975 NOSTRAND AVENUE

BROOKLYN, NEW YORK

SITE MANAGEMENT PLAN

NYSDEC Site Number: C224335

AKRF Project Number: 210225

Prepared for:

New York State Department of Environmental Conservation Division of Environmental Remediation Region 2 47-40 21st Street Long Island City, NY 11101

Prepared on Behalf of:

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Revisions to Final Approved Site Management Plan:

Revision	Date	Summary of Revision	NYSDEC
No.	Submitted		Approval Date
1	01-04-2024	Text updates related to vapor intrusion language (Section 3.2 and Executive Summary) to match the DD.	March 26, 2024

JANUARY 2024

CERTIFICATION STATEMENT

I, Rebecca Kinal, P.E., certify that I am currently a New York State registered Professional Engineer as in defined in 6 NYCRR Part 375 and that this Site Management Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).



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LIST OF ACRONYMS

Acronym	Definition	
ACM	Asbestos Containing Material	
AG	Air Guide	
AGC	Annual Guideline Concentrations	
ASP	Analytical Services Protocol	
ASTM	American Society for Testing and Materials	
AWQSGVs	Ambient Water Quality Standards and Guidance Values	
BCA	Brownfield Cleanup Agreement	
BCP	Brownfield Cleanup Program	
bgs	Below Ground Surface	
C&D	Construction and Demolition	
CAMP	Community Air Monitoring Plan	
CFR	Code of Federal Regulations	
CMWP	Corrective Measures Work Plan	
COC	Certificate of Completion	
СР	Commissioner's Policy	
CVOC	Chlorinated Volatile Organic Compound	
DAR	Division of Air Resources	
DD	Decision Document	
DER	Division of Environmental Remediation	
DGA	Dense Grade Aggregate	
DUSR	Data Usability Summary Report	
EC	Engineering Control	
ECDD	Engineering Controls Design Document	
ECL	Environmental Conservation Law	
EE	Environmental Easement	
ELAP	New York State Environmental Laboratory Approval Program	
EPA	United States Environmental Protection Agency	
ESA	Environmental Site Assessment	
EWP	Excavation Work Plan	
FER	Final Engineering Report	
GAC	Granular Activated Carbon	
GPA	Gas Permeable Aggregate	
HASP	Health and Safety Plan	
IC	Institutional Control	
inH ₂ O	Inches of Water	
IRM	Interim Remedial Measures	
IRMWP	Interim Remedial Measures Work Plan	
LBP	Lead-based Paint	
mg/m ³	Milligrams per Cubic Meter	

Acronym	Definition		
MP	Monitoring Point		
MW	Monitoring Well		
NY	New York		
NYCDOHMH	New York City Department of Health and Mental Hygiene		
NYCRR	New York Codes, Rules and Regulations		
NYS	New York State		
NYSDEC	New York State Department of Environmental Conservation		
NYSDOH	New York State Department of Health		
NYSDOT	New York State Department of Transportation		
P&ID	Process and Instrumentation Diagram		
РАН	Polycyclic Aromatic Hydrocarbon		
PBS	Petroleum Bulk Storage		
РСВ	Polychlorinated Biphenyl		
PCE	Tetrachloroethylene		
PDI	Pre-design Investigation		
PE	Professional Engineer		
PFAS	Per- and Polyfluoroalkyl Substances		
PID	Photoionization detector		
ppm	Parts per Million		
PRR	Periodic Review Report		
PVC	Polyvinyl Chloride		
QA	Quality Assurance		
QAPP	Quality Assurance Project Plan		
QC	Quality Control		
QEP	Qualified Environmental Professional		
RAO	Remedial Action Objective		
RAWP	Remedial Action Work Plan		
RCRA	Resource Conservation and Recovery Act		
REC	Recognized Environmental Condition		
RI	Remedial Investigation		
RIR	Remedial Investigation Report		
RIWP	Remedial Investigation Work Plan		
RMR	Remedy Modification Request		
RRSCO	Restricted Residential Soil Cleanup Objective		
RSO	Remedial Site Optimization		
SB	Soil Boring		
SCFM	Standard Cubic Feet per Minute		
SCGs	Standards, Criteria, and Guidance		
SGC	Short-term Guideline Concentrations		
SI	Site Investigation		
SIM	Selective Ion Monitoring		

Acronym	Definition	
SMP	Site Management Plan	
SOE	Support of Excavation	
SPDES	State Pollutant Discharge Elimination System	
SSDS	Sub-slab Depressurization System	
SSO	Site Safety Officer	
SV	Soil Vapor	
SVE	Soil Vapor Extraction	
SVES	Soil Vapor Extraction System	
SVOC	Semivolatile Organic Compound	
TAL	Target Analyte List	
TCL	Target Compound List	
TCLP	Toxicity Characteristic Leaching Procedure	
TOGS	Technical Operational and Guidance Series	
UST	Underground Storage Tank	
UUSCO	Unrestricted Use Soil Cleanup Objective	
VFD	Variable-frequency Drives	
VOC	Volatile Organic Compound	

EXECUTIVE SUMMARY

The following **In-Text Table I** provides a brief summary of the controls implemented for the Site, as well as the inspections, monitoring, maintenance, and reporting activities required by this Site Management Plan (SMP):

	BCP Site Identification No. C224335		
Site Identification:	975 Nostrand Ave.		
	Brooklyn, New York		
	1. The property may be used for restricted residential, commercial,		
	and industrial use only, as set forth in the Environmental Easement.		
	2. All ECs must be operated and maintained as specified in this		
	SMP.		
	3. All ECs must be inspected at a frequency and in a manner		
	defined in this SMP.		
	4. The use of groundwater underlying the property is prohibited		
	without the necessary water quality treatment as determined by		
	NYSDOH or the NYCDOHMH to render it safe for use as drinking		
	water or for industrial purposes, and the user must first notify and		
	obtain written approval to do so from NYSDEC.		
	5. Soil vapor and other environmental or public health monitoring		
	must be performed as defined in this SMP.		
	6. Data and information pertinent to site management must be		
	reported at the frequency and in a manner as defined in this SMP.		
	7. All future activities that will disturb the remaining contaminated		
Lestitutional Constants (ICa)	material must be conducted in accordance with this SMP.		
Institutional Controls (ICs):	8. Monitoring to assess the performance and effectiveness of the		
	remedy must be performed as defined in this SMP.		
	9. Operation, maintenance, monitoring, inspection, and reporting of		
	any mechanical or physical components of the remedy shall be		
	performed as defined in the SMP.		
	10. Access to the Site must be provided to agents, employees, or		
	other representatives of the State of New York with reasonable		
	prior notice to the property owner to assure compliance with the		
	restrictions identified in the Environmental Easement.		
	11. Any on-site buildings will be required to have a sub-slab		
	depressurization system, or other acceptable measures, to mitigate		
	the migration of vapors into the building from subsurface.		
	12. In-ground vegetable gardens and farming on the Site are		
	prohibited.		
	13. The Site may not be used for a higher level of use, such as		
	residential or unrestricted use, without an amendment to or the		
	extinguishment of the Environmental Easement.		
	extinguishment of the Environmental Easement.		

In-Text Table I Site Management Plan Summary

Institutional Controls (ICs):	Volunteer can de Department of E New York State	mental Easement may be extinguished if the lemonstrate to the satisfaction of the New York State Environmental Conservation (NYSDEC) and the e Department of Health (NYSDOH) that the ECs no longer required.	
Engineering Controls (ECs):	1. Active Sub-Sl	ab Depressurization System (SSDS)	
Engineering Controls (ECs):	2. Soil Vapor Ex	traction (SVE) System (SVES)	
Inspections:		Frequency	
1. Site Inspection		Annually	
2. Active SVES		Monthly (first year), annually (after first year)	
3. Active SSDS		Quarterly (first year), annually (after first year)	
Monitoring:			
1. SVES Extracted Vapor Sampling		6 months and 12 months after start-up, annually and as necessary thereafter	
2. SVES Monitoring		Monthly (first year), quarterly (after first year)	
3. SSDS Monitoring		Quarterly (first year), annually (after first year)	
Maintenance:			
1. SVES		Quarterly/As needed	
2. Active SSDS		Quarterly/As needed	
Reporting:			
1. Periodic Review Report (PRR)		First PRR 16 months after receipt of the Certificate of Completion (COC). Annually thereafter.	

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

1.0 INTRODUCTION

1.1 General

This Site Management Plan (SMP) is a required element of the remedial program for the 975 Nostrand Ave site located in Brooklyn, New York (hereinafter referred to as the "Site"), also identified on the New York City Tax Map as Tax Block 1309, Lot 6. The Site is currently in the New York State (NYS) Brownfield Cleanup Program (BCP), Site No. C224335, which is administered by the New York State Department of Environmental Conservation (NYSDEC). A Site Location map is provided as **Figure 1**.

On December 21, 2021, Nostrand Green LLC entered into a Brownfield Cleanup Agreement (BCA) (Index No. C224335-12-21) with NYSDEC as a Volunteer to remediate the Site. The Site was remediated to Track 2 Restricted Residential Soil Cleanup Objectives (RRSCOs) in accordance with the NYSDEC-approved Remedial Action Work Plan (RAWP), Decision Document (DD), Interim Remedial Measures Work Plan (IRMWP), and Remedy Modification Request (RMR), as described in this SMP. The boundaries of the Site are more fully described in the metes and bounds site description that is part of the Environmental Easement (EE) provided in **Appendix A**.

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

This SMP was prepared to manage remaining contamination at the Site until the EE is extinguished in accordance with Environmental Conservation Law (ECL) Article 71, Title 36. This SMP has been approved by NYSDEC, and compliance with this Plan is required by the grantor of the EE and the grantor's successors and assigns. This SMP may only be revised with the approval of NYSDEC.

It is important to note that:

- This SMP details the site-specific implementation procedures that are required by the EE. Failure to properly implement the SMP is a violation of the EE, which is grounds for revocation of the Certificate of Completion (COC); and
- Failure to comply with this SMP is also a violation of ECL, 6 New York Codes, Rules, and Regulations (NYCRR) Part 375, and the BCA for the Site (Index #C224335-12-21; Site No. C224335), and thereby subject to applicable penalties.

All reports associated with the Site can be viewed by contacting NYSDEC or its successor agency managing environmental issues in New York State. Contact lists for persons involved with the Site are provided in **In-Text Table II** and **Appendix B** of this SMP.

This SMP was prepared by AKRF, Inc. (AKRF), on behalf the Volunteer, in accordance with the requirements of NYSDEC's DER-10 ("Technical Guidance for Site Investigation and Remediation"), dated May 2010, and the guidelines provided by NYSDEC. This SMP addresses the means for implementing the ICs and ECs that are required by the EE for the Site.

1.2 Revisions and Alterations

Revisions and alterations to this SMP will be proposed in writing to the NYSDEC project manager. NYSDEC can also make changes to the SMP or request revisions from the remedial party.

Revisions will be necessary upon, but not limited to, the following occurring: a change in media monitoring requirements, upgrades to or shutdown of a remedial system, post-remedial removal of contaminated soil, or other significant change to the Site conditions. All approved alterations must conform with Article 145 Section 7209 of the Education Law regarding the application of professional seals and alterations. For example, any changes to as-built drawings must be stamped by a New York State Professional Engineer (PE). In accordance with the EE for the Site, NYSDEC will provide a notice of any approved changes to the SMP and append these notices to the SMP that is retained in its files.

1.3 Notifications

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

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

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

- 8. At least 60 days prior to the change, NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser/remedial party has been provided with a copy of the BCA and all approved work plans and reports, including this SMP.
- 9. Within 15 days after the transfer of all or part of the Site, the new owner's name, contact representative, and contact information will be confirmed in writing to NYSDEC.

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

Nouncations					
Name	Contact Information	Required Notification**			
Christopher Allan NYSDEC Project Manager	(718) 482-4065 christopher.allan@dec.ny.gov	All Notifications			
Cris-Sandra Maycock Section Chief	(718) 482- 4679 cris-sandra.maycock@dec.ny.gov	All Notifications			
Kelly Lewandowski NYSDEC Site Control	(518) 402-9569 kelly.lewandowski@dec.ny.gov	Notifications 1, 8, and 9			
Sally Rushford NYSDOH Project Manager	(518) 402-5465 sally.rushford@health.ny.gov	Notifications 4, 6, and 7			

In-Text Table II Notifications*

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

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

2.0 SUMMARY OF PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

2.1 Site Location and Description

The Site is located in Brooklyn, Kings County, New York, and is identified as Block 1309 and Lot 6 on the New York City Tax Map. The Site location is shown on **Figure 1**. The Site is an approximately 1.369-acre parcel bounded to the north by a construction site; to the east by Clove Road, followed by multi-family residential buildings; to the south by mixed residential and commercial uses; and to the west by Nostrand Avenue, followed by mixed residential and commercial uses and Sullivan Place. A Site plan is provided as **Figure 2**. The boundaries of the Site are more fully described in the EE, provided as **Appendix A**. The owner and operator of the Site at the time of issuance of this SMP is:

Nostrand Green LLC

826 Broadway, 11th Floor

New York, NY 10003

2.2 Physical Setting

2.2.1 Land Use

The Site is currently being redeveloped with a new mixed-use residential and commercial use building with a cellar. The Site is zoned as R7-1 (residential) and C2-3 (commercial), and the new building will occupy the entire Site.

The properties adjoining the Site and in the surrounding neighborhood primarily include commercial and residential properties with some institutional uses, including a public school. The properties immediately south of the Site include residential and commercial properties; the properties immediately north of the Site include a vacant lot; the properties immediately east of the Site include residential properties; and the properties to the west of the Site include commercial and residential properties.

2.2.2 Geology

Soil encountered during the Remedial Investigation (RI) and Subsurface Investigation (SI) consisted of fill materials comprising sand, gravel, and silt with varying amounts of concrete, brick, wood, ash, glass, and asphalt from surface grade to 15 feet below ground surface (bgs). The fill was underlain by sand, silt, and clay with gravel. The surface topography generally slopes down toward the south. Based on the U.S. Geological Survey, Brooklyn, New York quadrangle map, the Site lies at approximately 85 feet above mean sea level.

2.2.3 Hydrogeology

Based on the site-specific groundwater measurements, groundwater beneath the Site ranges from 10.71 to 10.78 feet above the North American Vertical Datum of 1988 (NAVD88). The groundwater flow direction could not be confirmed based on the site-specific groundwater depths and elevation survey; however, based on the topography of the area, groundwater beneath the Site is expected to flow in a southwesterly direction towards Prospect Lake (the nearest surface water body). Groundwater contour map is provided as **Figure 3**.

2.3 Investigation and Remedial History

<u>Phase I Environmental Site Assessment - 975 Nostrand Avenue, Brooklyn, NY, EBI Consulting,</u> <u>November 2020</u>

EBI Consulting (EBI) performed a Phase I Environmental Site Assessment (ESA) for the Site in November 2020, and the following Recognized Environmental Conditions (RECs) were identified:

- Based upon a review of historical resources, the Site was developed with a single-story structure situated on the western half of the Site. This building was constructed in 1925 and was originally configured with small stores/commercial units fronting Nostrand Avenue and a parking garage for 150 cars at the rear of the building. Fire insurance maps, dated 1932 and 1951, depicted two buried gasoline tanks located within a small courtyard area at the west-central portion of the building. It is presumed that the gasoline tanks were utilized for fueling operations associated with the parking garage. By the 1960s, the parking garage was occupied by a wholesale textiles warehouse, and the gasoline tanks were no longer depicted on the fire insurance maps. No documentation regarding closure of the former underground storage tank (UST) system, or documentation regarding any previous soil and/or groundwater investigation at this location, was identified during the assessment. Based upon the absence of closure documentation, EBI concluded that USTs may remain in the ground and could have impacted subsurface conditions at the Site.
- Review of historical resources also indicated that the area to the east of the former retail/garage building consisted of a paved parking area until around the 1960s, at which time a single-story auto repair facility was constructed. This auto repair facility was located on the central portion of the Site.
- Based upon review of historical fire insurance maps and New York City Department of Buildings records, the Site included a range of municipal addresses, specifically 969 to 983 Nostrand Avenue. Review of historical street directories for the full address range identified the following environmentally concerning tenants:
 - 1934 Windsor Printers (977 Nostrand Avenue), Schmidt WM & Melham Printers (981 Nostrand Avenue), Cut Rate Hand Laundry (983 Nostrand Avenue)
 - 1940 Garfinkel I Cleaner and Dyer (979 Nostrand Avenue)
 - 1945 Liberty Hand Laundry (975 Nostrand Avenue), Windsor Printers (977 Nostrand Avenue), Garfinkel I Cleaner and Dyer (979 Nostrand Avenue)
 - 1949 Liberty Hand Laundry (975 Nostrand Avenue), Garfinkel I Cleaner and Dyer (979 Nostrand Avenue)
 - o 1960 and 1965 Liberty Hand Laundry (975 Nostrand Avenue).

The dates noted suggest that these former tenants occupied retail units within the western portion of the former retail/garage structure. The exact operations of these former tenants are unknown. Based on the nature of these businesses (i.e., auto repair facility, printers, cleaners and dyers, and laundry facilities), these former tenants may have handled, generated, stored, and/or disposed of hazardous substances and/or petroleum products as a part of daily operations. The portions of the Site where the former retail units and auto repair facility were located currently consist of paved surface parking. Although these historical uses predate construction of the previous commercial building (constructed in the early 1970s), EBI concluded that the potential for the operations of these former tenants to have impacted subsurface conditions at the Site could not be ruled out.

In addition, the following consideration outside the scope of the American Society for Testing and Materials (ASTM) Standard E1527-13 was identified in connection with the Site:

• A limited visual screening survey for the presence of asbestos-containing materials (ACM) was conducted at the Site. Potential ACM identified included: friable suspect ACM in the form of sheetrock/joint compound composite material and 2' x 4' white perforated acoustical ceiling tile; and non-friable suspect ACM in the form of vinyl floor tile and associated mastic, various construction mastics, and caulking and roofing. These materials were observed to be undamaged and in good condition at the time of assessment. However, this survey was limited to visual observations of accessible areas and the scope of work for this assessment did not include the collection and laboratory analysis of bulk samples of suspect ACM. EBI concluded that additional suspect ACM may have been present in inaccessible areas, including but not limited to roofs, pipe chases behind solid walls and ceilings, concealed floor coverings, the interior of machinery or equipment, or water and sewer systems.

<u>Phase II Environmental Site Assessment - 975 Nostrand Avenue, Brooklyn, NY, EBI Consulting,</u> <u>December 2020</u>

Based on the results of the November 2020 Phase I ESA, EBI conducted a Phase II ESA at the Site in December 2020. The Phase II included the advancement of 9 soil borings with the collection and analysis of 15 soil samples, and the installation of 6 sub-slab samplers with the collection and analysis of 6 soil vapor samples. Soil samples were slated for laboratory analysis of volatile organic compounds (VOCs) by United States Environmental Protection Agency (EPA) Method 8260, polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8270, and lead by EPA Method 6010. Soil vapor samples were analyzed for VOCs by EPA Method TO-15. The results of the investigation indicated the following:

- The soil analytical results revealed that concentrations of VOCs, PAHs, and lead were detected above laboratory detection limits in the soil samples, with some concentrations above the NYSDEC 6 NYCRR Part 375 RRSCOs.
- The soil vapor analytical results revealed that low level concentrations of VOCs were detected at levels above the laboratory detection limits in the soil vapor samples.
- EBI concluded that the Site had been impacted with low concentrations of VOCs, PAHs and lead above laboratory method detection limits that appear characteristic of the presence of historic and urban fill material.

Phase I Environmental Site Assessment, 975 Nostrand Avenue, Brooklyn, New York, AKRF, Inc., July 2021

AKRF completed a Phase I ESA for the Site in July 2021 in general accordance with the ASTM Standard E1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Practice.* The following evidence of on-site RECs was identified:

- Historical Sanborn maps indicated that the Site contained two gasoline tanks in the western portion of the Site, along Nostrand Avenue, between 1932 and 1951. The Site was not registered in the NYSDEC Petroleum Bulk Storage (PBS) database and no evidence of vent pipes or fill ports were observed during the reconnaissance. AKRF concluded that the tanks may not have been removed during demolition of the former buildings and could still be present beneath the Site.
- Historic Sanborn maps and City Directories indicated that the Site was occupied by a printing facility between 1932 and 1951, and an auto repair shop between 1963 and 1965. Such uses may have affected the subsurface conditions beneath the Site.

- The Site building contained one hydraulic freight elevator and two hydraulic trash and cardboard compactors. Suspect historical staining was observed in the elevator machine room and around the compactors. It was unknown whether the hydraulic fluid contained polychlorinated biphenyls (PCBs). The sump within the elevator machine room was reportedly connected to the municipal sewer system.
- Sanborn maps and City Directories identified proximal automotive, industrial, and drycleaning uses between 1908 and 2007, including: a brass foundry, a sheet metal works, an auto greasing facility, a machine shop, filling stations, a furniture manufacturer, a printing facility, auto repair shops, and a car wash. Some of these uses were also identified in the EDR Historic Auto Station, NY SPILLS, Resource Conservation and Recovery Act (RCRA), PBS, and Registered/Historic Dry Cleaner databases, with documented impacts to subsurface soil.

The following considerations outside the scope of ASTM Standard E1527-13 were also identified:

- Based on the age of the Site building at the time of the investigation, ACM, PCBs, and/or leadbased paint (LBP) could be present within the building's components.
- Given the ages of former structures on the Site, potential fill material and/or demolition debris beneath the Site could contain suspect ACM, LBP, and/or PCBs. Fill material is of unknown origin.

Limited Subsurface Investigation Letter Report, 975 Nostrand Avenue, Brooklyn, New York, AKRF, Inc., August 2021

AKRF conducted a Limited SI that included the advancement of 8 soil borings on a portion of the Site with continuous sample collection and laboratory analysis of 24 samples to evaluate soil quality. Soil beneath the Site consisted of fill material (sand, gravel, silt, concrete, brick, ash, glass, asphalt) to boring termination. Groundwater was not encountered during the investigation. The laboratory results identified concentrations of VOCs, semivolatile organic compounds (SVOCs), pesticides, and metals above the NYSDEC 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives (UUSCOs) and/or RRSCOs.

Interim Remedial Measures Work Plan, 975 Nostrand Ave, Brooklyn, NY, AKRF Inc., June 2022

An Interim Remedial Measures (IRM) Work Plan (IRMWP) dated June 2022 was prepared by AKRF and approved by NYSDEC on June 30, 2022. The IRMWP included installation of support of excavation (SOE) along the Site perimeter to enable future remedial excavation of contaminated soil/fill; and collection of soil waste characterization samples for off-site disposal of contaminated soil/fill. The IRMWP was prepared based on the results of the previous investigations conducted at the Site (including the results of AKRF's 2022 RI detailed below).

<u>Remedial Investigation Report, 975 Nostrand Avenue, Brooklyn, New York, AKRF, Inc., September</u> 2022

AKRF conducted an RI in accordance with the NYSDEC-approved Remedial Investigation Work Plan (RIWP), dated February 2022 and approved by NYSDEC in a letter dated March 11, 2022. The following work was completed between March 23 and April 4, 2022, and detailed in a September 2022 RI Report (RIR):

- 1. The performance of a geophysical investigation across accessible portions of the Site.
- The advancement of 20 soil borings (RI-SB-01 to RI-SB-20) with the collection of 63 samples for laboratory analysis. Each collected soil sample was analyzed for VOCs by EPA Method 8260, SVOCs by EPA Method 8270, PCBs by EPA Method 8082, pesticides by EPA Method 8081, Target Analyte List (TAL) metals by EPA Method 6000/7000 series, hexavalent

chromium, 1,4-dioxane by EPA Method 8270, and per- and polyfluoroalkyl substances (PFAS) by EPA Method 537. In addition, one soil sample (RI-SB-20_13-15_20220328) with an elevated concentration of lead was analyzed for Toxicity Characteristic Leaching Procedure (TCLP) lead by EPA Method 1311.

- 3. The installation of 4 permanent, 2-inch-diameter groundwater monitoring wells (RIMW-01 through RI-MW-04) with the collection of 3 groundwater samples for laboratory analysis. The samples collected from monitoring wells RI-MW-02, RI-MW-03, and RI-MW-04 were analyzed for VOCs by EPA Method 8260, SVOCs by EPA Method 8270, PCBs by EPA Method 8082, pesticides by EPA Method 8081, TAL metals (total and dissolved) by EPA Method 6000/7000 series, and the emerging contaminants 1,4-dioxane by EPA Method 8270D Selective Ion Monitoring (SIM) and PFAS by EPA Method 537 (modified). A groundwater sample could not be collected from monitoring well RI-MW-01.
- 4. The installation of 12 temporary soil vapor probes (RI-SV-01 through RI-SV-012) with the collection of 12 soil vapor samples for laboratory analysis. In addition, an ambient air sample was also collected for QA/QC purposes. Each sample was analyzed for VOCs by EPA Method TO-15.
- 5. The performance of a groundwater monitoring well elevation and location survey.

Based on the results of the previous SI and this RI, the following contaminants of concern (COCs) were identified:

- Soil: The PAHs benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, indeno(1,2,3-c,d)pyrene, and 4-methylphenol, as well as select metals (arsenic, barium, cadmium, copper, hexavalent chromium, nickel, lead, mercury, nickel, selenium, silver, and zinc), pesticides (4,4'-DDE, 4,4'-DDD, 4,4'-DDT) were detected above RRSCOs and/or UUSCOs in one or more samples.
- Groundwater: The VOCs PCE and chloroform, as well as the metals antimony (dissolved), iron (dissolved), manganese (total and dissolved), selenium (dissolved), sodium (total), and silver (dissolved), were detected above AWQSGVs in one or more samples. PFAS were detected above the Screening Levels in one or more samples.
- Soil Vapor: The VOCs TCE, TCA, PCE, and benzene, toluene, ethylbenzene, and xylenes (collectively "BTEX").

Site History and Conceptual Model of Site Contamination

Based on a review of historical Sanborn maps and City Directories, the Site was developed with a trucking company as early as 1908. At the time, a portion of an unspecified road intersected the eastern portion of the Site in a north-south direction. Prior to the construction of the current building, the Site was occupied by various uses including stores, a parking garage, a printing facility, upholstery facility, and a carpenter, an auto repair shop, a printing press, hand laundry facility, an exterminator, and an auto school.

Based on the SI and RI findings, 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 and information in this RI and the previous SI, the Site is contaminated with: PAHs, pesticides, and metals in soil/fill; Chlorinated solvent-related VOCs and metals in groundwater, and chlorinated solvent-related and petroleum-related VOCs insoil vapor. metals in groundwater are likely related to regional groundwater conditions and not anon-site release. Elevated PCE concentrations in the soil vapor samples collected from the southwestern portion of the Site are attributable to an off-site soil vapor source. Based on the review of the Department of Buildings

(DOB) Certificate of Occupancy (CO) dated February 27, 1989, the first floor of the adjacent property (Block 1309, Lot 1) historically operated as a "dry cleaningstore", and additionally, multiple historic dry cleaners operated to the west of the Site across Nostrand Avenue. No significantly elevated concentrations of PCE were noted in the soil samples analyzed from across the Site.

Elevated metal concentrations in groundwater are likely related to regional groundwater conditions and not an on-site release.

Remedial Action Work Plan, 975 Nostrand Ave, Brooklyn, NY, AKRF Inc., November 2022

AKRF prepared a RAWP in November 2022, which outlined the remedial activities and cleanup objectives for the Site, and it was approved by NYSDEC on November 7, 2022. The RAWP proposed excavation and removal of soil/fill exceeding Track 2 RRSCOs in the southwestern corner and exceeding Track 1 UUSCOs from the remainder of the Site; and excavation and removal of any unknown USTs encountered during the excavation in accordance with applicable federal, state, and local laws and regulations, as defined by 6 NYCRR Part 375-6.8. The remedy also included the installation of ICs/ECs, including the installation of an active sub-slab depressurization system (SSDS) and a soil vapor extraction (SVE) system (SVES) into the proposed building design to address the contamination.

Engineering Controls Design Document, 975 Nostrand Ave, Brooklyn, NY, AKRF Inc., January 2023

AKRF prepared an Engineering Controls Design Document (ECDD) in November 2022, and revised January 2023, describing the SSDS and SVES designs, along with the requirements for installation and startup. The ECDD was approved by NYSDEC in a letter dated January 6, 2023.

Remedy Modification Request, 975 Nostrand Ave, Brooklyn, NY, AKRF Inc., February 2023

AKRF prepared a Remedy Modification Request (RMR) in February 2023 based on the findings of the remedial activities and endpoint sampling completed at the Site between July 2022 and January 2023. The request included modification to the remedy from a Track 1 Soil Cleanup to a Track 2 Cleanup. The RMR was approved by NYSDEC in a letter dated February 16, 2023.

2.4 Remedial Action Objectives

The Remedial Action Objectives (RAOs) for the Site, as listed in the DD dated November 7, 2022, are as follows:

Groundwater

RAOs for Public Health Protection

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

RAOs for Environmental Protection

• Remove the source of ground or surface water contamination.

Soil

RAOs for Public Health Protection

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

RAOs for Environmental Protection

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

Soil Vapor

RAOs for Public Health Protection

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

2.5 Summary of Remedial Actions

Remedial actions were performed at the Site in accordance with the NYSDEC-approved IRMWP dated June 2022, RAWP dated November 2022, November 2022 DD, February 2023 RMR, and all applicable federal, state, and local rules and regulations. Remedial activities during the BCP remedy phase began at the Site in July 2022 and were completed in September 2023.

The following is a summary of the remedial actions performed at the Site under the BCP:

2.5.1 Soil Excavation and Off-Site Disposal

On-site soils in the upper 15 feet across the Site were excavated and transported off-site for proper disposal at approved facilities in order to achieve a Track 2 Cleanup (**Figure 4** shows the extent of remedial excavation). A total of 72,263.79 tons of soil were excavated and disposed off-site. During all excavation and ground intrusive activities, AKRF conducted real-time air monitoring for particulates and VOCs in accordance with a NYSDEC-approved Community Air Monitoring Plan (CAMP), including a Special Requirements CAMP to be implemented when work occurred within 20 feet of any potentially exposed individuals or structures.

Post-excavation soil endpoint samples were collected across the Site in accordance with the RAWP to evaluate performance of the remedy. The endpoint sample analytical results are included in Attached **Tables 1 through 6**, and the endpoint sampling locations are shown on **Figure 2**.

2.5.2 Underground Storage Tank Removal

During soil excavation activities, two 500-gallon gasoline USTs were encountered and removed from the Site. One endpoint sample (EP-USTS-B_15_20230517) was collected from below the tanks. The USTs were properly cleaned, removed, and disposed of off-site by PAL Environmental Services of Queens, New York (a licensed tank remediation contractor). The USTs were registered and subsequently closed with the NYSDEC PBS Database under Facility ID 2-613454. The PBS registration is provided as **Appendix C**.

2.5.3 Stone/Gravel Import

A total of 388.41 tons of dense grade aggregate (DGA) were imported to backfill behind subgrade foundation walls on a portion of the Site. In addition, 3,967.26 tons of gas permeable aggregate (GPA) stone were imported as part of the SSDS and installed below the concrete slab. Import approvals are provided in **Appendix D**.

2.5.4 Active Sub-Slab Depressurization System

Installation of a vapor barrier/waterproofing membrane and an active SSDS was completed in September 2023 as a mitigation measure against potential soil vapors accumulating within the building. The SSDS layout plan is shown on **Figure 5**. Although not an engineering control, a vapor barrier was installed beneath the foundation slab (46-mil GCP Preprufe 300R) and behind subgrade walls (32-mil GCP Preprufe 160R for one-face walls and Bituthene 4000 membrane for two-face walls) as an element of construction. As-Builts of the SSDS are enclosed as **Appendix E**.

2.5.5 Soil Vapor Extraction System

An SVES was installed to treat residual elevated concentrations of chlorinated VOCs (CVOCs) in soil vapor in an approximately 4,000-square-foot area in the southwestern portion of the Site and prevent the off-site migration of contaminated soil vapor (if any). The SVES layout plan is shown on **Figure 6**. As-Builts of the SVES are enclosed as **Appendix E**.

2.6 Remaining Contamination

2.6.1 Soil

Soil/fill was characterized during previous investigations prior to entering the BCP and during the RI conducted as part of the BCP. The soil within the upper 15 feet of the Site was found to have concentrations of VOCs including acetone, SVOCs including PAHs, specifically 4-methylphenol, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, and indeno(1,2,3-c,d)pyrene, metals including arsenic, barium, cadmium, hexavalent chromium, copper, lead, mercury, nickel, selenium, silver, and zinc and pesticides including 4.4'-DDD, 4.4'-DDE, 4.4'-DDT and cis-chlordane were detected above the Unrestricted Use Soil Cleanup Objective (UUSCOs) and/or Restricted Residential Soil Cleanup Objectives (RRSCOs). Detected concentrations of PAHs and metals in soil at the Site appeared to be related to historic fill materials, which were observed across the Site extending from grade to 15 feet bgs. Soil/fill was excavated and removed from the Site as part of the remedial actions. Documentation endpoint soil samples were collected from the base of the excavation and the results are provided in Attached Tables 1 through 6. Some of the endpoint sample results exceeded the Track 2 RRSCOs. The endpoint sample locations are shown on Figure 2, and the sample concentrations exceeding the RRSCOs are shown on Figure 7.

2.6.2 Groundwater

Groundwater quality was characterized during previous investigations prior to entering the BCP and during the RI conducted as part of the BCP. The groundwater beneath the Site was found to have concentrations of VOCs, including chloroform and tetrachloroethylene (PCE), above the NYSDEC Technical Operational and Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Guidance Values (AWQSGVs). PFAS compounds was detected in the groundwater samples at concentrations above the NYSDEC PFAS AWQSGVs. Metals including antimony, iron, magnesium, manganese, selenium, and sodium were detected in the groundwater above the AWQSGVs. However, the PFAS, VOC, and metals detections in groundwater appeared to be reflective of regional groundwater quality and were not believed to be related to discharges from historical operations at the Site. Therefore, groundwater treatment was not included as a component of the DD. Low-level concentrations exceeding the AWQSGVs still remain.

Groundwater use at the Site is also subject to the ICs documented within the EE and is restricted for use as a source of potable or process water without the necessary water quality treatment as determined by the New York State Department of Health (NYSDOH) or the

New York City Department of Health and Mental Hygiene (NYCDOHMH). Groundwater quality results are presented in **Tables 7 through 13**, and on **Figures 8 and 9**.

2.6.3 Sub-Slab Soil Vapor

Based on the findings of the RI and additional soil vapor testing completed as part of the PDI, contaminated soil vapor remains at the Site. The results of the soil vapor sampling conducted during the RI indicated petroleum- related VOCs, including benzene, toluene, ethylbenzene, xylenes (collectively referred to as "BTEX"), 1,3-butadiene, ethanol, isopropanol, tert-butyl alcohol (TBA), n-hexane, cyclohexane, heptane, 2- hexanone, 1,3,5-Trimethylbenzene, 1,2,4-trimethylbenzene, 2,2,4-trimethylpentane, and 1,4-dichlorobenzene were detected in one or more samples at concentrations up to 234 micrograms per cubic meter (μ g/m³) (n-hexane in sample RI-SV-04_20220329). The highest concentrations of BTEX were detected in samples RI-SV-03_20220329, RI-SV-10_20220329, and RI-SV-11_20220329 collected from the northeastern and southern portions of the Site, respectively. Chlorinated solvent- related VOCs including TCE, PCE, 1,1-dichloroethane, 1,1,1-trichloroethane, trichloroethene, cis-1,2- dichloroethene, and methylene chloride were detected in one or more soil vapor samples at concentrations up to 37,000 μ g/m³ (PCE in sample RI-SV-10_20220329 collected from the southwestern corner of the Site).

Additionally, methyl ethyl ketone (MEK), a solvent commonly used in adhesives and printing inks, was detected in 11 of the 12 samples at concentrations ranging between 4.48 μ g/m³ and 34.5 μ g/m³, and trichlorofluoromethane, a chlorofluorocarbon (CFC) commonly used as a refrigerant and a foaming or blowing agent, was detected in 9 of the 12 samples with concentrations ranging between 2.19 μ g/m³ and 33.8 μ g/m³. The elevated concentrations are likely related to off-site soil vapor source(s) which include: the historic dry cleaning store located on the south-adjacent property; and multiple dry cleaners located directly west of the Site across Nostrand Avenue.

The results of the soil vapor sampling conducted during the PDI indicated the CVOCs PCE, TCE, 1,1-dichloroethane, 1,1-dichloroethylene, 1,2-dichloroethane, cis-1,2-dichloroethylene (cis-1,2-DCE), and 1,1,1- trichloroethane (TCA) were detected in one or more soil vapor samples ranging from estimated trace concentrations up to a maximum of 260,000 μ g/m3 for PCE in sample PDI-SV-05_20_20220726 (which was collected at a depth of 20 feet bgs in the southwestern corner of the Site). Sample dilution (ranging from a factor of 10 to 1,010) was necessary for the majority of the samples due to the elevated CVOC concentrations.

In the samples from the southwestern portion of the Site, TCE was detected at concentrations ranging from 0.78 to 1,800 μ g/m3; PCE was detected at concentrations ranging from 40 to 260,000 μ g/m3; and cis-1,2-DCE was detected at concentrations ranging from 0.83 to 1,500 μ g/m3. The highest concentrations were noted in the deeper samples collected from the southwestern portion at the 20-, 30-, and 40-foot depth intervals. Some elevated concentrations of CVOCs were also noted in the shallow 5- and 10-foot intervals (with a maximum shallow sample PCE detection of 11,000 μ g/m3 in sample PDI-SV-05 5 20220726).

During the RI, TCA was detected at a maximum concentration of 900 μ g/m3 in a sample (RI-SV-02_20220329) collected from the north central portion of the Site. As part of the PDI, two soil vapor sample clusters (at boring locations PDI-SB-07 and PDI-SB-08) were installed in this area to further investigate TCA concentrations. TCA was detected in the

PDI vapor points at concentrations ranging from 2.1 to 11 μ g/m3 (in sample PDI-SV-07_40_20220727 collected at 40 feet bgs).

The contaminated soil vapor will be treated by the SVES and the vapor mitigation system, which consists of an active SSDS installed below the entire building footprint (see Figures 5 and 6 for system layout details), designed to prevent vapor intrusion into the new building.

Soil vapor sample results are presented in Table 14 and on Figure 10.

3.0 INSTITUTIONAL AND ENGINEERING CONTROL PLAN

3.1 General

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

This plan provides:

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

3.2 Institutional Controls

A series of ICs is required by NYCDEC's November 2022 DD to: (1) implement, maintain, and monitor ECs; (2) prevent future exposure to remaining contamination; and (3) limit the use and development of the Site to restricted residential, commercial, and/or industrial uses only. Adherence to these ICs on the Site is required by the EE and will be implemented under this SMP. ICs identified in the EE may not be discontinued without an amendment to or extinguishment of the EE. The IC boundaries are shown on **Figure 2**. These ICs are:

- The property may be used for restricted residential, commercial, and industrial use only, as set forth in the Environmental Easement.
- All ECs must be operated and maintained as specified in this SMP;
- All ECs must be inspected at a frequency and in a manner defined in the SMP;
- The use of groundwater underlying the property is prohibited without the necessary water quality treatment as determined by NYSDOH or the NYCDOHMH to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from NYSDEC;
- Any soil vapor and other environmental or public health monitoring must be performed as defined in this SMP;
- Data and information pertinent to site management must be reported at the frequency and in a manner as defined in this SMP;
- All future activities that will disturb remaining contaminated material must be conducted in accordance with this SMP;

- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in this SMP;
- Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in this SMP;
- Access to the Site must be provided to agents, employees, or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the EE;
- Any on-site buildings will be required to have a sub-slab depressurization system, or other acceptable measures, to mitigate the migration of vapors into the building from subsurface; and
- In-ground vegetable gardens and farming on the Site are prohibited.
- The Site may not be used for a higher level of use, such as residential or unrestricted use, without an amendment to, or the extinguishment of, the Environmental Easement.
- The Environmental Easement may be extinguished if the Volunteer can demonstrate to the satisfaction of the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH) that the ECs listed below are no longer required.

3.3 Engineering Controls

3.3.1 SSDS

An active SSDS will be operated to mitigate the potential for soil vapor intrusion into the new building. The SSDS will induce a negative pressure (i.e., vacuum) beneath the building slab. The underground elements of the SSDS installed under the new building slab include the following components:

- Fifteen SSDS branches consisting of 0.02-inch slotted and solid, 4-inch-diameter Schedule 40 polyvinyl chloride (PVC) pipe lengths beneath the building slab with riser legs penetrating the building slab and stubbed out approximately 2 to 3 feet above the top of slab;
- Communication and pipe sleeves through concrete foundation elements;
- A minimum 6-inch-thick GPA stratum underlain by geotextile fabric beneath the majority of SSDS treatment area, with 6-mil poly sheeting in the southwestern portion only;
- Fourteen vacuum monitoring points (MPs) installed beneath the building slab; and
- A geogrid was installed above the SSDS pipe trenches installed below the mat slabs to protect the PVC from heavy concrete loads.

During construction of the new building superstructure, the following aboveground elements will be installed to complete the SSDS installation:

- Pipe manifolds, which combine the PVC riser legs into three separate 6- or 8-inch galvanized steel pipe risers, extending to the roof of the building following building completion;
- Roof-mounted blowers (3 total) with shut-off alarms connected to a local alarm panel;

- Three 6- or 8-inch-diameter galvanized steel rooftop exhaust stacks fitted with rain caps, terminating at least 4 feet above intake of adjacent mechanical equipment or 10 feet above the finished roof (whichever is greater);
- Accessories, including cleanouts, sample ports, vacuum indicators/pressure gauges, flow meters, butterfly valves, and differential pressure switches; and
- A control panel equipped with a telemetry system to notify select personnel of alarm conditions.

The SSDS complies with the requirements stated in Section 7.0 of the RAWP. The location and components of the SSDS are shown on **Figure 5**. As-built drawings for the underground components of the SSDS are included in **Appendix E**.

Procedures for operating and maintaining the SSDS are documented in the Operation and Maintenance Plan (see Section 5.0 of this SMP) and procedures for monitoring the SSDS are included in the Monitoring Plan (see Section 4.0 of this SMP). The Monitoring Plan also addresses severe condition inspections in the event that a severe condition occurs, which may affect controls at the Site.

3.3.2 SVES

The treatment of residual contaminated soil vapor in the approximately 4,000-square-foot area in the southwestern portion of the Site will be performed through operation of an SVES. The SVES also prevents off-site migration of contaminated soil vapor. The SVES installed at the Site is comprised of:

- Four 4-inch-diameter PVC SVE wells, which target the vadose zone treatment interval in the southwestern portion of the Site;
- Three 1-inch-diameter PVC soil vapor extraction monitoring points;
- One 15-horsepower SVE blower operating at approximately 50 inches of water (inH₂O) and 500 standard cubic feet per minute (SCFM);
- One 120-gallon moisture separator tank with a high-level alarm, transfer pump, and 55-gallon auxiliary drum with a high-level alarm;
- One inline particulate filter;
- One dilution line with particulate filter;
- Two Evoquua Water Technologies vapor-phase granulated activated carbon (GAC) vessels (piped in series, with influent, intermediate, and effluent sample ports).
- System alarms, including one high temperature sensor and one low vacuum sensor;
- Individual SVE line and dilution line accessories, including assemblies for air flow rate measurements, throttling valves, and sampling ports;
- One control panel equipped with a telemetry system to notify select personnel of alarm conditions; and
- One 4-inch diameter PVC effluent stack.

The SVES is designed to operate on a continual basis, 24 hours a day, 7 days a week, and 365 days a year except for periodic shut-downs for maintenance. The SVES will operate until monitoring (as outlined in Section 4.0 of this SMP) and appropriate consultation with NYSDEC and NYSDOH confirm that the SVE wells and/or carbon treatment are no longer

required to treat contaminated soil vapor remaining at the Site. The locations of the SVE wells and SVES components are shown on **Figure 6**.

Procedures for operating and maintaining the SVES are documented in the Operation and Maintenance Plan (see Section 5.0 of this SMP). An OM&M Manual for the SVE system is included in **Appendix M**. The Operation and Maintenance Plan also addresses severe condition inspections in the event that a severe condition, which may affect controls at the Site, occurs.

3.3.3 Criteria for Completion of Remediation/Termination of Remedial Systems

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

As discussed below, NYSDEC may approve termination of operation of the SVES and/or the SSDS. When a remedial party receives this approval, the remedial party will decommission all monitoring points and/or SVE wells, as appropriate.

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

<u>3.3.3.1 – Active SSDS</u>

The operation of the active SSDS will not be discontinued unless prior written approval is granted by NYSDEC and NYSDOH; the active SSDS is anticipated to be a permanent EC. If monitoring data collected under the Monitoring Plan (Section 4.0 of this SMP) indicates that the SSDS or one or more of its components may no longer be required, a proposal to discontinue the SSDS and/or applicable components will be submitted by the remedial party to NYSDEC and NYSDOH for review and approval. Conditions that warrant discontinuing the SSDS include contaminant concentrations in soil vapor that reach levels that are consistently below NYSDOH Matrix Values or that have become asymptotic to a low level over an extended period of time as accepted by NYSDEC, or if NYSDEC has determined that the SSDS has reached the limit of its effectiveness.

3.3.3.2 - SVES

The SVES will not be discontinued unless prior written approval is granted by NYSDEC in consultation with NYSDOH. In the event that monitoring data collected under the Monitoring Plan (Section 4.0 of this SMP) and/or the Operations and Maintenance Plan (see Section 5.0 of this SMP) indicates that the SVE system may no longer be required, a proposal to discontinue the system will be submitted by the remedial party to the NYSDEC project manager. Conditions that warrant discontinuing the SVES include contaminant concentrations in soil vapor that reach levels that are consistently below NYSDOH Matrix Values or that have become asymptotic to a low level over an extended period of time as accepted by NYSDEC, or if NYSDEC has determined that the SVES has reached the limit of its effectiveness. This assessment will be based in part on post-remediation contaminant

levels in soil vapor collected from sampling ports installed on the SVE manifold legs. The SVES will remain in place and operational until permission to discontinue or reduce controls associated with its use is granted in writing by NYSDEC.

4.0 MONITORING AND SAMPLING PLAN

4.1 General

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

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

- Sampling and analysis of all appropriate media (e.g., indoor air, sub-slab vapor, soil vapor);
- Assessing compliance with applicable NYSDEC standards, criteria, and guidance (SCGs), particularly NYSDOH Matrix Values;
- Evaluating Site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment; and
- Preparing the necessary reports for the various monitoring activities.

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

- Sampling locations, protocol, and frequency;
- Information on all designed monitoring systems;
- Analytical sampling program requirements; and
- Annual inspection and periodic certification.

Reporting requirements are provided in Section 7.0 of this SMP. Monitoring of the performance of the remedy and overall reduction in contamination on-site will be conducted for the periods specified for each matrix listed in **In-Text Table III**. The frequency thereafter will be determined in consultation with NYSDEC and based on reports submitted showing contaminant trends. Trends in contaminant levels in soil vapor in the affected areas will be evaluated to determine if the remedy continues to be effective in achieving remedial goals. Monitoring programs are summarized in **In-Text Table III** and outlined in detail in sections below.

In-Text Table III Monitoring/Inspection Schedule

Monitoring Program	Frequency*	Location	Matrix	Analysis
SSDS Routine Component Inspection and Maintenance	Monthly until December 2024, quarterly afterwards	SSDS riser pipes, manifold, vapor monitoring points, and system components on the roof	System Integrity and Air Flow	Visual Inspection of Conditions, Vacuum Monitoring Point, and System Readings
SVES	Monthly until December 2024, quarterly afterwards	Aboveground piping and SVE equipment shed	SVES Mechanics	Visual Inspection, SVE Monitoring Point, and System Readings

Monitoring Program	Frequency*	Location	Matrix	Analysis
SVE Extracted Vapor Sampling	6 months and 12 months after start- up, annually, and as necessary thereafter	SVE Equipment Shed	SVES influent, intermediate, and effluent collected at carbon vessels	CVOCs by TO-15
Site-Wide Inspection	Annually	Site-wide	Visual Inspection	N/A

Notes:

*The frequency of events will be conducted as specified until otherwise approved by NYSDEC and NYSDOH.

CVOCs - chlorinated volatile organic compounds

N/A – not applicable

4.2 Site-Wide Inspection

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

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

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

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

Reporting requirements are outlined in Section 7.0 of this SMP.

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

4.3 SSDS Monitoring

Monitoring of the active SSDS will be performed on a routine basis, as identified in **In-Text Table IV**. The monitoring of the SSDS must be conducted by a QEP as defined in 6 NYCRR Part 375, a PE who is licensed and registered in New York State, or a qualified person who directly reports to a PE who is licensed and registered in New York State. Modification to the frequency or sampling requirements will require approval from NYSDEC. A visual inspection of the complete system will be conducted during each monitoring event. Unscheduled inspections and/or sampling may take place when a suspected failure of the SSDS has been reported or an emergency occurs that is deemed likely to affect the operation of the system. SSDS components to be monitored include, but are not limited to, the components included in **In-Text Table IV** below.

SSDS Component	Monitoring Parameter	Operating Range ¹	Monitoring Schedule
Vacuum Monitoring Points	Induced Vacuum Reading	a minimum of 0.004 inches H ₂ O	Linon quatam start un or
Riser Legs	Flow Rate 40 to 100 CFM		Upon system start-up o re-start, quarterly (first
Riser Legs	Applied Vacuum Reading	0.5 to 5 inches of H_2O	year), annually (after
Aboveground System Components (following installation)	Visual-Intactness	N/A	first year)

In-Text Table IV SSDS Monitoring Requirements and Schedule

Notes:

CFM - Cubic feet per minute

N/A - not applicable

¹Operating ranges for flow rate and applied vacuum may be adjusted based on system performance, balancing of riser legs, throttling of the VFD, etc.

The inspection/monitoring frequency may be modified based on field screening with the approval of NYSDEC. This SMP will be modified to reflect changes in monitoring and sampling plans approved by NYSDEC.

4.4 SVE System Monitoring and Sampling

Four SVE wells were installed in the vadose zone to address the soil vapor contamination in the approximately 4,000-square-foot area in the southwestern portion of the Site and to treat and prevent the off-site migration of contaminant soil vapor (if any). After the initial month of operation, the SVES will be inspected at a minimum of once per month for a period of 12 months, and quarterly thereafter, to ensure proper operation. Monthly/quarterly checks will consist of individual SVE line gauge readings, blower and carbon inspections, and alarm checks. In addition,

extracted vapor samples will be collected at system start-up and semi-annually thereafter to monitor contaminant removal rates and ensure proper treatment of SVES effluent. The SVES monitoring requirements and schedule are summarized in **In-Text Table V** below.

SVES Component	Monitoring Parameter	Operating Range	Monitoring Schedule
SVE Vacuum Monitoring Points	Induced Vacuum Reading	\geq 0.1 inH ₂ O	Monthly (first year), quarterly (after first year)
Individual SVE Lines	Flow Rate and Applied Vacuum	Varies - see Log Sheets	Monthly (first year), quarterly (after first year)
SVE Blower Inlet Parameters	Temperature and Pressure	Varies - see Log Sheets	Monthly (first year), quarterly (after first year)
Aboveground System Components	Visual Intactness	N/A	Monthly (first year), quarterly (after first year)
Carbon System Vapor	VOCs	N/A	Semi-annually

In-Text Table V SVES Monitoring Requirements and Schedule

Notes:

inH2O - inches of water

N/A – not applicable

The SVES will continue to be maintained and operational until permission to discontinue operation is granted in writing by NYSDEC and NYSDOH. A proposal to discontinue the SVES may be submitted by the Volunteer based on SVES operation history, and effluent vapor sample data.

4.4.1 Confirmatory Soil Vapor Sampling

Confirmatory extracted soil vapor sampling will be performed following startup to assess VOC emissions calculations, and to provide baseline VOC concentrations at the onset of SVES operation. Influent, intermediate, and effluent vapor samples will be collected using 1-Liter Tedlar[®] bags in accordance with the QAPP (**Appendix G**) and analyzed for VOCs by EPA Method TO-15 by a NYSDOH Environmental Laboratory Approval Program (ELAP)-certified laboratory.

The effluent vapor VOC concentrations will be compared to the NYSDEC Division of Air Resources (DAR-1) publication Air Guide-1 (AG-1): Annual Guideline Concentrations (AGC)/Short-term Guideline Concentrations (SGC) Tables, updated October 18, 2010. The analysis will be performed using NYSDEC DAR-1 Air Guide-1 Policy (Policy DAR-1: Guidelines for the Control of Toxic Ambient Air Contaminants, November 12, 1997), which simulates the atmospheric processes that disperse pollutants from an emissions source to predict concentrations at selected downwind receptor locations. The procedures in the DAR-1 policy are used to model conservative, worst-case annual and short-term concentrations based on the laboratory analytical results and exhaust stack parameters to compare against the NYSDOH AGCs and SGCs.

4.4.2 Monitoring and Sampling Protocol

All sampling activities will be recorded in a field book and by collecting the readings listed on the sampling logs presented in **Appendix I**. Pertinent observations will be noted on the sampling log. One sampling log will be filled out for each monitoring point and will serve as the inspection form associated with the monitoring point network.

4.5 Monitoring Quality Assurance/Quality Control

All sampling and analyses will be performed in accordance with the requirements of the QAPP prepared for the Site (**Appendix G**). The main components of the QAPP include:

- QA/QC Objectives for Data Measurement;
- Sampling Program:
 - Samples will be collected into laboratory-supplied containers.
 - Sample holding times will be in accordance with the NYSDEC Analytical Services Protocol (ASP) requirements.
 - Field QC samples (e.g., trip blanks, coded field duplicates, and matrix spike/matrix spike duplicates) will be collected as necessary.
- Sample Tracking and Custody;
- Calibration Procedures:
 - All field analytical equipment will be calibrated immediately prior to each day's use and will follow all calibration procedures and schedules as specified in EPA SW-846 and subsequent updates that apply to the instruments used for the analytical methods.
- Analytical Procedures;
- Preparation of a DUSR, which will present the results of data validation, including a summary assessment of laboratory data packages, sample preservation and chain of custody procedures, and a summary assessment of precision, accuracy, representativeness, comparability, and completeness for each analytical method.
- Internal QC and Checks;
- QA Performance and System Audits;
- Preventative Maintenance Procedures and Schedules; and
- Corrective Action Measures.

5.0 OPERATION AND MAINTENANCE PLAN

5.1 General

This Operation and Maintenance Plan provides a brief description of the measures necessary to operate, monitor, and maintain the mechanical components of the remedy selected for the Site, which include an active SSDS and an SVES. This Operation and Maintenance Plan:

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

A copy of this Operation and Maintenance Manual, along with the complete SMP, is to be maintained at the Site. This Operation and Maintenance Plan is not to be used as a stand-alone document, but as a component document of this SMP.

5.2 Remedial Systems Performance Criteria

An active SSDS has been installed at the Site to prevent the potential for vapor intrusion into the building and will operate continuously in conjunction with the SVES. The SVES began operating at the Site on November 3, 2023. Details pertaining to the performance monitoring of these ECs are outlined below.

5.3 **Operation and Maintenance of the SSDS**

An active SSDS will be operated to mitigate the potential for soil vapor intrusion into the new building by applying negative pressure beneath the concrete slab, minimizing the potential for vapor intrusion. The major components of the SSDS include:

- Fifteen slotted 4-inch PVC horizontal SSDS pipes embedded in a GPA layer (3/4-inch stone) above the soil vapor extraction area;
- Fourteen sub-slab vacuum monitoring points throughout the footprint of the Site building;
- Three separate manifolds connecting the SSDS branches to 6- or 8-inch-diameter galvanized steel vertical risers (3 total) leading to the building roof;
- Magnehelic gauges and flow sensors installed on the pipe manifolds to monitor system performance;
- Three appropriately sized 1.5 HP blowers connected to each vertical riser at the building roof to vent soil vapor, with variable-frequency drives (VFD) to throttle blower operation to acceptable conditions;
- A control panel equipped with a remote alarm system to notify on-site personnel of alarm conditions; and
- Exhaust stacks (3 total) consisting of 6- or 8-inch galvanized steel pipe terminating a minimum of 25 feet from any air intakes/vents or off-Site buildings.

The SSDS layout is included as **Figure 5**, and as-built drawings for the underground components of the SSDS are included in **Appendix E**. The SMP will be updated after building construction to include as-built drawings of the aboveground SSDS elements.

Once completed, the SSDS is designed to operate continuously, 24 hours a day, 7 days a week, 365 days a year, without any required adjustments or repairs beyond the routine maintenance items discussed in Section 4.3 of this SMP. Regular system inspections, operation parameter documentation, and performance assessment guidelines are detailed in Sections 4.1 and 4.3 of this SMP.

5.3.1 SSDS Start-Up and Testing

The SSDS will be started up and tested following completion of building construction and prior to building occupancy. Testing will also be conducted after any future event that requires system shutdown/restart.

The SSDS start-up inspection will include the following:

- Confirmation of acceptable air flow rate from each of the three SSDS risers by a visual inspection of flow sensors affixed to each of the manifold legs and use of an appropriate manometer or portable vacuum gauging device;
- Confirmation of acceptable vacuum readings from each SSDS riser by a visual inspection of magnehelic gauges affixed to manifold legs;
- Confirmation that that an alarm is triggered at the corresponding alarm indication station when each fan is deactivated; and
- Confirmation of acceptable induced vacuum (a minimum of 0.004 inH₂O) beneath the entire basement slab from the 14 monitoring points (MP-1 through MP-14) through the manual access of each point and use of an appropriate manometer or portable vacuum gauging device.

The SSDS startup protocols are also provided in the In-Text Table VI below.

SSDS Component	Acceptable Air Flow Reading	Acceptable Vacuum Reading	Yes/No
Vertical Risers	NA	5 to 10 inches of water	NA
Monitoring Points	NA	0.004 inches of water (minimum)	NA
Individual SSDS Riser Legs	25 to 125 CFM (minimum)	1 to 5 inches of water (minimum)	NA
SSDS Fan	NA	5 to 10 inches of water	NA
Alarm Functionality	NA	NA	Yes/No

In-Text Table VI SSDS Startup Protocol

CFM = cubic feet per minute

NA = not applicable

Adjustments to the blower and individual SSDS lines may be necessary at start-up and after any alterations to the overall system. SSDS equipment, including individual valves on SSDS lines, will be throttled to rebalance the system, adjusting air flow rates and vacuum/pressure readings to acceptable values. A copy of the SSDS inspection log is provided in **Appendix J**. The log will be updated after initial system start-up and balancing to determine acceptable operating ranges for air flow and vacuum.

At a minimum, the findings and conclusions following system start-up/restart activities will be reported in the subsequent quarterly media monitoring report. In addition, depending on the nature of the adjustment to the system, the process and instrumentation diagram (P&ID) and/or Site figures may need to be updated to reflect the work completed. Such revisions shall be completed and submitted to NYSDEC with the media monitoring report.

5.3.2 SSDS Operation: Routine Operation

After start-up, the SSDS is designed to operate continuously without any required adjustments or repairs, beyond routine maintenance items discussed in Section 5.3.4. No adjustments to the operating schedule or other intentional interruptions to operation (other than those required for routine maintenance) shall be permitted without written approval by NYSDEC and NYSDOH.

The system includes a differential pressure switch that will trigger an alarm in the event of blower malfunction (or other condition resulting in low vacuum in the SSDS riser) so that appropriate corrective actions can be taken.

If shutdown of the SSDS is considered, a proposal to discontinue the SSDS will be submitted by the Volunteer for NYSDEC and NYSDOH approval. The SSDS will remain in place and operational until permission to discontinue use is granted in writing by NYSDEC and NYSDOH.

5.3.3 SSDS Operation: Routine Inspections

The effectiveness of the SSDS components will be confirmed via monthly system inspections to be conducted by a qualified building personnel. Monitoring of the SSDS will consist of a visual inspection of the complete system, including checking to confirm that the SSDS blowers are operating properly, observing all associated air flow and vacuum gauges and alarms to confirm they are within acceptable ranges, identification and repair of any system malfunctions or problems (e.g, leaks, cracks, collection of condensation, etc.), and taking vacuum readings at the fourteen vacuum monitoring points. A copy of the SSDS Routine Inspection Log is provided in **Appendix J**. The log will be updated after initial system start-up and balancing to determine acceptable operating ranges for air flow and vacuum.

Individual flow rate and vacuum readings will be recorded for the 15 SSDS pipe branches, and sub-slab vacuum will be confirmed in the 14 vacuum monitoring points. This operational data will be used as needed to adjust controls for individual branches and any faulty gauges will be repaired or replaced as needed. SSDS inspections will be conducted on a quarterly basis for the first year of operation, and annually thereafter.

Care shall be taken during inspections to identify and repair any system malfunctions or problems (e.g., leaks, cracks, collection of condensation, etc.).

5.3.4 SSDS Operation: Routine Equipment Maintenance

A schedule for SSDS routine equipment maintenance work is provided in **In-Text Table VII**:

Operations Task	Frequency	Maintenance Task	
SSDS Routine Inspection	monthly (by trained building personnel), annually thereafter, and as necessary	Repairs to system components as needed based on inspections	

In-Text Table VII SSDS Inspection/Maintenance Schedule

Routine Maintenance

The routine SSDS inspections will include:

- Confirmation that the blowers are operating and air is discharging through the exhaust piping at the roof;
- Confirmation that the pressure gauges and air flow sensors on each SSDS riser leg are clean and readings are within normal ranges;
- Confirmation that the vacuum gauges at the blower inlets are clean and reading within the acceptable range; and
- Confirmation that the exterior of the SSDS control panel is clean and that the alarm indications stations are operating correctly.

Maintenance to system components (e.g., cleaning/replacement of gauges, adjustments to system balancing) will be scheduled as needed based on findings from the inspection. Some routine maintenance will require intentional interruptions to SSDS operation. Both unexpected and deliberate alterations to and/or shutdowns of the system will be recorded in the field book and documented on an SSDS Inspection Log, provided in **Appendix J**. A cumulative shutdown log, provided in **Appendix K**, will be maintained separately to track any atypical system activity, including, but not limited to, alarm conditions and responses, and to track scheduled shutdowns for system maintenance.

Detailed SSDS Inspection and System Component Maintenance

The detailed operations check will be performed to identify/rectify operations-based maintenance items, such as malfunctioning SSDS risers, piping runs, and/or other system components. Typical detailed maintenance items that should be addressed during these inspections include the following:

- Confirm/assess blower performance and integrity;
- Assess blowers and determine need for replacement
- Confirm/assess alarm indication station performance and integrity;
- Confirm/assess the operating condition of vacuum monitoring points MP-1 though MP-14; and
- Confirm/assess the structural integrity of concrete floor slabs overlying constructed SSDS manifold and piping runs.

Each of the roof-mounted SSDS fans consists of a blower and motor pair. Each piece of equipment requires routine maintenance that is dictated either by runtimes or operating conditions, as defined by manufacturer's specifications. A binder containing complete paper copies of manufacturer's specifications for all system components will be maintained on-site.

5.3.5 SSDS Operation: Non-Routine Equipment Maintenance

In most instances, non-routine maintenance will be required due to operating conditions that are monitored by the SSDS alarm systems. The primary objective of the alarm systems is to notify personnel when operating conditions are likely to reduce or otherwise compromise SSDS efficiency.

An alarm condition may be indicative of damage to, blockage of, and/or deterioration of the SSDS piping or blower. Damage to the individual SSDS lines may be noticeable only by interpreting unusually high or low vacuum readings or air flow rates, which will be noted in the routine system inspections and remedied upon identification.

5.3.6 SSDS Monitoring Devices and Alarms

The SSDS will have a warning alarm system that notifies select personnel if the system is not operating properly (e.g., vacuum blower failure or a low vacuum condition). The alarm will provide remote notification, as well as provide both local audible/visual notification for a low vacuum condition from the differential pressure switch. Each audible alarm will be an 85 to 95 decibel horn or buzzer with a manually operated "off" switches.

In the event of an alarm, the on-site maintenance personnel shall investigate the problem by performing a detailed operations check and conducting applicable maintenance and repairs, as specified in this Operation and Maintenance Plan. When the system is restarted after an alarm condition, testing will be conducted as described in Section 5.3.1. Operational problems will be noted in the quarterly monitoring report and PRR prepared for that reporting period.

5.4 SVES Operation and Maintenance

An SVES was installed to remediate residual contaminated soil vapor in the vadose zone in the southwestern portion of the site beneath the building, and to help prevent the off-site migration of contaminants in soil vapor. The VOC-contaminated air extracted from the SVE wells is treated using granular activated carbon and the treated air is discharged to the atmosphere in accordance with 6 NYCRR Part 212.

The SVES collects and treats contaminated vapor, and subsequently discharges the vapor through a dedicated exhaust stack. The major components of the SVES include:

- Four 4-inch-diameter PVC SVE wells, which target the vadose zone treatment interval;
- One 10-horsepower blower to extract soil vapor, with a VFD to throttle blower operation to acceptable conditions;
- One 50-gallon moisture separator tank with a high-level alarm, transfer pump, and 55-gallon auxiliary drum with high-level alarm;
- A control panel equipped with a telemetry system to notify select personnel of alarm conditions;
- Two carbon treatment units connected in series to treat contaminated soil vapor; and
- An effluent stack consisting of a 6-inch galvanized steel riser pipe extending from the SVE shed.

5.4.1 SVES Start-Up and Testing

Initial startup of the SVES occurred on November 3, 2023. If, in the course of the SVES lifetime, significant changes are made to the system and the system must be restarted, some or all of the initial startup testing protocols listed in **In-Text Table VIII** shall be implemented and documented in addition to ongoing routine maintenance and monitoring activities. Since initial startup of the SVES was completed successfully, these procedures need not be followed after routine system restarts, such as those needed after alarm resets or following routine system maintenance.

In-Text Table VIII SVES Startup Protocols

	Following SVE well/pipe addition, repair, or replacement	Following SVE blower repair or replacement	Following carbon vessel repair or replacement	
SVE line pressure testing	Yes	No	No	
SVE blower inspection	Yes	Yes	Yes	

Note: Pressure testing and blower inspection procedures are described in full in the SVES Inspection and Sampling Logs and SVES Manufacturer's Specifications and Manuals, provided as Appendix L and M, respectively.

As described in the SVES Inspection and Sampling Logs and SVES Manufacturer's Specifications and Manuals, SVES blower inspections shall comprise confirmation of:

- VFD operation reading;
- Pre-particulate filter blower vacuum and air flow rate readings;
- Carbon influent, intermediate, and effluent pressure, temperature, and PID readings; and
- Vacuum and air flow rates at each SVE well.

Appropriate values for these confirmation readings are outlined in the SVES Inspection Log, provided in **Appendix L**.

Further adjustments to the blower and individual SVE lines may be necessary after any alterations to the overall system. SVE equipment, including individual valves on SVE lines, will be throttled to rebalance the system, adjusting air flow rates and vacuum/pressure readings to acceptable values.

At a minimum, the findings and conclusions following system restart activities will be reported in the subsequent quarterly media monitoring report. In addition, depending on the nature of the adjustment to the system, the P&ID and/or Site figures may need to be updated to reflect the work completed. Such revisions shall be completed and submitted to NYSDEC with the quarterly media monitoring report.

All further modifications, adjustments, or additions to the SVES should be completed in accordance with the equipment specifications provided by the manufacturer, included in **Appendix M**.

5.4.2 SVES Operation: Routine Operation Procedures

The SVES is designed to operate continuously without any required adjustments or repairs beyond the routine maintenance items discussed in sections below. No adjustments to the operating schedule or other intentional interruptions to operation (other than those required for routine maintenance) shall be permitted without written approval by NYSDEC and NYSDOH.

The operation of the SVES components will be confirmed by monthly system inspections (for the first year, quarterly afterwards) by an environmental professional. The check will consist of confirming the blower is operating properly with individual flow rate and vacuum readings for each of the SVE wells within designated ranges, and confirming instantaneous PID readings at the influent, intermediate, and effluent sample ports on the carbon treatment units. The check will also note any unusual conditions (e.g., unusual odors, spills, leaks, blower noise, etc.). A copy of the SVES Inspection Log is provided in **Appendix L**.

Care shall be taken during inspections to identify and repair any system malfunctions or problems (e.g., leaks, cracks, collection of condensation, etc.). Manufacturer's specifications and the troubleshooting guide, included as **Appendix M**, should be consulted prior to any repairs or adjustments that may become necessary.

If, in consultation with NYSDEC and NYSDOH, shutdown of the SVES and/or carbon treatment system is considered, a proposal to discontinue the SVES and/or carbon treatment system will be submitted by the property owner for NYSDEC and NYSDOH approval. The SVES and/or carbon treatment system will remain in place and operational until permission to discontinue use is granted in writing by NYSDEC and NYSDOH.

5.4.3 SVES Operation: Routine Equipment Maintenance

A tentative schedule for SVES routine equipment maintenance work is provided in the following **In-Text Table IX**:

Operations Monitoring Tasks	Frequency		
SVES Inspection	Monthly (first year), quarterly afterwards and		
5 VEB hispection	as necessary		
System Component Maintenance	Semi-annually and as necessary		
External System Component Maintenance	Annually and as necessary		

In-Text Table IX SVES Inspection/Maintenance Schedule

Typical routine maintenance items that should be addressed during monthly inspections are listed in the SVES Inspection Log provided in **Appendix L** and include:

- Confirmation that the blower is operating and air is discharging through the exhaust piping to the roof;
- Confirmation that the pressure and air flow rate gauges on each manifold leg are clean and within normal ranges;
- Confirmation that the blower effluent PID readings and temperatures are within acceptable ranges; and
- Confirmation that the exterior of the SVES control panel is clean.

Some routine maintenance will require intentional interruptions to SVES operation. Both unexpected and deliberate alterations to and/or shutdowns of the system will be recorded in the field book and documented on the SVES Inspection Log provided in **Appendix L**. A shutdown log, provided as **Appendix N**, will be maintained separately to track any atypical system activity, including, but not limited to, alarm conditions and responses, and scheduled shutdowns for system maintenance.

5.4.4 Routine SVES Component Maintenance

The SVES consists of one blower and motor pair. Each piece of equipment requires routine maintenance that is dictated either by runtimes or operating conditions, as defined by the manufacturer's specifications. However, most maintenance items are required on a quarterly basis, assuming continuous operation. Maintenance frequency will be adjusted as necessary following the transition to monthly pulsed operation. The pertinent material cut sheets and manuals are provided as **Appendix M**.

5.4.5 SVES Monitoring Points and External System Component Maintenance

Individual SVE monitoring points and manholes will be inspected, at a minimum, on an annual basis. All SVE wells extend above the slab and are routed to the SVE shed/equipment room along the ceiling. In the event of a damaged or out-of-service SVE well, the well will be properly decommissioned. Repairs and/or replacement of SVE wells will be performed based on assessments of structural integrity and overall performance.

NYSDEC will be notified prior to any repair or decommissioning of an SVE well for the purpose of replacement, and the repair or decommissioning and replacement process will be documented in the subsequent PRR. The decommissioning of SVE wells without replacement will be done only with the prior approval of NYSDEC. SVE well abandonment will be performed in accordance with NYSDEC's CP-43: Groundwater Monitoring Well Decommissioning Policy. If the SVE wells are decommissioned because they have been rendered unusable, replacement SVE wells will be reinstalled in the nearest available location, unless otherwise approved by NYSDEC.

All external system component inspections should be conducted as detailed in the SVES Inspection and Sampling Logs and SVES Manufacturer's Specifications and Manuals provided in **Appendix L** and **M**, respectively.

5.4.6 SVES Operation: Non-Routine Equipment Maintenance

In most instances, non-routine maintenance will be required due to operating conditions that are governed by the SVES alarm system and system telemetry. The primary objective of system telemetry is to notify personnel when operating conditions are likely to reduce or otherwise compromise SVE efficiency, which could lead to the potential uncontrolled migration of volatile soil vapor.

The system telemetry will also notify the current owner's environmental professional when operating conditions may be indicative of damage to the SVES equipment. SVES alarm conditions are detailed in **In-Text Table X**. Potential damage to the SVE pipes or carbon units should trigger one of the alarm conditions. Damage to the individual SVE lines may be noticeable only by interpreting unusually high or low vacuum readings or air flow rates, which will be noted in the system inspections and remedied upon identification.

Alarm Condition	Response Measure
Moisture Separator High Level	Drain/containerize moisture, identify and address/eliminate the cause of moisture influx
Blower Inlet Low Vacuum	Identify and address/eliminate cause of low pressure condition
Blower Outlet High Temperature	Identify and address/eliminate cause of high temperature condition

In-Text Table X SVES Alarm Conditions

The SVES was also designed with a particulate filter and moisture separator on the blower skid to prevent moisture/solids from reaching the blowers. The particulate filter and moisture separator are shown in the P&ID provided as part of the manual in **Appendix M**. Procedures for maintaining the particulate filter and moisture separator and all SVES components are provided in the operation and maintenance manuals provided in **Appendix M** and in the QAPP provided in **Appendix G**.

5.4.7 SVES Monitoring Devices and Alarms

The SVES will have a warning alarm system that notifies select personnel if the system is not operating properly (e.g., vacuum blower failure or a low vacuum condition). The alarm will notify the current owner's environmental professional when operating conditions may be indicative of damage to the SVES equipment, as discussed in Section 5.4.6.

In the event of an alarm, the environmental professional shall investigate the problem by performing a detailed operations check and conducting applicable maintenance and repairs, as specified in this Operation and Maintenance Plan. When the system is restarted after an alarm condition, testing will be conducted as described in Section 5.4.1. Operational problems will be noted in the quarterly monitoring report and PRR prepared for that reporting period.

5.5 SVES Sampling Event Protocol

5.5.1 Effluent Vapor Sampling Protocol

Though theoretical calculations have been made to approximate the anticipated carbon usage rate, carbon replacement frequency will be based on field screening using a PID and laboratory analytical results. Individual lines are not anticipated to be sampled in the routine sampling events; however, there are sampling ports for each line prior to manifolding to facilitate field screening or sampling as necessary at the discretion of the remedial engineer, in consultation with NYSDEC and NYSDOH.

The influent, intermediate, and effluent vapor from the set of SVES carbon vessels will be field-screened monthly (when the system is cycled on) for the first year and quarterly afterwards and sampled as described below to provide an estimate of carbon usage. Confirmatory SVES sampling will be conducted following startup to more accurately assess the VOC concentrations in extracted soil vapor from the entire Site, and the condition and lifespan of the carbon units. Samples of the SVES air will be collected as part of initial startup and again 6 months and 12 months following start-up. Subsequent SVES vapor sampling will be performed annually and as needed to evaluate system operating conditions and support the calculations of contaminant mass removal.

The vapor samples will be collected using a peristaltic pump to fill a one-liter Tedlar bag, in accordance with the sampling procedure detailed in the QAPP provided as **Appendix G**. All samples for laboratory analysis will be submitted to a NYSDOH ELAP-certified laboratory for analysis of CVOCs by EPA Method TO-15.

All sampling activities will be recorded in a field book and in the SVES Vapor Sampling Log presented in **Appendix L**. Field observations (e.g., visual observations and PID readings of effluent, etc.) will be noted on the sampling log, which will be subject to the reporting requirements and system checks as discussed in this section and Section 5.6, below. Complete effluent vapor sampling procedures are detailed in the QAPP, provided as **Appendix G**.

5.5.2 Spent Carbon Sampling Protocol

All spent carbon will be disposed of or recycled off-site in accordance with all applicable local, state, and federal regulations. Based on requirements of the disposal/recycling facility and waste disposal contractor, a carbon sample may need to be collected for facility acceptance purposes. If so, a representative sample of the spent carbon will be collected and submitted for laboratory analysis based on the requirements of the receiving facility, as detailed in the QAPP provided as **Appendix G**. Spent carbon will be handled as a listed hazardous waste unless a contained-in request is approved by NYSDEC.

All sampling activities will be recorded in a field book. Field observations (e.g., visual observations and PID reading of carbon, etc.) will be noted on the sampling log, which will be subject to the reporting requirements and system checks.

5.5.3 Condensate Water Sampling

All condensate water collected from the SVES water knock-out vessel (moisture separator) will be transferred to 55-gallon drums and be disposed of off-site in accordance with all applicable local, state and federal regulations on an as-needed basis. A representative condensate water sample will be collected from each 55-gallon drum and submitted for laboratory analysis as detailed in the QAPP, provided as **Appendix G**. Condensate water will be handled as a listed hazardous waste unless a contained-in request is approved by NYSDEC. Documentation associated with condensate water disposal will be subject to the reporting requirements and system checks.

5.6 Contingency Plan

Emergencies may include injury to personnel, fire or explosion, environmental release, or serious weather conditions.

The appropriate actions for on-site emergencies are detailed in the attached Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP), provided as **Appendix O**.

5.7 Fire Safety

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

5.8 Emergency Telephone Numbers

In the event of any environmentally related situation or unplanned occurrence requiring assistance, the Owner or Owner's representative(s) should contact the appropriate party from the contact list below. For emergencies, appropriate emergency response personnel should be contacted. Prompt contact should also be made to AKRF's Project Principal or Project Manager or the current property manager/owner's representative for the Site. Emergency contact lists must be maintained in an easily accessible location at the Site. **In-Text Table XI** includes contact information for the emergency response personnel.

In-Text Table XI
Emergency Contact Numbers

Medical, Fire, and Police:	911		
One Call Center:	(800) 272-4480		
one can center.	(3-day notice required for utility mark out)		
Poison Control Center:	(800) 222-1222		
Pollution Toxic Chemical Oil Spills:	(800) 424-8802		
NYSDEC Spills Hotline	(800) 457-7362		

5.9 Map and Directions to Nearest Health Facility

A map showing the route from the Site to the nearest Hospital is included under the HASP in **Appendix O**. The details are listed below:

- Nearest Hospital Name: Kings County Hospital Center
- Hospital Location: 489 Clarkson Avenue, Brooklyn, NY 11207
- Hospital Telephone: (718) 245-3131
- Directions to Hospital:
 - 1. Turn LEFT from the site onto Nostrand Avenue.
 - 2. Turn LEFT onto Clarkson Avenue.
 - 3. The emergency room will be on the LEFT.

6.0 PERIODIC ASSESSMENTS/EVALUATIONS

6.1 Climate Change Vulnerability Assessment

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

This section provides a summary of vulnerability assessments that will be conducted for the Site during periodic assessments, and briefly summarizes the vulnerability of the Site and/or ECs to severe storms/weather events and associated flooding.

- Flood Plain: The Site is not located within a flood plain.
- Site Drainage and Storm Water Management: Stormwater at the Site and the surrounding area flows to the New York City combined sewer system.
- Erosion: As the entire Site is covered with a concrete slab, erosion is not anticipated to be an issue of concern.
- High Wind: All permanent building components are secured against high winds. In the event that high winds are forecasted for the Site, proper precautions will be taken to secure or shelter any Site components that are not protected against high winds.
- Electricity: Electricity to the building is supplied via newly installed underground vaults and conduits and is not expected to be affected by severe weather events.
- Spill/Contaminant Release: Storage of large amounts of fuel oil or other chemicals at the Site is not expected. Nominal amounts of cleaning chemicals are likely to be stored throughout the Site but are not expected to be affected by severe weather conditions.
- The Site is located in an urban area and there is no risk associated with wildfires.

6.2 Soil Vapor Intrusion Evaluation

In the event that the existing building is modified, requiring subsurface disturbance, or additional buildings are constructed, a soil vapor intrusion evaluation will be conducted in coordination with NYSDEC and NYSDOH.

6.3 Green Remediation Evaluation

NYSDEC's DER-31 Green Remediation requires that green remediation concepts and techniques be considered during all stages of the remedial program, including site management, with the goal of improving the sustainability of the cleanup and summarizing the net environmental benefit of any implemented green technology. This section of the SMP provides a summary of any green remediation evaluations to be completed for the Site during site management, and as reported in the PRR.

6.3.1 Timing of Green Remediation Evaluations

For major remedial system components, green remediation evaluations and corresponding modifications will be undertaken as part of a formal Remedial System Optimization

(RSO), or at any time that the NYSDEC project manager feels appropriate, e.g., during significant maintenance events or in conjunction with storm recovery activities.

Modifications resulting from green remediation evaluations will be routinely implemented and scheduled to occur during planned/routine operation and maintenance activities. Reporting of these modifications will be presented in the PRR.

6.3.2 Remedial Systems

Remedial systems will be operated properly considering the current Site conditions to conserve materials and resources to the greatest extent possible. Consideration will be given to operating rates and use of reagents and consumables. Spent materials will be sent for recycling, as appropriate. The SSDS and SVES motors will be adjusted using the VFDs to minimize energy usage if feasible based on operating conditions.

6.3.3 Building Operations

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

6.3.4 Frequency of System Checks, Sampling, and Other Periodic Activities

Transportation to and from the Site and use of consumables in relation to visiting the Site to conduct inspections or collect samples and shipping samples to a laboratory for analyses have direct and/or inherent energy costs. The schedule and/or means of these periodic activities have been prepared so that these tasks can be accomplished in a manner that does not impact remedy protectiveness but reduces expenditure of energy or resources.

6.3.5 Metrics and Reporting

As discussed in Section 7.0 and as shown in **Appendix H** – Site Management Forms, information on energy usage, solid waste generation, transportation and shipping, water usage and land use and ecosystems will be recorded to facilitate and document consistent implementation of green remediation during site management and to identify corresponding benefits. A set of metrics has been developed.

6.4 Remedial System Optimization

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

- The remedial actions have not met or are not expected to meet RAOs in the time frame estimated in the DD;
- The management and operation of the remedial system exceeds the estimated costs;
- The remedial system is not performing as expected or as designed;
- Previously unidentified source material may be suspected;
- Plume shift has potentially occurred;
- Site conditions change due to development, change of use, change in groundwater use, etc.;
- There is an anticipated transfer of Site management to another remedial party or agency; and/or

• A new and applicable remedial technology becomes available.

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

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

7.0 **REPORTING REQUIREMENTS**

7.1 SSDS and SVES Maintenance and Performance Monitoring Reporting Requirements

Barring any unusual findings, the system inspections and maintenance described above will be reported per the requirements of Section 7.0 of this SMP. In the event that an unexpected condition is noted, such as a critical malfunction or extreme weather conditions that may hinder system operation, NYSDEC will be promptly alerted.

Any unexpected or critical issues identified during the monitoring tasks will be reported via email or phone notification to the NYSDEC project manager. Maintenance reports and any other information generated during regular operations at the Site will be kept on file on-site. All reports, forms, and other relevant information generated will be available to NYSDEC upon request and submitted as part of the PRR, as specified in the Section 6.0 of this SMP.

7.1.1 Routine Maintenance Forms

Checklists or forms (see **Appendix H**) will be completed during each maintenance event. Checklists/forms will include, but not be limited to, the following information:

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

7.1.2 Non-Routine Maintenance Forms

During each non-routine maintenance event, a form will be completed which will include, but not be limited to, the following information:

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

7.2 Site Management Reports

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

All applicable inspection forms and other records, including media sampling data and system maintenance reports, generated for the Site during the reporting period will be summarized in the Periodic Review Report (PRR) and provided in electronic format to NYSDEC in accordance with the requirements of **In-Text Table XII**.

Task/Report	Reporting Frequency*		
Interim Report with Initial Start-up Testing and Vacuum Reading	Upon Start-up		
Monitoring/Inspection Letter Report with Figures			
and Attachments (Treatment System Inspections	Quarterly		
and Associated Sampling Events)	Annually. First inspection no more than		
Periodic Review Report (Inclusive of All Inspections and Sampling Events)	16 months after issuance of COC, then at least annually thereafter, and PRR due 1 month after the end of the reporting		
	period.		

In-Text Table XII Schedule of Monitoring/Inspection Reports

Note: * The frequency of events will be conducted as specified until otherwise approved by NYSDEC.

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

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

Routine maintenance event reporting forms will be provided in the quarterly reports and will include, at a minimum:

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

Non-routine maintenance event reporting forms will be provided in the quarterly reports and will include, at a minimum:

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

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

7.3 **Periodic Review Report**

The initial PRR will be submitted to NYSDEC 16 months after the COC is issued. After submittal of the initial PRR, PRRs shall be submitted annually to NYSDEC or at another frequency as may be required by NYSDEC. In the event that the Site is subdivided into separate parcels with different ownership, a single PRR will be prepared that addresses the Site described in the EE (**Appendix A**). The report will be prepared in accordance with NYSDEC's DER-10 and submitted within 30 days of the end of each certification period. Media sampling results will also be incorporated into the PRR. The report will include the following:

- Identification, assessment, and certification of all ECs/ICs required by the remedy for the Site.
- Results of the required annual site inspections, fire inspections, and severe condition inspections, if applicable.
- A description of any change of use, import of materials, or excavation that occurred during the certifying period.
- All applicable site management forms and other records generated for the Site during the reporting period in the NYSDEC-approved electronic format, if not previously submitted.

- Identification of any wastes generated during the reporting period, along with waste characterization data, manifests, and disposal documentation.
- A summary of any discharge monitoring data and/or information generated during the reporting period, with comments and conclusions.
- Data summary tables and graphical representations of contaminants of concern by media (soil vapor, etc.), including a list of all compounds analyzed, along with the applicable standards, with all exceedances highlighted. These tables and figures will include a presentation of past data as part of an evaluation of contaminant concentration trends, including but not limited to:
 - Trend monitoring graphs depicting SVES influent analytical data on a per event and cumulative basis;
 - Operation and maintenance data summary tables; and
 - Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period, submitted in digital format as determined by NYSDEC. Currently, data is supplied electronically and submitted to the NYSDEC EQUIS[™] database in accordance with the requirements found at this link: http://www.dec.ny.gov/chemical/62440.html.
- A Site evaluation, which includes the following:
 - The compliance of the remedy with the requirements of the site-specific RAWP and DD;
 - The operation and effectiveness of the ECs, including identification of any needed repairs or modifications;
 - Any new conclusions or observations regarding Site contamination based on inspections or data generated;
 - Recommendations regarding any necessary changes to the remedy and/or Monitoring and Sampling Plan;
 - An evaluation of trends in contaminant levels in the affected media to determine if the remedy continues to be effective in achieving remedial goals as specified by the RAWP, and DD; and
 - The overall performance and effectiveness of the remedy.
- A performance summary for all treatment systems at the Site during the calendar year, including information such as:
 - The contaminant mass removed during the certification period and during the life of the treatment system;
 - A description of breakdowns and/or repairs along with an explanation for any significant downtime;
 - A description of the resolution of performance problems;
 - Alarm conditions;
 - Trends in equipment failure;
 - A summary of the performance, effluent, and/or effectiveness monitoring; and

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

7.3.1 Certification of Institutional and Engineering Controls

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

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

- The inspection of the Site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction;
- The institutional control and/or engineering control employed at this Site is unchanged from the date the control was put in place, or last approved by NYSDEC;
- Nothing has occurred that would impair the ability of the control to protect public health and the environment;
- Nothing has occurred that would constitute a violation or failure to comply with any Site management plan for this control;
- Access to the Site will continue to be provided to NYSDEC to evaluate the remedy, including access to evaluate the continued maintenance of this control;
- Use of the Site is compliant with the environmental easement;
- The engineering control systems are performing as designed and are effective;
- To the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program and generally accepted engineering practices; and
- The information presented in this report is accurate and complete.

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, [name], of [business address], am certifying as [Owner/Remedial Party or Owner's/Remedial Party's Designated Site Representative] [I have been authorized and designated by all site owners/remedial parties to sign this certification] for the Site.

I certify that the New York State Education Department has granted a Certificate of Authorization to provide Professional Engineering services to the firm that prepared this Periodic Review Report."

The signed certification will be included in the PRR.

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

7.4 Corrective Measures Work Plan

If any component of the remedy is found to have failed, or if the periodic certification cannot be provided due to the failure of an IC or EC or failure to conduct Site management activities, a Corrective Measures Work Plan (CMWP) will be submitted to the NYSDEC project manager for approval. This plan will explain the failure and provide the details and schedule for performing work necessary to correct the failure. Unless an emergency condition exists, no work will be performed pursuant to the CMWP until it has been approved by the NYSDEC project manager.

7.5 Remedial System Optimization Report

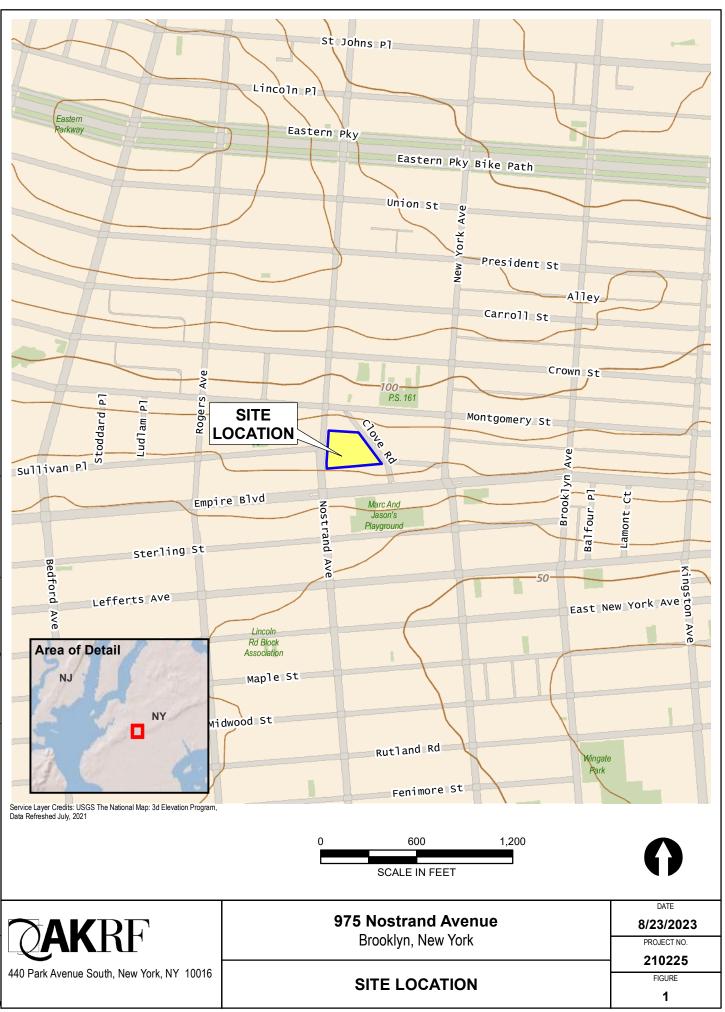
If an RSO is to be performed (see Section 6.4), an RSO report must be submitted to the NYSDEC project manager for approval upon completion of an RSO. A general outline for the RSO report is provided in **Appendix P**. The RSO report will document the research/investigation and data gathering that was conducted, evaluate the results and facts obtained, present a revised conceptual site model, and present recommendations. RSO recommendations are to be implemented upon approval from NYSDEC. Additional work plans, design documents, HASPs, etc., may still be required to implement the recommendations, based upon the actions that need to be taken. An FER and update to the SMP may also be required.

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

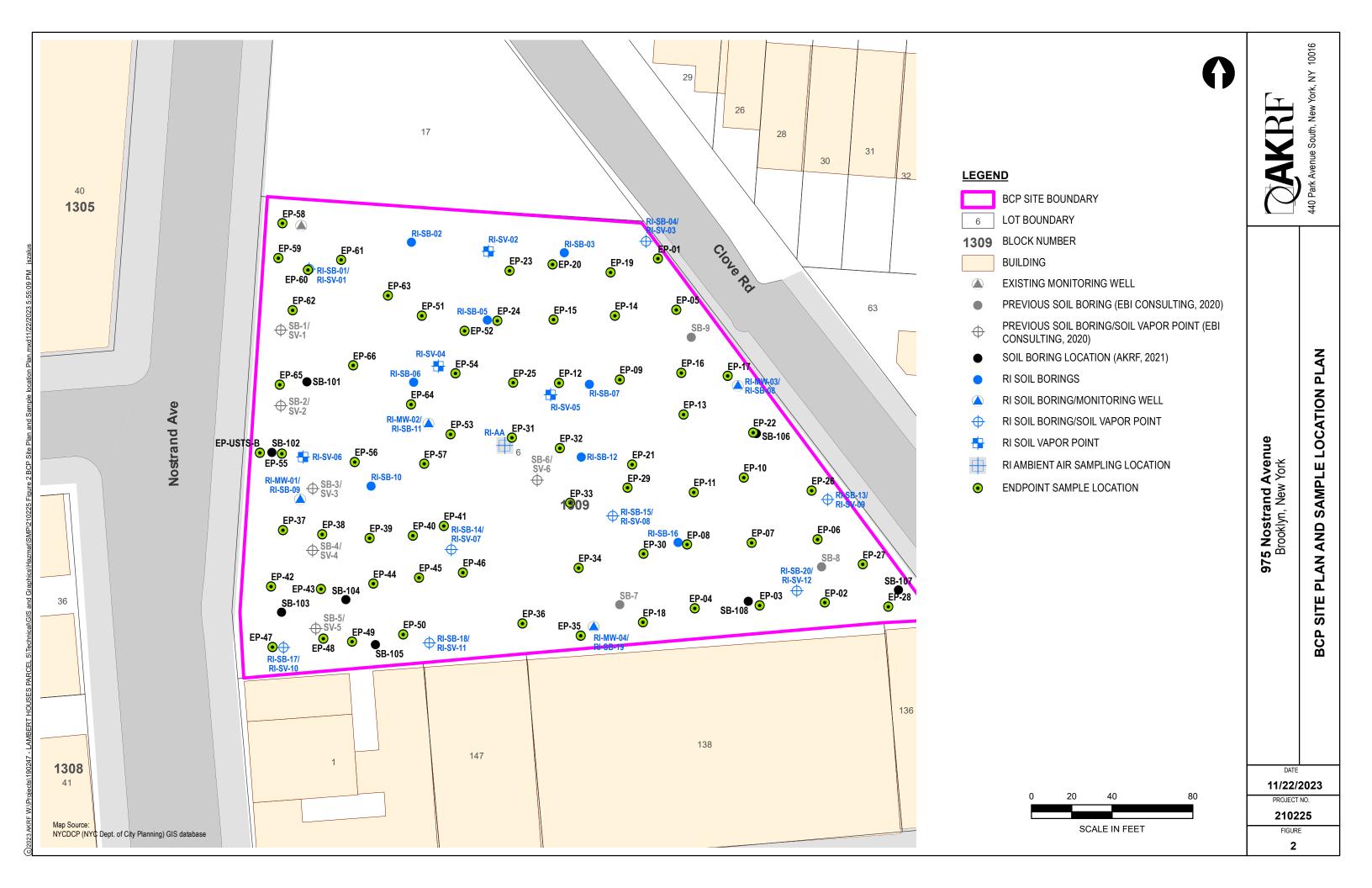
8.0 REFERENCES

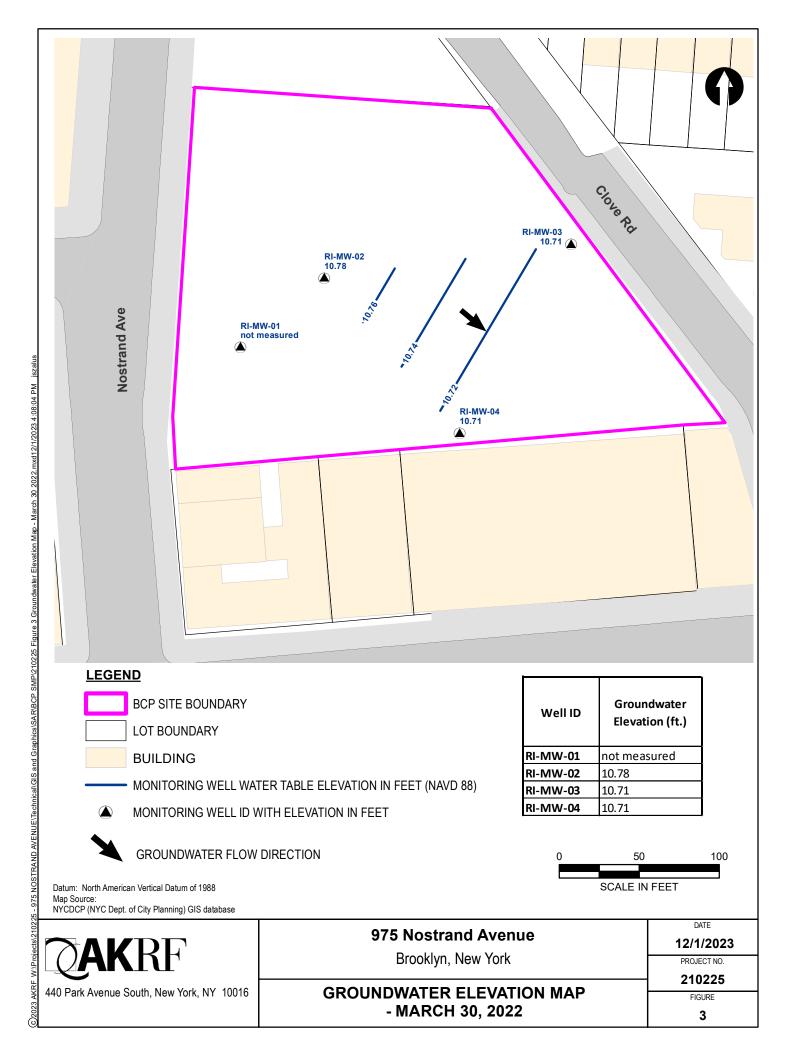
- 1. 6 NYCRR Part 375, Environmental Remediation Programs. December 14, 2006.
- 2. NYSDEC DER-10 "Technical Guidance for Site Investigation and Remediation".
- NYSDEC, 1998. Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1. June 1998 (April 2000 addendum).
- 4. Phase I Environmental Site Assessment 975 Nostrand Avenue, Brooklyn, NY, EBI Consulting, November 2020.
- 5. Phase II Environmental Site Assessment 975 Nostrand Avenue, Brooklyn, NY, EBI Consulting, December 2020.
- 6. Phase I Environmental Site Assessment, 975 Nostrand Avenue, Brooklyn, New York, AKRF, Inc., July 2021.
- 7. Limited Subsurface Investigation Letter Report, 975 Nostrand Avenue, Brooklyn, New York, AKRF, Inc., August 2021.
- 8. Interim Remedial Measures Work Plan (IRMWP), 975 Nostrand Avenue, Brooklyn, New York, AKRF, Inc., June 2022.
- 9. Remedial Investigation Report (RIR), 975 Nostrand Avenue, Brooklyn, New York, AKRF, Inc., September 2022.
- 10. Remedial Action Work Plan (RAWP), 975 Nostrand Ave, Brooklyn, NY, AKRF Inc., November, 2023.
- 11. Engineering Controls Design Document (ECDD), 975 Nostrand Ave, Brooklyn, NY, AKRF Inc., January, 2023.
- 12. Remedy Modification Request (RMR), 975 Nostrand Ave, Brooklyn, NY, AKRF Inc., February, 2023.
- 13. Final Engineering Report (FER), 975 Nostrand Ave, Brooklyn, NY, AKRF, Inc., December 2023

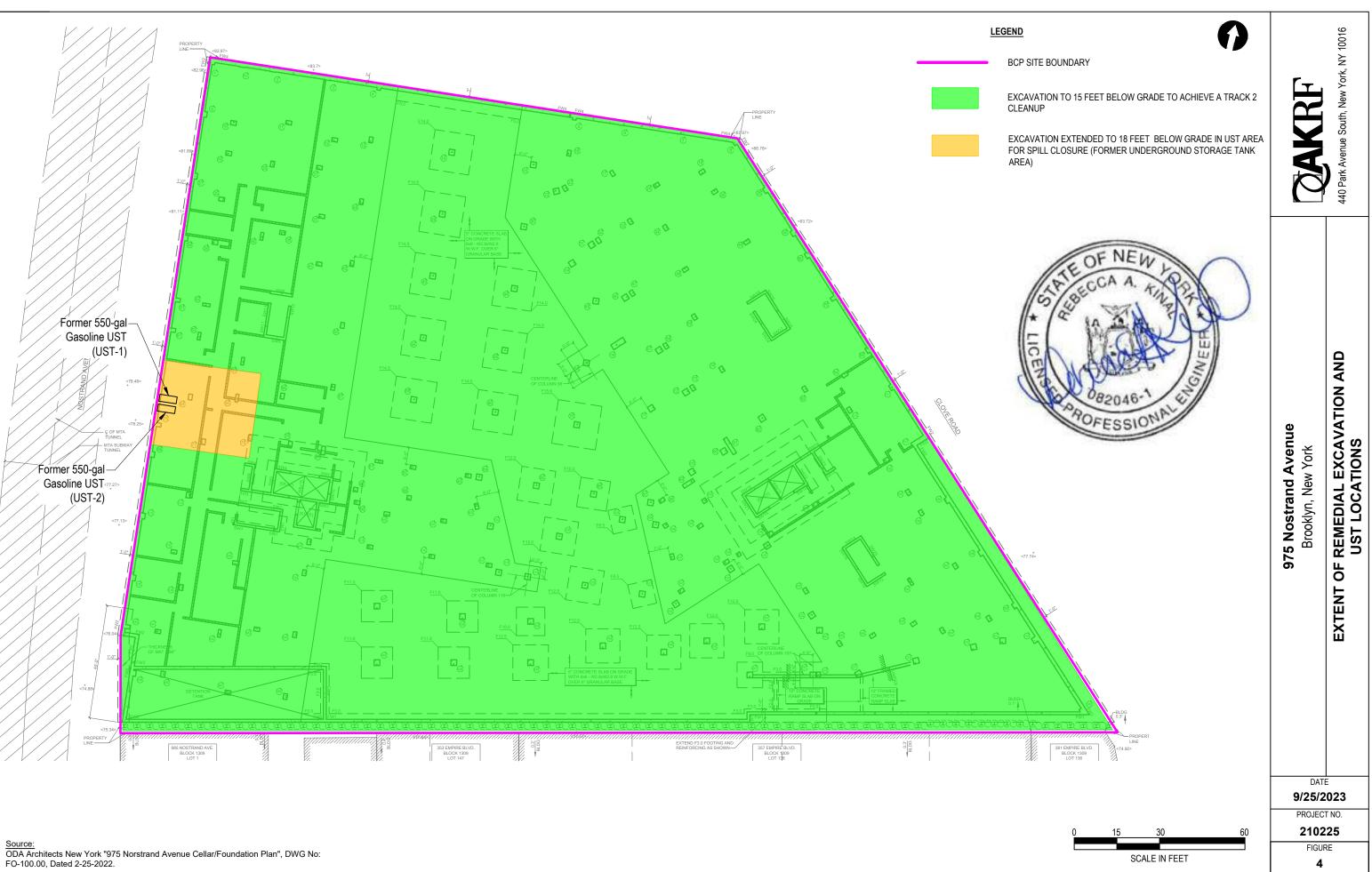
FIGURES

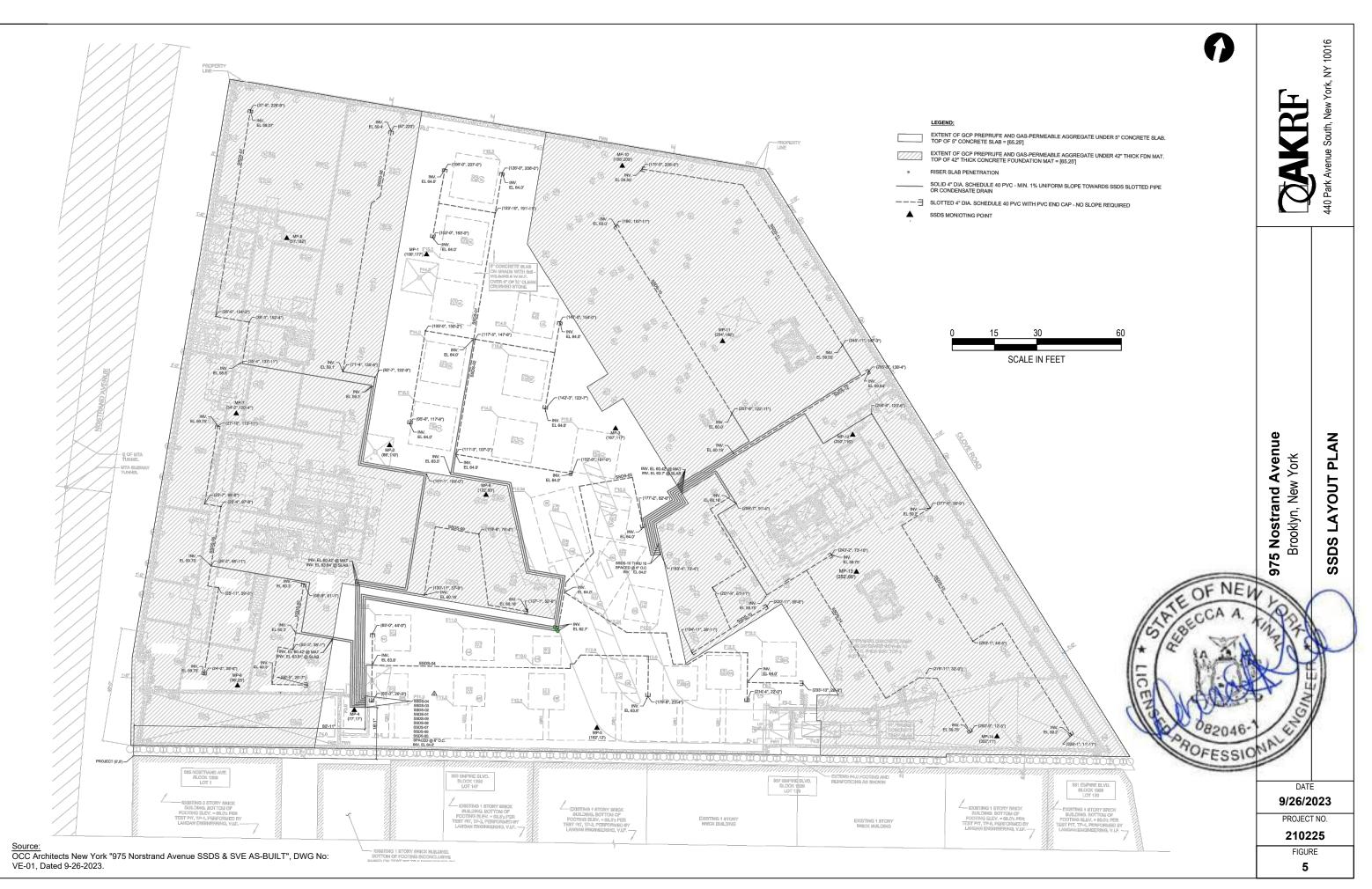


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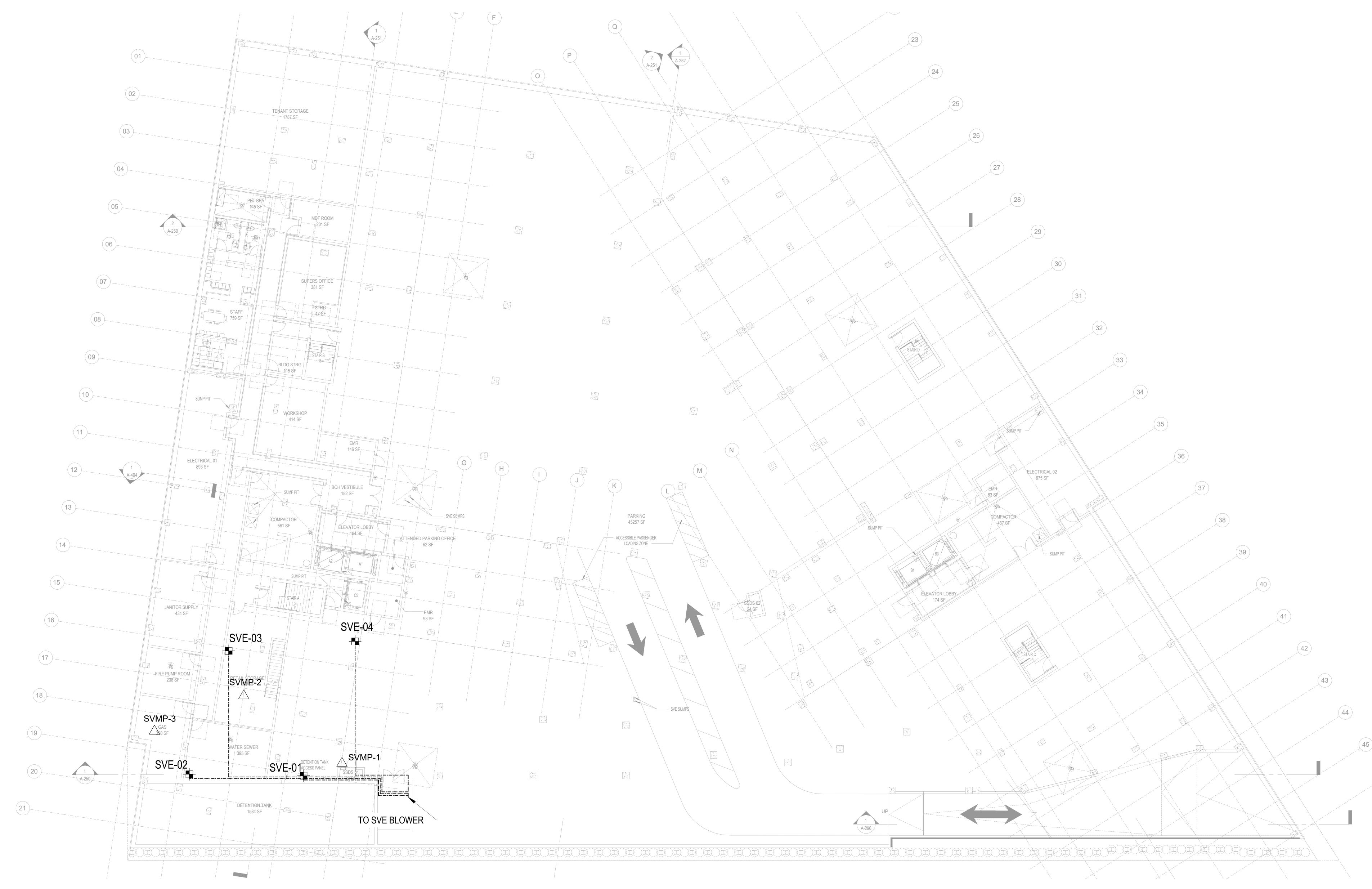








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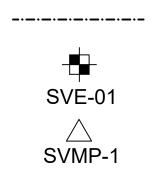


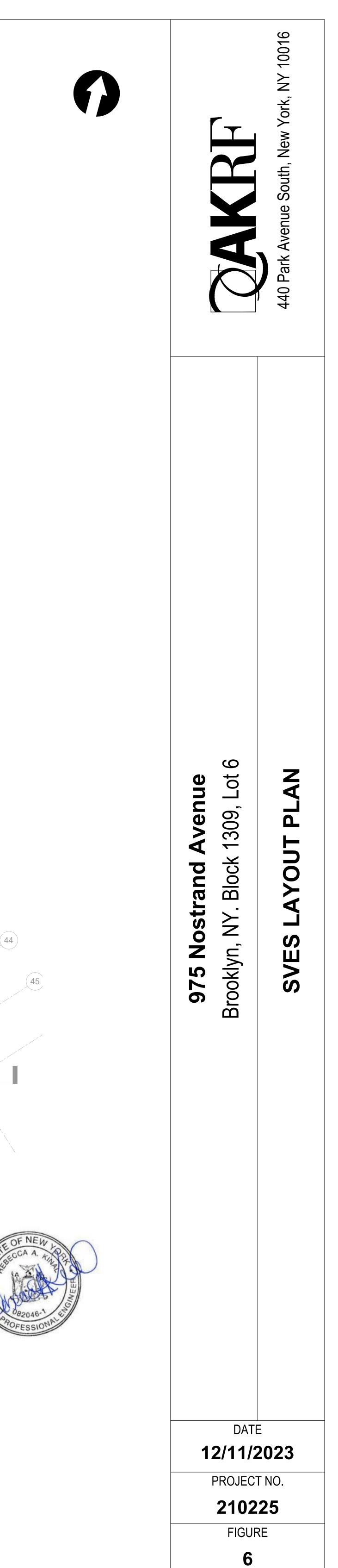
SVE VAPOR MONITORING									
P	OINT LOCA	ΓIONS							
ID	COLUMN LOCATION	ROOM							
SVMP-01	144	GARAGE (SOUTH)							
SVMP-02	143	RETAIL STORAGE							
SVMP-03	153	GAS ROOM							

LEGEND

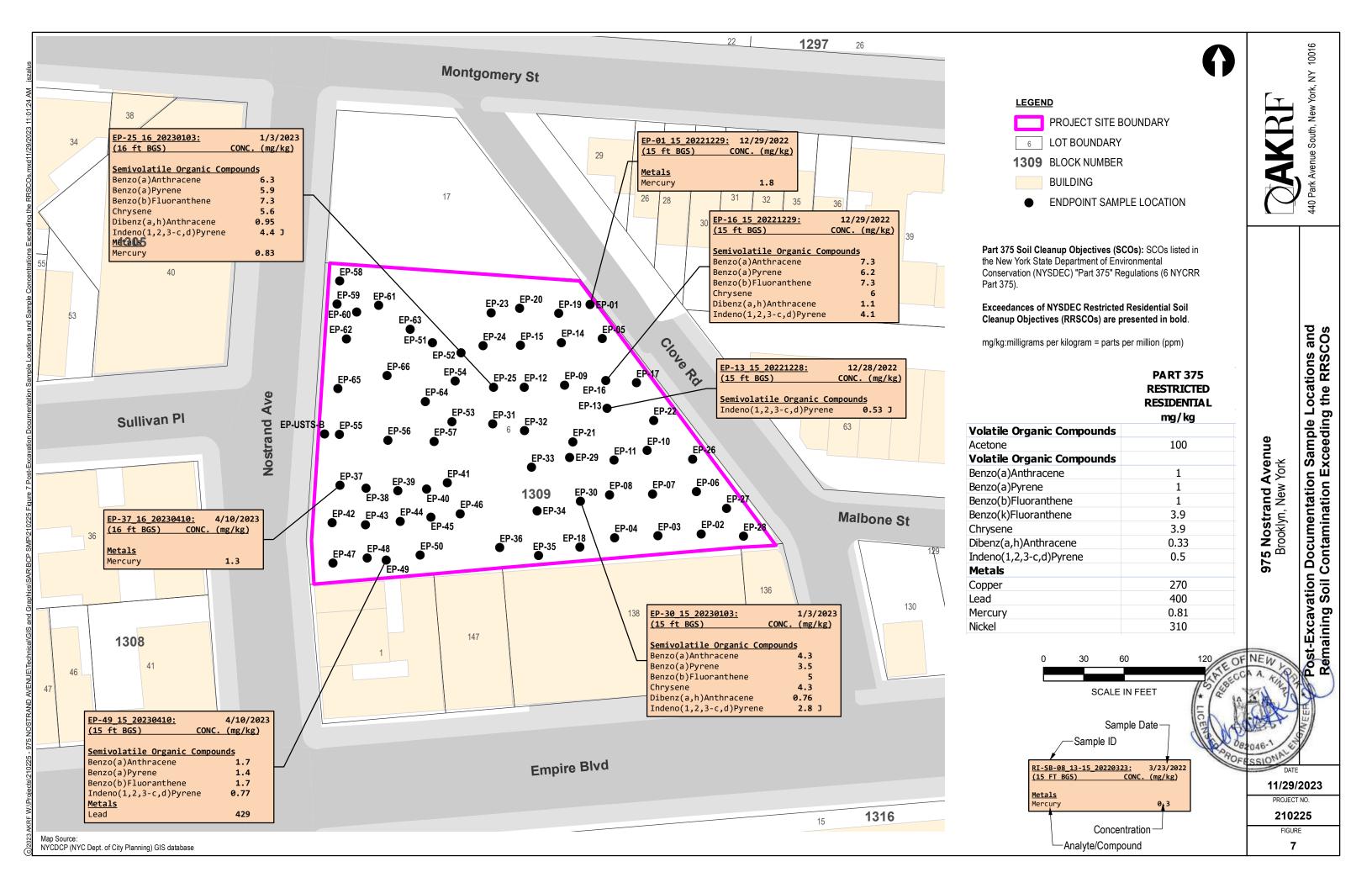
ABOVEGROUND SOLID 4" Ø SCHEDULE 40 PVC PIPE FROM SVE WELLS SOIL VAPOR EXTRACTION (SVE) WELL

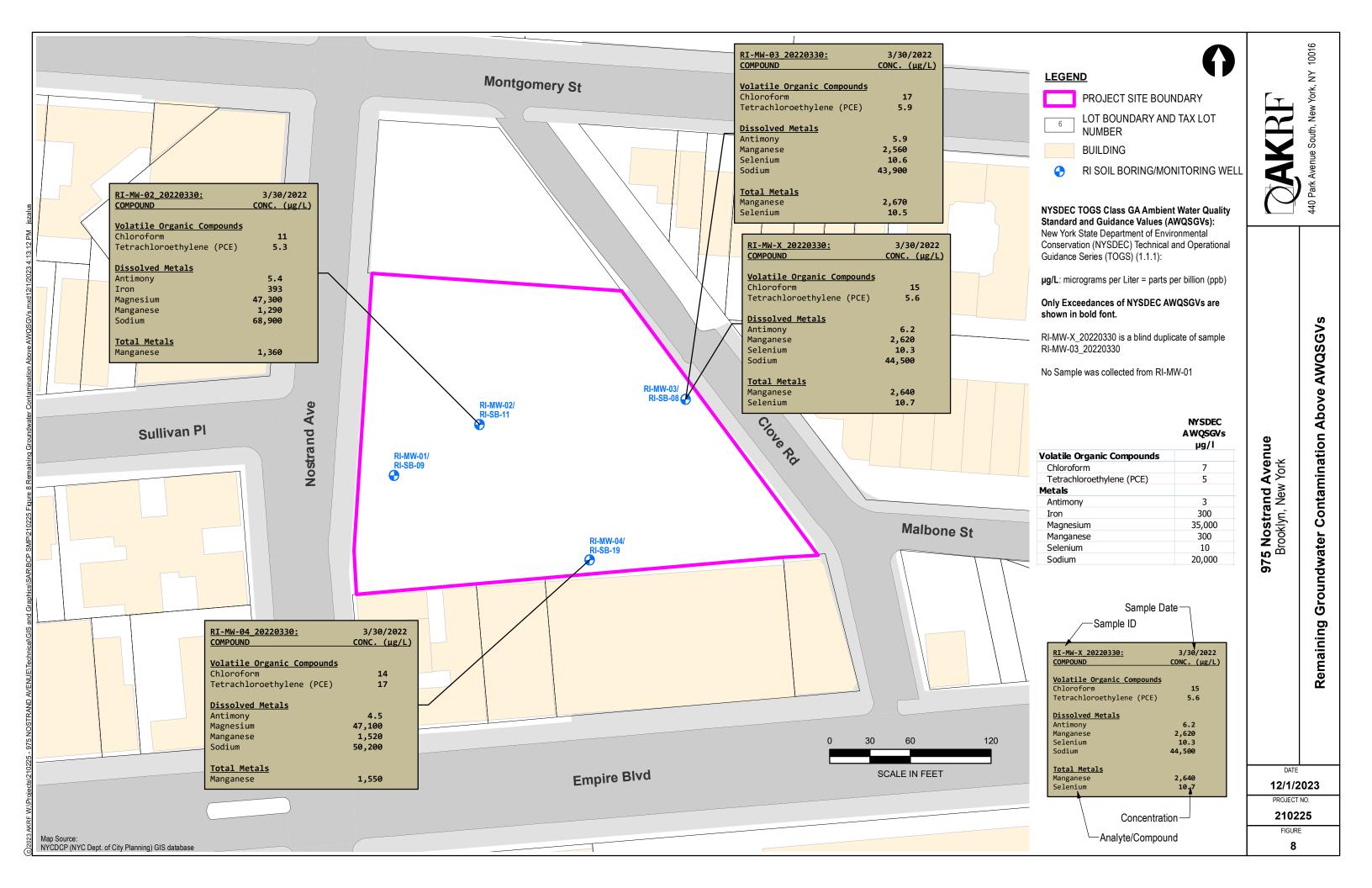
SVE VAPOR MONITORING POINT

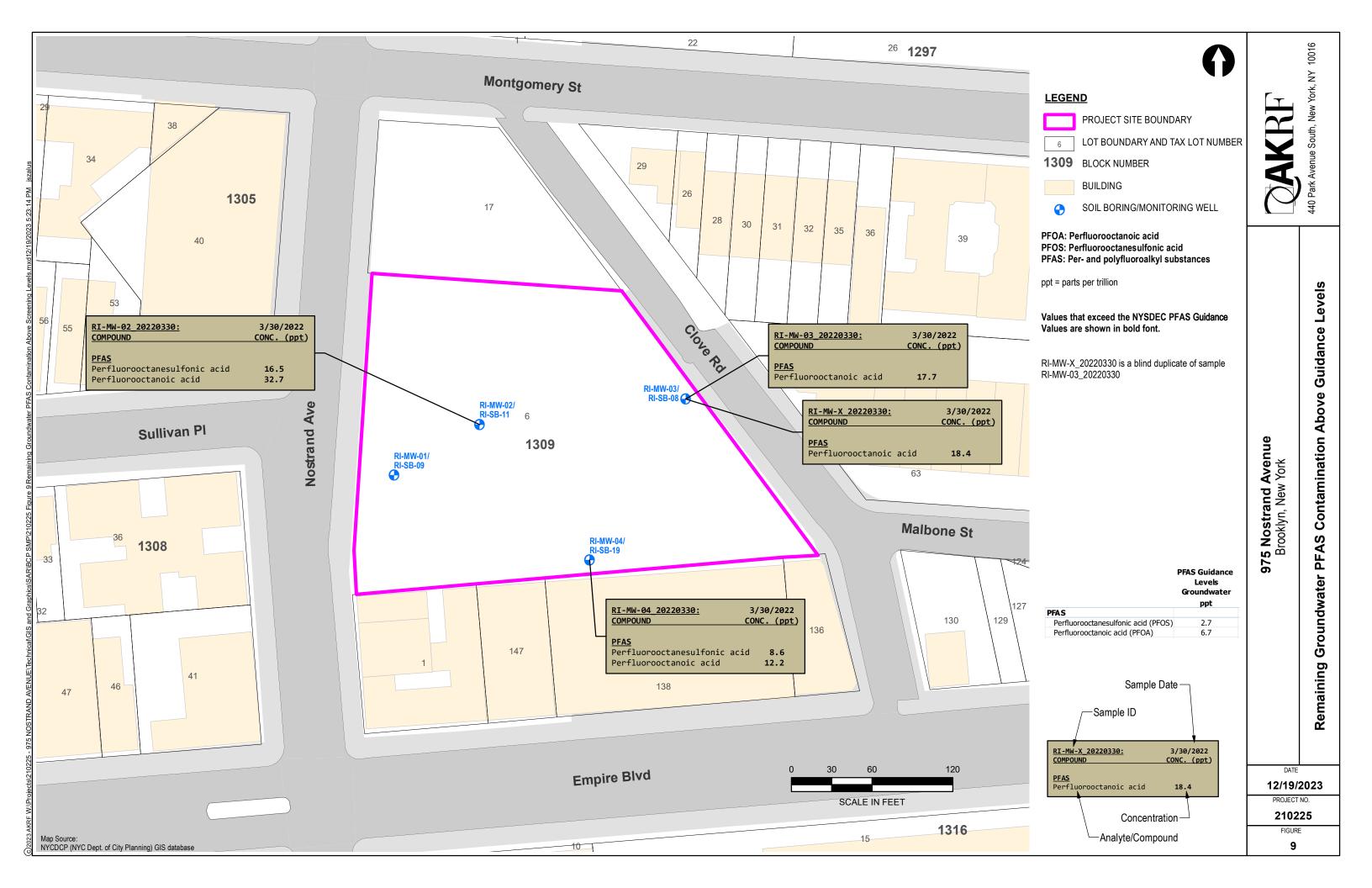


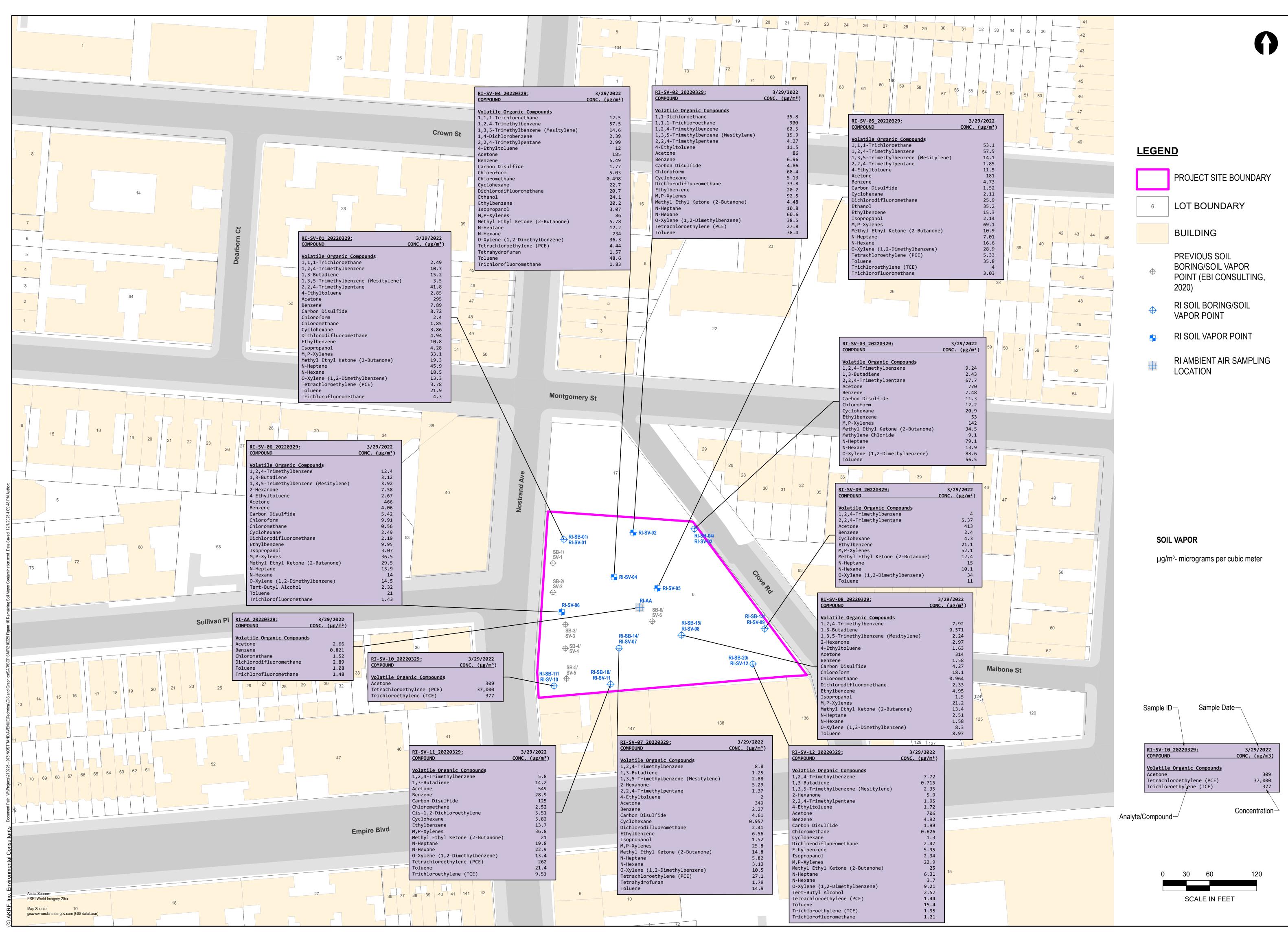


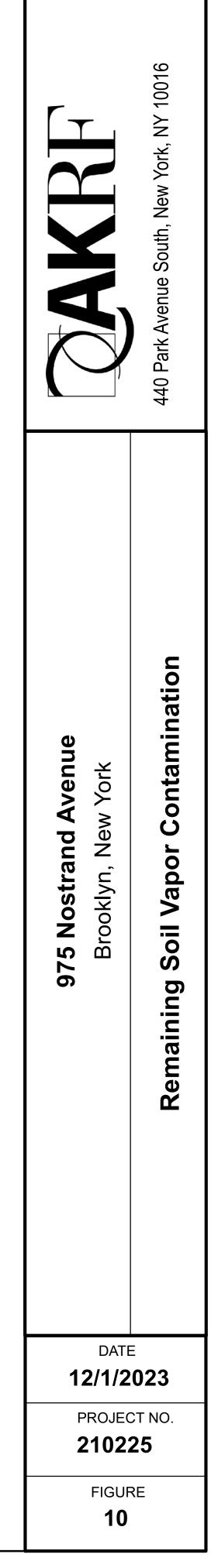


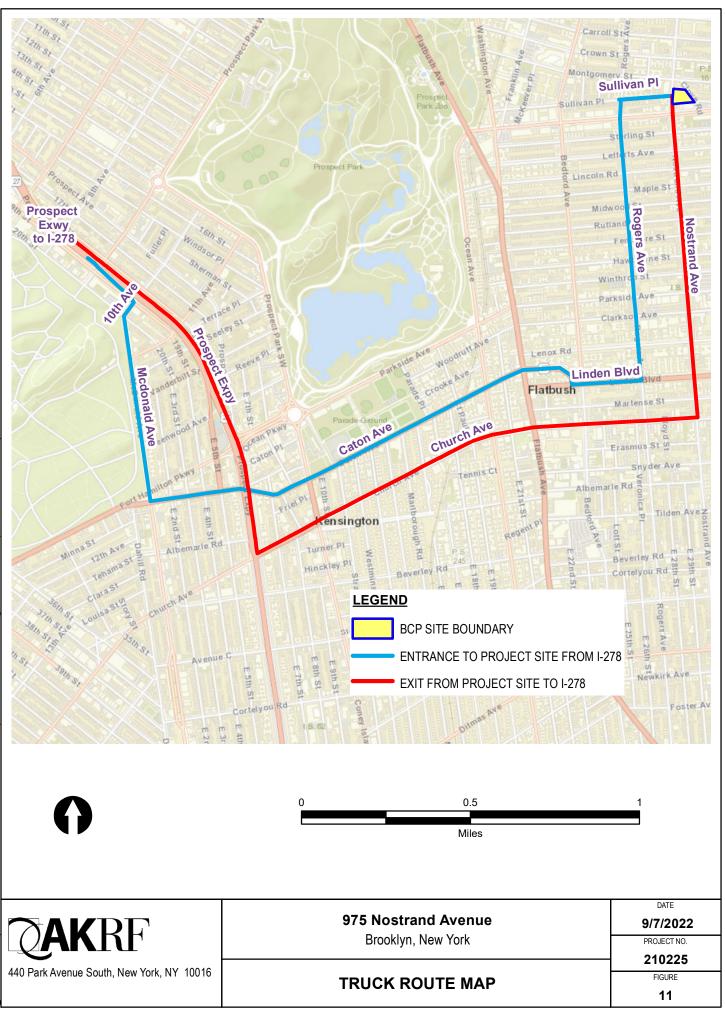












ATTACHED TABLES

			-	Volatile Organic Compounds (
			AKRF Sample ID	EP-01_15_20221229	EP-02_15_20221228	EP-03_15_20221228	EP-04_15_20221228
		L	aboratory Sample ID	460-272204-1	460-272140-1	460-272140-2	460-272140-3
			Date Sampled Dilution Factor	12/29/2022	12/28/2022 1	12/28/2022 1	12/28/2022 1
			Unit	1 mg/kg	mg/kg	mg/kg	mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.68	0.0012 U	0.0014 U	0.0013 U	0.0014 U
1.1.2.2-Tetrachloroethane	NS	NS	NS	0.0012 U	0.0014 U	0.0013 U	0.0014 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	NS	0.0012 U	0.0014 U	0.0013 U	0.0014 U
1,1,2-Trichloroethane	NS	NS	NS	0.0012 U	0.0014 U	0.0013 U	0.0014 U
1,1-Dichloroethane	0.27	26	0.27	0.0012 U	0.0014 U	0.0013 U	0.0014 U
1,1-Dichloroethene	0.33	100	0.33	0.0012 U	0.0014 U	0.0013 U	0.0014 U
1,2,3-Trichlorobenzene	NS	NS	NS	0.0012 U	0.0014 U	0.0013 U	0.0014 U
1,2,4-Trichlorobenzene	NS	NS	NS	0.0012 U	0.0014 UJ	0.0013 U	0.0014 U
1,2,4-Trimethylbenzene	3.6	52	3.6	0.0012 U	0.0014 UJ	0.0013 U	0.0014 U
1,2-Dibromo-3-Chloropropane	NS	NS	NS	0.0012 U	0.0014 U	0.0013 U	0.0014 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	NS	0.0012 U	0.0014 UJ	0.0013 U	0.0014 U
1,2-Dichlorobenzene	1.1	100	1.1	0.0012 U	0.0014 U	0.0013 U	0.0014 U
1,2-Dichloroethane	0.02	3.1	0.02	0.0012 U	0.0014 UJ	0.0013 U	0.0014 U
1,2-Dichloropropane	NS 8.4	NS 52	NS 8.4	0.0012 U 0.0012 U	0.0014 U 0.0014 UJ	0.0013 U 0.0013 U	0.0014 U 0.0014 U
1,3,5-Trimethylbenzene (Mesitylene) 1,3-Dichlorobenzene	2.4	52 49	8.4	0.0012 U 0.0012 U	0.0014 UJ 0.0014 UJ	0.0013 U 0.0013 U	0.0014 U 0.0014 U
1,4-Dichlorobenzene	1.8	13	1.8	0.0012 U	0.0014 UJ	0.0013 U	0.0014 U
2-Hexanone	NS	NS	NS	0.0012 U	0.0068 U	0.0067 U	0.0014 0 0.0069 U
Acetone	0.05	100	0.05	0.0073 U	0.0082 U	0.0083 U	0.0083 U
Benzene	0.06	4.8	0.06	0.0012 U	0.0014 U	0.0013 U	0.0014 U
Bromochloromethane	NS	NS	NS	0.0012 U	0.0014 U	0.0013 U	0.0014 U
Bromodichloromethane	NS	NS	NS	0.0012 U	0.0014 UJ	0.0013 U	0.0014 U
Bromoform	NS	NS	NS	0.0012 U	0.0014 UJ	0.0013 UJ	0.0014 UJ
Bromomethane	NS	NS	NS	0.0024 U	0.0027 U	0.0027 U	0.0028 U
Carbon Disulfide	NS	NS	NS	0.0012 U	0.0014 U	0.0013 U	0.0014 U
Carbon Tetrachloride	0.76	2.4	0.76	0.0012 U	0.0014 UJ	0.0013 U	0.0014 U
Chlorobenzene	1.1	100	1.1	0.0012 U	0.0014 U	0.0013 U	0.0014 U
Chloroethane	NS	NS	NS	0.0012 U	0.0014 U	0.0013 U	0.0014 U
Chloroform	0.37	49	0.37	0.0012 U	0.0014 U	0.0013 U	0.0014 U
Chloromethane	NS	NS	NS	0.0012 U	0.0014 U	0.0013 U	0.0014 U
Cis-1,2-Dichloroethylene	0.25 NS	100 NS	0.25 NS	0.0012 U 0.0012 U	0.0014 U 0.0014 UJ	0.0013 U	0.0014 U 0.0014 U
Cis-1,3-Dichloropropene Cyclohexane	NS NS	NS	NS	0.0012 U 0.0012 U	0.0014 UJ 0.0014 U	0.0013 U 0.0013 U	0.0014 U 0.0014 U
Cymene	NS	NS	NS	NR	NR	0.0013-0	NR
Dibromochloromethane	NS	NS	NS	0.0012 U	0.0014 UJ	0.0013 U	0.0014 U
Dichlorodifluoromethane	NS	NS	NS	0.0012 U	0.0014 U	0.0013 U	0.0014 U
Ethylbenzene	1	41	1	0.0012 U	0.0014 U	0.0013 U	0.0014 U
Isopropylbenzene (Cumene)	NS	NS	NS	0.0012 U	0.0014 U	0.0013 U	0.0014 U
M,P-Xylenes	NS	NS	NS	0.0012 U	0.0014 UJ	0.0013 U	0.0014 U
Methyl Acetate	NS	NS	NS	0.006 U	0.0068 UJ	0.0067 UJ	0.0069 UJ
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.12	0.006 U	0.0068 U	0.0067 U	0.0069 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	NS	0.006 U	0.0068 U	0.0067 U	0.0069 U
Methylcyclohexane	NS	NS	NS	0.0012 U	0.0014 U	0.0013 U	0.0014 U
Methylene Chloride	0.05	100	0.05	0.0024 U	0.0027 U	0.0027 U	0.0028 U
N-Butylbenzene	12	100	12	0.0012 U	0.0014 UJ	0.0013 UJ	0.0014 UJ
N-Propylbenzene	3.9	100 NS	3.9	0.0012 U	0.0014 U	0.0013 U	0.0014 U
O-Xylene (1,2-Dimethylbenzene) Sec-Butylbenzene	NS 11	NS 100	NS 11	0.0012 U 0.0012 U	0.0014 U 0.0014 UJ	0.0013 U 0.0013 U	0.0014 U 0.0014 U
Styrene	NS	NS	NS	0.0012 U 0.0012 U	0.0014 UJ	0.0013 U	0.0014 U 0.0014 U
T-Butylbenzene	5.9	100	5.9	0.0012 U	0.0014 UJ	0.0013 U	0.0014 U
Tert-Butyl Methyl Ether	0.93	100	0.93	0.0012 U	0.0014 U	0.0013 U	0.0014 U
Tetrachloroethylene (PCE)	1.3	100	1.3	0.0012 U	0.0014 UJ	0.0013 U	0.0014 U
	0.7	100	0.7	0.0012 U	0.0014 U	0.0013 U	0.0014 U
Trans-1,2-Dichloroethene	0.19	100	0.19	0.0012 U	0.0014 U	0.0013 U	0.0014 U
Trans-1,3-Dichloropropene	NS	NS	NS	0.0012 U	0.0014 UJ	0.0013 U	0.0014 U
Trichloroethylene (TCE)	0.47	21	0.47	0.0012 U	0.0014 UJ	0.0013 U	0.0014 U
Trichlorofluoromethane	NS	NS	NS	0.0012 U	0.0014 U	0.0013 U	0.0014 U
Vinyl Chloride	0.02	0.9	0.02	0.0012 U	0.0014 U	0.0013 U	0.0014 U
Xylenes, Total	0.26	100	1.6	0.0024 U	0.0027 U	0.0027 U	0.0028 U

1			-	FD V01 15 20221228			
			AKRF Sample ID aboratory Sample ID.	EP-X01_15_20221228 460-272140-11	EP-05_15_20221229 460-272204-2	EP-06_15_20221228 460-272140-4	EP-07_15_20221228 460-272140-5
		L	Date Sampled	12/28/2022	12/29/2022	12/28/2022	12/28/2022
			Dilution Factor	12/20/2022	12/29/2022	12/20/2022	12/28/2022
			Unit	mg/kg	mg/kg	mg/kg	mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.68	0.0011 U	0.0011 U	0.0013 U	0.0013 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	0.0011 U	0.0011 U	0.0013 U	0.0013 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	NS	0.0011 U	0.0011 U	0.0013 U	0.0013 U
1,1,2-Trichloroethane	NS	NS	NS	0.0011 U	0.0011 U	0.0013 U	0.0013 U
1,1-Dichloroethane	0.27	26	0.27	0.0011 U	0.0011 U	0.0013 U	0.0013 U
1,1-Dichloroethene	0.33	100	0.33	0.0011 U	0.0011 U	0.0013 U	0.0013 U
1,2,3-Trichlorobenzene	NS	NS	NS	0.0011 U	0.0011 U	0.0013 U	0.0013 U
1,2,4-Trichlorobenzene	NS	NS	NS	0.0011 U	0.0011 U	0.0013 U	0.0013 U
1,2,4-Trimethylbenzene	3.6	52	3.6	0.0011 U	0.0011 U	0.0013 U	0.0013 U
1,2-Dibromo-3-Chloropropane	NS	NS	NS	0.0011 U	0.0011 U	0.0013 U	0.0013 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	NS	0.0011 U	0.0011 U	0.0013 U	0.0013 U
1,2-Dichlorobenzene	1.1	100	1.1	0.0011 U	0.0011 U	0.0013 U	0.0013 U
1,2-Dichloroethane	0.02	3.1	0.02	0.0011 U	0.0011 U	0.0013 U	0.0013 U
1,2-Dichloropropane	NS 8.4	NS 52	NS 8.4	0.0011 U 0.0011 U	0.0011 U 0.0011 U	0.0013 U 0.0013 U	0.0013 U 0.0013 U
1,3,5-Trimethylbenzene (Mesitylene) 1,3-Dichlorobenzene	2.4	52 49	2.4	0.0011 U 0.0011 U	0.0011 U 0.0011 U	0.0013 U 0.0013 U	0.0013 U 0.0013 U
1,3-Dichlorobenzene	1.8	13	1.8	0.0011 U	0.0011 U	0.0013 U	0.0013 U
2-Hexanone	NS	NS	NS	0.0056 U	0.0057 U	0.0066 U	0.0065 U
Acetone	0.05	100	0.05	0.0071 U	0.0068 U	0.0079 U	0.0078 U
Benzene	0.06	4.8	0.06	0.0011 U	0.0011 U	0.0013 U	0.0013 U
Bromochloromethane	NS	NS	NS	0.0011 U	0.0011 U	0.0013 U	0.0013 U
Bromodichloromethane	NS	NS	NS	0.0011 U	0.0011 U	0.0013 U	0.0013 U
Bromoform	NS	NS	NS	0.0011 UJ	0.0011 U	0.0013 UJ	0.0013 UJ
Bromomethane	NS	NS	NS	0.0022 U	0.0023 U	0.0026 U	0.0026 U
Carbon Disulfide	NS	NS	NS	0.0011 U	0.0011 U	0.0013 U	0.0013 U
Carbon Tetrachloride	0.76	2.4	0.76	0.0011 U	0.0011 U	0.0013 U	0.0013 U
Chlorobenzene	1.1	100	1.1	0.0011 U	0.0011 U	0.0013 U	0.0013 U
Chloroethane	NS	NS	NS	0.0011 U	0.0011 U	0.0013 U	0.0013 U
Chloroform	0.37	49	0.37	0.0011 U	0.0011 U	0.0013 U	0.0013 U
Chloromethane	NS	NS	NS	0.0011 U	0.0011 U	0.0013 U	0.0013 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.0011 U	0.0011 U	0.0013 U	0.0013 U
Cis-1,3-Dichloropropene	NS	NS	NS	0.0011 U	0.0011 U	0.0013 U	0.0013 U
Cyclohexane	NS	NS	NS	0.0011 U	0.0011 U	0.0013 U	0.0013 U
	NS	NS	NS	NR	NR 0.0014 11	NR 0.0013 U	NR 0.0012 U
Dibromochloromethane Dichlorodifluoromethane	NS NS	NS NS	NS NS	0.0011 U 0.0011 U	0.0011 U 0.0011 U	0.0013 U	0.0013 U 0.0013 U
Ethylbenzene	1	41	1	0.0011 U	0.0011 U	0.0013 U	0.0013 U 0.0013 U
Isopropylbenzene (Cumene)	NS	NS	NS	0.0011 U	0.0011 U	0.0013 U	0.0013 U
M,P-Xylenes	NS	NS	NS	0.0011 U	0.0011 U	0.0013 U	0.0013 U
Methyl Acetate	NS	NS	NS	0.0056 UJ	0.0057 U	0.0066 UJ	0.0065 UJ
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.12	0.0056 U	0.0057 U	0.0066 U	0.0065 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	NS	0.0056 U	0.0057 U	0.0066 U	0.0065 U
Methylcyclohexane	NS	NS	NS	0.0011 U	0.0011 U	0.0013 U	0.0013 U
Methylene Chloride	0.05	100	<u>0.05</u>	0.0022 U	0.0023 U	0.0026 U	0.0026 U
N-Butylbenzene	12	100	12	0.0011 UJ	0.0011 U	0.0013 UJ	0.0013 UJ
N-Propylbenzene	3.9	100	3.9	0.0011 U	0.0011 U	0.0013 U	0.0013 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	NS	0.0011 U	0.0011 U	0.0013 U	0.0013 U
Sec-Butylbenzene	11	100	11	0.0011 U	0.0011 U	0.0013 U	0.0013 U
Styrene	NS	NS	NS	0.0011 U	0.0011 U	0.0013 U	0.0013 U
T-Butylbenzene	5.9	100	5.9	0.0011 U	0.0011 U	0.0013 U	0.0013 U
Tert-Butyl Methyl Ether	0.93	100	0.93	0.0011 U	0.0011 U	0.0013 U	0.0013 U
Tetrachloroethylene (PCE)	1.3	19	<u>1.3</u>	0.0011 U	0.0011 U	0.0013 U	0.0013 U
	0.7	100	0.7	0.0011 U	0.0011 U	0.0013 U	0.0013 U
Trans-1,2-Dichloroethene	0.19	100	0.19	0.0011 U	0.0011 U	0.0013 U	0.0013 U
Trans-1,3-Dichloropropene	NS 0.47	NS	NS 0.47	0.0011 U	0.0011 U	0.0013 U	0.0013 U
Trichloroethylene (TCE)	0.47	21	0.47	0.0011 U 0.0011 U	0.0011 U	0.0013 U	0.0013 U 0.0013 U
Trichlorofluoromethane Vinyl Chloride	NS 0.02	NS 0.9	NS 0.02	0.0011 U 0.0011 U	0.0011 U 0.0011 U	0.0013 U 0.0013 U	0.0013 U 0.0013 U
Xylenes, Total	0.02	100	1.6	0.0011 U 0.0022 U	0.0011 U 0.0023 U	0.0013 U 0.0026 U	0.0013 U 0.0026 U
Ayionos, Tolai	0.20	100	0.1	0.0022 0	0.0023 0	0.0020 0	0.0020 0

			-	Volatile Organic Compounds (
			AKRF Sample ID	EP-08_15_20221228	EP-09_15_20221229	EP-10_15_20221228	EP-11_15_20221228
		L	aboratory Sample ID	460-272140-6	460-272204-3	460-272140-7	460-272140-8
			Date Sampled Dilution Factor	12/28/2022 1	12/29/2022 1	12/28/2022 1	12/28/2022 1
			Unit	mg/kg	mg/kg	ng/kg	mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.68	0.0011 U	0.0011 U	0.0015 U	0.0014 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	0.0011 U	0.0011 U	0.0015 U	0.0014 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	NS	0.0011 U	0.0011 U	0.0015 U	0.0014 U
1,1,2-Trichloroethane	NS	NS	NS	0.0011 U	0.0011 U	0.0015 U	0.0014 U
1,1-Dichloroethane	0.27	26	0.27	0.0011 U	0.0011 U	0.0015 U	0.0014 U
1,1-Dichloroethene	0.33	100	0.33	0.0011 U	0.0011 U	0.0015 U	0.0014 U
1,2,3-Trichlorobenzene	NS	NS	NS	0.0011 U	0.0011 U	0.0015 U	0.0014 U
1,2,4-Trichlorobenzene	NS	NS	NS	0.0011 U	0.0011 U	0.0015 U	0.0014 U
1,2,4-Trimethylbenzene	3.6	52	3.6	0.0011 U	0.0011 U	0.0015 U	0.0014 U
1,2-Dibromo-3-Chloropropane	NS	NS	NS	0.0011 U	0.0011 U	0.0015 U	0.0014 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	NS	0.0011 U	0.0011 U	0.0015 U	0.0014 U
1,2-Dichlorobenzene	1.1	100	1.1	0.0011 U	0.0011 U	0.0015 U	0.0014 U
1,2-Dichloroethane	0.02	3.1	0.02	0.0011 U	0.0011 U	0.0015 U	0.0014 U
1,2-Dichloropropane	NS 8.4	NS 52	NS 8.4	0.0011 U 0.0011 U	0.0011 U 0.0011 U	0.0015 U 0.0015 U	0.0014 U 0.0014 U
1,3,5-Trimethylbenzene (Mesitylene) 1,3-Dichlorobenzene	8.4	52 49	8.4	0.0011 U 0.0011 U	0.0011 U 0.0011 U	0.0015 U 0.0015 U	0.0014 U 0.0014 U
1,4-Dichlorobenzene	1.8	13	1.8	0.0011 U	0.0011 U	0.0015 U	0.0014 U
2-Hexanone	NS	NS	NS	0.0056 U	0.0055 U	0.0077 U	0.0014 0 0.0069 U
Acetone	0.05	100	0.05	0.0085 U	<u>0.063</u>	0.0093 U	0.003 U
Benzene	0.06	4.8	0.06	0.0011 U	0.0011 U	0.0015 U	0.0014 U
Bromochloromethane	NS	NS	NS	0.0011 U	0.0011 U	0.0015 U	0.0014 U
Bromodichloromethane	NS	NS	NS	0.0011 U	0.0011 U	0.0015 U	0.0014 U
Bromoform	NS	NS	NS	0.0011 UJ	0.0011 U	0.0015 UJ	0.0014 UJ
Bromomethane	NS	NS	NS	0.0023 U	0.0022 U	0.0031 U	0.0028 U
Carbon Disulfide	NS	NS	NS	0.0011 U	0.0011 U	0.0015 U	0.0014 U
Carbon Tetrachloride	0.76	2.4	0.76	0.0011 U	0.0011 U	0.0015 U	0.0014 U
Chlorobenzene	1.1	100	1.1	0.0011 U	0.0011 U	0.0015 U	0.0014 U
Chloroethane	NS	NS	NS	0.0011 U	0.0011 U	0.0015 U	0.0014 U
Chloroform	0.37	49	0.37	0.0011 U	0.0011 U	0.0015 U	0.0014 U
Chloromethane	NS	NS	NS	0.0011 U	0.0011 U	0.0015 U	0.0014 U
Cis-1,2-Dichloroethylene Cis-1,3-Dichloropropene	0.25 NS	100 NS	0.25 NS	0.0011 U 0.0011 U	0.0011 U 0.0011 U	0.0015 U 0.0015 U	0.0014 U 0.0014 U
Cyclohexane	NS	NS	NS	0.0011 U	0.0011 U	0.0015 U	0.0014 U
Cymene	NS	NS	NS	NR	NR	0.0013-0	NR
Dibromochloromethane	NS	NS	NS	0.0011 U	0.0011 U	0.0015 U	0.0014 U
Dichlorodifluoromethane	NS	NS	NS	0.0011 U	0.0011 U	0.0015 U	0.0014 U
Ethylbenzene	1	41	1	0.0011 U	0.0011 U	0.0015 U	0.0014 U
Isopropylbenzene (Cumene)	NS	NS	NS	0.0011 U	0.0011 U	0.0015 U	0.0014 U
M,P-Xylenes	NS	NS	NS	0.0011 U	0.0011 U	0.0015 U	0.0014 U
Methyl Acetate	NS	NS	NS	0.0056 UJ	0.0055 U	0.0077 UJ	0.0069 UJ
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.12	0.0056 U	0.0055 U	0.0077 U	0.0069 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	NS	0.0056 U	0.0055 U	0.0077 U	0.0069 U
Methylcyclohexane	NS	NS	NS	0.0011 U	0.0011 U	0.0015 U	0.0014 U
Methylene Chloride	0.05	100	0.05	0.0023 U	0.0022 U	0.0031 U	0.0028 U
N-Butylbenzene	12	100	12	0.0011 UJ	0.0011 U	0.0015 UJ	0.0014 UJ
N-Propylbenzene	3.9	100	3.9	0.0011 U	0.0011 U	0.0015 U	0.0014 U
O-Xylene (1,2-Dimethylbenzene)	NS 11	NS 100	NS 11	0.0011 U	0.0011 U	0.0015 U	0.0014 U
Sec-Butylbenzene Styrene	11 NS	100 NS	11 NS	0.0011 U 0.0011 U	0.0011 U 0.0011 U	0.0015 U 0.0015 U	0.0014 U 0.0014 U
T-Butylbenzene	5.9	100	5.9	0.0011 U	0.0011 U	0.0015 U	0.0014 U
Tert-Butyl Methyl Ether	0.93	100	0.93	0.0011 U	0.0011 U	0.0015 U	0.0014 U
Tetrachloroethylene (PCE)	1.3	19	1.3	0.0011 U	0.0011 U	0.0015 U	0.0014 U
	0.7	100	0.7	0.0011 U	0.0011 U	0.0015 U	0.0014 U
Trans-1,2-Dichloroethene	0.19	100	0.19	0.0011 U	0.0011 U	0.0015 U	0.0014 U
Trans-1,3-Dichloropropene	NS	NS	NS	0.0011 U	0.0011 U	0.0015 U	0.0014 U
Trichloroethylene (TCE)	0.47	21	0.47	0.0011 U	0.0011 U	0.0015 U	0.0014 U
Trichlorofluoromethane	NS	NS	NS	0.0011 U	0.0011 U	0.0015 U	0.0014 U
Vinyl Chloride	0.02	0.9	0.02	0.0011 U	0.0011 U	0.0015 U	0.0014 U
Xylenes, Total	0.26	100	1.6	0.0023 U	0.0022 U	0.0031 U	0.0028 U

[AKRF Sample ID	EP 12 15 20221220		ED 14 15 20221220	ED 15 15 20221220
			aboratory Sample ID	EP-12_15_20221229 460-272204-4	EP-13_15_20221228 460-272140-9	EP-14_15_20221229 460-272204-5	EP-15_15_20221229 460-272204-6
		L	Date Sampled	12/29/2022	12/28/2022	12/29/2022	12/29/2022
			Dilution Factor	1	1	1	1
			Unit	mg/kg	mg/kg	mg/kg	mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.68	0.0012 U	0.0012 U	0.0013 U	0.0013 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	0.0012 U	0.0012 U	0.0013 U	0.0013 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	NS	0.0012 U	0.0012 U	0.0013 U	0.0013 U
1,1,2-Trichloroethane	NS	NS	NS	0.0012 U	0.0012 U	0.0013 U	0.0013 U
1,1-Dichloroethane	0.27	26	0.27	0.0012 U	0.0012 U	0.0013 U	0.0013 U
1,1-Dichloroethene	0.33	100	0.33	0.0012 U	0.0012 U	0.0013 U	0.0013 U
1,2,3-Trichlorobenzene	NS NS	NS NS	NS NS	0.0012 U	0.0012 U	0.0013 U 0.0013 U	0.0013 U 0.0013 U
1,2,4-Trichlorobenzene 1,2,4-Trimethylbenzene	3.6	52	3.6	0.0012 U 0.0012 U	0.0012 U 0.0012 U	0.0013 U	0.0013 U
1,2-Dibromo-3-Chloropropane	NS State	NS S2	NS S.0	0.0012 U	0.0012 U	0.0013 U	0.0013 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	NS	0.0012 U	0.0012 U	0.0013 U	0.0013 U
1,2-Diblomoethane (Ethylene Diblomide)	1.1	100	1.1	0.0012 U	0.0012 U	0.0013 U	0.0013 U
1,2-Dichloroethane	0.02	3.1	0.02	0.0012 U	0.0012 U	0.0013 U	0.0013 U
1,2-Dichloropropane	NS	NS	NS	0.0012 U	0.0012 U	0.0013 U	0.0013 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	8.4	0.0012 U	0.0012 U	0.0013 U	0.0013 U
1,3-Dichlorobenzene	2.4	49	2.4	0.0012 U	0.0012 U	0.0013 U	0.0013 U
1,4-Dichlorobenzene	1.8	13	1.8	0.0012 U	0.0012 U	0.0013 U	0.0013 U
2-Hexanone	NS	NS	NS	0.0061 U	0.0059 U	0.0063 U	0.0066 U
Acetone	0.05	100	<u>0.05</u>	0.0074 U	0.011 U	0.011	<u>0.071</u>
Benzene	0.06	4.8	0.06	0.0012 U	0.0012 U	0.0013 U	0.0013 U
Bromochloromethane	NS	NS	NS	0.0012 U	0.0012 U	0.0013 U	0.0013 U
Bromodichloromethane	NS	NS	NS	0.0012 U	0.0012 U	0.0013 U	0.0013 U
Bromoform	NS	NS	NS	0.0012 U	0.0012 UJ	0.0013 U	0.0013 U
Bromomethane Carbon Disulfide	NS NS	NS NS	NS NS	0.0025 U 0.0012 U	0.0023 U 0.0012 U	0.0025 U 0.0013 U	0.0026 U 0.0013 U
Carbon Disulide Carbon Tetrachloride	0.76	2.4	0.76	0.0012 U 0.0012 U	0.0012 U	0.0013 U	0.0013 U
Chlorobenzene	1.1	100	1.1	0.0012 U	0.0012 U	0.0013 U	0.0013 U
Chloroethane	NS	NS	NS	0.0012 U	0.0012 U	0.0013 U	0.0013 U
Chloroform	0.37	49	0.37	0.0012 U	0.0012 U	0.0013 U	0.0013 U
Chloromethane	NS	NS	NS	0.0012 U	0.0012 U	0.0013 U	0.0013 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.0012 U	0.0012 U	0.0013 U	0.0013 U
Cis-1,3-Dichloropropene	NS	NS	NS	0.0012 U	0.0012 U	0.0013 U	0.0013 U
Cyclohexane	NS	NS	NS	0.0012 U	0.0012 U	0.0013 U	0.0013 U
Cymene	NS	NS	NS	NR	NR	NR	NR
Dibromochloromethane	NS	NS	NS	0.0012 U	0.0012 U	0.0013 U	0.0013 U
Dichlorodifluoromethane	NS	NS	NS	0.0012 U	0.0012 U	0.0013 U	0.0013 U
Ethylbenzene	1	41	1	0.0012 U	0.0012 U	0.0013 U	0.0013 U
Isopropylbenzene (Cumene)	NS	NS	NS	0.0012 U	0.0012 U	0.0013 U	0.0013 U
M,P-Xylenes	NS	NS	NS	0.0012 U	0.0012 U	0.0013 U	0.0013 U
Methyl Acetate	NS 0.12	NS 100	NS 0.12	0.0061 U 0.0061 U	0.0059 UJ	0.0063 U 0.0063 U	0.0066 U
Methyl Ethyl Ketone (2-Butanone) Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	0.12 NS	100 NS	0.12 NS	0.0061 U 0.0061 U	0.0059 U 0.0059 U	0.0063 U	0.0066 U 0.0066 U
Methylcyclohexane	NS	NS	NS	0.0061 U 0.0012 U	0.0059 U 0.0012 U	0.0063 U	0.0066 U 0.0013 U
Methylene Chloride	0.05	100	0.05	0.0012 U	0.0012 U 0.0023 U	0.0013 U	0.0013 U
N-Butylbenzene	12	100	12	0.0023 0 0.0012 U	0.0023 U 0.0012 UJ	0.0013 U	0.0020 U
N-Propylbenzene	3.9	100	3.9	0.0012 U	0.0012 U	0.0013 U	0.0013 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	NS	0.0012 U	0.0012 U	0.0013 U	0.0013 U
Sec-Butylbenzene	11	100	11	0.0012 U	0.0012 U	0.0013 U	0.0013 U
Styrene	NS	NS	NS	0.0012 U	0.0012 U	0.0013 U	0.0013 U
T-Butylbenzene	5.9	100	5.9	0.0012 U	0.0012 U	0.0013 U	0.0013 U
Tert-Butyl Methyl Ether	0.93	100	0.93	0.0012 U	0.0012 U	0.0013 U	0.0013 U
Tetrachloroethylene (PCE)	1.3	19	<u>1.3</u>	0.0012 U	0.0012 U	0.0013 U	0.0013 U
Toluene	0.7	100	0.7	0.0012 U	0.0012 U	0.0013 U	0.0013 U
Trans-1,2-Dichloroethene	0.19	100	0.19	0.0012 U	0.0012 U	0.0013 U	0.0013 U
Trans-1,3-Dichloropropene	NS	NS	NS	0.0012 U	0.0012 U	0.0013 U	0.0013 U
Trichloroethylene (TCE)	0.47	21	0.47	0.0012 U	0.0012 U	0.0013 U	0.0013 U
Trichlorofluoromethane	NS 0.02	NS	NS 0.02	0.0012 U	0.0012 U	0.0013 U	0.0013 U
Vinyl Chloride	0.02	0.9	0.02	0.0012 U	0.0012 U	0.0013 U	0.0013 U
Xylenes, Total	0.26	1 100	1.6	0.0025 U	0.0023 U	0.0025 U	0.0026 U

			-	r Volatile Organic Compounds (
			AKRF Sample ID	EP-16_15_20221229	EP-17_15_20221229	EP-18_15_20221228	EP-19_15_20221229
		L	aboratory Sample ID	460-272204-7	460-272204-8	460-272140-10	460-272204-9
			Date Sampled Dilution Factor	12/29/2022 1	12/29/2022 1	12/28/2022	12/29/2022 1
			Unit	mg/kg	mg/kg	1 mg/kg	mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.68	0.0014 U	0.0014 U	0.0012 U	0.0014 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	0.0014 U	0.0014 U	0.0012 U	0.0014 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	NS	0.0014 U	0.0014 U	0.0012 U	0.0014 U
1,1,2-Trichloroethane	NS	NS	NS	0.0014 U	0.0014 U	0.0012 U	0.0014 U
1,1-Dichloroethane	0.27	26	0.27	0.0014 U	0.0014 U	0.0012 U	0.0014 U
1,1-Dichloroethene	0.33	100	0.33	0.0014 U	0.0014 U	0.0012 U	0.0014 U
1,2,3-Trichlorobenzene	NS	NS	NS	0.0014 U	0.0014 U	0.0012 U	0.0014 U
1,2,4-Trichlorobenzene	NS	NS	NS	0.0014 U	0.0014 U	0.0012 U	0.0014 U
1,2,4-Trimethylbenzene	3.6	52	3.6	0.0014 U	0.0014 U	0.0012 U	0.0014 U
1,2-Dibromo-3-Chloropropane	NS	NS	NS	0.0014 U	0.0014 U	0.0012 U	0.0014 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	NS	0.0014 U	0.0014 U	0.0012 U	0.0014 U
1,2-Dichlorobenzene	1.1	100	1.1	0.0014 U	0.0014 U	0.0012 U	0.0014 U
1,2-Dichloroethane	0.02	3.1	0.02	0.0014 U	0.0014 U	0.0012 U	0.0014 U
1,2-Dichloropropane	NS	NS	NS	0.0014 U	0.0014 U	0.0012 U	0.0014 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52 49	8.4	0.0014 U	0.0014 U	0.0012 U	0.0014 U
1,3-Dichlorobenzene 1,4-Dichlorobenzene	2.4	49 13	2.4 1.8	0.0014 U 0.0014 U	0.0014 U 0.0014 U	0.0012 U 0.0012 U	0.0014 U 0.0014 U
1,4-Dichlorobenzene 2-Hexanone	1.8 NS	NS	1.8 NS	0.0014 U 0.0072 U	0.0014 U 0.0068 U	0.0012 U 0.0062 U	0.0014 U 0.0071 U
Z-mexanone Acetone	0.05	100	0.05	0.0072 0	0.0068 0	0.0062 U 0.0075 U	0.0071 0 0.0083 J
Benzene	0.05	4.8	0.06	0.0019 0.0014 U	0.001 0.0014 U	0.0075 U 0.0012 U	0.0083 J 0.0014 U
Bromochloromethane	NS	NS NS	NS	0.0014 U	0.0014 U	0.0012 U	0.0014 U
Bromodichloromethane	NS	NS	NS	0.0014 U	0.0014 U	0.0012 U	0.0014 U
Bromoform	NS	NS	NS	0.0014 U	0.0014 U	0.0012 UJ	0.0014 U
Bromomethane	NS	NS	NS	0.0029 U	0.0027 U	0.0025 U	0.0028 U
Carbon Disulfide	NS	NS	NS	0.0014 U	0.0014 U	0.0012 U	0.0014 U
Carbon Tetrachloride	0.76	2.4	0.76	0.0014 U	0.0014 U	0.0012 U	0.0014 U
Chlorobenzene	1.1	100	1.1	0.0014 U	0.0014 U	0.0012 U	0.0014 U
Chloroethane	NS	NS	NS	0.0014 U	0.0014 U	0.0012 U	0.0014 U
Chloroform	0.37	49	0.37	0.0014 U	0.0014 U	0.0012 U	0.0014 U
Chloromethane	NS	NS	NS	0.0014 U	0.0014 U	0.0012 U	0.0014 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.0014 U	0.0014 U	0.0012 U	0.0014 U
Cis-1,3-Dichloropropene	NS	NS	NS	0.0014 U	0.0014 U	0.0012 U	0.0014 U
Cyclohexane	NS	NS	NS	0.0014 U	0.0014 U	0.0012 U	0.0014 U
Cymene	NS	NS	NS	NR	NR	NR	NR
Dibromochloromethane	NS NS	NS NS	NS NS	0.0014 U	0.0014 U	0.0012 U	0.0014 U
Dichlorodifluoromethane Ethylbenzene	1	41	1	0.0014 U 0.0014 U	0.0014 U 0.0014 U	0.0012 U 0.0012 U	0.0014 U 0.0014 U
Isopropylbenzene (Cumene)	NS	NS	NS	0.0014 U	0.0014 U	0.0012 U	0.0014 U
M,P-Xylenes	NS	NS	NS	0.0014 U	0.0014 U	0.00026 J	0.0014 U
Methyl Acetate	NS	NS	NS	0.0072 U	0.0068 U	0.0062 UJ	0.0071 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.12	0.0072 U	0.0068 U	0.0062 U	0.0071 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	NS	0.0072 U	0.0068 U	0.0062 U	0.0071 U
Methylcyclohexane	NS	NS	NS	0.0014 U	0.0014 U	0.0012 U	0.0014 U
Methylene Chloride	0.05	100	<u>0.05</u>	0.0029 U	0.0027 U	0.0025 U	0.0028 U
N-Butylbenzene	12	100	12	0.0014 U	0.0014 U	0.0012 UJ	0.0014 U
N-Propylbenzene	3.9	100	3.9	0.0014 U	0.0014 U	0.0012 U	0.0014 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	NS	0.0014 U	0.0014 U	0.0012 U	0.0014 U
Sec-Butylbenzene	11	100	11	0.0014 U	0.0014 U	0.0012 U	0.0014 U
Styrene	NS	NS	NS	0.0014 U	0.0014 U	0.0012 U	0.0014 U
T-Butylbenzene	5.9	100	5.9	0.0014 U	0.0014 U	0.0012 U	0.0014 U
Tert-Butyl Methyl Ether	0.93	100	0.93	0.0014 U	0.0014 U	0.0012 U	0.0014 U
Tetrachloroethylene (PCE)	1.3	19	<u>1.3</u>	0.0014 U	0.0014 U	0.0012 U	0.0014 U
	0.7	100	0.7	0.0014 U	0.0014 U	0.0012 U	0.0014 U
Trans-1,2-Dichloroethene	0.19	100	0.19	0.0014 U	0.0014 U	0.0012 U	0.0014 U
Trans-1,3-Dichloropropene	NS 0.47	NS	NS 0.47	0.0014 U	0.0014 U	0.0012 U	0.0014 U
Trichloroethylene (TCE) Trichlorofluoromethane	0.47 NS	21 NS	0.47 NS	0.0014 U 0.0014 U	0.0014 U 0.0014 U	0.0012 U 0.0012 U	0.0014 U 0.0014 U
Vinyl Chloride	0.02	0.9	0.02	0.0014 U 0.0014 U	0.0014 U 0.0014 U	0.0012 U 0.0012 U	0.0014 U 0.0014 U
Xylenes, Total	0.02	100	1.6	0.0014 0 0.0029 U	0.0014 U 0.0027 U	0.00042 J	0.0014 0 0.0028 U
	0.20	100	1.0	0.0020 0	0.0027 0	0.00072 0	0.0020 0

			-	f volatile Organic Compounds (
			AKRF Sample ID	EP-20_15_20221229	EP-21_15_20230103	EP-22_15_20230103	EP-X02_15_20230103
		L	aboratory Sample ID	460-272204-10	460-272291-1	460-272291-2	460-272291-11
			Date Sampled	12/29/2022	1/03/2023	1/03/2023	1/03/2023
			Dilution Factor Unit	1 mg/kg	1 mg/kg	1 mg/kg	1 mg/kg
Compound		NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.68	0.002 U	0.00095 U	0.00097 U	0.001 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	0.002 U	0.00095 UJ	0.00097 U	0.001 U
1,1,2,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	NS	0.002 U	0.00095 U	0.00097 U	0.001 U
1,1,2-Trichloroethane	NS	NS	NS	0.002 U	0.00095 UJ	0.00097 U	0.001 U
1,1-Dichloroethane	0.27	26	0.27	0.002 U	0.00095 U	0.00097 U	0.001 U
1,1-Dichloroethene	0.33	100	0.33	0.002 U	0.00095 U	0.00097 U	0.001 U
1,2,3-Trichlorobenzene	NS	NS	NS	0.002 U	0.00095 U	0.00097 U	0.001 U
1,2,4-Trichlorobenzene	NS	NS	NS	0.002 U	0.00095 UJ	0.00097 U	0.001 U
1,2,4-Trimethylbenzene	3.6	52	3.6	0.002 U	0.00095 UJ	0.00097 U	0.001 U
1,2-Dibromo-3-Chloropropane	NS	NS	NS	0.002 U	0.00095 UJ	0.00097 U	0.001 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	NS	0.002 U	0.00095 UJ	0.00097 U	0.001 U
1,2-Dichlorobenzene	1.1	100	1.1	0.002 U	0.00095 UJ	0.00097 U	0.001 U
1,2-Dichloroethane	0.02	3.1	0.02	0.002 U	0.00095 U	0.00097 U	0.001 U
1,2-Dichloropropane	NS	NS 52	NS 8.4	0.002 U	0.00095 U	0.00097 U	0.001 U
1,3,5-Trimethylbenzene (Mesitylene) 1,3-Dichlorobenzene	8.4	52 49	8.4 2.4	0.002 U 0.002 U	0.00095 UJ	0.00097 U 0.00097 U	0.001 U 0.001 U
1,3-Dichlorobenzene 1,4-Dichlorobenzene	2.4	49 13	2.4	0.002 U 0.002 U	0.00095 UJ 0.00095 UJ	0.00097 U 0.00097 U	0.001 U 0.001 U
2-Hexanone	NS	NS	NS	0.002 U 0.01 U	0.00095 UJ 0.0048 U	0.00097 U 0.0048 U	0.001 U 0.0051 U
Acetone	0.05	100	0.05	0.012 U	0.0048 U 0.0057 U	0.0058 U	0.0051 U
Benzene	0.06	4.8	0.06	0.002 U	0.00095 UJ	0.00097 U	0.001 U
Bromochloromethane	NS	NS	NS	0.002 U	0.00095 U	0.00097 U	0.001 U
Bromodichloromethane	NS	NS	NS	0.002 U	0.00095 U	0.00097 U	0.001 U
Bromoform	NS	NS	NS	0.002 U	0.00095 U	0.00097 U	0.001 U
Bromomethane	NS	NS	NS	0.004 U	0.0019 U	0.0019 U	0.002 U
Carbon Disulfide	NS	NS	NS	0.002 U	0.00095 U	0.00097 U	0.001 U
Carbon Tetrachloride	0.76	2.4	0.76	0.002 U	0.00095 U	0.00097 U	0.001 U
Chlorobenzene	1.1	100	1.1	0.002 U	0.00095 UJ	0.00097 U	0.001 U
Chloroethane	NS	NS	NS	0.002 U	0.00095 U	0.00097 U	0.001 U
Chloroform	0.37	49	0.37	0.002 U	0.00095 U	0.00097 U	0.001 U
Chloromethane	NS	NS 100	NS 0.05	0.002 U	0.00095 U	0.00097 U	0.001 U
Cis-1,2-Dichloroethylene	0.25 NS	100 NS	0.25 NS	0.002 U 0.002 U	0.00095 U 0.00095 UJ	0.00097 U 0.00097 U	0.001 U 0.001 U
Cis-1,3-Dichloropropene Cyclohexane	NS	NS	NS	0.002 U	0.00095 U	0.00097 U	0.001 U
Cymene	NS	NS	NS	NR	NR	NR	NR
Dibromochloromethane	NS	NS	NS	0.002 U	0.00095 U	0.00097 U	0.001 U
Dichlorodifluoromethane	NS	NS	NS	0.002 U	0.00095 U	0.00097 U	0.001 U
Ethylbenzene	1	41	1	0.002 U	0.00095 UJ	0.00097 U	0.001 U
Isopropylbenzene (Cumene)	NS	NS	NS	0.002 U	0.00095 UJ	0.00097 U	0.001 U
M,P-Xylenes	NS	NS	NS	0.002 U	0.00095 UJ	0.00097 U	0.001 U
Methyl Acetate	NS	NS	NS	0.01 U	0.0048 U	0.0048 U	0.0051 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.12	0.01 U	0.0048 U	0.0048 U	0.0051 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	NS	0.01 U	0.0048 UJ	0.0048 U	0.0051 U
Methylcyclohexane	NS	NS	NS	0.002 U	0.00095 U	0.00097 U	0.001 U
Methylene Chloride	0.05	100	0.05	0.004 U	0.0019 U	0.0019 U	0.002 U
N-Butylbenzene	12	100	12	0.002 U	0.00095 UJ	0.00097 U	0.001 U
N-Propylbenzene	3.9 NS	100 NS	3.9 NS	0.002 U 0.002 U	0.00095 UJ	0.00097 U 0.00097 U	0.001 U 0.001 U
O-Xylene (1,2-Dimethylbenzene) Sec-Butylbenzene	11	100	11	0.002 U	0.00095 UJ 0.00095 UJ	0.00097 U	0.001 U
Styrene	NS	NS	NS	0.002 U	0.00095 UJ	0.00097 U	0.001 U
T-Butylbenzene	5.9	100	5.9	0.002 U	0.00095 UJ	0.00097 U	0.001 U
Tert-Butyl Methyl Ether	0.93	100	0.93	0.002 U	0.00095 UJ	0.00097 U	0.001 U
Tetrachloroethylene (PCE)	1.3	19	1.3	0.002 U	0.00095 U	0.00097 U	0.001 U
Toluene	0.7	100	0.7	0.002 U	0.00095 UJ	0.00097 U	0.001 U
Trans-1,2-Dichloroethene	0.19	100	0.19	0.002 U	0.00095 U	0.00097 U	0.001 U
Trans-1,3-Dichloropropene	NS	NS	NS	0.002 U	0.00095 UJ	0.00097 U	0.001 U
Trichloroethylene (TCE)	0.47	21	0.47	0.002 U	0.00095 UJ	0.00097 U	0.001 U
Trichlorofluoromethane	NS	NS	NS	0.002 U	0.00095 U	0.00097 U	0.001 U
Vinyl Chloride	0.02	0.9	0.02	0.002 U	0.00095 U	0.00097 U	0.001 U
Xylenes, Total	0.26	100	1.6	0.004 U	0.0019 UJ	0.0019 U	0.002 U

			-	f Volatile Organic Compounds (
			AKRF Sample ID	EP-23_17_20230103	EP-24_17_20230103	EP-25_16_20230103	EP-26_15_20230103
		L	aboratory Sample ID	460-272291-3	460-272291-4	460-272291-5	460-272291-6
			Date Sampled	1/03/2023	1/03/2023	1/03/2023	1/03/2023
			Dilution Factor Unit	1	1	1	1
Compound			NYSDEC PGWSCO	mg/kg CONC Q	mg/kg CONC Q	mg/kg CONC Q	mg/kg CONC Q
1,1,1-Trichloroethane	0.68	100	0.68	0.0012 U	0.001 U	0.001 U	0.0012 U
1,1,2,2-Tetrachloroethane	0.00 NS	NS	0.00 NS	0.0012 U 0.0012 U	0.001 U	0.001 U	0.0012 U
1,1,2,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	NS	0.0012 U	0.001 U	0.001 U	0.0012 U
1,1,2-Trichloroethane	NS	NS	NS	0.0012 U	0.001 U	0.001 U	0.0012 U
1,1-Dichloroethane	0.27	26	0.27	0.0012 U	0.001 U	0.001 U	0.0012 U
1,1-Dichloroethene	0.33	100	0.33	0.0012 U	0.001 U	0.001 U	0.0012 U
1,2,3-Trichlorobenzene	NS	NS	NS	0.0012 U	0.001 U	0.001 U	0.0012 U
1,2,4-Trichlorobenzene	NS	NS	NS	0.0012 U	0.001 U	0.001 U	0.0012 U
1,2,4-Trimethylbenzene	3.6	52	3.6	0.0012 U	0.001 U	0.001 U	0.0012 U
1,2-Dibromo-3-Chloropropane	NS	NS	NS	0.0012 U	0.001 U	0.001 U	0.0012 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	NS	0.0012 U	0.001 U	0.001 U	0.0012 U
1,2-Dichlorobenzene	1.1	100	1.1	0.0012 U	0.001 U	0.001 U	0.0012 U
1,2-Dichloroethane	0.02	3.1	0.02	0.0012 U	0.001 U	0.001 U	0.0012 U
1,2-Dichloropropane	NS	NS	NS	0.0012 U	0.001 U	0.001 U	0.0012 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52 49	8.4 2.4	0.0012 U 0.0012 U	0.001 U	0.001 U	0.0012 U 0.0012 U
1,3-Dichlorobenzene 1,4-Dichlorobenzene	2.4	49 13	2.4	0.0012 U 0.0012 U	0.001 U 0.001 U	0.001 U 0.001 U	0.0012 U 0.0012 U
2-Hexanone	NS	NS	NS	0.0012 U 0.0062 U	0.001 U 0.0052 U	0.001 U	0.0012 U 0.006 U
Acetone	0.05	100	0.05	0.0082 0 0.0074 U	0.0052 U 0.0063 U	0.0052 U 0.0063 U	0.008 U 0.0072 U
Benzene	0.06	4.8	0.06	0.0012 U	0.001 U	0.001 U	0.0012 U
Bromochloromethane	NS	NS	NS	0.0012 U	0.001 U	0.001 U	0.0012 U
Bromodichloromethane	NS	NS	NS	0.0012 U	0.001 U	0.001 U	0.0012 U
Bromoform	NS	NS	NS	0.0012 U	0.001 U	0.001 U	0.0012 U
Bromomethane	NS	NS	NS	0.0025 U	0.0021 U	0.0021 U	0.0024 U
Carbon Disulfide	NS	NS	NS	0.0012 U	0.001 U	0.001 U	0.0012 U
Carbon Tetrachloride	0.76	2.4	0.76	0.0012 U	0.001 U	0.001 U	0.0012 U
Chlorobenzene	1.1	100	1.1	0.0012 U	0.001 U	0.001 U	0.0012 U
Chloroethane	NS	NS	NS	0.0012 U	0.001 U	0.001 U	0.0012 U
Chloroform	0.37	49	0.37	0.0012 U	0.001 U	0.001 U	0.0012 U
Chloromethane	NS	NS 100	NS	0.0012 U	0.001 U	0.001 U	0.0012 U
Cis-1,2-Dichloroethylene Cis-1,3-Dichloropropene	0.25 NS	100 NS	0.25 NS	0.0012 U 0.0012 U	0.001 U 0.001 U	0.001 U 0.001 U	0.0012 U 0.0012 U
Cyclohexane	NS	NS	NS	0.0012 U 0.0012 U	0.001 U	0.001 U	0.0012 U
Cymene	NS	NS	NS	NR	NR	NR	NR
Dibromochloromethane	NS	NS	NS	0.0012 U	0.001 U	0.001 U	0.0012 U
Dichlorodifluoromethane	NS	NS	NS	0.0012 U	0.001 U	0.001 U	0.0012 U
Ethylbenzene	1	41	1	0.0012 U	0.001 U	0.001 U	0.0012 U
Isopropylbenzene (Cumene)	NS	NS	NS	0.0012 U	0.001 U	0.001 U	0.0012 U
M,P-Xylenes	NS	NS	NS	0.0012 U	0.001 U	0.001 U	0.0012 U
Methyl Acetate	NS	NS	NS	0.0062 U	0.0052 U	0.0052 U	0.006 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.12	0.0062 U	0.0052 U	0.0052 U	0.006 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	NS	0.0062 U	0.0052 U	0.0052 U	0.006 U
Methylcyclohexane	NS	NS	NS	0.0012 U	0.001 U	0.001 U	0.0012 U
Methylene Chloride	0.05	100	0.05	0.0025 U	0.0021 U	0.0021 U	0.0024 U
N-Butylbenzene N-Propylbenzene	12 3.9	100	12 3.9	0.0012 U	0.001 U	0.001 U	0.0012 U
N-Propylbenzene O-Xylene (1,2-Dimethylbenzene)	3.9 NS	100 NS	3.9 NS	0.0012 U 0.0012 U	0.001 U 0.001 U	0.001 U 0.001 U	0.0012 U 0.0012 U
Sec-Butylbenzene	11	100	11	0.0012 U 0.0012 U	0.001 U 0.001 U	0.001 U	0.0012 U
Styrene	NS	NS	NS	0.0012 U	0.001 U	0.001 U	0.0012 U
T-Butylbenzene	5.9	100	5.9	0.0012 U	0.001 U	0.001 U	0.0012 U
Tert-Butyl Methyl Ether	0.93	100	0.93	0.0012 U	0.001 U	0.001 U	0.0012 U
Tetrachloroethylene (PCE)	1.3	19	<u>1.3</u>	0.0012 U	0.001 U	0.001 U	0.0012 U
Toluene	0.7	100	0.7	0.0012 U	0.001 U	0.001 U	0.0012 U
Trans-1,2-Dichloroethene	0.19	100	0.19	0.0012 U	0.001 U	0.001 U	0.0012 U
Trans-1,3-Dichloropropene	NS	NS	NS	0.0012 U	0.001 U	0.001 U	0.0012 U
Trichloroethylene (TCE)	0.47	21	0.47	0.0012 U	0.001 U	0.001 U	0.0012 U
Trichlorofluoromethane	NS	NS	NS	0.0012 U	0.001 U	0.001 U	0.0012 U
Vinyl Chloride	0.02	0.9	0.02	0.0012 U	0.001 U	0.001 U	0.0012 U
Xylenes, Total	0.26	100	1.6	0.0025 U	0.0021 U	0.0021 U	0.0024 U

				f Volatile Organic Compounds	. ,		
			AKRF Sample ID	EP-27_15_20230103	EP-28_15_20230103	EP-29_15_20230103	EP-30_15_20230103
		L	aboratory Sample ID	460-272291-7	460-272291-8	460-272291-9	460-272291-10
			Date Sampled	1/03/2023	1/03/2023	1/03/2023	1/03/2023
			Dilution Factor	1	1	1	1
			Unit	mg/kg	mg/kg	mg/kg	mg/kg
Compound			NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.68	0.0011 U	0.001 U	0.0011 U	0.0011 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	0.0011 U	0.001 U	0.0011 U	0.0011 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	NS	0.0011 U	0.001 U	0.0011 U	0.0011 U
1,1,2-Trichloroethane	NS	NS	NS	0.0011 U	0.001 U	0.0011 U	0.0011 U
1,1-Dichloroethane	0.27	26	0.27	0.0011 U	0.001 U	0.0011 U	0.0011 U
1,1-Dichloroethene	0.33	100	0.33	0.0011 U	0.001 U	0.0011 U	0.0011 U
1,2,3-Trichlorobenzene	NS	NS	NS	0.0011 U	0.001 U	0.0011 U	0.0011 U
1,2,4-Trichlorobenzene	NS	NS	NS	0.0011 U	0.001 U	0.0011 U	0.0011 U
1,2,4-Trimethylbenzene	3.6	52	3.6	0.0011 U	0.001 U	0.0011 U	0.0011 U
1,2-Dibromo-3-Chloropropane	NS	NS	NS	0.0011 U	0.001 U	0.0011 U	0.0011 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	NS	0.0011 U	0.001 U	0.0011 U	0.0011 U
1,2-Dichlorobenzene	1.1	100	1.1	0.0011 U	0.001 U	0.0011 U	0.0011 U
1,2-Dichloroethane	0.02	3.1	0.02	0.0011 U	0.001 U	0.0011 U	0.0011 U
1,2-Dichloropropane	NS	NS	NS 8.4	0.0011 U	0.001 U	0.0011 U	0.0011 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52 49	8.4 2.4	0.0011 U	0.001 U	0.0011 U	0.0011 U
1,3-Dichlorobenzene 1,4-Dichlorobenzene	2.4	49 13	2.4	0.0011 U 0.0011 U	0.001 U 0.001 U	0.0011 U 0.0011 U	0.0011 U 0.0011 U
1,4-Dichlorobenzene 2-Hexanone	1.8 NS	NS	1.8 NS	0.0011 U 0.0057 U	0.001 U 0.0051 U	0.0011 U 0.0054 U	0.0011 U 0.0056 U
Acetone	0.05	100	0.05	0.0057 U 0.0068 U	0.0051 U 0.0062 U	0.0054 U 0.0065 U	0.0056 U 0.0067 U
Benzene	0.05	4.8	0.06	0.0008 0 0.0011 U	0.0082 0 0.001 U	0.0065 U 0.0011 U	0.0087 U 0.0011 U
Bromochloromethane	0.06 NS	4.0 NS	0.06 NS	0.0011 U	0.001 U	0.0011 U	0.0011 U
Bromodichloromethane	NS	NS	NS	0.0011 U	0.001 U	0.0011 U	0.0011 U
Bromoform	NS	NS	NS	0.0011 U	0.001 U	0.0011 U	0.0011 U
Bromomethane	NS	NS	NS	0.0023 U	0.0021 U	0.0022 U	0.0022 U
Carbon Disulfide	NS	NS	NS	0.0023 0 0.0011 U	0.0021 0 0.001 U	0.0011 U	0.0022 0 0.0011 U
Carbon Tetrachloride	0.76	2.4	0.76	0.0011 U	0.001 U	0.0011 U	0.0011 U
Chlorobenzene	1.1	100	1.1	0.0011 U	0.001 U	0.0011 U	0.0011 U
Chloroethane	NS	NS	NS	0.0011 U	0.001 U	0.0011 U	0.0011 U
Chloroform	0.37	49	0.37	0.0011 U	0.001 U	0.0011 U	0.0011 U
Chloromethane	NS	NS	NS	0.0011 U	0.001 U	0.0011 U	0.0011 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.0011 U	0.001 U	0.0011 U	0.0011 U
Cis-1,3-Dichloropropene	NS	NS	NS	0.0011 U	0.001 U	0.0011 U	0.0011 U
Cyclohexane	NS	NS	NS	0.0011 U	0.001 U	0.0011 U	0.0011 U
Cymene	NS	NS	NS	NR	NR	NR	NR
Dibromochloromethane	NS	NS	NS	0.0011 U	0.001 U	0.0011 U	0.0011 U
Dichlorodifluoromethane	NS	NS	NS	0.0011 U	0.001 U	0.0011 U	0.0011 U
Ethylbenzene	1	41	1	0.0011 U	0.001 U	0.0011 U	0.0011 U
Isopropylbenzene (Cumene)	NS	NS	NS	0.0011 U	0.001 U	0.0011 U	0.0011 U
M,P-Xylenes	NS	NS	NS	0.0011 U	0.001 U	0.0011 U	0.0011 U
Methyl Acetate	NS	NS	NS	0.0057 U	0.0051 U	0.0054 U	0.0056 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.12	0.0057 U	0.0051 U	0.0054 U	0.0056 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	NS	0.0057 U	0.0051 U	0.0054 U	0.0056 U
Methylcyclohexane	NS	NS	NS	0.0011 U	0.001 U	0.0011 U	0.0011 U
Methylene Chloride	0.05	100	<u>0.05</u>	0.0023 U	0.0021 U	0.0022 U	0.0022 U
N-Butylbenzene	12	100	12	0.0011 U	0.001 U	0.0011 U	0.0011 U
N-Propylbenzene	3.9	100	3.9	0.0011 U	0.001 U	0.0011 U	0.0011 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	NS	0.0011 U	0.001 U	0.0011 U	0.0011 U
Sec-Butylbenzene	11	100	11	0.0011 U	0.001 U	0.0011 U	0.0011 U
Styrene	NS	NS	NS	0.0011 U	0.001 U	0.0011 U	0.0011 U
T-Butylbenzene	5.9	100	5.9	0.0011 U	0.001 U	0.0011 U	0.0011 U
Tert-Butyl Methyl Ether	0.93	100	0.93	0.0011 U	0.001 U	0.0011 U	0.0011 U
Tetrachloroethylene (PCE)	1.3	19	<u>1.3</u>	0.0011 U	0.001 U	0.0011 U	0.0011 U
Toluene	0.7	100	0.7	0.0011 U	0.001 U	0.0011 U	0.0011 U
Trans-1,2-Dichloroethene	0.19	100	0.19	0.0011 U	0.001 U	0.0011 U	0.0011 U
Trans-1,3-Dichloropropene	NS	NS	NS	0.0011 U	0.001 U	0.0011 U	0.0011 U
Trichloroethylene (TCE)	0.47	21	0.47	0.0011 U	0.001 U	0.0011 U	0.0011 U
Trichlorofluoromethane	NS	NS	NS	0.0011 U	0.001 U	0.0011 U	0.0011 U
Vinyl Chloride	0.02	0.9	0.02	0.0011 U	0.001 U	0.0011 U	0.0011 U
Xvlenes, Total	0.26	100	1.6	0.0023 U	0.0021 U	0.0022 U	0.0022 U

			-	Volatile Organic Compounds			
			AKRF Sample ID	EP-31_15_20230214	EP-32_15_20230214	EP-33_15_20230214	EP-34_15_20230214
		L	aboratory Sample ID	460-274640-1	460-274640-2	460-274640-3	460-274640-4
			Date Sampled	2/14/2023	2/14/2023	2/14/2023	2/14/2023
			Dilution Factor	1	1	1	1
-			Unit	mg/kg	mg/kg	mg/kg	mg/kg
Compound			NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.68	0.0013 U	0.0012 U	0.0011 U	0.0018 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	0.0013 U	0.0012 U	0.0011 U	0.0018 UJ
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	NS	0.0013 U	0.0012 U	0.0011 U	0.0018 U
1,1,2-Trichloroethane	NS	NS	NS	0.0013 U	0.0012 U	0.0011 U	0.0018 UJ
1,1-Dichloroethane	0.27	26	0.27	0.0013 U	0.0012 U	0.0011 U	0.0018 U
1,1-Dichloroethene	0.33	100	0.33	0.0013 U	0.0012 U	0.0011 U	0.0018 U
1,2,3-Trichlorobenzene	NS	NS	NS	0.0013 U	0.0012 U	0.0011 U	0.0018 UJ
1,2,4-Trichlorobenzene	NS	NS	NS	0.0013 U	0.0012 U	0.0011 U	0.0018 UJ
1,2,4-Trimethylbenzene	3.6	52	3.6	0.0013 U	0.0012 U	0.0011 U	0.0018 UJ
1,2-Dibromo-3-Chloropropane	NS	NS	NS	0.0013 U	0.0012 U	0.0011 U	0.0018 UJ
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	NS	0.0013 U	0.0012 U	0.0011 U	0.0018 UJ
1,2-Dichlorobenzene	1.1	100	1.1	0.0013 U	0.0012 U	0.0011 U	0.0018 UJ
1,2-Dichloroethane	0.02	3.1	0.02	0.0013 U	0.0012 U	0.0011 U	0.0018 UJ
1,2-Dichloropropane	NS	NS F2	NS 8.4	0.0013 U	0.0012 U	0.0011 U	0.0018 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52 49	8.4 2.4	0.0013 U 0.0013 U	0.0012 U 0.0012 U	0.0011 U	0.0018 UJ 0.0018 UJ
1,3-Dichlorobenzene 1,4-Dichlorobenzene	2.4	49	2.4	0.0013 U 0.0013 U	0.0012 U 0.0012 U	0.0011 U 0.0011 U	0.0018 UJ
1,4-Dichlorobenzene 2-Hexanone	1.8 NS	NS	1.8 NS	0.0013 U 0.0064 U	0.0012 U 0.006 U	0.0011 U 0.0053 U	0.0018 UJ 0.0091 U
Acetone	0.05	100	0.05	0.0064 U 0.0077 U	0.006 U 0.0072 U	0.0053 0	0.0091 0 0.011 U
Benzene	0.05	4.8	0.06	0.0077 U 0.0013 U	0.0072 U 0.0012 U	0.0011 U	0.0018 UJ
Bromochloromethane	0.06 NS	4.0 NS	0.06 NS	0.0013 U	0.0012 U	0.0011 U	0.0018 UJ
Bromodichloromethane	NS	NS	NS	0.0013 U	0.0012 U	0.0011 U	0.0018 UJ
Bromoform	NS	NS	NS	0.0013 U	0.0012 U	0.0011 U	0.0018 UJ
Bromomethane	NS	NS	NS	0.0026 U	0.0012 U	0.0021 U	0.0036 U
Carbon Disulfide	NS	NS	NS	0.0013 U	0.0012 U	0.0021 U	0.0018 UJ
Carbon Tetrachloride	0.76	2.4	0.76	0.0013 U	0.0012 U	0.0011 U	0.0018 U
Chlorobenzene	1.1	100	1.1	0.0013 U	0.0012 U	0.0011 U	0.0018 UJ
Chloroethane	NS	NS	NS	0.0013 U	0.0012 U	0.0011 U	0.0018 U
Chloroform	0.37	49	0.37	0.0013 U	0.0012 U	0.0011 U	0.0018 UJ
Chloromethane	NS	NS	NS	0.0013 U	0.0012 U	0.0011 U	0.0018 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.0013 U	0.0012 U	0.0011 U	0.0018 UJ
Cis-1,3-Dichloropropene	NS	NS	NS	0.0013 U	0.0012 U	0.0011 U	0.0018 UJ
Cyclohexane	NS	NS	NS	0.0013 U	0.0012 U	0.0011 U	0.0018 U
Cymene	NS	NS	NS	NR	NR	NR	NR
Dibromochloromethane	NS	NS	NS	0.0013 U	0.0012 U	0.0011 U	0.0018 UJ
Dichlorodifluoromethane	NS	NS	NS	0.0013 U	0.0012 U	0.0011 U	0.0018 U
Ethylbenzene	1	41	1	0.0013 U	0.0012 U	0.0011 U	0.0018 UJ
Isopropylbenzene (Cumene)	NS	NS	NS	0.0013 U	0.0012 U	0.0011 U	0.0018 UJ
M,P-Xylenes	NS	NS	NS	0.0013 U	0.0012 U	0.0011 U	0.0018 UJ
Methyl Acetate	NS	NS	NS	0.0064 U	0.006 U	0.0053 U	0.0091 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.12	0.0064 U	0.006 U	0.0053 U	0.0091 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	NS	0.0064 U	0.006 U	0.0053 U	0.0091 U
Methylcyclohexane	NS	NS	NS	0.0013 U	0.0012 U	0.0011 U	0.0018 UJ
Methylene Chloride	0.05	100	<u>0.05</u>	0.0026 U	0.0024 U	0.0021 U	0.0036 UJ
N-Butylbenzene	12	100	12	0.0013 U	0.0012 U	0.0011 U	0.0018 UJ
N-Propylbenzene	3.9	100	3.9	0.0013 U	0.0012 U	0.0011 U	0.0018 UJ
O-Xylene (1,2-Dimethylbenzene)	NS	NS	NS	0.0013 U	0.0012 U	0.0011 U	0.0018 UJ
Sec-Butylbenzene	11	100	11	0.0013 U	0.0012 U	0.0011 U	0.0018 UJ
Styrene	NS	NS	NS	0.0013 U	0.0012 U	0.0011 U	0.0018 UJ
T-Butylbenzene	5.9	100	5.9	0.0013 U	0.0012 U	0.0011 U	0.0018 UJ
Tert-Butyl Methyl Ether	0.93	100	0.93	0.0013 U	0.0012 U	0.0011 U	0.0018 UJ
Tetrachloroethylene (PCE)	1.3	19	<u>1.3</u>	0.0013 U	0.0012 U	0.0011 U	0.0018 UJ
Toluene	0.7	100	0.7	0.0013 U	0.0012 U	0.0011 U	0.0018 UJ
Trans-1,2-Dichloroethene	0.19	100	0.19	0.0013 U	0.0012 U	0.0011 U	0.0018 UJ
Trans-1,3-Dichloropropene	NS	NS	NS	0.0013 U	0.0012 U	0.0011 U	0.0018 UJ
Trichloroethylene (TCE)	0.47	21	0.47	0.0013 U	0.0012 U	0.0011 U	0.0018 UJ
Trichlorofluoromethane	NS	NS	NS	0.0013 U	0.0012 U	0.0011 U	0.0018 U
Vinyl Chloride	0.02	0.9	0.02	0.0013 U	0.0012 U	0.0011 U	0.0018 U
Xylenes, Total	0.26	100	1.6	0.0026 U	0.0024 U	0.0021 U	0.0036 UJ

				f Volatile Organic Compounds			
			AKRF Sample ID	EP-35_15_20230214 460-274640-5	EP-36_15_20230214 460-274640-6	EP-X03_15_20230214 460-274640-7	EP-37_16_20230410 460-278010-1
		L	aboratory Sample ID. Date Sampled	460-274640-5 2/14/2023	2/14/2023	2/14/2023	4/10/2023
			Dilution Factor	1	1	1	1
			Unit	mg/kg	mg/kg	mg/kg	mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.68	0.001 U	0.0014 U	0.0012 U	0.001 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	0.001 U	0.0014 U	0.0012 U	0.001 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	NS	0.001 U	0.0014 U	0.0012 U	0.001 U
1,1,2-Trichloroethane	NS	NS	NS	0.001 U	0.0014 U	0.0012 U	0.001 U
1,1-Dichloroethane	0.27	26	0.27	0.001 U	0.0014 U	0.0012 U	0.001 U
1,1-Dichloroethene	0.33	100	0.33	0.001 U	0.0014 U	0.0012 U	0.001 U
1,2,3-Trichlorobenzene	NS	NS	NS	0.001 U	0.0014 U	0.0012 U	0.001 U
1,2,4-Trichlorobenzene 1,2,4-Trimethylbenzene	NS 3.6	NS 52	NS 3.6	0.001 U 0.001 U	0.0014 U 0.0014 U	0.0012 U 0.0012 U	0.001 U 0.001 U
1,2,4-Thinediyiberizene 1,2-Dibromo-3-Chloropropane	NS	NS S2	NS S.0	0.001 U	0.0014 U	0.0012 U	0.001 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	NS	0.001 U	0.0014 U	0.0012 U	0.001 U
1,2-Diblomoethane (Ethylene Diblomide)	1.1	100	1.1	0.001 U	0.0014 U	0.0012 U	0.001 U
1,2-Dichloroethane	0.02	3.1	0.02	0.001 U	0.0014 U	0.0012 U	0.001 U
1,2-Dichloropropane	NS	NS	NS	0.001 U	0.0014 U	0.0012 U	0.001 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	8.4	0.001 U	0.0014 U	0.0012 U	0.001 U
1,3-Dichlorobenzene	2.4	49	2.4	0.001 U	0.0014 U	0.0012 U	0.001 U
1,4-Dichlorobenzene	1.8	13	1.8	0.001 U	0.0014 U	0.0012 U	0.001 U
2-Hexanone	NS	NS	NS	0.0051 U	0.0068 U	0.0061 U	0.0051 U
Acetone	0.05	100	<u>0.05</u>	0.0062 U	0.028	0.044	0.0061 U
Benzene	0.06	4.8	0.06	0.001 U	0.0014 U	0.0012 U	0.001 U
Bromochloromethane	NS	NS	NS	0.001 U	0.0014 U	0.0012 U	0.001 U
Bromodichloromethane Bromoform	NS NS	NS NS	NS NS	0.001 U 0.001 U	0.0014 U 0.0014 U	0.0012 U 0.0012 U	0.001 U 0.001 U
Bromomethane	NS	NS	NS	0.001 U	0.0014 0 0.0027 U	0.0012 U	0.001 U
Carbon Disulfide	NS	NS	NS	0.001 U	0.0014 U	0.0012 U	0.002 U 0.001 U
Carbon Tetrachloride	0.76	2.4	0.76	0.001 U	0.0014 U	0.0012 U	0.001 U
Chlorobenzene	1.1	100	1.1	0.001 U	0.0014 U	0.0012 U	0.001 U
Chloroethane	NS	NS	NS	0.001 U	0.0014 U	0.0012 U	0.001 U
Chloroform	0.37	49	0.37	0.001 U	0.0014 U	0.0012 U	0.001 U
Chloromethane	NS	NS	NS	0.001 U	0.0014 U	0.0012 U	0.001 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.001 U	0.0014 U	0.0012 U	0.001 U
Cis-1,3-Dichloropropene	NS	NS	NS	0.001 U	0.0014 U	0.0012 U	0.001 U
Cyclohexane	NS	NS	NS	0.001 U	0.0014 U	0.0012 U	0.001 U
Cymene	NS	NS	NS	NR	NR	NR 0.0010 H	NR
Dibromochloromethane	NS NS	NS NS	NS NS	0.001 U 0.001 U	0.0014 U	0.0012 U	0.001 U 0.001 U
Dichlorodifluoromethane Ethylbenzene	1	41	1	0.001 U	0.0014 U 0.0014 U	0.0012 U 0.0012 U	0.001 U
Isopropylbenzene (Cumene)	NS	NS	NS	0.001 U	0.0014 U	0.0012 U	0.001 U
M,P-Xylenes	NS	NS	NS	0.00035 J	0.0014 U	0.0012 U	0.001 U
Methyl Acetate	NS	NS	NS	0.0051 U	0.0068 U	0.0061 U	0.0051 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.12	0.0051 U	0.0068 U	0.0061 U	0.0051 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	NS	0.0051 U	0.0068 U	0.0061 U	0.0051 U
Methylcyclohexane	NS	NS	NS	0.001 U	0.0014 U	0.0012 U	0.001 U
Methylene Chloride	0.05	100	<u>0.05</u>	0.0021 U	0.0027 U	0.0025 U	0.002 U
N-Butylbenzene	12	100	12	0.001 U	0.0014 U	0.0012 U	0.001 U
N-Propylbenzene	3.9	100	3.9	0.001 U	0.0014 U	0.0012 U	0.001 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS 100	NS	0.001 U	0.0014 U	0.0012 U	0.001 U
Sec-Butylbenzene	11 NS	100 NS	11 NS	0.001 U 0.001 U	0.0014 U	0.0012 U	0.001 U 0.001 U
Styrene T-Butylbenzene	5.9	100	5.9	0.001 U 0.001 U	0.0014 U 0.0014 U	0.0012 U 0.0012 U	0.001 U
Tert-Butyl Methyl Ether	0.93	100	0.93	0.001 U	0.0014 U	0.0012 U	0.001 U
Tetrachloroethylene (PCE)	1.3	19	1.3	0.001 U	0.0014 U	0.0012 U	0.001 U
Toluene	0.7	100	0.7	0.00074 J	0.0014 U	0.0012 U	0.001 U
Trans-1,2-Dichloroethene	0.19	100	0.19	0.001 U	0.0014 U	0.0012 U	0.001 U
Trans-1,3-Dichloropropene	NS	NS	NS	0.001 U	0.0014 U	0.0012 U	0.001 U
Trichloroethylene (TCE)	0.47	21	0.47	0.001 U	0.0014 U	0.0012 U	0.001 U
Trichlorofluoromethane	NS	NS	NS	0.001 U	0.0014 U	0.0012 U	0.001 U
Vinyl Chloride	0.02	0.9	0.02	0.001 U	0.0014 U	0.0012 U	0.001 UJ
Xylenes, Total	0.26	100	1.6	0.00035 J	0.0027 U	0.0025 U	0.002 U

				f Volatile Organic Compounds			
			AKRF Sample ID	EP-38_16_20230410	EP-39_15_20230410	EP-40_16_20230410	EP-41_15_20230410
		L	aboratory Sample ID	460-278010-2	460-278010-3	460-278010-4	460-278010-5
			Date Sampled	4/10/2023	4/10/2023	4/10/2023	4/10/2023
			Dilution Factor	1	1	1	1
			Unit	mg/kg	mg/kg	mg/kg	mg/kg
Compound			NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.68	0.00093 U	0.0015 U	0.0011 U	0.0011 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	0.00093 U	0.0015 U	0.0011 U	0.0011 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	NS	0.00093 U	0.0015 U	0.0011 U	0.0011 U
1,1,2-Trichloroethane	NS	NS	NS	0.00093 U	0.0015 U	0.0011 U	0.0011 U
1,1-Dichloroethane	0.27	26	0.27	0.00093 U	0.0015 U	0.0011 U	0.0011 U
1,1-Dichloroethene	0.33	100	0.33	0.00093 U	0.0015 U	0.0011 U	0.0011 U
1,2,3-Trichlorobenzene	NS	NS	NS	0.00093 U	0.0015 U	0.0011 U	0.0011 U
1,2,4-Trichlorobenzene	NS	NS	NS	0.00093 U	0.0015 U	0.0011 U	0.0011 U
1,2,4-Trimethylbenzene	3.6	52	3.6	0.00093 U	0.0015 U	0.0011 U	0.0011 U
1,2-Dibromo-3-Chloropropane	NS	NS	NS	0.00093 U	0.0015 U	0.0011 U	0.0011 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	NS	0.00093 U	0.0015 U	0.0011 U	0.0011 U
1,2-Dichlorobenzene	1.1	100	1.1	0.00093 U	0.0015 U	0.0011 U	0.0011 U
1,2-Dichloroethane	0.02	3.1	0.02	0.00093 U	0.0015 U	0.0011 U	0.0011 U
1,2-Dichloropropane	NS	NS	NS	0.00093 U	0.0015 U	0.0011 U	0.0011 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	8.4	0.00093 U	0.0015 U	0.0011 U	0.0011 U
1,3-Dichlorobenzene	2.4	49	2.4	0.00093 U	0.0015 U	0.0011 U	0.0011 U
1,4-Dichlorobenzene	1.8	13	1.8	0.00093 U	0.0015 U	0.0011 U	0.0011 U
2-Hexanone	NS	NS	NS	0.0046 U	0.0073 U	0.0056 U	0.0053 U
Acetone	0.05	100	<u>0.05</u>	0.017	0.0088 U	0.045	0.0076
Benzene	0.06	4.8	0.06	0.00093 U	0.0015 U	0.0011 U	0.0011 U
Bromochloromethane	NS	NS	NS	0.00093 U	0.0015 U	0.0011 U	0.0011 U
Bromodichloromethane	NS	NS	NS	0.00093 U	0.0015 U	0.0011 U	0.0011 U
Bromoform	NS	NS	NS	0.00093 U	0.0015 U	0.0011 U	0.0011 U
Bromomethane	NS	NS	NS	0.0019 U	0.0029 U	0.0023 U	0.0021 UJ
Carbon Disulfide	NS	NS	NS	0.00093 U	0.0015 U	0.0011 U	0.0011 U
Carbon Tetrachloride	0.76	2.4	0.76	0.00093 U	0.0015 U	0.0011 U	0.0011 U
Chlorobenzene	1.1	100	1.1	0.00093 U	0.0015 U	0.0011 U	0.0011 U
Chloroethane	NS	NS	NS	0.00093 U	0.0015 U	0.0011 U	0.0011 U
Chloroform	0.37	49	0.37	0.00093 U	0.0015 U	0.0011 U	0.0011 U
Chloromethane	NS	NS	NS	0.00093 U	0.0015 U	0.0011 U	0.0011 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.00093 U	0.0015 U	0.0011 U	0.0011 U
Cis-1,3-Dichloropropene	NS	NS	NS	0.00093 U	0.0015 U	0.0011 U	0.0011 U
Cyclohexane	NS	NS	NS	0.00093 U	0.0015 U	0.0011 U	0.0011 U
	NS NS	NS NS	NS NS	NR 0.00093 U	NR 0.0015 U	NR	NR 0.0011 U
Dibromochloromethane		NS				0.0011 U	
Dichlorodifluoromethane	NS		NS	0.00093 U	0.0015 U	0.0011 U	0.0011 U
	1	41	1	0.00093 U	0.0015 U	0.0011 U	0.0011 U
Isopropylbenzene (Cumene) M,P-Xylenes	NS NS	NS NS	NS NS	0.00093 U 0.00093 U	0.0015 U 0.0015 U	0.0011 U 0.0011 U	0.0011 U 0.0002 J
Methyl Acetate	NS NS	NS	NS	0.00093 U 0.0046 U	0.0015 U 0.0073 U	0.0056 U	0.0002 J 0.0053 U
Methyl Acetate Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.12	0.0046 U	0.0073 U	0.0056 0	0.0053 UJ
Methyl Isobutyl Ketone (2-Butanone)	NS	NS	0.12 NS	0.0046 U	0.0073 U	0.0055 U	0.0053 U
Methylcyclohexane	NS	NS	NS	0.0048 U	0.0075 U	0.0036 U	0.0053 U 0.0011 U
Methylene Chloride	0.05	100	0.05	0.00093 0 0.0019 U	0.0015 U 0.0029 U	0.0023 U	0.0011 U 0.0013 J
N-Butylbenzene	12	100	12	0.0019 U	0.0029 0 0.0015 U	0.0023 U 0.0011 U	0.0013 J 0.0011 U
N-Propylbenzene	3.9	100	3.9	0.00093 U	0.0015 U	0.0011 U	0.0011 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	NS	0.00093 U	0.0015 U	0.0011 U	0.0011 U
Sec-Butylbenzene	11	100	11	0.00093 U	0.0015 U	0.0011 U	0.0011 U
Styrene	NS	NS	NS	0.00093 U	0.0015 U	0.0011 U	0.0011 U
T-Butylbenzene	5.9	100	5.9	0.00093 U	0.0015 U	0.0011 U	0.0011 U
Tert-Butyl Methyl Ether	0.93	100	0.93	0.00093 U	0.0015 U	0.0011 U	0.0011 U
Tetrachloroethylene (PCE)	1.3	19	1.3	0.00093 U	0.0015 U	0.0011 U	0.0011 U
Toluene	0.7	100	0.7	0.00093 U	0.0015 U	0.0011 U	0.0011 U
Trans-1,2-Dichloroethene	0.19	100	0.19	0.00093 U	0.0015 U	0.0011 U	0.0011 U
Trans-1,2-Dichloropropene	NS	NS	NS	0.00093 U	0.0015 U	0.0011 U	0.0011 U
Trichloroethylene (TCE)	0.47	21	0.47	0.00093 U	0.0015 U	0.0011 U	0.0011 U
Trichlorofluoromethane	0.47 NS	NS	0.47 NS	0.00093 U	0.0015 U	0.0011 U	0.0011 UJ
Vinvl Chloride	0.02	0.9	0.02	0.00093 UJ	0.0015 UJ	0.0011 U	0.0011 U
Xylenes, Total	0.02	100	1.6	0.00093 03	0.0015 U3	0.0023 U	0.0002 J
	0.20	1 100	0.1	0.0010 0	0.0020 0	0.0020 0	0.0002 0

				f Volatile Organic Compounds			
			AKRF Sample ID	EP-42_17_20230410	EP-43_16_20230410	EP-44_15_20230410	EP-45_15_20230410
		L	aboratory Sample ID	460-278010-6	460-278010-7	460-278010-8	460-278010-9
			Date Sampled	4/10/2023	4/10/2023	4/10/2023	4/10/2023
			Dilution Factor	1	1	1	1
			Unit	mg/kg	mg/kg	mg/kg	mg/kg
Compound			NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.68	0.0013 U	0.0011 U	0.001 U	0.0011 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	0.0013 U	0.0011 U	0.001 U	0.0011 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	NS	0.0013 U	0.0011 U	0.001 U	0.0011 U
1,1,2-Trichloroethane	NS	NS	NS	0.0013 U	0.0011 U	0.001 U	0.0011 U
1,1-Dichloroethane	0.27	26	0.27	0.0013 U	0.0011 U	0.001 U	0.0011 U
1,1-Dichloroethene 1.2.3-Trichlorobenzene	0.33 NS	100 NS	0.33 NS	0.0013 U 0.0013 U	0.0011 U 0.0011 U	0.001 U 0.001 U	0.0011 U 0.0011 U
1.2.4-Trichlorobenzene	NS	NS	NS	0.0013 U	0.0011 U	0.001 U	0.0011 U
1,2,4-Trimethylbenzene	3.6	52	3.6	0.0013 U	0.0011 U	0.001 U	0.0011 U
1,2-Dibromo-3-Chloropropane	NS S.0	NS	NS S.0	0.0013 U	0.0011 U	0.001 U	0.0011 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	NS	0.0013 U	0.0011 U	0.001 U	0.0011 U
1,2-Diblombenzene	1.1	100	1.1	0.0013 U	0.0011 U	0.001 U	0.0011 U
1,2-Dichloroethane	0.02	3.1	0.02	0.0013 U	0.0011 U	0.001 U	0.0011 U
1,2-Dichloropropane	NS	NS	NS	0.0013 U	0.0011 U	0.001 U	0.0011 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	8.4	0.0013 U	0.0011 U	0.001 U	0.0011 U
1,3-Dichlorobenzene	2.4	49	2.4	0.0013 U	0.0011 U	0.001 U	0.0011 U
1,4-Dichlorobenzene	1.8	13	1.8	0.0013 U	0.0011 U	0.001 U	0.0011 U
2-Hexanone	NS	NS	NS	0.0065 U	0.0055 U	0.0051 U	0.0053 U
Acetone	0.05	100	0.05	0.0078 U	0.014	0.027	0.0064 U
Benzene	0.06	4.8	0.06	0.0013 U	0.0011 U	0.001 U	0.0011 U
Bromochloromethane	NS	NS	NS	0.0013 U	0.0011 U	0.001 U	0.0011 U
Bromodichloromethane	NS	NS	NS	0.0013 U	0.0011 U	0.001 U	0.0011 U
Bromoform	NS	NS	NS	0.0013 U	0.0011 U	0.001 U	0.0011 U
Bromomethane	NS	NS	NS	0.0026 UJ	0.0022 UJ	0.002 UJ	0.0021 UJ
Carbon Disulfide	NS	NS	NS	0.0013 U	0.0011 U	0.00048 J	0.0011 U
Carbon Tetrachloride	0.76	2.4	0.76	0.0013 U	0.0011 U	0.001 U	0.0011 U
Chlorobenzene	1.1	100	1.1	0.0013 U	0.0011 U	0.001 U	0.0011 U
Chloroethane	NS	NS	NS	0.0013 U	0.0011 U	0.001 U	0.0011 U
Chloroform	0.37	49	0.37	0.0013 U	0.0011 U	0.001 U	0.0011 U
Chloromethane	NS	NS	NS	0.0013 U	0.0011 U	0.001 U	0.0011 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.0013 U	0.0011 U	0.001 U	0.0011 U
Cis-1,3-Dichloropropene	NS	NS	NS	0.0013 U	0.0011 U	0.001 U	0.0011 U
Cyclohexane	NS	NS	NS	0.0013 U	0.0011 U	0.001 U	0.0011 U
Cymene	NS	NS	NS	NR	NR	NR	NR
Dibromochloromethane	NS	NS	NS	0.0013 U	0.0011 U	0.001 U	0.0011 U
Dichlorodifluoromethane	NS	NS	NS	0.0013 U	0.0011 U	0.001 U	0.0011 U
Ethylbenzene	1	41	1	0.0013 U	0.0011 U	0.001 U	0.0011 U
Isopropylbenzene (Cumene)	NS NS	NS NS	NS	0.0013 U	0.0011 U	0.001 U	0.0011 U
M,P-Xylenes	NS NS	NS	NS	0.0013 U	0.0011 U	0.001 U	0.00024 J
Methyl Acetate Methyl Ethyl Ketone (2-Butanone)	0.12	100	NS 0.12	0.0065 U 0.0065 UJ	0.0055 U 0.0055 UJ	0.0051 U 0.0051 UJ	0.0053 U 0.0053 UJ
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	NS	0.0065 U	0.0055 U	0.0051 U	0.0053 U
Methylcyclohexane	NS	NS	NS	0.0013 U	0.0035 U 0.0011 U	0.001 U	0.0011 U
Methylene Chloride	0.05	100	0.05	0.0026 U	0.0022 U	0.001 U	0.0011 U 0.0012 J
N-Butylbenzene	12	100	12	0.0013 U	0.0011 U	0.002 U 0.001 U	0.0012 0 0.0011 U
N-Propylbenzene	3.9	100	3.9	0.0013 U	0.0011 U	0.001 U	0.0011 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	NS	0.0013 U	0.0011 U	0.001 U	0.0011 U
Sec-Butylbenzene	11	100	11	0.0013 U	0.0011 U	0.001 U	0.0011 U
Styrene	NS	NS	NS	0.0013 U	0.0011 U	0.001 U	0.0011 U
T-Butylbenzene	5.9	100	5.9	0.0013 U	0.0011 U	0.001 U	0.0011 U
Tert-Butyl Methyl Ether	0.93	100	0.93	0.0013 U	0.0011 U	0.001 U	0.0011 U
Tetrachloroethylene (PCE)	1.3	19	<u>1.3</u>	0.0018	0.00066 J	0.001 U	0.00089 J
Toluene	0.7	100	0.7	0.0013 U	0.0011 U	0.001 U	0.0011 U
Trans-1,2-Dichloroethene	0.19	100	0.19	0.0013 U	0.0011 U	0.001 U	0.0011 U
Trans-1,3-Dichloropropene	NS	NS	NS	0.0013 U	0.0011 U	0.001 U	0.0011 U
Trichloroethylene (TCE)	0.47	21	0.47	0.0013 U	0.0011 U	0.001 U	0.0011 U
Trichlorofluoromethane	NS	NS	NS	0.0013 UJ	0.0011 UJ	0.001 UJ	0.0011 UJ
Vinyl Chloride	0.02	0.9	0.02	0.0013 U	0.0011 U	0.001 U	0.0011 U
Xylenes, Total	0.26	100	1.6	0.0026 U	0.0022 U	0.002 U	0.00024 J

		· · · · · ·		f Volatile Organic Compounds (
			AKRF Sample ID	EP-X04_15_20230410	EP-46_16_20230410	EP-47_15_20230410	EP-48_15_20230410
		L	aboratory Sample ID	460-278010-17	460-278010-10	460-278010-11	460-278010-12
			Date Sampled	4/10/2023	4/10/2023	4/10/2023	4/10/2023
			Dilution Factor	1	1	1	1
			Unit	mg/kg	mg/kg	mg/kg	mg/kg
Compound			NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.68	0.0011 U	0.001 U	0.0013 U	0.0011 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	0.0011 U	0.001 U	0.0013 U	0.0011 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	NS	0.0011 U	0.001 U	0.0013 U	0.0011 U
1,1,2-Trichloroethane	NS	NS	NS	0.0011 U	0.001 U	0.0013 U	0.0011 U
1,1-Dichloroethane	0.27	26	0.27	0.0011 U	0.001 U	0.0013 U	0.0011 U
1,1-Dichloroethene	0.33	100	0.33	0.0011 U	0.001 U	0.0013 U	0.0011 U
1,2,3-Trichlorobenzene	NS	NS	NS	0.0011 U	0.001 U	0.0013 U	0.0011 U
1,2,4-Trichlorobenzene	NS	NS	NS	0.0011 U	0.001 U	0.0013 U	0.0011 U
1,2,4-Trimethylbenzene	3.6	52	3.6	0.0011 U	0.001 U	0.0013 U	0.0011 U
1,2-Dibromo-3-Chloropropane	NS	NS	NS	0.0011 U	0.001 U	0.0013 U	0.0011 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	NS	0.0011 U	0.001 U	0.0013 U	0.0011 U
1,2-Dichlorobenzene	1.1	100	1.1	0.0011 U	0.001 U	0.0013 U	0.0011 U
1,2-Dichloroethane	0.02	3.1	0.02	0.0011 U	0.001 U	0.0013 U	0.0011 U
1,2-Dichloropropane	NS	NS	NS	0.0011 U	0.001 U	0.0013 U	0.0011 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	8.4	0.0011 U	0.001 U	0.0013 U	0.0011 U
1,3-Dichlorobenzene	2.4	49	2.4	0.0011 U	0.001 U	0.0013 U	0.0011 U
1,4-Dichlorobenzene	1.8	13 NS	1.8	0.0011 U	0.001 U	0.0013 U	0.0011 U
2-Hexanone	NS	NS 100	NS 0.05	0.0057 U 0.011	0.0052 U 0.014	0.0063 U 0.0076 U	0.0056 U 0.0067 U
Acetone	0.05						0.0067 U 0.0011 U
Benzene	0.06	4.8	0.06	0.0011 U	0.001 U	0.0013 U	
Bromochloromethane	NS	NS NS	NS NS	0.0011 U	0.001 U	0.0013 U	0.0011 U
Bromodichloromethane Bromoform	NS NS	NS	NS	0.0011 U 0.0011 U	0.001 U 0.001 U	0.0013 U 0.0013 U	0.0011 U 0.0011 U
Bromomethane	NS	NS	NS	0.0023 UJ	0.001 U 0.0021 UJ	0.0013 U 0.0025 UJ	0.0011 U 0.0022 UJ
Carbon Disulfide	NS	NS	NS	0.0023 0J 0.0011 U	0.0021 03 0.001 U	0.0025 UJ 0.0013 U	0.0022 03 0.0011 U
Carbon Disulide Carbon Tetrachloride	0.76	2.4	0.76	0.0011 U	0.001 U	0.0013 U	0.0011 U
Chlorobenzene	1.1	100	1.1	0.0011 U	0.001 U	0.0013 U	0.0011 U
Chloroethane	NS	NS	NS	0.0011 U	0.001 U	0.0013 U	0.0011 U
Chloroform	0.37	49	0.37	0.0011 U	0.001 U	0.0013 U	0.0011 U
Chloromethane	NS	NS NS	NS	0.0011 U	0.001 U	0.0013 U	0.0011 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.0011 U	0.001 U	0.0013 U	0.0011 U
Cis-1,3-Dichloropropene	NS	NS	NS	0.0011 U	0.001 U	0.0013 U	0.0011 U
Cyclohexane	NS	NS	NS	0.0011 U	0.001 U	0.0013 U	0.0011 U
Cymene	NS	NS	NS	NR	NR	NR	NR
Dibromochloromethane	NS	NS	NS	0.0011 U	0.001 U	0.0013 U	0.0011 U
Dichlorodifluoromethane	NS	NS	NS	0.0011 U	0.001 U	0.0013 U	0.0011 U
Ethylbenzene	1	41	1	0.0011 U	0.001 U	0.0013 U	0.0011 U
Isopropylbenzene (Cumene)	NS	NS	NS	0.0011 U	0.001 U	0.0013 U	0.0011 U
M,P-Xylenes	NS	NS	NS	0.00022 J	0.001 U	0.0013 U	0.0011 U
Methyl Acetate	NS	NS	NS	0.0057 U	0.0052 U	0.0063 U	0.0056 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.12	0.0057 UJ	0.0052 UJ	0.0063 UJ	0.0056 UJ
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	NS	0.0057 U	0.0052 U	0.0063 U	0.0056 U
Methylcyclohexane	NS	NS	NS	0.0011 U	0.001 U	0.0013 U	0.0011 U
Methylene Chloride	0.05	100	0.05	0.0023 U	0.0021 U	0.0025 U	0.0022 U
N-Butylbenzene	12	100	12	0.0011 U	0.001 U	0.0013 U	0.0011 U
N-Propylbenzene	3.9	100	3.9	0.0011 U	0.001 U	0.0013 U	0.0011 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	NS	0.0011 U	0.001 U	0.0013 U	0.0011 U
Sec-Butylbenzene	11	100	11	0.0011 U	0.001 U	0.0013 U	0.0011 U
Styrene	NS	NS	NS	0.0011 U	0.001 U	0.0013 U	0.0011 U
T-Butylbenzene	5.9	100	5.9	0.0011 U	0.001 U	0.0013 U	0.0011 U
Tert-Butyl Methyl Ether	0.93	100	0.93	0.0011 U	0.001 U	0.0013 U	0.0011 U
Tetrachloroethylene (PCE)	1.3	19	<u>1.3</u>	0.0084 J	0.0011	0.027	0.21
Toluene	0.7	100	0.7	0.0011 U	0.001 U	0.0013 U	0.0011 U
Trans-1,2-Dichloroethene	0.19	100	0.19	0.0011 U	0.001 U	0.0013 U	0.0011 U
Trans-1,3-Dichloropropene	NS	NS	NS	0.0011 U	0.001 U	0.0013 U	0.0011 U
Trichloroethylene (TCE)	0.47	21	0.47	0.0011 U	0.001 U	0.0013 U	0.0006 J
Trichlorofluoromethane	NS	NS	NS	0.0011 UJ	0.001 UJ	0.0013 UJ	0.0011 UJ
Vinyl Chloride	0.02	0.9	0.02	0.0011 U	0.001 U	0.0013 U	0.0011 U
Villy Official		100		0.00022 J		0.0025 U	0.0022 U

			-	Volatile Organic Compounds (• · · · · · · · · · · · · · · · · ·
			AKRF Sample ID	EP-49_15_20230410	EP-49_15_20230410	EP-50_15_20230410	EP-51_15_20230412
		L	aboratory Sample ID	460-278010-13	460-278010-13	460-278010-14	460-278159-1
			Date Sampled	4/10/2023	4/10/2023	4/10/2023	4/12/2023
			Dilution Factor	1	50	1	1
			Unit	mg/kg	mg/kg	mg/kg	mg/kg
Compound			NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.68	0.0013 U	NR	0.0013 U	0.001 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	0.0013 U	NR	0.0013 U	0.001 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	NS	0.0013 U	NR	0.0013 U	0.001 U
1,1,2-Trichloroethane	NS	NS	NS	0.0013 U	NR	0.0013 U	0.001 UJ
1,1-Dichloroethane	0.27	26	0.27	0.0013 U	NR	0.0013 U	0.001 U
1,1-Dichloroethene	0.33	100	0.33	0.0013 U	NR NR	0.0013 U	0.001 U
1,2,3-Trichlorobenzene	NS NS	NS NS	NS NS	0.0013 U	NR	0.0013 U	0.001 U
1,2,4-Trichlorobenzene		52		0.0013 U	NR NR	0.0013 U	0.001 UJ
1,2,4-Trimethylbenzene 1,2-Dibromo-3-Chloropropane	3.6 NS	NS	3.6 NS	0.0013 U 0.0013 U	NR NR	0.0013 U 0.0013 U	0.001 UJ 0.001 U
	NS NS	NS	NS				
1,2-Dibromoethane (Ethylene Dibromide)				0.0013 U	NR NR	0.0013 U	0.001 UJ
1,2-Dichlorobenzene	1.1	100	1.1	0.0013 U	NR NR	0.0013 U	0.001 UJ
1,2-Dichloroethane 1,2-Dichloropropane	0.02 NS	3.1 NS	0.02 NS	0.0013 U 0.0013 U	NR NR	0.0013 U 0.0013 U	0.001 U 0.001 U
1,2-Dichloropropane 1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	8.4	0.0013 U	NR NR	0.0013 U	0.001 UJ
1,3,5-1 rimetryibenzene (Mesityiene) 1,3-Dichlorobenzene	2.4	49	2.4	0.0013 U 0.0013 U	NR NR	0.0013 U	0.001 UJ
1,3-Dichlorobenzene	1.8	13	1.8	0.0013 U	NR	0.0013 U	0.001 UJ
2-Hexanone	NS	NS	NS	0.0013 U 0.0064 U	NR	0.0013 U 0.0064 U	0.001 UJ
Acetone	0.05	100	0.05	0.0064 U 0.0077 U	NR	0.0084 0	0.0051 U
Benzene	0.05	4.8	0.06	0.0013 U	NR	0.0013 U	0.0001 U
Bromochloromethane	NS	NS	NS	0.0013 U	NR	0.0013 U	0.001 U
Bromodichloromethane	NS	NS	NS	0.0013 U	NR	0.0013 U	0.001 U
Bromotorm	NS	NS	NS	0.0013 U	NR	0.0013 U	0.001 U
Bromomethane	NS	NS	NS	0.0026 UJ	NR	0.0026 UJ	0.002 U
Carbon Disulfide	NS	NS	NS	0.0013 U	NR	0.0025	0.002 0 0.001 U
Carbon Tetrachloride	0.76	2.4	0.76	0.0013 U	NR	0.0013 U	0.001 U
Chlorobenzene	1.1	100	1.1	0.0013 U	NR	0.0013 U	0.001 U
Chloroethane	NS	NS	NS	0.0013 U	NR	0.0013 U	0.001 U
Chloroform	0.37	49	0.37	0.0013 U	NR	0.0013 U	0.001 U
Chloromethane	NS	NS	NS	0.0013 U	NR	0.0013 U	0.001 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.0013 U	NR	0.0013 U	0.001 U
Cis-1,3-Dichloropropene	NS	NS	NS	0.0013 U	NR	0.0013 U	0.001 UJ
Cyclohexane	NS	NS	NS	0.0013 U	NR	0.0013 U	0.001 U
Cymene	NS	NS	NS	NR	NR	NR	NR
Dibromochloromethane	NS	NS	NS	0.0013 U	NR	0.0013 U	0.001 UJ
Dichlorodifluoromethane	NS	NS	NS	0.0013 U	NR	0.0013 U	0.001 U
Ethylbenzene	1	41	1	0.0013 U	NR	0.0013 U	0.001 U
Isopropylbenzene (Cumene)	NS	NS	NS	0.0013 U	NR	0.0013 U	0.001 U
M,P-Xylenes	NS	NS	NS	0.0013 U	NR	0.0013 U	0.001 UJ
Methyl Acetate	NS	NS	NS	0.0064 U	NR	0.0064 U	0.0051 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.12	0.0064 UJ	NR	0.011	0.0051 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	NS	0.0064 U	NR	0.0064 U	0.0051 UJ
Methylcyclohexane	NS	NS	NS	0.0013 U	NR	0.0013 U	0.001 U
Methylene Chloride	0.05	100	<u>0.05</u>	0.0026 U	NR	0.0026 U	0.002 U
N-Butylbenzene	12	100	12	0.0013 U	NR	0.0013 U	0.001 U
N-Propylbenzene	3.9	100	3.9	0.0013 U	NR	0.0013 U	0.001 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	NS	0.0013 U	NR	0.0013 U	0.001 U
Sec-Butylbenzene	11	100	11	0.0013 U	NR	0.0013 U	0.001 U
Styrene	NS	NS	NS	0.0013 U	NR	0.0013 U	0.001 UJ
T-Butylbenzene	5.9	100	5.9	0.0013 U	NR	0.0013 U	0.001 UJ
Tert-Butyl Methyl Ether	0.93	100	0.93	0.0013 U	NR	0.0013 U	0.001 U
Tetrachloroethylene (PCE)	1.3	19	<u>1.3</u>	NR	<u>3.8 D</u>	0.057	0.001 UJ
Toluene	0.7	100	0.7	0.0013 U	NR	0.0013 U	0.001 UJ
Trans-1,2-Dichloroethene	0.19	100	0.19	0.0013 U	NR	0.0013 U	0.001 U
Trans-1,3-Dichloropropene	NS	NS	NS	0.0013 U	NR	0.0013 U	0.001 UJ
Trichloroethylene (TCE)	0.47	21	0.47	0.018	NR	0.013	0.001 U
Trichlorofluoromethane	NS	NS	NS	0.0013 UJ	NR	0.0013 UJ	0.001 U
			0.00	0.0013 U	NR	0.0013 U	0.001 U
Vinyl Chloride Xylenes, Total	0.02	0.9	0.02	0.0013 U 0.0026 U	NR	0.0013 U 0.0026 U	0.001 U 0.002 UJ

				f Volatile Organic Compounds	(1003)		
			AKRF Sample ID	EP-52_15_20230412	EP-X05_15_20230412	EP-53_15_20230509	EP-54_16_20230509
		L	aboratory Sample ID	460-278159-2	460-278159-3	460-279980-1	460-279980-2
			Date Sampled	4/12/2023	4/12/2023	5/09/2023	5/09/2023
			Dilution Factor	1	1	1	1
-			Unit	mg/kg	mg/kg	mg/kg	mg/kg
Compound			NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.68	0.0012 U	0.001 U	0.00091 U	0.0011 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	0.0012 U	0.001 U	0.00091 UJ	0.0011 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	NS	0.0012 U	0.001 U	0.00091 U	0.0011 U
1,1,2-Trichloroethane	NS	NS	NS	0.0012 U	0.001 U	0.00091 U	0.0011 U
1,1-Dichloroethane	0.27	26	0.27	0.0012 U	0.001 U	0.00091 U	0.0011 U
1,1-Dichloroethene	0.33	100	0.33	0.0012 U	0.001 U	0.00091 U	0.0011 U
1,2,3-Trichlorobenzene	NS	NS	NS	0.0012 U	0.001 U	0.00091 U	0.0011 U
1,2,4-Trichlorobenzene	NS	NS	NS	0.0012 U	0.001 U	0.00091 UJ	0.0011 U
1,2,4-Trimethylbenzene	3.6	52	3.6	0.0012 U	0.001 U	0.00091 UJ	0.0011 U
1,2-Dibromo-3-Chloropropane	NS	NS	NS	0.0012 U	0.001 U	0.00091 UJ	0.0011 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	NS	0.0012 U	0.001 U	0.00091 UJ	0.0011 U
1,2-Dichlorobenzene	1.1	100	1.1	0.0012 U	0.001 U	0.00091 UJ	0.0011 U
1,2-Dichloroethane 1,2-Dichloropropane	0.02 NS	3.1 NS	0.02 NS	0.0012 U	0.001 U 0.001 U	0.00091 U 0.00091 U	0.0011 U 0.0011 U
1,2-Dicnioropropane 1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	NS 8.4	0.0012 U 0.0012 U	0.001 U 0.001 U	0.00091 U 0.00091 UJ	0.0011 U 0.0011 U
1,3,5-1 nmethylbenzene (Mesitylene) 1,3-Dichlorobenzene	2.4	49	2.4	0.0012 U 0.0012 U	0.001 U	0.00091 UJ	0.0011 U
1,4-Dichlorobenzene	1.8	13	1.8	0.0012 U 0.0012 U	0.001 U	0.00091 UJ	0.0011 U
2-Hexanone	NS	NS	NS	0.0012 0 0.006 U	0.001 U 0.0052 U	0.00091 UJ	0.0056 U
Acetone	0.05	100	0.05	0.000 U	0.0052 U	0.0045 U	0.0058 U
Benzene	0.05	4.8	0.06	0.0072 0 0.0012 U	0.0002 U 0.001 U	0.00091 U	0.0008 U 0.0011 U
Bromochloromethane	NS	NS	NS	0.0012 U	0.001 U	0.00091 U	0.0011 U
Bromodichloromethane	NS	NS	NS	0.0012 U	0.001 U	0.00091 U	0.0011 U
Bromoform	NS	NS	NS	0.0012 U	0.001 U	0.00091 UJ	0.0011 U
Bromomethane	NS	NS	NS	0.0012 U	0.0021 U	0.0018 U	0.0023 U
Carbon Disulfide	NS	NS	NS	0.0012 U	0.001 U	0.00091 U	0.0011 U
Carbon Tetrachloride	0.76	2.4	0.76	0.0012 U	0.001 U	0.00091 U	0.0011 U
Chlorobenzene	1.1	100	1.1	0.0012 U	0.001 U	0.00091 UJ	0.0011 U
Chloroethane	NS	NS	NS	0.0012 U	0.001 U	0.00091 U	0.0011 U
Chloroform	0.37	49	0.37	0.0012 U	0.001 U	0.00091 U	0.0011 U
Chloromethane	NS	NS	NS	0.0012 U	0.001 U	0.00091 U	0.0011 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.0012 U	0.001 U	0.00091 UJ	0.0011 U
Cis-1,3-Dichloropropene	NS	NS	NS	0.0012 U	0.001 U	0.00091 U	0.0011 U
Cyclohexane	NS	NS	NS	0.0012 U	0.001 U	0.00091 U	0.0011 U
Cymene	NS	NS	NS	NR	NR	NR	NR
Dibromochloromethane	NS	NS	NS	0.0012 U	0.001 U	0.00091 UJ	0.0011 U
Dichlorodifluoromethane	NS	NS	NS	0.0012 U	0.001 U	0.00091 U	0.0011 U
Ethylbenzene	1	41	1	0.0012 U	0.001 U	0.00091 U	0.0011 U
Isopropylbenzene (Cumene)	NS	NS	NS	0.0012 U	0.001 U	0.00091 UJ	0.0011 U
M,P-Xylenes	NS	NS	NS	0.0012 U	0.001 U	0.00091 UJ	0.0011 U
Methyl Acetate	NS	NS	NS	0.006 U	0.0052 U	0.0045 U	0.0056 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.12	0.006 U	0.0052 U	0.0045 UJ	0.0056 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	NS	0.006 U	0.0052 U	0.0045 UJ	0.0056 U
Methylcyclohexane	NS	NS	NS	0.0012 U	0.001 U	0.00091 U	0.0011 U
Methylene Chloride	0.05	100	<u>0.05</u>	0.0024 U	0.0021 U	0.0018 U	0.0023 U
N-Butylbenzene	12	100	12	0.0012 U	0.001 U	0.00091 UJ	0.0011 U
N-Propylbenzene	3.9	100	3.9	0.0012 U	0.001 U	0.00091 UJ	0.0011 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	NS	0.0012 U	0.001 U	0.00091 U	0.0011 U
Sec-Butylbenzene	11	100	11	0.0012 U	0.001 U	0.00091 UJ	0.0011 U
Styrene	NS	NS	NS	0.0012 U	0.001 U	0.00091 UJ	0.0011 U
T-Butylbenzene	5.9	100	5.9	0.0012 UJ	0.001 UJ	0.00091 UJ	0.0011 U
Tert-Butyl Methyl Ether	0.93	100	0.93	0.0012 U	0.001 U	0.00091 UJ	0.0011 U
Tetrachloroethylene (PCE)	1.3	19	<u>1.3</u>	0.0012 U	0.00047 J	0.00091 U	0.0011 U
	0.7	100	0.7	0.0012 U	0.001 U	0.00091 UJ	0.0011 U
Trans-1,2-Dichloroethene	0.19	100	0.19	0.0012 U 0.0012 U	0.001 U	0.00091 U	0.0011 U
Trans-1,3-Dichloropropene	NS 0.47	NS 21	NS 0.47		0.001 U	0.00091 UJ	0.0011 U
Trichloroethylene (TCE) Trichlorofluoromethane	0.47 NS	21	0.47	0.0012 U	0.001 U	0.00091 U 0.00091 U	0.0011 U 0.0011 U
Vinyl Chloride	0.02	NS 0.9	NS 0.02	0.0012 U 0.0012 U	0.001 U 0.001 U	0.00091 U 0.00091 U	0.0011 U 0.0011 U
Vinyi Chioride Xylenes, Total	0.02	100	1.6	0.0012 U 0.0024 U	0.001 U 0.0021 U	0.00091 U 0.0018 UJ	0.0011 U 0.0023 U
Ayiches, IUldi	0.20	100	0.1	0.0024 U	0.0021 0	0.0016 UJ	0.0023 0

				f Volatile Organic Compounds (
			AKRF Sample ID	EP-X06_16_20230509	EP-56_15_20230517	EP-X07_15_20230517	EP-57_15_20230517
		L	aboratory Sample ID	460-279980-3	460-280490-2	460-280490-7	460-280490-3
			Date Sampled	5/09/2023 1	5/17/2023	5/17/2023	5/17/2023
			Dilution Factor Unit	ng/kg	1 mg/kg	1 mg/kg	1 mg/kg
Compound		NVSDEC PPSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
1.1.1-Trichloroethane	0.68	100	0.68	0.00095 U	0.0011 U	0.0012 U	0.001 UJ
1,1,2,2-Tetrachloroethane	NS	NS	NS	0.00095 U	0.0011 U	0.0012 U	0.001 U
1,1,2,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	NS	0.00095 U	0.0011 U	0.0012 U	0.001 U
1,1,2-Trichloroethane	NS	NS	NS	0.00095 U	0.0011 U	0.0012 U	0.001 U
1,1-Dichloroethane	0.27	26	0.27	0.00095 U	0.0011 U	0.0012 U	0.001 UJ
1,1-Dichloroethene	0.33	100	0.33	0.00095 U	0.0011 UJ	0.0012 UJ	0.001 U
1.2.3-Trichlorobenzene	NS	NS	NS	0.00095 U	0.0011 U	0.0012 U	0.001 U
1,2,4-Trichlorobenzene	NS	NS	NS	0.00095 U	0.0011 U	0.0012 U	0.001 U
1,2,4-Trimethylbenzene	3.6	52	3.6	0.00095 U	0.0011 U	0.0012 U	0.001 U
1,2-Dibromo-3-Chloropropane	NS	NS	NS	0.00095 U	0.0011 U	0.0012 U	0.001 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	NS	0.00095 U	0.0011 U	0.0012 U	0.001 U
1,2-Dichlorobenzene	1.1	100	1.1	0.00095 U	0.0011 U	0.0012 U	0.001 U
1,2-Dichloroethane	0.02	3.1	0.02	0.00095 U	0.0011 U	0.0012 U	0.001 U
1,2-Dichloropropane	NS	NS	NS	0.00095 U	0.0011 U	0.0012 U	0.001 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	8.4	0.00095 U	0.0011 U	0.0012 U	0.001 UJ
1,3-Dichlorobenzene	2.4	49	2.4	0.00095 U	0.0011 U	0.0012 U	0.001 U
1,4-Dichlorobenzene	1.8	13	1.8	0.00095 U	0.0011 U	0.0012 U	0.001 U
2-Hexanone	NS	NS	NS	0.0048 U	0.0055 U	0.0059 U	0.005 U
Acetone	0.05	100	<u>0.05</u>	0.0057 U	0.0066 U	0.0071 U	0.006 U
Benzene	0.06	4.8	0.06	0.00095 U	0.0011 U	0.0012 U	0.001 UJ
Bromochloromethane	NS	NS	NS	0.00095 U	0.0011 U	0.0012 U	0.001 U
Bromodichloromethane	NS	NS	NS	0.00095 U	0.0011 U	0.0012 U	0.001 U
Bromoform	NS	NS	NS	0.00095 U	0.0011 U	0.0012 U	0.001 U
Bromomethane	NS	NS	NS	0.0019 U	0.0022 U	0.0024 U	0.002 U
Carbon Disulfide	NS	NS	NS	0.00095 U	0.0011 U	0.0012 U	0.001 UJ
Carbon Tetrachloride	0.76	2.4	0.76	0.00095 U	0.0011 U	0.0012 U	0.001 UJ
Chlorobenzene	1.1	100	1.1	0.00095 U	0.0011 U	0.0012 U	0.001 U
Chloroethane	NS	NS	NS	0.00095 U	0.0011 U	0.0012 U	0.001 UJ
Chloroform	0.37	49	0.37	0.00095 U	0.0011 U	0.0012 U	0.001 U
Chloromethane	NS	NS	NS	0.00095 U	0.0011 U	0.0012 U	0.001 UJ
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.00095 U	0.0011 U	0.0012 U	0.001 U
Cis-1,3-Dichloropropene	NS NS	NS NS	NS NS	0.00095 U	0.0011 U	0.0012 U	0.001 U
Cyclohexane	NS	NS	NS	0.00095 U	0.0011 U	0.0012 U	0.001 U
Cymene Dibromochloromethane	NS	NS	NS	<u>NR</u> 0.00095 U	NR 0.0011 U	NR 0.0012 U	NR 0.001 U
Dichlorodifluoromethane	NS	NS	NS	0.00095 U	0.0011 U	0.0012 U	0.001 UJ
Ethylbenzene	1	41	1	0.00095 U	0.0011 U	0.0012 U	0.001 U
Isopropylbenzene (Cumene)	NS	NS	NS	0.00095 U	0.0011 U	0.0012 U	0.001 UJ
M,P-Xylenes	NS	NS	NS	0.00095 U	0.0011 U	0.0012 U	0.001 UJ
Methyl Acetate	NS	NS	NS	0.0048 U	0.0055 U	0.0059 U	0.005 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.12	0.0048 U	0.0055 U	0.0059 U	0.005 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	NS	0.0048 U	0.0055 U	0.0059 U	0.005 U
Methylcyclohexane	NS	NS	NS	0.00095 U	0.0011 U	0.0012 U	0.001 U
Methylene Chloride	0.05	100	<u>0.05</u>	0.0019 U	0.0022 U	0.0013 J	0.002 U
N-Butylbenzene	12	100	12	0.00095 U	0.0011 U	0.0012 U	0.001 U
N-Propylbenzene	3.9	100	3.9	0.00095 U	0.0011 U	0.0012 U	0.001 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	NS	0.00095 U	0.0011 U	0.0012 U	0.001 U
Sec-Butylbenzene	11	100	11	0.00095 U	0.0011 U	0.0012 U	0.001 UJ
Styrene	NS	NS	NS	0.00095 U	0.0011 U	0.0012 U	0.001 U
T-Butylbenzene	5.9	100	5.9	0.00095 U	0.0011 U	0.0012 U	0.001 UJ
Tert-Butyl Methyl Ether	0.93	100	0.93	0.00095 U	0.0011 U	0.0012 U	0.001 U
Tetrachloroethylene (PCE)	1.3	19	<u>1.3</u>	0.00095 U	0.0011 U	0.001 J	0.001 UJ
Toluene	0.7	100	0.7	0.00095 U	0.0011 U	0.0012 U	0.001 UJ
Trans-1,2-Dichloroethene	0.19	100	0.19	0.00095 U	0.0011 U	0.0012 U	0.001 U
Trans-1,3-Dichloropropene	NS	NS	NS	0.00095 U	0.0011 U	0.0012 U	0.001 UJ
Trichloroethylene (TCE)	0.47	21	0.47	0.00095 U	0.0011 U	0.0012 U	0.001 U
Trichlorofluoromethane	NS	NS	NS	0.00095 U	0.0011 U	0.0012 U	0.001 UJ
Vinyl Chloride	0.02	0.9	0.02	0.00095 U	0.0011 U	0.0012 U	0.001 UJ
Xylenes, Total	0.26	100	1.6	0.0019 U	0.0022 U	0.0024 U	0.002 UJ

			-	f Volatile Organic Compounds (
			AKRF Sample ID	EP-58_15_20230601	EP-59_15_20230601	EP-X08_15_20230601	EP-60_15_20230601
		L	aboratory Sample ID	460-281385-1	460-281385-2	460-281385-3	460-281385-4
			Date Sampled	6/01/2023	6/01/2023	6/01/2023	6/01/2023
			Dilution Factor Unit	1	1	1	1
Compound			NYSDEC PGWSCO	mg/kg CONC Q	mg/kg CONC Q	mg/kg CONC Q	mg/kg CONC Q
1,1,1-Trichloroethane	0.68	100	0.68	0.0011 U	0.0011 U	0.0011 U	0.0013 U
1,1,2,2-Tetrachloroethane	0.00 NS	NS	0.00 NS	0.0011 UJ	0.0011 UJ	0.0011 UJ	0.0013 UJ
1,1,2,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0013 U
1,1,2-Trichloroethane	NS	NS	NS	0.0011 UJ	0.0011 U	0.0011 U	0.0013 U
1,1-Dichloroethane	0.27	26	0.27	0.0011 U	0.0011 U	0.0011 U	0.0013 U
1,1-Dichloroethene	0.33	100	0.33	0.0011 U	0.0011 U	0.0011 U	0.0013 U
1,2,3-Trichlorobenzene	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0013 U
1,2,4-Trichlorobenzene	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0013 U
1,2,4-Trimethylbenzene	3.6	52	3.6	0.0011 UJ	0.0011 U	0.0011 U	0.0013 U
1,2-Dibromo-3-Chloropropane	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0013 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0013 U
1,2-Dichlorobenzene	1.1	100	1.1	0.0011 U	0.0011 U	0.0011 U	0.0013 U
1,2-Dichloroethane	0.02	3.1	0.02	0.0011 U	0.0011 U	0.0011 U	0.0013 U
1,2-Dichloropropane	NS	NS	NS	0.0011 UJ	0.0011 UJ	0.0011 UJ	0.0013 UJ
1,3,5-Trimethylbenzene (Mesitylene)	8.4 2.4	52 49	8.4 2.4	0.0011 UJ 0.0011 U	0.0011 U	0.0011 U	0.0013 U 0.0013 U
1,3-Dichlorobenzene 1,4-Dichlorobenzene	2.4	49 13	2.4	0.0011 U 0.0011 U	0.0011 U 0.0011 U	0.0011 U 0.0011 U	0.0013 U 0.0013 U
2-Hexanone	NS	NS	NS	0.0011 U 0.0054 U	0.0011 U 0.0057 U	0.0053 U	0.0013 U 0.0065 U
Acetone	0.05	100	0.05	0.0065 U	0.0037 0 0.12 J	0.0033 J	0.0005 0
Benzene	0.06	4.8	0.06	0.0011 UJ	0.0011 U	0.0011 U	0.0013 U
Bromochloromethane	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0013 U
Bromodichloromethane	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0013 U
Bromoform	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0013 U
Bromomethane	NS	NS	NS	0.0022 U	0.0023 U	0.0021 U	0.0026 U
Carbon Disulfide	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0013 U
Carbon Tetrachloride	0.76	2.4	0.76	0.0011 U	0.0011 U	0.0011 U	0.0013 U
Chlorobenzene	1.1	100	1.1	0.0011 U	0.0011 U	0.0011 U	0.0013 U
Chloroethane	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0013 U
Chloroform	0.37	49	0.37	0.0011 U	0.0011 U	0.0011 U	0.0013 U
Chloromethane	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0013 U
Cis-1,2-Dichloroethylene Cis-1,3-Dichloropropene	0.25 NS	100 NS	0.25 NS	0.0011 U 0.0011 U	0.0011 U 0.0011 U	0.0011 U 0.0011 U	0.0013 U 0.0013 U
Cyclohexane	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0013 U
Cymene	NS	NS	NS	NR	NR	NR	NR
Dibromochloromethane	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0013 U
Dichlorodifluoromethane	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0013 U
Ethylbenzene	1	41	1	0.0011 U	0.0011 U	0.0011 U	0.0013 U
Isopropylbenzene (Cumene)	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0013 U
M,P-Xylenes	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0013 U
Methyl Acetate	NS	NS	NS	0.0054 U	0.0057 U	0.0053 U	0.0065 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.12	0.0054 U	0.0057 U	0.0053 U	0.0065 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	NS	0.0054 U	0.0057 U	0.0053 U	0.0065 U
Methylcyclohexane	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0013 U
Methylene Chloride	0.05	100	0.05	0.0022 U	0.0023 U	0.0021 U	0.0026 U
N-Butylbenzene N-Propylbenzene	12 3.9	100 100	12 3.9	0.0011 UJ 0.0011 U	0.0011 U 0.0011 U	0.0011 U 0.0011 U	0.0013 U 0.0013 U
N-Propyldenzene O-Xvlene (1.2-Dimethylbenzene)	3.9 NS	100 NS	3.9 NS	0.0011 U 0.0011 U	0.0011 U 0.0011 U	0.0011 U 0.0011 U	0.0013 U
Sec-Butylbenzene	11	100	11	0.0011 UJ	0.0011 U	0.0011 U	0.0013 U
Styrene	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0013 U
T-Butylbenzene	5.9	100	5.9	0.0011 UJ	0.0011 U	0.0011 U	0.0013 U
Tert-Butyl Methyl Ether	0.93	100	0.93	0.0011 U	0.0011 U	0.0011 U	0.0013 U
Tetrachloroethylene (PCE)	1.3	19	<u>1.3</u>	0.0011 UJ	0.0011 UJ	0.0011 UJ	0.0013 UJ
Toluene	0.7	100	0.7	0.0011 U	0.0011 U	0.0011 U	0.0013 U
Trans-1,2-Dichloroethene	0.19	100	0.19	0.0011 U	0.0011 U	0.0011 U	0.0013 U
Trans-1,3-Dichloropropene	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0013 U
Trichloroethylene (TCE)	0.47	21	0.47	0.0011 U	0.0011 U	0.0011 U	0.0013 U
Trichlorofluoromethane	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0013 U
Vinyl Chloride	0.02	0.9	0.02	0.0011 U 0.0022 U	0.0011 U	0.0011 U	0.0013 U
Xylenes, Total	0.26				0.0023 U	0.0021 U	0.0026 U

				Volatile Organic Compounds			
			AKRF Sample ID	EP-61_15_20230601	EP-55_15_20230517	EP-62_15_20230706	EP-63_15_20230706
		L	aboratory Sample ID	460-281385-5	460-280490-1	460-283756-1	460-283756-2
			Date Sampled	6/01/2023	5/17/2023	7/06/2023	7/06/2023
			Dilution Factor	1	1	1	1
Common and			Unit NYSDEC PGWSCO	mg/kg CONC Q	mg/kg	mg/kg CONC Q	mg/kg
Compound							CONC Q
1,1,1-Trichloroethane	0.68 NS	100 NS	0.68	0.00098 U 0.00098 UJ	0.0013 U	0.00099 U	0.0012 U
1,1,2,2-Tetrachloroethane	NS	NS	NS NS		0.0013 U	0.00099 U	0.0012 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS			0.00098 U	0.0013 U 0.0013 U	0.00099 U 0.00099 U	0.0012 U
1,1,2-Trichloroethane 1,1-Dichloroethane	0.27	NS 26	NS 0.27	0.00098 U 0.00098 U	0.0013 U	0.00099 U	0.0012 U 0.0012 U
1,1-Dichloroethene	0.33	100	0.33	0.00098 U	0.0013 UJ	0.00099 U	0.0012 U
1,2,3-Trichlorobenzene	0.33 NS	NS	0.33 NS	0.00098 U	0.0013 U	0.00099 U	0.0012 U
1,2,4-Trichlorobenzene	NS	NS	NS	0.00098 U	0.0013 U	0.00099 U	0.0012 U
1,2,4-Trimethylbenzene	3.6	52	3.6	0.00098 U	0.0013 U	0.00099 U	0.0012 U
1,2-Dibromo-3-Chloropropane	NS State	NS	NS Store	0.00098 U	0.0013 U	0.00099 U	0.0012 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	NS	0.00098 U	0.0013 U	0.00099 U	0.0012 U
1,2-Diblomberiane (Ethylene Diblomide)	1.1	100	1.1	0.00098 U	0.0013 U	0.00099 U	0.0012 U
1,2-Dichloroethane	0.02	3.1	0.02	0.00098 U	0.0013	0.00099 U	0.0012 U
1,2-Dichloropropane	NS	NS	NS	0.00098 UJ	0.0013 U	0.00099 U	0.0012 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	8.4	0.00098 U	0.0013 U	0.00099 U	0.0012 U
1,3-Dichlorobenzene	2.4	49	2.4	0.00098 U	0.0013 U	0.00099 U	0.0012 U
1,4-Dichlorobenzene	1.8	13	1.8	0.00098 U	0.0013 U	0.00099 U	0.0012 U
2-Hexanone	NS	NS	NS	0.0049 U	0.0063 U	0.005 U	0.0062 U
Acetone	0.05	100	0.05	0.036	0.0075 U	0.012 U	0.0074 U
Benzene	0.06	4.8	0.06	0.00098 U	0.0013 U	0.00099 U	0.0012 U
Bromochloromethane	NS	NS	NS	0.00098 U	0.0013 U	0.00099 U	0.0012 U
Bromodichloromethane	NS	NS	NS	0.00098 U	0.0013 U	0.00099 U	0.0012 U
Bromoform	NS	NS	NS	0.00098 U	0.0013 U	0.00099 U	0.0012 U
Bromomethane	NS	NS	NS	0.002 U	0.0025 U	0.002 U	0.0025 U
Carbon Disulfide	NS	NS	NS	0.00098 U	0.0013 U	0.00099 U	0.0012 U
Carbon Tetrachloride	0.76	2.4	0.76	0.00098 U	0.0013 U	0.00099 U	0.0012 U
Chlorobenzene	1.1	100	1.1	0.00098 U	0.0013 U	0.00099 U	0.0012 U
Chloroethane	NS	NS	NS	0.00098 U	0.0013 U	0.00099 U	0.0012 U
Chloroform	0.37	49	0.37	0.00098 U	0.0013 U	0.00099 U	0.0012 U
Chloromethane	NS	NS	NS	0.00098 U	0.0013 U	0.00099 U	0.0012 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.00098 U	0.0013 U	0.00099 U	0.0012 U
Cis-1,3-Dichloropropene	NS	NS	NS	0.00098 U	0.0013 U	0.00099 U	0.0012 U
Cyclohexane	NS	NS	NS	0.00098 U	0.0013 U	0.00099 U	0.0012 U
Cymene	NS	NS	NS	NR	NR	NR	NR
Dibromochloromethane	NS	NS	NS	0.00098 U	0.0013 U	0.00099 U	0.0012 U
Dichlorodifluoromethane	NS	NS	NS	0.00098 U	0.0013 U	0.00099 U	0.0012 U
Ethylbenzene	1	41	1	0.00098 U	0.0013 U	0.00099 U	0.0012 U
Isopropylbenzene (Cumene)	NS	NS	NS	0.00098 U	0.0013 U	0.00099 U	0.0012 U
M,P-Xylenes	NS	NS	NS	0.00098 U	0.0013 U	0.00099 U	0.0012 U
Methyl Acetate	NS	NS	NS	0.0049 U	0.0063 U	0.005 U	0.0062 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.12	0.0049 U	0.0063 U	0.005 U	0.0062 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	NS	0.0049 U	0.0063 U	0.005 U	0.0062 U
Methylcyclohexane	NS	NS	NS	0.00098 U	0.0013 U	0.00099 U	0.0012 U
Methylene Chloride	0.05	100	0.05	0.002 U	0.0015 J	0.002 U	0.0025 U
N-Butylbenzene	12	100	12	0.00098 U	0.0013 U	0.00099 U	0.0012 U
N-Propylbenzene	3.9	100	3.9	0.00098 U	0.0013 U	0.00099 U	0.0012 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS 100	NS	0.00098 U	0.0013 U	0.00099 U	0.0012 U
Sec-Butylbenzene	11 NS	100 NS	11 NS	0.00098 U 0.00098 U	0.0013 U 0.0013 U	0.00099 U 0.00099 U	0.0012 U 0.0012 U
Styrene	5.9	100	5.9	0.00098 U	0.0013 U	0.00099 U 0.00099 U	
T-Butylbenzene Tert-Butyl Methyl Ether	0.93	100	0.93	0.00098 U	0.0013 U	0.00099 U	0.0012 U 0.0012 U
Tetrachloroethvlene (PCE)	1.3	100	1.3	0.00098 UJ	0.0013 U	0.00099 U	0.0012 U 0.0012 U
Toluene	0.7	100	0.7	0.00098 U	0.0013 U	0.00099 U	0.0012 U
Trans-1,2-Dichloroethene	0.19	100	0.19	0.00098 U	0.0013 U	0.00099 U	0.0012 U 0.0012 U
Trans-1,2-Dichloropene	0.19 NS	NS	0.19 NS	0.00098 U	0.0013 U	0.00099 U	0.0012 U 0.0012 U
Trichloroethylene (TCE)	0.47	21	0.47	0.00098 U	0.0013 U	0.00099 U	0.0012 U
Trichlorofluoromethane	0.47 NS	NS	0.47 NS	0.00098 U	0.0013 U	0.00099 U	0.0012 U
Vinyl Chloride	0.02	0.9	0.02	0.00098 U	0.0013 U	0.00099 U	0.0012 U
Xylenes, Total	0.02	100	1.6	0.002 U	0.0013 U	0.0039 U 0.002 U	0.0012 U 0.0025 U
	0.20	100	1.0	0.002 0	0.0020 0	0.002 0	0.0020 0

		· · · · ·		f Volatile Organic Compounds (
			AKRF Sample ID	EP-X09_15_20230706	EP-64_15_20230706	EP-65_15_20230706	EP-66_15_20230706
		L	aboratory Sample ID	460-283756-6	460-283756-3	460-283756-4	460-283756-5
			Date Sampled	7/06/2023	7/06/2023	7/06/2023	7/06/2023
			Dilution Factor	1	1	1	1
Commonwead				mg/kg	mg/kg	mg/kg	mg/kg
Compound			NYSDEC PGWSCO	CONC Q		CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.68	0.0012 U	0.0011 U	0.0012 U	0.0012 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0012 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF) 1,1,2-Trichloroethane	NS NS	NS NS	NS NS	0.0012 U 0.0012 U	0.0011 U 0.0011 U	0.0012 U 0.0012 U	0.0012 U 0.0012 U
1,1,2-11chloroethane	0.27	26	0.27	0.0012 U	0.0011 U	0.0012 U	0.0012 U
1.1-Dichloroethene	0.33	100	0.33	0.0012 U	0.0011 U	0.0012 U	0.0012 U
1,2,3-Trichlorobenzene	NS NS	NS	NS	0.0012 U	0.0011 U	0.0012 UJ	0.0012 U
1,2,4-Trichlorobenzene	NS	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0012 U
1,2,4-Trimethylbenzene	3.6	52	3.6	0.0012 U	0.0011 U	0.0012 U	0.0012 U
1,2-Dibromo-3-Chloropropane	NS	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0012 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0012 U
1,2-Dichlorobenzene	1.1	100	1.1	0.0012 U	0.0011 U	0.0012 U	0.0012 U
1,2-Dichloroethane	0.02	3.1	0.02	0.0012 U	0.0011 U	0.0012 U	0.0012 U
1,2-Dichloropropane	NS	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0012 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	8.4	0.0012 U	0.0011 U	0.0012 U	0.0012 U
1,3-Dichlorobenzene	2.4	49	2.4	0.0012 U	0.0011 U	0.0012 UJ	0.0012 U
1,4-Dichlorobenzene	1.8	13	1.8	0.0012 U	0.0011 U	0.0012 U	0.0012 U
2-Hexanone	NS	NS	NS	0.0058 U	0.0056 U	0.0059 U	0.0062 U
Acetone	0.05	100	<u>0.05</u>	0.0069 U	0.0067 U	0.0071 U	0.0074 U
Benzene	0.06	4.8	0.06	0.0012 U	0.0011 U	0.0012 U	0.0012 U
Bromochloromethane	NS	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0012 U
Bromodichloromethane	NS	NS	NS	0.0012 U	0.0011 U 0.0011 U	0.0012 U	0.0012 U
Bromoform	NS NS	NS NS	NS NS	0.0012 U 0.0023 U	0.0022 U	0.0012 U 0.0024 U	0.0012 U 0.0025 U
Bromomethane Carbon Disulfide	NS	NS	NS	0.0023 U	0.0022 0 0.0011 U	0.0024 U 0.0012 U	0.0025 U 0.0012 U
Carbon Distincte	0.76	2.4	0.76	0.0012 U	0.0011 U	0.0012 U	0.0012 U
Chlorobenzene	1.1	100	1.1	0.0012 U	0.0011 U	0.0012 U	0.0012 U
Chloroethane	NS	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0012 U
Chloroform	0.37	49	0.37	0.0012 U	0.0011 U	0.0012 U	0.0012 U
Chloromethane	NS	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0012 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.0012 U	0.0011 U	0.0012 U	0.0012 U
Cis-1,3-Dichloropropene	NS	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0012 U
Cyclohexane	NS	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0012 U
Cymene	NS	NS	NS	NR	NR	NR	NR
Dibromochloromethane	NS	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0012 U
Dichlorodifluoromethane	NS	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0012 U
Ethylbenzene	1	41	1	0.0012 U	0.0011 U	0.0012 U	0.0012 U
Isopropylbenzene (Cumene)	NS	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0012 U
M,P-Xylenes	NS	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0012 U
Methyl Acetate Methyl Ethyl Ketone (2-Butanone)	NS 0.12	NS 100	NS 0.12	0.0058 U 0.0058 U	0.0056 U 0.0056 U	0.0059 U 0.0059 U	0.0062 U 0.0062 U
Metnyl Etnyl Ketone (2-Butanone) Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	0.12 NS	100 NS	0.12 NS	0.0058 U 0.0058 U	0.0056 U	0.0059 U 0.0059 U	0.0062 U 0.0062 U
Methylcyclohexane	NS	NS	NS	0.0058 U 0.0012 U	0.0036 U 0.0011 U	0.0059 U 0.0012 U	0.0082 U 0.0012 U
Methylene Chloride	0.05	100	0.05	0.0012 U	0.0022 U	0.0012 U	0.0012 U
N-Butylbenzene	12	100	12	0.0012 U	0.0011 U	0.0012 U	0.0023 U
N-Propylbenzene	3.9	100	3.9	0.0012 U	0.0011 U	0.0012 U	0.0012 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0012 U
Sec-Butylbenzene	11	100	11	0.0012 U	0.0011 U	0.0012 U	0.0012 U
Styrene	NS	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0012 U
T-Butylbenzene	5.9	100	5.9	0.0012 U	0.0011 U	0.0012 U	0.0012 U
Tert-Butyl Methyl Ether	0.93	100	0.93	0.0012 U	0.0011 U	0.0012 U	0.0012 U
Tetrachloroethylene (PCE)	1.3	19	<u>1.3</u>	0.0012 U	0.0011 U	0.0012 U	0.0012 U
Toluene	0.7	100	0.7	0.0012 U	0.0011 U	0.0012 U	0.0012 U
Trans-1,2-Dichloroethene	0.19	100	0.19	0.0012 U	0.0011 U	0.0012 U	0.0012 U
Trans-1,3-Dichloropropene	NS	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0012 U
Trichloroethylene (TCE)	0.47	21	0.47	0.0012 U	0.0011 U	0.0012 U	0.0012 U
Trichlorofluoromethane	NS	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0012 U
Vinyl Chloride	0.02	0.9	0.02	0.0012 U	0.0011 U	0.0012 U	0.0012 U
Xylenes, Total	0.26	100	1.6	0.0023 U	0.0022 U	0.0024 U	0.0025 U

				f Volatile Organic Compounds (
			AKRF Sample ID	FB-01_20221228	FB-01_20230103	FB-01_20230214	FB-01_20230410
		L	aboratory Sample ID	460-272140-12	460-272291-12	460-274640-8	460-278010-18
			Date Sampled	12/28/2022	1/03/2023	2/14/2023	4/10/2023
			Dilution Factor	1	1	1	1
			Unit	µg/L	µg/L	μg/L	µg/L
Compound			NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.68	1 U	1 U	<u>1 U</u>	1 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	NS	<u>1 U</u>	1 U	<u>1 U</u>	<u>1 U</u>
1,1,2-Trichloroethane	NS	NS	NS	<u>1 U</u>	1 U	<u> </u>	<u>1 U</u>
1,1-Dichloroethane	0.27	26	0.27	<u>1 U</u>	10	<u>1 U</u>	<u>1 U</u>
1,1-Dichloroethene	0.33	100	0.33	<u>1 U</u>	10	<u>1 U</u>	1 U
1,2,3-Trichlorobenzene	NS	NS	NS	<u>1 U</u>	10	<u>1 U</u>	1 U
1,2,4-Trichlorobenzene	NS 3.6	NS 52	NS 3.6	<u>1 U</u> 1 U	<u>1 U</u> 1 U	<u> </u>	1 U 1 U
1,2,4-Trimethylbenzene	3.0 NS	52 NS	3.6 NS	10	10	1 U	10
1,2-Dibromo-3-Chloropropane	NS NS	NS	NS	10	10	1 U	10
1,2-Dibromoethane (Ethylene Dibromide) 1,2-Dichlorobenzene	1.1	100	1.1	1 U	10	1 U	10
	0.02	3.1	0.02	<u> </u>	10	<u> </u>	1 U
1,2-Dichloroethane 1,2-Dichloropropane	0.02 NS	NS	0.02 NS	1 U	10	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	8.4	10	10	1 U	1 U
1,3-Dichlorobenzene	2.4	49	2.4	10	10	1 U	10
1,4-Dichlorobenzene	1.8	13	1.8	1 U	1 U	1 U	1 U
2-Hexanone	NS	NS	NS	5 U	5 U	5 U	5 U
Acetone	0.05	100	0.05	<u>5.6</u>	5 U	5 U	5 U
Benzene	0.06	4.8	0.06	<u>0.0</u> 1 U	1 U	1 U	1 U
Bromochloromethane	NS	NS	NS	1 U	1 U	1 U	1 U
Bromodichloromethane	NS	NS	NS	1 U	1 U	1 U	1 U
Bromoform	NS	NS	NS	1 U	1 U	1 U	1 UJ
Bromomethane	NS	NS	NS	1 U	1 U	1 U	1 UJ
Carbon Disulfide	NS	NS	NS	1 U	1 U	1 U	1 U
Carbon Tetrachloride	0.76	2.4	0.76	1 U	1 U	1 U	1 U
Chlorobenzene	1.1	100	1.1	1 U	1 U	1 U	1 U
Chloroethane	NS	NS	NS	1 U	1 U	1 U	1 U
Chloroform	0.37	49	0.37	1 U	1 U	1 U	1 U
Chloromethane	NS	NS	NS	1 U	1 U	1 U	0.72 J
Cis-1,2-Dichloroethylene	0.25	100	0.25	1 U	1 U	1 U	1 U
Cis-1,3-Dichloropropene	NS	NS	NS	1 U	1 U	1 U	1 U
Cyclohexane	NS	NS	NS	1 U	1 U	1 U	1 U
Cymene	NS	NS	NS	NR	NR	NR	NR
Dibromochloromethane	NS	NS	NS	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	NS	NS	NS	1 UJ	1 U	1 UJ	1 U
Ethylbenzene	1	41	1	1 U	1 U	1 U	1 U
Isopropylbenzene (Cumene)	NS	NS	NS	1 U	1 U	1 U	1 U
M,P-Xylenes	NS	NS	NS	1 U	1 U	1 U	1 U
Methyl Acetate	NS	NS	NS	5 U	5 U	5 U	5 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.12	5 U	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	NS	5 U	<u>5 U</u>	5 U	5 U
Methylcyclohexane	NS	NS	NS	1 U	1 U	1 U	1 U
Methylene Chloride	0.05	100	<u>0.05</u>	1 U	1 U	1 U	1 U
N-Butylbenzene	12	100	12	<u>1 U</u>	<u>1 U</u>	<u>1 U</u>	1 U
N-Propylbenzene	3.9	100	3.9	<u>1 U</u>	1 U	<u>1 U</u>	<u>1 U</u>
O-Xylene (1,2-Dimethylbenzene)	NS	NS	NS	<u>1 U</u>	1 U	<u>1 U</u>	<u>1 U</u>
Sec-Butylbenzene	11	100	11	1 U	10	<u> </u>	1 U
Styrene	NS	NS	NS	<u>1 U</u>	10	<u>1 U</u>	1 U
T-Butylbenzene	5.9	100	5.9	<u>1 U</u>	10	1 U	1 U
Tert-Butyl Methyl Ether	0.93	100	0.93	<u>1 U</u>	1 U	<u>1 U</u>	1 U
Tetrachloroethylene (PCE)	1.3	19	<u>1.3</u>	1 U	1 U	<u>1 U</u>	1 U
Toluene	0.7	100	0.7	<u>1 U</u>	1 U	<u>1 U</u>	1 U
Trans-1,2-Dichloroethene	0.19	100	0.19	<u>1 U</u>	1 U	<u>1 U</u>	1 U
Trans-1,3-Dichloropropene	NS 0.47	NS	NS 0.47	<u>1 U</u>	1 U	<u>1 U</u>	1 U
Trichloroethylene (TCE)	0.47	21	0.47	1 U	1 U	1 U	1 U
Trichlorofluoromethane	NS	NS	NS	<u>1 U</u>	<u>1 U</u>	<u>1 U</u>	1 U
Vinyl Chloride	0.02	0.9	0.02	<u>1 U</u>	1 U	1 U	1 U
Xylenes, Total	0.26	100	1.6	2 U	2 U	2 U	2 U

·				f Volatile Organic Compounds (
			AKRF Sample ID	FB-01_20230412	FB-01_20230509	FB-01_20230517	FB-01_20230601
		L	aboratory Sample ID	460-278159-12	460-279980-4	460-280490-5	460-281385-6
			Date Sampled	4/12/2023	5/09/2023	5/17/2023	6/01/2023
			Dilution Factor	1	1	1	1
			Unit	µg/L	µg/L	µg/L	µg/L
Compound			NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.68	1 U	<u>1 U</u>	1 U	1 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	1 U	1 U	<u>1 U</u>	1 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	NS	<u>1 U</u>	1 U	1 U	1 U
1,1,2-Trichloroethane 1,1-Dichloroethane	NS 0.27	NS 26	NS 0.27	<u> </u>	<u> </u>	<u>1 U</u> 1 U	1 U 1 U
1,1-Dichloroethane	0.33	100	0.33	10	<u> </u>	1 U	1 U
1,2,3-Trichlorobenzene	NS	NS	0.33 NS	10	1 U	1 U	1 U
1,2,4-Trichlorobenzene	NS	NS	NS	1 U	1 U	1 U	1 U
1,2,4-Trimethylbenzene	3.6	52	3.6	1 U	1 U	1 U	1 U
1,2-Dibromo-3-Chloropropane	NS	NS	NS	1 U	1 U	1 U	1 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	NS	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1.1	100	1.1	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.02	3.1	0.02	1 U	1 U	1 U	1 U
1,2-Dichloropropane	NS	NS	NS	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	8.4	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	2.4	49	2.4	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1.8	13	1.8	1 U	1 U	1 U	1 U
2-Hexanone	NS	NS	NS	5 U	<u>5 U</u>	5 U	5 U
Acetone	0.05	100	<u>0.05</u>	5 U	<u>5 U</u>	5 U	5 U
Benzene	0.06	4.8	0.06	<u>1 U</u>	<u>1 U</u>	<u>1 U</u>	1 U
Bromochloromethane	NS	NS	NS	<u>1 U</u>	<u>1 U</u>	1 U	1 U
Bromodichloromethane	NS	NS	NS	<u>1 U</u>	1 U	1 U	1 U
Bromoform	NS	NS	NS	<u>1 U</u> 1 U	<u> </u>	1 U	1 U 1 U
Bromomethane Carbon Disulfide	NS NS	NS NS	NS NS	<u> </u>	1 U	1 U 1 U	1 U
Carbon Disulide Carbon Tetrachloride	0.76	2.4	0.76	<u> </u>	1 U	1 U	1 U
Chlorobenzene	1.1	100	1.1	10	10	1 U	1 U
Chloroethane	NS	NS	NS	1 U	1 U	1 U	1 U
Chloroform	0.37	49	0.37	1 U	1 U	1 U	1 U
Chloromethane	NS	NS	NS	1 U	1 U	0.81 J	1 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	1 U	1 U	1 U	1 U
Cis-1,3-Dichloropropene	NS	NS	NS	1 U	1 U	1 U	1 U
Cyclohexane	NS	NS	NS	1 U	1 U	1 U	1 U
Cymene	NS	NS	NS	NR	NR	NR	NR
Dibromochloromethane	NS	NS	NS	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	NS	NS	NS	1 U	1 U	1 U	1 U
Ethylbenzene	1	41	1	1 U	1 U	1 U	1 U
Isopropylbenzene (Cumene)	NS	NS	NS	1 U	<u> </u>	1 U	1 U
M,P-Xylenes	NS	NS	NS	1 U	<u>1 U</u>	1 U	1 U
Methyl Acetate	NS	NS	NS	5 U	5 U	5 U	5 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.12	<u>5 U</u>	<u>5 U</u>	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	NS	5 U	5 U	5 U	5 U
Methylcyclohexane Methylene Chloride	NS	NS 100	NS 0.05	<u>1 U</u> 0.76 J	1 U 0.74 J	1 U 1 U	1 U 1 U
N-Butylbenzene	0.05 12	100	<u>0.05</u> 12	<u>0.76</u> <u>J</u> 1 U	<u> </u>	10	1 U
N-Butylbenzene N-Propylbenzene	3.9	100	3.9	1 U	1 U	1 U	1 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	NS	10	1 U	1 U	1 U
Sec-Butylbenzene	11	100	11	1 U	1 U	1 U	1 U
Styrene	NS	NS	NS	1 U	1 U	1 U	1 U
T-Butylbenzene	5.9	100	5.9	1 U	10	1 U	1 U
Tert-Butyl Methyl Ether	0.93	100	0.93	1 U	1 U	1 U	1 U
Tetrachloroethylene (PCE)	1.3	19	1.3	1 U	1 U	1 U	1 U
Toluene	0.7	100	0.7	1 U	1 U	1 U	1 U
Trans-1,2-Dichloroethene	0.19	100	0.19	1 U	1 U	1 U	1 U
Trans-1,3-Dichloropropene	NS	NS	NS	1 U	1 U	1 U	1 U
Trichloroethylene (TCE)	0.47	21	0.47	1 U	1 U	1 U	1 U
Trichlorofluoromethane	NS	NS	NS	1 U	1 U	1 U	1 U
Vinyl Chloride	0.02	0.9	0.02	1 U	1 U	1 U	1 U
Xylenes, Total	0.26	100	1.6	2 U	2 U	2 U	2 U

Table 1 975 Nostrand Avenue

			AKRF Sample ID	FB-01_20230706	TB_20230601	TB-01_20221228	TB-01_20230103								
		-	aboratory Sample ID	460-283756-7	460-281385-7	460-272140-13	460-272291-13								
			Date Sampled	7/06/2023	6/01/2023	12/28/2022	1/03/2023								
			Dilution Factor	1	1	1	1								
			Unit	μg/L	µg/L	μg/L	μg/L								
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q								
1,1,1-Trichloroethane	0.68	100	0.68	1 U	1 U	1 U	1 U								
1,1,2,2-Tetrachloroethane	NS	NS	NS	1 U	1 U	1 U	1 U								
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	NS	1 U	1 U	1 U	1 U								
1,1,2-Trichloroethane	NS	NS	NS	1 U	1 U	1 U	1 U								
1,1-Dichloroethane	0.27	26	0.27	1 U	1 U	1 U	1 U								
1,1-Dichloroethene	0.33	100	0.33	1 U	1 U	1 U	1 U								
1,2,3-Trichlorobenzene	NS	NS	NS	1 U	1 U	1 U	1 U								
1,2,4-Trichlorobenzene	NS	NS	NS	1 U	1 U	1 U	1 U								
1,2,4-Trimethylbenzene	3.6	52	3.6	1 U	1 U	1 U	1 U								
1,2-Dibromo-3-Chloropropane	NS	NS	NS	1 U	1 U	1 U	1 U								
1.2-Dibromoethane (Ethylene Dibromide)	NS	NS	NS	1 U	1 U	1 U	1 U								
1,2-Dichlorobenzene	1.1	100	1.1	1 U	1 U	1 U	1 U								
1,2-Dichloroethane	0.02	3.1	0.02	1 U	1 U	1 U	1 U								
1,2-Dichloropropane	NS	NS	NS	1 U	1 U	1 U	1 U								
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	8.4	1 U	1 U	1 U	1 U								
1,3-Dichlorobenzene	2.4	49	2.4	1 U	1 U	1 U	10								
1,4-Dichlorobenzene	1.8	13	1.8	1 U	1 U	<u> </u>	1 U								
2-Hexanone	NS	NS	NS	5 U	5 U	5 U	5 U								
Acetone	0.05	100	0.05	<u> </u>	5 U	5 U	5 U								
Benzene	0.05	4.8	0.05	<u>1 U</u>	5 U 1 U	<u> </u>	1 U								
Bromochloromethane	0.06 NS	4.0 NS	0.06 NS	<u> </u>	1 U	<u> </u>	10								
Bromodichloromethane	NS	NS	NS	1 U	1 U	1 U	1 U								
Bromodichioromethane	NS	NS	NS	1 U	1 U	10	10								
	NS	NS	NS	1 U	1 U	10	10								
Bromomethane	NS	NS NS	NS	1 U		_									
Carbon Disulfide		2.4			1 U	<u>1 U</u>	1 U								
Carbon Tetrachloride	0.76	2.4	0.76	<u>1 U</u> 1 U	1 U 1 U	<u> </u>	1 U 1 U								
Chlorobenzene	1.1			-	-	-	-								
Chloroethane	NS	NS	NS	<u>1 U</u>	<u>1 U</u>	<u>1 U</u>	1 U								
Chloroform	0.37	49	0.37	<u>1 U</u>	1 U	<u>1 U</u>	<u>1 U</u>								
Chloromethane	NS	NS	NS	1 U	1 U	<u>1 U</u>	1 U								
Cis-1,2-Dichloroethylene	0.25	100	0.25	1 U	1 U	<u> </u>	1 U								
Cis-1,3-Dichloropropene	NS	NS	NS	<u>1 U</u>	1 U	<u>1 U</u>	1 U								
Cyclohexane	NS	NS	NS	1 U	1 U	1 U	1 U								
Cymene	NS	NS	NS	NR	NR	NR	NR								
Dibromochloromethane	NS	NS	NS	1 U	1 U	1 U	1 U								
Dichlorodifluoromethane	NS	NS	NS	1 U	1 U	1 UJ	1 U								
Ethylbenzene	1	41	1	1 U	1 U	1 U	1 U								
Isopropylbenzene (Cumene)	NS	NS	NS	1 U	1 U	1 U	1 U								
M,P-Xylenes	NS	NS	NS	1 U	1 U	1 U	1 U								
Methyl Acetate	NS	NS	NS	5 U	5 U	5 U	5 U								
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.12	5 U	5 U	5 U	5 U								
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	NS	5 U	5 U	5 U	5 U								
Methylcyclohexane	NS	NS	NS	1 U	1 U	1 U	1 U								
Methylene Chloride	0.05	100	<u>0.05</u>	<u>0.44</u> J	1 U	1 U	1 U								
N-Butylbenzene	12	100	12	1 U	1 U	1 U	1 U								
N-Propylbenzene	3.9	100	3.9	1 U	1 U	1 U	1 U								
O-Xylene (1,2-Dimethylbenzene)	NS	NS	NS	1 U	1 U	1 U	1 U								
Sec-Butylbenzene	11	100	11	1 U	1 U	1 U	1 U								
Styrene	NS	NS	NS	1 U	1 U	1 U	1 U								
T-Butylbenzene	5.9	100	5.9	1 U	1 U	1 U	1 U								
Tert-Butyl Methyl Ether	0.93	100	0.93	1 U	1 U	1 U	1 U								
Tetrachloroethylene (PCE)	1.3	19	<u>1.3</u>	1 U	1 U	1 U	1 U								
Toluene	0.7	100	0.7	1 U	1 U	1 U	1 U								
Trans-1,2-Dichloroethene	0.19	100	0.19	1 U	1 U	1 U	1 U								
Trans-1,3-Dichloropropene	NS	NS	NS	1 U	1 U	1 U	1 U								
Trichloroethylene (TCE)	0.47	21	0.47	1 U	1 U	1 U	1 U								
Trichlorofluoromethane	NS	NS	NS	1 U	1 U	1 U	1 U								
Vinyl Chloride	0.02	0.9	0.02	1 U	1 U	1 U	1 U								
Xylenes, Total	0.26	100	1.6	2 U	2 U	2 U	2 U								

Table 1 975 Nostrand Avenue

				f Volatile Organic Compounds			
			AKRF Sample ID	TB-01_20230214	TB-01_20230410	TB-01_20230412	TB-01_20230509
		L	aboratory Sample ID	460-274640-9	460-278010-19	460-278159-13	460-279980-5
			Date Sampled	2/14/2023	4/10/2023	4/12/2023	5/09/2023
			Dilution Factor	1	1	1	1
			Unit	µg/L	μg/L	μg/L	µg/L
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.68	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	NS	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	NS	NS	NS	1 U	1 U	1 U	1 U
1,1-Dichloroethane	0.27	26	0.27	1 U	1 U	1 U	1 U
1,1-Dichloroethene	0.33	100	0.33	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	NS	NS	NS	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	NS	NS	NS	1 U	1 U	1 U	1 U
1,2,4-Trimethylbenzene	3.6	52	3.6	1 U	1 U	1 U	1 U
1,2-Dibromo-3-Chloropropane	NS	NS	NS	1 U	1 U	1 U	1 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	NS	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1.1	100	1.1	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.02	3.1	0.02	1 U	1 U	1 U	1 U
1,2-Dichloropropane	NS	NS	NS	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	8.4	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	2.4	49	2.4	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1.8	13	1.8	1 U	1 U	1 U	1 U
2-Hexanone	NS	NS	NS	5 U	5 U	5 U	5 U
Acetone	0.05	100	0.05	5 U	5 U	5 U	5 U
Benzene	0.06	4.8	0.06	1 U	1 U	1 U	1 U
Bromochloromethane	NS	NS	NS	1 U	1 U	1 U	1 U
Bromodichloromethane	NS	NS	NS	1 U	1 U	1 U	1 U
Bromoform	NS	NS	NS	1 U	1 UJ	1 U	1 U
Bromomethane	NS	NS	NS	1 U	1 UJ	1 U	1 U
Carbon Disulfide	NS	NS	NS	1 U	1 U	1 U	1 U
Carbon Tetrachloride	0.76	2.4	0.76	1 U	1 U	1 U	1 U
Chlorobenzene	1.1	100	1.1	1 U	1 U	1 U	1 U
Chloroethane	NS	NS	NS	1 U	1 U	1 U	1 U
Chloroform	0.37	49	0.37	1 U	1 U	1 U	1 U
Chloromethane	NS	NS	NS	1 U	1 U	1 U	1 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	1 U	1 U	1 U	1 U
Cis-1,3-Dichloropropene	NS	NS	NS	1 U	1 U	1 U	1 U
Cyclohexane	NS	NS	NS	1 U	1 U	1 U	1 U
Cymene	NS	NS	NS	NR	NR	NR	NR
Dibromochloromethane	NS	NS	NS	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	NS	NS	NS	1 UJ	1 U	1 U	1 U
Ethylbenzene	1	41	1	1 U	1 U	1 U	1 U
Isopropylbenzene (Cumene)	NS	NS	NS	1 U	1 U	1 U	1 U
M,P-Xylenes	NS	NS	NS	1 U	1 U	1 U	1 U
Methyl Acetate	NS	NS	NS	5 U	5 U	5 U	5 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.12	<u> </u>	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	NS	5 U	5 U	5 U	5 U
Methylcyclohexane	NS	NS	NS	1 U	1 U	1 U	1 U
Methylene Chloride	0.05	100	0.05	1 U	1 U	<u>0.43 J</u>	0.39 J
N-Butylbenzene	12	100	12	1 U	1 U	<u>0.43 J</u> 1 U	<u>0.39 J</u> 1 U
N-Propylbenzene	3.9	100	3.9	<u> </u>	1 U	1 U	10
O-Xylene (1,2-Dimethylbenzene)		NS	NS	<u> </u>	10	1 U	10
Sec-Butylbenzene	11	100	11	1 U	1 U	1 U	10
Styrene	NS	NS	NS	<u>1 U</u>	10	1 U	10
T-Butylbenzene	5.9	100	5.9	1 U	1 U	1 U	1 U
Tert-Butyl Methyl Ether	0.93	100	0.93	1 U	1 U	1 U	1 U
Tetrachloroethylene (PCE)	1.3	100	1.3	1 U	1 U	1 U	10
		100	0.7	1 U	1 U	1 U	1 U
Toluene	0.7						
Trans-1,2-Dichloroethene	0.19	100	0.19	1 U	1 U	1 U	1 U
Trans-1,3-Dichloropropene	NS 0.47	NS	NS 0.47	1 U	<u>1 U</u>	1 U	1 U
Trichloroethylene (TCE)	0.47	21	0.47	<u>1 U</u>	10	1 U	1 U
Trichlorofluoromethane	NS	NS	NS	<u>1 U</u>	1 U	1 U	1 U
Vinyl Chloride	0.02	0.9	0.02	<u>1 U</u>	<u>1 U</u>	1 U	1 U
Xylenes, Total	0.26	100	1.6	2 U	2 U	2 U	2 U

		L	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit	TB-01_20230517 460-280490-6 5/17/2023 1 μg/L	ТВ-01_20230706 460-283756-8 7/06/2023 1 µg/L
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.68	1 U	1 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	1 U	1 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	NS	1 U	1 U
1,1,2-Trichloroethane	NS	NS	NS	1 U	1 U
1,1-Dichloroethane	0.27	26	0.27	1 U	1 U
1,1-Dichloroethene	0.33	100	0.33	1 U	1 U
1,2,3-Trichlorobenzene	NS	NS	NS	1 U	1 U
1,2,4-Trichlorobenzene	NS	NS	NS	1 U	1 U
1,2,4-Trimethylbenzene	3.6	52	3.6	1 U	1 U
1,2-Dibromo-3-Chloropropane	NS	NS	NS	1 U	1 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	NS	1 U	1 U
1,2-Dichlorobenzene	1.1	100	1.1	1 U	1 U
1,2-Dichloroethane	0.02	3.1	0.02	1 U	1 U
1,2-Dichloropropane	NS	NS	NS	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	8.4	1 U	1 U
1,3-Dichlorobenzene	2.4	49	2.4	1 U	1 U
1,4-Dichlorobenzene	1.8	13	1.8	1 U	1 U
2-Hexanone	NS	NS	NS	5 U	5 U
Acetone	0.05	100	<u>0.05</u>	5 U	5 U
Benzene	0.06	4.8	0.06	1 U	1 U
Bromochloromethane	NS	NS	NS	1 U	1 U
Bromodichloromethane	NS	NS	NS	1 U	1 U
Bromoform	NS	NS	NS	1 U	1 U
Bromomethane	NS	NS	NS	1 U	1 U
Carbon Disulfide	NS	NS	NS	<u> </u>	1 U
Carbon Tetrachloride	0.76	2.4	0.76	<u> </u>	1 U
Chlorobenzene	1.1	100	1.1	1 U	1 U
Chloroethane	NS	NS	NS	<u> </u>	1 U
Chloroform	0.37	49	0.37	<u> </u>	1 U
Chloromethane	NS	NS	NS	<u>1 U</u>	1 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	<u> </u>	1 U
Cis-1,3-Dichloropropene	NS	NS	NS	<u> </u>	1 U
Cyclohexane	NS	NS	NS	<u> </u>	1 U
Cymene	NS	NS	NS	NR	NR
Dibromochloromethane	NS	NS	NS	<u> </u>	1 U
Dichlorodifluoromethane	NS	NS	NS	1 U	1 U
Ethylbenzene	1	41 NS	1	<u> </u>	1 U 1 U
Isopropylbenzene (Cumene)	NS	NS	NS	1 U	
M,P-Xylenes Methyl Acetate	NS NS	NS NS	NS NS	<u> </u>	1 U 5 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.12	5 U	5 U
Methyl Isobutyl Ketone (2-Butanone) Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	0.12 NS	NS	0.12 NS	5 U	5 U
Methylcyclohexane	NS	NS	NS	<u> </u>	5 U 1 U
Methylene Chloride	0.05	100	0.05	1 U	1 U
N-Butylbenzene	12	100	12	1 U	1 U
N-Propylbenzene	3.9	100	3.9	1 U	1 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	NS	1 U	1 U
Sec-Butylbenzene	11	100	11	<u> </u>	1 U
Styrene	NS	NS	NS	1 U	1 U
T-Butvlbenzene	5.9	100	5.9	1 U	1 U
Tert-Butyl Methyl Ether	0.93	100	0.93	1 U	1 U
Tetrachloroethylene (PCE)	1.3	19	1.3	1 U	1 U
Toluene	0.7	100	0.7	1 U	1 U
Trans-1,2-Dichloroethene	0.19	100	0.19	1 U	1 U
Trans-1,3-Dichloropropene	NS	NS	NS	1 U	1 U
Trichloroethylene (TCE)	0.47	21	0.47	1 U	1 U
Trichlorofluoromethane	NS	NS	NS	1 U	1 U
Vinyl Chloride	0.02	0.9	0.02	1 U	1 U
Xylenes, Total	0.26	100	1.6	2 U	2 U

8				ical Results of Semivolatile Org				
			AKRF Sample ID	EP-01_15_20221229	EP-02_15_20221228	EP-03_15_20221228	EP-04_15_20221228	EP-X01_15_20221228
		Li	aboratory Sample ID Date Sampled	460-272204-1 12/29/2022	460-272140-1 12/28/2022	460-272140-2 12/28/2022	460-272140-3 12/28/2022	460-272140-11 12/28/2022
			Dilution Factor	12/29/2022	12/20/2022	12/28/2022	12/28/2022	12/28/2022
			Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1.2.4.5-Tetrachlorobenzene	NS	NS	NS	0.4 U	0.37 U	0.42 U	0.36 U	0.37 U
1,4-Dioxane (P-Dioxane)	0.1	13	0.1	0.04 U	0.037 U	0.042 U	0.036 U	0.037 U
2,3,4,6-Tetrachlorophenol	NS	NS	NS	0.4 U	0.37 U	0.42 U	0.36 U	0.37 U
2,4,5-Trichlorophenol	NS	NS	NS	0.4 U	0.37 U	0.42 U	0.36 U	0.37 U
2,4,6-Trichlorophenol	NS	NS	NS	0.16 U	0.15 U	0.17 U	0.15 U	0.15 U
2,4-Dichlorophenol	NS	NS	NS	0.16 U	0.15 U	0.17 U	0.15 U	0.15 U
2,4-Dimethylphenol	NS	NS	NS	0.4 U	0.37 U	0.42 U	0.36 U	0.37 U
2,4-Dinitrophenol	NS	NS	NS	0.32 U	0.3 UJ	0.34 UJ	0.29 UJ	0.3 UJ
2,4-Dinitrotoluene	NS	NS	NS	0.081 U	0.075 UJ	0.085 UJ	0.074 UJ	0.075 UJ
2,6-Dinitrotoluene	NS	NS	NS	0.081 U	0.075 UJ	0.085 UJ	0.074 UJ	0.075 UJ
2-Chloronaphthalene	NS	NS	NS	0.4 U	0.37 U	0.42 U	0.36 U	0.37 U
2-Chlorophenol	NS	NS	NS	0.4 U	0.37 U	0.42 U	0.36 U	0.37 U
2-Methylnaphthalene	NS	NS	NS	0.4 U	0.37 U	0.42 U	0.36 U	0.37 U
2-Methylphenol (O-Cresol)	0.33	100	0.33	0.4 U	0.37 U	0.42 U	0.36 U	0.37 U
2-Nitroaniline	NS	NS	NS	0.4 U	0.37 UJ	0.42 UJ	0.36 UJ	0.37 UJ
2-Nitrophenol	NS	NS	NS	0.4 U	0.37 U	0.42 U	0.36 U	0.37 U
3- And 4- Methylphenol (Total)	NS	NS	NS	0.4 U	0.37 U	0.42 U	0.36 U	0.37 U
3,3'-Dichlorobenzidine	NS	NS	NS	0.16 U	0.15 UJ	0.17 UJ	0.15 UJ	0.15 UJ
3-Nitroaniline	NS	NS	NS	0.4 U	0.37 UJ	0.42 UJ	0.36 UJ	0.37 UJ
4,6-Dinitro-2-Methylphenol	NS	NS	NS	0.32 U	0.3 UJ	0.34 UJ	0.29 UJ	0.3 UJ
4-Bromophenyl Phenyl Ether	NS	NS	NS	0.4 U	0.37 U	0.42 U	0.36 U	0.37 U
4-Chloro-3-Methylphenol	NS	NS	NS	0.4 U	0.37 U	0.42 U	0.36 U	0.37 U
4-Chloroaniline	NS	NS	NS	0.4 U	0.37 U	0.42 U	0.36 U	0.37 U
4-Chlorophenyl Phenyl Ether	NS	NS	NS	0.4 U	0.37 U	0.42 U	0.36 U	0.37 U
4-Methylphenol (P-Cresol)	0.33	100	0.33	0.4 U	0.37 U	0.42 U	0.36 U	0.37 U
4-Nitroaniline	NS	NS	NS	0.4 U	0.37 UJ	0.42 UJ	0.36 UJ	0.37 UJ
4-Nitrophenol	NS 20	NS 100	NS	0.81 U 0.012 J	0.75 UJ	0.85 UJ 0.42 U	0.74 UJ	0.75 UJ 0.37 U
Acenaphthene	100	100	98 107	0.012 J 0.014 J	0.034 J	0.42 U	0.36 U 0.36 U	0.37 U
Acenaphthylene	NS	NS	NS	0.4 U	0.015 J 0.37 U	0.42 U	0.36 U	0.37 U
Acetophenone	100	100	1,000	0.04 U 0.042 J	0.073 J	0.42 U	0.025 J	0.012 J
Anthracene Atrazine	NS	NS	NS	0.042 J 0.16 U	0.15 U	0.42 U 0.17 U	0.025 J 0.15 U	0.15 U
Benzaldehyde	NS	NS	NS	0.16 U 0.4 UJ	0.15 U 0.37 UJ	0.17 U 0.42 UJ	0.15 U 0.36 UJ	0.15 U 0.37 UJ
Benzo(a)Anthracene	1	1	1	0.4 05	0.22	0.42 0J 0.021 J	0.12 J	0.046
Benzo(a)Pyrene	1	1	22	0.24	0.22	0.021 J	0.12 J	0.046 0.035 J
Benzo(b)Fluoranthene	1	1	1.7	0.23	0.25	0.019 J	0.14 J	0.038
Benzo(g,h,i)Perylene	100	100	1,000	0.13 J	0.12 JL	0.015 J	0.071 J	0.024 J
Benzo(k)Fluoranthene	0.8	3.9	1.7	0.13	0.087	0.042 U	0.049 J	0.019 J
Benzyl Butyl Phthalate	NS	NS	NS	0.4 U	0.37 U	0.42 U	0.36 U	0.37 U
Biphenyl (Diphenyl)	NS	NS	NS	0.4 U	0.37 U	0.42 U	0.36 U	0.37 U
Bis(2-Chloroethoxy) Methane	NS	NS	NS	0.4 U	0.37 U	0.42 U	0.36 U	0.37 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	NS	0.04 U	0.037 U	0.042 U	0.036 U	0.037 U
Bis(2-Chloroisopropyl) Ether	NS	NS	NS	0.4 U	0.37 U	0.42 U	0.36 U	0.37 U
Bis(2-Ethylhexyl) Phthalate	NS	NS	NS	0.4 U	0.37 U	0.42 U	0.36 U	0.37 U
Caprolactam	NS	NS	NS	0.4 U	0.37 UJ	0.42 UJ	0.36 UJ	0.37 UJ
Carbazole	NS	NS	NS	0.021 J	0.03 J	0.42 U	0.36 U	0.37 U
Chrysene	1	3.9	1	0.29 J	0.23 J	0.013 J	0.13 J	0.037 J
Dibenz(a,h)Anthracene	0.33	0.33	1,000	0.035 J	0.039 J	0.042 UJ	0.021 J	0.037 UJ
Dibenzofuran	7	59	210	0.014 J	0.018 J	0.42 U	0.36 U	0.37 U
Diethyl Phthalate	NS	NS	NS	0.4 U	0.37 U	0.42 U	0.36 U	0.37 U
Dimethyl Phthalate	NS	NS	NS	0.4 U	0.37 U	0.42 U	0.36 U	0.37 U
Di-N-Butyl Phthalate	NS	NS	NS	0.4 U	0.37 U	0.42 U	0.36 U	0.37 U
Di-N-Octylphthalate	NS	NS	NS	0.4 U	0.37 U	0.42 U	0.36 U	0.37 U
Fluoranthene	100	100	1,000	0.47	0.52	0.025 J	0.27 J	0.089 J
Fluorene	30	100	386	0.4 U	0.026 J	0.42 U	0.36 U	0.37 U
Hexachlorobenzene	0.33	1.2	3.2	0.04 U	0.037 U	0.042 U	0.036 U	0.037 U
Hexachlorobutadiene	NS	NS	NS	0.081 U	0.075 U	0.085 U	0.074 U	0.075 U
Hexachlorocyclopentadiene	NS	NS	NS	0.4 U	0.37 UJ	0.42 U	0.36 U	0.37 U
Hexachloroethane	NS	NS	NS	0.04 U	0.037 U	0.042 U	0.036 U	0.037 U
Indeno(1,2,3-c,d)Pyrene	0.5	0.5	8.2 NS	0.17	0.14 J	0.016 J	0.082 J	0.028 J
Isophorone	NS 12	NS 100	NS 12	0.16 U	0.15 U	0.17 U	0.15 U	0.15 U
Naphthalene	12	100	12 NS	0.032 J	0.011 J	0.42 U	0.0075 J	0.37 U
Nitrobenzene N-Nitrosodi-N-Propylamine	NS NS	NS NS	NS NS	0.04 U 0.04 U	0.037 U	0.042 U	0.036 U	0.037 U
· / /	NS NS		NS NS		0.037 U	0.042 U	0.036 U	0.037 U
N-Nitrosodiphenylamine		NS 6.7		0.4 U	0.37 U	0.42 U	0.36 U	0.37 U
Pentachlorophenol Phonophenol	0.8	6.7 100	0.8	0.32 U	0.3 U 0.32 J	0.34 U 0.013 J	0.29 U	0.3 U 0.049 J
Phenanthrene Phenol	0.33	100	1,000 0.33	0.2 J 0.4 U	0.32 J 0.37 U	0.013 J 0.42 U	0.15 J 0.36 U	0.049 J 0.37 U
Pyrene	100	100	1,000	0.43	0.37 U 0.36 J	0.42 0 0.018 J	0.36 U 0.22 J	0.061 J
	100	100	1,000	0.40	0.30 J	0.010 J	U.22 J	0.001 J

		L	AKRF Sample ID aboratory Sample ID	EP-05_15_20221229 460-272204-2	EP-06_15_20221228 460-272140-4	EP-07_15_20221228 460-272140-5	EP-08_15_20221228 460-272140-6	EP-09_15_20221229 460-272204-3
			Date Sampled Dilution Factor	12/29/2022 1	12/28/2022 1	12/28/2022 1	12/28/2022 1	12/29/2022 1
			Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Compound I	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q				
1,2,4,5-Tetrachlorobenzene	NS	NS	NS	0.36 U	0.37 U	0.38 U	0.37 U	0.36 U
1,4-Dioxane (P-Dioxane)	0.1	13	0.1	0.036 U	0.037 U	0.038 U	0.037 U	0.036 U
2,3,4,6-Tetrachlorophenol	NS	NS	NS	0.36 U	0.37 U	0.38 U	0.37 U	0.36 U
2,4,5-Trichlorophenol	NS	NS	NS	0.36 U	0.37 U	0.38 U	0.37 U	0.36 U
2,4,6-Trichlorophenol 2,4-Dichlorophenol	NS NS	NS NS	NS NS	0.15 U 0.15 U				
2,4-Dimethylphenol	NS	NS	NS	0.36 U	0.13 U	0.38 U	0.13 U	0.36 U
2,4-Dinitrophenol	NS	NS	NS	0.29 U	0.3 UJ	0.31 UJ	0.3 UJ	0.30 U
2,4-Dinitrotoluene	NS	NS	NS	0.074 U	0.075 UJ	0.078 UJ	0.076 UJ	0.074 U
2,6-Dinitrotoluene	NS	NS	NS	0.074 U	0.075 UJ	0.078 UJ	0.076 UJ	0.074 U
2-Chloronaphthalene	NS	NS	NS	0.36 U	0.37 U	0.38 U	0.37 U	0.36 U
2-Chlorophenol	NS	NS	NS	0.36 U	0.37 U	0.38 U	0.37 U	0.36 U
2-Methylnaphthalene	NS	NS	NS	0.36 U	0.37 U	0.051 J	0.37 U	0.36 U
2-Methylphenol (O-Cresol)	0.33	100	0.33	0.36 U	0.37 U	0.38 U	0.37 U	0.36 U
2-Nitroaniline	NS	NS	NS	0.36 U	0.37 U	0.38 UJ	0.37 UJ	0.36 U
2-Nitrophenol	NS	NS	NS	0.36 U	0.37 UJ	0.38 U	0.37 U	0.36 U
3- And 4- Methylphenol (Total)	NS	NS	NS	0.36 U 0.15 U	0.37 U	0.38 U	0.37 U	0.36 U
3,3'-Dichlorobenzidine 3-Nitroaniline	NS NS	NS NS	NS NS	0.15 U 0.36 U	0.15 UJ 0.37 UJ	0.15 UJ 0.38 UJ	0.15 UJ 0.37 UJ	0.15 U 0.36 U
4,6-Dinitro-2-Methylphenol	NS	NS	NS	0.36 U 0.29 U	0.37 UJ 0.3 UJ	0.38 UJ 0.31 UJ	0.37 UJ 0.3 UJ	0.36 U 0.29 U
4-Bromophenyl Phenyl Ether	NS	NS	NS	0.36 U	0.3 U	0.38 U	0.37 U	0.36 U
4-Chloro-3-Methylphenol	NS	NS	NS	0.36 U	0.37 U	0.38 U	0.37 U	0.36 U
4-Chloroaniline	NS	NS	NS	0.36 U	0.37 U	0.38 U	0.37 U	0.36 U
4-Chlorophenyl Phenyl Ether	NS	NS	NS	0.36 U	0.37 U	0.38 U	0.37 U	0.36 U
4-Methylphenol (P-Cresol)	0.33	100	0.33	0.36 U	0.37 U	0.38 U	0.37 U	0.36 U
4-Nitroaniline	NS	NS	NS	0.36 U	0.37 UJ	0.38 UJ	0.37 UJ	0.36 U
4-Nitrophenol	NS	NS	NS	0.74 U	0.75 UJ	0.78 UJ	0.76 UJ	0.74 U
Acenaphthene	20	100	98	0.36 U	0.37 U	0.078 J	0.026 J	0.36 U
Acenaphthylene	100	100	107	0.36 U	0.013 J	0.037 J	0.018 J	0.36 U
Acetophenone	NS	NS	NS	0.36 U	0.37 U	0.38 U	0.37 U	0.36 U
Anthracene Atrazine	100 NS	100 NS	1,000 NS	0.36 U 0.15 U	0.018 J 0.15 U	0.15 J 0.15 U	0.049 J 0.15 U	0.026 J 0.15 U
Benzaldehyde	NS	NS	NS	0.36 UJ	0.15 U 0.37 UJ	0.15 U 0.38 UJ	0.15 U 0.37 UJ	0.15 U 0.36 UJ
Benzo(a)Anthracene	1	1	1	0.054	0.089	0.3	0.14	0.11
Benzo(a)Pyrene	1	1	22	0.046	0.089	0.26	0.13	0.096
Benzo(b)Fluoranthene	1	1	1.7	0.053	0.12	0.32	0.16	0.12
Benzo(g,h,i)Perylene	100	100	1,000	0.029 J	0.063 J	0.15 J	0.073 J	0.059 J
Benzo(k)Fluoranthene	0.8	3.9	1.7	0.025 J	0.04	0.1	0.057	0.054
Benzyl Butyl Phthalate	NS	NS	NS	0.36 U	0.37 U	0.38 U	0.37 U	0.36 U
Biphenyl (Diphenyl)	NS	NS	NS	0.36 U	0.37 U	0.014 J	0.37 U	0.36 U
Bis(2-Chloroethoxy) Methane	NS	NS	NS	0.36 U	0.37 U	0.38 U	0.37 U	0.36 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS NS	NS	NS NS	0.036 U	0.037 U 0.37 U	0.038 U 0.38 U	0.037 U 0.37 U	0.036 U
Bis(2-Chloroisopropyl) Ether Bis(2-Ethylhexyl) Phthalate	NS	NS NS	NS	0.36 U 0.36 U	0.37 U	0.38 U	0.37 U	0.36 U 0.36 U
Caprolactam	NS	NS	NS	0.36 U	0.37 UJ	0.38 UJ	0.37 UJ	0.36 U
Carbazole	NS	NS	NS	0.36 U	0.37 U	0.078 J	0.023 J	0.36 U
Chrysene	1	3.9	1	0.053 J	0.095 J	0.3 J	0.14 J	0.12 J
Dibenz(a,h)Anthracene	0.33	0.33	1,000	0.036 U	0.019 J	0.049 J	0.023 J	0.017 J
Dibenzofuran	7	59	210	0.36 U	0.37 U	0.073 J	0.017 J	0.36 U
Diethyl Phthalate	NS	NS	NS	0.36 U	0.37 U	0.38 U	0.37 U	0.36 U
Dimethyl Phthalate	NS	NS	NS	0.36 U	0.37 U	0.38 U	0.37 U	0.36 U
Di-N-Butyl Phthalate	NS	NS	NS	0.36 U	0.37 U	0.38 U	0.37 U	0.36 U
Di-N-Octylphthalate	NS 100	NS 100	NS 1,000	0.36 U 0.081 J	0.37 U	0.38 U	0.37 U	0.36 U
Fluoranthene Fluorene	<u>100</u> 30	100	1,000	0.081 J 0.36 U	0.19 J 0.37 U	0.73 0.092 J	0.32 J 0.028 J	0.19 J 0.36 U
Hexachlorobenzene	0.33	1.2	3.2	0.036 U	0.037 U	0.032 J 0.038 U	0.028 J 0.037 U	0.036 U
Hexachlorobutadiene	NS	NS	NS	0.074 U	0.075 U	0.078 U	0.076 U	0.074 U
Hexachlorocyclopentadiene	NS	NS	NS	0.36 U	0.37 U	0.38 U	0.37 U	0.36 U
Hexachloroethane	NS	NS	NS	0.036 U	0.037 U	0.038 U	0.037 U	0.036 U
Indeno(1,2,3-c,d)Pyrene	0.5	0.5	8.2	0.034 J	0.074 J	0.19 J	0.091 J	0.066
Isophorone	NS	NS	NS	0.15 U				
Naphthalene	12	100	12	0.36 U	0.015 J	0.16 J	0.017 J	0.36 U
Nitrobenzene	NS	NS	NS	0.036 U	0.037 U	0.038 U	0.037 U	0.036 U
			NS	0.036 U	0.037 U	0.038 U	0.037 U	0.036 U
N-Nitrosodi-N-Propylamine	NS	NS				0.00		
N-Nitrosodiphenylamine	NS NS	NS	NS	0.36 U	0.37 U	0.38 U	0.37 U	0.36 U
N-Nitrosodiphenylamine Pentachlorophenol	NS NS 0.8	NS 6.7	NS 0.8	0.36 U 0.29 U	0.37 U 0.3 U	0.31 U	0.37 U 0.3 U	0.36 U 0.29 U
N-Nitrosodiphenylamine	NS NS	NS	NS	0.36 U	0.37 U		0.37 U	0.36 U

0				Ical Results of Semivolatile Org				55.44.45.00004000
			AKRF Sample ID	EP-10_15_20221228	EP-11_15_20221228	EP-12_15_20221229	EP-13_15_20221228	EP-14_15_20221229
		La	boratory Sample ID	460-272140-7	460-272140-8	460-272204-4	460-272140-9	460-272204-5
			Date Sampled	12/28/2022	12/28/2022	12/29/2022	12/28/2022	12/29/2022
			Dilution Factor	1	1	1	1	1
			Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Compound	NYSDEC UUSCO		NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS	NS	0.4 U	0.41 U	0.37 U	0.39 U	0.37 U
1,4-Dioxane (P-Dioxane)	0.1	13	0.1	0.04 U	0.041 U	0.037 U	0.039 U	0.037 U
2,3,4,6-Tetrachlorophenol	NS	NS	NS	0.4 U	0.41 U	0.37 U	0.39 U	0.37 U
2,4,5-Trichlorophenol	NS	NS	NS	0.4 U	0.41 U	0.37 U	0.39 U	0.37 U
2,4,6-Trichlorophenol	NS	NS	NS	0.16 U	0.16 U	0.15 U	0.16 U	0.15 U
2,4-Dichlorophenol	NS	NS	NS	0.16 U	0.16 U	0.15 U	0.16 U	0.15 U
2,4-Dimethylphenol	NS	NS	NS	0.4 U	0.41 U	0.37 U	0.39 U	0.37 U
2,4-Dinitrophenol	NS	NS	NS	0.32 UJ	0.33 U	0.3 U	0.31 UJ	0.3 U
2,4-Dinitrotoluene	NS	NS	NS	0.081 UJ	0.083 U	0.075 U	0.079 UJ	0.075 U
2,6-Dinitrotoluene	NS	NS	NS	0.081 UJ	0.083 U	0.075 U	0.079 UJ	0.075 U
2-Chloronaphthalene	NS	NS	NS	0.4 U	0.41 U	0.37 U	0.39 U	0.37 U
2-Chlorophenol	NS	NS	NS	0.4 U	0.41 U	0.37 U	0.39 U	0.37 U
2-Methylnaphthalene	NS	NS	NS	0.4 U	0.038 J	0.011 J	0.09 J	0.37 U
2-Methylphenol (O-Cresol)	0.33	100	0.33	0.4 U	0.41 U	0.37 U	0.39 U	0.37 U
2-Nitroaniline	NS	NS	NS	0.4 UJ	0.41 U	0.37 U	0.39 UJ	0.37 U
2-Nitrophenol	NS	NS	NS	0.4 U	0.41 U	0.37 U	0.39 U	0.37 U
3- And 4- Methylphenol (Total)	NS	NS	NS	0.4 U	0.41 U	0.37 U	0.39 U	0.37 U
3,3'-Dichlorobenzidine	NS	NS	NS	0.4 U 0.16 UJ	0.16 U	0.15 U	0.39 U 0.16 UJ	0.15 U
3.3-Dichloroberizidine 3-Nitroaniline	NS	NS	NS	0.4 UJ	0.10 U	0.15 U	0.39 UJ	0.37 U
4,6-Dinitro-2-Methylphenol	NS	NS	NS	0.32 UJ	0.33 U	0.3 U	0.39 UJ	0.3 U
4,0-Dinitro-2-Methylphenol 4-Bromophenyl Phenyl Ether	NS	NS	NS	0.32 UJ 0.4 U	0.33 U 0.41 U	0.3 U	0.31 UJ 0.39 U	0.3 U
4-Bromophenyi Phenyi Ether 4-Chloro-3-Methylphenol	NS	NS	NS	0.4 U	0.41 U	0.37 U	0.39 U	0.37 U
4-Chloroaniline	NS	NS	NS	0.4 U	0.41 U	0.37 U	0.39 U	0.37 U
4-Chlorophenyl Phenyl Ether 4-Methylphenol (P-Cresol)	NS 0.33	NS 100	NS 0.33	0.4 U 0.4 U	0.41 U 0.41 U	0.37 U 0.37 U	0.39 U 0.39 U	0.37 U 0.37 U
4-Nitroaniline	NS	NS	NS	0.4 UJ	0.41 U	0.37 U	0.39 UJ	0.37 U
4-Nitrophenol	NS	NS	NS	0.81 UJ	0.83 U	0.75 U	0.79 UJ	0.75 U
Acenaphthene	20	100	98	0.014 J	0.07 J	0.031 J	0.18 J	0.37 U
Acenaphthylene	100	100	107	0.015 J	0.025 J	0.37 U	0.053 J	0.37 U
Acetophenone	NS	NS	NS	0.4 U	0.41 U	0.37 U	0.39 U	0.37 U
Anthracene	100	100	1,000	0.042 J	0.19 J	0.064 J	0.35 J	0.022 J
Atrazine	NS	NS	NS	0.16 U	0.16 U	0.15 U	0.16 U	0.15 U
Benzaldehyde	NS	NS	NS	0.4 UJ	0.41 UJ	0.37 UJ	0.39 UJ	0.37 UJ
Benzo(a)Anthracene	1	1	1	0.15	0.38	0.18	0.87	0.065
Benzo(a)Pyrene	1	1	22	0.13	0.34	0.17	0.78	0.053
Benzo(b)Fluoranthene	1	1	1.7	0.15	0.42	0.23	0.92	0.064
Benzo(g,h,i)Perylene	100	100	1,000	0.091 J	0.21 J	0.11 J	0.44	0.034 J
Benzo(k)Fluoranthene	0.8	3.9	1.7	0.055	0.12	0.078	0.38	0.031 J
Benzyl Butyl Phthalate	NS	NS	NS	0.4 U	0.41 UJ	0.37 U	0.39 U	0.37 U
Biphenyl (Diphenyl)	NS	NS	NS	0.4 U	0.41 U	0.37 U	0.027 J	0.37 U
Bis(2-Chloroethoxy) Methane	NS	NS	NS	0.4 U	0.41 U	0.37 U	0.39 U	0.37 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	NS	0.04 U	0.041 U	0.037 U	0.039 U	0.037 U
Bis(2-Chloroisopropyl) Ether	NS	NS	NS	0.4 U	0.41 UJ	0.37 U	0.39 U	0.37 U
Bis(2-Ethylhexyl) Phthalate	NS	NS	NS	0.4 U	0.41 U	0.37 U	0.39 U	0.37 U
Caprolactam	NS	NS	NS	0.4 UJ	0.41 U	0.37 U	0.39 UJ	0.37 U
Carbazole	NS	NS	NS	0.4 U	0.07 J	0.028 J	0.17 J	0.37 U
Chrysene	1	3.9	1	0.14 J	0.37 J	0.16 J	0.88	0.069 J
Dibenz(a,h)Anthracene	0.33	0.33	1,000	0.026 J	0.06	0.031 J	0.13 J	0.037 U
Dibenzofuran	7	59	210	0.4 U	0.057 J	0.022 J	0.14 J	0.37 U
Diethyl Phthalate	NS	NS	NS	0.4 U	0.41 U	0.37 U	0.39 U	0.37 U
Dimethyl Phthalate	NS	NS	NS	0.4 U	0.41 U	0.37 U	0.39 U	0.37 U
Di-N-Butyl Phthalate	NS	NS	NS	0.4 U	0.41 U	0.37 U	0.39 U	0.37 U
Di-N-Octylphthalate	NS	NS	NS	0.4 U	0.41 UJ	0.37 U	0.39 U	0.37 U
Fluoranthene	100	100	1,000	0.28 J	0.64	0.35 J	2	0.11 J
Fluorene	30	100	386	0.015 J	0.09 J	0.031 J	0.19 J	0.37 U
Hexachlorobenzene	0.33	1.2	3.2	0.04 U	0.041 U	0.037 U	0.039 U	0.037 U
Hexachlorobutadiene	NS	NS	NS	0.081 U	0.083 U	0.075 U	0.079 U	0.075 U
Hexachlorocyclopentadiene	NS	NS	NS	0.4 U	0.41 UJ	0.37 U	0.39 U	0.37 U
Hexachloroethane	NS	NS	NS	0.04 U	0.041 U	0.037 U	0.039 U	0.037 U
Indeno(1,2,3-c,d)Pyrene	0.5	0.5	8.2	0.1 J	0.24 J	0.14	0.53 J	0.042
Isophorone	NS	NS	NS	0.16 U	0.16 U	0.14 0.15 U	0.16 U	0.15 U
Naphthalene	12	100	12	0.016 J	0.088 J	0.032 J	0.18 J	0.011 J
Nitrobenzene	NS	NS	NS	0.04 U	0.041 U	0.037 U	0.039 U	0.037 U
N-Nitrosodi-N-Propylamine	NS	NS	NS	0.04 U	0.041 UJ	0.037 U	0.039 U	0.037 U
N-Nitrosodiphenylamine	NS	NS	NS	0.4 U	0.41 U	0.37 U	0.39 U	0.037 U
N-Nitrosodiphenylamine Pentachlorophenol			0.8		0.41 U 0.33 U	0.37 U 0.3 U		0.37 U 0.3 U
	0.8	6.7 100		0.32 U 0.2 J		0.3 U 0.27 J	0.31 U	
Phenanthrene Dhenel	100		1,000		0.67		2	0.086 J
Phenol Puropo	0.33	100	0.33	0.4 U	0.41 U	0.37 U	0.39 U	0.37 U
Pyrene	100	100	1,000	0.23 J	0.74	0.32 J	1.9	0.1 J

			AKRF Sample ID	EP-15 15 20221229	EP-16 15 20221229	EP-16 15 20221229	EP-17 15 20221229	EP-18_15_20221228
		Li	aboratory Sample ID	460-272204-6	460-272204-7	460-272204-7	460-272204-8	460-272140-10
			Date Sampled	12/29/2022	12/29/2022	12/29/2022	12/29/2022	12/28/2022
			Dilution Factor	1	1	5	1	1
0		NIXODEO DDOOO	Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
			NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS	NS	0.36 U	0.39 U	NR	0.38 U	0.37 U
1.4-Dioxane (P-Dioxane) 2.3.4.6-Tetrachlorophenol	0.1 NS	13 NS	0.1 NS	0.036 U 0.36 U	0.039 U 0.39 U	NR NR	0.038 U 0.38 U	0.037 U 0.37 U
2,4,5-Trichlorophenol	NS	NS	NS	0.36 U	0.39 U	NR	0.38 U	0.37 U
2,4,6-Trichlorophenol	NS	NS	NS	0.15 U	0.16 U	NR	0.15 U	0.15 U
2,4-Dichlorophenol	NS	NS	NS	0.15 U	0.16 U	NR	0.15 U	0.15 U
2,4-Dimethylphenol	NS	NS	NS	0.36 U	0.21 J	NR	0.38 U	0.37 U
2,4-Dinitrophenol	NS	NS	NS	0.29 U	0.32 U	NR	0.31 U	0.3 UJ
2,4-Dinitrotoluene	NS	NS	NS	0.073 U	0.08 U	NR	0.078 U	0.075 UJ
2,6-Dinitrotoluene	NS	NS	NS	0.073 U	0.08 U	NR	0.078 U	0.075 UJ
2-Chloronaphthalene	NS	NS	NS	0.36 U	0.39 U	NR	0.38 U	0.37 U
2-Chlorophenol	NS	NS	NS	0.36 U	0.39 U	NR	0.38 U	0.37 U
2-Methylnaphthalene	NS 0.33	NS 100	NS 0.33	0.36 U 0.36 U	2.3 0.12 J	NR NR	0.38 U 0.38 U	0.015 J 0.37 U
2-Methylphenol (O-Cresol) 2-Nitroaniline	0.33 NS		0.33 NS	0.36 U	0.12 J 0.39 U	NR NR	0.38 U	0.37 U 0.37 UJ
2-Nitrophenol	NS	NS	NS	0.36 U	0.39 U	NR	0.38 U	0.37 U
3- And 4- Methylphenol (Total)	NS	NS	NS	0.36 U	0.29 J	NR	0.38 U	0.37 U
3,3'-Dichlorobenzidine	NS	NS	NS	0.15 U	0.16 U	NR	0.15 U	0.15 UJ
3-Nitroaniline	NS	NS	NS	0.36 U	0.39 U	NR	0.38 U	0.37 UJ
4,6-Dinitro-2-Methylphenol	NS	NS	NS	0.29 U	0.32 U	NR	0.31 U	0.3 UJ
4-Bromophenyl Phenyl Ether	NS	NS	NS	0.36 U	0.39 U	NR	0.38 U	0.37 U
4-Chloro-3-Methylphenol	NS	NS	NS	0.36 U	0.39 U	NR	0.38 U	0.37 U
4-Chloroaniline	NS	NS	NS	0.36 U	0.39 U	NR	0.38 U	0.37 U
4-Chlorophenyl Phenyl Ether	NS	NS	NS	0.36 U	0.39 U	NR	0.38 U	0.37 U
4-Methylphenol (P-Cresol)	0.33	100	0.33	0.36 U	0.29 J	NR	0.38 U	0.37 U
4-Nitroaniline 4-Nitrophenol	NS NS	NS NS	NS NS	0.36 U 0.73 U	0.39 U 0.8 U	NR NR	0.38 U 0.78 U	0.37 UJ 0.75 UJ
Acenaphthene	20	100	98	0.022 J	2.7	NR	0.38 U	0.065 J
Acenaphthylene	100	100	107	0.36 U	1	NR	0.38 U	0.02 J
Acetophenone	NS	NS	NS	0.36 U	0.39 U	NR	0.38 U	0.37 U
Anthracene	100	100	1,000	0.05 J	5.8	NR	0.38 U	0.14 J
Atrazine	NS	NS	NS	0.15 U	0.16 U	NR	0.15 U	0.15 U
Benzaldehyde	NS	NS	NS	0.36 UJ	0.39 UJ	NR	0.38 UJ	0.37 UJ
Benzo(a)Anthracene	1	1	1	0.16	7.3	NR	0.016 J	0.36
Benzo(a)Pyrene	1	1	22	0.14	6.2	NR	0.038 U	0.33
Benzo(b)Fluoranthene	1	1	1.7	0.17	7.3	NR	0.012 J	0.39
Benzo(g,h,i)Perylene Benzo(k)Fluoranthene	100 0.8	100 3.9	1,000 1.7	0.089 J 0.08	3.3 2.8	NR NR	0.38 U 0.038 U	0.2 J 0.13
Benzyl Butyl Phthalate	NS	NS	NS	0.36 U	0.39 U	NR	0.38 U	0.13 0.37 U
Biphenyl (Diphenyl)	NS	NS	NS	0.36 U	0.59	NR	0.38 U	0.37 U
Bis(2-Chloroethoxy) Methane	NS	NS	NS	0.36 U	0.39 U	NR	0.38 U	0.37 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	NS	0.036 U	0.039 U	NR	0.038 U	0.037 U
Bis(2-Chloroisopropyl) Ether	NS	NS	NS	0.36 U	0.39 U	NR	0.38 U	0.37 U
Bis(2-Ethylhexyl) Phthalate	NS	NS	NS	0.36 U	0.39 U	NR	0.38 U	0.37 U
Caprolactam	NS	NS	NS	0.36 U	0.39 U	NR	0.38 U	0.37 UJ
Carbazole	NS	NS	NS	0.022 J	2.6	NR	0.38 U	0.061 J
Chrysene	1	3.9	1	0.17 J	6	NR	0.0099 J	0.33 J
Dibenz(a,h)Anthracene Dibenzofuran	0.33 7	0.33	1,000 210	0.019 J 0.016 J	1.1 3.2	NR NR	0.038 U 0.38 U	0.062 J 0.042 J
Dibenzoturan Diethvl Phthalate	NS /	NS	210 NS	0.016 J 0.36 U	0.39 U	NR	0.38 U	0.042 J 0.37 U
Dimethyl Phthalate	NS	NS	NS	0.36 U	0.39 U	NR	0.38 U	0.37 U
Di-N-Butyl Phthalate	NS	NS	NS	0.36 U	0.39 U	NR	0.38 U	0.37 U
Di-N-Octylphthalate	NS	NS	NS	0.36 U	0.39 U	NR	0.38 U	0.37 U
Fluoranthene	100	100	1,000	0.32 J	NR	15 D	0.016 J	0.77
Fluorene	30	100	386	0.023 J	4	NR	0.38 U	0.065 J
Hexachlorobenzene	0.33	1.2	3.2	0.036 U	0.039 U	NR	0.038 U	0.037 U
Hexachlorobutadiene	NS	NS	NS	0.073 U	0.08 U	NR	0.078 U	0.075 U
Hexachlorocyclopentadiene	NS	NS	NS	0.36 U	0.39 U	NR	0.38 U	0.37 U
Hexachloroethane	NS	NS	NS	0.036 U	0.039 U	NR	0.038 U	0.037 U
Indeno(1,2,3-c,d)Pyrene	0.5 NS	0.5 NS	8.2 NS	<u>0.11</u> 0.15 U	4.1 0.16 U	NR NR	0.038 U 0.15 U	0.24 J 0.15 U
Isophorone Naphthalene	NS 12	100	NS 12	0.15 U 0.018 J	0.16 U 6.9	NR NR	0.15 U 0.38 U	0.15 U 0.033 J
Nitrobenzene	NS	NS	NS	0.018 J 0.036 U	0.039 U	NR	0.038 U	0.033 J 0.037 U
N-Nitrosodi-N-Propylamine	NS	NS	NS	0.036 U	0.039 U	NR	0.038 U	0.037 U
N-Nitrosodiphenylamine	NS	NS	NS	0.36 U	0.39 U	NR	0.38 U	0.37 U
Pentachlorophenol	0.8	6.7	0.8	0.29 U	0.32 U	NR	0.31 U	0.3 U
Phenanthrene	100	100	1,000	0.23 J	NR	18 D	0.011 J	0.59
Phenol	0.33	100	0.33	0.36 U	0.16 J	NR	0.38 U	0.37 U
Pyrene	100	100	1,000	0.29 J	NR	15 D	0.015 J	0.62

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			AKRF Sample ID	EP-19_15_20221229 460-272204-9	EP-20_15_20221229	EP-21_15_20230103	EP-22_15_20230103	EP-X02_15_20230103
		Li	aboratory Sample ID Date Sampled	12/29/2022	460-272204-10 12/29/2022	460-272291-1 1/03/2023	460-272291-2 1/03/2023	460-272291-11 1/03/2023
			Dilution Factor	12/29/2022	12/29/2022	1/03/2023	1/03/2023	1/03/2023
			Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS	NS	0.37 U	0.42 U	0.38 U	0.38 U	0.38 U
1,4-Dioxane (P-Dioxane)	0.1	13	0.1	0.037 U	0.42 U	0.038 U	0.038 U	0.038 U
2,3,4,6-Tetrachlorophenol	NS	NS	NS	0.37 U	0.42 U	0.38 U	0.38 U	0.38 U
2,4,5-Trichlorophenol	NS	NS	NS	0.37 U	0.42 U	0.38 U	0.38 U	0.38 U
2,4,6-Trichlorophenol	NS	NS	NS	0.15 U	0.17 U	0.15 U	0.15 U	0.15 U
2,4-Dichlorophenol	NS	NS	NS	0.15 U	0.17 U	0.15 U	0.15 U	0.15 U
2,4-Dimethylphenol	NS	NS	NS	0.37 U	0.42 U	0.38 U	0.38 U	0.38 U
2,4-Dinitrophenol	NS	NS	NS	0.3 U	0.34 U	0.31 R	0.31 U	0.3 U
2,4-Dinitrotoluene	NS	NS	NS	0.076 U	0.085 U	0.078 UJ	0.077 UJ	0.077 UJ
2,6-Dinitrotoluene	NS	NS	NS	0.076 U	0.085 U	0.078 U	0.077 U	0.077 U
2-Chloronaphthalene	NS	NS	NS	0.37 U	0.42 U	0.38 U	0.38 U	0.38 U
2-Chlorophenol	NS	NS	NS	0.37 U	0.42 U	0.38 U	0.38 U	0.38 U
2-Methylnaphthalene	NS	NS	NS	0.37 U	0.42 U	0.013 J	0.38 U	0.38 U
2-Methylphenol (O-Cresol)	0.33	100	0.33	0.37 U	0.42 U	0.38 U	0.38 U	0.38 U
2-Nitroaniline	NS	NS	NS	0.37 U	0.42 U	0.38 U	0.38 U	0.38 U
2-Nitrophenol	NS	NS	NS	0.37 U	0.42 U	0.38 U	0.38 U	0.38 U
3- And 4- Methylphenol (Total)	NS	NS	NS	0.37 U	0.42 U	0.38 U	0.38 U	0.38 U
3.3'-Dichlorobenzidine	NS	NS	NS	0.15 U	0.17 U	0.15 U	0.15 U	0.15 U
3-Nitroaniline	NS	NS	NS	0.37 U	0.42 U	0.38 U	0.38 U	0.38 U
4,6-Dinitro-2-Methylphenol	NS	NS	NS	0.3 U	0.34 U	0.31 UJ	0.31 U	0.3 U
4-Bromophenyl Phenyl Ether	NS	NS	NS	0.37 U	0.42 U	0.38 U	0.38 U	0.38 U
4-Chloro-3-Methylphenol	NS	NS	NS	0.37 U	0.42 U	0.38 U	0.38 U	0.38 U
4-Chloroaniline	NS	NS	NS	0.37 U	0.42 U	0.38 UJ	0.38 UJ	0.38 UJ
4-Chlorophenyl Phenyl Ether	NS	NS	NS	0.37 U	0.42 U	0.38 U	0.38 U	0.38 U
4-Methylphenol (P-Cresol)	0.33	100	0.33	0.37 U	0.42 U	0.38 U	0.38 U	0.38 U
4-Nitroaniline	NS	NS	NS	0.37 U	0.42 U	0.38 U	0.38 U	0.38 U
4-Nitrophenol	NS	NS	NS	0.76 U	0.85 U	0.78 U	0.77 U	0.77 U
Acenaphthene	20	100	98	0.011 J	0.016 J	0.027 J	0.38 U	0.38 U
Acenaphthylene	100	100	107	0.37 U	0.015 J	0.011 J	0.38 U	0.38 U
Acetophenone	NS	NS	NS	0.37 U	0.42 U	0.38 U	0.38 U	0.38 U
Anthracene	100	100	1,000	0.028 J	0.054 J	0.065 J	0.38 U	0.38 U
Atrazine	NS	NS	NS	0.15 U	0.17 U	0.15 U	0.15 U	0.15 U
Benzaldehyde	NS	NS	NS	0.37 UJ	0.42 UJ	0.38 UJ	0.38 UJ	0.38 UJ
Benzo(a)Anthracene	1	1	1	0.11	0.33	0.2	0.03 J	0.024 J
Benzo(a)Pyrene	1	1	22	0.087	0.32	0.19	0.021 J	0.013 J
Benzo(b)Fluoranthene	1	1	1.7	0.1	0.45	0.24	0.028 J	0.015 J
Benzo(g,h,i)Perylene	100	100	1,000	0.052 J	0.2 J	0.12 JL	0.012 J	0.014 J
Benzo(k)Fluoranthene	0.8	3.9 NS	1.7 NS	0.048 0.37 U	0.15 0.42 U	0.095 0.38 UJ	0.0087 J	0.015 J
Benzyl Butyl Phthalate Biphenyl (Diphenyl)	NS NS	NS	NS	0.37 U	0.42 U	0.38 UJ 0.38 U	0.38 UJ 0.38 U	0.38 UJ 0.38 U
Bis(2-Chloroethoxy) Methane	NS	NS	NS	0.37 U	0.42 U	0.38 U	0.38 U	0.38 U
	NS		NS	0.037 U	0.42 U		0.038 U	
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether) Bis(2-Chloroisopropyl) Ether	NS NS	NS NS	NS NS	0.037 U 0.37 U	0.042 U 0.42 U	0.038 U 0.38 U	0.038 U	0.038 U 0.38 U
Bis(2-Ethylhexyl) Phthalate	NS	NS	NS	0.37 U	0.42 U	0.38 UJ	0.38 UJ	0.38 UJ
Caprolactam	NS	NS	NS	0.37 U	0.42 U	0.38 U	0.38 U	0.38 U
Carbazole	NS	NS	NS	0.37 U	0.025 J	0.037 J	0.38 U	0.38 U
Chrysene	1	3.9	1	0.11 J	0.38 J	0.037 J	0.022 J	0.014 J
Dibenz(a,h)Anthracene	0.33	0.33	1,000	0.037 U	0.059	0.23 0.035 J	0.022 3	0.038 U
Dibenzofuran	7	59	210	0.37 U	0.033 0.018 J	0.023 J	0.38 U	0.38 U
Diethyl Phthalate	NS	NS	NS	0.37 U	0.42 U	0.38 U	0.38 U	0.38 U
Dimethyl Phthalate	NS	NS	NS	0.37 U	0.42 U	0.38 U	0.38 U	0.38 U
Di-N-Butyl Phthalate	NS	NS	NS	0.37 U	0.42 U	0.38 U	0.38 U	0.38 U
Di-N-Octylphthalate	NS	NS	NS	0.37 U	0.42 U	0.38 UJ	0.38 UJ	0.38 UJ
Fluoranthene	100	100	1,000	0.21 J	0.57	0.39	0.04 J	0.015 J
Fluorene	30	100	386	0.012 J	0.017 J	0.029 J	0.38 U	0.38 U
Hexachlorobenzene	0.33	1.2	3.2	0.037 U	0.042 U	0.038 U	0.038 U	0.038 U
Hexachlorobutadiene	NS	NS	NS	0.076 U	0.085 U	0.078 U	0.077 U	0.077 U
Hexachlorocyclopentadiene	NS	NS	NS	0.37 U	0.42 U	0.38 UJ	0.38 UJ	0.38 UJ
Hexachloroethane	NS	NS	NS	0.037 U	0.042 U	0.038 U	0.038 U	0.038 U
Indeno(1,2,3-c,d)Pyrene	0.5	0.5	8.2	0.064	0.23	0.14 J	0.016 J	0.019 J
Isophorone	NS	NS	NS	0.15 U	0.17 U	0.15 U	0.15 U	0.15 U
Naphthalene	12	100	12	0.0084 J	0.031 J	0.031 J	0.38 U	0.38 U
Nitrobenzene	NS	NS	NS	0.037 U	0.042 U	0.038 U	0.038 U	0.038 U
N-Nitrosodi-N-Propylamine	NS	NS	NS	0.037 U	0.042 U	0.038 UJ	0.038 UJ	0.038 UJ
17			NS	0.37 U	0.42 U	0.38 U	0.38 U	0.38 U
N-Nitrosodiphenylamine	NS	NS	110					
N-Nitrosodiphenylamine Pentachlorophenol	NS 0.8	6.7	0.8	0.3 U	0.34 U	0.31 UJ	0.31 UJ	0.3 UJ
							0.31 UJ 0.04 J	0.3 UJ 0.016 J
Pentachlorophenol	0.8	6.7	0.8	0.3 U	0.34 U	0.31 UJ		

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Big(2-Chloroisopropt) Entr NS NS NS 0.36 U 0.36 U 0.36 U 0.36 U NR 0.38 U Caprolotam NS NS NS NS 0.36 U 0.36 U 0.36 U NR 0.38 U Carbazole NS NS NS NS 0.36 U 0.36 U 0.36 U NR 0.38 U Carbazole NS NS NS NS 0.016 J 0.028 J 0.81 NR 0.023 J Dibenzofuran 0.33 0.33 1.000 0.044 0.037 0.95 NR 0.031 J Dibenzofuran 7 59 2.10 0.022 J 0.015 J 0.74 NR 0.38 U Dierkoft/Prihalate NS NS NS 0.36 U 0.36 U NR 0.38 U Din-N-Cryphithalate NS NS NS 0.36 U 0.36 U NR 0.38 U Din-N-Cryphithalate NS NS NS 0.36 U 0.36 U	Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	NS	0.036 U	0.036 U	0.036 U	NR	0.038 U
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Phenol 0.33 100 0.33 0.36 U 0.36 U 0.067 J NR 0.38 U									
	Phenol Pyrene	0.33	100	0.33	0.36 U 0.57	0.36 U 0.36	0.067 J NR	<u>NR</u> 12 D	0.38 U 0.43

			AKRF Sample ID	EP-27_15_20230103	EP-28 15 20230103	EP-29 15 20230103	EP-30 15 20230103	EP-30_15_20230103
		La	aboratory Sample ID	460-272291-7	460-272291-8	460-272291-9	460-272291-10	460-272291-10
			Date Sampled	1/03/2023	1/03/2023	1/03/2023	1/03/2023	1/03/2023
			Dilution Factor	1	1	1	1	2
			Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
· ·			NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS	NS	0.39 U	0.36 U	0.4 U	0.34 U	NR
1,4-Dioxane (P-Dioxane)	0.1	13	0.1	0.039 U	0.036 U	0.04 U	0.034 U	NR
2,3,4,6-Tetrachlorophenol	NS	NS	NS NS	0.39 U	0.36 U	0.4 U 0.4 U	0.34 U 0.34 U	NR
2,4,5-Trichlorophenol 2,4,6-Trichlorophenol	NS NS	NS NS	NS	0.39 U 0.16 U	0.36 U 0.15 U	0.4 U 0.16 U	0.34 U 0.14 U	NR NR
2,4,6-Inchlorophenol	NS NS	NS	NS	0.16 U	0.15 U	0.16 U	0.14 U	NR
2,4-Dimethylphenol	NS	NS	NS	0.39 U	0.36 U	0.4 U	0.34 U	NR
2,4-Dinitrophenol	NS	NS	NS	0.31 U	0.29 U	0.32 U	0.28 U	NR
2,4-Dinitrotoluene	NS	NS	NS	0.079 UJ	0.073 UJ	0.08 UJ	0.069 UJ	NR
2,6-Dinitrotoluene	NS	NS	NS	0.079 U	0.073 U	0.08 U	0.069 U	NR
2-Chloronaphthalene	NS	NS	NS	0.39 U	0.36 U	0.4 U	0.34 U	NR
2-Chlorophenol	NS	NS	NS	0.39 U	0.36 U	0.4 U	0.34 U	NR
2-Methylnaphthalene	NS	NS	NS	0.39 U	0.36 U	0.4 U	0.14 J	NR
2-Methylphenol (O-Cresol)	0.33	100	0.33	0.39 U	0.36 U	0.4 U	0.34 U	NR
2-Nitroaniline	NS	NS	NS	0.39 U	0.36 U	0.4 U	0.34 U	NR
2-Nitrophenol	NS NS	NS NS	NS NS	0.39 U 0.39 U	0.36 U 0.36 U	0.4 U 0.4 U	0.34 U 0.34 U	NR NR
3- And 4- Methylphenol (Total) 3,3'-Dichlorobenzidine	NS NS	NS NS	NS NS	0.39 U 0.16 U	0.36 U 0.15 U	0.4 U 0.16 U	0.34 U 0.14 U	NR NR
3.3-Dichlorobenzidine 3-Nitroaniline	NS	NS	NS	0.39 U	0.15 U	0.18 U	0.14 U	NR
4,6-Dinitro-2-Methylphenol	NS	NS	NS	0.31 U	0.29 U	0.32 U	0.28 U	NR
4-Bromophenyl Phenyl Ether	NS	NS	NS	0.39 U	0.36 U	0.4 U	0.34 U	NR
4-Chloro-3-Methylphenol	NS	NS	NS	0.39 U	0.36 U	0.4 U	0.34 U	NR
4-Chloroaniline	NS	NS	NS	0.39 UJ	0.36 UJ	0.4 UJ	0.34 UJ	NR
4-Chlorophenyl Phenyl Ether	NS	NS	NS	0.39 U	0.36 U	0.4 U	0.34 U	NR
4-Methylphenol (P-Cresol)	0.33	100	0.33	0.39 U	0.36 U	0.4 U	0.34 U	NR
4-Nitroaniline	NS	NS	NS	0.39 U	0.36 U	0.4 U	0.34 U	NR
4-Nitrophenol	NS	NS	NS	0.79 U	0.73 U	0.8 U	0.69 U	NR
Acenaphthene	20	100	98	0.39 U	0.36 U	0.4 U	0.73	NR
Acenaphthylene Acetophenone	100 NS	100 NS	107 NS	0.39 U 0.39 U	0.36 U 0.36 U	0.4 U 0.4 U	0.054 J 0.34 U	NR NR
Anthracene	100	100	1,000	0.012 J	0.36 U	0.4 U	1.9	NR
Atrazine	NS	NS	NS	0.16 U	0.15 U	0.4 U	0.14 U	NR
Benzaldehyde	NS	NS	NS	0.39 UJ	0.36 UJ	0.4 UJ	0.34 UJ	NR
Benzo(a)Anthracene	1	1	1	0.06	0.014 J	0.04 U	4.3	NR
Benzo(a)Pyrene	1	1	22	0.054	0.036 U	0.04 U	3.5	NR
Benzo(b)Fluoranthene	1	1	1.7	0.071	0.01 J	0.04 U	5	NR
Benzo(g,h,i)Perylene	100	100	1,000	0.033 J	0.36 U	0.4 U	2.3	NR
Benzo(k)Fluoranthene	0.8	3.9	1.7	0.027 J	0.036 U	0.04 U	1.4	NR
Benzyl Butyl Phthalate	NS	NS	NS	0.39 UJ	0.36 UJ	0.4 UJ	0.34 UJ	NR
Biphenyl (Diphenyl)	NS	NS	NS	0.39 U	0.36 U	0.4 U 0.4 U	0.062 J	NR
Bis(2-Chloroethoxy) Methane Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS NS	NS NS	NS NS	0.39 U 0.039 U	0.36 U 0.036 U	0.4 U 0.04 U	0.34 U 0.034 U	NR NR
Bis(2-Chloroisopropyl) Ether	NS	NS	NS	0.39 U	0.36 U	0.04 U	0.34 U	NR
Bis(2-Ethylhexyl) Phthalate	NS	NS	NS	0.39 UJ	0.36 UJ	0.4 UJ	0.34 UJ	NR
Caprolactam	NS	NS	NS	0.39 U	0.36 U	0.4 U	0.34 U	NR
Carbazole	NS	NS	NS	0.39 U	0.36 U	0.4 U	1.3	NR
Chrysene	1	3.9	1	0.054 J	0.0073 J	0.4 U	4.3	NR
Dibenz(a,h)Anthracene	0.33	0.33	1,000	0.039 U	0.036 U	0.04 U	0.76	NR
Dibenzofuran	7	59	210	0.39 U	0.36 U	0.4 U	0.58	NR
Diethyl Phthalate	NS	NS	NS	0.39 U	0.36 U	0.4 U	0.34 U	NR
Dimethyl Phthalate	NS	NS	NS	0.39 U	0.36 U	0.4 U	0.34 U	NR
Di-N-Butyl Phthalate Di-N-Octylphthalate	NS NS	NS NS	NS NS	0.39 U 0.39 UJ	0.36 U 0.36 UJ	0.4 U 0.4 UJ	0.34 U 0.34 UJ	NR NR
Fluoranthene	100	100	1,000	0.39 UJ 0.094 J	0.36 U	0.4 UJ 0.4 U	7.7	NR
Fluorene	30	100	386	0.094 J 0.39 U	0.36 U	0.4 U	1.1	NR
Hexachlorobenzene	0.33	1.2	3.2	0.039 U	0.036 U	0.4 U	0.034 U	NR
Hexachlorobutadiene	NS	NS	NS	0.079 U	0.073 U	0.08 U	0.069 U	NR
Hexachlorocyclopentadiene	NS	NS	NS	0.39 UJ	0.36 UJ	0.4 UJ	0.34 UJ	NR
Hexachloroethane	NS	NS	NS	0.039 U	0.036 U	0.04 U	0.034 U	NR
Indeno(1,2,3-c,d)Pyrene	0.5	0.5	8.2	0.037 J	0.036 UJ	0.04 UJ	2.8 J	NR
Isophorone	NS	NS	NS	0.16 U	0.15 U	0.16 U	0.14 U	NR
Naphthalene	12	100	12	0.39 U	0.36 U	0.4 U	0.3 J	NR
Nitrobenzene	NS	NS	NS	0.039 U	0.036 U	0.04 U	0.034 U	NR
N-Nitrosodi-N-Propylamine	NS	NS	NS	0.039 UJ	0.036 UJ	0.04 UJ	0.034 UJ	NR
N-Nitrosodiphenylamine Pentachlorophenol	NS	NS 6.7	NS	0.39 U	0.36 U	0.4 U	0.34 U	NR
Peniachiorobhenoi	0.8	6.7	0.8	0.31 UJ	0.29 UJ	0.32 UJ	0.28 UJ	NR
	100	100	1 000	0.057 !	0.26.11	0411	ND	07 D
Phenanthrene Phenol	100 0.33	100 100	1,000 0.33	0.057 J 0.39 U	0.36 U 0.36 U	0.4 U 0.4 U	NR 0.34 U	8.7 D NR

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		•	AKRF Sample ID	EP-31_15_20230214	EP-32_15_20230214	EP-33_15_20230214	EP-34_15_20230214	EP-35_15_20230214 460-274640-5
		La	aboratory Sample ID Date Sampled	460-274640-1 2/14/2023	460-274640-2 2/14/2023	460-274640-3 2/14/2023	460-274640-4 2/14/2023	460-274640-5 2/14/2023
			Dilution Factor	2/14/2023	2/14/2023	2/14/2023	2/14/2023	2/14/2023
			Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q				
1,2,4,5-Tetrachlorobenzene	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.38 U	0.36 U
1,4-Dioxane (P-Dioxane)	0.1	13	0.1	0.036 U	0.037 U	0.037 U	0.038 U	0.036 U
2,3,4,6-Tetrachlorophenol	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.38 U	0.36 U
2,4,5-Trichlorophenol	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.38 U	0.36 U
2,4,6-Trichlorophenol	NS	NS	NS	0.14 U	0.15 U	0.15 U	0.15 U	0.15 U
2,4-Dichlorophenol	NS	NS	NS	0.14 U	0.15 U	0.15 U	0.15 U	0.15 U
2,4-Dimethylphenol	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.38 U	0.36 U
2,4-Dinitrophenol	NS	NS	NS	0.29 U	0.29 U	0.3 U	0.3 U	0.29 U
2,4-Dinitrotoluene	NS	NS	NS	0.073 U	0.074 U	0.076 U	0.077 U	0.074 U
2.6-Dinitrotoluene 2-Chloronaphthalene	NS NS	NS NS	NS NS	0.073 U 0.36 U	0.074 U 0.37 U	0.076 U 0.37 U	0.077 U 0.38 U	0.074 U 0.36 U
2-Chlorophenol	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.38 U	0.36 U
2-Methylnaphthalene	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.38 U	0.36 U
2-Methylphenol (O-Cresol)	0.33	100	0.33	0.36 U	0.37 U	0.37 U	0.38 U	0.36 U
2-Nitroaniline	NS	NS	NS	0.36 UJ	0.37 UJ	0.37 UJ	0.38 UJ	0.36 UJ
2-Nitrophenol	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.38 U	0.36 U
3- And 4- Methylphenol (Total)	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.38 U	0.36 U
3,3'-Dichlorobenzidine	NS	NS	NS	0.14 U	0.15 U	0.15 U	0.15 U	0.15 U
3-Nitroaniline	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.38 U	0.36 U
4,6-Dinitro-2-Methylphenol	NS	NS	NS	0.29 U	0.29 U	0.3 U	0.3 U	0.29 U
4-Bromophenyl Phenyl Ether	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.38 U	0.36 U
4-Chloro-3-Methylphenol	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.38 U	0.36 U
4-Chloroaniline	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.38 U	0.36 U
4-Chlorophenyl Phenyl Ether	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.38 U	0.36 U
4-Methylphenol (P-Cresol)	0.33	100	0.33	0.36 U	0.37 U 0.37 U	0.37 U 0.37 U	0.38 U	0.36 U 0.36 U
4-Nitroaniline 4-Nitrophenol	NS NS	NS NS	NS NS	0.36 U 0.73 UJ	0.37 U 0.74 UJ	0.37 U 0.76 UJ	0.38 U 0.77 UJ	0.36 U
Acenaphthene	20	100	98	0.023 J	0.74 0J 0.017 J	0.04 J	0.03 J	0.36 U
Acenaphthylene	100	100	107	0.36 U	0.37 U	0.04 J	0.38 U	0.36 U
Acetophenone	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.38 U	0.36 U
Anthracene	100	100	1,000	0.049 J	0.051 J	0.082 J	0.055 J	0.36 U
Atrazine	NS	NS	NS	0.14 U	0.15 U	0.15 U	0.15 U	0.15 U
Benzaldehyde	NS	NS	NS	0.36 UJ	0.37 UJ	0.37 UJ	0.38 UJ	0.36 UJ
Benzo(a)Anthracene	1	1	1	0.14	0.15	0.23	0.14	0.043
Benzo(a)Pyrene	1	1	22	0.13	0.14	0.19	0.13	0.033 J
Benzo(b)Fluoranthene	1	1	1.7	0.15	0.17	0.25	0.15	0.039
Benzo(g,h,i)Perylene	100	100	1,000	0.082 J	0.094 J	0.12 J	0.086 J	0.019 J
Benzo(k)Fluoranthene	0.8 NS	3.9 NS	1.7 NS	0.055	0.078 0.37 U	0.1 0.37 U	0.064 0.38 U	0.013 J 0.36 U
Benzyl Butyl Phthalate Biphenyl (Diphenyl)	NS	NS	NS	0.36 U 0.36 U	0.37 U	0.37 U	0.38 U	0.36 U
Bis(2-Chloroethoxy) Methane	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.38 U	0.36 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	NS	0.036 U	0.037 U	0.037 U	0.038 U	0.036 U
Bis(2-Chloroisopropyl) Ether	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.38 U	0.36 U
Bis(2-Ethylhexyl) Phthalate	NS	NS	NS	0.039 J	0.37 U	0.37 U	0.38 U	0.36 U
Caprolactam	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.38 U	0.36 U
Carbazole	NS	NS	NS	0.017 J	0.016 J	0.04 J	0.016 J	0.36 U
Chrysene	1	3.9	1	0.15 J	0.15 J	0.21 J	0.15 J	0.036 J
Dibenz(a,h)Anthracene	0.33	0.33	1,000	0.019 J	0.022 J	0.03 J	0.017 J	0.036 U
Dibenzofuran	7	59	210	0.013 J	0.013 J	0.022 J	0.018 J	0.36 U
Diethyl Phthalate	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.38 U	0.36 U
Dimethyl Phthalate	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.38 U	0.36 U
Di-N-Butyl Phthalate Di-N-Octylphthalate	NS NS	NS NS	NS NS	0.36 U 0.36 U	0.37 U 0.37 U	0.37 U 0.37 U	0.38 U 0.38 U	0.36 U 0.36 U
Fluoranthene	100	100	1,000	0.36 U	0.37 U 0.31 J	0.51	0.38 U	0.36 U 0.071 J
Fluorene	30	100	386	0.022 J	0.017 J	0.038 J	0.024 J	0.36 U
Hexachlorobenzene	0.33	1.2	3.2	0.036 U	0.037 U	0.037 U	0.038 U	0.036 U
Hexachlorobutadiene	NS	NS	NS	0.073 U	0.074 U	0.076 U	0.077 U	0.074 U
Hexachlorocyclopentadiene	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.38 U	0.36 U
Hexachloroethane	NS	NS	NS	0.036 U	0.037 U	0.037 U	0.038 U	0.036 U
Indeno(1,2,3-c,d)Pyrene	0.5	0.5	8.2	0.084	0.1	0.14	0.084	0.022 J
Isophorone	NS	NS	NS	0.14 U	0.15 U	0.15 U	0.15 U	0.15 U
Naphthalene	12	100	12	0.017 J	0.018 J	0.027 J	0.018 J	0.0074 J
Nitrobenzene	NS	NS	NS	0.036 U	0.037 U	0.037 U	0.038 U	0.036 U
N-Nitrosodi-N-Propylamine	NS	NS	NS	0.036 U	0.037 U	0.037 U	0.038 U	0.036 U
N-Nitrosodiphenylamine	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.38 U	0.36 U
Pentachlorophenol	0.8	6.7	0.8	0.29 U	0.29 U	0.3 U	0.3 U	0.29 U
Phenanthrene Rhanal	100	100	1,000	0.25 J	0.21 J	0.42	0.31 J	0.054 J
Phenol Byropo	0.33	100 100	0.33	0.36 U 0.28 J	0.37 U 0.28 J	0.37 U 0.43	0.38 U 0.31 J	0.36 U 0.067 J
Pyrene	1 100	1 100	000,1	0.20 J	U.20 J	0.43	U.31 J	0.007 J

i						ED 37 46 00000440	ED 20, 46, 20220440	ED 20, 45, 20220440
		1.	AKRF Sample ID aboratory Sample ID	EP-36_15_20230214 460-274640-6	EP-X03_15_20230214 460-274640-7	EP-37_16_20230410 460-278010-1	EP-38_16_20230410 460-278010-2	EP-39_15_20230410 460-278010-3
		L	Date Sampled	2/14/2023	2/14/2023	4/10/2023	4/10/2023	4/10/2023
			Dilution Factor	1	1	1	1	1
			Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS	NS	0.36 U	0.36 U	0.38 U	0.36 U	0.42 U
1,4-Dioxane (P-Dioxane)	0.1	13	0.1	0.036 U	0.036 U	0.038 U	0.036 U	0.042 U
2,3,4,6-Tetrachlorophenol	NS	NS	NS	0.36 U	0.36 U	0.38 U	0.36 U	0.42 U
2,4,5-Trichlorophenol	NS	NS	NS	0.36 U	0.36 U	0.38 U	0.36 U	0.42 U
2,4,6-Trichlorophenol	NS	NS	NS	0.14 U	0.14 U	0.15 U	0.14 U	0.17 U
2,4-Dichlorophenol	NS	NS	NS	0.14 U	0.14 U	0.15 U	0.14 U	0.17 U
2,4-Dimethylphenol	NS	NS	NS	0.36 U	0.36 U	0.38 U	0.36 U	0.42 U
2,4-Dinitrophenol	NS	NS	NS	0.29 U	0.29 U	0.31 U	0.29 U	0.34 U
2.4-Dinitrotoluene	NS	NS	NS	0.073 U	0.073 U	0.077 U	0.072 U	0.085 U
2,6-Dinitrotoluene	NS	NS	NS	0.073 U	0.073 U	0.077 U	0.072 U	0.085 U
2-Chloronaphthalene	NS	NS	NS	0.36 U	0.36 U	0.38 U	0.36 U	0.42 U
2-Chlorophenol	NS	NS	NS	0.36 U	0.36 U	0.38 U	0.36 U	0.42 U
2-Methylnaphthalene 2-Methylphenol (O-Cresol)	NS 0.33	NS 100	NS 0.33	0.36 U 0.36 U	0.36 U 0.36 U	0.38 U 0.38 U	0.36 U 0.36 U	0.016 J 0.42 U
			0.33 NS			0.38 U		0.42 U 0.42 U
2-Nitroaniline 2-Nitrophenol	NS NS	NS NS	NS	0.36 UJ 0.36 U	0.36 UJ 0.36 U	0.38 U	0.36 U 0.36 U	0.42 U 0.42 U
2-Nitrophenol 3- And 4- Methylphenol (Total)	NS	NS	NS	0.36 U	0.36 U	0.38 U	0.36 U	0.42 0 0.03 J
3,3'-Dichlorobenzidine	NS	NS	NS	0.36 U 0.14 U	0.14 U	0.38 U	0.36 U	0.03 J 0.17 U
3-Nitroaniline	NS	NS	NS	0.14 U 0.36 U	0.14 U 0.36 U	0.15 U	0.36 U	0.42 U
4,6-Dinitro-2-Methylphenol	NS	NS	NS	0.29 U	0.29 U	0.31 U	0.30 U	0.34 U
4-Bromophenyl Phenyl Ether	NS	NS	NS	0.36 U	0.36 U	0.38 U	0.36 U	0.42 U
4-Chloro-3-Methylphenol	NS	NS	NS	0.36 U	0.36 U	0.38 U	0.36 U	0.42 U
4-Chloroaniline	NS	NS	NS	0.36 U	0.36 U	0.38 U	0.36 U	0.42 U
4-Chlorophenyl Phenyl Ether	NS	NS	NS	0.36 U	0.36 U	0.38 U	0.36 U	0.42 U
4-Methylphenol (P-Cresol)	0.33	100	0.33	0.36 U	0.36 U	0.38 U	0.36 U	0.03 J
4-Nitroaniline	NS	NS	NS	0.36 U	0.36 U	0.38 U	0.36 U	0.42 U
4-Nitrophenol	NS	NS	NS	0.73 UJ	0.73 UJ	0.77 U	0.72 U	0.85 U
Acenaphthene	20	100	98	0.36 U	0.36 U	0.38 U	0.36 U	0.037 J
Acenaphthylene	100	100	107	0.36 U	0.36 U	0.38 U	0.36 U	0.015 J
Acetophenone	NS	NS	NS	0.36 U	0.36 U	0.38 U	0.36 U	0.42 U
Anthracene	100	100	1,000	0.36 U	0.36 U	0.38 U	0.36 U	0.084 J
Atrazine	NS	NS	NS	0.14 U	0.14 U	0.15 U	0.14 U	0.17 U
Benzaldehyde	NS	NS	NS	0.36 UJ	0.36 UJ	0.38 U	0.36 U	0.42 U
Benzo(a)Anthracene	1	1	1 22	0.036 U	0.036 U	0.038 U	0.039	0.37
<u>Benzo(a)Pyrene</u> Benzo(b)Fluoranthene	1	1	1.7	0.036 U 0.036 U	0.036 U 0.036 U	0.038 U 0.038 U	0.037 0.045	0.42
Benzo(g,h,i)Perylene	100	100	1,000	0.36 U	0.36 U	0.38 U	0.045 0.024 J	0.48 0.24 J
Benzo(k)Fluoranthene	0.8	3.9	1.7	0.036 U	0.036 U	0.038 U	0.024 J	0.17
Benzyl Butyl Phthalate	NS	NS	NS	0.36 U	0.36 U	0.38 U	0.36 U	0.42 U
Biphenyl (Diphenyl)	NS	NS	NS	0.36 U	0.36 U	0.38 U	0.36 U	0.42 U
Bis(2-Chloroethoxy) Methane	NS	NS	NS	0.36 U	0.36 U	0.38 U	0.36 U	0.42 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	NS	0.036 U	0.036 U	0.038 U	0.036 U	0.042 U
Bis(2-Chloroisopropyl) Ether	NS	NS	NS	0.36 U	0.36 U	0.38 U	0.36 U	0.42 U
Bis(2-Ethylhexyl) Phthalate	NS	NS	NS	0.36 U	0.36 U	0.38 U	0.36 U	0.42 U
Caprolactam	NS	NS	NS	0.36 U	0.36 U	0.38 U	0.36 U	0.42 U
Carbazole	NS	NS	NS	0.36 U	0.36 U	0.38 U	0.36 U	0.032 J
Chrysene	1	3.9	1	0.36 U	0.36 U	0.38 U	0.042 J	0.38 J
Dibenz(a,h)Anthracene	0.33	0.33	1,000	0.036 U	0.036 U	0.038 U	0.036 U	0.07
Dibenzofuran	7	59	210	0.36 U	0.36 U	0.38 U	0.36 U	0.024 J
Diethyl Phthalate	NS	NS	NS	0.36 U	0.36 U	0.38 U	0.36 U	0.42 U
Dimethyl Phthalate	NS	NS	NS	0.36 U	0.36 U	0.38 U	0.36 U	0.42 U
Di-N-Butyl Phthalate	NS	NS	NS	0.36 U	0.36 U	0.38 U	0.36 U	0.42 U
Di-N-Octylphthalate	NS 100	NS 100	NS 1,000	0.36 U 0.36 U	0.36 U 0.36 U	0.38 U 0.38 U	0.36 U 0.065 J	0.42 U 0.6
Fluoranthene Fluorene	30	100	386	0.36 U 0.36 U	0.36 U	0.38 U	0.065 J 0.36 U	0.034 J
Huorene Hexachlorobenzene	0.33	1.2	386	0.36 U 0.036 U	0.036 U	0.38 U	0.36 U 0.036 U	0.034 J 0.042 U
Hexachlorobutadiene	0.33 NS	NS	3.2 NS	0.036 U 0.073 U	0.038 U	0.038 U 0.077 U	0.036 U	0.042 U 0.085 U
Hexachlorocyclopentadiene	NS	NS	NS	0.36 U	0.36 U	0.38 U	0.072 0 0.36 U	0.085 U
Hexachloroethane	NS	NS	NS	0.036 U	0.036 U	0.038 U	0.036 U	0.042 U
Indeno(1,2,3-c,d)Pyrene	0.5	0.5	8.2	0.036 U	0.036 U	0.038 U	0.029 J	0.27
Isophorone	NS	NS	NS	0.14 U	0.14 U	0.15 U	0.14 U	0.17 U
Naphthalene	12	100	12	0.36 U	0.36 U	0.38 U	0.36 U	0.053 J
Nitrobenzene	NS	NS	NS	0.036 U	0.036 U	0.038 U	0.036 U	0.042 U
N-Nitrosodi-N-Propylamine	NS	NS	NS	0.036 U	0.036 U	0.038 U	0.036 U	0.042 U
N-Nitrosodiphenylamine	NS	NS	NS	0.36 U	0.36 U	0.38 U	0.36 U	0.42 U
Pentachlorophenol	0.8	6.7	0.8	0.29 U	0.29 U	0.31 U	0.29 U	0.34 U
Phenanthrene	100	100	1,000	0.36 U	0.36 U	0.38 U	0.031 J	0.39 J
Phenol	0.33	100	0.33	0.36 U	0.36 U	0.38 U	0.36 U	0.42 U
Pyrene	100	100	1,000	0.36 U	0.36 U	0.38 U	0.059 J	0.74

b				ical Results of Semivolatile Org		-		
			AKRF Sample ID	EP-40_16_20230410	EP-41_15_20230410	EP-42_17_20230410	EP-43_16_20230410	EP-44_15_20230410
		La	boratory Sample ID	460-278010-4	460-278010-5	460-278010-6	460-278010-7	460-278010-8
			Date Sampled	4/10/2023	4/10/2023	4/10/2023	4/10/2023	4/10/2023
			Dilution Factor	1	1	1	1	1
			Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Compound	NYSDEC UUSCO		NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS	NS	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
1,4-Dioxane (P-Dioxane)	0.1	13	0.1	0.038 U	0.037 U	0.04 U	0.04 U	0.04 U
2,3,4,6-Tetrachlorophenol	NS	NS	NS	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
2,4,5-Trichlorophenol	NS	NS	NS	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
2,4,6-Trichlorophenol	NS	NS	NS	0.15 U	0.15 U	0.16 U	0.16 U	0.16 U
2,4-Dichlorophenol	NS	NS	NS	0.15 U	0.15 U	0.16 U	0.16 U	0.16 U
2,4-Dimethylphenol	NS	NS	NS	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
2,4-Dinitrophenol	NS	NS	NS	0.31 U	0.3 U	0.32 U	0.32 U	0.32 U
2,4-Dinitrotoluene	NS	NS	NS	0.078 U	0.074 U	0.082 U	0.081 U	0.081 U
2,6-Dinitrotoluene	NS	NS	NS	0.078 U	0.074 U	0.082 U	0.081 U	0.081 U
2-Chloronaphthalene	NS	NS	NS	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol	NS	NS	NS	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
2-Methylnaphthalene	NS	NS	NS	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
2-Methylphenol (O-Cresol)	0.33	100	0.33	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
2-Nitroaniline	NS	NS	NS	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
2-Nitrophenol	NS	NS	NS	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
3- And 4- Methylphenol (Total)	NS	NS	NS	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
3,3'-Dichlorobenzidine	NS	NS	NS	0.15 U	0.15 U	0.4 0 0.16 U	0.4 0	0.4 0 0.16 U
3-Nitroaniline	NS	NS	NS	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
4,6-Dinitro-2-Methylphenol	NS	NS	NS	0.31 U	0.3 U	0.4 U	0.4 0	0.4 0 0.32 U
4-Bromophenyl Phenyl Ether	NS	NS	NS	0.38 U	0.37 U	0.32 U 0.4 U	0.32 U	0.32 U 0.4 U
4-Chloro-3-Methylphenol	NS	NS	NS	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
4-Chloroaniline	NS	NS	NS	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
				0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
4-Chlorophenyl Phenyl Ether 4-Methylphenol (P-Cresol)	NS 0.33	NS 100	NS 0.33	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
4-Nitroaniline	NS	NS	NS	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
4-Nitrophenol	NS	NS	NS	0.78 U	0.74 U	0.82 U	0.81 U	0.81 U
Acenaphthene	20	100	98	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
Acenaphthylene	100	100	107	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
Acetophenone	NS	NS	NS	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
Anthracene	100	100	1,000	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
Atrazine	NS	NS	NS	0.15 U	0.15 U	0.16 U	0.16 U	0.16 U
Benzaldehyde	NS	NS	NS	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
Benzo(a)Anthracene	1	1	1	0.038 U	0.037 U	0.04 U	0.04 U	0.031 J
Benzo(a)Pyrene	1	1	22	0.013 J	0.037 U	0.014 J	0.04 U	0.025 J
Benzo(b)Fluoranthene	1	1	1.7	0.019 J	0.037 U	0.016 J	0.04 U	0.033 J
Benzo(g,h,i)Perylene	100	100	1,000	0.38 U	0.37 U	0.4 U	0.4 U	0.016 J
Benzo(k)Fluoranthene	0.8	3.9	1.7	0.038 U	0.037 U	0.04 U	0.04 U	0.014 J
Benzyl Butyl Phthalate	NS	NS	NS	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
Biphenyl (Diphenyl)	NS	NS	NS	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
Bis(2-Chloroethoxy) Methane	NS	NS	NS	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	NS	0.038 U	0.037 U	0.04 U	0.04 U	0.04 U
Bis(2-Chloroisopropyl) Ether	NS	NS	NS	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
Bis(2-Ethylhexyl) Phthalate	NS	NS	NS	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
Caprolactam	NS	NS	NS	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
Carbazole	NS	NS	NS	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
Chrysene	1	3.9	1	0.38 U	0.37 U	0.4 U	0.4 U	0.026 J
Dibenz(a,h)Anthracene	0.33	0.33	1,000	0.038 U	0.037 U	0.04 U	0.04 U	0.04 U
Dibenzofuran	7	59	210	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
Diethyl Phthalate	NS	NS	NS	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
Dimethyl Phthalate	NS	NS	NS	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
Di-N-Butyl Phthalate	NS	NS	NS	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
Di-N-Octylphthalate	NS	NS	NS	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
Fluoranthene	100	100	1,000	0.016 J	0.37 U	0.024 J	0.4 U	0.047 J
Fluorene	30	100	386	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
Hexachlorobenzene	0.33	1.2	3.2	0.038 U	0.037 U	0.4 U	0.04 U	0.04 U
Hexachlorobutadiene	NS	NS	NS	0.078 U	0.074 U	0.082 U	0.081 U	0.04 U
Hexachlorocyclopentadiene	NS	NS	NS	0.38 U	0.37 U	0.082 U 0.4 U	0.081 U	0.081 U
Hexachloroethane	NS	NS	NS	0.038 U	0.037 U	0.04 U	0.4 U	0.04 U
Indeno(1,2,3-c,d)Pyrene	0.5	0.5	8.2	0.038 U	0.037 U	0.04 U	0.04 U	0.04 0
Isophorone	NS	0.5 NS	8.2 NS	0.038 U 0.15 U	0.15 U	0.04 U 0.16 U	0.04 U	0.16 U
Naphthalene	12	100	12	0.15 U 0.38 U	0.15 U	0.16 U 0.4 U	0.16 U	0.16 U 0.4 U
	NS	NS	NS	0.038 U	0.037 U	0.4 U 0.04 U	0.4 U	0.4 U
Nitrobenzene N-Nitrosodi-N-Propylamine	NS	NS	NS	0.038 U		0.04 U		0.04 U
1.4					0.037 U		0.04 U	
N-Nitrosodiphenylamine	NS	NS	NS	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
Pentachlorophenol	0.8	6.7	0.8	0.31 U	0.3 U	0.32 U	0.32 U	0.32 U
Phenanthrene	100	100	1,000	0.38 U	0.37 U	0.017 J	0.4 U	0.017 J
Phenol	0.33	100	0.33	0.38 U	0.37 U	0.4 U	0.4 U	0.4 U
Pyrene	100	100	1,000	0.016 J	0.011 J	0.021 J	0.4 U	0.045 J

1			AKRF Sample ID	EP-45_15_20230410	EP-X04 15 20230410	EP-46 16 20230410	EP-47 15 20230410	EP-48 15 20230410
		Li	aboratory Sample ID	460-278010-9	460-278010-17	460-278010-10	460-278010-11	460-278010-12
		_	Date Sampled	4/10/2023	4/10/2023	4/10/2023	4/10/2023	4/10/2023
			Dilution Factor	1	1	1	1	1
			Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Compound			NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.39 U	0.37 U
1,4-Dioxane (P-Dioxane)	0.1	13	0.1	0.04 U	0.04 U	0.04 U 0.4 U	0.039 U	0.037 U
2,3,4,6-Tetrachlorophenol 2,4,5-Trichlorophenol	NS NS	NS NS	NS NS	0.4 U 0.4 U	0.4 U 0.4 U	0.4 U 0.4 U	0.39 U 0.39 U	0.37 U 0.37 U
2,4,5-Trichlorophenol	NS	NS	NS	0.16 U	0.4 U	0.16 U	0.39 U 0.16 U	0.15 U
2,4-Dichlorophenol	NS	NS	NS	0.16 U	0.16 U	0.16 U	0.16 U	0.15 U
2,4-Dimethylphenol	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.39 U	0.37 U
2,4-Dinitrophenol	NS	NS	NS	0.33 U	0.32 U	0.32 U	0.31 U	0.3 U
2,4-Dinitrotoluene	NS	NS	NS	0.082 U	0.08 U	0.081 U	0.079 U	0.075 U
2,6-Dinitrotoluene	NS	NS	NS	0.082 U	0.08 U	0.081 U	0.079 U	0.075 U
2-Chloronaphthalene	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.39 U	0.37 U
2-Chlorophenol 2-Methylnaphthalene	NS NS	NS NS	NS NS	0.4 U 0.4 U	0.4 U 0.013 J	0.4 U 0.4 U	0.39 U 0.39 U	0.37 U 0.37 U
2-Methylphenol (O-Cresol)	0.33	100	0.33	0.4 U	0.4 U	0.4 U	0.39 U	0.37 U
2-Nitroaniline	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.39 U	0.37 U
2-Nitrophenol	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.39 U	0.37 U
3- And 4- Methylphenol (Total)	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.39 U	0.37 U
3.3'-Dichlorobenzidine	NS	NS	NS	0.16 U	0.16 U	0.16 U	0.16 U	0.15 U
3-Nitroaniline	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.39 U	0.37 U
4,6-Dinitro-2-Methylphenol	NS	NS	NS	0.33 U	0.32 U	0.32 U	0.31 U	0.3 U
4-Bromophenyl Phenyl Ether 4-Chloro-3-Methylphenol	NS NS	NS NS	NS NS	0.4 U 0.4 U	0.4 U 0.4 U	0.4 U 0.4 U	0.39 U 0.39 U	0.37 U 0.37 U
4-Chloroaniline	NS NS	NS NS	NS NS	0.4 U 0.4 U	0.4 U	0.4 U 0.4 U	0.39 U	0.37 U 0.37 U
4-Chlorophenyl Phenyl Ether	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.39 U	0.37 U
4-Methylphenol (P-Cresol)	0.33	100	0.33	0.4 U	0.4 U	0.4 U	0.39 U	0.37 U
4-Nitroaniline	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.39 U	0.37 U
4-Nitrophenol	NS	NS	NS	0.82 U	0.8 U	0.81 U	0.79 U	0.75 U
Acenaphthene	20	100	98	0.4 U	0.4 U	0.4 U	0.39 U	0.37 U
Acenaphthylene	100	100	107	0.4 U	0.4 U	0.4 U	0.39 U	0.37 U
Acetophenone	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.39 U	0.37 U
Anthracene	100	100	1,000	0.4 U	0.4 U	0.021 J	0.39 U	0.37 U
Atrazine Benzaldehyde	NS NS	NS NS	NS NS	0.16 U 0.4 U	0.16 U 0.4 U	0.16 U 0.4 U	0.16 U 0.39 U	0.15 U 0.37 U
Benzo(a)Anthracene	1	1	1	0.04 U	0.04 U	0.098	0.039 U	0.037 U
Benzo(a)Pyrene	1	1	22	0.04 U	0.04 U	0.096	0.039 U	0.017 J
Benzo(b)Fluoranthene	1	1	1.7	0.04 U	0.04 U	0.11	0.013 J	0.026 J
Benzo(g,h,i)Perylene	100	100	1,000	0.4 U	0.4 U	0.055 J	0.39 U	0.011 J
Benzo(k)Fluoranthene	0.8	3.9	1.7	0.04 U	0.04 U	0.057	0.039 U	0.0098 J
Benzyl Butyl Phthalate	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.39 U	0.37 U
Biphenyl (Diphenyl)	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.39 U	0.37 U
Bis(2-Chloroethoxy) Methane Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS NS	NS NS	NS NS	0.4 U 0.04 U	0.4 U 0.04 U	0.4 U 0.04 U	0.39 U 0.039 U	0.37 U 0.037 U
Bis(2-Chloroisopropyl) Ether	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.39 U	0.37 U
Bis(2-Ethylhexyl) Phthalate	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.39 U	0.37 U
Caprolactam	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.39 U	0.37 U
Carbazole	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.39 U	0.37 U
Chrysene	1	3.9	1	0.4 U	0.4 U	0.11 J	0.39 U	0.019 J
Dibenz(a,h)Anthracene	0.33	0.33	1,000	0.04 U	0.04 U	0.04 U	0.039 U	0.037 U
Dibenzofuran	7	59	210	0.4 U	0.4 U	0.4 U 0.4 U	0.39 U	0.37 U
Diethyl Phthalate Dimethyl Phthalate	NS NS	NS NS	NS NS	0.4 U 0.4 U	0.4 U 0.4 U	0.4 U 0.4 U	0.39 U 0.39 U	0.37 U 0.37 U
Di-N-Butyl Phthalate	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.39 U	0.37 U
Di-N-Octylphthalate	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.39 U	0.37 U
Fluoranthene	100	100	1,000	0.4 U	0.4 U	0.18 J	0.014 J	0.03 J
Fluorene	30	100	386	0.4 U	0.4 U	0.4 U	0.39 U	0.37 U
Hexachlorobenzene	0.33	1.2	3.2	0.04 U	0.04 U	0.04 U	0.039 U	0.037 U
Hexachlorobutadiene	NS	NS	NS	0.082 U	0.08 U	0.081 U	0.079 U	0.075 U
Hexachlorocyclopentadiene	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.39 U	0.37 U
Hexachloroethane	NS	NS	NS	0.04 U	0.04 U	0.04 U	0.039 U	0.037 U
Indeno(1,2,3-c,d)Pyrene Isophorone	0.5 NS	0.5 NS	8.2 NS	0.04 U 0.16 U	0.04 U 0.16 U	0.068 0.16 U	0.039 U 0.16 U	0.014 J 0.15 U
Naphthalene	12	100	NS 12	0.16 U 0.4 U	0.028 J	0.16 U 0.4 U	0.16 U 0.39 U	0.15 U 0.37 U
Nitrobenzene	NS	NS	NS	0.04 U	0.028 J 0.04 U	0.4 U	0.39 U 0.039 U	0.037 U
N-Nitrosodi-N-Propylamine	NS	NS	NS	0.04 U	0.04 U	0.04 U	0.039 U	0.037 U
N-Nitrosodiphenylamine	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.39 U	0.37 U
Pentachlorophenol	0.8	6.7	0.8	0.33 U	0.32 U	0.32 U	0.31 U	0.3 U
Phenanthrene	100	100	1,000	0.4 U	0.4 U	0.11 J	0.39 U	0.018 J
Phenol	0.33	100	0.33	0.4 U	0.4 U	0.4 U	0.39 U	0.37 U
Pyrene	100	100	1,000	0.011 J	0.4 U	0.17 J	0.39 U	0.031 J

United by the second	1				ical Results of Semivolatile Org				
Disk Serger Junior 4*102021 (2002) 4*102023 (2002) 4*120021 (2002) 4*12002				AKRF Sample ID	EP-49_15_20230410	EP-50_15_20230410	EP-51_15_20230412	EP-52_15_20230412	EP-X05_15_20230412
Description 1 model			Li						
constrait model model model model model model model model model Laborative Constrait Laborative ConstraiveC						4/10/2023			4/12/2023
Companie VPROEC USDD VFBOEC PRANCEO CONC 10 CONC 10 <thconc 10<="" th=""> <thconc 10<="" th=""> CONC</thconc></thconc>						ma/ka	-		ma/ka
12.4.5 M6 N5 0.41 0.643 0.853 0.853 <th0.853< th=""> <th0.853< th=""> <th0.853< t<="" td=""><td>Compound</td><td>NYSDEC UUSCO</td><td>NYSDEC RRSCO</td><td></td><td></td><td></td><td></td><td></td><td></td></th0.853<></th0.853<></th0.853<>	Compound	NYSDEC UUSCO	NYSDEC RRSCO						
1.4.Decard 6.1 5.3 6.1 6.041 6.064 0.051.0 6.025 0.0721.0 2.4.Decard NS NS 0.41 0.041 0.025.0 <th0.025.0< th=""> 0.025.0 <th0.025.0< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th0.025.0<></th0.025.0<>									
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64.Decknopmend NS NS NS OTI U OTI U <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>									
54.0ms/mprod NS NS NS 0.410 0.430 0.320 0									
24-Decomposed NS NS NS NS OBS O									
24-Disclosense NB NB NB NB 0.081 // 0.071 // 0.077 // 0.077 // 0.077 // Columnations NB NB NB NB 0.081 // 0.071 // 0.077 // 0.077 // 0.077 // 0.071 //					0.33 U				
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Saberhyshend NS NS NS 0.2 J 0.3 J <th0.3 j<="" th=""> <th0.3< td=""><td>2-Chloronaphthalene</td><td></td><td>NS</td><td></td><td>0.41 U</td><td>0.43 U</td><td>0.35 U</td><td>0.38 U</td><td>0.37 U</td></th0.3<></th0.3>	2-Chloronaphthalene		NS		0.41 U	0.43 U	0.35 U	0.38 U	0.37 U
Determine 0.33 160 0.33 0.41 0.43 0.35 0.35 0.37 0.27	2-Chlorophenol	NS	NS	NS	0.41 U	0.43 U	0.35 U	0.38 U	0.37 U
Selfection NS NS NS 0.41 U 0.43 U 0.53 U 0.38 U 0.37 U Schuldmein NS NS NS 0.41 U 0.43 U 0.38 U 0.38 U 0.37 U Schuldmein NS NS 0.47 U 0.41 U 0.42 U 0.32 U 0.37 U Schuldmein NS NS NS 0.41 U 0.41 U 0.42 U 0.32 U 0.32 U 0.37 U Schuldmein NS NS NS 0.41 U 0.41 U 0.42 U 0.32 U 0.38 U 0.37 U Schuldmein NS NS NS 0.41 U 0.43 U 0.52 U 0.38 U 0.37 U 0.37 U Schuldmein NS NS NS 0.41 U 0.43 U 0.52 U 0.38 U 0.37 U 0.57 U Schuldmein NS NS 0.41 U 0.45 U 0.52 U 0.	2-Methylnaphthalene							0.38 U	
Existention NS NS NS 0.41 U 0.45 U 0.35 U 0.38 U 0.37 U Dards Life/Applement NS NS 0.41 U 0.45 U 0.35 U 0.38 U 0.37 U Dards Life/Applement NS NS 0.41 U 0.45 U 0.35 U 0.38 U 0.37 U Dards Applement Markut Effer NS NS 0.43 U 0.45 U 0.35 U 0.38 U 0.37 U decomponent Markut Effer NS NS 0.41 U 0.45 U 0.35 U 0.38 U 0.37 U decomponent Markut Effer NS NS 0.41 U 0.45 U 0.35 U 0.38 U 0.37 U decomponent Markut Effer NS NS 0.41 U 0.45 U 0.35 U 0.38 U 0.37 U	2-Methylphenol (O-Cresol)					0.43 U		0.38 U	
3-And - Methychenol Tr381 NS NS NS 0.41 U 0.42 U 0.28 UJ 0.08 UJ 0.37 UJ 3-Lubicschwinghenol NS NS NS 0.31 U 0.47 UJ 0.41 U 0.45 U 0.51 U	2-Nitroaniline	NS	NS	NS	0.41 U	0.43 U		0.38 U	0.37 U
3.3-Detrobenation NS NS 0.7.1 0.7.1 0.1.4 0.1.5 0.5.5 Actionaline NS NS NS 0.41 0.42 0.55									
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64.DBMD-2AMBHybened NS NS NS 0.31 0.32 0.32 0.32 0.31 0.33 0.41 0.45 0.45 0.35 0.38 0.31 0.31 0.31 0.31 0.41 0.45 0.35 0.38 0.38 0.31 <th0.31< th=""> 0.31 <th0.31< th=""></th0.31<></th0.31<>									
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4 Netoenine NS NS 0.41 U 0.42 U 0.32 U 0.33 U 0.37 U Acenaghthene 20 100 66 0.43 U 0.07 U 0.72 U 0.77 U 0.77 U Acenaghthysine 100 100 66 0.43 U 0.02 U 0.0									
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Acenaphthene 20 100 98 0.14 0.022 0.02 0.044 0.022 J Acetaphthene 100 107 0.23 0.43 0.35 0.35 0.38 0.37 0.37 Acetaphthene 100 100 1000 0.71 0.031 0.051 0.36 0.38 0.38 0.37 0.37 0.35 0.35 0.35 0.38 0.38 0.49 0.37 0.35 0.35 0.35 0.38 0.38 0.494 0.41 0.435 0.41 0.424 0.424 0.424 0.424 0.424 0.424 0.424 0.424 0.424 0.424 0.424 0.424 0.424 0.424 0.424 0.424 0.424 0.424 0.424									
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Pyrene 100 100 1,000 3.2 0.28 J 0.34 JK 0.57 0.41									

1						ED X06 16 20220500	ED 56 15 20220517	ED X07 15 20220517
		1.	AKRF Sample ID aboratory Sample ID	EP-53_15_20230509 460-279980-1	EP-54_16_20230509 460-279980-2	EP-X06_16_20230509 460-279980-3	EP-56_15_20230517 460-280490-2	EP-X07_15_20230517 460-280490-7
		Lā	Date Sampled	5/09/2023	5/09/2023	5/09/2023	5/17/2023	5/17/2023
			Dilution Factor	1	1	1	1	1
			Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.36 U	0.39 U
1,4-Dioxane (P-Dioxane)	0.1	13	0.1	0.036 UJ	0.037 UJ	0.037 UJ	0.036 U	0.039 U
2,3,4,6-Tetrachlorophenol	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.36 U	0.39 U
2,4,5-Trichlorophenol	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.36 U	0.39 U
2,4,6-Trichlorophenol	NS	NS	NS	0.14 U	0.15 U	0.15 U	0.14 U	0.16 U
2,4-Dichlorophenol	NS	NS	NS	0.14 U	0.15 U	0.15 U	0.14 U	0.16 U
2,4-Dimethylphenol	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.36 U	0.39 U
2,4-Dinitrophenol	NS	NS	NS	0.29 U	0.3 U	0.3 U	0.29 U	0.31 U
2,4-Dinitrotoluene	NS	NS	NS	0.073 U	0.075 U	0.074 U	0.073 U	0.078 U
2,6-Dinitrotoluene	NS	NS	NS	0.073 U	0.075 U	0.074 U	0.073 U	0.078 U
2-Chloronaphthalene	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.36 U	0.39 U
2-Chlorophenol	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.36 U	0.39 U
2-Methylnaphthalene 2-Methylphenol (O-Cresol)	NS 0.33	NS 100	NS 0.33	0.36 U 0.36 U	0.37 U 0.37 U	0.37 U 0.37 U	0.36 U 0.36 U	0.019 J 0.39 U
			0.33 NS		0.37 UJ	0.37 UJ		0.39 U
2-Nitroaniline 2-Nitrophenol	NS NS	NS NS	NS	0.36 UJ 0.36 U	0.37 UJ 0.37 U	0.37 UJ 0.37 U	0.36 U 0.36 U	0.39 U 0.39 U
3- And 4- Methylphenol (Total)	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.36 U	0.39 U
3,3'-Dichlorobenzidine	NS	NS	NS	0.36 U 0.14 U	0.15 U	0.15 U	0.14 U	0.39 U 0.16 U
3.3-Dichlorobenzidine 3-Nitroaniline	NS	NS	NS	0.14 U 0.36 U	0.15 U	0.15 U	0.14 U 0.36 UJ	0.39 UJ
4,6-Dinitro-2-Methylphenol	NS	NS	NS	0.29 U	0.3 U	0.3 U	0.29 U	0.31 U
4-Bromophenyl Phenyl Ether	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.36 U	0.39 U
4-Chloro-3-Methylphenol	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.36 U	0.39 U
4-Chloroaniline	NS	NS	NS	0.36 UJ	0.37 U	0.37 U	0.36 U	0.39 U
4-Chlorophenyl Phenyl Ether	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.36 U	0.39 U
4-Methylphenol (P-Cresol)	0.33	100	0.33	0.36 U	0.37 U	0.37 U	0.36 U	0.39 U
4-Nitroaniline	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.36 U	0.39 U
4-Nitrophenol	NS	NS	NS	0.73 UJ	0.75 UJ	0.74 UJ	0.73 U	0.78 U
Acenaphthene	20	100	98	0.36 U	0.03 J	0.026 J	0.025 J	0.075 J
Acenaphthylene	100	100	107	0.36 U	0.021 J	0.021 J	0.36 U	0.012 J
Acetophenone	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.36 U	0.39 U
Anthracene	100	100	1,000	0.36 U	0.067 J	0.065 J	0.059 J	0.16 J
Atrazine	NS	NS	NS	0.14 U	0.15 U	0.15 U	0.14 U	0.16 U
Benzaldehyde	NS	NS	NS	0.36 UJ	0.37 UJ	0.37 UJ	0.36 UJ	0.39 UJ
Benzo(a)Anthracene	1	1	1 22	0.036 U	0.19	0.2	0.17 J	0.43 J
Benzo(a)Pyrene Benzo(b)Fluoranthene	<u>1</u> 1	1	1.7	0.036 U 0.036 U	0.2	0.21 0.23	0.15 J 0.18 J	0.4 J 0.48 J
Benzo(g,h,i)Perylene	100	100	1,000	0.36 U	0.24 0.1 J	0.23 0.11 J	0.18 J	0.46 J 0.3 J
Benzo(g,n,n) Perviene Benzo(k)Fluoranthene	0.8	3.9	1.7	0.036 U	0.096	0.1	0.088 J	0.18 J
Benzyl Butyl Phthalate	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.36 UJ	0.39 UJ
Biphenyl (Diphenyl)	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.36 U	0.39 U
Bis(2-Chloroethoxy) Methane	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.36 U	0.39 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	NS	0.036 UJ	0.037 UJ	0.037 UJ	0.036 U	0.039 U
Bis(2-Chloroisopropyl) Ether	NS	NS	NS	0.36 UJ	0.37 UJ	0.37 UJ	0.36 UJ	0.39 UJ
Bis(2-Ethylhexyl) Phthalate	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.36 UJ	0.39 UJ
Caprolactam	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.36 U	0.39 U
Carbazole	NS	NS	NS	0.36 U	0.034 J	0.032 J	0.014 J	0.051 J
Chrysene	1	3.9	1	0.36 U	0.2 J	0.2 J	0.16 J	0.43 J
Dibenz(a,h)Anthracene	0.33	0.33	1,000	0.036 U	0.028 J	0.028 J	0.036 U	0.074 J
Dibenzofuran	7	59	210	0.36 U	0.019 J	0.015 J	0.36 U	0.031 J
Diethyl Phthalate	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.36 U	0.39 U
Dimethyl Phthalate	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.36 U	0.39 U
Di-N-Butyl Phthalate	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.36 U	0.39 U
Di-N-Octylphthalate	NS 100	NS 100	NS 1,000	0.36 U 0.36 U	0.37 U 0.41	0.37 U 0.43	0.36 U 0.31 J	0.39 U 0.81 J
Fluoranthene Fluorene	30	100	386	0.36 U 0.36 U	0.41 0.03 J	0.024 J	0.31 J 0.016 J	0.81 J 0.052 J
Huorene Hexachlorobenzene	0.33	100	386	0.36 U 0.036 U	0.03 J 0.037 U	0.024 J 0.037 U	0.016 J 0.036 U	0.052 J 0.039 U
Hexachlorobutadiene	0.33 NS	NS	3.2 NS	0.036 U 0.073 U	0.037 U	0.037 U 0.074 U	0.038 U	0.039 U 0.078 UJ
Hexachlorocyclopentadiene	NS	NS	NS	0.36 U	0.37 U	0.074 U	0.36 UJ	0.39 UJ
Hexachloroethane	NS	NS	NS	0.036 U	0.037 U	0.037 U	0.036 U	0.039 U
Indeno(1,2,3-c,d)Pyrene	0.5	0.5	8.2	0.036 U	0.12	0.13	0.000 0	0.31 J
Isophorone	NS	NS	NS	0.14 UJ	0.15 UJ	0.15 UJ	0.14 U	0.16 U
Naphthalene	12	100	12	0.36 U	0.021 J	0.016 J	0.014 J	0.049 J
Nitrobenzene	NS	NS	NS	0.036 U	0.037 U	0.037 U	0.036 U	0.039 U
N-Nitrosodi-N-Propylamine	NS	NS	NS	0.036 UJ	0.037 UJ	0.037 UJ	0.036 U	0.039 U
N-Nitrosodiphenylamine	NS	NS	NS	0.36 U	0.37 U	0.37 U	0.36 U	0.39 U
Pentachlorophenol	0.8	6.7	0.8	0.29 U	0.3 U	0.3 U	0.29 U	0.31 U
Phenanthrene	100	100	1,000	0.36 U	0.3 J	0.29 J	0.28 J	0.7
Phenol	0.33	100	0.33	0.36 U	0.37 U	0.37 U	0.36 U	0.39 U
Pyrene		100	1,000	0.36 U	0.35 J	0.35 J	0.39 J	0.98 J

		14	AKRF Sample ID aboratory Sample ID	EP-57_15_20230517 460-280490-3	EP-58_15_20230601 460-281385-1	EP-59_15_20230601 460-281385-2	EP-X08_15_20230601 460-281385-3	EP-60_15_20230601 460-281385-4
		L.	Date Sampled	5/17/2023	6/01/2023	6/01/2023	6/01/2023	6/01/2023
			Dilution Factor	1	1	1	1	1
			Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS	NS	0.35 U	0.35 U	0.36 U	0.35 U	0.37 U
1,4-Dioxane (P-Dioxane)	0.1	13	0.1	0.035 U	0.035 U	0.036 U	0.035 U	0.037 U
2,3,4,6-Tetrachlorophenol	NS	NS	NS	0.35 U	0.35 U	0.36 U	0.35 U	0.37 U
2,4,5-Trichlorophenol	NS NS	NS NS	NS NS	0.35 U 0.14 U	0.35 U 0.14 U	0.36 U 0.14 U	0.35 U 0.14 U	0.37 U 0.15 U
2,4,6-Trichlorophenol 2,4-Dichlorophenol	NS	NS	NS	0.14 UJ	0.14 U	0.14 U 0.14 U	0.14 U	0.15 U
2,4-Dimethylphenol	NS	NS	NS	0.35 UJ	0.35 U	0.36 U	0.35 U	0.13 U
2,4-Dinitrophenol	NS	NS	NS	0.28 U	0.28 UJ	0.29 UJ	0.29 UJ	0.3 UJ
2,4-Dinitrotoluene	NS	NS	NS	0.072 U	0.071 U	0.073 U	0.072 U	0.075 U
2,6-Dinitrotoluene	NS	NS	NS	0.072 U	0.071 U	0.073 U	0.072 U	0.075 U
2-Chloronaphthalene	NS	NS	NS	0.35 U	0.35 U	0.36 U	0.35 U	0.37 U
2-Chlorophenol	NS	NS	NS	0.35 UJ	0.35 U	0.36 U	0.35 U	0.37 U
2-Methylnaphthalene	NS 0.33	NS 100	NS 0.33	0.35 UJ 0.35 U	0.35 U 0.35 U	0.36 U 0.36 U	0.35 U 0.35 U	0.37 U 0.37 U
2-Methylphenol (O-Cresol) 2-Nitroaniline	0.33 NS	NS	0.33 NS	0.35 U	0.35 U	0.36 U	0.35 U	0.37 U
2-Nitrophenol	NS	NS	NS	0.35 UJ	0.35 U	0.36 U	0.35 U	0.37 U
3- And 4- Methylphenol (Total)	NS	NS	NS	0.35 UJ	0.35 U	0.36 U	0.35 U	0.37 U
3,3'-Dichlorobenzidine	NS	NS	NS	0.14 U	0.14 U	0.14 U	0.14 U	0.15 U
3-Nitroaniline	NS	NS	NS	0.35 U	0.35 U	0.36 U	0.35 U	0.37 U
4,6-Dinitro-2-Methylphenol	NS	NS	NS	0.28 U	0.28 U	0.29 U	0.29 U	0.3 U
4-Bromophenyl Phenyl Ether	NS	NS	NS	0.35 U	0.35 U	0.36 U	0.35 U	0.37 U
4-Chloro-3-Methylphenol	NS	NS	NS	0.35 UJ	0.35 U	0.36 U	0.35 U	0.37 U
4-Chloroaniline 4-Chlorophenyl Phenyl Ether	NS NS	NS NS	NS NS	0.35 U 0.35 U	0.35 U 0.35 U	0.36 U 0.36 U	0.35 U 0.35 U	0.37 U 0.37 U
4-Methylphenol (P-Cresol)	0.33	100	0.33	0.35 UJ	0.35 U	0.36 U	0.35 U	0.37 U
4-Nitroaniline	NS	NS	NS	0.35 U	0.35 U	0.36 U	0.35 U	0.37 U
4-Nitrophenol	NS	NS	NS	0.72 U	0.71 U	0.73 U	0.72 U	0.75 U
Acenaphthene	20	100	98	0.35 U	0.35 U	0.36 U	0.35 U	0.37 U
Acenaphthylene	100	100	107	0.35 U	0.35 U	0.36 U	0.35 U	0.37 U
Acetophenone	NS	NS	NS	0.35 UJ	0.35 U	0.36 U	0.35 U	0.37 U
Anthracene	100	100	1,000	0.35 U	0.015 J	0.017 J	0.35 U	0.37 U
Atrazine	NS	NS	NS	0.14 U	0.14 U	0.14 U 0.36 UJ	0.14 U	0.15 U
Benzaldehyde Benzo(a)Anthracene	<u>NS</u>	NS 1	<u>NS</u>	0.35 U 0.035 U	0.35 UJ 0.066	0.059 J	0.35 UJ 0.035 U	0.37 UJ 0.035 J
Benzo(a)Pyrene	1	1	22	0.035 UJ	0.056	0.039 J 0.049 J	0.035 U	0.033 J
Benzo(b)Fluoranthene	1	1	1.7	0.035 U	0.072	0.061 J	0.035 U	0.03 J
Benzo(g,h,i)Perylene	100	100	1,000	0.35 U	0.035 J	0.027 J	0.35 U	0.012 J
Benzo(k)Fluoranthene	0.8	3.9	1.7	0.035 U	0.033 J	0.029 J	0.035 U	0.014 J
Benzyl Butyl Phthalate	NS	NS	NS	0.35 U	0.35 U	0.36 U	0.35 U	0.37 U
Biphenyl (Diphenyl)	NS	NS	NS	0.35 U	0.35 U	0.36 U	0.35 U	0.37 U
Bis(2-Chloroethoxy) Methane	NS	NS	NS	0.35 UJ	0.35 U	0.36 U	0.35 U	0.37 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether) Bis(2-Chloroisopropyl) Ether	NS NS	NS NS	NS NS	0.035 UJ 0.35 UJ	0.035 U 0.35 U	0.036 U 0.36 U	0.035 U 0.35 U	0.037 U 0.37 U
Bis(2-Ethylhexyl) Phthalate	NS	NS	NS	0.35 U	0.35 U	0.36 U	0.35 U	0.37 U
Caprolactam	NS	NS	NS	0.35 U	0.35 U	0.36 U	0.35 U	0.37 U
Carbazole	NS	NS	NS	0.35 U	0.35 U	0.36 U	0.35 U	0.37 U
Chrysene	1	3.9	1	0.35 U	0.056 J	0.049 J	0.35 U	0.025 J
Dibenz(a,h)Anthracene	0.33	0.33	1,000	0.035 U	0.035 U	0.036 U	0.035 U	0.037 U
Dibenzofuran	7	59	210	0.35 U	0.35 U	0.36 U	0.35 U	0.37 U
Diethyl Phthalate	NS	NS	NS	0.35 U	0.35 U	0.36 U	0.35 U	0.37 U
Dimethyl Phthalate	NS	NS	NS	0.35 U 0.35 U	0.35 U 0.35 U	0.36 U 0.36 U	0.35 U 0.35 U	0.37 U 0.37 U
Di-N-Butyl Phthalate Di-N-Octylphthalate	NS NS	NS NS	NS NS	0.35 U 0.35 U	0.35 U	0.36 U	0.35 U	0.37 U
Fluoranthene	100	100	1,000	0.35 U	0.33 0 0.12 J	0.11 J	0.35 U	0.05 J
Fluorene	30	100	386	0.35 U	0.35 U	0.36 U	0.35 U	0.37 U
Hexachlorobenzene	0.33	1.2	3.2	0.035 U	0.035 U	0.036 U	0.035 U	0.037 U
Hexachlorobutadiene	NS	NS	NS	0.072 UJ	0.071 U	0.073 U	0.072 U	0.075 U
Hexachlorocyclopentadiene	NS	NS	NS	0.35 U	0.35 U	0.36 U	0.35 U	0.37 U
Hexachloroethane	NS	NS	NS	0.035 U	0.035 U	0.036 U	0.035 U	0.037 U
Indeno(1,2,3-c,d)Pyrene	0.5	0.5	8.2 NS	0.035 U	0.044	0.034 J	0.035 U	0.016 J
Isophorone	NS 12	NS 100	NS 12	0.14 UJ	0.14 U 0.35 U	0.14 U 0.36 U	0.14 U 0.35 U	0.15 U 0.37 U
Naphthalene Nitrobenzene	12 NS	100 NS	12 NS	0.35 UJ 0.035 UJ	0.35 U 0.035 U	0.36 U 0.036 U	0.35 U 0.035 U	0.37 U 0.037 U
Nitrosodi-N-Propylamine	NS	NS	NS	0.035 U	0.035 U	0.036 U	0.035 U	0.037 U
N-Nitrosodiphenylamine	NS	NS	NS	0.35 U	0.35 U	0.36 U	0.35 U	0.37 U
Pentachlorophenol	0.8	6.7	0.8	0.28 U	0.28 U	0.29 U	0.29 U	0.3 U
Phenanthrene	100	100	1,000	0.35 U	0.069 J	0.1 J	0.35 U	0.04 J
Phenol	0.33	100	0.33	0.35 UJ	0.35 U	0.36 U	0.35 U	0.37 U
Pyrene	100	100	1,000	0.35 U	0.11 J	0.096 J	0.35 U	0.046 J

ñ				Ical Results of Semivolatile Org				
			AKRF Sample ID	EP-61_15_20230601 460-281385-5	EP-55_15_20230517	EP-62_15_20230706	EP-63_15_20230706	EP-X09_15_20230706
		Li	aboratory Sample ID Date Sampled	6/01/2023	460-280490-1 5/17/2023	460-283756-1 7/06/2023	460-283756-2 7/06/2023	460-283756-6 7/06/2023
			Dilution Factor	1	3/17/2023	1/06/2023	1/06/2023	1/00/2023
			Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1.2.4.5-Tetrachlorobenzene	NS	NS	NS	0.36 U	0.4 U	0.39 U	0.38 U	0.39 U
1,4-Dioxane (P-Dioxane)	0.1	13	0.1	0.036 U	0.4 U	0.039 U	0.038 U	0.039 U
2,3,4,6-Tetrachlorophenol	NS	NS	NS	0.36 U	0.4 U	0.39 U	0.38 U	0.39 U
2,4,5-Trichlorophenol	NS	NS	NS	0.36 U	0.4 U	0.39 U	0.38 U	0.39 U
2,4,6-Trichlorophenol	NS	NS	NS	0.15 U	0.16 U	0.16 U	0.15 U	0.16 U
2,4-Dichlorophenol	NS	NS	NS	0.15 U	0.16 U	0.16 U	0.15 U	0.16 U
2,4-Dimethylphenol	NS	NS	NS	0.36 U	0.4 U	0.39 U	0.38 U	0.39 U
2,4-Dinitrophenol	NS	NS	NS	0.29 UJ	0.32 U	0.32 U	0.31 U	0.33 U
2,4-Dinitrotoluene	NS	NS	NS	0.074 U	0.081 U	0.08 U	0.078 U	0.078 U
2.6-Dinitrotoluene	NS	NS	NS	0.074 U	0.081 U	0.08 U	0.078 U	0.078 U
2-Chloronaphthalene	NS	NS	NS	0.36 U	0.4 U	0.39 U	0.38 U	0.39 U
2-Chlorophenol	NS	NS	NS	0.36 U	0.4 U	0.39 U	0.38 U	0.39 U
2-Methylnaphthalene	NS	NS	NS	0.014 J	0.4 U	0.39 U	0.38 U	0.39 U
2-Methylphenol (O-Cresol)	0.33	100	0.33	0.36 U	0.4 U	0.39 U	0.38 U	0.39 U
2-Metryphenol (O-Cresol) 2-Nitroaniline	0.33 NS	NS	0.33 NS	0.36 U	0.4 U	0.39 U	0.38 U	0.39 U
2-Nitrophenol	NS	NS	NS	0.36 U	0.4 U	0.39 U	0.38 U	0.39 U
3- And 4- Methylphenol (Total)	NS	NS	NS	0.36 U	0.4 U	0.39 U	0.38 U	0.39 U
3.3'-Dichlorobenzidine	NS	NS	NS	0.36 U	0.4 U 0.16 U	0.39 U 0.16 U	0.38 U 0.15 U	0.39 U 0.16 U
3.3'-Dichiorobenzialne 3-Nitroaniline	NS NS	NS NS	NS NS	0.15 U 0.36 U	0.16 U 0.4 UJ	0.16 U 0.39 U	0.15 U 0.38 U	0.16 U 0.39 U
4,6-Dinitro-2-Methylphenol	NS	NS	NS	0.36 U 0.29 U	0.4 UJ 0.32 U	0.39 U	0.38 U	0.39 U 0.31 U
	NS NS	NS NS	NS NS	0.29 U 0.36 U	0.32 U 0.4 U	0.32 U 0.39 U	0.31 U 0.38 U	0.31 U 0.39 U
4-Bromophenyl Phenyl Ether	NS NS	NS NS	NS NS	0.36 U 0.36 U	0.4 U 0.4 U	0.39 U 0.39 U	0.38 U 0.38 U	0.39 U 0.39 U
4-Chloro-3-Methylphenol 4-Chloroaniline	NS NS	NS NS	NS NS		0.4 U 0.4 U	0.39 U 0.39 U		0.39 U 0.39 U
				0.36 U			0.38 U	
4-Chlorophenyl Phenyl Ether	NS	NS	NS	0.36 U	0.4 U	0.39 U	0.38 U	0.39 U
4-Methylphenol (P-Cresol)	0.33	100	0.33	0.36 U	0.4 U	0.39 U	0.38 U	0.39 U
4-Nitroaniline	NS	NS	NS	0.36 U	0.4 U	0.39 U	0.38 U	0.39 U
4-Nitrophenol	NS	NS	NS	0.74 U	0.81 U	0.8 U	0.78 U	0.78 U
Acenaphthene	20	100	98	0.031 J	0.4 U	0.39 U	0.38 U	0.39 U
Acenaphthylene	100	100	107	0.36 U	0.4 U	0.39 U	0.38 U	0.39 U
Acetophenone	NS	NS	NS	0.36 U	0.4 U	0.39 U	0.38 U	0.39 U
Anthracene	100	100	1,000	0.081 J	0.4 U	0.39 U	0.38 U	0.39 U
Atrazine	NS	NS	NS	0.15 U	0.16 U	0.16 U	0.15 U	0.16 U
Benzaldehyde	NS	NS	NS	0.36 UJ	0.4 UJ	0.39 UJ	0.38 UJ	0.39 UJ
Benzo(a)Anthracene	1	1	1	0.21	0.04 U	0.039 U	0.029 J	0.031 J
Benzo(a)Pyrene	1	1	22	0.19	0.021 J	0.039 U	0.026 J	0.039
Benzo(b)Fluoranthene	1	1	1.7	0.24	0.022 J	0.039 U	0.03 J	0.046
Benzo(g,h,i)Perylene	100	100	1,000	0.14 J	0.013 J	0.39 U	0.38 U	0.066 J
Benzo(k)Fluoranthene	0.8	3.9	1.7	0.12	0.011 J	0.039 U	0.012 J	0.016 J
Benzyl Butyl Phthalate	NS	NS	NS	0.36 U	0.4 UJ	0.39 U	0.38 U	0.39 U
Biphenyl (Diphenyl)	NS	NS	NS	0.36 U	0.4 U	0.39 U	0.38 U	0.39 U
Bis(2-Chloroethoxy) Methane	NS	NS	NS	0.36 U	0.4 U	0.39 U	0.38 U	0.39 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	NS	0.036 U	0.04 U	0.039 U	0.038 U	0.039 U
Bis(2-Chloroisopropyl) Ether	NS	NS	NS	0.36 U	0.4 UJ	0.39 U	0.38 U	0.39 U
Bis(2-Ethylhexyl) Phthalate	NS	NS	NS	0.36 U	0.4 UJ	0.39 U	0.38 U	0.39 U
Caprolactam	NS	NS	NS	0.36 U	0.4 U	0.39 U	0.38 U	0.39 U
Carbazole	NS	NS	NS	0.038 J	0.4 U	0.39 U	0.38 U	0.39 U
Chrysene	1	3.9	1	0.18 J	0.021 J	0.39 U	0.028 J	0.024 J
Dibenz(a,h)Anthracene	0.33	0.33	1,000	0.043	0.04 U	0.039 U	0.038 U	0.039 U
Dibenzofuran	7	59	210	0.018 J	0.4 U	0.39 U	0.38 U	0.39 U
Diethyl Phthalate	NS	NS	NS	0.36 U	0.4 U	0.39 U	0.38 U	0.39 U
Dimethyl Phthalate	NS	NS	NS	0.36 U	0.4 U	0.39 U	0.38 U	0.39 U
Di-N-Butyl Phthalate	NS	NS	NS	0.36 U	0.4 U	0.39 U	0.38 U	0.39 U
Di-N-Octylphthalate	NS	NS	NS	0.36 U	0.4 U	0.39 U	0.38 U	0.39 U
Fluoranthene	100	100	1,000	0.46	0.023 J	0.39 U	0.047 J	0.04 J
Fluorene	30	100	386	0.027 J	0.4 U	0.39 U	0.38 U	0.39 U
Hexachlorobenzene	0.33	1.2	3.2	0.036 U	0.04 U	0.039 U	0.038 U	0.039 U
Hexachlorobutadiene	NS	NS	NS	0.074 U	0.081 UJ	0.08 U	0.078 U	0.078 U
Hexachlorocyclopentadiene	NS	NS	NS	0.36 U	0.4 UJ	0.39 U	0.38 U	0.39 U
Hexachloroethane	NS	NS	NS	0.036 U	0.04 U	0.039 U	0.038 U	0.039 U
Indeno(1,2,3-c,d)Pyrene	0.5	0.5	8.2	0.16	0.04 UJ	0.039 U	0.038 U	0.056
Isophorone	NS	NS	NS	0.15 U	0.16 U	0.16 U	0.15 U	0.16 U
Naphthalene	12	100	12	0.028 J	0.4 U	0.39 U	0.38 U	0.39 U
Nitrobenzene	NS	NS	NS	0.036 U	0.04 U	0.039 U	0.038 U	0.039 U
N-Nitrosodi-N-Propylamine	NS	NS	NS	0.036 U	0.04 U	0.039 U	0.038 U	0.039 U
N-Nitrosodiphenylamine	NS	NS	NS	0.36 U	0.4 U	0.39 U	0.38 U	0.39 U
Pentachlorophenol	0.8	6.7	0.8	0.29 U	0.32 U	0.32 U	0.31 U	0.31 U
Phenanthrene	100	100	1,000	0.36	0.4 U	0.39 U	0.035 J	0.033 J
Phenol	0.33	100	0.33	0.36 U	0.4 U	0.39 U	0.38 U	0.39 U
Pyrene	100	100	1,000	0.38	0.036 J	0.39 U	0.05 J	0.044 J

		L	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor	EP-64_15_20230706 460-283756-3 7/06/2023 1	EP-65_15_20230706 460-283756-4 7/06/2023 1	EP-66_15_20230706 460-283756-5 7/06/2023 1	FB-01_20221228 460-272140-12 12/28/2022 1	FB-01_20230103 460-272291-12 1/03/2023 1
Commonweat			Unit	mg/kg CONC Q	mg/kg CONC Q	mg/kg CONC Q	μg/L CONC Q	μg/L CONC Q
			NYSDEC PGWSCO			0.4 U		10 U
1,2,4,5-Tetrachlorobenzene 1,4-Dioxane (P-Dioxane)	NS 0.1	NS 13	NS 0.1	0.35 U 0.035 U	0.4 U 0.04 U	0.4 U	<u>10 U</u> 0.2 U	0.2 U
2.3.4.6-Tetrachlorophenol	NS	NS	NS U.I	0.35 U	0.4 U	0.04 U	10 U	<u> </u>
2,4,5-Trichlorophenol	NS	NS	NS	0.35 U	0.4 U	0.4 U	10 U	10 U
2,4,6-Trichlorophenol	NS	NS	NS	0.14 U	0.16 U	0.16 U	10 U	10 U
2,4-Dichlorophenol	NS	NS	NS	0.14 U	0.16 U	0.16 U	10 U	10 U
2,4-Dimethylphenol	NS	NS	NS	0.35 U	0.4 U	0.4 U	10 U	10 U
2,4-Dinitrophenol	NS	NS	NS	0.29 U	0.32 U	0.32 U	40 U	40 U
2,4-Dinitrotoluene	NS	NS	NS	0.072 U	0.08 U	0.082 U	10 U	10 U
2,6-Dinitrotoluene	NS	NS	NS	0.072 U	0.08 U	0.082 U	2 U	2 U
2-Chloronaphthalene	NS	NS	NS	0.35 U	0.4 U	0.4 U	10 U	10 U
2-Chlorophenol	NS	NS	NS	0.35 U	0.4 U	0.4 U	10 U	10 U
2-Methylnaphthalene	NS	NS	NS	0.35 U	0.4 U	0.4 U	10 U	10 U
2-Methylphenol (O-Cresol)	0.33	100	0.33	0.35 U	0.4 U	0.4 U	10 U	10 U
2-Nitroaniline	NS	NS	NS	0.35 U	0.4 U	0.4 U	10 UJ	10 UJ
2-Nitrophenol	NS	NS NS	NS NS	0.35 U	0.4 U 0.4 U	0.4 U 0.4 U	<u>10 U</u> 10 U	<u>10 U</u> 10 U
3- And 4- Methylphenol (Total) 3,3'-Dichlorobenzidine	NS NS	NS NS	NS	0.35 U 0.14 U	0.4 U 0.16 U	0.4 U 0.16 U	10 U	10 U
3.3-Dichlorobenzidine 3-Nitroaniline	NS	NS	NS	0.35 U	0.16 U 0.4 U	0.16 U 0.4 U	10 U	10 U
4,6-Dinitro-2-Methylphenol	NS	NS	NS	0.29 U	0.4 U	0.4 0 0.32 U	20 U	20 U
4-Bromophenyl Phenyl Ether	NS	NS	NS	0.35 U	0.4 U	0.32 0 0.4 U	10 U	10 U
4-Chloro-3-Methylphenol	NS	NS	NS	0.35 U	0.4 U	0.4 U	10 U	10 U
4-Chloroaniline	NS	NS	NS	0.35 U	0.4 U	0.4 U	10 U	10 U
4-Chlorophenyl Phenyl Ether	NS	NS	NS	0.35 U	0.4 U	0.4 U	10 U	10 U
4-Methylphenol (P-Cresol)	0.33	100	0.33	0.35 U	0.4 U	0.4 U	10 U	10 U
4-Nitroaniline	NS	NS	NS	0.35 U	0.4 U	0.4 U	10 U	10 U
4-Nitrophenol	NS	NS	NS	0.72 U	0.8 U	0.82 U	20 U	20 U
Acenaphthene	20	100	98	0.35 U	0.4 U	0.4 U	10 U	10 U
Acenaphthylene	100	100	107	0.35 U	0.4 U	0.4 U	10 U	10 U
Acetophenone	NS	NS	NS	0.35 U	0.4 U	0.4 U	19	10 U
Anthracene	100	100	1,000	0.35 U	0.4 U	0.4 U	10 U	10 U
Atrazine Benzaldehyde	NS NS	NS NS	NS NS	0.14 U 0.35 UJ	0.16 U 0.4 UJ	0.16 U 0.4 UJ	2 U 10 UJ	2 U 10 UJ
Benzo(a)Anthracene	1	1	1	0.035 U	0.033 J	0.04 05	1 U	1 U
Benzo(a)Pyrene	1	1	22	0.035 U	0.031 J	0.041 0.035 J	1 U	1 U
Benzo(b)Fluoranthene	1	1	1.7	0.035 U	0.038 J	0.044	2 U	2 U
Benzo(g,h,i)Perylene	100	100	1,000	0.35 U	0.014 J	0.4 U	10 U	10 U
Benzo(k)Fluoranthene	0.8	3.9	1.7	0.035 U	0.015 J	0.017 J	1 U	1 U
Benzyl Butyl Phthalate	NS	NS	NS	0.35 U	0.4 U	0.4 U	10 U	10 U
Biphenyl (Diphenyl)	NS	NS	NS	0.35 U	0.4 U	0.4 U	10 U	10 U
Bis(2-Chloroethoxy) Methane	NS	NS	NS	0.35 U	0.4 U	0.4 U	10 U	10 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	NS	0.035 U	0.04 U	0.04 U	1 U	1 U
Bis(2-Chloroisopropyl) Ether	NS	NS	NS	0.35 U	0.4 U	0.4 U	10 U	10 U
Bis(2-Ethylhexyl) Phthalate	NS	NS	NS	0.35 U	0.4 U	0.4 U	2 U	2 U
Caprolactam	NS	NS	NS	0.35 U	0.4 U	0.4 U	10 U	10 U
Carbazole	NS 1	NS 3.9	NS 1	0.35 U 0.35 U	0.4 U 0.038 J	0.4 U 0.043 J	10 U 2 U	10 U 2 U
Chrysene Dibenz(a,h)Anthracene	0.33	0.33	1,000	0.35 U 0.035 U	0.038 J 0.04 U	0.043 J 0.04 U	2 U 1 U	2 U 1 U
Dibenz(a,n)Aninracene Dibenzofuran	7	59	210	0.035 U	0.04 U	0.04 U	10 U	10 U
Diethyl Phthalate	NS	NS	NS	0.35 U	0.4 U	0.4 U	10 U	10 U
Dimethyl Phthalate	NS	NS	NS	0.35 U	0.4 U	0.4 U	10 U	10 U
Di-N-Butyl Phthalate	NS	NS	NS	0.35 U	0.4 U	0.4 U	10 U	10 U
Di-N-Octylphthalate	NS	NS	NS	0.35 U	0.4 U	0.4 U	10 UJ	10 U
Fluoranthene	100	100	1,000	0.35 U	0.062 J	0.078 J	10 U	10 U
Fluorene	30	100	386	0.35 U	0.4 U	0.4 U	10 U	10 U
Hexachlorobenzene	0.33	1.2	3.2	0.035 U	0.04 U	0.04 U	1 U	1 U
Hexachlorobutadiene	NS	NS	NS	0.072 U	0.08 U	0.082 U	1 U	1 U
Hexachlorocyclopentadiene	NS	NS	NS	0.35 U	0.4 U	0.4 U	10 U	10 U
Hexachloroethane	NS	NS	NS	0.035 U	0.04 U	0.04 U	2 U	2 U
Indeno(1,2,3-c,d)Pyrene	0.5	0.5	8.2	0.035 U	0.04 U	0.04 U	2 UJ	2 U
Isophorone	NS	NS	NS	0.14 U	0.16 U	0.16 U	10 U	10 U
Naphthalene	12 NS	100	12 NS	0.35 U	0.4 U	0.4 U	2 U	2 U
Nitrobenzene N-Nitrosodi-N-Propylamine	NS NS	NS NS	NS NS	0.035 U 0.035 U	0.04 U 0.04 U	0.04 U 0.04 U	<u>1 U</u> 1 U	<u>1 U</u> 1 U
N-Nitrosodi-N-Propylamine N-Nitrosodiphenylamine	NS NS	NS NS	NS	0.035 U 0.35 U	0.04 U	0.04 U 0.4 U	1 U 10 U	10 U
Pentachlorophenol	0.8	6.7	0.8	0.35 U 0.29 U	0.4 U	0.4 U 0.32 U	20 UJ	20 UJ
Phenanthrene	100	100	1,000	0.35 U	0.047 J	0.06 J	10 U	10 U
								10 0
Phenol	0.33	100	0.33	0.35 U	0.4 U	0.4 U	10 U	10 U

Table 2 975 Nostrand Avenue Brooklyn, NY

Brooklyn, NY Post-Excavation Endpoint Sample Results Soil Analytical Results of Semivolatile Organic Compounds (SVOCs)

Laboratory Sampled Diution Factor 440.274640-8 2/14/2023 440.278010-18 4/10/203 440.278010-18 4/12/203 440.278010-18 4/12/2010 440.278010-18 4/2/20100-180 440.2780100-1800 44	U 10 U U 0.2 U U 10 U U 2 U U 10 U U 10 U U 10 U U 10 U
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	/2023 5/17/2023 1 1 g/L µg/L Q CONC Q U 10 U U 0.2 U U 10 U
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
Unit µg/L Q/L	μg/L μg/L Q CONC Q U 10 U U 0.2 U U 10 U U 2 U U 10 U
Compound NYSDEC UUSCO NYSDEC RRSCO NSDEC CONC Q	Q CONC Q U 10 U U 0.2 U U 10 U
12.4.5-Tetrachlorobenzene NS NS NS 10 U 0.2 U	U 10 U U 0.2 U U 10 U U 2 U U 10 U U 10 U U 10 U U 10 U
14-Dioxane (P-Dioxane) 0.1 13 0.1 0.2 U 0.2 U <th0.2 th="" u<=""></th0.2>	U 0.2 U U 10 U U 20 U 10 U
23.4.6-Tetrachlorophenol NS NS NS 10 U 10 U 10 U 10 U 10 U 2.4.5-Trichlorophenol NS NS NS NS 10 U 40 U 2 U 2 U 2 U 2 U 2 U 2 U 2 U 2 U 2 U 2 U 2 Chorophenol NS NS NS NS NS NS NS 10 U 10 U 10 U 10 U 10 U	U 10 U U 20 U 10 U
2,4,5-Trichlorophenol NS NS NS 10 U	U 10 U U 20 U 10 U
2.4.6-Trichlorophenol NS NS NS 10 U 40 U	U 10 U U 10 U U 10 U U 10 U U 20 U 10 U
2,4-Dichlorophenol NS NS NS 10 U 10 U 10 U 10 U 10 U 10 U 2,4-Dinitrophenol NS NS NS 10 U	U 10 U U 40 U U 10 U U 2 U U 10 U
2.4-Dinitrophenol NS NS NS 40 U	U 40 U U 10 U U 2 U U 10 U
2.4-Dinitrotoluene NS NS NS 10 U 2 U	U 10 U U 2 U U 10 U
2.6-Dinitrobluene NS NS NS 2 U	U 2 U U 10 U
2-Chloronaphthalene NS NS NS 10 U	U 10 U
2-Chlorophenol NS NS NS 10 U	U 10 U U 10 U U 10 U
2-Methylaphtalene NS NS NS 10 U 10 U 10 U 10 U 10 U 2-Methylphenol (O-Cresol) 0.33 100 0.33 10 U <	U 10 U U 10 U
2-Methylphenol (O-Cresol) 0.33 100 0.33 10 U 10 U 10 U 10 U 10 U 2-Nitrophenol NS NS NS NS 10 U 10	U 10 U
2-Nitroanline NS NS NS 10 U	
2-Nitrophenol NS NS NS 10 U	
3- And 4- Methylphenol (Total) NS NS NS 10 U 1	
3.3-Dichlorobenzidine NS NS NS 10 U	
3-Nitroaniline NS NS NS 10 U 20 U	
A.6-Dinitro-2-Methylphenol NS NS NS 20 U 20 U<	
4-Bromophenyl Phenyl Ether NS NS NS 10 U 10 U<	
4-Chloro-3-Methylphenol NS NS NS 10 U 10 U <td></td>	
4-Chloroaniline NS NS NS 10 U 10 U 10 U 10 U 10 4-Chlorophenyl Phenyl Ether NS NS NS 10 U	
4-Methylphenol (P-Cresol) 0.33 100 0.33 10 U 10 U 10 U 10	
4-Nitroaniline NS NS NS 10 U 10 U 10 U 10	
4-Nitrophenol NS NS NS 20 U 20 20 20	
Acenaphthene 20 100 98 10 U 10 U 10 U 10 U	
Acenaphthylene 100 100 107 10 U 10 U 10 U 10 U 10 U	
Acetophenone NS NS NS 10 U 10 U 10 U 10 10 Anthracene 100 100 1,000 10 U 10 U <td< td=""><td></td></td<>	
	U 2 U
	UJ 10 U
	U 1 U
	U 1 U
	U 2 U
Benzo(g,h,i)Perylene 100 100 1,000 10 UJ 10 U 10 10 10	
	U 1 U
Benzyl Butyl Phthalate NS NS NS 10 UJ 10 U 10 10	U 10 U
Biphenyl (Diphenyl) NS NS 10 U 10 U 10 U 10 U	
Bis(2-Chloroethoxy) Methane NS NS 10 U 10 U 10 U 10 U	
	U 1 U
Bis(2-chloroisopropu) Ether NS NS 10 U 10	
	U 2 U
Caprolactam NS NS NS 10 U 10 U <t< td=""><td></td></t<>	
	U 2 U
	U 1 U
Dibenzofuran 7 59 210 10 10 10 10 10 10 10	
Distry(Phthalate NS NS NS 10 U 10 U 10 U 10 U	
Dimethy/Phthalate NS NS NS 10 U 10 U 10 U 10 U	
Di-N-Butyl Phthalate NS NS NS 10 U 10 U 10 U 10 U	
Di-N-Octylphthalate NS NS NS 10 UJ 10 U 10 10	U 10 U
Fluoranthene 100 100 1,000 10 U 10 U 10 U 10 10	
Fluorene 30 100 386 10 U 10 U 10 U 10 10	
	U 1 U
	U 1 U
	UJ 10 U
	U 2 U
	U 2 U U 10 U
	U 2 U
	U 1 U
	U 1U
N-Nitosodin-N-rouppanine NS NS NS 10 10 10 10 10 10 10	
No No<	
Premativene 0.0 0.0 0.0 2.0 <th< td=""><td></td></th<>	
Phenol 0.33 100 0.33 10 10 10 10 10 10 10 10 10 10	
Direction Direction <thdirection< th=""> Direction <thdirection< th=""> Direction <thdirection< th=""> <thdirection< th=""> <thdir< td=""><td></td></thdir<></thdirection<></thdirection<></thdirection<></thdirection<>	

Table 2 975 Nostrand Avenue

Brooklyn, NY Post-Excavation Endpoint Sample Results Soil Analytical Results of Semivolatile Organic Compounds (SVOCs)

		AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit	FB-01_20230601 460-281385-6 6/01/2023 1 μg/L	FB-01_20230706 460-283756-7 7/06/2023 1 μg/L	
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS	NS	10 U	10 U
1,4-Dioxane (P-Dioxane)	0.1	13	0.1	0.2 U	0.2 U
2,3,4,6-Tetrachlorophenol	NS	NS	NS	10 U	10 U
2,4,5-Trichlorophenol	NS	NS	NS	10 U	10 U
2,4,6-Trichlorophenol	NS	NS	NS	10 U	10 U
2,4-Dichlorophenol	NS	NS	NS	10 U	10 U
2,4-Dimethylphenol	NS	NS	NS	10 U	10 U
2,4-Dinitrophenol	NS	NS	NS	40 U	40 UJ
2,4-Dinitrotoluene	NS	NS	NS	10 U	10 U
2.6-Dinitrotoluene 2-Chloronaphthalene	NS NS	NS NS	NS NS	2 U 10 U	2 U 10 U
2-Chlorophenol	NS	NS	NS	10 U	10 U
2-Methylnaphthalene	NS	NS	NS	10 U	10 U
2-Methylphenol (O-Cresol)	0.33	100	0.33	10 U	10 U
2-Nitroaniline	NS	NS	NS	10 U	10 U
2-Nitrophenol	NS	NS	NS	10 U	10 U
3- And 4- Methylphenol (Total)	NS	NS	NS	10 U	10 U
3,3'-Dichlorobenzidine	NS	NS	NS	10 U	10 U
3-Nitroaniline	NS	NS	NS	10 U	10 U
4,6-Dinitro-2-Methylphenol	NS	NS	NS	20 U	20 UJ
4-Bromophenyl Phenyl Ether	NS	NS	NS	10 U	10 U
4-Chloro-3-Methylphenol	NS	NS	NS	10 U	10 U
4-Chloroaniline	NS	NS	NS	10 U	10 U
4-Chlorophenyl Phenyl Ether	NS	NS	NS	10 U	10 U
4-Methylphenol (P-Cresol)	0.33	100	0.33	10 U	10 U
4-Nitroaniline	NS	NS	NS	10 U	10 U
4-Nitrophenol	NS	NS	NS	20 U	20 U
Acenaphthene	20	100	98	10 U	10 U
Acenaphthylene Acetophenone	100 NS	100 NS	107 NS	10 U 10 U	10 U 10 U
Anthracene	100	100	1,000	10 U	10 U
Atrazine	NS	NS	NS	2 U	2 U
Benzaldehyde	NS	NS	NS	10 U	10 UJ
Benzo(a)Anthracene	1	1	1	1 U	1 U
Benzo(a)Pyrene	1	1	22	1 U	1 U
Benzo(b)Fluoranthene	1	1	1.7	2 U	2 U
Benzo(g,h,i)Perylene	100	100	1,000	10 U	10 U
Benzo(k)Fluoranthene	0.8	3.9	1.7	1 U	1 U
Benzyl Butyl Phthalate	NS	NS	NS	10 U	10 U
Biphenyl (Diphenyl)	NS	NS	NS	10 U	10 U
Bis(2-Chloroethoxy) Methane	NS	NS	NS	10 U	10 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	NS	1 U	1 U
Bis(2-Chloroisopropyl) Ether	NS	NS	NS	10 U	10 U
Bis(2-Ethylhexyl) Phthalate	NS	NS	NS	2 U	2 UJ
Caprolactam	NS NS	NS NS	NS NS	10 U 10 U	10 U 10 U
Carbazole Chrysene	1	3.9	1 1	10 U 2 U	10 U 2 U
Dibenz(a,h)Anthracene	0.33	0.33	1,000	<u> </u>	1 U
Dibenzofuran	7	59	210	10 U	10 U
Diethyl Phthalate	NS	NS	NS	10 U	10 U
Dimethyl Phthalate	NS	NS	NS	10 U	10 U
Di-N-Butyl Phthalate	NS	NS	NS	10 U	10 U
Di-N-Octylphthalate	NS	NS	NS	10 U	10 UJ
Fluoranthene	100	100	1,000	10 U	10 U
Fluorene	30	100	386	10 U	10 U
Hexachlorobenzene	0.33	1.2	3.2	1 U	1 U
Hexachlorobutadiene	NS	NS	NS	1 U	1 U
Hexachlorocyclopentadiene	NS	NS	NS	10 U	10 U
Hexachloroethane	NS	NS	NS	2 U	2 U
Indeno(1,2,3-c,d)Pyrene	0.5	0.5	8.2	2 U	2 U
Isophorone	NS	NS	NS	10 U	10 U
Naphthalene	12	100	12	2 U	2 U
Nitrobenzene	NS	NS	NS	1 U	1 U 1 U
N-Nitrosodi-N-Propylamine N-Nitrosodiphenylamine	NS NS	NS NS	NS NS	1 U 10 U	1 U 10 U
N-Nitrosodipnenylamine Pentachlorophenol	0.8	6.7	0.8	20 U	20 U
Penachorophenol	100	100	1,000		10 U
Phenol	0.33	100	0.33	10 U	10 U
Pyrene	100	100	1,000	10 U	10 U

		L	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit	460-272204-1	EP-01_15_20221229 460-272204-1 12/29/2022 3 mg/kg	EP-02_15_20221228 460-272140-1 12/28/2022 1 mg/kg	EP-03_15_20221228 460-272140-2 12/28/2022 1 mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	NS	13,000	NR	7,780	7,590
Antimony	NS	NS	NS	1.1 U	NR	1.1 UJ	1.1 U
Arsenic	13	16	16	4.3	NR	2.4	4
Barium	350	400	820	153	NR	46.7 JL	38.1
Beryllium	7.2	72	47	0.72	NR	0.44 J	0.51
Cadmium	2.5	4.3	7.5	1.1 U	NR	1.1 U	1.1 U
Calcium	NS	NS	NS	1,990	NR	1,280 JK	800
Chromium, Total	NS	NS	NS	19.1	NR	17.2 JK	18.8
Cobalt	NS	NS	NS	6.6	NR	6.8 JL	6.9
Copper	50	270	1,720	23.3	NR	18.7 JK	19.6
Iron	NS	NS	NS	17,500	NR	16,300	21,800
Lead	63	400	450	178	NR	28	17
Magnesium	NS	NS	NS	2,530	NR	2,210 JK	2,000
Manganese	1,600	2,000	2,000	425	NR	334	412
Mercury	0.18	0.81	<u>0.73</u>	NR	<u>1.8</u>	0.055	0.049
Nickel	30	310	130	18.1	NR	19.6	17.7
Potassium	NS	NS	NS	1,090	NR	1,280 JK	1,020
Selenium	3.9	180	4	0.34 J	NR	1.4 U	0.23 J
Silver	2	180	8.3	0.11 J	NR	0.45 U	0.45 U
Sodium	NS	NS	NS	164	NR	91.8 J	77.6 J
Thallium	NS	NS	NS	0.13 J	NR	0.1 J	0.082 J
Vanadium	NS	NS	NS	26.4	NR	21.7 JK	25.5
Zinc	109	10,000	2,480	58.5	NR	40.9	35.4

		L	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit	EP-04_15_20221228 460-272140-3 12/28/2022 1 mg/kg	EP-X01_15_20221228 460-272140-11 12/28/2022 1 mg/kg	EP-05_15_20221229 460-272204-2 12/29/2022 1 mg/kg	EP-06_15_20221228 460-272140-4 12/28/2022 1 mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	NS	7,090	6,910	7,980	6,410
Antimony	NS	NS	NS	1 U	0.96 U	1 U	1.1 U
Arsenic	13	16	16	1.7	1.7	2.5	2.1
Barium	350	400	820	30.5	33.6	48.2	44.7
Beryllium	7.2	72	47	0.34 J	0.39	0.43	0.35 J
Cadmium	2.5	4.3	7.5	1 U	0.96 U	1 U	1.1 U
Calcium	NS	NS	NS	1,250	870	1,060	1,000
Chromium, Total		NS	NS	14	14	19.3	12.5
Cobalt	NS	NS	NS	5	4.4	6.6	4.2
Copper	50	270	1,720	16.8	13.5	20.6	13.9
Iron	NS	NS	NS	14,400	12,300	16,500	13,500
Lead	63	400	450	13.7	13.9	24.2	57.4
Magnesium	NS	NS	NS	1,620	1,540	2,380	1,360
Manganese	1,600	2,000	2,000	197	175	400	246
Mercury	0.18	0.81	0.73	0.03	0.024	0.025	0.22
Nickel	30	310	130	13	13.9	19	10.4
Potassium	NS	NS	NS	634	593	1,230	508
Selenium	3.9	180	4	0.16 J	0.16 J	1.3 U	0.18 J
Silver	2	180	8.3	0.41 U	0.38 U	0.4 U	0.42 U
Sodium	NS	NS	NS	106 J	53.1 J	133	70.4 J
Thallium	NS	NS	NS	0.064 J	0.069 J	0.12 J	0.061 J
Vanadium	NS	NS	NS	18.3	19	25.7	19.2
Zinc	109	10,000	2,480	25.1	24.9	49.6	37.7

		L	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor	EP-07_15_20221228 460-272140-5 12/28/2022 1	EP-08_15_20221228 460-272140-6 12/28/2022 1	EP-09_15_20221229 460-272204-3 12/29/2022 1	EP-10_15_20221228 460-272140-7 12/28/2022 1
Compound			Unit NYSDEC PGWSCO	mg/kg CONC Q	mg/kg CONC Q	mg/kg CONC Q	mg/kg CONC Q
Compound			NTSDEC PGWSCO NS				
Aluminum	NS	NS		6,880	6,940	8,080	8,920
Antimony	NS	NS	NS	<u>1.1 U</u>	<u>1.1 U</u>	0.96 U	<u> </u>
Arsenic	13	16	16	1.9	2.1	2.3	2.3
Barium	350	400	820	37.5	42.7	41.7	53.7
Beryllium	7.2	72	47	0.39 J	0.4 J	0.43	0.49
Cadmium	2.5	4.3	7.5	1.1 U	1.1 U	0.13 J	1.1 U
Calcium	NS	NS	NS	1,230	1,270	2,760	1,520
Chromium, Total		NS	NS	15.4	14.8	17.4	13.3
Cobalt	NS	NS	NS	5.3	5.2	5.9	4.2
Copper	50	270	1,720	17.5	19.8	18.5	15.7
Iron	NS	NS	NS	15,300	13,600	17,200	12,200
Lead	63	400	450	24.6	47.8	22	81.4
Magnesium	NS	NS	NS	1,840	1,860	2,150	1,450
Manganese	1,600	2,000	2,000	296	306	313	246
Mercury	0.18	0.81	<u>0.73</u>	0.38	0.22	0.076	0.2
Nickel	30	310	130	14.6	15.5	18	9.8
Potassium	NS	NS	NS	851	756	996	534
Selenium	3.9	180	4	1.4 U	0.15 J	1.2 U	0.29 J
Silver	2	180	8.3	0.43 U	0.42 U	0.38 U	0.44 U
Sodium	NS	NS	NS	80 J	71.2 J	106	66.8 J
Thallium	NS	NS	NS	0.075 J	0.068 J	0.11 J	0.081 J
Vanadium	NS	NS	NS	22.3	20.1	24.5	18.6
Zinc	109	10,000	2,480	33.7	41.9	34.8	46.2

		L	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit	EP-11_15_20221228 460-272140-8 12/28/2022 1 mg/kg	EP-11_15_20221228 460-272140-8 12/28/2022 5 mg/kg	EP-12_15_20221229 460-272204-4 12/29/2022 1 mg/kg	EP-13_15_20221228 460-272140-9 12/28/2022 1 mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	NS	NR	7,710	7,050	6,830
Antimony	NS	NS	NS	1.1 U	NR	1 U	1.1 U
Arsenic	13	16	16	NR	2.8 J	2.8	3.3
Barium	350	400	820	58.3	NR	47.6	83.6
Beryllium	7.2	72	47	0.43 J	NR	0.54	0.34 J
Cadmium	2.5	4.3	7.5	0.38 J	NR	1 U	0.19 J
Calcium	NS	NS	NS	NR	1,910	12,100	2,960
Chromium, Total		NS	NS	NR	14.9	18.2	13.7
Cobalt	NS	NS	NS	NR	5.1 J	7.2	4.7
Copper	50	270	1,720	NR	36.3	24.6	28.8
Iron	NS	NS	NS	NR	14,100	27,500	11,600
Lead	63	400	450	83	NR	24.5	154
Magnesium	NS	NS	NS	NR	1,850	8,470	1,930
Manganese	1,600	2,000	2,000	NR	255	560	192
Mercury	0.18	0.81	0.73	0.27	NR	0.048	0.49
Nickel	30	310	130	NR	14.4	19.2	14.5
Potassium	NS	NS	NS	NR	766	885	824
Selenium	3.9	180	4	NR	7 U	0.18 J	0.24 J
Silver	2	180	8.3	0.16 J	NR	0.42 U	0.42 U
Sodium	NS	NS	NS	NR	564 U	94.3 J	139
Thallium	NS	NS	NS	0.091 J	NR	0.19 J	0.072 J
Vanadium	NS	NS	NS	NR	21.7	27	22.8
Zinc	109	10,000	2,480	NR	79.4	42.5	96.2

		L	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor	EP-14_15_20221229 460-272204-5 12/29/2022 1	EP-15_15_20221229 460-272204-6 12/29/2022 1	EP-16_15_20221229 460-272204-7 12/29/2022 1	EP-17_15_20221229 460-272204-8 12/29/2022 1
Compound			Unit NYSDEC PGWSCO	mg/kg CONC Q	mg/kg CONC Q	mg/kg CONC Q	mg/kg CONC Q
Compound							
Aluminum	NS	NS	NS	7,200	7,710	9,470	10,800
Antimony	NS	NS	NS	<u>1 U</u>	<u>1 U</u>	<u>1 U</u>	<u>1.1 U</u>
Arsenic	13	16	16	2.4	2.5	3.3	3.9
Barium	350	400	820	41.9	44.7	59	31.5
Beryllium	7.2	72	47	0.43	0.44	0.53	0.41 J
Cadmium	2.5	4.3	7.5	1 U	1 U	0.12 J	1.1 U
Calcium	NS	NS	NS	973	1,330	1,860	789
Chromium, Total		NS	NS	17.6	16.8	23	20.1
Cobalt	NS	NS	NS	6.2	6.6	7.4	7.5
Copper	50	270	1,720	21.4	21	31.8	12.8
Iron	NS	NS	NS	16,300	19,600	19,600	19,800
Lead	63	400	450	23.1	18.3	84.7	9.9
Magnesium	NS	NS	NS	1,990	2,780	2,260	1,990
Manganese	1,600	2,000	2,000	327	394	392	545
Mercury	0.18	0.81	0.73	0.085	0.052	0.21	0.01 J
Nickel	30	310	130	17	17.9	23.8	14.6
Potassium	NS	NS	NS	985	1,000	973	695
Selenium	3.9	180	4	0.15 J	1.3 U	0.23 J	0.15 J
Silver	2	180	8.3	0.4 U	0.4 U	0.41 U	0.43 U
Sodium	NS	NS	NS	147	106	193	109
Thallium	NS	NS	NS	0.1 J	0.11 J	0.11 J	0.098 J
Vanadium	NS	NS	NS	24.8	27.5	36.3	28.2
Zinc	109	10,000	2,480	35.8	36.3	62.4	27.6

		L	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit	EP-18_15_20221228 460-272140-10 12/28/2022 1 mg/kg	EP-19_15_20221229 460-272204-9 12/29/2022 1 mg/kg	EP-20_15_20221229 460-272204-10 12/29/2022 1 mg/kg	EP-21_15_20230103 460-272291-1 1/03/2023 1 mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	NS	7,720	9,370	18,100	10,100
Antimony	NS	NS	NS	1 U	1 U	1.3 UJ	1.2 UJ
Arsenic	13	16	16	2.1	3.2	5.9	3.7
Barium	350	400	820	42.7	64.5	95.6	61.2
Beryllium	7.2	72	47	0.42	0.57	0.95	0.5
Cadmium	2.5	4.3	7.5	1 U	1 U	1.3 U	0.15 J
Calcium	NS	NS	NS	1,370	760	2,320	1,900 JL
Chromium, Total	NS	NS	NS	22.6	23	25.8	18.6 J
Cobalt	NS	NS	NS	6.2	6.2	9.7	6.7 J
Copper	50	270	1,720	181	26	28.1	31.6 J
Iron	NS	NS	NS	15,100	24,900	21,800	17,800
Lead	63	400	450	36.8	35	108	81.8
Magnesium	NS	NS	NS	1,960	3,880	3,490	2,440 J
Manganese	1,600	2,000	2,000	258	437	730	295
Mercury	0.18	0.81	<u>0.73</u>	0.15	0.17	0.4	0.25 JL
Nickel	30	310	130	35.2	19.3	23	17.8 J
Potassium	NS	NS	NS	865	1,650	1,240	1,140 JL
Selenium	3.9	180	4	0.16 J	0.24 J	0.59 J	0.29 J
Silver	2	180	8.3	0.11 J	0.4 U	0.12 J	0.46 U
Sodium	NS	NS	NS	86.5 J	176	140	108 J
Thallium	NS	NS	NS	0.082 J	0.16 J	0.18 J	0.1 J
Vanadium	NS	NS	NS	22.8	34.5	36.1	28.2 J
Zinc	109	10,000	2,480	38.9	37.4	82.7	84.2 J

		L	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor	EP-22_15_20230103 460-272291-2 1/03/2023 1	EP-X02_15_20230103 460-272291-11 1/03/2023 1	EP-23_17_20230103 460-272291-3 1/03/2023 1	EP-24_17_20230103 460-272291-4 1/03/2023 1
			Unit	mg/kg	mg/kg	mg/kg	mg/kg
Compound			NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	NS	11,900	11,600	6,400	7,650
Antimony	NS	NS	NS	1 U	1.1 U	1.1 U	0.87 U
Arsenic	13	16	16	3.5	3.8	3.5	2.5
Barium	350	400	820	34.9	37.7	36	48.8
Beryllium	7.2	72	47	0.44	0.46	0.47	0.42
Cadmium	2.5	4.3	7.5	1 U	1.1 U	1.1 U	0.87 U
Calcium	NS	NS	NS	836	857	1,200	1,970
Chromium, Total		NS	NS	17.4	18.1	15.1	21.6
Cobalt	NS	NS	NS	5.4	5.8	8.1	8
Copper	50	270	1,720	10.4	11.3	25.2	18.5
Iron	NS	NS	NS	21,200	21,400	20,700	14,900
Lead	63	400	450	8.2	11.4	47.1	83
Magnesium	NS	NS	NS	1,780	1,820	2,020	2,610
Manganese	1,600	2,000	2,000	137	168	362	401
Mercury	0.18	0.81	0.73	0.012 J	0.014 J	0.22	0.042
Nickel	30	310	130	10	10.6	17.2	53.1
Potassium	NS	NS	NS	611	625	665	1,000
Selenium	3.9	180	4	0.25 J	0.3 J	0.23 J	0.13 J
Silver	2	180	8.3	0.42 U	0.44 U	0.42 U	0.35 U
Sodium	NS	NS	NS	60.2 J	62.4 J	65.3 J	95.9
Thallium	NS	NS	NS	0.089 J	0.089 J	0.07 J	0.094 J
Vanadium	NS	NS	NS	27.7	28.7	22.9	38.5
Zinc	109	10,000	2,480	27.9	33	40.4	44.2

		L	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor	EP-25_16_20230103 460-272291-5 1/03/2023 1	EP-26_15_20230103 460-272291-6 1/03/2023 1	EP-27_15_20230103 460-272291-7 1/03/2023 1	EP-28_15_20230103 460-272291-8 1/03/2023 1
			Unit	mg/kg	mg/kg	mg/kg	mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	NS	6,980	18,700	11,600	10,700
Antimony	NS	NS	NS	1 U	1.1 U	1.1 U	0.99 U
Arsenic	13	16	16	2.9	6.3	3.7	2.5
Barium	350	400	820	68.4	44.1	57.5	37.6
Beryllium	7.2	72	47	0.39 J	0.56	0.44	0.52
Cadmium	2.5	4.3	7.5	0.14 J	1.1 U	1.1 U	0.99 U
Calcium	NS	NS	NS	2,250	1,010	1,070	887
Chromium, Total	NS	NS	NS	16.2	28.6	18.7	19.3
Cobalt	NS	NS	NS	5.8	13.9	6.2	5.7
Copper	50	270	1,720	21.4	23.6	11.2	15.7
Iron	NS	NS	NS	15,000	29,100	16,500	19,400
Lead	63	400	450	122	12.1	14.9	9.2
Magnesium	NS	NS	NS	2,240	4,370	1,830	2,330
Manganese	1,600	2,000	2,000	278	314	226	246
Mercury	0.18	0.81	0.73	<u>0.83</u>	0.028	0.02	0.017 J
Nickel	30	310	130	16.8	21.5	11.3	16
Potassium	NS	NS	NS	1,090	940	648	1,300
Selenium	3.9	180	4	0.19 J	0.26 J	0.3 J	0.14 J
Silver	2	180	8.3	0.42 U	0.45 U	0.44 U	0.39 U
Sodium	NS	NS	NS	68.7 J	92.1 J	75.4 J	64.1 J
Thallium	NS	NS	NS	0.085 J	0.12 J	0.094 J	0.13 J
Vanadium	NS	NS	NS	23.4	40.7	29.3	31.3
Zinc	109	10,000	2,480	76.4	41.2	34.8	30.4

		L	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit	EP-29_15_20230103 460-272291-9 1/03/2023 1 mg/kg	EP-30_15_20230103 460-272291-10 1/03/2023 1 mg/kg	EP-31_15_20230214 460-274640-1 2/14/2023 1 mg/kg	EP-32_15_20230214 460-274640-2 2/14/2023 1 mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	NS	18,800	3,670	10,200	10,000
Antimony	NS	NS	NS	1.2 U	0.15 J	0.97 U	1 U
Arsenic	13	16	16	6.4	12.3	3.5	4.1
Barium	350	400	820	54.4	39.7	56.8	62
Beryllium	7.2	72	47	0.42 J	0.22 J	0.46	0.44
Cadmium	2.5	4.3	7.5	1.2 U	0.13 J	0.97 U	0.12 J
Calcium	NS	NS	NS	987	2,440	2,760	4,060
Chromium, Total	NS	NS	NS	26.5	25.3	19	17.6
Cobalt	NS	NS	NS	5.3	3.4	6.4	6.3
Copper	50	270	1,720	14.4	24.6	26	29.3
Iron	NS	NS	NS	23,900	9,320	17,900	17,500
Lead	63	400	450	11.5	103	83.8	113
Magnesium	NS	NS	NS	2,430	1,200	2,640	2,700
Manganese	1,600	2,000	2,000	241	471	344	378
Mercury	0.18	0.81	0.73	0.024	0.24	0.41	0.39
Nickel	30	310	130	15.7	10.7	16.4	15.7
Potassium	NS	NS	NS	800	535	932	855
Selenium	3.9	180	4	0.27 J	0.27 J	0.25 J	0.39 J
Silver	2	180	8.3	0.47 U	0.4 U	0.39 U	0.42 U
Sodium	NS	NS	NS	70.4 J	66.2 J	126	103 J
Thallium	NS	NS	NS	0.12 J	0.071 J	0.092 J	0.096 J
Vanadium	NS	NS	NS	36.8	11.6	27.8	25.4
Zinc	109	10,000	2,480	39.8	66.5	55.8	63.9

		L	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor	EP-33_15_20230214 460-274640-3 2/14/2023 1	EP-34_15_20230214 460-274640-4 2/14/2023 1	EP-35_15_20230214 460-274640-5 2/14/2023 1	EP-36_15_20230214 460-274640-6 2/14/2023 1
Common and				mg/kg	mg/kg	mg/kg	mg/kg
Compound			NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	NS	11,000	11,300	8,450	7,820
Antimony	NS	NS	NS	1 U	1.1 UJ	<u> </u>	0.25 J
Arsenic	13	16	16	3.9	4.7	3.3	3
Barium	350	400	820	61.7	69.6	69.5	35.5
Beryllium	7.2	72	47	0.49	0.52	0.44	0.45
Cadmium	2.5	4.3	7.5	1 U	1.1 U	1 U	0.13 J
Calcium	NS	NS	NS	3,080	2,360	1,710	1,230
Chromium, Total		NS	NS	21.4	19.2	17.3	16.1
Cobalt	NS	NS	NS	6.9	6.5	6.2	6.6
Copper	50	270	1,720	30.5	33.6 JK	24.9	13.7
Iron	NS	NS	NS	18,000	18,800	14,900	21,900
Lead	63	400	450	89	124	178	11.6
Magnesium	NS	NS	NS	2,960	2,410	2,170	1,970
Manganese	1,600	2,000	2,000	348	363	220	821
Mercury	0.18	0.81	0.73	0.52	0.6	0.13	0.017
Nickel	30	310	130	17.2	17	15.6	15.1
Potassium	NS	NS	NS	1,030	879	838	583
Selenium	3.9	180	4	0.34 J	0.4 J	0.31 J	0.24 J
Silver	2	180	8.3	0.42 U	0.46 U	0.4 U	0.39 U
Sodium	NS	NS	NS	124	101 J	106	70.4 J
Thallium	NS	NS	NS	0.1 J	0.1 J	0.084 J	0.079 J
Vanadium	NS	NS	NS	29.5	27.8	24.3	27
Zinc	109	10,000	2,480	69.8	79.1	54.5	27.8

		L	AKRF Sample ID aboratory Sample ID Date Sampled	460-274640-7	EP-X03_15_20230214 460-274640-7 2/14/2023	EP-37_16_20230410 460-278010-1 4/10/2023	EP-37_16_20230410 460-278010-1 4/10/2023
			Dilution Factor	1	5	1	3
Compound				mg/kg	mg/kg CONC Q	mg/kg	mg/kg CONC Q
Compound			NYSDEC PGWSCO	CONC Q		CONC Q	
Aluminum	NS	NS	NS	9,430	NR	8,240	NR
Antimony	NS	NS	NS	0.25 J	NR	<u> </u>	NR
Arsenic	13	16	16	2.9	NR	2.4	NR
Barium	350	400	820	53.6	NR	59.8	NR
Beryllium	7.2	72	47	0.45	NR	0.49	NR
Cadmium	2.5	4.3	7.5	0.33 J	NR	1 U	NR
Calcium	NS	NS	NS	1,400	NR	1,130	NR
Chromium, Total	NS	NS	NS	15.9	NR	18.3	NR
Cobalt	NS	NS	NS	6.7	NR	6.1	NR
Copper	50	270	1,720	14.6	NR	32.1	NR
Iron	NS	NS	NS	19,300	NR	18,300	NR
Lead	63	400	450	12.3	NR	29.3	NR
Magnesium	NS	NS	NS	2,530	NR	2,250	NR
Manganese	1,600	2,000	2,000	NR	1,430	344	NR
Mercury	0.18	0.81	0.73	0.018	NR	NR	<u>1.3</u>
Nickel	30	310	130	18.6	NR	16.3	NR
Potassium	NS	NS	NS	649	NR	1,020	NR
Selenium	3.9	180	4	0.24 J	NR	0.16 J	NR
Silver	2	180	8.3	0.39 U	NR	0.41 U	NR
Sodium	NS	NS	NS	78.2 J	NR	194	NR
Thallium	NS	NS	NS	0.12 J	NR	0.11 J	NR
Vanadium	NS	NS	NS	23.4	NR	27	NR
Zinc	109	10,000	2,480	34.6	NR	33.6	NR

		L	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor	EP-38_16_20230410 460-278010-2 4/10/2023 1	EP-39_15_20230410 460-278010-3 4/10/2023 1	EP-40_16_20230410 460-278010-4 4/10/2023 1	EP-40_16_20230410 460-278010-4 4/10/2023 2
			Unit	mg/kg	mg/kg	mg/kg	mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	NS	10,900	14,900	8,800	NR
Antimony	NS	NS	NS	0.98 U	1.2 U	1.5	NR
Arsenic	13	16	16	2.4	3.5	2.8	NR
Barium	350	400	820	31.1	85.5	53.2	NR
Beryllium	7.2	72	47	0.35 J	0.8	0.51	NR
Cadmium	2.5	4.3	7.5	0.98 U	1.2 U	1.1 U	NR
Calcium	NS	NS	NS	550	1,690	2,180	NR
Chromium, Total	NS	NS	NS	13.9	15.5	14.8	NR
Cobalt	NS	NS	NS	4.8	5.1	6.7	NR
Copper	50	270	1,720	9.1	12.3	20.6	NR
Iron	NS	NS	NS	14,400	14,400	26,700	NR
Lead	63	400	450	7.3	39.2	110	NR
Magnesium	NS	NS	NS	2,280	2,360	1,880	NR
Manganese	1,600	2,000	2,000	139	354	NR	1,720
Mercury	0.18	0.81	<u>0.73</u>	0.017 U	0.17	0.4	NR
Nickel	30	310	130	9.6	12.8	13.9	NR
Potassium	NS	NS	NS	574	729	954	NR
Selenium	3.9	180	4	1.2 U	0.55 J	0.41 J	NR
Silver	2	180	8.3	0.39 U	0.46 U	0.45 U	NR
Sodium	NS	NS	NS	81.4 J	261	83.4 J	NR
Thallium	NS	NS	NS	0.095 J	0.15 J	0.11 J	NR
Vanadium	NS	NS	NS	22.1	24.1	32.6	NR
Zinc	109	10,000	2,480	28.7	38.1	45.8	NR

		L	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit	EP-41_15_20230410 460-278010-5 4/10/2023 1 mg/kg	EP-42_17_20230410 460-278010-6 4/10/2023 1 mg/kg	EP-43_16_20230410 460-278010-7 4/10/2023 1 mg/kg	EP-44_15_20230410 460-278010-8 4/10/2023 1 mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	NS	9,300	14,600	13,900	16,900
Antimony	NS	NS	NS	1 U	1.1 U	1.2 U	1.2 UJ
Arsenic	13	16	16	4.1	3.1	3.7	2.9
Barium	350	400	820	55.5	60.2	46.9	47 JK
Beryllium	7.2	72	47	0.58	0.52	0.5	0.38 J
Cadmium	2.5	4.3	7.5	1 U	1.1 U	1.2 U	1.2 U
Calcium	NS	NS	NS	1,770	670	1,070	1,100 JL
Chromium, Total	NS	NS	NS	23.8	18.1	18.3	20.3
Cobalt	NS	NS	NS	9.6	6.2	6	4.1
Copper	50	270	1,720	30.7	8.3	12.8	10.1
Iron	NS	NS	NS	23,900	18,300	19,100	16,200
Lead	63	400	450	11.6	14.5	21.5	11.1
Magnesium	NS	NS	NS	2,640	2,140	2,460	2,690
Manganese	1,600	2,000	2,000	867	288	284	189 JK
Mercury	0.18	0.81	<u>0.73</u>	0.019	0.034	0.069	0.017 J
Nickel	30	310	130	24.8	11.3	13.7	11.8
Potassium	NS	NS	NS	1,090	605	824	862
Selenium	Selenium 3.9 180 4				0.32 J	0.36 J	0.18 J
Silver	2	180	8.3	0.41 U	0.46 U	0.47 U	0.48 U
Sodium	NS	NS	NS	122	227	125	198
Thallium	NS	NS	NS	0.17 J	0.13 J	0.14 J	0.15 J
Vanadium	NS	NS	NS	30.9	27.4	28.5	31.2 JL
Zinc	109	10,000	2,480	39.7	34.3	37.7	35.8

		L	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit	EP-45_15_20230410 460-278010-9 4/10/2023 1 mg/kg	EP-X04_15_20230410 460-278010-17 4/10/2023 1 mg/kg	EP-46_16_20230410 460-278010-10 4/10/2023 1 mg/kg	EP-47_15_20230410 460-278010-11 4/10/2023 1 mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	NS	19,500	9,870	7,510	14,000
Antimony	NS	NS	NS	1.1 U	1.1 U	1.1 U	0.97 U
Arsenic	13	16	16	2.8	3	3.7	3
Barium	350	400	820	50.9	56.7	50.3	55.4
Beryllium	7.2	72	47	0.42 J	0.58	0.43 J	0.56
Cadmium	2.5	4.3	7.5	1.1 U	1.1 U	0.12 J	0.97 U
Calcium	NS	NS	NS	1,410	2,570	1,590	1,220
Chromium, Total	NS	NS	NS	24.2	19.6	16.9	16.6
Cobalt	NS	NS	NS	4.2	7.1	5.5	5.6
Copper	50	270	1,720	10.6 J	25.7 J	34.4	8.8
Iron	NS	NS	NS	15,000	21,600	22,500	15,500
Lead	63	400	450	15.4	30.3	73.2	20
Magnesium	NS	NS	NS	2,990	2,930	2,400	2,200
Manganese	1,600	2,000	2,000	168 J	398 J	575	326
Mercury	0.18	0.81	0.73	0.058	0.053	0.44	0.069
Nickel	30	310	130	11.6	20.3	15	10.8
Potassium	NS	NS	NS	1,290	1,190	867	640
Selenium	Selenium 3.9 180 4				0.17 J	0.29 J	0.38 J
Silver	2	180	8.3	0.43 U	0.46 U	0.44 U	0.39 U
Sodium	NS	NS	NS	121	117	105 J	175
Thallium	NS	NS	NS	0.18 J	0.12 J	0.093 J	0.13 J
Vanadium	NS	NS	NS	37	30.4	26.4	24.4
Zinc	109	10,000	2,480	38.4	52.4	66.6	39

		L	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit	EP-48_15_20230410 460-278010-12 4/10/2023 1 mg/kg	EP-49_15_20230410 460-278010-13 4/10/2023 1 mg/kg	EP-50_15_20230410 460-278010-14 4/10/2023 1 mg/kg	EP-51_15_20230412 460-278159-1 4/12/2023 1 mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	NS	9,480	9,670	12,700	8,460
Antimony	NS	NS	NS	0.92 U	0.22 J	1.2 U	1.1 UJ
Arsenic	13	16	16	3.8	4.4	3.3	2.5
Barium	350	400	820	42.2	164	57.8	52.7
Beryllium	7.2	72	47	0.46	0.48	0.58	0.47
Cadmium	2.5	4.3	7.5	0.92 U	0.2 J	1.2 U	1.1 U
Calcium	NS	NS	NS	1,220	3,060	1,580	2,340 J
Chromium, Total	NS	NS	NS	16	21.1	18	17.5
Cobalt	NS	NS	NS	7.7	6.3	7	6.3
Copper	50	270	1,720	25.1	51.4	20.4	20
Iron	NS	NS	NS	19,000	18,200	18,100	16,000
Lead	63	400	450	60.3	429	37.3	25.4
Magnesium	NS	NS	NS	2,780	2,680	2,970	2,680
Manganese	1,600	2,000	2,000	412	342	306	333
Mercury	0.18	0.81	<u>0.73</u>	0.2	0.22	0.18	0.066
Nickel	30	310	130	17.3	17.6	19	17.8
Potassium	NS	NS	NS	848	983	977	1,090
Selenium	3.9	180	4	0.25 J	0.32 J	0.35 J	0.15 J
Silver	2	180	8.3	0.37 U	0.44 U	0.5 U	0.43 U
Sodium	NS	NS	NS	96.3	242	116 J	104 J
Thallium	NS	NS	NS	0.095 J	0.11 J	0.12 J	0.1 J
Vanadium	NS	NS	NS	25.1	27.4	25.3	24.1 JK
Zinc	109	10,000	2,480	45.6	141	45.2	36.8

		L	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit	1	EP-X05_15_20230412 460-278159-3 4/12/2023 1 mg//rg	EP-53_15_20230509 460-279980-1 5/09/2023 1 mg//rg	EP-54_16_20230509 460-279980-2 5/09/2023 1 mg//rg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	mg/kg CONC Q	mg/kg CONC Q	mg/kg CONC Q	mg/kg CONC Q
Aluminum	NS	NS	NS	10,200	10,100	7,250	10,200
Antimony	NS	NS	NS	0.96 U	0.9 U	0.88 U	0.19 J
Arsenic	13	16	16	3.3	2.8	2	3
Barium	350	400	820	67.5	57.8	44.5	53.5
Beryllium	7.2	72	47	0.51	0.5	0.42	0.49
Cadmium	2.5	4.3	7.5	0.96 U	0.9 U	0.88 U	0.9 U
Calcium	NS	NS	NS	1,840	2,970	1,180	2,400
Chromium, Total	NS	NS	NS	19.6	18.5	17.9	21.6
Cobalt	NS	NS	NS	6.5	6.5	5.6	6.5
Copper	50	270	1,720	21.6	21	14.7	21.4
Iron	NS	NS	NS	16,400	15,900	14,700	17,800
Lead	63	400	450	44.7	39	5.6 JK	42.5
Magnesium	NS	NS	NS	2,610	3,430	2,330	3,180
Manganese	1,600	2,000	2,000	345	341	319	328
Mercury	0.18	0.81	<u>0.73</u>	0.27	0.13	0.017 U	0.2
Nickel	30	310	130	18.1	16.5	17.7	19.2
Potassium	NS	NS	NS	1,070	964	1,190 JK	1,480
Selenium 3.9 180 4				0.26 J	0.25 J	0.13 J	0.23 J
Silver	2	180	8.3	0.38 U	0.36 U	0.35 U	0.36 U
Sodium	NS	NS	NS	96.3	111	94.2	159
Thallium	NS	NS	NS	0.11 J	0.11 J	0.079 J	0.12 J
Vanadium	NS	NS	NS	26.5	25.4	24.6 JK	31.5
Zinc	109	10,000	2,480	48.5	43.2	27	51

		L	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit	EP-X06_16_20230509 460-279980-3 5/09/2023 1 mg/kg	EP-56_15_20230517 460-280490-2 5/17/2023 1 mg/kg	EP-X07_15_20230517 460-280490-7 5/17/2023 1 mg/kg	EP-57_15_20230517 460-280490-3 5/17/2023 1 mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	NS	9,300	8,460	9,350	6,880
Antimony	NS	NS	NS	0.2 J	0.13 J	0.23 J	1.1 UJ
Arsenic	13	16	16	3	4.4	6.2	2.4
Barium	350	400	820	56.6	68.6	97.9	41.6
Beryllium	7.2	72	47	0.46	0.61	0.66	0.47
Cadmium	2.5	4.3	7.5	0.86 U	0.21 J	0.26 J	1.1 U
Calcium	NS	NS	NS	2,350	1,220	1,540	1,030
Chromium, Total	NS	NS	NS	20.4	20.2	18.6	17
Cobalt	NS	NS	NS	6.9	7.7	7.8	6.3
Copper	50	270	1,720	23.5	34.1	48.2	18.4
Iron	NS	NS	NS	17,400	21,700	20,600	18,200
Lead	63	400	450	44.5	61.6	250 J	10.9
Magnesium	NS	NS	NS	2,280	2,950	2,700	2,450
Manganese	1,600	2,000	2,000	381	784	654	289
Mercury	0.18	0.81	0.73	0.15	0.24	0.25	0.067 JK
Nickel	30	310	130	18.2	19.6	21.4	16.1
Potassium	NS	NS	NS	1,090	953	889	1,240
Selenium 3.9 180 4			0.22 J	0.34 J	0.42 J	0.15 J	
Silver	2	180	8.3	0.34 U	0.37 U	0.1 J	0.43 U
Sodium	NS	NS	NS	116	220	277	110
Thallium	NS	NS	NS	0.1 J	0.15 J	0.15 J	0.11 J
Vanadium	NS	NS	NS	27.1	30.2	29.6	27.5 JL
Zinc	109	10,000	2,480	45.6	65.6	88.2	33.9

		L	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor	EP-58_15_20230601 460-281385-1 6/01/2023 1	EP-59_15_20230601 460-281385-2 6/01/2023 1	EP-X08_15_20230601 460-281385-3 6/01/2023 1	EP-60_15_20230601 460-281385-4 6/01/2023 1
			Unit	mg/kg	mg/kg	mg/kg	mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	NS	5,820	8,280	7,510	10,200
Antimony	NS	NS	NS	1.1 UJ	0.97 U	0.95 U	0.98 U
Arsenic	13	16	16	2	2.3	2.4	3.6
Barium	350	400	820	34.7	43.4	35.2	112
Beryllium	7.2	72	47	0.35 J	0.46	0.41	0.45
Cadmium	2.5	4.3	7.5	1.1 U	0.12 J	0.95 U	0.98 U
Calcium	NS	NS	NS	1,710 JL	983	1,070	3,620
Chromium, Total		NS	NS	27.6 JL	14.7	16.6	16.4
Cobalt	NS	NS	NS	5.1	7.1	4.9	6
Copper	50	270	1,720	30.3 JL	22.2	15.3	14
Iron	NS	NS	NS	17,000	15,500	13,800	16,900
Lead	63	400	450	33.5	21.1	28.4	133
Magnesium	NS	NS	NS	2,720 J	3,130	3,010	2,280
Manganese	1,600	2,000	2,000	428 J	533	306	230
Mercury	0.18	0.81	0.73	0.29 JL	0.056	0.088	0.22
Nickel	30	310	130	17.4	19.2	14.8	13.1
Potassium	NS	NS	NS	735 JK	702	763	775
Selenium	Selenium 3.9 180 4				0.14 J	0.17 J	0.28 J
Silver	2	180	8.3	0.42 U	0.39 U	0.38 U	0.39 U
Sodium	NS	NS	NS	181	118	110	147
Thallium	NS	NS	NS	0.057 J	0.081 J	0.072 J	0.084 J
Vanadium	NS	NS	NS	20	20.3	21.4	23.4
Zinc	109	10,000	2,480	34.3	60.5 J	27.9 J	82.8

		L	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor	EP-61_15_20230601 460-281385-5 6/01/2023 1	EP-55_15_20230517 460-280490-1 5/17/2023 1	EP-62_15_20230706 460-283756-1 7/06/2023 1	EP-63_15_20230706 460-283756-2 7/06/2023 1
Compound	NYSDEC UUSCO	NYSDEC RRSCO	Unit NYSDEC PGWSCO	mg/kg CONC Q	mg/kg CONC Q	mg/kg CONC Q	mg/kg CONC Q
Aluminum	NS	NS	NS	8,790	13,700	10,500	10,900
Antimony	NS	NS	NS	0.9 U	1.1 U	1.1 U	1 U
Arsenic	13	16	16	2.9	3	2.8	4.1
Barium	350	400	820	53.7	56.7	65.1	45.7
Beryllium	7.2	72	47	0.42	0.4 J	0.51	0.5
Cadmium	2.5	4.3	7.5	0.9 U	1.1 U	1.1 U	1 U
Calcium	NS	NS	NS	1,970	953	802	1,400
Chromium, Total	NS	NS	NS	17.1	19	13	20.2
Cobalt	NS	NS	NS	5.8	4.4	4.5	6.4
Copper	50	270	1,720	20.9	7	8	16.2
Iron	NS	NS	NS	14,800	15,800	13,300	18,200
Lead	63	400	450	56.9	9.4 J	8.2	20.2
Magnesium	NS	NS	NS	2,310	1,930	2,400	2,420
Manganese	1,600	2,000	2,000	265	173	96.9	283
Mercury	0.18	0.81	<u>0.73</u>	0.2	0.074	0.02 U	0.052
Nickel	30	310	130	16.4	10.4	10.2	13.4
Potassium	NS	NS	NS	862	671	599	775
Selenium	Selenium 3.9 180 4				0.29 J	1.4 U	0.25 J
Silver	2	180	8.3	0.36 U	0.42 U	0.43 U	0.41 U
Sodium	NS	NS	NS	151	153	238	203
Thallium	NS	NS	NS	0.089 J	0.11 J	0.11 J	0.11 J
Vanadium	NS	NS	NS	23	28.1	22.5	26.2
Zinc	109	10,000	2,480	45.2	34.6	33	46.5

			AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit	460-283756-6 7/06/2023 1 mg/kg	EP-64_15_20230706 460-283756-3 7/06/2023 1 mg/kg	EP-65_15_20230706 460-283756-4 7/06/2023 1 mg/kg	EP-66_15_20230706 460-283756-5 7/06/2023 1 mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	NS	10,700	5,510	13,000	14,600
Antimony	NS	NS	NS	0.99 U	1.1 U	1.2 UJ	1.2 U
Arsenic	13	16	16	4.5	2	4.4	2.9
Barium	350	400	820	45.2	38.1	45.1 JK	58
Beryllium	7.2	72	47	0.48	0.4 J	0.54	0.41 J
Cadmium	2.5	4.3	7.5	0.99 U	1.1 U	1.2 U	1.2 U
Calcium	NS	NS	NS	1,700	722	1,690 JL	1,200
Chromium, Total		NS	NS	16.1	16.6	16.4 JK	21.3
Cobalt	NS	NS	NS	6.5	5.5	8 JL	5.1
Copper	50	270	1,720	12.7	16.5	11	16.5
Iron	NS	NS	NS	17,600	16,900	18,500	14,400
Lead	63	400	450	21.1	6.6	15.1 JK	36.8
Magnesium	NS	NS	NS	2,290	2,020	2,630	2,460
Manganese	1,600	2,000	2,000	285	374	288	253
Mercury	0.18	0.81	<u>0.73</u>	0.081	0.0079 J	0.025	0.12
Nickel	30	310	130	11.9	17.9	11.9	12.5
Potassium	NS	NS	NS	665	839	726	827
Selenium	Selenium 3.9 180 4			0.3 J	1.3 U	0.21 J	0.33 J
Silver	2	180	8.3	0.4 U	0.42 U	0.48 U	0.46 U
Sodium	NS	NS	NS	123	86.7 J	199	106 J
Thallium	NS	NS	NS	0.093 J	0.1 J	0.11 J	0.14 J
Vanadium	NS	NS	NS	25.3	21.7	27.7 JK	30.1
Zinc	109	10,000	2,480	38.6	28.4	41.1	47.7

		L	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit	FB-01_20221228 460-272140-12 12/28/2022 1 μg/L	FB-01_20230103 460-272291-12 1/03/2023 1 μg/L	FB-01_20230214 460-274640-8 2/14/2023 1 μg/L	FB-01_20230410 460-278010-18 4/10/2023 1 μg/L
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	NS	40 U	40 U	40 U	40 U
Antimony	NS	NS	NS	2 U	2 U	2 U	2 U
Arsenic	13	16	16	2 U	2 U	2 U	2 U
Barium	350	400	820	4 U	4 U	4 U	4 U
Beryllium	7.2	72	47	0.8 U	0.8 U	0.8 U	0.8 U
Cadmium	2.5	4.3	7.5	2 U	2 U	2 U	2 U
Calcium	NS	NS	NS	112 J	500 U	500 U	500 U
Chromium, Total	NS	NS	NS	4 U	4 U	4 U	4 U
Cobalt	NS	NS	NS	4 U	4 U	4 U	4 U
Copper	50	270	1,720	4 U	4 U	4 U	4 U
Iron	NS	NS	NS	120 U	120 U	120 U	120 U
Lead	63	400	450	1.2 U	1.2 U	1.2 U	1.2 U
Magnesium	NS	NS	NS	200 U	200 U	200 U	200 U
Manganese	1,600	2,000	2,000	8 U	8 U	8 U	8 U
Mercury	0.18	0.81	<u>0.73</u>	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	30	310	130	4 U	4 U	4 U	4 U
Potassium	NS	NS	NS	200 U	200 U	200 U	200 U
Selenium	3.9	180	4	2.5 U	2.5 U	2.5 U	2.5 U
Silver	2	180	8.3	2 U	2 U	2 U	2 U
Sodium	NS	NS	NS	500 U	500 U	500 U	500 U
Thallium	NS	NS	NS	0.8 U	0.8 U	0.8 U	0.8 U
Vanadium	NS	NS	NS	4 U	4 U	4 U	4 U
Zinc	109	10,000	2,480	16 U	16 U	16 U	16 U

		L	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit		FB-01_20230509 460-279980-4 5/09/2023 1 μg/L	FB-01_20230517 460-280490-5 5/17/2023 1 μg/L
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	NS	40 U	40 U	40 U
Antimony	NS	NS	NS	2 U	2 U	2 U
Arsenic	13	16	16	2 U	2 U	2 U
Barium	350	400	820	4 U	4 U	4 U
Beryllium	7.2	72	47	0.8 U	0.8 U	0.8 U
Cadmium	2.5	4.3	7.5	2 U	2 U	2 U
Calcium	NS	NS	NS	500 U	500 U	500 U
Chromium, Total	NS	NS	NS	4 U	4 U	4 U
Cobalt	NS	NS	NS	4 U	4 U	4 U
Copper	50	270	1,720	4 U	4 U	4 U
Iron	NS	NS	NS	120 U	120 U	120 U
Lead	63	400	450	1.2 U	1.2 U	1.2 U
Magnesium	NS	NS	NS	200 U	200 U	200 U
Manganese	1,600	2,000	2,000	8 U	8 U	8 U
Mercury	0.18	0.81	0.73	0.2 U	0.2 U	0.2 U
Nickel	30	310	130	4 U	4 U	4 U
Potassium	NS	NS	NS	200 U	200 U	200 U
Selenium	3.9	180	4	2.5 U	2.5 U	2.5 U
Silver	2	180	8.3	2 U	2 U	2 U
Sodium	NS	NS	NS	500 U	500 U	500 U
Thallium	NS	NS	NS	0.8 U	0.8 U	0.8 U
Vanadium	NS	NS	NS	4 U	4 U	4 U
Zinc	109	10,000	2,480	16 U	16 U	16 U

		L	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit	6/01/2023 1	FB-01_20230706 460-283756-7 7/06/2023 1
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	μg/L CONC Q	μg/L CONC Q
Aluminum	NS	NS	NS	40 U	40 U
Antimony	NS	NS	NS	2 U	2 U
Arsenic	13	16	16	2 U	2 U
Barium	350	400	820	4 U	4 U
Beryllium	7.2	72	47	0.8 U	0.8 U
Cadmium	2.5	4.3	7.5	2 U	2 U
Calcium	NS	NS	NS	32.4 J	500 U
Chromium, Total	NS	NS	NS	4 U	4 U
Cobalt	NS	NS	NS	4 U	4 U
Copper	50	270	1,720	4 U	4 U
Iron	NS	NS	NS	120 U	120 U
Lead	63	400	450	1.2 U	1.2 U
Magnesium	NS	NS	NS	200 U	200 U
Manganese	1,600	2,000	2,000	8 U	8 U
Mercury	0.18	0.81	<u>0.73</u>	0.2 U	0.2 U
Nickel	30	310	130	4 U	4 U
Potassium	NS	NS	NS	200 U	200 U
Selenium	3.9	180	4	2.5 U	2.5 U
Silver	2	180	8.3	2 U	2 U
Sodium	NS	NS	NS	53.3 J	62.5 J
Thallium	NS	NS	NS	0.8 U	0.8 U
Vanadium	NS	NS	NS	4 U	4 U
Zinc	109	10,000	2,480	16 U	16 U

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		Li	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit	460-272204-1	EP-02_15_20221228 460-272140-1 12/28/2022 1 mg/kg	EP-03_15_20221228 460-272140-2 12/28/2022 1 mg/kg	EP-04_15_20221228 460-272140-3 12/28/2022 1 mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	NS	0.081 U	0.075 U	0.085 U	0.074 U
PCB-1221 (Aroclor 1221)	NS	NS	NS	0.081 U	0.075 U	0.085 U	0.074 U
PCB-1232 (Aroclor 1232)	NS	NS	NS	0.081 U	0.075 U	0.085 U	0.074 U
PCB-1242 (Aroclor 1242)	NS	NS	NS	0.081 U	0.075 U	0.085 U	0.074 U
PCB-1248 (Aroclor 1248)	NS	NS	NS	0.081 U	0.075 U	0.085 U	0.074 U
PCB-1254 (Aroclor 1254)	NS	NS	NS	0.081 U	0.075 U	0.085 U	0.074 U
PCB-1260 (Aroclor 1260)	NS	NS	NS	0.081 U	0.075 U	0.085 U	0.074 U
PCB-1262 (Aroclor 1262)	NS	NS	NS	0.081 U	0.075 U	0.085 U	0.074 U
PCB-1268 (Aroclor 1268)	NS	NS	NS	0.081 U	0.075 U	0.085 U	0.074 U
Total PCBs	0.1	1	3.2	0.081 U	0.075 U	0.085 U	0.074 U

Table 4 975 Nostrand Avenue Brooklyn, NY Post-Excavation Endpoint Sample Results Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

		Li	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit		EP-05_15_20221229 460-272204-2 12/29/2022 1 mg/kg	EP-06_15_20221228 460-272140-4 12/28/2022 1 mg/kg	EP-07_15_20221228 460-272140-5 12/28/2022 1 mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	NS	0.075 U	0.074 U	0.075 U	0.078 U
PCB-1221 (Aroclor 1221)	NS	NS	NS	0.075 U	0.074 U	0.075 U	0.078 U
PCB-1232 (Aroclor 1232)	NS	NS	NS	0.075 U	0.074 U	0.075 U	0.078 U
PCB-1242 (Aroclor 1242)	NS	NS	NS	0.075 U	0.074 U	0.075 U	0.078 U
PCB-1248 (Aroclor 1248)	NS	NS	NS	0.075 U	0.074 U	0.075 U	0.078 U
PCB-1254 (Aroclor 1254)	NS	NS	NS	0.075 U	0.074 U	0.075 U	0.078 U
PCB-1260 (Aroclor 1260)	NS	NS	NS	0.075 U	0.074 U	0.075 U	0.078 U
PCB-1262 (Aroclor 1262)	NS	NS	NS	0.075 U	0.074 U	0.075 U	0.078 U
PCB-1268 (Aroclor 1268)	NS	NS	NS	0.075 U	0.074 U	0.075 U	0.078 U
Total PCBs	0.1	1	3.2	0.075 U	0.074 U	0.075 U	0.078 U

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Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

			AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit		EP-09_15_20221229 460-272204-3 12/29/2022 1 mg/kg	EP-10_15_20221228 460-272140-7 12/28/2022 1 mg/kg	EP-11_15_20221228 460-272140-8 12/28/2022 1 mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	NS	0.076 U	0.074 U	0.081 U	0.083 U
PCB-1221 (Aroclor 1221)	NS	NS	NS	0.076 U	0.074 U	0.081 U	0.083 U
PCB-1232 (Aroclor 1232)	NS	NS	NS	0.076 U	0.074 U	0.081 U	0.083 U
PCB-1242 (Aroclor 1242)	NS	NS	NS	0.076 U	0.074 U	0.081 U	0.083 U
PCB-1248 (Aroclor 1248)	NS	NS	NS	0.076 U	0.074 U	0.081 U	0.083 U
PCB-1254 (Aroclor 1254)	NS	NS	NS	0.076 U	0.074 U	0.081 U	0.083 U
PCB-1260 (Aroclor 1260)	NS	NS	NS	0.076 U	0.074 U	0.081 U	0.083 U
PCB-1262 (Aroclor 1262)	NS	NS	NS	0.076 U	0.074 U	0.081 U	0.083 U
PCB-1268 (Aroclor 1268)	NS	NS	NS	0.076 U	0.074 U	0.081 U	0.083 U
Total PCBs	0.1	1	3.2	0.076 U	0.074 U	0.081 U	0.083 U

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Analytical Results of Polychlorinated Biphenyls (PCBs)

Soil

		Li	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit		EP-13_15_20221228 460-272140-9 12/28/2022 1 mg/kg	EP-14_15_20221229 460-272204-5 12/29/2022 1 mg/kg	EP-15_15_20221229 460-272204-6 12/29/2022 1 mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	NS	0.075 U	0.079 U	0.075 U	0.073 U
PCB-1221 (Aroclor 1221)	NS	NS	NS	0.075 U	0.079 U	0.075 U	0.073 U
PCB-1232 (Aroclor 1232)	NS	NS	NS	0.075 U	0.079 U	0.075 U	0.073 U
PCB-1242 (Aroclor 1242)	NS	NS	NS	0.075 U	0.079 U	0.075 U	0.073 U
PCB-1248 (Aroclor 1248)	NS	NS	NS	0.075 U	0.079 U	0.075 U	0.073 U
PCB-1254 (Aroclor 1254)	NS	NS	NS	0.075 U	0.079 U	0.075 U	0.073 U
PCB-1260 (Aroclor 1260)	NS	NS	NS	0.075 U	0.079 U	0.075 U	0.073 U
PCB-1262 (Aroclor 1262)	NS	NS	NS	0.075 U	0.079 U	0.075 U	0.073 U
PCB-1268 (Aroclor 1268)	NS	NS	NS	0.075 U	0.079 U	0.075 U	0.073 U
Total PCBs	0.1	1	3.2	0.075 U	0.079 U	0.075 U	0.073 U

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Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

		Li	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit		EP-17_15_20221229 460-272204-8 12/29/2022 1 mg/kg	EP-18_15_20221228 460-272140-10 12/28/2022 1 mg/kg	EP-19_15_20221229 460-272204-9 12/29/2022 1 mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	NS	0.08 U	0.078 U	0.075 U	0.076 U
PCB-1221 (Aroclor 1221)	NS	NS	NS	0.08 U	0.078 U	0.075 U	0.076 U
PCB-1232 (Aroclor 1232)	NS	NS	NS	0.08 U	0.078 U	0.075 U	0.076 U
PCB-1242 (Aroclor 1242)	NS	NS	NS	0.08 U	0.078 U	0.075 U	0.076 U
PCB-1248 (Aroclor 1248)	NS	NS	NS	0.08 U	0.078 U	0.075 U	0.076 U
PCB-1254 (Aroclor 1254)	NS	NS	NS	0.08 U	0.078 U	0.075 U	0.076 U
PCB-1260 (Aroclor 1260)	NS	NS	NS	0.08 U	0.078 U	0.075 U	0.076 U
PCB-1262 (Aroclor 1262)	NS	NS	NS	0.08 U	0.078 U	0.075 U	0.076 U
PCB-1268 (Aroclor 1268)					0.078 U	0.075 U	0.076 U
Total PCBs	0.1	1	3.2	0.08 U	0.078 U	0.075 U	0.076 U

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Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

		La	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit		EP-21_15_20230103 460-272291-1 1/03/2023 1 mg/kg	EP-22_15_20230103 460-272291-2 1/03/2023 1 mg/kg	EP-X02_15_20230103 460-272291-11 1/03/2023 1 mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	NS	0.085 U	0.078 UJ	0.077 U	0.076 U
PCB-1221 (Aroclor 1221)	NS	NS	NS	0.085 U	0.078 U	0.077 U	0.076 U
PCB-1232 (Aroclor 1232)	NS	NS	NS	0.085 U	0.078 U	0.077 U	0.076 U
PCB-1242 (Aroclor 1242)	NS	NS	NS	0.085 U	0.078 U	0.077 U	0.076 U
PCB-1248 (Aroclor 1248)	NS	NS	NS	0.085 U	0.078 U	0.077 U	0.076 U
PCB-1254 (Aroclor 1254)	NS	NS	NS	0.085 U	0.078 U	0.077 U	0.076 U
PCB-1260 (Aroclor 1260)	NS	NS	NS	0.085 U	0.078 UJ	0.077 U	0.076 U
PCB-1262 (Aroclor 1262)	NS	NS	NS	0.085 U	0.078 U	0.077 U	0.076 U
PCB-1268 (Aroclor 1268)	NS	NS	NS	0.085 U	0.078 U	0.077 U	0.076 U
Total PCBs	0.1	1	3.2	0.085 U	0.078 U	0.077 U	0.076 U

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Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

		Li	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit		EP-24_17_20230103 460-272291-4 1/03/2023 1 mg/kg	EP-25_16_20230103 460-272291-5 1/03/2023 1 mg/kg	EP-26_15_20230103 460-272291-6 1/03/2023 1 mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	NS	0.073 U	0.073 U	0.073 U	0.076 U
PCB-1221 (Aroclor 1221)	NS	NS	NS	0.073 U	0.073 U	0.073 U	0.076 U
PCB-1232 (Aroclor 1232)	NS	NS	NS	0.073 U	0.073 U	0.073 U	0.076 U
PCB-1242 (Aroclor 1242)	NS	NS	NS	0.073 U	0.073 U	0.073 U	0.076 U
PCB-1248 (Aroclor 1248)	NS	NS	NS	0.073 U	0.073 U	0.073 U	0.076 U
PCB-1254 (Aroclor 1254)	NS	NS	NS	0.073 U	0.073 U	0.073 U	0.076 U
PCB-1260 (Aroclor 1260)	NS	NS	NS	0.073 U	0.073 U	0.073 U	0.076 U
PCB-1262 (Aroclor 1262)	NS	NS	NS	0.073 U	0.073 U	0.073 U	0.076 U
PCB-1268 (Aroclor 1268)	NS	NS	NS	0.073 U	0.073 U	0.073 U	0.076 U
Total PCBs	0.1	1	3.2	0.073 U	0.073 U	0.073 U	0.076 U

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Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

		Li	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit		EP-28_15_20230103 460-272291-8 1/03/2023 1 mg/kg	EP-29_15_20230103 460-272291-9 1/03/2023 1 mg/kg	EP-30_15_20230103 460-2772291-10 1/03/2023 1 mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	NS	0.00079 U	0.073 U	0.08 U	0.069 U
PCB-1221 (Aroclor 1221)	NS	NS	NS	0.00079 U	0.073 U	0.08 U	0.069 U
PCB-1232 (Aroclor 1232)	NS	NS	NS	0.00079 U	0.073 U	0.08 U	0.069 U
PCB-1242 (Aroclor 1242)	NS	NS	NS	0.00079 U	0.073 U	0.08 U	0.069 U
PCB-1248 (Aroclor 1248)	NS	NS	NS	0.00079 U	0.073 U	0.08 U	0.069 U
PCB-1254 (Aroclor 1254)	NS	NS	NS	0.00079 U	0.073 U	0.08 U	0.069 U
PCB-1260 (Aroclor 1260)	NS	NS	NS	0.00079 U	0.073 U	0.08 U	0.069 U
PCB-1262 (Aroclor 1262)	NS	NS	NS	0.00079 U	0.073 U	0.08 U	0.069 U
CB-1268 (Aroclor 1268) NS NS NS				0.00079 U	0.073 U	0.08 U	0.069 U
Total PCBs	0.1	1	3.2	0.00079 U	0.073 U	0.08 U	0.069 U

Table 4
975 Nostrand Avenue
Brooklyn, NY
Post-Excavation Endpoint Sample Results
Analytical Results of Polychlorinated Biphenyls (PCBs)

Soil

		Li	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit		EP-32_15_20230214 460-274640-2 2/14/2023 1 mg/kg	EP-33_15_20230214 460-274640-3 2/14/2023 1 mg/kg	EP-34_15_20230214 460-274640-4 2/14/2023 1 mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	NS	0.073 U	0.074 U	0.076 U	0.076 U
PCB-1221 (Aroclor 1221)	NS	NS	NS	0.073 U	0.074 U	0.076 U	0.076 U
PCB-1232 (Aroclor 1232)	NS	NS	NS	0.073 U	0.074 U	0.076 U	0.076 U
PCB-1242 (Aroclor 1242)	NS	NS	NS	0.073 U	0.074 U	0.076 U	0.076 U
PCB-1248 (Aroclor 1248)	NS	NS	NS	0.073 U	0.074 U	0.076 U	0.076 U
PCB-1254 (Aroclor 1254)	NS	NS	NS	0.073 U	0.074 U	0.076 U	0.076 U
PCB-1260 (Aroclor 1260)	NS	NS	NS	0.073 U	0.074 U	0.076 U	0.076 U
PCB-1262 (Aroclor 1262)	NS	NS	NS	0.073 U	0.074 U	0.076 U	0.076 U
PCB-1268 (Aroclor 1268)	NS	NS	NS	0.073 U	0.074 U	0.076 U	0.076 U
Total PCBs	0.1	1	3.2	0.073 U	0.074 U	0.076 U	0.076 U

Table 4
975 Nostrand Avenue
Brooklyn, NY
Post-Excavation Endpoint Sample Results
Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

		L	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit		EP-36_15_20230214 460-274640-6 2/14/2023 1 mg/kg	EP-X03_15_20230214 460-274640-7 2/14/2023 1 mg/kg	EP-37_16_20230410 460-278010-1 4/10/2023 1 mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	NS	0.074 U	0.072 U	0.073 U	0.077 U
PCB-1221 (Aroclor 1221)	NS	NS	NS	0.074 U	0.072 U	0.073 U	0.077 U
PCB-1232 (Aroclor 1232)	NS	NS	NS	0.074 U	0.072 U	0.073 U	0.077 U
PCB-1242 (Aroclor 1242)	NS	NS	NS	0.074 U	0.072 U	0.073 U	0.077 U
PCB-1248 (Aroclor 1248)	NS	NS	NS	0.074 U	0.072 U	0.073 U	0.077 U
PCB-1254 (Aroclor 1254)	NS	NS	NS	0.074 U	0.072 U	0.073 U	0.077 U
PCB-1260 (Aroclor 1260)	NS	NS	NS	0.074 U	0.072 U	0.073 U	0.077 U
PCB-1262 (Aroclor 1262)	NS	NS	NS	0.074 U	0.072 U	0.073 U	0.077 U
PCB-1268 (Aroclor 1268)	NS	NS	NS	0.074 U	0.072 U	0.073 U	0.077 U
Total PCBs	0.1	1	3.2	0.074 U	0.072 U	0.073 U	0.077 U

Table 4
975 Nostrand Avenue
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Post-Excavation Endpoint Sample Results
Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

		Li	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit		EP-39_15_20230410 460-278010-3 4/10/2023 1 mg/kg	EP-40_16_20230410 460-278010-4 4/10/2023 1 mg/kg	EP-41_15_20230410 460-278010-5 4/10/2023 1 mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	NS	0.072 U	0.085 U	0.077 U	0.074 U
PCB-1221 (Aroclor 1221)	NS	NS	NS	0.072 U	0.085 U	0.077 U	0.074 U
PCB-1232 (Aroclor 1232)	NS	NS	NS	0.072 U	0.085 U	0.077 U	0.074 U
PCB-1242 (Aroclor 1242)	NS	NS	NS	0.072 U	0.085 U	0.077 U	0.074 U
PCB-1248 (Aroclor 1248)	NS	NS	NS	0.072 U	0.085 U	0.077 U	0.074 U
PCB-1254 (Aroclor 1254)	NS	NS	NS	0.072 U	0.085 U	0.077 U	0.074 U
PCB-1260 (Aroclor 1260)	NS	NS	NS	0.072 U	0.085 U	0.077 U	0.074 U
PCB-1262 (Aroclor 1262)	NS	NS	NS	0.072 U	0.085 U	0.077 U	0.074 U
PCB-1268 (Aroclor 1268)	NS	NS	NS	0.072 U	0.085 U	0.077 U	0.074 U
Total PCBs	0.1	1	3.2	0.072 U	0.085 U	0.077 U	0.074 U

Table 4
975 Nostrand Avenue
Brooklyn, NY
Post-Excavation Endpoint Sample Results
Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

		Li	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit		EP-43_16_20230410 460-278010-7 4/10/2023 1 mg/kg	EP-44_15_20230410 460-278010-8 4/10/2023 1 mg/kg	EP-45_15_20230410 460-278010-9 4/10/2023 1 mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	NS	0.081 U	0.081 U	0.081 U	0.082 U
PCB-1221 (Aroclor 1221)	NS	NS	NS	0.081 U	0.081 U	0.081 U	0.082 U
PCB-1232 (Aroclor 1232)	NS	NS	NS	0.081 U	0.081 U	0.081 U	0.082 U
PCB-1242 (Aroclor 1242)	NS	NS	NS	0.081 U	0.081 U	0.081 U	0.082 U
PCB-1248 (Aroclor 1248)	NS	NS	NS	0.081 U	0.081 U	0.081 U	0.082 U
PCB-1254 (Aroclor 1254)	NS	NS	NS	0.081 U	0.081 U	0.081 U	0.082 U
PCB-1260 (Aroclor 1260)	NS	NS	NS	0.081 U	0.081 U	0.081 U	0.082 U
PCB-1262 (Aroclor 1262)	NS	NS	NS	0.081 U	0.081 U	0.081 U	0.082 U
PCB-1268 (Aroclor 1268)	NS	NS	NS	0.081 U	0.081 U	0.081 U	0.082 U
Total PCBs	0.1	1	3.2	0.081 U	0.081 U	0.081 U	0.082 U

Table 4
975 Nostrand Avenue
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Post-Excavation Endpoint Sample Results
Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

		La	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit		EP-46_16_20230410 460-278010-10 4/10/2023 1 mg/kg	EP-47_15_20230410 460-278010-11 4/10/2023 1 mg/kg	EP-48_15_20230410 460-278010-12 4/10/2023 1 mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	NS	0.08 U	0.081 U	0.079 U	0.075 U
PCB-1221 (Aroclor 1221)	NS	NS	NS	0.08 U	0.081 U	0.079 U	0.075 U
PCB-1232 (Aroclor 1232)	NS	NS	NS	0.08 U	0.081 U	0.079 U	0.075 U
PCB-1242 (Aroclor 1242)	NS	NS	NS	0.08 U	0.081 U	0.079 U	0.075 U
PCB-1248 (Aroclor 1248)	NS	NS	NS	0.08 U	0.081 U	0.079 U	0.075 U
PCB-1254 (Aroclor 1254)	NS	NS	NS	0.08 U	0.081 U	0.079 U	0.075 U
PCB-1260 (Aroclor 1260)	NS	NS	NS	0.08 U	0.081 U	0.079 U	0.075 U
PCB-1262 (Aroclor 1262)	NS	NS	NS	0.08 U	0.081 U	0.079 U	0.075 U
PCB-1268 (Aroclor 1268)	NS	NS	NS	0.08 U	0.081 U	0.079 U	0.075 U
Total PCBs	0.1	1	3.2	0.08 U	0.081 U	0.079 U	0.075 U

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Post-Excavation Endpoint Sample Results
Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

		Li	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit		EP-50_15_20230410 460-278010-14 4/10/2023 1 mg/kg	EP-51_15_20230412 460-278159-1 4/12/2023 1 mg/kg	EP-52_15_20230412 460-278159-2 4/12/2023 1 mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	NS	0.083 U	0.087 U	0.072 U	0.076 U
PCB-1221 (Aroclor 1221)	NS	NS	NS	0.083 U	0.087 U	0.072 U	0.076 U
PCB-1232 (Aroclor 1232)	NS	NS	NS	0.083 U	0.087 U	0.072 U	0.076 U
PCB-1242 (Aroclor 1242)	NS	NS	NS	0.083 U	0.087 U	0.072 U	0.076 U
PCB-1248 (Aroclor 1248)	NS	NS	NS	0.083 U	0.087 U	0.072 U	0.076 U
PCB-1254 (Aroclor 1254)	NS	NS	NS	0.083 U	0.087 U	0.072 U	0.076 U
PCB-1260 (Aroclor 1260)	NS	NS	NS	0.083 U	0.087 U	0.072 U	0.076 U
PCB-1262 (Aroclor 1262)	NS	NS	NS	0.083 U	0.087 U	0.072 U	0.076 U
PCB-1268 (Aroclor 1268)	NS	NS	NS	0.083 U	0.087 U	0.072 U	0.076 U
Total PCBs	0.1	1	3.2	0.083 U	0.087 U	0.072 U	0.076 U

		L	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit		EP-53_15_20230509 460-279980-1 5/09/2023 1 mg/kg	EP-54_16_20230509 460-279980-2 5/09/2023 1 mg/kg	EP-X06_16_20230509 460-279980-3 5/09/2023 1 mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	NS	0.075 U	0.073 U	0.075 U	0.074 U
PCB-1221 (Aroclor 1221)	NS	NS	NS	0.075 U	0.073 U	0.075 U	0.074 U
PCB-1232 (Aroclor 1232)	NS	NS	NS	0.075 U	0.073 U	0.075 U	0.074 U
PCB-1242 (Aroclor 1242)	NS	NS	NS	0.075 U	0.073 U	0.075 U	0.074 U
PCB-1248 (Aroclor 1248)	NS	NS	NS	0.075 U	0.073 U	0.075 U	0.074 U
PCB-1254 (Aroclor 1254)	NS	NS	NS	0.075 U	0.073 U	0.075 U	0.074 U
PCB-1260 (Aroclor 1260)	NS	NS	NS	0.075 U	0.073 U	0.075 U	0.074 U
PCB-1262 (Aroclor 1262)	NS	NS	NS	0.075 U	0.073 U	0.075 U	0.074 U
PCB-1268 (Aroclor 1268)	NS	NS	NS	0.075 U	0.073 U	0.075 U	0.074 U
Total PCBs	0.1	1	3.2	0.075 U	0.073 U	0.075 U	0.074 U

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Post-Excavation Endpoint Sample Results
Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

		Li	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit		EP-X07_15_20230517 460-280490-7 5/17/2023 1 mg/kg	EP-57_15_20230517 460-280490-3 5/17/2023 1 mg/kg	EP-58_15_20230601 460-281385-1 6/01/2023 1 mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	NS	0.073 U	0.078 U	0.072 U	0.071 U
PCB-1221 (Aroclor 1221)	NS	NS	NS	0.073 U	0.078 U	0.072 U	0.071 U
PCB-1232 (Aroclor 1232)	NS	NS	NS	0.073 U	0.078 U	0.072 U	0.071 U
PCB-1242 (Aroclor 1242)	NS	NS	NS	0.073 U	0.078 U	0.072 U	0.071 U
PCB-1248 (Aroclor 1248)	NS	NS	NS	0.073 U	0.078 U	0.072 U	0.071 U
PCB-1254 (Aroclor 1254)	NS	NS	NS	0.073 U	0.078 U	0.072 U	0.071 U
PCB-1260 (Aroclor 1260)	NS	NS	NS	0.073 U	0.078 U	0.072 U	0.071 U
PCB-1262 (Aroclor 1262)	NS	NS	NS	0.073 U	0.078 U	0.072 U	0.071 U
PCB-1268 (Aroclor 1268)	NS	NS	NS	0.073 U	0.078 U	0.072 U	0.071 U
Total PCBs	0.1	1	3.2	0.073 U	0.078 U	0.072 U	0.071 U

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Post-Excavation Endpoint Sample Results
Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

		Li	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit		EP-X08_15_20230601 460-281385-3 6/01/2023 1 mg/kg	EP-60_15_20230601 460-281385-4 6/01/2023 1 mg/kg	EP-61_15_20230601 460-281385-5 6/01/2023 1 mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	NS	0.073 U	0.072 U	0.075 U	0.074 U
PCB-1221 (Aroclor 1221)	NS	NS	NS	0.073 U	0.072 U	0.075 U	0.074 U
PCB-1232 (Aroclor 1232)	NS	NS	NS	0.073 U	0.072 U	0.075 U	0.074 U
PCB-1242 (Aroclor 1242)	NS	NS	NS	0.073 U	0.072 U	0.075 U	0.074 U
PCB-1248 (Aroclor 1248)	NS	NS	NS	0.073 U	0.072 U	0.075 U	0.074 U
PCB-1254 (Aroclor 1254)	NS	NS	NS	0.073 U	0.072 U	0.075 U	0.074 U
PCB-1260 (Aroclor 1260)	NS	NS	NS	0.073 U	0.072 U	0.075 U	0.074 U
PCB-1262 (Aroclor 1262)	NS	NS	NS	0.073 U	0.072 U	0.075 U	0.074 U
PCB-1268 (Aroclor 1268)	NS	NS	NS	0.073 U	0.072 U	0.075 U	0.074 U
Total PCBs	0.1	1	3.2	0.073 U	0.072 U	0.075 U	0.074 U

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Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

		Li	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit		EP-62_15_20230706 460-283756-1 7/06/2023 1 mg/kg	EP-63_15_20230706 460-283756-2 7/06/2023 1 mg/kg	EP-X09_15_20230706 460-283756-6 7/06/2023 1 mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	NS	0.081 U	0.08 U	0.078 U	0.079 U
PCB-1221 (Aroclor 1221)	NS	NS	NS	0.081 U	0.08 U	0.078 U	0.079 U
PCB-1232 (Aroclor 1232)	NS	NS	NS	0.081 U	0.08 U	0.078 U	0.079 U
PCB-1242 (Aroclor 1242)	NS	NS	NS	0.081 U	0.08 U	0.078 U	0.079 U
PCB-1248 (Aroclor 1248)	NS	NS	NS	0.081 U	0.08 U	0.078 U	0.079 U
PCB-1254 (Aroclor 1254)	NS	NS	NS	0.081 U	0.08 U	0.078 U	0.079 U
PCB-1260 (Aroclor 1260)	NS	NS	NS	0.081 U	0.08 U	0.078 U	0.079 U
PCB-1262 (Aroclor 1262)	NS	NS	NS	0.081 U	0.08 U	0.078 U	0.079 U
PCB-1268 (Aroclor 1268)	NS	NS	NS	0.081 U	0.08 U	0.078 U	0.079 U
Total PCBs	0.1	1	3.2	0.081 U	0.08 U	0.078 U	0.079 U

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Brooklyn, NY
Post-Excavation Endpoint Sample Results
Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

		La	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit		EP-65_15_20230706 460-283756-4 7/06/2023 1 mg/kg	EP-66_15_20230706 460-283756-5 7/06/2023 1 mg/kg	FB-01_20221228 460-272140-12 12/28/2022 1 μg/L
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	NS	0.072 U	0.081 U	0.082 U	0.4 U
PCB-1221 (Aroclor 1221)	NS	NS	NS	0.072 U	0.081 U	0.082 U	0.4 U
PCB-1232 (Aroclor 1232)	NS	NS	NS	0.072 U	0.081 U	0.082 U	0.4 U
PCB-1242 (Aroclor 1242)	NS	NS	NS	0.072 U	0.081 U	0.082 U	0.4 U
PCB-1248 (Aroclor 1248)	NS	NS	NS	0.072 U	0.081 U	0.082 U	0.4 U
PCB-1254 (Aroclor 1254)	NS	NS	NS	0.072 U	0.081 U	0.082 U	0.4 U
PCB-1260 (Aroclor 1260)	NS	NS	NS	0.072 U	0.081 U	0.082 U	0.4 U
PCB-1262 (Aroclor 1262)	NS	NS	NS	0.072 U	0.081 U	0.082 U	0.4 U
PCB-1268 (Aroclor 1268)	NS	NS	NS	0.072 U	0.081 U	0.082 U	0.4 U
Total PCBs	0.1	1	3.2	0.072 U	0.081 U	0.082 U	0.4 U

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Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

		Li	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit	FB-01_20230103 460-272291-12 1/03/2023 1 μg/L	FB-01_20230214 460-274640-8 2/14/2023 1 µg/L	FB-01_20230410 460-278010-18 4/10/2023 1 μg/L	FB-01_20230412 460-278159-12 4/12/2023 1 μg/L
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1221 (Aroclor 1221)	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1232 (Aroclor 1232)	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1242 (Aroclor 1242)	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1248 (Aroclor 1248)	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1254 (Aroclor 1254)	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1260 (Aroclor 1260)	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1262 (Aroclor 1262)	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1268 (Aroclor 1268)	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.4 U
Total PCBs	0.1	1	3.2	0.4 U	0.4 U	0.4 U	0.4 U

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Soil Analytical Results of Polychlorinated Biphenyls (PCBs)								

		Li	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit		FB-01_20230517 460-280490-5 5/17/2023 1 μg/L	FB-01_20230601 460-281385-6 6/01/2023 1 μg/L	FB-01_20230706 460-283756-7 7/06/2023 1 μg/L
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1221 (Aroclor 1221)	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1232 (Aroclor 1232)	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1242 (Aroclor 1242)	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1248 (Aroclor 1248)	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1254 (Aroclor 1254)	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1260 (Aroclor 1260)	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1262 (Aroclor 1262)	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1268 (Aroclor 1268)	NS	NS	NS	0.4 U	0.4 U	0.4 U	0.4 U
Total PCBs	0.1	1	3.2	0.4 U	0.4 U	0.4 U	0.4 U

		Li	AKRF Sample ID aboratory Sample ID	EP-01_15_20221229 460-272204-1	EP-02_15_20221228 460-272140-1	EP-03_15_20221228 460-272140-2	EP-04_15_20221228 460-272140-3
			Date Sampled	12/29/2022	12/28/2022	12/28/2022	12/28/2022
			Dilution Factor	1	1	1	1
			Unit	mg/kg	mg/kg	mg/kg	mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
Aldrin	0.005	0.097	0.19	0.0081 U	0.0075 U	0.0085 U	0.0074 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.02	0.0024 U	0.0022 U	0.0025 U	0.0022 U
Alpha Endosulfan	NS	NS	102	0.0081 U	0.0075 U	0.0085 U	0.0074 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.09	0.0024 U	0.0022 U	0.0025 U	0.0022 U
Beta Endosulfan	NS	NS	102	0.0081 U	0.0075 U	0.0085 U	0.0074 U
cis-Chlordane	0.094	4.2	2.9	0.0081 U	0.0075 U	0.0085 U	0.0074 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.25	0.0024 U	0.0022 U	0.0025 U	0.0022 U
Dieldrin	0.005	0.2	0.1	0.0024 U	0.0022 U	0.0025 U	0.0022 U
Endosulfan Sulfate	NS	NS	1,000	0.0081 U	0.0075 U	0.0085 U	0.0074 U
Endosulfans ABS	2.4	24	NS	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.06	0.0081 U	0.0075 U	0.0085 U	0.0074 U
Endrin Aldehyde	NS	NS	NS	0.0081 U	0.0075 U	0.0085 U	0.0074 U
Endrin Ketone	NS	NS	NS	0.0081 U	0.0075 U	0.0085 U	0.0074 U
Gamma Bhc (Lindane)	0.1	1.3	0.1	0.0024 U	0.0022 U	0.0025 U	0.0022 U
Heptachlor	0.042	2.1	0.38	0.0081 U	0.0075 U	0.0085 U	0.0074 U
Heptachlor Epoxide	NS	NS	NS	0.0081 U	0.0075 U	0.0085 U	0.0074 U
Methoxychlor	NS	NS	NS	0.0081 U	0.0075 U	0.0085 U	0.0074 U
P,P'-DDD	0.0033	13	14	0.0081 U	0.0075 U	0.0085 U	0.0074 U
P,P'-DDE	0.0033	8.9	17	0.0081 U	0.0075 U	0.0085 U	0.0074 U
P,P'-DDT	0.0033	7.9	136	0.0081 U	0.0075 U	0.0085 U	0.0074 U
Toxaphene	NS	NS	NS	0.081 U	0.075 U	0.085 U	0.074 U

		La	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor	EP-X01_15_20221228 460-272140-11 12/28/2022 1	EP-05_15_20221229 460-272204-2 12/29/2022	EP-06_15_20221228 460-272140-4 12/28/2022 1	EP-07_15_20221228 460-272140-5 12/28/2022 1
			Unit	mg/kg	mg/kg	mg/kg	mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
Aldrin	0.005	0.097	0.19	0.0075 U	0.0074 U	0.0075 U	0.0078 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.02	0.0022 U	0.0022 U	0.0022 U	0.0023 U
Alpha Endosulfan	NS	NS	102	0.0075 U	0.0074 U	0.0075 U	0.0078 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.09	0.0022 U	0.0022 U	0.0022 U	0.0023 U
Beta Endosulfan	NS	NS	102	0.0075 U	0.0074 U	0.0075 U	0.0078 U
cis-Chlordane	0.094	4.2	2.9	0.0075 U	0.0074 U	0.0075 U	0.0078 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.25	0.0022 U	0.0022 U	0.0022 U	0.0023 U
Dieldrin	0.005	0.2	0.1	0.0022 U	0.0022 U	0.0022 U	0.0023 U
Endosulfan Sulfate	NS	NS	1,000	0.0075 U	0.0074 U	0.0075 U	0.0078 U
Endosulfans ABS	2.4	24	NS	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.06	0.0075 U	0.0074 U	0.0075 U	0.0078 U
Endrin Aldehyde	NS	NS	NS	0.0075 U	0.0074 U	0.0075 U	0.0078 U
Endrin Ketone	NS	NS	NS	0.0075 U	0.0074 U	0.0075 U	0.0078 U
Gamma Bhc (Lindane)	0.1	1.3	0.1	0.0022 U	0.0022 U	0.0022 U	0.0023 U
Heptachlor	0.042	2.1	0.38	0.0075 U	0.0074 U	0.0075 U	0.0078 U
Heptachlor Epoxide	NS	NS	NS	0.0075 U	0.0074 U	0.0075 U	0.0078 U
Methoxychlor	NS	NS	NS	0.0075 U	0.0074 U	0.0075 U	0.0078 U
P,P'-DDD	0.0033	13	14	0.0075 U	0.0074 U	0.0075 U	0.0078 U
P,P'-DDE	0.0033	8.9	17	0.0075 U	0.0074 U	0.0075 U	0.0078 U
P,P'-DDT	0.0033	7.9	136	0.0075 U	0.0074 U	0.0075 U	0.0078 U
Toxaphene	NS	NS	NS	0.075 U	0.074 U	0.075 U	0.078 U

		La	AKRF Sample ID aboratory Sample ID Date Sampled	EP-08_15_20221228 460-272140-6 12/28/2022	EP-09_15_20221229 460-272204-3 12/29/2022	EP-10_15_20221228 460-272140-7 12/28/2022	EP-11_15_20221228 460-272140-8 12/28/2022
			Dilution Factor Unit		1	1	1 ma/ka
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	mg/kg CONC Q	mg/kg CONC Q	mg/kg CONC Q	mg/kg CONC Q
Aldrin	0.005	0.097	0.19	0.0076 U	0.0074 U	0.0081 U	0.0083 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.003	0.48	0.02	0.0023 U	0.0022 U	0.0024 U	0.0025 U
Alpha Endosulfan	NS	NS	102	0.0076 U	0.0074 U	0.0024 0 0.0081 U	0.0083 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.09	0.0023 U	0.0022 U	0.0024 U	0.0025 U
Beta Endosulfan	NS	NS	102	0.0076 U	0.0074 U	0.0081 U	0.0083 U
cis-Chlordane	0.094	4.2	2.9	0.0076 U	0.0074 U	0.0081 U	0.0083 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.25	0.0023 U	0.0022 U	0.0024 U	0.0025 U
Dieldrin	0.005	0.2	0.1	0.0023 U	0.0022 U	0.0024 U	0.0025 U
Endosulfan Sulfate	NS	NS	1,000	0.0076 U	0.0074 U	0.0081 U	0.0083 U
Endosulfans ABS	2.4	24	NS	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.06	0.0076 U	0.0074 U	0.0081 U	0.0083 U
Endrin Aldehyde	NS	NS	NS	0.0076 U	0.0074 U	0.0081 U	0.0083 U
Endrin Ketone	NS	NS	NS	0.0076 U	0.0074 U	0.0081 U	0.0083 U
Gamma Bhc (Lindane)	0.1	1.3	0.1	0.0023 U	0.0022 U	0.0024 U	0.0025 U
Heptachlor	0.042	2.1	0.38	0.0076 U	0.0074 U	0.0081 U	0.0083 U
Heptachlor Epoxide	NS	NS	NS	0.0076 U	0.0074 U	0.0081 U	0.0083 U
Methoxychlor	NS	NS	NS	0.0076 U	0.0074 U	0.0081 U	0.0083 U
P,P'-DDD	0.0033	13	14	0.0076 U	0.0074 U	0.0081 U	0.0083 U
P,P'-DDE	0.0033	8.9	17	0.0076 U	0.0074 U	0.0081 U	0.0083 U
P,P'-DDT	0.0033	7.9	136	0.0076 U	0.0074 U	0.0081 U	0.0083 U
Toxaphene	NS	NS	NS	0.076 U	0.074 U	0.081 U	0.083 U

		L	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor		EP-13_15_20221228 460-272140-9 12/28/2022 1	EP-14_15_20221229 460-272204-5 12/29/2022 1	EP-15_15_20221229 460-272204-6 12/29/2022 1
			Unit	mg/kg	mg/kg	mg/kg	mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
Aldrin	0.005	0.097	0.19	0.0075 U	0.0079 U	0.0075 U	0.0073 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.02	0.0022 U	0.0023 U	0.0022 U	0.0022 U
Alpha Endosulfan	NS	NS	102	0.0075 U	0.0079 U	0.0075 U	0.0073 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.09	0.0022 U	0.0023 U	0.0022 U	0.0022 U
Beta Endosulfan	NS	NS	102	0.0075 U	0.0079 U	0.0075 U	0.0073 U
cis-Chlordane	0.094	4.2	2.9	0.0075 U	0.0079 U	0.0075 U	0.0073 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.25	0.0022 U	0.0023 U	0.0022 U	0.0022 U
Dieldrin	0.005	0.2	0.1	0.0022 U	0.0023 U	0.0022 U	0.0022 U
Endosulfan Sulfate	NS	NS	1,000	0.0075 U	0.0079 U	0.0075 U	0.0073 U
Endosulfans ABS	2.4	24	NS	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.06	0.0075 U	0.0079 U	0.0075 U	0.0073 U
Endrin Aldehyde	NS	NS	NS	0.0075 U	0.0079 U	0.0075 U	0.0073 U
Endrin Ketone	NS	NS	NS	0.0075 U	0.0079 U	0.0075 U	0.0073 U
Gamma Bhc (Lindane)	0.1	1.3	0.1	0.0022 U	0.0023 U	0.0022 U	0.0022 U
Heptachlor	0.042	2.1	0.38	0.0075 U	0.0079 U	0.0075 U	0.0073 U
Heptachlor Epoxide	NS	NS	NS	0.0075 U	0.0079 U	0.0075 U	0.0073 U
Methoxychlor	NS	NS	NS	0.0075 U	0.0079 U	0.0075 U	0.0073 U
P,P'-DDD	0.0033	13	14	0.0075 U	0.0079 U	0.0075 U	0.0073 U
P,P'-DDE	0.0033	8.9	17	0.0075 U	0.0079 U	0.0075 U	0.0073 U
P,P'-DDT	0.0033	7.9	136	0.0075 U	0.0079 U	0.0075 U	0.0073 U
Toxaphene	NS	NS	NS	0.075 U	0.079 U	0.075 U	0.073 U

		La	AKRF Sample ID aboratory Sample ID	EP-16_15_20221229 460-272204-7	EP-17_15_20221229 460-272204-8	EP-18_15_20221228 460-272140-10	EP-19_15_20221229 460-272204-9
			Date Sampled	12/29/2022	12/29/2022	12/28/2022	12/29/2022
			Dilution Factor	1	1	1	1
			Unit	mg/kg	mg/kg	mg/kg	mg/kg
Compound		NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
Aldrin	0.005	0.097	0.19	0.008 U	0.0078 U	0.0075 U	0.0076 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.02	0.0024 U	0.0023 U	0.0022 U	0.0023 U
Alpha Endosulfan	NS	NS	102	0.008 U	0.0078 U	0.0075 U	0.0076 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.09	0.0024 U	0.0023 U	0.0022 U	0.0023 U
Beta Endosulfan	NS	NS	102	0.008 U	0.0078 U	0.0075 U	0.0076 U
cis-Chlordane	0.094	4.2	2.9	0.008 U	0.0078 U	0.0075 U	0.0076 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.25	0.0024 U	0.0023 U	0.0022 U	0.0023 U
Dieldrin	0.005	0.2	0.1	0.0024 U	0.0023 U	0.0022 U	0.0023 U
Endosulfan Sulfate	NS	NS	1,000	0.008 U	0.0078 U	0.0075 U	0.0076 U
Endosulfans ABS	2.4	24	NS	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.06	0.008 U	0.0078 U	0.0075 U	0.0076 U
Endrin Aldehyde	NS	NS	NS	0.008 U	0.0078 U	0.0075 U	0.0076 U
Endrin Ketone	NS	NS	NS	0.008 U	0.0078 U	0.0075 U	0.0076 U
Gamma Bhc (Lindane)	0.1	1.3	0.1	0.0024 U	0.0023 U	0.0022 U	0.0023 U
Heptachlor	0.042	2.1	0.38	0.008 U	0.0078 U	0.0075 U	0.0076 U
Heptachlor Epoxide	NS	NS	NS	0.008 U	0.0078 U	0.0075 U	0.0076 U
Methoxychlor	NS	NS	NS	0.008 U	0.0078 U	0.0075 U	0.0076 U
P,P'-DDD	0.0033	13	14	0.008 U	0.0078 U	0.0075 U	0.0076 U
P,P'-DDE	0.0033	8.9	17	0.008 U	0.0078 U	0.0075 U	0.0076 U
P,P'-DDT	0.0033	7.9	136	0.008 U	0.0078 U	0.0075 U	0.0076 U
Toxaphene	NS	NS	NS	0.08 U	0.078 U	0.075 U	0.076 U

		La	AKRF Sample ID aboratory Sample ID	EP-20_15_20221229 460-272204-10	EP-21_15_20230103 460-272291-1	EP-22_15_20230103 460-272291-2	EP-X02_15_20230103 460-272291-11
			Date Sampled	12/29/2022	1/03/2023	1/03/2023	1/03/2023
			Dilution Factor	1	1	1	1
			Unit	mg/kg	mg/kg	mg/kg	mg/kg
Compound		NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
Aldrin	0.005	0.097	0.19	0.0085 U	0.0078 U	0.0077 U	0.0076 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.02	0.0025 U	0.0023 U	0.0023 U	0.0023 U
Alpha Endosulfan	NS	NS	102	0.0085 U	0.0078 U	0.0077 U	0.0076 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.09	0.0025 U	0.0023 UJ	0.0023 U	0.0023 U
Beta Endosulfan	NS	NS	102	0.0085 U	0.0078 U	0.0077 U	0.0076 U
cis-Chlordane	0.094	4.2	2.9	0.0085 U	0.0078 U	0.0077 U	0.0076 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.25	0.0025 U	0.0023 U	0.0023 U	0.0023 U
Dieldrin	0.005	0.2	0.1	0.0025 U	0.0023 U	0.0023 U	0.0023 U
Endosulfan Sulfate	NS	NS	1,000	0.0085 U	0.0078 U	0.0077 U	0.0076 U
Endosulfans ABS	2.4	24	NS	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.06	0.0085 U	0.0078 U	0.0077 U	0.0076 U
Endrin Aldehyde	NS	NS	NS	0.0085 U	0.0078 U	0.0077 U	0.0076 U
Endrin Ketone	NS	NS	NS	0.0085 U	0.0078 U	0.0077 U	0.0076 U
Gamma Bhc (Lindane)	0.1	1.3	0.1	0.0025 U	0.0023 U	0.0023 U	0.0023 U
Heptachlor	0.042	2.1	0.38	0.0085 U	0.0078 U	0.0077 U	0.0076 U
Heptachlor Epoxide	NS	NS	NS	0.0085 U	0.0078 U	0.0077 U	0.0076 U
Methoxychlor	NS	NS	NS	0.0085 U	0.0078 U	0.0077 U	0.0076 U
P,P'-DDD	0.0033	13	14	0.0085 U	0.0078 U	0.0077 U	0.0076 U
P,P'-DDE	0.0033	8.9	17	0.0085 U	0.0078 UJ	0.0077 U	0.0076 U
P,P'-DDT	0.0033	7.9	136	0.0085 U	0.0078 U	0.0077 U	0.0076 U
Toxaphene	NS	NS	NS	0.085 U	0.078 U	0.077 U	0.076 U

		Li	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor	EP-23_17_20230103 460-272291-3 1/03/2023	EP-24_17_20230103 460-272291-4 1/03/2023	EP-25_16_20230103 460-272291-5 1/03/2023 1	EP-26_15_20230103 460-272291-6 1/03/2023
			Unit	mg/kg	mg/kg	mg/kg	mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
Aldrin	0.005	0.097	0.19	0.0073 U	0.0073 U	0.0073 U	0.0076 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.02	0.0022 U	0.0022 U	0.0022 U	0.0023 U
Alpha Endosulfan	NS	NS	102	0.0073 U	0.0073 U	0.0073 U	0.0076 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.09	0.0022 U	0.0022 U	0.0022 U	0.0023 U
Beta Endosulfan	NS	NS	102	0.0073 U	0.0073 U	0.0073 U	0.0076 U
cis-Chlordane	0.094	4.2	2.9	0.0073 U	0.0073 U	0.0073 U	0.0076 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.25	0.0022 U	0.0022 U	0.0022 U	0.0023 U
Dieldrin	0.005	0.2	0.1	0.0022 U	0.0022 U	0.0022 U	0.0023 U
Endosulfan Sulfate	NS	NS	1,000	0.0073 U	0.0073 U	0.0073 U	0.0076 U
Endosulfans ABS	2.4	24	NS	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.06	0.0073 U	0.0073 U	0.0073 U	0.0076 U
Endrin Aldehyde	NS	NS	NS	0.0073 U	0.0073 U	0.0073 U	0.0076 U
Endrin Ketone	NS	NS	NS	0.0073 U	0.0073 U	0.0073 U	0.0076 U
Gamma Bhc (Lindane)	0.1	1.3	0.1	0.0022 U	0.0022 U	0.0022 U	0.0023 U
Heptachlor	0.042	2.1	0.38	0.0073 U	0.0073 U	0.0073 U	0.0076 U
Heptachlor Epoxide	NS	NS	NS	0.0073 U	0.0073 U	0.0073 U	0.0076 U
Methoxychlor	NS	NS	NS	0.0073 U	0.0073 U	0.0073 U	0.0076 U
P,P'-DDD	0.0033	13	14	0.0073 U	0.0073 U	0.0073 U	0.0076 U
P,P'-DDE	0.0033	8.9	17	0.0073 U	0.0073 U	0.0073 U	0.0076 U
P,P'-DDT	0.0033	7.9	136	0.0073 U	0.0073 U	0.0073 U	0.0076 U
Toxaphene	NS	NS	NS	0.073 U	0.073 U	0.073 U	0.076 U

		La	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor	EP-27_15_20230103 460-272291-7 1/03/2023 1	EP-28_15_20230103 460-272291-8 1/03/2023 1	EP-29_15_20230103 460-272291-9 1/03/2023 1	EP-30_15_20230103 460-272291-10 1/03/2023 1
			Unit	mg/kg	mg/kg	mg/kg	mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
Aldrin	0.005	0.097	0.19	0.0079 U	0.0073 U	0.008 U	0.0069 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.02	0.0024 U	0.0022 U	0.0024 U	0.0021 U
Alpha Endosulfan	NS	NS	102	0.0079 U	0.0073 U	0.008 U	0.0069 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.09	0.0024 U	0.0022 U	0.0024 U	0.0021 U
Beta Endosulfan	NS	NS	102	0.0079 U	0.0073 U	0.008 U	0.0069 U
cis-Chlordane	0.094	4.2	2.9	0.0079 U	0.0073 U	0.008 U	0.0069 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.25	0.0024 U	0.0022 U	0.0024 U	0.0021 U
Dieldrin	0.005	0.2	0.1	0.0024 U	0.0022 U	0.0024 U	0.0021 U
Endosulfan Sulfate	NS	NS	1,000	0.0079 U	0.0073 U	0.008 U	0.0069 U
Endosulfans ABS	2.4	24	NS	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.06	0.0079 U	0.0073 U	0.008 U	0.0069 U
Endrin Aldehyde	NS	NS	NS	0.0079 U	0.0073 U	0.008 U	0.0069 U
Endrin Ketone	NS	NS	NS	0.0079 U	0.0073 U	0.008 U	0.0069 U
Gamma Bhc (Lindane)	0.1	1.3	0.1	0.0024 U	0.0022 U	0.0024 U	0.0021 U
Heptachlor	0.042	2.1	0.38	0.0079 U	0.0073 U	0.008 U	0.0069 U
Heptachlor Epoxide	NS	NS	NS	0.0079 U	0.0073 U	0.008 U	0.0069 U
Methoxychlor	NS	NS	NS	0.0079 U	0.0073 U	0.008 U	0.0069 U
P,P'-DDD	0.0033	13	14	0.0079 U	0.0073 U	0.008 U	0.0069 U
P,P'-DDE	0.0033	8.9	17	0.0079 U	0.0073 U	0.008 U	0.0069 U
P,P'-DDT	0.0033	7.9	136	0.0079 U	0.0073 U	0.008 U	0.0069 U
Toxaphene	NS	NS	NS	0.079 U	0.073 U	0.08 U	0.069 U

		La	AKRF Sample ID aboratory Sample ID Date Sampled		EP-32_15_20230214 460-274640-2 2/14/2023	EP-33_15_20230214 460-274640-3 2/14/2023	EP-34_15_20230214 460-274640-4 2/14/2023
			Dilution Factor Unit	1	1	1	1 ma/ka
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	mg/kg CONC Q	mg/kg CONC Q	mg/kg CONC Q	mg/kg CONC Q
Aldrin	0.005	0.097	0.19	0.0073 U	0.0074 U	0.0076 U	0.0076 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.003	0.48	0.19	0.0073 U	0.0022 U	0.0023 U	0.0023 U
Alpha Endosulfan	NS	NS	102	0.0073 U	0.0074 U	0.0076 U	0.0076 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.09	0.0022 U	0.0022 U	0.0023 U	0.0023 U
Beta Endosulfan	NS	NS	102	0.0073 U	0.0074 U	0.0076 U	0.0076 U
cis-Chlordane	0.094	4.2	2.9	0.0073 U	0.0074 U	0.0076 U	0.0076 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.25	0.0022 U	0.0022 U	0.0023 U	0.0023 U
Dieldrin	0.005	0.2	0.1	0.0022 U	0.0022 U	0.0023 U	0.0023 U
Endosulfan Sulfate	NS	NS	1,000	0.0073 U	0.0074 U	0.0076 U	0.0076 U
Endosulfans ABS	2.4	24	NS	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.06	0.0073 U	0.0074 U	0.0076 U	0.0076 U
Endrin Aldehyde	NS	NS	NS	0.0073 U	0.0074 U	0.0076 U	0.0076 U
Endrin Ketone	NS	NS	NS	0.0073 U	0.0074 U	0.0076 U	0.0076 U
Gamma Bhc (Lindane)	0.1	1.3	0.1	0.0022 U	0.0022 U	0.0023 U	0.0023 U
Heptachlor	0.042	2.1	0.38	0.0073 U	0.0074 U	0.0076 U	0.0076 U
Heptachlor Epoxide	NS	NS	NS	0.0073 U	0.0074 U	0.0076 U	0.0076 U
Methoxychlor	NS	NS	NS	0.0073 U	0.0074 U	0.0076 U	0.0076 U
P,P'-DDD	0.0033	13	14	0.0073 U	0.0074 U	0.0076 U	0.0076 U
P,P'-DDE	0.0033	8.9	17	0.0073 U	0.0074 U	0.0076 U	0.0076 U
P,P'-DDT	0.0033	7.9	136	0.0073 U	0.0074 U	0.0076 U	0.0076 U
Toxaphene	NS	NS	NS	0.073 U	0.074 U	0.076 U	0.076 U

		La	AKRF Sample ID aboratory Sample ID Date Sampled	EP-35_15_20230214 460-274640-5 2/14/2023	EP-36_15_20230214 460-274640-6 2/14/2023	EP-X03_15_20230214 460-274640-7 2/14/2023	EP-37_16_20230410 460-278010-1 4/10/2023
			Dilution Factor Unit	mg/kg	mg/kg	mg/kg	mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
Aldrin	0.005	0.097	0.19	0.0074 U	0.0072 U	0.0073 U	0.0077 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.00	0.48	0.02	0.0022 U	0.0072 U	0.0022 U	0.0023 U
Alpha Endosulfan	NS	NS	102	0.0074 U	0.0072 U	0.0073 U	0.0077 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.09	0.0022 U	0.0022 U	0.0022 U	0.0023 U
Beta Endosulfan	NS	NS	102	0.0074 U	0.0072 U	0.0073 U	0.0077 U
cis-Chlordane	0.094	4.2	2.9	0.0074 U	0.0072 U	0.0073 U	0.0077 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.25	0.0022 U	0.0022 U	0.0022 U	0.0023 U
Dieldrin	0.005	0.2	0.1	0.0022 U	0.0022 U	0.0022 U	0.0023 U
Endosulfan Sulfate	NS	NS	1,000	0.0074 U	0.0072 U	0.0073 U	0.0077 U
Endosulfans ABS	2.4	24	NS	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.06	0.0074 U	0.0072 U	0.0073 U	0.0077 U
Endrin Aldehyde	NS	NS	NS	0.0074 U	0.0072 U	0.0073 U	0.0077 U
Endrin Ketone	NS	NS	NS	0.0074 U	0.0072 U	0.0073 U	0.0077 U
Gamma Bhc (Lindane)	0.1	1.3	0.1	0.0022 U	0.0022 U	0.0022 U	0.0023 U
Heptachlor	0.042	2.1	0.38	0.0074 U	0.0072 U	0.0073 U	0.0077 U
Heptachlor Epoxide	NS	NS	NS	0.0074 U	0.0072 U	0.0073 U	0.0077 U
Methoxychlor	NS	NS	NS	0.0074 U	0.0072 U	0.0073 U	0.0077 U
P,P'-DDD	0.0033	13	14	0.0074 U	0.0072 U	0.0073 U	0.0077 U
P,P'-DDE	0.0033	8.9	17	0.0074 U	0.0072 U	0.0073 U	0.0077 U
P,P'-DDT	0.0033	7.9	136	0.0074 U	0.0072 U	0.0073 U	0.0077 U
Toxaphene	NS	NS	NS	0.074 U	0.072 U	0.073 U	0.077 U

		La	AKRF Sample ID boratory Sample ID Date Sampled	EP-38_16_20230410 460-278010-2 4/10/2023	EP-39_15_20230410 460-278010-3 4/10/2023	EP-40_16_20230410 460-278010-4 4/10/2023	EP-41_15_20230410 460-278010-5 4/10/2023
			Dilution Factor Unit		1 ma/ka	1 mg/kg	1 mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	mg/kg CONC Q	mg/kg CONC Q	mg/kg CONC Q	mg/kg CONC Q
Aldrin	0.005	0.097	0.19	0.0072 U	0.0085 U	0.0077 U	0.0074 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.00	0.48	0.02	0.0022 U	0.0026 U	0.0023 U	0.0022 U
Alpha Endosulfan	NS	NS	102	0.0072 U	0.0085 U	0.0077 U	0.0074 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.09	0.0022 U	0.0026 U	0.0023 U	0.0022 U
Beta Endosulfan	NS	NS	102	0.0072 U	0.0085 U	0.0077 U	0.0074 U
cis-Chlordane	0.094	4.2	2.9	0.0072 U	0.0085 U	0.0077 U	0.0074 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.25	0.0022 U	0.0026 U	0.0023 U	0.0022 U
Dieldrin	0.005	0.2	0.1	0.0022 U	0.0026 U	0.0023 U	0.0022 U
Endosulfan Sulfate	NS	NS	1,000	0.0072 U	0.0085 U	0.0077 U	0.0074 U
Endosulfans ABS	2.4	24	NS	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.06	0.0072 U	0.0085 U	0.0077 U	0.0074 U
Endrin Aldehyde	NS	NS	NS	0.0072 U	0.0085 U	0.0077 U	0.0074 U
Endrin Ketone	NS	NS	NS	0.0072 U	0.0085 U	0.0077 U	0.0074 U
Gamma Bhc (Lindane)	0.1	1.3	0.1	0.0022 U	0.0026 U	0.0023 U	0.0022 U
Heptachlor	0.042	2.1	0.38	0.0072 U	0.0085 U	0.0077 U	0.0074 U
Heptachlor Epoxide	NS	NS	NS	0.0072 U	0.0085 U	0.0077 U	0.0074 U
Methoxychlor	NS	NS	NS	0.0072 U	0.0085 U	0.0077 U	0.0074 U
P,P'-DDD	0.0033	13	14	0.0072 U	0.0085 U	0.0077 U	0.0074 U
P,P'-DDE	0.0033	8.9	17	0.0072 U	0.0085 U	0.0077 U	0.0074 U
P,P'-DDT	0.0033	7.9	136	0.0072 U	0.0085 U	0.0077 U	0.0074 U
Toxaphene	NS	NS	NS	0.072 U	0.085 U	0.077 U	0.074 U

		La	AKRF Sample ID boratory Sample ID	EP-42_17_20230410 460-278010-6	EP-43_16_20230410 460-278010-7	EP-44_15_20230410 460-278010-8	EP-45_15_20230410 460-278010-9
			Date Sampled	4/10/2023	4/10/2023	4/10/2023	4/10/2023
			Dilution Factor	1	1	1	1
			Unit	mg/kg	mg/kg	mg/kg	mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
Aldrin	0.005	0.097	0.19	0.0081 U	0.0081 U	0.0081 U	0.0082 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.02	0.0024 U	0.0024 U	0.0024 U	0.0024 U
Alpha Endosulfan	NS	NS	102	0.0081 U	0.0081 U	0.0081 U	0.0082 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.09	0.0024 U	0.0024 U	0.0024 U	0.0024 U
Beta Endosulfan	NS	NS	102	0.0081 U	0.0081 U	0.0081 U	0.0082 U
cis-Chlordane	0.094	4.2	2.9	0.0081 U	0.0081 U	0.0081 U	0.0082 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.25	0.0024 U	0.0024 U	0.0024 U	0.0024 U
Dieldrin	0.005	0.2	0.1	0.0024 U	0.0024 U	0.0024 U	0.0024 U
Endosulfan Sulfate	NS	NS	1,000	0.0081 U	0.0081 U	0.0081 U	0.0082 U
Endosulfans ABS	2.4	24	NS	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.06	0.0081 U	0.0081 U	0.0081 U	0.0082 U
Endrin Aldehyde	NS	NS	NS	0.0081 U	0.0081 U	0.0081 U	0.0082 U
Endrin Ketone	NS	NS	NS	0.0081 U	0.0081 U	0.0081 U	0.0082 U
Gamma Bhc (Lindane)	0.1	1.3	0.1	0.0024 U	0.0024 U	0.0024 U	0.0024 U
Heptachlor	0.042	2.1	0.38	0.0081 U	0.0081 U	0.0081 U	0.0082 U
Heptachlor Epoxide	NS	NS	NS	0.0081 U	0.0081 U	0.0081 U	0.0082 U
Methoxychlor	NS	NS	NS	0.0081 U	0.0081 U	0.0081 U	0.0082 U
P,P'-DDD	0.0033	13	14	0.0081 U	0.0081 U	0.0081 U	0.0082 U
P,P'-DDE	0.0033	8.9	17	0.0081 U	0.0081 U	0.0081 U	0.0082 U
P,P'-DDT	0.0033	7.9	136	0.0081 U	0.0081 U	0.0081 U	0.0082 U
Toxaphene	NS	NS	NS	0.081 U	0.081 U	0.081 U	0.082 U

		Li	AKRF Sample ID aboratory Sample ID Date Sampled	EP-X04_15_20230410 460-278010-17 4/10/2023	EP-46_16_20230410 460-278010-10 4/10/2023	EP-47_15_20230410 460-278010-11 4/10/2023	EP-48_15_20230410 460-278010-12 4/10/2023
			Dilution Factor	1	1	1	1
			Unit	mg/kg	mg/kg	mg/kg	mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONCQ	CONC Q	CONCQ	CONCQ
Aldrin	0.005	0.097	0.19	0.008 U	0.0081 U	0.0079 U	0.0075 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.02	0.0024 U	0.0024 U	0.0023 U	0.0022 U
Alpha Endosulfan	NS	NS	102	0.008 U	0.0081 U	0.0079 U	0.0075 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.09	0.0024 U	0.0024 U	0.0023 U	0.0022 U
Beta Endosulfan	NS	NS	102	0.008 U	0.0081 U	0.0079 U	0.0075 U
cis-Chlordane	0.094	4.2	2.9	0.008 U	0.0081 U	0.0079 U	0.0075 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.25	0.0024 U	0.0024 U	0.0023 U	0.0022 U
Dieldrin	0.005	0.2	0.1	0.0024 U	0.0024 U	0.0023 U	0.0022 U
Endosulfan Sulfate	NS	NS	1,000	0.008 U	0.0081 U	0.0079 U	0.0075 U
Endosulfans ABS	2.4	24	NS	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.06	0.008 U	0.0081 U	0.0079 U	0.0075 U
Endrin Aldehyde	NS	NS	NS	0.008 U	0.0081 U	0.0079 U	0.0075 U
Endrin Ketone	NS	NS	NS	0.008 U	0.0081 U	0.0079 U	0.0075 U
Gamma Bhc (Lindane)	0.1	1.3	0.1	0.0024 U	0.0024 U	0.0023 U	0.0022 U
Heptachlor	0.042	2.1	0.38	0.008 U	0.0081 U	0.0079 U	0.0075 U
Heptachlor Epoxide	NS	NS	NS	0.008 U	0.0081 U	0.0079 U	0.0075 U
Methoxychlor	NS	NS	NS	0.008 U	0.0081 U	0.0079 U	0.0075 U
P,P'-DDD	0.0033	13	14	0.008 U	0.0081 U	0.0079 U	0.0075 U
P,P'-DDE	0.0033	8.9	17	0.008 U	0.0081 U	0.0079 U	0.0075 U
P,P'-DDT	0.0033	7.9	136	0.008 U	0.0081 U	0.0079 U	0.0075 U
Toxaphene	NS	NS	NS	0.08 U	0.081 U	0.079 U	0.075 U

		La	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor	EP-49_15_20230410 460-278010-13 4/10/2023 1	EP-50_15_20230410 460-278010-14 4/10/2023	EP-51_15_20230412 460-278159-1 4/12/2023 1	EP-52_15_20230412 460-278159-2 4/12/2023
			Unit	mg/kg	mg/kg	mg/kg	mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONCQ	CONC Q	CONC Q	CONC Q
Aldrin	0.005	0.097	0.19	0.0083 U	0.0087 U	0.0072 U	0.0076 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.02	0.0025 U	0.0026 U	0.0021 U	0.0023 U
Alpha Endosulfan	NS	NS	102	0.0083 U	0.0087 U	0.0072 U	0.0076 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.09	0.0025 U	0.0026 U	0.0021 U	0.0023 U
Beta Endosulfan	NS	NS	102	0.0083 U	0.0087 U	0.0072 U	0.0076 U
cis-Chlordane	0.094	4.2	2.9	0.0083 U	0.0087 U	0.0072 U	0.0076 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.25	0.0025 U	0.0026 U	0.0021 U	0.0023 U
Dieldrin	0.005	0.2	0.1	0.0025 U	0.0026 U	0.0021 U	0.0023 U
Endosulfan Sulfate	NS	NS	1,000	0.0083 U	0.0087 U	0.0072 U	0.0076 U
Endosulfans ABS	2.4	24	NS	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.06	0.0083 U	0.0087 U	0.0072 U	0.0076 U
Endrin Aldehyde	NS	NS	NS	0.0083 U	0.0087 U	0.0072 UJ	0.0076 U
Endrin Ketone	NS	NS	NS	0.0083 U	0.0087 U	0.0072 U	0.0076 U
Gamma Bhc (Lindane)	0.1	1.3	0.1	0.0025 U	0.0026 U	0.0021 U	0.0023 U
Heptachlor	0.042	2.1	0.38	0.0083 U	0.0087 U	0.0072 U	0.0076 U
Heptachlor Epoxide	NS	NS	NS	0.0083 U	0.0087 U	0.0072 U	0.0076 U
Methoxychlor	NS	NS	NS	0.0083 U	0.0087 U	0.0072 U	0.0076 U
P,P'-DDD	0.0033	13	14	0.0083 U	0.0087 U	0.0072 U	0.0076 U
P,P'-DDE	0.0033	8.9	17	0.0083 U	0.0087 U	0.0072 U	0.0076 U
P,P'-DDT	0.0033	7.9	136	0.0083 U	0.0087 U	0.0072 U	0.0076 U
Toxaphene	NS	NS	NS	0.083 U	0.087 U	0.072 U	0.076 U

		La	AKRF Sample ID aboratory Sample ID Date Sampled	EP-X05_15_20230412 460-278159-3 4/12/2023	EP-53_15_20230509 460-279980-1 5/09/2023	EP-54_16_20230509 460-279980-2 5/09/2023	EP-X06_16_20230509 460-279980-3 5/09/2023
			Dilution Factor	1	1	1	1
Compound				mg/kg CONC Q	mg/kg CONC Q	mg/kg CONC Q	mg/kg CONC Q
Compound			NYSDEC PGWSCO				
Aldrin	0.005	0.097	0.19	0.0075 U	0.0073 U	0.0075 U	0.0074 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.02	0.0022 U	0.0022 U	0.0022 U	0.0022 U
Alpha Endosulfan	NS	NS	102	0.0075 U	0.0073 U	0.0075 U	0.0074 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.09	0.0022 U	0.0022 U	0.0022 U	0.0022 U
Beta Endosulfan	NS	NS	102	0.0075 U	0.0073 U	0.0075 U	0.0074 U
cis-Chlordane	0.094	4.2	2.9	0.0075 U	0.0073 U	0.0075 U	0.0074 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.25	0.0022 U	0.0022 U	0.0022 U	0.0022 U
Dieldrin	0.005	0.2	0.1	0.0022 U	0.0022 U	0.0022 U	0.0022 U
Endosulfan Sulfate	NS	NS	1,000	0.0075 U	0.0073 U	0.0075 U	0.0074 U
Endosulfans ABS	2.4	24	NS	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.06	0.0075 U	0.0073 U	0.0075 U	0.0074 U
Endrin Aldehyde	NS	NS	NS	0.0075 U	0.0073 U	0.0075 U	0.0074 U
Endrin Ketone	NS	NS	NS	0.0075 U	0.0073 U	0.0075 U	0.0074 U
Gamma Bhc (Lindane)	0.1	1.3	0.1	0.0022 U	0.0022 U	0.0022 U	0.0022 U
Heptachlor	0.042	2.1	0.38	0.0075 U	0.0073 U	0.0075 U	0.0074 U
Heptachlor Epoxide	NS	NS	NS	0.0075 U	0.0073 U	0.0075 U	0.0074 U
Methoxychlor	NS	NS	NS	0.0075 U	0.0073 U	0.0075 U	0.0074 U
P,P'-DDD	0.0033	13	14	0.0075 U	0.0073 U	0.0075 U	0.0074 U
P,P'-DDE	0.0033	8.9	17	0.0075 U	0.0073 U	0.0075 U	0.0074 U
P,P'-DDT	0.0033	7.9	136	0.0075 U	0.0073 U	0.0075 U	0.0074 U
Toxaphene	NS	NS	NS	0.075 U	0.073 U	0.075 U	0.074 U

		La	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor	EP-56_15_20230517 460-280490-2 5/17/2023 1	EP-X07_15_20230517 460-280490-7 5/17/2023 1	EP-57_15_20230517 460-280490-3 5/17/2023 1	EP-58_15_20230601 460-281385-1 6/01/2023 1
			Unit	mg/kg	mg/kg	mg/kg	mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
Aldrin	0.005	0.097	0.19	0.0073 U	0.0078 U	0.0072 U	0.0071 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.02	0.0022 U	0.0023 U	0.0021 U	0.0021 U
Alpha Endosulfan	NS	NS	102	0.0073 U	0.0078 U	0.0072 U	0.0071 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.09	0.0022 U	0.0023 U	0.0021 U	0.0021 U
Beta Endosulfan	NS	NS	102	0.0073 U	0.0078 U	0.0072 U	0.0071 U
cis-Chlordane	0.094	4.2	2.9	0.0073 U	0.0078 U	0.0072 U	0.0071 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.25	0.0022 U	0.0023 U	0.0021 U	0.0021 U
Dieldrin	0.005	0.2	0.1	0.0022 U	0.0023 U	0.0021 U	0.0021 U
Endosulfan Sulfate	NS	NS	1,000	0.0073 U	0.0078 U	0.0072 U	0.0071 U
Endosulfans ABS	2.4	24	NS	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.06	0.0073 U	0.0078 U	0.0072 U	0.0071 U
Endrin Aldehyde	NS	NS	NS	0.0073 U	0.0078 U	0.0072 UJ	0.0071 U
Endrin Ketone	NS	NS	NS	0.0073 U	0.0078 U	0.0072 U	0.0071 U
Gamma Bhc (Lindane)	0.1	1.3	0.1	0.0022 U	0.0023 U	0.0021 U	0.0021 U
Heptachlor	0.042	2.1	0.38	0.0073 U	0.0078 U	0.0072 U	0.0071 U
Heptachlor Epoxide	NS	NS	NS	0.0073 U	0.0078 U	0.0072 U	0.0071 U
Methoxychlor	NS	NS	NS	0.0073 U	0.0078 U	0.0072 U	0.0071 U
P,P'-DDD	0.0033	13	14	0.0073 U	0.0078 U	0.0072 U	0.0071 U
P,P'-DDE	0.0033	8.9	17	0.0073 U	0.0078 U	0.0072 U	0.0071 U
P,P'-DDT	0.0033	7.9	136	0.0073 U	0.0078 U	0.0072 U	0.0071 U
Toxaphene	NS	NS	NS	0.073 U	0.078 U	0.072 U	0.071 U

		La	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor	EP-59_15_20230601 460-281385-2 6/01/2023 1	EP-X08_15_20230601 460-281385-3 6/01/2023 1	EP-60_15_20230601 460-281385-4 6/01/2023 1	EP-61_15_20230601 460-281385-5 6/01/2023 1
			Unit	mg/kg	mg/kg	mg/kg	mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
Aldrin	0.005	0.097	0.19	0.0073 U	0.0072 U	0.0075 U	0.0074 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.02	0.0022 U	0.0021 U	0.0022 U	0.0022 U
Alpha Endosulfan	NS	NS	102	0.0073 U	0.0072 U	0.0075 U	0.0074 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.09	0.0022 U	0.0021 U	0.0022 U	0.0022 U
Beta Endosulfan	NS	NS	102	0.0073 U	0.0072 U	0.0075 U	0.0074 U
cis-Chlordane	0.094	4.2	2.9	0.0073 U	0.0072 U	0.0075 U	0.0074 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.25	0.0022 U	0.0021 U	0.0022 U	0.0022 U
Dieldrin	0.005	0.2	0.1	0.0022 U	0.0021 U	0.0022 U	0.0022 U
Endosulfan Sulfate	NS	NS	1,000	0.0073 U	0.0072 U	0.0075 U	0.0074 U
Endosulfans ABS	2.4	24	NS	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.06	0.0073 U	0.0072 U	0.0075 U	0.0074 U
Endrin Aldehyde	NS	NS	NS	0.0073 U	0.0072 U	0.0075 U	0.0074 U
Endrin Ketone	NS	NS	NS	0.0073 U	0.0072 U	0.0075 U	0.0074 U
Gamma Bhc (Lindane)	0.1	1.3	0.1	0.0022 U	0.0021 U	0.0022 U	0.0022 U
Heptachlor	0.042	2.1	0.38	0.0073 U	0.0072 U	0.0075 U	0.0074 U
Heptachlor Epoxide	NS	NS	NS	0.0073 U	0.0072 U	0.0075 U	0.0074 U
Methoxychlor	NS	NS	NS	0.0073 U	0.0072 U	0.0075 U	0.0074 U
P,P'-DDD	0.0033	13	14	0.0073 U	0.0072 U	0.0075 U	0.0074 U
P,P'-DDE	0.0033	8.9	17	0.0073 U	0.0072 U	0.0075 U	0.0074 U
P,P'-DDT	0.0033	7.9	136	0.0073 U	0.0072 U	0.0075 U	0.0074 U
Toxaphene	NS	NS	NS	0.073 U	0.072 U	0.075 U	0.074 U

		La	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor Unit	EP-55_15_20230517 460-280490-1 5/17/2023 1 5/17/2023	EP-62_15_20230706 460-283756-1 7/06/2023 1	EP-63_15_20230706 460-283756-2 7/06/2023 1	EP-X09_15_20230706 460-283756-6 7/06/2023 1
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	mg/kg CONC Q	mg/kg CONC Q	mg/kg CONC Q	mg/kg CONC Q
Aldrin	0.005	0.097	0.19	0.0081 U	0.008 U	0.0078 U	0.0079 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.003	0.48	0.02	0.0024 U	0.0024 U	0.0023 U	0.0023 U
Alpha Endosulfan	NS	NS	102	0.0081 U	0.008 U	0.0078 U	0.0079 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.09	0.0024 U	0.0024 U	0.0023 U	0.0023 U
Beta Endosulfan	NS	NS	102	0.0081 U	0.008 U	0.0078 U	0.0079 U
cis-Chlordane	0.094	4.2	2.9	0.0081 U	0.008 U	0.0078 U	0.0079 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.25	0.0024 U	0.0024 U	0.0023 U	0.0023 U
Dieldrin	0.005	0.2	0.1	0.0024 U	0.0024 U	0.0023 U	0.0023 U
Endosulfan Sulfate	NS	NS	1,000	0.0081 U	0.008 U	0.0078 U	0.0079 U
Endosulfans ABS	2.4	24	NS	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.06	0.0081 U	0.008 U	0.0078 U	0.0079 U
Endrin Aldehyde	NS	NS	NS	0.0081 U	0.008 U	0.0078 U	0.0079 U
Endrin Ketone	NS	NS	NS	0.0081 U	0.008 U	0.0078 U	0.0079 U
Gamma Bhc (Lindane)	0.1	1.3	0.1	0.0024 U	0.0024 U	0.0023 U	0.0023 U
Heptachlor	0.042	2.1	0.38	0.0081 U	0.008 U	0.0078 U	0.0079 U
Heptachlor Epoxide	NS	NS	NS	0.0081 U	0.008 U	0.0078 U	0.0079 U
Methoxychlor	NS	NS	NS	0.0081 U	0.008 U	0.0078 U	0.0079 U
P,P'-DDD	0.0033	13	14	0.0081 U	0.008 U	0.0078 U	0.0079 U
P,P'-DDE	0.0033	8.9	17	0.0081 U	0.008 U	0.0078 U	0.0079 U
P,P'-DDT	0.0033	7.9	136	0.0081 U	0.008 U	0.0078 U	0.0079 U
Toxaphene	NS	NS	NS	0.081 U	0.08 U	0.078 U	0.079 U

		La	AKRF Sample ID aboratory Sample ID Date Sampled Dilution Factor	EP-64_15_20230706 460-283756-3 7/06/2023 1	EP-65_15_20230706 460-283756-4 7/06/2023 1	EP-66_15_20230706 460-283756-5 7/06/2023 1	FB-01_20221228 460-272140-12 12/28/2022 1
			Unit	mg/kg	mg/kg	mg/kg	µg/L
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
Aldrin	0.005	0.097	0.19	0.0072 U	0.0081 U	0.0082 U	0.02 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.02	0.0022 U	0.0024 U	0.0024 U	0.02 U
Alpha Endosulfan	NS	NS	102	0.0072 U	0.0081 U	0.0082 U	0.02 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.09	0.0022 U	0.0024 U	0.0024 U	0.02 U
Beta Endosulfan	NS	NS	102	0.0072 U	0.0081 U	0.0082 U	0.02 U
cis-Chlordane	0.094	4.2	2.9	0.0072 U	0.0081 U	0.0082 U	0.02 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.25	0.0022 U	0.0024 U	0.0024 U	0.02 U
Dieldrin	0.005	0.2	0.1	0.0022 U	0.0024 U	0.0024 U	0.02 U
Endosulfan Sulfate	NS	NS	1,000	0.0072 U	0.0081 U	0.0082 U	0.02 U
Endosulfans ABS	2.4	24	NS	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.06	0.0072 U	0.0081 U	0.0082 U	0.02 U
Endrin Aldehyde	NS	NS	NS	0.0072 U	0.0081 U	0.0082 U	0.02 U
Endrin Ketone	NS	NS	NS	0.0072 U	0.0081 U	0.0082 U	0.02 U
Gamma Bhc (Lindane)	0.1	1.3	0.1	0.0022 U	0.0024 U	0.0024 U	0.02 U
Heptachlor	0.042	2.1	0.38	0.0072 U	0.0081 U	0.0082 U	0.02 U
Heptachlor Epoxide	NS	NS	NS	0.0072 U	0.0081 U	0.0082 U	0.02 U
Methoxychlor	NS	NS	NS	0.0072 U	0.0081 U	0.0082 U	0.02 U
P,P'-DDD	0.0033	13	14	0.0072 U	0.0081 U	0.0082 U	0.02 U
P,P'-DDE	0.0033	8.9	17	0.0072 U	0.0081 U	0.0082 U	0.02 U
P,P'-DDT	0.0033	7.9	136	0.0072 U	0.0081 U	0.0082 U	0.02 U
Toxaphene	NS	NS	NS	0.072 U	0.081 U	0.082 U	0.5 U

		1	AKRF Sample ID aboratory Sample ID	FB-01_20230103 460-272291-12	FB-01_20230214 460-274640-8	FB-01_20230410 460-278010-18	FB-01_20230412 460-278159-12
			Date Sampled	1/03/2023	2/14/2023	4/10/2023	4/12/2023
			Dilution Factor	1	1	1	1
			Unit	μg/L	μg/L	μg/L	μg/L
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONCQ	CONCQ	CONC Q	CONCQ
Aldrin	0.005	0.097	0.19	0.02 U	0.02 U	0.02 U	0.02 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.02	0.02 U	0.02 U	0.02 U	0.02 U
Alpha Endosulfan	NS	NS	102	0.02 U	0.02 U	0.02 U	0.02 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.09	0.02 U	0.02 U	0.02 U	0.02 U
Beta Endosulfan	NS	NS	102	0.02 U	0.02 U	0.02 U	0.02 U
cis-Chlordane	0.094	4.2	2.9	0.02 U	0.02 U	0.02 U	0.02 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.25	0.02 U	0.02 U	0.02 U	0.02 U
Dieldrin	0.005	0.2	0.1	0.02 U	0.02 U	0.02 U	0.02 U
Endosulfan Sulfate	NS	NS	1,000	0.02 U	0.02 U	0.02 U	0.02 U
Endosulfans ABS	2.4	24	NS	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.06	0.02 U	0.02 U	0.02 U	0.02 U
Endrin Aldehyde	NS	NS	NS	0.02 U	0.02 U	0.02 U	0.02 U
Endrin Ketone	NS	NS	NS	0.02 U	0.02 U	0.02 U	0.02 U
Gamma Bhc (Lindane)	0.1	1.3	0.1	0.02 U	0.02 U	0.02 U	0.02 U
Heptachlor	0.042	2.1	0.38	0.02 U	0.02 U	0.02 U	0.02 U
Heptachlor Epoxide	NS	NS	NS	0.02 U	0.02 U	0.02 U	0.02 U
Methoxychlor	NS	NS	NS	0.02 U	0.02 U	0.02 U	0.02 U
P,P'-DDD	0.0033	13	14	0.02 U	0.02 U	0.02 U	0.02 U
P,P'-DDE	0.0033	8.9	17	0.02 U	0.02 U	0.02 U	0.02 U
P,P'-DDT	0.0033	7.9	136	0.02 U	0.02 U	0.02 U	0.02 U
Toxaphene	NS	NS	NS	0.5 U	0.5 U	0.5 U	0.5 U

		Li	AKRF Sample ID aboratory Sample ID	460-279980-4	FB-01_20230517 460-280490-5	FB-01_20230601 460-281385-6	FB-01_20230706 460-283756-7
			Date Sampled	5/09/2023	5/17/2023	6/01/2023	7/06/2023
			Dilution Factor	1	1	1	1
			Unit	μg/L	µg/L	µg/L	µg/L
Compound	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
Aldrin	0.005	0.097	0.19	0.02 U	0.02 U	0.02 U	0.02 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.02	0.02 U	0.02 U	0.02 U	0.02 U
Alpha Endosulfan	NS	NS	102	0.02 U	0.02 U	0.02 U	0.02 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.09	0.02 U	0.02 U	0.02 U	0.02 U
Beta Endosulfan	NS	NS	102	0.02 U	0.02 U	0.02 U	0.02 U
cis-Chlordane	0.094	4.2	2.9	0.02 U	0.02 U	0.02 U	0.02 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.25	0.02 U	0.02 U	0.02 U	0.02 U
Dieldrin	0.005	0.2	0.1	0.02 U	0.02 U	0.02 U	0.02 U
Endosulfan Sulfate	NS	NS	1,000	0.02 U	0.02 U	0.02 U	0.02 U
Endosulfans ABS	2.4	24	NS	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.06	0.02 U	0.02 U	0.02 U	0.02 U
Endrin Aldehyde	NS	NS	NS	0.02 U	0.02 U	0.02 U	0.02 U
Endrin Ketone	NS	NS	NS	0.02 U	0.02 U	0.02 U	0.02 U
Gamma Bhc (Lindane)	0.1	1.3	0.1	0.02 U	0.02 U	0.02 U	0.02 U
Heptachlor	0.042	2.1	0.38	0.02 U	0.02 U	0.02 U	0.02 U
Heptachlor Epoxide	NS	NS	NS	0.02 U	0.02 U	0.02 U	0.02 U
Methoxychlor	NS	NS	NS	0.02 U	0.02 U	0.02 U	0.02 U
P,P'-DDD	0.0033	13	14	0.02 U	0.02 U	0.02 U	0.02 U
P,P'-DDE	0.0033	8.9	17	0.02 U	0.02 U	0.02 U	0.02 U
P,P'-DDT	0.0033	7.9	136	0.02 U	0.02 U	0.02 U	0.02 U
Toxaphene	NS	NS	NS	0.5 U	0.5 U	0.5 U	0.5 U

			AKRF Sample ID	EP-01_15_20221229	EP-02_15_20221228	EP-03_15_20221228	EP-04_15_20221228
		Lat	poratory Sample ID	460-272189-1	460-272141-1	460-272141-2	460-272141-3
			Date Sampled	12/29/2022	12/28/2022	12/28/2022	12/28/2022
			Dilution Factor	1	1	1	1
			Unit	ppb	ppb	ppb	ppb
Compound	NYSDEC UUGV	NYSDEC RRGV	NYSDEC PGWGV	CONC Q	CONC Q	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	NS	NS	NS	2.93 U	2.36 U	2.38 U	2.49 U
8:2 Fluorotelomer sulfonate	NS	NS	NS	2.93 U	2.36 U	2.38 U	2.49 U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.93 U	2.36 U	2.38 U	2.49 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.93 U	2.36 U	2.38 U	2.49 U
Perfluorobutanesulfonic acid	NS	NS	NS	0.29 U	0.24 U	0.24 U	0.25 U
Perfluorobutanoic acid	NS	NS	NS	0.73 U	0.59 U	0.59 U	0.62 U
Perfluorodecanesulfonic acid	NS	NS	NS	0.29 U	0.24 U	0.24 U	0.25 U
Perfluorodecanoic acid	NS	NS	NS	0.29 U	0.24 U	0.24 U	0.25 U
Perfluorododecanoic acid	NS	NS	NS	0.29 U	0.24 U	0.24 U	0.25 U
Perfluoroheptanesulfonic acid	NS	NS	NS	0.29 U	0.24 U	0.24 U	0.25 U
Perfluoroheptanoic acid	NS	NS	NS	0.071 J	0.24 U	0.24 U	0.25 U
Perfluorohexanesulfonic acid	NS	NS	NS	0.29 U	0.24 U	0.24 U	0.25 U
Perfluorohexanoic acid	NS	NS	NS	0.087 J	0.24 U	0.24 U	0.25 U
Perfluorononanoic acid	NS	NS	NS	0.29 U	0.24 U	0.24 U	0.25 U
Perfluorooctanesulfonamide	NS	NS	NS	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	NS	NS	1	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	0.88	44	1	0.29 U	0.24 U	0.24 U	0.25 U
Perfluorooctanoic acid (PFOA)	NS	NS	0.8	NR	NR	NR	NR
Perfluorooctanoic acid (PFOA)	0.66	33	<u>0.8</u>	<u>0.84</u>	0.24 U	0.24 U	0.25 U
Perfluoropentanoic acid	NS	NS	NS	0.14 J	0.24 U	0.24 U	0.25 U
Perfluorotetradecanoic acid	NS	NS	NS	0.29 U	0.24 U	0.24 U	0.25 U
Perfluorotridecanoic acid	NS	NS	NS	0.29 U	0.24 U	0.24 U	0.25 U
Perfluoroundecanoic acid	NS	NS	NS	0.29 U	0.24 U	0.24 U	0.25 U
Perfluroroctanesulfonamide	NS	NS	NS	0.29 U	0.24 U	0.24 U	0.25 U

			AKRF Sample ID	EP-X01_15_20221228	EP-05_15_20221229	EP-06_15_20221228	EP-07_15_20221228
		Lat	ooratory Sample ID	460-272141-11	460-272189-2	460-272141-4	460-272141-5
			Date Sampled	12/28/2022	12/29/2022	12/28/2022	12/28/2022
			Dilution Factor	1	1	1	1
			Unit	ppb	ppb	ppb	ppb
Compound			NYSDEC PGWGV	CONC Q	CONC Q	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	NS	NS	NS	2.21 U	2.51 U	2.15 U	2.2 U
8:2 Fluorotelomer sulfonate	NS	NS	NS	2.21 U	2.51 U	2.15 U	2.2 U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.21 U	2.51 U	2.15 U	2.2 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.21 U	2.51 U	2.15 U	2.2 U
Perfluorobutanesulfonic acid	NS	NS	NS	0.22 U	0.25 U	0.22 U	0.22 U
Perfluorobutanoic acid	NS	NS	NS	0.55 U	0.63 U	0.54 U	0.55 U
Perfluorodecanesulfonic acid	NS	NS	NS	0.22 U	0.25 U	0.22 U	0.22 U
Perfluorodecanoic acid	NS	NS	NS	0.22 U	0.25 U	0.22 U	0.22 U
Perfluorododecanoic acid	NS	NS	NS	0.22 U	0.25 U	0.22 U	0.22 U
Perfluoroheptanesulfonic acid	NS	NS	NS	0.22 U	0.25 U	0.22 U	0.22 U
Perfluoroheptanoic acid	NS	NS	NS	0.22 U	0.25 U	0.22 U	0.22 U
Perfluorohexanesulfonic acid	NS	NS	NS	0.22 U	0.25 U	0.22 U	0.22 U
Perfluorohexanoic acid	NS	NS	NS	0.22 U	0.25 U	0.22 U	0.22 U
Perfluorononanoic acid	NS	NS	NS	0.22 U	0.25 U	0.22 U	0.22 U
Perfluorooctanesulfonamide	NS	NS	NS	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	NS	NS	1	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	0.88	44	1	0.22 U	0.25 U	0.22 U	0.22 U
Perfluorooctanoic acid (PFOA)	NS	NS	0.8	NR	NR	NR	NR
Perfluorooctanoic acid (PFOA)	0.66	33	<u>0.8</u>	0.22 U	0.25 U	0.22 U	0.22 U
Perfluoropentanoic acid	NS	NS	NS	0.22 U	0.25 U	0.22 U	0.22 U
Perfluorotetradecanoic acid	NS	NS	NS	0.22 U	0.25 U	0.22 U	0.22 U
Perfluorotridecanoic acid	NS	NS	NS	0.22 U	0.25 U	0.22 U	0.22 U
Perfluoroundecanoic acid	NS	NS	NS	0.22 U	0.25 U	0.22 U	0.22 U
Perfluroroctanesulfonamide	NS	NS	NS	0.22 U	0.25 U	0.22 U	0.22 U

			AKRF Sample ID		EP-09_15_20221229	EP-10_15_20221228	EP-11_15_20221228
		Lat	poratory Sample ID		460-272189-3	460-272141-7	460-272141-8
			Date Sampled	12/28/2022	12/29/2022	12/28/2022	12/28/2022
			Dilution Factor	1	1	1	1
			Unit	ppb	ppb	ppb	ppb
Compound	NYSDEC UUGV	NYSDEC RRGV	NYSDEC PGWGV	CONC Q	CONC Q	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	NS	NS	NS	2.32 U	2.35 U	2.41 U	2.52 U
8:2 Fluorotelomer sulfonate	NS	NS	NS	2.32 U	2.35 U	2.41 U	2.52 U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.32 U	2.35 U	2.41 U	2.52 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.32 U	2.35 U	2.41 U	2.52 U
Perfluorobutanesulfonic acid	NS	NS	NS	0.23 U	0.23 U	0.24 U	0.25 U
Perfluorobutanoic acid	NS	NS	NS	0.58 U	0.59 U	0.6 U	0.63 U
Perfluorodecanesulfonic acid	NS	NS	NS	0.23 U	0.23 U	0.24 U	0.25 U
Perfluorodecanoic acid	NS	NS	NS	0.23 U	0.23 U	0.24 U	0.25 U
Perfluorododecanoic acid	NS	NS	NS	0.23 U	0.23 U	0.24 U	0.25 U
Perfluoroheptanesulfonic acid	NS	NS	NS	0.23 U	0.23 U	0.24 U	0.25 U
Perfluoroheptanoic acid	NS	NS	NS	0.23 U	0.23 U	0.24 U	0.25 U
Perfluorohexanesulfonic acid	NS	NS	NS	0.23 U	0.23 U	0.24 U	0.25 U
Perfluorohexanoic acid	NS	NS	NS	0.23 U	0.23 U	0.24 U	0.25 U
Perfluorononanoic acid	NS	NS	NS	0.23 U	0.23 U	0.24 U	0.25 U
Perfluorooctanesulfonamide	NS	NS	NS	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	NS	NS	1	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	0.88	44	1	0.23 U	0.28	0.24 U	0.25 U
Perfluorooctanoic acid (PFOA)	NS	NS	0.8	NR	NR	NR	NR
Perfluorooctanoic acid (PFOA)	0.66	33	<u>0.8</u>	0.23 U	0.11 J	0.24 U	0.25 U
Perfluoropentanoic acid	NS	NS	NS	0.23 U	0.23 U	0.24 U	0.25 U
Perfluorotetradecanoic acid	NS	NS	NS	0.23 U	0.23 U	0.24 U	0.25 U
Perfluorotridecanoic acid	NS	NS	NS	0.23 U	0.23 U	0.24 U	0.25 U
Perfluoroundecanoic acid	NS	NS	NS	0.23 U	0.23 U	0.24 U	0.25 U
Perfluroroctanesulfonamide	NS	NS	NS	0.23 U	0.23 U	0.24 U	0.25 U

			AKRF Sample ID		EP-13_15_20221228	EP-14_15_20221229	EP-15_15_20221229
		Lat	poratory Sample ID	460-272189-4	460-272141-9	460-272189-5	460-272189-6
			Date Sampled	12/29/2022	12/28/2022	12/29/2022	12/29/2022
			Dilution Factor	1	1	1	1
			Unit	ppb	ppb	ppb	ppb
Compound	NYSDEC UUGV	NYSDEC RRGV	NYSDEC PGWGV	CONC Q	CONC Q	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	NS	NS	NS	2.54 U	2.36 U	2.21 U	2.37 U
8:2 Fluorotelomer sulfonate	NS	NS	NS	2.54 U	2.36 U	2.21 U	2.37 U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.54 U	2.36 U	2.21 U	2.37 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.54 U	2.36 U	2.21 U	2.37 U
Perfluorobutanesulfonic acid	NS	NS	NS	0.25 U	0.24 U	0.22 U	0.24 U
Perfluorobutanoic acid	NS	NS	NS	0.63 U	0.59 U	0.55 U	0.59 U
Perfluorodecanesulfonic acid	NS	NS	NS	0.25 U	0.24 U	0.22 U	0.24 U
Perfluorodecanoic acid	NS	NS	NS	0.25 U	0.24 U	0.22 U	0.24 U
Perfluorododecanoic acid	NS	NS	NS	0.25 U	0.24 U	0.22 U	0.24 U
Perfluoroheptanesulfonic acid	NS	NS	NS	0.25 U	0.24 U	0.22 U	0.24 U
Perfluoroheptanoic acid	NS	NS	NS	0.25 U	0.24 U	0.22 U	0.24 U
Perfluorohexanesulfonic acid	NS	NS	NS	0.25 U	0.24 U	0.22 U	0.24 U
Perfluorohexanoic acid	NS	NS	NS	0.25 U	0.24 U	0.22 U	0.24 U
Perfluorononanoic acid	NS	NS	NS	0.25 U	0.24 U	0.22 U	0.24 U
Perfluorooctanesulfonamide	NS	NS	NS	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	NS	NS	1	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	0.88	44	1	0.17 J	0.24 U	0.22 U	0.15 J
Perfluorooctanoic acid (PFOA)	NS	NS	0.8	NR	NR	NR	NR
Perfluorooctanoic acid (PFOA)	0.66	33	<u>0.8</u>	0.086 J	0.24 U	0.22 U	0.11 J
Perfluoropentanoic acid	NS	NS	NS	0.25 U	0.24 U	0.22 U	0.24 U
Perfluorotetradecanoic acid	NS	NS	NS	0.25 U	0.24 U	0.22 U	0.24 U
Perfluorotridecanoic acid	NS	NS	NS	0.25 U	0.24 U	0.22 U	0.24 U
Perfluoroundecanoic acid	NS	NS	NS	0.25 U	0.24 U	0.22 U	0.24 U
Perfluroroctanesulfonamide	NS	NS	NS	0.25 U	0.24 U	0.22 U	0.24 U

		Lat	AKRF Sample ID poratory Sample ID	460-272189-7	EP-17_15_20221229 460-272189-8	EP-18_15_20221228 460-272141-10	EP-19_15_20221229 460-272189-9
			Date Sampled	12/29/2022	12/29/2022	12/28/2022	12/29/2022
			Dilution Factor	1	1	1	1
			Unit	ppb	ppb	ppb	ppb
Compound	NYSDEC UUGV	NYSDEC RRGV	NYSDEC PGWGV	CONC Q	CONC Q	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	NS	NS	NS	2.44 U	2.42 U	2.12 U	2.44 U
8:2 Fluorotelomer sulfonate	NS	NS	NS	2.44 U	2.42 U	2.12 U	2.44 U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.44 U	2.42 U	2.12 U	2.44 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.44 U	2.42 U	2.12 U	2.44 U
Perfluorobutanesulfonic acid	NS	NS	NS	0.24 U	0.24 U	0.21 U	0.24 U
Perfluorobutanoic acid	NS	NS	NS	0.61 U	0.61 U	0.53 U	0.61 U
Perfluorodecanesulfonic acid	NS	NS	NS	0.24 U	0.24 U	0.21 U	0.24 U
Perfluorodecanoic acid	NS	NS	NS	0.24 U	0.24 U	0.21 U	0.24 U
Perfluorododecanoic acid	NS	NS	NS	0.24 U	0.24 U	0.21 U	0.24 U
Perfluoroheptanesulfonic acid	NS	NS	NS	0.24 U	0.24 U	0.21 U	0.24 U
Perfluoroheptanoic acid	NS	NS	NS	0.24 U	0.24 U	0.21 U	0.24 U
Perfluorohexanesulfonic acid	NS	NS	NS	0.24 U	0.24 U	0.21 U	0.24 U
Perfluorohexanoic acid	NS	NS	NS	0.24 U	0.24 U	0.21 U	0.24 U
Perfluorononanoic acid	NS	NS	NS	0.24 U	0.24 U	0.21 U	0.24 U
Perfluorooctanesulfonamide	NS	NS	NS	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	NS	NS	1	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	0.88	44	1	0.24 U	0.24 U	0.21 U	0.24 U
Perfluorooctanoic acid (PFOA)	NS	NS	0.8	NR	NR	NR	NR
Perfluorooctanoic acid (PFOA)	0.66	33	<u>0.8</u>	0.2 J	0.24 U	0.21 U	0.24 U
Perfluoropentanoic acid	NS	NS	NS	0.24 U	0.24 U	0.099 J	0.24 U
Perfluorotetradecanoic acid	NS	NS	NS	0.24 U	0.24 U	0.21 U	0.24 U
Perfluorotridecanoic acid	NS	NS	NS	0.24 U	0.24 U	0.21 U	0.24 U
Perfluoroundecanoic acid	NS	NS	NS	0.24 U	0.24 U	0.21 U	0.24 U
Perfluroroctanesulfonamide	NS	NS	NS	0.24 U	0.24 U	0.21 U	0.24 U

		Lat	AKRF Sample ID poratory Sample ID	EP-20_15_20221229 460-272189-10	EP-21_15_20230103 460-272295-1	EP-22_15_20230103 460-272295-2	EP-X02_15_20230103 460-272295-11
			Date Sampled	12/29/2022	1/03/2023	1/03/2023	1/03/2023
			Dilution Factor	1	1	1	1
			Unit	ppb	ppb	ppb	ppb
Compound	NYSDEC UUGV	NYSDEC RRGV	NYSDEC PGWGV	CONC Q	CONC Q	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	NS	NS	NS	2.61 U	2.33 U	2.32 U	2.35 U
8:2 Fluorotelomer sulfonate	NS	NS	NS	2.61 U	2.33 U	2.32 U	2.35 U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.61 U	2.33 U	2.32 U	2.35 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.61 U	2.33 U	2.32 U	2.35 U
Perfluorobutanesulfonic acid	NS	NS	NS	0.26 U	0.23 U	0.23 U	0.23 U
Perfluorobutanoic acid	NS	NS	NS	0.65 U	0.58 U	0.58 U	0.59 U
Perfluorodecanesulfonic acid	NS	NS	NS	0.26 U	0.23 U	0.23 U	0.23 U
Perfluorodecanoic acid	NS	NS	NS	0.26 U	0.23 U	0.23 U	0.23 U
Perfluorododecanoic acid	NS	NS	NS	0.26 U	0.23 U	0.23 U	0.23 U
Perfluoroheptanesulfonic acid	NS	NS	NS	0.26 U	0.23 U	0.23 U	0.23 U
Perfluoroheptanoic acid	NS	NS	NS	0.26 U	0.23 U	0.23 U	0.23 U
Perfluorohexanesulfonic acid	NS	NS	NS	0.26 U	0.23 U	0.23 U	0.23 U
Perfluorohexanoic acid	NS	NS	NS	0.26 U	0.23 U	0.23 U	0.23 U
Perfluorononanoic acid	NS	NS	NS	0.26 U	0.23 U	0.23 U	0.23 U
Perfluorooctanesulfonamide	NS	NS	NS	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	NS	NS	1	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	0.88	44	1	0.26 U	0.23 U	0.23 U	0.23 U
Perfluorooctanoic acid (PFOA)	NS	NS	0.8	NR	NR	NR	NR
Perfluorooctanoic acid (PFOA)	0.66	33	<u>0.8</u>	0.26 U	0.089 J	0.23 U	0.23 U
Perfluoropentanoic acid	NS	NS	NS	0.26 U	0.07 J	0.23 U	0.23 U
Perfluorotetradecanoic acid	NS	NS	NS	0.26 U	0.23 U	0.23 U	0.23 U
Perfluorotridecanoic acid	NS	NS	NS	0.26 U	0.23 U	0.23 U	0.23 U
Perfluoroundecanoic acid	NS	NS	NS	0.26 U	0.23 U	0.23 U	0.23 U
Perfluroroctanesulfonamide	NS	NS	NS	0.26 U	0.23 U	0.23 U	0.23 U

			AKRF Sample ID		EP-24_17_20230103	EP-25_16_20230103	EP-26_15_20230103
		Lat	poratory Sample ID		460-272295-4	460-272295-5	460-272295-6
			Date Sampled	1/03/2023	1/03/2023	1/03/2023	1/03/2023
			Dilution Factor	1	1	1	1
			Unit	ppb	ppb	ppb	ppb
Compound	NYSDEC UUGV	NYSDEC RRGV	NYSDEC PGWGV	CONC Q	CONC Q	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	NS	NS	NS	2.27 U	2.22 U	2.24 U	2.4 U
8:2 Fluorotelomer sulfonate	NS	NS	NS	2.27 U	2.22 U	2.24 U	2.4 U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.27 U	2.22 U	2.24 U	2.4 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.27 U	2.22 U	2.24 U	2.4 U
Perfluorobutanesulfonic acid	NS	NS	NS	0.23 U	0.22 U	0.22 U	0.24 U
Perfluorobutanoic acid	NS	NS	NS	0.57 U	0.55 U	0.56 U	0.6 U
Perfluorodecanesulfonic acid	NS	NS	NS	0.23 U	0.22 U	0.22 U	0.24 U
Perfluorodecanoic acid	NS	NS	NS	0.23 U	0.22 U	0.22 U	0.24 U
Perfluorododecanoic acid	NS	NS	NS	0.23 U	0.22 U	0.22 U	0.24 U
Perfluoroheptanesulfonic acid	NS	NS	NS	0.23 U	0.22 U	0.22 U	0.24 U
Perfluoroheptanoic acid	NS	NS	NS	0.23 U	0.22 U	0.22 U	0.24 U
Perfluorohexanesulfonic acid	NS	NS	NS	0.23 U	0.22 U	0.22 U	0.24 U
Perfluorohexanoic acid	NS	NS	NS	0.23 U	0.22 U	0.22 U	0.24 U
Perfluorononanoic acid	NS	NS	NS	0.23 U	0.22 U	0.22 U	0.24 U
Perfluorooctanesulfonamide	NS	NS	NS	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	NS	NS	1	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	0.88	44	1	0.23 U	0.22 U	0.22 U	0.24 U
Perfluorooctanoic acid (PFOA)	NS	NS	0.8	NR	NR	NR	NR
Perfluorooctanoic acid (PFOA)	0.66	33	<u>0.8</u>	0.087 J	0.22 U	0.22 U	0.24 U
Perfluoropentanoic acid	NS	NS	NS	0.23 U	0.22 U	0.22 U	0.24 U
Perfluorotetradecanoic acid	NS	NS	NS	0.23 U	0.22 U	0.22 U	0.24 UJ
Perfluorotridecanoic acid	NS	NS	NS	0.23 U	0.22 U	0.22 U	0.24 U
Perfluoroundecanoic acid	NS	NS	NS	0.23 U	0.22 U	0.22 U	0.24 U
Perfluroroctanesulfonamide	NS	NS	NS	0.23 U	0.22 U	0.22 U	0.24 U

			AKRF Sample ID		EP-28_15_20230103	EP-29_15_20230103	EP-30_15_20230103
		Lat	ooratory Sample ID		460-272295-8	460-272295-9	460-272295-10
			Date Sampled	1/03/2023	1/03/2023	1/03/2023	1/03/2023
			Dilution Factor	1	1	1	1
			Unit	ppb	ppb	ppb	ppb
Compound	NYSDEC UUGV	NYSDEC RRGV	NYSDEC PGWGV	CONC Q	CONC Q	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	NS	NS	NS	2.41 U	2.2 U	2.44 U	2.59 U
8:2 Fluorotelomer sulfonate	NS	NS	NS	2.41 U	2.2 U	2.44 U	2.59 U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.41 U	2.2 U	2.44 U	2.59 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.41 U	2.2 U	2.44 U	2.59 U
Perfluorobutanesulfonic acid	NS	NS	NS	0.24 U	0.22 U	0.24 U	0.26 U
Perfluorobutanoic acid	NS	NS	NS	0.6 U	0.55 U	0.61 U	0.65 U
Perfluorodecanesulfonic acid	NS	NS	NS	0.24 U	0.22 U	0.24 U	0.26 U
Perfluorodecanoic acid	NS	NS	NS	0.24 U	0.22 U	0.24 U	0.26 U
Perfluorododecanoic acid	NS	NS	NS	0.24 U	0.22 U	0.24 U	0.26 U
Perfluoroheptanesulfonic acid	NS	NS	NS	0.24 U	0.22 U	0.24 U	0.26 U
Perfluoroheptanoic acid	NS	NS	NS	0.24 U	0.22 U	0.24 U	0.26 U
Perfluorohexanesulfonic acid	NS	NS	NS	0.24 U	0.22 U	0.24 U	0.26 U
Perfluorohexanoic acid	NS	NS	NS	0.24 U	0.22 U	0.24 U	0.26 U
Perfluorononanoic acid	NS	NS	NS	0.24 U	0.22 U	0.24 U	0.26 U
Perfluorooctanesulfonamide	NS	NS	NS	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	NS	NS	1	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	0.88	44	1	0.24 U	0.22 U	0.24 U	0.26 U
Perfluorooctanoic acid (PFOA)	NS	NS	0.8	NR	NR	NR	NR
Perfluorooctanoic acid (PFOA)	0.66	33	<u>0.8</u>	0.24 U	0.22 U	0.24 U	0.26 U
Perfluoropentanoic acid	NS	NS	NS	0.24 U	0.22 U	0.24 U	0.26 U
Perfluorotetradecanoic acid	NS	NS	NS	0.24 U	0.22 U	0.24 U	0.26 U
Perfluorotridecanoic acid	NS	NS	NS	0.24 U	0.22 U	0.24 U	0.26 U
Perfluoroundecanoic acid	NS	NS	NS	0.24 U	0.22 U	0.24 U	0.26 U
Perfluroroctanesulfonamide	NS	NS	NS	0.24 U	0.22 U	0.24 U	0.26 U

			AKRF Sample ID		EP-32_15_20230214	EP-33_15_20230214	EP-34_15_20230214
		Lat	ooratory Sample ID		460-274625-2	460-274625-3	460-274625-4
			Date Sampled	2/14/2023	2/14/2023	2/14/2023	2/14/2023
			Dilution Factor	1	1	1	1
-			Unit	ppb	ppb	ppb	ppb
Compound			NYSDEC PGWGV	CONC Q	CONC Q	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	NS	NS	NS	2.15 U	2.13 U	2.32 U	2.14 U
8:2 Fluorotelomer sulfonate	NS	NS	NS	2.15 U	2.13 U	2.32 U	2.14 U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.15 U	2.13 U	2.32 U	2.14 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.15 U	2.13 U	2.32 U	2.14 U
Perfluorobutanesulfonic acid	NS	NS	NS	0.22 U	0.21 U	0.23 U	0.21 U
Perfluorobutanoic acid	NS	NS	NS	0.54 U	0.53 U	0.58 U	0.53 U
Perfluorodecanesulfonic acid	NS	NS	NS	0.22 U	0.21 U	0.23 U	0.21 U
Perfluorodecanoic acid	NS	NS	NS	0.22 U	0.21 U	0.23 U	0.21 U
Perfluorododecanoic acid	NS	NS	NS	0.22 U	0.21 U	0.23 U	0.21 U
Perfluoroheptanesulfonic acid	NS	NS	NS	0.22 U	0.21 U	0.23 U	0.21 U
Perfluoroheptanoic acid	NS	NS	NS	0.22 U	0.21 U	0.23 U	0.21 U
Perfluorohexanesulfonic acid	NS	NS	NS	0.22 U	0.21 U	0.23 U	0.21 U
Perfluorohexanoic acid	NS	NS	NS	0.22 U	0.21 U	0.23 U	0.21 U
Perfluorononanoic acid	NS	NS	NS	0.22 U	0.21 U	0.23 U	0.21 U
Perfluorooctanesulfonamide	NS	NS	NS	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	NS	NS	1	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	0.88	44	1	0.13 J	0.21 U	0.23 U	0.21 U
Perfluorooctanoic acid (PFOA)	NS	NS	0.8	NR	NR	NR	NR
Perfluorooctanoic acid (PFOA)	0.66	33	<u>0.8</u>	0.11 J	0.076 J	0.076 J	0.081 J
Perfluoropentanoic acid	NS	NS	NS	0.22 U	0.21 U	0.23 U	0.21 U
Perfluorotetradecanoic acid	NS	NS	NS	0.22 U	0.21 U	0.23 U	0.21 U
Perfluorotridecanoic acid	NS	NS	NS	0.22 U	0.21 U	0.23 U	0.21 U
Perfluoroundecanoic acid	NS	NS	NS	0.22 U	0.21 U	0.23 U	0.21 U
Perfluroroctanesulfonamide	NS	NS	NS	0.22 U	0.21 U	0.23 U	0.21 U

		Lat	AKRF Sample ID poratory Sample ID		EP-36_15_20230214 460-274625-6	EP-X03_15_20230214 460-274625-7	EP-37_16_20230410 460-278010-20
		Eur	Date Sampled		2/14/2023	2/14/2023	4/10/2023
			Dilution Factor	1	1	1	1
			Unit	ppb	ppb	ppb	ppb
Compound	NYSDEC UUGV	NYSDEC RRGV	NYSDEC PGWGV	CONC Q	CONC Q	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	NS	NS	NS	2.2 U	0.096 J	2.16 U	2.12 U
8:2 Fluorotelomer sulfonate	NS	NS	NS	2.2 U	2.11 U	2.16 U	2.12 UJ
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.2 U	2.11 U	2.16 U	2.12 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.2 U	2.11 U	2.16 U	2.12 U
Perfluorobutanesulfonic acid	NS	NS	NS	0.22 U	0.21 U	0.22 U	0.21 U
Perfluorobutanoic acid	NS	NS	NS	0.55 U	0.53 U	0.54 U	0.53 U
Perfluorodecanesulfonic acid	NS	NS	NS	0.22 U	0.21 U	0.22 U	0.21 U
Perfluorodecanoic acid	NS	NS	NS	0.22 U	0.21 U	0.22 U	0.21 U
Perfluorododecanoic acid	NS	NS	NS	0.22 U	0.21 U	0.22 U	0.21 U
Perfluoroheptanesulfonic acid	NS	NS	NS	0.22 U	0.21 U	0.22 U	0.21 U
Perfluoroheptanoic acid	NS	NS	NS	0.22 U	0.21 U	0.22 U	0.21 U
Perfluorohexanesulfonic acid	NS	NS	NS	0.22 U	0.21 U	0.22 U	0.21 U
Perfluorohexanoic acid	NS	NS	NS	0.22 U	0.21 U	0.22 U	0.21 U
Perfluorononanoic acid	NS	NS	NS	0.22 U	0.21 U	0.22 U	0.21 U
Perfluorooctanesulfonamide	NS	NS	NS	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	NS	NS	1	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	0.88	44	1	0.22 U	0.21 U	0.22 U	0.21 U
Perfluorooctanoic acid (PFOA)	NS	NS	0.8	NR	NR	NR	NR
Perfluorooctanoic acid (PFOA)	0.66	33	<u>0.8</u>	0.22 U	0.21 U	0.22 U	0.21 U
Perfluoropentanoic acid	NS	NS	NS	0.22 U	0.21 U	0.22 U	0.21 U
Perfluorotetradecanoic acid	NS	NS	NS	0.22 U	0.21 U	0.22 U	0.21 U
Perfluorotridecanoic acid	NS	NS	NS	0.22 U	0.21 U	0.22 U	0.21 U
Perfluoroundecanoic acid	NS	NS	NS	0.22 U	0.21 U	0.22 U	0.21 U
Perfluroroctanesulfonamide	NS	NS	NS	0.22 U	0.21 U	0.22 U	0.21 U

			AKRF Sample ID		EP-39_15_20230410	EP-40_16_20230410	EP-41_15_20230410
		Lat	ooratory Sample ID		460-278010-22	460-278010-23	460-278010-24
			Date Sampled	4/10/2023	4/10/2023	4/10/2023	4/10/2023
			Dilution Factor	1	1	1	1
			Unit	ppb	ppb	ppb	ppb
Compound	NYSDEC UUGV	NYSDEC RRGV	NYSDEC PGWGV	CONC Q	CONC Q	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	NS	NS	NS	2.3 U	2.32 U	2.43 U	2.3 U
8:2 Fluorotelomer sulfonate	NS	NS	NS	2.3 UJ	2.32 UJ	2.43 UJ	2.3 UJ
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.3 U	2.32 U	2.43 U	2.3 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.3 U	2.32 U	2.43 U	2.3 U
Perfluorobutanesulfonic acid	NS	NS	NS	0.23 U	0.23 U	0.24 U	0.23 U
Perfluorobutanoic acid	NS	NS	NS	0.57 U	0.58 U	0.61 U	0.58 U
Perfluorodecanesulfonic acid	NS	NS	NS	0.23 U	0.23 U	0.24 U	0.23 U
Perfluorodecanoic acid	NS	NS	NS	0.23 U	0.23 U	0.24 U	0.23 U
Perfluorododecanoic acid	NS	NS	NS	0.23 U	0.23 U	0.24 U	0.23 U
Perfluoroheptanesulfonic acid	NS	NS	NS	0.23 U	0.23 U	0.24 U	0.23 U
Perfluoroheptanoic acid	NS	NS	NS	0.23 U	0.23 U	0.24 U	0.23 U
Perfluorohexanesulfonic acid	NS	NS	NS	0.23 U	0.23 U	0.24 U	0.23 U
Perfluorohexanoic acid	NS	NS	NS	0.23 U	0.23 U	0.24 U	0.23 U
Perfluorononanoic acid	NS	NS	NS	0.23 U	0.23 U	0.24 U	0.23 U
Perfluorooctanesulfonamide	NS	NS	NS	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	NS	NS	1	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	0.88	44	1	0.23 U	0.23 U	0.24 U	0.23 U
Perfluorooctanoic acid (PFOA)	NS	NS	0.8	NR	NR	NR	NR
Perfluorooctanoic acid (PFOA)	0.66	33	<u>0.8</u>	0.23 U	0.23 U	0.24 U	0.23 U
Perfluoropentanoic acid	NS	NS	NS	0.23 U	0.23 U	0.24 U	0.23 U
Perfluorotetradecanoic acid	NS	NS	NS	0.23 U	0.23 U	0.24 U	0.23 U
Perfluorotridecanoic acid	NS	NS	NS	0.23 U	0.23 U	0.24 U	0.23 U
Perfluoroundecanoic acid	NS	NS	NS	0.23 U	0.23 U	0.24 U	0.23 U
Perfluroroctanesulfonamide	NS	NS	NS	0.23 U	0.23 U	0.084 J	0.23 U

			AKRF Sample ID		EP-43_16_20230410	EP-44_15_20230410	EP-45_15_20230410
		Lat	poratory Sample ID		460-278010-26	460-278010-27	460-278010-28
			Date Sampled	4/10/2023	4/10/2023	4/10/2023	4/10/2023
			Dilution Factor	1	1	1	1
			Unit	ppb	ppb	ppb	ppb
Compound	NYSDEC UUGV	NYSDEC RRGV	NYSDEC PGWGV	CONC Q	CONC Q	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	NS	NS	NS	2.31 U	2.18 U	2.35 U	2.42 U
8:2 Fluorotelomer sulfonate	NS	NS	NS	2.31 UJ	2.18 UJ	2.35 UJ	2.42 UJ
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.31 U	2.18 U	0.11 J	2.42 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.31 U	2.18 U	2.35 U	2.42 U
Perfluorobutanesulfonic acid	NS	NS	NS	0.23 U	0.22 U	0.24 U	0.24 U
Perfluorobutanoic acid	NS	NS	NS	0.58 U	0.54 U	0.59 U	0.6 U
Perfluorodecanesulfonic acid	NS	NS	NS	0.23 U	0.22 U	0.24 U	0.24 U
Perfluorodecanoic acid	NS	NS	NS	0.23 U	0.22 U	0.24 U	0.24 U
Perfluorododecanoic acid	NS	NS	NS	0.23 U	0.22 U	0.24 U	0.24 U
Perfluoroheptanesulfonic acid	NS	NS	NS	0.23 U	0.22 U	0.24 U	0.24 U
Perfluoroheptanoic acid	NS	NS	NS	0.23 U	0.22 U	0.24 U	0.24 U
Perfluorohexanesulfonic acid	NS	NS	NS	0.23 U	0.22 U	0.24 U	0.24 U
Perfluorohexanoic acid	NS	NS	NS	0.23 U	0.22 U	0.24 U	0.24 U
Perfluorononanoic acid	NS	NS	NS	0.23 U	0.22 U	0.24 U	0.24 U
Perfluorooctanesulfonamide	NS	NS	NS	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	NS	NS	1	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	0.88	44	1	0.23 U	0.22 U	0.24 U	0.24 U
Perfluorooctanoic acid (PFOA)	NS	NS	0.8	NR	NR	NR	NR
Perfluorooctanoic acid (PFOA)	0.66	33	<u>0.8</u>	0.23 U	0.22 U	0.24 U	0.24 U
Perfluoropentanoic acid	NS	NS	NS	0.23 U	0.22 U	0.24 U	0.24 U
Perfluorotetradecanoic acid	NS	NS	NS	0.23 U	0.22 U	0.24 U	0.24 U
Perfluorotridecanoic acid	NS	NS	NS	0.23 U	0.22 U	0.24 U	0.24 U
Perfluoroundecanoic acid	NS	NS	NS	0.23 U	0.22 U	0.24 U	0.24 U
Perfluroroctanesulfonamide	NS	NS	NS	0.23 U	0.22 U	0.24 U	0.24 U

í			AKRF Sample ID	EP-X04_15_20230410	EP-46_16_20230410	EP-47_15_20230410	EP-48_15_20230410
		Lat	poratory Sample ID	460-278010-36	460-278010-29	460-278010-30	460-278010-31
			Date Sampled	4/10/2023	4/10/2023	4/10/2023	4/10/2023
			Dilution Factor	1	1	1	1
			Unit	ppb	ppb	ppb	ppb
Compound	NYSDEC UUGV	NYSDEC RRGV	NYSDEC PGWGV	CONC Q	CONC Q	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	NS	NS	NS	2.45 U	2.39 U	2.46 U	2.21 U
8:2 Fluorotelomer sulfonate	NS	NS	NS	2.45 UJ	2.39 UJ	2.46 UJ	2.21 UJ
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.45 U	2.39 U	2.46 U	2.21 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.45 U	2.39 U	2.46 U	2.21 U
Perfluorobutanesulfonic acid	NS	NS	NS	0.24 U	0.24 U	0.25 U	0.22 U
Perfluorobutanoic acid	NS	NS	NS	0.61 U	0.6 U	0.62 U	0.55 U
Perfluorodecanesulfonic acid	NS	NS	NS	0.24 U	0.24 U	0.25 U	0.22 U
Perfluorodecanoic acid	NS	NS	NS	0.24 U	0.24 U	0.25 U	0.22 U
Perfluorododecanoic acid	NS	NS	NS	0.24 U	0.24 U	0.25 U	0.22 U
Perfluoroheptanesulfonic acid	NS	NS	NS	0.24 U	0.24 U	0.25 U	0.22 U
Perfluoroheptanoic acid	NS	NS	NS	0.24 U	0.17 J	0.25 U	0.22 U
Perfluorohexanesulfonic acid	NS	NS	NS	0.24 U	0.24 U	0.25 U	0.22 U
Perfluorohexanoic acid	NS	NS	NS	0.24 U	0.067 J	0.25 U	0.22 U
Perfluorononanoic acid	NS	NS	NS	0.24 U	0.24 U	0.25 U	0.22 U
Perfluorooctanesulfonamide	NS	NS	NS	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	NS	NS	1	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	0.88	44	1	0.24 U	0.24 U	0.25 U	0.22 U
Perfluorooctanoic acid (PFOA)	NS	NS	0.8	NR	NR	NR	NR
Perfluorooctanoic acid (PFOA)	0.66	33	<u>0.8</u>	0.24 U	0.24 U	0.25 U	0.22 U
Perfluoropentanoic acid	NS	NS	NS	0.24 U	0.24 U	0.25 U	0.22 U
Perfluorotetradecanoic acid	NS	NS	NS	0.24 U	0.24 U	0.25 U	0.22 U
Perfluorotridecanoic acid	NS	NS	NS	0.24 U	0.24 U	0.25 U	0.22 U
Perfluoroundecanoic acid	NS	NS	NS	0.24 U	0.24 U	0.25 U	0.22 U
Perfluroroctanesulfonamide	NS	NS	NS	0.24 U	0.24 U	0.25 U	0.22 U

			AKRF Sample ID		EP-50_15_20230410	EP-51_15_20230412	EP-52_15_20230412
		Lat	ooratory Sample ID		460-278010-33	460-278158-1	460-278158-2
			Date Sampled	4/10/2023	4/10/2023	4/12/2023	4/12/2023
			Dilution Factor	1	1	1	1
			Unit	ppb	ppb	ppb	ppb
Compound	NYSDEC UUGV	NYSDEC RRGV	NYSDEC PGWGV	CONC Q	CONC Q	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	NS	NS	NS	2.37 U	2.16 U	2.13 U	2.19 U
8:2 Fluorotelomer sulfonate	NS	NS	NS	2.37 UJ	2.16 UJ	2.13 U	2.19 U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.37 U	2.16 U	2.13 U	2.19 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.37 U	2.16 U	2.13 U	2.19 U
Perfluorobutanesulfonic acid	NS	NS	NS	0.24 U	0.22 U	0.21 U	0.22 U
Perfluorobutanoic acid	NS	NS	NS	0.59 U	0.54 U	0.53 U	0.55 U
Perfluorodecanesulfonic acid	NS	NS	NS	0.24 U	0.22 U	0.21 U	0.22 U
Perfluorodecanoic acid	NS	NS	NS	0.24 U	0.22 U	0.21 U	0.22 U
Perfluorododecanoic acid	NS	NS	NS	0.24 U	0.22 U	0.21 U	0.22 U
Perfluoroheptanesulfonic acid	NS	NS	NS	0.24 U	0.22 U	0.21 U	0.22 U
Perfluoroheptanoic acid	NS	NS	NS	0.24 U	0.22 U	0.048 J	0.22 U
Perfluorohexanesulfonic acid	NS	NS	NS	0.24 U	0.22 U	0.21 U	0.22 U
Perfluorohexanoic acid	NS	NS	NS	0.24 U	0.22 U	0.07 J	0.051 J
Perfluorononanoic acid	NS	NS	NS	0.24 U	0.22 U	0.21 U	0.22 U
Perfluorooctanesulfonamide	NS	NS	NS	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	NS	NS	1	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	0.88	44	1	0.24 U	0.22 U	0.26	0.18 J
Perfluorooctanoic acid (PFOA)	NS	NS	0.8	NR	NR	NR	NR
Perfluorooctanoic acid (PFOA)	0.66	33	<u>0.8</u>	0.24 U	0.22 U	0.22	0.16 J
Perfluoropentanoic acid	NS	NS	NS	0.24 U	0.22 U	0.074 J	0.088 J
Perfluorotetradecanoic acid	NS	NS	NS	0.24 U	0.22 U	0.21 U	0.22 U
Perfluorotridecanoic acid	NS	NS	NS	0.24 U	0.22 U	0.21 U	0.22 U
Perfluoroundecanoic acid	NS	NS	NS	0.24 U	0.22 U	0.21 U	0.22 U
Perfluroroctanesulfonamide	NS	NS	NS	0.24 U	0.22 U	0.21 U	0.22 U

			AKRF Sample ID		EP-53_15_20230509	EP-54_16_20230509	EP-X06_16_20230509
		Lal	poratory Sample ID		460-279952-1	460-279952-2	460-279952-3
			Date Sampled	4/12/2023	5/09/2023	5/09/2023	5/09/2023
			Dilution Factor	1	1	1	1
			Unit	ppb	ppb	ppb	ppb
Compound	NYSDEC UUGV	NYSDEC RRGV	NYSDEC PGWGV	CONC Q	CONC Q	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	NS	NS	NS	2.38 U	2.16 U	2.23 U	2.13 U
8:2 Fluorotelomer sulfonate	NS	NS	NS	2.38 U	2.16 U	2.23 U	2.13 U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.38 U	2.16 U	2.23 U	2.13 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.38 U	2.16 U	2.23 U	2.13 U
Perfluorobutanesulfonic acid	NS	NS	NS	0.24 U	0.22 U	0.22 U	0.21 U
Perfluorobutanoic acid	NS	NS	NS	0.59 U	0.54 U	0.56 U	0.53 U
Perfluorodecanesulfonic acid	NS	NS	NS	0.24 U	0.22 U	0.22 U	0.21 U
Perfluorodecanoic acid	NS	NS	NS	0.24 U	0.22 U	0.22 U	0.21 U
Perfluorododecanoic acid	NS	NS	NS	0.24 U	0.22 U	0.22 U	0.21 U
Perfluoroheptanesulfonic acid	NS	NS	NS	0.24 U	0.22 U	0.22 U	0.21 U
Perfluoroheptanoic acid	NS	NS	NS	0.24 U	0.22 U	0.053 J	0.051 J
Perfluorohexanesulfonic acid	NS	NS	NS	0.24 U	0.22 U	0.22 U	0.21 U
Perfluorohexanoic acid	NS	NS	NS	0.24 U	0.22 U	0.22 U	0.21 U
Perfluorononanoic acid	NS	NS	NS	0.24 U	0.22 U	0.22 U	0.21 U
Perfluorooctanesulfonamide	NS	NS	NS	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	NS	NS	1	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	0.88	44	1	0.24 U	0.22 U	0.22 U	0.13 J
Perfluorooctanoic acid (PFOA)	NS	NS	0.8	NR	NR	NR	NR
Perfluorooctanoic acid (PFOA)	0.66	33	<u>0.8</u>	0.12 J	0.22 U	0.32	0.28
Perfluoropentanoic acid	NS	NS	NS	0.24 U	0.22 U	0.22 U	0.06 J
Perfluorotetradecanoic acid	NS	NS	NS	0.24 U	0.22 U	0.22 U	0.21 U
Perfluorotridecanoic acid	NS	NS	NS	0.24 U	0.22 U	0.22 U	0.21 U
Perfluoroundecanoic acid	NS	NS	NS	0.24 U	0.22 U	0.22 U	0.21 U
Perfluroroctanesulfonamide	NS	NS	NS	0.24 U	0.22 U	0.22 U	0.21 U

			AKRF Sample ID	EP-56_15_20230517	EP-X07_15_20230517	EP-57_15_20230517	EP-58_15_20230601
		Lar	ooratory Sample ID Date Sampled		460-280531-4 5/17/2023	460-280531-3 5/17/2023	460-281414-1 6/01/2023
			Dilution Factor	5/17/2025	3/17/2023	5/17/2025	0/01/2023
			Unit	I ppb	l nph	l nph	l ppb
Compound				ppb CONC Q	ppb CONC Q	ppb CONC Q	ppb CONC Q
Compound			NYSDEC PGWGV				
6:2 Fluorotelomer sulfonate	NS	NS	NS	2.77 U	2.58 U	2.47 U	2.07 U
8:2 Fluorotelomer sulfonate	NS	NS	NS	2.77 U	2.58 U	2.47 U	2.07 U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.77 U	2.58 U	2.47 U	2.07 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.77 U	2.58 U	2.47 U	2.07 U
Perfluorobutanesulfonic acid	NS	NS	NS	0.28 U	0.26 U	0.25 U	0.21 U
Perfluorobutanoic acid	NS	NS	NS	0.69 U	0.65 U	0.62 U	0.52 U
Perfluorodecanesulfonic acid	NS	NS	NS	0.28 U	0.26 U	0.25 U	0.21 U
Perfluorodecanoic acid	NS	NS	NS	0.28 U	0.26 U	0.25 U	0.21 U
Perfluorododecanoic acid	NS	NS	NS	0.28 U	0.26 U	0.25 U	0.21 U
Perfluoroheptanesulfonic acid	NS	NS	NS	0.28 U	0.26 U	0.25 U	0.21 U
Perfluoroheptanoic acid	NS	NS	NS	0.28 U	0.26 U	0.25 U	0.21 U
Perfluorohexanesulfonic acid	NS	NS	NS	0.28 U	0.26 U	0.25 U	0.21 U
Perfluorohexanoic acid	NS	NS	NS	0.28 U	0.26 U	0.25 U	0.21 U
Perfluorononanoic acid	NS	NS	NS	0.28 U	0.26 U	0.25 U	0.21 U
Perfluorooctanesulfonamide	NS	NS	NS	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	NS	NS	1	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	0.88	44	1	0.28 U	0.26 U	0.25 U	0.13 J
Perfluorooctanoic acid (PFOA)	NS	NS	0.8	NR	NR	NR	NR
Perfluorooctanoic acid (PFOA)	0.66	33	<u>0.8</u>	0.28 U	0.26 U	0.25 U	0.21 U
Perfluoropentanoic acid	NS	NS	NS	0.28 U	0.26 U	0.25 U	0.21 U
Perfluorotetradecanoic acid	NS	NS	NS	0.28 U	0.26 U	0.25 U	0.21 U
Perfluorotridecanoic acid	NS	NS	NS	0.28 U	0.26 U	0.25 U	0.21 U
Perfluoroundecanoic acid	NS	NS	NS	0.28 U	0.26 U	0.25 U	0.21 U
Perfluroroctanesulfonamide	NS	NS	NS	0.28 U	0.26 U	0.25 U	0.21 U

		Lat	AKRF Sample ID poratory Sample ID	EP-59_15_20230601 460-281414-2	EP-X08_15_20230601 460-281414-5	EP-60_15_20230601 460-281414-3	EP-61_15_20230601 460-281414-4
		Eur	Date Sampled	6/01/2023	6/01/2023	6/01/2023	6/01/2023
			Dilution Factor	1	1	1	1
			Unit	ppb	ppb	ppb	ppb
Compound	NYSDEC UUGV	NYSDEC RRGV	NYSDEC PGWGV	CONC Q	CONC Q	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	NS	NS	NS	2.13 U	2.19 U	2.58 U	2.41 U
8:2 Fluorotelomer sulfonate	NS	NS	NS	2.13 U	2.19 U	2.58 U	2.41 U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.13 U	2.19 U	2.58 U	2.41 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.13 U	2.19 U	2.58 U	2.41 U
Perfluorobutanesulfonic acid	NS	NS	NS	0.21 U	0.22 U	0.26 U	0.24 U
Perfluorobutanoic acid	NS	NS	NS	0.53 U	0.55 U	0.65 U	0.6 U
Perfluorodecanesulfonic acid	NS	NS	NS	0.21 U	0.22 U	0.26 U	0.24 U
Perfluorodecanoic acid	NS	NS	NS	0.21 U	0.22 U	0.26 U	0.24 U
Perfluorododecanoic acid	NS	NS	NS	0.21 U	0.22 U	0.26 U	0.24 U
Perfluoroheptanesulfonic acid	NS	NS	NS	0.21 U	0.22 U	0.26 U	0.24 U
Perfluoroheptanoic acid	NS	NS	NS	0.21 U	0.22 U	0.26 U	0.24 U
Perfluorohexanesulfonic acid	NS	NS	NS	0.21 U	0.22 U	0.26 U	0.24 U
Perfluorohexanoic acid	NS	NS	NS	0.21 U	0.22 U	0.26 U	0.24 U
Perfluorononanoic acid	NS	NS	NS	0.21 U	0.22 U	0.26 U	0.24 U
Perfluorooctanesulfonamide	NS	NS	NS	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	NS	NS	1	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	0.88	44	1	0.21 U	0.22 U	0.26 U	0.17 J
Perfluorooctanoic acid (PFOA)	NS	NS	0.8	NR	NR	NR	NR
Perfluorooctanoic acid (PFOA)	0.66	33	<u>0.8</u>	0.53	0.56	0.26 U	0.12 J
Perfluoropentanoic acid	NS	NS	NS	0.21 U	0.22 U	0.26 U	0.069 J
Perfluorotetradecanoic acid	NS	NS	NS	0.21 U	0.22 U	0.26 U	0.24 U
Perfluorotridecanoic acid	NS	NS	NS	0.21 U	0.22 U	0.26 U	0.24 U
Perfluoroundecanoic acid	NS	NS	NS	0.21 U	0.22 U	0.26 U	0.24 U
Perfluroroctanesulfonamide	NS	NS	NS	0.084 J	0.22 U	0.26 U	0.24 U

			AKRF Sample ID	EP-55_15_20230517	EP-62_15_20230706	EP-63_15_20230706	EP-X09_15_20230706
		Lat	poratory Sample ID	460-280531-1	460-283742-1	460-283742-2	460-283742-6
			Date Sampled	5/17/2023	7/06/2023	7/06/2023	7/06/2023
			Dilution Factor	1	1	1	1
			Unit	ppb	ppb	ppb	ppb
Compound	NYSDEC UUGV	NYSDEC RRGV	NYSDEC PGWGV	CONC Q	CONC Q	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	NS	NS	NS	2.81 U	2.32 U	2.22 U	2.61 U
8:2 Fluorotelomer sulfonate	NS	NS	NS	2.81 U	2.32 U	2.22 U	2.61 U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.81 U	2.32 U	2.22 U	2.61 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.81 U	2.32 U	2.22 U	2.61 U
Perfluorobutanesulfonic acid	NS	NS	NS	0.28 U	0.23 U	0.22 U	0.26 U
Perfluorobutanoic acid	NS	NS	NS	0.7 U	0.58 U	0.55 U	0.65 U
Perfluorodecanesulfonic acid	NS	NS	NS	0.28 U	0.23 U	0.22 U	0.26 U
Perfluorodecanoic acid	NS	NS	NS	0.28 U	0.23 U	0.22 U	0.26 U
Perfluorododecanoic acid	NS	NS	NS	0.28 U	0.23 U	0.22 U	0.26 U
Perfluoroheptanesulfonic acid	NS	NS	NS	0.28 U	0.23 U	0.22 U	0.26 U
Perfluoroheptanoic acid	NS	NS	NS	0.28 U	0.23 U	0.22 U	0.26 U
Perfluorohexanesulfonic acid	NS	NS	NS	0.28 U	0.23 U	0.22 U	0.26 U
Perfluorohexanoic acid	NS	NS	NS	0.28 U	0.23 U	0.22 U	0.26 U
Perfluorononanoic acid	NS	NS	NS	0.28 U	0.23 U	0.22 U	0.26 U
Perfluorooctanesulfonamide	NS	NS	NS	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	NS	NS	1	NR	NR	NR	NR
Perfluorooctanesulfonic acid (PFOS)	0.88	44	1	0.45	0.23 U	0.22 U	0.26 U
Perfluorooctanoic acid (PFOA)	NS	NS	0.8	NR	NR	NR	NR
Perfluorooctanoic acid (PFOA)	0.66	33	<u>0.8</u>	0.13 J	0.23 U	0.22 U	0.26 U
Perfluoropentanoic acid	NS	NS	NS	0.28 U	0.23 U	0.065 J	0.26 U
Perfluorotetradecanoic acid	NS	NS	NS	0.28 U	0.23 UJ	0.22 U	0.26 U
Perfluorotridecanoic acid	NS	NS	NS	0.28 U	0.23 U	0.22 U	0.26 U
Perfluoroundecanoic acid	NS	NS	NS	0.28 U	0.23 U	0.22 U	0.26 U
Perfluroroctanesulfonamide	NS	NS	NS	0.28 U	0.23 U	0.22 U	0.26 U

			AKRF Sample ID		EP-65_15_20230706	EP-66_15_20230706	FB-01_20221228
		Lat	poratory Sample ID		460-283742-4	460-283742-5	460-272141-12
			Date Sampled	7/06/2023	7/06/2023	7/06/2023	12/28/2022
			Dilution Factor	1	1	1	1
			Unit	ppb	ppb	ppb	ppt
Compound	NYSDEC UUGV	NYSDEC RRGV	NYSDEC PGWGV	CONC Q	CONC Q	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	NS	NS	NS	2.14 U	2.3 U	2.39 U	4.41 U
8:2 Fluorotelomer sulfonate	NS	NS	NS	2.14 U	2.3 U	2.39 U	1.77 U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.14 U	2.3 U	2.39 U	4.41 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	2.14 U	2.3 U	2.39 U	4.41 U
Perfluorobutanesulfonic acid	NS	NS	NS	0.21 U	0.23 U	0.24 U	1.77 U
Perfluorobutanoic acid	NS	NS	NS	0.54 U	0.58 U	0.6 U	3.45 J
Perfluorodecanesulfonic acid	NS	NS	NS	0.21 U	0.23 U	0.24 U	1.77 U
Perfluorodecanoic acid	NS	NS	NS	0.21 U	0.23 U	0.24 U	1.77 U
Perfluorododecanoic acid	NS	NS	NS	0.21 U	0.23 U	0.24 U	1.77 U
Perfluoroheptanesulfonic acid	NS	NS	NS	0.21 U	0.23 U	0.24 U	1.77 U
Perfluoroheptanoic acid	NS	NS	NS	0.12 J	0.23 U	0.24 U	1.77 U
Perfluorohexanesulfonic acid	NS	NS	NS	0.056 J	0.23 U	0.24 U	1.77 U
Perfluorohexanoic acid	NS	NS	NS	0.1 J	0.23 U	0.056 J	1.77 U
Perfluorononanoic acid	NS	NS	NS	0.21 U	0.055 J	0.24 U	1.77 U
Perfluorooctanesulfonamide	NS	NS	NS	NR	NR	NR	1.77 U
Perfluorooctanesulfonic acid (PFOS)	NS	NS	1	NR	NR	NR	1.77 U
Perfluorooctanesulfonic acid (PFOS)	0.88	44	1	0.21 U	0.56	0.17 J	NR
Perfluorooctanoic acid (PFOA)	NS	NS	0.8	NR	NR	NR	1.77 U
Perfluorooctanoic acid (PFOA)	0.66	33	<u>0.8</u>	0.14 J	0.23 U	0.081 J	NR
Perfluoropentanoic acid	NS	NS	NS	0.13 J	0.23 U	0.12 J	1.77 U
Perfluorotetradecanoic acid	NS	NS	NS	0.21 U	0.23 U	0.24 U	1.77 U
Perfluorotridecanoic acid	NS	NS	NS	0.21 U	0.23 U	0.24 U	1.77 U
Perfluoroundecanoic acid	NS	NS	NS	0.21 U	0.23 U	0.24 U	1.77 U
Perfluroroctanesulfonamide	NS	NS	NS	0.21 U	0.23 U	0.24 U	NR

			AKRF Sample ID		FB-01_20230214	FB-01_20230410	FB-01_20230412
		Lab	ooratory Sample ID		460-274625-8	460-278010-37	460-278158-6
			Date Sampled	1/03/2023	2/14/2023	4/10/2023	4/12/2023
			Dilution Factor	1	1	1	1
	Uni					ppt	ppt
Compound	NYSDEC UUGV	NYSDEC RRGV	NYSDEC PGWGV	CONC Q	CONC Q	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	NS	NS	NS	4.35 U	4.06 U	4.63 U	4.25 U
8:2 Fluorotelomer sulfonate	NS	NS	NS	1.74 U	1.62 U	1.85 UJ	1.7 U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	4.35 U	4.06 U	4.63 U	4.25 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	4.35 U	4.06 U	4.63 U	4.25 U
Perfluorobutanesulfonic acid	NS	NS	NS	1.74 U	1.62 U	1.85 U	1.7 U
Perfluorobutanoic acid	NS	NS	NS	4.35 U	4.06 U	4.63 U	4.25 U
Perfluorodecanesulfonic acid	NS	NS	NS	1.74 U	1.62 U	1.85 U	1.7 U
Perfluorodecanoic acid	NS	NS	NS	1.74 U	1.62 U	1.85 U	1.7 U
Perfluorododecanoic acid	NS	NS	NS	1.74 U	1.62 U	1.85 U	1.7 U
Perfluoroheptanesulfonic acid	NS	NS	NS	1.74 U	1.62 U	1.85 U	1.7 U
Perfluoroheptanoic acid	NS	NS	NS	1.74 U	1.62 U	1.85 U	1.7 U
Perfluorohexanesulfonic acid	NS	NS	NS	1.74 U	1.62 U	1.85 U	1.7 U
Perfluorohexanoic acid	NS	NS	NS	1.74 U	1.62 U	1.85 U	1.7 U
Perfluorononanoic acid	NS	NS	NS	1.74 U	1.62 U	1.85 U	1.7 U
Perfluorooctanesulfonamide	NS	NS	NS	1.74 U	1.62 U	1.85 U	1.7 U
Perfluorooctanesulfonic acid (PFOS)	NS	NS	1	1.74 U	1.62 U	1.85 U	1.7 U
Perfluorooctanesulfonic acid (PFOS)	0.88	44	1	NR	NR	NR	NR
Perfluorooctanoic acid (PFOA)	NS	NS	0.8	1.74 U	1.62 U	1.85 U	1.7 U
Perfluorooctanoic acid (PFOA)	0.66	33	<u>0.8</u>	NR	NR	NR	NR
Perfluoropentanoic acid	NS	NS	NS	1.74 U	1.62 U	1.85 U	1.7 U
Perfluorotetradecanoic acid	NS	NS	NS	1.74 U	1.62 U	1.85 U	1.7 U
Perfluorotridecanoic acid	NS	NS	NS	1.74 U	1.62 U	1.85 U	1.7 U
Perfluoroundecanoic acid	NS	NS	NS	1.74 U	1.62 U	1.85 U	1.7 U
Perfluroroctanesulfonamide	NS	NS	NS	NR	NR	NR	NR

		Lak	AKRF Sample ID ooratory Sample ID		FB-01_20230517 460-280531-5	FB-01_20230605 460-281629-1	FB-01_20230706 460-283742-7
		Lai	Date Sampled		5/17/2023	6/05/2023	7/06/2023
			Dilution Factor	1	1	0/03/2023	1/00/2023
			Unit	ppt	ppt	ppt	ppt
Compound	NYSDEC UUGV	NYSDEC RRGV	NYSDEC PGWGV	CONC Q	CONC Q	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	NS	NS	NS	4.23 U	4.35 U	4.45 U	4.47 U
8:2 Fluorotelomer sulfonate	NS	NS	NS	1.69 U	1.74 U	1.78 U	1.79 U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	4.23 U	4.35 U	4.45 U	4.47 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	NS	4.23 U	4.35 U	4.45 U	4.47 U
Perfluorobutanesulfonic acid	NS	NS	NS	1.69 U	1.74 U	1.78 U	1.79 U
Perfluorobutanoic acid	NS	NS	NS	4.23 U	4.35 U	3.54 J	4.47 U
Perfluorodecanesulfonic acid	NS	NS	NS	1.69 U	1.74 U	1.78 U	1.79 U
Perfluorodecanoic acid	NS	NS	NS	1.69 U	1.74 U	1.78 U	1.79 U
Perfluorododecanoic acid	NS	NS	NS	1.69 U	1.74 U	1.78 U	1.79 U
Perfluoroheptanesulfonic acid	NS	NS	NS	1.69 U	1.74 U	1.78 U	1.79 U
Perfluoroheptanoic acid	NS	NS	NS	1.69 U	1.74 U	1.78 U	1.79 U
Perfluorohexanesulfonic acid	NS	NS	NS	1.69 U	1.74 U	1.78 U	1.79 U
Perfluorohexanoic acid	NS	NS	NS	1.69 U	1.74 U	1.78 U	1.79 U
Perfluorononanoic acid	NS	NS	NS	1.69 U	1.74 U	1.78 U	1.79 U
Perfluorooctanesulfonamide	NS	NS	NS	1.69 U	1.74 U	1.78 U	1.79 U
Perfluorooctanesulfonic acid (PFOS)	NS	NS	1	1.69 U	1.74 U	1.78 U	1.79 U
Perfluorooctanesulfonic acid (PFOS)	0.88	44	1	NR	NR	NR	NR
Perfluorooctanoic acid (PFOA)	NS	NS	0.8	1.69 U	1.74 U	1.78 U	1.79 U
Perfluorooctanoic acid (PFOA)	0.66	33	<u>0.8</u>	NR	NR	NR	NR
Perfluoropentanoic acid	NS	NS	NS	1.69 U	1.74 U	1.78 U	1.79 U
Perfluorotetradecanoic acid	NS	NS	NS	1.69 U	1.74 U	1.78 U	1.79 U
Perfluorotridecanoic acid	NS	NS	NS	1.69 U	1.74 U	1.78 U	1.79 U
Perfluoroundecanoic acid	NS	NS	NS	1.69 U	1.74 U	1.78 U	1.79 U
Perfluroroctanesulfonamide	NS	NS	NS	NR	NR	NR	NR

Tables 1-6 975 Nostrand Avenue Brooklyn, NY

Post-Excavation Endpoint Sample Results

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.
- 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).
- U: The analyte was not detected at the indicated concentration.
- mg/kg: milligrams per kilogram
 - **ppb**: parts per billion
 - ppt : parts per trillion
 - **µg/L** : micrograms per liter

STANDARDS

Part 375 Soil Soil Cleanup Objectives listed in New York State Department of Environmental Conservation Cleanup Objectives Soil Cleanup Objectives listed in New York State Department of Environmental Conservation Objectives (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. Exceedances of Part 375 Protection of Groundwater Soil Cleanup Objectives (PGWSCOs) are highlighted with an underline.

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. Exceedances of NYSDEC PFAS Protection of Groundwater Guidance Values (PGWGVs) are highlighted with an underline.

DUPLICATES

$$\begin{split} & \mathsf{EP-X01}_15_20221228 \text{ is a blind duplicate of sample } \mathsf{EP-04}_15_20221228 \\ & \mathsf{EP-X02}_15_20230103 \text{ is a blind duplicate of sample } \mathsf{EP-22}_15_20230103 \\ & \mathsf{EP-X03}_15_20230214 \text{ is a blind duplicate of sample } \mathsf{EP-36}_15_20230214 \\ & \mathsf{EP-X04}_15_20230410 \text{ is a blind duplicate of sample } \mathsf{EP-45}_15_20230410 \\ & \mathsf{EP-X05}_15_20230412 \text{ is a blind duplicate of sample } \mathsf{EP-54}_16_20230514 \\ & \mathsf{EP-X06}_16_20230509 \text{ is a blind duplicate of sample } \mathsf{EP-54}_16_20230509 \\ & \mathsf{EP-X07}_15_20230611 \text{ is a blind duplicate of sample } \mathsf{EP-56}_15_20230601 \\ & \mathsf{EP-X08}_15_20230706 \text{ is a blind duplicate of sample } \mathsf{EP-59}_15_20230706 \\ & \mathsf{EP-X09}_15_20230706 \text{ is a blind duplicate of sample } \mathsf{EP-63}_15_20230706 \\ & \mathsf{EP-X09}_15_20230706 \text{ is a blind duplicate of sample } \mathsf{EP-63}_15_20230706 \\ & \mathsf{EP-X09}_15_20230706 \\ & \mathsf{EP-X09}_15_2$$

Table 7 975 Nostrand Avenue Brooklyn, NY Remaining Groundwater Contamination Volatile Organic Compounds (VOCs)

				ompounds (VOCs)			
	F Sample ID	RI-MW-02_20220330	RI-MW-03_20220330	RI-MW-X_20220330	RI-MW-04_20220330	RI-FB-GW_20220330	RI-TB-GW_20220330
	y Sample ID	460-255300-1	460-255300-2	460-255300-4	460-255300-3	460-255300-6	460-255300-5
Da	te Sampled	3/30/2022	3/30/2022	3/30/2022	3/30/2022	3/30/2022	3/30/2022
	Unit	μg/L	µg/L	µg/L	µg/L	μg/L	μg/L
Dilu	ution Factor	1	1	1	1	1	1
Compound	AWQSGV	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 U	1 U
1,1,2,2-Tetrachloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	5	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1	1 U	1 U	1 U	1 U	1 U	1 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	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1	1 U	1 U	1 U	1 U	1 U	1 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	4.6 J	12	11	4.8 J	5 U	5 U
Benzene	1	1 U	1 U	1 U	1 U	1 U	1 U
Bromochloromethane	5	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	50	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	50	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	5	1 U	1.2	1.6	0.79 J	10	1 U
Carbon Disulfide	60	1 U	1.2 1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	5	1 U	10	10	1 U	1 U	1 U
Chlorobenzene	5	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	5	10	10	1 U	10	10	1 U
Chloroform	7	11	17	15	14	10	1 U
Chloromethane	5	1 U	1 U	1 U	1 U	1 U	1 U
Cis-1,2-Dichloroethylene	5	1 U	10	10	0.47 J	10	1 U
Cis-1,3-Dichloropropene	NS	10	10	1 U	1 U	10	1 U
Cvclohexane	NS	10	10	10	10	10	10
Dibromochloromethane	50	1 U	10	1 U	10	10	1 U
Dichlorodifluoromethane	5	10	10	10	10	10	10
Ethylbenzene	5	10	10	10	10	10	10
Isopropylbenzene (Cumene)	5	10	10	10	10	10	10
M,P-Xylenes	5	10	10	10	10	0.63 J	0.88 J
Methyl Acetate	5 NS	5 U	5 U	5 U	5 U	0.63 J 5 U	0.88 J 5 U
Methyl Ethyl Ketone (2-Butanone)	50	5 U	5 U	5 U	5 U	5 U	5 U
Methyl Ethyl Ketone (2-Butanone) Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	50 NS	5 U 5 U	5 U 5 U	5 U 5 U	5 U	5 U	5 U
Methylcyclohexane	NS	<u> </u>	5 U 1 U	1 U	5 U 1 U	<u> </u>	5 U 1 U
Methylcyclonexane Methylene Chloride	NS 5	1 U 1 U	1 U 1 U	1 U 1 U	1 U 1 U	1 U 1 U	1 U 1 U
N-Butylbenzene	5	10	10	10	10	10	10
	5	1 U 1 U	1 U 1 U	10	1 U 1 U	1 U 1 U	1 U 1 U
N-Propylbenzene		1 U 1 U				1 U 1 U	
O-Xylene (1,2-Dimethylbenzene)	5		1 U	1 U	1 U		1 U
Sec-Butylbenzene	5	1 U	1 U	1 U	10	10	1 U
Styrene	5	1 U	1 U	1 U	10	10	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	10	1 U
Tetrachloroethylene (PCE)	5	5.3	5.9	5.6	17	10	1 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	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethylene (TCE)	5	1 U	1 U	1 U	0.65 J	1 U	1 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 U	1 U
Xylenes, Total	NS	1 U	1 U	1 U	1 U	0.63 J	0.88 J

Table 8 975 Nostrand Avenue Brooklyn, NY Remaining Groundwater Contamination Semivolatile Organic Compounds (SVOCs)

Semivolatile Organic Compounds (SVOCs)									
Laborato	RF Sample ID ry Sample ID	RI-MW-02_20220330 460-255300-1	RI-MW-03_20220330 460-255300-2	RI-MW-X_20220330 460-255300-4	RI-MW-04_20220330 460-255300-3	RI-FB-GW_20220330 460-255300-6			
	ate Sampled Unit	3/30/2022 µg/L	3/30/2022 µg/L	3/30/2022 µg/L	3/30/2022 µg/L	3/30/2022 µg/L			
	lution Factor	1	1	1	1	1			
Compound	AWQSGV	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			
1,4-Dioxane (P-Dioxane)	NS	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 U	10 U	10 U			
2,4,5-Trichlorophenol	NS	10 U	10 U	10 U	10 U	10 U			
2,4,6-Trichlorophenol	NS	10 U	10 U	10 U	10 U	10 U			
2,4-Dichlorophenol	5	10 U	10 U	10 U	10 U	10 U			
2,4-Dimethylphenol	50	10 U	10 U	10 U	10 U	10 U			
2,4-Dinitrophenol	10	20 U	20 U	20 U	20 U	20 U			
2,4-Dinitrotoluene	5	2 U	2 U	2 U	2 U	2 U			
2,6-Dinitrotoluene	5	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ			
2-Chloronaphthalene	10	10 U	10 U	10 U	10 U	10 U			
2-Chlorophenol	NS	10 U	10 U	10 U	10 U	10 U			
2-Methylnaphthalene	NS	10 U	10 U	10 U	10 U	10 U			
2-Methylphenol (O-Cresol)	NS	10 U	10 U	10 U	10 U	10 U			
2-Nitroaniline	5	10 U	10 U	10 UJ	10 R	10 U			
2-Nitrophenol	NS	10 UJ	10 UJ	10 U	10 UJ	10 UJ			
3- And 4- Methylphenol (Total)	NS	6.2 J	1.3 J	1.2 J	1.2 J	10 U			
3,3'-Dichlorobenzidine	5	10 U	10 U	10 U	10 R	10 U			
3-Nitroaniline	5	10 U	10 U	10 U	10 R	10 U			
4,6-Dinitro-2-Methylphenol	NS	20 UJ	20 UJ	20 UJ	20 UJ	20 UJ			
4-Bromophenyl Phenyl Ether	NS	10 U	10 U	10 U	10 U	10 U			
4-Chloro-3-Methylphenol	NS	10 U	10 U	10 U	10 U	10 U			
4-Chloroaniline	5	10 U	10 U	10 U	10 R	10 U			
4-Chlorophenyl Phenyl Ether	NS	10 U	10 U	10 U	10 U	10 U			
4-Methylphenol (P-Cresol)	NS	6.2 J	1.3 J	1.2 J	1.2 J	10 U			
4-Nitroaniline	5	10 U	10 U	10 U	10 R	10 U			
4-Nitrophenol	NS	20 U	20 U	20 U	20 U	20 U			
Acenaphthene	20	10 U	10 U	10 U	10 U	10 U			
Acenaphthylene	NS	10 U	10 U	10 U	10 U	10 U			
Acetophenone	NS	10 U	10 U	10 U	10 U	10 U			
Anthracene	50	10 U	10 U	10 U	10 U	10 U			
Atrazine	7.5	2 U	2 U	2 U	2 U	2 U			
Benzaldehyde	NS	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ			
Benzo(a)Anthracene	0.002	1 U	1 U	1 U	1 U	1 U			
Benzo(a)Pyrene	ND	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			
Benzo(g,h,i)Perylene	NS	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			
Benzyl Butyl Phthalate	50	10 U	10 U	10 U	10 U	10 U			
Biphenyl (Diphenyl)	5	10 U	10 U	10 U	10 U	10 U			
Bis(2-Chloroethoxy) Methane	5	10 U	10 U	10 U	10 U	10 U			
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	1	1 U	1 U	1 U	1 U	1 U			
Bis(2-Chloroisopropyl) Ether	5	10 U	10 U	10 U	10 U	10 U			
Bis(2-Ethylhexyl) Phthalate	5	2 U	2 U	2 U	2 U	2 U			
Caprolactam	NS	10 U	10 U	10 U	10 U	10 U			
Carbazole	NS	10 U	10 U	10 U	10 U	10 U			
Chrysene	0.002	2 U	2 U	2 U	2 U	2 U			
Dibenz(a,h)Anthracene	NS	1 U	1 U	2 0 1 U	1 U	1 U			
Dibenzofuran	NS	10 U	10 U	10 U	10 U	10 U			
Diethyl Phthalate	50	10 U	10 U	10 U	10 U	10 U			
Dimethyl Phthalate	50	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			
Di-N-Octylphthalate	50	10 U	10 U	10 U	10 U	10 U			
Fluoranthene	50	10 U	10 U	10 U	10 U	10 U			
	50	10 U	10 U	10 U	10 U	10 U			
Fluorene Hexachlorobenzene	0.04	1 U	100	10 U	10 0	10 0 1 U			
Hexachlorobenzene Hexachlorobutadiene	0.04	10	10	10	10	10			
	-			10.11					
Hexachlorocyclopentadiene	5	10 U	10 U	10 U	10 U 2 U	10 U			
Hexachloroethane	5	2 U	2 U	2 U		2 U			
Indeno(1,2,3-c,d)Pyrene	0.002	2 U	2 U	2 U	2 U	2 U			
Isophorone	50	10 U	10 U	10 U	10 U	10 U			
Naphthalene	10	2 U	2 U	2 U	2 U	2 U			
Nitrobenzene	0.4	10	10	1 U	1 U	10			
N-Nitrosodi-N-Propylamine	NS	1 U	10	1 U	1 U	1 U			
N-Nitrosodiphenylamine	50	10 U	10 U	10 U	10 U	10 U			
Pentachlorophenol	NS	20 U	20 U	20 U	20 U	20 U			
Phenanthrene	50	10 U	10 U	10 U	10 U	10 U			
Phenol	1	10 U	10 U	10 U	10 U	10 U			
Pyrene	50	10 U	10 U	10 U	10 U	10 U			

Table 9 975 Nostrand Avenue Brooklyn, NY Remaining Groundwater Contamination

460-255300-6

3/30/2022

µg/L

1

40 U

2 U

2 U

4 U

2 U

4 U

4 U

4 U 120 U

1.2 U

200 U

8 U

4 U 200 U

0.2 U

2.5 U

0.8 U

4 U

16 U

2 U 500 U

0.8 U

500 U

CONC Q

Total Metals **AKRF Sample ID** RI-MW-02 20220330 RI-MW-03 20220330 RI-MW-X 20220330 RI-MW-04 20220330 RI-FB-GW_20220330 460-255300-4 Laboratory Sample ID 460-255300-1 460-255300-2 460-255300-3 3/30/2022 3/30/2022 3/30/2022 3/30/2022 **Date Sampled** Unit µg/L µg/L µg/L µg/L **Dilution Factor** 1 1 1 1 AWQSGV CONC Q CONC Q CONC Q CONC Q NS 81.9 167 149 91.3 3 6.1 6.3 6.2 5 25 2 U 2 U 2 U 2 U 1,000 113 116 118 114 3 0.8 U 0.8 U 0.8 U 0.8 U 5 2 U 2 U 2 U 2 U NS 66,900 65,700 65,000 48.800 4 U Chromium, Total 50 4 U 4 U 4 U 4.2 3.2 J NS 7.1 4.1 200 22.9 9.3 9.1 9.3 300 630 334 305 214 25 1.2 U 1.2 U 1.2 U 1.2 U

25,300

2.640

15.5

10.7

2 U

0.8 U

4 U

16 U

5,770

45,600

0.2 U

49,500

1,550

21.8

8,350

53,100

0.2 U

1.3 J

0.8 U

4 U

16 U

2 U

25,300

2,670

15.4

10.5

2 U

0.8 U

4 U

16 U

5,790

46,900

0.2 U

Compound Aluminum

Antimony

Arsenic

Barium Beryllium

Cadmium

Calcium

Cobalt

Copper

Iron

Lead

Magnesium

Manganese

Mercury Nickel

Potassium

Selenium

Silver

Zinc

Sodium

Thallium

Vanadium

35,000

300

0.7

100

NS

10

50

20,000

0.5

NS

2,000

49,600

1.360

14.3

6,770

72,600

0.2 U

2.2 J

2 U

0.8 U

4 U

16 U

Table 10975 Nostrand AvenueBrooklyn, NYRemaining Groundwater ContaminationDissolved Metals

AKRF	Sample ID	RI-MW-02_20220330	RI-MW-03_20220330	RI-MW-X_20220330	RI-MW-04_20220330	RI-FB-GW_20220330
Laboratory	Sample ID	460-255300-1	460-255300-2	460-255300-4	460-255300-3	460-255300-6
Dat	te Sampled	3/30/2022	3/30/2022	3/30/2022	3/30/2022	3/30/2022
	Unit	µg/L	µg/L	μg/L	μg/L	μg/L
Dilu	tion Factor	1	1	1	1	1
Compound	AWQSGV	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	40 U	40 U	40 U	40 U	40 U
Antimony	3	5.4	5.9	6.2	4.5	2 U
Arsenic	25	2 U	2 U	2 U	2 U	2 U
Barium	1,000	108	109	110	106	4 U
Beryllium	3	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Cadmium	5	2 U	2 U	2 U	2 U	2 U
Calcium	NS	64,300	64,700	62,700	48,100	500 U
Chromium, Total	50	4 U	4 U	4 U	4 U	4 U
Cobalt	NS	6.6	3.9 J	3.9 J	3.2 J	4 U
Copper	200	15.3	7.3	6	6.2	4 U
Iron	300	393	58.4 J	120 U	62.1 J	120 U
Lead	25	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Magnesium	35,000	47,300	23,900	24,500	47,100	200 U
Manganese	300	1,290	2,560	2,620	1,520	8 U
Mercury	0.7	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	100	14.2	14.2	14	21	4 U
Potassium	NS	6,570	5,590	5,630	7,970	200 U
Selenium	10	3	10.6	10.3	1.1 J	2.5 U
Silver	50	2 U	2 U	2 U	2 U	2 U
Sodium	20,000	68,900	43,900	44,500	50,200	500 U
Thallium	0.5	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Vanadium	NS	4 U	4 U	4 U	4 U	4 U
Zinc	2,000	16 U	16 U	16 U	16 U	16 U

Table 11							
975 Nostrand Avenue							
Brooklyn, NY							
Remaining Groundwater Contamination							
Polychlorinated Biphenyls (PCBs)							

Laboratory Sample ID 460-25530 Date Sampled 3/30/2022 Unit μg/L Dilution Factor 1		460-255300-1 3/30/2022 μg/L	RI-MW-03_20220330 460-255300-2 3/30/2022 µg/L 1	RI-MW-X_20220330 460-255300-4 3/30/2022 µg/L 1	RI-MW-04_20220330 460-255300-3 3/30/2022 µg/L 1	RI-FB-GW_20220330 460-255300-6 3/30/2022 µg/L 1
Compound	AWQSGV	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1221 (Aroclor 1221)	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1232 (Aroclor 1232)	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1242 (Aroclor 1242)	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1248 (Aroclor 1248)	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1254 (Aroclor 1254)	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1260 (Aroclor 1260)	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1262 (Aroclor 1262)	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1268 (Aroclor 1268)	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Total PCBs	0.09	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U

Table 12 975 Nostrand Avenue Brooklyn, NY Remaining Groundwater Contamination *Pesticides*

	Sample ID		RI-MW-03_20220330 460-255300-2	RI-MW-X_20220330 460-255300-4	RI-MW-04_20220330 460-255300-3	RI-FB-GW_20220330 460-255300-6
	te Sampled		3/30/2022	3/30/2022	3/30/2022	3/30/2022
Da	Unit					
Dilu	tion Factor	μg/L 1	μg/L 1	μg/L 1	μg/L 1	μg/L 1
Compound	AWQSGV	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
	0.01	0.02 U				
Alpha Bhc (Alpha Hexachlorocyclohexane)			0.02 U	0.02 U	0.02 U	0.02 U
Alpha Endosulfan	NS	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
Beta Endosulfan	NS	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
cis-Chlordane	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 Sulfate	NS	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Endosulfans ABS	NS	NR	NR	NR	NR	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 13 975 Nostrand Avenue Brooklyn, NY Remaining Groundwater Contamination Per- and Polyfluoroalkyl Substances (PFAS)

AKI	RF Sample ID	RI-MW-02_20220330	RI-MW-03_20220330	RI-MW-X_20220330	RI-MW-04_20220330	RI-FB-GW_20220330
Laborato	ry Sample ID	200-62791-1	200-62791-2	200-62791-4	200-62791-3	200-62791-5
C	Date Sampled		3/30/2022	3/30/2022	3/30/2022	3/30/2022
	Unit	ppt	ppt	ppt	ppt	ppt
Di	ilution Factor	1	1	1	1	1
Compound	AWQSGV	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	NS	4.5 U	4.51 U	4.65 U	4.61 U	4.52 U
8:2 Fluorotelomer sulfonate	NS	1.8 U	1.8 U	1.86 U	1.84 U	1.81 U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	4.5 U	4.51 U	4.65 U	4.61 U	4.52 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	4.5 U	4.51 U	4.65 U	4.61 U	4.52 U
Perfluorobutanesulfonic acid	NS	4.72	7.07	7.51	2.7	1.81 U
Perfluorobutanoic acid	NS	9.63	9.95	10.1	6.23	4.52 U
Perfluorodecanesulfonic acid	NS	1.8 U	1.8 U	1.86 U	1.84 U	1.81 U
Perfluorodecanoic acid	NS	1.8 U	1.8 U	1.86 U	1.84 U	1.81 U
Perfluorododecanoic acid	NS	1.8 U	1.8 U	1.86 U	1.84 U	1.81 U
Perfluoroheptanesulfonic acid	NS	0.28 J	1.8 U	1.86 U	1.84 U	1.81 U
Perfluoroheptanoic acid	NS	14.5	25.7	23.1	6.95	1.81 U
Perfluorohexanesulfonic acid	NS	5.33	3.22	3.21	2.41	1.81 U
Perfluorohexanoic acid	NS	21.3	23.8	24	13.1	1.81 U
Perfluorononanoic acid	NS	1.95	1.8 U	1.86 U	1.02 J	1.81 U
Perfluorooctanesulfonic acid	2.7	16.5	1.29 J	1.32 J	8.6	1.81 U
Perfluorooctanoic acid	6.7	32.7	17.7	18.4	12.2	1.81 U
Perfluoropentanoic acid	NS	21.9	23.4	23	20.2	1.81 U
Perfluorotetradecanoic acid	NS	1.8 U	1.8 U	1.86 U	1.84 U	1.81 U
Perfluorotridecanoic acid	NS	1.8 U	1.8 U	1.86 U	1.84 U	1.81 U
Perfluoroundecanoic acid	NS	1.8 U	1.8 U	1.86 U	1.84 U	1.81 U
Perfluroroctanesulfonamide	NS	1.8 U	1.8 U	1.86 U	1.84 U	1.81 U

Table 14 975 Nostrand Avenue Brooklyn, NY Soil Vapor Analytical Results VOCs

		VOCs			
Sample ID	RI-SV-01_20220329	RI-SV-02_20220329	RI-SV-03_20220329	RI-SV-04_20220329	RI-SV-05_20220329
Lab Sample ID	L2216213-01	L2216213-02	L2216213-03	L2216213-04	L2216213-05
Date Sampled	3/29/2022	3/29/2022	3/29/2022	3/29/2022	3/29/2022
Unit	µg/m ³	μg/m ³	µg/m ³	μg/m ³	µg/m ³
Dilution Factor	1.163	2.5	5	1	1
Compound	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	2.49	900	5.46 U	12.5	53.1
1,1,2,2-Tetrachloroethane	1.6 U	3.43 U	6.87 U	1.37 U	1.37 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	1.79 U	3.83 U	7.66 U	1.53 U	1.53 U
1,1,2-Trichloroethane 1,1-Dichloroethane	1.27 U 0.943 U	2.73 U 35.8	5.46 U 4.05 U	1.09 U 0.809 U	1.09 U 0.809 U
1,1-Dichloroethene	0.943 0 0.924 U	1.98 U	4.05 U 3.96 U	0.809 U 0.793 U	0.809 U
1,2,4-Trichlorobenzene	1.73 U	3.71 U	7.42 U	1.48 U	1.48 U
1.2.4-Trimethylbenzene	10.7	60.5	9.24	57.5	57.5
1,2-Dibromoethane (Ethylene Dibromide)	1.79 U	3.84 U	7.69 U	1.54 U	1.54 U
1,2-Dichlorobenzene	1.4 U	3.01 U	6.01 U	1.2 U	1.2 U
1,2-Dichloroethane	0.943 U	2.02 U	4.05 U	0.809 U	0.809 U
1,2-Dichloropropane	1.08 U	2.31 U	4.62 U	0.924 U	0.924 U
1,2-Dichlorotetrafluoroethane	1.63 U	3.49 U	6.99 U	1.4 U	1.4 U
1,3,5-Trimethylbenzene (Mesitylene)	3.5	15.9	4.92 U	14.6	14.1
1,3-Butadiene	15.2	1.11 U	2.43	0.442 U	0.442 U
1,3-Dichlorobenzene 1,4-Dichlorobenzene	1.4 U 1.4 U	3.01 U 3.01 U	6.01 U 6.01 U	1.2 U 2.39	1.2 U 1.2 U
2,2,4-Trimethylpentane	41.8	4.27	6.01 0	2.39	1.2 0
2-Hexanone	0.955 U	4.27 2.05 U	4.1 U	0.82 U	0.82 U
4-Ethyltoluene	2.85	11.5	4.92 U	12	11.5
Acetone	295	86	770	185	181
Allyl Chloride (3-Chloropropene)	0.729 U	1.57 U	3.13 U	0.626 U	0.626 U
Benzene	7.89	6.96	7.48	6.49	4.73
Benzyl Chloride	1.21 U	2.59 U	5.18 U	1.04 U	1.04 U
Bromodichloromethane	1.56 U	3.35 U	6.7 U	1.34 U	1.34 U
Bromoform	2.41 U	5.17 U	10.3 U	2.07 U	2.07 U
Bromomethane Carbon Disulfide	0.905 U 8.72	1.94 U 4.86	3.88 U 11.3	0.777 U 1.77	0.777 U 1.52
Carbon Tetrachloride	1.47 U	3.15 U	6.29 U	1.26 U	1.32 1.26 U
Chlorobenzene	1.07 U	2.3 U	4.61 U	0.921 U	0.921 U
Chloroethane	0.615 U	1.32 U	2.64 U	0.528 U	0.528 U
Chloroform	2.4	68.4	12.2	5.03	0.977 U
Chloromethane	1.85	1.03 U	2.07 U	0.498	0.413 U
Cis-1,2-Dichloroethylene	0.924 U	1.98 U	3.96 U	0.793 U	0.793 U
Cis-1,3-Dichloropropene	1.06 U	2.27 U	4.54 U	0.908 U	0.908 U
Cyclohexane	3.86	5.13 4.26 U	20.9	22.7	2.11
Dibromochloromethane Dichlorodifluoromethane	1.99 U 4.94	4.26 U	8.52 U 4.94 U	1.7 U 20.7	1.7 U 25.9
Ethanol	4.94 11 U	23.6 U	4.94 U 47.1 U	20.7	35.2
Ethyl Acetate	2.1 U	4.5 U	9.01 U	1.8 U	1.8 U
Ethylbenzene	10.8	20.2	53	20.2	15.3
Hexachlorobutadiene	2.49 U	5.33 U	10.7 U	2.13 U	2.13 U
Isopropanol	4.28	3.07 U	6.15 U	3.07	2.14
M,P-Xylenes	33.1	92.5	142	86	69.1
Methyl Ethyl Ketone (2-Butanone)	19.3	4.48	34.5	5.78	10.9
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	2.39 U	5.12 U	10.2 U	2.05 U	2.05 U
Methylene Chloride N-Heptane	2.02 U 45.9	4.34 U 10.8	9.1 79.1	1.74 U 12.2	1.74 U 7.01
N-періале N-Hexane	18.5	60.6	13.9	234	16.6
O-Xylene (1,2-Dimethylbenzene)	13.3	38.5	88.6	36.3	28.9
Styrene	0.992 U	2.13 U	4.26 U	0.852 U	0.852 U
Tert-Butyl Alcohol	1.76 U	3.79 U	7.58 U	1.52 U	1.52 U
Tert-Butyl Methyl Ether	0.84 U	1.8 U	3.61 U	0.721 U	0.721 U
Tetrachloroethylene (PCE)	3.78	27.8	6.78 U	4.44	5.33
Tetrahydrofuran	1.72 U	3.69 U	7.37 U	1.57	1.47 U
Toluene	21.9	38.4	56.5	48.6	35.8
Trans-1,2-Dichloroethene Trans-1,3-Dichloropropene	0.924 U 1.06 U	1.98 U 2.27 U	3.96 U 4.54 U	0.793 U 0.908 U	0.793 U 0.908 U
Trichloroethylene (TCE)	1.06 U 1.25 U	2.27 U 2.69 U	4.54 U 5.37 U	1.07 U	4
Trichlorofluoromethane	4.3	2.89 U	5.62 U	1.83	3.03
	1.02 U				
Vinyl Bromide	1.02 U	2.19 U	4.37 U	0.874 U	0.874 U

Table 14 975 Nostrand Avenue Brooklyn, NY Soil Vapor Analytical Results VOCs

		VOCs			
Sample ID	RI-SV-06 20220329	RI-SV-07 20220329	RI-SV-08 20220329	RI-SV-09 20220329	RI-SV-10 20220329
Lab Sample ID	L2216213-06	L2216213-07	L2216213-08	L2216213-09	L2216213-10
Date Sampled	3/29/2022	3/29/2022	3/29/2022	3/29/2022	3/29/2022
Unit	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³
Dilution Factor	1	1	μg/m 1	3.333	66.31
Compound	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	1.09 U	1.09 U	1.09 U	3.64 U	72.6 U
1.1.2.2-Tetrachloroethane	1.37 U	1.09 U 1.37 U	1.09 U	4.58 U	91.3 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	1.57 U	1.57 U	1.53 U	4.56 U 5.11 U	102 U
	1.09 U	1.09 U	1.09 U		72.6 U
1,1,2-Trichloroethane				3.64 U 2.7 U	
1,1-Dichloroethane	0.809 U	0.809 U	0.809 U		53.8 U
1,1-Dichloroethene 1,2,4-Trichlorobenzene	0.793 U	0.793 U	0.793 U	2.64 U	52.7 U
	1.48 U	1.48 U	1.48 U	4.95 U	98.7 U
1,2,4-Trimethylbenzene	12.4 1.54 U	8.8 1.54 U	7.92 1.54 U	4 5.13 U	65.4 U 102 U
1,2-Dibromoethane (Ethylene Dibromide)				4.01 U	80 U
1,2-Dichlorobenzene	1.2 U 0.809 U	1.2 U 0.809 U	1.2 U 0.809 U	4.01 U 2.7 U	53.8 U
1,2-Dichloroethane				_	
1,2-Dichloropropane	0.924 U	0.924 U	0.924 U	3.08 U	61.5 U
1,2-Dichlorotetrafluoroethane	1.4 U	1.4 U	1.4 U	4.66 U	93 U
1,3,5-Trimethylbenzene (Mesitylene)	3.92	2.88	2.24	3.28 U	65.4 U
1,3-Butadiene	3.12	1.25	0.571	1.48 U	29.4 U
1,3-Dichlorobenzene	1.2 U	1.2 U	1.2 U	4.01 U	80 U
1,4-Dichlorobenzene	1.2 U	1.2 U	1.2 U	4.01 U	80 U
2,2,4-Trimethylpentane	0.934 U	1.37	0.934 U 2.97	5.37	62.1 U
2-Hexanone	7.58	5.29		2.73 U	54.5 U
4-Ethyltoluene Acetone	2.67 466	2 349	1.63 314	3.28 U 413	65.4 U 309
Allyl Chloride (3-Chloropropene)	0.626 U	0.626 U	0.626 U	2.09 U	41.6 U
Benzene	4.06 1.04 U	2.27	1.58 1.04 U	2.4	42.5 U 68.9 U
Benzyl Chloride	1.04 U	1.04 U 1.34 U	1.04 U	3.45 U 4.47 U	
Bromodichloromethane					89.1 U
Bromoform	2.07 U	2.07 U	2.07 U 0.777 U	6.9 U	138 U
Bromomethane Carbon Disulfide	0.777 U 5.42	0.777 U 4.61	4.27	2.59 U	51.6 U 41.4 U
Carbon Tetrachloride	1.26 U	4.01 1.26 U	4.27 1.26 U	2.08 U	83.7 U
Chlorobenzene				4.2 U 3.07 U	61.3 U
	0.921 U 0.528 U	0.921 U	0.921 U 0.528 U		
Chloroethane Chloroform	9.91	0.528 U 0.977 U	18.1	1.76 U 3.26 U	35.1 U 64.9 U
Chloromethane	0.56	0.413 U	0.964	1.38 U	27.5 U
Cis-1,2-Dichloroethylene	0.56 0.793 U	0.413 U	0.793 U	2.64 U	52.7 U
	0.908 U	0.908 U	0.993 U	3.03 U	60.4 U
Cis-1,3-Dichloropropene Cyclohexane	2.49	0.908 0	0.688 U	4.3	45.8 U
Dibromochloromethane	1.7 U	1.7 U	1.7 U	4.3 5.68 U	45.8 U
	2.19	2.41	2.33		
Dichlorodifluoromethane Ethanol	9.42 U	9.42 U	9.42 U	3.3 U 31.5 U	65.8 U 626 U
Ethyl Acetate	9.42 U 1.8 U	9.42 U 1.8 U	9.42 U 1.8 U	6.02 U	120 U
Ethylbenzene	9.95	6.56	4.95	21.1	57.8 U
Hexachlorobutadiene	2.13 U	2.13 U	4.95 2.13 U	7.11 U	142 U
Isopropanol	3.07	1.52	1.5	4.1 U	81.6 U
M.P-Xylenes	36.5	25.8	21.2	52.1	115 U
Methyl Ethyl Ketone (2-Butanone)	29.5	14.8	13.4	12.4	97.9 U
Methyl Isobutyl Ketone (2-Butanone) Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	29.5 2.05 U	2.05 U	2.05 U	6.84 U	97.9 U 136 U
Methylene Chloride	1.74 U	1.74 U	1.74 U	5.8 U	138 U
N-Heptane	13.9	5.82	2.51	15	54.5 U
N-Hexane	14	3.12	1.58	10.1	46.9 U
O-Xylene (1,2-Dimethylbenzene)	14.5	10.5	8.3	34	40.9 U
Styrene	0.852 U	0.852 U	0.852 U	2.84 U	56.6 U
Tert-Butyl Alcohol	2.32	1.52 U	1.52 U	5.06 U	101 U
Tert-Butyl Methyl Ether	0.721 U	0.721 U	0.721 U	2.4 U	48 U
Tetrachloroethylene (PCE)	1.36 U	27.1	1.36 U	4.52 U	37,000
Tetrahydrofuran	1.47 U	1.79	1.47 U	4.93 U	97.9 U
Toluene	21	14.9	8.97	11	50.1 U
Trans-1,2-Dichloroethene	0.793 U	0.793 U	0.793 U	2.64 U	52.7 U
Trans-1,3-Dichloropropene	0.908 U	0.908 U	0.908 U	3.03 U	60.4 U
Trichloroethylene (TCE)	1.07 U	1.07 U	1.07 U	3.58 U	377
					74.7 U
Trichlorofluoromethane	1.43	1.12 U	1.12 U	3.75 U	
Trichlorofluoromethane Vinyl Bromide	1.43 0.874 U	1.12 U 0.874 U	1.12 U 0.874 U	3.75 U 2.92 U	58.2 U

Table 14 975 Nostrand Avenue Brooklyn, NY Soil Vapor Analytical Results VOCs

	VOCS		
Sample ID	RI-SV-11_20220329	RI-SV-12_20220329	RI-AA_20220329
Lab Sample ID	L2216213-11	L2216213-12	L2216213-13
Date Sampled	3/29/2022	3/29/2022	3/29/2022
Unit	µg/m ³	µg/m ³	µg/m ³
Dilution Factor	3.571	1	1
Compound	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	3.9 U	1.09 U	1.09 U
1,1,2,2-Tetrachloroethane	4.9 U	1.37 U	1.37 U
1,1,2,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	5.47 U	1.53 U	1.53 U
1,1,2-Trichloroethane	3.9 U	1.09 U	1.09 U
	2.89 U		
1,1-Dichloroethane		0.809 U	0.809 U
1,1-Dichloroethene	2.83 U	0.793 U	0.793 U
1,2,4-Trichlorobenzene	5.3 U	1.48 U	1.48 U
1,2,4-Trimethylbenzene	5.8	7.72	0.983 U
1,2-Dibromoethane (Ethylene Dibromide)	5.49 U	1.54 U	1.54 U
1,2-Dichlorobenzene	4.29 U	1.2 U	1.2 U
1,2-Dichloroethane	2.89 U	0.809 U	0.809 U
1,2-Dichloropropane	3.3 U	0.924 U	0.924 U
1,2-Dichlorotetrafluoroethane	4.99 U	1.4 U	1.4 U
1,3,5-Trimethylbenzene (Mesitylene)	3.51 U	2.35	0.983 U
1,3-Butadiene	14.2	0.715	0.442 U
1,3-Dichlorobenzene	4.29 U	1.2 U	1.2 U
1,4-Dichlorobenzene	4.29 U	1.2 U	1.2 U
2,2,4-Trimethylpentane	3.33 U	1.95	0.934 U
2-Hexanone	2.93 U	5.9	0.82 U
4-Ethyltoluene	3.51 U	1.72	0.983 U
Acetone	549	706	2.66
Allyl Chloride (3-Chloropropene)	2.23 U	0.626 U	0.626 U
Benzene	28.9	4.92	0.821
Benzyl Chloride	3.7 U	1.04 U	1.04 U
Bromodichloromethane	4.78 U	1.34 U	1.34 U
Bromoform	7.38 U	2.07 U	2.07 U
Bromomethane	2.77 U	0.777 U	
	125		0.777 U
Carbon Disulfide		1.99	0.623 U
Carbon Tetrachloride	4.49 U	1.26 U	1.26 U
Chlorobenzene	3.29 U	0.921 U	0.921 U
Chloroethane	1.88 U	0.528 U	0.528 U
Chloroform	3.49 U	0.977 U	0.977 U
Chloromethane	2.52	0.626	1.52
Cis-1,2-Dichloroethylene	5.51	0.793 U	0.793 U
Cis-1,3-Dichloropropene	3.24 U	0.908 U	0.908 U
Cyclohexane	5.82	1.3	0.688 U
Dibromochloromethane	6.08 U	1.7 U	1.7 U
Dichlorodifluoromethane	3.53 U	2.47	2.89
Ethanol	33.5 U	9.42 U	9.42 U
Ethyl Acetate	6.41 U	1.8 U	1.8 U
Ethylbenzene	13.7	5.95	0.869 U
Hexachlorobutadiene	7.62 U	2.13 U	2.13 U
Isopropanol	4.38 U	2.34	1.23 U
M,P-Xylenes	36.8	22.9	1.74 U
Methyl Ethyl Ketone (2-Butanone)	21	25	1.47 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	7.29 U	2.05 U	2.05 U
Methylene Chloride	6.18 U	1.74 U	1.74 U
N-Heptane	19.8	6.31	0.82 U
N-Hexane	22.9	3.7	0.705 U
O-Xylene (1,2-Dimethylbenzene)	13.4	9.21	0.869 U
Styrene	3.04 U	0.852 U	0.852 U
Tert-Butyl Alcohol	5.4 U	2.57	1.52 U
Tert-Butyl Methyl Ether	2.57 U	0.721 U	0.721 U
Tetrachloroethylene (PCE)	262	1.44	1.36 U
Tetrahydrofuran	5.25 U	1.44 1.47 U	1.36 U
		15.4	
Toluene	21.4		1.08
Trans-1,2-Dichloroethene	2.83 U	0.793 U	0.793 U
Trans-1,3-Dichloropropene	3.24 U	0.908 U	0.908 U
Trichloroethylene (TCE)	9.51	1.95	1.07 U
Trichlorofluoromethane	4.01 U	1.21	1.48
Vinyl Bromide	3.12 U	0.874 U	0.874 U
Vinyl Chloride	1.83 U	0.511 U	0.511 U

Tables 7 -14 975 Nostrand Avenue Brooklyn, NY Notes

DEFINITIONS

- **J** : The reported value is estimated
- **ND**: The standard is a non-detectable concentration by the approved analytical method.
- NS: No Standard
 - U: Indicates that the compound was analyzed for, but not detected.
- **ppt** : parts per trillion
- **µg/L** : micrograms per liter
- **µg/m³** : micrograms per cubic meter of air

STANDARDS

- **NYSDEC** New York State Department of Environmental Conservation (NYSDEC)
- Class GA : Technical and Operational Guidance Series (1.1.1): Class GA Ambient Water

AWQSGVs Quality Standards and Guidance Values (AWQSGVs).

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

DUPLICATES

RI-MW-X_20220330 is a blind duplicate of sample RI-MW-03_20220330

APPENDIX A Environmental Easement

NYC DEPARTMENT OF OFFICE OF THE CITY R This page is part of the instrume Register will rely on the informa by you on this page for purposes this instrument. The information will control for indexing purpose of any conflict with the rest of the	REGISTER nt. The City tion provided of indexing on this page es in the event ne document.		202310170076100				
			DRSEMENT COVER PAGE	PAGE 1 OF 10			
Document ID: 2023101700761001Document Date: 10-12-2023Preparation Date: 10-18-2023Document Type: EASEMENTDocument Page Count: 9Preparation Date: 10-18-2023							
PRESENTER:			RETURN TO:				
SIVE PAGET & RIESEL, P.C.SIVE PAGET & RIESEL, P.C.560 LEXINGTON AVENUE, 15TH FLOOR560 LEXINGTON AVENUE, 15TH FLOORNEW YORK, NY 10022212-421-2150212-421-2150212-421-2150NDUNCAN@SPRLAW.COMNDUNCAN@SPRLAW.COM							
		PROPER	RTY DATA				
PROPERTY DATA Unit Address BROOKLYN 1309 6 Entire Lot 975 NOSTRAND AVENUE Property Type: OTHER Easement							
		CROSS REF	ERENCE DATA				
CRFN or Docum	entID		fear Reel Page	or File Number			
GRANTOR/SELLER: NOSTRAND GREEN LLC C/O: THE HUDSON COMPA BROADWAY, 11TH FLOOR NEW YORK, NY 10003			FIES GRANTEE/BUYER: PEOPLE OF STATE OF NEW YORK BY DEPT. ENVIRONMENTAL 625 BROADWAY ALBANY, NY 12233				
		FFFS	I ND TAXES				
Mandana		I LEG F	1				
Mortgage : Mortgage Amount:	ا م	0.00	Filing Fee:	\$ 100.00			
Taxable Mortgage Amount:	\$ \$	0.00	NYC Real Property Transfer				
Exemption:	Ф 	0.00		\$ 0.00			
TAXES: County (Basic):	\$	0.00	NYS Real Estate Transfer T				
City (Additional):	\$ \$	0.00	-	ax: \$ 0.00			
Spec (Additional):	\$	0.00	DECODDED	OR FILED IN THE OFFICE			
TASF:	\$	0.00					
MTA:	\$	0.00	A ANDA SA	CITY REGISTER OF THE			
NYCTA:	\$	0.00	- CUI	Y OF NEW YORK			
Additional MRT:	\$	0.00	8.53 J 363.4 8 70350657***********************************	rded/Filed 10-19-2023 12:17			
TOTAL:	\$	0.00		Register File No.(CRFN): 2023000270549			
Recording Fee:	\$	82.00		//.			
Affidavit Fee:	\$	0.00	_ " With	N/Cain-Jacques			
				Register Official Signature			

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

THIS INDENTURE made this 12+b day of October, 2023 between Owner, Nostrand Green LLC, having an office at c/o: The Hudson Companies Inc., 826 Broadway, 11th Floor, County of New York, State of New York (the "Grantor"), and The People of the State of New York (the "Grantee"), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

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

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

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

WHEREAS, Grantor, is the owner of real property located at the address of 975 Nostrand Avenue in the City of New York, County of Kings and State of New York, known and designated on the tax map of the New York City Department of Finance as tax map parcel number: Block 1309 Lot 6, being the same as that property conveyed to Grantor by deed dated August 25, 2021 and recorded in the City Register of the City of New York as City Register File No. 2021000350268. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 1.369 +/- acres and is hereinafter more fully described in the Land Title Survey dated April 12, 2023 and revised September 19, 2023 prepared by Gregory Gallas, License No. 50124, which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

WHEREAS, the Department accepts this Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation established for the Controlled Property until such time as this Environmental Easement is extinguished pursuant to ECL Article 71, Title 36; and

Environmental Easement Page 1

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of Brownfield Cleanup Agreement Index Number: C224335-12-21, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement").

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

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

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

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

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

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

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

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

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

(7) All future activities on the property that will disturb remaining

Environmental Easement Page 2

County: Kings Site No: C224335 Brownfield Cleanup Agreement Index : C224335-12-21

contaminated material must be conducted in accordance with the SMP;

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

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

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

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

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

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

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

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

This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the Environmental Conservation

Law.

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

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

(1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).

(2) the institutional controls and/or engineering controls employed at such site:

(i) are in-place;

(ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved by the NYSDEC and that all controls are in the Department-approved format; and

(iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;

(3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;

(4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;

(5) the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

(6) to the best of his/her knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and

(7) the information presented is accurate and complete.

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

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

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

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

5. <u>Enforcement</u>

A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against

the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

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

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

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

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

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

Parties shall address correspondence to:

Site Number: C224335 Office of General Counsel NYSDEC 625 Broadway Albany New York 12233-5500

With a copy to:

Site Control Section Division of Environmental Remediation NYSDEC 625 Broadway Albany, NY 12233

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

7. <u>Recordation</u>. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the

Environmental Easement Page 5

recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. <u>Amendment</u>. Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

9. <u>Extinguishment.</u> This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. <u>Joint Obligation</u>. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

11. <u>Consistency with the SMP</u>. To the extent there is any conflict or inconsistency between the terms of this Environmental Easement and the SMP, regarding matters specifically addressed by the SMP, the terms of the SMP will control.

Remainder of Page Intentionally Left Blank

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

Nostrand Green LLC: By:

Print Name: David Kramer

Title: Authorized Signating Date: 10/03/2023

Grantor's Acknowledgment

STATE OF NEW YORK

COUNTY OF New York) ss:

On the 3^{\prime} day of 2^{\prime} the personally appeared 3^{\prime} day of 2^{\prime} before me, the undersigned, personally appeared 3^{\prime} day of 2^{\prime} before me, the undersigned, personally appeared 3^{\prime} day definition of the personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Notary Public - State of New York

JOSEPH D. LOVE NOTARY PUBLIC, STATE OF NEW YORK NO. 01LO6009118 QUALIFIED IN QUEENS COUNTY COMMISSION EXPIRES MARCH 3, 20 2 2

)

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

By:

Andrew O. Guglielmi, Director Division of Environmental Remediation

Grantee's Acknowledgment

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

On the 1240 day of 000000, in the year 2023 before me, the undersigned, personally appeared Andrew O. Guglielmi, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

Notary Public - State of New York

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

SCHEDULE "A" PROPERTY DESCRIPTION

Environmental Easement Area:

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

BEGINNING at a point on the easterly side of Nostrand Avenue, distant 100 feet northerly from the corner formed by the intersection of the easterly side of Nostrand Avenue and the northerly side of Empire Boulevard;

RUNNING THENCE easterly parallel with Empire Boulevard, 350 feet 4-3/4 inches to the southwesterly side of Clove Road;

THENCE northwesterly along the southwesterly side of Clove Road, 248 feet 2-5/8 inches;

THENCE westerly at right angles to Nostrand Avenue, 187 feet 6-1/4 inches to the easterly side of Nostrand Avenue;

THENCE southerly along the easterly side of Nostrand Avenue, 205 feet 9-5/8 inches;

THENCE continuing southerly along the easterly side of Nostrand Avenue, 34 feet 2-3/8 inches to the point or place of BEGINNING.

Area of Lot 6 (Environmental Easement Area) = 59,634 sq. ft. or 1.369 acres

Deed:

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

BEGINNING at a point on the easterly side of Nostrand Avenue, distant 100 feet northerly from the corner formed by the intersection of the easterly side of Nostrand Avenue and the northerly side of Empire Boulevard;

RUNNING THENCE easterly parallel with Empire Boulevard, 350 4-3/4 inches to the southwesterly side of Clove Road;

THENCE northwesterly along the southwesterly side of Clove Road, 248 2-5/8 inches;

THENCE westerly at right angles to Nostrand Avenue, 187 feet 6-1/4 inches to the easterly side of Nostrand Avenue;

THENCE southerly along the easterly side of Nostrand Avenue, 240 feet to the point or place of BEGINNING.

Area of Lot 6 (Deed) = 59,634 sq. ft. or 1.369 acres

APPENDIX B SITE CONTACT INFORMATION

Name	Phone/Email Address	
Nostrand Green LLC	(212) 777-9500 / jkohlriggs@hudsoninc.com	
Rebecca Kinal (PE/Qualified Environmental Professional)	(914) 922-2362 / rkinal@akrf.com	
Christopher H. Allan NYSDEC Project Manager 47-40 21 st Street Long Island City, NY 11101	(718) 482-4065 / christopher.allan@dec.ny.gov	
Sally Rushford Bureau of Environmental Exposure Investigation New York State Department of Health	(518) 402-5465 / sally.rushford@health.ny.gov	
Chief, Site Control Section New York State Department of Environmental Conservation Division of Environmental Remediation	(518) 402-9543	

APPENDIX B – LIST OF SITE CONTACTS

APPENDIX C PBS REGISTRATION

NEW YORK PBS # : 2-613454	NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION Petroleum Bulk Storage Program Facility Information Report		Printed : 7/25/2023 pbsfacrpt_foil.rpt Page 1 of 1	
Site Information	<u>Tax Map Information</u>	Site Owner Information	- <u>Mail Correspondent Information</u>	
975 NOSTRAND AVENUE	Boro/Sec.: Brooklyn	NOSTRAND GREEN, LLC	NOSTRAND GREEN, LLC	
975 NOSTRAND AVENUE	Block: 1309	826 BROADWAY, 11TH FLOOR	826 BROADWAY, 11TH FLOOR	
BROOKLYN, NY 11225	Lot: 6	NEW YORK, NY 10003	NEW YORK, NY 10003	
		(212) 777-9500		
Site Phone: (212) 777-9500		Owner Type : Corporate/Commercial/Other	ATTN: JOSEPH KOHL RIGGS	
Town: New York City Co	unty: Kings		(212) 777-9500	
Facility Operator: N/A			(212) ///->500	
Authorized Representative: JOSEPH KOHL RIGGS				
Emergency Contact: JOSEPH KOHL RIGGSEmergency Phone: (212) 777-9500				
Site Status : Unregulated/Closed	Reg Expires : 06/23/2028 Cer	t Printed: Total Active Tanks : 0	Last Inspected:	
Site Type: Other	Cert Iss	ued: 06/23/2023 Total Active Capacity : 0	Inspected By:	
(2) (3) (4) (5) (5) <u>Tank Tank</u> Status <u>Date</u> <u>Date</u>	<u>Capacity</u> Product <u>Tank</u> <u>Tank</u> <u>Tank</u>	(11) (12) (13) (14) (15) (16) (17) (18) <u>Fank Tank Tank Tank Pipe Pipe</u> Pipe	(19) (20) (21) <u>Next Next Tank</u> 2 <u>Pipe Pipe UDC Tank Line Owner</u>	
No Loc Instal Closed UST-1 5 3 08/25/2021 04/11/2		<u>SC</u> LD <u>OP</u> <u>SP</u> Disp <u>Loc</u> <u>Type</u> EP) 00 00 00 00 00 00 00	SC LD Test Test	
UST-1 5 3 08/25/2021 04/11/2	023 550 0009 01 00 00 \therefore 00) : 00 : 00 : 00 00 00 00 :	00 00 :	
Subpart: 2 Category: 3				
UST-2 5 3 08/25/2021 04/11/2	023 550 0009 01 00 00 00	0 00 00 00 00 00 00	00 00 :	

Subpart: 2 Category: 3

(See Reverse Side or Last Page for Code Keys)

PETROLEUM BULK STORAGE APPLICATION - SECTION B - TANK INFORMATION - CODE KEY

Action (1)

- 1. Initial Listing
- 2. Add Tank
- 3. Close/Remove Tank
- 4. Information Correction

5. Repair/Reline Tank

Tank Location (3)

- 1. Aboveground-contact w/soil
- 2. Aboveground-contact w/ impervious barrier
- 3. Aboveground on saddles, leggs, stilts, rack or cradle
- 4. Partially buried tank (tank with 10% or more below ground)
- 5. Underground including vaulted with no access for inspection
- 6. Aboveground in Subterranean Vault w/access for inspections

Status (4)

- 1. In-service
- 2. Out-of-service
- 3. Closed-Removed
- 4. Closed- In Place
- 5. Tank converted to Non-Regulated use 6. Closed prior to 03/1991

Products Stored (7)

Heating Oils: On-Site

- Consumption
- 0001. #2 Fuel Oil 0002. #4 Fuel Oil 0259. #5 Fuel Oil 0003. #6 Fuel Oil 0012. Kerosene 0591. Clarified Oil 2711. Biofuel Oil 2642. Used Oil (Heating) Heating Oils: Resale/ Redistribution
- 2718. #2 Fuel Oil 2719. #4 Fuel Oil 2720. #5 Fuel Oil 2721. #6 Fuel Oil 2722. Kerosene 2723. Clarified Oil 2724. Biofuel Oil

Motor Fuels

0009. Gasoline 2712. Gasoline/Ethanol 0008. Diesel 2710. Biodiesel 0011. Jet Fuel 1044. Jet Fuel (Biofuel) 2641 Aviation Gasoline

Emergency Generator Fuels

0001 #2 Fuel Oil 2730. Biodiesel (E-Gen) 2731. Diesel (E-Gen)

Lubricating/Cutting Oils

0013. Lube Oil 0015. Motor Oil 1045. Gear/Spindle Oil 0010. Hydraulic Oil 0007. Cutting Oil 0021. Transmission Fluid 1836. Turbine Oil 0308. Petroleum Grease Oils Used as Building Materials 2626. Asphaltic Emulsions 0748. Form Oil Petroleum Spirits 0014. White/Mineral Spirits

1731. Naptha

Mineral/Insulating Oils

0020. Insulating Oil (e.g., Transformer, Cable Oil) 2630. Mineral Oil

Waste/Used/Other Oils

0022 Waste/Used Oil 9999. Other-Please list:*

Crude Oil

0006. Crude Oil 0701. Crude Oil Fractions

Tank Type (8)

01. Steel/Carbon Steel/Iron 02. Galvanized Steel Allov 03. Stainless Steel Alloy 04. Fiberglass Coated Steel 05. Steel Tank in Concrete 06. Fiberglass Reinforced Plastic (FRP) 07. Plastic 08. Equivalent Technology

10. Urethane Clad Steel 99 Other-Please list* **Internal Protection (9)** 00. None 01 Epoxy Liner 02. Rubber Liner 03. Fiberglass Liner (FRP)

04. Glass Liner 99. Other-Please list:*

External Protection (10/18)

00. None 01. Painted/Asphalt Coating 02. Original Sacrificial Anode 03. Original Impressed Current 04. Fiberglass 05. Jacketed 06. Wrapped (Piping) 07 Retrofitted Sacrificial Anode 08. Retrofitted Impressed Current 09 Urethane 99. Other-Please list:*

Tank Secondary Containment (11)

00. None 01. Diking (AST Only) 02. Vault (w/access) 03. Vault (w/o access) 04. Double-Walled (UST Only) 05. Synthetic Liner 06. Remote Impounding Area 07. Excavation Liner 09. Modified Double-Walled (AST Only) 10. Impervious Underlayment (AST Only)** 11. Double Bottom (AST Only)** 12. Double-Walled (AST Only)

Tank Leak Detection (12)

00. None 01. Interstitial Electronic Monitoring 02. Interstitial Manual Monitoring 03. Vapor Well 04. Groundwater Well 05. In-Tank System (Auto Tank Gauge) 06. Impervious Barrier/Concrete Pad (AST Only) 07. Statistical Inventory Reconciliation (SIR) 08. Weep holes in vaults with no access for inspection. 99. Other-Please list:*

Overfill Protection (13)

00. None 01. Float Vent Valve 02. High Level Alarm 03. Automatic Shut-Off 04. Product Level Gauge (AST) 05. Vent Whistle 99. Other-Please list:*

Spill Prevention (14)

00. None 01. Catch Basin 99. Other-Please list:*

Pumping/Dispensing Method (15)

00. None 01. Presurized Dispenser 02. Suction Dispenser 03. Gravity 04. On-Site Heating System (Suction) 05. On-Site Heating System (Supply/Return) 06. Tank-Mounted Dispenser 07. Loading Rack/Transfer Pump

Piping Location (16)

00. No Piping 01. Aboveground 02. Underground/On-ground 03. Aboveground/Underground Combination

Piping Type (17)

- 00. None 01. Steel/Carbon Steel/Iron 02. Galvanized Steel 03. Stainless Steel Alloy 04. Fiberglass Coated Steel 05. Steel Encased in Concrete 06. Fiberglass Reinforced Plastic (FRP) 07. Plastic 08. Equivalent Technology 09. Concrete 10. Copper 11. Flexible Piping
- 99. Other-Please list:*

Piping Secondary Containment (19)

- 00 None
- 01. Diking (Aboveground Only)
- 02. Vault (w/access)
- 04. Double-Walled (Underground Only)
- 06. Remote Impounding Area
- 07. Trench Liner
- 12. Double-Walled (Aboveground Only)
- 99. Other Please List:*

Pipe Leak Detection (20)

- 00. None
- 01. Interstitial Electronic
- Monitoring 02. Insterstitial Manual Monitoring
- 03. Vapor Well
- 04. Groundwater Well
- 07. Pressurized Piping Leak Detector
- 09. Exempt Suction Piping
- 10. Statistical Inventory
- Reconciliation (SIR)
- 99. Other-Please list:*

Under Dispenser Containment

(UDC)(21)

Check Box if Present

- * If other, please list on a separate sheet including tank number.
- ** Each of these codes must be combined with code 01 or 06 to meet compliance requirements.

APPENDIX D Import Approvals

RE: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Allan, Christopher H (DEC) < Christopher.Allan@dec.ny.gov>

Thu 6/22/2023 2:30 PM

To:Ashutosh Sharma <asharma@akrf.com>

Cc:Axel Schwendt <aschwendt@akrf.com>;Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>

Good afternoon,

The Department has reviewed the request dated June 22, 2023 to import 2,500 cy of stone sourced from Impact Materials Jersey City (IMJC). Based on the information provided, the request is hereby approved.

The proposed fill material meets the requirements for material other than soil (i.e., gravel, /rock, stone, recycled concrete or recycled brick) as specified in section 5.4(e)5 of DER-10. Therefore, this material may be placed below the demarcation barrier or above the demarcation layer as part of final site cover.

Regards,

Chris

Christopher H. Allan

he/him/his Environmental Engineer, Superfund and Brownfield Cleanup Section, Division of Environmental Remediation **New York State Department of Environmental Conservation** 47-40 21st Street, Long Island City, NY 11101

P: (718) 482-4065 | F: (718) 482-6358 | Christopher.Allan@dec.ny.gov | www.dec.ny.gov |

NEW YORK STATE Conservation

From: Ashutosh Sharma <asharma@akrf.com>
Sent: Thursday, June 22, 2023 2:12 PM
To: Allan, Christopher H (DEC) <Christopher.Allan@dec.ny.gov>
Cc: aschwendt@akrf.com; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>
Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Revised form attached. thanks again, Chris.

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016 From: Ashutosh Sharma <<u>asharma@akrf.com</u>>
 Sent: Thursday, June 22, 2023 2:08 PM
 To: Allan, Christopher H (DEC) <<u>Christopher.Allan@dec.ny.gov</u>>
 Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>>; Maycock, Cris-Sandra (DEC) <<u>cris-sandra.maycock@dec.ny.gov</u>>
 Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Sorry about that. I will fix it now.

From: Allan, Christopher H (DEC) <<u>Christopher.Allan@dec.ny.gov</u>>
 Sent: Thursday, June 22, 2023 2:07 PM
 To: Ashutosh Sharma <<u>asharma@akrf.com</u>>
 Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>>; Maycock, Cris-Sandra (DEC) <<u>cris-sandra.maycock@dec.ny.gov</u>>
 Subject: RE: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Good afternoon,

I'll do a detailed review now, but one thing I noticed was that the form has the 500-800 CY dropdown selected, but the entered volume is 2500 cy. If its 2500 cy, then you'll need to select the >1000 option.

Best, Chris

Christopher H. Allan he/him/his Environmental Engineer, Superfund and Brownfield Cleanup Section, Division of Environmental Remediation New York State Department of Environmental Conservation

47-40 21st Street, Long Island City, NY 11101

P: (718) 482-4065 | F: (718) 482-6358 | Christopher.Allan@dec.ny.gov | www.dec.ny.gov |



From: Ashutosh Sharma <asharma@akrf.com
Sent: Thursday, June 22, 2023 2:00 PM
To: Allan, Christopher H (DEC) < Christopher.Allan@dec.ny.gov
Cc: aschwendt@akrf.com; Maycock, Cris-Sandra (DEC) < cris-sandra.maycock@dec.ny.gov
Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Hi Chris,

As discussed, attached is the formal request form for this material. Could you please let me know if this material can be used for backfilling behind the walls? We have about 10 trucks at the site.

thanks

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>>
 Sent: Thursday, June 22, 2023 1:30 PM
 To: Allan, Christopher H (DEC) <<u>Christopher.Allan@dec.ny.gov</u>>
 Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>>; Maycock, Cris-Sandra (DEC) <<u>cris-sandra.maycock@dec.ny.gov</u>>
 Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

The contractor is looking to import material for backfilling behind the foundation walls (between walls and SOE) and the material will be capped with pavement. Could you take a look at the attached submittal and let me know if this material can be approved? I can submit a formal import request following your review. The contractor wanted to import material from the IRRC facility (approved previously) but they are low on material volumes and the contractor would like to import asap.

thanks

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>>
Sent: Wednesday, June 21, 2023 2:20 PM
To: Allan, Christopher H (DEC) <<u>Christopher.Allan@dec.ny.gov</u>>
Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>>; Maycock, Cris-Sandra (DEC) <<u>cris-sandra.maycock@dec.ny.gov</u>>
Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Thank you.

Sent from my Verizon, Samsung Galaxy smartphone Get Outlook for Android

From: Allan, Christopher H (DEC) <<u>Christopher.Allan@dec.ny.gov</u>>
Sent: Wednesday, June 21, 2023 2:13:48 PM
To: Ashutosh Sharma <<u>asharma@akrf.com</u>>
Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>>; Maycock, Cris-Sandra (DEC) <<u>cris-sandra.maycock@dec.ny.gov</u>>
Subject: RE: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

RE: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Allan, Christopher H (DEC) < Christopher.Allan@dec.ny.gov>

Wed 1/4/2023 11:40 AM

To:Ashutosh Sharma <asharma@akrf.com>

Cc:Axel Schwendt <aschwendt@akrf.com>;Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>;Rushford, Sally (HEALTH) <Sally.Rushford@health.ny.gov>

Good morning,

The Department has reviewed the requests dated January 4, 2023 to import 1500 cy of stone sourced from the Mount Hope quarry. Based on the information provided, the request is hereby approved.

The proposed fill material meets the requirements for material other than soil (i.e., gravel, /rock, stone, recycled concrete or recycled brick) as specified in section 5.4(e)5 of DER-10. Therefore, this material may be placed below the demarcation barrier or above the demarcation layer as part of final site cover.

Regards, Chris **Christopher H. Allan** he/him/his Environmental Engineer, Superfund and Brownfield Cleanup Section, Division of Environmental Remediation **New York State Department of Environmental Conservation** 47-40 21st Street, Long Island City, NY 11101

P: (718) 482-4065 | F: (718) 482-6358 | Christopher.Allan@dec.ny.gov | www.dec.ny.gov |

NEW YORK STATE Conservation

From: Ashutosh Sharma <asharma@akrf.com>
Sent: Wednesday, January 04, 2023 10:07 AM
To: Allan, Christopher H (DEC) <Christopher.Allan@dec.ny.gov>
Cc: aschwendt@akrf.com; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>; Rushford, Sally (HEALTH)
<Sally.Rushford@health.ny.gov>
Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Hi Chris,

Please find attached the import request form for the proposed virgin crushed stone which the contractor plans to import for use as the GPA layer of the SSDS below the slab. Let me know if you need additional information towards the review and approval.

Thanks

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | asharma@akrf.com | www.akrf.com 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <asharma@akrf.com> Sent: Tuesday, January 3, 2023 10:56 AM To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>> Cc: Axel Schwendt <aschwendt@akrf.com>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>; Rushford, Sally (HEALTH) <<u>Sally.Rushford@health.ny.gov</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Happy New Year.

Including Sally and Cris-Sandra here as well.

Please find attached the daily report for December 30, 2022. Please note that we plan on collecting another 15-20 soil endpoint samples this week. Let me know if you have any questions.

thanks and have a good day.

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | asharma@akrf.com | www.akrf.com 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <asharma@akrf.com> Sent: Friday, December 30, 2022 1:07 PM To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>> Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Please find attached the daily reports for December 28 and 29, 2022. We collected 20 soil samples over the last two days and another 15-20 samples will be collected early next week. Attached is the progress figure showing the endpoint sample locations. Let me know if you have any questions.

Talk to you in a year (next week). 🙂



Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>>
Sent: Wednesday, December 28, 2022 1:55 PM
To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>>
Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>>
Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Please find attached the daily report for December 27, 2022. We are collecting soil endpoint samples from a portion of the site following excavation today. Let me know if you have any question.

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>>
Sent: Tuesday, December 27, 2022 10:20 AM
To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>>
Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>>
Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Hope you had a great Christmas weekend.

Please find attached the daily report for December 22, 2022. No remedial work occurred at the site last Friday (December 23rd) or yesterday (December 26th). Work resumed at the site today and AKRF is on-site. We plan on collecting some soil endpoint samples tomorrow from the eastern portion of the site. Let me know if you have any questions.

Thanks and have a good day.

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>>
Sent: Thursday, December 22, 2022 11:26 AM
To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>>
Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>>
Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Please find attached the daily report for December 21, 2022. We are expecting to collect our first endpoint samples (up to 4 samples) from the eastern portion of the site next week. Let me know if you have any questions.

thanks

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>>
Sent: Wednesday, December 21, 2022 1:19 PM
To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>>
Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>>
Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Please find attached the daily reports for December 19 and 20, 2022. Let me know if you have any questions.

thanks

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>>
Sent: Tuesday, December 20, 2022 10:16 AM
To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>>
Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>>
Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Please find attached the daily reports for December 12-16, 2022. Let me know if you have any questions.

thanks and have a good day.

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Axel Schwendt <<u>aschwendt@akrf.com</u>>
Sent: Wednesday, December 14, 2022 12:37 PM
To: Ashutosh Sharma <<u>asharma@akrf.com</u>>; Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>>
Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Attached are the daily reports for Dec 7 - 9 last week. I will be sending you Monday's and Tuesday's reports from this week shortly. Nothing problematic or particularly exciting has occurred, otherwise I would have called. Thanks for your patience. Best,

Axel

Axel Schwendt

Vice President

From: Ashutosh Sharma <<u>asharma@akrf.com</u>>
Sent: Wednesday, December 7, 2022 12:33 PM
To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>>
Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>>
Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Please find attached the daily report for December 6, 2022. Let me know if you have any questions.

thanks and have a good day.

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>>
Sent: Tuesday, December 6, 2022 2:15 PM
To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>>
Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>>
Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Please find attached the daily report for December 5, 2022. Let me know if you have any questions.

thanks and have a good day.

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>>
Sent: Monday, December 5, 2022 2:03 PM
To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>>

Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Hope you had a good weekend.

Please find attached the daily report for December 2, 2022, and the Monthly Progress Report (MPR) for November 2022. Let me know if you have any questions.

thanks

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>>
Sent: Friday, December 2, 2022 2:35 PM
To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>>
Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>>
Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

ached is the daily report for December 1, 2022. thanks and have a good weekend.

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>>
Sent: Friday, December 2, 2022 9:59 AM
To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>>
Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>>
Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

attachment didnt go through earlier. Attached now.

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>>
Sent: Friday, December 2, 2022 9:58 AM
To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>>
Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>>
Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Please find attached the daily report for November 30, 2022. I will send over yesterday's DR shortly. Let me know if you have any questions.

Thanks and have a good day

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>>
Sent: Wednesday, November 30, 2022 2:33 PM
To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>>
Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>>
Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Please find attached the daily report for November 29, 2022. Let me know if you have any questions.

Thanks and have a good day.

From: Ashutosh Sharma <<u>asharma@akrf.com</u>>
Sent: Tuesday, November 29, 2022 10:25 AM
To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>>
Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>>
Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Please find attached the daily report for November 28, 2022. Let me know if you have any questions.

Thanks and have a good day.

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>>
Sent: Monday, November 28, 2022 10:17 AM
To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>>
Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>>
Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Hope you had a good weekend.

Please find attached the daily report for November 25, 2022. Let m know if you have any questions.

thanks

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016 From: Ashutosh Sharma <<u>asharma@akrf.com</u>>
Sent: Friday, November 25, 2022 10:28 AM
To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>>
Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>>
Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Attached is the daily report for November 23, 2022. thanks

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>>
Sent: Monday, November 21, 2022 11:19 AM
To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>>
Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>>
Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Hope you had a good weekend.

Please find attached the daily report for November 18, 2022. Let me know if you have any questions

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>>
Sent: Friday, November 18, 2022 12:57 PM
To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>>
Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>>
Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Happy Friday.

Please find attached the daily report for November 17, 2022. Let me know if you have any questions.

Have a good weekend. thanks

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>>
Sent: Thursday, November 17, 2022 9:18 AM
To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>>
Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>>
Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Please find attached the daily report for November 16, 2022. Let me know if you have any questions.

thanks and have a good day.

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>>
Sent: Wednesday, November 16, 2022 2:00 PM
To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>>
Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>>
Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Please find attached the daily report for November 15, 2022. Also, the RA start factsheets were mailed yesterday and attached is the certificate of mailing for reference.

Thanks and have a good day.

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>>
Sent: Tuesday, November 15, 2022 10:16 AM
To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>>
Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>>
Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Please find attached the daily report for November 14, 2022. Please note that no work occurred at the site on 11/11/22.

Thanks and have a good day.

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>>
Sent: Friday, November 11, 2022 9:55 AM
To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>>
Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>>
Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Happy Friday.

Attached is the daily report for November 10, 2022. Please note that the site is closed today. Soil export and trucking will commence next week starting Monday (11/14).

Thanks and have a good day.

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>>
Sent: Thursday, November 10, 2022 3:51 PM
To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>>
Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>>
Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Attached is another one.

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <asharma@akrf.com>
Sent: Thursday, November 10, 2022 3:30 PM
To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>>
Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>>
Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Attached are the two soil disposal facility approval letters for your records. No work is planned at the site for tomorrow and soil export will occur on Monday.

Let me know if you have any questions.

thanks

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>>
Sent: Thursday, November 10, 2022 9:16 AM
To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>>
Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>>
Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Please find attached the daily report for November 9, 2022. Also, let us know when we can receive the updated DD.

thanks and have a good day.

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>>
Sent: Wednesday, November 9, 2022 10:57 AM
To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>>
Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>>
Subject: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Starting a new email thread here for submitting the daily and monthly reports for work completed following the RAWP approval.

Attached is the daily report for November 8, 2022. Let me know if you have questions.

thanks and have a good day.



Ashutosh Sharma Senior Technical Director P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

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RE: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Allan, Christopher H (DEC) < Christopher.Allan@dec.ny.gov>

Wed 1/4/2023 11:40 AM

To: Ashutosh Sharma <asharma@akrf.com>

Cc: Axel Schwendt <aschwendt@akrf.com>;Maycock, Cris-Sandra (DEC) <cris-

sandra.maycock@dec.ny.gov>;Rushford, Sally (HEALTH) <Sally.Rushford@health.ny.gov>

Good morning,

The Department has reviewed the requests dated January 4, 2023 to import 1500 cy of stone sourced from the Mount Hope quarry. Based on the information provided, the request is hereby approved.

The proposed fill material meets the requirements for material other than soil (i.e., gravel, /rock, stone, recycled concrete or recycled brick) as specified in section 5.4(e)5 of DER-10. Therefore, this material may be placed below the demarcation barrier or above the demarcation layer as part of final site cover.

Regards, Chris **Christopher H. Allan** he/him/his Environmental Engineer, Superfund and Brownfield Cleanup Section, Division of Environmental Remediation **New York State Department of Environmental Conservation** 47-40 21st Street, Long Island City, NY 11101

P: (718) 482-4065 | F: (718) 482-6358 | Christopher.Allan@dec.ny.gov | www.dec.ny.gov |

NEW YORK STATE Conservation

From: Ashutosh Sharma <asharma@akrf.com>
Sent: Wednesday, January 04, 2023 10:07 AM
To: Allan, Christopher H (DEC) <Christopher.Allan@dec.ny.gov>
Cc: aschwendt@akrf.com; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>; Rushford, Sally (HEALTH)
<Sally.Rushford@health.ny.gov>
Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Hi Chris,

Please find attached the import request form for the proposed virgin crushed stone which the contractor plans to import for use as the GPA layer of the SSDS below the slab. Let me know if you need additional information towards the review and approval.

Thanks

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | asharma@akrf.com | www.akrf.com 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <asharma@akrf.com> Sent: Tuesday, January 3, 2023 10:56 AM To: Allan, Christopher H (DEC) < <u>christopher.allan@dec.ny.gov</u>> Cc: Axel Schwendt <aschwendt@akrf.com>; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov>; Rushford, Sally (HEALTH) <<u>Sally.Rushford@health.ny.gov</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Happy New Year.

Including Sally and Cris-Sandra here as well.

Please find attached the daily report for December 30, 2022. Please note that we plan on collecting another 15-20 soil endpoint samples this week. Let me know if you have any questions.

thanks and have a good day.

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | asharma@akrf.com | www.akrf.com 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <asharma@akrf.com> Sent: Friday, December 30, 2022 1:07 PM To: Allan, Christopher H (DEC) < <u>christopher.allan@dec.ny.gov</u>> Cc: Axel Schwendt <a>aschwendt@akrf.com> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Please find attached the daily reports for December 28 and 29, 2022. We collected 20 soil samples over the last two days and another 15-20 samples will be collected early next week. Attached is the progress figure showing the endpoint sample locations. Let me know if you have any questions.

Talk to you in a year (next week). 🙂



Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>>
Sent: Wednesday, December 28, 2022 1:55 PM
To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>>
Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>>
Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Please find attached the daily report for December 27, 2022. We are collecting soil endpoint samples from a portion of the site following excavation today. Let me know if you have any question.

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>>
Sent: Tuesday, December 27, 2022 10:20 AM
To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>>
Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>>
Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Hope you had a great Christmas weekend.

Please find attached the daily report for December 22, 2022. No remedial work occurred at the site last Friday (December 23rd) or yesterday (December 26th). Work resumed at the site today and AKRF is on-site. We plan on collecting some soil endpoint samples tomorrow from the eastern portion of the site. Let me know if you have any questions.

Thanks and have a good day.

RE: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Allan, Christopher H (DEC) < Christopher.Allan@dec.ny.gov>

Tue 1/10/2023 10:21 AM

To: Ashutosh Sharma <asharma@akrf.com>

Good morning,

The Department has reviewed the requests dated January 9, 2023 to import 1500 cy of stone provided by Vulcan Materials Company. Based on the information provided, the request is hereby approved.

The proposed fill material meets the requirements for material other than soil (i.e., gravel, /rock, stone, recycled concrete or recycled brick) as specified in section 5.4(e)5 of DER-10. Therefore, this material may be placed below the demarcation barrier or above the demarcation layer as part of final site cover.

Regards, Chris Christopher H. Allan he/him/his Environmental Engineer, Superfund and Brownfield Cleanup Section, Division of Environmental Remediation New York State Department of Environmental Conservation 47-40 21st Street, Long Island City, NY 11101 P: (718) 482-4065 | F: (718) 482-6358 | Christopher.Allan@dec.ny.gov | www.dec.ny.gov | **F** | **E**



From: Ashutosh Sharma <asharma@akrf.com> Sent: Monday, January 09, 2023 4:14 PM To: Allan, Christopher H (DEC) <Christopher.Allan@dec.ny.gov> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Hi Chris,

Please find attached the import request letter for GPA stone supplied by Vulcan Materials Company for your review and approval. Let me know if this is approved.

thanks

Ashutosh Sharma Senior Technical Director From: Ashutosh Sharma <<u>asharma@akrf.com</u>> Sent: Monday, January 9, 2023 3:02 PM To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Checking in to see if you got the chance to review. Sorry to pester you with emails but we plan to re-sample at the 13 locations tomorrow. Want to make sure the sampling plan works on your end as well. We have addressed similar situations on other BCP site in this manner and that is how I came up with the plan noted in my email.

Let me know. thanks

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>> Sent: Monday, January 9, 2023 11:47 AM To: Allan, Christopher H (DEC) <<u>Christopher.Allan@dec.ny.gov</u>> Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Hope you had a good weekend

I tried calling you but couldn't connect (didnt leave a VM). We received endpoint sample results for vocs/svocs/pests/pcbs/metals for EP-01 thru EP-20. We are still waiting for PFAS results (expected later today). Based on the results, looks like 7 out of the 20 samples

meet the UUSCOs and the remaining 13 failed for one or more parameters. A complete summary of the findings is below:

- Samples EP-02, -03, -04, -05, -12, -14, and -19 (7 out of 20) meet our Track 1 Unrestricted Use Soil Cleanup Objectives (UUSCOs).
- Samples EP-01, -06, -07, and -08 exceeded the UUSCOs for mercury.
- Samples EP-10, -11, 13, and -20 exceeded the UUSCOs for lead and mercury.
- Sample EP-18 exceeded the UUSCOs for copper and nickel.
- Samples EP-09, -15, and -17 exceeded UUSCOs for acetone.

• Sample EP-16 exceeded UUSCOs for lead, mercury, and polycyclic aromatic hydrocarbons (PAHs).

Based on the findings, we plan on excavating the areas where the samples failed down to an additional 1.5-2 feet and re-collect the samples from the excavation bottoms. These samples will be analyzed for the failed parameters only. No sidewall samples will be required as the excavation will extend to the SOE. We will analyze for PFAS as well if any of the samples fail (results coming in later today). We plan to collect these samples tomorrow to keep things moving with the concrete schedule (first pour planned in 2 weeks).

Let me know if you agree to this plan. Please call my cell (347-249-0652) with any questions. attached are the lab results and the sample location figure for reference.

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Allan, Christopher H (DEC) <<u>Christopher.Allan@dec.ny.gov</u>>
Sent: Friday, January 6, 2023 9:36 AM
To: Ashutosh Sharma <<u>asharma@akrf.com</u>>
Subject: RE: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Thank you! And good job making the updates without the pdf containing the "pink square" comment boxes that doh provided, I forgot to attach that.

Best, Chriss Christopher H. Allan he/him/his Environmental Engineer, Superfund and Brownfield Cleanup Section, Division of Environmental Remediation New York State Department of Environmental Conservation 47-40 21st Street, Long Island City, NY 11101

P: (718) 482-4065 | F: (718) 482-6358 | Christopher.Allan@dec.ny.gov | www.dec.ny.gov |



From: Ashutosh Sharma <<u>asharma@akrf.com</u>> Sent: Thursday, January 05, 2023 4:24 PM To: Allan, Christopher H (DEC) <<u>Christopher.Allan@dec.ny.gov</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Sorry about that.

Attached is the revised DR for October 26th with correct readings and the November 21st report with all details.

thanks

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Allan, Christopher H (DEC) <<u>Christopher.Allan@dec.ny.gov</u>> Sent: Thursday, January 5, 2023 4:14 PM To: Ashutosh Sharma <<u>asharma@akrf.com</u>> Subject: RE: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Thanks for submitting,

DOH has some questions/comment on previous daily reports. 10/26/2022: I have added 2 pink comment squares that show Max Downwind VOC and Dust detections. They are inconsistent. Please clarify.

11/21/2022: this Report doesn't include CAMP monitoring graphs, Site Layout Grid of Photos.

Please address these questions/comments and re submit.

Best, Chris Christopher H. Allan he/him/his Environmental Engineer, Superfund and Brownfield Cleanup Section, Division of Environmental Remediation New York State Department of Environmental Conservation 47-40 21st Street, Long Island City, NY 11101

P: (718) 482-4065 | F: (718) 482-6358 | Christopher.Allan@dec.ny.gov | www.dec.ny.gov |



From: Ashutosh Sharma <asharma@akrf.com> Sent: Thursday, January 05, 2023 2:22 PM To: Allan, Christopher H (DEC) <<u>Christopher.Allan@dec.ny.gov</u>> Cc: aschwendt@akrf.com; Maycock, Cris-Sandra (DEC) <<u>cris-sandra.maycock@dec.ny.gov</u>>; Rushford, Sally (HEALTH) <<u>Sally.Rushford@health.ny.gov</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Hi Chris,

Please find attached the daily report for January 4, 2023. Let me know if you have any questions.

thanks

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

 From: Ashutosh Sharma <asharma@akrf.com</td>

 Sent: Wednesday, January 4, 2023 2:08 PM

 To: Allan, Christopher H (DEC) <christopher.Allan@dec.ny.gov

 Cc: Axel Schwendt aschwendt@akrf.com; Maycock, Cris-Sandra (DEC) <cris-sandra.maycock@dec.ny.gov

 Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Thanks Chris.

Please find attached the daily report for January 3, 2023 and the updated soil endpoint sample location figure. We have collected 30 samples so far from the excavation bottom at depths ranging from 15 to 17 feet below sidewalk grade.

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016 From: Allan, Christopher H (DEC) <<u>Christopher.Allan@dec.ny.gov</u>> Sent: Wednesday, January 4, 2023 11:40 AM To: Ashutosh Sharma <<u>asharma@akrf.com</u>> Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>>; Maycock, Cris-Sandra (DEC) <<u>cris-sandra.maycock@dec.ny.gov</u>>; Rushford, Sally (HEALTH) <<u>Sally.Rushford@health.ny.gov</u>> Subject: RE: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Good morning,

The Department has reviewed the requests dated January 4, 2023 to import 1500 cy of stone sourced from the Mount Hope guarry. Based on the information provided, the request is hereby approved.

The proposed fill material meets the requirements for material other than soil (i.e., gravel, /rock, stone, recycled concrete or recycled brick) as specified in section 5.4(e)5 of DER-10. Therefore, this material may be placed below the demarcation barrier or above the demarcation layer as part of final site cover.

Regards, Chris Christopher H. Allan he/him/his Environmental Engineer, Superfund and Brownfield Cleanup Section, Division of Environmental Remediation New York State Department of Environmental Conservation 47-40 21st Street, Long Island City, NY 11101

P: (718) 482-4065 | F: (718) 482-6358 | Christopher.Allan@dec.ny.gov | www.dec.ny.gov |



From: Ashutosh Sharma <asharma@akrf.com> Sent: Wednesday, January 04, 2023 10:07 AM To: Allan, Christopher H (DEC) <<u>Christopher.Allan@dec.ny.gov</u>> Cc: aschwendt@akrf.com; Maycock, Cris-Sandra (DEC) <<u>cris-sandra.maycock@dec.ny.gov</u>>; Rushford, Sally (HEALTH) <<u>Sally.Rushford@health.ny.gov</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Hi Chris,

Please find attached the import request form for the proposed virgin crushed stone which the contractor plans to import for use as the GPA layer of the SSDS below the slab. Let me know if you need additional information towards the review and approval.

Thanks

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South. 7th Floor. New York. NY 10016

 From: Ashutosh Sharma <asharma@akrf.com</td>

 Sent: Tuesday, January 3, 2023 10:56 AM

 To: Allan, Christopher H (DEC) <christopher.allan@dec.ny.gov</td>

 Cc: Axel Schwendt <aschwendt@akrf.com</td>

 Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Happy New Year.

Including Sally and Cris-Sandra here as well.

Please find attached the daily report for December 30, 2022. Please note that we plan on collecting another 15-20 soil endpoint samples this week. Let me know if you have any questions.

thanks and have a good day.

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>> Sent: Friday, December 30, 2022 1:07 PM To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>> Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Please find attached the daily reports for December 28 and 29, 2022. We collected 20 soil samples over the last two days and another 15-20 samples will be collected early next week. Attached is the progress figure showing the endpoint sample locations. Let me know if you have any questions.

Talk to you in a year (next week). 🙂

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>> Sent: Wednesday, December 28, 2022 1:55 PM To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>> Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Please find attached the daily report for December 27, 2022. We are collecting soil endpoint samples from a portion of the site following excavation today. Let me know if you have any question.

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>> Sent: Tuesday, December 27, 2022 10:20 AM To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>> Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Hope you had a great Christmas weekend.

Please find attached the daily report for December 22, 2022. No remedial work occurred at the site last Friday (December 23rd) or yesterday (December 26th). Work resumed at the site today and AKRF is on-site. We plan on collecting some soil endpoint samples tomorrow from the eastern portion of the site. Let me know if you have any questions.

Thanks and have a good day.

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>> Sent: Thursday, December 22, 2022 11:26 AM To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>> Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Please find attached the daily report for December 21, 2022. We are expecting to collect our first endpoint samples (up to 4 samples) from the eastern portion of the site next week. Let me know if you have any questions.

thanks

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>> Sent: Wednesday, December 21, 2022 1:19 PM To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>> Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Please find attached the daily reports for December 19 and 20, 2022. Let me know if you have any questions.

thanks

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>> Sent: Tuesday, December 20, 2022 10:16 AM To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>> Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Please find attached the daily reports for December 12-16, 2022. Let me know if you have any questions.

thanks and have a good day.

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Axel Schwendt <<u>aschwendt@akrf.com</u>> Sent: Wednesday, December 14, 2022 12:37 PM To: Ashutosh Sharma <<u>asharma@akrf.com</u>>; Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Attached are the daily reports for Dec 7 - 9 last week. I will be sending you Monday's and Tuesday's reports from this week shortly. Nothing problematic or particularly exciting has occurred, otherwise I would have called. Thanks for your patience.

Axel Schwendt

Vice President

P: 917.596.8992 | <u>aschwendt@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>> Sent: Wednesday, December 7, 2022 12:33 PM To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>> Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Please find attached the daily report for December 6, 2022. Let me know if you have any questions.

thanks and have a good day.

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>> Sent: Tuesday, December 6, 2022 2:15 PM To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>> Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Please find attached the daily report for December 5, 2022. Let me know if you have any questions.

thanks and have a good day.

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>> Sent: Monday, December 5, 2022 2:03 PM To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>> Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Hope you had a good weekend.

Please find attached the daily report for December 2, 2022, and the Monthly Progress Report (MPR) for November 2022. Let me know if you have any questions.

thanks

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>> Sent: Friday, December 2, 2022 2:35 PM To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>> Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

ached is the daily report for December 1, 2022. thanks and have a good weekend.

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>> Sent: Friday, December 2, 2022 9:59 AM To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>> Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

attachment didnt go through earlier. Attached now.

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>> Sent: Friday, December 2, 2022 9:58 AM To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>> Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Please find attached the daily report for November 30, 2022. I will send over yesterday's DR shortly. Let me know if you have any questions.

Thanks and have a good day

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u>

440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>> Sent: Wednesday, November 30, 2022 2:33 PM To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>> Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Please find attached the daily report for November 29, 2022. Let me know if you have any questions.

Thanks and have a good day.

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>> Sent: Tuesday, November 29, 2022 10:25 AM To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>> Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Please find attached the daily report for November 28, 2022. Let me know if you have any questions.

Thanks and have a good day.

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u>

440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>> Sent: Monday, November 28, 2022 10:17 AM To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>> Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Hope you had a good weekend.

Please find attached the daily report for November 25, 2022. Let m know if you have any questions.

thanks

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>> Sent: Friday, November 25, 2022 10:28 AM To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>> Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Attached is the daily report for November 23, 2022. thanks

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>> Sent: Monday, November 21, 2022 11:19 AM To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>> Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Hope you had a good weekend.

Please find attached the daily report for November 18, 2022. Let me know if you have any questions

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>> Sent: Friday, November 18, 2022 12:57 PM To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>> Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Happy Friday.

Please find attached the daily report for November 17, 2022. Let me know if you have any questions.

Have a good weekend. thanks

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u>

440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>> Sent: Thursday, November 17, 2022 9:18 AM To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>> Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Please find attached the daily report for November 16, 2022. Let me know if you have any questions.

thanks and have a good day.

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>> Sent: Wednesday, November 16, 2022 2:00 PM To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>> Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Please find attached the daily report for November 15, 2022. Also, the RA start factsheets were mailed yesterday and attached is the certificate of mailing for reference.

Thanks and have a good day.

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South. 7th Floor. New York. NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>> Sent: Tuesday, November 15, 2022 10:16 AM To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>> Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Please find attached the daily report for November 14, 2022. Please note that no work occurred at the site on 11/11/22.

Thanks and have a good day.

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>> Sent: Friday, November 11, 2022 9:55 AM To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>> Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Happy Friday.

Attached is the daily report for November 10, 2022. Please note that the site is closed today. Soil export and trucking will commence next week starting Monday (11/14).

Thanks and have a good day.

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>> Sent: Thursday, November 10, 2022 3:51 PM To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>> Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Attached is another one.

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>> Sent: Thursday, November 10, 2022 3:30 PM To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>> Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Attached are the two soil disposal facility approval letters for your records. No work is planned at the site for tomorrow and soil export will occur on Monday.

Let me know if you have any questions.

thanks

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u>

440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>> Sent: Thursday, November 10, 2022 9:16 AM To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>> Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>> Subject: Re: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Please find attached the daily report for November 9, 2022. Also, let us know when we can receive the updated DD.

thanks and have a good day.

Ashutosh Sharma

Senior Technical Director

P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

From: Ashutosh Sharma <<u>asharma@akrf.com</u>> Sent: Wednesday, November 9, 2022 10:57 AM To: Allan, Christopher H (DEC) <<u>christopher.allan@dec.ny.gov</u>> Cc: Axel Schwendt <<u>aschwendt@akrf.com</u>> Subject: 975 Nostrand Ave (C224335)- RAWP Implementation Daily Reports

Hi Chris,

Starting a new email thread here for submitting the daily and monthly reports for work completed following the RAWP approval.

Attached is the daily report for November 8, 2022. Let me know if you have questions.

thanks and have a good day.

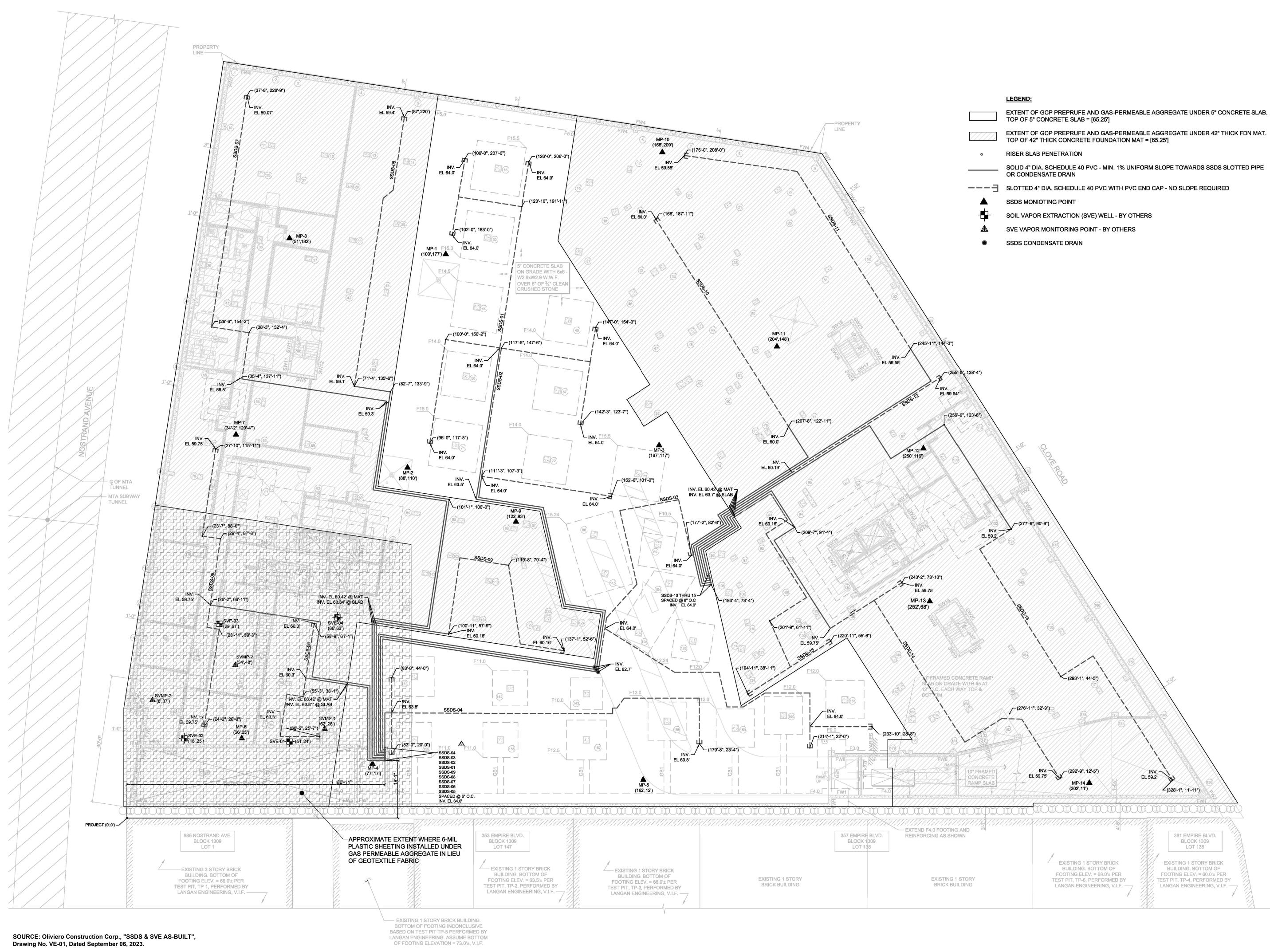
Ashutosh Sharma

Senior Technical Director

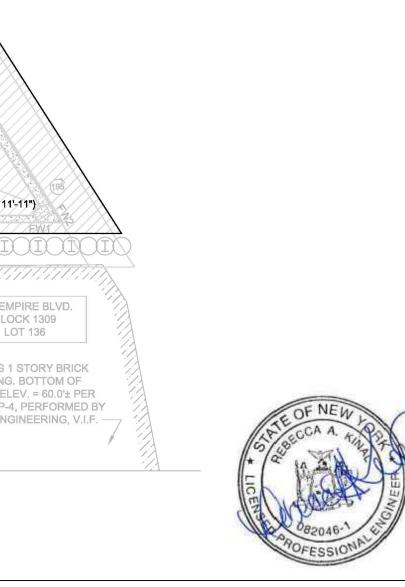
P: 646.388.9865 | M: 347.249.0652 | <u>asharma@akrf.com</u> | <u>www.akrf.com</u> 440 Park Avenue South, 7th Floor, New York, NY 10016

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APPENDIX E SSDS AND SVES AS-BUILTS







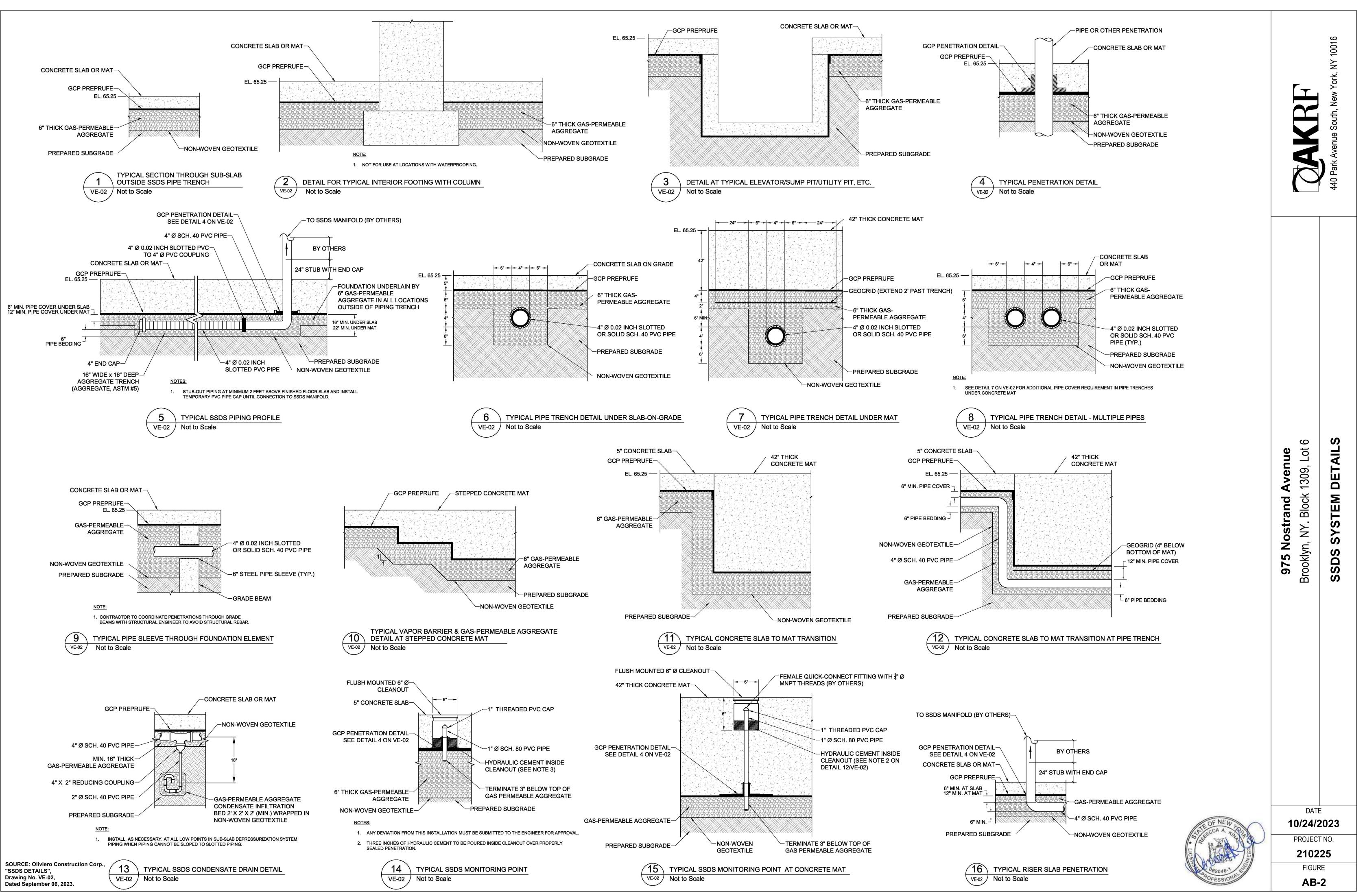
AKRF	440 Park Avenue South, New York, NY 10016
375 Nostrand Avenue Brooklyn, NY. Block 1309, Lot 6 1074/2	

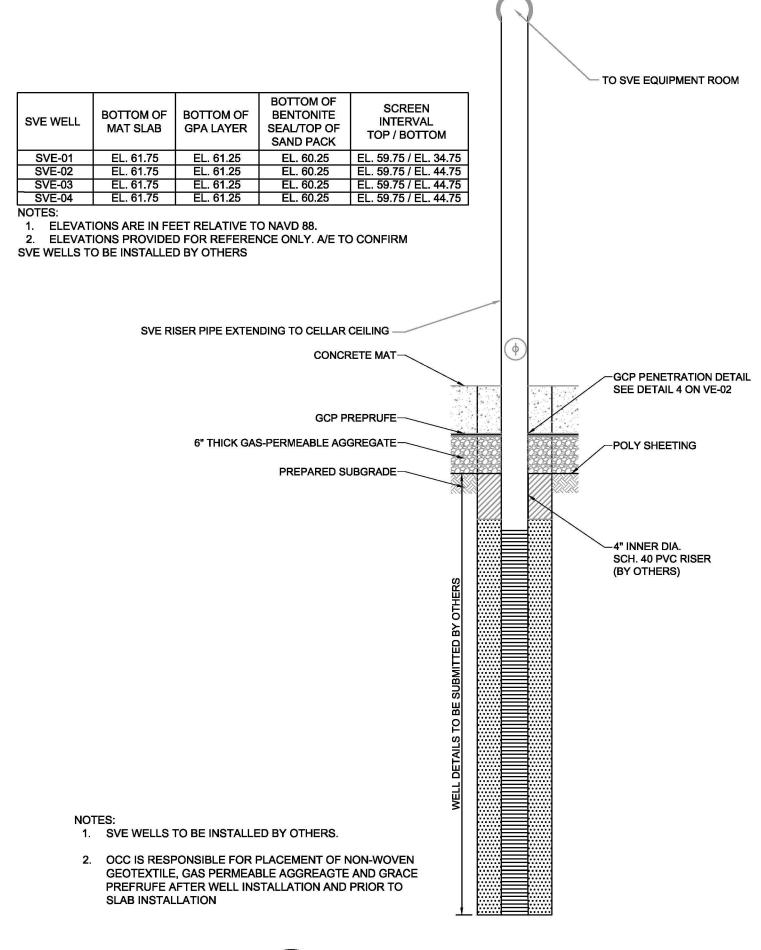
PROJECT NO.

210225

FIGURE

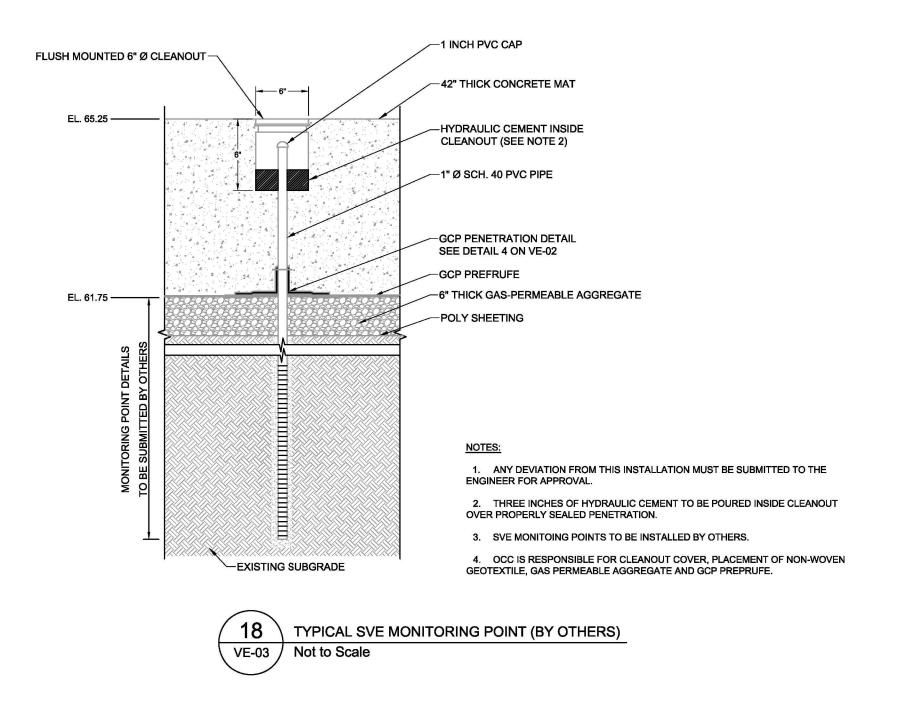
AB-1





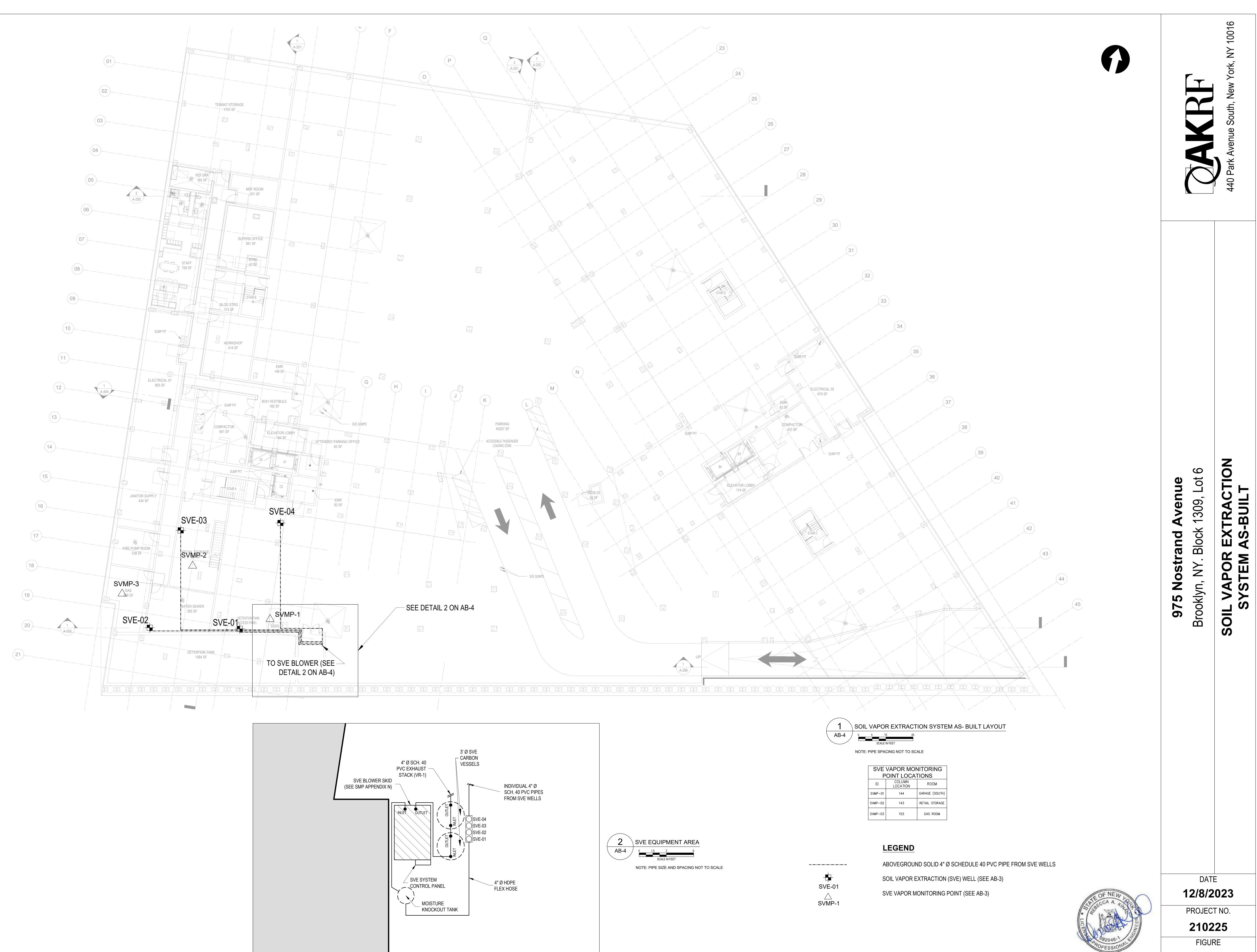
VE-03

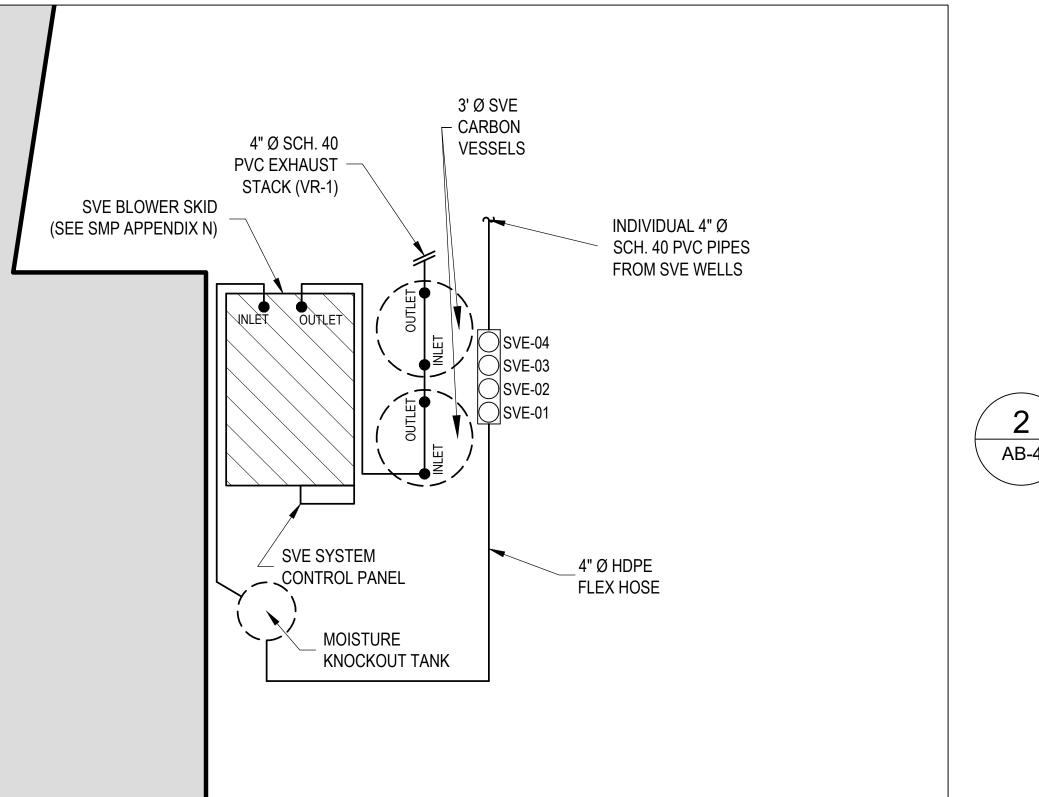
17 SVE-01 THROUGH SVE-04 WELL CONSTRUCTION (BY OTHERS) SCALE: N.T.S.



			440 Park Avenue South, New York, NY 10016
	975 Nostrand Avenue	Brooklyn, NY. Block 1309, Lot 6	SVE WELLS and MONITORING POINT DETAILS
MONVEER A		DATE 0/24/2 PROJECT 2102 FIGUR AB-	2023 NO. 25







SVE VAPOR MONITORING POINT LOCATIONS			
ID	COLUMN LOCATION	ROOM	
SVMP-01	144	GARAGE (SOUTH)	
SVMP-02	143	RETAIL STORAGE	
SVMP-03	153	GAS ROOM	

AB-4



APPENDIX F EXCAVATION WORK PLAN (EWP)

APPENDIX F EXCAVATION WORK PLAN (EWP)

1.1 Notification

At least 15 days prior to the start of any activity that is anticipated to encounter remaining contamination, the Site owner or their representative will notify the New York State Department of Environmental Conservation (NYSDEC) contacts listed in the table below. The information on this table will be updated as necessary to provide accurate contact information. A full listing of Site-related contact information is provided in **Appendix B**.

Table F-1: Notifications*

Company/ Regulator	Contact Name	Contact Title	Contact Number
NYSDEC	Christopher H. Allan	Project Manager	718-482-4065
	Cris-Sandra Maycock	Section Chief	718-482- 4679
	Kelly Lewandowski	Chief, Site Control	518-402-9569

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

This notification will include:

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

The NYSDEC project manager will review the notification and may impose additional requirements for excavations that are not listed in this EWP. The alteration, restoration, and

modification of ECs must conform with Article 145 Section 7209 of the Education Law regarding the application of professional seals and alterations.

1.2 Soil Screening Methods

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

Soils will be segregated based on previous environmental data and screening results into material that requires off-site disposal and material that requires testing to determine if the material can be reused on-site. Further discussion of off-site disposal of materials and on-site reuse is provided in Sections 1.6 and 1.7 of this Appendix.

1.3 Stockpile Methods

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

Stockpiles will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced.

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

1.4 Materials Excavation and Load-Out

A QEP as defined in 6 NYCRR Part 375, a PE who is licensed and registered in New York State, or a qualified person who directly reports to a PE who is licensed and registered in New York State will oversee all invasive work and the excavation and load-out of all excavated material.

The owner of the property and remedial party (if applicable) and its contractors are responsible for safe execution of all invasive and other work performed under this EWP.

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

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

A truck wash will be operated on-site, as appropriate. The QEP will be responsible for ensuring that all outbound trucks will be washed at the truck wash before leaving the Site until the activities performed under this section are complete. Truck wash waters will be collected and disposed of off-site in an appropriate manner.

Locations where vehicles enter or exit the Site shall be inspected daily for evidence of off-site soil tracking.

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

1.5 Materials Transport Off-Site

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

Material transported by trucks exiting the Site will be secured with either tight-fitting opaque covers that are secured on the sides and/or back, or opaque covers that are locked on all sides. Loose-fitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.

Truck transport routes are as follows: All trucks loaded with site materials will exit the vicinity of the site using only these approved truck routes. 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. The proposed truck routes are provided in **Figure 11**.

Trucks will be prohibited from stopping and idling in the neighborhood outside the Site.

Egress points for truck and equipment transport from the Site will be kept clean of dirt and other materials during Site remediation and development.

Queuing of trucks will be performed on-site in order to minimize off-site disturbance. Off-site queuing will be prohibited.

1.6 Materials Disposal Off-Site

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

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

Non-hazardous historic fill and contaminated soils taken off-site will be handled consistent with 6 NYCRR Parts 360, 361, 362, 363, 364 and 365. Material that does not meet Unrestricted Use Soil

Cleanup Objectives (UUSCOs) is prohibited from being taken to a New York State C&D debris recovery facility (6 NYCRR Subpart 360-15 registered or permitted facility).

1.7 Materials Reuse On-Site

The QEP, as defined in 6 NYCRR Part 375, will ensure that procedures defined for materials reuse in this SMP are followed and that unacceptable material (i.e. contaminated) does not remain onsite. Contaminated on-site material, including historic fill and contaminated soil, that is acceptable for reuse on-site will be placed below the demarcation layer, and will not be reused within landscaping berms. Contaminated on-site material may only be used beneath the building as backfill for subsurface utility lines with prior approval from the NYSDEC project manager.

Proposed materials for reuse on-site must be sampled for the full suite of analytical parameters, including volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, target analyte list (TAL) metals, polychlorinated biphenyls (PCBs), 1,4-dioxane, and per- and polyfluoroalkyl substances (PFAS). The sampling frequency will be in accordance with DER-10 Table 5.4(e)10 unless prior approval is obtained from the NYSDEC project manager for modification of the sampling frequency. The analytical results of soil/fill material testing must meet Restricted Residential Use criteria presented in NYSDEC DER-10 Appendix 5 – Allowable Constituent Levels for Imported Fill or Soil for all constituents listed, and the NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances April 2023 guidance values. Approvals for modifications to the analytical parameters must be obtained from NYSDEC prior to the sampling event.

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

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

1.8 Fluids Management

All liquids to be removed from the Site, including but not limited to excavation dewatering, decontamination waters, and groundwater monitoring well purge and development waters, will be handled, transported, and disposed off-site at a permitted facility in accordance with applicable local, state, and federal regulations. Dewatering, purge, and development fluids will not be recharged back to the land surface or subsurface of the Site, and will be managed off-site, unless prior approval is obtained from NYSDEC.

Discharge of water generated during large-scale construction activities to surface waters (i.e. a local pond, stream, or river) will be performed under a State Pollutant Discharge Elimination System (SPDES) permit.

1.9 EC System Restoration

After the completion of soil removal and any other invasive activities that disturb any ECs, the system(s) will be restored in a manner that complies with the Remedial Action Work Plan (RAWP) and Remedy Modification Request (RMR). The ECs include the active sub-slab depressurization system (SSDS), and the soil vapor extraction system (SVES). A figure showing the modified

surface will be included in the subsequent Periodic Review Report (PRR) and in an updated Site Management Plan (SMP).

1.10 Backfill from Off-Site Sources

All materials proposed for import onto the Site will be approved by the QEP, as defined in 6 NYCRR Part 375, and will be in compliance with provisions in this SMP prior to receipt at the Site. A Request to Import/Reuse Fill or Soil form, which can be found at <u>http://www.dec.ny.gov/regulations/67386.html</u>, will be prepared and submitted to the NYSDEC project manager allowing a minimum of 5 business days for review.

Material from industrial sites, spill sites, other environmental remediation sites, or potentially contaminated sites will not be imported to the Site.

All imported soils will meet the backfill and cover soil quality standards established in 6 NYCRR 375-6.7(d) and DER-10 Appendix 5 for Restricted Residential Use. Soils that meet 'general' fill requirements under 6 NYCRR Part 360.13, but do not meet backfill or cover soil objectives for this Site, will not be imported onto the Site without prior approval by the NYSDEC project manager. Soil material will be sampled for the full suite of analytical parameters, including PFAS and 1, 4-dioxane. Solid waste will not be imported onto the Site.

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

1.11 Stormwater Pollution Prevention

Barriers and hay bale checks will be installed and inspected once a week and after every storm event. Results of inspections will be recorded in a logbook, 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 SMP shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters.

Silt fencing or hay bales will be installed around the entire perimeter of the construction area.

1.12 Excavation Contingency Plan

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

Sampling will be performed on product, sediment, and surrounding soils, etc. as necessary to determine the nature of the material and proper disposal method. Chemical analysis will be performed for a full list of analytes [TAL metals, target compound list (TCL) volatiles and semi-

volatiles (including 1,4-dioxane), TCL pesticides and PCBs, and PFAS], unless the Site history and previous sampling results provide sufficient justification to limit the list of analytes. In this case, a reduced list of analytes will be proposed to NYSDEC for approval prior to sampling. Any tanks will be closed as per NYSDEC regulations and guidance.

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

1.13 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) Generic Community Air Monitoring Plan (CAMP). Real-time air monitoring for volatile compounds at the perimeter of the exclusion zone will be performed as follows:

VOC Monitoring

Continuous monitoring for VOCs will be conducted during all soil disturbance/excavation. Upwind concentrations will be measured at the start of each workday and periodically thereafter to establish background concentrations. VOCs will be monitored continuously at the downwind perimeter of the exclusion zone. Monitoring will be conducted with a PID equipped with a 10.6 eV lamp capable of calculating 15-minute running average concentrations.

The following actions will be taken based on the organic vapor levels measured:

- If total organic vapor levels exceed 5 parts per million (ppm) above background for the 15minute 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 downwind 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.

More frequent intervals of monitoring will be conducted if required as determined by the Site Safety Office (SSO). All 15-minute readings will be recorded and available for NYSDEC and NYSDOH personnel to review. Instantaneous readings, if any, will also be recorded. Any exceedances of the 15-minute average for VOCs will be reported to the New York State Departments of Environmental Conservation and Health within 24 hours of the exceedance(s), and the corrective action taken.

Dust/Particulate Monitoring

A Dust Trak[®] dust monitor or equivalent will be used to measure concentrations of total particulate matter during field activities. Continuous monitoring will be conducted during all soil excavation/disturbance. Upwind concentrations will be measured at the start of each workday and periodically thereafter to establish background concentrations. VOCs will be monitored continuously at the downwind perimeter of the exclusion zone.

The action levels developed for the Site are based upon 15-minute averages of the monitoring data. The measurements will be made as close to the workers as practicable and at the breathing height of the workers. 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 work zone action levels and required responses are listed in the following table:

Action Level	Response Action
Less than 0.150 mg/m ³	Level D, D-Modified, or C (subject to PID readings)
More than 0.150 mg/m ³ above background in breathing zone	Stop work. Resume work when readings are less than 0.150 mg/m^3 .

Work Zone Action Levels and Required Responses

Notes:

 $mg/m^3 = milligrams$ per cubic meter

If, after implementation of dust suppression techniques, downwind particulate levels are greater than 0.150 mg/m^3 above the background (upwind level), work shall be reevaluated and changes initiated to reduce particulate levels and to prevent visible dust migration, including work stoppage if necessary.

In addition, fugitive dust migration to the nearby community should be visually assessed during all work activities as follows:

- If the downwind particulate level is 0.1 mg/m³ greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques will be employed. Work will continue with dust suppression techniques provided that downwind particulate levels do not exceed 0.150 mg/m³ above the upwind level and provided that no visible dust is migrating from the work area.
- If, after implementation of dust suppression techniques, downwind particulate levels are greater than 0.150 mg/m³ above the upwind level, work will be stopped and a reevaluation of activities initiated. Work will resume provided that dust suppression measures and other controls are successful in reducing the downwind particulate concentration to within 0.150 mg/m³ of the upwind level and in preventing visible dust migration.

Exceedances of action levels listed in the CAMP will be reported to NYSDEC and NYSDOH. Any exceedances of the 15-minute average for dust/particulate will be reported to the New York State Departments of Environmental Conservation and Health within 24 hours of the exceedance(s), and the corrective action taken.

1.13.1 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 ECs such as vapor/dust barriers, temporary negative-pressure enclosures, or special ventilation devices should be considered to prevent exposures related to the work activities and to control dust and odors. Consideration should be given to implementing the planned activities when potentially exposed populations are at a minimum, such as during weekends or evening hours in non-residential settings.

- If total VOC concentrations opposite the walls of occupied structures or next to intake vents exceed 1 ppm, monitoring should occur within the occupied structure(s). Depending upon the nature of contamination, chemical-specific colorimetric tubes of sufficient sensitivity may be necessary for comparing the exposure point concentrations with appropriate pre-determined response levels (response actions should also be pre-determined). Background readings in the occupied spaces must be taken prior to commencement of the planned work. Any unusual background readings should be discussed with NYSDOH prior to commencement of the work.
- If total particulate concentrations opposite the walls of occupied structures or next to intake vents exceed 0.150 mg/m³, work activities should be suspended until controls are implemented and are successful in reducing the total particulate concentration to 0.150 mg/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.

1.13.2 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 ECs 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.

1.14 Odor Control Plan

This odor control plan is capable of controlling emissions of nuisance odors on- and off-site. Specific odor control methods to be used on a routine basis will include monitoring by the on-site QEP or personnel under their direct supervision. If nuisance odors are identified at the Site boundary, or if odor complaints are received, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all odor events and of any other complaints about the project. Implementation of all odor controls, including the halt of work, is the responsibility of the remedial party's Remediation Engineer, and any measures that are implemented will be discussed in the PRR.

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

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

1.15 Dust Control Plan

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

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

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

1.16 Other Nuisances

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

A plan will be developed and utilized by the contractor for all remedial work to ensure compliance with local noise control ordinances.

APPENDIX G Quality Assurance Project Plan

975 NOSTRAND AVENUE

BROOKLYN, NEW YORK

Quality Assurance Project Plan

AKRF Project Number: 210225 BCP Site Number: C224335

Prepared for:

New York State Department of Environmental Conservation Division of Environmental Remediation, Remedial Bureau B 625 Broadway, 12th Floor Albany, New York 12233

On Behalf Of:

Nostrand Green LLC 826 Broadway, 11th Floor New York, NY 10003

Prepared by:



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DECEMBER 2023

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FIGURE

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ATTACHMENTS

Attachment A – Resumes for Project Director, Quality Assurance Officer, Project Manager, Project Manager Alternates, and Field Team Leaders

1.0 INTRODUCTION

This Quality Assurance Project Plan (QAPP) describes the protocols and procedures that will be followed during implementation of the Site Management Plan (SMP) at the 975 Nostrand Ave site, hereafter referred to as "the Site." The legal definition of the Site is NYC Tax Block 1309, Lot 6. The Site is bounded to the north by a construction site; to the east by Clove Road, followed by multi-family residential buildings; to the south by mixed residential and commercial uses; and to the west by Nostrand Avenue followed by mixed residential and commercial uses and Sullivan Place. A Site Location Plan is provided as Figure 1.

The objective of this QAPP is to provide for Quality Assurance (QA) and maintain Quality Control (QC) during sampling performed under the SMP for BCP Site No. C224335. Adherence to the QAPP will ensure that defensible data will be obtained to confirm the successful operation and maintenance of remedial systems or other engineering controls.

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 CFR Part 1910. The following sections describe the key project personnel and their responsibilities.

2.1 Quality Assurance/Quality Control Officer

The QA/QC Officer will be responsible will be responsible for adherence to this QAPP and will review the procedures with all personnel prior to commencing any fieldwork and conduct periodic Site inspections to assess implementation of the procedures. Axel Schwendt will serve as the QA/QC officer for the SMP. Mr. Schwendt's resume is included in Attachment A.

2.2 Remedial Engineer

The Remedial Engineer is a registered professional engineer licensed by the State of New York. The Remedial Engineer will have primary direct responsibility for implementation of the SMP. The Remedial Engineer will certify in the Periodic Review Reports which summarize that the engineering controls were monitored, maintained, and remain effective. The Remedial Engineer will certify that the Site management activities were conducted by qualified environmental professionals under her supervision and that the remediation requirements set forth in the SMP and any other relevant provisions of ECL 27-1419 have been achieved in full conformance with that Plan. The Remedial Engineer for this project will be Rebecca Kinal, P.E. Ms. Kinal'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 SMP. The project manager will prepare reports and participate in meetings with the Site owner/BCP Requestor, and/or the NYSDEC. Ashutosh Sharma will serve as the project manager for the SMP. Mr. Sharma's resume is included in Attachment A.

2.4 Field Team Leader, Field Technician, Site Safety Officer, and Alternates

The field team leader will be responsible for conducting routine operations maintenance and monitoring and health and safety activities in the field and will ensure adherence to the SMP and Health and Safety Plan (HASP), included in Appendix P of the SMP. The field team leader will also act as the field technician and Site safety officer (SSO) and will report to the project manager or project manager alternate on a regular basis regarding daily progress and any deviations from the work plan. The field team leader will be a qualified and responsible person able to act professionally and promptly during environmental work at the Site. Stephen Schmid will act as the field team leader. The field team leader alternate is Brian Quinn. Resumes for Mr. Schmid and Mr. Quinn are included in Attachment A.

2.5 Laboratory Quality Assurance/Quality Control (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

Environment Testing – Edison, of Edison, New Jersey, a New York State Department of Health (NYSDOH) Environmental Laboratory Accreditation Program (ELAP)-certified laboratory being employed for all environmental sampling at the Site.

2.6 Laboratory Data Validator

The laboratory data validator will be responsible for third party data validation and preparation of Data Usability Summary Reports (DUSRs). The third-party laboratory data validator will be Lori Beyer of L.A.B. Validation Corp.

3.0 STANDARD OPERATING PROCEDURES (SOPS)

The following sections describe the SOPs for the monitoring activities included in the SMP. During these operations, safety monitoring will be performed as described in the HASP, included as Appendix P of the SMP. SMP implementation will include routine inspection of the soil vapor extraction system (SVES) and active sub-slab depressurization system (SSDS) and soil vapor intrusion evaluation for new building (once after building completion and then as needed).

3.1 Well Installation and Development

Soil vapor extraction wells have been installed in the southwestern portion of the Site. The following procedure should be followed in the event that a well requires replacement or redevelopment or additional wells are installed. The well locations and/or screen depths may be adjusted based on observations and data compiled during the necessary field activities. Details outlined below may be altered based on the preparation and submittal of a work plan submitted to NYSDEC and NYSDOH. This QAPP will be updated accordingly and included in the SMP.

All soil vapor extraction wells will be advanced using a Geoprobe sonic technology or hollow stem auger technology. Soil vapor extraction wells will be constructed with 15 to 25 feet of polyvinyl chloride (PVC) screen (based on the location).

Morie sand will be backfill around the screen zone of each new well to a depth of 6-inches above the screen. The annular space around the well riser will be sealed with bentonite extending one to two feet above the sand filter pack and completed with a non-shrinking cement mixture to approximately one foot below grade. Each SVE well will be completed using flush to grade locking gate boxes.

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 procedure will be as follows:

- 1. Scrub using tap water/Simple Green[®] mixture and bristle brush.
- 2. Rinse with tap water.
- 3. Scrub again with tap water/Simple Green[®] mixture and bristle brush.
- 4. Rinse with tap water.
- 5. Rinse with distilled water.
- 6. Air-dry the equipment, if possible.

3.3 Management of Investigation Derived Waste (IDW)

IDW will be containerized in New York State Department of Transportation (NYSDOT)approved 55-gallon drums during the site management activities. The drums will be sealed at the end of each work day and labeled with the date, the boring location(s), the type of waste e.g., drill cuttings, excavated trenching material), and the name and phone number of an AKRF point-ofcontact. 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 Sub-Slab Soil Vapor and Indoor Air Sampling

Sub-slab soil vapor and indoor air sampling, if needed in the future, will be conducted using Summa canisters with 24-hour flow regulators. Samples will be collected using the following procedures:

4.1.1 Sample Set-up

- 1. Conduct a pre-sampling inspection and record chemical inventory of the Site building.
- 2. Install flexible hose to a Gilian GilAir plus (or equivalent) sampling pump and connect the Teflon sample tubing to the hose. Connect the other end (discharge end) of the flexible tubing to a 1-liter Tedlar bag. Purge the soil gas sampler of approximately three sampler volumes by activating the pump to fill the Tedlar bag to near capacity. The air withdrawal flow rate shall be 0.2 liters/minute or less.
- 3. The Tedlar bag will be analyzed in the field using a PID calibrated to the manufacturer's specifications to check for levels of volatile organic compounds (VOCs) in the sub-slab soil vapor.
- 4. Disconnect the sample tubing from the Gilian GilAir plus (or equivalent) pump and connect it to the inlet of a labeled 6-liter Summa canister.
- 5. Repeat procedure for all sampling locations.

4.1.2 Sample Collection

- 1. After Summa canisters are set up at all of the sampling locations, record the vacuum reading from the vacuum gauge on the canister at the beginning of the 24-hour sampling period. Open the valve of the canister and record the time in the field book. In addition, place labeled Summa canisters at the breathing zone level (minimum of 3- to 5-feet above the ground floor) adjacent to the monitoring point locations for collection of co-located indoor air (IA) samples from the cellar level, and place canisters at select locations on the first floor space for collection of IA samples over a 24-hour period.
- 2. At the end of the 24-hour sampling period, close the valve, remove the flow-rate controllers and vacuum gauges, install caps on canisters, and record the time at the end of the sampling period.
- 3. Place the sub-slab soil vapor and co-located IA sample, and the first floor IA sample canisters in shipping containers for transportation to laboratory.
- 4. Repeat procedure for all sampling locations.

4.2 SSDS and SVE System Vacuum Monitoring

A network of 14 vacuum monitoring points (MP-1 through MP-14) were installed as part of the SSDS system and three monitoring points (SVMP-01 through SVMP-03) were installed as part of the SVE system during remedial action implementation at strategic locations to inspect induced vacuum conditions during the operation of the SSDS and SVE system. Vacuum will be monitored at these locations at regular intervals as designated in the SMP. The procedures for instantaneously screening the vacuum monitoring points are as follows:

• Slowly remove the access manhole cover.

- Attach the analog vacuum gauge or digital manometer with male Quick-Connect fitting to the female Quick-Connect fitting at the monitoring point and document reading.
- Detach vacuum gauge/manometer and confirm that Quick-Connect female fitting is closed/sealed.
- Replace the access manhole cover and twist to tighten seal.

4.3 Influent/Effluent Vapor Sampling

Confirmatory effluent vapor sampling will be conducted following 6 months and 12 months after startup (and as determined by the SMP and NYSDEC thereafter) as part of a reassessment of VOC emissions calculations according to the following procedure:

- Confirmatory sampling will comprise grab samples from each individual SVE line and combined influent, intermediate and effluent samples, as appropriate.
- A Gilian GilAir plus (or equivalent) pump will be used to extract influent/effluent vapors from each of the sample ports installed on the SVE line. A 1-liter Tedlar bag will be filled with extracted vapors by attaching dedicated silicon-lined or silicon tubing from the sampling port to the inlet of the pump. The Tedlar bag fill port will be attached to the outlet of the pump. Both ports will be opened and the pump will be started. The pump rate will be throttled to fill the 1-liter Tedlar bag in approximately 10 minutes, resulting in a an approximate air flow rate of 0.1 liters per minute. The Tedlar bag will be removed after its fill port has been closed.
- The Tedlar bag will be properly labeled and enclosed in a zip-lock bag which will be used as an added protection layer to ensure safety in transit to the laboratory.
- The tubing used will be replaced after each sample collected.
- Place Tedlar bags in a shipping container for transportation to laboratory (do not put the tedlar bags on ice).
- Samples will be collected in accordance with the QAPP and analyzed for CVOCs by EPA Method TO-15.
- Decontaminate all non-dedicated sampling equipment between sampling locations as described in Section 3.3 of this QAPP.

4.4 Carbon Sampling

Based on monitoring inspections performed during the operation of the SVE system, a representative grab sample of spent carbon will be collected and submitted for laboratory analysis prior to off-site disposal according to the following procedure:

- Access carbon treatment filter in accordance with manufacturer's specification and component manuals.
- Note any visual or field observations.
- Collect one aliquot of spent carbon material into a laboratory supplied sampling container.
- Relinquish sealed sampling container to a certified laboratory for analysis of total VOCs.

4.5 Condensate Water Sampling

Based on monitoring inspections performed during the operation of the SVE system, a representative sample of condensate water will be collected and submitted for laboratory analysis prior to off-site disposal according to the following procedure:

- Slowly remove the lid of the 55-gallon drum containing the collected condensate water and immediately measure the vapor concentrations in the well with a PID calibrated to the manufacturer's specifications.
- Lightly stir the water in the drum with clean, dedicated sample collection equipment or tubing to homogenize the collected condensate water.
- Collect a representative sample directly from a dedicated bailer or tubing connected to a peristaltic pump and place into the required sample containers. Sample should be collected for VOCs and submitted to a NYSDOH-certified laboratory.

4.6 Soil Sampling (If Needed)

Soil sampling will be conducted according to the following procedures:

- Characterize the sample according to the modified Burmister soil classification system.
- Field screen the sample for evidence of contamination (e.g., odors, staining) using visual and olfactory methods and screen for volatile organic compounds (VOCs) using a photoionization detector (PID) equipped with a 10.6 electron Volt (eV) lamp, which has been calibrated to the manufacturer's specifications.
- Record sample location, sample depth, and sample observations (evidence of contamination, PID readings, soil classification, etc.) in the field logbook and boring log data sheet, if applicable.
- Collect an aliquot of soil from each proposed sample location, place into the required laboratory-supplied sample containers as described in Section 4.7 of this QAPP, label the sample in accordance with Section 4.9 of this QAPP, and place in an ice-filled cooler for shipment to the laboratory.
- Conduct soil sampling for per- and polyfluoroalkyl substances (PFAS) in accordance with the April 2023 NYSDEC Sampling, Analysis and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs.
- Complete the chain of custody (COC) paperwork and seal the cooler.
- Decontaminate non-dedicated sampling equipment between sample locations in accordance with Section 3.2 of this QAPP and properly dispose of dedicated sampling equipment.

4.7 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 Environment Testing America - Edison of Edison, New Jersey, a NYSDOH ELAP-certified laboratory subcontracted to AKRF, will be used for all chemical analyses in accordance with the Division of Environmental Remediation (DER)-10 2.1(b) and 2.1(f) with Category B Deliverables.

Matrix	Analysis	EPA Method	Bottle Type	Preservative	Hold Time		
	Volatile Organic Compounds (VOCs)	8260C	EnCore [®] samplers (3) and 2 oz. plastic jar	≤6 °C	48 hours to extract; 14 days to analyze		
	Semivolatile Organic Compounds (SVOCs)	8270D	8 oz. Glass Jar	≤ 6 °C	14 days to extract;40 days to analyze		
	1,4-Dioxane	8270D; 0.1 mg/kg RL	4 oz. Glass Jar	≤ 6 °C	14 days to extract;40 days to analyze		
Soil (if needed)	Total Analyte List (TAL) Metals, and Hexavalent Chromium	6000/7000 Series, 6010C, and 7196A	8 oz. Glass Jar	≤ 6 °C	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 $\leq 6 ^{\circ}\mathrm{C}$		14 days to extract;40 days to analyze		
	Polychlorinated Biphenyls (PCBs)	8082A	8 oz. Glass Jar	≤6 °C	14 days to extract; 40 days to analyze		
	Per- and Polyfluorinated Compounds (PFAS)	1633; 0.2 ng/L RL	4 oz. HDPE Plastic Container	≤6 °C	14 days to extract;40 days to analyze		
Sub-Slab Soil Vapor	VOCs	TO-15	6L Summa Canisters (24-hr flow controllers)	None	30 days		
Indoor Air	Indoor Air VOCs TO-		6L Summa Canisters (24-hr flow controllers)	None	30 days		
Influent/Effluent SVE and SSDS Vapor	CVOCs	TO-15	1L Tedlar Bag	None	72 hours		
Carbon Sampling	VOCs	8260C	EnCore sampler	4°C	48 hours		
Condensate Water Sampling VOCs		8260C	8260C $\begin{array}{c} 3 \ 40 \ \text{mL Glass} \\ \text{Vials} \\ \end{array} \begin{array}{c} \text{HCl to } \text{pH} < 2 \\ \text{and} \le 6 \ ^\circ\text{C} \end{array}$		14 days to analyze		
Notes: EPA - Environmental Protection Agency HDPE – High Density Poly Ethylene							

Table 1Laboratory Analytical Methods

4.8 Quality Control (QC) Sampling

In addition to the laboratory analysis of the groundwater samples, additional analysis will be included for QC measures, as required by the Category B sampling techniques. These samples

will include 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. QC samples will be analyzed for the same parameters as the accompanying samples, with the exception of any trip blanks, which will be analyzed for the VOC list only.

				QC Samples			
Sample Type	Parameters	EPA Method ¹	Field Samples	Duplicate ³	MS/MSD ³	Field Blank	Trip Blank ²
	VOCs	EPA 8260C	TBD	1/20 (TBD)	1/20 (TBD)	1/20 (TBD)	l (Laboratory- Supplied)
Soil	SVOCs, TAL Metals, Mercury, PCBs, Pesticides, and PFAS	EPA 8270D, 6010C/7471B, 8082A, 8081B, and 1633	TBD	1/20 (TBD)	1/20 (TBD)	1/20 (TBD)	NA
Sub-Slab Soil Vapor	VOCs	TO-15	14	1	NA	NA	1 Ambient Air
Indoor Air	VOCs	TO-15	14	1	NA	NA	1 Ambient Air (TBD)
Influent/Intermediate/ Effluent SVE Vapor	CVOCs	TO-15	3	1	NA	NA	1

Table 2Field Sample and QC Sample Quantities

Notes:

MS/MSD - matrix spike/matrix spike duplicate

TBD – To be determined based on planned work activities

NA – Not Applicable

1 - NYSDEC July 2005 ASP Category B deliverables

2 - One trip blank per shipment with VOC analyses

3 - One MS/MSD and Duplicate sample per twenty field samples or sample shipment

4.9 Sample Handling

4.9.1 Sample Identification

All samples will be consistently identified in all field documentation, chain-of-custody (COC) documents, and laboratory reports. All samples will be amended with a collection date at the end of the sample same 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.

4.9.1.1 Site Management (SM) Sample Identification

All samples will be consistently identified in all field documentation, chain-of-custody documents and laboratory reports using an alpha-numeric code. Soil samples collected during the Site Management phase will be identified with "SS-" followed by groundwater monitoring well number. The field duplicate samples will be labeled with a dummy sample location to ensure that they are submitted as blind samples to the laboratory. Trip blanks and field blanks will be identified with "TB" and "FB",

respectively. Table 3 provides examples of the sampling identification scheme for samples collected during the Site management activities.

Table 3Sample Nomenclature

Sample Description	Sample Designation		
Sub-slab soil vapor sample collected from sub-slab soil vapor point MP- 01 on August 1, 2023	MP-01_20230801		
Indoor air sample collected from the cellar of the building on August 1, 2023	IA-01_20230801		
Soil sample (if needed) collected from 1 to 2 feet below basement grade on August 1, 2023	SS-01_1-2_20230801		
SVE effluent sample collected from the effluent port on August 1,2023	SVE-EFF_20230801		

4.9.1.2 Waste Classification

Any waste classification samples (if needed) will be amended with "WC-" and the alphanumeric drum identification. Table 4 provides examples of the sampling identification scheme for proposed waste classification samples.

Table 4Waste Classification Sample Nomenclature

Sample Description	Sample Designation		
Waste classification sample collected from Drum 1 on August 1, 2023	WC-D1 20230801		

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 (except for sub-slab soil vapor or IA samples) 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. 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.

4.10 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.

4.11 Quality Assurance (QA)

All soil and groundwater laboratory analytical data will be reviewed by a third-party validator and a Data Usability Summary Report (DUSR) will be prepared to document the usability and validity of the data. The objective of the third-party validator is to provide an unbiased review to confirm that the laboratory followed all method and reporting requirements, and to provide a basis for making decisions about the minimum quality of environmental data that is sufficient to support risk assessment remedial performance decisions. The quarterly reports will include a detailed description of sampling activities, data summary tables, concentration map showing sample locations and concentrations, DUSR, and laboratory reports.

4.12 Data Quality Objectives (DQOs) and Process

Data Quality Objectives (DQOs) are qualitative and quantitative statements to help ensure that data of known and appropriate quality are obtained during the project. DQOs for sampling activities are determined by evaluating the following five factors:

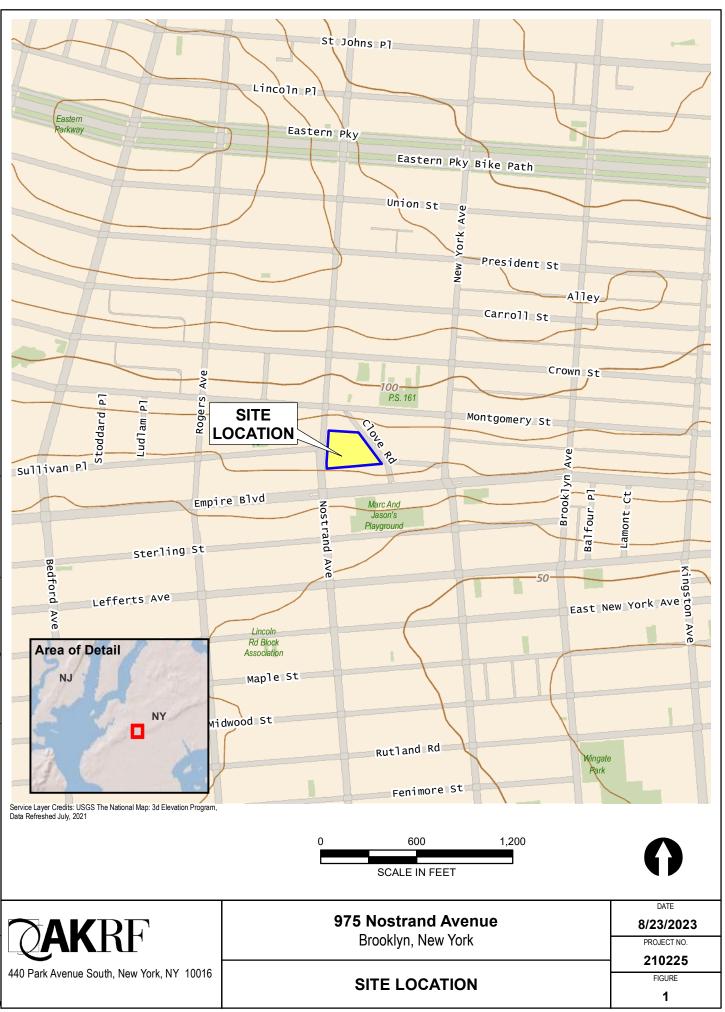
- Data Needs and Uses: The type of data required and how that data will be used after it is obtained.
- Parameters of Interest: The type of chemical or physical parameters required for the intended use.
- Level of Concern: Levels of constituents that may require remedial actions or further investigations.
- Required Analytical Level: The level of data quality, data precision, and QA/QC documentation required for the chemical analysis.
- Required Detection Limits: The detection limits necessary based on the above information. The quality assurance and quality control objectives for all data measurements include:

- Precision an expression of the reproducibility of measurements of the same parameter under a given set of conditions. Field sampling precision will be determined by analyzing duplicate samples and analytical precision will be determined by analyzing internal QC duplicates and/or matrix spike duplicates.
- Accuracy a measure of the degree of agreement of a measured value with the true or expected value of the quantity of concern. For soil samples, accuracy will be determined through the assessment of the analytical results of field blanks and trip blanks for each sample set. Analytical accuracy will be assessed by examining the percent recoveries of surrogate compounds that are added to each sample (organic analyses only), internal standards, laboratory method blanks, instrument calibration, and the percent recoveries of matrix spike compounds added to selected samples and laboratory blanks.
- Representativeness expresses the degree to which sample data accurately and precisely represent a characteristic of a population, parameter variations at a sampling point, or an environmental condition. Representativeness is dependent upon the adequate design of the sampling program and will be satisfied by ensuring that the scope of work is followed and that specified sampling and analysis techniques are used. Representativeness in the laboratory is ensured by compliance to nationally-recognized analytical methods, meeting sample holding times, and maintaining sample integrity while the samples are in the laboratory's possession. This is accomplished by following all applicable methods, laboratory is required to be properly certified and accredited.
- Completeness the percentage of measurements made which are judged to be valid.
 Completeness will be assessed through data validation. The QC objective for completeness is generation of valid data for at least 90 percent of the analyses requested.
- Comparability expresses the degree of confidence with which one data set can be compared to another. The comparability of all data collected for this project will be ensured using several procedures, including standard methods for sampling and analysis as documented in the QAPP, using standard reporting units and reporting formats, and data validation.
- Sensitivity the ability of the instrument or method to detect target analytes at the levels of interest. The project manager will select, with input from the laboratory and QA personnel, sampling and analytical procedures that achieve the required levels of detection

4.13 Reporting of Data

All data generated during the monitoring activities will be submitted in the appropriate EQuIS[™] EDD format.

FIGURE



iszalu 10:32:53 AM map ocation Site Figure 1 and Graphics/SAR\210225 GIS NOSTRAND AVENUE/ **323 AKRF** ATTACHMENT A Resumes of Project Director, Project Manager, Project Manager Alternate, and Field Team Leader

BRIAN QUINN

ENVIRONMENTAL PROFESSIONAL I - SITE ASSESSMENT AND REMEDIATION

Brian Quinn is an Environmental Professional I in AKRF's Site Assessment and Remediation group, with experience in environmental sampling and monitoring during site remediation, subsurface and vapor intrusion investigations, and groundwater remediation system operation and maintenance.

BACKGROUND

Role in Project Field Technician

EDUCATION

B.A. Environmental Studies, Bucknell University, May 2020

CERTIFICATIONS

OSHA 40-hour Hazardous Waste Operations and Emergency Response Training

OSHA 30-hour Construction Safety Training

YEARS OF EXPERIENCE

Date started at AKRF: March 2022

Prior industry experience: Greenstar Environmental Solutions: February 2021- February 2022 (1 year)

RELEVANT EXPERIENCE - AKRF

Construction Oversight and Community Air Monitoring – American Museum of Natural History, Manhattan, New York

AKRF prepared and is implementing a NYCDEP-approved RAP during construction of the new Gilder Center for Science, Education, and Innovation at the AMNH. Mr. Quinn serves as an on-site environmental monitor during construction to ensure compliance with the RAP. His duties include community and work zone air monitoring, overseeing excavation and export of contaminated soil, and documenting the import of environmentally clean backfill.

RELEVANT EXPERIENCE – GREENSTAR ENVIRONMENTAL SOLUTIONS, SOMERSET, NJ

As an Environmental Scientist at Greenstar, Mr. Quinn conducted Phase II subsurface investigations, lowflow groundwater sampling and soil vapor intrusion assessments, and prepared associated technical reports. He also conducted routine O&M of a large groundwater treatment system, and oversaw installation of new extraction wells for system upgrades

VICE PRESIDENT

Rebecca Kinal has over 20 years of experience in the assessment and remediation of soil and groundwater contamination and other hazardous/non-hazardous waste problems. Ms. Kinal's 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, including design of groundwater remediation systems and vapor mitigation systems. She 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 New York City "E-designation" program. As a part of this work, her 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.

BACKGROUND

Education

M.S., Hydrogeology, Rensselaer Polytechnic Institute, 1995 B.S., Civil Engineering, Lafayette College, 1992

Licenses/Certifications

State of New York, P.E. Registration No. 082046, 2004

Years of Experience

Year started in company: 2000 Year started in industry: 1996

RELEVANT EXPERIENCE

White Plains Mall/Hamilton Green

Ms. Kinal 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.

New York City School Construction Authority On-Call Contracts for Environmental Consulting Services, Various Sites, NY

Ms. Kinal serves as the project manager for AKRF's on-call hazardous materials consulting contract with the New York City School Construction Authority for over 8 years. For potential new school sites, assignments include initial due diligence, Phase I environmental site assessments, (ESAs) and subsurface investigation of soil, groundwater, and soil vapor to determine the suitability of a site for development as a school, likely remediation requirements, and associated costs. For sites undergoing design and development, assignments include preparation of remediation plan, contract specifications, and design drawings. The work has also included conducting indoor air quality testing, vapor intrusion assessments, preparation of specifications, supervision of storage tank removals, and investigation and remediation of spills for existing schools. Due to the sensitivity of school sites, work under this contract is often conducted on short notice and during non-school hours.



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USTA National Tennis Center, Queens, NY

AKRF prepared an EIS for the New York City Departments of City Planning (DCP) and Environmental Protection (DEP) as co-lead agencies to analyze the expansion of the National Tennis Center, which includes multiple improvements and construction projects at the USTA campus over several years. As part of the EIS requirements, AKRF prepared a Remedial Action Plan for implementation during the proposed project's construction. In accordance with the RAP, vapor mitigation systems were incorporated into the design for several of the proposed structures at the facility, including two new stadiums, a new transportation center, and several practice court facilities. Ms. Kinal prepared the specifications and design drawings for the vapor mitigation and is providing on-going construction support to review contractor submittals and inspect the vapor barrier and sub-slab depressurization system installations.

Montefiore Medical Center, Various Locations, NY

Ms. Kinal provides due diligence assistance to Montefiore Medical Center (MMC) for the ongoing expansion of their facilities, primarily in the Bronx and Westchester County. She conducts and manages environmental due diligence tasks related to their property transactions, including Phase I Environmental Site Assessments (ESAs), Phase II investigations, and geophysical surveys. She also assists MMC in making decisions with respect to environmental risk issues.

Queens West Development Project, Long Island City, NY

For over 20 years, AKRF has played a key role in advancing the Queens West development, which promises to transform an underused industrial waterfront property into one of largest and most vibrant mixed-use communities just across the East River from the United Nations. AKRF has prepared an Environmental Impact Statement that examines issues pertaining to air quality, land use and community character, economic impacts, historic and archaeological resources, and infrastructure. As part of the project, AKRF also undertook the largest remediation ventures completed to date under the NYSDEC Brownfields Cleanup Program (BCP). Ms. Kinal helped prepare the Remedial Work Plan (RWP) and oversaw the remediation of Parcel 9, a 1.8-acre former industrial site. Remediation includes installation of a sheet pile containment wall, excavation of coal tar- and petroleum-contaminated soil under a temporary structure to control odors during remediation, vapor mitigation for the future buildings, and institutional controls. Upon completion of the remediation activities, Ms. Kinal managed the preparation of a Final Engineering Report (FER) to document the clean-up activities. The NYSDEC issued a Certificate of Completion (COC) for the Parcel 9 site in December 2006. Ms. Kinal continues to oversee post-remediation monitoring and site management activities to ensure that the remedy remains in-place and effective.

Roosevelt Union Free School District, Roosevelt, NY

Ms. Kinal managed environmental investigation and remediation activities for the sites of three new elementary schools and a new middle school in Roosevelt, New York. Remediation activities include removal/closure of contaminated dry wells and underground petroleum storage tanks, and excavation and off-site disposal of petroleum- and pesticide-contaminated soil. Remediation of the new middle school site, which also included a sub-slab depressurization system, was conducted through coordination with the NYSDEC, NYSDOH, New York State Education Department (NYSED), and the local school district. Upon completion of the remediation and school construction, Ms. Kinal managed confirmatory indoor air testing and preparation of a Final Engineering Report to document the site clean-up. The NYSDEC issued a Certificate of Completion and the school was open for the Fall 2008 semester as planned.

Proposed NYC Public School Campus, Bronx, NY

Ms. Kinal provided environmental consulting services to the selected environmental remediation contractor for this former manufactured gas plant in the Mott Haven neighborhood of the Bronx, which was remediated under the NYSDEC BCP. These services included: preparation of an in situ sampling plan and excavation plan for waste



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characterization and disposal; supervision of waste characterization sampling activities; development and implementation of a community air monitoring program during all remediation activities; and daily reporting to the NYC School Construction Authority.

National Grid - Halesite Manufactured Gas Plant Site, Town of Huntington, NY

Ms. Kinal served as the project manager for the remedial design and engineering work associated with remediation of National Grid's former manufactured gas plant (MGP) located in the Town of Huntington. The site is situated in a sensitive location along the waterfront, surround by commercial and residential properties, and half the property where the remediation was conducted is a steep slope. The remedy consisted of soil removal, oxygen injection, and non-aqueous phase liquid recovery. Ms. Kinal developed the remedial work plans, design/construction documents, and managed environmental oversight of the remedial work, including waste characterization and tracking, confirmatory endpoint sampling, air monitoring, and reporting to the NYSDEC. After the remediation work was completed, Ms. Kinal prepared appropriate close-out documentation in accordance with NYSDEC requirements.

Shell Service Station, Millwood, NY

Ms. Kinal planned and oversaw a Phase I Environmental Site Assessment and Phase II Subsurface Investigation of this active gasoline station in northern Westchester County. The Phase I/Phase II investigations were performed for the potential buyer of the property who wished to redevelop it with a more modern service station and convenience store. Ms. Kinal also prepared a conceptual remediation plan to address several areas of petroleum contamination identified during the Phase II. The plan, which was approved by NYSDEC, will be implemented in conjunction with the site redevelopment activities to achieve closure for several spills reported at the site.

Pelham Plaza Shopping Center Site Investigation & Remediation, Pelham Manor, NY

Ms. Kinal managed a Site Investigation at Pelham Plaza, an approximately ten-acre site that formerly contained a manufactured gas plant. The site was investigated under a voluntary clean-up agreement entered into with the NYSDEC by the site owner. The site investigation included advancing over 100 soil borings with continuous soil sampling to bedrock, installing monitoring and recovery wells, and conducting test pitting both indoor and outdoor locations to collect soil and groundwater samples and determine the extent of Non-Aqueous Phase Liquid (NAPL). The investigation also included: soil gas sampling to determine contaminant concentrations in the vapors beneath the foundation of an on-site retail store; sediment sampling in an adjacent creek to identify off-site impacts; and a tidal survey to determine tidal influence on groundwater levels at the site. Ms. Kinal also oversaw interim remedial measures, which include biweekly pumping of recovery wells to remove dense NAPL (DNAPL) from the site subsurface.

Shaws Supermarket Redevelopment Project, New Fairfield, CT

Ms. Kinal managed the Remedial Investigation (RI) for an approximately nine-acre shopping center site that was contaminated by releases from former dry cleaning operations. The site was being redeveloped with a new supermarket and separate retail stores. The investigation included the installation of monitoring wells in the intermediate overburden aquifer and bedrock aquifer, sampling of existing and newly installed wells, geophysical logging in bedrock wells, and pump testing in intermediate and bedrock wells. Ms. Kinal prepared a Remedial Action Work Plan (RAWP) based on results from the RI, which included a groundwater pump and treat system to contain a plume of perchlorethylene (PCE)-contaminated groundwater, and excavation and disposal of contaminated soil in the presumed source area. Following CTDEP approval of the RAWP, Ms. Kinal prepared bid specifications for soil excavation and remediation system installation, and oversaw their implementation. Ms. Kinal also prepared NPDES permit applications for discharges from construction dewatering and the groundwater remediation system, and conducted associated discharge monitoring.



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Yankee Stadium, Bronx, NY

Ms. Kinal performed the hazardous materials analysis for the Draft Environmental Impact Statement for the proposed new Yankee Stadium. The analysis included a Phase I Environmental Site Assessment of the entire project area and Subsurface (Phase II) Investigation in areas where environmental conditions were identified. The Phase II investigation included geophysical surveys to search for potential underground storage tanks; and soil, soil gas, and groundwater sampling at over 40 locations to determine potential environmental impacts during and after the proposed construction. Ms. Kinal also developed an extensive community air monitoring plan and oversaw its implementation during deconstruction of the old Yankee Stadium.

Avalon on the Sound, New Rochelle, NY

Ms. Kinal oversaw environmental investigation and soil remediation during the construction of two luxury highrise apartment buildings and an associated parking garage. Investigation activities included an electromagnetic survey to search for possible underground storage tanks, and subsurface sampling to characterize soil and groundwater. Remediation activities included removing underground storage tanks, excavating and disposing of soil contaminated with volatile and semi-volatile organic compounds, and collecting end-of-excavation confirmation samples.

Davids Island Environmental Audit, New Rochelle, NY

Ms. Kinal managed the hazardous materials portion of the audit of this undeveloped island site, including a Phase I Environmental Site Assessment (ESA) and Subsurface (Phase II) Investigation in areas where environmental conditions were identified. The Phase II investigation included collecting soil samples from more than 100 locations and analyzing them for targeted compounds, including volatile organic compounds, semi-volatile compounds, metals, pesticides, and polychlorinated biphenyls (PCBs). Ms. Kinal also oversaw an electromagnetic (EM) survey conducted to identify the location of suspected underground storage tanks on the island. Based on soil sample results, Ms. Kinal estimated the volume of contaminated soil requiring remediation and prepared cost estimates for soil excavation and for transportation and disposal of contaminated soil and hazardous materials.

Outlet City Site Investigation, Queens, NY

Ms. Kinal prepared a work plan for remedial investigation of the Outlet City site, a property in Long Island City that was formerly occupied by a manufacturer of industrial cleaners and pharmaceuticals. The site is being investigated and remediated under the NYSDEC voluntary clean-up program. In preparing the work plan, Ms. Kinal evaluated results from several previous investigations and conducted a limited groundwater sampling program to determine future data needs for designing remediation of creosote-contaminated soil and groundwater. The work plan included additional soil and groundwater sampling, a tidal survey to determine tidal influence on groundwater levels, and pilot free product recovery testing. Ms. Kinal also helped design a venting system for an on-site basement and performed exposure calculations for the vented vapors.

Yonkers Waterfront Redevelopment Project, Yonkers, NY

For this redevelopment along Yonkers' Hudson River waterfront, Ms. Kinal supervised the remediation of Parcels H and I that were contaminated with hazardous soil. During the remediation process, she reviewed the subcontractor health and safety plans, delineated the areas of excavation, and oversaw field activities to ensure compliance with the specifications and appropriate regulations. This property was remediated under the NYSDEC Environmental Restoration Program (ERP).



VICE PRESIDENT

Mr. Schwendt is a Vice President for AKRF with over 20 years of experience in the environmental consulting field. Mr. Schwendt has extensive experience in Phase II studies involving subsurface soil and groundwater investigations, and has been involved in all aspects of soil and groundwater remediation, including those related to manufactured gas plants (MGP). He has designed, managed and implemented large-scale site investigations and remedial measures for various properties, including those under different regulatory programs such as the New York State Department of Environmental Conservation's (NYSDEC) Voluntary Cleanup Program and Brownfield Cleanup Program, New York State's Spill Response Program, the Mayor's Office of Environmental Remediation (OER) E-Designation Program, New Jersey's Industrial Site Recovery Act (ISRA), and Pennsylvania's Land Recycling program. Mr. Schwendt manages the hazardous materials tasks for the company's Environmental Impact Statements (EISs) and also conducts and manages Phase I Environmental Site Assessments (ESAs) for various individual clients and industries as well as for area-wide rezoning projects.

Mr. Schwendt has extensive experience in underground and aboveground storage tank (UST and AST) management, including tank removals, installations, and upgrades. He has designed and implemented remedial investigations surrounding UST and AST releases and overseen the installation and maintenance of pump-and-treat and other remedial systems. He has performed storage tank compliance audits and maintenance inspections all across the country and prepared Spill Prevention, Control, and Countermeasures Plans (SPCC Plans) for over 100 individual facilities, including designing and conducting the personnel training programs.

Mr. Schwendt worked with several other firms prior to joining AKRF, which provided him with a variety of skills. He has expertise with Chemical Bulk Storage Spill Prevention Reports, Environmental Emergency Response Plans, Integrated Contingency Plans, and multi-phase compliance audits, including some international projects. He has also performed various types of hydrogeologic testing, including pilot tests, slug tests, pump tests and groundwater modeling, and has been responsible for data review and management.

BACKGROUND

Education

B.A., Earth Science and Environmental Studies, Tulane University, 1991M.S., Geology, University of Delaware, 2002

Years of Experience

Year started in company: 2002 Year started in industry: 1995

RELEVANT EXPERIENCE

New York City Department of Design and Construction (NYCDDC) Feasibility and Pre-Scoping Services for East Side Coastal Resiliency, New York, NY

Mr. Schwendt assisted with the subsurface exploration program for a multidisciplinary design team selected by the New York City agency partnership of NYCDDC, New York City Department of Parks and Recreation (NYCDPR), and Office of Recovery and Resiliency (ORR) for the Feasibility Study and Pre-Scoping Services for East Side Coastal Resiliency (ESCR) project. The AKRF Team provided technical analysis and pre-scoping



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services, including complex conceptual design services, for 100+ year storm protection with anticipated sea level rise along the east side of Lower Manhattan. The ESCR subsurface exploration program involved a review of available utility plans and environmental reports involving manufactured gas plant (MGP) and petroleum-related contamination along a 2.5 mile study area from Montgomery Street to East 23rd Street to develop a Subsurface Investigation Work Plan for approval by the New York City Department of Environmental Protection (NYCDEP). The program included both public and private utility mark-out services across vast areas of the project containing critical infrastructure to enable the installation of 81 deep borings, 515 shallow borings, and 10 temporary groundwater wells.

New York City Health and Hospitals Corporation (NYCHHC)'s Post-Sandy mitigation program at Bellevue, Coler-Goldwater, Coney Island, and Metropolitan Hospitals

AKRF is assisting the NYCHHC in the recovery, reconstruction and hazard mitigation of Bellevue Hospital, Coler Hospital, and Coney Island Hospital and other NYCHHC facilities, which were damaged as a result of the Hurricane Sandy disaster. The majority of the funding for these projects will be reimbursed from the Federal Emergency Management Agency (FEMA). AKRF is collecting baseline information and develop study plan and approach, including assessing for critical path approvals, preparing FEMA NEPA Environmental Assessments (EAs), conducting additional studies required by Federal Regulations for FEMA, permitting, and providing design/bid support. Mr. Schwendt is responsible for the hazazrdous materials tasks associated with the program, including conducting Phase I ESAs and subsurface (Phase II) investigations, and preparing necessary work plans and Remedial Action Plans (RAPs)/Construction Health and Safety Plans (CHASPs) for federal, state and city agency review and approval.

NYCDEP Task Order Contracts (TOCs) for Design and Construction Management Services Professional Engineering Design Services and Construction Management (PEDS)

AKRF is currently serving as environmental review and permitting subcontractor under all four NYCDEP TOCs contracts and both PEDS contracts that were recently awarded. In addition to the preparation of environmental review/ULURP documentation and permit applications, AKRF's responsibilities include site selection support, site/civil design, and the preparation of various permit management plans and regulatory compliance tracking in accordance with DEP's Project Delivery Manual. Mr. Schwendt is providing Hazardous Materials consulting services for the TOCs and PEDS contracts, including:

- Prospect Expressway Pump Station Upgrade;
- Clearview Pump Station Reconstruction;
- Rockaway Wastewater Treatment Plant Level 1 Biological Nutrient Removal (BNR) Upgrade; and
- Oakwood Beach Wastewater Treatment Plant Headworks Improvements.

Verdopolis JFK Airport Facility, Queens, NY

On behalf of Verdopolis JFK, AKRF prepared documentation for a New York State Department of Environmental Conservation (NYSDEC) Part 360 Solid Waste Management Facility Permit application. The facility, which would be constructed at the abandoned Hangar 16 site of the John F. Kennedy International Airport (JFK Airport), would process 180,000 tons per year of source separated, pre-consumer organic waste generated largely by food preparation facilities at JFK Airport. Using an anaerobic digestion process, the proposed facility would convert the food waste, which would otherwise be discarded in a landfill or incinerated, into three usable products. Mr. Schwendt assisted in preparing the application package, including preparation of the Engineering Report, Operations and Maintenance Plan, Contingency Plan, Facility Closure Plan, Hiring and Training Plan,



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Chemical Bulk Storage Spill Prevention Report, and the Spill Control Prevention and Countermeasure Plan (SPCC Plan). Mr. Schwendt also prepared a Phase I Environmental Site Assessment (ESA) of the property to ascertain potential environmental conditions that may be exposed during site development activities.

2477 Third Avenue, Bronx, NY

Mr. Schwendt prepared the application to enter the former 2477 Third Avenue gasoline station property into the New York State Department of Environmental Conservation's (NYSDEC) Brownfield Cleanup Program (BCP). Since its acceptance into the program, Mr. Schwendt has been managing and coordinating the remedial investigation of the site, including shallow and deep aquifer groundwater testing, delineation of known areas of soil contamination, soil vapor analyses, and investigation for potential non-aqueous phase liquid (DNAPL) from past industrial activities in the surrounding area. Mr. Schwendt was responsible for developing work plans for approval by the NYSDEC and New York State Department of Health (NYSDOH), and for preparing summary reports for public comment. As part of the project, Mr. Schwendt coordinated with the client, lawyers, and architects of the planned development, tenants of neighboring properties, NYSDEC, NYSDOH, and the New York City Department of Environmental Protection (NYCDEP). Mr. Schwendt is also conducting the work necessary to address a hazardous materials E-Designation assigned to the property.

E-Designation Properties/Voluntary Cleanup Program, New York City, NY

Mr. Schwendt has assisted various public and private clients with addressing E-Designations assigned by the New York City Department of Environmental Protection (NYCDEP) to properties throughout New York City. He has prepared the required Phase I Environmental Site Assessments (Phase I ESAs) and implemented Phase II testing to the satisfaction of the New York Office of Environmental Remediation (OER). Based on the results of the testing, he has prepared Remedial Action Plans (RAPs) and Construction Health and Safety Plans (CHASPs) for approval by the NYCOER, which included strategies for mitigating on-site environmental conditions and plans for incorporating environmental engineering controls into proposed construction projects. Mr. Schwendt's clients promptly receive the Notice of Satisfaction necessary to acquire building permits from the New York City Department of Buildings (DOB). Mr. Schwendt has also managed several projects enrolled in the New York City Voluntary Cleanup Program.

St. George Ferry Terminal, Staten Island, NY

Mr. Schwendt prepared a Spill Prevention, Control, and Countermeasures Plan (SPCC Plan) for the Department of Transportation's (DOT) St. George Ferry Terminal facility in Staten Island. The facility's bulk containers store over 600,000-gallons of petroleum used to fuel boilers and emergency generators, provide oil for maintenance and repair of equipment and vessels, and to fuel the ferry vessels. Mr. Schwendt also consulted the DOT on how to upgrade the facility's fueling systems to comply with the SPCC and New York State Department of Environmental Conservation (NYSDEC) regulations.

Mount Sinai Medical Center, Manhattan, NY

Mr. Schwendt managed the Hazardous Materials task for the environmental assessment of the Mount Sinai Medical Center, which is constructing a 700,000 sf, mixed-use residential and bio-medical research facility building. His work included managing the Phase I Environmental Site Assessment (ESA), Phase II investigation, and preparing the Remedial Action Plan (RAP) and Construction Health and Safety Plan (CHASP) approved by the New York City Department of Environmental Protection (NYCDEP).

Lincoln Center Development Project, New York, NY

On behalf of the Lincoln Center Development Project, Inc., Mr. Schwendt conducted a Subsurface (Phase II) Investigation in the area of an underground storage tank (UST) farm located beneath the lower garage level of the West 62nd Street parking garage at Lincoln Center. The Phase II study was prompted by a request from the New York State Department of Environmental Conservation (NYSDEC) to properly close out the tanks. The tank farm includes seventeen (17) 550-gallon gasoline USTs and one (1) 550-gallon waste oil UST. The purpose of this Phase



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II investigation was to determine whether historic leaks from the tanks had affected the subsurface and to assist with future tank closure activities. The Phase II report was submitted to the NYSDEC for review and included a request to close the tanks in-place instead of removing them due to the structural constraints of the tank farm location. Mr. Schwendt also managed the closure of the 18 USTs to the satisfaction of the NYSDEC.

512-522 Vanderbilt Avenue, Brooklyn, NY

On behalf of the Empire State Development Corporation (ESDC), AKRF was retained to provide hazardous material consulting services in connection with the former gasoline station property located at 512-522 Vanderbilt Avenue. Mr. Schwendt performed a Phase I Environmental Site Assessment (ESA), a geophysical survey of the site, and a soil and groundwater subsurface investigation. Data from the investigation would be used to assess remedial strategies during development of the site.

Whitney Museum of American Art, Gansevoort Facility, New York, NY

AKRF has provided various consulting services in support of the Whitney Museum of American Art's long-term planning requirements. Tasks have included transportation surveys, traffic counts, attendance projections, visual impact and shadow studies, economic benefit studies, and two Environmental Assessment Statements (EASs) for proposed new facilities for the Museum. Mr. Schwendt was responsible for the hazardous materials elements of the assessment, including preparing a Phase I ESA and conducting several Subsurface (Phase II) Investigations for review by the New York City department of Environmental Protection (NYCDEP) and Mayor's Office of Environmental Remediation (OER). Mr. Schwendt prepared and managed the implementation of the OER-approved Remedial Action Plan (RAP) for the construction project and is responsible for satisfying all of the associated regulatory reporting requirements. Environmental work at the site also included mitigating a petroleum spill discovered during site excavation activities and coordinating all remedial efforts with the New York State Department of Environmental Conservation's (NYSDEC) Department of Environmental Remediation (DER).

New York Botanical Garden, Bronx, NY

The New York Botanical Garden (NYBG) proposed to construct an accessory parking garage of approximately 825 spaces at Bedford Park Boulevard and Webster Avenue in the Bronx to provide a parking garage for staff and visitors who cannot be accommodated within NYBG's on-site facilities. Mr. Schwendt was the Project Manager for the environmental assessment's hazardous materials work, which included a Phase I Environmental Site Assessment (ESA), Phase II Investigation and the preparation of a Remedial Action Plan (RAP) and a Construction Health and Safety Plan (CHASP) to the satisfaction of the New York City Department of Environmental monitoring during all subsurface work and preparing the post-construction Closure Report required by the NYCDEP in order to receive the Notice of Satisfaction necessary to obtain occupancy permits from the New York City Department of Buildings (DOB).

Roberto Clemente State Park, Bronx, NY

AKRF participated in the rehabilitation of an existing ballfield, redevelopment of the existing picnic areas, and shoreline restoration along the Harlem River at Roberto Clemente State Park. AKRF is charged with preparing the Joint Permit Application which is necessary to procure the federal, state and local permits and approvals for the shoreline redevelopment. Mr. Schwendt worked with the firm's engineering group to conduct testing to pre-characterize soil to assist with the management of soil during construction. The testing included pre-characterization of soil for on-site reuse in accordance with the New York State Department of Environmental Conservation (NYSDEC) tidal wetland permit requirements and testing for physical parameters required for landscape planning.

Long Island Power Authority (LIPA), Long Island, NY



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Mr. Schwendt managed the preparation of Phase I Environmental Site Assessments and Phase II Investigations, along with the Hazardous Materials chapters for Environmental Impact Statements, for properties owned or to be acquired by LIPA to identify potential sources of environmental contaminants prior to power station and power line installation.

Rose Plaza on the River, Brooklyn, NY

Mr. Schwendt conducted a Subsurface (Phase II) Investigation at the 470 Kent Avenue property located in Brooklyn, New York. The objective of the subsurface investigation was to characterize the subsurface soil and groundwater conditions and determine whether past or present on-site and/or off-site potential sources of contamination have adversely affected the site. Results of the Phase II study were also used to evaluate any potential environmental risks and/or the need for remedial action at the site prior to future development. The proposed development of the site includes the construction of approximately 665 market rate dwelling units and approximately 33,750 square feet of commercial uses. The scope of the Phase II study was based on a Phase I Environmental Site Assessment (January 2004) performed by AKRF, which identified recognized environmental conditions for the site, including the potential for soil and groundwater contamination from a historical on-site manufactured gas plant, and potential underground storage tanks. Phase II activities were conducted in accordance with AKRF's Sampling Protocol and site-specific Health and Safety Plan (HASP), which was reviewed and approved by the New York City Department of Environmental Protection (NYCDEP).

Albert Einstein College of Medicine Environmental Investigation, Bronx, NY

Mr. Schwendt managed a Subsurface (Phase II) Investigation at an approximately eight-acre portion of the Jacobi Medical Center fronting on Eastchester Road in the Bronx, New York. The site, owned by New York City, contained an old boiler house, a storage warehouse, a laundry facility, and several paved parking areas. The objective of the subsurface investigation was to characterize the subsurface conditions on the property and determine whether past or present on-site and/or off-site potential sources of contamination have adversely affected the site.

Storage Deluxe, Various Locations, NY

Mr. Schwendt is currently the project manager for assisting Storage Deluxe with the ongoing expansion of their self-storage facilities primarily in the five boroughs of New York City and Westchester County. He conducts and manages environmental due diligence needs related to their property transactions, including Phase I Environmental Site Assessments (ESAs), Phase II investigations, and geophysical surveys, as well as consulting on petroleum bulk storage tank management. He assists Storage Deluxe in making decisions with respect to environmental risk issues.

South Bronx Overall Economic Development Corporation (SoBRO) Port Morris Brownfield Opportunity Areas (BOA), Bronx, NY

Mr. Schwendt is assisting SoBRO with the in-depth and thorough analysis of existing conditions, opportunities, and reuse potential for properties located in the proposed Port Morris Brownfield Opportunity Area with an emphasis on the identification and reuse potential of strategic brownfield sites that may be catalysts for revitalization. His work so far has included the preparation of Phase I Environmental Site Assessments (ESAs) and conducting Phase II investigations for the catalyst sites and advising on the suitability of enacting zoning changes to permit various property uses. Mr. Schwendt also assisted SoBRO with the BOA application process.

Kings Plaza, LLC Total Energy Plant, Brooklyn, NY

Mr. Schwendt has conducted regular environmental compliance reviews of the Kings Plaza Total Energy Plant (TEP) in Brooklyn, New York. The reviews were conducted to observe operations and to review environmental permits, agency correspondence, operating records, recordkeeping and monitoring procedures, and regulatory reporting requirements. As a result of the review, Mr. Schwendt provided the TEP with recommendations for the



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management of various waste streams and petroleum/chemical bulk storage associated with facility operations and prepared a Spill Control Prevention and Countermeasure Plan (SPCC Plan) for the facility.

270 Greenwich Street, New York NY

Mr. Schwendt conducted a subsurface (Phase II) investigation that included the advancement of soil borings and the collection of soil and groundwater samples from the 270 Greenwich Street property in the Tribeca neighborhood of New York City. The site will be developed with approximately 402 dwelling units (172 rental units and 230 for sale condominiums), approximately 224,084 gross square feet of destination and local retail space, and below-grade public parking. The purpose of this Phase II subsurface investigation was to ascertain subsurface soil and groundwater quality beneath the site and determine whether past on- or off-site operations have affected the property. The subsurface investigation was also intended to determine whether there are any special handling or disposal requirements for pumped groundwater, should dewatering be necessary during site development. The Phase II study included soil and groundwater sampling as well as a geophysical investigation to determine whether unknown underground storage tanks were present at the site. Field activities were performed in accordance with Mr. Schwendt's Sampling Protocol and Health and Safety Plan (HASP), which were approved by the New York City Department of Environmental Protection (NYCDEP).

Columbia University Manhattanville Rezoning and Academic Mixed-Use Development, New York, NY

Mr. Schwendt managed the hazardous materials task on the Environmental Impact Statement (EIS) for approximately 4 million square feet of new academic, research and neighborhood uses to be constructed north of Columbia University's existing Morningside Heights campus. The work included more than 25 Phase I Environmental Site Assessments (ESAs) for the properties within the rezoning area and estimates for upcoming investigation and remediation. In addition, a Preliminary Environmental Site Assessment (PESA) was completed for the whole project area. Recognized environmental concerns in the area included: current and historical underground storage tanks; current and historical auto-related use such as repair shops and gasoline stations; two historical manufactured gas holders; and a Consolidated Edison cooling plant located on West 132nd Street. Mr. Schwendt conducted a subsurface investigation at the site to characterize the subsurface conditions on the property and determine whether past or present on-site and/or off-site potential sources of contamination have adversely affected the study site, and to use the analytical data to evaluate any potential environmental risks and/or the need for remedial action at the site prior to future development. Based on the results of the investigation, Mr. Schwendt prepared a Remedial Action Plan (RAP) and Construction Health and Safety Plan (CHASP) for the project, which was approved by the New York City Department of Environmental Protection (NYCDEP).

Hudson River Park, New York, NY

Mr. Schwendt serves as the on-call environmental consultant for the ongoing development of the Hudson River Park, the approximately 5 to 6 mile section of waterfront property from Battery Place to 59th Street along the western edge of Manhattan. He conducts subsurface investigations, coordinates tank removals, implements soil and groundwater remediations, provides guidance on construction and environmental health and safety issues, interfaces with regulatory agencies as necessary, and manages the mitigation of environmental conditions encountered during site development activities.

Brooklyn Bridge Park, Brooklyn, NY

AKRF is providing environmental planning and review services for the development of a new 70-acre park that will revitalize 1.5 miles of the East River waterfront between Jay Street and Atlantic Avenue. When completed, the park will provide open space, recreational facilities, a hotel, restaurants, and retail, historic, and educational venues. Mr. Schwendt was involved with the completion of the Environmental Impact Statement (EIS) and conducted a Phase I Environmental Site Assessment (ESA) and Phase II Subsurface Investigation for the proposed Brooklyn



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Bridge Park area. He serves as the park's on-call consultant for addressing environmental conditions as development progresses and has conducted several tank removals and contaminated soil delineation and remediation projects for various sections of the park.

Titan Property Management, Rego Park, NY

Mr. Schwendt was involved with an extensive site investigation for a property involved in the New York State Voluntary Cleanup Program. The property was resting on a plume of PCE contamination. The goal of the investigation was to determine whether the property is the source of the contamination and to collect data to provide information for the design and implementation of a site remedial system. The investigation involved extensive soil, soil gas, and groundwater investigation, and included the investigation of surrounding properties.

ABCO Refrigeration Company, Long Island, NY

Mr. Schwendt managed a tank closure and dry well assessment and remediation project for the ABCO Refrigeration Company. Historic contamination was found seeping from the ground in the location of an old underground storage tank, which is believed to be a source of adverse impact. An adjacent drywell was impacted by the tank as well as from past dumping activities of a former typewriter ribbon ink manufacturing company. A site-wide investigation of the ten drywells was also implemented at the request of the Nassau County Department of Health. Mr. Schwendt undertook soil remedial activities that led to the property receiving closure with respect to the underground storage tank. Drywell remedial activities were successful and the site received approval from the United States Environmental Protection Agency (USEPA) to continue use of on-site drywells.

Levin Management Corporation Property—Site Investigation, Pelham Manor, NY

Mr. Schwendt was involved in the site investigation of a former manufactured gas plant (MGP) that handled petroleum off-loading and storage until the late 1950s. Soils have also been observed to have been affected by non-aqueous phase liquid (NAPL) consisting of oil- and tar-like material. Floating or light NAPL (LNAPL) has also been detected in on-site groundwater. The objectives of the site investigation were to collect additional data to further determine the extent of NAPL-affected soil both above and below the water table throughout the site and to further delineate groundwater contamination throughout the site. The site investigation also sought to confirm the on-site groundwater flow direction and that NAPL had not migrated to the downgradient perimeter of the site, including Eastchester Creek. Mr. Schwendt was brought on board for this project for his expertise in soil and groundwater MGP contaminant delineation.

NYCDEP Bureau of Environmental Engineering 26th Ward Wastewater Treatment Plant—Site Investigation, Brooklyn, New York

Mr. Schwendt managed and conducted environmental sampling and testing at the 26th Ward Wastewater Treatment Plant property located in Brooklyn, New York. This investigation was performed to determine the presence or absence of contamination in the soil and groundwater that would affect the proposed construction of a new raw sewage pump station. Mr. Schwendt provided the 26th Ward with the protocol necessary for the special handling and disposal of the excavated soil as well as for the groundwater that would be pumped during dewatering operations.

Olnick Organization, New York, NY

AKRF was retained by the Olnick Organization to prepare and implement an Spill Prevention, Control, and Countermeasures Plan (SPCC Plan) for their aboveground storage tank system for an office building in Manhattan. Mr. Schwendt performed the site inspections and provided the Olnick Organization with a list of recommendations for upgrades to their fuel transfer piping system that would bring the facility into compliance with SPCC regulations. He also provided Olnick with a plan for implementing the required SPCC training program for their facility personnel.



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Site investigations of former MGP Facilities/Properties for Consolidated Edison, New York City, NY & Westchester County, NY

While with another firm, Mr. Schwendt worked on this project, which included a service station in New York City and an electrical substation in Westchester County, New York. Mr. Schwendt performed the site characterizations, including subsurface soil and groundwater impact delineation and aquifer testing. The findings from these characterizations are being used by Consolidated Edison to make appropriate changes to the design specifications and to plan for appropriate handling of impacted materials and health and safety protocols during future construction activities.

UST Site Investigation and Remediation for Consolidated Edison Service Center, Queens, NY

While with another firm, Mr. Schwendt worked on this project, which included due diligence site reviews, soil boring installation, monitoring well installation, hydrogeologic testing, and water quality sampling. Risk-based closures incorporating natural attenuation and groundwater monitoring activities have been proposed. Remedial work plans are under development for other facilities where more aggressive remedial actions are required. Mr. Schwendt also performed subsurface investigations and site characterizations for several other Consolidated Edison facilities including soil-gas surveys and a radiological scoping survey.

Petroleum Bulk Storage Management Program for Bell Atlantic-New York (now Verizon), Manhattan, Brooklyn, Queens, Bronx, Staten Island, and Long Island, NY

While with another firm, Mr. Schwendt personally designed and conducted subsurface investigations for underground storage tank (UST) remediations including characterization of releases, soil and ground water investigations, pilot tests, slug tests, pump tests, groundwater modeling, horizontal and vertical impact delineation, and preparation of compliance documentation for regulatory agencies. He performed oversight of the installation of 'pump and treat' remedial systems and performed maintenance activities. He also supervised UST installations, upgrades and closures; implemented tank tightness testing programs; addressed on-site health and safety issues and other regulatory requirements; prepared closure reports; and managed soil disposal.

Hertz Rent-A-Car Corporate Headquarters, Park Ridge, NJ

While with another firm, Mr. Schwendt served as an in-house consultant/project manager for the environmental department at Hertz's corporate office in Park Ridge, New Jersey. He managed Phase I and Phase II investigations for real estate purchases, leases and acquisitions throughout the United States and Canada. He coordinated Hertz's subcontractors and environmental consulting firms, reviewed reports, and made recommendations to the legal and real estate departments with respect to environmental risk issues.

Temple University, Philadelphia, PA

Mr. Schwendt was a lead auditor for a multi-phase compliance audit of the five campuses of Temple University. The audit included an assessment of all of the Temple University Hospitals, the School of Medicine, the College of Science and Technology, the Tyler School of Art, the College of Engineering, Ambler College (Community and Regional Planning, Horticulture, and Landscape Architecture), the Physical Plant Department, and all university facilities and maintenance departments. Regulatory programs targeted as part of the audit included, but were not limited to, federal and state air and water programs, hazardous waste management, hazardous chemicals and substances, Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) for pesticides, emergency response, Community Right-to-Know, Toxic Substance Control Act (TSCA), and petroleum bulk storage regulations. Following completion of the audit, Mr. Schwendt prepared and implemented an environmental management system that conformed to the needs and culture of the Temple University organization.

University of Pennsylvania, Philadelphia, PA



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Mr. Schwendt was the lead auditor for an environmental compliance audit of the University of Pennsylvania's Department of Environmental Health and Radiation Safety. The audit included an assessment for the preparation and implementation of the university's Spill Prevention, Control, and Countermeasures Plans (SPCC Plans). Mr. Schwendt prepared and implemented the university's environmental management program and provided training for the facility personnel.

Wistar Institute, Philadelphia, PA

Mr. Schwendt was the lead auditor for an environmental compliance audit of the Wistar Institute, an independent non-profit biomedical research institute in West Philadelphia, Pennsylvania. The multi-phase audit comprised an assessment of the entire facility for compliance with federal, state and local environmental regulations and included the development of an environmental management system.

Seton Hall University, South Orange, NJ

Mr. Schwendt was a lead auditor for a multi-phase compliance audit of the Seton Hall University campus. The audit comprised an assessment of the entire facility for compliance with federal and state air and water programs, hazardous waste management programs, hazardous chemicals and substances programs, the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) for pesticides, emergency response and Community Right-to-Know regulations, the Toxic Substance Control Act (TSCA), and petroleum bulk storage regulations. The audit included the development and implementation of an environmental management system for the Seton Hall University faculty and staff.

New York City College of Technology (City Tech) Academic Building, Brooklyn, New York

Mr. Schwendt is assisting the City University of New York (CUNY) and the Dormitory Authority of the State of New York (DASNY) in addressing the E-Designation assigned to the New York City College of Technology (City Tech) redevelopment project site in Brooklyn, New York. CUNY is proposing to construct an eight-story academic building with classrooms, laboratories, administrative space, and underground parking. Mr. Schwendt conducted the required Phase I Environmental Site Assessment (ESA) and Phase II testing to the satisfaction of the Mayor's Office of Environmental Remediation (OER) and will assist CUNY with entering the project site in the City's Voluntary Cleanup Program (VCP). The work will include preparing the required Remedial Action Plan (RAP) and Construction Health and Safety Plan (CHASP) and conducting the necessary environmental monitoring during construction. Mr. Schwendt will also prepare the closure documentation required for CUNY to receive the Notice of Satisfaction necessary to obtain occupancy permits from the New York City Department of Buildings (DOB).

New York University Langone Medical Center, New York, NY

Mr. Schwendt managed the hazardous materials task on the EAS for the NYU Langone Medical Center (NYULMC) development project in Manhattan, New York. NYULMC is in the process of developing the Kimmel Program, which consists of two new buildings on its main campus: the Kimmel Pavilion to house hospital functions and an Energy Building to house a combined heat and power (CHP) plant, primary electric service and emergency generators to support the campus, as well as space for patient care (specifically, radiation oncology). The work included conducting Phase I Environmental Site Assessments and Phase II subsurface investigations at each site to characterize the subsurface environmental conditions at the project site. Based on the results of the investigations, a Remedial Action Plan (RAP) and Construction Health and Safety Plan (CHASP) were prepared for each project phase for submission to the New York City Department of Environmental Protection (NYCDEP) and Mayor's Office of Environmental Remediation (OER). Mr. Schwendt will assist NYULMC by conducting the environmental monitoring required by the agency-approved RAPs/CHASPs as construction progresses, and will prepare the closure documentation required by the agencies to obtain Certificates of Occupancy from the New York City Department of Buildings (DOB).

DASNY Term Environmental Consultant 2006-2012 and 2012-2016, Various Locations, NY



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Mr. Schwendt serves as a hazardous materials task leader under the firm's on-call contract with DASNY, through which AKRF is providing State Environmental Quality Review Act (SEQRA) and City Environmental Quality Review (CEQR) environmental review services for a wide range of educational, healthcare and other institutional projects, as well as specialized technical services in historic and archaeological resources, hazardous materials, traffic, air quality, noise, and natural resources. Mr. Schwendt has also assisted DASNY with addressing E-Designations and by conducting various types of environmental investigations, including Phase I and Phase II assessments.

NYCDEP Permit Resource Division On-Call Contract, New York, NY

Under subcontract to a national engineering firm, and as part of two successive Program Management contracts, AKRF is providing support in a wide range of technical areas related to environmental and engineering permits for NYCDEP capital projects. These services fall into two major categories: preparing detailed guidance documents that will be used by project designers and construction managers on future projects, in order to expedite permit approvals and prevent delays; and providing expert review and guidance regarding permits for current projects, in order to ensure completeness of permit applications and effective coordination with regulatory agencies. The technical areas covered by AKRF include: wetlands, groundwater, surface water, and other natural resources; hazardous materials; traffic and transportation; air quality; noise and vibration; historic and archaeological resources; stormwater management; open space and parkland; and a broad range of permits and approvals from the New York City Fire Department (FDNY), the New York City Police Department (NYPD), the New York City Department of Buildings (NYCDOB), and other municipal agencies. AKRF is also helping NYCDEP improve the overall process for tracking environmental and engineering permits and approvals, from the planning and design phases of a project to construction and long-term operation. Mr. Schwendt provides consulting services related to the hazardous materials issues.



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

College	, 0					3	UNY WESTCHESTER COMMUNITY COLLEGE Valhalla, New York 10595
Center Center	Awards this Certificate of Achievement To	BEYER	for Successfully Completing	VALIDATION COURSE (35 HOURS) Dr. John Samuelian	JST 1992	President	
Westchester Co Professiona	Awards this Certifi	LORI	for Success	ORGANIC DATA VALID	Date AUGUST	Professional Development Center	
Mes							The Professional Development Center

Westchester Community College Dale Boshart Awards this Certificate of Achievement To Professional Development Instructor: for Successfully Completing President INORGANIC DATA VALIDATION Center **MARCH 1993** LORI BEYER Professional Development Center Date _ Parts VIIIV Assistant Dean



The Professional Development Center

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, mauren P.C

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

914 285-6619



The Professional Development Center

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

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The Professional Development Center AT Westchester COMMUNITY COLLEGE 914 285-6619

June 21, 1993

Dear Ms. Beyer:

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

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

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

Very truly yours,

Elaine Sall Program Coordinator

ES/bf

Enclosures





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

STEPHEN SCHMID

ENVIRONMENTAL SCIENTIST

Stephen Schmid is an Environmental Scientist in AKRF's Hazardous Materials Department with five years of experience. He has experience in Phase I and II site assessments, asbestos surveying and monitoring, and construction/remediation. Mr. Schmid is a 2011 graduate from the University of New Hampshire, where he studied marine and freshwater biology, and environmental conservation. Prior to joining AKRF Mr. Schmid conducted fieldwork, water sampling and analysis in addition to assisting in a study of lakes in the North Eastern United States.

BACKGROUND

Education

BS Marine & Freshwater Biology, University of New Hampshire, Durham, NH

Licenses/Certifications

40 Hour OSHA HAZWOPER

10 Hour OSHA Construction Health and Safety

NYS DEC Erosion and Sediment Control Certificate

Asbestos Project Monitor, Air Sampling Technician, Inspector and Investigator

Years of Experience

Year started in company: 2012

Year started in industry: 2011

RELEVANT EXPERIENCE

Willets Point, Queens, NY

AKRF supported the New York City Economic Development Corporation (EDC) with Phase 1 of the Willets Point Redevelopment Plan, which includes the demolition of existing structures. Mr. Schmid performed predemolition asbestos-containing materials and universal waste surveys of approximately 70 structures throughout the 23-acre area site in Queens along with an AKRF licensed NYC asbestos investigator.

Adelaar, Monticello, NY

The project is a multi-phase development consisting of approximately 1,700 acres. The project site has been developed with a mixed-use residential-commercial hotel, casino, water park and entertainment village. AKRF provided acquisition and development support, including performing Phase I and II environmental site assessments. Mr. Schmid provided assistance with Phase I assessments, oversight during remedial soil handling activities and conducted inspections in accordance with the Stormwater Pollution and Prevention Plans.

NYCHA Randolph Houses, W 114th Street, Harlem, NY

AKRF was directed to survey 14 five story affordable housing apartment buildings for potential asbestos containing materials prior to the renovation of the buildings. Mr. Schmid along with AKRF licensed NYC asbestos investigators performed the collection of bulk samples throughout the building's main floors, basements and roofs to confirm the presence of asbestos in some of the building materials.



STEPHEN SCHMID

ENVIRONMENTAL SCIENTIST p. 2

25 Broad Street, Manhattan, NY

AKRF was contracted by LCOR during the demolition of a residential building on a property which will eventually be redeveloped. AKRF was responsible for creating and implementing a community air monitoring program during demolition activities. As the environmental scientist Mr. Schmid was the on-site monitor responsible for calibrating equipment and monitoring levels of volatile organic compounds and particulate matter for the surrounding area and construction personnel. Reports of the daily activity including data collected throughout the day were prepared for submittal to the client.

Kent Avenue, Brooklyn, NY (AKA Northside Piers and 1 North 4th Place)

The project was a multi-phase development consisting of a waterfront block in the Williamsburg Rezoning Area. The project site has been developed with a mixed-use residential-commercial high rise towers with an esplanade and a pier along the East River. AKRF provided acquisition and development support, including performing Phase I and II environmental site assessments, and preparation of Remedial Action Plans (RAPs) and Construction Health and Safety Plan (CHASPs) for approval by DEP and OER. As the environmental scientist Mr. Schmid provided assistance with construction oversight during soil handling activities and managing the Community Air Monitoring Plan (CAMP) activities.

250 North 10th Street, LLC., Residential Redevelopment Site, Brooklyn, NY

AKRF was retained to investigate and remediate this former industrial property in the Williamsburg section of Brooklyn, New York in connection with site redevelopment. The site is approximately 50,000 square feet, and redevelopment included a six story residential building and parking garage. The work was completed to satisfy the requirements of the NYC E-designation Program and NYC Voluntary Cleanup Program (NYC VCP). AKRF completed a Remedial Investigation (RI) to evaluate the nature and extent of site contamination, and developed Action a Remedial Work Plan (RAWP) to properly address site contamination during redevelopment. Remediation included removal of underground storage tanks, more than 7,500 tons of contaminated soil, and installation of a vapor barrier and site cap across the entire property. The remediation was completed under oversight of the NYC Office of Environmental Remediation (OER), and in a manner that has rendered the Site protective of public health and the environment consistent with residential use of the property. As the environmental scientist Mr. Schmid conducted construction oversight and community air monitoring during the removal of contaminated soil.

Pier 40, 353 West Street, New York, NY

AKRF was directed to survey the property for potential asbestos containing materials prior to renovations and upgrades to multiple rooms. As the environmental scientist Mr. Schmid collected bulk samples to test for asbestos along with an AKRF licensed NYC asbestos investigator. Results confirmed the presence of asbestos in some of the rooms and Mr. Schmid subsequently provided project monitoring and the collection of air samples during the abatement.

137-44 94th Avenue, Queens, NY

AKRF was contracted to survey the building for potential asbestos containing materials prior to demolition. As the environmental scientist Mr. Schmid collected bulk samples to test for asbestos along with an AKRF licensed NYC asbestos investigator. Results confirmed the presence of asbestos in an office, trailer and the roof. During abatement Mr. Schmid served as the project monitor and collected daily air samples.

The Home Depot, Rego Park, NY

AKRF has designed, installed and performed upgrades to an air sparging and soil vapor extraction system being used to remediate tetrachloroethene contamination at this site under the NYSDEC Voluntary Cleanup Program. As the environmental scientist Mr. Schmid has performed low flow, indoor air and effluent sampling as part of ongoing monitoring activities to assess the progress of the cleanup.



STEPHEN SCHMID

ENVIRONMENTAL SCIENTIST p. 3

AP-Williamsburg, LLC, 50 North 5th Street Development, Brooklyn, NY

AKRF directed the remedial program at a 55,000-square foot site located in the Williamsburg section of Brooklyn, New York. The site had an industrial and manufacturing history for over 100 years that included a barrel making factory, use of kilns, and a carpet and flooring materials warehouse. AKRF completed a Remedial Investigation (RI) to evaluate the nature and extent of site contamination, and developed a Remedial Action Work Plan (RAWP) to properly address site contamination during redevelopment. Remediation included removal of more than 5,000 tons of contaminated soil, and installation of a vapor barrier and sub-slab depressurization system (SSDS) beneath the site building. The remediation was completed in a manner that has rendered the Site protective of public health and the environment consistent with commercial and residential use of the property, and in accordance with the requirements of the NYC OER E-designation program. The site includes a seven story residential apartment building with street level retail space and a parking garage. As the environmental scientist Mr. Schmid provided oversight and community air monitoring during construction activities.

Gedney Way Leaf and Yard Waste Composting Facility, White Plains, NY

AKRF directed the remediation and landfill closure project at the existing composting facility. The project included investigation to document disposal history, extent of landfill materials and a solvent plume, preparation of a landfill closure plan, and management of landfill closure and cap construction. The landfill investigation and closure activities were completed to satisfy the requirements of a New York State Department of Environmental Conservation's (NYSDEC) consent order, and were completed in compliance with NYSDEC DER-10 and 6NYCRR Part 360. As the environmental scientist Mr. Schmid performed construction oversight and low-flow groundwater sampling during construction activities.

443 Greenwich Street, New York, NY

AKRF was retained to investigate and remediate this property in the Tribeca section of Manhattan, New York in connection with site redevelopment for a multi-story residential building. AKRF completed a Remedial Investigation (RI) to evaluate the nature and extent of site contamination, and developed a Remedial Action Work Plan (RAWP) to properly address site contamination during redevelopment. Remediation included removal of contaminated soil and installation of a vapor barrier. The remediation was completed under oversight of the NYC Office of Environmental Remediation (OER), and in a manner that has rendered the Site protective of public health and the environment consistent with residential use of the property. As the environmental scientist Mr. Schmid conducted construction oversight and community air monitoring during the removal of contaminated soil.

606 W 57th Street, New York, NY

AKRF was retained to investigate and remediate this property in Manhattan, New York in connection with site redevelopment for a multi-story residential structure. The work is being completed to satisfy the requirements of the NYC E-designation Program. AKRF completed a Remedial Investigation (RI) to evaluate the nature and extent of site contamination, and developed a Remedial Action Work Plan (RAWP) to properly address site contamination during redevelopment. Remediation includes removal of underground storage tanks and contaminated soil. The remediation is being completed under oversight of the NYC Office of Environmental Remediation (OER), and in a manner that has rendered the Site protective of public health and the environment consistent with residential use of the property. As the environmental scientist Mr. Schmid conducted construction oversight and community air monitoring during the removal of contaminated soil.

NYCEDC Office of Environmental Remediation (OER) On-Call Environmental Consulting Services

Second Farms, Bronx, NY

AKRF, Inc. was contracted by OER to conduct a subsurface investigation of a 1.12-acre parcel in the Bronx, New York under the United States Environmental Protection Agency (USEPA) Brownfield Assessment Grant program.



STEPHEN SCHMID

ENVIRONMENTAL SCIENTIST p. 4

As the environmental scientist Mr. Schmid assisted in the investigation which included a geophysical survey and utility mark-outs, and the collection and analysis of soil, groundwater, soil vapor, indoor air and ambient air samples.

Former Nelson Foundry, Long Island City, NY

AKRF, Inc. was contracted by OER to conduct a subsurface investigation around the perimeter of a former foundry property in Long Island City, New York under the USEPA Brownfield Assessment Grant program. The work included preparation of a rigorous investigation work plan, Quality Assurance Project Plan, and Health and Safety Plan. The investigation will include a geophysical survey and utility mark-outs and the collection and analysis of soil, groundwater, soil vapor, and ambient air samples. The project also requires careful coordination of investigation-derived waste due to lack of on-site storage and daily drum pick-ups. As the environmental scientist Mr. Schmid conducted low flow sampling for the analysis of groundwater.



Ashutosh Sharma

Senior Environmental Professional

Ashutosh Sharma is an Environmental Scientist with over 10 years of experience in the environmental consulting field. He has managed and implemented investigations and remedial measures for various properties, including those under different regulatory programs such as the New York State Department of Environmental Conservation's (NYSDEC) Voluntary Cleanup Program and Brownfield Cleanup Program, New York State's Spill Response Program, the Mayor's Office of Environmental Remediation (OER) E-Designation Program. Mr. Sharma has extensive experience in Phase I and Phase II (subsurface) site assessment and remedial investigation, remediation and cleanup of contaminated sites, and construction oversight. He has experience with subsurface soil, groundwater and sub-slab air/vapor sampling procedures, coordinating and running Community Air Monitoring Plans (CAMP) and is familiar with relevant United States Environmental Protection Agency (USEPA), New York State Department of Environmental Conservation (NYSDEC), and New York City Department of Environmental Protection (NYCDEP) environmental laws and regulations.

Background

Education

M.S., Environmental Science, New Jersey Institute of Technology, 2007 B.Tech, Dr. B.R. Ambedkar National Institute of Technology, India, 2005

Years of Experience

Year started in industry: 2007 Year started in company: 2007

Relevant Experience

New York City School Construction Authority: On Call Environmental Consulting

Under an on-call contract, AKRF provides the New York City School Construction Authority (NYCSCA) with hazardous materials consulting services. Mr. Sharma has provided assistance with various environmental assessment tasks including Phase II (Subsurface) Environmental Site Investigations (soil, groundwater and soil gas investigations); Indoor Air Quality (IAQ) and Vapor Intrusion (VI) Assessments; and Underground Storage Tank (UST) investigations. He evaluates the results of the investigations in the context of applicable environmental regulations to assist the project manager and/or project engineer in developing recommendations for remedial actions. Mr. Sharma also provided assistance with the lead in drinking water and plumbing disinfection tasks under the current on-call contract. AKRF also oversees plumbing disinfection work, which is required prior to new plumbing being placed into service. The assignments involve reviewing and commenting on disinfection plans, supervision of the disinfection and confirmation testing, and preparation of reports documenting the work was conducted in accordance with the specifications and applicable requirements. Due to the sensitivity of school sites, work under this contract is often conducted on short notice and during non-school hours.

RXR Realty, NY: Multiple Projects

AKRF has worked with RXR Realty on multiple projects and provided services for completion of Phase I Environmental Site Assessments (ESAs), implemented Phase II Environmental Site Investigations (ESI) and soil waste characterization sampling. Mr. Sharma acted as project manager, overseeing field personnel

implementing the Phase I ESA site reconnaissance the subsurface investigations, as well as completing reports for delivery to the client.

Larkin Plaza, Yonkers, NY

RXR SoYo Exalta LLC enrolled in the New York State Brownfield Cleanup Program (NYS BCP) to investigate and remediate the property located at 25 Warburton Avenue in Yonkers, NY. Mr. Sharma assisted the client in preparing the application to enroll the site in the NYS BCP program. Mr. Sharma acted as the project manager for the project and prepared the Remedial Investigation Work Plan (RIWP). the Remedial Investigation Report (RIR), the Interim Remedial Measure Work Plan (IRMWP), the Remedial Action Work Plan (RAWP), the Interim Remedial Measures Construction Completion Report and the Site Management Plan (SMP) for the BCP site. Mr. Sharma also managed the field implementation of the remedial investigation and site cleanup activities during the development. Mr. Sharma maintained constant communication with the NYS Department of Environmental Conservation (NYSDEC) project manager and the client during the site redevelopment.

810 Fulton Street, Brooklyn, NY

RXR 810 Fulton Owner LLC developed the property located at 810 Fulton Street in Brooklyn. Mr. Sharma acted as project manager, overseeing field personnel implementing the requirements of the NYC Office of Environmental Remediation (OER)-approved Remedial Action Plan (RAP). Mr. Sharma also coordinated with the OER on behalf of the client on the day to day activities during the remedial action. Mr. Sharma also completed reports for delivery to the client and OER.

Lambert Houses, Bronx, NY

988 East 180th Street Housing Development Fund Corporation enrolled in the New York City Voluntary Cleanup Program (NYC VCP) to investigate and remediate the property located at 988 East 180th Street in the Bronx. Mr. Sharma acted as the deputy project manager overseeing field personnel implementing the construction oversight during site redevelopment, and coordinated with the client and their subcontractors. Mr. Sharma prepared the spill investigation work plan, coordinated spill cleanup and prepared the spill closure report to address the petroleum spill encountered during site redevelopment.

Melrose Commons Site C, Bronx, NY

The Bridge Inc. enrolled in the New York City Voluntary Cleanup Program (NYC VCP) to investigate and remediate the property located at 988 East 18th Street in the Bronx. Mr. Sharma acted as the deputy project manager overseeing field personnel implementing the construction oversight during site redevelopment, and coordinated with the client and their subcontractors. Mr. Sharma prepared the remedial closure report for delivery to the client.

Essex Crossing Sites 1, 2, 3, 4, 5, 6, and 8, Manhattan, NY

AKRF provided various services during the redevelopment of the Essex Crossing sites in the lower east of Manhattan. Mr. Sharma acted as the deputy project manager overseeing field personnel implementing the construction oversight during site redevelopment, and coordinated with the client and their subcontractors. Mr. Sharma also coordinated spill cleanups and prepared the spill closure reports to address the multiple petroleum spills encountered during redevelopment. Mr. Sharma also coordinated with the client and the New York City Department of Housing & Preservation (HPD) during the implementation of the NYC Department of Environmental Protection (DEP)-approved Remedial Action Plan (RAP). Mr. Sharma also completed reports for delivery to the client.

NYU Langone Medical Center (NYULMC) - Kimmel Pavilion, New York, NY

New York University Langone Medical Center enrolled in the New York City Voluntary Cleanup Program (NYC VCP) to investigate and remediate the property located at 424 East 34th Street in Manhattan. The proposed development consisted of a new medical facility. Mr. Sharma acted as the deputy project manager overseeing field personnel implementing the construction oversight during site redevelopment, and coordinated with the client and their subcontractors.

551 Tenth Avenue, New York, NY

Extell 4110 LLC enrolled in the New York City Voluntary Cleanup Program (NYC VCP) to investigate and remediate the property located at 547-551 Tenth Avenue in Manhattan. The property was developed with a 52-story residential building with one sub-grade level. Mr. Sharma provided construction oversight during site excavation, spill remediation, coordination and management of soil removal and fill material imports, oversight of the on-site air monitoring program, identification and proper management of contamination encountered during excavation work, and maintenance of critical paperwork and preparation of the final closure report.

Zerega Avenue - Phase I, Phase II and Wetland Survey, Bronx, NY

AKRF was contracted by EDC to conduct perform environmental services at an approximately 255,000square foot project area located at 530 to 590 Zerega Avenue, Bronx, New York. The work included a Phase I Environmental Site Assessment (ESA), and Phase II Environmental Site Investigation which included preparation of a site-specific health and safety plan, a geophysical survey and utility mark-outs, and the collection and analysis of soil, groundwater, soil vapor, indoor air and ambient air samples. Mr. Sharma provided assistance with subsurface soil, groundwater and soil gas investigation as part of the Phase II investigation of the project site.

Rego Park Home Depot, Queens, NY

Solvent contamination was encountered during retail development of a former industrial property in Rego Park, Queens, New York. The site work included an extensive investigation and a multi-phase remediation performed under the NYSDEC Voluntary Cleanup Program (BCP). Remediation included removal of aboveground and underground storage tanks (ASTs and USTs) and hotspot soil removal. An Air Sparging/Soil Vapor Extraction (AS/SVE) groundwater remediation system designed by AKRF was installed as part of the building construction. Continued remediation work included upgrading and expanding the AS/SVE system after the store was opened. AKRF prepared the Final Engineering Report and obtained closure with a Release and Covenant Not to Sue issued by NYSDEC in 2013. AKRF continues operations, maintenance, and monitoring under the NYSDEC-approved Site Management Plan. Mr. Sharma assisted with ongoing operation, maintenance and monitoring of the AS/SVE system.

TF Cornerstone - 606 West 57th Street, New York, NY

AKRF has been retained by TF Cornerstone to provide environmental services for the proposed redevelopment of a portion of the block bounded by Eleventh and Twelfth Avenues and West 56th and 57th Streets. The proposed actions include a zoning map amendment, zoning text amendments, a special permit, and an authorization to facilitate development of approximately 1.2 million square feet of residential and retail space. AKRF is currently preparing an Environmental Impact Statement (EIS) for the New York City Department of City Planning (DCP) to analyze the effects of the proposed actions and development of the proposed building. The EIS will address the full range of environmental impacts associated with the proposed development. As part of the project's review, AKRF also prepared documents and graphics submitted to DCP under its Blue PRint program, a pre-application process that presents basic project information to DCP and clarifies major issues prior to the filing of a land use- or zoning-related application. The process is intended to standardize the pre-application process and expedite DCP's overall project review. Mr. Sharma was responsible for contractor oversight for the spill remediation activities as requested by the NYSDEC.

Whitney Museum of American Art, NY

Mr. Sharma provided assistance with subsurface soil and groundwater investigation, construction oversight and soil disposal management during the remediation phase of the project. The project included the construction of an approximately 230,000-square foot museum building with one sub-grade level with exhibition galleries, administrative offices, accessory use (café and bookstore), storage space, and an approximately 4,000-square foot restaurant.

Yankee Stadium Demolition, Bronx, NY

The New York City Economic Development Corporation (NYCEDC) project included demolition of the old Yankee Stadium and construction of a ball field known as Heritage Field. Mr. Sharma provided air monitoring and remedial action plan (RAP) oversight during the demolition and soil disturbance work.

East River Science Park, New York, NY

The New York City Economic Development Corporation (NYCEDC) proposed to construct two seventeen-story buildings to serve as a biomedical research center. The space between the two towers included an elevated atrium and an outdoor plaza on top of a parking garage. Mr. Sharma provided construction oversight during site excavation, coordination and management of soil removal and fill material imports, oversight of the on-site air monitoring program, identification and proper management of contamination encountered during excavation work, and maintenance of critical paperwork and preparation of the final closure report.

W 61st Street Site, NY

Mr. Sharma provided assistance with construction oversight during site excavation activities and helped prepare the final closure report for the site which, as part of the Brownfield Cleanup Program (BCP), was slated for redevelopment as two residential buildings with a courtyard and a tennis court.

164 Kent Avenue, Brooklyn, NY

The project was a multi-phase development consisting of a large waterfront block in the Williamsburg Rezoning Area. The project site has been developed with a mixed-use residential-commercial high rise towers with an esplanade and a pier along the East River. AKRF provided acquisition and development support, including performing Phase I and II environmental site assessments, and preparation of Remedial Action Plans (RAPs) and Construction Health and Safety Plan (CHASPs) for approval by DEP and OER. AKRF provided assistance with construction oversight during soil handling activities and managing the Community Air Monitoring Plan (CAMP) activities. To date, closure reports have been prepared and occupancy achieved for three of the four buildings. Mr. Sharma provided construction oversight during soil handling activities and running the Community Air Monitoring Plan (CAMP).

285 Jay Street, Brooklyn, NY

Under contract with the Dormitory Authority of the State New York (DASNY), AKRF completed a Phase II Subsurface investigation at the site of a proposed CUNY educational building to satisfy New York City Edesignation requirements. As part of the work AKRF performed at the site, Mr. Sharma conducted subsurface soil and groundwater investigation work and coordinated with the driller and the property owner for successful completion of the work. Mr. Sharma prepared the remedial closure report for delivery to the client.

MTA Long Island Railroad, East Side Access Project, New York, NY

The Metropolitan Transportation Authority (MTA) sponsored the East Side Access project to connect the Long Island Railroad to the Grand Central Terminal, thereby allowing Long Island commuters direct access to the East Side of Manhattan. Mr. Sharma provided assistance with the execution of the Community Air Monitoring Plan (CAMP) at various locations during the construction phase.

Adam Clayton Powell Jr. Boulevard, New York, NY

AKRF performed a Phase II study to meet the requirements of the New York City Department of Environmental Protection (NYCDEP) and to determine whether subsurface conditions had been affected by the on-site and/or off-site petroleum storage tanks and to ascertain whether current or former on- or off-site activities had adversely affected the subject property. Mr. Sharma conducted sub-surface soil and groundwater investigation at the abandoned site slated for future development. He was responsible for coordinating with the driller and the property owner for successful completion of the work.

APPENDIX H SITE MANAGEMENT INSPECTION FORMS

AKRF, Inc.

Annual Site-Wide Inspection

Overview of Annual Site-Wide Inspection requirements:

1) General Site conditions at time of inspection;

2) SMP-related Site Activities being conducted, upcoming SMP-related tasks;

3) Institutional Control (IC) Checklist (SMP, EWP maintained on-Site, routine SMP tasks being conducted);

4) Evaluation of Engineering Controls; and

5) Site Documentation.

1) General Site conditions at time of inspection:

NAME:	DATE:
TIME:	WEATHER:
Annual Inspection or Emergency Inspection (if emer	gency, specify nature)?
Notes:	
2) Are any SMP-related site activities currently be	eing conducted (SSDS and SVE Operation)?

Notes/Details:

3) IC Checklist (SMP maintained on-Site, routine SMP tasks being conducted)

Copy of SMP on-Site?	YES	
Building Use Still Consistent with SMP (Restricted Residential)?	YES	

Have the required SMP tasks been conducted during the reporting period?

SSDS inspections/monitoring	YES		
SVE system monitoring	YES		
Notes:		 	

4) Evaluation of ECs

Environmental Control Type: SVE System							
Is the SVE system currently operating? If no, describe reason/alarm condition(s):	YES						
Are the various gauges and components of system and the digital control panel clean?	YES	NO					
Have any problems occurred that require corrective action to the treatment system components or well access manifolds? If yes, describe:	VES	NO					

SVE System operations have also been documented using the applicable inspections logs (see attached) that will be provided as part of the PRR.

Notes:

Environmental Control Type: Active SSDS								
Are there any unusual odors, spills or leaks near the SSDS piping in the basement? If yes, describe source and plans for repair:	YES	NO						
Are the above grade components of the SSDS clean?	VES	NO						
Is the SSDS blower running? If yes, describe:	T YES	NO						
Any evidence of SSDS piping tampering, vandalism or damage on the SSDS piping or system components? If yes, describe:	VES							
Notes:								

5) Site documentation

Including updates regarding notification to NYSDEC regarding any changes to Site conditions/operations, routine reporting to NYSDEC, etc.).

Notes:_____

APPENDIX I SOIL VAPOR SAMPLING LOGS

ØAK RF			Soil Vapor Sample Log
AKRF Project No:	210225	Point Installed By:	
Project Location:	975 Nostrand Avenue	Installation Method:	
Client:	Nostrand Green LLC	Sampled By:	
Date:		Weather:	
		Sample Setup	
Vapor Point Depth:	Inches	Total Time of Purge:	minutes
Purging Pump:		Purge Volume:	Liters
Pump Flow Rate*:	L/min	Purged Vapor PID:	ppb
		Helium Concentration:	%
		Sample Identification	
Soil Vapor Point ID:		SUMMA [®] Canister ID:	
Flow Controller ID:		Soil Vapor Sample ID:	
		Sample Collection	
Time	Vacuum (in/Hg)	Background PID	Notes
Time Started:			
Time Halfway:			
Time Stopped:			
	*Purge flow rate not to exceed	0.2 L/min.	
Notes:	ND = non	-detect ppm = parts per mill	lion L/min = Liters per minute
	Soil vapor sample	collected in a -L SUMMA [®] car	nister using a -hour flow controller.

APPENDIX J SSDS INSPECTION LOG

	SSD	S MONITORING		ORM			
		975 Nostra Brooki					
Inspector Name:			Date:				
Time In: General			Time Out:				
Weather:	Temperature:		Barometric Pres	sure:			
When was the last rain ev							
Are the blowers currently If no, please list reason/ala							
	impering, vandalism or damage	in the first floor e	quipment room?	-			
Is air discharging from the	exhaust piping to the roof? -						
Any evidence of system ta	impering, vandalism, or damage	e to the exhaust s	tack? -				
	1 0, , , , , , , , , , , , , , , , , , ,						
Were all cleanout/samplin	g port caps securely attached p	rior to system tes	ting? -				
If no, list location and cont	act Project Manager/Project Di	rector.					
Is the concrete floor slab o	overlying all of the SSDS piping	runs intact? -					
If no, list location and cont	act Project Manager/Project Di	rector.					
Monitoring Point (MP)		SSDS Op	erations Applied	Induced			
or Riser (R) Identification	Location	Flow Rate ¹	Vacuum ¹	Vacuum ²	Notes		
MP-1	Garage (north)	cfm NA	in. H ₂ O NA	in. H ₂ O			
MP-2	Garage (center-west)	NA	NA				
MP-3	Garage (center-east)	NA	NA				
MP-4	Garage (SVE/SSDS room)	NA	NA				
MP-5	Garage (southeast)	NA	NA				
MP-6	Water Meter Room	NA	NA				
MP-7	Hallway	NA	NA				
MP-8	MDF Room	NA	NA				
MP-9	Garage	NA	NA				
MP-10	Garage	NA	NA				
MP-11	Garage	NA	NA				
MP-12	Next to GMR	NA	NA				
MP-13	Next to Stair C	NA	NA				
MP-14							
	Next to Ramp SSDS/SVE Room	NA	NA				
R-1	(Southwest) SSDS/SVE Room			NA			
R-2	(Southwest)			NA			
R-3	SSDS/SVE Room (Southwest)			NA			
R-4	SSDS/SVE Room (Southwest)			NA			
R-5	SSDS/SVE Room (Southwest)			NA			
R-6	SSDS/SVE Room (Southwest)			NA			
R-7	SSDS/SVE Room (Southwest)			NA			
R-8	SSDS/SVE Room (Southwest)			NA			
R-9	SSDS/SVE Room			NA			
R-10	(Southwest) SSDS Room (East)			NA			
R-11	SSDS Room (East)			NA			
R-12	SSDS Room (East)			NA			
R-13	SSDS Room (East)			NA			
R-14	SSDS Room (East)			NA			
R-15	SSDS Room (East)			NA			
	applied vacuum on VR-2 riser		, VR-4 rise	er=			
Vaccum readings: SF-2=	, SF-3= , SF	-4	<u> </u>	<u> </u>			
Notes: 1. Normal system flow rat	tes range from 40 to 100 cfm. A	opplied vacuum re	adings range fro	m 1 to 15 in. H ₂ O.	System readings will be obtained		
from each riser leg (R-1 th	rough R-5).			-			
(MP-1 through MP-14).					obtained from each monitoring point		
If observations are con	firmed to be outside of this rang	je, inform emerge	ency contacts bel	ow and prepare co	rrective action plan, if necessary.		
in. of H ₂ O - inches of wate							
cfm - cubic feet per minut NA - not applicable	e						
not applicable							

APPENDIX K SSDS Shutdown Log

SSDS System Shutdown Log TRACKING FORM

975 Nostrand Avenue, Brooklyn, NY

Date	Time	Message	Unusual conditions on Restart arrival successful?		Description of persistant problem(s)
MM/DD/YY	HH:MM	Alarm	fan shut down.	Yes	

APPENDIX L SVES INSPECTION AND SAMPLING LOGS

	MONT	SVE INSPECTION HLY SOIL VAPOR EXTRACTION 975 Nostrand Avenue, E	ON SYSTEM INSPECTION					
Inspector Nan	ne:	Date:						
Time IN:	-	Time OUT:	Time OUT:					
GENERAL								
Weather:	Temperature:	Barometric Pressure:	Equipment Room Temperature:					
When was the	last rain event?							
	wer currently operating? Yes / T PROJECT MANAGER and	No (circle one) please list reason/alarm conditio	n:					
What is the VF	D setting?							
lf under 30 l	Hz, ALERT PROJECT MANA	GER:						
	in the knockout tank gauge be T PROJECT MANAGER and I	low the low-high float sensor? Y nanually drain knockout tank	′es / No (circle one)					
	np working? Yes / No (circle or T PROJECT MANAGER.	ne)						
ls 50-gallon dru	um full? Yes / No (circle one)							
lf yes, ackno	owledge alarm on panel and A	LERT PROJECT MANAGER.						
Any evidence of	of system tampering, vandalisr	n or damage? Yes / No (circle o	one)					
If yes, ALERT	PROJECT MANAGER and pl	ease note findings:						
-	of system tampering, vandalisr PROJECT MANAGER and pl	n or damage to the exhaust stac ease note findings:	k? Yes / No (circle one)					
		ompleted along with the samplin er million: NA - Not applicable: (g log for each sampling event. GAC - Granular Activated Carbon					
Comments:	,,, Fair F	<i>,</i> , , , , , , , , , , , , , , , , , ,						
		Emergency Contact Information	n					
	Name	Title	Contact Number					
	Ashutosh Sharma Joseph Kohl Riggs	AKRF Project Manager Owner's Representative	646-388-9865 (office) 718-473-9663 (office)					

	MONT	THLY SOIL VAPO	E INSPECTION R EXTRACTION rand Avenue, E	ON SYSTEM IN	ISPECTION
CALI	PROJECT MAN	AGER IF READIN	SVE Operatio	on CCEPTABLE/	TYPICAL RANGE (IN GRAY)
	Pre-Blower Inlet Temperature (°F):		Post-Blower Outlet Temperature (°F): 70-110°F		Knockout Tank Vacuum (Inches of water column): 0-90 inH2O
Pre-filter Vacuum (Inches 0-90 inH2O	of water column):	Post-filter Vacuur 0-90 inH2O	m (Inches of w	ater column):	Post-Blower Pressure (Inches of water column): 0-90 inH2O
GAC Influent PID (ppm):		GAC Intermediate PID (ppm): Less than GAC Influent PID			GAC Effluent PID (ppm): 0 ppm
Monitoring Location	Vacuum Reading "H2O Between 0 and 90 "H2O	Air Flow Reading "H2O Between 0.000 and 0.050 "H2O	Air Flow Reading CFM		Notes
SVE-01					
SVE-02					
SVE-03					
SVE-04					

nspector Nar	ne:			Date:			
Time IN:			Time OUT:				
Location	Start Time	Start Vacuum	End Time	End Vacuum	PID Field Screen	Sample ID	Notes
SVE Carbon Influent							
SVE Carbon Intermediate							
SVE Carbon Effluent							
Comments:							

APPENDIX M SVES MANUFACTURER'S SPECIFICATIONS AND MANUALS



460 West Gay Street West Chester, PA 19380

AWT ENVIRONMENTAL 22-60 46TH STREET ASTORIA, NY 11105

RENTAL O&M

PO# 18261

EQUIPTMENT DESCRIPTION: GASHO RENTAL PACKAGE TO INCLUDE: AMETEK MODEL DR979, 20 HP TEFC MOTOR, DILUTION VALVE ASSEMBLY, GX 90 MOISTURE SEPARATOR, SOUND ENCLOSURE, NEMA 4 CONTROL PANEL

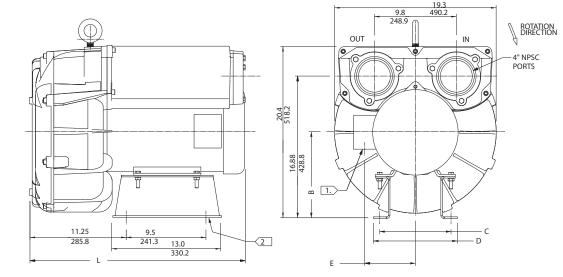
> 3595 September 8, 2022

Industrial / Chemical Processing Blowers

ROTRON[®]

DR 979 & CP 979

15.0 / 20.0 HP Regenerative Blower



IN MM NOTES

1) TERMINAL BOX CONNECTOR HOLE 1.09 DIA. (DR979BE72W) 1.375 DIA. (DR979BH72W).

2>.75 (19.1) X 2.00 (50.8) 4X MOUNTING SLOTS.

2 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.

3 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

MODEL	L (IN/MM)	B (IN/MM)	C (IN/MM)	D (IN/MM)	E (IN/MM)
DR979BH72W	29.0/736.6	12.25/311.2	11.50/292.1	13.19/335	8.09/205.5
DR979BE72W	25.38/644.6	10.25/260.4	8.38/212.9	9.88/250.9	6.88/174.8
DR979BE86W	25.81/655.6	10.25/260.4	8.38/212.9	9.88/250.9	6.88/174.8

		*					
		Part/ Model Number					
		DR979BH72W	DR979BE72W	DR979BE86W	DR979BH86W	CP979FJ72WLR	HiE979BE72W
Specification	Units	080718	080704	080702	080719	081777	
Motor Enclosure - Shaft Mtl.	-	TEFC-CS	TEFC-CS	TEFC-CS	TEFC-CS	CHEM TEFC-SS	TEFC-CS
Horsepower	-	20	15	15	20	15	20
Voltage	AC	230/460	230/460	575	575	230/460	230/460
Phase - Frequency	-	Three-60 hz	Three-60 hz	Three-60 hz	Three-60 hz	Three-60 hz	Three-60 hz
Insulation Class	-	Н	н	н	Н	Н	Н
NEMA Rated Motor Amps	Amps (A)	46/23	44/22	14.6	46/23	44/22	44/22
Service Factor	-	1.15	1.25	1.15	1.15	1.25	1.25
Max. Blower Amps	Amps (A)	60/30	52/26	21	66/33	52/26	52/26
Locked Rotor Amps	Amps (A)	294/147	290/145	93	294/147	290/145	290/145
NEMA Starter Size	- 1	3/2	2/2	2	3/2	2/2	2/2
Chinning Weight	Lbs	350	300	300	350	300	300
Shipping Weight	Kg	158.8	136.1	136.1	158.8	136.1	136.1

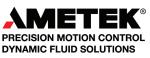
Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: 208-230/415-460 VAC-3 ph-60 Hz and 190-208/380-415 VAC-3 ph-50 Hz. Our dual voltage 1 phase motors are factory tested and certified to operate on both: 104-115/208-230 VAC-1 ph-60 Hz and 100-110/200-220 VAC-1 ph-50 Hz. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

This document is for informational purposes only and should not be considered as a binding description of the products or their performance in all applications. The performance data on this page depicts typical performance under controlled laboratory conditions. AMETEK is not responsible for blowers driven beyond factory specified speed, temperature, pressure, flow or without proper alignment. Actual performance will vary depending on the operating environment and application. AMETEK products are not designed for and should not be used in medical life support applications. AMETEK reserves the right to revise its products without notification. The above characteristics represent standard products. For product designed to meet specific applications, contact AMETEK Technical & Industrial Products Sales department.





Industrial / Chemical Processing Blowers

DR 979 & CP 979

15.0 / 20.0 HP Regenerative Blower

FEATURES

- Manufactured in the USA ISO 9001 and NAFTA compliant
- CE compliant Declaration of Conformity on file
- Maximum flow: 1100 SCFM
- Maximum pressure: 80 IWG
- Maximum vacuum: 87 IWG
- Standard motor: 15 HP, TEFC
- Cast aluminum blower housing, impeller & cover; cast iron flanges (threaded)
- · UL & CSA approved motor with permanently sealed ball bearings
- Inlet & outlet internal muffling
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Vairous horsepowers for application-specific needs

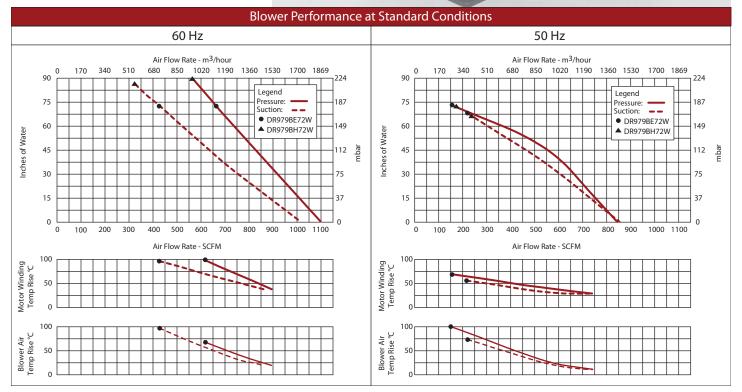
BLOWER OPTIONS

- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

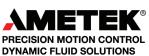




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AMETEK DYNAMIC FLUID SOLUTIONS 75 North Street, Saugerties, NY 12477 USA: +1 215-256-6601 - Europe: +49 7703 930909 - Asia: +86 21 5763 1258 Customer Service Fax: +1 215.256.1338 www.ametekdfs.com





ROTRON®

SERVICE AND PARTS MANUAL FOR BLOWER MODEL

DR6, 858, 909, 979, 14

DIRECT DRIVE REGENERATIVE BLOWER



AMETEK Dynamic Fluid Solutions 100 East Erie St., Kent, Ohio 44240 Telephone: 330-673-3452 Fax: 330-677-3306 email: dfs.information@ametek.com internet: www.ametekdfs.com



Your Choice. Our Commitment.™

WARRANTY, INSTALLATION, MAINTENANCE AND TROUBLESHOOTING INSTRUCTIONS





AMETEK Dynamic Fluid Solutions 100 East Erie St., Kent, Ohio 44240 Telephone: 330-673-3452 Fax: 330-677-3306 email: dfs.information@ametek.com internet: www.ametekdfs.com

- 1. AMETEK Rotron DR, EN and HiE regenerative direct drive blowers are guaranteed for one full year from the date of installation (limited to 18 months from the date of shipment) to the original purchaser only. Should the blower fail we will evaluate the failure If failure is determined to be workmanship or material defect related, we will at our option repair or replace the blower.
- 2. AMETEK Rotron Minispiral, Revaflow, Multiflow, Nautilair, remote drive blowers, moisture separators, packaged units, CP blowers, Nasty Gas[™] models and special built (EO) products are guaranteed for one full year from date of shipment for workmanship and material defect to the original purchaser only. Should the blower fail, If failure is determined to be workmanship or material defect related, we will at our option repair or replace the blower.
- 3. **Parts Policy** AMETEK Rotron spare parts and accessories are guaranteed for three months from date of shipment for workmanship and material defect to the original purchaser only. If failure is determined to be workmanship or material defect related we will at our option repair or replace the part.

Corrective Action - A written report will be provided indicating reason(s) for failure, with suggestions for corrective action. Subsequent customer failures due to abuse, misuse, misapplication or repeat offense will not be covered. AMETEK Rotron will then notify you of your options. Any failed unit that is tampered with by attempting repair or diagnosis will void the warranty, unless authorized by the factory.

Terms and Conditions - Our warranty covers repairs or replacement of regenerative blowers only, and will not cover labor for installation, outbound and inbound shipping costs, accessories or other items not considered integral blower parts. Charges may be incurred on products returned for reasons other than failures covered by their appropriate warranty. Out-of-warranty product and in warranty product returned for failures determined to be caused by abuse, misuse, or repeat offense will be subject to an evaluation charge. Maximum liability will in no case exceed the value of the product purchased. Damage resulting from mishandling during shipment is not covered by this warranty. It is the responsibility of the purchaser to file claims with the carrier. Other terms and conditions of sale are stated on the back of the order acknowledgement.

Installation Instructions for SL, DR, EN, CP, and HiE Series Blowers

- 1. **Bolt It Down** Any blower must be secured against movement prior to starting or testing to prevent injury or damage. The blower does not vibrate much more than a standard electric motor.
- 2. **Filtration** All blowers should be filtered prior to starting. Care must be taken so that no foreign material enters the blower. If foreign material does enter the blower, it could cause internal damage or may exit at extremely high velocity.

Should excessive amounts of material pass through the blower, it is suggested that the cover(s) and impeller(s) be removed periodically and cleaned to avoid impeller imbalance. Impeller

imbalance greatly speeds bearing wear, thus reducing blower life. Disassembling the blower will void warranty, so contact the factory for cleaning authorization.

- 3. **Support the Piping** The blower flanges and nozzles are designed as connection points only and are not designed to be support members.
 - Caution: Plastic piping should not be used on blowers larger than 1 HP that are operating near their maximum pressure or suction point. Blower housing and nearby piping temperatures can exceed 200°F. Access by personnel to the blower or nearby piping should be limited, guarded, or marked, to prevent danger of burns.
- 4. **Wiring** Blowers must be wired and protected/fused in accordance with local and national electrical codes. All blowers must be grounded to prevent electrical shock. Slo-Blo or time delay fuses should be used to bypass the first second of start-up amperage.
- 5. **Pressure/Suction Maximums** The maximum pressure and/or suction listed on the model label should <u>not be exceeded</u>. This can be monitored by means of a pressure or suction gage (available from Rotron), installed in the piping at the blower outlet or inlet. Also, if problems do arise, the Rotron Field representative will need to know the operating pressure/suction to properly diagnose the problem.
- 6. **Excess Air** Bleed excess air off. DO NOT throttle to reduce flow. When bleeding off excess air, the blower draws less power and runs cooler.

Note: Remote Drive (Motorless) Blowers - Properly designed and installed guards should be used on all belts, pulleys, couplings, etc. Observe maximum remote drive speed allowable. Due to the range of uses, drive guards are the responsibility of the customer or user. Belts should be tensioned using belt gauge.

Maintenance Procedure

When properly piped, filtered, and applied, little or no routine maintenance is required. Keep the filter clean. Also, all standard models in the DR, EN, CP, and HiE series have sealed bearings that require no maintenance. Bearing should be changed after 15,000 to 20,000 hours, on average. Replacement bearing information is specified on the chart below.

Bearing Part Number	Size	Seal Material	Grease	Heat Stabilized
510217 510218 510219	205 206 207	Polyacrylic	Nye Rheotemp 500 30% +/- 5% Fill	Yes – 325 F
510449 516440 516648	203 202 307	Buna N	Exxon Polyrex Grease	NO
516840 516841 516842 516843	206 207 208 210	Buna N	Exxon Polyrex Grease	NO
516844 516845 516846	309 310 311			
516847	313			

Troubleshooting

		POSSIBLE CAUSE		OU	T OF WARRANTY REMEDY ***
IMPELLER DOES NOT TURN	р	1.	1. * One phase of power line not connected		Connect
	Humming Sound	2.	* One phase of stator winding open	2.	Rewind or buy new motor
	g	3.	Bearings defective	3.	Change bearings
	nin	4.	Impeller jammed by foreign material	4.	Clean and add filter
	l III	5.	Impeller jammed against housing or cover	5.	Adjust
	Ť	6.	** Capacitor open	6.	Change capacitor
	No Soun d	1.	* Two phases of power line not connected	1.	Connect
		2.	* Two phases of stator winding open	2.	Rewind or buy new motor
Fuse	own use	1. 2.	Insufficient fuse capacity Short circuit	1.	Use time delay fuse of proper rating
	ᇳᇿ			2.	Repair
	L	1.	High or low voltage	1.	Check input voltage
	о р «	2.	* Operating in single phase condition	2.	Check connections
MPELLER TURNS mai Motor Overheated Or Protector Trips	irips	3.	Bearings defective	3.	Check bearings
	or Te	4.	Impeller rubbing against housing or cover	4.	Adjust
	ovel ecto	5.	Impeller or air passage clogged by foreign material	5.	Clean and add filter
	ro to	6.	Unit operating beyond performance range	6.	Reduce system pressure/vacuum
	Pote	7.	Capacitor shorted	7.	Change capacitor
	2	8.	* One phase of stator winding short circuited	8.	Rewind or buy new motor
IMPEL Performance Abnormal Below Standard Sound	a	1.	Impeller rubbing against housing or cover	1.	Adjust
	n n	2.	Impeller or air passages clogged by foreign	2.	Clean and add filter
	bnc Sol		material	3.	Change bearings
	-	3.	Bearings defective		
	Se ard	1.	Leak in piping	1.	Tighten
	and	2.	Piping and air passages clogged	2.	Clean
	Sta	3.	Impeller rotation reversed	3.	Check wiring
	erfo	4.	Leak in blower	4.	Tighten cover, flange
	Bel P	5.	Low voltage		Check input voltage

* 3 phase units

** 1 phase units

*** Disassembly and repair of new blowers or motors will void the Rotron warranty. Factory should be contacted prior to any attempt to field repair an in-warranty unit.

Blower Disassembly:

WARNING: Attempting to repair or diagnose a blower may void Rotron's warranty. It may also be difficult to successfully disassemble and reassemble the unit.

- 1) Disconnect the power leads. **CAUTION:** Be sure the power is disconnected before doing any work whatsoever on the unit.
- 2) Remove or separate piping and/or mufflers and filters from the unit.
- 3) Remove the cover bolts and then the cover. **NOTE:** Some units are equipped with seals. It is mandatory that these seals be replaced once the unit has been opened.
- 4) Remove the impeller bolt and washers and then remove the impeller. **NOTE:** Never pry on the edges of the impeller. Use a puller as necessary.
- 5) Carefully note the number and location of the shims. Remove and set them aside. NOTE: If the disassembly was for inspection and cleaning the unit may now be reassembled by reversing the above steps. If motor servicing or replacement and/or impeller replacement is required the same shims may not be used. It will be necessary to re-shim the impeller according to the procedure explained under assembly.

- 6) Remove the housing bolts and remove the motor assembly (arbor/.housing on remote drive models).
- 7) Arbor disassembly (Applicable on remote drive models only):
 - a) Slide the bearing retraining sleeve off the shaft at the blower end.
 - b) Remove the four (4) screws and the bearing retaining plate from the blower end.
 - c) Lift the shaft assembly far enough out of the arbor to allow removal of the blower end snap ring.
 - d) Remove the shaft assembly from the arbor.
 - e) If necessary, remove the shaft dust seal from the pulley end of the arbor.

Muffler Material Replacement:

- 1) Remove the manifold cover bolts and them manifold cover.
- The muffler material can now be removed and replaced if necessary. On blowers with fiberglass
 acoustical wrap the tubular retaining screens with the fiberglass matting before sliding the muffler
 pads over the screens.
- 3) Reassemble by reversing the procedure.

NOTE: On DR068 models with tubular mufflers it is necessary to remove the cover and impeller accessing the muffler material from the housing cavity.

Blower Reassembly:

- 1) Place the assembled motor (assembled arbor assembly for remote drive models) against the rear of the housing and fasten with the bolts and washer.
- 2) To ensure the impeller is centered within the housing cavity re-shim the impeller according to the procedure outlined below.
- 3) If blower had a seal replace the seal with a new one.
- 4) Place the impeller onto the shaft making sure the shaft key is in place and fasten with the bolt, washer and spacer as applicable. Torque the impeller bolt per the table below. Once fastened carefully rotate the impeller to be sure it turns freely.
- 5) Replace the cover and fasten with bolts.
- 6) Reconnect the power leads to the motor per the motor nameplate.

Bolt Size	Torque
	Pound-Force-Foot
1/4-20	6.25 +/- 0.25
5/16-18	11.5 +/- 0.25
3/8-16	20.0 +/- 0.5
1⁄2-13	49.0 +/- 1
5/8 –11	90.0 +/- 2

Impeller Shimming Procedure:

WARNING: This unit may be difficult to shim. Extreme care may be exercised.

Tools Needed:Machinist's Parallel Bar

Vernier Caliper with depth measuring capability Feeler gauges or depth gauge

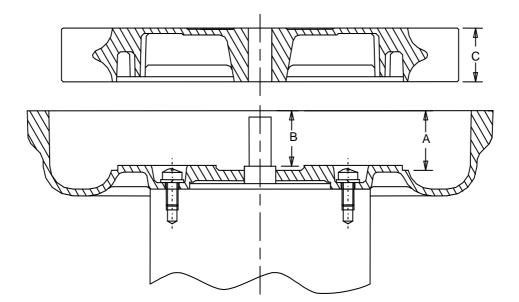
Measure the Following:

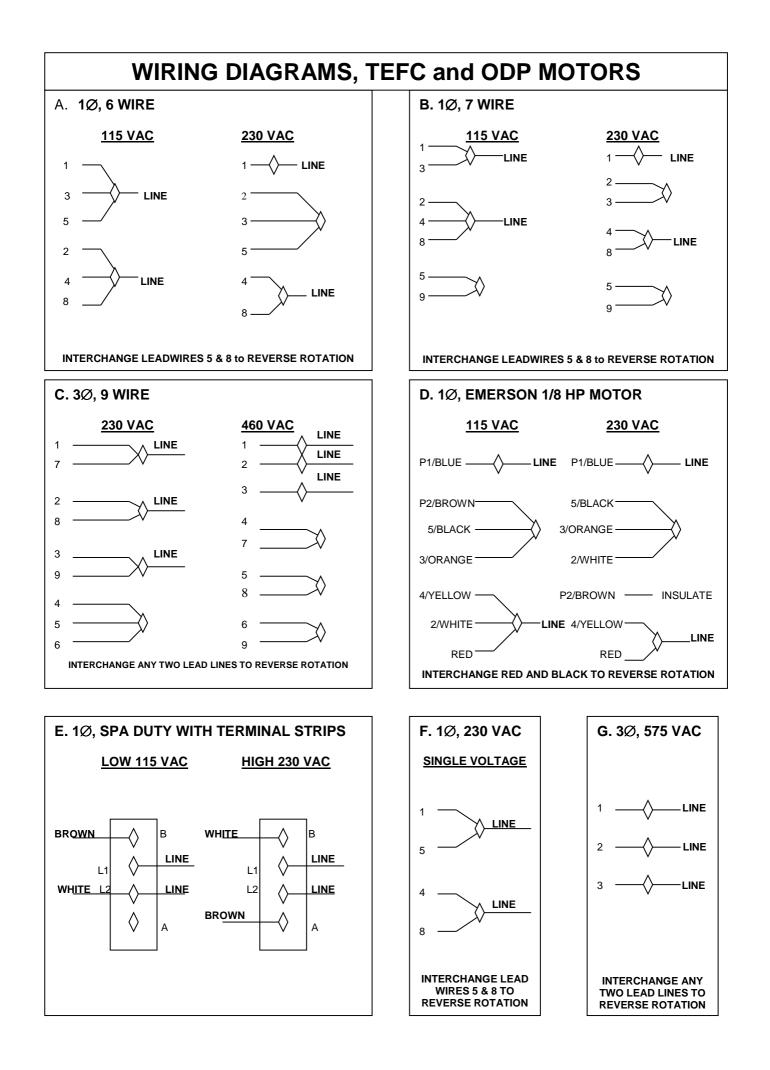
Distance from the flange face to the housing (A) Distance from the flange face to the motor shaft shoulder (B) Impeller Thickness (C)

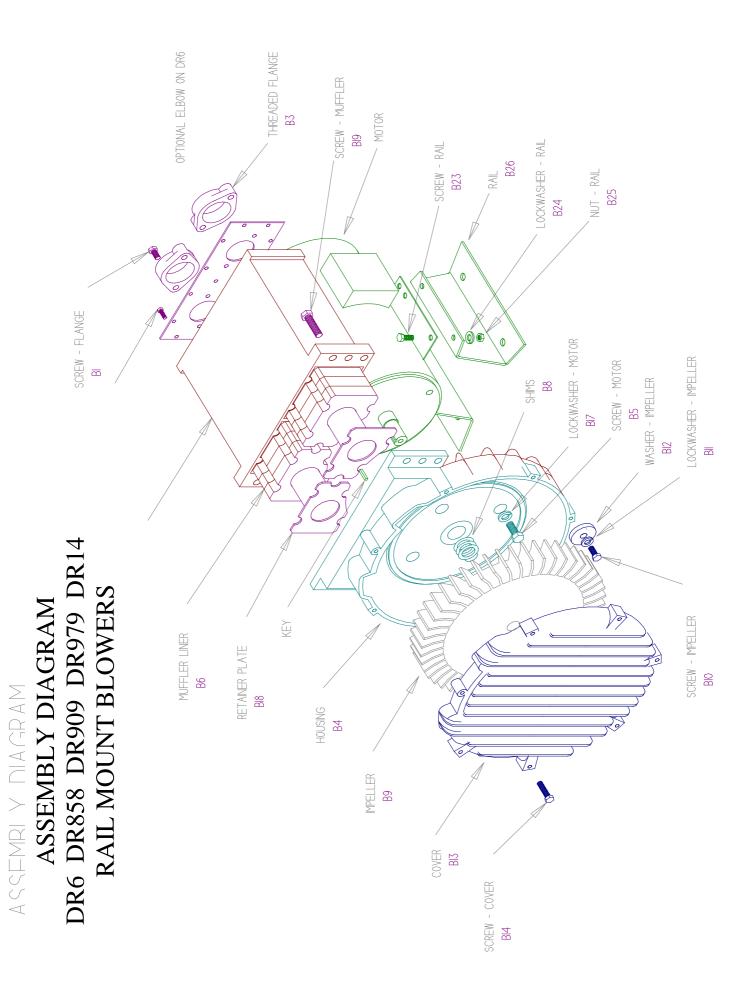
Measurements (A) and (B) are made by laying the parallel bar across the housing flange face and measuring to the proper points. Each measurement should be made at three points, and the average of the readings should be used.

Shim Thickness = B - (A+C)/2

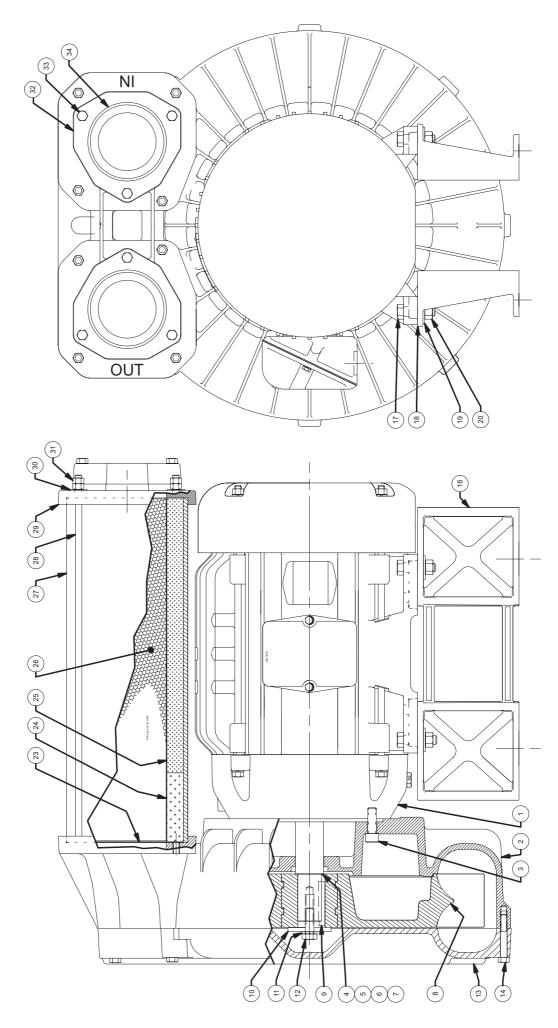
After the impeller installation (step #4 above) the impeller/cover clearance can be checked with feeler gauges, laying the parallel bar across the housing flange face. This clearance should nominally be (A-C)/2.







ASSEMBLY DIAGRAM "B"



DR 6/858/909/979/14	/606/8	979/14			<u>Pa</u>	Parts Breakdown	-			
Service	and F	Service and Parts Manual Model: Part No.:	DR6 027578 027579 027500 027500 036212 038071	DR858 - Rail 038738 038740 038742 038743 038743 038743	DR858 - Base 038735 038736 038736 038737 038737 080173	DR909 - Rail 038620 038621 038625 086300 080300 038633	DR909 - Base 038622 038623 038626 038626 080183	DR909 - Rail 081737 081739 081738 081744	DR979 080702 080704 080632 080632	DR14 038750 038751 038759 038759 080451 080612
ltem No.	Qty. Rea'c	Qty. Rea'd Description		080172		OBSOLETE		NEW		OBSOLETE
M3	-	Key Motor Shaft	510212	511532	511532	511532	511532	511532	551570	155066
B1	90	Screw, Flange	(4 pcs) 120065	(4 pcs) 155067	(4 pcs) 155067	140016	140016	140016	140016	140016
20	2 0	Flange Screen, Flange Guard	511479	Not Used	Not Used	Not Used	Not Used	Not Used	Not Used	Not Used
		Elbow 90°	See Next Page	Not Used	Not Used	Not Used	Not Used	Not Used	Not Used	Not Used
B4	1	Housing	515497	515410	515410	515356	553039	552409	See Next Page	515975
B5	4	Screw, Hsg /Motor	251792	155034	155034	140014	140014	120205	120205	120205
B6		Muffler Material	Not Used	(7 pcs) 551736	(7 pcs) 551736	(10 pcs) 551738	551738	(2 pcs) 552477		(12 pcs) 551740
	c	Muttler Material	Not Used	(Z pcs) 551/3/ Not Lood	(2 pcs) 551/3/ Not Lood	(Z pcs) 551/39	(Z pcs) 551/39	552483 Not 11004	Not Used	(Z pcs) 551/41
B8	N *	Shim .002"	272703	511547	511547	511547	511547	511547	511547	515991
	*	Shim .005"	272704	511548	511548	511548	511548	511548	511548	515992
	*	Shim .010"	272705	511549	511549	511549	511549	511549	511549	515993
	*	Shim .020"	272706	511550	511550	511550	511550	511550	511550	515994
B9	-	Impeller	515484	515249	515249	552544	552431	552431	551566	515509
B10		Bolt, Impeller	251791	120210	120210	140015	140015	120210	140015	155068
B11		Lockwasher, Impeller	251787	251788	251788	251788	251788	251788	251788	251788
B12 B13		Washer, Impeller	Not Used	511529 51527	511529 515247	Not Used	Not Used	Not Used	Not Used	Not Used
B14	- ∞	Screw, Cover	155170	140016	140016	140016	140016	140016	155512	155069
B15	-	Eye Bolt	Not Used	140019	Not Used	140019	Not Used	Not Used	See Next Page	140019
B16	1	Spacer, Impeller Bolt	478336	515555	515555	511529	511529	511529	511529	515990
		Shaft Sleeve	Not Used	Not Used	Not Used	Not Used	Not Used	Not Used	Not Used	Not Used
B17	4	Lockwasher, Housing	251788	Not Used	Not Used	Not Used	Not Used	Not Used	Not Used	Not Used
B18	2	Screen, Muffler	Not Used	551723	551723	551725	551725	552479	551611	551727
	2	Finger guard	Not Used	Not Used	Not Used	551730	Not Used	Not Used	Not Used	Not Used
B19	9	Bolt, Muffler Hsg/Hsg	Not Used	155025	155025	155025	155025	(3) 120251	155512	155067
B19A	4	Bolt, Muffler Hsg/Hsg	Not Used	120214	Not Used	120214	Not Used	(4) 155025	Not Used	120214
B20	-	Muffler Housing	Not Used	550019	550017	529932	552976	552428	See Next Page	550039
	~	Muffler Discrete	522948	Not Used	Not Used	Not Used	Not Used	Not Used	Not Used	Not Used
	2	Bolt, Motor/Muffler	Not Used	Not Used	Not Used	Not Used	Not Used	Not Used	Not Used	Not Used
	2	Lockwasher, Motor/Mu	Not Used	Not Used	Not Used	Not Used	Not Used	Not Used	Not Used	Not Used
	2	Washer, Motor/Muffler	Not Used	Not Used	Not Used	Not Used	Not Used	Not Used	Not Used	Not Used

seded **Viewed looking atinlet/outlet ports

7-17-17 Rev. Q

323	4	Bolt, Rail	251791	120007	Not Used	See Next Page	Not Used	140016	See Next Page	120256
324	4	Lockwasher Rail	251787	251787	Not Used	251787	Not Used	251787	See Next Page	251788
	8	Washer Rail/Motor	Not Used	Not Used	Not Used	See Next Page	Not Used	(8) 155091	See Next Page	Not Used
B25	4	Nut, Rail	251789	251789	Not Used	251789	Not Used	251789	See Next Page	155070
326	2	Rail Mounting	478338	595301	Not Used	See Next Page	Not Used	551658	See Next Page	551658

7-17-17 Rev. Q

						Decise
Model	Part #	Motor	Wiring Diagram	Specific Parts	Rear (M1)	Impeller End (M2)
DR6D89	027578	500291	С	Elbow - not used		
DR6D86	027579	500292	Ð		510217	510218
DR6K72	027600	500293	С			-
DR6D5	036212	510459	Ъ	Elbow - (1 pc) 120153		-
HiE6D89	038071	529325	С			
DR858AY72W	038738	511570	С			
DR858AY86W	080172	515568	B			
DR858AY86X	080173	515568	9			
HIE858AY72W	080022	529599	C			-
DR858BB72W	038740	511571	С			-
DR858BB86W	038742	515567	G			
HiE858BB72W	038743	529600	С			
DR858BB72X	038735	511571	С			
DR858AY72X	038736	511570	С			
DR858BB86X	038737	515567	9			-
DR909BE72W	038620	553286	ပ	B23 (4 pcs) 140016		-
DR909BB72W	038621	511571	С	(16 pcs) 155091		-
DR909BE86W	038625	TBD	Ð	B26 (2 pcs) 595301		
DR909BB86W	080300	515567	IJ			
HiE909BE72W	038633	529601	ပ	B23 (4 pcs) 120256 (8 pcs) 155091 B26 (2 pcs) 516242	516840	516844
DR909BE72X	038622	553066	ပ	Note 511572 replaced by 553286 with cut down fins		
DR909BB72X	038623	511571	ပ			
DR909BE86X	038626	TBD	თ	(note was 511601 but that motor no longer fits)		-
DR909BB86X	080183	515567	თ			-
DR909BE72W	081737	553286	ပ	Note 511572 replaced by 553286 with cut down fins		
DR909BB72W	081738	511571	С			-
DR909BE86W	081739	TBD	9	(note was 511601 but that motor no longer fits)		
DR909BB86W	081744	515567	9			
DR979BE86W	080702	551605	9	B4 = 551383, B15 = 140019		-
DR979BE72W	080704	551604	C	B19A = Not used, B23 = 155095, B26 = 595301		
DR979BE72W	080632	551603	v	B24 = (4pcs) 251787 & (8 pcs) 155091,		
				B25 =595301, B20 = 551422		
DR979BH72W	080718	551635	O	B4 = 551560 B15 = Not used B19A = 155070, B23 = 120256 B26 = 551658 B24= (4 pcs) 251788 & (8 pcs) 120211, (4) 155091, B24= (4 pcs) = 551422 Pc5 = 155070		
	038750	E16006	ر		5168AA	516846
DR14DW86MW	038751	516097	טט		1100-0	010010
DR14BH72MW	038752	510463	ပ		516842	516844
DR14BH86MW	038753	511511	U			

7-17-17 Rev. Q

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Parts Breakdown

	DR14	038752	038753	OBSOLETE		511532	140016	529912	Not Used	Not Used	515983	120205	(12 pcs) 551740	(2 pcs) 551741	551744	511547	511548	511549	511550	515683	120251	251788	Not Used	515910	155069	140019	515990	Not Used	Not Used	551727	Not Used	155067	120214	550039	Not Used	Not Used
						Key Motor Shaft	Screw, Flange	Flange	Screen, Flange Guard	Elbow 90°	Housing	Screw, Hsg /Motor	Muffler Material	Muffler Material	Muffler Screen guard	Shim .002"	Shim .005"	Shim .010"	Shim .020"	Impeller	Bolt, Impeller	Lockwasher, Impeller	Washer, Impeller	Cover	Screw, Cover	Eye Bolt	Spacer, Impeller Bolt	Shaft Sleeve	Lockwasher, Housing	Screen, Muffler Retaining, Right	Finger guard	Bolt, Muffler Hsg/Hsg	Bolt, Muffler Hsg/Hsg	Muffler Housing	Muffler Discrete	Bolt, Motor/Muffler
						Ł	9	2	2		Ļ	4	28	2	2	*	*	*	*	1	1	1	1	Ļ	8	1	Ļ		4	2	2	9	4	1	-	2
						M3	B1	B3			B4	B5	B6			B8				B9	B10	B11	B12	B13	B14	B15	B16		B17	B18		B19	B19A	B20		
	DR14	081480	081484			See Below	552304	155025	511547	511548	511549	511550	515683	511532	515990	251788	120251	515910	155069	Not used	551658	120205	Not used	251788	155070	155091	Not used	552322	552328	552327	552332	552324	552325	552298	155091	251789
	DR14	081476	081479 081483	081497		See Below	552309	120256	515991	515992	515993	515994	515509	155066	515990	251788	155068	515910	155069	Not used	551658	120205	Not used	251788	155070	155091	Not used	552322	552328	552327	552332	552324	552325	552298	155091	251789
oei vice alla Fai is Mallual	Model:	Part No.:			Description	Motor	Housing	Housing to mtr bolts	Shim	Shim	Shim	Shim	Impeller	Mtr shaft Key	Impeller washer	Impeller lockwasher	Impeller bolt	Cover	Cover screws	Not used	Mounting Rails	Rail Bolts	Rail spacers	Rail lockwashers	Rail -Nuts	Rail washers	Not used	Finger guard screen	Muffler foam (hi temp)	Muffler foam (regular)	Retainer	Muffler tube	Muffler Tie Rod	Connector plate	Muffler washer	Muffler tie rod nuts
וכב מווח בכ					=# QTY	-	2	3 4	4	ى *	* 9	* 2	8	9	10 1	11 1	12 1	13 1	14 8	15	16 2	17 4	18 4	19 4	20 4	21 4	22	23 2	24 2	25 2	26 2	27 2		29 1		31 16
2001					REF #																															

2	Flange	529912	529912		0	Lockwasher, Motor/Muffler	Not Used
9	Flange bolts	140016	140016		2	Washer, Motor/Muffler	Not Used
	Flange Cap.	Not used	Not used	B23	4	Bolt, Rail	155025
	Not used	Not used	Not used	B24	4	Lockwasher Rail	251788
	Nameplate- Blower	Not used	Not used		ω	Washer Rail/Motor	Not Used
	Rotation Sticker	Not used	Not used	B25	4	Nut, Rail	155070
	Not used	Not used	Not used	B26	2	Rail Mounting	551658

Model	Part #	Motor	Motor Wiring Diagram	Specific Parts	Bearing, Rear (M1)	Bearing, Impeller End (M2)
DR14DW72MW	081476	516096	ပ		516844	516846
DR14DW86MW	081479	516097	IJ			
DR14BH72MW	081480	510463	ပ		516842	516844
DR14BH86MW	081481	511511	IJ			
DR14DT72MW	081483	551037	ပ		616011	616816
DR14DT86MW	081484	516100	IJ		t+00-0	0+0010
HiE14DW72MW	081497	529603	ပ			

460 West Gay Street West Chester, PA 610-692-5650 Fax:



19380 610-692-5837 cs@gasho.org

The Leader in Blower & Vacuum Solutions

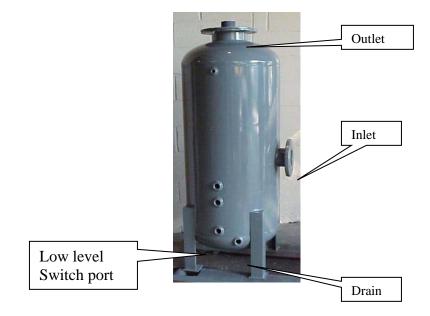
Moisture Separators

Moisture separators are used to remove water and other liquids from air streams. They are typically used on the inlet of vacuum systems to remove water and other contaminants before they enter the vacuum pump. The air volume of the moisture separator reduces the velocity of the air stream to allow liquids to precipitate. Up to 95% water removal is possible. The models GX-30 & GX-60 are rated for full vacuum. Other moisture separators are rated to 18 in. Hg. Higher vacuum ratings available.

Inside the top of the separators is a basket with stainless steel demister/filter media to trap entrained water droplets. Standard accessories include a sight gauge and drain valve.

Options include: 1 to 3 level switches, hand operated sludge pump, automatic pump down systems, heat tracing, vacuum gauges, and thermometers.

Model	Nominal	Liquid	Diameter	Height	Inlet	Discharge	Cleanout	Weight
Number	Flow Rate	Capacity	(inches)	(inches)	Size	Size	Size	(Pounds)
GX-30	250	8	16	47	3"	3"	4"	125
GX-60	500	22	20	57	4"	4"	4"	175
GX-90	1200	30	24	58	6" Flange	6" Flange	4"	240
GX-100DL	1300	40	27	70	4"	4"	6" Flange	305
GX-125DL	1500	40	27	82	6" Flange	6" Flange	6" Flange	320





CWI Tech-Mesh™ Knitted Products

Stainless and Specialty Alloy Wire Mesh Technology

The Right Wire Grade for your Unique Demister Application

CWI Tech-Mesh[™] typically employs 300 series stainless grades(304, 304L, 316, 316L, 321, 347) for its wire mesh mist eliminators. For extreme or aggressive process conditions with unique product chemistries, CWI has a wide range of specialty alloys such as Monel 400, Copper, Duplex, Alloy 20Cb3, and Inconel. Other exotics and copper base metals may be available upon request.

CWI Tech-Mesh

A Leader In Wire Technology

Central Wire Industries is a world leader in the manufacture of wire in specialty alloys tailored to their customers specific requirements. Our product range includes stainless steel, nickel, cobalt, copper, brass, bronze, and zinc wires, in diameters ranging from 0.003 inches (0.0762 mm) to 1.000 inches (25.4 mm).

CWI Tech-Mesh[™] products are engineered for maximum separation efficiency or minimum pressure drop in order to meet your specifications and vessel configurations.

www.centralwire.com



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HOUSTON, Tx 800-325-5861

CWI Tech-Mesh

Applications

Liquid mist extraction from a vapor-liquid process stream using a knitted wire mesh pad (demister pad).

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Dry Gas Out

CWI Tech Mesh

CWI Tech-Mesh[™] demister pads are engineered and designed for specific process conditions.

Process Applications

Gas-liquid separators

Wet Gas In

- · Distillation equipment
- Process absorbers, precipitators, and scrubbers
- · Chemical separators and extractors
- · Oil and gas processing equipment
- Combustion gas scrubbers
- Knock-out drums and receivers
- Refinery towers
- · Liquid-Liquid coalescers
- Pollution control equipment
- Liquid entrainment for compressor equipment
- Product recovery systems

CWI Tech-Mesh[™] Engineered products

CWI Tech-Mesh[™] is knitted on state of the art equipment under strict quality control processes. Your demanding mist extraction applications require that our demister pads meet rigorous technical specifications. Whether the process is mist eliminaton or coalescing, CWI offers product options in a variety of wire diameters, alloys, mesh densities, and product geometries. CWI Tech-Mesh[™] products are engineered for maximum separation efficiency or minimum pressure drop in order to meet your specifications and vessel configurations.

Central Wire Industries is a world leader in the manufacture of wire in specialty alloys tailored to their customers specific requirements. Our product range includes stainless steel, nickel, cobalt, copper, brass, bronze, and zinc wires, in diameters ranging from 0.003 inches (0.0762 mm) to 1.000 inches (25.4 mm).

The industry standard size wire for mist eliminators is 0.011 inches (0.28 mm). The most common alloys used are 304 and 316 stainless steel.

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CWI Tech-Mesh

Custom Manufactured with Exceptional Quality

Andre Grander Ste

Mist eliminators are custom designed specifically to meet each customers' specifications and equipment geometry.

A wide array of product configurations and geometries

CWI 's engineering team designs exactly what you need and follows a rigorous design process:

- Wire grade selection and verification
- Drawing wire to exact size diameter
- Wire surface finishing/coating
- Knit configuration setup
- Crimped for correct mesh density construction
- Pad design and construction



CWI Tech-Mesh[™] wire is drawn and treated under the highest quality standards in one of our several manufacturing locations in North America

Mist eliminators are configured and constructed to ensure minimum liquid entrainment at maximum flow conditions.



CWI Tech-Mesh™ Quality Assurance

Meeting exact customer product dimensional, ductility, and performance specifications requires specialized alloy selection and engineered manufacturing. CWI Tech-Mesh[™] can be manufactured in a wide range of wire diameters, alloys, mesh densities, and product geometries under precise production and processing equipment capabilities. Mist Eliminator Mesh Densities typically range from 5.0 to 12.0 lb/ft3.

- Engineering and design consultation services
- Mechanical wire testing measures tensile strength, yield strength, and elongation
- Microscopy evaluation for alloy grain structure and surface quality
- Engineering and manufacturing process step checks
- Final product thorough inspection
- Fast, reliable shipping, customized inventory and delivery programs
- Customer service: in person, on-line or over the phone



CWI produces the core products in-house that comprise the final product including wire, support rods, and welding wire.

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CWI Tech-Mesh

Made in the USA Engineering and designing the best

Engineering and designing the bes mist extraction mesh products.

CWI has the widest range of alloys.

300 series stainless grades (304, 304L, 316, 316L, 321, 347)

Monel 400, Copper, Duplex, Alloy 20Cb3, and Inconel.

Exotics and Copper base metals - available upon request

CWI engineered products are tailored to your requirements to ensure that your process is optimized and the product lasts.

CWI has the materials and resources to meet your custom mist elimination requirements.

The Right Wire Grade for your Unique Demister Application

The Right Wire Grade for

your Unique Demister

Application

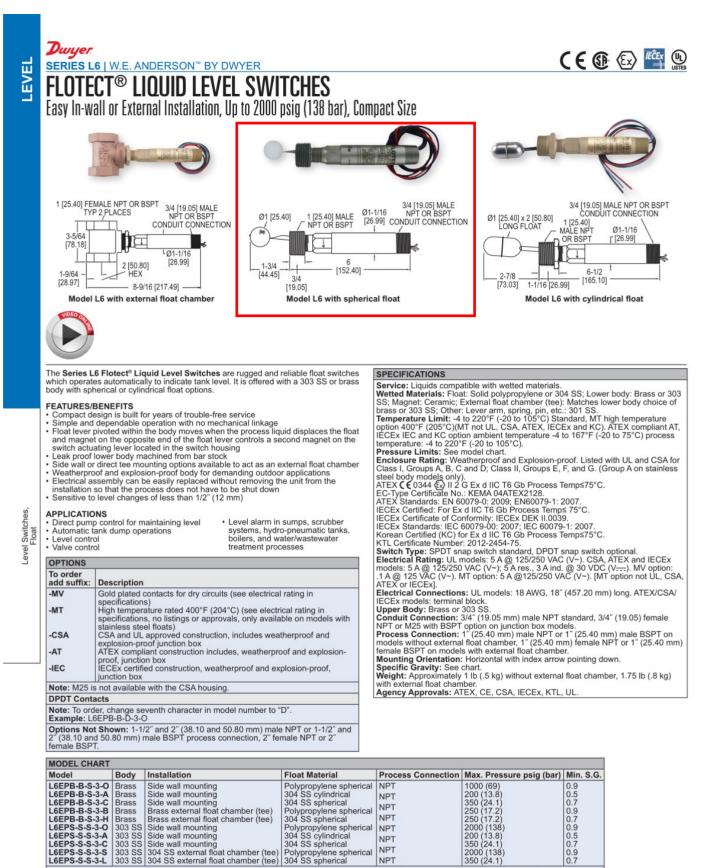
CWI Tech-Mesh[™] typically employs **300 series stainless** grades (304, 304L, 316, 316L, 321, 347) for its wire mesh mist eliminators. For extreme or aggressive process conditions with unique product chemistries, CWI has a wide range of specialty alloys such as Monel 400, Copper, Duplex, Alloy 20Cb3, and Inconel. Other exotics and copper base metals may be available upon request. You can choose the wire alloy most suitable to withstand and last under your harsh operating conditions. CWI has the widest range of alloys.

We can also design "co-knits" using a range of non-metallic synthetic materials such as fiberglass, polypropylene, Dacron, Teflon, and other polymers.

Contact our engineering team to discuss your special mist elimination challenge.

If you have any additional questions about our products, check out the Live Chat Option on

our website. **www.centralwire.com**



BSPT process connection and M25 conduit connection. Note: To order, change eighth character in model to "4". Example: L6EPB-B-S-4-A USA: California Proposition 65

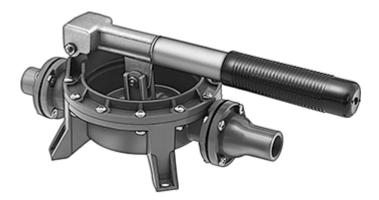
NPT

MWARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

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McMASTER-CARR.

Hand-Operated Water-Removal Pump 14 oz./Stroke Maximum Flow Rate



Ритр Туре	Sump
Pump Style	Diaphragm
Power Source	Manual
Maximum	14 oz./stroke
Flow Rate	14 02./311086
Maximum	
Discharge	35 Feet of Head (15 psi)
Pressure	
Maximum	
Solids	1/8"
Diameter	
Maximum	100.000 cp
Viscosity	100,000 ср
Temperature	
Range, °F	
Min.	35°
Maximum	150°
Intake Connection	
	Hose
Type For Hose ID	1"
Hose	1
Connection	Barbed
	Baibed
Type Gender	Male
Discharge	Male
Connection	
Туре	Hose
For Hose ID	1"
Hose	
Connection	Barbed
Туре	
Gender	Male
Self-Priming	Self-Priming
Housing	
Material	Acetal Plastic
Diaphragm	
Material	Buna-N Rubber
Overall	
Height	4 3/8"

McMaster-Carr

4332K31

McMaster-Carr

IcMaster-Carr	
Width	4 3/8"
Depth	12 3/4"
	Water, Deionized Water, Salt
For Use With	Water
Warning Message	Chemical compatibility must be determined by the customer based on the conditions in which the product is being used, including the presence of other chemicals, temperature, and consistency.
Chemical Resistance	
Excellent	Deionized Water, Ethylene Glycol, Hydraulic Oil, Motor Oil, Salt Water, Sodium Hydroxide (20%), Sodium Hydroxide (50%), Water
Moderate	Ammonium Hydroxide
Poor	Acetone, Diesel Fuel, Ethanol, Gasoline, Hydrochloric Acid (100%), Hydrochloric Acid (20%), Hydrochloric Acid (37%), Isopropyl Alcohol, Kerosene, Lacquer Thinner, Methanol, Methyl Chloride, Methyl Ethyl Ketone (MEK), Mineral Spirits, Nitric Acid (20%), Nitric Acid (50%), Nitric Acid (Concentrated), Paint, Phosphoric Acid (40%), Phosphoric Acid (Greater Than or Equal to 40%), Sodium Hydroxide (80%), Sodium Hydroxide (80%), Sulfuric Acid (<10%), Sulfuric Acid (10- 75%), Sulfuric Acid (75-100%), Xylene
Wetted Parts	304 Stainless Steel, Acetal
Material	Plastic, Buna-N Rubber
RoHS	RoHS 3 (2015/863/EU) compliant

Install these pumps right in your line and engage the lever handle to start pumping. They have few moving parts that can fail for an extended service life.



Compact Filter Silencers

FS Series 1/2" - 6"

Features

- Fully drawn weatherhood
- Tubular silencing design tubes are positioned to maximize attenuation and air flow while minimizing pressure drop
- Corrosive resistant gray powder coat carbon steel

Technical Specifications

- Temp (continuous): min -15°F (-26°C) max 220°F (104°C)
- Filter change out differential: 15-20" H₂O over initial △ P
- Pressure drop graphs available upon request
- Polyester: 99%+ removal efficiency standard to 5 micron
- Paper: 99%+ removal efficiency standard to 2 micron



Threaded Outlet Assembly



Flange Outlet Assembly

Rev: FS .5-6-US1903K

Sales/Service: 630.773.1363

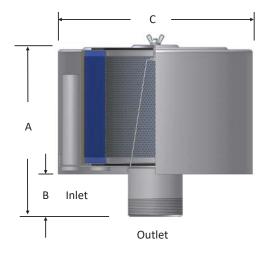
Options

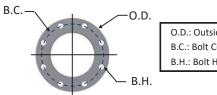
ATEX Available

- Tap holes available
- Pressure drop indicator
- Various media for different environments
- Stainless steel construction
- Various nonstandard finishes and connection styles
- Side Access Silencer Filters (LQB Series) for space restricted enclosures (select models)

sales@solbergmfg.com

FS Series 1/2" - 6"





O.D.: Outside Diameter
B.C.: Bolt Circle
B.H.: Bolt Hole

125/150# Pattern	Dime	ensions - in	No. of	Flango	
Flange	O.D.	B.C.	B.H.	Holes	Flange Thickness
4″	9	7 1/2	0.75	8	0.5
5″	10	8 1/2	0.88	8	0.5
6"	11	9 ½	0.88	8	0.5

	MPT Outlet	Assembly SCFM Rating	Assembly F Polyester	Part Number Paper	Dime A	nsions - ir B	nches C	Suggested Service ht. inches	No. of Silencing Tubes	Approx. Weight Ibs.	Replace Element Polyester	ement Part No. Paper	Element SCFM Rating
	1⁄2″	10	FS-15-050	FS-14-050	3 7⁄16	1	6	3	1	2	15	14	35
	³ /4″	25	FS-15-075	FS-14-075	4	1 1/4	6	3	2	2	15	14	35
[1″	35	FS-15-100	FS-14-100	4	1 5⁄16	6	3	3	2	15	14	35
[1″	55	FS-19P-100	FS-18P-100	6 3⁄8	1 4⁄16	6	5	3	3	19P	18P	100
[1 ¼"	70	FS-19P-125	FS-18P-125	6 ³ ⁄4	1 1 1/8	6	5	5	3	19P	18P	100
[1½"	85	FS-19P-150	FS-18P-150	6 ³ ⁄4	1 1 1/8	6	5	5	4	19P	18P	100
	2″	135	FS-31P-200	FS-30P-200	7 1/2	2 1⁄4	10	5	5	8	31P	30P	195
[2″	135	FS-231P-200	FS-230P-200	12	2 3/8	10	10	5	14	231P	230P	300
[2 ½"	195	FS-31P-250	FS-30P-250	7 1/2	2 1/2	10	5	5	8	31P	30P	195
\geq	2 ½"	195	FS-231P-250	FS-230P-250	12 3 ⁄8	2 1/8	10	10	9	15	231P	230P	300
[3″	300	FS-231P-300	FS-230P-300	12 ¾	3 1/8	10 1⁄4	10	9	15	231P	230P	300
[3″	300	FS(12)-235P-300	FS(12)-234P-300	12 7⁄8	2 ¹¹ ⁄16	12 1⁄4	10	3	29	235P	234P	570
[3″	300	FS-275P-300	FS-274P-300	13	3	16	10	9	33	275P	274P	1100
	4″	520	FS(12)-235P-400	FS(12)-234P-400	13 7⁄8	3 ¹¹ /16	12 1⁄4	10	6	29	235P	234P	570
[4″	520	FS-275P-400	FS-274P-400	14	4	16	10	9	34	275P	274P	1100
[5″	800	FS-245P-500	FS-244P-500	14	4 1/8	16	10	14	33	245P	244P	880
[5″	800	FS-275P-500	FS-274P-500	14	4 1/8	16	10	14	36	275P	274P	1100
[6″	1100	FS-275P-600	FS-274P-600	15	5 1/8	16	10	18	38	275P	274P	1100

Flange	Assembly Assembly Part Number SCFM		Dimensions - inches		Suggested Service ht.	No. of Silencing	Approx. Weight	Replace Element	ement Part No	Element SCFM		
Outlet	Rating	Polyester	Paper	Α	В	С	inches	Tubes	lbs.	Polyester	Paper	Rating
4″	520	FS(12)-235P-400F	FS(12)-234P-400F	13 7⁄8	3 ¹¹ ⁄16	12 1⁄4	10	6	32	235P	234P	570
4″	520	FS-275P-400F	FS-274P-400F	14	4	16	10	9	39	275P	274P	1100
5″	800	FS-245P-500F	FS-244P-500F	14	4 1/8	16	10	14	38	245P	244P	880
5″	800	FS-275P-500F	FS-274P-500F	14	4 1/8	16	10	14	41	275P	274P	1100
6″	1100	FS-275P-600F	FS-274P-600F	15	5 1⁄8	16	10	18	42	275P	274P	1100

See Filter Silencer Technical Data for sizing guidelines.



All model offerings and design parameters are subject to change without prior notice. Contact your representative or Solberg for the most current information.

www.solbergmfg.com



77F-100 Series Full Port Threaded End Brass Ball Valve



DESCRIPTION

The Apollo 77F-100 Series is a full port forged brass ball valve suitable for a wide range of flow control applications including HVAC, fuel gas, fire protection, irrigation etc. These NPT threaded, 2-piece valves combine reliable operation with maximum economy. Valves include most pertinent agency approvals. Proudly Made in the USA.

FEATURES

- Heavy Pattern Forged Design
- Corrosion Resistant Materials
- Full-Port Flow
- Premium RPTFE Seats and Packing
- Adjustable Stem Packing
- Blowout-Proof Stem
- 2-1/2" 4" Sizes Now Feature 316SS Ball and Stem (Standard)
- Silicone Free Assembly
- 100% Factory Tested
- Made in USA, ARRA Compliant

PERFORMANCE RATING

- Rating: 600 CWP (1/4" 2")
- Rating: 400 CWP (2-1/2" 4")
- Steam Rating: 150 psi SWP
- Temperature Range: 0°F 400°F
- Vacuum Service to 29 in. Hg

Not intended for potable water in USA

OPTIONS

- (-01) Standard Lever
- (-04) 2-1/4" Stem Extension
- (-07) Tee Handle
- (-10) Stainless Steel Lever & Nut
- (-11) Therma-Seal[™] Insulating Tee Handle
- (-27) Locking Handle SS
- (77F140 Series) SS Ball & Stem
- (77FLF Series) Lead Free (0.25% Lead Max)

APPROVALS

FM LISTED

- MSS SP-110
- IAPMO/ANSI Z1157

FM 1140 (<175 PSI) (1/4" - 2")

CSA LISTED

- CGA 3.16 (125 PSI)
- CGA CR91-002 (5 PSI)
- ANSI Z21.15/CSA 9.1 (1/2 PSI)
- ASME B16.44 (5 PSI)
 - ASME B16.33 (125 PSI) (1/2" 2")

UL LISTED

• UL 125 - Flow Control Valves for LP-Gas, Guide YSDT to 250 psi max

1/4" - 2-1/2"

1/4" - 2"

1/4" - 2"

1/4" - 2"

1/4" - 2-1/2"

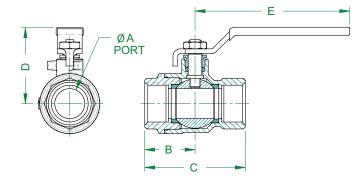
- UL 258 Fire Protection Trim & Drain, Guide VQGU to 175psi max (1/4" 2")
- UL 842 Valves for Flammable Fluids, Guides YRBX, YRPV, and MHKZ to 250 psi max. (1/4" - 4" NPT only)

UL 1477 - Compressed Gas Shutoff Valves, Guide YQNZ to 250 psi max (1/4" - 4" NPT only)

*Gas approvals apply to NPT models only

DIMENSIONS

	PART	SIZE	DIMENSIONS (IN.)						
	NUMBER	(IN.)	Α	В	с	D	E	(LB.)	
	77F-101-01	1/4″	0.38	0.81	1.62	1.61	2.85	0.3	
	77F-102-01	3/8"	0.38	0.85	1.70	1.61	2.85	0.3	
	77F-103-01	1/2"	0.50	1.14	2.25	1.66	2.85	0.5	
[77F-104-01	3/4"	0.75	1.29	2.57	1.91	3.86	0.8	
	77F-105-01	1″	1.00	1.60	3.20	2.11	3.86	1.3	
[77F-106-01	1-1/4″	1.25	1.73	3.46	2.44	4.75	2.1	
[77F-107-01	1-1/2"	1.50	2.00	4.00	2.91	5.42	3.2	
	77F-108-01	2"	2.00	2.37	4.74	3.69	7.77	5.6	
▶[77F-149-01	2-1/2"	2.50	2.99	5.98	4.14	7.77	12.8	
[77F-140-01	3"	3.00	3.52	7.05	5.03	9.92	19.7	
	77F-14A-01	4"	4.00	3.83	7.65	5.70	14.78	25.5	





This specification is provided for reference only. Apollo reserves the right to change any portion of this specification without notice and without incurring obligation to make such changes to Apollo products previously or subsequently sold. Most current information available at apollovalves.com.

STANDARD MATERIALS LIST

BODY	Brass, ASTM B283 alloy C37700
SEAT	RPTFE
BALL	Brass, ASTM B16, C36000 or B283, C37700 Chrome Plated 316 SS (2-1/2" - 4")
STEM PACKING	RPTFE
NUT	Corrosion Resistant Plated Steel
STEM	Brass, ASTM B16, C36000 316 SS (2-1/2" - 4")
RETAINER	Brass, ASTM B283 alloy C37700 or ASTM B16, C3600
HANDLE	Plated Steel / Insulated Polyvinyl
GLAND	Brass, ASTM B16, C36000

integrated

aalberts

piping systems



Enclosure Specification Modular System

•Enclosure shall be designed to fit just around the equipment to keep cost down. A 4" clearance is the standard dimension provided between the enclosure and the equipment on all sides and the top.

•Each sound enclosure should be factory assembled and skidded or shipped knocked down. The enclosure shall be designed to incorporate: forced air ventilation with acoustically treated air intake and exhaust. Fan will be sized to maintain a temperature outside/inside variation no greater than 15°F.

•The enclosure frame shall be made of a heavy-duty aluminum square-tubing frame that allows each wall and roof panel to be removable. A three directional slip fit aluminum corner fitting piece shall be provided at each of the eight corners to connect all aluminum frame pieces together.

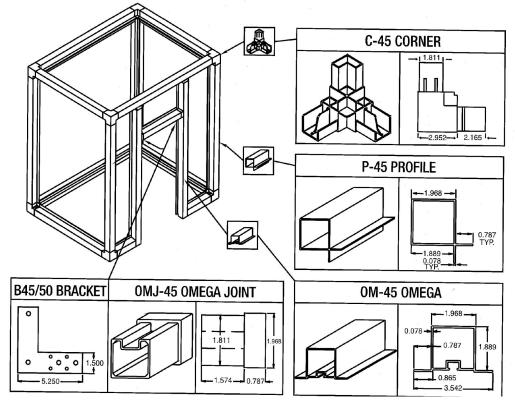
•Acoustic panels shall have 18 gauge aluminized steel channel provided for bottom caps, top caps, and openings.

•Acoustic panels:

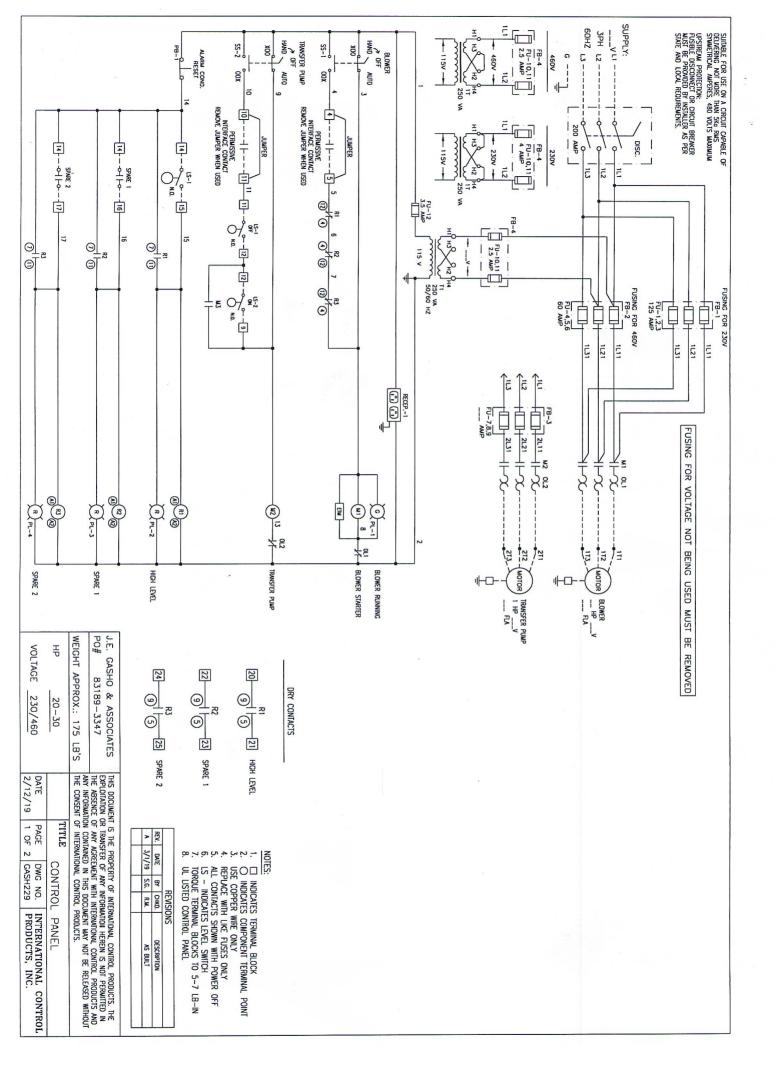
•Wall and roof panels shall have exterior skin of 18-gauge aluminized steel. Skin shall be 2.5#/ft²

- •2" absorption material, sound absorbing embossed densified polyurethane foam.
- •All doors will be provided with acoustic seals on all four sides with stainless steel or nylon handles and hinges.
- •All side panels to be easily removable via a quick release clamp.

•Panel acoustical performances have been tested by an independent laboratory and achieve a NRC = 1.0. Expected 20-25 dba reduction when measured at 1 meter in a free field.



See a complete listing of our noise reduction products online at www.ramequipment.com



APPENDIX N SVES SHUTDOWN LOG

SVE System Shutdown Log TRACKING FORM

975 Nostrand Avenue, Brooklyn, NY

Date	Time	Message	Unusual conditions on arrival	Restart successful?	Description of persistant problem(s)
MM/DD/YY	HH:MM	Alarm	fan shut down.	Yes	High Temperature

APPENDIX O HEALTH AND SAFETY PLAN AND COMMUNITY AIR MONITORING PLAN

975 NOSTRAND AVENUE

BROOKLYN, NEW YORK

Health and Safety Plan and Community Air Monitoring Plan

NYSDEC BCP Site: C224335 AKRF Project Number: 210225

Prepared for:

New York State Department of Environmental Conservation Division of Environmental Remediation, Remedial Bureau B 625 Broadway, 12th Floor Albany, New York 12233

On Behalf Of:

Nostrand Green LLC 826 Broadway, 11th Floor New York, NY 10003





AKRF, Inc. 440 Park Avenue South, 7th Floor New York, NY 10016 212-696-0670

DECMEBER 2023

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FIGURES

Figure 1 – Site Location Figure 2 – Hospital Location Map

ATTACHMENTS

Attachment A – Potential Health Effects from On-Site Contaminants

Attachment B – West Nile Virus/St. Louis Encephalitis Prevention

Attachment C – Report Forms

Attachment D – Emergency Hand Signals

Attachment E – Special Requirements CAMP

1.0 INTRODUCTION

This environmental Health and Safety Plan (HASP) has been developed for implementation of Site Management Plan (SMP) activities conducted by all personnel on-Site, both AKRF, Inc. (AKRF) employees and others, at 975 Nostrand Avenue, Brooklyn, NY (the "Site"). The legal definition of the Site is Tax Block 1309, Lot 6. A Site Location plan is provided as Figure 1.

Nostrand Green LLC entered into a Brownfield Cleanup Agreement (BCA) (Index No. C224335-12-21) on December 17, 2021 with the New York State Department of Environmental Conservation (NYSDEC) as a Volunteer to remediate the Site. The Site is zoned residential (R7-1) and commercial (C2-3). The Site is currently being redeveloped with a new mixed-use residential and commercial use building with a cellar.

After completion of the remedial work in accordance with the NYSDEC-approved Remedial Action Work Plan (RAWP) and Remedy Modification Request (RMR), some contamination was left at this Site. Institutional and Engineering Controls (ICs/ECs) have been incorporated into the Site remedy to control exposure to remaining contamination to ensure protection of public health and the environment. An Environmental Easement granted to the NYSDEC, and recorded with the Kings County Clerk, requires compliance with the SMP and all ICs/ECs placed on the Site.

This HASP and CAMP does not discuss routine health and safety issues common to general construction and excavation, including, but not, limited to slips, trips, falls, shoring, and other physical hazards. All AKRF employees are directed that all work must be performed in accordance with the AKRF's Generic HASP and all Occupation 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				
(X) 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 app	ly	
(X) Liquid	(X) Solid	() Sludge
(X) Vapors	() Unknown	() Other
Comments:		· · ·

2.1.3 Hazardous Materials

Check all that	Check all that apply							
Chemicals	Solids	Sludges	Solvents	Oils	Other			
() Acids	() Ash	() Paints	() Halogens	() Transformer	() Lab			
() Caustics	() Asbestos	() Metals	(X) Petroleum	() Other DF	() Pharm			
(X) Pesticides	() Tailings	() POTW	(X) Other	() Motor or Hydraulic Oil	() Hospital			
(X) Petroleum	(X) Other	() Other	Chlorinated Solvents	(X) Gasoline	() Rad			
() Inks	Fill material			(X) Fuel Oil	() MGP			
() PCBs				(X) Waste Oil	() Mold			
(X) Metals					() Cyanide			
(X)Other: SVOCs								

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, periphera neuropathy, resp irritation, hyperpigmentation of skin, [potential occupational carcinogen].	
Asbestos	No exposure limits listed.	Asbestosis (chronic exposure): dyspnea (breathing difficulty), interstitial fibrosis, restricted pulmonary function, finger clubbing; irritation eyes; [potential occupational carcinogen].	
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].	
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.	

2.1.4 Chemicals of Concern

Chemical	REL/PEL/STEL	Health Hazards
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.
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].
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].
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].

Chemical	REL/PEL/STEL	Health Hazards	
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			

The potential health effects from on-Site contaminants are provided in Attachment A. Information provided by the CDC Division of Vector-Borne Infectious Diseases on prevention of the West Nile Virus is provided in Attachment B.

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 implementation of the HASP. The SSO will have a 2-year or 4-year college degree in occupational safety or a related environmental 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 are 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 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 and 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 Site activities. 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 is the zone area where support facilities such as vehicles, 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. The exclusion zone and CRZ are 10 and 25 feet from the drill rig during excavation and/or sampling. Control measures such as caution tape and/or traffic cones will be placed around the perimeter of the work area when needed.

Task	Exclusion Zone	CRZ	Support Zone
Excavation and/or	10 ft from Drill Rig or	25 ft from Drill Rig or	As Needed
Sampling	Excavator	Excavator	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 in the soil and groundwater. Results of the air monitoring will be used to determine the appropriate response action, if needed.

2.6.1 Volatile Organic Compound (VOC) Monitoring

Continuous monitoring for VOCs will be conducted during all ground-intrusive activities, including soil boring advancement and groundwater monitoring well installation. Upwind concentrations will be measured at the start of each workday and periodically thereafter to establish background concentrations. VOCs will be monitored continuously at the downwind perimeter of the exclusion zone. Monitoring will be conducted with a PID equipped with an 10.6 eV lamp capable of calculating 15-minute running average concentrations.

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.

2.6.2 Community Air Monitoring Action Levels

VOC Action Levels

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 downwind 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 shutdown.

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:

- The 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 Site Health and Safety Officer; 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.

Instrument	Action Level	Response Action	
	Less than 5 ppm in breathing zone	Level D or D-Modified	
PID	Between 5 ppm and 50 ppm	Level C	
PID	Mana than 50 mm	Stop work. Resume work when	
	More than 50 ppm	readings are less than 50 ppm.	
ppm = parts per million			

2.7 Special Requirements CAMP

As the Site is located within 20 feet of potentially occupied structures, a Special Requirements CAMP will be implemented during activities involving subsurface disturbance. One of the two fixed CAMP stations will be located near potentially exposed individuals.

The additional CAMP provisions included in the Special Requirements CAMP are as follows:

- 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.

The following Site-Specific CAMP provisions will be implemented at the Site, as necessary:

- 1. If total VOC concentrations near the outside walls or next to intake vents of the southadjacent occupied structures exceed 1 ppm, air monitoring should occur within the occupied structures; and
- 2. If total particulate concentrations near the outside walls or next to intake vents of the southadjacent occupied structures exceed 0.150 mg/m³, work activities should be suspended until controls are implemented.

Additional information regarding the Special Requirements CAMP is provided in Attachment E.

2.8 Personal Protection Equipment

The PPE required for various kinds of 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 D PPE includes donning of the following during drilling and sampling:

- 1. Steel Toed Boots
- 2. Hard Hat
- 3. Work Gloves
- 4. Safety Glasses
- 5. Ear Plugs
- 6. Nitrile Gloves
- 7. Tyvek Suit if NAPL is present

If PID readings exceed 5 ppm in the breathing zone, personnel will don Level C PPE, which includes Level D PPE and a half- or full-face respirator with a dual organic and particulate cartridge.

LEVEL OF PROTECTION & PPE		Excavation/ 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 rig 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)	

Cartridges to be changed out at least once per shift unless warranted beforehand (e.g., more difficult to breathe or any odors detected).

2.9 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 on leaving the work area and before eating, drinking, or any other such activity.
- The workers should shower as soon as possible after leaving the Site. 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 provided as Figure 2. A Weekly Safety Report Form and an Injury Report Form are provided in Attachment C. Emergency Hand signals are provided in Attachment D.

3.1 Hospital Directions

Hospital Name:	Kings County Hospital Center
Phone Number:	(718) 245-3131
Address/Location:	489 Clarkson Avenue, Brooklyn, NY 11207
Directions:	Turn LEFT from the site onto Nostrand Avenue. Turn LEFT onto Clarkson Avenue. The Emergency Room will be on the LEFT.

3.2 Emergency Contacts

Company	Individual Name	Title	Contact Number	
	Axel Schwendt	Project Director	646-388-9529 (office)	
AKRF	Ashutosh Sharma	Project Manager	646-388-9865 (office)	
	Stephen Schmid	SSO	914-400-9736 (cell)	
Nostrand Green LLC	Marlee Busching- Truscott	BCP Volunteer Representative	212-777-9500	
Ambulance, Fire				
Department & Police	-	-	911	
Department				
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

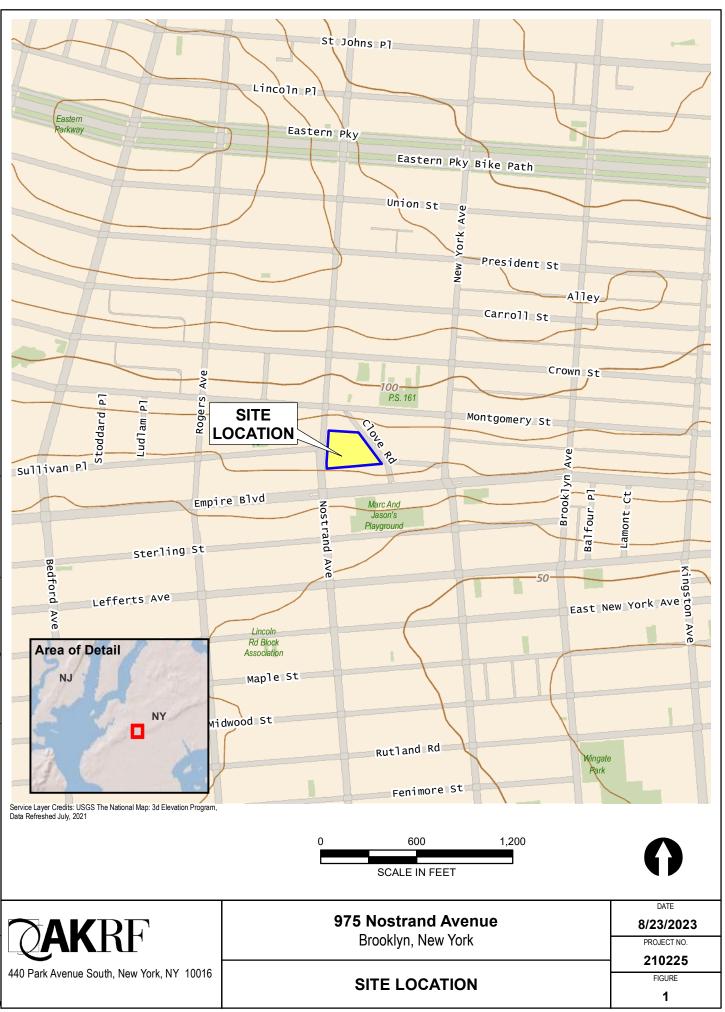
Below is an affidavit that must be signed by all workers who enter the site. A copy of the HASP must be on-site at all times and will be kept by the SSO.

AFFIDAVIT

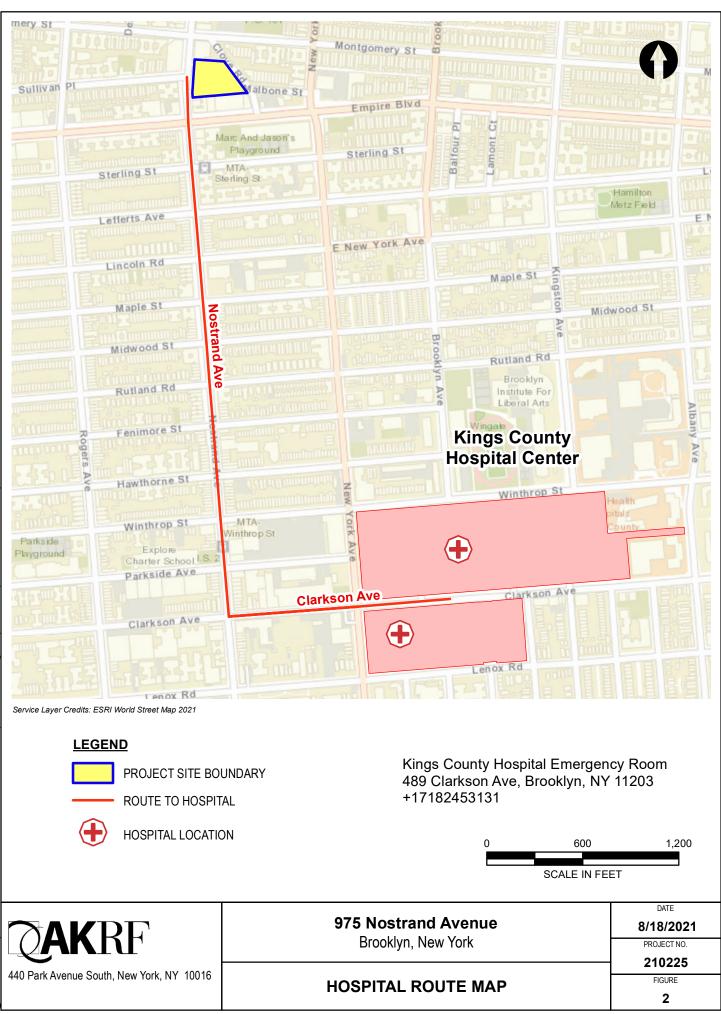
I, _____(name), of _____(company name), have read the Health and Safety Plan (HASP) for the 975 Nostrand Avenue property located at 975 Nostrand Avenue in Brooklyn, New York. I agree to conduct all on-site work in accordance with the requirements set forth in this HASP and understand that failure to comply with this HASP could lead to my removal from the site.

Signed:	Company:	Date:
Signed:	Company:	Date:

FIGURES



iszalu 10:32:53 AM map ocation Site Figure 1 and Graphics/SAR\210225 GIS NOSTRAND AVENUE/ **323 AKRF**



ATTACHMENT A

POTENTIAL HEALTH EFFECTS FROM ON-SITE CONTAMINANTS

ARSENIC CAS # 7440-38-2

Division of Toxicology ToxFAQsTM

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?

 \Box Arsenic cannot be destroyed in the environment. It can only change its form.

 \Box Arsenic in air will settle to the ground or is washed out of the air by rain.

□ Many arsenic compounds can dissolve in water.

 \Box 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

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, Public Health Service Agency for Toxic Substances and Disease Registry



December 2003

ToxFAQsTM Internet address is http://www.atsdr.cdc.gov/toxfaq.html

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 μ g arsenic per cubic meter of workplace air (10 μ g/m³) 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. ToxFAQsTM 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.





Division of Toxicology ToxFAQsTM

AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

September 2001

This fact sheet answers the most frequently asked health questions (FAQs) about asbestos. 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, individual susceptibility and personal habits, and whether other chemicals are present.

HIGHLIGHTS: Exposure to asbestos usually occurs by breathing contaminated air in workplaces that make or use asbestos. Asbestos is also found in the air of buildings that are being torn down or renovated. Asbestos exposure can cause serious lung problems and cancer. This substance has been found at 83 of the 1,585 National Priorities List sites identified by the Environmental Protection Agency (EPA).

What is asbestos?

Asbestos is the name given to a group of six different fibrous minerals (amosite, chrysotile, crocidolite, and the fibrous varieties of tremolite, actinolite, and anthophyllite) that occur naturally in the environment. Asbestos minerals have separable long fibers that are strong and flexible enough to be spun and woven and are heat resistant. Because of these characteristics, asbestos has been used for a wide range of manufactured goods, mostly in building materials (roofing shingles, ceiling and floor tiles, paper products, and asbestos cement products), friction products (automobile clutch, brake, and transmission parts), heat-resistant fabrics, packaging, gaskets, and coatings. Some vermiculite or talc products products may contain asbestos.

What happens to asbestos when it enters the environment?

Asbestos fibers can enter the air or water from the breakdown of natural deposits and manufactured asbestos products. Asbestos fibers do not evaporate into air or dissolve in water. Small diameter fibers and particles may remain suspended in the air for a long time and be carried long distances by wind or water before settling down. Larger diameter fibers and particles tend to settle more quickly.

Asbestos fibers are not able to move through soil. Asbestos fibers are generally not broken down to other compounds and will remain virtually unchanged over long periods.

How might I be exposed to asbestos?

We are all exposed to low levels of asbestos in the air we breathe. These levels range from 0.00001 to 0.0001 fibers per milliliter of air and generally are highest in cities and industrial areas.

People working in industries that make or use asbestos products or who are involved in asbestos mining may be exposed to high levels of asbestos. People living near these industries may also be exposed to high levels of asbestos in air.

Asbestos fibers may be released into the air by the disturbance of asbestos-containing material during product use, demolition work, building or home maintenance, repair, and remodeling. In general, exposure may occur only when the asbestos-containing material is disturbed in some way to release particles and fibers into the air.

Drinking water may contain asbestos from natural sources or from asbestos-containing cement pipes.

How can asbestos affect my health?

Asbestos mainly affects the lungs and the membrane that surrounds the lungs. Breathing high levels of asbestos fibers for a long time may result in scar-like tissue in the lungs and in the pleural membrane (lining) that surrounds the lung. This disease is called asbestosis and is usually found in workers exposed to asbestos, but not in the general public. People with asbestosis have difficulty breathing, often a cough, and in severe cases heart enlargement. Asbestosis is a serious disease and can eventually lead to disability and death.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, Public Health Service Agency for Toxic Substances and Disease Registry

ASBESTOS CAS # 1332-21-4

ToxFAQsTM Internet address is http://www.atsdr.cdc.gov/toxfaq.html

Breathing lower levels of asbestos may result in changes called plaques in the pleural membranes. Pleural plaques can occur in workers and sometimes in people living in areas with high environmental levels of asbestos. Effects on breathing from pleural plaques alone are not usually serious, but higher exposure can lead to a thickening of the pleural membrane that may restrict breathing.

How likely is asbestos to cause cancer?

The Department of Health and Human Services (DHHS), the World Health Organization (WHO), and the EPA have determined that asbestos is a human carcinogen.

It is known that breathing asbestos can increase the risk of cancer in people. There are two types of cancer caused by exposure to asbestos: lung cancer and mesothelioma. Mesothelioma is a cancer of the thin lining surrounding the lung (pleural membrane) or abdominal cavity (the peritoneum). Cancer from asbestos does not develop immediately, but shows up after a number of years. Studies of workers also suggest that breathing asbestos can increase chances of getting cancer in other parts of the body (stomach, intestines, esophagus, pancreas, and kidneys), but this is less certain. Early identification and treatment of any cancer can increase an individual's quality of life and survival.

Cigarette smoke and asbestos together significantly increase your chances of getting lung cancer. Therefore, if you have been exposed to asbestos you should stop smoking. This may be the most important action that you can take to improve your health and decrease your risk of cancer.

How can asbestos affect children?

We do not know if exposure to asbestos will result in birth defects or other developmental effects in people. Birth defects have not been observed in animals exposed to asbestos.

It is likely that health effects seen in children exposed to high levels of asbestos will be similar to the effects seen in adults.

How can families reduce the risk of exposure to asbestos?

Materials containing asbestos that are not disturbed or deteriorated do not, in general, pose a health risk and can be left alone. If you suspect that you may be exposed to asbestos in your home, contact your state or local health department or the regional offices of EPA to find out how to test your home and how to locate a company that is trained to remove or contain the fibers.

Is there a medical test to show whether I've been exposed to asbestos?

Low levels of asbestos fibers can be measured in urine, feces, mucus, or lung washings of the general public. Higher than average levels of asbestos fibers in tissue can confirm exposure but not determine whether you will experience any health effects.

A thorough history, physical exam, and diagnostic tests are needed to evaluate asbestos-related disease. Chest x-rays are the best screening tool to identify lung changes resulting from asbestos exposure. Lung function tests and CAT scans also assist in the diagnosis of asbestos-related disease.

Has the federal government made recommendations to protect human health?

In 1989, EPA banned all new uses of asbestos; uses established before this date are still allowed. EPA established regulations that require school systems to inspect for damaged asbestos and to eliminate or reduce the exposure by removing the asbestos or by covering it up. EPA regulates the release of asbestos from factories and during building demolition or renovation to prevent asbestos from getting into the environment.

EPA has proposed a concentration limit of 7 million fibers per liter of drinking water for long fibers (lengths greater than or equal to 5 μ m). The Occupational Safety and Health Administration has set limits of 100,000 fibers with lengths greater than or equal to 5 μ m per cubic meter of workplace air for 8-hour shifts and 40-hour work weeks.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 2001. Toxicological Profile for Asbestos. 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. ToxFAQsTM 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.



Agency for Toxic Substances and Disease Registry ToxFAQs

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.

September 1997

BENZENE

CAS # 71-43-2



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.



Division of Toxicology and Environmental Medicine $ToxFAQs^{\mbox{\tiny TM}}$

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.

 $\hfill\square$ Chromium does not usually remain in the atmosphere, but is deposited into the soil and water \hfill .

□ 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).

September 2008

ATSDR AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

CHROMIUM CAS # 7440-47-3

CHROMIUM CAS # 7440-47-3

ToxFAQs[™] Internet address is http://www.atsdr.cdc.gov/toxfaq.html

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/m³ chromium(VI), 0.5 mg/m³ chromium(III), and 1.0 mg/m³ 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 environmental 1 quality department if you have any more questions or concerns.



COPPER CAS # 7440-50-8

September 2002



AGENCY FOR TOXIC SUBSTANCES AND DISEASE BEGISTRY

Division of Toxicology ToxFAQsTM

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.

 \Box 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

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COPPER CAS # 7440-50-8

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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.

 \Box 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/m³) of copper fumes (vapor generated from heating copper) and 1 mg/m³ 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 μ g) of copper per day for children aged 1-3 years, 440 μ g/day for children aged 4-8 years, 700 μ g/day for children aged 9-13 years, 890 μ g/day for children aged 14-18 years, and 900 μ g/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.



DDT, DDE, AND DDD

CAS # 50-29-3, 72-55-9, 72-54-8

Division of Toxicology ToxFAQsTM

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



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DDT, DDE, AND DDD CAS # 50-29-3, 72-55-9, 72-54-8

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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, shortterm 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/m³) 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.



ETHYLBENZENE CAS # 100-41-4

Agency for Toxic Substances and Disease Registry ToxFAQs

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 ĕth' əl bĕn' zēn')

AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

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.

June 1999

ETHYLBENZENE CAS # 100-41-4

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.





FUEL OILS CAS # 8008-20-6, 70892-10-3, 68476-30-2, 68476-34-6, 68476-31-3

Agency for Toxic Substances and Disease Registry ToxFAQs

September 1996

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 fyoo/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

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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/m³) 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.



Division of Toxicology and Environmental Medicine ToxFAQsTM

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. Highlevel 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

August 2007



LEAD CAS # 7439-92-1

ToxFAQsTM Internet address is http://www.atsdr.cdc.gov/toxfaq.html

(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 (μ g/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 μ g/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.



Agency for Toxic Substances and Disease Registry ToxFAQs

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 mūr/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,

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MERCURY CAS # 7439-97-6

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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. 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/m³) and 0.05 mg/m³ 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.

Pregnant women and children should keep away from

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.



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, Public Health Service Agency for Toxic Substances and Disease Registry

Division of Toxicology ToxFAQsTM

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.

D 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

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NICKEL

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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.

 \Box 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/m³) 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.





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'drəkar'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.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, Public Health Service Agency for Toxic Substances and Disease Registry

POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)

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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/m³). The OSHA Permissible Exposure Limit (PEL) for mineral oil mist that contains PAHs is 5 mg/m³ 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.





POLYCHLORINATED BIPHENYLS

Division of Toxicology ToxFAQsTM

February 2001

This fact sheet answers the most frequently asked health questions (FAQs) about polychlorinated biphenyls. 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: Polychlorinated biphenyls (PCBs) are a mixture of individual chemicals which are no longer produced in the United States, but are still found in the environment. Health effects that have been associated with exposure to PCBs include acne-like skin conditions in adults and neurobehavioral and immunological changes in children. PCBs are known to cause cancer in animals. PCBs have been found in at least 500 of the 1,598 National Priorities List sites identified by the Environmental Protection Agency (EPA).

What are polychlorinated biphenyls?

Polychlorinated biphenyls are mixtures of up to 209 individual chlorinated compounds (known as congeners). There are no known natural sources of PCBs. PCBs are either oily liquids or solids that are colorless to light yellow. Some PCBs can exist as a vapor in air. PCBs have no known smell or taste. Many commercial PCB mixtures are known in the U.S. by the trade name Aroclor.

PCBs have been used as coolants and lubricants in transformers, capacitors, and other electrical equipment because they don't burn easily and are good insulators. The manufacture of PCBs was stopped in the U.S. in 1977 because of evidence they build up in the environment and can cause harmful health effects. Products made before 1977 that may contain PCBs include old fluorescent lighting fixtures and electrical devices containing PCB capacitors, and old microscope and hydraulic oils.

What happens to PCBs when they enter the environment?

□ PCBs entered the air, water, and soil during their manufacture, use, and disposal; from accidental spills and leaks during their transport; and from leaks or fires in products containing PCBs.

□ PCBs can still be released to the environment from hazardous waste sites; illegal or improper disposal of industrial wastes and consumer products; leaks from old electrical transformers containing PCBs; and burning of some wastes in incinerators.

□ PCBs do not readily break down in the environment and thus may remain there for very long periods of time. PCBs can travel long distances in the air and be deposited in areas far away from where they were released. In water, a small amount of PCBs may remain dissolved, but most stick to organic particles and bottom sediments. PCBs also bind strongly to soil.

□ PCBs are taken up by small organisms and fish in water. They are also taken up by other animals that eat these aquatic animals as food. PCBs accumulate in fish and marine mammals, reaching levels that may be many thousands of times higher than in water.

How might I be exposed to PCBs?

□ Using old fluorescent lighting fixtures and electrical devices and appliances, such as television sets and refrigerators, that were made 30 or more years ago. These items may leak small amounts of PCBs into the air when they get hot during operation, and could be a source of skin exposure.

□ Eating contaminated food. The main dietary sources of PCBs are fish (especially sportfish caught in contaminated lakes or rivers), meat, and dairy products.

□ Breathing air near hazardous waste sites and drinking contaminated well water.

□ In the workplace during repair and maintenance of PCB transformers; accidents, fires or spills involving transformers, fluorescent lights, and other old electrical devices; and disposal of PCB materials.

How can PCBs affect my health?

The most commonly observed health effects in people exposed to large amounts of PCBs are skin conditions such as acne and rashes. Studies in exposed workers have shown changes in blood and urine that may indicate liver damage. PCB exposures in the general population are not likely to result in skin and liver effects. Most of the studies of health effects of PCBs in the general population examined children of mothers who were exposed to PCBs.

Animals that ate food containing large amounts of PCBs for short periods of time had mild liver damage and some died. Animals that ate smaller amounts of PCBs in food over several weeks or months developed various kinds of health effects, including anemia; acne-like skin conditions; and liver, stomach, and thyroid gland injuries. Other effects

Page 2 POLYCHLORINATED BIPHENYLS

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of PCBs in animals include changes in the immune system, behavioral alterations, and impaired reproduction. PCBs are not known to cause birth defects.

How likely are PCBs to cause cancer?

Few studies of workers indicate that PCBs were associated with certain kinds of cancer in humans, such as cancer of the liver and biliary tract. Rats that ate food containing high levels of PCBs for two years developed liver cancer. The Department of Health and Human Services (DHHS) has concluded that PCBs may reasonably be anticipated to be carcinogens. The EPA and the International Agency for Research on Cancer (IARC) have determined that PCBs are probably carcinogenic to humans.

How can PCBs affect children?

Women who were exposed to relatively high levels of PCBs in the workplace or ate large amounts of fish contaminated with PCBs had babies that weighed slightly less than babies from women who did not have these exposures. Babies born to women who ate PCBcontaminated fish also showed abnormal responses in tests of infant behavior. Some of these behaviors, such as problems with motor skills and a decrease in short-term memory, lasted for several years. Other studies suggest that the immune system was affected in children born to and nursed by mothers exposed to increased levels of PCBs. There are no reports of structural birth defects caused by exposure to PCBs or of health effects of PCBs in older children. The most likely way infants will be exposed to PCBs is from breast milk. Transplacental transfers of PCBs were also reported In most cases, the benefits of breastfeeding outweigh any risks from exposure to PCBs in mother's milk.

How can families reduce the risk of exposure to PCBs?

You and your children may be exposed to PCBs by eating fish or wildlife caught from contaminated locations. Certain states, Native American tribes, and U.S. territories have issued advisories to warn people about PCB-contaminated fish and fish-eating wildlife. You can reduce your family's exposure to PCBs by obeying these advisories.
 Children should be told not play with old appliances,

electrical equipment, or transformers, since they may contain PCBs.

Children should be discouraged from playing in the dirt near hazardous waste sites and in areas where there was a transformer fire. Children should also be discouraged from eating dirt and putting dirty hands, toys or other objects in their mouths, and should wash hands frequently.
 If you are exposed to PCBs in the workplace it is possible to carry them home on your clothes, body, or tools. If this is the case, you should shower and change 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 PCBs?

Tests exist to measure levels of PCBs in your blood, body fat, and breast milk, but these are not routinely conducted. Most people normally have low levels of PCBs in their body because nearly everyone has been environmentally exposed to PCBs. The tests can show if your PCB levels are elevated, which would indicate past exposure to above-normal levels of PCBs, but cannot determine when or how long you were exposed or whether you will develop health effects.

Has the federal government made recommendations to protect human health?

The EPA has set a limit of 0.0005 milligrams of PCBs per liter of drinking water (0.0005 mg/L). Discharges, spills or accidental releases of 1 pound or more of PCBs into the environment must be reported to the EPA. The Food and Drug Administration (FDA) requires that infant foods, eggs, milk and other dairy products, fish and shellfish, poultry and red meat contain no more than 0.2-3 parts of PCBs per million parts (0.2-3 ppm) of food. Many states have established fish and wildlife consumption advisories for PCBs.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 2000. Toxicological profile for polychlorinated biphenyls (PCBs). 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. ToxFAQsTM 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.





TRICHLOROETHYLENE CAS # 79-01-6

Division of Toxicology ToxFAQsTM

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.

such as hear 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.

TRICHLOROETHYLENE CAS # 79-01-6

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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. ToxFAQsTM 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.



TETRACHLOROETHYLENE CAS # 127-18-4

Agency for Toxic Substances and Disease Registry ToxFAQs

September 1997

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-

TETRACHLOROETHYLENE CAS # 127-18-4

ToxFAQs Internet home page via WWW is http://www.atsdr.cdc.gov/toxfaq.html

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.





Division of Toxicology ToxFAQsTM

This fact sheet answers the most frequently asked health questions (FAOs) 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.

U 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.

U 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, drunkentype actions, memory loss, nausea, loss of appetite, and

February 2001

TOLUENE

CAS # 108-88-3

AGENCY FOR TOXIC SUBSTANCES



TOLUENE CAS # 108-88-3

ToxFAQs[™] Internet address is http://www.atsdr.cdc.gov/toxfaq.html

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. ToxFAQsTM 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.



Agency for Toxic Substances and Disease Registry ToxFAQs

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.
- $\hfill\square$ 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

XYLENE CAS # 1330-20-7



September 1996

ToxFAQs Internet home page via WWW is http://www.atsdr.cdc.gov/toxfaq.html

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.

Federal Recycling Program



Division of Toxicology ToxFAQsTM

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.

 \Box 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.

 $\hfill\square$ Most of the zinc in soil stays bound to soil particles and

does not dissolve in water.

 \Box 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.

August 2005

CAS # 7440-66-6

ZINC



ToxFAQs[™] Internet address is http://www.atsdr.cdc.gov/toxfaq.html

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.

Federal Recycling Program



ATTACHEMENT B West Nile Virus/St. Louis Encephalitis Prevention

WEST NILE VIRUS/ST. LOUIS ENCEPHALITIS PREVENTION

The following section is based upon information provided by the CDC Division of Vector-Borne Infectious Diseases. Symptoms of West Nile Virus include fever, headache, and body aches, occasionally with skin rash and swollen lymph glands, with most infections being mild. More severe infection may be marked by headache, high fever, neck stiffness, stupor, disorientation, coma, tremors, convulsions, muscle weakness, paralysis, and, rarely, death. Most infections of St. Louis encephalitis are mild without apparent symptoms other than fever with headache. More severe infection is marked by headache, high fever, neck stiffness, stupor, occasional convulsions (especially infants) and spastic (but rarely flaccid) paralysis. The only way to avoid infection of West Nile Virus and St. Louis encephalitis is to avoid mosquito bites. To reduce the chance of mosquito contact:

- Stay indoors at dawn, dusk, and in the early evening.
- Wear long-sleeved shirts and long pants whenever you are outdoors.
- Spray clothing with repellents containing permethrin or DEET (N, N-diethyl-meta-toluamide), since mosquitoes may bite through thin clothing.
- Apply insect repellent sparingly to exposed skin. An effective repellent will contain 35% DEET. DEET in high concentrations (greater than 35%) provides no additional protection.
- Repellents may irritate the eyes and mouth.
- Whenever you use an insecticide or insect repellent, be sure to read and follow the manufacturer's directions for use, as printed on the product.

ATTACHMENT C 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:		
	d injuries, illnesses, or near misses that week:		
actions taken):	g data that week (include and sample analyses, action levels exceeded, and		
Comments:			
Name:	Company:		
Signature:	Title:		

INCIDENT REPORT FORM

Date of Report:		
Injured:		
Employer:		
Site:	Site Lo	cation:
Report Prepared By:		
Sign	ature	Title
ACCIDENT/INCIDENT (CATEGORY (check al	l that applies)
Injury	Illness	Near Miss
Property Damage	Fire	Chemical Exposure
On-site Equipment	Motor Vehicle	Electrical
Mechanical	Spill	Other
WITNESS TO ACCIDEN	T/INCIDENT:	
Name:	,	Company:
Address:		Address:
Phone No.:		Phone No.:
Name:		Company:
Address:		Address:
Phone No.:		Phone No.:

INJURED - ILL:		
Name:	SSN:	
Address:		
Length of Service:	Time on Pre	esent Job:
Time/Classification:		
SEVERITY OF INJURY OR	R ILLNESS:	
Disabling	Non-disabling	Fatality
Medical Treatment	First Aid Only	
ESTIMATED NUMBER OF NATURE OF INJURY OR I		·
CLASSIFICATION OF INJ	U RY:	
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:		
(If two or more injuries, record	on separate sheets)	

PROPERTY DAMAGE:

Description of Damage:		
Cost of Damage:	\$	
ACCIDENT/INCIDENT L	OCATION:	
ACCIDENT/INCIDENT A (Object, substance, material,	ANALYSIS: Causative agent most directly related to accident/incident machinery, equipment, conditions)	
Was weather a factor?:		
Unsafe mechanical/physical/	environmental condition at time of accident/incident (Be specific):	
Personal factors (Attitude, kr	nowledge or skill, reaction time, fatigue):	
ON-SITE ACCIDENTS/IN	CIDENTS:	
Level of personal protection	equipment required in Site Safety Plan:	
Modifications:		
Was injured using required ea	quipment?:	

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 REV	/IEWED BY:
SSO Name Printed	SSO Signature
OTHERS PARTICIPATING IN INVES	STIGATION:
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 D 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!



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!



ATTACHMENT E Special Requirements CAMP

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 P Remedial System Optimization Table of Contents

REMEDIAL SYSTEM OPTIMIZATION FOR 975 NOSTRAND AVENUE

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