167	160	167	175	
			Monthly Emissions (lb/month)		603	575	661	167	160	167	167	167	167	160	167	175	
			Monthly Emissions (short ton/month)		0.30	0.29	0.33	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.09	

3,339 lb
2 short ton

Annual Direct SO2 Emissions (lb/month)

Site	Start Date	End Date	Task	Annual SO2 Factor (lb/day)	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																	
	Jan-27	Mar-27	Excavation	0.02527481	0.53	0.51	0.58										
	Apr-27	Dec-27	Excavation/Exterior Work	0.016118154				0.35	0.34	0.35	0.35	0.35	0.35	0.34	0.35	0.37	
			Monthly Emissions (lb/month)		0.53	0.51	0.58	0.35	0.34	0.35	0.35	0.35	0.35	0.34	0.35	0.37	
			Monthly Emissions (short ton/month)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

4.79 lb
0.00 short ton

Annual Direct PM10 Emissions (lb/month)

Site	Start Date	End Date	Task	Annual PM10 Factor (lb/day)	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																	
	Jan-27	Mar-27	Excavation	1.125669927	24	23	26										
	Apr-27	Dec-27	Excavation/Exterior Work	0.416742823				9	9	9	9	9	9	9	9	10	
			Monthly Emissions (lb/month)		24	23	26	9	9	9	9	9	9	9	9	10	
			Monthly Emissions (short ton/month)		0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

154 lb
0 short ton

CO2e Emissions Summary (metric ton)

	Monthly Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Annual Total
Equipment-Direct	89	84	97	61	59	61	61	61	61	59	61	64	819
Equipment-Indirect	27	26	29	19	18	19	19	19	19	18	19	19	246
Trucks	245	232	267	59	56	59	59	59	59	56	59	61	1269
Truck - Upstream	75	71	81	18	17	18	18	18	18	17	18	19	386
Cars	1	1	1	1	1	1	1	1	1	1	1	1	14
Cars - Upstream	0	0	1	0	0	0	0	0	0	0	0	1	6
Materials													365
Waste													2026
Total	437	414	476	158	151	158	158	158	158	151	158	165	5122

Stevenson Commons B3
Environmental Footprint Analysis
Imported Material Emissions

							Lookup ID 3	4	5	6	7	8	
Material	**SEFA Lookup**	**Quantity**	**Unit**	**Conversion**	**Quantity**	**Unit**	**Energy Usage (MMBtu)**	**GHG (lb CO2e)**	**NOx (lb)**	**SOx (lb)**	**PM (lb)**	**HAPs (lb)**	
Clean Fill	Sand	167,556	ton	2000	335,112,000	lb	8,311	804,269	6,032	1,515	875	103	
						Total	8,311	804,269	6,032	1,515	875	103	lb
								402.134	3.016	0.757	0.437	0.052	ton
								364,810					kg
								365					MT

SEFA Tool Material Table

		Lookup ID 3	4	5	6	7	8	
Construction Materials	**Unit**	**Energy Usage (MMBtu/unit)**	**GHG (lb CO2e/unit)**	**NOx (lb/unit)**	**SOx (lb/unit)**	**PM (lb/unit)**	**HAPs (lb/unit)**	
Aluminum, Rolled Sheet	lb	0.0633	9.15	0.0148	0.0283	0.0088	0.00102	
Asphalt, mastic	lb	0.0412	0.85	0.00271	0.00798	0.000766	0.00107	
Asphalt, paving-grade	lb	0.5	8.58	0.0299	0.0969	0.0091	0.0133	
Ethanol, Corn, 95%	lb	0.0318	-0.0199	0.00425	0.00303	0.000469	0.0000846	
Ethanol, Corn, 99.7%	lb	0.0324	0.0591	0.00431	0.0031	0.000472	0.000087	
Ethanol, Petroleum, 99.7%	lb	0.0205	1.25	0.00199	0.00214	0.000277	0.0000589	
Gravel/Sand Mix, 65% Gravel	lb	0.0000248	0.0024	0.000018	0.00000452	0.00000261	0.000000308	
Gravel/sand/clay	lb	0.000028	0.00335	0.0000165	0.000015	0.000002	2.05E-10	
HDPE	lb	0.0332	1.94	0.00325	0.00409	0.000439	0.0000641	
Photovoltaic system (installed)	W	0.0336	4.47	0.015	0.032	0.00063	0.0000029	
PVC	lb	0.0262	2.02	0.004	0.00274	0.000372	0.000375	
Portland cement, US average	lb	0.0139	1.34	0.00654	0.0104	0.00378	0.00097	
Ready-mixed concrete, 20 MPa	ft3	0.217	19.5	0.0975	0.154	0.057	0.0141	
Round Gravel	lb	0.0000248	0.0024	0.000018	0.00000452	0.00000261	0.000000308	
Sand	lb	0.0000248	0.0024	0.000018	0.00000452	0.00000261	0.000000308	
Stainless Steel	lb	0.0116	3.4	0.0075	0.012	0.0044	0.000144	
Steel	lb	0.0044	1.1	0.0014	0.0017	0.00056	0.000067	
Other refined construction materials	lb	0.01885	2.115	0.0040375	0.0051325	0.00144275	0.000162525	
Other unrefined construction materials	lb	0.000028	0.00335	0.0000165	0.000015	0.000002	2.05E-10	
Cheese Whey	lbs	0.0025	0.031	0.000062	0.000033	0.000002	NP	
Emulsified vegetable oil	lbs	0.0077	3.44	0.0066	0.0019	0.000033	NP	
Granular activated carbon, primary	lbs	0.0356	4.82	0.0793	0.128	0.000987	0.000657	
Granular activated carbon, regenerated	lbs	0.00873	1.7	0.00733	0.0129	0.000886	0.000671	
Hydrogen Peroxide, 50% in H2O	lbs	0.00979	1.19	0.00142	0.0024	0.000308	0.0000629	
Iron (II) Sulfate	lbs	0.00147	0.167	0.000316	0.000589	0.000103	0.000023	
Lime, Hydrated, Packed	lbs	0.00206	0.762	0.000513	0.000358	0.00013	0.00000657	
Molasses	lbs	0.0044	0.48	0.0011	0.00024	0.0000041	NP	
Phosphoric Acid, 70% in H2O	lbs	0.0067	0.882	0.00282	0.0294	0.00171	0.000163	
Potassium Permanganate	lbs	0.00981	1.16	0.00234	0.0032	0.000422	0.000122	
Sodium Hydroxide, 50% in H2O	lbs	0.00977	1.09	0.00194	0.00352	0.000403	0.000129	
Other Treatment Chemicals & Materials	lbs	0.015	1.67	0.003	0.0065	0.00061	0.000016	

Stevenson Commons B3
Environmental Footprint Analysis
Waste Emissions

				Lookup ID 3	4	5	6	7	8	
Material	**SEFA Lookup**	**Quantity**	**Unit**	**Energy Usage (MMBtu)**	**GHG (lb CO2e)**	**NOx (lb)**	**SOx (lb)**	**PM (lb)**	**HAPs (lb)**	
Non-Hazardous Soil	Off-site non-hazardous waste landfill	177,869	ton	28,459	4,446,725	24,902	13,340	71,148	249	
Hazardous Soil	Off-site hazardous waste landfill	725	ton	131	19,938	112	60	319	1	
			Total	28,590	4,466,663	25,013	13,400	71,467	250	lb
					2,233.331	12.507	6.700	35.733	0.125	ton
					2,026,044					kg
					2,026					MT

SEFA Tool Waste Table

		Lookup ID 3	4	5	6	7	8
Waste Treatment	**Unit**	**Energy Usage (MMBtu/unit)**	**GHG (lb CO2e/unit)**	**NOx (lb/unit)**	**SOx (lb/unit)**	**PM (lb/unit)**	**HAPs (lb/unit)**
Hazardous waste incineration	lb	0.00609	2.43	0.0016	0.00167	0.000209	0.000087
Off-site waste water treatment (POTW)	gal x 1000	0.015	4.4	0.016	0.015		
Off-site non-hazardous waste landfill	ton	0.16	25	0.14	0.075	0.4	0.0014
Off-site hazardous waste landfill	ton	0.18	27.5	0.154	0.0825	0.44	0.00154
Off-site Laboratory Analysis - Other	sample	0.058071029	6.85343842	0.131401957	0.303875767	0.045569824	0.033016529
Off-site Laboratory Analysis - Metals	sample	0.212	27.4693	0.6423	1.5072	0.2264	0.1643
Off-site Laboratory Analysis - Mercury	sample	0.073171472	9.325458	0.2127439	0.4982396	0.07473594	0.05423316
Off-site Laboratory Analysis - Inorganic Anions	sample	0.007402451	0.6459478	0.006768122	0.014792866	0.002202395	0.001554243
Off-site Laboratory Analysis - Alkalinity	sample	0.017439833	1.3381922	0.007010628	0.013249646	0.001940048	0.001283077
Off-site Laboratory Analysis - Perchlorate	sample	0.023884988	1.8717054	0.007980652	0.014153532	0.002054687	0.001287486
Off-site Laboratory Analysis - Nitrogen/Nitrate	sample	0.033647504	4.29897	0.09545918	0.2226646	0.03350992	0.0242506
Off-site Laboratory Analysis - Sulfate	sample	0.014122473	1.4726728	0.007980652	0.013602382	0.001979731	0.001201507
Off-site Laboratory Analysis - PCBs	sample	0.0512769	5.224902	0.08333388	0.19047744	0.02843934	0.021208252
Off-site Laboratory Analysis - VOCs	sample	0.076204487	9.016814	0.10449804	0.2270738	0.03395084	0.02358922
Off-site Laboratory Analysis - SVOCs	sample	0.071560184	7.870422	0.14594452	0.3373038	0.05048534	0.03725774

Stevenson Commons B3
Environmental Footprint Analysis
Grid Electricity Emissions

					2026												2027												
Site	**Start Date**	**End Date**	**Eletrical Equipment**	**Daily Energy Demand (kWh/day)**	Jan-26	Feb-26	Mar-26	Apr-26	May-26	Jun-26	Jul-26	Aug-26	Sep-26	Oct-26	Nov-26	Dec-26	Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28	
Stevenson Commons B3																													
	1/1/2027	12/31/2027	Mobile Office	50													1,050	1,000	1,150	1,100	1,050	1,100	1,100	1,100	1,100	1,050	1,100	1,150		
																													Total Demand	
				Scope 1 Energy Consumption (kWh)	-	-	-	-	-	-	-	-	-	-	-	-	**1,050**	**1,000**	**1,150**	**1,100**	**1,050**	**1,100**	**1,100**	**1,100**	**1,100**	**1,050**	**1,100**	**1,150**		13,050 kWh
				Scope 1 Energy Consumption (MMBtu)	-	-	-	-	-	-	-	-	-	-	-	-	**4**	**3**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**		45 MMBtu
				eGrid MMBtu/MWh 7.35																										
				Scope 2 Energy Consumption (MMBtu)	-	-	-	-	-	-	-	-	-	-	-	-	**4**	**4**	**5**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**5**		51 MMBtu
				SEFA Transmission Loss % 10%																										
				Grid Baseload Emissions (g/kWh) 393.19																										
				Scope 3 Loss Energy Consumption (MMBtu)	-	-	-	-	-	-	-	-	-	-	-	-	**0.8**	**0.7**	**0.8**	**0.8**	**0.8**	**0.8**	**0.8**	**0.8**	**0.8**	**0.8**	**0.8**	**0.8**		10 MMBtu
				Scope 3 Loss Emissions (kg)	-	-	-	-	-	-	-	-	-	-	-	-	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**		1 kg
				Scope 3 Loss Emissions (MT)	-	-	-	-	-	-	-	-	-	-	-	-	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		0.001 MT

					2026												2027												
Site	**Start Date**	**End Date**	**Eletrical Equipment**	**Scope 2 Grid Baseload Emissions (g/kWh)**	Jan-26	Feb-26	Mar-26	Apr-26	May-26	Jun-26	Jul-26	Aug-26	Sep-26	Oct-26	Nov-26	Dec-26	Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28	
Stevenson Commons B3																													
	1/1/2027	12/31/2027	Mobile Office	393.194278													412,854	393,194	452,173	432,514	412,854	432,514	432,514	432,514	432,514	412,854	432,514	452,173		
																													Total Emissions	
					-	-	-	-	-	-	-	-	-	-	-	-	**412,854**	**393,194**	**452,173**	**432,514**	**412,854**	**432,514**	**432,514**	**432,514**	**432,514**	**412,854**	**432,514**	**452,173**		5,131,185 g
					-	-	-	-	-	-	-	-	-	-	-	-	413	393	452	433	413	433	433	433	433	413	433	452		5,131 kg
					-	-	-	-	-	-	-	-	-	-	-	-	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5		5 MT

Scope 3 Upstream Energy Consumption

Natural Gas Generation - Upstream

eGrid Resource Mix 98%
Energy Factor (SEFA Default) (MMBtu/MWh) 1.6318
GHG Emission Factor (SEFA Default) (lb/MWh) 270

Monthly Energy Consumption (MMBtu/month)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.68	1.60	1.84	1.76	1.68	1.76	1.76	1.76	1.68	1.76	1.84		20.91 MMBtu
Monthly GHG Emissions (kg/month)	-	-	-	-	-	-	-	-	-	-	-	-	126	120	138	132	126	132	132	132	126	132	138		1,569.46 kg
Monthly GHG Emissions (MT/month)	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		1.57 MT

Oil Generation - Upstream

eGrid Resource Mix 1%
Energy Factor (SEFA Default) (MMBtu/MWh) 2.2954
GHG Emission Factor (SEFA Default) (lb/MWh) 270

Monthly Energy Consumption (MMBtu/month)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		0.15 MMBtu
Monthly GHG Emissions (kg/month)	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1	1	1	1	1	1		7.99 kg
Monthly GHG Emissions (MT/month)	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.01 MT

Stevenson Commons B3
Environmental Footprint Analysis
Water Emissions

						Lookup ID 2	3	4	5	6	7	8	
Water Source	**Quantity**	**Unit**	**Conversion**	**Quantity**	**Unit**		**Energy Usage (MMBtu)**	**GHG (lb CO2e)**	**NOx (lb)**	**SOx (lb)**	**PM (lb)**	**HAPs (lb)**	
NYC Public Water	0	gal	0.001	0.00	gal x 1000		0	0	0	0	0	0	
						Total	0	0	0	0	0	0	lb
								0.000	0.000	0.000	0.000	0.000	ton
								0					kg
								0					MT

Water Usage Emission Factors

		Lookup ID 3	4	5	6	7	8
Water Source Type	**Unit**	**Energy Usage (MMBtu/unit)**	**GHG (lb CO2e/unit)**	**NOx (lb/unit)**	**SOx (lb/unit)**	**PM (lb/unit)**	**HAPs (lb/unit)**
Public Water (SEFA Default)	gal x 1000	0.0092	5	0.0097	0.0059	0.016	0.000015
Other	sample	0.071560184	7.870422	0.14594452	0.3373038	0.05048534	0.03725774

Stevenson Commons B3
Environmental Footprint Analysis
Emission Factors

BSFC Emission Factors (g/hp-hr)

ID	Equipment	Engine	SCC Code	HPmin	HPmax	HP	Equipment	Load	2027
	Dsl - Excavators	2270002036	Diesel	301	600	345	Excavator	59%	168.28
	Dsl - Excavators	2270002036	Diesel	17	25	20.4	Mini Excavator	59%	186.88
	Dsl - Bore/Drill Rigs	2270002033	Diesel	751	1000	755	Pile Rig	43%	166.47
	Dsl - Bore/Drill Rigs	2270002033	Diesel	101	175	120	Drill Rig	43%	166.47
	Dsl - Forklifts	2270003020	Diesel	51	75	55	Forklift	59%	186.88
	Dsl - Skid Steer Loaders	2270002072	Diesel	51	75	60	Skid steer loader (	21%	218.18
	Dsl - Rollers	2270002015	Diesel	101	175	130	Compactor	59%	168.28
	Dsl - Generator Sets	2270006005	Diesel	51	75	50	Generator	43%	185.07

NOx Emission Factors (g/hp-hr)

ID	Equipment	Engine	SCC Code	HPmin	HPmax	HP	Equipment	Load	2027
	Dsl - Excavators	2270002036	Diesel	301	600	345	Excavator	59%	0.20367
	Dsl - Excavators	2270002036	Diesel	17	25	20.4	Mini Excavator	59%	3.76428
	Dsl - Bore/Drill Rigs	2270002033	Diesel	751	1000	755	Pile Rig	43%	3.68843
	Dsl - Bore/Drill Rigs	2270002033	Diesel	101	175	120	Drill Rig	43%	1.75265
	Dsl - Forklifts	2270003020	Diesel	51	75	55	Forklift	59%	2.54496
	Dsl - Skid Steer Loaders	2270002072	Diesel	51	75	60	Skid steer loader (	21%	3.81948
	Dsl - Rollers	2270002015	Diesel	101	175	130	Compactor	59%	0.24131
	Dsl - Generator Sets	2270006005	Diesel	51	75	50	Generator	43%	2.96624

PM10 Emission Factors (g/hp-hr)

ID	Equipment	Engine	SCC Code	HPmin	HPmax	HP	Equipment	Load	2027
	Dsl - Excavators	2270002036	Diesel	301	600	345	Excavator	59%	0.01533
	Dsl - Excavators	2270002036	Diesel	17	25	20.4	Mini Excavator	59%	0.17424
	Dsl - Bore/Drill Rigs	2270002033	Diesel	751	1000	755	Pile Rig	43%	0.12381
	Dsl - Bore/Drill Rigs	2270002033	Diesel	101	175	120	Drill Rig	43%	0.11739
	Dsl - Forklifts	2270003020	Diesel	51	75	55	Forklift	59%	0.01742
	Dsl - Skid Steer Loaders	2270002072	Diesel	51	75	60	Skid steer loader (	21%	0.39320
	Dsl - Rollers	2270002015	Diesel	101	175	130	Compactor	59%	0.02114
	Dsl - Generator Sets	2270006005	Diesel	51	75	50	Generator	43%	0.09744

SO2 Emission Factors (g/hp-hr)

ID	Equipment	Engine	SCC Code	HPmin	HPmax	HP	Equipment	Load	2027
	Dsl - Excavators	2270002036	Diesel	301	600	345	Excavator	59%	0.00143
	Dsl - Excavators	2270002036	Diesel	17	25	20.4	Mini Excavator	59%	0.00219
	Dsl - Bore/Drill Rigs	2270002033	Diesel	751	1000	755	Pile Rig	43%	0.00160
	Dsl - Bore/Drill Rigs	2270002033	Diesel	101	175	120	Drill Rig	43%	0.00158
	Dsl - Forklifts	2270003020	Diesel	51	75	55	Forklift	59%	0.00157
	Dsl - Skid Steer Loaders	2270002072	Diesel	51	75	60	Skid steer loader (	21%	0.00207
	Dsl - Rollers	2270002015	Diesel	101	175	130	Compactor	59%	0.00143
	Dsl - Generator Sets	2270006005	Diesel	51	75	50	Generator	43%	0.00169

Fuel Properties

Densities	kg/L	g/gal	lb/gal
Diesel	0.84	3,179.75	7.01
Gasoline	0.74	2,801.21	6.18
LPG	0.54	2,044.12	4.51

BSFC Emission Factors (gal/hp-hr)

ID	Equipment	Engine	SCC Code	HPmin	HPmax	HP	Equipment	Load	2027
	Dsl - Excavators	2270002036	Diesel	301	600	345	Excavator	59%	0.0529
	Dsl - Excavators	2270002036	Diesel	17	25	20.4	Mini Excavator	59%	0.0588
	Dsl - Bore/Drill Rigs	2270002033	Diesel	751	1000	755	Pile Rig	43%	0.0524
	Dsl - Bore/Drill Rigs	2270002033	Diesel	101	175	120	Drill Rig	43%	0.0524
	Dsl - Forklifts	2270003020	Diesel	51	75	55	Forklift	59%	0.0588
	Dsl - Skid Steer Loaders	2270002072	Diesel	51	75	60	Skid steer loader (	21%	0.0686
	Dsl - Rollers	2270002015	Diesel	101	175	130	Compactor	59%	0.0529
	Dsl - Generator Sets	2270006005	Diesel	51	75	50	Generator	43%	0.0582

EPA Fuel Emission Factors

Diesel

GWP-100	GWP-20	kg/gal	GHG	GWP-20 Equivalent Emissions	GWP-100 Equivalent Emissions	SEFA Default
1	1	10.21	CO2	10.54 kg CO2e/gal	10.48738 kg CO2e/gal	10.20582833 kg CO2e/gal
28	84	0.00101	CH4	23.24333476 lb CO2e/gal	23.12071366 lb CO2e/gal	22.5 lb CO2e/gal
265	264	0.00094	N2O			

https://www.epa.gov/system/files/documents/2021-01/ghg-emission-factors-hub-2021.pdf

GWP-20 Equivalent Emissions with Upstream	
13.7327628	kg CO2e/gal
30.27555753	lb CO2e/gal

Gasoline

GWP-100	GWP-20	kg/gal	GHG	GWP-20 Equivalent Emissions	GWP-100 Equivalent Emissions	SEFA Default
1	1	8.78	CO2	8.83 kg CO2e/gal	8.81184 kg CO2e/gal	8.890410452 kg CO2e/gal
28	84	0.00038	CH4	19.47351852 lb CO2e/gal	19.42678052 lb CO2e/gal	19.6 lb CO2e/gal
265	264	0.00008	N2O			

https://www.epa.gov/system/files/documents/2021-01/ghg-emission-factors-hub-2021.pdf

MOVES TRUCKS FACTORS	NOx	SO2	PM10	CO2e	
2027 - Truck Idling (g/hr)	46.36	0.0257	0.292	8801.65	
2027 - Truck Cruising - 5mph (g/veh)	1.47	0.0010	0.129	310.62	
2027 - Truck Cruising - 25mph (g/veh	5.01	0.0059	1.130	1877.91	
2027 - Auto Cruising - 25mph (g/mi)	0.10	0.0019	1.263	295.90	

Distance Traveled On-site: approximately 0.1 mile per truck

0.1 mile per truck

Truck Mileage	
10487.38	g/gal
1877.9054	g/mi
5.584615712	mpg
0.17906335	gal per mi
0.024567492	MMBtu/mi

Car Mileage	
8811.84	g/gal
295.8974508	g/mi
29.78004703	mpg
0.033579531	gal per mi
0.00418401	MMBtu/mi

HHV

Diesel	0.1372	mmBtu per gallon
Gasoline	0.1246	mmBtu per gallon

NYSDEC Upstream Emission Factor

Table A1. 2023 Emission Rates for Upstream Out-of-State Sources (g/mmbtu)

	Diesel Fuel	
CH4	115.000	g/MMBtu
N2O	0.250	g/MMBtu
CO2	13.542	g/MMBtu
CO2e	23.249	g/MMBtu

	Diesel Fuel	
CH4	15.778	g/gal
N2O	0.034	g/gal
CO2	1.858	g/gal
CO2e	3.190	g/gal

	Gasoline Fuel	
CH4	122.000	g/MMBtu
N2O	0.320	g/MMBtu
CO2	18.276	g/MMBtu
CO2e	28.570	g/MMBtu

	Gasoline Fuel	
CH4	15.201	g/gal
N2O	0.040	g/gal
CO2	2.277	g/gal
CO2e	3.560	g/gal

NYSDEC, Appendix A of the 2025 Statewide GHG Emission Report. December 2025

eGRID Baseload Electricity Factor

Data Year	eGRID subregion acronym	eGRID subregion name	eGRID subregion total annual heat input (MMBtu)	eGRID subregion annual net generation (MWh)	Unit	eGRID subregion annual CO2 total output emission rate	eGRID subregion annual CH4 total output emission rate	eGRID subregion annual N2O total output emission rate	eGRID subregion annual CO2 equivalent total output emission rate (GWP-100)	eGRID subregion annual CO2 equivalent total output emission rate (GWP-20)
2023	NYCW	NPCC NYC/Westchester	254,301,464	34,602,268	lb/MWh	864.469	0.022	0.002	885.744	868.845
					g/kWh	392.117	0.010	0.001	392.695	**393.194**

	NPCC NYC/Westchester
	Resource Mix
eGRID subregion coal generation	0.000%
eGRID subregion oil generation	0.500%
eGRID subregion gas generation	98.200%
eGRID subregion nuclear generation	0.000%
eGRID subregion hydro generation	0.000%
eGRID subregion biomass generation	0.500%
eGRID subregion wind generation	0.000%
eGRID subregion solar generation	0.100%
eGRID subregion geothermal generation	0.000%
eGRID subregion other fossil generation	0.700%
eGRID subregion other unknown/ purchased fuel generation	0.000%
	100.0%

Stevenson Commons B3
Environmental Footprint Analysis
SEFA Equipment Table

Table 3. Equipment Type and Representative Horsepower
Asphalt paver (150 HP)
Backhoe (100 HP)
Concrete paving machine (200 HP)
Dozer - large (200 HP)
Dozer - small (100 HP)
Drilling - direct push (60 HP)
Drilling - large rig (500 HP)
Drilling - medium rig (150 HP)
Dump truck (400 HP)
Excavator - large (250 HP)
Excavator - medium (175 HP)
Excavator/hoe - small (75 HP)
Generator - HP varies
Grader (175 HP)
Grout pump (20 HP)
Hydroseeder (20 HP)
Integrated tool carrier (100 HP)
Loader (200 HP)
Loader - small (75 HP)
Mobile laboratory (25 HP)
Mowers (5 HP)
Other - HP varies
Riding trencher (55 HP)
Roller (100 HP)
Rotary-screw air compressor - 250 cfm (60 HP)
Skid-steer - small (60 HP)
Telescopic handler (60 HP)
Tractor mower (25 HP)
Water truck (400 HP)

GHG Emissions Detailed Calculations

Alternative 3

Dual Track 4 / Track 2 RRSCOs

Stevenson Commons B3
Environmental Footprint Analysis
Construction Emissions Summary

Table 3
Summary of GHG Emissions--Alternative 3
(metric tons CO2e)

Core Element	Energy Consumption (MMBtu)	Direct Emissions	Indirect Emissions	*Total*
On-Site Fuel Usage	6,621	451	137	588
Off-Site Fuel Usage	1,890	0	166	166
Material	506	0	22	22
Waste	3,206	0	227	227
Total	**12,224**	**451**	**552**	**1,003**

Note: Totals may not sum due to rounding. See detailed calculations in Attachment A.

Table 7
Summary of NOx Emissions--Alternative 3
(short ton)

Core Element	Direct Emissions	Indirect Emissions	*Total*
On-Site Fuel Usage	1.17	0.00	1.17
Off-Site Fuel Usage	0.00	0.35	0.35
Material	0.00	0.18	0.18
Waste	0.00	1.40	1.40
Total	**1.17**	**1.93**	**3.10**

Note: Totals may not sum due to rounding. See detailed calculations in Attachment A.

Table 8
Summary of SOx Emissions--Alternative 3
(short ton)

Core Element	Direct Emissions	Indirect Emissions	*Total*
On-Site Fuel Usage	0.0013	0.0000	0.0013
Off-Site Fuel Usage	0.0000	0.0005	0.0005
Material	0.0000	0.0461	0.0461
Waste	0.0000	0.7514	0.7514
Total	**0.0013**	**0.7979**	**0.7993**

Note: Totals may not sum due to rounding. See detailed calculations in Attachment A.

Table 9
Summary of PM10 Emissions--Alternative 3
(short ton)

Core Element	Direct Emissions	Indirect Emissions	*Total*
On-Site Fuel Usage	0.05	0.00	0.05
Off-Site Fuel Usage	0.00	0.11	0.11
Material	0.00	0.03	0.03
Waste	0.00	4.01	4.01
Total	**0.05**	**4.15**	**4.19**

Note: Totals may not sum due to rounding. See detailed calculations in Attachment A.

Stevenson Commons B3
Environmental Footprint Analysis
Construction Task Schedule

Representative Start Date 1/1/2027

Site	Task	Duration		
		Days	Start	End
Stevenson Commons B3	Excavation	64	1/1/2027	3/31/2027
	Excavation/Exterior Work	65	4/1/2027	6/30/2027
	Total	129	1/1/2027	6/30/2027

Stevenson Commons B3

Excavated Soil		
Non-Hazardous	19,982	ton
Hazardous	50	ton
TOTAL	20,032	ton

Stevenson Commons B3
Environmental Footprint Analysis
Truck Schedule

Import/Export Material Type	Material Origin/Destination	Tonnage	Total Trucks	Travel Distance (mi)
SOIL DISPOSAL				
	TOTAL	20,032	890	
	Non-hazardous (SEFA Default)	*19,982*	888	25.0
	Hazardous (SEFA Default)	*50*	2	500.0
MATERIAL IMPORT				
	TOTAL	10,200	340	
	Clean Fill (SEFA Default)	*10,200*	340	25.0

Stevenson Commons B3
Environmental Footprint Analysis
Worker Projections

Site	Start Date	End Date	Task	Workers Per Day	Modal Split	Auto Occupancy	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																			
	Jan-27	Mar-27	Excavation	20	43%	1.17	154	147	169	0	0	0	0	0	0	0	0	0	
	Apr-27	Jun-27	Excavation/Exterior Work	20	43%	1.17	0	0	0	162	154	162	0	0	0	0	0	0	
						Monthly Auto Trips (trip/month)	**154**	**147**	**169**	**162**	**154**	**162**	**0**	**0**	**0**	**0**	**0**	**0**	

Total Trips
948 trips

Site	Start Date	End Date	Task	One Way Trip Distance (mi)	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																	
	Jan-27	Mar-27	Excavation	12.64	3902	3716	4274	0	0	0	0	0	0	0	0	0	
	Apr-27	Jun-27	Excavation/Exterior Work	12.64	0	0	0	4088	3902	4088	0	0	0	0	0	0	
				Monthly VMT (mi/month)	**3902**	**3716**	**4274**	**4088**	**3902**	**4088**	**0**	**0**	**0**	**0**	**0**	**0**	

Total VMT
23,971 mi

Site	Start Date	End Date	Task	Fuel Economy (mpg)	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																	
	Jan-27	Mar-27	Excavation	29.78	131	125	144	0	0	0	0	0	0	0	0	0	
	Apr-27	Jun-27	Excavation/Exterior Work	29.78	0	0	0	137	131	137	0	0	0	0	0	0	
				Monthly Fuel Consumption (gal/month)	**131**	**125**	**144**	**137**	**131**	**137**	**0**	**0**	**0**	**0**	**0**	**0**	

Fuel Consumption
805 gallons
100 MMBtu

Site	Start Date	End Date	Task	CO2e Emission Factor	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																	
	Jan-27	Mar-27	Excavation	296	1155	1100	1265	0	0	0	0	0	0	0	0	0	
	Apr-27	Jun-27	Excavation/Exterior Work	296	0	0	0	1210	1155	1210	0	0	0	0	0	0	
				Monthly Emissions (kg/month)	**1,155**	**1,100**	**1,265**	**1,210**	**1,155**	**1,210**	**0**	**0**	**0**	**0**	**0**	**0**	
				Monthly Emissions (MT/month)	**1.2**	**1.1**	**1.3**	**1.2**	**1.2**	**1.2**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	

Total Emissions
7,093 kg
7 metric ton

Site	Start Date	End Date	Task	SEFA Default Factor Gasoline (MMBtu/gal)	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																	
	Jan-27	Mar-27	Excavation	0.03	4	4	5	0	0	0	0	0	0	0	0	0	
	Apr-27	Jun-27	Excavation/Exterior Work	0.03	0	0	0	5	4	5	0	0	0	0	0	0	
				Monthly Upstream Energy Consumption (MMBtu/month)	**4**	**4**	**5**	**5**	**4**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	

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Total Energy Consumption
27 MMBtu

Site	Start Date	End Date	Task	NYSDEC GHG Factor (kg CO2e/gal)	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																	
	Jan-27	Mar-27	Excavation	3.56	466	444	511	0	0	0	0	0	0	0	0	0	
	Apr-27	Jun-27	Excavation/Exterior Work	3.56	0	0	0	489	466	489	0	0	0	0	0	0	
				Monthly Upstream Emissions (kg/month)	**466**	**444**	**511**	**489**	**466**	**489**	**0**	**0**	**0**	**0**	**0**	**0**	
				Monthly Upstream Emissions (MT/month)	**0.5**	**0.4**	**0.5**	**0.5**	**0.5**	**0.5**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	

Total Emissions
2,865 kg
3 metric ton

Site	Start Date	End Date	Task	NOx Emission Factor	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																	
	Jan-27	Mar-27	Excavation	0.000223	1	1	1	0	0	0	0	0	0	0	0	0	
	Apr-27	Jun-27	Excavation/Exterior Work	0.000223	0	0	0	1	1	1	0	0	0	0	0	0	
				Monthly Emissions (lb/month)	**0.87**	**0.83**	**0.95**	**0.91**	**0.87**	**0.91**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	
				Monthly Emissions (short ton/month)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	

Total Emissions
5.33 lb
0.00 short ton

Site	Start Date	End Date	Task	SO2 Emission Factor	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																	
	Jan-27	Mar-27	Excavation	0.000004	0	0	0	0	0	0	0	0	0	0	0	0	
	Apr-27	Jun-27	Excavation/Exterior Work	0.000004	0	0	0	0	0	0	0	0	0	0	0	0	
				Monthly Emissions (lb/month)	**0.0167**	**0.0159**	**0.0183**	**0.0175**	**0.0167**	**0.0175**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	
				Monthly Emissions (short ton/month)	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	

Total Emissions
0.1024 lb
0.0001 short ton

Site	Start Date	End Date	Task	PM10 Emission Factor	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																	
	Jan-27	Mar-27	Excavation	0.002785	11	10	12	0	0	0	0	0	0	0	0	0	
	Apr-27	Jun-27	Excavation/Exterior Work	0.002785	0	0	0	11	11	11	0	0	0	0	0	0	
				Monthly Emissions (lb/month)	**10.87**	**10.35**	**11.90**	**11.38**	**10.87**	**11.38**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	
				Monthly Emissions (short ton/month)	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	

Total Emissions
66.75 lb
0.03 short ton

Stevenson Commons B3
Environmental Footprint Analysis
Truck Emissions

Site	Start Date	End Date	Task	Truck Type	Total Trucks	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																		
	Jan-27	Mar-27	Export (Non-hazardous)	DT	888	291	278	319	0	0	0	0	0	0	0	0	0	
	Jan-27	Mar-27	Export (Hazardous)	DT	2	1	0	0	0	0	0	0	0	0	0	0	0	
	Apr-27	Jun-27	Import	DT	340	0	0	0	115	110	115	0	0	0	0	0	0	
					Monthly trips (trip/month)	**292.4041667**	**277.5278**	**319.1569444**	**115.0769**	**109.8462**	**115.0769**	**0**	**0**	**0**	**0**	**0**	**0**	

Site	Start Date	End Date	Task	Truck Type	One Way Trip Distance	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																		
	Jan-27	Mar-27	Export (Non-hazardous)	DT	25	14570	13876	15958	0	0	0	0	0	0	0	0	0	
	Jan-27	Mar-27	Export (Hazardous)	DT	500	1000	0	0	0	0	0	0	0	0	0	0	0	
	Apr-27	Jun-27	Import	DT	25	0	0	0	5754	5492	5754	0	0	0	0	0	0	
					Monthly VMT (mi/month)	**15570**	**13876.39**	**15957.84722**	**5753.846**	**5492.308**	**5753.846**	**0**	**0**	**0**	**0**	**0**	**0**	

Total VMT
62,404 mi

Site	Start Date	End Date	Task	Truck Type	Fuel Economy (mpg)	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																		
	Jan-27	Mar-27	Export (Non-hazardous)	DT	5.58	2609	2485	2857	0	0	0	0	0	0	0	0	0	
	Jan-27	Mar-27	Export (Hazardous)	DT	5.58	179	0	0	0	0	0	0	0	0	0	0	0	
	Apr-27	Jun-27	Import	DT	5.58	0	0	0	1030	983	1030	0	0	0	0	0	0	
					Monthly Fuel Consumption (gal/month)	**2788**	**2485**	**2857**	**1030**	**983**	**1030**	**0**	**0**	**0**	**0**	**0**	**0**	

Total Fuel Consumption
11,174 gallon
1,533 MMBtu

Site	Start Date	End Date	Task	Truck Type	CO2e Emission Factor	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																		
	Jan-27	Mar-27	Export (Non-hazardous)	DT	1,878	27361	26059	29967	0	0	0	0	0	0	0	0	0	
	Jan-27	Mar-27	Export (Hazardous)	DT	1,878	1878	0	0	0	0	0	0	0	0	0	0	0	
	Apr-27	Jun-27	Import	DT	1,878	0	0	0	10805	10314	10805	0	0	0	0	0	0	
					Monthly Emissions (kg/month)	**29,239**	**26,059**	**29,967**	**10,805**	**10,314**	**10,805**	**0**	**0**	**0**	**0**	**0**	**0**	
					Monthly Emissions (MT/month)	**29.2**	**26.1**	**30.0**	**10.8**	**10.3**	**10.8**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	

Total Emissions
117,190 kg
117 metric ton

Site	Start Date	End Date	Task	Truck Type	SEFA Default Factor Diesel (MMBtu/gal)	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																		
	Jan-27	Mar-27	Export (Non-hazardous)	DT	0.017	44	42	49	0	0	0	0	0	0	0	0	0	
	Jan-27	Mar-27	Export (Hazardous)	DT	0.017	3	0	0	0	0	0	0	0	0	0	0	0	
	Apr-27	Jun-27	Import	DT	0.017	0	0	0	18	17	18	0	0	0	0	0	0	
					Monthly Upstream Energy Consumption (MMBtu/month)	**47**	**42**	**49**	**18**	**17**	**18**	**0**	**0**	**0**	**0**	**0**	**0**	

Total Energy Consumption
190 MMBtu

Site	Start Date	End Date	Task	Truck Type	NYSDEC GHG Factor (kg CO2e/gal)	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																		
	Jan-27	Mar-27	Export (Non-hazardous)	DT	3.190	8322	7926	9115	0	0	0	0	0	0	0	0	0	
	Jan-27	Mar-27	Export (Hazardous)	DT	3.190	571	0	0	0	0	0	0	0	0	0	0	0	
	Apr-27	Jun-27	Import	DT	3.190	0	0	0	3286	3137	3286	0	0	0	0	0	0	
					Monthly Upstream Emissions (kg/month)	**8,893**	**7,926**	**9,115**	**3,286**	**3,137**	**3,286**	**0**	**0**	**0**	**0**	**0**	**0**	
					Monthly Upstream Emissions (MT/month)	**8.9**	**7.9**	**9.1**	**3.3**	**3.1**	**3.3**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	

Total Emissions
35,644 kg
36 metric ton

Site	Start Date	End Date	Task	Truck Type	NOx Emission Factor	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																		
	Jan-27	Mar-27	Export (Non-hazardous)	DT	0.01104	161	153	176	0	0	0	0	0	0	0	0	0	
	Jan-27	Mar-27	Export (Hazardous)	DT	0.01104	11	0	0	0	0	0	0	0	0	0	0	0	
	Apr-27	Jun-27	Import	DT	0.01104	0	0	0	64	61	64	0	0	0	0	0	0	
					Monthly Emissions (lb/month)	**172**	**153**	**176**	**64**	**61**	**64**	**0**	**0**	**0**	**0**	**0**	**0**	
					Monthly Emissions (short ton/month)	**0.1**	**0.1**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	

Total Emissions
689 lb
0 short ton

Site	Start Date	End Date	Task	Truck Type	SO2 Emission Factor	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																		
	Jan-27	Mar-27	Export (Non-hazardous)	DT	0.00001	0	0	0	0	0	0	0	0	0	0	0	0	
	Jan-27	Mar-27	Export (Hazardous)	DT	0.00001	0	0	0	0	0	0	0	0	0	0	0	0	
	Apr-27	Jun-27	Import	DT	0.00001	0	0	0	0	0	0	0	0	0	0	0	0	
					Monthly Emissions (lb/month)	**0.20**	**0.18**	**0.21**	**0.07**	**0.07**	**0.07**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	
					Monthly Emissions (short ton/month)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	

Total Emissions
0.81 lb
0.00 short ton

Site	Start Date	End Date	Task	Truck Type	PM10 Emission Factor	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																		
	Jan-27	Mar-27	Export (Non-hazardous)	DT	0.00249	36	35	40	0	0	0	0	0	0	0	0	0	
	Jan-27	Mar-27	Export (Hazardous)	DT	0.00249	2	0	0	0	0	0	0	0	0	0	0	0	
	Apr-27	Jun-27	Import	DT	0.00249	0	0	0	14	14	14	0	0	0	0	0	0	
					Monthly Emissions (lb/month)	**39**	**35**	**40**	**14**	**14**	**14**	**0**	**0**	**0**	**0**	**0**	**0**	
					Monthly Emissions (short ton/month)	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	

Total Emissions
155 lb
0 short ton

Stevenson Commons B3
Environmental Footprint Analysis
Equipment Schedule

Assumed

	Start Date	End Date	Equipment	Engine type	Size (hp)	Qty	Daily use	Average Use	Load	Fuel Consumption Factor (g/hp-hr)	Short-Term BSFC Factor (lb/day)	Fuel Consumption Factor (gal/hp-hr)	Short-Term BSFC Factor (gal/day)	NOx Factor (g/hp-hr)	Short-Term NOx Factor (lb/day)	SO2 Factor (g/hp-hr)	Short-Term SO2 Factor (lb/day)	PM10 Factor (g/hp-hr)	Short-Term PM10 Factor (lb/day)
										2027	2027	2027	2027	2027	2027	2027	2027	2027	2027
Excavation																			
	1/1/2027	3/31/2027	Excavator	Diesel	345	2	100%	100%	59%	168.2825	1208.2710	0.0529	172.3605	0.2037	1.4624	0.0014	0.0103	0.0153	0.1100
	1/1/2027	2/1/2027	Pile Rig	Diesel	755	1	100%	100%	43%	166.4682	953.1714	0.0524	135.9704	3.6884	21.1194	0.0016	0.0092	0.1238	0.7089
	1/1/2027	3/31/2027	Mini Excavator	Diesel	20.4	1	100%	100%	59%	186.8798	39.6706	0.0588	5.6590	3.7643	0.7991	0.0022	0.0005	0.1742	0.0370
	1/1/2027	3/31/2027	Forklift	Diesel	55	1	100%	100%	59%	186.8797	106.9550	0.0588	15.2572	2.5450	1.4565	0.0016	0.0009	0.0174	0.0100
	1/1/2027	3/31/2027	Skid steer loader (Bobcat)	Diesel	60	1	100%	100%	21%	218.1778	48.4848	0.0686	6.9164	3.8195	0.8488	0.0021	0.0005	0.3932	0.0874
	1/1/2027	3/31/2027	Welding Machine	Electric	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/1/2027	3/31/2027	Drill Rig	Diesel	120	1	100%	100%	43%	166.4682	151.4974	0.0524	21.6112	1.7527	1.5950	0.0016	0.0014	0.1174	0.1068
	1/1/2027	3/31/2027	Compactor	Diesel	130	1	100%	100%	59%	168.2826	227.6454	0.0529	32.4737	0.2413	0.3264	0.0014	0.0019	0.0211	0.0286
	1/1/2027	3/31/2027	Generator	Diesel	50	1	100%	100%	43%	185.0654	70.1759	0.0582	10.0106	2.9662	1.1248	0.0017	0.0006	0.0974	0.0369
Excavation/Exterior Work																			
	4/1/2027	6/30/2027	Excavator	Diesel	345	2	100%	100%	59%	168.2825	1208.2710	0.0529	172.3605	0.2037	1.4624	0.0014	0.0103	0.0153	0.1100
	4/1/2027	6/30/2027	Mini Excavator	Diesel	20.4	1	100%	100%	59%	186.8798	39.6706	0.0588	5.6590	3.7643	0.7991	0.0022	0.0005	0.1742	0.0370
	4/1/2027	6/30/2027	Forklift	Diesel	55	1	100%	100%	59%	186.8797	106.9550	0.0588	15.2572	2.5450	1.4565	0.0016	0.0009	0.0174	0.0100
	4/1/2027	6/30/2027	Skid steer loader (Bobcat)	Diesel	60	1	100%	100%	21%	218.1778	48.4848	0.0686	6.9164	3.8195	0.8488	0.0021	0.0005	0.3932	0.0874
	4/1/2027	6/30/2027	Welding Machine	Electric	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/1/2027	6/30/2027	Drill Rig	Diesel	120	1	100%	100%	43%	166.4682	151.4974	0.0524	21.6112	1.7527	1.5950	0.0016	0.0014	0.1174	0.1068
	4/1/2027	6/30/2027	Compactor	Diesel	130	1	100%	100%	59%	168.2826	227.6454	0.0529	32.4737	0.2413	0.3264	0.0014	0.0019	0.0211	0.0286
	4/1/2027	6/30/2027	Generator	Diesel	50	1	100%	100%	43%	185.0654	70.1759	0.0582	10.0106	2.9662	1.1248	0.0017	0.0006	0.0974	0.0369
										Excavation	2805.8716		400.2590		28.7324		0.0253		1.1257
										Excavation/Exterior Work	1852.7002		264.2886		7.6130		0.0161		0.4167

Stevenson Commons B3
Environmental Footprint Analysis
Equipment Emissions

Site	Start Date	End Date	Task	Annual BSFC Factor (lb/day)	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																	
	Jan-27	Mar-27	Excavation	2805.871595	58,923	56,117	64,535										
	Apr-27	Jun-27	Excavation/Exterior Work	1852.700153				40,759	38,907	40,759							

Site	Start Date	End Date	Task	Annual Fuel Consumption (gal/day)	2027 Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	Jan-26
Stevenson Commons B3																	
	Jan-27	Mar-27	Excavation	400.2590241	8,405	8,005	9,206										
	Apr-27	Jun-27	Excavation/Exterior Work	264.2886283				5,814	5,550	5,814							
			Monthly Fuel Consumption (gal/month)		8,405	8,005	9,206	5,814	5,550	5,814	-	-	-	-	-	-	

Total Fuel Consumption
42,795 gal
5,872 MMBtu

Annual CO2 Emissions (kg/month)

Site	Start Date	End Date	Task	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																
	Jan-27	Mar-27	Excavation	85,820	81,733	93,993										
	Apr-27	Jun-27	Excavation/Exterior Work				59,365	56,666	59,365							
			Monthly Emissions (kg/month)	85,820	81,733	93,993	59,365	56,666	59,365	-	-	-	-	-	-	

Annual CH4 Emissions (kg/month)

Site	Start Date	End Date	Task	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																
	Jan-27	Mar-27	Excavation	8	8	9										
	Apr-27	Jun-27	Excavation/Exterior Work				6	6	6							
			Monthly Emissions (kg/month)	8	8	9	6	6	6	-	-	-	-	-	-	

Annual N2O Emissions (kg/month)

Site	Start Date	End Date	Task	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																
	Jan-27	Mar-27	Excavation	8	8	9										
	Apr-27	Jun-27	Excavation/Exterior Work				5	5	5							
			Monthly Emissions (kg/month)	8	8	9	5	5	5	-	-	-	-	-	-	

Annual Direct CO2e Emissions (kg/month)

Site	Start Date	End Date	Task	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																
	Jan-27	Mar-27	Excavation	88,619	84,399	97,058										
	Apr-27	Jun-27	Excavation/Exterior Work				61,301	58,514	61,301							
			Monthly Emissions (kg/month)	88,619	84,399	97,058	61,301	58,514	61,301	-	-	-	-	-	-	
			Monthly Emissions (MT/month)	88.62	84.40	97.06	61.30	58.51	61.30	-	-	-	-	-	-	

451,191 kg
451 metric ton

Annual Upstream Energy Consumption (MMBtu/month)

Site	Start Date	End Date	Task	SEFA Default Factor Diesel (MMBtu/ea)	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																	
	Jan-27	Mar-27	Excavation	0.017	143	136	157										
	Apr-27	Jun-27	Excavation/Exterior Work	0.017				99	94	99							
			Monthly Fuel Consumption (MMBtu/month)		143	136	157	99	94	99	-	-	-	-	-	-	

Total Energy Consumption
728 MMBtu

Annual Upstream CO2e Emissions (kg/month)

Site	Start Date	End Date	Task	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																
	Jan-27	Mar-27	Excavation	26,811	25,535	29,365										
	Apr-27	Jun-27	Excavation/Exterior Work				18,546	17,703	18,546							
			Monthly Emissions (kg/month)	26,811	25,535	29,365	18,546	17,703	18,546	-	-	-	-	-	-	
			Monthly Emissions (MT/month)	26.81	25.53	29.36	18.55	17.70	18.55	-	-	-	-	-	-	

136,507 kg
137 metric ton

Annual Direct NOx Emissions (lb/month)

Site	Start Date	End Date	Task	Annual NOx Factor (lb/day)	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																	
	Jan-27	Mar-27	Excavation	28.73241475	603	575	661										
	Apr-27	Jun-27	Excavation/Exterior Work	7.61301902				167	160	167							
			Monthly Emissions (lb/month)		603	575	661	167	160	167	-	-	-	-	-	-	
			Monthly Emissions (short ton/month)		0.30	0.29	0.33	0.08	0.08	0.08	-	-	-	-	-	-	

2,334 lb
1 short ton

Annual Direct SO2 Emissions (lb/month)

Site	Start Date	End Date	Task	Annual SO2 Factor (lb/day)	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																	
	Jan-27	Mar-27	Excavation	0.025274815	0.53	0.51	0.58										
	Apr-27	Jun-27	Excavation/Exterior Work	0.016118354				0.35	0.34	0.35							
			Monthly Emissions (lb/month)		0.53	0.51	0.58	0.35	0.34	0.35	0.00	0.00	0.00	0.00	0.00	0.00	
			Monthly Emissions (short ton/month)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

2.67 lb
0.00 short ton

Annual Direct PM10 Emissions (lb/month)

Site	Start Date	End Date	Task	Annual PM10 Factor (lb/day)	2027 Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28
Stevenson Commons B3																	
	Jan-27	Mar-27	Excavation	1.125669927	24	23	26										
	Apr-27	Jun-27	Excavation/Exterior Work	0.416742823				9	9	9							
			Monthly Emissions (lb/month)		24	23	26	9	9	9	-	-	-	-	-	-	
			Monthly Emissions (short ton/month)		0.01	0.01	0.01	0.00	0.00	0.00	-	-	-	-	-	-	

99 lb
0 short ton

CO2e Emissions Summary (metric ton)

	Monthly Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Annual Total
Equipment-Direct	89	84	97	61	59	61	0	0	0	0	0	0	451
Equipment-Indirect	27	26	29	19	18	19	0	0	0	0	0	0	137
Trucks	29	26	30	11	10	11	0	0	0	0	0	0	117
Truck - Upstream	9	8	9	3	3	3	0	0	0	0	0	0	36
Cars	1	1	1	1	1	1	0	0	0	0	0	0	7
Cars - Upstream	0	0	1	0	0	0	0	0	0	0	0	0	1
Materials													22
Waste													227
Total	155	145	167	96	91	96	0	0	0	0	0	0	1000

Stevenson Commons B3
Environmental Footprint Analysis
Imported Material Emissions

							Lookup ID 3	4	5	6	7	8	
Material	**SEFA Lookup**	**Quantity**	**Unit**	**Conversion**	**Quantity**	**Unit**	**Energy Usage (MMBtu)**	**GHG (lb CO2e)**	**NOx (lb)**	**SOx (lb)**	**PM (lb)**	**HAPs (lb)**	
Clean Fill	Sand	10,200	ton	2000	20,400,000	lb	506	48,960	367	92	53	6	
						Total	506	48,960	367	92	53	6	lb
								24.480	0.184	0.046	0.027	0.003	ton
								22,208					kg
								22					MT

SEFA Tool Material Table

		Lookup ID 3	4	5	6	7	8	
Construction Materials	**Unit**	**Energy Usage (MMBtu/unit)**	**GHG (lb CO2e/unit)**	**NOx (lb/unit)**	**SOx (lb/unit)**	**PM (lb/unit)**	**HAPs (lb/unit)**	
Aluminum, Rolled Sheet	lb	0.0633	9.15	0.0148	0.0283	0.0088	0.00102	
Asphalt, mastic	lb	0.0412	0.85	0.00271	0.00798	0.000766	0.00107	
Asphalt, paving-grade	lb	0.5	8.58	0.0299	0.0969	0.0091	0.0133	
Ethanol, Corn, 95%	lb	0.0318	-0.0199	0.00425	0.00303	0.000469	0.0000846	
Ethanol, Corn, 99.7%	lb	0.0324	0.0591	0.00431	0.0031	0.000472	0.000087	
Ethanol, Petroleum, 99.7%	lb	0.0205	1.25	0.00199	0.00214	0.000277	0.0000589	
Gravel/Sand Mix, 65% Gravel	lb	0.0000248	0.0024	0.000018	0.00000452	0.00000261	0.000000308	
Gravel/sand/clay	lb	0.000028	0.00335	0.0000165	0.000015	0.000002	2.05E-10	
HDPE	lb	0.0332	1.94	0.00325	0.00409	0.000439	0.0000641	
Photovoltaic system (installed)	W	0.0336	4.47	0.015	0.032	0.00063	0.0000029	
PVC	lb	0.0262	2.02	0.004	0.00274	0.000372	0.000375	
Portland cement, US average	lb	0.0139	1.34	0.00654	0.0104	0.00378	0.00097	
Ready-mixed concrete, 20 MPa	ft3	0.217	19.5	0.0975	0.154	0.057	0.0141	
Round Gravel	lb	0.0000248	0.0024	0.000018	0.00000452	0.00000261	0.000000308	
Sand	lb	0.0000248	0.0024	0.000018	0.00000452	0.00000261	0.000000308	
Stainless Steel	lb	0.0116	3.4	0.0075	0.012	0.0044	0.000144	
Steel	lb	0.0044	1.1	0.0014	0.0017	0.00056	0.000067	
Other refined construction materials	lb	0.01885	2.115	0.0040375	0.0051325	0.00144275	0.000162525	
Other unrefined construction materials	lb	0.000028	0.00335	0.0000165	0.000015	0.000002	2.05E-10	
Cheese Whey	lbs	0.0025	0.031	0.000062	0.000033	0.000002	NP	
Emulsified vegetable oil	lbs	0.0077	3.44	0.0066	0.0019	0.000033	NP	
Granular activated carbon, primary	lbs	0.0356	4.82	0.0793	0.128	0.000987	0.000657	
Granular activated carbon, regenerated	lbs	0.00873	1.7	0.00733	0.0129	0.000886	0.000671	
Hydrogen Peroxide, 50% in H2O	lbs	0.00979	1.19	0.00142	0.0024	0.000308	0.0000629	
Iron (II) Sulfate	lbs	0.00147	0.167	0.000316	0.000589	0.000103	0.000023	
Lime, Hydrated, Packed	lbs	0.00206	0.762	0.000513	0.000358	0.00013	0.00000657	
Molasses	lbs	0.0044	0.48	0.0011	0.00024	0.0000041	NP	
Phosphoric Acid, 70% in H2O	lbs	0.0067	0.882	0.00282	0.0294	0.00171	0.000163	
Potassium Permanganate	lbs	0.00981	1.16	0.00234	0.0032	0.000422	0.000122	
Sodium Hydroxide, 50% in H2O	lbs	0.00977	1.09	0.00194	0.00352	0.000403	0.000129	
Other Treatment Chemicals & Materials	lbs	0.015	1.67	0.003	0.0065	0.00061	0.000016	

Stevenson Commons B3
Environmental Footprint Analysis
Waste Emissions

				Lookup ID 3	4	5	6	7	8	
Material	**SEFA Lookup**	**Quantity**	**Unit**	**Energy Usage (MMBtu)**	**GHG (lb CO2e)**	**NOx (lb)**	**SOx (lb)**	**PM (lb)**	**HAPs (lb)**	
Non-Hazardous Soil	Off-site non-hazardous waste landfill	19,982	ton	3,197	499,550	2,797	1,499	7,993	28	
Hazardous Soil	Off-site hazardous waste landfill	50	ton	9	1,375	8	4	22	0	
			Total	3,206	500,925	2,805	1,503	8,015	28	lb
					250.463	1.403	0.751	4.007	0.014	ton
					227,216					kg
					227					MT

SEFA Tool Waste Table

		Lookup ID 3	4	5	6	7	8
Waste Treatment	**Unit**	**Energy Usage (MMBtu/unit)**	**GHG (lb CO2e/unit)**	**NOx (lb/unit)**	**SOx (lb/unit)**	**PM (lb/unit)**	**HAPs (lb/unit)**
Hazardous waste incineration	lb	0.00609	2.43	0.0016	0.00167	0.000209	0.000087
Off-site waste water treatment (POTW)	gal x 1000	0.015	4.4	0.016	0.015		
Off-site non-hazardous waste landfill	ton	0.16	25	0.14	0.075	0.4	0.0014
Off-site hazardous waste landfill	ton	0.18	27.5	0.154	0.0825	0.44	0.00154
Off-site Laboratory Analysis - Other	sample	0.058071029	6.85343842	0.131401957	0.303875767	0.045569824	0.033016529
Off-site Laboratory Analysis - Metals	sample	0.212	27.4693	0.6423	1.5072	0.2264	0.1643
Off-site Laboratory Analysis - Mercury	sample	0.073171472	9.325458	0.2127439	0.4982396	0.07473594	0.05423316
Off-site Laboratory Analysis - Inorganic Anions	sample	0.007402451	0.6459478	0.006768122	0.014792866	0.002202395	0.001554243
Off-site Laboratory Analysis - Alkalinity	sample	0.017439833	1.3381922	0.007010628	0.013249646	0.001940048	0.001283077
Off-site Laboratory Analysis - Perchlorate	sample	0.023884988	1.8717054	0.007980652	0.014153532	0.002054687	0.001287486
Off-site Laboratory Analysis - Nitrogen/Nitrate	sample	0.033647504	4.29897	0.09545918	0.2226646	0.03350992	0.0242506
Off-site Laboratory Analysis - Sulfate	sample	0.014122473	1.4726728	0.007980652	0.013602382	0.001979731	0.001201507
Off-site Laboratory Analysis - PCBs	sample	0.0512769	5.224902	0.08333388	0.19047744	0.02843934	0.021208252
Off-site Laboratory Analysis - VOCs	sample	0.076204487	9.016814	0.10449804	0.2270738	0.03395084	0.02358922
Off-site Laboratory Analysis - SVOCs	sample	0.071560184	7.870422	0.14594452	0.3373038	0.05048534	0.03725774

Stevenson Commons B3
Environmental Footprint Analysis
Grid Electricity Emissions

					2026												2027												
Site	**Start Date**	**End Date**	**Eletrical Equipment**	**Daily Energy Demand (kWh/day)**	Jan-26	Feb-26	Mar-26	Apr-26	May-26	Jun-26	Jul-26	Aug-26	Sep-26	Oct-26	Nov-26	Dec-26	Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28	
Stevenson Commons B3																													
	1/1/2027	6/30/2027	Mobile Office	50													1,050	1,000	1,150	1,100	1,050	1,100								

Total Demand

				Scope 1 Energy Consumption (kWh)	-	-	-	-	-	-	-	-	-	-	-	-	**1,050**	**1,000**	**1,150**	**1,100**	**1,050**	**1,100**	-	-	-	-	-	-		6,450	kWh
				Scope 1 Energy Consumption (MMBtu)	-	-	-	-	-	-	-	-	-	-	-	-	**4**	**3**	**4**	**4**	**4**	**4**	-	-	-	-	-	-		22	MMBtu
				eGrid MMBtu/MWh 7.35																										
				Scope 2 Energy Consumption (MMBtu)	-	-	-	-	-	-	-	-	-	-	-	-	**4**	**4**	**5**	**4**	**4**	**4**	-	-	-	-	-	-		25	MMBtu
				SEFA Transmission Loss % 10%																										
				Grid Baseload Emissions (g/kWh) 393.19																										
				Scope 3 Loss Energy Consumption (MMBtu)	-	-	-	-	-	-	-	-	-	-	-	-	**0.8**	**0.7**	**0.8**	**0.8**	**0.8**	**0.8**	-	-	-	-	-	-		5	MMBtu
				Scope 3 Loss Emissions (kg)	-	-	-	-	-	-	-	-	-	-	-	-	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	-	-	-	-	-	-		1	kg
				Scope 3 Loss Emissions (MT)	-	-	-	-	-	-	-	-	-	-	-	-	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	-	-	-	-	-	-		0.001	MT

					2026												2027												
Site	**Start Date**	**End Date**	**Eletrical Equipment**	**Scope 2 Grid Baseload Emissions (g/kWh)**	Jan-26	Feb-26	Mar-26	Apr-26	May-26	Jun-26	Jul-26	Aug-26	Sep-26	Oct-26	Nov-26	Dec-26	Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28	
Stevenson Commons B3																													
	1/1/2027	6/30/2027	Mobile Office	393.194278													412,854	393,194	452,173	432,514	412,854	432,514								

Total Emissions

					-	-	-	-	-	-	-	-	-	-	-	-	**412,854**	**393,194**	**452,173**	**432,514**	**412,854**	**432,514**	-	-	-	-	-	-		2,536,103	g
					-	-	-	-	-	-	-	-	-	-	-	-	413	393	452	433	413	433	-	-	-	-	-	-		2,536	kg
					-	-	-	-	-	-	-	-	-	-	-	-	0.4	0.4	0.5	0.4	0.4	0.4	-	-	-	-	-	-		3	MT

Scope 3 Upstream Energy Consumption

Natural Gas Generation - Upstream

eGrid Resource Mix 98%
Energy Factor (SEFA Default) (MMBtu/MWh) 1.6318
GHG Emission Factor (SEFA Default) (lb/MWh) 270

				Monthly Energy Consumption (MMBtu/month)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.68	1.60	1.84	1.76	1.68	1.76	0.00	0.00	0.00	0.00	0.00	0.00		10.34	MMBtu
				Monthly GHG Emissions (kg/month)	-	-	-	-	-	-	-	-	-	-	-	-	126	120	138	132	126	132	-	-	-	-	-	-		775.71	kg
				Monthly GHG Emissions (MT/month)	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1	0.1	0.1	-	-	-	-	-	-		0.78	MT

Oil Generation - Upstream

eGrid Resource Mix 1%
Energy Factor (SEFA Default) (MMBtu/MWh) 2.2954
GHG Emission Factor (SEFA Default) (lb/MWh) 270

				Monthly Energy Consumption (MMBtu/month)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00		0.07	MMBtu
				Monthly GHG Emissions (kg/month)	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1	-	-	-	-	-	-		3.95	kg
				Monthly GHG Emissions (MT/month)	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		0.00	MT

Stevenson Commons B3
Environmental Footprint Analysis
Water Emissions

						Lookup ID 2	3	4	5	6	7	8	
Water Source	**Quantity**	**Unit**	**Conversion**	**Quantity**	**Unit**		**Energy Usage (MMBtu)**	**GHG (lb CO2e)**	**NOx (lb)**	**SOx (lb)**	**PM (lb)**	**HAPs (lb)**	
NYC Public Water	0	gal	0.001	0.00	gal x 1000		0	0	0	0	0	0	
						Total	0	0	0	0	0	0	lb
								0.000	0.000	0.000	0.000	0.000	ton
								0					kg
								0					MT

Water Usage Emission Factors

		Lookup ID 3	4	5	6	7	8
Water Source Type	**Unit**	**Energy Usage (MMBtu/unit)**	**GHG (lb CO2e/unit)**	**NOx (lb/unit)**	**SOx (lb/unit)**	**PM (lb/unit)**	**HAPs (lb/unit)**
Public Water (SEFA Default)	gal x 1000	0.0092	5	0.0097	0.0059	0.016	0.000015
Other	sample	0.071560184	7.870422	0.14594452	0.3373038	0.05048534	0.03725774

Stevenson Commons B3
Environmental Footprint Analysis
Emission Factors

BSFC Emission Factors (g/hp-hr)

ID	Equipment	Engine	SCC Code	HPmin	HPmax	HP	Equipment	Load	2027
	Dsl - Excavators	2270002036	Diesel	301	600	345	Excavator	59%	168.28
	Dsl - Excavators	2270002036	Diesel	17	25	20.4	Mini Excavator	59%	186.88
	Dsl - Bore/Drill Rigs	2270002033	Diesel	751	1000	755	Pile Rig	43%	166.47
	Dsl - Bore/Drill Rigs	2270002033	Diesel	101	175	120	Drill Rig	43%	166.47
	Dsl - Forklifts	2270003020	Diesel	51	75	55	Forklift	59%	186.88
	Dsl - Skid Steer Loaders	2270002072	Diesel	51	75	60	Skid steer loader (	21%	218.18
	Dsl - Rollers	2270002015	Diesel	101	175	130	Compactor	59%	168.28
	Dsl - Generator Sets	2270006005	Diesel	51	75	50	Generator	43%	185.07

NOx Emission Factors (g/hp-hr)

ID	Equipment	Engine	SCC Code	HPmin	HPmax	HP	Equipment	Load	2027
	Dsl - Excavators	2270002036	Diesel	301	600	345	Excavator	59%	0.20367
	Dsl - Excavators	2270002036	Diesel	17	25	20.4	Mini Excavator	59%	3.76428
	Dsl - Bore/Drill Rigs	2270002033	Diesel	751	1000	755	Pile Rig	43%	3.68843
	Dsl - Bore/Drill Rigs	2270002033	Diesel	101	175	120	Drill Rig	43%	1.75265
	Dsl - Forklifts	2270003020	Diesel	51	75	55	Forklift	59%	2.54496
	Dsl - Skid Steer Loaders	2270002072	Diesel	51	75	60	Skid steer loader (	21%	3.81948
	Dsl - Rollers	2270002015	Diesel	101	175	130	Compactor	59%	0.24131
	Dsl - Generator Sets	2270006005	Diesel	51	75	50	Generator	43%	2.96624

PM10 Emission Factors (g/hp-hr)

ID	Equipment	Engine	SCC Code	HPmin	HPmax	HP	Equipment	Load	2027
	Dsl - Excavators	2270002036	Diesel	301	600	345	Excavator	59%	0.01533
	Dsl - Excavators	2270002036	Diesel	17	25	20.4	Mini Excavator	59%	0.17424
	Dsl - Bore/Drill Rigs	2270002033	Diesel	751	1000	755	Pile Rig	43%	0.12381
	Dsl - Bore/Drill Rigs	2270002033	Diesel	101	175	120	Drill Rig	43%	0.11739
	Dsl - Forklifts	2270003020	Diesel	51	75	55	Forklift	59%	0.01742
	Dsl - Skid Steer Loaders	2270002072	Diesel	51	75	60	Skid steer loader (	21%	0.39320
	Dsl - Rollers	2270002015	Diesel	101	175	130	Compactor	59%	0.02114
	Dsl - Generator Sets	2270006005	Diesel	51	75	50	Generator	43%	0.09744

SO2 Emission Factors (g/hp-hr)

ID	Equipment	Engine	SCC Code	HPmin	HPmax	HP	Equipment	Load	2027
	Dsl - Excavators	2270002036	Diesel	301	600	345	Excavator	59%	0.00143
	Dsl - Excavators	2270002036	Diesel	17	25	20.4	Mini Excavator	59%	0.00219
	Dsl - Bore/Drill Rigs	2270002033	Diesel	751	1000	755	Pile Rig	43%	0.00160
	Dsl - Bore/Drill Rigs	2270002033	Diesel	101	175	120	Drill Rig	43%	0.00158
	Dsl - Forklifts	2270003020	Diesel	51	75	55	Forklift	59%	0.00157
	Dsl - Skid Steer Loaders	2270002072	Diesel	51	75	60	Skid steer loader (	21%	0.00207
	Dsl - Rollers	2270002015	Diesel	101	175	130	Compactor	59%	0.00143
	Dsl - Generator Sets	2270006005	Diesel	51	75	50	Generator	43%	0.00169

Fuel Properties

Densities	kg/L	g/gal	lb/gal
Diesel	0.84	3,179.75	7.01
Gasoline	0.74	2,801.21	6.18
LPG	0.54	2,044.12	4.51

BSFC Emission Factors (gal/hp-hr)

ID	Equipment	Engine	SCC Code	HPmin	HPmax	HP	Equipment	Load	2027
	Dsl - Excavators	2270002036	Diesel	301	600	345	Excavator	59%	0.0529
	Dsl - Excavators	2270002036	Diesel	17	25	20.4	Mini Excavator	59%	0.0588
	Dsl - Bore/Drill Rigs	2270002033	Diesel	751	1000	755	Pile Rig	43%	0.0524
	Dsl - Bore/Drill Rigs	2270002033	Diesel	101	175	120	Drill Rig	43%	0.0524
	Dsl - Forklifts	2270003020	Diesel	51	75	55	Forklift	59%	0.0588
	Dsl - Skid Steer Loaders	2270002072	Diesel	51	75	60	Skid steer loader (	21%	0.0686
	Dsl - Rollers	2270002015	Diesel	101	175	130	Compactor	59%	0.0529
	Dsl - Generator Sets	2270006005	Diesel	51	75	50	Generator	43%	0.0582

EPA Fuel Emission Factors

Diesel

GWP-100	GWP-20	kg/gal	GHG	GWP-20 Equivalent Emissions	GWP-100 Equivalent Emissions	SEFA Default
1	1	10.21	CO2	10.54 kg CO2e/gal	10.48738 kg CO2e/gal	10.20582833 kg CO2e/gal
28	84	0.00101	CH4	23.24333476 lb CO2e/gal	23.12071366 lb CO2e/gal	22.5 lb CO2e/gal
265	264	0.00094	N2O			

https://www.epa.gov/system/files/documents/2021-01/ghg-emission-factors-hub-2021.pdf

GWP-20 Equivalent Emissions with Upstream	
13.7327628	kg CO2e/gal
30.27555753	lb CO2e/gal

Gasoline

GWP-100	GWP-20	kg/gal	GHG	GWP-20 Equivalent Emissions	GWP-100 Equivalent Emissions	SEFA Default
1	1	8.78	CO2	8.83 kg CO2e/gal	8.81184 kg CO2e/gal	8.890410452 kg CO2e/gal
28	84	0.00038	CH4	19.47351852 lb CO2e/gal	19.42678052 lb CO2e/gal	19.6 lb CO2e/gal
265	264	0.00008	N2O			

https://www.epa.gov/system/files/documents/2021-01/ghg-emission-factors-hub-2021.pdf

MOVES TRUCKS FACTORS	NOx	SO2	PM10	CO2e	
2027 - Truck Idling (g/hr)	46.36	0.0257	0.292	8801.65	
2027 - Truck Cruising - 5mph (g/veh)	1.47	0.0010	0.129	310.62	
2027 - Truck Cruising - 25mph (g/veh	5.01	0.0059	1.130	1877.91	
2027 - Auto Cruising - 25mph (g/mi)	0.10	0.0019	1.263	295.90	

Distance Traveled On-site: approximately 0.1 mile per truck

0.1 mile per truck

Truck Mileage	
10487.38	g/gal
1877.9054	g/mi
5.584615712	mpg
0.17906335	gal per mi
0.024567492	MMBtu/mi

Car Mileage	
8811.84	g/gal
295.8974508	g/mi
29.78004703	mpg
0.033579531	gal per mi
0.00418401	MMBtu/mi

HHV

Diesel	0.1372	mmBtu per gallon
Gasoline	0.1246	mmBtu per gallon

NYSDEC Upstream Emission Factor

Table A1. 2023 Emission Rates for Upstream Out-of-State Sources (g/mmbtu)

	Diesel Fuel	
CH4	115.000	g/MMBtu
N2O	0.250	g/MMBtu
CO2	13.542	g/MMBtu
CO2e	23.249	g/MMBtu

	Diesel Fuel	
CH4	15.778	g/gal
N2O	0.034	g/gal
CO2	1.858	g/gal
CO2e	3.190	g/gal

	Gasoline Fuel	
CH4	122.000	g/MMBtu
N2O	0.320	g/MMBtu
CO2	18.276	g/MMBtu
CO2e	28.570	g/MMBtu

	Gasoline Fuel	
CH4	15.201	g/gal
N2O	0.040	g/gal
CO2	2.277	g/gal
CO2e	3.560	g/gal

NYSDEC, Appendix A of the 2025 Statewide GHG Emission Report. December 2025

eGRID Baseload Electricity Factor

Data Year	eGRID subregion acronym	eGRID subregion name	eGRID subregion total annual heat input (MMBtu)	eGRID subregion annual net generation (MWh)	Unit	eGRID subregion annual CO2 total output emission rate	eGRID subregion annual CH4 total output emission rate	eGRID subregion annual N2O total output emission rate	eGRID subregion annual CO2 equivalent total output emission rate (GWP-100)	eGRID subregion annual CO2 equivalent total output emission rate (GWP-20)
2023	NYCW	NPCC NYC/Westchester	254,301,464	34,602,268	lb/MWh	864.469	0.022	0.002	885.744	868.845
					g/kWh	392.117	0.010	0.001	392.695	**393.194**

	NPCC NYC/Westchester
	Resource Mix
eGRID subregion coal generation	0.000%
eGRID subregion oil generation	0.500%
eGRID subregion gas generation	98.200%
eGRID subregion nuclear generation	0.000%
eGRID subregion hydro generation	0.000%
eGRID subregion biomass generation	0.500%
eGRID subregion wind generation	0.000%
eGRID subregion solar generation	0.100%
eGRID subregion geothermal generation	0.000%
eGRID subregion other fossil generation	0.700%
eGRID subregion other unknown/ purchased fuel generation	0.000%
	100.0%

Stevenson Commons B3
Environmental Footprint Analysis
SEFA Equipment Table

Table 3. Equipment Type and Representative Horsepower
Asphalt paver (150 HP)
Backhoe (100 HP)
Concrete paving machine (200 HP)
Dozer - large (200 HP)
Dozer - small (100 HP)
Drilling - direct push (60 HP)
Drilling - large rig (500 HP)
Drilling - medium rig (150 HP)
Dump truck (400 HP)
Excavator - large (250 HP)
Excavator - medium (175 HP)
Excavator/hoe - small (75 HP)
Generator - HP varies
Grader (175 HP)
Grout pump (20 HP)
Hydroseeder (20 HP)
Integrated tool carrier (100 HP)
Loader (200 HP)
Loader - small (75 HP)
Mobile laboratory (25 HP)
Mowers (5 HP)
Other - HP varies
Riding trencher (55 HP)
Roller (100 HP)
Rotary-screw air compressor - 250 cfm (60 HP)
Skid-steer - small (60 HP)
Telescopic handler (60 HP)
Tractor mower (25 HP)
Water truck (400 HP)

APPENDIX K
CLIMATE CHANGE VULNERABILITY ASSESSMENT

440 Park Avenue South, 7th Floor
New York, NY 10016
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www.akrf.com

Marlen Salazar
New York State Department of Environmental Conservation
Division of Environmental Remediation
One Hunters Point Plaza
Long Island City, NY, 11101

09.30.2026

Re: Climate Vulnerability Analysis
1850 Lafayette Avenue, Bronx, NY
NYSDEC BCP Site No. C203189

Dear Ms. Salazar:

This Climate Vulnerability Analysis (CVA) has been prepared by AKRF, Inc. (AKRF) on behalf of Stevenson B3 LLC (the "Volunteer") for the Site [New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) Site No. C203189] located at the above-referenced location, also identified as Borough of Bronx Tax Block 3600, portions of Lot 4, Lot 15, and Lot 25 on the New York City Tax Map (the "Site"). As further detailed in the November 2023 NYSDEC Memorandum, DER-31: Green and Sustainable Remediation Initiative, beginning January 1, 2024, all remedial work plans and reports submitted to NYSDEC pursuant to a remedial program under Part 375 are required to address green and sustainable remediation (GSR) in accordance with DER-31. The EFA was preemptively incorporated into the Remedial Action Work Plan (RAWP) and into the NYSDEC Decision Document as a requirement for the remedy alternatives.

This CVA focuses on the risks associated with the construction and operation of the primary components of the remedy alternatives: excavation and disposal of contaminated soil and import of backfill materials.

POLICY CONTEXT

The New York State Sea Level Rise Task Force was created to assess potential impacts on the state's coastlines from rising seas and increased storm surge. The Task Force prepared a report of its findings and recommendations including protective and adaptive measures.[1] The recommendations are to: provide more protective standards for coastal development, wetlands protection, shoreline armoring, and post-storm recovery; implement adaptive measures for habitats; integrate climate change adaptation strategies into state environmental plans; and amend local and state regulations or statutes to respond to climate change. The Task Force also recommended the formal adoption of projections of sea-level rise.

The New York State Climate Action Plan Interim Report identified a number of policy options and actions that could increase the climate change resilience of natural systems, the built environment, and key economic sectors—focusing on agriculture, vulnerable coastal zones, ecosystems, water resources, energy infrastructure, public health, telecommunications and information infrastructure, and transportation.[2] New York State's Community Risk and Resiliency Act (CRRA)[3] requires that applicants for certain State programs demonstrate that they have taken into account future physical climate risks from storm surges, sea-level rise and flooding, and required the NYSDEC to establish official State sea-level rise projections. In February 2017, DEC adopted a rule (6 NYCRR Part 490) defining the existing projections for use. These

[1] New York State Sea Level Rise Task Force. *Report to the Legislature*. December 2010.

[2] NYSERDA. New York State Climate Action Plan Interim Report. November 2010.

[3] *Community Risk and Resiliency Act.* Chapter 355, NY Laws of 2014. April 9, 2013. Signed September 22, 2014.

projections provide the basis for State adaptation decisions and are available for use by all decision makers. CRRA applies to specific State permitting, funding and regulatory decisions, including: smart growth assessments; funding for wastewater treatment plants; siting of hazardous waste facilities; design and construction of petroleum and chemical bulk storage facilities; oil and gas drilling; and State acquisition of open space. As required under the CRRA, DEC published implementation guidance and reference to climate change projections specific to New York State in August 2021.

In New York City, the Climate Change Adaptation Task Force is tasked with fostering collaboration and cooperation between public and private organizations working to build the resilience of the city's critical infrastructure against rising seas, higher temperatures, and changing precipitation patterns. The Task Force is composed of over 57 New York City and State agencies, public authorities, and companies that operate, regulate, or maintain critical infrastructure in New York City. Led by the Mayor's Office of Climate and Environmental Justice, the Task Force works together to assess risks, prioritize strategies, and examine how standards and regulations may need to be adjusted in response to a changing climate.

To assist the Task Force, the New York City Panel on Climate Change (NPCC) has prepared a set of climate change projections for the New York City region[4], which was subsequently updated,[5,6] and has suggested approaches to create an effective adaptation program for critical infrastructure. The NPCC includes leading climatologists, sea-level rise specialists, adaptation experts, and engineers, as well as representatives from the insurance and legal sectors. The climate change projections include a summary of baseline and projected climate conditions throughout the 21st century including heat waves and cold events, intense precipitation and droughts, sea-level rise, and coastal storm levels and frequency.

Temperature & Urban Heat Island

The probability that New York City would experience an increase in air temperatures and relative humidity (characterized as the heat index of a given location) is considered by NPCC to be "very likely." NPCC projected that temperatures are likely to increase by up to 7.1 degrees Fahrenheit by the 2050s and that New York City would experience up to 9 heat waves per year with an average duration up to 6 days. By the end of the century, temperatures are likely to increase by up to 13.5 degrees Fahrenheit with up to 10 heat waves per year with an average duration of 10 days.

Precipitation

NPCC projected that precipitation levels are likely to increase by up to 13 percent compared to the 1971–2000 base period by the 2050s and up to 25 percent by the end of the century with up to 5 rainfall events projected to result in 2 inches or more of precipitation.

Sea Level Rise

NPCC has projected that sea levels are likely to increase by up to 23 inches by the 2050s and up to 65 inches by the end of the century (more detailed ranges and timescales are available). In general, the probability of increased sea levels is characterized by NPCC as "extremely likely," but there is uncertainty regarding the probability the various levels projected and timescale. Intense hurricanes are characterized by NPCC as "more likely than not" to increase in intensity and/or frequency, and the likelihood of changes in other large storms ("Nor'easters") are characterized by NPCC as unknown. Therefore, the projections for

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[4] New York City Panel on Climate Change. *Climate Change Adaptation in New York City: Building a Risk Management Response*. Annals of the New York Academy of Sciences, May 2010.

[5] Braneon, C., Ortiz, L., Bader, D., Devineni, N., Orton, P., Rosenzweig, B., McPhearson, T., Smalls-Mantey, L., Gornitz, V., Mayo, T., Kadam, S., Sheerazi, H., Glenn, E., Yoon, L., Derras-Chouk, A., Towers, J., Leichenko, R., Balk, D., Marcotullio, P., & Horton, R. (2024). *NYC climate risk information 2022: Observations and projections*. Interim Report for Public Release https://climateassessment.nyc

[6] Balk, D., Braneon, C., Leichenko, R., Moss, R., Towers, J. (2024). *Climate Risk and Equity: Advancing Knowledge Toward a Sustainable Future: Introduction*. New York City Panel on Climate Change. https://climateassessment.nyc

future 1-in-100 coastal storm surge levels for New York City include only sea-level rise at this time, and do not account for changes in storm frequency.

CLIMATE RISKS

Temperature & Urban Heat Island

Existing Conditions

The Site is identified as being vulnerable to extreme heat by the New York City Department of Health (DOH), with a Heat Vulnerability Index (HVI) of 4 out of 5—a high level of risk.[7] The proposed redevelopment plan for the Site entails construction of a 9- to 13-story mixed-use residential/community facility building, with a footprint of approximately 33,850 square feet (sf) and approximately 126,127 gross square feet (gsf), on the central-eastern portion of the Site. The Site is bounded to the north by parking lots and tennis courts associated with the existing Stevenson Commons apartment complex, followed by Lafayette Avenue; to the east by the existing Stevenson Commons apartment complex, followed by White Plains Road; to the south by the Stevenson Commons Building B4 and B5 project sites, followed by Seward Avenue; and to the west by Thieriot Avenue, followed by residential buildings. The surrounding area is comprised of predominantly residential and commercial uses.

Pugsley Creek Park and Sound View Park are both roughly a half mile from the Site. Numerous other natural resources are easily accessible from the Site via public transportation.

Future Conditions

According to projections for increases in annual mean temperatures, the Site is anticipated to experience increased temperatures between 4.2 degrees Fahrenheit and 13.5 degrees Fahrenheit by the end of the century.[8, 9] Additionally, by the 2080s NPCC projects that the number of days with temperatures above 90 degrees Fahrenheit would increase by 91 days (or 69 days above 95 degrees Fahrenheit). By the end of the century, NPCC projects that New York City would likely experience up to 10 heat waves per year with an average duration of 10 days.

Climate Vulnerability of the Remedy Alternatives

The remedy alternatives would not be affected by the projected increase in temperature or urban heat island effect. Therefore, no further assessment of heat impacts is warranted.

Precipitation

Existing Conditions

Precipitation in New York City was observed to have increased by a rate of 0.76 inch per decade with an average storm rainfall intensity of approximately 2 inches in one hour and a 10 percent chance of occurrence per year. New York City Department of Environmental Protection (NYCDEP) has identified that the Site does not experience nuisance flooding (with flood levels greater than 4 inches) or deep and continuous flooding (with flood levels greater than 1 foot).

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[7] NYCDOH. *Interactive Heat Vulnerability Index*. https://a816-dohbesp.nyc.gov/IndicatorPublic/beta/key-topics/climatehealth/hvi/

[8] NYSERDA. Climate Change in New York State. Updating the 2011 ClimAID Climate Risk Information Supplement to NYSERDA Report 11-18 (Responding to Climate Change in New York State). September 2014.

[9] Braneon, C., Ortiz, L., Bader, D., Devineni, N., Orton, P., Rosenzweig, B., McPhearson, T., Smalls-Mantey, L., Gornitz, V., Mayo, T., Kadam, S., Sheerazi, H., Glenn, E., Yoon, L., Derras-Chouk, A., Towers, J., Leichenko, R., Balk, D., Marcotullio, P., & Horton, R. (2024). *NYC climate risk information 2022: Observations and projections*. Interim Report for Public Release https://climateassessment.nyc

Future Conditions

Annual precipitation levels are anticipated to increase in New York City up to 14 percent (approximately 56.7 inches per year) by the 2050s and up to 30 percent (approximately 64.6 inches per year) by the end of the century.[10]

Climate Vulnerability of the Remedy Alternatives

As described in the draft Remedial Action Work Plan (RAWP), erosion and sedimentation control measures will be implemented for the selected remedy during construction activities at the Site. The RAWP included requirements regarding stormwater management, erosion and sediment control, and construction practices to minimize stormwater contamination. Since remediation will be completed in approximately 12 months for Alternative 2 and 6 months for Alternative 3, these measures are resilient to the current rainfall levels of approximately 2 inches in one hour.

Following completion, the remedy alternatives are not likely to be affected by increased future projected precipitation levels. Therefore, no further assessment of stormwater flooding impacts is warranted.

Sea Level Rise

Existing Conditions

According to current flood hazard projections,[11] the Site is not within the current 1-in-100 coastal storm surge levels or current 1-in-500 coastal storm surge levels. The nearest 1-in-500 flood zone is located approximately 0.3 mile southeast of the Site.

Note that these flood areas and elevations are likely conservatively high and may be revised in the future. On October 17, 2016, the Federal Emergency Management Agency (FEMA) and New York City Mayor de Blasio announced plans to revise the FEMA flood maps based on a 2015 New York City appeal of FEMA's flood risk calculations for New York City and the region. Therefore, it is possible that the revised FEMA current flood elevations would be lower, and the resulting future flood elevations, including sea-level rise, may also be lower than those presented here.

Future Conditions

According to NPCC data (under the NPCC high-end estimate), by the 2050s, the 1-in-100 flood levels could reach 23 inches higher due to sea-level rise. By the end of the century, the 1-in-100 flood levels could reach 65 inches higher.

Climate Vulnerability of the Remedy Alternatives

The completed remedy would not be affected by projected increases in sea level rise. Therefore, no further assessment of coastal flooding impacts is warranted.

[10] As noted by the NPCC, the greatest increases in precipitation are projected to occur during the winter months with smaller increased generally projected for the summer and fall seasons. However, NPCC projects that some reductions in mean precipitation is anticipated under the low-end scenario by 2100, with the greatest decreases projected for the summer and fall seasons.

[11] FEMA. *Preliminary Flood Insurance Rate Map*. Panel 3604970103F. Release Date: 9/5/2007.

CONCLUSIONS

Based on the review of potential flooding (from both sea level rise and increased precipitation) and heat impacts, the remedy alternatives are resilient to existing and future climate risks.

If you have any questions or require additional information, please contact me at (646) 388-9846 or Tim Larigan at (646) 388-9508.

Sincerely,
AKRF, Inc.



Kevin Edwards
Senior Technical Director

Climate Screening Checklist

Background Information

- Project Manager: Marlen Salazar, NYSDEC
- Site Name: Stevenson Commons B3
- Site Number: C203189
- Site Location: 1850 Lafayette Avenue, Bronx, NY
- Site Elevation (average above sea level): 16 ft above mean sea level
- ClimAID Region (Responding Climate Change in New York State (ClimAID) - NYSERDA): Region 4
- Remedial Stage/site classification: Remedial Action

- Contamination - Media Impacted/ Contaminants of Concern:
  SOIL - The primary Contaminants of Concern at the Site include PAHs, PCBs, pesticides, and metals (i.e., lead, arsenic, barium and mercury) detected in soil at concentrations above their respective NYSDEC UUSCOs and/or RRSCOs.
- Proposed/Current Remedy:
  DUAL TRACK 4/TRACK 2 CLEANUP - excavation of contaminated soil/fill to a min. of 2 feet bgs across the majority of the Site to attain a Track 4 cleanup; and in the upper 10 ft, plus an additional 900-sf area between 10-15 ft bgs, within the proposed new building cellar footprint to attain a Track 2 cleanup
- What is the predicted timeframe of the remedy and its components?
  Approximately 6 months
- Is the site in a 0.5-mile radius to any sensitive receptors? (e.g. wetlands, waterbodies, residential properties, schools, drinking water supplies, etc.) Did the Fish and Wildlife Resource Impact Analysis identify any ecological receptors of concern?
  Yes, multiple sensitive receptors, including schools and daycare centers were identified within 0.5-miles of the site. The FWRIA did not identify ecological receptors of concern.
- Have there been any climate related incidents or precautions made around the area?
  No.

Is the site located in within a 0.5-mile radius from a disadvantaged community (DAC) (Use DECinfolocator: DECinfo Locator (ny.gov))?

☒ Yes ☐ No

If the site is in a DAC, will climate impacts be magnified? (E.g. sites located in areas with less reliable infrastructure may experience more frequent service interruptions and be more susceptible to climate related events.) If yes, list how and why (Use: DAC).

☐ Yes ☒ No

Should thresholds of concern be lowered to account for magnification of impacts? If yes, indicate how lower thresholds will be used in the screening.

☐ Yes ☒ No

Climate Screening Table*

The Remedial Party is responsible for attaching sufficient justification of its determinations based on an engineering evaluation considering site specific conditions and data from sources listed under Potential Data Sources below, or other sources as approved by DEC

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	Y	No appreciable change in the 6 or 12 months of remediation	N	Y
Temperature[2] (Extreme Heat or Cold Weather Impacts)	Y	No appreciable change in the 6 or 12 months of remediation	N	Y
Sea level/water level rise	N	N/A	N/A	N/A
Flooding	N	N/A	N/A	N/A
Storm Surge	N	N/A	N/A	N/A
Wildfire- Air Quality	Y	No appreciable change in the 6 or 12 months of remediation	N	Y
Drought	N	N/A	N/A	N/A
Storm Severity	N	N/A	N/A	N/A
Landslides	N	N/A	N/A	N/A
Other Hazards:				

* Links to potential data sources can be found on the following page

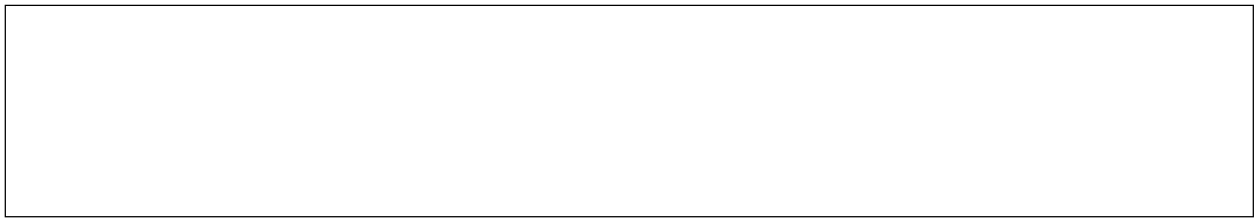
[1] If the first column is N → The rest of the columns will be N/A, the hazard is not applicable to the site.

[2] Extreme Heat: periods of three or more days above 90°F- Extreme Cold: Individual days with minimum temperatures at or below 32°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.

Required Next Steps (If no further action is required, provide justification acceptable to DEC):



Appendix A- Photo-documentation of engineering controls (SVE systems, SSDs, cover system, etc.) described above

Potential Data Sources (not an exhaustive list)- from https://www.epa.gov/superfund/remedy-resilience-vulnerability-assessment

NYSERDA ClimAID report- https://www.nyserda.ny.gov/About/Publications/Energy-Analysis-Reports-and-Studies/Environmental-Research-and-Development-Technical-Reports/Response-to-Climate-Change-in-New-York

FEMA- https://www.fema.gov/flood-maps/national-flood-hazard-layer

Global Earthquake Model- https://maps.openquake.org/map/global-seismic-hazard-map/#6/43.205/-77.388

NOAA- https://www.nhc.noaa.gov/nationalsurge/#data

Department of Agriculture Forest Service https://wildfirerisk.org/

EPA https://toolkit.climate.gov/tool/climate-resilience-evaluation-awareness-tool-creat

EPA https://www.epa.gov/water-research/national-stormwater-calculator

National Integrated Drought Information System https://www.drought.gov/

National Interagency Coordination Center https://www.nifc.gov/fire-information/maps

National Oceanic and Atmospheric Administration Coastal Services Digital Coast Home

- Resources to help communities assess coastal hazards, such as the https://coast.noaa.gov/digitalcoast/tools/slr.html for visualizing community-level impacts of flooding or sea level rise and https://coast.noaa.gov/digitalcoast/training/intro-lidar.html

National Oceanic and Atmospheric Administration https://www.ncei.noaa.gov/

National Oceanic and Atmospheric Administration https://tidesandcurrents.noaa.gov/sltrends/sltrends.html

National Weather Service https://www.cpc.ncep.noaa.gov/products/Soilmst_Monitoring/US/Soilmst/Soilmst.shtml

National Weather Service https://www.nhc.noaa.gov/gis/

National Weather Service https://www.nhc.noaa.gov/nationalsurge/

U.S. Federal Government Climate Resilience Toolkit: https://crt-climate-explorer.nemac.org/

U.S. Army Corps of Engineers U.S. Army Corps of Engineers 2024-2027 Climate Adaptation Plan

U.S. Geological Survey https://marine.usgs.gov/coastalchangehazardsportal/

U.S. Geological Survey https://www.usgs.gov/programs/landslide-hazards

U.S. Geological Survey https://www.usgs.gov/apps/ngwmn/

U.S. Geological Survey https://toolkit.climate.gov/tool/national-climate-change-viewer

U.S. Geological Survey https://dashboard.waterdata.usgs.gov/app/nwd/en/

U.S. Geological Survey https://streamstats.usgs.gov/ss/

NYS Department of State-https://dos.ny.gov/assess

NYSERDA NY Costal Floodplain Mapper- https://services.nyserda.ny.gov/SLR_Viewer/default

NYSDEC Costal Erosion Hazards- https://dec.ny.gov/regulatory/permits-licenses/waterways-coastlines-wetlands/coastal-erosion-management-permit-program

NYSDOH Heat Index- health.ny.gov/environmental/weather/vulnerability_index/county_maps.htm

APPENDIX L
CITIZEN PARTICIPATION PLAN

NEW YORK STATE OF OPPORTUNITY. Department of Environmental Conservation

Brownfield Cleanup Program

Citizen Participation Plan
for
Stevenson Commons B3

July 2025

BCP Site No. C203189
1850 Lafayette Avenue
Bronx, NY 10473

Prepared by:

akrf
AKRF, Inc.
440 Park Avenue South, 7th Floor
New York, NY 10016
(212) 696-0670

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Appendix B - Site Contact List B-1
Appendix C - Site Location Map C-1
Appendix D - Brownfield Cleanup Program Process D-1

* * * * *

Note: The information presented in this Citizen Participation Plan was current as of the date of its approval by the New York State Department of Environmental Conservation. Portions of this Citizen Participation Plan may be revised during the Site's investigation and cleanup process.

Applicant: **Stevenson B3 LLC ("Applicant")**
Site Name: **Stevenson Commons B3 ("Site")**
Site Address: **1850 Lafayette Avenue, Bronx, NY**
Site County: **Bronx County**
Site Number: **C203189**

What is New York's Brownfield Cleanup Program?

New York's Brownfield Cleanup Program (BCP) works with private developers to encourage the voluntary cleanup of contaminated properties known as "brownfields" so that they can be reused and developed. These uses include recreation, housing, and business.

A *brownfield* is any real property that is difficult to reuse or redevelop because of the presence or potential presence of contamination. A brownfield typically is a former industrial or commercial property where operations may have resulted in environmental contamination. A brownfield can pose environmental, legal, and financial burdens on a community. If a brownfield is not addressed, it can reduce property values in the area and affect economic development of nearby properties.

The BCP is administered by the New York State Department of Environmental Conservation (NYSDEC), which oversees Applicants who conduct brownfield site investigation and cleanup activities. An Applicant is a person who has requested to participate in the BCP and has been accepted by NYSDEC. The BCP contains investigation and cleanup requirements, ensuring that cleanups protect public health and the environment. When NYSDEC certifies that these requirements have been met, the property can be reused or redeveloped for the intended use.

For more information about the BCP, go online at: https://dec.ny.gov/environmental-protection/site-cleanup/brownfield-and-state-superfund-programs/brownfield.

Citizen Participation Activities

Why NYSDEC Involves the Public and Why It Is Important

NYSDEC involves the public to improve the process of investigating and cleaning up contaminated sites, and to enable citizens to participate more fully in decisions that affect their health, environment, and social well-being. NYSDEC provides opportunities for citizen involvement and encourages early two-way communication with citizens before decision makers form or adopt final positions.

Involving citizens affected by and interested in site investigation and cleanup programs is important for many reasons. These include:

- Promoting the development of timely, effective site investigation and cleanup programs that protect public health and the environment;
- Improving public access to, and understanding of, issues and information related to a particular site and that site's investigation and cleanup process;

- Providing citizens with early and continuing opportunities to participate in NYSDEC's site investigation and cleanup process;
- Ensuring that NYSDEC makes site investigation and cleanup decisions that benefit from input that reflects the interests and perspectives found within the affected community; and
- Encouraging dialogue to promote the exchange of information among the affected/interested public, state agencies, and other interested parties that strengthens trust among the parties, increases understanding of site and community issues and concerns, and improves decision-making.

This Citizen Participation Plan (CPP) provides information about how NYSDEC will inform and involve the public during the investigation and cleanup of the Site identified above. The public information and involvement program will be carried out with assistance, as appropriate, from the Applicant.

Project Contacts

Appendix A identifies NYSDEC project contact(s) to whom the public should address questions or request information about the Site's investigation and cleanup program. The public's suggestions about this CPP and the Citizen Participation (CP) program for the Site are always welcome. Interested people are encouraged to share their ideas and suggestions with the project contacts at any time.

Locations of Reports and Information

The locations of the reports and information related to the Site's investigation and cleanup program are also identified in Appendix A. These locations provide convenient access to important project documents for public review and comment. Some documents may be placed on the NYSDEC website. If this occurs, NYSDEC will inform the public in fact sheets distributed about the Site and by other means, as appropriate.

Site Contact List

Appendix B contains the Site contact list. This list has been developed to keep the community informed about, and involved in, the Site's investigation and cleanup process. The Site contact list will be used periodically to distribute fact sheets that provide updates about the status of the project. These will include notifications of upcoming activities at the Site (such as fieldwork), as well as availability of project documents and announcements about public comment periods.

The Site contact list includes, at a minimum:

- Chief executive officer and planning board chairperson of each county, city, town and village in which the Site is located;
- Residents, owners, and occupants of the Site and properties adjacent to the Site;
- The public water supplier that services the area in which the Site is located;
- Any person who has requested to be placed on the Site contact list;

- The administrator of any school or day care facility located on or near the Site for purposes of posting and/or disseminating information at the facility; and
- Location(s) of reports and information.

The Site location is shown in Appendix C.

The Site contact list will be reviewed periodically and updated as appropriate. Individuals and organizations will be added to the Site contact list upon request. Such requests should be submitted to the NYSDEC project contact(s) identified in Appendix A. Other additions to the Site contact list may be made at the discretion of the NYSDEC project manager, in consultation with other NYSDEC staff as appropriate.

Note: The first Site fact sheet [usually related to the Draft Remedial Investigation Work Plan (RIWP)] is distributed both by paper mailing through the postal service and through DEC Delivers, NYSDEC's email listserv service. The fact sheet includes instructions for signing up with the appropriate county listserv to receive future notifications about the Site. For more information, visit: https://dec.ny.gov/environmental-protection/site-cleanup/regional-remediation-project-information/environmental-cleanup-email-newsletters.

Subsequent fact sheets about the Site will be distributed exclusively through the listserv, except for households without internet access that have indicated the need to continue to receive Site information in paper form. Please advise the NYSDEC Site project manager identified in Appendix A if that is the case. Paper mailings may continue during the investigation and cleanup process for some sites, based on public interest and need.

CP Activities

The table at the end of this section identifies the CP activities, at a minimum, that have been and will be conducted during the Site's investigation and cleanup program. The flowchart in Appendix D shows how these CP activities integrate with the site investigation and cleanup process. The public is informed about these CP activities through fact sheets and notices distributed at significant points during the program. Elements of the investigation and cleanup process that match up with the CP activities are explained briefly in Section 5.

- **Notices and fact sheets** help the interested and affected public to understand contamination issues related to a site, and the nature and progress of efforts to investigate and clean up a site.
- **Public forums, comment periods, and contact with project managers** provide opportunities for the public to contribute information, opinions and perspectives that have the potential to influence decisions about a site's investigation and cleanup.

The public is encouraged to contact project staff at any time during the Site's investigation and cleanup process with questions, comments, or requests for information.

This CPP may be revised due to changes in major issues of public concern identified in Section 3 or in the nature and scope of investigation and cleanup activities. Modifications may include additions to the Site contact list and changes in planned CP activities.

Technical Assistance Grant

NYSDEC must determine whether the Site poses a significant threat to public health or the environment. This determination generally is made using information developed during the investigation of the Site, as described in Section 5.

If the Site is determined to be a significant threat, a qualifying community group may apply for a Technical Assistance Grant (TAG). The purpose of a TAG is to provide funds to the qualifying group to obtain independent technical assistance. This assistance helps the TAG recipient interpret and understand existing environmental information about the nature and extent of contamination related to the Site and the development/implementation of a remedy.

An eligible community group must certify that its membership represents the interests of the community affected by the Site, and that its members' health, economic well-being or enjoyment of the environment may be affected by a release or threatened release of contamination at the Site.

As of the date the declaration (page 2) was signed by the NYSDEC project manager, the significant threat determination for the Site has not yet been made.

To verify the significant threat status of the Site, the interested public may contact the NYSDEC project manager identified in Appendix A.

For more information about TAGs, go online at: https://dec.ny.gov/regulatory/regulations/technical-assistance-grant-tag-guidance-handbook-der-14

Note: The table identifying the CP activities related to the Site's investigation and cleanup program follows on the next page:

CP Activity(ies)	Timing of CP Activity(ies)
Application Process:	
• Prepare Site contact list • Establish document repository(ies)	At time of preparation of application to participate in the BCP
• Publish notice in Environmental Notice Bulletin (ENB) announcing receipt of application and 30-day public comment period • Publish above ENB content in local newspaper • Mail above ENB content to Site contact list • Conduct 30-day public comment period	When the NYSDEC determines that the BCP application is complete. The 30-day public comment period begins on the date of publication of the notice in ENB. End date of public comment period is as stated in ENB notice. Therefore, ENB notice, newspaper notice, and notice to the Site contact list should be provided to the public at the same time.
After Execution of Brownfield Site Cleanup Agreement (BCA):	
• Prepare CPP	Before start of Remedial Investigation (RI) **Note:** Applicant must submit the CPP to NYSDEC for review and approval within 20 days of the effective date of the BCA.
Before NYSDEC Approves RI Work Plan (RIWP):	
• Distribute fact sheet to Site contact list about proposed RI activities and announcing 30-day public comment period about Draft RIWP • Conduct 30-day public comment period	Before NYSDEC approves the RIWP. If the RIWP is submitted with the application, public comment periods will be combined and public notice will include the fact sheet. The 30-day public comment period begins/ends as per dates identified in the fact sheet.
After Applicant Completes RI:	
• Distribute fact sheet to Site contact list that describes RI results	Before NYSDEC approves the RI Report (RIR).
Before NYSDEC Approves Remedial Action Work Plan (RAWP):	
• Distribute fact sheet to Site contact list about Draft RAWP and announcing 45-day public comment period • Public meeting by NYSDEC about proposed RAWP (if requested by affected community or at discretion of NYSDEC project manager)	Before NYSDEC approves the RAWP. The 45-day public comment period begins/ends as per the dates identified in the fact sheet. The public meeting would be held within the 45-day public comment period.

CP Activity(ies)	Timing of CP Activity(ies)
• Conduct 45-day public comment period	
Before Applicant Starts Cleanup Action:	
• Distribute fact sheet to Site contact list that describes upcoming cleanup action	Before the start of cleanup action.
After Applicant Completes Cleanup Action:	
• Distribute fact sheet to Site contact list that announces that cleanup action has been completed and that NYSDEC is reviewing the Final Engineering Report (FER) • Distribute fact sheet to Site contact list announcing NYSDEC approval of FER and issuance of Certificate of Completion (COC)	At the time the cleanup action has been completed. **Note:** The two fact sheets are combined when possible if there is not a delay in issuing the COC.

Major Issues of Public Concern

This section of the CPP identifies major issues of public concern that relate to the Site. Additional major issues of public concern may be identified during the course of the Site's investigation and cleanup process.

Redevelopment Project-Related Issues

The Applicant submitted a BCP Application to NYSDEC in March 2025, which was deemed complete by NYSDEC on April 14, 2025. The Brownfield Cleanup Agreement (No. C203189-06-25) was executed between NYSDEC and the Applicant on July 9, 2025. The project is proposed to start at the investigation stage, and a Remedial Investigation Work Plan (RIWP) was submitted to NYSDEC along with the BCP application.

The approximately 2.43-acre Site comprises portions of two parcels located at 1850 Lafayette Avenue in the Clason Point neighborhood of the Bronx, NY, also identified as Bronx Borough Block 3600, portions of Lots 4 and 15. The Site is part of the Bronx County Census Tract 16. According to the 2023 American Community Survey (ACS) Profile data, it is estimated that 18.1% of the population in Census Tract 16 are living below the poverty line. The unemployment rate for Bronx County is estimated at 6.1% as of April 2025, compared to the New York City unemployment rate of 4.8% (as of June 2025) and the national unemployment rate of 4.1% (as of June 2025). The Site is not located in an En-Zone.

Currently, the Site consists of a vacant field with overgrown vegetation enclosed by fencing. The proposed development is currently under design. The preliminary development plans assume the Site will be redeveloped into a 9- to 13-story mixed-use residential/community facility building with a footprint of approximately 33,850 square feet (sf), and parking and tennis courts on exterior portions of the Site.

Potential Remediation/Construction-Related Issues

Issues of concern to the community during the on-site remedial investigation phase will likely include those related to the possibility of discovering additional contamination associated with the historical filling at the Site, which could have potential impacts to on-site subsurface conditions including soil, groundwater, and soil vapor. As the Site is currently vacant/unoccupied and no structures are present, there is no existing potential exposure pathway for vapor intrusion. In addition, groundwater beneath the Site is not used for drinking water.

Issues of concern to the community during the on-site remediation phase will likely include those related to the on-site handling and off-site disposal of contaminated soil and any tanks (if encountered). The likely concern to the surrounding community will be the possibility of the generation of vapors or dust from the Site during investigation and remediation. On-site air quality and dust levels will be monitored during any drilling, soil excavation and removal activities in accordance with a Site-specific Health and Safety Plan (HASP) that will be included as part of both the RIWP and RAWP. Dust and vapor suppression techniques will be employed to minimize the generation of dust and vapors.

All air and dust monitoring will be performed in accordance with New York State Department of Health's (NYSDOH) Community Air Monitoring Program (CAMP).

Additional remediation/construction concern will be the potential presence of trucks traveling through the community, and parking or idling at or near the Site during soil excavation and disposal as part of remediation. The RAWP will include provisions for on-site soil handling techniques that minimize the number of trucks and duration of time within or near the Site. In addition, provisions will be included to restrict truck traffic (to the extent possible) to designated routes along main roads while minimizing traffic within the community.

The concern over construction-related noise is a common one for communities in which redevelopment is occurring. Construction plans will minimize noise to the extent possible and the operation of heavy equipment will be restricted to normal working hours as will be set forth in the required Bronx County-issued permits. Additional mitigation measures will also be evaluated.

The Site is located in an Environmental Justice Area. Environmental justice is defined as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

Environmental justice efforts focus on improving the environment in communities, specifically minority and low-income communities, and addressing disproportionate adverse environmental impacts that may exist in those communities.
The Site is located in an area with a sizable Hispanic-American and African-American population nearby. Therefore, all future fact sheets will be translated into Spanish.

For additional information, visit: https://statisticalatlas.com/tract/New-York/Bronx-County/001600/Overview

Site Information

Appendix C contains a map identifying the location of the Site.

Site Description

The Site consists of an approximately 2.43-acre vacant parcel and is identified on the New York City tax map as Bronx Borough Block 3600, portions of Lots 4 and 15. The Site is bounded to the north by parking lots and tennis courts associated with the adjacent Stevenson Commons apartment complex, followed by Lafayette Avenue; to the east by a fire lane and the adjacent Stevenson Commons apartment complex, followed by White Plains road; to the south by the Stevenson Commons Building B4 and B5 project sites (actively under construction), followed by Seward Avenue; and to the west by Thieriot Avenue, followed by residential buildings.

The preliminary development plans assume the Site will be redeveloped into a 9- to 13-story mixed-use residential/community facility building with a footprint of approximately 33,850 square feet (sf), and parking and tennis courts on exterior portions of the Site.

History of Site Use, Investigation, and Cleanup

Historical records indicate that the Site has remained undeveloped since 1898. Filling of a tidal creek with material of unknown origin occurred between 1924 and 1951, and the Site was later used for recreational/baseball fields between 1980 and 1994.

Based on the previous investigations conducted by IEC in April 2021 and AKRF in December 2024, the primary Contaminants of Concern (CoCs) at the Site include polycyclic aromatic hydrocarbons (PAHs) [a class of semi-volatile organic compounds (SVOCs) commonly found in fill] and metals in soil/fill above the Unrestricted Use Soil Cleanup Objectives (UUSCOs) and/or Restricted Residential Soil Cleanup Objectives (RRSCOs), and lead above EPA's hazardous waste criteria. Additionally, PAHs, polychlorinated biphenyls (PCBs), and metals were detected in groundwater above their Ambient Water Quality Standards and Guidance Values (AWQSGVs), PFAS was detected in groundwater above their NYSDEC Human Health Criteria, and petroleum-related VOCs and chlorinated VOCs were detected in soil vapor. These CoCs appear to be associated with historical filling of the tidal creek previously located on the Site.

Investigation and Cleanup Process

Application

The Applicant has applied for and been accepted into New York's BCP as a Volunteer. This means that the Applicant was not responsible for the disposal or discharge of the contaminants, or whose ownership or operation of the Site took place after the discharge or disposal of contaminants. The Volunteer must fully characterize the nature and extent of contamination on-site, and must conduct a "qualitative exposure assessment," a process that characterizes the actual or potential exposures of people, fish, and wildlife to contaminants on the Site and to contamination that has migrated from the Site.

The Applicant in its Application proposes that the Site will be used for restricted residential purposes.

To achieve this goal, the Applicant will conduct investigation and cleanup activities at the Site with oversight provided by NYSDEC. The Brownfield Cleanup Agreement (BCA) executed by NYSDEC and the Applicant sets forth the responsibilities of each party in conducting these activities at the Site.

Investigation

The Applicant will conduct an investigation of the Site, officially called a "Remedial Investigation" (RI). The Applicant developed an RI Work Plan (RIWP), which is subject to public comment.

The RI has several goals:

- Define the nature and extent of contamination in soil, surface water, groundwater, and any other parts of the environment that may be affected;
- Identify the source(s) of the contamination;
- Assess the impact of the contamination on public health and the environment; and

- Provide information to support the development of a proposed remedy to address the contamination or the determination that cleanup is not necessary.

The Applicant submitted a Draft RIWP to NYSDEC for review and approval along with the BCP Application, which was available to the public for review during a 30-day public comment period.

NYSDEC will use the information in the investigation report to determine whether the Site poses a significant threat to public health or the environment. If the Site is a "significant threat," it must be cleaned up using a remedy selected by NYSDEC from an analysis of alternatives prepared by the Applicant and approved by NYSDEC. If the Site does not pose a significant threat, the Applicant may select the remedy from the approved analysis of alternatives.

Interim Remedial Measure (IRM)

An IRM is an action that can be undertaken at a site when a source of contamination or exposure pathway can be effectively addressed before the site investigation and analysis of alternatives are completed. If an IRM is likely to represent all or a significant part of the final remedy, NYSDEC will require a 30-day public comment period.

Remedy Selection

When the investigation of the Site has been determined to be complete, the project likely would proceed in one of two directions:

1. The Applicant may recommend that no action is necessary at the Site in its investigation report. In this case, NYSDEC would make the investigation report available for public comment for 45 days. NYSDEC would then complete its review, make any necessary revisions, and, if appropriate, approve the investigation report. Finally, NYSDEC would issue a "Certificate of Completion" (described below) to the Applicant.

or

2. The Applicant may recommend that action needs to be taken to address Site contamination in its investigation report. After NYSDEC approves the investigation report, the Applicant may then develop a cleanup plan, officially called a Remedial Action Work Plan (RAWP). The RAWP describes the Applicant's proposed remedy for addressing contamination related to the Site.

Once the Applicant submits a Draft RAWP for approval, NYSDEC would announce the availability of the Draft RAWP for public review during a 45-day public comment period.

Cleanup Action

NYSDEC will consider public comments and revise the Draft RAWP, if necessary, before approving the proposed remedy. The NYSDOH must concur with the proposed remedy.

After approval, the proposed remedy becomes the selected remedy. The selected remedy is formalized in the Decision Document (DD).

The Applicant then may design and perform the cleanup action to address the Site contamination. NYSDEC and NYSDOH will oversee the activities. When the Applicant completes cleanup activities, it will prepare a Final Engineering Report (FER) that certifies that cleanup requirements have been achieved or will be achieved within a specific time frame. NYSDEC will review the report to be certain that the cleanup is protective of public health and the environment for the intended use of the Site.

Certificate of Completion (COC)

When NYSDEC is satisfied that cleanup requirements have been achieved or will be achieved for the Site, it will approve the FER. NYSDEC will then issue a COC to the Applicant. The COC states that cleanup goals have been achieved, and relieves the Applicant from future liability for Site-related contamination, subject to certain conditions. The Applicant would be eligible to redevelop the Site after it receives a COC.

Site Management

The purpose of site management is to ensure the safe reuse of the property if contamination will remain in place. Site management is the last phase of the Site cleanup program. This phase begins when the COC is issued. Site management incorporates any institutional controls (ICs) and/or engineering controls (ECs) required to ensure that the remedy implemented for the Site remains protective of public health and the environment. All significant activities are detailed in a Site Management Plan (SMP).

An institutional control (IC) is a non-physical restriction on use of the site, such as a deed restriction that would prevent or restrict certain uses of the property. An IC may be used when the cleanup action leaves some contamination that makes the site suitable for some, but not all, uses.

An engineering control (EC) is a physical barrier or method to manage contamination. Examples include caps, covers, barriers, fences, and treatment of water supplies.

Site management also may include the operation and maintenance of a component of the remedy, such as a system that pumps and treats groundwater. Site management continues until NYSDEC determines that it is no longer needed.

APPENDIX A
PROJECT CONTACTS AND LOCATIONS OF REPORTS AND INFORMATION

Project Contacts

For information about the Site's investigation and cleanup program, the public may contact any of the following project staff:

New York State Department of Environmental Conservation (NYSDEC):

Marlen Salazar
Project Manager
NYSDEC Region 2
Division of Environmental Remediation
1 Hunter's Point Plaza
47-40 21st Street
Long Island City, NY 11101
(718) 482-7129
marlen.salazar@dec.ny.gov

Thomas Panzone
Public Participation Specialist
NYSDEC Region 2
1 Hunter's Point Plaza
47-40 21st Street
Long Island City, NY 11101
(718) 482-4953
thomas.panzone@dec.ny.gov

New York State Department of Health (NYSDOH):

Ryan Minzloff
Public Health Specialist
Bureau of Environmental Exposure Investigation
New York State Department of Health
Empire State Plaza, Corning Tower, Room 1787
Albany, NY 12237
(518) 402-5465
beei@health.ny.gov

Locations of Reports and Information

The facilities identified below are being used to provide the public with convenient access to important project documents:

DECInfo Locator: https://www.dec.ny.gov/data/DecDocs/C203189/

Soundview Library 660 Soundview Avenue Bronx, NY 10473 Attn: Katherine Jimenez Phone: (718) 589-0880 soundview@nypl.org Hours: Monday-Thursday 10am-6pm Friday - Saturday 10am-5pm Sunday Closed	Bronx Community Board District 9 1967 Turnbull Avenue, Room 201 Bronx, NY 10473 Attn: Mohammed Mujumder, Chairperson Land, Zoning, Planning & Economic Development Committee - Chairperson: Mitchell Halpern District Manager: William Rivera Phone: (718) 823-3034 bx09@cb.nyc.gov Constituent Hours: Mon-Fri, 9:00am-2:00pm Hours: Monday-Friday 9am-5pm

APPENDIX B
SITE CONTACT LIST

1. Local, State, and Federal Officials

Hon. Eric Adams NYC Mayor1 Centre Street New York, NY 10007	Hon. Brad Lander New York City Comptroller 1 Centre Street New York, NY 10007
Hon. Jumaane D. Williams Public Advocate 1 Centre Street, 15th Floor North New York, NY 10007	Hon. Vanessa L. Gibson Bronx Borough President 851 Grand Concourse, 3rd Floor Bronx, NY 10451
Hon. Karines Reyes New York State Assembly District 87 NYS Assemblymember 1973 Westchester Avenue Bronx, NY 10462	Hon. Amanda Farías New York City Council District 18 NYC Councilmember 778 Castle Hill Avenue Bronx, NY 10473
David Gold, Esq. NYC Department of City Planning 120 Broadway, 31st Floor New York, New York 10271	NYC Department of City Planning Bronx Borough Office Paul Philps – Borough Director 1775 Grand Concourse, Suite 503 Bronx, NY 10453
Hon. Charles Schumer U.S. Senate 780 Third Avenue, Suite 2301 New York, NY 10017	Hon. Kirsten Gillibrand U.S. Senate 780 Third Avenue, Suite 2601 New York, New York 10017
Hon. Alexandria Ocasio-Cortez U.S. House of Representatives Hunts Point Office 1231 Lafayette Avenue, Suite L-610 Bronx, NY 10474	
Shaminder Chawla, Director Mayor's Office of Environmental Remediation 100 Gold Street, 2nd Floor New York, NY 10038	Elijah Hutchinson, Executive Director Mayor's Office of Climate and Environmental Justice 253 Broadway, 14th Floor New York, NY 10007
Melissa Enoch, Assistant Commissioner Bureau of Environmental Planning and Analysis NYCDEP 59-17 Junction Boulevard, 11th Floor Flushing, NY 11373	Bronx County Clerk Hon. Ischia Bravo 851 Grand Concourse, Room 118 Bronx, NY 10451

Rohit T. Aggarwala – Public Water Supplier Commissioner, NYC Dept. of Environmental Protection 59-17 Junction Boulevard Flushing, NY 11373	Hon. Nathalia Fernandez New York State Senator, 34th District NYS Senator 3853 East Tremont Avenue Bronx, NY 10465

2. Residents, Owners, and Occupants of the Site and Adjacent Properties

The Site (Block 3600, portions of Lots 4 and 15) is currently owned by Stevenson Commons Housing Company Inc. A list of adjacent properties and owners is provided below:

Adjacent to the north:	**Adjacent to the east:**
Block 3600, Lot 10 *Owner* – Stevenson Commons Housing Company Inc./Stevenson Commons Affordable LLC 247 West 37th Street, 4th Floor New York NY 10018 Phone Number: (646) 849-4565 *Occupant* – Stevenson Commons Housing Company Inc. 247 West 37th Street, 4th Floor New York, NY 10018 Phone Number: (646) 849-4565 Block 3600, remainder of Lot 15 *Owner* – Stevenson Commons Housing Company Inc./Stevenson Commons Affordable LLC 247 West 37th Street, 4th Floor New York, NY 10018 Phone Number: (646) 849-4565 *Occupant* – Stevenson Commons Housing Company Inc. 247 West 37th Street, 4th Floor New York, NY 10018 Phone Number: (646) 849-4565 Block 3600, Lot 20 *Owner* – Stevenson Commons Housing Company Inc./Stevenson Commons Affordable LLC	Block 3600, remainder of Lot 4 *Owner* – Stevenson Commons Housing Company Inc./Stevenson Commons Affordable LLC 247 West 37th Street, 4th Floor New York, NY 10018 Phone Number: (646) 849-4565 *Occupant* – Stevenson Commons Housing Company Inc. 247 West 37th Street, 4th Floor New York, NY 10018 Phone Number: (646) 849-4565 **Adjacent to the south:** Block 3600, remainder of Lot 4 *Owner* – Stevenson Commons Housing Company Inc./Stevenson Commons Affordable LLC 247 West 37th Street, 4th Floor New York, NY 10018 Phone Number: (646) 849-4565 *Occupant* – Stevenson Commons Housing Company Inc. 247 West 37th Street, 4th Floor New York, NY 10018 Phone Number: (646) 849-4565 **Adjacent to the west:** Block 3599, Lot 53 *Owner/Occupant* – Fabian Rosario

247 West 37th Street, 4th Floor New York, NY 10018 Phone Number: (646) 849-4565 *Occupant* – Stevenson Commons Housing Company Inc. 247 West 37th Street, 4th Floor New York, NY 10018 Phone Number: (646) 849-4565	737 Thieriot Avenue Bronx, NY 10473 Phone Number: (718) 319-1952 *Occupant* – Carmen Asevedo 737 Thieriot Avenue Bronx, NY 10473 Phone Number: (718) 328-3524
Adjacent to the west (continued): Block 3599, Lot 54 *Owner/Occupant* – Lorraine Hill Campbell 735 Thieriot Avenue Bronx, NY 10473 Phone Number: (718) 893-2208 *Occupant* – John Paul Campbell 735 Thieriot Avenue Bronx, NY 10473 Phone Number: (718) 893-2208 Block 3599, Lot 55 *Owner/Occupant* – Christopher Adeniyi 733 Thieriot Avenue Bronx, NY 10473 Phone Number: (718) 542-2829 *Occupant* – Mark Lewis 733 Thieriot Avenue Bronx, NY 10473 Phone Number: (407) 291-0966 Block 3599, Lot 56 *Owner/Occupant* – Silvia F. Palmay 731 Thieriot Avenue Bronx, NY 10473 Phone (347) 664-6297 *Occupant* – Nimia Palmay 731 Thieriot Avenue	**Adjacent to the west (continued):** Block 3599, Lot 58 *Owner/Occupant* – Clarence Lake 727 Thieriot Avenue Bronx, NY 10473 Phone Number: (718) 328-5928 *Occupant* – Emma Lafrossia 727 Thieriot Avenue Bronx, NY 10473 Phone Number: (347) 851-2779 Block 3599, Lot 59 *Owner* – Sheikh J. Uddin 725 Thieriot Avenue Bronx, NY 10473 Phone (718) 518-9522 *Occupant* – Lisa A Beltran 725 Thieriot Avenue Bronx, NY 10473 Phone Number: (718) 379-3840 *Occupant* – Evelyn Mesa 725 Thieriot Avenue Bronx, NY 10473 Phone Number: (718) 585-3245 Block 3599, Lot 60 *Owner/Occupant* – David Fearon 723 Thieriot Avenue Bronx, NY 10473 Phone (212) 480-7628

Bronx, NY 10473 Phone (646) 542-9886 <u>Block 3599, Lot 57</u> *Owner/Occupant* – Mosiur Rahman 729 Thieriot Avenue Bronx, NY 10473 Phone Number: (917) 476-1112 *Occupant* – Mohammad Imam 729 Thieriot Avenue Bronx, NY 10473 Phone Number: (917) 392-9147 *Occupant* – Rezwana Hossain 729 Thieriot Avenue Bronx, NY 10473 Phone Number: (718) 685-2195 **<u>Adjacent to the west (continued):</u>** <u>Block 3599, Lot 64</u> *Owner/Occupant* – Christina Best 715 Thieriot Avenue Bronx, NY 10473 Phone Number: (917) 557-8450	<u>Block 3599, Lot 61</u> *Owner/Occupant* – Rahsaan M. Haynes 721 Thieriot Avenue Bronx, NY 10473 Phone Number (646) 339-9982 <u>Block 3599, Lot 62</u> *Owner/Occupant* – Gregory Cruz 719 Thieriot Avenue Bronx, NY 10473 Phone Number: (718) 328-0463 **<u>Adjacent to the west (continued):</u>** <u>Block 3599, Lot 63</u> *Owner/Occupant* – George Wilmoth 717 Thieriot Avenue Bronx, NY 10473 Phone Number (718) 991-2985

3. Local News Media

New York Post 1211 Avenue of the Americas New York, New York 10036	The Bronx Chronicle Sal J. Conforto J.D. Esq. Publisher/CEO, Editor-In-Chief sal@thebronxchronicle.com tips@thebronxchronicle.com
Spectrum New York 1 News 75 Ninth Avenue New York, NY 10011 New York Daily News PO Box 7180 New York, NY 10008	The Bronx Daily https://bronx.com/ info@bronx.com

Bronx Times Reporter 3602 East Tremont Avenue Bronx, NY 10465 Schneps Media 3602 East Tremont Avenue Bronx, NY 10465	Hoy Nueva York Impremedia, 41 Flatbush Avenue 1st Floor Brooklyn, NY 11217 El Diario NY Impremedia, 41 Flatbush Avenue 1st Floor Brooklyn, NY 11217

4. Public Water Supply

Public water is provided by The City of New York, Department of Environmental Protection:
Customer Service Center
59-17 Junction Boulevard, 13th Floor
Flushing, New York 11373
Rohit T. Aggarwala
Commissioner, NYCDEP
59-17 Junction Boulevard
Flushing, NY 11373

5. Additional Contacts

None

6. Nearby Schools and Daycare Centers

Daycares:

Yira's Daycare
President/Executive Director/Principal
740 Taylor Avenue
Bronx, NY 10473
(646) 407-4296

Shiny Time Group Family Daycare
President/Executive Director/Principal
728 Soundview Avenue
Bronx, NY 10473
(347) 309-6790

Little Apron Day Care
President/Executive Director/Principal
649 St. Lawerence Avenue
Bronx, NY 10473
(347) 488-5074

Yeln Group Family Daycare
President/Executive Director/Principal
741 Commonwealth Avenue, 1st Floor
Bronx, NY 10473
(646) 705-9489

Multicultural Kids Daycare
President/Executive Director/Principal

(718) 842-1461

735 Commonwealth Avenue
Bronx, NY 10473
(646) 363-6176

Happy Moon Daycare
President/Executive
Director/Principal
758 Rosedale Avenue
Bronx, NY 10473
(347) 206-0737

Hugs Daycare
President/Executive
Director/Principal

555 Bolton Avenue
Bronx, NY 10473
(646) 643-8078

Lil Kingdom of Light Group
Family Daycare
President/Executive
Director/Principal

614 St. Lawrence Avenue
Bronx, NY 10473
(646) 753-3038

Our Kid's Rainbow Daycare 2
President/Executive
Director/Principal

510 Soundview Avenue
Bronx, NY 10473
(646) 707-5052

Schools:

P.S. 100 Isaac Clason
President/Executive
Director/Principal

800 Taylor Avenue
Bronx, NY 10473

Soundview Academy for Culture
and Scholarship
President/Executive
Director/Principal

885 Bolton Avenue
Bronx, NY 10473
(718) 991-4027

J.H.S 131 – Albert Einstein
President/Executive
Director/Principal
885 Bolton Avenue
Bronx, NY 10473
(718) 991-7490

Millennium Art Academy
President/Executive
Director/Principal

1980 Lafayette Avenue
Bronx, NY 10473
(718) 824-0978

Pathways to
GraduationPresident/Executive
Director/Principal
1980 Lafayette Avenue
Bronx, NY 10473
(718) 794-1550

X432 Bronx Bridges High School
President/Executive
Director/Principal
1980 Lafayette Avenue
Bronx, NY 10473
(718) 829-2984

P.S. 182
President/Executive
Director/Principal

601 Stickball Boulevard
Bronx, NY 10473
718.828.6607

PS 138 Samuel Randall
President/Executive Director/Principal
https://insideschools.org/school/08X138
718-822-5325
2060 Lafayette Avenue
Bronx, NY 10473

Jackie's Sunshine Daycare Inc.
President/Executive Director/Principal
(929) 405-9410
910 Thieriot Ave
Bronx, NY 10473

Success Academy Charter School – Bronx 4 Elementary School
President/Executive Director/Principal
https://www.successacademies.org/school/bronx-4/
(646) 558-0043
1880 Story Avenue 3rd Floor
Bronx, NY 10473

Bambi's Playhouse Group Daycare LLC
President/Executive Director/Principal
(347) 681-2344
784 Olmstead Ave
Bronx, NY 10473

Bronx Guild High School
President/Executive Director/Principal
(718) 597-1587
1980 Lafayette Avenue
Bronx, NY 10473

X377 Bronx Community High School
President/Executive Director/Principal
https://www.bronxcommunityhighschool.com/
(718) 892-1026
1980 Lafayette Avenue
Bronx, NY 10473

X561 Bronx Compass High School
President/Executive Director/Principal
https://www.bronxcompass.org/
(718) 828-1206
1980 Lafayette Avenue 3rd Floor
Bronx, NY 10473

Holy Cross School
President/Executive Director/Principal
https://holycrossbx.org/
(718) 842-4492
1846 Randall Ave
Bronx, NY 10473

New Sunrise Group Family Daycare
President/Executive Director/Principal
(929) 478-8818
510 Pugsley Ave Apt 1,
Bronx, NY 10473

Neidy's Daycare
President/Executive Director/Principal
(347) 324-2634
632 Leland Ave,
Bronx, NY 10473

Sweet Little Bears Daycare
President/Executive Director/Principal
(917) 284-1499
1785 Story Ave,
Bronx, NY 10473

Multicultural Family Group Daycare
President/Executive Director/Principal
(347) 688-7245
945 Underhill Ave
Bronx, NY 10473

Baby On Board Family Group Daycare
President/Executive Director/Principal
(929) 371-9607
955 Underhill Ave Apt 1407,
Bronx, NY 10473

Little Hands Little Feet's GFDC
President/Executive Director/Principal
(718) 991-5418
755 White Plains Rd,
Bronx, NY 10473
Sweetsymphony Family Daycare
President/Executive Director/Principal
(917) 257-7154
1762 Story Ave,
Bronx, NY 10473

Claire Heureuse Community Center
President/Executive Director/Principal
https://www.chccnydaycare.org/
833-524-3265, 212-756-5470, 718-576-5835, 718-848-5800
575 Soundview Ave
Bronx, NY 10473

Emery's Treasure Box Daycare, Inc
President/Executive Director/Principal
(646) 400-9792
2024 Cicero Ave #1,
Bronx, NY 10473

X376 Antonia Pantoja Preparatory Academy: A College Board School
President/Executive Director/Principal
(718) 824-3152
1980 Lafayette Ave
Bronx, NY 10473

P.S. X017@377
President/Executive Director/Principal
https://p017x.org/p17x377.html
(718) 794-7079
1980 Lafayette Ave
Bronx, NY 10473

Gotham Collaborative High School
President/Executive Director/Principal
1980 Lafayette Ave,
Bronx, NY 10473
(718) 597-1587

Success Academy Charter School - Bronx 4 Elementary
President/Executive Director/Principal
https://www.successacademies.org/school/bronx-4/
1880 Story Ave 3rd Floor,
Bronx, NY 10473
(646) 558-0043

Our Kids Rainbow Daycare
President/Executive Director/Principal
510 Soundview Ave,
Bronx, NY 10473
(646) 707-5052

P.S. 069 Journey Prep School
President/Executive Director/Principal
560 Thieriot Ave,
Bronx, NY
10473https://insideschools.org/school/08X069
(718) 378-4736

Community, Civic, Religious and Other Environmental Organizations:

Consolidated Edison Corporate Affairs
Franchesca Diaz - Director Regional and Community Affairs team Bronx.
511 Theodore Fremd Avenue
Rye, NY 10580

NYPD 43rd Police Precinct Council
President Aurora Carrion
900 Fteley Ave.
Bronx, NY 10473

FDNY

ENGINE 96/LADDER 54
1689 STORY AVENUE
Bronx, NY 10473

Ramos A Cesar
2022 Turnbull Ave
Bronx, NY 10473

Church of Jesus Christ-NY Inc
625 Leland Avenue
Bronx, NY 10473

Holy Cross RC Church
600 Soundview Ave,
Bronx, NY 10473

Renovation City Church/Soundview Presbyterian Church
760 Soundview Ave,
Bronx, NY 10473

Legacy Movement Church
1994 Bruckner Blvd , 2nd Floor
Bronx, NY 10473
Church of God of Seward Avenue
1780 Seward Ave,
Bronx, NY 10473

Soundview Masjid
1749 Seward Ave,
Bronx, NY 10473

NYCHA Monroe Houses
Senior Center
chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.nyc.gov/assets/nycha/downloads/pdf/Monroe.pdf
1780 STORY AVENUE
Bronx, NY 10473

NYCHA Monroe Houses
DEVELOPMENT MANAGEMENT OFFICE
extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.nyc.gov/assets/nycha/downloads/pdf/Monroe.pdf
1779 STORY AVENUE
Bronx, NY 10473

Grand Manor Nursing & Rehabilitation Center
700 White Plains Rd
Bronx, NY 10473

Bronx Center for Rehabilitation and Nursing
1010 Underhill Ave,
Bronx, NY 10472

New York City Housing Authority
Monroe Community Center
1780 Story Ave,
Bronx, NY 10473

Carol Gardens
820 Thieriot Ave,
Bronx, NY 10473

Bruckner Nursing Home
1010 Underhill Ave,
Bronx, NY 10472

Soundview Senior Housing Hf DC
669 White Plains Rd,
Bronx, NY 10473

Soundview Spanish Seventh-Day Adventist Church
1822 Lacombe Ave,
Bronx, NY 10473

Soundview Avenue Missionary Baptist Church
629 Soundview Ave,
Bronx, NY 10473

Bethel 2nd Christian Church
459 Thieriot Ave,

Bronx, NY 10473

Victory Through Praise Evangelistic Ministries
461 Soundview Ave,
Bronx, NY 10473

Salem Gospel Mission International
1768 Randall Ave,
Bronx, NY 10473

Iglesia Pentecostal Luz Res
510 Leland Ave #514,
Bronx, NY 10473

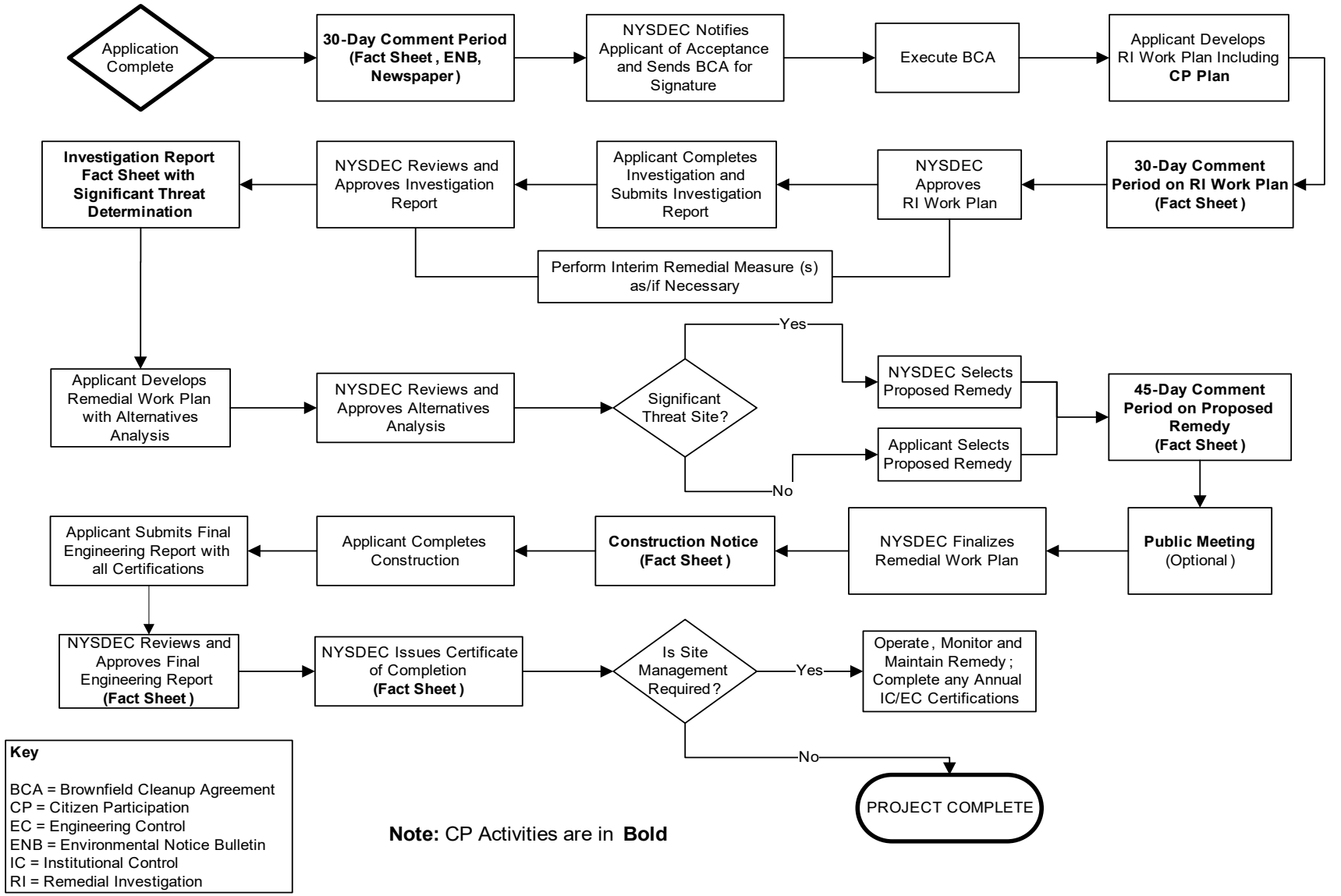
Iglesia Pentecostal Emanuel, Dios Con Nosotros
617 Soundview Ave,
Bronx, NY 10473

Second Pentecostal Church
1810 Randall Ave,
Bronx, NY 10473

APPENDIX C
SITE LOCATION MAP



Appendix D– Brownfield Cleanup Program Process



Note: CP Activities are in **Bold**

APPENDIX M
RESUMES OF KEY PERSONNEL



BACKGROUND

Education

MS, Hydrogeology, Rensselaer Polytechnic Institute

BS, Civil Engineering, Lafayette College

Licenses/Certifications

Professional Engineer, NY - 082046-1

OSHA 40 Hour HAZWOPER

OSHA 8 Hour Refresher

REBECCA KINAL, PE

Senior Vice President

Rebecca Kinal has extensive experience in the assessment and remediation of soil and groundwater contamination and other hazardous/non-hazardous waste problems. Her experience includes environmental due diligence, soil and groundwater investigations, leaking underground storage tank studies, soil gas/vapor intrusion surveys, and oversight of small- and large-scale remediation programs. Rebecca has directed numerous Phase I and Phase II investigations and remediation programs, many of them in conjunction with commercial/ residential developers, law firms, lending institutions, and public agencies. She is experienced in the cleanup of contaminated properties under New York State Brownfield Cleanup Program (BCP) regulations and the NYC E-designation program. As a part of this work, Rebecca's duties have included technical and report review, proposal writing, scheduling, budgeting, and acting as liaison between clients and regulatory agencies, and project coordination with federal, state, and local authorities.

RELEVANT EXPERIENCE

Mott Haven Remediation, Bronx, NY

Rebecca provided environmental consulting services to the selected environmental remediation contractor for this former manufactured gas plant in Mott Haven the Bronx, which was remediated under the NYSDEC BCP.

Avalon Yonkers PCW, Yonkers, NY

Rebecca served as the Engineer of Record for remediation of the former Polychrome research and development site, a NYSDEC Brownfield redevelopment project along the Hudson River. The remediation included hot spot excavation, LNAPL collection, in-situ soil stabilization, soil management, groundwater treatment, dewatering, shoreline permitting, groundwater discharge permitting, and a site-wide engineered cover systems, including a vapor barrier and sub-slab depressurization system. Rebecca reviewed the design documents, supervised field inspections, provided support to the project team regarding contractor submittals and field changes, and certified the Final Engineering Report and Site Management Plan. The site received its Certificate of Completion in December 2019.

Hamilton Green (200 Hamilton Avenue), White Plains, NY

Rebecca managed environmental due diligence and remediation planning for the project, which included Phase I and II environmental assessments, a petroleum Spill investigation, preparation of remediation cost estimates, and application to the NYSDEC BCP.

Montefiore Medical Center, Bronx and Westchester County, NY

Rebecca provided environmental due diligence assistance to MMC for the ongoing expansion of their facilities. She conducted and managed environmental due diligence tasks related to their property transactions, including Phase I ESAs, Phase II investigations, indoor air quality surveys/vapor intrusion assessments, and remediation cost estimates. She also assisted MMC in making decisions with respect to environmental risk issues. Projects ranged from small, single-lot properties to large hospital campuses.



BACKGROUND

Education

MS, Environmental Science, American University

BA, Environmental Studies, American University

Licenses/Certifications

Qualified Environmental Professional, NY - 4120008

OSHA 10 Hour Construction Safety & Health Course

OSHA 40 Hour HAZWOPER

OSHA 8 Hour Refresher

OSHA 8 Hour Supervisor

DEBORAH G. SHAPIRO, QEP

Senior Vice President

Deborah Shapiro, QEP is a Senior Vice President with experience in the assessment and remediation of hazardous waste issues. She supervises project teams and manages all aspects of assessment and remediation projects. Deborah works with developers, non-profit organizations, architects, local community groups, local businesses, and government agencies. Her projects fall under the regulatory oversight of NYSDEC, NYCDEP, and NYCOER including the NYSBCP, NYCVCP, NYSDEC petroleum spills program, Resource Conservation and Recovery Act/Underground Injection Control closures, and NYCOER's E-designation program. She has also assisted commercial and industrial property owners with maintaining the integrity of their portfolios by providing compliance related cleanup and chemical storage management services. Deborah manages all aspects of redevelopment projects from the initial Phase I ESA, Phase II, and remediation through post-remedial site management. Her experience also includes groundwater investigations, monitoring, and sampling programs; Brownfield and hazardous waste site investigations; In-Situ Chemical Oxidation; underground storage tank studies; waste characterization sampling; exposure assessments; on-going remedial action, and permitting.

RELEVANT EXPERIENCE

Brook 156, Bronx, NY

Deborah served as Project Manager for site assessment/remediation services for Brook 156, a new affordable housing project in the Bronx. She managed all technical, schedule, and budgetary components of the project and communicated with NYSDEC and the client team. Brook 156 received its Certificate of Completion under the NYSBCP in 2021.

OER On-Call Contract, Various Locations, NY

Deborah Shapiro is managing an on-call contract with the OER for brownfields environmental assessment and remediation.

Atlantic Chestnut, Brooklyn, NY

Deborah serves as Project Manager for site assessment/remediation services at Atlantic Chestnut, a 4.5-acre affordable housing project in the East New York, Brooklyn. Services have included a Phase I ESA and Phase II Subsurface Investigations at each site; accepted applications for the NYSBPC; preparation of Remedial Investigation Work Plans and implementation of remediation investigations and associated reporting; and Interim Remedial Work Plans for each site, including three soil vapor extraction systems.

US EPA Multi-Purpose Grant and NYSDOS BOA Predevelopment Grant

Deborah is the Principal-in-Charge of a North Hempstead on-call contract to conduct brownfields assessment, investigation, identification, market analysis, marketing, clean-up planning and analysis, and remediation, wayfinding, connectivity planning and analysis, and other activities supporting redevelopment and revitalization services for New Cassel under an EPA Multi-purpose Grant and NYSDOS BOA Predevelopment Grant. Tasks under the on-call to date have included conducting Phase IIs and reuse planning including preparation of ABCAs.

akrf



TIMOTHY G. LARIGAN

Senior Environmental Scientist

Timothy Larigan is an environmental scientist with experience in environmental remediation/compliance, Phase I/Phase II Environmental Assessments; project management; technical reporting; data analysis; field sampling; contractor oversight; wetlands delineation and permitting. He has directed environmental remediation, due diligence, asbestos, and wetlands projects and completed them within the proposed timeframe and budget. Tim has also managed client and regulatory agency interactions. He has performed various field activities such as soil, groundwater, and vapor sampling and wetlands delineation. Timothy has a working knowledge of GIS software and SAS statistical software.

BACKGROUND

Education

BS, Environmental Science, Stockton University

Licenses/Certifications

Confined Space Entry Training for Construction, 360 Training

Regulatory Training in Underground Storage Tanks (UST) Certification, Rutgers University

Wetland Delineation Series Certificate,

OSHA 40 Hour HAZWOPER,

RELEVANT EXPERIENCE

Starhill at 1600 Macombs Road, Bronx, NY

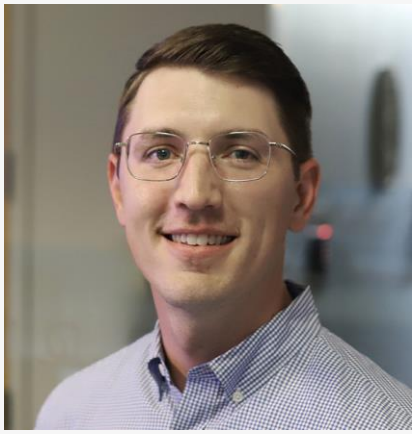
Starhill JV Associates LLC enrolled in the New York City Voluntary Cleanup Program (VCP) to investigate and remediate the property located at 1600 Macombs Road. The property was previously developed with a three-story, former medical facility building last used as a transitional housing and drug/alcohol rehabilitation center, and was being redeveloped with two new two 14-story affordable/sustainable housing residential buildings connected by a one-story structure. Tim prepared a Phase I ESA for the property, as well as coordinated and conducted field sampling during subsequent subsurface investigations. He went on to provide project management and field oversight during site remediation for Phase I of the project under the NYCOER-approved Remedial Action Work Plan (RAWP), which included construction oversight during soil excavation, UST removal, spill remediation, confirmatory endpoint sampling and data analysis/interpretation, implementation of on-site air monitoring program, and preparation of the final closure report.

1760 and 1768 Jerome Avenue, Bronx, NY

ACMH, Inc. enrolled in the NYC VCP to investigate and remediate the property located at 1760 and 1768 Jerome Avenue. The property is currently developed with a one and two-story commercial/industrial building that most recently operated as a manufacturer and wholesale distributor of aluminum, glass, and plexiglass storefronts. Tim prepared a Phase I ESA and coordinated/ provided deputy project management during a subsurface investigation as part of environmental due diligence and acceptance into the VCP.

380 4th Avenue, Brooklyn, NY

380 4th Avenue Owner LLC enrolled in the NYS Brownfield Cleanup Program (BCP) to investigate and remediate the property located at 380 4th Avenue. The property was previously developed with a single-story building that operated as a taxi business, and was being redeveloped with a new 17-story, mixed residential and commercial building. Tim coordinated and conducted field sampling during subsurface investigations, and provided project management during site remediation under a NYSDEC-approved RAWP, which included construction oversight during soil excavation, underground storage tank (UST) removal, spill remediation, confirmatory endpoint sampling and data analysis/interpretation, implementation of on-site air monitoring program, and preparation of the final closure report.



BACKGROUND

Education

BS, Environmental Science, The Ohio State University

Licenses/Certifications

OSHA 10 Hour Construction Safety & Health Course

OSHA 30 Hour Construction

OSHA 40 Hour HAZWOPER

OSHA 8 Hour Refresher

MARK F. JEPSEN

Senior Technical Director

Mark Jepsen is an Environmental Scientist in AKRF's Hazardous Materials group. He has a great deal of experience in both environmental science and natural resources, including environmental remediation and consulting, groundwater quality and soil science, hydrology, and geology. Since joining AKRF, Mark has overseen a wide variety of environmental investigations. He has performed oversight at large scale construction sites dealing with underground storage tanks closure and removal. Mark has performed various Phase I site visits and reports; and followed up these Phase I investigations by performing Phase II remedial investigations including soil, groundwater, and soil vapor sampling. Mark has also had a great deal of experience creating environmental reports discussion results found during the preliminary investigations.

RELEVANT EXPERIENCE

3200 Jerome Avenue, Bronx, NY

Mark conducted groundwater and soil vapor requirements sampling set by the NYSDEC as part of the Brownfield Cleanup Agreement for the project site. Mark is also supporting the ongoing operations and maintenance of an active sub-slab depressurization and soil vapor extraction system installed beneath the building slab. He has also overseen in-situ chemical oxidation groundwater treatment injection activities performed on-site.

1559 Boone Avenue, Bronx, NY

Mark is supporting AKRF's environmental planning, site assessment/remediation services, and geotechnical engineering for a new eight-story, 66-unit supportive housing building. The project received a Certificate of Completion from the New NYSDEC under the Brownfield Cleanup Program (BCP) in 2024.

1769 Jerome Avenue E-Designation, Bronx, NY

Mark provided project management for the remedial investigation phase and assisting the client with enrollment into OER's Voluntary Cleanup Program.

2264 Morris Avenue, Bronx, NY

Mark supported AKRF's environmental consulting services for this site including, Phase I ESA, Phase II remedial site investigations and subsurface sampling, ongoing construction oversight and vapor barrier inspections.

11 Greene Street, Environmental Consulting Services, New York, NY

Investigation and remediation being conducted to satisfy NYCOER requirements under VCP and CEQR. As an Environmental Scientist, Mark is supporting AKRF's environmental consulting services for this site including Waste Classification testing and delineation, preparation of a Remedial Investigation (Phase II) Work Plan; Remedial Investigation (RI) and Report; Preparation of a NYCDEP Dewatering Application and Permit; Preparation of a Remedial Action Work Plan (RAWP) and Construction Health and Safety Plan (CHASP); Pre-Characterization of Soil for Off-site Disposal; Environmental Monitoring; and Environmental Bid Specifications and Design Coordination.

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BACKGROUND

Education

BS, Environmental Science, University of Vermont

Licenses/Certifications

NYC SST - 8-Hour Fall Prevention for Construction Certification

NYSDEC Erosion and Sediment Control Certificate

OSHA 30 Hour Construction

OSHA 40 Hour HAZWOPER

JONAS PETERS

Environmental Scientist

Jonas Peters is an Environmental Scientist at AKRF. He has experience in a laboratory setting, as well as participating in scientific field work and analysis. His environmental consulting experience includes implementing Phase II Environmental Site Investigations; and overseeing remedial action programs under the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP), including soil excavation, community air monitoring, and collection of environmental samples. Jonas has also had multiple years of experience using geographic information systems (GIS) software for various projects.

RELEVANT EXPERIENCE

New York-Presbyterian Cancer Center, New York, NY

Jonas provided air monitoring in accordance with the site-specific Community Air Monitoring Plan (CAMP) during excavation activities, overseeing soil export manifests, collecting waste class samples, and documenting general construction and remedial activities on-site.

Marcy Houses CAMP, Brooklyn, NY

Jonas provided air monitoring in accordance with the site-specific Community Air Monitoring Plan (CAMP) during excavation activities. He is also documenting general construction and remedial activities.

New York Historical Tang Wing for American Democracy, New York, NY

Jonas provided air monitoring in accordance with the site-specific Community Air Monitoring Plan (CAMP) during excavation activities, oversaw soil export manifests, and documented general construction and remedial activities on-site, including soil treatment.

NYCHA PACT Williamsburg Houses, Brooklyn, NY

Jonas provided air monitoring in accordance with the site-specific Community Air Monitoring Plan (CAMP) during soil export, oversaw soil export manifests, and documented activities approved under a NYCDEP-approved Remedial Action Work Plan (RAWP).

Las Raices East Harlem, New York, NY

Jonas provided air monitoring in accordance with the site-specific Community Air Monitoring Plan (CAMP) during excavation activities, oversaw soil export manifests, and documented general construction and remedial activities on-site.

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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Personnel Resume

Carl Armbruster
QA Manager

Qualifications Summary

Mr. Armbruster has over 30 years of experience in the environmental laboratory and engineering industry that includes extensive technical, management/leadership experience in all aspects of the laboratory business. He is an action-oriented manager dedicated to ensuring the laboratory maintains a quality program that holds the highest credentials in PT scores, accreditations and customer satisfaction. His unique experience lends itself to working successfully with employees, managers and clients at all levels.

Professional Experience

Quality Assurance Manager – TestAmerica Edison - 2005 to Present

Mr. Armbruster is responsible for establishing and implementing the quality assurance program at the Edison facility; and for interfacing with the corporate Quality Assurance Director to ensure adherence with the overall Quality Management Plan. He is also responsible for monitoring implementation and compliance with NELAC and TestAmerica's QMP, conducting annual management system audits and data audits, as well as providing regulatory updates and technical support to the Laboratory Director, Operations Manager, Client Services and Sales department.

Project Manager/Assistant Technical Director – STL Edison --2000 to 2005

Laboratory Director − STL Whippany − 1998 to 2000

Account Manager − Clean Harbors Environmental Services − 1997 to 1998

Laboratory Manager − Waste Management Inc., and Chemical Waste Management Inc − 1988 to 1997

Environmental Scientist − ICF Technology − 1987 to 1988

Analytical Chemist − IT Corporation – 1985 to 1987

Analytical Chemist − Hess Environmental Laboratories – 1983 to 1985

Education

- MS in Biology – East Stroudsburg University, 1984
- BS in Environmental Studies - East Stroudsburg University, 1980

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

Lori A. Beyer

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

EXPERIENCE:

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

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

1998-Present American Analytical Laboratories, LLC. 56 Toledo Street, Farmingdale, NY
Laboratory Director/Technical Director

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

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

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

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

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

1995-1996 Nytest Environmental, Inc. (NEI) Port Washington, New York
Corporate QA/QC Officer

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

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

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

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

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

1986-1987 Nytest Environmental, Inc (NEI) Port Washington, New York
GC/MS VOA Analyst

EDUCATION:

1982-1985 State University of New York at Stony Brook, New York; BS Biology/Biochemistry
1981-1982 University of Delaware; Biology/Chemistry
5/91 Rutgers University; Mass Spectral Data Interpretation Course, GC/MS Training
8/92 Westchester Community College; Organic Data Validation Course
9/93 Westchester Community College; Inorganic Data Validation Course

Form **W-9**
(Rev. December 2011)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

Give Form to the requester. Do not send to the IRS.

Print or type
See Specific Instructions on page 2.

Name (as shown on your income tax return)
L.A.B VALIOATION CORP

Business name/disregarded entity name, if different from above

Check appropriate box for federal tax classification:
☐ Individual/sole proprietor ☐ C Corporation ☒ S Corporation ☐ Partnership ☐ Trust/estate

☐ Limited liabilty company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶

☐ Other (see instructions) ▶

☐ Exempt payee

Address (number, street, and apt. or suite no.)
14 WEST POINT DRIVE

Requester's name and address (optional)

City, state, and ZIP code
EAST NORTHPORT, New York 11731

List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on the "Name" line to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Note. If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

Social security number
[ ][ ][ ] - [ ][ ] - [ ][ ][ ][ ]

Employer identification number
5 8 - 2 3 8 1 7 1 4

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
3. I am a U.S. citizen or other U.S. person (defined below).

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 4.

Sign Here Signature of U.S. person ▶ Lou A. Bey Date ▶ 01/18/13

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

Note. If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.

Westchester Community College

Professional Development Center

Awards this Certificate of Achievement To

LORI BEYER

for Successfully Completing

ORGANIC DATA VALIDATION COURSE (35 HOURS)

Dr. John Samuelian

Date AUGUST 1992

Assistant Dean
Professional Development Center

President

The Professional
Development Center

SUNY
WESTCHESTER COMMUNITY COLLEGE
Valhalla, New York 10595

Westchester Community College

Professional Development Center

Awards this Certificate of Achievement To

LORI BEYER

for Successfully Completing

INORGANIC DATA VALIDATION

Instructor: Dale Boshart

Date MARCH 1993

Assistant Dean
Professional Development Center

President

The Professional
Development Center

SUNY
WESTCHESTER COMMUNITY COLLEGE
Valhalla, New York 10595

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

Thomas C. Jorling
Commissioner

July 8, 1992

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

Dear Elaine,

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

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

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

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

Sincerely,

Maureen P. Serafini

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

The Professional
Development Center
AT
WESTCHESTER COMMUNITY COLLEGE

914 285-6619

October 2, 1992

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

Dear Ms. Beyer:

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

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

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

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

Very truly yours,

Passing Grade is 70%
Your Grade is 99%

Elaine Sall
Program Coordinator

ES/bf

SUNY
WESTCHESTER COMMUNITY COLLEGE
Valhalla, New York 10595

The Professional
Development Center
AT
WESTCHESTER COMMUNITY COLLEGE

914 285-6619

June 21, 1993

Dear Ms. Beyer:

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

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

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

Very truly yours,

Elaine Sall

Elaine Sall
Program Coordinator

ES/bf

Enclosures

SUNY
WESTCHESTER COMMUNITY COLLEGE
Valhalla, New York 10595

APPENDIX N
CONSTRUCTION QUALITY ASSURANCE PLAN

STEVENSON COMMONS B3

1850 LAFAYETTE AVENUE

BRONX, NEW YORK

Construction Quality Assurance Project Plan

AKRF Project Number: 240663
NYSDEC BCP Project Number: C203189

Prepared for:
New York State Department of Environmental Conservation
Division of Environmental Remediation
One Hunters Point Plaza
47-40 21st Street
Long Island City, NY 11101

On behalf of:
Stevenson B3 LLC
℅ Camber Property Group
116 East 27th Street, 11th Floor
New York, NY 10016

Prepared by:

AKRF, Inc.
440 Park Avenue South
New York, NY 10016
212-696-0670

OCTOBER 2026

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LIST OF ACRONYMS

Acronym	Definition
BCP	Brownfield Cleanup Project
CAMP	Community Air Monitoring Plan
CQAP	Construction Quality Assurance Plan
FER	Final Engineering Report
HASP	Health and Safety Plan
NYSDEC	New York State Department of Environmental Conservation
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
QC	Quality Control
RAWP	Remedial Action Work Plan
SCO	Soil Cleanup Objective
SMMP	Soil/Material Management Plan

1.0 INTRODUCTION

This Construction Quality Assurance Plan (CQAP) has been prepared for remedial activities conducted under the Remedial Action Work Plan (RAWP) that will be performed at the Stevenson Commons B3 project site located in the Point section of the Bronx (Tax Block 3600, portions of Lots 4, 15, and 25) on the New York City Tax Map, and under the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP), Site No. C203189. This CQAP supplements the NYSDEC-approved RAWP and provides monitoring, inspection, testing, and documentation protocols and procedures.

The following information is provided:

1. Responsibility, Authority and Qualifications – The responsibility, authority and qualifications of the key personnel involved in the project.
2. Inspection and Testing Activities – Inspections and tests that will be used to verify that construction activities meet or exceed all design criteria and federal, state, and local regulations and requirements.
3. Meetings – The requirements for project coordination meetings between the Volunteer and its representatives, the remedial or environmental Contractors, and other involved parties.
4. Documentation and Reporting – Field documentation and reporting requirements.

2.0 RESPONSIBILITY AND AUTHORITY

Measures will be implemented to ensure that a functional quality control (QC) organization is active during the project and to provide support for the construction QC system in conducting inspections, tests and retesting (in the event of failure of any item of work). This includes oversight of subcontractors and compliance with contract provisions. Construction QC includes, but is not limited to, the inspections and tests required in the RAWP and approved submittals and will cover all project operations. A consultant hired by the BCP Volunteer will manage field activities and coordinate the contractor's activities.

2.1 Volunteer

Stevenson B3 LLC (the "Volunteer") is responsible for coordinating the project, including activities of the Site consultant, contractor(s) and subcontractor(s), to comply with the requirements of the RAWP and regulatory agencies. The Volunteer is also responsible for completing and submitting documentation required by the RAWP, the CQAP, and the Quality Assurance Project Plan (QAPP) and has the authority to accept or reject the materials and workmanship of any subcontractors at the Site.

2.2 Construction Quality Assurance (QA) Officer (Consultant)

The Construction QA Officer will be an employee of the consultant hired by the Volunteer and will perform activities that are necessary to assure the quality of construction. He/she will be on-site as required during construction activities and will have the authority to take any action necessary to maintain compliance with the RAWP and approved submittals and to monitor construction quality.

Specific responsibilities of the Construction QA Officer include:

- Supporting the Volunteer and the consultant's field staff;
- Evaluating construction activities and activities of the field staff;
- Verifying that remedial activities are performed in accordance with the RAWP, approved submittals, and with federal, state, and local regulations and requirements;
- Verifying that data are properly recorded, validated, reduced, summarized, and inspected;
- Evaluating sampling and monitoring activities;
- Educating the field staff on construction QC requirements and procedures; and
- Scheduling and coordinating inspections.

2.3 Field Team Leader (Consultant)

The Field Team Leader will be an employee of AKRF, Inc. (AKRF) and will be on-site during construction activities. He/she will have authority to take any action necessary to maintain compliance with the RAWP and approved submittals and to maintain construction quality. The Field Team Leader will also manage the field staff discussed in this CQAP.

Specific responsibilities of the Field Team Leader include:

- Reviewing the RAWP for clarity and completeness so that the construction activities can be effectively implemented;
- Verifying that the contractor's work is in accordance with the RAWP, approved submittals, and this CQAP;

- Performing on-site inspection of the work in progress to assess compliance with the RAWP, approved submittals, and this CQAP;
- Scheduling and coordinating inspections;
- Reporting the results of all observations and tests as the work progresses and modifying materials and work to comply with the RAWP and approved submittals as noted below:
    1. Providing daily reports on field construction, material shipments, and inspection results.
    2. Review and interpretation of all data, drawings, and reports.
    3. Identification of all work that should be accepted, rejected, or uncovered for observation, or that may require special testing, inspection, or approval.
    4. Rejection of defective work and verification that corrective measures are implemented.
    5. Making observations and records that will aid in the preparation of a report on remedial activities.
- Inspecting each delivery of materials and/or equipment;
- Reporting to the Construction QA Officer the results of all inspections, including work that is not of acceptable quality or that fails to meet the requirements of the RAWP, approved submittals, and this CQAP;
- Verifying that testing equipment meets established requirements that the tests are conducted according to the proper standardized procedures;
- Confirming that testing equipment, personnel, and procedures do not change over time, or making sure that any changes do not adversely impact the inspection process;
- Confirming that regular calibration of testing equipment occurs and is properly recorded; and
- Confirming that waste treatment or disposal is performed in accordance with applicable federal, state, and local laws and regulations.

2.4 Site Technician (Consultant)

A qualified scientist, geologist, or engineer (supplemented by additional personnel, if necessary) from AKRF will be on-site during remedial construction documenting site personnel, equipment, samples collected, contamination observations and any other observations of field activities. Specific responsibilities include:

- Calibration, operation, and maintenance of air monitoring instrumentation in accordance with the RAWP and approved submittals;
- Collecting, packaging, and shipping of environmental samples in accordance with the RAWP and QAPP;
- Documenting sample collection in a field notebook and identifying all sample locations in a field notebook or Site drawing;
- Preparing and logging manifests for transportation of any non-hazardous and hazardous materials;
- Informing the Site Project Coordinator when (if) the concentrations of air contaminants exceed action levels specified in the RAWP; and

- Maintaining and organizing the field equipment and supply storage area.

3.0 FIELD QUALITY CONTROL (QC) INSPECTIONS, TESTING, AND SAMPLING

The definable features of work are described in Sections 5.0 and 6.0 of the RAWP. This section describes the anticipated inspection, testing, and sampling requirements associated with these definable features of work.

3.1 Mobilization

Inspections will be performed to assure that Site laydown areas, support facilities, surface water controls, and air monitoring systems are established in accordance with the RAWP and approved submittals. In addition, the stakeout of existing utilities in work areas and the maintenance of Site security will be verified. There are no testing and sampling requirements associated with mobilization of the contractor(s).

Each delivery of materials and/or equipment will be inspected relative to approved submittals. Approved materials and/or equipment will be stored at a designated area of the Site.

Equipment will be set-up and tested in accordance with the RAWP and approved submittals.

3.2 Soil Excavation

The Soil/Materials Management Plan (SMMP), Section 6.4 of the RAWP, outlines the procedures to be performed during the handling of soil/fill materials on-site during all intrusive work. Inspections will be performed during soil excavation activities including concrete removal, soil excavation, stockpiling, and load out, shoring, and re-use and backfilling (if any). Any impacts to building structural elements will be documented and assessed immediately. AKRF will confirm that all soil excavation related work will be conducted as specified in the RAWP, or are equivalent. Air monitoring will be conducted as outlined in the Health and Safety Plan (HASP), provided as Appendix G of the RAWP. Soil screening will be conducted as outlined in Section 6.4.1 of the RAWP. Any corrective actions will be summarized in the Daily Reports.

3.3 Soil Sampling

Soil sampling activities at the Site include waste classification sampling, endpoint and/or reuse sampling, and sampling of clean backfill from off-site sources. Proposed endpoint sample locations are shown on Figure 10 of the RAWP. All soil sampling activities will be conducted in accordance with the QAPP and Section 6.2 of the RAWP. The applicable Soil Cleanup Objectives (SCOs) for this Site are the Track 4 Restricted Residential SCOs (RRSCOs).

Soil and materials management on-site and off-site will be conducted in accordance with the SMMP (Section 6.4 of the RAWP).

3.4 Loading of Waste Material for Transportation

Inspections will be conducted to verify that material removed from the Site is properly loaded for transfer to a permitted treatment/disposal facility. Manifests and bills of lading will be maintained and will be included as an Appendix in the Final Engineering Report (FER).

3.5 Site Restoration

Site restoration will be observed and recorded to verify compliance with the RAWP and approved submittals. The surface will be restored to match the surrounding ground surface.

4.0 MEETINGS

A pre-construction meeting will be held with representatives of NYSDEC, the consultants, and contractor(s) performing the work prior to the start of major construction activities. Additional meetings will be called as necessary if work conditions change or deviations are necessary.

Project personnel and visitors will be given health and safety briefings periodically by the Site Technician or Field Team Leader to assist Site personnel in safely conducting their work activities. The safety briefings will include information on new operations to be conducted, changes in work practices or changes in the Site's environmental conditions, as well as periodic reinforcement of previously discussed topics.

5.0 DOCUMENTATION AND REPORTING REQUIREMENTS

The value of the CQAP will be assured by proper documentation. The inspectors will use data sheets, field reports, log forms, schedules, and checklists to document Site work and verify compliance with the RAWP and approved submittals. Documentation will include, at a minimum, the following reports and information:

Daily field construction reports;

Photographs;

Sampling chains of custody;

Material disposition logs; and

Variances to the RAWP and approved submittals.

5.1 Daily Report

The Site Technician or Field Team Leader will prepare a daily report that identifies the following:

- Work force and visitors to the Site;
- An update of progress made during the reporting day;
- Locations of work and quantities of material imported and exported from the Site;
- References to alphanumeric grid map for Site activities;
- A summary of any and all complaints with relevant details (names, phone numbers);
- A summary of Community Air Monitoring Plan (CAMP) findings, including excursions;
- Apparent deviations from the RAWP;
- Weather conditions;
- Photographs of the Site and pertinent work; and
- An explanation of notable Site conditions.

5.2 Photographic Log

The photographic log will be kept to document construction activities by still photographs. The photographic log may also be used to record activities recorded in the daily report. All photographs will be taken with a camera capable of producing date and timestamps.

5.3 Sampling Documentation

The project field book will be used to document all sampling activities and how they correspond to the RAWP. All observations and field and/or laboratory tests will be recorded in the project field book or on separate logs. Recorded field observations may take the form of notes, charts, sketches, or photographs.

5.4 Material Disposition Tracking

All materials that are taken off-site for disposal will be tracked and final disposition confirmed. Copies of all waste manifests and bills of lading will be maintained by the Project Manager.

5.5 Variances to Remedial Action Work Plan (RAWP)

Required changes to the RAWP will be documented as construction proceeds. Any material deviations from the NYSDEC-approved RAWP will be communicated to the NYSDEC Project Manager. NYSDEC approval will be sought prior to proceeding with work deviating materially from the RAWP. In the event of an emergency change to the work plan, the NYSDEC Project Manager will be consulted immediately.

5.6 Final Engineering Report (FER)

At the completion of the project the consultant/construction manager will prepare an FER. This report will describe the implementation of the RAWP and will include a summary of the field work, as-built drawings for constructed elements, manifests, bills of lading, test results demonstrating that all mitigation and remedial systems are functioning properly, and photographic documentation. The FER will also include a description of the changes in the Remedial Action from the elements provided in the RAWP.

5.7 Document Storage

The Field Team Leader will maintain the current field book and all original field paperwork during the performance of work. The Project Manager will maintain the field paperwork after completion and will maintain all submittal document files.

APPENDIX O
NYSDEC REQUEST TO IMPORT/REUSE FILL OR SOIL

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

Site Name:

Site Number:

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.

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:

Name and address of fill source:

Location where fill was obtained:

Identification of any state or local approvals as a fill source:

If no approvals are available, provide a brief history of the use of the property that is the fill source:

Provide a list of supporting documentation included with this request:

The information provided on this form is accurate and complete.

_____ _____

Signature Date

_____

Print Name

_____

Firm