

INTERIM REMEDIAL MEASURE WORK PLAN

FOR

**BCP SITE No. C915394
1803 ELMWOOD AVENUE BCP
1803 ELMWOOD AVENUE
CITY OF BUFFALO, ERIE COUNTY, NEW YORK**

Prepared by:



C&S ENGINEERS, INC.

499 Colonel Eileen Collins Blvd.
Syracuse, New York 13212

Prepared on Behalf of:

1803-1807 ELMWOOD AVENUE LLC

MOD-PAC Corporation
City of Buffalo, New York 14207

March 2026

Revision 2

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Acronym List

AAR	ALTERNATIVES ANALYSIS REPORT
ACM	ASBESTOS-CONTAINING MATERIAL
AWQS	AMBIENT WATER QUALITY STANDARD
BCA	BROWNFIELD CLEANUP AGREEMENT
BCP	BROWNFIELD CLEANUP PROGRAM
BGS	BELOW GROUND SURFACE
BMP	BEST MANAGEMENT PRACTICE
CAMP	COMMUNITY AIR MONITORING PLAN
CCR	CONSTRUCTION COMPLETION REPORT
COC	CERTIFICATE OF COMPLETION
CVOC	CHLORINATED VOLATILE ORGANIC COMPOUND
DER	DEPARTMENT OF ENVIRONMENTAL REMEDIATION
EC	ENGINEERING CONTROL
EDD	ELECTRONIC DATA DELIVERABLE
ELAP	ENVIRONMENTAL LABORATORY APPROVAL PROGRAM
ESA	ENVIRONMENTAL SITE ASSESSMENT
EWP	EXCAVATION WORK PLAN
GHG	GREENHOUSE GAS
HASP	HEALTH AND SAFETY PLAN
HFM	HISTORIC FILL MATERIAL
IC	INSTITUTIONAL CONTROL
ISMP	INTERIM SITE MANAGEMENT PLAN
IRM/IRMWP	INTERIM REMEDIAL MEASURE / INTERIM REMEDIAL MEASURE WORK PLAN
NYSDEC	NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
NYSDOH	NEW YORK STATE DEPARTMENT OF HEALTH
O&M	OPERATIONS AND MAINTENANCE

Acronym List

PAH	POLYCYCLIC AROMATIC HYDROCARBONS
PPM	PARTS PER MILLION
PCB	POLYCHLORINATED BIPHENYL
PID	PHOTO-IONIZATION DETECTOR
PCE	TETRACHLOROETHYLENE
PFAS	PER- AND POLYFLUOROALKYL SUBSTANCES
QA/QC	QUALITY ASSURANCE / QUALITY CONTROL
RAO	REMEDIAL ACTION OBJECTIVE
REC	RECOGNIZED ENVIRONMENTAL CONDITION
RI	REMEDIAL INVESTIGATION
RIWP	REMEDIAL INVESTIGATION WORK PLAN
SCG	STANDARDS, CRITERIA, GUIDANCE
SCO	SOIL CLEANUP OBJECTIVE
SEFA	SPREADSHEETS FOR ENVIRONMENTAL FOOTPRINT ANALYSIS
SITE	1803 ELMWOOD AVENUE, BUFFALO, NEW YORK
SSDS	SUB-SLAB DEPRESSURIZATION SYSTEM
SVOC	SEMI-VOLATILE ORGANIC COMPOUND
TAL	TARGET ANALYTE LIST
TCE	TRICHLOROETHENE
TCL	TARGET COMPOUND LIST
TOGS	TECHNICAL AND OPERATIONAL GUIDANCE SERIES
$\mu\text{G}/\text{M}^3$	MICROGRAM PER CUBIC METER
USEPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
USGS	UNITED STATES GEOLOGIC SERVICE
VOC	VOLATILE ORGANIC COMPOUND
VOV	VOLATILE ORGANIC VAPOR

Professional Engineer Certification

I, H. Nevin Bradford, certify that I am currently a NYS Registered Professional Engineer and that this Interim Remedial Measure Work Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and DER Green Remediation (DER-31).



H. Nevin Bradford
State of New York Professional Engineer No. 086008



Registration Expires: 04.31.2026

March 5, 2026

1 INTRODUCTION

On behalf of 1803-1807 Elmwood Avenue, LLC and MOD-PAC CORP. (collectively the "Applicants"), C&S Engineers, Inc. (C&S) has prepared this Interim Remedial Measure Work Plan (IRMWP) for Brownfield Cleanup Program (BCP) Site No. C915394 located at 1803 Elmwood Avenue, City of Buffalo, Erie County, New York (the "Site"). The Applicants entered into a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) on October 13, 2023. **Figure 1** shows the location of the Site and **Figure 2** shows the Site boundaries and identified pertinent site features.

A Remedial Investigation Work Plan (RIWP) was subsequently approved on April 19, 2024, and the Remedial Investigation (RI) commenced on May 9, 2024.

The RI was conducted to assess the nature and extent of contamination at the Site and consisted of:

- The advancement of 29 soil borings and collection and analysis of 60 subsurface soil samples;
- The installation of five shallow and five deep groundwater monitoring wells and performance of one round of groundwater sampling for both shallow and deep wells;
- The collection of three sub-slab, three indoor air, and one outdoor air vapor samples; and
- The collection of eight concrete slab foundation samples.

Soil and groundwater samples were analyzed for: a combination of volatile organic compounds (VOCs); semi-volatile organic compounds (SVOCs); pesticides; herbicides; polychlorinated biphenyls (PCBs); metals; cyanide; hexavalent chromium; per- and polyfluoroalkyl substances (PFAS); and 1,4-dioxane. Soil vapor samples were analyzed for VOCs. Concrete slab samples were analyzed for PCBs.

Contamination exceeding Commercial Use Soil Cleanup Objectives (SCO) appropriate for the proposed Site use was identified, and the contamination is generally associated with industrial uses of the property and presence of historic fill material (HFM). Constituents in the HFM at concentrations that exceed Commercial Use SCOs primarily include SVOCs and metals. In addition, VOCs, metals, and PFAS concentrations exceed standards in groundwater, CVOCs exceed standards in one sub-slab vapor and one indoor air sample, and PCBs exceed Commercial Use SCOs in two superficial concrete slab samples. The RI is discussed in further detail in Section 2.5.

This Interim Remedial Measure (IRM) is being completed to immediately resolve indoor air issues in the warehouse structure and move forward with the warehouse construction that is actively taking place.

2 PROJECT BACKGROUND

2.1 Site Description

The Site consists of approximately 0.655 acres of a larger parent parcel totaling approximately 8.53 acres of land addressed at 1803 Elmwood Avenue in the City of Buffalo, Erie County, New York. For purposes of this Work Plan, the larger parcel that contains the Site will be referred to as “the parent parcel”, whereas the BCP site will be referred to as “the Site”. The Site is located within an urban area, utilized for industrial, commercial, and residential purposes. The parent parcel, known as SBL #78.70-3-20.11, is bound to the west by an industrial parcel occupied by MOD-PAC Corp. and the Nardin Academy outside sports complex, to the south by Brinks Security Company and the CSX railroad tracks, to the east by commercial buildings occupied by various private tenants, and to the north by commercial buildings occupied by various private tenants and a small community of residential structures. The Site is bound to the north, west, and south by the industrial parcel occupied by MOD-PAC Corp., and to the east by portions of the parent parcel, developed with both commercial and industrial buildings occupied by MOD-PAC Corp., Nardin Academy, and various other private tenants. The area within the BCP boundary is developed with one structure.

The Site includes an approximate +/-14,400 square-foot warehouse structure, previously utilized for storage by MOD-PAC Corp. since late-2021, but currently unoccupied. The Site structure occupies the northern portion of the BCP area and was originally constructed by 1935. Exterior Site features consist of the exterior of the building, as well as asphalt, concrete paved areas, and railroad spurs. The entire Site is covered in hardscape surfaces.

Figure 1 shows the location of the Site and **Figure 2** shows the Site boundaries and identified pertinent site features.

2.2 Geology and Hydrogeology

2.2.1 Geology

According to the *Surficial Geology Map of New York, Niagara Sheet* (D.H. Cadwell, G.G. Connally, P.J. Fleisher, E.H. Muller, 1991), the overburden materials at and in the vicinity of the Site are comprised of Urban land. This material is generally described as covered by asphalt, concrete, buildings and other impervious structures. During the RI, the following subsurface geology was generally observed: approximately a foot of asphalt / gravel / concrete, followed by approximately seven to eight feet of HFM primarily consisting of brown sand and black foundry sand, followed by native soil characterized as dense brown clay.

The *Geologic Map of New York, Niagara Sheet* (Lawrence V. Rickard and Donald W. Fisher, 1970) identifies the local bedrock in the area of the Site as from the Akron Dolostone – included in the Bertie Formation, part of the Salina group, which consist primarily of light to dark grey dolostone. Bedrock was not encountered during the RI or previous documented investigation activities.

2.2.2 Hydrogeology

Based on a review of the Site topographic conditions, as depicted on the USGS 7.5-minute Topographic Quadrangle Map of Buffalo, regional groundwater is expected to flow south-southwest toward Scajaquada Creek located approximately 0.7 miles south of the Site. Scajaquada Creek flows in a western direction and ultimately discharges to the Niagara River. The surface elevation for the Site is approximately 600 feet above mean sea level. Site-specific groundwater flow was determined to be variable and therefore the direction of groundwater flow is inconclusive. This is likely caused by the miscellaneous underground foundations discovered throughout the parent parcel, buried rails, and other underground features affecting local groundwater flow directions.

C&S assumes that the regional groundwater table typically conforms to surface and bedrock topography. Localized shallow groundwater flow may vary as a result of underground utilities, site features, or other subsurface conditions. Underground hydrostatic pressure likely produced shallower groundwater elevations in deeper wells (MW-01 to MW-05).

Figure 3 and **Table 2-1** on the next page presents locations and data about the groundwater monitoring wells on the site as well as some adjacent monitoring wells. The figure also displays the local groundwater contours.

**Table 2-1
Groundwater Monitoring Well Data**

<i>Well ID</i>	<i>Well Installation Date</i>	<i>Well Decommission Date</i>	<i>Ground Elevation (ft)</i>	<i>Depth to Groundwater (ft)</i>	<i>Groundwater Elevation (ft)</i>	<i>Gauging Date</i>	<i>Well Depth (ft)</i>	<i>Top of riser Elevation (ft)</i>	<i>Well Diameter (in)</i>	<i>Length of Screen (ft)</i>	<i>Screen interval (ft below grade)</i>
MW-01	5/23/24	10/8/25	601.70	4.70	597.00	6/24/24	35	601.70	2	15	20 – 35
MW-02	5/24/24	10/8/25	601.09	5.50	595.59	6/25/24	25	601.09	2	15	10 – 25
MW-03	5/30/24	10/8/25	600.78	3.20	597.58	6/25/24	25	600.78	2	15	10 - 25
MW-04	5/23/24	10/8/25	601.27	5.50	595.77	6/24/24	30	601.27	2	15	15 – 30
MW-05	5/24/24	10/8/25	601.27	5.40	595.87	6/24/24	35	601.27	2	15	20 - 35
MW-01A	10/14/25	N/A	601.56	12.99	588.57	10/27/25	15	601.56	2	10	5 – 15
MW-02A	10/15/25	N/A	601.18	4.74	596.44	10/27/25	15	601.18	2	10	5 – 15
MW-03A	10/14/25	N/A	600.82	14.23	586.59	10/27/25	15	600.82	2	10	5 – 15
MW-04A	10/13/25	N/A	600.77	14.95	585.82	10/27/25	15	603.73	2	10	5 – 15
MW-05A	10/13/25	N/A	601.00	13.42	587.58	10/27/25	15	604.17	2	10	5 - 15
MW-1	Unknown	N/A	601.16	4.49	596.67	10/27/25	14.3	600.39	1	10	4.3 – 14.3
MW-3	Unknown	N/A	600.97	6.15	594.82	10/27/25	15.5	600.37	2	10	5.5 – 15.5
MW-11	Unknown	N/A	600.83	6.30	594.53	10/27/25	15.5	599.97	1	10	5.5 – 15.5
MW-13	Unknown	N/A	601.08	5.13	595.95	10/27/25	14.49	600.45	1	10	4.49 –14.49
MW-A	Unknown	N/A	601.03	5.55	595.48	10/27/25	10.22	600.56	1	10	0.22 –10.22
MW-B	Unknown	N/A	602.28	6.97	595.31	10/27/25	10.04	601.72	1	10	0.04 –10.04

2.3 Site History

The Site and surrounding properties were originally developed as a radiator manufacturing plant, occupied by American Radiator Co., since 1912 and were utilized as such until approximately 1959 when the plant reportedly closed. During that time, structural improvements were erected on-site which included four buildings that were situated in the central portion of the Site associated with the foundry to the west of the Site.

A portion of the current Site structure was constructed in 1935. This building was utilized as a crane building. By 1950 the warehouse as it exists today was constructed with a crane occupying the building. Rail spurs which previously ran through the area where the warehouse is located were preserved.

Following the closure of American Radiator in 1959, American Radiator and Standard Stamping Plant (1803 Elmwood Avenue) and Office (1807 Elmwood Avenue), totaling 55-acres at the corner of Elmwood and Hertel Avenues (including the Site), were sold to Irving Levick, Buffalo real estate investor and chairman of Sattler's Department Store. Levick planned to move some warehousing operations out of his Seneca Warehouse (701 Seneca Street; formerly the Larkin Warehouse) to the Elmwood Avenue property, which would reportedly fill more than half of the plant. The Elmwood Avenue property became known as the Seneca Warehouse and Industrial Center, Inc.

The Site was part of a larger property formerly occupied by Sattler's Home Furnishing City. The Sattler's buildings were utilized as a department store as well as for warehousing. Reportedly, Niagara Machine occupied the Site structure prior to 1990; however, the Site operations and time frame of occupancy is not known.

The former larger parcel was leased to Buffalo Industrial Leasing Corp. in 1977. Several sections were sold off to MOD-PAC Corp. in the 1980s, and Newbuff Holdings Corp. purchased the parent parcel in 1992. Newbuff Holdings began leasing the Site to O'Connell Machinery Company, Inc. in 1998 and 1803-1807 Elmwood Avenue LLC in 2003.

Upon acquisition of the Site and parent parcel by Newbuff Associates in 1992, the Site was utilized as commercial spaces for multiple tenants. Since 1992, AIRSEP (1992-1996), Goodwill (1996-1998), Mack Pallet (1996-1998), and O'Connell Machinery Co, Inc. (1998-2021) have occupied the Site structure. The Site had previously been under a 50-year lease agreement with 1803-1807 Elmwood Avenue LLC beginning in 2003. 1803-1807 Elmwood Avenue LLC purchased the Site and portions of the parent parcel on November 1, 2022. The Site structure is currently used for storage by MOD-PAC Corp. 1803-1807 Elmwood Avenue LLC is solely owned by MOD-PAC Corp.

The following table summarizes the historical and current operations on the Site based on the October 2022 Phase I ESA.

**Table 2-2
Historical Owner & Occupant Summary**

Years	Owner / Occupants
1939-1963	American Radiator & Standard Corporation
1963-1964	Irving Levick
1964-1967	Senvick Corporation
1967	Landeb, Inc.
1967-1979	Arnold Raynor & Marvin B. Tepper
1979-1986	Helen Schmincke
1986-1992	Martin C. Barrell & Donald C. Shack
1992-2004	Newbuff Holdings Corporation AIRSEP – Lessor (1992-1996) Goodwill – Lessor 1996-1998 Mack Pallet – Lessor (1996-1998) O’Connell Machinery Company, Inc. – Lessor (1998-2021) 1803-1807 Elmwood Avenue LLC – Lessor (2003-2022)
2004-2022	Newbuff Associates LLC
2022-Present	1803-1807 Elmwood Avenue LLC c/o MOD-PAC Corp.

The applicant purchased the Site in November 2022. The most recent operators at the Site consist of Newbuff Associates LLC, including commercial tenants AIRSEP, Goodwill, Mack Pallet, O’Connell Machining, and 1803-1807 Elmwood Avenue LLC.

2.4 Previous Investigations

Environmental information exists for the Site from a Phase I Environmental Site Assessment (ESA) report completed by Environmental Advantage, Inc. in October 2022, a Phase II ESA report completed by Environmental Advantage, Inc. in February 2023, and an Asbestos Conditions Assessment completed by AMD Environmental Consultants, Inc. in February 2024. The following provides a summary of those reports.

Environmental Advantage, Inc. Phase I ESA Report – October 2022

- The Site consists of approximately 0.655 acres of a larger parcel totaling approximately 11.55 acres of land addressed at 1803 Elmwood Avenue in the City of Buffalo.

The Phase I ESA identified the following Recognized Environmental Conditions (RECs).

- The Site was originally occupied by American Radiator Co. Former structures were replaced by the current structure in approximately 1935. Following the closure of American Radiator in 1959, the American Radiator and Standard Stamping Plant (1803 Elmwood Avenue) and Office (1807 Elmwood Avenue) were sold to Irving Levick, Buffalo real estate investor and chairman of Sattler's Department Store. Environmental Advantage, Inc. could not find accurate records of the Site occupants from the 1960s to the acquisition by Newbuff Associates in 1992. Although exact occupants of the Site structure could not be determined, the Site was part of a larger property formerly occupied by Sattler's Home Furnishing City that was utilized as a department store as well as for warehousing. Reportedly, Niagara Machine occupied the Site structure prior to 1990; however, the time frame of occupancy is not known. Since 1992, AIRSEP Corp. (1992-1996), Goodwill (1996-1998), Mack Pallet (1996-1998), and O'Connell Machinery Co, Inc. (1998-2021) have occupied the Site structure. The Site has been under a 50-year lease agreement with 1803-1807 Elmwood Avenue LLC beginning in 2003. Industrial facilities may have had operations suspected to have included the routine use storage and handling of various regulated substances, including but not limited to, petroleum products, heavy metals, paints, and solvent materials.

- The western adjoining property (MOD-PAC Corp.) is currently listed as a Completed Brownfield Cleanup Program Site with remaining contamination, regulated by institutional and engineering controls under a Site Management Plan.

Environmental Advantage, Inc. Focused Phase II ESA – February 2023

The Focused Phase II ESA (i.e., Investigation) was completed to obtain an overview of the environmental and subsurface conditions of the Site. The Investigation consisted of a combination of multiple soil boring sampling events occurring in October 2021 and April 2022, in addition to a Soil Vapor Intrusion investigation that occurred in July 2020. A total of 27 exterior borings and 14 interior borings were completed in October 2021 and April 2022 utilizing a direct-push track-mounted Geoprobe. The Investigation is summarized below.

- Sub-Slab Vapor Intrusion Monitoring performed July 28, 2020:
 - Investigation work included two Sub-slab vapor intrusion monitoring points located in the southern portion of the Site structure. Indoor and outdoor air samples were not collected due to uncontrolled site conditions.
 - Elevated levels of trichloroethene (TCE) were encountered at a concentration above NYSDOH Soil Vapor/Indoor Air Matrix A mitigation levels for sub-slab vapors.

- PCBs were detected in samples from three locations where oily residue was identified on the concrete surface. A concrete sample was collected which indicated total PCBs of 1.75 ppm, exceeding Commercial Use SCOs.
- Soil Sampling performed October 12-13, 2021:
 - Investigation work included 11 soil borings within the BCP limits and 14 on the larger parent parcel for a total of 25 soil borings.
 - Of the 11 samples collected within the BCP limits, five were submitted for laboratory analysis at an Environmental Laboratory Approval Program (ELAP) certified laboratory. Elevated levels of Arsenic and SVOCs were found in four of the five samples submitted for analysis.
- Additional Soil Sampling performed April 21, 2022:
 - Investigation work included 15 soil borings located within the BCP Site.
 - Elevated levels of SVOCs, mercury, and arsenic were identified in 7 of the 13 samples submitted for analysis.
- Based on the Phase II Investigation completed, the primary contaminants of concern in the soil are SVOCs, including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene' and metals, including arsenic and mercury.
- Exceedance of NYSDOH Sub-slab Vapor concentrations includes one chlorinated solvent, TCE. TCE was encountered at a concentration of 83.8 micrograms/cubic meter (ug/m³) in the sub-slab soil vapor of the interior southeast corner of the Site structure. Indoor air was not collected as a part of this investigation. NYSDOH Soil Vapor/Indoor Air Matrix A for sub-slab concentrations of TCE, *cis*-1,2-Dichloroethene (c12-DCE), 1,1-Dichloroethene (11-DCE), and Carbon Tetrachloride recommends mitigation for levels ≥60 ug/m³.

A soil analytical results summary was prepared from the soil samples collected during the Phase II ESA for the soil borings completed on the BCP Site in October 2021 and April 2022. The primary contaminants of concern in the soil include SVOCs, specifically polycyclic aromatic hydrocarbons (PAHs), and metals which were encountered in the soil samples collected from the Site at concentrations exceeding Commercial Use SCOs. The concentrations of the PAHs were up to 33 parts-per-million (ppm) of benzo(a)anthracene (Commercial Use SCO – 5.6 ppm); 32 ppm benzo(a)pyrene (Commercial Use SCO – 1 ppm); 37 ppm benzo(b)fluoranthene (Commercial Use SCO – 5.6 ppm); 2 ppm dibenzo(a,h)anthracene (Commercial Use SCO – 0.56 ppm); and 22 ppm indeno(1,2,3-cd)pyrene (Commercial Use SCO – 5.6 ppm). The concentrations of the metals were up to 75.4 ppm arsenic (Commercial Use SCO – 16 ppm); and 16.3 ppm mercury (Commercial Use SCO – 2.8 ppm). The contamination at the Site is primarily due to

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historic industrial fill, which varies from 0.5 to 7-feet below ground surface (bgs). Below is a summary of sampling data collected during the Investigation.

**Table 2-3
Subsurface Soil Analytical Results Summary**

Analyte Exceeding Commercial Use SCO	Number of Exceedances	Maximum Detection (ppm)	Commercial Use SCO (ppm)	Depth (ft bgs)
Benzo(a)anthracene	4	33	5.6	0.5-7.0
Benzo(a)pyrene	7	32	1	0.5-7.0
Benzo(b)fluoranthene	4	37	5.6	0.5-7.0
Dibenzo(a,h)anthracene	4	2.0	0.56	0.5-7.0
Indeno(1,2,3-cd)pyrene	2	22	5.6	2.5-7.0
Arsenic	4	75.4	16	0.5-3.5
Mercury	1	16.3	2.8	2.5-4.5

**Table 2-4
Sub-Slab Vapor Analytical Results Summary**

Analyte	Total Detections	Maximum Detection (ug/m ³)	Type
Dichlorodifluoromethane	2	87	Soil Vapor
Ethanol	1	16.3	Soil Vapor
Acetone	2	156	Soil Vapor
Trichlorofluoromethane	1	1.81	Soil Vapor
Isopropanol	1	3.27	Soil Vapor
Tertiary butyl Alcohol	1	1.76	Soil Vapor
Carbon disulfide	2	48	Soil Vapor
2-Butanone	1	5.22	Soil Vapor
Chloroform	1	18.7	Soil Vapor
n-Hexane	2	7080	Soil Vapor
Benzene	2	24.8	Soil Vapor
Cyclohexane	2	87.1	Soil Vapor
Trichloroethene	2	83.8	Soil Vapor
Heptane	2	4390	Soil Vapor
Toluene	2	180	Soil Vapor
Tetrachloroethene	1	25.7	Soil Vapor
Ethylbenzene	2	46.5	Soil Vapor
p/m-Xylene	2	222	Soil Vapor
o-Xylene	2	86	Soil Vapor
4-Ethyltoluene	1	23.8	Soil Vapor
1,3,5-Trimethylbenzene	2	34.1	Soil Vapor

In addition, the report summarized past groundwater sampling events that occurred on the Site outside of this investigation by Wittman Geosciences, PLLC in June 2018. A total of four groundwater samples were collected within the Site boundary and analyzed for VOCs. Two of the samples contained compounds that exceeded the NYSDEC Division of Water Technical and Operational Guidance Series (TOGS 1.1.1) Ambient Water Quality Standards (AWQS) and Guidance Values. There is also groundwater contamination present in the adjoining BCP Site (C915314) that may be a common source of contamination on both sites.

Below is a summary of sampling data collected during the June 2018 Wittman Geosciences, PLLC investigation.

**Table 2-5
Groundwater Analytical Results Summary**

Analyte Exceeding TOGS	Number of Exceedances	Maximum Detection (ug/L)	TOGS Guidance Value (ug/L)
Acetone	2	53	50
Trichloroethene	1	8.4	5

AMD Environmental Consultants, Inc. Asbestos Conditions Assessment – February 2024

The report outlined the screening and sample collection of suspected asbestos containing materials (ACM) located within the structure on the Site that occurred in July and August 2020. The purpose was to assess areas planned for renovation.

An original assessment was conducted in July 2020 and included the collection of 12 samples from six separate locations. Of those samples, three locations were identified that were positive for ACM. Those areas are outlined in the table below:

**Table 2-6
July 2020 ACM Analytical Results Summary**

Homogeneous Area Number (HAN)	Material Description	Space Identification Number (SID)	Estimated Quantity (ft ²)	Friability / Condition
700	Roof Field	High Bay Roof	14,000	Non-Friable / Damaged

**Interim Remedial Measure Work Plan
1803 Elmwood Avenue - BCP Site No. C915394
City of Buffalo, Erie County, New York**

Homogeneous Area Number (HAN)	Material Description	Space Identification Number (SID)	Estimated Quantity (ft²)	Friability / Condition
701	Roof Flashing	High Bay Roof at all perimeters, protrusions, and penetrations	Included in HAN 700	Non-Friable / Damaged
703	Aluminum Casing	High Bay Roof on Roof Field	Included in HAN 700	Non-Friable / Damaged

*Quantities are approximate and are only associated with areas of planned renovation. Additional asbestos containing materials may be located outside areas of planned renovation that were not surveyed, assessed, or quantified during this inspection.

Additional ACM samples were collected and analyzed following the results of the first sampling event in August 2020. A total of five samples were collected from five separate locations in Site structure. Of those additional samples collected, three locations were identified that were positive for ACM. Those areas are outlined in the table below:

**Table 2-7
August 2020 ACM Analytical Results Summary**

Homogeneous Area Number (HAN)	Material Description	Space Identification Number (SID)	Estimated Quantity (ft²)	Friability / Condition
400	Mud Fittings	High Bay Warehouse Interior – Located on Elevated Pipe Lines	50 linear feet	Friable / Damaged
401	Mud Pipe Insulation	High Bay Warehouse Interior – Located on Elevated Pipe Lines	20 linear feet <10 ft ² of Debris	Friable / Damaged
601	Coating on Corrugated Metal Panels	High Bay Roof Warehouse Interior	30,000	Non-Friable / Damaged

*Quantities are approximate and are only associated with areas of planned renovation. Additional asbestos containing materials may be located outside areas of planned renovation that were not surveyed, assessed, or quantified during this inspection.

2.5 Summary of Remedial Investigation

To characterize site conditions and identify the appropriate IRM for the Site, a RI was implemented. The RI included the collection and analysis of 35 soil samples, one round of groundwater sampling from five wells, soil vapor intrusion (SVI) sampling, and concrete sampling. As per NYSDEC’s September 10, 2025 comment letter, additional investigation was required. The additional RI included the collection and analysis of 22

soil samples, the decommissioning of five existing wells and installation of five new wells, and one round of groundwater sampling from five wells.

Contaminant Source and Constituents

Contamination exceeding SCOs is generally associated with HFM located throughout the Site. Constituents in the HFM at concentrations that exceed the Commercial Use SCOs generally include semi-volatile organic compounds (SVOCs) and metals. Constituents in the HFM at concentrations that exceed the Unrestricted Use SCOs generally include volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs), and per- and polyfluoroalkyl substances (PFAS).

In the groundwater samples, VOCs and SVOCs are present at concentrations marginally exceeding groundwater values. TCE, cis-1,2-Dichloroethene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, and indeno(1,2,3-cd)pyrene exceedances are likely due to past site uses.

Based on New York State Department of Health (NYSDOH) guidance, vapor intrusion mitigation is required due to the concentration of TCE in the sub-slab vapor and indoor air.

Extent of Contamination

HFM is located across the Site. The HFM is located immediately below existing surfaces and is underlain by native soils. Generally, the HFM thickness extends to seven to eight feet below ground surface. The variation in analyte concentrations in the soils across the Site that contain HFM indicates that the source of contamination in these soil samples is the HFM material.

VOCs and SVOCs are present at concentrations marginally exceeding groundwater values. Trichloroethene (TCE), cis-1,2-Dichloroethene, and polycyclic aromatic hydrocarbon exceedances are likely due to past site uses. It is likely that chlorinated VOC (cVOC) exceedances in groundwater are attributed to the adjoining MOD-PAC BCP Site (C915314) which contains documented cVOC contamination that is being managed through previous groundwater injections and a Site Management Plan.

Two metal analytes were present in the groundwater that did exceed groundwater guidance values. Sodium concentrations were above TOGS standards in every sample collected from the initial investigation, and one sample from the additional investigation contained manganese in a concentration exceeding TOGS standards. Sodium and manganese are naturally occurring and common in groundwater in the area. Sodium exceedances may be attributed to repeated use of rock salt for de-icing pavement.

Low level PFAS was detected in one monitoring well. Since PFAS were also detected in HFM, it is likely that the PFAS-contaminated HFM is a source of PFAS contamination in groundwater. However, at this time, no current/past uses of the Site can be directly attributed to the presence of PFAS in the groundwater. It is also possible that PFAS at the adjoining MOD-PAC BCP Site source is a source for PFAS in groundwater.

The soil vapor exceedances were located in the southeast corner of the warehouse structure. The vapors beneath the sub-slab and in indoor air contain concentrations of TCE that warrant mitigation. Soil vapor intrusion sampling results are shown in **Figure 4**.

The concrete sample exceedances included multiple individual PCB Aroclors detected at concentrations exceeding Unrestricted Use SCOs in seven samples. Total PCBs were detected at concentrations exceeding Unrestricted Use SCOs in five samples, and Commercial Use SCOs in two samples. The removal of the PCB contaminated concrete slab is part of this IRM. Concrete sampling results are shown in **Figure 5**.

Table 1 through **Table 9** summarize the results of the RI for each medium investigated.

3 INTERIM REMEDIAL MEASURE WORK PLAN

This section is the Interim Remedial Measure Work Plan (IRMWP) which summarizes the remedial activities related to the removal of the concrete slab and installation of a sub-slab depressurization system (SSDS) for the structure on-site. This IRMWP is based on the data collected during the RI at the Site and the recommended final remedial approach for the Site proposed in the AAR. This IRMWP identifies the controls to be applied with respect to the remediation of the Site and how the actions will successfully achieve Commercial Use SCOs.

3.1 Introduction

As summarized in Section 6 – Alternatives Analysis of the Remedial Investigation report, the recommended final remedial approach for the Site is the Track 4 (Commercial) – Cover System and Vapor Mitigation IRM. The overall Track 4 IRM is shown in **Figure 6**. The following sections describe the activities associated with the removal of the concrete slab and SSDS installation.

3.2 Engineering Controls – Design Details

3.2.1 Cover System

The need for the cover system is based on the results of the RI, which indicates that HFM is present across the majority of Site. Generally, the HFM is present at depths down to an average of seven to eight feet bgs. Based on RI sampling data, the HFM may contain contaminants at concentrations exceeding Commercial SCOs, and therefore the cover system is necessary to prevent human exposure to potential contaminants. The cover system will be installed across the Site except for where samples analyzed during the RI did not exceed Commercial SCOs.

The cover system will be comprised of hardscape and the details of each system is as follows.

A new hardscape concrete slab cover will be installed within the structure due to PCB impacts discovered in the existing slab during the RI. The existing concrete slab will be broken up, removed, and disposed of/recycled at a permitted facility, prior to the installation of an SSDS. The SSDS is further summarized in **Section 3.2.2**. As part of the new concrete slab cover system, cinder material beneath the existing slab will need to be removed to make way for SSDS piping. That material will be properly disposed of at a permitted landfill.

Air monitoring will be required during the removal of the building slab and any other ground intrusive activities. Remedial observation will also be required by a qualified environmental scientist or engineer. Sub-slab soils will be examined and screened throughout the removal and installation activities. Should any soils be uncovered which differed from what was encountered through the RI, additional soil samples will be collected and NYSDEC will be notified.

3.2.2 Vapor Mitigation

Based on the sampling of soil, groundwater, and air during the RI, a system designed to mitigate vapor intrusion will be installed in the existing warehouse structure.

The design objective of the SSDS is to mitigate potential vapor migration into the Site building by maintaining a negative pressure of at least 0.004 inches water column (WC) in the sub-slab. The design was done by Matrix Environmental Technologies (Matrix), as retained directly by MOD-PAC, and was developed in accordance with the applicable standards, criteria, and guidance contained in or referenced in NYSDOH's "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" and USEPA radon guidance.

The remedial plan for the 14,000 ft² Site building includes the removal of the existing floor in its entirety and installation of a new commercial grade concrete slab. The SSDS is designed for installation before a new slab is poured, therefore the design is for a new construction scenario. The scope of work includes the following:

- Installation of horizontal vapor extraction wells and monitoring points;
- Installation of riser piping from each extraction well to a wall mounted manifold;
- Installation of a sub-slab vapor barrier;
- Pilot testing following installation of the new concrete slab to collect data for blower sizing and to determine if air treatment is required;
- Installation of SSDS equipment (blower/fan and instrumentation); and
- System startup and collection of operating data for engineering certification.

To achieve the design objective, four vapor extraction wells (EWs) and eight vapor monitoring points (VMPs) are required as shown in **Figure 7**. The EWs will consist of perforated four-inch inner diameter (ID) SCH40 PVC piping wrapped in filter fabric. The EWs will be installed ten feet from the east and west walls and spaced 50 feet apart resulting in a coverage of approximately 3,500 ft² per EW.

As shown in **Detail B of Figure 8A & 8B**, the EWs will be bedded in a 12-inch layer of washed stone installed above native soil throughout the 14,000 ft² building. A high-permeability nonwoven demarcation geotextile will be installed as a warning layer between the washed stone and native soil. Above the washed stone, a light nonwoven

geotextile fabric (3-4 ounces) will be installed followed by a 12-inch layer of NYSDOT Item #203.07 or 302.12 and a 20-mil or thicker vapor barrier. The new concrete slab will be poured over the vapor barrier.

Each EW will be connected to solid four-inch (ID) SCH40 PVC pipe extending to and up the interior west wall of the building. The PVC pipe will extend vertically through the concrete slab in a five-inch ID galvanized steel sleeve for protection. The riser pipe from the four EWs will run along the west wall to a manifold where a single four-inch ID SCH40 PVC pipe will extend through the west wall to an exterior blower enclosure. Riser and manifold piping will be supported on columns or walls with pipe supports placed near valves, elbows, fittings, and along horizontal runs.

Alternate designs are provided in **Figures 8A & 8B** for riser piping runs below the ceiling or near the elevation of the wall penetration. The manifold will include a ball valve, vacuum gauge, and air sample port for each EW. The concrete floor will be poured around the galvanized pipe sleeve and sealed with non-shrinking grout as needed. A profile view of the EWs, riser piping and manifold are provided in a north-south (**Figures 8A & 8B**) and east-west orientation (**Figure 9**).

A hammer drill will be used to install the VMPs, Vapor Pin® or equivalent, to a depth that extends just below the surface of the concrete slab. VOC-free duct sealant (Gardner Bender Duct Sealing Compound) will be used to create a vapor tight seal between the VMPs and concrete slab. Product information and the Safety Data Sheet (SDS) for the sealant is provided in **Appendix A**. Once installation is complete, a pilot test will be conducted using a regenerative blower with monitoring of flow and vacuum from the EWs and vacuum at the VMPs. The blower will be operated over a range of flow rates and associated vacuum to determine the optimal operating conditions to maintain the required sub-slab vacuum. The air discharge will be monitored with an organic vapor meter and a sample will be collected for laboratory analysis of VOCs using EPA Method TO-15 shortly after testing begins to capture the worst-case conditions for VOCs in the sub-slab vapor. The pilot test data will be used to select a blower for full scale operation to be installed as shown in **Figure 10** in an exterior enclosure. A moisture separator (knockout tank) will be installed before the blower.

Operation & Maintenance Manuals as well as inspection plans for the systems will be included in the Interim Site Management Plan (ISMP) which will remain in place until the final remedy is complete and will be appended to the Construction Completion Report (CCR).

3.3 Engineering Controls – Construction Compliance and Effectiveness Monitoring

3.3.1 Cover System

The following activities will be performed to ensure that the cover system is properly constructed and that activities are performed consistent with previously submitted work plans:

- A Request to Import / Reuse Fill or Soil form will be completed and subsequently approved by NYSDEC for each source of material imported to construct the cover system. Department approval letters and tabulated summaries of the materials imported will be provided in the CCR.
- C&S will observe the removal of the present concrete building slab and installation of the hardscape cover system. Prior to installing the cover system, a demarcation layer will be installed above soils that will remain in place. Pavement and concrete surfaces will be at least four inches in thickness. Following completion of the cover system, C&S will perform a final inspection.
- Original and final grades will be shown in the final survey, which will be appended to the CCR.
- Consistent with the Community Air Monitoring Plan (CAMP), C&S will provide full-time observation of ground intrusive activities that have the potential to disturb contaminated soils, which includes the building slab removal. During these activities, C&S will perform air monitoring for volatile organic vapors (VOVs) and dust. Work reports and CAMP logs will be prepared daily and will be provided to the NYSDEC and NYSDOH on the following work day for the duration of work under this work plan. The Department will be notified of any exceedances of action levels within 24 hours.

3.3.2 Vapor Mitigation

Prior to installation, the Contractor will perform an evaluation to determine if extraction wells can be connected to the existing SSDS fan system already installed in the adjacent building (Area A).

A 6 HP regenerative GAST blower (190 SCFM at 46 inches WC) was installed in September 2019 to maintain a pressure differential of 0.002 inches WC in the sub-slab in Area A. A 1,000-pound vapor phase carbon vessel is in place to treat VOC emissions to levels acceptable for discharge and to control nuisance odors in accordance with 6 NYCRR Part 212. Following the completion of the pilot test, it will be determined if the Area A blower and carbon vessel have the capacity to connect to the four new EWs, and if feasible a cost analysis will be completed.

If use of the existing fan in the adjacent structure is not feasible, the SSDS will be equipped with appropriately-sized in-line fans to provide active depressurization of the sub-slab environment.

Once the SSDS is installed and connected to a blower, a startup test will be completed to collect operating data and as-built drawings prepared for engineering certification.

3.4 Green Remediation Evaluation

NYSDEC's Program Policy DER-31 / Green Remediation and DER-31 Green and Sustainable Remediation Initiative Memorandum require that green remediation concepts and techniques be considered during all stages of the remedial program including remediation, with the goal of improving the sustainability of the cleanup and documenting the net environmental benefit of any implemented green technology. Green Remediation is defined as "the practice of considering all environmental effects of remedy implementation and incorporating options to minimize the environmental footprint of cleanup actions." The use of these practices and technologies during remediation should be less disruptive to the environment, generate less waste, increase reuse and recycling, and emit fewer pollutants, including greenhouse gases (GHGs), to the atmosphere.

3.4.1 Green Remediation Components

This IRMWP identifies the green remediation components of the remedial design program which will be implemented for the construction, operation, optimization, maintenance, and monitoring of the remedial program, and which also meet the requirements for the intended use of the Site for Commercial Use. The purpose of this section is to identify concepts and develop a plan to best achieve a "Green Remediation" goal for each of the Sites selected remedies. The Green Remediation concepts considered during the development of the remedial alternatives include:

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term when choosing a site remedy;
- Reducing direct and indirect GHG and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals;

- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development; and
- Designing buildings to meet the 2020 Energy Conservation Construction Code of New York.

Based on the type of remediation required for the Site, the principal green remediation goals for the Site are focused on the reduction of waste and the reuse of materials to extent feasible throughout the remediation process. The reduction in wastes indirectly reduces the consumption of fossil fuels and generation of greenhouse gases.

3.4.2 Environmental Footprint Analysis

For the purpose of analyzing the overall impact and sustainability of the planned remediation activities, C&S developed a Green Remediation Calculator that contains pertinent content of the DER-31 referenced calculators [(e.g. SEFA (Spreadsheets for Environmental Footprint Analysis, USEPA) and SiteWise™ (developed by the US military)]. In addition to that content, C&S' Green Remediation calculator is based upon content previously created by engineers and scientists in C&S' air resources and aviation practices for use at industrial facilities to calculate emissions of GHGs, hazardous air pollutants (HAPs) and criteria pollutants for permitting, tracking, and reporting purposes; as well as for large airport construction projects to calculate potential and actual emissions from construction of terminals, taxiways, runways, etc.

Based on the anticipated elements of the implementation of the IRM, the following elements were considered as part of the IRM:

- Water consumption
 - Wetting of the Site during construction to comply with the CAMP
- GHGs
 - Emissions related to export of contaminated soil and concrete
 - Emissions related to the mining and import of clean soil / aggregate
 - Emissions related to the manufacture and import of asphalt and concrete
 - Emissions related to the operation of site work equipment (excavators, loaders, etc.)
- Renewable and non-renewable energy usage
 - Electricity for the operation of the SSDS
 - Charging of environmental monitoring equipment
- Waste reduction and material usage
 - Reuse of materials on and off site

Narratives regarding the various elements of the IRM, their potential impact on the environment, and strategies employed to reduce their footprint (Best Management Practices or BMPs) are provided in the following subsections.

3.4.3 Green Remediation Techniques

To further reduce the environmental footprint of the remediation, Green Remediation Techniques (GRTs) were identified and will be implemented.

NYSDEC DER-31 identifies a list of specific techniques which were considered during the development of this IRMWP. This section further describes the techniques which were identified as being feasible to be implemented during the Site redevelopment and remediation to best achieve a green remediation goal for the Site.

Based on the planned redevelopment of the Site, the following green remediation techniques were identified as being feasible to be implemented.

3.4.4 Best Management Practices

The section describes the BMPs which will be implemented throughout the implementation of the IRM to support green remediation goals. The following BMPs were identified for implementation:

Minimize Mobilizations – The owner and C&S will coordinate with the site contractor(s) to best schedule Site activities in conjunction to minimize the number of trips to the Site for field staff, workers, and mobilizing equipment.

Excavation Equipment – Site contractor(s) will be required to use equipment that is suitably sized to complete the anticipated sitework. The use of equipment which is undersized or oversized can decrease the efficiency of the equipment considerably. When possible, equipment will be used which can perform multiple types of tasks without mobilizing a single piece of equipment for each task. Contractors will be encouraged to utilize Clean Fuel Fleet vehicles and Tier 2 or higher Equipment and will burn ultra-low sulfur diesel fuel.

Idling of Motorized Equipment – Equipment and trucks will be shut down if left idling longer than 5-minutes.

Stormwater and Erosion Controls – Where possible, the use of compost socks / coir logs will be used for controlling sediment run-off, in lieu of synthetic non-decomposable sediment fencing. Soil piles will be covered with tarps or plastic sheeting in a manner to allow for the reuse of the covers each day to minimize the generation of waste.

Soil Stockpiles – Where necessary, soil will be stockpiled within the planned areas needing additional soil to meet the final grading. This will reduce additional handling of waste soil and minimize mobilization to new sections of the Site.

C&S Field Equipment

Battery-Powered Sampling Equipment – CAMP equipment (PIDs, Dustraks, Thiamis Antenna), Geopump Peristaltic groundwater Pump, Horiba Water Quality Meter, data loggers, and any other battery-operated equipment will be charged at the C&S facility. C&S estimated in 2022 that 26% of the electricity used at their facility is generated on-site through use of solar panels. This practice will reduce the load on the electrical grid and allow for the use of renewable energy sources, indirectly minimize the use of fossil fuels, and reduce the generation of greenhouse gas emissions.

Waste Storage Containers – C&S uses cleaned reclaimed 5-gallon buckets and 55-gallon drums for the collection, transport, and storage of sampling wastes. The re-use of containers decreases the generation of waste.

Cover-System – The selected geotextile fabric used for the demarcation barrier will be composed of recycled materials. The geotextile fabric will allow for the percolation of water through the cover system to control erosion and/or pooling of water.

Sustainable Laboratory Practices – C&S will submit samples to a laboratory, which implements the following sustainable practices:

- Recycles paper products and shipping materials.
- Uses energy-efficient lighting and other equipment
- Maintains a paperless reporting and invoicing program.
- Minimizes waste through use of EPA-approved microscale methods.

3.4.5 Summary

The elements of the IRM with a significant environmental footprint will be tracked to document metrics and identify reductions of the environmental footprint throughout the remediation planning and implementation. The actual environmental footprint results will be summarized in the CCR.

3.5 Site Control

Site control is an important aspect of this remedial program. To safeguard the health and safety of site workers and the general public, access to all remedial work areas will be restricted. Perimeter fencing will be installed to facilitate site control. Additionally,

temporary construction fencing will be erected around accessible excavations and staging areas to prevent unauthorized personnel from entering these areas.

3.6 Site Preparation

Site preparation activities include:

- Installation of temporary fencing to restrict access to remedial work areas.
- Removal and disposal of PCB impacted concrete slab foundation within the warehouse building. Waste characterization concrete delineation sampling has indicated that concrete is approved for recycling at Swift River Associates Concrete Recycling. If the environmental professional determines that areas of grossly contaminated concrete is encountered that is inconsistent with the remainder of the slab, that material will be segregated and transported to an NYSDEC approved landfill for disposal. Sampling results and approvals are included in **Appendix B**.
- Buried utility repair or relocation.

3.7 Excavation

3.7.1 Excavation Methods

As discussed previously, HFM is present across much of the Site. The underlying native material meets, at a minimum, the Commercial Use SCOs. Installation of the Site cover system could result in the disturbance of these soils / HFM.

In addition, although this soil / HFM will be located under the cover system, future development or utility work at the Site may require excavation resulting in the disturbance of this material.

Prior to excavation, the presence of utilities and easements on the site will be investigated by a qualified environmental professional 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. It will be determined whether a risk or impediment to the planned work under this IRM 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.

The excavation will extend across the entirety of the 14,000 ft² warehouse. It is anticipated that excavation depths will be a minimum of 39 inches beneath the current top of slab elevation. This will make room for the SSDS; which includes a 12-inch layer of washed stone, a 12-inch layer of NYSDOT Item #203.07 or #302.12, and a new 15-inch concrete

slab, which will act as a cover system. There is potential for deeper excavations if historical pits, grossly contaminated material, or structurally unsuitable material are encountered during the excavation operation, although such materials are anticipated to be limited in extent. Such determinations will be made by the qualified environmental professional conducting remedial observation, and will be based upon visual, olfactory, and instrument-based (e.g. photoionization detector) soil screening methods.

Based on previous environmental data and screening results, in the event that soil/fill materials are encountered which do not exhibit evidence of contamination, such material will be segregated from material which requires off-site disposal, and temporarily stockpiled. This material will be sampled and analyzed to determine if it can be reused on-site for any acceptable cost-effective purposes.

Excavated material that is not immediately being loaded out for disposal will be stockpiled on polyethylene sheeting and kept covered at all times with appropriately anchored tarps. Soil stockpiles will be continuously encircled with a berm and / or silt fence. Hay bales will be used as needed near catch basins, surface waters, and other discharge points. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced. Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by the NYSDEC. All soils containing contaminants which exceed the Commercial SCOs and cannot be beneficially re-used on-site in connection with the final site remedy will be taken off-site for proper disposal to implement the IRM.

3.7.2 Material Load Out

Loaded vehicles leaving the site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State, and local 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. Loose-fitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used. A qualified environmental professional will oversee all invasive work and the load-out of all excavated material.

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

The qualified environmental professional will be responsible for ensuring that all egress points for truck and equipment transport from the site are clean of dirt and other materials derived from the site during intrusive excavation activities. Locations where vehicles enter or exit the site shall be inspected daily for evidence of off-site soil tracking. 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.

3.7.3 Materials Transport and Disposal 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.

All trucks loaded with site materials will exit the vicinity of the site using only approved truck routes. The most appropriate route 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 site; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport. Trucks will be prohibited from stopping and idling in the neighborhood outside the project site. Queuing of trucks will be performed on-site to minimize off-site disturbance. Off-site queuing will be prohibited.

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, C&D debris recovery facility). Actual disposal quantities and associated documentation will be reported to the NYSDEC in the Periodic Review Report. 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 SCOs is prohibited from being taken to a New York State C&D debris recovery facility (6 NYCRR Subpart 361-5 registered or permitted facility).

3.7.4 Monitoring

Monitoring during slab removal, excavation, and load-out of all excavated material will include a CAMP. The location of air monitoring stations will be based on excavation location within the structure. One station will be situated near the exit, and one on the

opposite side of the excavation area. Due to this work happening within an interior area, prevailing wind conditions will not affect station location selection. These locations will be adjusted on a daily or more frequent basis based on exact excavation area within the structure. Exceedances of action levels listed in the CAMP will be reported to NYSDEC and NYSDOH Project Managers. Air monitoring is further outlined in **Section 3.9**. Health and Safety Plan (HASP) is provided as **Appendix C**.

3.8 Backfilling

Following excavation, a 12-inch layer of washed stone will be installed above native soil. Above the washed stone, a 12-inch layer of NYSDOT Item #203.07 or #302.12 will be placed. All backfilled material will be compacted before the installation of a new concrete slab. The NYSDOT Item #203.07 or #302.12 may be placed in areas of deeper excavations and compacted beneath the washed stone layer if historical pits, grossly contaminated material, or structurally unsuitable material are encountered during the excavation operation.

For each source of backfill that is imported to the Site, one of the following will be completed prior to importing the backfill.

- a. Documentation will be provided to NYSDEC as to the source of the material and the consistency of the material in accordance with the exemption for no chemical testing listed in DER-10 Section 5.4e(5); **OR**
- b. Chemical testing will be completed in accordance with the following table:

**Table 3-1
DER-10 5.4(e)10**

Recommended Number of Soil Samples for Soil Imported To or Exported From a Site			
Contaminant	VOCs		SVOCs, Inorganics & PCBs/Pesticides
Soil Quantity (cubic yards)	Discrete Samples	Composite	Discrete Samples/Composite
0-50	1	1	3-5 discrete samples from different locations in the fill being provided will comprise a composite sample for analysis
50-100	2	1	
100-200	3	1	
200-300	4	1	
300-400	4	2	
400-500	5	2	
500-800	6	2	
800-1000	7	2	
1000	Add an additional 2 VOC and 1 composite for each additional 1000 Cubic yards or consult with DER.		

Taken from DER-10 - Table 5.4(e)10

Imported soil/fill will be tested for PFAS. PFAS shall be sampled as composite samples per the table above.

For materials that must undergo laboratory analytical testing, the results for each new source of fill will meet the values provided in Appendix 5 of DER-10 for Commercial Use. For contaminants that are present in groundwater, fill material results will be compared to the lower of Commercial Use and Protection of Groundwater SCOs. All fill materials will receive approval by the NYSDEC prior to being imported to the Site. Trucks entering the site with imported fill materials will be securely covered with tight fitting covers. Imported fill materials will be stockpiled separately from excavated materials and covered to prevent dust releases.

On-site soil which does not exceed any Commercial Use SCOs, or clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d), may be kept for beneficial reuse on-site in connection with the final site remedy.

Based on previous environmental data and screening results, in the event that soil/fill materials are encountered which do not exhibit evidence of contamination, such material will be segregated from material which requires off-site disposal, and temporarily stockpiled. This material will be sampled and analyzed to determine if it can be reused on-site for any acceptable cost-effective purposes.

3.9 Air Monitoring

When intrusive subsurface work is being performed at the Site, the CAMP included in **Appendix D** will be implemented.

The action threshold for VOCs established in the CAMP is 5 ppm above background. If this value is exceeded for the 15-minute average work will be halted. Work may resume with continued monitoring once instantaneous readings fall below 5 ppm. The action level for dust is 100 $\mu\text{g}/\text{m}^3$ over background during a 15-minute average. If this limit is exceeded, dust suppression techniques will be employed, including using water to wet the area. Work may continue provided that downwind particulate levels do not exceed 150 $\mu\text{g}/\text{m}^3$ with dust suppression techniques employed.

3.10 Dust Controls

As part of the remedial actions to be performed at the Site, measures will be needed to limit dust generation. Dust suppression techniques will be employed as necessary to limit fugitive dust generated in disturbed areas during remediation and redevelopment activities. Such techniques may be employed even if the community air monitoring

results indicate that particulate levels are below action levels. Techniques may include but are not limited to:

- Using compostable socks, coir logs, silt fencing, hay bales, and / or mulching
- Applying water on haul roads and ingress / egress points
- Wetting equipment and excavation surfaces
- Hauling materials in properly tarped or watertight containers
- Limiting vehicle speed on the Site
- Limiting the size of excavations
- Covering excavated areas and materials following excavation

Effectiveness of the dust suppression measures will be evaluated based on the results of the air monitoring that will be conducted under the CAMP provided in **Appendix D**.

3.11 Confirmatory Sampling

The RI determined the nature and extent of contamination on the Site. Subsurface soil contamination is not present at levels that warrant soil removal and confirmatory sampling. However, if while implementing the IRM, soil conditions or contamination is observed below the slab that differs from that observed in other investigation locations during the RI, confirmatory sampling may be considered consistent with the requirements of DER-10, or in consultation with the Department.

3.12 Schedule

The following is the schedule to implement the IRM:

Table 3-2: Schedule

Date	Task
February 27, 2026	IRMWP Submission to DEC
March 2026	IRMWP Approval
March 2026	Concrete Slab Removal
April 2026	SSDS Installation
May 2026	SSDS Startup Testing

3.13 Evaluation

It is important to assess the effectiveness of the implementation of the IRM. Measures to determine the short-term and long-term success of the IRM, include, but may not be limited to the following:

- Inspections of cover system components
- Post vapor mitigation system installation testing, sampling, and monitoring
- Ongoing O&M of ECs
- Site control

The criteria for assessing the effectiveness of the cover system and vapor mitigation systems are detailed in Section 3.3 above. The evaluation criteria for the remainder of the items are currently under consideration and will be detailed in the ISMP.

The ISMP is intended to provide a detailed description of the procedures required to manage residual contamination left in place at the Site following completion of the IRM in accordance with the BCA with the NYSDEC, prior to the final SMP completion. This includes: (1) development, implementation, and management of all Engineering and Institutional Controls; (2) development and implementation of monitoring systems and a Monitoring Plan; (3) development of a plan to operate and maintain any treatment, collection, containment, or recovery systems (including, where appropriate, preparation of an Operation and Maintenance Manual); (4) submittal of Site Management Reports, performance of inspections and certification of results, and demonstration of proper communication of Site information to NYSDEC; and (5) defining criteria for termination of treatment system operation.

All air monitoring data, daily work reports, potential sampling data, and SSDS pilot test data will be included in the CCR.

4 REFERENCES

C&S Engineers, Inc., *Remedial Investigation (RI) / Alternatives Analysis Report (AAR) for BCP Site No. C915394 1803 Elmwood Avenue BCP*, December 2025.

AMD Environmental Consultants, Inc., *Asbestos Conditions Assessment*, February 2024.

Environmental Advantage, Inc., *Focused Phase II Environmental Site Assessment for Historical Industrial Property 1803 Elmwood Avenue*, February 2023.

Environmental Advantage, *Phase I Environmental Site Assessment for Industrial Property Western Portion of 1803 Elmwood Avenue*, October 2022.

New York Codes, Rules, and regulations, Title 6 (6 NYCRR), Chapter IV, Subpart 375-6: *Remedial Program Soil Cleanup Objectives*,

NYSDEC Program Policy DER-10, *Technical Guidance for Site Investigation and Remediation*, New York State Department of Environmental Conservation, May 2010.

Figures

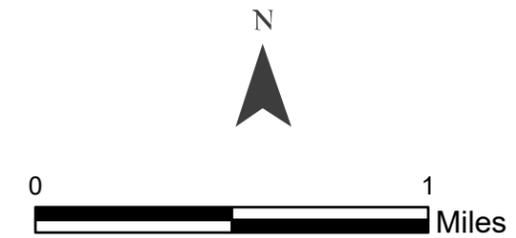
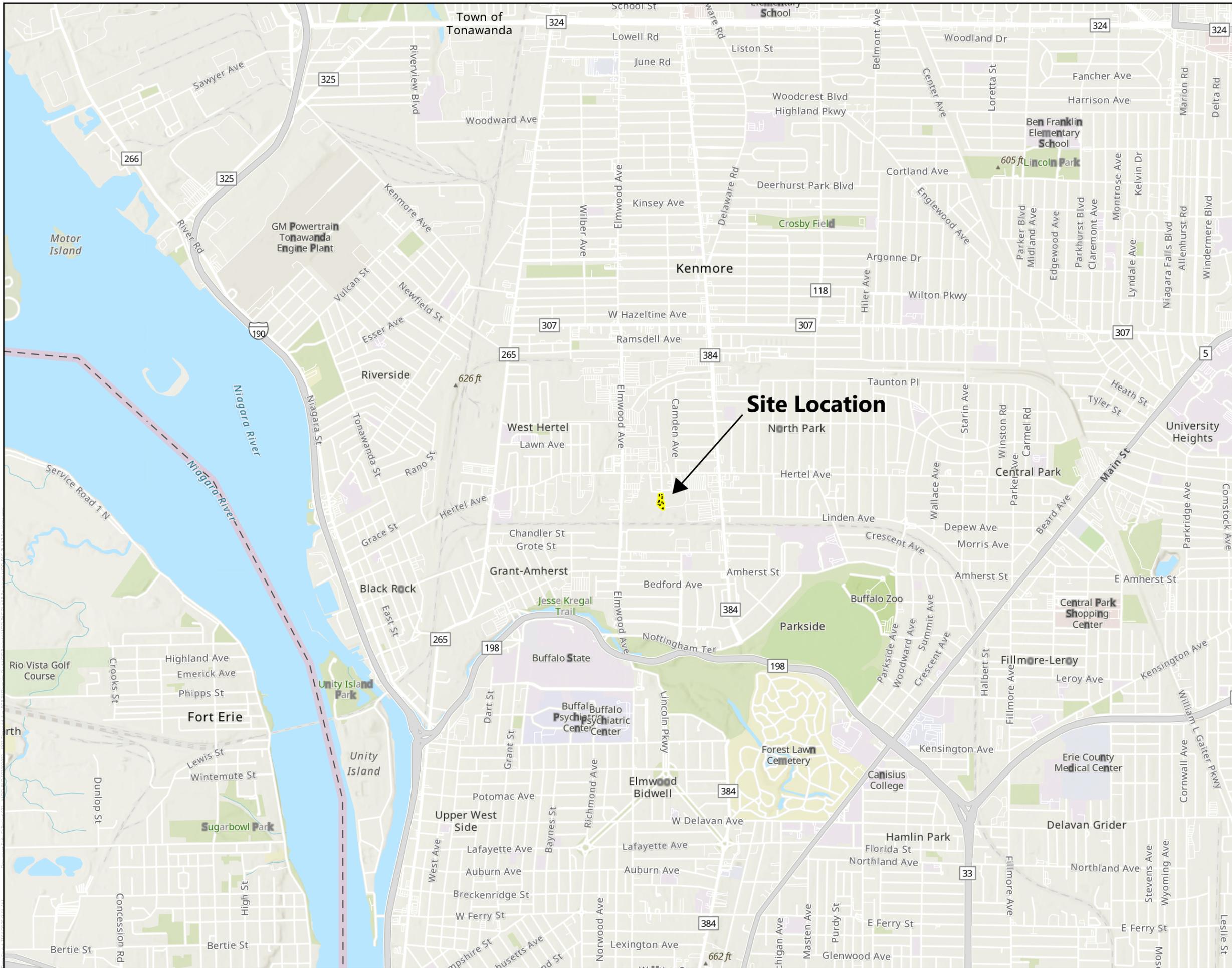


Figure 1

Site Location

Legend

 BCP Boundary



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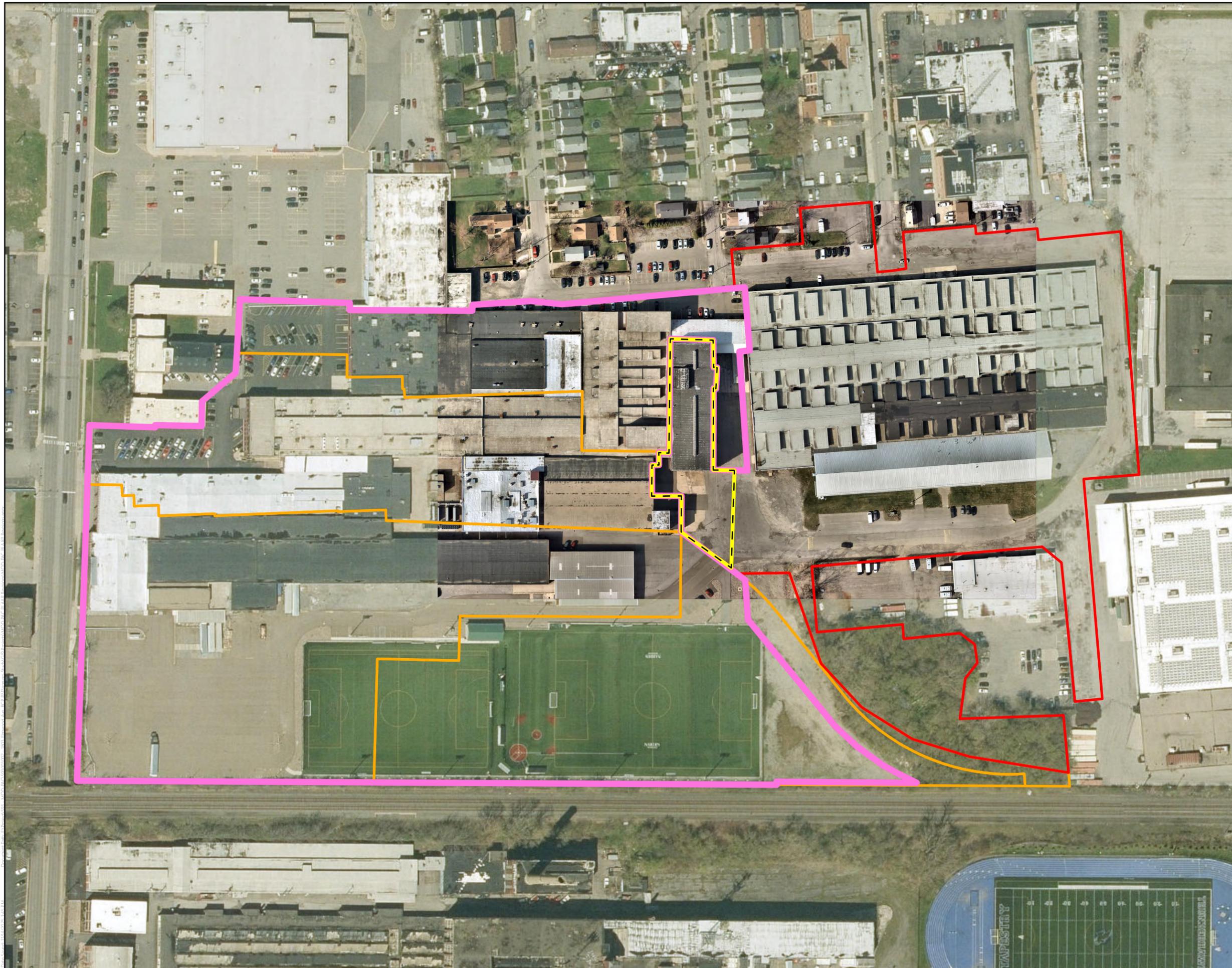
1803 Elmwood Avenue BCP

Sources: . Created by C&S Engineers, Inc.

Figure 2
Site Map

Legend

-  BCP Boundary
-  Parent parcel
-  Adjoining Mod-Pac BCP Site (C915314) Boundary
-  Adjoining Mod-Pac BCP Site (C915314) individual parcels



When printed at 11 in. by 17 in.

1803 Elmwood Avenue BCP

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Figure 3
Groundwater Contours

Legend

- BCP Boundary
- Groundwater Contour
- Additional RI Monitoring Well
- Adjoining BCP Site Monitoring Well

Note:

Groundwater depths for MW-01A through MW-05A and wells on the adjoining BCP Site were measured on October 27, 2025.

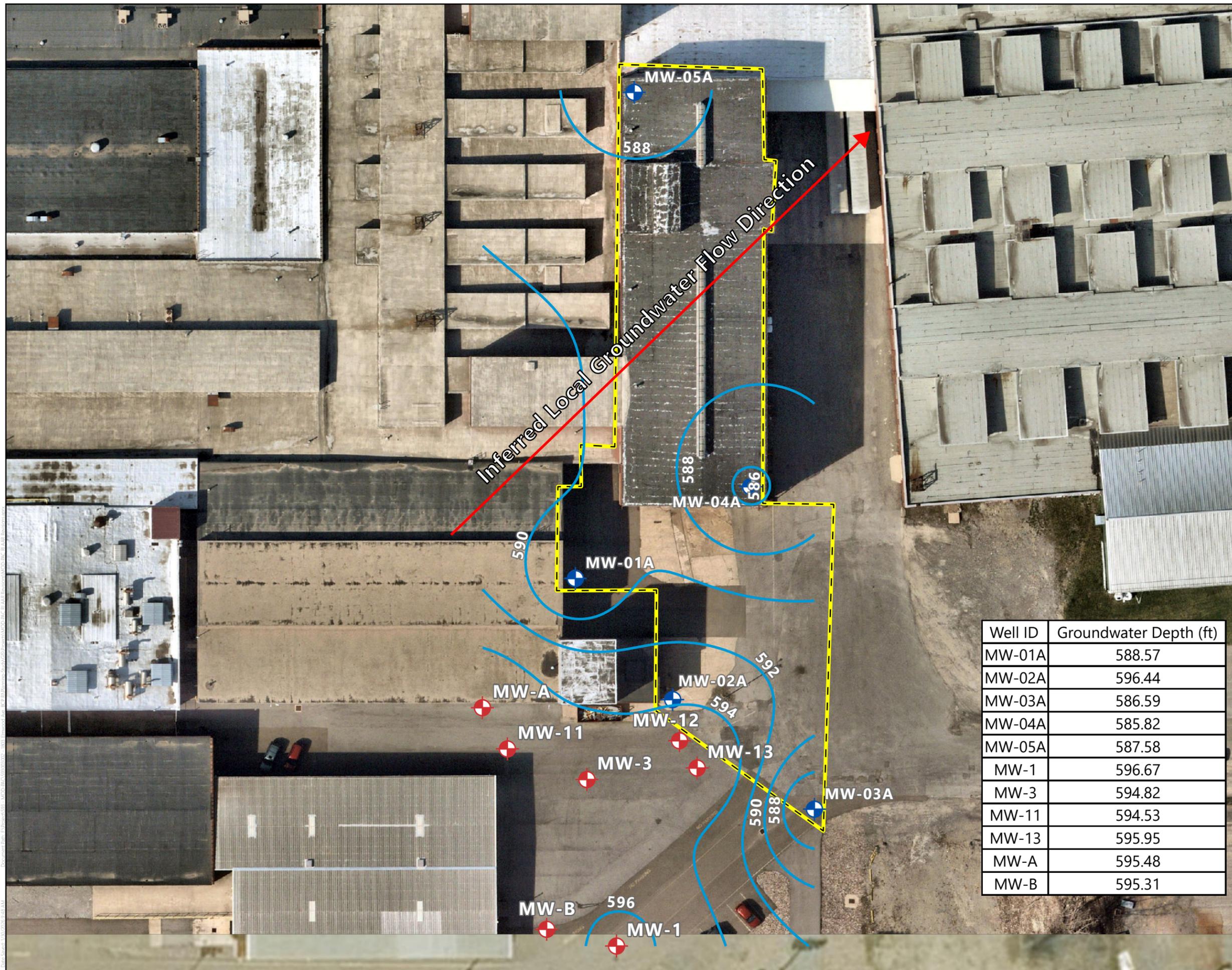
Well ID	Groundwater Depth (ft)
MW-01A	588.57
MW-02A	596.44
MW-03A	586.59
MW-04A	585.82
MW-05A	587.58
MW-1	596.67
MW-3	594.82
MW-11	594.53
MW-13	595.95
MW-A	595.48
MW-B	595.31



When printed at 11 in. by 17 in.

1803 Elmwood Avenue BCP

Sources: . Created by C&S Engineers, Inc.



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B1 A1B. Revision\MOC.DWG



Sample ID	IA-02
Date Sampled	5/10/2024
Analyte	ug/m3
Carbon tetrachloride	0.44

Sample ID	IA-03
Date Sampled	5/10/2024
Analyte	ug/m3
Carbon tetrachloride	0.5
Trichloroethene	0.21

Sample ID	OA-01
Date Sampled	5/10/2024
Analyte	ug/m3
Carbon tetrachloride	0.5
Trichloroethene	0.21

Sample ID	SSV-01
Date Sampled	5/10/2024
Analyte	ug/m3
Trichloroethene	270

Sample ID	IA-01
Date Sampled	7/17/2024
Analyte	ug/m3
Carbon tetrachloride	0.44
Trichloroethene	0.59

Figure 4
SVI Sample Locations and Results

Legend

- BCP Boundary
- Outdoor Air Sample
- SVI Sample

Analytes in white were detected in concentrations above NY-IAC-A only and do not require monitoring or mitigation.

Analytes in yellow were detected in concentrations above both NY-IAC-A and NY-SSC-A and must be monitored or mitigated.



When printed at 11 in. by 17 in.



Sample ID	C-08
Date Sampled	7/17/2024
Analyte	mg/kg
Aroclor 1254	0.118
Aroclor 1260	0.182
Total PCBs	0.397

Sample ID	C-06
Date Sampled	7/17/2024
Analyte	mg/kg
Aroclor 1260	0.143
Aroclor 1268	0.194
Total PCBs	0.488

Sample ID	C-04
Date Sampled	7/17/2024
Analyte	mg/kg
Aroclor 1254	0.248
Aroclor 1260	0.418
Aroclor 1268	0.463
Total PCBs	1.17

Sample ID	C-02
Date Sampled	7/17/2024
Analyte	mg/kg
Aroclor 1254	0.128
Aroclor 1260	0.173
Total PCBs	0.411

Sample ID	C-07
Date Sampled	7/17/2024
Analyte	mg/kg
Aroclor 1254	0.154
Aroclor 1260	0.125
Total PCBs	0.391

Sample ID	C-05
Date Sampled	7/17/2024
Analyte	mg/kg
Aroclor 1254	0.319
Aroclor 1260	0.238
Aroclor 1268	0.156
Total PCBs	0.713

Sample ID	Concrete-001
Date Sampled	7/28/2020
Analyte	mg/kg
Aroclor 1248	0.917
Aroclor 1254	0.714
Aroclor 1260	0.122
Total PCBs	1.75

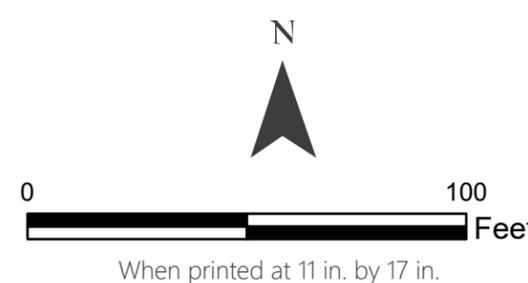
Sample ID	C-01
Date Sampled	7/17/2024
Analyte	mg/kg
Aroclor 1242	0.247
Aroclor 1254	0.506
Aroclor 1260	0.615
Aroclor 1268	0.379
Total PCBs	1.75

Figure 5
Concrete Sampling Locations and Results

- Legend**
- BCP Boundary
 - RI Concrete Samples
 - Previous Phase II Concrete Samples

SCO Exceedances

Unrestricted Use
Commercial Use



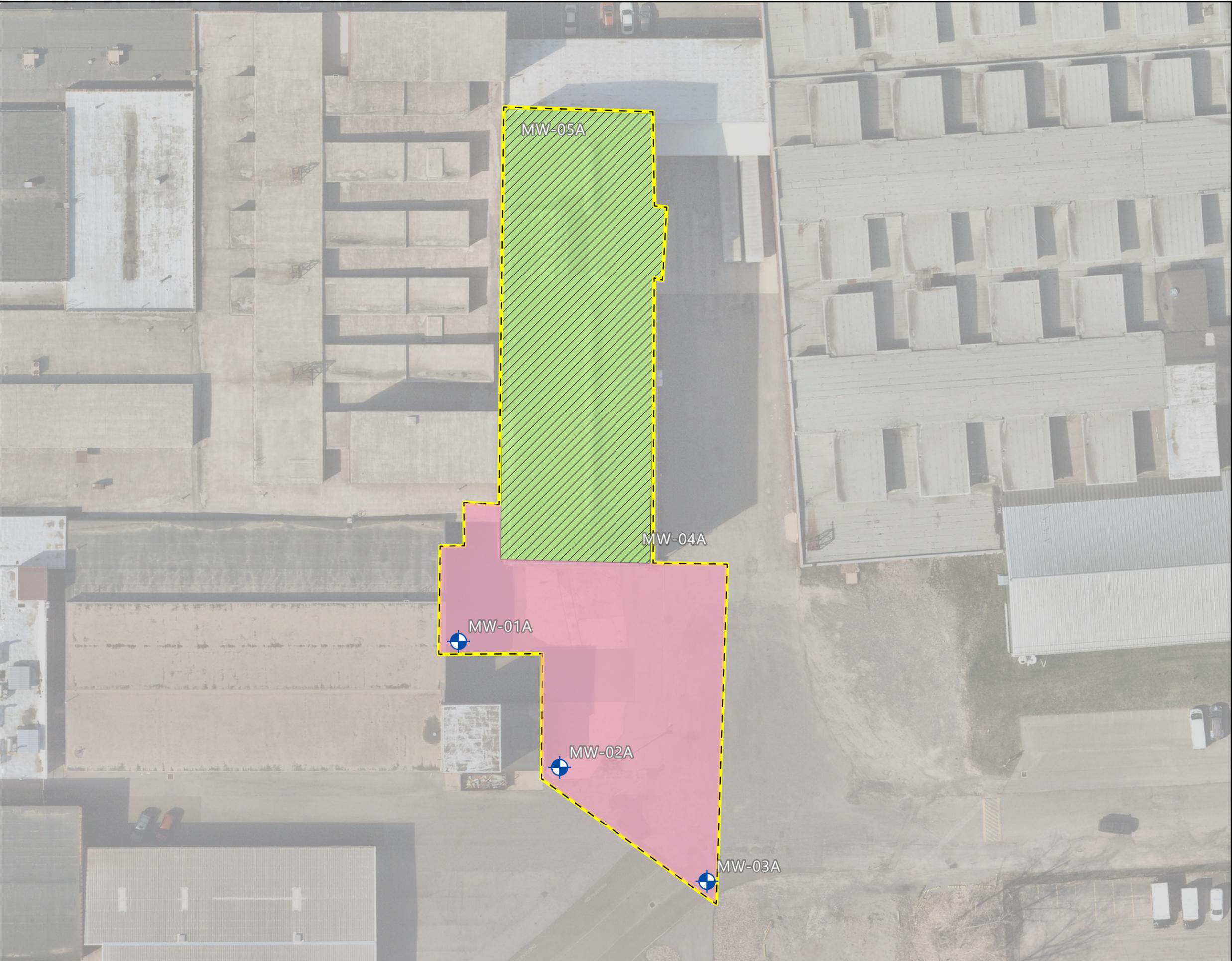
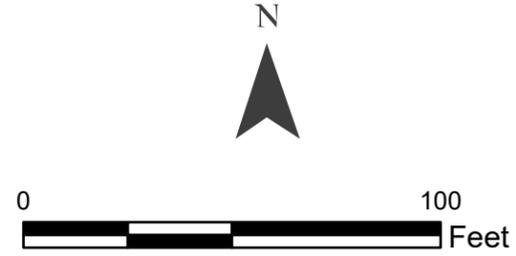
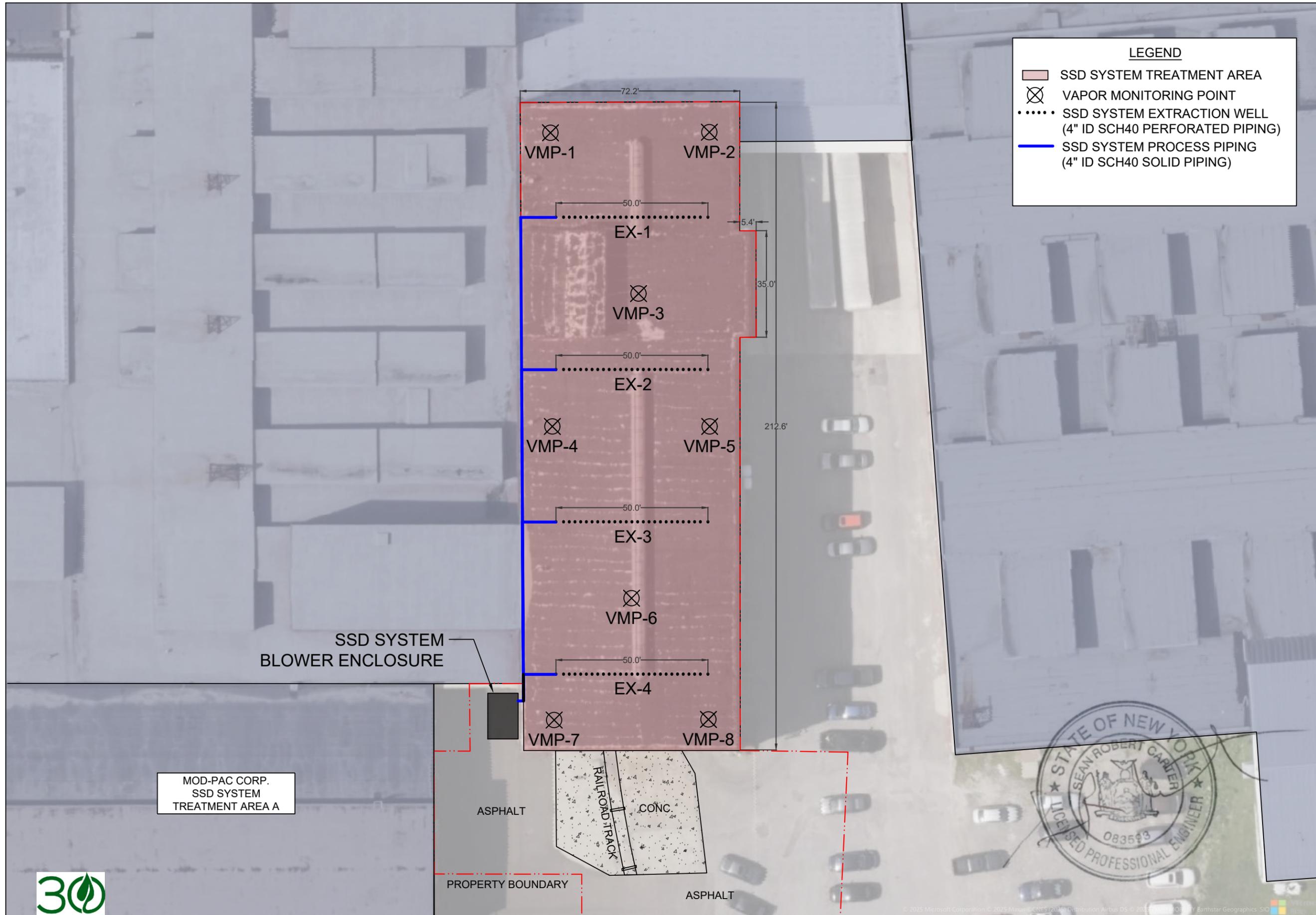


Figure 6
Track 4 Remedy

- Legend**
- BCP Boundary
 - Concrete Slab Removal & SSDS
 - Existing Hardscape
 - Monitoring Wells to Remain



When printed at 11 in. by 17 in.



LEGEND

- SSD SYSTEM TREATMENT AREA
- ⊗ VAPOR MONITORING POINT
- SSD SYSTEM EXTRACTION WELL (4" ID SCH40 PERFORATED PIPING)
- SSD SYSTEM PROCESS PIPING (4" ID SCH40 SOLID PIPING)

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 ORCHARD PARK - ROCHESTER - ITHACA
www.matrixbiotech.com

PREPARED FOR:
MOD-PAC CORP.
 BUFFALO, NY

PROJECT NAME/LOCATION:
MOD-PAC CORP,
1803 ELMWOOD AVENUE
BUFFALO, NEW YORK

NYSDEC BCP SITE
#C915394

PROJECT NUMBER:
15-017

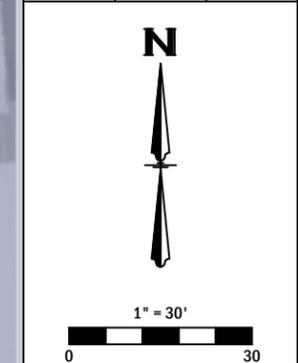
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SLM

DRAWN BY:
CMC

REVIEWED BY:
SRC

REVISION HISTORY

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SSD SYSTEM LAYOUT

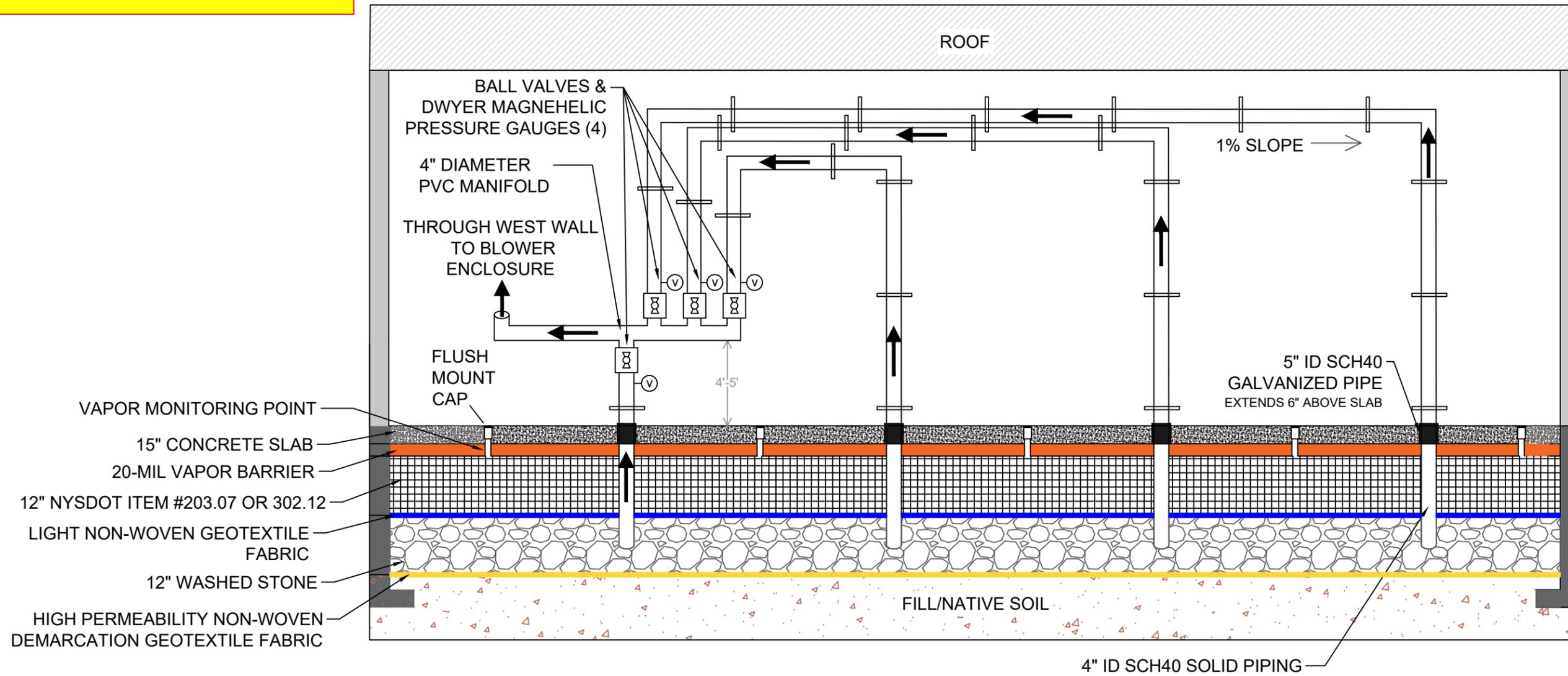
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FEBRUARY 20, 2026

FIGURE:
7

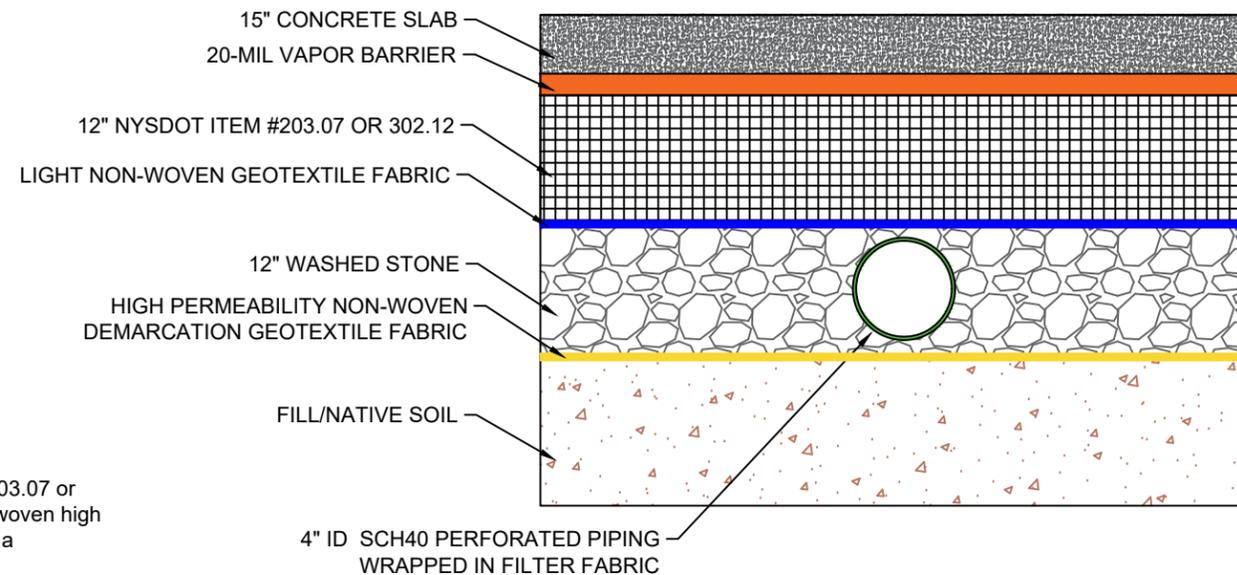


ALTERNATE #1

DETAIL A: SYSTEM PROFILE VIEW - NORTH/SOUTH ORIENTATION



DETAIL B: BUILDING SLAB DETAIL



NOTE: A light, non-woven geotextile fabric (3-4 oz) will be placed between the NYSDOT Item #203.07 or 302.12 material and the washed stone to prevent fines from entering the washed stone. A non-woven high permeability geotextile fabric will be placed between the washed stone and the fill/native soil as a demarcation layer.



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 ORCHARD PARK - ROCHESTER - ITHACA
 www.matrixbiotech.com

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 BUFFALO, NY

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2	CMC	2/20/26

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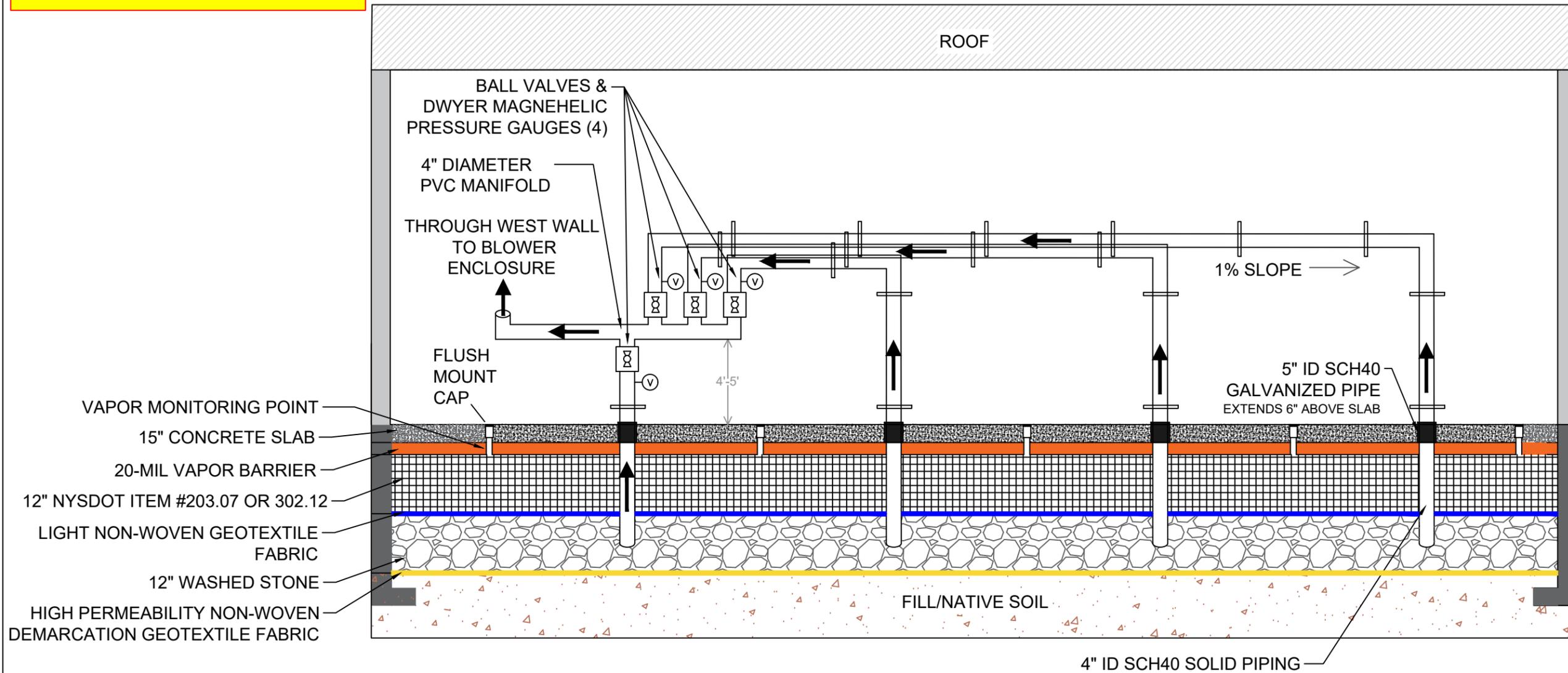
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SSD SYSTEM
PROFILE VIEW
NORTH/SOUTH
ORIENTATION

DATE:
FEBRUARY 20, 2026

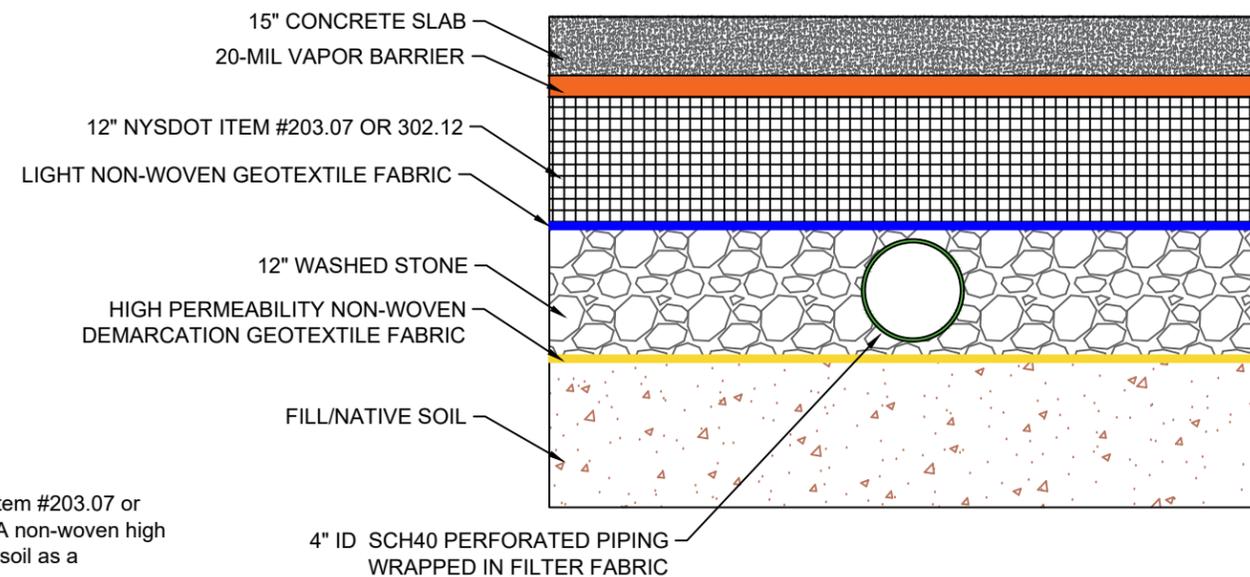
FIGURE:
8A

ALTERNATE #2

DETAIL A: SYSTEM PROFILE VIEW - NORTH/SOUTH ORIENTATION



DETAIL B: BUILDING SLAB DETAIL



NOTE: A light, non-woven geotextile fabric (3-4 oz) will be placed between the NYSDOT Item #203.07 or 302.12 material and the washed stone to prevent fines from entering the washed stone. A non-woven high permeability geotextile fabric will be placed between the washed stone and the fill/native soil as a demarcation layer.



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 ORCHARD PARK - ROCHESTER - ITHACA
 www.matrixbiotech.com

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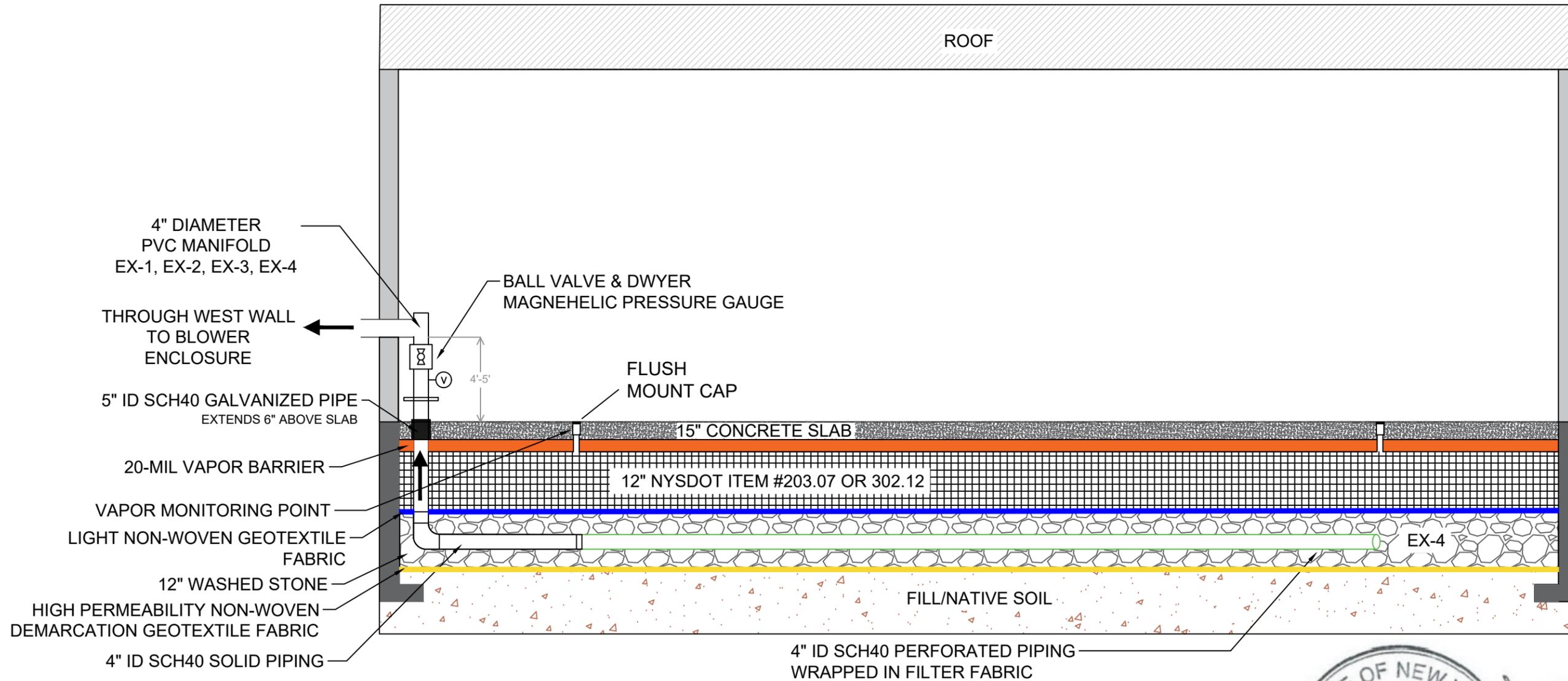
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TITLE:
SSD SYSTEM
PROFILE VIEW
NORTH/SOUTH
ORIENTATION

DATE:
FEBRUARY 20, 2026

FIGURE:
8B

SYSTEM PROFILE VIEW - EAST/WEST ORIENTATION



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 BUFFALO, NY

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NUMBER	BY	DATE
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1	CMC	2/20/26

TITLE:

SSD SYSTEM
PROFILE VIEW
EAST/WEST ORIENTATION

DATE:
FEBRUARY 20, 2026

FIGURE:
9

NOT TO SCALE

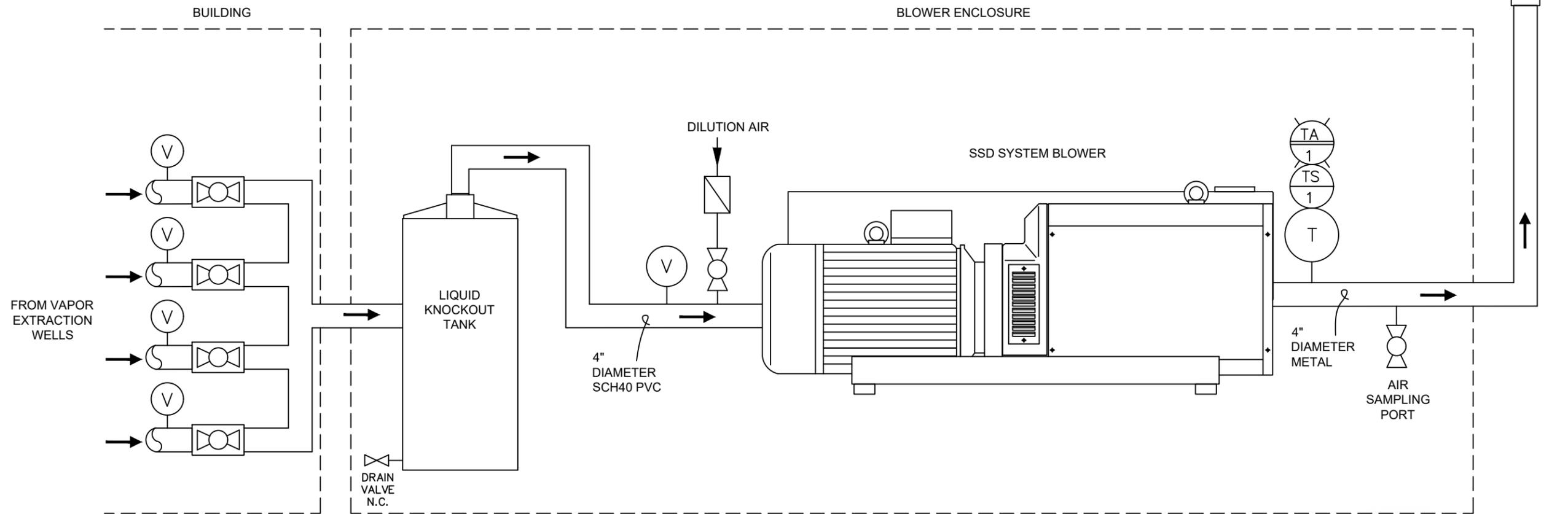


NOTE: A light, non-woven geotextile fabric (3-4 oz) will be placed between the NYSDOT Item #203.07 or 302.12 material and the washed stone to prevent fines from entering the washed stone. A non-woven high permeability geotextile fabric will be placed between the washed stone and the fill/native soil as a demarcation layer.



LEGEND

	VACUUM/PRESSURE GAUGE
	TEMPERATURE GAUGE
	TEMPERATURE SWITCH
	TEMPERATURE ALARM
	BALL VALVE
	FILTER



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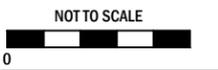
REVISION HISTORY

NUMBER	BY	DATE
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1	CMC	2/4/26

TITLE:
SSD SYSTEM
PROCESS &
INSTRUMENTATION
DIAGRAM

DATE:
FEBRUARY 20, 2026

FIGURE:
10



Tables

Table 2
 Historical Groundwater Monitoring and Sampling Data Summary
 MOD-PAC CORP.

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	GW Elevation (ft)	1,1-Dichloroethene (µg/L)	2-Butanone (µg/L)	Acetone (µg/L)	Benzene (µg/L)	cis-1,2-Dichloroethene (µg/L)	trans-1,2-Dichloroethene (µg/L)	Trichloroethene (µg/L)	Vinyl chloride (µg/L)	Total VOCs (µg/L)	% Increase/Decrease TCE	
MW - 3	NY-TOGS-GA (µg/L)				5	50	50	1	5	5	5	2			
	2/5/18	600.71	5.05	595.66	ND	ND	ND	ND	80	14	280	13	387.0	Baseline	
	Potassium Permanganate Pilot Study June 27, 2019 - June 28, 2019														
	7/16/19	600.71	NG	NG	ND	3.10 J	38	ND	ND	ND	ND	ND	ND	43.4	-100.00
	Potassium Permanganate Injections October 1, 2019 - October 10, 2019														
	10/24/2019*	600.71	NG	NG	ND	ND	<20	<1	30	3	220	<1	253.0	-21.43	
	4/15/20	600.71	5.54	595.17	ND	ND	6.40 J	ND	57	7.3	370 JH	3.7	444.4	32.14	
	4/14/21	600.71	5.98	594.73	0.88 J	ND	ND	ND	82	8.8	340	5.6	440.5	21.43	
	7/1/21	600.71	6.30	594.41	2.0	ND	ND	0.41 J	140	16	400	8.1	566.5	42.86	
	11/19/21	600.71	5.30	595.41	0.77 J	ND	ND	ND	43	4 J	340	2.9	390.7	21.43	
	1/12/22	600.71	5.70	595.01	0.86	ND	ND	0.16 J	57	3.3	190	3.5	254.8	-32.14	
	4/5/22	600.71	5.65	595.06	0.44 J	ND	ND	ND	46	5.1 J	280	2.3 J	333.8	0.00	
	7/6/22	600.71	5.91	594.80	0.48 J	ND	ND	ND	74	6.2	240	3.7	324.4	-14.29	
	10/7/22	600.71	6.03	594.68	0.76 J	6.50 J	7.60 J	0.34 J	92	6.5	350	7.2	470.9	25.00	
	1/5/23	600.71	4.70	596.01	0.24 J	ND	ND	ND	29	1.5 J	170 R1	0.55 J	201.3	-39.29	
	4/6/23	600.71	5.35	595.36	ND	ND	ND	ND	17 J	0.92 J	120 J	0.41 J	138.3	-57.14	
	7/25/23	600.71	NG	NG	NT	NT	NT	NT	NT	NT	NT	NT	NT	N/A	
	10/3/23	600.71	6.30	594.41	ND	ND	ND	ND	99	8.3 J	400	4.8	512.1	42.86	
	1/12/24	600.71	5.28	595.43	0.35 J	ND	ND	ND	66	5.4	330	1.7 J	403.5	17.86	
	4/9/24	600.71	5.62	595.09	0.41 J	ND	ND	ND	54	4.9 J	300	1.9 J	361.2	7.14	
MW - 11	2/5/18	600.41	4.66	595.75	ND	2.3 J	9.4	0.16 J	3.1	2.9	40	5.6	64.56	Baseline	
	Potassium Permanganate Pilot Study June 27, 2019 - June 28, 2019														
	7/16/19	600.41	NG	NG	0.35 J	ND	4.5 J	ND	14	25	20	9.8	73.65	-50.00	
	Potassium Permanganate Injections October 1, 2019 - October 10, 2019														
	10/24/2019*	600.41	NG	NG	ND	150 J	920	ND	<10	<10	16	ND	1086.0	-60.00	
	4/15/20	600.41	5.27	595.14	ND	2.2 J	11	0.21 J	7	10	45 JH	9	84.4	12.50	
	4/14/21	600.41	5.74	594.67	ND	ND	ND	ND	8	9.4	16	5.7	39.1	-60.00	
	7/1/21	600.41	6.00	594.41	0.35 J	ND	ND	0.25 J	13	17	47	10	87.6	17.50	
	11/19/21	600.41	5.15	595.26	0.27 J	ND	ND	0.25 J	17	30	32	7.8	87.3	-20.00	
	1/12/22	600.41	5.45	594.96	0.31 J	ND	ND	0.20 J	11	19	22	6.2	58.7	-45.00	
	4/5/22	600.41	5.45	594.96	0.27 J	ND	ND	0.17 J	9.8	15	24	9.7	58.9	-40.00	
	7/6/22	600.41	5.63	594.78	0.36 J	ND	3.6 J	0.22 J	15	20	27	10	76.2	-32.50	
	10/7/22	600.41	5.80	594.61	ND	ND	ND	0.22 J	13	15	34	7.2	69.4	-15.00	
	1/5/23	600.41	4.73	595.68	0.25 J	ND	ND	0.16 J	11	16	31	9.4	67.8	-22.50	
	4/6/23	600.41	4.60	595.81	0.39 J	ND	ND	ND	10 J	16	19 J	10	55.4	-52.50	
	7/25/23	600.41	5.60	594.81	0.22 J	ND	2.5 J	0.2 J	12	17	23	17	71.9	-42.50	
	10/3/23	600.41	6.05	594.36	ND	ND	5.7	ND	11	12	12	8.5	49.2	-70.00	
	1/12/24	600.41	5.34	595.07	0.22 J	ND	ND	ND	11	13	12	8.7	44.9	-70.00	
	4/9/24	600.41	5.58	594.83	0.52	ND	2.4 J	0.17 J	12	18	29	12	74.1	-27.50	
	MW - 12	2/5/18	600.50	4.52	595.98	ND	ND	2.2 J	ND	ND	ND	0.44 J	ND 9	2.64	Baseline
Potassium Permanganate Pilot Study June 27, 2019 - June 28, 2019															
7/16/19		600.50	NG	NG	ND	3 J	ND	ND	ND	ND	ND	ND	3.0	-100.00	
Potassium Permanganate Injections October 1, 2019 - October 10, 2019															
10/24/2019*		600.50	NG	NG	ND	ND	<200	ND	ND	ND	ND	ND	ND	ND	-100.00
4/15/20		600.50	4.41	596.09	ND	ND	11	ND	ND	ND	ND	ND	11.0	-100.00	
4/14/21		600.50	4.86	595.64	ND	ND	ND	ND	ND	ND	ND	ND	ND	-100.00	
7/1/21		600.50	5.35	595.15	ND	ND	ND	ND	ND	ND	ND	ND	ND	-100.00	
11/19/21		600.50	4.10	596.40	ND	ND	ND	ND	ND	ND	ND	ND	ND	-100.00	
1/12/22		600.50	4.58	595.92	ND	ND	ND	ND	ND	ND	ND	ND	ND	-100.00	
4/5/22		600.50	4.41	596.09	ND	ND	ND	ND	ND	ND	ND	ND	ND	-100.00	
7/6/22		600.50	4.10	596.40	ND	ND	ND	ND	ND	ND	ND	ND	ND	-100.00	
10/7/22		600.50	5.04	595.46	ND	ND	ND	ND	ND	ND	ND	ND	ND	-100.00	
1/5/23		600.50	3.54	596.96	ND	ND	ND	ND	ND	ND	ND	ND	ND	-100.00	
4/6/23		600.50	3.76	596.74	ND	ND	ND	ND	ND	ND	ND	ND	ND	-100.00	
7/25/23		600.50	4.71	595.79	ND	ND	ND	ND	ND	ND	0.20 J	ND	0.2	-54.55	
10/3/23		600.50	5.39	595.11	ND	ND	ND	ND	ND	ND	0.18 J	ND	0.2	-59.09	
1/12/24		600.50	4.14	596.36	ND	ND	ND	ND	ND	ND	ND	ND	ND	-100.00	
4/9/24		600.50	4.41	596.09	ND	ND	ND	ND	ND	ND	ND	ND	ND	-100.00	
MW - 13		2/5/18	600.31	4.44	595.87	1	ND	ND	ND	180	4.1	160	25	371.3	Baseline
	Potassium Permanganate Pilot Study June 27, 2019 - June 28, 2019														
	7/16/19	600.31	NG	NG	1.20 J	ND	ND	ND	400	3.9 J	78	56	539.1	-51.25	
	Potassium Permanganate Injections October 1, 2019 - October 10, 2019														
	10/24/2019*	600.31	NG	NG	<1	ND	28	ND	97	2	240	2	369.0	50.00	
	4/15/20	600.31	3.70	596.61	0.73	ND	3.2 J	ND	200	4.4	140 JH	55	403.3	-12.50	
	4/14/21	600.31	4.13	596.18	0.69	ND	ND	ND	150	1.7 J	95	70	317.4	-40.63	
	7/1/21	600.31	4.60	595.71	1.5	ND	ND	0.18 J	210	3.9	150	88	453.6	-6.25	
	11/19/21	600.31	3.30	597.01	0.45 J	ND	ND	ND	50	ND	73	20	143.5	-54.38	
	1/12/22	600.31	3.85	596.46	1.1	ND	ND	ND	140	1.8 J	74	54	270.9	-53.75	
	4/5/22	600.31	3.80	596.51	0.9	ND	ND	ND	130	1.8 J	59	75	266.7	-63.13	
	7/6/22	600.31	4.11	596.20	0.73	ND	ND	ND	110	1.7 J	89	51	252.4	-44.38	
	10/7/22	600.31	5.66	594.65	0.53	1.9 J	ND	ND	85	1.2 J	72	39	199.6	-55.00	
	1/5/23	600.31	2.62	597.69	0.19 J	ND	ND	ND	40	ND	35	6	81.2	-78.13	
	4/6/23	600.31	3.10	597.21	0.22 J	ND	ND	ND	42 J	ND	32 J	15	89.2	-80.00	
	7/25/23	600.31	3.98	596.33	0.55	ND	ND	ND	89	1.3 J	90	35	215.9	-43.75	
	10/3/23	600.31	6.70	593.61	0.55	ND	ND	ND	90	1.1 J	71	35	197.7	-55.63	
	1/12/24	600.31	3.11	597.20	0.18 J	ND	ND	ND	35	ND	36	9.1	80.3	-77.50	
	4/9/24	600.31	3.66	596.65	0.3 J	ND	ND	ND	55	0.7 J	43	22	121.0	-73.13	

Notes:

1. NG = Not Gauged; NT = Not Tested; J = Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs). ; H = The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection;
2. Water Levels measured from top of riser
3. Blue Shading = Result exceeds NY-TOGS-GA for TCE
4. RED BOLDED = Percent increase of TCE from Baseline
5. BLUE BOLDED = Result changed as a result of data validation.
6. Data Validation was not performed on the following sample dates: 7/16/19 (sampled by others), 10/24/19 (sampled by others), 7/1/21, 11/19/21, 1/12/22.
7. 10/24/2019 data analyzed by eurofins Lancaster Laboratories Environmental, all other data analyzed by Alpha Analytical
8. QA/QC Results not included on this table, please see full analytical report.

TABLE 3

FILL MATERIAL SAMPLING RESULTS
1803 ELMWOOD AVENUE BCP - C915394
CITY OF BUFFALO, NEW YORK



ANALYTE	SAMPLE ID:						SB-01-2FT			SB-03-2FT			SB-04-2FT			SB-05-5FT			SB-06-3FT			SB-07-3FT					
	NY-UNRES	NY-RESGW	NY-RESR	NY-RESRR	NY-RESC	NY-RESI	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL			
VOLATILE ORGANICS BY EPA 5035																											
Methylene chloride	0.05	0.05	51	100	500	1000	ND		0.0037	ND		0.28	ND		0.0051	ND		0.005	ND		0.003	ND		0.003			
1,1-Dichloroethane	0.27	0.27	19	26	240	480	ND		0.00074	ND		0.056	ND		0.001	ND		0.001	ND		0.0006	ND		0.0006			
Chloroform	0.37	0.37	10	49	350	700	ND		0.0011	0.027	J	0.084	ND		0.0015	ND		0.0015	ND		0.0009	ND		0.0009			
Carbon tetrachloride	0.76	0.76	1.4	2.4	22	44	ND		0.00074	ND		0.056	ND		0.001	ND		0.001	ND		0.0006	ND		0.0006			
Tetrachloroethene	1.3	1.3	5.5	19	150	300	0.00043		0.00037	0.023	J	0.028	ND		0.00051	ND		0.0005	ND		0.0003	ND		0.0003			
Chlorobenzene	1.1	1.1	100	100	500	1000	ND		0.00037	ND		0.028	ND		0.00051	ND		0.0005	ND		0.0003	ND		0.0003			
1,2-Dichloroethane	0.02	0.02	2.3	3.1	30	60	ND		0.00074	ND		0.056	ND		0.001	ND		0.001	ND		0.0006	ND		0.0006			
1,1,1-Trichloroethane	0.68	0.68	100	100	500	1000	ND		0.00037	ND		0.028	ND		0.00051	ND		0.0005	ND		0.0003	ND		0.0003			
Benzene	0.06	0.06	2.9	4.8	44	89	ND		0.00037	ND		0.028	0.0012		0.00051	0.00019	J	0.0005	ND		0.0003	ND		0.0003			
Toluene	0.7	0.7	100	100	500	1000	ND		0.00074	0.05	J	0.056	ND		0.001	ND		0.001	ND		0.0006	ND		0.0006			
Ethylbenzene	1	1	30	41	390	780	ND		0.00074	ND		0.056	ND		0.001	ND		0.001	ND		0.0006	ND		0.0006			
Vinyl chloride	0.02	0.02	0.21	0.9	13	27	ND		0.00074	ND		0.056	0.0019		0.001	0.01		0.001	ND		0.0006	ND		0.0006			
1,1-Dichloroethene	0.33	0.33	100	100	500	1000	ND		0.00074	ND		0.056	ND		0.001	ND		0.001	ND		0.0006	ND		0.0006			
trans-1,2-Dichloroethene	0.19	0.19	100	100	500	1000	ND		0.0011	0.0063	J	0.084	ND		0.0015	0.00093	J	0.0015	ND		0.0009	ND		0.0009			
Trichloroethene	0.47	0.47	10	21	200	400	0.0041		0.00037	12		0.028	ND		0.00051	0.0053		0.0005	ND		0.0003	0.0005		0.0003			
1,2-Dichlorobenzene	1.1	1.1	100	100	500	1000	ND		0.0015	ND		0.11	ND		0.002	ND		0.002	ND		0.0012	ND		0.0012			
1,3-Dichlorobenzene	2.4	2.4	17	49	280	560	ND		0.0015	ND		0.11	ND		0.002	ND		0.002	ND		0.0012	ND		0.0012			
1,4-Dichlorobenzene	1.8	1.8	9.8	13	130	250	ND		0.0015	ND		0.11	ND		0.002	ND		0.002	ND		0.0012	ND		0.0012			
Methyl tert butyl ether	0.93	0.93	62	100	500	1000	ND		0.0015	ND		0.11	ND		0.002	ND		0.002	ND		0.0012	ND		0.0012			
p/m-Xylene	NA	NA	NA	NA	NA	NA	ND		0.0015	ND		0.11	ND		0.002	ND		0.002	ND		0.0012	ND		0.0012			
o-Xylene	NA	NA	NA	NA	NA	NA	ND		0.00074	ND		0.056	ND		0.001	ND		0.001	ND		0.0006	ND		0.0006			
cis-1,2-Dichloroethene	0.25	0.25	59	100	500	1000	ND		0.00074	0.052	J	0.056	ND		0.001	0.0042		0.001	ND		0.0006	ND		0.0006			
Acetone	0.05	0.05	100	100	500	1000	ND		0.0074	ND		0.56	0.009	J	0.01	0.055		0.01	ND		0.006	ND		0.006			
2-Butanone	0.12	0.12	100	100	500	1000	ND		0.0074	ND		0.56	0.0024	J	0.01	0.011		0.01	ND		0.006	ND		0.006			
n-Butylbenzene	12	12	100	100	500	1000	ND		0.00074	ND		0.056	ND		0.001	ND		0.001	ND		0.0006	ND		0.0006			
sec-Butylbenzene	11	11	100	100	500	1000	ND		0.00074	ND		0.056	ND		0.001	ND		0.001	ND		0.0006	ND		0.0006			
tert-Butylbenzene	5.9	5.9	100	100	500	1000	ND		0.0015	ND		0.11	ND		0.002	ND		0.002	ND		0.0012	ND		0.0012			
n-Propylbenzene	3.9	3.9	100	100	500	1000	ND		0.00074	ND		0.056	ND		0.001	ND		0.001	ND		0.0006	ND		0.0006			
1,3,5-Trimethylbenzene	8.4	8.4	47	52	190	380	ND		0.0015	ND		0.11	ND		0.002	ND		0.002	ND		0.0012	ND		0.0012			
1,2,4-Trimethylbenzene	3.6	3.6	47	52	190	380	ND		0.0015	ND		0.11	ND		0.002	ND		0.002	ND		0.0012	ND		0.0012			
1,4-Dioxane	0.1	0.1	9.8	13	130	250	ND		0.059	ND		4.5	ND		0.081	ND		0.08	ND		0.048	ND		0.048			
SEMI-VOLATILE ORGANICS BY GC/MS																											
Acenaphthene	20	98	100	100	500	1000	ND		0.17	0.13	J	0.18	0.068	J	0.14	ND		0.15	ND		0.15	ND		0.14			
Hexachlorobenzene	0.33	3.2	0.33	1.2	6	12	ND		0.12	ND		0.13	ND		0.11	ND		0.11	ND		0.12	ND		0.11			
Fluoranthene	100	1000	100	100	500	1000	0.13		0.12	1.7		0.13	0.09	J	0.11	ND		0.11	0.047	J	0.12	0.07	J	0.11			
Naphthalene	12	12	100	100	500	1000	ND		0.21	0.096	J	0.22	0.3		0.18	ND		0.19	0.045	J	0.19	ND		0.18			
Benzo(a)anthracene	1	1	1	1	5.6	11	0.072	J	0.12	0.74		0.13	0.064	J	0.11	ND		0.11	0.034	J	0.12	0.036	J	0.11			
Benzo(a)pyrene	1	22	1	1	1.1	1.1	0.059	J	0.17	0.71		0.18	0.047	J	0.14	ND		0.15	ND		0.15	ND		0.14			
Benzo(b)fluoranthene	1	1.7	1	1	5.6	11	0.078	J	0.12	0.89		0.13	0.072	J	0.11	ND		0.11	0.053	J	0.12	0.049	J	0.11			
Benzo(k)fluoranthene	0.8	1.7	1	3.9	56	110	ND		0.12	0.36		0.13	ND		0.11	ND		0.11	ND		0.12	ND		0.11			
Chrysene	1	1	1	3.9	56	110	0.063	J	0.12	0.7		0.13	0.081	J	0.11	ND		0.11	0.038	J	0.12	0.034	J	0.11			
Acenaphthylene	100	107	100	100	500	1000	ND		0.17	ND		0.18	ND		0.14	ND		0.15	ND		0.15	ND		0.14			
Anthracene	100	1000	100	100	500	1000	ND		0.12	0.28		0.13	ND		0.11	ND		0.11	ND		0.12	ND		0.11			
Benzo(ghi)perylene	100	1000	100	100	500	1000	0.033	J	0.17	0.44		0.18	0.055	J	0.14	ND		0.15	0.03	J	0.15	0.026	J	0.14			
Fluorene	30	386	100	100	500	1000	ND		0.21	0.14	J	0.22	0.02	J	0.18	ND		0.19	ND		0.19	ND		0.18			
Phenanthrene	100	1000	100	100	500	1000	0.094	J	0.12	1.2		0.13	0.1	J	0.11	ND		0.11	0.041	J	0.12	0.046	J	0.11			
Dibenzo(a,h)anthracene	0.33	1000	0.33	0.33	0.56	1.1	ND		0.12	0.11	J	0.13	ND		0.11	ND		0.11	ND		0.12	ND		0.11			
Indeno(1,2,3-cd)pyrene	0.5	8.2	0.5	0.5	5.6	11	0.034	J	0.17	0.44		0.18	0.038	J	0.14	ND		0.15	0.027	J	0.15	0.026	J	0.14			
Pyrene	100	1000	100	100	500	1000	0.1	J	0.12	1.3		0.13	0.081	J	0.11	ND		0.11	0.042	J	0.12	0.059	J	0.11			
Dibenzofuran	7	210	14	59	350	1000	ND		0.21	0.089	J	0.22	0.033	J	0.18	ND		0.19	ND		0.19	ND		0.18			
Pentachlorophenol	0.8	0.8	2.4	6.7	55	55	ND		0.17	ND		0.18	ND		0.14	ND		0.15	ND		0.15	ND		0.14			
Phenol	0.33	0.33	100	100	500	1000	ND		0.21	ND		0.22	ND		0.18	ND		0.19	ND		0.19	ND		0.18			
2-Methylphenol	0.33	0.33	100	100	500	1000	ND		0.21	ND		0.22	ND		0.18	ND		0.19	ND		0.19	ND		0.18			
3-Methylphenol/4-Methylphenol	0.33	0.33	34	100	500	1000	ND		0.3	ND		0.32	ND		0.26	ND		0.27	ND		0.28	ND		0.26			
1,4-Dioxane	0.1	0.1	9.8	13	130	250	ND		0.031	ND		0.033	ND		0.027	ND		0.028	ND		0.029	ND		0.027			

TABLE 3

FILL MATERIAL SAMPLING RESULTS
1803 ELMWOOD AVENUE BCP - C915394
CITY OF BUFFALO, NEW YORK



ANALYTE	SAMPLE ID:						SB-01-2FT		SB-03-2FT		SB-04-2FT		SB-05-5FT		SB-06-3FT		SB-07-3FT						
	LAB ID:						L2427942-01		L2428242-09		L2427942-05		L2427942-03		L2428242-01		L2428242-07						
	COLLECTION DATE:						5/20/2024		5/21/2024		5/20/2024		5/20/2024		5/21/2024		5/21/2024						
	SAMPLE DEPTH:						2 FT		2 FT		2 FT		5 FT		3 FT		3 FT						
SAMPLE MATRIX:						HFM		HFM		HFM		HFM		HFM		HFM		HFM					
	NY-UNRES	NY-RESGW	NY-RESR	NY-RESRR	NY-RESC	NY-RESI	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL		
CHLORINATED HERBICIDES BY GC																							
2,4,5-TP (Silvex)	3.8	3.8	58	100	500	1000	-	-	ND	0.225	ND	0.179	-	-	-	-	-	-	-	-	-		
ORGANOCHLORINE PESTICIDES BY GC																							
Delta-BHC	0.04	0.25	100	100	500	1000	-	-	ND	0.00206	ND	0.00167	-	-	-	-	-	-	-	-	-		
Lindane	0.1	0.1	0.28	1.3	9.2	23	-	-	ND	0.000858	ND	0.000696	-	-	-	-	-	-	-	-	-		
Alpha-BHC	0.02	0.02	0.097	0.48	3.4	6.8	-	-	ND	0.000858	ND	0.000696	-	-	-	-	-	-	-	-	-		
Beta-BHC	0.036	0.09	0.072	0.36	3	14	-	-	ND	0.00206	ND	0.00167	-	-	-	-	-	-	-	-	-		
Heptachlor	0.042	0.38	0.42	2.1	15	29	-	-	ND	0.00103	ND	0.000835	-	-	-	-	-	-	-	-	-		
Aldrin	0.005	0.19	0.019	0.097	0.68	1.4	-	-	ND	0.00206	ND	0.00167	-	-	-	-	-	-	-	-	-		
Endrin	0.014	0.06	2.2	11	89	410	-	-	ND	0.000858	ND	0.000696	-	-	-	-	-	-	-	-	-		
Dieldrin	0.005	0.1	0.039	0.2	1.4	2.8	-	-	ND	0.00129	ND	0.00104	-	-	-	-	-	-	-	-	-		
4,4'-DDE	0.0033	17	1.8	8.9	62	120	-	-	ND	0.00206	ND	0.00167	-	-	-	-	-	-	-	-	-		
4,4'-DDD	0.0033	14	2.6	13	92	180	-	-	ND	0.00206	ND	0.00167	-	-	-	-	-	-	-	-	-		
4,4'-DDT	0.0033	136	1.7	7.9	47	94	-	-	ND	0.00206	ND	0.00167	-	-	-	-	-	-	-	-	-		
Endosulfan I	2.4	102	4.8	24	200	920	-	-	ND	0.00206	ND	0.00167	-	-	-	-	-	-	-	-	-		
Endosulfan II	2.4	102	4.8	24	200	920	-	-	ND	0.00206	ND	0.00167	-	-	-	-	-	-	-	-	-		
Endosulfan sulfate	2.4	1000	4.8	24	200	920	-	-	ND	0.000858	ND	0.000696	-	-	-	-	-	-	-	-	-		
cis-Chlordane	0.094	2.9	0.91	4.2	24	47	-	-	ND	0.00257	ND	0.00209	-	-	-	-	-	-	-	-	-		
POLYCHLORINATED BIPHENYLS BY GC																							
Aroclor 1016	0.1	3.2	1	1	1	25	ND	0.0612	ND	0.0669	ND	0.0525	ND	0.0528	ND	0.0536	ND	0.0511					
Aroclor 1221	0.1	3.2	1	1	1	25	ND	0.0612	ND	0.0669	ND	0.0525	ND	0.0528	ND	0.0536	ND	0.0511					
Aroclor 1232	0.1	3.2	1	1	1	25	ND	0.0612	ND	0.0669	ND	0.0525	ND	0.0528	ND	0.0536	ND	0.0511					
Aroclor 1242	0.1	3.2	1	1	1	25	ND	0.0612	ND	0.0669	ND	0.0525	ND	0.0528	ND	0.0536	ND	0.0511					
Aroclor 1248	0.1	3.2	1	1	1	25	ND	0.0612	ND	0.0669	ND	0.0525	ND	0.0528	ND	0.0536	ND	0.0511					
Aroclor 1254	0.1	3.2	1	1	1	25	0.0442	JIP	0.0612	0.0802	0.0669	ND	0.0525	ND	0.0528	ND	0.0536	ND	0.0511				
Aroclor 1260	0.1	3.2	1	1	1	25	0.028	JP	0.0612	0.0977	0.0669	ND	0.0525	ND	0.0528	ND	0.0536	ND	0.0511				
Aroclor 1262	0.1	3.2	1	1	1	25	ND	0.0612	ND	0.0669	ND	0.0525	ND	0.0528	ND	0.0536	ND	0.0511					
Aroclor 1268	0.1	3.2	1	1	1	25	ND	0.0612	0.105	0.0669	ND	0.0525	ND	0.0528	0.127	0.0536	ND	0.0511					
PCBs, Total	0.1	3.2	1	1	1	25	0.1	J	0.0612	0.283	0.0669	ND	0.0525	ND	0.0528	0.127	0.0536	ND	0.0511				
DIESEL RANGE ORGANICS																							
DRO (C10-C28)	NA	NA	NA	NA	NA	NA	72	J	81	1000	220	77	35	54	37	23	J	37	5.5	J	35		
GASOLINE RANGE ORGANICS																							
Gasoline Range Organics	NA	NA	NA	NA	NA	NA	ND	1.5	3.4	1.9	7.3	2.4	2.5	2	ND	1.1	ND	2.6					
TOTAL METALS																							
Arsenic, Total	13	16	16	16	16	16	12.9	0.969	21.4	2.14	5.83	0.877	6.66	0.873	20	1.81	2.21	0.834					
Barium, Total	350	820	350	400	400	10000	131	0.969	118	2.14	66.7	0.877	96.6	0.873	151	1.81	13.1	0.834					
Beryllium, Total	7.2	47	14	72	590	2700	0.578	0.484	0.601	J	1.07	0.634	0.439	0.686	0.436	0.256	J	0.903	0.096	J	0.417		
Cadmium, Total	2.5	7.5	2.5	4.3	9.3	60	1.75	0.969	5.18	2.14	0.207	J	0.877	0.173	J	0.873	4.62	1.81	ND	0.834			
Chromium, Total	NA	NA	NA	NA	NA	NA	19.4	0.969	41.8	2.14	17.4	0.877	19.8	0.873	20.4	1.81	3.92	0.834					
Copper, Total	50	1720	270	270	270	10000	61.9	0.969	105	2.14	11.6	0.877	21.7	0.873	103	1.81	2.67	0.834					
Lead, Total	63	450	400	400	1000	3900	119	4.84	341	10.7	28.6	4.39	13	4.36	554	9.03	17.9	4.17					
Manganese, Total	1600	2000	2000	2000	10000	10000	813	0.969	572	2.14	357	0.877	343	0.873	1300	1.81	171	0.834					
Mercury, Total	0.18	0.73	0.81	0.81	2.8	5.7	28.2	0.787	7.41	1.05	ND	0.081	ND	0.072	0.125	0.08	ND	0.087					
Nickel, Total	30	130	140	310	310	10000	26.1	2.42	43.9	5.35	14.7	2.19	25.6	2.18	153	4.52	3.44	2.08					
Selenium, Total	3.9	4	36	180	1500	6800	ND	1.94	1.27	J	4.28	0.343	J	1.75	ND	1.74	0.618	J	3.61	0.385	J	1.67	
Silver, Total	2	8.3	36	180	1500	6800	0.287	J	0.484	ND	1.07	ND	0.439	ND	0.436	0.558	J	0.903	ND	0.417			
Zinc, Total	109	2480	2200	10000	10000	10000	1150	4.84	1540	10.7	57.8	4.39	58	4.36	988	9.03	13.4	4.17					
GENERAL CHEMISTRY																							
Chromium, Trivalent	30	NA	36	180	1500	6800	19.4	1.01	41.8	2.14	17.4	0.878	19.8	0.911	20.4	1.81	3.92	0.854					
Solids, Total	NA	NA	NA	NA	NA	NA	79.4	NA	0.1	73.5	0.1	91.1	0.1	87.8	0.1	85.9	0.1	93.7	0.1				
Cyanide, Total	27	40	27	27	27	10000	ND	1.2	0.83	J	1.2	ND	1.1	ND	1	ND	1.1	ND	1				
Chromium, Hexavalent	1	800	22	110	400	800	ND	1.01	ND	1.09	ND	0.878	ND	0.911	ND	0.931	ND	0.854					

TABLE 3

FILL MATERIAL SAMPLING RESULTS
1803 ELMWOOD AVENUE BCP - C915394
CITY OF BUFFALO, NEW YORK



ANALYTE	SAMPLE ID:						SB-01-2FT		SB-03-2FT		SB-04-2FT		SB-05-5FT		SB-06-3FT		SB-07-3FT							
	LAB ID:						L2427942-01		L2428242-09		L2427942-05		L2427942-03		L2428242-01		L2428242-07							
	COLLECTION DATE:						5/20/2024		5/21/2024		5/20/2024		5/20/2024		5/21/2024		5/21/2024							
	SAMPLE DEPTH:						2 FT		2 FT		2 FT		5 FT		3 FT		3 FT							
SAMPLE MATRIX:						HFM		HFM		HFM		HFM		HFM		HFM		HFM						
	NY-UNRES	NY-RESGW	NY-RESR	NY-RESRR	NY-RESC	NY-RESI	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL			
PERFLUORINATED ALKYL ACIDS BY EPA 1633																								
Perfluorobutanoic Acid (PFBA)	NA	NA	NA	NA	NA	NA	ND		0.000753	ND		0.000789	ND		0.00076	ND		0.000797	ND		0.000792			
Perfluoropentanoic Acid (PFPeA)	NA	NA	NA	NA	NA	NA	0.000063	J	0.000376	0.000075	J	0.000394	ND		0.00038	ND		0.000378	0.000073	J	0.000399	ND	0.000396	
Perfluorobutanesulfonic Acid (PFBS)	NA	NA	NA	NA	NA	NA	ND		0.000188	ND		0.000197	ND		0.000189	ND		0.000189	ND		0.000199	ND	0.000198	
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2F)	NA	NA	NA	NA	NA	NA	ND		0.000753	ND		0.000789	ND		0.00076	ND		0.000756	ND		0.000797	ND	0.000792	
Perfluorohexanoic Acid (PFHxA)	NA	NA	NA	NA	NA	NA	0.000069	J	0.000188	0.000062	J	0.000197	ND		0.00019	ND		0.000189	0.000067	J	0.000199	ND	0.000198	
Perfluoropentanesulfonic Acid (PFPeS)	NA	NA	NA	NA	NA	NA	ND		0.000188	ND		0.000197	ND		0.00019	ND		0.000189	ND		0.000199	ND	0.000198	
Perfluoroheptanoic Acid (PFHpA)	NA	NA	NA	NA	NA	NA	0.000028	J	0.000188	0.000039	J	0.000197	ND		0.00019	ND		0.000189	0.000027	J	0.000199	ND	0.000198	
Perfluorohexanesulfonic Acid (PFHxS)	NA	NA	NA	NA	NA	NA	ND		0.000188	ND		0.000197	ND		0.00019	ND		0.000189	0.000181	J	0.000199	ND	0.000198	
Perfluorooctanoic Acid (PFOA)	0.00066	0.0008	0.0066	0.033	0.5	0.6	0.000102	J	0.000188	0.000128	J	0.000197	ND		0.00019	ND		0.000189	0.000169	J	0.000199	ND	0.000198	
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2F)	NA	NA	NA	NA	NA	NA	ND		0.000753	ND		0.000789	ND		0.00076	ND		0.000756	ND		0.000797	ND	0.000792	
Perfluoroheptanesulfonic Acid (PFHpS)	NA	NA	NA	NA	NA	NA	ND		0.000188	ND		0.000197	ND		0.00019	ND		0.000189	ND		0.000199	ND	0.000198	
Perfluorononanoic Acid (PFNA)	NA	NA	NA	NA	NA	NA	0.000075	J	0.000188	0.000093	J	0.000197	ND		0.00019	ND		0.000189	ND		0.000199	0.000189	J	0.000198
Perfluorooctanesulfonic Acid (PFOS)	0.00088	0.001	0.0088	0.044	0.44	0.44	0.000565		0.000188	0.000894		0.000197	0.000078	J	0.00019	ND		0.000189	ND		0.000199	0.000378		0.000198
Perfluorodecanoic Acid (PFDA)	NA	NA	NA	NA	NA	NA	0.000123	J	0.000188	0.000153	J	0.000197	ND		0.00019	ND		0.000189	ND		0.000199	ND	0.000198	
1H,1H,2H,2H-Perfluorodecane sulfonic Acid (8:2F)	NA	NA	NA	NA	NA	NA	ND		0.000753	ND		0.000789	ND		0.00076	ND		0.000756	ND		0.000797	ND	0.000792	
Perfluorononanesulfonic Acid (PFNS)	NA	NA	NA	NA	NA	NA	ND		0.000188	ND		0.000197	ND		0.00019	ND		0.000189	ND		0.000199	ND	0.000198	
N-Methyl Perfluorooctanesulfonamideacetic Acid	NA	NA	NA	NA	NA	NA	ND		0.000188	ND		0.000197	ND		0.00019	ND		0.000189	ND		0.000199	ND	0.000198	
Perfluoroundecanoic Acid (PFUnA)	NA	NA	NA	NA	NA	NA	0.000065	J	0.000188	0.000058	J	0.000197	ND		0.00019	ND		0.000189	ND		0.000199	ND	0.000198	
Perfluorodecane sulfonic Acid (PFDS)	NA	NA	NA	NA	NA	NA	ND		0.000188	ND		0.000197	ND		0.00019	ND		0.000189	ND		0.000199	ND	0.000198	
Perfluorooctanesulfonamide (PFOSA)	NA	NA	NA	NA	NA	NA	ND		0.000188	ND		0.000197	ND		0.00019	ND		0.000189	ND		0.000199	ND	0.000198	
N-Ethyl Perfluorooctanesulfonamideacetic Acid (N)	NA	NA	NA	NA	NA	NA	ND		0.000188	ND		0.000197	ND		0.00019	ND		0.000189	ND		0.000199	ND	0.000198	
Perfluorododecanoic Acid (PFDoA)	NA	NA	NA	NA	NA	NA	0.000109	J	0.000188	0.000052	J	0.000197	ND		0.00019	ND		0.000189	ND		0.000199	ND	0.000198	
Perfluorotridecanoic Acid (PFTriDA)	NA	NA	NA	NA	NA	NA	ND		0.000188	ND		0.000197	ND		0.00019	ND		0.000189	ND		0.000199	ND	0.000198	
Perfluorotetradecanoic Acid (PFTeDA)	NA	NA	NA	NA	NA	NA	ND		0.000188	ND		0.000197	ND		0.00019	ND		0.000189	ND		0.000199	ND	0.000198	
Hexafluoropropylene Oxide Dimer Acid (HFPO-D)	NA	NA	NA	NA	NA	NA	ND		0.000753	ND		0.000789	ND		0.00076	ND		0.000756	ND		0.000797	ND	0.000792	
4,8-Dioxa-3H-Perfluorononanoic Acid (ADONA)	NA	NA	NA	NA	NA	NA	ND		0.000753	ND		0.000789	ND		0.00076	ND		0.000756	ND		0.000797	ND	0.000792	
Perfluorodecane sulfonic Acid (PFDoS)	NA	NA	NA	NA	NA	NA	ND		0.000188	ND		0.000197	ND		0.00019	ND		0.000189	ND		0.000199	ND	0.000198	
9-Chlorohexadecafluoro-3-Oxanonone-1-Sulfonic Ac	NA	NA	NA	NA	NA	NA	ND		0.000753	ND		0.000789	ND		0.00076	ND		0.000756	ND		0.000797	ND	0.000792	
11-Chloroheptafluoro-3-Oxadecane-1-Sulfonic	NA	NA	NA	NA	NA	NA	ND		0.000753	ND		0.000789	ND		0.00076	ND		0.000756	ND		0.000797	ND	0.000792	
N-Methyl Perfluorooctane Sulfonamide (NMeFOS)	NA	NA	NA	NA	NA	NA	ND		0.000188	ND		0.000197	ND		0.00019	ND		0.000189	ND		0.000199	ND	0.000198	
N-Ethyl Perfluorooctane Sulfonamide (NEFOSA)	NA	NA	NA	NA	NA	NA	ND		0.000188	ND		0.000197	ND		0.00019	ND		0.000189	ND		0.000199	ND	0.000198	
N-Methyl Perfluorooctanesulfonamide Ethanol (NI	NA	NA	NA	NA	NA	NA	ND		0.00188	ND		0.00197	ND		0.0019	ND		0.00189	ND		0.00199	ND	0.00198	
N-Ethyl Perfluorooctanesulfonamide Ethanol (NEI	NA	NA	NA	NA	NA	NA	ND		0.00188	ND		0.00197	ND		0.0019	ND		0.00189	ND		0.00199	ND	0.00198	
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	NA	NA	NA	NA	NA	NA	ND		0.000376	ND		0.000394	ND		0.00038	ND		0.000378	ND		0.000399	ND	0.000396	
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	NA	NA	NA	NA	NA	NA	ND		0.000376	ND		0.000394	ND		0.00038	ND		0.000378	ND		0.000399	ND	0.000396	
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESe)	NA	NA	NA	NA	NA	NA	ND		0.000376	ND		0.000394	ND		0.00038	ND		0.000378	ND		0.000399	ND	0.000396	
Nonafluoro-3,6-Dioxahexanoic Acid (NFDHA)	NA	NA	NA	NA	NA	NA	ND		0.000376	ND		0.000394	ND		0.00038	ND		0.000378	ND		0.000399	ND	0.000396	
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	NA	NA	NA	NA	NA	NA	ND		0.000941	ND		0.000986	ND		0.00095	ND		0.000944	ND		0.000997	ND	0.00099	
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	NA	NA	NA	NA	NA	NA	ND		0.00471	ND		0.00493	ND		0.00475	ND		0.00472	ND		0.00498	ND	0.00495	
3-Perfluorohexyl Propanoic Acid (7:3FTCA)	NA	NA	NA	NA	NA	NA	ND		0.00471	ND		0.00493	ND		0.00475	ND		0.00472	ND		0.00498	ND	0.00495	

* Comparison is not performed on parameters with non-numeric criteria.

NY-UNRES: New York NYCRR Part 375 New York Unrestricted use Criteria Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.
 NY-RESR: New York NYCRR Part 375 Residential Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.
 NY-RESRR: New York NYCRR Part 375 Restricted-Residential Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.
 NY-RESC: New York NYCRR Part 375 Commercial Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.
 NY-RESI: New York NYCRR Part 375 Industrial Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

TABLE 3

FILL MATERIAL SAMPLING RESULTS
1803 ELMWOOD AVENUE BCP - C915394
CITY OF BUFFALO, NEW YORK



ANALYTE	SAMPLE ID:						SB-08-3FT			DUP-B			SB-09-3FT			SB-10-2FT			SB-11-2FT			SB-12-2F		
	NY-UNRES	NY-RESGW	NY-RESR	NY-RESRR	NY-RESC	NY-RESI	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL
VOLATILE ORGANICS BY EPA 5035																								
Methylene chloride	0.05	0.05	51	100	500	1000	ND		0.34	ND		0.33	ND		0.013	ND		0.0023	ND		0.0051	ND		0.0054
1,1-Dichloroethane	0.27	0.27	19	26	240	480	ND		0.069	ND		0.067	ND		0.0026	ND		0.0047	ND		0.001	ND		0.0011
Chloroform	0.37	0.37	10	49	350	700	ND		0.1	ND		0.1	ND		0.0039	ND		0.0007	ND		0.0015	ND		0.0016
Carbon tetrachloride	0.76	0.76	1.4	2.4	22	44	ND		0.069	ND		0.067	ND		0.0026	ND		0.0047	ND		0.001	ND		0.0011
Tetrachloroethene	1.3	1.3	5.5	19	150	300	ND		0.034	ND		0.033	ND		0.0013	ND		0.0023	ND		0.00051	ND		0.00054
Chlorobenzene	1.1	1.1	100	100	500	1000	ND		0.034	ND		0.033	ND		0.0013	ND		0.0023	ND		0.00051	ND		0.00054
1,2-Dichloroethane	0.02	0.02	2.3	3.1	30	60	ND		0.069	ND		0.067	ND		0.0026	ND		0.0047	ND		0.001	ND		0.0011
1,1,1-Trichloroethane	0.68	0.68	100	100	500	1000	ND		0.034	ND		0.033	ND		0.0013	ND		0.0023	ND		0.00051	ND		0.00054
Benzene	0.06	0.06	2.9	4.8	44	89	ND		0.034	ND		0.033	ND		0.0013	0.0001	J	0.0023	ND		0.00051	ND		0.00054
Toluene	0.7	0.7	100	100	500	1000	ND		0.069	ND		0.067	ND		0.0026	ND		0.0047	ND		0.001	ND		0.0011
Ethylbenzene	1	1	30	41	390	780	ND		0.069	ND		0.067	ND		0.0026	ND		0.0047	ND		0.001	ND		0.0011
Vinyl chloride	0.02	0.02	0.21	0.9	13	27	ND		0.069	ND		0.067	ND		0.0026	0.012		0.0047	ND		0.001	ND		0.0011
1,1-Dichloroethene	0.33	0.33	100	100	500	1000	ND		0.069	ND		0.067	ND		0.0026	0.00034	J	0.0047	ND		0.001	ND		0.0011
trans-1,2-Dichloroethene	0.19	0.19	100	100	500	1000	0.011	J	0.1	0.029	J	0.1	ND		0.0039	0.014		0.0007	ND		0.0015	ND		0.0016
Trichloroethene	0.47	0.47	10	21	200	400	5.6		0.034	7.2	0.033	0.001	J	0.013	0.029		0.0023	0.011	0.00051	ND		0.00054		
1,2-Dichlorobenzene	1.1	1.1	100	100	500	1000	ND		0.14	ND		0.13	ND		0.0052	ND		0.0094	ND		0.002	ND		0.0021
1,3-Dichlorobenzene	2.4	2.4	17	49	280	560	ND		0.14	ND		0.13	ND		0.0052	ND		0.0094	ND		0.002	ND		0.0021
1,4-Dichlorobenzene	1.8	1.8	9.8	13	130	250	ND		0.14	ND		0.13	ND		0.0052	ND		0.0094	ND		0.002	ND		0.0021
Methyl tert butyl ether	0.93	0.93	62	100	500	1000	ND		0.14	ND		0.13	ND		0.0052	ND		0.0094	ND		0.002	ND		0.0021
p/m-Xylene	NA	NA	NA	NA	NA	NA	0.049	J	0.14	ND		0.13	ND		0.0052	ND		0.0094	ND		0.002	ND		0.0021
o-Xylene	NA	NA	NA	NA	NA	NA	ND		0.069	ND		0.067	ND		0.0026	ND		0.0047	ND		0.001	ND		0.0011
cis-1,2-Dichloroethene	0.25	0.25	59	100	500	1000	0.012	J	0.069	0.038	J	0.067	ND		0.0026	0.045		0.0047	ND		0.001	ND		0.0011
Acetone	0.05	0.05	100	100	500	1000	ND		0.69	ND		0.67	0.013	J	0.026	0.0022	J	0.0047	0.0059	J	0.01	0.0072	J	0.011
2-Butanone	0.12	0.12	100	100	500	1000	ND		0.69	ND		0.67	ND		0.026	ND		0.0047	ND		0.01	ND		0.011
n-Butylbenzene	12	12	100	100	500	1000	ND		0.069	ND		0.067	ND		0.0026	ND		0.0047	ND		0.001	ND		0.0011
sec-Butylbenzene	11	11	100	100	500	1000	ND		0.069	ND		0.067	ND		0.0026	ND		0.0047	ND		0.001	ND		0.0011
tert-Butylbenzene	5.9	5.9	100	100	500	1000	ND		0.14	ND		0.13	ND		0.0052	ND		0.0094	ND		0.002	ND		0.0021
n-Propylbenzene	3.9	3.9	100	100	500	1000	ND		0.069	ND		0.067	ND		0.0026	ND		0.0047	ND		0.001	ND		0.0011
1,3,5-Trimethylbenzene	8.4	8.4	47	52	190	380	ND		0.14	ND		0.13	ND		0.0052	ND		0.0094	ND		0.002	ND		0.0021
1,2,4-Trimethylbenzene	3.6	3.6	47	52	190	380	ND		0.14	ND		0.13	ND		0.0052	ND		0.0094	ND		0.002	ND		0.0021
1,4-Dioxane	0.1	0.1	9.8	13	130	250	ND		5.5	ND		5.4	ND		0.21	ND		0.037	ND		0.082	ND		0.086
SEMI-VOLATILE ORGANICS BY GC/MS																								
Acenaphthene	20	98	100	100	500	1000	0.33		0.16	2.7		1.6	0.47	J	0.73	ND		0.16	ND		0.15	0.084	J	0.16
Hexachlorobenzene	0.33	3.2	0.33	1.2	6	12	ND		0.12	ND		0.12	ND		0.55	ND		0.12	ND		0.11	ND		0.12
Fluoranthene	100	1000	100	100	500	1000	4.7		0.12	26		1.2	17		0.55	0.68		0.12	0.25		0.11	1.4		0.12
Naphthalene	12	12	100	100	500	1000	0.28		0.2	3.9		2	0.5	J	0.82	ND		0.2	0.084	J	0.19	0.053	J	0.2
Benzo(a)anthracene	1	1	1	1	5.6	11	2.3		0.12	12		1.2	8.4		0.55	0.32		0.12	0.14		0.11	0.64		0.12
Benzo(a)pyrene	1	22	1	1	1.1	1.1	1.4		0.16	9.9		1.6	6.8		0.73	0.32		0.16	0.12	J	0.15	0.5		0.16
Benzo(b)fluoranthene	1	1.7	1	1	5.6	11	2.4		0.12	11		1.2	9.4		0.55	0.45		0.12	0.17		0.11	0.67		0.12
Benzo(k)fluoranthene	0.8	1.7	1	3.9	56	110	0.64		0.12	3.9		1.2	2.4		0.55	0.14		0.12	0.056	J	0.11	0.18		0.12
Chrysene	1	1	1	3.9	56	110	2.1		0.12	11		1.2	7.4		0.55	0.33		0.12	0.13		0.11	0.59		0.12
Acenaphthylene	100	107	100	100	500	1000	0.16		0.16	ND		1.6	0.48	J	0.73	ND		0.16	ND		0.15	0.045	J	0.16
Anthracene	100	1000	100	100	500	1000	0.9		0.12	7.6		1.2	2.7		0.55	0.052	J	0.12	ND		0.11	0.23		0.12
Benzo(ghi)perylene	100	1000	100	100	500	1000	1		0.16	4.7		1.6	4.2		0.73	0.21		0.16	0.081	J	0.15	0.29		0.16
Fluorene	30	386	100	100	500	1000	0.43		0.2	3.5		2	0.63	J	0.92	ND		0.2	ND		0.19	0.12	J	0.2
Phenanthrene	100	1000	100	100	500	1000	3.6		0.12	27		1.2	8.4		0.55	0.2		0.12	0.17		0.11	0.91		0.12
Dibenzo(a,h)anthracene	0.33	1000	0.33	0.33	0.56	1.1	0.3		0.12	1.4		1.2	1.1		0.55	0.051	J	0.12	0.024	J	0.11	0.084	J	0.12
Indeno(1,2,3-cd)pyrene	0.5	8.2	0.5	0.5	5.6	11	1.1		0.16	5.1		1.6	4.5		0.73	0.19		0.16	0.082	J	0.15	0.31		0.16
Pyrene	100	1000	100	100	500	1000	3.9		0.12	21		1.2	13		0.55	0.57		0.12	0.2		0.11	1.1		0.12
Dibenzofuran	7	210	14	59	350	1000	0.24		0.2	1.8	J	2	0.48	J	0.92	ND		0.2	0.023	J	0.19	0.056	J	0.2
Pentachlorophenol	0.8	0.8	2.4	6.7	55	ND	ND		0.16	ND		1.6	ND		0.73	ND		0.16	ND		0.15	ND		0.16
Phenol	0.33	0.33	100	100	500	1000	ND		0.2	ND		2	ND		0.92	ND		0.2	ND		0.19	ND		0.2
2-Methylphenol	0.33	0.33	100	100	500	1000	ND		0.2	ND		2	ND		0.92	ND		0.2	ND		0.19	ND		0.2
3-Methylphenol/4-Methylphenol	0.33	0.33	34	100	500	1000	ND		0.29	ND		2.9	ND		1.3	ND		0.29	ND		0.27	ND		0.29
1,4-Dioxane	0.1	0.1	9.8	13	130	250	ND		0.03	ND		0.3	ND		0.14	ND		0.03	ND		0.028	ND		0.03

TABLE 3

FILL MATERIAL SAMPLING RESULTS
1803 ELMWOOD AVENUE BCP - C915394
CITY OF BUFFALO, NEW YORK



ANALYTE	SAMPLE MATRIX:						SB-09-3FT			DUP-B			SB-09-3FT			SB-10-2FT			SB-11-2FT			SB-12-2F			
	NY-UNRES	NY-RESGW	NY-RESR	NY-RESRR	NY-RESC	NY-RESI	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	
LAB ID:							L2428514-04			L2428514-05			L2428514-06			L2428242-04			L2428514-12			L2428514-03			
COLLECTION DATE:							5/22/2024			5/22/2024			5/22/2024			5/21/2024			5/22/2024			5/22/2024			
SAMPLE DEPTH:							3 FT			3 FT			3 FT			2 FT			2 FT			2 FT			
SAMPLE MATRIX:							HFM			HFM			HFM			HFM			HFM			HFM			
CHLORINATED HERBICIDES BY GC																									
2,4,5-TP (Silvex)	3.8	3.8	58	100	500	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	0.198
ORGANOCHLORINE PESTICIDES BY GC																									
Delta-BHC	0.04	0.25	100	100	500	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	0.00188
Lindane	0.1	0.1	0.28	1.3	9.2	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	0.000785
Alpha-BHC	0.02	0.02	0.097	0.48	3.4	6.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	0.000785
Beta-BHC	0.036	0.09	0.072	0.36	3	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	0.00188
Heptachlor	0.042	0.38	0.42	2.1	15	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	0.000942
Aldrin	0.005	0.19	0.019	0.097	0.68	1.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	0.00188
Endrin	0.014	0.06	2.2	11	89	410	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	0.000785
Dieldrin	0.005	0.1	0.039	0.2	1.4	2.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	0.00118
4,4'-DDE	0.0033	17	1.8	8.9	62	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	0.00188
4,4'-DDD	0.0033	14	2.6	13	92	180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	0.00188
4,4'-DDT	0.0033	136	1.7	7.9	47	94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	0.00188
Endosulfan I	2.4	102	4.8	24	200	920	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	0.00188
Endosulfan II	2.4	102	4.8	24	200	920	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	0.00188
Endosulfan sulfate	2.4	1000	4.8	24	200	920	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	0.000785
cis-Chlordane	0.094	2.9	0.91	4.2	24	47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	0.00236
POLYCHLORINATED BIPHENYLS BY GC																									
Aroclor 1016	0.1	3.2	1	1	1	25	ND	0.058	ND	0.0566	ND	0.0516	ND	0.061	ND	0.0536	ND	0.0574							
Aroclor 1221	0.1	3.2	1	1	1	25	ND	0.058	ND	0.0566	ND	0.0516	ND	0.061	ND	0.0536	ND	0.0574							
Aroclor 1232	0.1	3.2	1	1	1	25	ND	0.058	ND	0.0566	ND	0.0516	ND	0.061	ND	0.0536	ND	0.0574							
Aroclor 1242	0.1	3.2	1	1	1	25	ND	0.058	ND	0.0566	ND	0.0516	ND	0.061	ND	0.0536	ND	0.0574							
Aroclor 1248	0.1	3.2	1	1	1	25	ND	0.058	ND	0.0566	ND	0.0516	ND	0.061	ND	0.0536	ND	0.0574							
Aroclor 1254	0.1	3.2	1	1	1	25	ND	0.058	ND	0.0566	0.0177	J	0.0516	0.0246	J	0.061	ND	0.0536	ND	0.0574					
Aroclor 1260	0.1	3.2	1	1	1	25	ND	0.058	ND	0.0566	0.0266	J	0.0516	ND	0.061	ND	0.0536	ND	0.0574						
Aroclor 1262	0.1	3.2	1	1	1	25	ND	0.058	ND	0.0566	ND	0.0516	ND	0.061	ND	0.0536	ND	0.0574							
Aroclor 1268	0.1	3.2	1	1	1	25	ND	0.058	ND	0.0566	ND	0.0516	ND	0.061	ND	0.0536	ND	0.0574							
PCBs, Total	0.1	3.2	1	1	1	25	ND	0.058	ND	0.0566	0.0443	J	0.0516	0.0246	J	0.061	0.0161	J	0.0536	ND	0.0574				
DIESEL RANGE ORGANICS																									
DRO (C10-C28)	NA	NA	NA	NA	NA	NA	120	40	95	40	290	36	55	40	64	37	220	39							
GASOLINE RANGE ORGANICS																									
Gasoline Range Organics	NA	NA	NA	NA	NA	NA	2.4	J	2.8	2.8	4.3	3.3	3.1	2	2.5	2.5	ND	2.4							
TOTAL METALS																									
Arsenic, Total	13	16	16	16	16	16	11.2	0.946	6.03	0.959	8.16	0.848	5.24	1.92	9.73	1.71	6.06	0.95							
Barium, Total	350	820	350	400	400	10000	257	0.946	195	0.959	75.5	0.848	69.9	1.92	232	1.71	133	0.95							
Beryllium, Total	7.2	47	14	72	590	2700	0.215	J	0.473	0.289	J	0.479	0.473	0.424	1.3	0.962	0.204	J	0.857	0.088	J	0.475			
Cadmium, Total	2.5	7.5	2.5	4.3	9.3	60	0.595	J	0.946	0.365	J	0.959	0.305	J	0.848	ND	0.532	J	1.71	2.28	0.95				
Chromium, Total	NA	NA	NA	NA	NA	NA	17.8	0.946	13.6	0.959	7.62	0.848	10.4	1.92	15.9	1.71	11.3	0.95							
Copper, Total	50	1720	270	270	270	10000	57.5	0.946	46.2	0.959	96.7	0.848	12.8	1.92	50	1.71	44	0.95							
Lead, Total	63	450	400	400	1000	3900	126	4.73	85.2	4.79	44.9	4.24	33.2	9.62	112	8.57	111	4.75							
Manganese, Total	1600	2000	2000	2000	10000	10000	602	0.946	962	0.959	434	0.848	550	1.92	548	1.71	177	0.95							
Mercury, Total	0.18	0.73	0.81	0.81	2.8	5.7	0.079	0.051	J	0.079	ND	0.07	ND	0.084	ND	0.072	0.241	0.078							
Nickel, Total	30	130	140	310	310	10000	16.1	2.36	13.2	2.4	8.61	2.12	9.12	4.81	13.2	4.29	10.4	2.38							
Selenium, Total	3.9	4	36	180	1500	6800	0.392	J	1.89	ND	1.92	ND	1.7	1.38	J	3.85	ND	3.43	0.383	J	1.9				
Silver, Total	2	8.3	36	180	1500	6800	0.422	J	0.473	ND	0.479	ND	0.424	ND	0.962	ND	0.857	2.09	0.475						
Zinc, Total	109	2480	2200	10000	10000	10000	415	4.73	233	4.79	93	4.24	54.6	9.62	369	8.57	322	4.75							
GENERAL CHEMISTRY																									
Chromium, Trivalent	30	NA	36	180	1500	6800	17.8	0.986	13.6	0.98	7.62	0.887	10.4	1.92	15.9	1.71	11.3	0.971							
Solids, Total	NA	NA	NA	NA	NA	NA	81.1	NA	81.6	0.1	90.2	NA	81	0.1	87.9	0.1	82.4	0.1							
Cyanide, Total	27	40	27	27	27	10000	ND	1.1	ND	1.2	ND	1	ND	1.1	ND	1.1	ND	1.1							
Chromium, Hexavalent	1	800	22	110	400	800	ND	0.986	ND	0.98	ND	0.887	ND	0.988	ND	0.91	ND	0.971							

TABLE 3

FILL MATERIAL SAMPLING RESULTS
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CITY OF BUFFALO, NEW YORK



ANALYTE	SAMPLE ID:						SB-09-3FT			DUP-B			SB-09-3FT			SB-10-2FT			SB-11-2FT			SB-12-2F					
	NY-UNRES	NY-RESGW	NY-RESR	NY-RESRR	NY-RESC	NY-RESI	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL			
PERFLUORINATED ALKYL ACIDS BY EPA 1633																											
Perfluorobutanoic Acid (PFBA)	NA	NA	NA	NA	NA	NA	ND		0.000715	ND		0.000732	0.000066	J	0.000789	ND		0.000789	ND		0.000789	ND		0.000789	ND		0.000789
Perfluoropentanoic Acid (PFPeA)	NA	NA	NA	NA	NA	NA	0.000104	J	0.000357	0.000096	J	0.000366	0.000185	J	0.000394	ND		0.000394	ND		0.000394	ND		0.000394	ND		0.000394
Perfluorobutanesulfonic Acid (PFBS)	NA	NA	NA	NA	NA	NA	ND		0.000179	ND		0.000183	ND		0.000197	ND		0.000197	ND		0.000197	ND		0.000197	ND		0.000197
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2F)	NA	NA	NA	NA	NA	NA	ND		0.000715	ND		0.000732	ND		0.000789	ND		0.000789	ND		0.000789	ND		0.000789	ND		0.000789
Perfluorohexanoic Acid (PFHxA)	NA	NA	NA	NA	NA	NA	0.000055	J	0.000179	0.000053	J	0.000183	0.000089	J	0.000197	ND		0.000197	ND		0.000197	ND		0.000197	ND		0.000197
Perfluoropentanesulfonic Acid (PFPeS)	NA	NA	NA	NA	NA	NA	ND		0.000179	ND		0.000183	ND		0.000197	ND		0.000197	ND		0.000197	ND		0.000197	ND		0.000197
Perfluoroheptanoic Acid (PFHpA)	NA	NA	NA	NA	NA	NA	0.000069	J	0.000179	0.000059	J	0.000183	0.000082	J	0.000197	ND		0.000197	0.000026	J	0.000197	ND		0.000197	ND		0.000197
Perfluorohexanesulfonic Acid (PFHxS)	NA	NA	NA	NA	NA	NA	0.000067	J	0.000179	0.000062	J	0.000183	0.000075	J	0.000197	ND		0.000197	ND		0.000197	ND		0.000197	ND		0.000197
Perfluorooctanoic Acid (PFOA)	0.000066	0.0008	0.0066	0.033	0.5	0.6	ND		0.000179	ND		0.000183	0.000181	J	0.000197	ND		0.000197	0.000147	J	0.000197	ND		0.000197	ND		0.000197
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2F)	NA	NA	NA	NA	NA	NA	ND		0.000715	ND		0.000732	ND		0.000789	ND		0.000789	ND		0.000789	ND		0.000789	ND		0.000789
Perfluoroheptanesulfonic Acid (PFHpS)	NA	NA	NA	NA	NA	NA	ND		0.000179	ND		0.000183	ND		0.000197	ND		0.000197	ND		0.000197	ND		0.000197	ND		0.000197
Perfluorononanoic Acid (PFNA)	NA	NA	NA	NA	NA	NA	0.000177	J	0.000179	0.000189		0.000183	ND		0.000197	ND		0.000197	ND		0.000197	ND		0.000197	ND		0.000197
Perfluorooctanesulfonic Acid (PFOS)	0.00088	0.001	0.0088	0.044	0.44	0.44	0.00114		0.000179	0.00103		0.000183	0.000911		0.000197	0.000305		0.000197	0.000338		0.000197	0.000197		0.000197	0.000197		0.000197
Perfluorodecanoic Acid (PFDA)	NA	NA	NA	NA	NA	NA	ND		0.000179	ND		0.000183	ND		0.000197	ND		0.000197	ND		0.000197	ND		0.000197	ND		0.000197
1H,1H,2H,2H-Perfluorodecane sulfonic Acid (8:2F)	NA	NA	NA	NA	NA	NA	ND		0.000715	ND		0.000732	ND		0.000789	ND		0.000789	ND		0.000789	ND		0.000789	ND		0.000789
Perfluorononanesulfonic Acid (PFNS)	NA	NA	NA	NA	NA	NA	ND		0.000179	ND		0.000183	ND		0.000197	ND		0.000197	ND		0.000197	ND		0.000197	ND		0.000197
N-Methyl Perfluorooctanesulfonamideacetic Acid	NA	NA	NA	NA	NA	NA	ND		0.000179	ND		0.000183	ND		0.000197	ND		0.000197	ND		0.000197	ND		0.000197	ND		0.000197
Perfluoroundecanoic Acid (PFUnA)	NA	NA	NA	NA	NA	NA	ND		0.000179	ND		0.000183	0.000057	JF	0.000197	ND		0.000197	ND		0.000197	ND		0.000197	ND		0.000197
Perfluorodecane sulfonic Acid (PFDS)	NA	NA	NA	NA	NA	NA	ND		0.000179	ND		0.000183	ND		0.000197	0.000085	J	0.000197	ND		0.000197	ND		0.000197	ND		0.000197
Perfluorooctanesulfonamide (PFOSA)	NA	NA	NA	NA	NA	NA	ND		0.000179	ND		0.000183	ND		0.000197	ND		0.000197	ND		0.000197	ND		0.000197	ND		0.000197
N-Ethyl Perfluorooctanesulfonamideacetic Acid (N)	NA	NA	NA	NA	NA	NA	ND		0.000179	ND		0.000183	ND		0.000197	0.000269		0.000197	ND		0.000197	ND		0.000197	ND		0.000197
Perfluorododecanoic Acid (PFDoA)	NA	NA	NA	NA	NA	NA	ND		0.000179	ND		0.000183	ND		0.000197	ND		0.000197	ND		0.000197	ND		0.000197	ND		0.000197
Perfluorotridecanoic Acid (PFTriDA)	NA	NA	NA	NA	NA	NA	ND		0.000179	ND		0.000183	ND		0.000197	ND		0.000197	ND		0.000197	ND		0.000197	ND		0.000197
Perfluorotetradecanoic Acid (PFTeDA)	NA	NA	NA	NA	NA	NA	ND		0.000179	ND		0.000183	ND		0.000197	ND		0.000197	ND		0.000197	ND		0.000197	ND		0.000197
Hexafluoropropylene Oxide Dimer Acid (HFPO-D)	NA	NA	NA	NA	NA	NA	ND		0.000715	ND		0.000732	ND		0.000789	ND		0.000789	ND		0.000789	ND		0.000789	ND		0.000789
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	NA	NA	NA	NA	NA	NA	ND		0.000715	ND		0.000732	ND		0.000789	ND		0.000789	ND		0.000789	ND		0.000789	ND		0.000789
Perfluorodecane sulfonic Acid (PFDoS)	NA	NA	NA	NA	NA	NA	ND		0.000179	ND		0.000183	ND		0.000197	ND		0.000197	ND		0.000197	ND		0.000197	ND		0.000197
9-Chlorohexadecafluoro-3-Oxandecane-1-Sulfonic Ac	NA	NA	NA	NA	NA	NA	ND		0.000715	ND		0.000732	ND		0.000789	ND		0.000789	ND		0.000789	ND		0.000789	ND		0.000789
11-Chloroheptafluoro-3-Oxandecane-1-Sulfonic	NA	NA	NA	NA	NA	NA	ND		0.000715	ND		0.000732	ND		0.000789	ND		0.000789	ND		0.000789	ND		0.000789	ND		0.000789
N-Methyl Perfluorooctane Sulfonamide (NMeFOS)	NA	NA	NA	NA	NA	NA	ND		0.000179	ND		0.000183	ND		0.000197	ND		0.000197	ND		0.000197	ND		0.000197	ND		0.000197
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	NA	NA	NA	NA	NA	NA	ND		0.000179	ND		0.000183	ND		0.000197	ND		0.000197	ND		0.000197	ND		0.000197	ND		0.000197
N-Methyl Perfluorooctanesulfonamido Ethanol (NI	NA	NA	NA	NA	NA	NA	ND		0.00179	ND		0.00183	ND		0.00197	ND		0.00197	ND		0.00197	ND		0.00197	ND		0.00197
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEt	NA	NA	NA	NA	NA	NA	ND		0.00179	ND		0.00183	ND		0.00197	ND		0.00197	ND		0.00197	ND		0.00197	ND		0.00197
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	NA	NA	NA	NA	NA	NA	ND		0.000357	ND		0.000366	ND		0.000394	ND		0.000394	ND		0.000394	ND		0.000394	ND		0.000394
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	NA	NA	NA	NA	NA	NA	ND		0.000357	ND		0.000366	ND		0.000394	ND		0.000394	ND		0.000394	ND		0.000394	ND		0.000394
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESeA)	NA	NA	NA	NA	NA	NA	ND		0.000357	ND		0.000366	ND		0.000394	ND		0.000394	ND		0.000394	ND		0.000394	ND		0.000394
Nonafluoro-3,6-Dioxahexanoic Acid (NFDHA)	NA	NA	NA	NA	NA	NA	ND		0.000357	ND		0.000366	ND		0.000394	ND		0.000394	ND		0.000394	ND		0.000394	ND		0.000394
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	NA	NA	NA	NA	NA	NA	ND		0.000894	ND		0.000914	ND		0.000986	ND		0.000986	ND		0.000986	ND		0.000986	ND		0.000986
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	NA	NA	NA	NA	NA	NA	ND		0.00447	ND		0.00457	ND		0.00493	ND		0.00493	ND		0.00493	ND		0.00493	ND		0.00493
3-Perfluorohexyl Propanoic Acid (7:3FTCA)	NA	NA	NA	NA	NA	NA	ND		0.00447	ND		0.00457	ND		0.00493	ND		0.00493	ND		0.00493	ND		0.00493	ND		0.00493

* Comparison is not performed on parameters with non-numeric criteria.

NY-UNRES: New York NYCRR Part 375 New York Unrestricted use Criteria Criteria per 6 NYCRR Part 375 Environmental Remediation Progr
 NY-RESR: New York NYCRR Part 375 Residential Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediat
 NY-RESRR: New York NYCRR Part 375 Restricted-Residential Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmen
 NY-RESC: New York NYCRR Part 375 Commercial Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remedia
 NY-RESI: New York NYCRR Part 375 Industrial Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation

TABLE 3

FILL MATERIAL SAMPLING RESULTS
1803 ELMWOOD AVENUE BCP - C915394
CITY OF BUFFALO, NEW YORK



ANALYTE	SAMPLE ID:						SB-13-2FT		SB-14-1FT		SB-15-2FT		SB-16-1FT		SB-17-2FT		SB-18-2FT		SB-19-3FT								
	LAB ID:						L2428514-11		L2428242-11		L2428242-12		L2428242-13		L2428514-08		L2428514-09		L2428729-01								
	COLLECTION DATE:						5/22/2024		5/21/2024		5/21/2024		5/21/2024		5/22/2024		5/22/2024		5/23/2024								
	SAMPLE DEPTH:						2 FT		1 FT		2 FT		1 FT		2 FT		2 FT		3 FT								
SAMPLE MATRIX:						HFM		HFM		HFM		HFM		HFM		HFM		HFM		HFM							
	NY-UNRES	NY-RESGW	NY-RESR	NY-RESRR	NY-RESC	NY-RESI	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL			
VOLATILE ORGANICS BY EPA 5035																											
Methylene chloride	0.05	0.05	51	100	500	1000	ND		0.0065	ND		0.0087	ND		0.0054	ND		0.012	ND		0.0034	ND		0.008	ND	0.0043	
1,1-Dichloroethane	0.27	0.27	19	26	240	480	ND		0.0013	ND		0.0017	ND		0.0011	ND		0.0025	ND		0.0069	ND		0.0016	ND	0.00086	
Chloroform	0.37	0.37	10	49	350	700	ND		0.0019	ND		0.0026	ND		0.0016	ND		0.0038	ND		0.001	ND		0.0024	ND	0.0013	
Carbon tetrachloride	0.76	0.76	1.4	2.4	22	44	ND		0.0013	ND		0.0017	ND		0.0011	ND		0.0025	ND		0.0069	ND		0.0016	ND	0.00086	
Tetrachloroethene	1.3	1.3	5.5	19	150	300	ND		0.0065	ND		0.0087	ND		0.0011	ND		0.0054	ND		0.0012	ND		0.0034	ND	0.00043	
Chlorobenzene	1.1	1.1	100	100	500	1000	ND		0.0065	ND		0.0087	ND		0.0054	ND		0.0012	ND		0.0034	ND		0.0008	ND	0.00043	
1,2-Dichloroethane	0.02	0.02	2.3	3.1	30	60	ND		0.0013	ND		0.0017	ND		0.0011	ND		0.0025	ND		0.0069	ND		0.0016	ND	0.00086	
1,1,1-Trichloroethane	0.68	0.68	100	100	500	1000	ND		0.0065	ND		0.0087	ND		0.0054	ND		0.0012	ND		0.0034	ND		0.0008	ND	0.00043	
Benzene	0.06	0.06	2.9	4.8	44	89	ND		0.0065	ND		0.0087	ND		0.0054	ND		0.0012	ND		0.0034	ND		0.0008	ND	0.00043	
Toluene	0.7	0.7	100	100	500	1000	ND		0.0013	ND		0.0017	ND		0.0011	ND		0.0025	ND		0.0069	ND		0.0016	ND	0.00086	
Ethylbenzene	1	1	30	41	390	780	ND		0.0013	ND		0.0017	ND		0.0027	J		0.0011	ND		0.0025	ND		0.0016	ND	0.00086	
Vinyl chloride	0.02	0.02	0.21	0.9	13	27	ND		0.0013	ND		0.0017	ND		0.0011	ND		0.0025	ND		0.0069	ND		0.0016	ND	0.00086	
1,1-Dichloroethene	0.33	0.33	100	100	500	1000	ND		0.0013	ND		0.0017	ND		0.0011	ND		0.0025	ND		0.0069	ND		0.0016	ND	0.00086	
trans-1,2-Dichloroethene	0.19	0.19	100	100	500	1000	ND		0.0019	ND		0.0026	ND		0.0016	ND		0.0038	ND		0.001	ND		0.0024	ND	0.0013	
Trichloroethene	0.47	0.47	10	21	200	400	ND		0.0065	ND		0.0087	ND		0.0054	ND		0.0012	ND		0.0034	ND		0.0008	ND	0.00043	
1,2-Dichlorobenzene	1.1	1.1	100	100	500	1000	ND		0.0026	ND		0.0035	ND		0.0022	ND		0.005	ND		0.0014	ND		0.0032	ND	0.0017	
1,3-Dichlorobenzene	2.4	2.4	17	49	280	560	ND		0.0026	ND		0.0035	ND		0.0022	ND		0.005	ND		0.0014	ND		0.0032	ND	0.0017	
1,4-Dichlorobenzene	1.8	1.8	9.8	13	130	250	ND		0.0026	ND		0.0035	ND		0.0022	ND		0.005	ND		0.0014	ND		0.0032	ND	0.0017	
Methyl tert butyl ether	0.93	0.93	62	100	500	1000	ND		0.0026	ND		0.0035	ND		0.0022	ND		0.005	ND		0.0014	ND		0.0032	ND	0.0017	
p,m-Xylene	NA	NA	NA	NA	NA	NA	ND		0.0026	ND		0.0035	ND		0.0022	ND		0.005	ND		0.0014	ND		0.0032	ND	0.0017	
o-Xylene	NA	NA	NA	NA	NA	NA	ND		0.0013	ND		0.0017	ND		0.0033	J		0.0011	ND		0.0025	ND		0.0069	ND	0.00086	
cis-1,2-Dichloroethene	0.25	0.25	59	100	500	1000	ND		0.0013	ND		0.0017	ND		0.0011	ND		0.0025	ND		0.0069	ND		0.0016	ND	0.00086	
Acetone	0.05	0.05	100	100	500	1000	ND		0.013	ND		0.017	ND		0.011	ND		0.025	ND		0.069	ND		0.016	ND	0.0086	
2-Butanone	0.12	0.12	100	100	500	1000	ND		0.013	ND		0.017	ND		0.011	ND		0.025	ND		0.069	ND		0.016	ND	0.0086	
n-Butylbenzene	12	12	100	100	500	1000	ND		0.0013	ND		0.0017	ND		0.0011	ND		0.0025	ND		0.0069	ND		0.0016	ND	0.00086	
sec-Butylbenzene	11	11	100	100	500	1000	ND		0.0013	ND		0.0017	ND		0.0011	ND		0.0025	ND		0.0069	ND		0.0016	ND	0.00086	
tert-Butylbenzene	5.9	5.9	100	100	500	1000	ND		0.0026	ND		0.0035	ND		0.0022	ND		0.005	ND		0.0014	ND		0.0032	ND	0.0017	
n-Propylbenzene	3.9	3.9	100	100	500	1000	ND		0.0013	ND		0.0017	ND		0.0023	J		0.0011	ND		0.0025	ND		0.0069	ND	0.00086	
1,3,5-Trimethylbenzene	8.4	8.4	47	52	190	380	ND		0.0026	ND		0.0035	ND		0.0022	ND		0.005	ND		0.0014	ND		0.0032	ND	0.0017	
1,2,4-Trimethylbenzene	3.6	3.6	47	52	190	380	ND		0.0026	ND		0.0035	ND		0.0037	J		0.0022	ND		0.005	ND		0.0032	ND	0.0017	
1,4-Dioxane	0.1	0.1	9.8	13	130	250	ND		0.1	ND		0.14	ND		0.086	ND		0.2	ND		0.055	ND		0.13	ND	0.068	
SEMI-VOLATILE ORGANICS BY GC/MS																											
Aceaphthene	20	98	100	100	500	1000	ND		0.16	ND		0.17	1.3		0.14	0.15	J		0.16	ND		0.14	1.9		0.15	ND	0.18
Hexachlorobenzene	0.33	3.2	0.33	1.2	6	12	ND		0.12	ND		0.13	ND		0.11	ND		0.12	ND		0.1	ND		0.12	ND	0.13	
Fluoranthene	100	1000	100	100	500	1000	0.1	J	0.12	0.068	J	0.13	7.6	E	0.11	2.4		0.12	0.033	J	0.1	10	E	0.12	0.04	J	0.13
Naphthalene	12	12	100	100	500	1000	ND		0.2	ND		0.21	1.8		0.18	0.42		0.19	ND		0.17	2.4		0.19	ND	0.22	
Benzo(a)anthracene	1	1	1	1	5.6	11	0.054	J	0.12	0.089	J	0.13	3.3		0.11	2.1		0.12	ND		0.1	5		0.12	ND	0.13	
Benzo(a)pyrene	1	22	1	1	1.1	1.1	ND		0.16	0.11	J	0.17	3		0.14	2.8		0.16	ND		0.14	4		0.15	ND	0.18	
Benzo(b)fluoranthene	1	1.7	1	1	5.6	11	0.056	J	0.12	0.18		0.13	3.8		0.11	4.3		0.12	ND		0.1	4.8		0.12	ND	0.13	
Benzo(k)fluoranthene	0.8	1.7	1	1	3.9	56	110	ND		0.12	0.056	J	0.13	1.4		0.11	1.1		0.12	ND		0.1	1.6		0.12	ND	0.13
Chrysene	1	1	1	3.9	56	110	0.051	J	0.12	0.089	J	0.13	3.4		0.11	2.3		0.12	ND		0.1	4.2		0.12	ND	0.13	
Aceaphthylene	100	107	100	100	500	1000	ND		0.16	ND		0.17	1.2	J	0.14	0.78		0.16	ND		0.14	0.19		0.15	ND	0.18	
Anthracene	100	1000	100	100	500	1000	ND		0.12	ND		0.13	1.7		0.11	0.55		0.12	ND		0.1	3.8		0.12	ND	0.13	
Benzo(ghi)perylene	100	1000	100	100	500	1000	0.024	J	0.16	0.064	J	0.17	1.8		0.14	1.2		0.16	ND		0.14	2.4		0.15	ND	0.18	
Fluorene	30	386	100	100	500	1000	ND		0.21	ND		0.21	1.3		0.18	0.14	J	0.19	ND		0.17	1.7		0.19	ND	0.22	
Phenanthrene	100	1000	100	100	500	1000	0.09	J	0.12	0.029	J	0.13	8.6	E	0.11	0.96		0.12	0.022	J	0.1	9.9	E	0.12	0.036	J	0.13
Dibenzo(a,h)anthracene	0.33	1000	0.33	0.33	0.56	1.1	ND		0.12	ND		0.13	0.45		0.11	0.43		0.12	ND		0.1	0.65		0.12	ND	0.13	
Indeno(1,2,3-cd)pyrene	0.5	8.2	0.5	0.5	5.6	11	ND		0.16	0.066	J	0.17	1.7		0.14	1.4		0.16	ND		0.14	2.5		0.15	ND	0.18	
Pyrene	100	1000	100	100	500	1000	0.079	J	0.12	0.079	J	0.13	6.1		0.11	3.4		0.12	0.029	J	0.1	8.4	E	0.12	0.034	J	0.13
Dib																											

TABLE 3

FILL MATERIAL SAMPLING RESULTS
1803 ELMWOOD AVENUE BCP - C915394
CITY OF BUFFALO, NEW YORK



ANALYTE	SAMPLE ID:							SB-13-2FT			SB-14-1FT			SB-15-2FT			SB-16-1FT			SB-17-2FT			SB-18-2FT			SB-19-3FT			
	LAB ID:							L2428514-11			L2428242-11			L2428242-12			L2428242-13			L2428514-08			L2428514-09			L2428729-01			
	COLLECTION DATE:							5/22/2024			5/21/2024			5/21/2024			5/21/2024			5/22/2024			5/22/2024			5/23/2024			
	SAMPLE DEPTH:							2 FT			1 FT			2 FT			1 FT			2 FT			2 FT			3 FT			
SAMPLE MATRIX:							HFM			HFM			HFM			HFM			HFM			HFM			HFM				
	NY-UNRES	NY-RESGW	NY-RESR	NY-RESRR	NY-RESC	NY-RESI	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL		
CHLORINATED HERBICIDES BY GC																													
2,4,5-TP (Silvex)	3.8	3.8	58	100	500	1000	-	-	ND	0.209	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ORGANOCHLORINE PESTICIDES BY GC																													
Delta-BHC	0.04	0.25	100	100	500	1000	-	-	ND	0.00201	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Lindane	0.1	0.1	0.28	1.3	9.2	23	-	-	ND	0.000838	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Alpha-BHC	0.02	0.02	0.097	0.48	3.4	6.8	-	-	ND	0.000838	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Beta-BHC	0.036	0.09	0.072	0.36	3	14	-	-	ND	0.00201	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Heptachlor	0.042	0.38	0.42	2.1	15	29	-	-	ND	0.00101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Aldrin	0.005	0.19	0.019	0.097	0.68	1.4	-	-	ND	0.00201	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Endrin	0.014	0.06	2.2	11	89	410	-	-	ND	0.000838	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Dieldrin	0.005	0.1	0.039	0.2	1.4	2.8	-	-	ND	0.00126	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4,4'-DDE	0.0033	17	1.8	8.9	62	120	-	-	ND	0.00201	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4,4'-DDD	0.0033	14	2.6	13	92	180	-	-	ND	0.00201	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4,4'-DDT	0.0033	136	1.7	7.9	47	94	-	-	ND	0.00201	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Endosulfan I	2.4	102	4.8	24	200	920	-	-	ND	0.00201	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Endosulfan II	2.4	102	4.8	24	200	920	-	-	ND	0.00201	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Endosulfan sulfate	2.4	1000	4.8	24	200	920	-	-	ND	0.000838	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
cis-Chlordane	0.094	2.9	0.91	4.2	24	47	-	-	ND	0.00252	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
POLYCHLORINATED BIPHENYLS BY GC																													
Aroclor 1016	0.1	3.2	1	1	1	25	ND	0.058	ND	0.0614	ND	0.0515	ND	0.054	ND	0.051	ND	0.0573	ND	0.0663									
Aroclor 1221	0.1	3.2	1	1	1	25	ND	0.058	ND	0.0614	ND	0.0515	ND	0.054	ND	0.051	ND	0.0573	ND	0.0663									
Aroclor 1232	0.1	3.2	1	1	1	25	ND	0.058	ND	0.0614	ND	0.0515	ND	0.054	ND	0.051	ND	0.0573	ND	0.0663									
Aroclor 1242	0.1	3.2	1	1	1	25	ND	0.058	ND	0.0614	ND	0.0515	ND	0.054	ND	0.051	ND	0.0573	ND	0.0663									
Aroclor 1248	0.1	3.2	1	1	1	25	ND	0.058	ND	0.0614	ND	0.0515	ND	0.054	ND	0.051	ND	0.0573	ND	0.0663									
Aroclor 1254	0.1	3.2	1	1	1	25	ND	0.058	ND	0.0614	ND	0.0515	ND	0.054	ND	0.051	ND	0.0573	ND	0.0663									
Aroclor 1260	0.1	3.2	1	1	1	25	ND	0.058	ND	0.0614	ND	0.0515	ND	0.054	ND	0.051	ND	0.0573	ND	0.0663									
Aroclor 1262	0.1	3.2	1	1	1	25	ND	0.058	ND	0.0614	ND	0.0515	ND	0.054	ND	0.051	ND	0.0573	ND	0.0663									
Aroclor 1268	0.1	3.2	1	1	1	25	ND	0.058	0.00772	J	0.0614	ND	0.0515	0.0369	J	0.054	ND	0.051	0.0382	J	0.0573	ND	0.0663						
PCBs, Total	0.1	3.2	1	1	1	25	ND	0.058	0.00772	J	0.0614	ND	0.0515	0.0369	J	0.054	ND	0.051	0.0382	J	0.0573	ND	0.0663						
DIESEL RANGE ORGANICS																													
DRO (C10-C28)	NA	NA	NA	NA	NA	NA	9.4	J	40	17	J	42	59	36	340	38	5.8	J	34	130	38	14	J	42					
GASOLINE RANGE ORGANICS																													
Gasoline Range Organics	NA	NA	NA	NA	NA	NA	ND	3.6	ND	6.6	ND	2.4	ND	3.5	ND	2.3	3.8	J	4.5	ND	2.3								
TOTAL METALS																													
Arsenic, Total	13	16	16	16	16	16	6.72	0.959	5.27	1.03	6.82	0.888	13	1.82	1.99	0.81	8.63	0.909	4.69	1.06									
Barium, Total	350	820	350	400	400	10000	34.7	0.959	104	1.03	62.5	0.888	48	1.82	5.7	0.81	42.5	0.909	107	1.06									
Beryllium, Total	7.2	47	14	72	590	2700	0.246	J	0.48	1.3	0.516	J	0.444	0.74	J	0.405	0.299	J	0.454	0.661	0.528								
Cadmium, Total	2.5	7.5	2.5	4.3	9.3	60	0.211	J	0.959	0.729	J	1.03	0.611	J	0.888	0.266	J	1.82	ND	0.81	0.267	J	0.909	0.111	J	1.06			
Chromium, Total	NA	NA	NA	NA	NA	NA	10.6	0.959	22.8	1.03	17.4	0.888	11.5	1.82	1.86	0.81	8.6	0.909	16.4	1.06									
Copper, Total	50	1720	270	270	270	10000	10.6	0.959	27.2	1.03	22.4	0.888	46.2	1.82	1.75	0.81	49.5	0.909	14.6	1.06									
Lead, Total	63	450	400	400	1000	3900	22	4.8	24	5.16	16.5	4.44	24.1	9.09	7.93	4.05	47.2	4.54	10.9	5.28									
Manganese, Total	1600	2000	2000	2000	10000	10000	350	0.959	774	1.03	581	0.888	447	1.82	92.5	0.81	282	0.909	499	1.06									
Mercury, Total	0.18	0.73	0.81	0.81	2.8	5.7	ND	0.077	0.587	0.102	ND	0.081	ND	0.091	ND	0.067	ND	0.075	ND	0.085									
Nickel, Total	30	130	140	310	310	10000	8.14	2.4	37	2.58	23.9	2.22	14.9	4.54	1.7	J	2.02	13.2	2.27	17.4	2.64								
Selenium, Total	3.9	4	36	180	1500	6800	0.438	J	1.92	0.406	J	2.06	ND	1.78	0.618	J	3.64	ND	1.62	0.535	J	1.82	ND	2.11					
Silver, Total	2	8.3	36	180	1500	6800	ND	0.48	ND	0.516	ND	0.444	ND	0.909	ND	0.405	ND	0.454	ND	0.528									
Zinc, Total	109	2480	2200	10000	10000	10000	44.2	4.8	154	5.16	48.9	4.44	35.7	9.09	18.2	4.05	52	4.54	45.9	5.28									
GENERAL CHEMISTRY																													
Chromium, Trivalent	30	NA	36	180	1500	6800	10.6	0.979	22.8	1.04	17.4	0.89	11.5	1.82	1.86	0.847	8.6	0.938	15.9	J	1.07								
Solids, Total	NA	NA	NA	NA	NA	NA	81.7	NA	77.1	NA	89.9	NA	0.1	94.4	0.1	85.3	0.1	85.3	0.1	74.7	0.1								
Cyanide, Total	27	40	27	27	27	10000	ND	1.1	ND	1.2	ND	1	0.45	J	1.1	ND	1	ND	1.1	ND									
Chromium, Hexavalent	1	800	22	110	400	800	ND	0.979	ND	1.04	ND	0.89	ND	0.937	ND	0.847	ND	0.938	0.482	J	1.07								

TABLE 3

FILL MATERIAL SAMPLING RESULTS
1803 ELMWOOD AVENUE BCP - C915394
CITY OF BUFFALO, NEW YORK



ANALYTE	SAMPLE ID:						SB-13-2FT		SB-14-1FT		SB-15-2FT		SB-16-1FT		SB-17-2FT		SB-18-2FT		SB-19-3FT								
	LAB ID:						L2428514-11		L2428242-11		L2428242-12		L2428242-13		L2428514-08		L2428514-09		L2428729-01								
	COLLECTION DATE:						5/22/2024		5/21/2024		5/21/2024		5/21/2024		5/22/2024		5/22/2024		5/23/2024								
	SAMPLE DEPTH:						2 FT		1 FT		2 FT		1 FT		2 FT		2 FT		3 FT								
SAMPLE MATRIX:						HFM		HFM		HFM		HFM		HFM		HFM		HFM									
	NY-UNRES	NY-RESGW	NY-RESR	NY-RESRR	NY-RESC	NY-RESI	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL			
PERFLUORINATED ALKYL ACIDS BY EPA 1633																											
Perfluorobutanoic Acid (PFBA)	NA	NA	NA	NA	NA	NA	0.000063	J	0.000738	ND		0.00079	ND		0.000783	ND		0.000788	ND		0.000695	ND		0.000722	ND		0.00074
Perfluoropentanoic Acid (PFPeA)	NA	NA	NA	NA	NA	NA	ND		0.000369	ND		0.000395	ND		0.000392	ND		0.000394	ND		0.000347	ND		0.000361	ND		0.00037
Perfluorobutanesulfonic Acid (PFBS)	NA	NA	NA	NA	NA	NA	ND		0.000185	ND		0.000197	ND		0.000196	ND		0.000197	ND		0.000174	ND		0.000181	ND		0.000185
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2F)	NA	NA	NA	NA	NA	NA	ND		0.000738	ND		0.00079	ND		0.000783	ND		0.000788	ND		0.000695	ND		0.000722	ND		0.00074
Perfluorohexanoic Acid (PFHxA)	NA	NA	NA	NA	NA	NA	ND		0.000185	ND		0.000197	ND		0.000196	ND		0.000197	ND		0.000174	ND		0.000181	ND		0.000185
Perfluoropentanesulfonic Acid (PFPeS)	NA	NA	NA	NA	NA	NA	ND		0.000185	ND		0.000197	ND		0.000196	ND		0.000197	ND		0.000174	ND		0.000181	ND		0.000185
Perfluorohexanoic Acid (PFHpA)	NA	NA	NA	NA	NA	NA	ND		0.000185	ND		0.000197	ND		0.000196	ND		0.000197	ND		0.000174	ND		0.000181	ND		0.000185
Perfluorohexanesulfonic Acid (PFHxS)	NA	NA	NA	NA	NA	NA	ND		0.000185	ND		0.000197	ND		0.000196	ND		0.000197	ND		0.000174	ND		0.000181	ND		0.000185
Perfluorooctanoic Acid (PFOA)	0.00066	0.0008	0.0066	0.033	0.5	0.6	0.000071	J	0.000185	ND		0.000197	ND		0.000196	ND		0.000197	ND		0.000174	0.000074	J	0.000181	ND		0.000185
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2F)	NA	NA	NA	NA	NA	NA	ND		0.000738	ND		0.00079	ND		0.000783	ND		0.000788	ND		0.000695	ND		0.000722	ND		0.00074
Perfluorooheptanesulfonic Acid (PFHpS)	NA	NA	NA	NA	NA	NA	ND		0.000185	ND		0.000197	ND		0.000196	ND		0.000197	ND		0.000174	ND		0.000181	ND		0.000185
Perfluorononanoic Acid (PFNA)	NA	NA	NA	NA	NA	NA	ND		0.000185	ND		0.000197	ND		0.000196	ND		0.000197	ND		0.000174	ND		0.000181	ND		0.000185
Perfluorooctanesulfonic Acid (PFOS)	0.00088	0.001	0.0088	0.044	0.44	0.44	ND		0.000185	ND		0.000197	ND		0.000196	ND		0.000197	ND		0.000174	ND		0.000181	ND		0.000185
Perfluorodecanoic Acid (PFDA)	NA	NA	NA	NA	NA	NA	ND		0.000185	ND		0.000197	ND		0.000196	ND		0.000197	ND		0.000174	ND		0.000181	ND		0.000185
1H,1H,2H,2H-Perfluorodecane sulfonic Acid (8:2F)	NA	NA	NA	NA	NA	NA	ND		0.000738	ND		0.00079	ND		0.000783	ND		0.000788	ND		0.000695	ND		0.000722	ND		0.00074
Perfluorononanesulfonic Acid (PFNS)	NA	NA	NA	NA	NA	NA	ND		0.000185	ND		0.000197	ND		0.000196	ND		0.000197	ND		0.000174	ND		0.000181	ND		0.000185
N-Methyl Perfluorooctanesulfonamideacetic Acid	NA	NA	NA	NA	NA	NA	ND		0.000185	ND		0.000197	ND		0.000196	ND		0.000197	ND		0.000174	ND		0.000181	ND		0.000185
Perfluoroundecanoic Acid (PFUnA)	NA	NA	NA	NA	NA	NA	ND		0.000185	ND		0.000197	ND		0.000196	ND		0.000197	ND		0.000174	ND		0.000181	ND		0.000185
Perfluorodecane sulfonic Acid (PFDS)	NA	NA	NA	NA	NA	NA	ND		0.000185	ND		0.000197	ND		0.000196	ND		0.000197	ND		0.000174	ND		0.000181	ND		0.000185
Perfluorooctanesulfonamide (PFOSA)	NA	NA	NA	NA	NA	NA	ND		0.000185	ND		0.000197	ND		0.000196	ND		0.000197	ND		0.000174	ND		0.000181	ND		0.000185
N-Ethyl Perfluorooctanesulfonamideacetic Acid (N)	NA	NA	NA	NA	NA	NA	ND		0.000185	ND		0.000197	ND		0.000196	ND		0.000197	ND		0.000174	ND		0.000181	ND		0.000185
Perfluorododecanoic Acid (PFDoA)	NA	NA	NA	NA	NA	NA	ND		0.000185	ND		0.000197	ND		0.000196	ND		0.000197	ND		0.000174	ND		0.000181	ND		0.000185
Perfluorotridecanoic Acid (PFTriDA)	NA	NA	NA	NA	NA	NA	ND		0.000185	ND		0.000197	ND		0.000196	ND		0.000197	ND		0.000174	ND		0.000181	ND		0.000185
Perfluorotetradecanoic Acid (PFTeDA)	NA	NA	NA	NA	NA	NA	ND		0.000185	ND		0.000197	ND		0.000196	ND		0.000197	ND		0.000174	ND		0.000181	ND		0.000185
Hexafluoropropylene Oxide Dimer Acid (HFPO-D)	NA	NA	NA	NA	NA	NA	ND		0.000738	ND		0.00079	ND		0.000783	ND		0.000788	ND		0.000695	ND		0.000722	ND		0.00074
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	NA	NA	NA	NA	NA	NA	ND		0.000738	ND		0.00079	ND		0.000783	ND		0.000788	ND		0.000695	ND		0.000722	ND		0.00074
Perfluorodecane sulfonic Acid (PFDoS)	NA	NA	NA	NA	NA	NA	ND		0.000185	ND		0.000197	ND		0.000196	ND		0.000197	ND		0.000174	ND		0.000181	ND		0.000185
9-Chlorohexadecafluoro-3-Oxadecane-1-Sulfonic Ac	NA	NA	NA	NA	NA	NA	ND		0.000738	ND		0.00079	ND		0.000783	ND		0.000788	ND		0.000695	ND		0.000722	ND		0.00074
11-Chlorooctadecafluoro-3-Oxadecane-1-Sulfonic	NA	NA	NA	NA	NA	NA	ND		0.000738	ND		0.00079	ND		0.000783	ND		0.000788	ND		0.000695	ND		0.000722	ND		0.00074
N-Methyl Perfluorooctane Sulfonamide (NMeFOS)	NA	NA	NA	NA	NA	NA	ND		0.000185	ND		0.000197	ND		0.000196	ND		0.000197	ND		0.000174	ND		0.000181	ND		0.000185
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	NA	NA	NA	NA	NA	NA	ND		0.000185	ND		0.000197	ND		0.000196	ND		0.000197	ND		0.000174	ND		0.000181	ND		0.000185
N-Methyl Perfluorooctanesulfonamide Ethanol (NI	NA	NA	NA	NA	NA	NA	ND		0.00185	ND		0.00197	ND		0.00196	ND		0.00197	ND		0.00174	ND		0.00181	ND		0.00185
N-Ethyl Perfluorooctanesulfonamide Ethanol (NEt	NA	NA	NA	NA	NA	NA	ND		0.00185	ND		0.00197	ND		0.00196	ND		0.00197	ND		0.00174	ND		0.00181	ND		0.00185
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	NA	NA	NA	NA	NA	NA	ND		0.000369	ND		0.000395	ND		0.000392	ND		0.000394	ND		0.000347	ND		0.000361	ND		0.00037
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	NA	NA	NA	NA	NA	NA	ND		0.000369	ND		0.000395	ND		0.000392	ND		0.000394	ND		0.000347	ND		0.000361	ND		0.00037
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESeA)	NA	NA	NA	NA	NA	NA	ND		0.000369	ND		0.000395	ND		0.000392	ND		0.000394	ND		0.000347	ND		0.000361	ND		0.00037
Nonafluoro-3,6-Dioxahexanoic Acid (NFDHA)	NA	NA	NA	NA	NA	NA	ND		0.000369	ND		0.000395	ND		0.000392	ND		0.000394	ND		0.000347	ND		0.000361	ND		0.00037
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	NA	NA	NA	NA	NA	NA	ND		0.000923	ND		0.000979	ND		0.000986	ND		0.000986	ND		0.000934	ND		0.000903	ND		0.000924
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	NA	NA	NA	NA	NA	NA	ND		0.00462	ND		0.00494	ND		0.00493	ND		0.00493	ND		0.00434	ND		0.00452	ND		0.00462
3-Perfluorohexyl Propanoic Acid (7:3FTCA)	NA	NA	NA	NA	NA	NA	ND		0.00462	ND		0.00494	ND		0.00493	ND		0.00493	ND		0.00434	ND		0.00452	ND		0.00462

* Comparison is not performed on parameters with non-numeric criteria.

NY-UNRES: New York NYCRR Part 375 New York Unrestricted use Criteria Criteria per 6 NYCRR Part 375 Environmental Remediation Progy
 NY-RESR: New York NYCRR Part 375 Residential Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediatid
 NY-RESRR: New York NYCRR Part 375 Restricted-Residential Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmen
 NY-RESC: New York NYCRR Part 375 Commercial Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remedia
 NY-RESI: New York NYCRR Part 375 Industrial Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation

TABLE 4

NATIVE SOIL SAMPLING RESULTS
1803 ELMWOOD AVENUE BCP - C915394
CITY OF BUFFALO, NEW YORK



SAMPLE ID:	SB-01-6FT	SB-03-7FT	SB-04-7FT	SB-05-8FT	SB-06-7FT	DUP-A
LAB ID:	L2427942-02	L2428242-06	L2427942-06	L2427942-04	L2428242-02	L2428242-03
COLLECTION DATE:	5/20/2024	5/21/2024	5/20/2024	5/20/2024	5/21/2024	5/21/2024
SAMPLE DEPTH:	6 FT	7 FT	7 FT	8 FT	7 FT	
SAMPLE MATRIX:	NATIVE SOIL					

ANALYTE	NY-UNRES	NY-RESGW	NY-RESR	NY-RESRR	NY-RESC	NY-RESI	Result			Result			Result			Result			Result				
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Result	Fig	RL	Result	Fig	RL	Result	Fig	RL	Result	Fig	RL	Result	Fig	RL		
VOLATILE ORGANICS BY EPA 5035																							
Methylene chloride	0.05	0.05	51	100	500	1000	ND		0.005	ND		0.0048	ND		0.004	ND		0.0046	ND		0.005	ND	
1,1-Dichloroethane	0.27	0.27	19	26	240	480	ND		0.001	ND		0.00095	ND		0.0008	ND		0.00091	ND		0.00099	ND	
Chloroform	0.37	0.37	10	49	350	700	ND		0.0015	ND		0.0014	ND		0.0012	ND		0.0014	ND		0.0015	ND	
Carbon tetrachloride	0.76	0.76	1.4	2.4	22	44	ND		0.001	ND		0.00095	ND		0.0008	ND		0.00091	ND		0.00099	ND	
Tetrachloroethene	1.3	1.3	5.5	19	150	300	ND		0.0005	ND		0.00048	ND		0.0004	ND		0.00046	ND		0.0005	ND	
Chlorobenzene	1.1	1.1	100	100	500	1000	ND		0.0005	ND		0.00048	ND		0.0004	ND		0.00046	ND		0.0005	ND	
1,2-Dichloroethane	0.02	0.02	2.3	3.1	30	60	ND		0.001	ND		0.00095	ND		0.0008	ND		0.00091	ND		0.00099	ND	
1,1,1-Trichloroethane	0.68	0.68	100	100	500	1000	ND		0.0005	ND		0.00048	ND		0.0004	ND		0.00046	ND		0.0005	ND	
Benzene	0.06	0.06	2.9	4.8	44	89	ND		0.0005	ND		0.00048	ND		0.0004	ND		0.00046	ND		0.0005	ND	
Toluene	0.7	0.7	100	100	500	1000	ND		0.001	ND		0.00095	ND		0.0008	ND		0.00091	ND		0.00099	ND	
Ethylbenzene	1	1	30	41	390	780	ND		0.001	ND		0.00095	ND		0.0008	ND		0.00091	ND		0.00099	ND	
Vinyl chloride	0.02	0.02	0.21	0.9	13	27	ND		0.001	ND		0.00095	0.00091		0.0008	0.00077	J	0.00091	ND		0.00099	ND	
1,1-Dichloroethene	0.33	0.33	100	100	500	1000	ND		0.001	ND		0.00095	ND		0.0008	ND		0.00091	ND		0.00099	ND	
trans-1,2-Dichloroethene	0.19	0.19	100	100	500	1000	ND		0.0015	0.0007	J	0.0014	ND		0.0012	ND		0.0014	ND		0.0015	ND	
Trichloroethene	0.47	0.47	10	21	200	400	ND		0.0005	0.00027	J	0.00048	ND		0.0004	ND		0.00046	ND		0.0005	ND	
1,2-Dichlorobenzene	1.1	1.1	100	100	500	1000	ND		0.002	ND		0.0019	ND		0.0016	ND		0.0018	ND		0.002	ND	
1,3-Dichlorobenzene	2.4	2.4	17	49	280	560	ND		0.002	ND		0.0019	ND		0.0016	ND		0.0018	ND		0.002	ND	
1,4-Dichlorobenzene	1.8	1.8	9.8	13	130	250	ND		0.002	ND		0.0019	ND		0.0016	ND		0.0018	ND		0.002	ND	
Methyl tert butyl ether	0.93	0.93	62	100	500	1000	ND		0.002	ND		0.0019	ND		0.0016	ND		0.0018	ND		0.002	ND	
pim-Xylene	NA	NA	NA	NA	NA	NA	ND		0.002	ND		0.0019	ND		0.0016	ND		0.0018	ND		0.002	ND	
o-Xylene	NA	NA	NA	NA	NA	NA	ND		0.001	ND		0.00095	ND		0.0008	ND		0.00091	ND		0.00099	ND	
cis-1,2-Dichloroethene	0.25	0.25	59	100	500	1000	ND		0.001	0.0074		0.00095	0.00045	J	0.0008	0.0014		0.00091	ND		0.00099	ND	
Acetone	0.05	0.05	100	100	500	1000	ND		0.01	0.0068	J	0.0095	0.034		0.008	0.0092		0.0091	0.02		0.0099	0.0056	J
2-Butanone	0.12	0.12	100	100	500	1000	ND		0.01	ND		0.0095	ND		0.008	ND		0.0091	0.0039	J	0.0099	ND	
n-Butylbenzene	12	12	100	100	500	1000	ND		0.001	ND		0.00095	ND		0.0008	ND		0.00091	ND		0.00099	ND	
sec-Butylbenzene	11	11	100	100	500	1000	ND		0.001	ND		0.00095	ND		0.0008	ND		0.00091	ND		0.00099	ND	
tert-Butylbenzene	5.9	5.9	100	100	500	1000	ND		0.002	ND		0.0019	ND		0.0016	ND		0.0018	ND		0.002	ND	
n-Propylbenzene	3.9	3.9	100	100	500	1000	ND		0.001	ND		0.00095	ND		0.0008	ND		0.00091	ND		0.00099	ND	
1,3,5-Trimethylbenzene	8.4	8.4	47	52	190	380	ND		0.002	ND		0.0019	ND		0.0016	ND		0.0018	ND		0.002	ND	
1,2,4-Trimethylbenzene	3.6	3.6	47	52	190	380	ND		0.002	ND		0.0019	ND		0.0016	ND		0.0018	ND		0.002	ND	
1,4-Dioxane	0.1	0.1	9.8	13	130	250	ND		0.08	ND		0.076	ND		0.064	ND		0.073	ND		0.08	ND	
SEMIVOLATILE ORGANICS BY GC/MS																							
Acenaphthene	20	98	100	100	500	1000	ND		0.16	ND		0.16	ND		0.16	ND		0.15	ND		0.16	ND	
Hexachlorobenzene	0.33	3.2	0.33	1.2	6	12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND	
Fluoranthene	100	1000	100	100	500	1000	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND	
Naphthalene	12	12	100	100	500	1000	ND		0.19	ND		0.19	ND		0.2	ND		0.19	ND		0.2	ND	
Benzo(a)anthracene	1	1	1	1	5.6	11	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND	
Benzo(a)pyrene	1	22	1	1	1	1.1	ND		0.16	ND		0.16	ND		0.16	ND		0.15	ND		0.16	ND	
Benzo(b)fluoranthene	1	1.7	1	1	5.6	11	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND	
Benzo(k)fluoranthene	0.8	1.7	1	3.9	56	110	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND	
Chrysene	1	1	1	3.9	56	110	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND	
Acenaphthylene	100	107	100	100	500	1000	ND		0.16	ND		0.16	ND		0.16	ND		0.15	ND		0.16	ND	
Anthracene	100	1000	100	100	500	1000	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND	
Benzo(ghi)perylene	100	1000	100	100	500	1000	ND		0.16	ND		0.16	ND		0.16	ND		0.15	ND		0.16	ND	
Fluorene	30	386	100	100	500	1000	ND		0.19	ND		0.19	ND		0.2	ND		0.19	ND		0.2	ND	
Phenanthrene	100	1000	100	100	500	1000	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND	
Dibenzo(a,h)anthracene	0.33	1000	0.33	0.33	0.56	1.1	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND	
Indeno(1,2,3-cd)pyrene	0.5	8.2	0.5	0.5	5.6	11	ND		0.16	ND		0.16	ND		0.16	ND		0.15	ND		0.16	ND	
Pyrene	100	1000	100	100	500	1000	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND	
Dibenzofuran	7	210	14	59	350	1000	ND		0.19	ND		0.19	ND		0.2	ND		0.19	ND		0.2	ND	
Pentachlorophenol	0.8	0.8	2.4	6.7	6.7	55	ND		0.16	ND		0.16	ND		0.16	ND		0.15	ND		0.16	ND	
Phenol	0.33	0.33	100	100	500	1000	ND		0.19	ND		0.19	ND		0.2	ND		0.19	ND		0.2	ND	
2-Methylphenol	0.33	0.33	100	100	500	1000	ND		0.19	ND		0.19	ND		0.2	ND		0.19	ND		0.2	ND	
3-Methylphenol/4-Methylphenol	0.33	0.33	34	100	500	1000	ND		0.28	ND		0.28	ND		0.28	ND		0.28	ND		0.28	ND	
1,4-Dioxane	0.1	0.1	9.8	13	130	250	ND		0.029	ND		0.029	ND		0.029	ND		0.029	ND		0.03	ND	

TABLE 4

NATIVE SOIL SAMPLING RESULTS
 1803 ELMWOOD AVENUE BCP - C915394
 CITY OF BUFFALO, NEW YORK



SAMPLE ID:	SB-01-6FT	SB-03-7FT	SB-04-7FT	SB-05-8FT	SB-06-7FT	DUP-A
LAB ID:	L2427942-02	L2428242-06	L2427942-06	L2427942-04	L2428242-02	L2428242-03
COLLECTION DATE:	5/20/2024	5/21/2024	5/20/2024	5/20/2024	5/21/2024	5/21/2024
SAMPLE DEPTH:	6 FT	7 FT	7 FT	8 FT	7 FT	
SAMPLE MATRIX:	NATIVE SOIL					

ANALYTE	NY-UNRES	NY-RESGW	NY-RESR	NY-RESRR	NY-RESC	NY-RESI	SB-01-6FT			SB-03-7FT			SB-04-7FT			SB-05-8FT			SB-06-7FT			DUP-A			
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	
CHLORINATED HERBICIDES BY GC																									
2,4,5-TP (Silvex)	3.8	3.8	58	100	500	1000	-	-	-	-	-	-	ND		0.196	-	-	-	-	-	-	-	-	-	-
ORGANOCHLORINE PESTICIDES BY GC																									
Delta-BHC	0.04	0.25	100	100	500	1000	-	-	-	-	-	-	ND		0.00181	-	-	-	-	-	-	-	-	-	-
Lindane	0.1	0.1	0.28	1.3	9.2	23	-	-	-	-	-	-	ND		0.000753	-	-	-	-	-	-	-	-	-	-
Alpha-BHC	0.02	0.02	0.097	0.48	3.4	6.8	-	-	-	-	-	-	ND		0.000753	-	-	-	-	-	-	-	-	-	-
Beta-BHC	0.036	0.09	0.072	0.36	3	14	-	-	-	-	-	-	ND		0.00181	-	-	-	-	-	-	-	-	-	-
Heptachlor	0.042	0.38	0.42	2.1	15	29	-	-	-	-	-	-	ND		0.000903	-	-	-	-	-	-	-	-	-	-
Aldrin	0.005	0.19	0.019	0.097	0.68	1.4	-	-	-	-	-	-	ND		0.00181	-	-	-	-	-	-	-	-	-	-
Endrin	0.014	0.06	2.2	11	89	410	-	-	-	-	-	-	ND		0.000753	-	-	-	-	-	-	-	-	-	-
Dieldrin	0.005	0.1	0.039	0.2	1.4	2.8	-	-	-	-	-	-	ND		0.00113	-	-	-	-	-	-	-	-	-	-
4,4'-DDE	0.0033	17	1.8	8.9	62	120	-	-	-	-	-	-	ND		0.00181	-	-	-	-	-	-	-	-	-	-
4,4'-DDD	0.0033	14	2.6	13	92	180	-	-	-	-	-	-	ND		0.00181	-	-	-	-	-	-	-	-	-	-
4,4'-DDT	0.0033	136	1.7	7.9	47	94	-	-	-	-	-	-	ND		0.00181	-	-	-	-	-	-	-	-	-	-
Endosulfan I	2.4	102	4.8	24	200	920	-	-	-	-	-	-	ND		0.00181	-	-	-	-	-	-	-	-	-	-
Endosulfan II	2.4	102	4.8	24	200	920	-	-	-	-	-	-	ND		0.00181	-	-	-	-	-	-	-	-	-	-
Endosulfan sulfate	2.4	1000	4.8	24	200	920	-	-	-	-	-	-	ND		0.000753	-	-	-	-	-	-	-	-	-	-
cis-Chlordane	0.094	2.9	0.91	4.2	24	47	-	-	-	-	-	-	ND		0.00226	-	-	-	-	-	-	-	-	-	-
POLYCHLORINATED BIPHENYLS BY GC																									
Aroclor 1016	0.1	3.2	1	1	1	25	ND		0.0573	ND		0.0551	ND		0.0574	ND		0.0567	ND		0.0575	ND		0.0586	
Aroclor 1221	0.1	3.2	1	1	1	25	ND		0.0573	ND		0.0551	ND		0.0574	ND		0.0567	ND		0.0575	ND		0.0586	
Aroclor 1232	0.1	3.2	1	1	1	25	ND		0.0573	ND		0.0551	ND		0.0574	ND		0.0567	ND		0.0575	ND		0.0586	
Aroclor 1242	0.1	3.2	1	1	1	25	ND		0.0573	ND		0.0551	ND		0.0574	ND		0.0567	ND		0.0575	ND		0.0586	
Aroclor 1248	0.1	3.2	1	1	1	25	ND		0.0573	ND		0.0551	ND		0.0574	ND		0.0567	ND		0.0575	ND		0.0586	
Aroclor 1254	0.1	3.2	1	1	1	25	ND		0.0573	ND		0.0551	ND		0.0574	ND		0.0567	ND		0.0575	ND		0.0586	
Aroclor 1260	0.1	3.2	1	1	1	25	ND		0.0573	ND		0.0551	ND		0.0574	ND		0.0567	ND		0.0575	ND		0.0586	
Aroclor 1262	0.1	3.2	1	1	1	25	ND		0.0573	ND		0.0551	ND		0.0574	ND		0.0567	ND		0.0575	ND		0.0586	
Aroclor 1268	0.1	3.2	1	1	1	25	ND		0.0573	ND		0.0551	ND		0.0574	ND		0.0567	ND		0.0575	ND		0.0586	
PCBs, Total	0.1	3.2	1	1	1	25	ND		0.0573	ND		0.0551	ND		0.0574	ND		0.0567	ND		0.0575	ND		0.0586	
TOTAL METALS																									
Arsenic, Total	13	16	16	16	16	16	6.57		0.916	4.52		1.81	5.34		0.924	2.37		0.904	4.62		0.94	4.8		0.96	
Barium, Total	350	820	350	400	400	10000	142		0.916	141		1.81	116		0.924	40.6		0.904	131		0.94	160		0.96	
Beryllium, Total	7.2	47	14	72	590	2700	0.655		0.458	0.478	J	0.906	0.565		0.462	0.678		0.452	0.889		0.47	0.629		0.48	
Cadmium, Total	2.5	7.5	2.5	4.3	9.3	60	0.229	J	0.916	0.195	J	1.81	0.247	J	0.924	0.155	J	0.904	0.104	J	0.94	0.233	J	0.96	
Chromium, Total	NA	NA	NA	NA	NA	NA	19.9		0.916	17.7		1.81	18.8		0.924	22.5		0.904	24.7		0.94	20.4		0.96	
Copper, Total	50	1720	270	270	270	10000	24		0.916	17.9		1.81	23		0.924	19.9		0.904	26.8		0.94	22.2		0.96	
Lead, Total	63	450	400	400	1000	3900	11.1		4.58	8.82	J	9.06	10.8		4.62	9.45		4.52	12.2		4.7	11.3		4.8	
Manganese, Total	1600	2000	2000	2000	10000	10000	603		0.916	474		1.81	551		0.924	317		0.904	479		0.94	531		0.96	
Mercury, Total	0.18	0.73	0.81	0.81	2.8	5.7	ND		0.08	ND		0.087	ND		0.087	ND		0.084	ND		0.078	ND		0.092	
Nickel, Total	30	130	140	310	310	10000	27.4		2.29	21.8		4.53	23.9		2.31	28.5		2.26	33.9		2.35	29		2.4	
Selenium, Total	3.9	4	36	180	1500	6800	ND		1.83	ND		3.62	ND		1.85	ND		1.81	ND		1.88	ND		1.92	
Silver, Total	2	8.3	36	180	1500	6800	ND		0.458	ND		0.906	ND		0.462	ND		0.452	ND		0.47	ND		0.48	
Zinc, Total	109	2480	2200	10000	10000	10000	65.9		4.58	64.2		9.06	62.4		4.62	73.2		4.52	83.8		4.7	70.5		4.8	
GENERAL CHEMISTRY																									
Chromium, Trivalent	30	NA	36	180	1500	6800	19.9		0.958	17.7		1.81	18.8		0.957	22.5		0.936	24.7		0.976	20.4		0.985	
Solids, Total	NA	NA	NA	NA	NA	NA	83.5		0.1	84.4		0.1	83.6		0.1	85.5		0.1	82		0.1	81.2		0.1	
Cyanide, Total	27	40	27	27	27	10000	ND		1.2	ND		1.1	12		1.2	ND		1.1	ND		1.1	ND		1.2	
Chromium, Hexavalent	1	800	22	110	400	800	ND		0.958	ND		0.948	ND		0.957	ND		0.936	ND		0.976	ND		0.985	

TABLE 4

NATIVE SOIL SAMPLING RESULTS
1803 ELMWOOD AVENUE BCP - C915394
CITY OF BUFFALO, NEW YORK



ANALYTE	SAMPLE ID:						SB-01-6FT			SB-03-7FT			SB-04-7FT			SB-05-8FT			SB-06-7FT			DUP-A		
	NY-UNRES	NY-RESGW	NY-RESR	NY-RESRR	NY-RESC	NY-RESI	Result	Fig	RL	Result	Fig	RL	Result	Fig	RL	Result	Fig	RL	Result	Fig	RL	Result	Fig	RL
PERFLUORINATED ALKYL ACIDS BY EPA 1633	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)																		
Perfluorobutanoic Acid (PFBA)	NA	NA	NA	NA	NA	NA	ND	0.000796	ND	0.000795	ND	0.000756	ND	0.000796	ND	0.000792	ND	0.000792	ND	0.000792	ND	0.000792	ND	0.000792
Perfluoropentanoic Acid (PFPeA)	NA	NA	NA	NA	NA	NA	ND	0.000388	ND	0.000388	ND	0.000378	ND	0.000388	ND	0.000386	ND	0.000386	ND	0.000386	ND	0.000386	ND	0.000386
Perfluorobutanesulfonic Acid (PFBS)	NA	NA	NA	NA	NA	NA	ND	0.000199	ND	0.000199	ND	0.000189	ND	0.000199	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:4)	NA	NA	NA	NA	NA	NA	ND	0.000796	ND	0.000795	ND	0.000756	ND	0.000796	ND	0.000792	ND	0.000792	ND	0.000792	ND	0.000792	ND	0.000792
Perfluorohexanoic Acid (PFHxA)	NA	NA	NA	NA	NA	NA	ND	0.000199	ND	0.000199	ND	0.000189	ND	0.000199	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198
Perfluoropentanesulfonic Acid (PFPeS)	NA	NA	NA	NA	NA	NA	ND	0.000199	ND	0.000199	ND	0.000189	ND	0.000199	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198
Perfluoroheptanoic Acid (PFHpA)	NA	NA	NA	NA	NA	NA	ND	0.000199	ND	0.000199	ND	0.000189	ND	0.000199	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198
Perfluorohexanesulfonic Acid (PFHxS)	NA	NA	NA	NA	NA	NA	ND	0.000199	ND	0.000199	ND	0.000189	ND	0.000199	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198
Perfluorooctanoic Acid (PFOA)	0.00066	NA	0.0066	0.033	0.5	0.6	ND	0.000199	ND	0.000199	ND	0.000189	ND	0.000199	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2)	NA	NA	NA	NA	NA	NA	ND	0.000796	ND	0.000795	ND	0.000756	ND	0.000796	ND	0.000792	ND	0.000792	ND	0.000792	ND	0.000792	ND	0.000792
Perfluoroheptanesulfonic Acid (PFHpS)	NA	NA	NA	NA	NA	NA	ND	0.000199	ND	0.000199	ND	0.000189	ND	0.000199	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198
Perfluorononanoic Acid (PFNA)	NA	NA	NA	NA	NA	NA	ND	0.000199	ND	0.000199	ND	0.000189	ND	0.000199	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198
Perfluorooctanesulfonic Acid (PFOS)	0.00088	NA	0.0088	0.044	0.44	0.44	ND	0.000199	ND	0.000199	ND	0.000189	ND	0.000199	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198
Perfluorodecanoic Acid (PFDA)	NA	NA	NA	NA	NA	NA	ND	0.000199	ND	0.000199	ND	0.000189	ND	0.000199	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198
1H,1H,2H,2H-Perfluorodecane sulfonic Acid (8:2)	NA	NA	NA	NA	NA	NA	ND	0.000796	ND	0.000795	ND	0.000756	ND	0.000796	ND	0.000792	ND	0.000792	ND	0.000792	ND	0.000792	ND	0.000792
Perfluorononanesulfonic Acid (PFNS)	NA	NA	NA	NA	NA	NA	ND	0.000199	ND	0.000199	ND	0.000189	ND	0.000199	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198
N-Methyl Perfluorooctanesulfonamidoacetic Acid	NA	NA	NA	NA	NA	NA	ND	0.000199	ND	0.000199	ND	0.000189	ND	0.000199	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198
Perfluoroundecanoic Acid (PFUnA)	NA	NA	NA	NA	NA	NA	ND	0.000199	ND	0.000199	ND	0.000189	ND	0.000199	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198
Perfluorodecane sulfonic Acid (PFDS)	NA	NA	NA	NA	NA	NA	ND	0.000199	ND	0.000199	ND	0.000189	ND	0.000199	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198
Perfluorooctanesulfonamide (PFOSA)	NA	NA	NA	NA	NA	NA	ND	0.000199	ND	0.000199	ND	0.000189	ND	0.000199	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198
N-Ethyl Perfluorooctanesulfonamidoacetic Acid	NA	NA	NA	NA	NA	NA	ND	0.000199	ND	0.000199	ND	0.000189	ND	0.000199	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198
Perfluorododecanoic Acid (PFDoA)	NA	NA	NA	NA	NA	NA	ND	0.000199	ND	0.000199	ND	0.000189	ND	0.000199	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198
Perfluorotridecanoic Acid (PFTrDA)	NA	NA	NA	NA	NA	NA	ND	0.000199	ND	0.000199	ND	0.000189	ND	0.000199	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198
Perfluorotetradecanoic Acid (PFTeDA)	NA	NA	NA	NA	NA	NA	ND	0.000199	ND	0.000199	ND	0.000189	ND	0.000199	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198
Hexafluoropropylene Oxide Dimer Acid (HFPO)	NA	NA	NA	NA	NA	NA	ND	0.000796	ND	0.000795	ND	0.000756	ND	0.000796	ND	0.000792	ND	0.000792	ND	0.000792	ND	0.000792	ND	0.000792
4,8-Dioxo-3h-Perfluorononanoic Acid (ADONA)	NA	NA	NA	NA	NA	NA	ND	0.000796	ND	0.000795	ND	0.000756	ND	0.000796	ND	0.000792	ND	0.000792	ND	0.000792	ND	0.000792	ND	0.000792
Perfluorododecane sulfonic Acid (PFDS)	NA	NA	NA	NA	NA	NA	ND	0.000199	ND	0.000199	ND	0.000189	ND	0.000199	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic	NA	NA	NA	NA	NA	NA	ND	0.000796	ND	0.000795	ND	0.000756	ND	0.000796	ND	0.000792	ND	0.000792	ND	0.000792	ND	0.000792	ND	0.000792
11-Chloroicosadecafluoro-3-Oxaundecane-1-Sulfo	NA	NA	NA	NA	NA	NA	ND	0.000796	ND	0.000795	ND	0.000756	ND	0.000796	ND	0.000792	ND	0.000792	ND	0.000792	ND	0.000792	ND	0.000792
N-Methyl Perfluorooctane Sulfonamide (NMeFOS)	NA	NA	NA	NA	NA	NA	ND	0.000199	ND	0.000199	ND	0.000189	ND	0.000199	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198
N-Ethyl Perfluorooctane Sulfonamide (NEtFOS)	NA	NA	NA	NA	NA	NA	ND	0.000199	ND	0.000199	ND	0.000189	ND	0.000199	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198	ND	0.000198
N-Methyl Perfluorooctanesulfonamido Ethanol	NA	NA	NA	NA	NA	NA	ND	0.00199	ND	0.00199	ND	0.00189	ND	0.00199	ND	0.00198	ND	0.00198	ND	0.00198	ND	0.00198	ND	0.00198
N-Ethyl Perfluorooctanesulfonamido Ethanol (N)	NA	NA	NA	NA	NA	NA	ND	0.00199	ND	0.00199	ND	0.00189	ND	0.00199	ND	0.00198	ND	0.00198	ND	0.00198	ND	0.00198	ND	0.00198
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	NA	NA	NA	NA	NA	NA	ND	0.000398	ND	0.000398	ND	0.000378	ND	0.000398	ND	0.000396	ND	0.000396	ND	0.000396	ND	0.000396	ND	0.000396
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	NA	NA	NA	NA	NA	NA	ND	0.000398	ND	0.000398	ND	0.000378	ND	0.000398	ND	0.000396	ND	0.000396	ND	0.000396	ND	0.000396	ND	0.000396
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEE)	NA	NA	NA	NA	NA	NA	ND	0.000398	ND	0.000398	ND	0.000378	ND	0.000398	ND	0.000396	ND	0.000396	ND	0.000396	ND	0.000396	ND	0.000396
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	NA	NA	NA	NA	NA	NA	ND	0.000398	ND	0.000398	ND	0.000378	ND	0.000398	ND	0.000396	ND	0.000396	ND	0.000396	ND	0.000396	ND	0.000396
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	NA	NA	NA	NA	NA	NA	ND	0.000995	ND	0.000994	ND	0.000945	ND	0.000995	ND	0.000993	ND	0.000993	ND	0.000993	ND	0.000993	ND	0.000993
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	NA	NA	NA	NA	NA	NA	ND	0.00497	ND	0.00497	ND	0.00472	ND	0.00497	ND	0.00495	ND	0.00495	ND	0.00495	ND	0.00495	ND	0.00495
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	NA	NA	NA	NA	NA	NA	ND	0.00497	ND	0.00497	ND	0.00472	ND	0.00497	ND	0.00495	ND	0.00495	ND	0.00495	ND	0.00495	ND	0.00495

* Comparison is not performed on parameters with non-numeric criteria.

NY-UNRES: New York NYCRR Part 375 New York Unrestricted use Criteria Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.
 NY-RESR: New York NYCRR Part 375 Residential Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.
 NY-RESRR: New York NYCRR Part 375 Restricted-Residential Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.
 NY-RESC: New York NYCRR Part 375 Commercial Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.
 NY-RESI: New York NYCRR Part 375 Industrial Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

TABLE 4

NATIVE SOIL SAMPLING RESULTS
1803 ELMWOOD AVENUE BCP - C915394
CITY OF BUFFALO, NEW YORK



SAMPLE ID:	SB-07-7FT	SB-08-7FT	SB-09-7FT	SB-10-4FT	SB-11-7FT	SB-12-8FT
LAB ID:	L2428242-08	L2428514-01	L2428514-07	L2428242-05	L2428514-13	L2428514-14
COLLECTION DATE:	5/21/2024	5/22/2024	5/22/2024	5/21/2024	5/22/2024	5/22/2024
SAMPLE DEPTH:	7 FT	7 FT	7 FT	4 FT	11 FT	8 FT
SAMPLE MATRIX:	NATIVE SOIL					

ANALYTE	NY-UNRES	NY-RESGW	NY-RESR	NY-RESRR	NY-RESC	NY-RESI	SB-07-7FT			SB-08-7FT			SB-09-7FT			SB-10-4FT			SB-11-7FT			SB-12-8FT			
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Result	Fig	RL	Result	Fig	RL	Result	Fig	RL	Result	Fig	RL	Result	Fig	RL	Result	Fig	RL	
VOLATILE ORGANICS BY EPA 5035																									
Methylene chloride	0.05	0.05	51	100	500	1000	ND		0.0062	ND		0.0036	ND		0.0062	ND		0.0055	ND		0.0044	ND		0.0048	
1,1-Dichloroethane	0.27	0.27	19	26	240	480	ND		0.0012	ND		0.0071	ND		0.0012	ND		0.0011	ND		0.0088	ND		0.0095	
Chloroform	0.37	0.37	10	49	350	700	ND		0.0019	ND		0.0011	ND		0.0019	ND		0.0016	ND		0.0013	ND		0.0014	
Carbon tetrachloride	0.76	0.76	1.4	2.4	22	44	ND		0.0012	ND		0.0071	ND		0.0012	ND		0.0011	ND		0.0088	ND		0.0095	
Tetrachloroethene	1.3	1.3	5.5	19	150	300	ND		0.00062	ND		0.0036	ND		0.00062	ND		0.00055	ND		0.0044	ND		0.0048	
Chlorobenzene	1.1	1.1	100	100	500	1000	ND		0.0062	ND		0.0036	ND		0.0062	ND		0.00055	ND		0.0044	ND		0.0048	
1,2-Dichloroethane	0.02	0.02	2.3	3.1	30	60	ND		0.0012	ND		0.0071	ND		0.0012	ND		0.0011	ND		0.0088	ND		0.0095	
1,1,1-Trichloroethane	0.68	0.68	100	100	500	1000	ND		0.00062	ND		0.0036	ND		0.00062	ND		0.00055	ND		0.0044	ND		0.0048	
Benzene	0.06	0.06	2.9	4.8	44	89	ND		0.00062	ND		0.0036	ND		0.00062	ND		0.00055	ND		0.0044	ND		0.0048	
Toluene	0.7	0.7	100	100	500	1000	ND		0.0012	ND		0.0071	ND		0.0012	ND		0.0011	ND		0.0088	ND		0.0095	
Ethylbenzene	1	1	30	41	390	780	ND		0.0012	ND		0.0071	ND		0.0012	ND		0.0011	ND		0.0088	ND		0.0095	
Vinyl chloride	0.02	0.02	0.21	0.9	13	27	ND		0.0012	ND		0.0071	ND		0.0012	0.017		0.0011	ND		0.0088	ND		0.0095	
1,1-Dichloroethene	0.33	0.33	100	100	500	1000	ND		0.0012	ND		0.0071	ND		0.0012	0.0078		0.0011	ND		0.0088	ND		0.0095	
trans-1,2-Dichloroethene	0.19	0.19	100	100	500	1000	ND		0.0019	ND		0.0011	ND		0.0019	0.0031		0.0016	ND		0.0013	ND		0.0014	
Trichloroethene	0.47	0.47	10	21	200	400	0.0024		0.00062	ND		0.0036	ND		0.00062	0.31		0.00055	ND		0.0044	ND		0.0048	
1,2-Dichlorobenzene	1.1	1.1	100	100	500	1000	ND		0.0025	ND		0.0014	ND		0.0025	ND		0.0022	ND		0.0018	ND		0.0019	
1,3-Dichlorobenzene	2.4	2.4	17	49	280	560	ND		0.0025	ND		0.0014	ND		0.0025	ND		0.0022	ND		0.0018	ND		0.0019	
1,4-Dichlorobenzene	1.8	1.8	9.8	13	130	250	ND		0.0025	ND		0.0014	ND		0.0025	ND		0.0022	ND		0.0018	ND		0.0019	
Methyl tert butyl ether	0.93	0.93	62	100	500	1000	ND		0.0025	ND		0.0014	ND		0.0025	ND		0.0022	ND		0.0018	ND		0.0019	
pim-Xylene	NA	NA	NA	NA	NA	NA	ND		0.0025	ND		0.0014	ND		0.0025	ND		0.0022	ND		0.0018	ND		0.0019	
o-Xylene	NA	NA	NA	NA	NA	NA	ND		0.0012	ND		0.0071	ND		0.0012	ND		0.0011	ND		0.0088	ND		0.0095	
cis-1,2-Dichloroethene	0.25	0.25	59	100	500	1000	ND		0.0012	ND		0.0071	ND		0.0012	0.084		0.0011	0.00017	J	0.0088	ND		0.0095	
Acetone	0.05	0.05	100	100	500	1000	0.01	J	0.012	0.013		0.0071	0.044		0.012	ND		0.011	ND		0.0088	ND		0.0095	
2-Butanone	0.12	0.12	100	100	500	1000	ND		0.012	ND		0.0071	0.012		0.012	ND		0.011	ND		0.0088	ND		0.0095	
n-Butylbenzene	12	12	100	100	500	1000	ND		0.0012	ND		0.0071	ND		0.0012	ND		0.0011	ND		0.0088	ND		0.0095	
sec-Butylbenzene	11	11	100	100	500	1000	ND		0.0012	ND		0.0071	ND		0.0012	ND		0.0011	ND		0.0088	ND		0.0095	
tert-Butylbenzene	5.9	5.9	100	100	500	1000	ND		0.0025	ND		0.0014	ND		0.0025	ND		0.0022	ND		0.0018	ND		0.0019	
n-Propylbenzene	3.9	3.9	100	100	500	1000	ND		0.0012	ND		0.0071	ND		0.0012	ND		0.0011	ND		0.0088	ND		0.0095	
1,3,5-Trimethylbenzene	8.4	8.4	47	52	190	380	ND		0.0025	ND		0.0014	ND		0.0025	ND		0.0022	ND		0.0018	ND		0.0019	
1,2,4-Trimethylbenzene	3.6	3.6	47	52	190	380	ND		0.0025	ND		0.0014	ND		0.0025	ND		0.0022	ND		0.0018	ND		0.0019	
1,4-Dioxane	0.1	0.1	9.8	13	130	250	ND		0.1	ND		0.057	ND		0.1	ND		0.088	ND		0.071	ND		0.076	
SEMIVOLATILE ORGANICS BY GC/MS																									
Acenaphthene	20	98	100	100	500	1000	ND		0.16	ND		0.16	ND		0.18	ND		0.17	ND		0.15	ND		0.16	
Hexachlorobenzene	0.33	3.2	0.33	1.2	6	12	ND		0.12	ND		0.12	ND		0.14	ND		0.13	ND		0.11	ND		0.12	
Fluoranthene	100	1000	100	100	500	1000	ND		0.12	ND		0.12	ND		0.14	ND		0.13	ND		0.11	ND		0.12	
Naphthalene	12	12	100	100	500	1000	ND		0.2	ND		0.2	ND		0.23	ND		0.22	ND		0.19	ND		0.2	
Benzo(a)anthracene	1	1	1	1	5.6	11	ND		0.12	ND		0.12	ND		0.14	ND		0.13	ND		0.11	ND		0.12	
Benzo(a)pyrene	1	22	1	1	1	1.1	ND		0.16	ND		0.16	ND		0.18	ND		0.17	ND		0.15	ND		0.16	
Benzo(b)fluoranthene	1	1.7	1	1	5.6	11	ND		0.12	ND		0.12	ND		0.14	ND		0.13	ND		0.11	ND		0.12	
Benzo(k)fluoranthene	0.8	1.7	1	3.9	56	110	ND		0.12	ND		0.12	ND		0.14	ND		0.13	ND		0.11	ND		0.12	
Chrysene	1	1	1	3.9	56	110	ND		0.12	ND		0.12	ND		0.14	ND		0.13	ND		0.11	ND		0.12	
Acenaphthylene	100	107	100	100	500	1000	ND		0.16	ND		0.16	ND		0.18	ND		0.17	ND		0.15	ND		0.16	
Anthracene	100	1000	100	100	500	1000	ND		0.12	ND		0.12	ND		0.14	ND		0.13	ND		0.11	ND		0.12	
Benzo(ghi)perylene	100	1000	100	100	500	1000	ND		0.16	ND		0.16	ND		0.18	ND		0.17	ND		0.15	ND		0.16	
Fluorene	30	386	100	100	500	1000	ND		0.2	ND		0.2	ND		0.23	ND		0.22	ND		0.19	ND		0.2	
Phenanthrene	100	1000	100	100	500	1000	ND		0.12	ND		0.12	ND		0.14	ND		0.13	ND		0.11	ND		0.12	
Dibenzo(a,h)anthracene	0.33	1000	0.33	0.33	0.56	1.1	ND		0.12	ND		0.12	ND		0.14	ND		0.13	ND		0.11	ND		0.12	
Indeno(1,2,3-cd)pyrene	0.5	8.2	0.5	0.5	5.6	11	ND		0.16	ND		0.16	ND		0.18	ND		0.17	ND		0.15	ND		0.16	
Pyrene	100	1000	100	100	500	1000	ND		0.12	ND		0.12	ND		0.14	ND		0.13	ND		0.11	ND		0.12	
Dibenzofuran	7	210	14	59	350	1000	ND		0.2	ND		0.2	ND		0.23	ND		0.22	ND		0.19	ND		0.2	
Pentachlorophenol	0.8	0.8	2.4	6.7	6.7	55	ND		0.16	ND		0.16	ND		0.18	ND		0.17	ND		0.15	ND		0.16	
Phenol	0.33	0.33	100	100	500	1000	ND		0.2	ND		0.2	ND		0.23	ND		0.22	ND		0.19	ND		0.2	
2-Methylphenol	0.33	0.33	100	100	500	1000	ND		0.2	ND		0.2	ND		0.23	ND		0.22	ND		0.19	ND		0.2	
3-Methylphenol/4-Methylphenol	0.33	0.33	34	100	500	1000	ND		0.28	ND		0.3	ND		0.33	ND		0.31	ND		0.27	ND		0.28	
1,4-Dioxane	0.1	0.1	9.8																						

TABLE 4

NATIVE SOIL SAMPLING RESULTS
 1803 ELMWOOD AVENUE BCP - C915394
 CITY OF BUFFALO, NEW YORK



SAMPLE ID:	SB-07-7FT	SB-08-7FT	SB-09-7FT	SB-10-4FT	SB-11-7FT	SB-12-8FT
LAB ID:	L2428242-08	L2428514-01	L2428514-07	L2428242-05	L2428514-13	L2428514-14
COLLECTION DATE:	5/21/2024	5/22/2024	5/22/2024	5/21/2024	5/22/2024	5/22/2024
SAMPLE DEPTH:	7 FT	7 FT	7 FT	4 FT	11 FT	8 FT
SAMPLE MATRIX:	NATIVE SOIL					

ANALYTE	NY-UNRES	NY-RESGW	NY-RESR	NY-RESRR	NY-RESC	NY-RESI	SB-07-7FT			SB-08-7FT			SB-09-7FT			SB-10-4FT			SB-11-7FT			SB-12-8FT			
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	
CHLORINATED HERBICIDES BY GC																									
2,4,5-TP (Silvex)	3.8	3.8	58	100	500	1000	-	-	ND	-	-	0.205	-	-	-	-	-	-	-	-	-	-	-	-	-
ORGANOCHLORINE PESTICIDES BY GC																									
Delta-BHC	0.04	0.25	100	100	500	1000	-	-	ND	-	-	0.00191	-	-	-	-	-	-	-	-	-	-	-	-	-
Lindane	0.1	0.1	0.28	1.3	9.2	23	-	-	ND	-	-	0.000797	-	-	-	-	-	-	-	-	-	-	-	-	-
Alpha-BHC	0.02	0.02	0.097	0.48	3.4	6.8	-	-	ND	-	-	0.000797	-	-	-	-	-	-	-	-	-	-	-	-	-
Beta-BHC	0.036	0.09	0.072	0.36	3	14	-	-	ND	-	-	0.00191	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptachlor	0.042	0.38	0.42	2.1	15	29	-	-	ND	-	-	0.000956	-	-	-	-	-	-	-	-	-	-	-	-	-
Aldrin	0.005	0.19	0.019	0.097	0.88	1.4	-	-	ND	-	-	0.00191	-	-	-	-	-	-	-	-	-	-	-	-	-
Endrin	0.014	0.06	2.2	11	89	410	-	-	ND	-	-	0.000797	-	-	-	-	-	-	-	-	-	-	-	-	-
Dieldrin	0.005	0.1	0.039	0.2	1.4	2.8	-	-	ND	-	-	0.0012	-	-	-	-	-	-	-	-	-	-	-	-	-
4,4'-DDE	0.0033	17	1.8	8.9	62	120	-	-	ND	-	-	0.00191	-	-	-	-	-	-	-	-	-	-	-	-	-
4,4'-DDD	0.0033	14	2.6	13	92	180	-	-	ND	-	-	0.00191	-	-	-	-	-	-	-	-	-	-	-	-	-
4,4'-DDT	0.0033	136	1.7	7.9	47	94	-	-	ND	-	-	0.00191	-	-	-	-	-	-	-	-	-	-	-	-	-
Endosulfan I	2.4	102	4.8	24	200	920	-	-	ND	-	-	0.00191	-	-	-	-	-	-	-	-	-	-	-	-	-
Endosulfan II	2.4	102	4.8	24	200	920	-	-	ND	-	-	0.00191	-	-	-	-	-	-	-	-	-	-	-	-	-
Endosulfan sulfate	2.4	1000	4.8	24	200	920	-	-	ND	-	-	0.000797	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-Chlordane	0.094	2.9	0.91	4.2	24	47	-	-	ND	-	-	0.00239	-	-	-	-	-	-	-	-	-	-	-	-	-
POLYCHLORINATED BIPHENYLS BY GC																									
Aroclor 1016	0.1	3.2	1	1	1	25	ND	0.0551	ND	0.0581	ND	0.0696	ND	0.0624	ND	0.056	ND	0.0566	ND	0.0566	ND	0.0566	ND	0.0566	ND
Aroclor 1221	0.1	3.2	1	1	1	25	ND	0.0551	ND	0.0581	ND	0.0696	ND	0.0624	ND	0.056	ND	0.0566	ND	0.0566	ND	0.0566	ND	0.0566	ND
Aroclor 1232	0.1	3.2	1	1	1	25	ND	0.0551	ND	0.0581	ND	0.0696	ND	0.0624	ND	0.056	ND	0.0566	ND	0.0566	ND	0.0566	ND	0.0566	ND
Aroclor 1242	0.1	3.2	1	1	1	25	ND	0.0551	ND	0.0581	ND	0.0696	ND	0.0624	ND	0.056	ND	0.0566	ND	0.0566	ND	0.0566	ND	0.0566	ND
Aroclor 1248	0.1	3.2	1	1	1	25	ND	0.0551	ND	0.0581	ND	0.0696	ND	0.0624	ND	0.056	ND	0.0566	ND	0.0566	ND	0.0566	ND	0.0566	ND
Aroclor 1254	0.1	3.2	1	1	1	25	ND	0.0551	ND	0.0581	ND	0.0696	ND	0.0624	ND	0.056	ND	0.0566	ND	0.0566	ND	0.0566	ND	0.0566	ND
Aroclor 1260	0.1	3.2	1	1	1	25	ND	0.0551	ND	0.0581	ND	0.0696	ND	0.0624	ND	0.056	ND	0.0566	ND	0.0566	ND	0.0566	ND	0.0566	ND
Aroclor 1262	0.1	3.2	1	1	1	25	ND	0.0551	ND	0.0581	ND	0.0696	ND	0.0624	ND	0.056	ND	0.0566	ND	0.0566	ND	0.0566	ND	0.0566	ND
Aroclor 1268	0.1	3.2	1	1	1	25	ND	0.0551	ND	0.0581	ND	0.0696	ND	0.0624	ND	0.056	ND	0.0566	ND	0.0566	ND	0.0566	ND	0.0566	ND
PCBs, Total	0.1	3.2	1	1	1	25	ND	0.0551	ND	0.0581	ND	0.0696	ND	0.0624	ND	0.056	ND	0.0566	ND	0.0566	ND	0.0566	ND	0.0566	ND
TOTAL METALS																									
Arsenic, Total	13	16	16	16	16	16	0.9	J	0.938	6.53	0.971	6.26	2.22	5.64	1.04	4.7	0.88	4.49	0.964						
Barium, Total	350	820	350	400	400	10000	45.4	0.938	99.3	0.971	100	2.22	154	1.04	55.8	0.88	88.9	0.964							
Beryllium, Total	7.2	47	14	72	590	2700	0.466	J	0.469	0.959	0.485	1.01	J	1.11	1.04	0.521	0.338	J	0.44	0.496	0.482				
Cadmium, Total	2.5	7.5	2.5	4.3	9.3	60	0.287	J	0.938	0.18	J	0.971	0.508	J	2.22	0.228	J	1.04	0.121	J	0.88	0.175	J	0.964	0.964
Chromium, Total	NA	NA	NA	NA	NA	NA	18.3	0.938	24.8	0.971	21.2	2.22	28.1	1.04	15	0.88	20.3	0.964							
Copper, Total	50	1720	270	270	270	10000	14.5	0.938	19.4	0.971	10.7	2.22	27.4	1.04	18.2	0.88	21.6	0.964							
Lead, Total	63	450	400	400	1000	3900	11.1	4.69	11.1	4.85	18.8	11.1	14.6	5.21	8.97	4.4	11.3	4.82							
Manganese, Total	1600	2000	2000	2000	10000	10000	396	0.938	256	0.971	3370	2.22	584	1.04	328	0.88	338	0.964							
Mercury, Total	0.18	0.73	0.81	0.81	2.8	5.7	ND	0.093	ND	0.078	0.065	J	0.091	ND	0.09	ND	0.073	ND	0.077						
Nickel, Total	30	130	140	310	310	10000	23.2	2.34	31.8	2.43	16.7	5.56	43	2.6	20	2.2	26	2.41							
Selenium, Total	3.9	4	36	180	1500	6800	ND	1.88	0.828	J	1.94	1.08	J	4.45	0.352	J	2.08	ND	1.93						
Silver, Total	2	8.3	36	180	1500	6800	ND	0.469	ND	0.485	ND	1.11	ND	0.521	ND	0.44	ND	0.482							
Zinc, Total	109	2480	2200	10000	10000	10000	78.9	4.69	72.8	4.85	92.3	11.1	84	5.21	58.6	4.4	72.6	4.82							
GENERAL CHEMISTRY																									
Chromium, Trivalent	30	NA	36	180	1500	6800	18.3	0.947	24.8	0.996	21.2	2.22	28.1	1.04	15	0.923	20.3	0.979							
Solids, Total	NA	NA	NA	NA	NA	NA	84.5	0.1	80.3	0.1	70.2	0.1	76.7	0.1	86.7	0.1	81.7	0.1							
Cyanide, Total	27	40	27	27	27	10000	ND	1.1	ND	1.1	ND	1.4	ND	1.2	ND	1.1	ND	1.2							
Chromium, Hexavalent	1	800	22	110	400	800	ND	0.947	ND	0.996	ND	1.14	ND	1.04	ND	0.923	ND	0.979							

TABLE 4

NATIVE SOIL SAMPLING RESULTS
1803 ELMWOOD AVENUE BCP - C915394
CITY OF BUFFALO, NEW YORK



ANALYTE	SAMPLE ID:						SB-07-7FT			SB-08-7FT			SB-09-7FT			SB-10-4FT			SB-11-7FT			SB-12-8FT		
	NY-UNRES	NY-RESGW	NY-RESR	NY-RESRR	NY-RESC	NY-RESI	Result	Fig	RL	Result	Fig	RL	Result	Fig	RL	Result	Fig	RL	Result	Fig	RL	Result	Fig	RL
PERFLUORINATED ALKYL ACIDS BY EPA 1633	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)																		
Perfluorobutanoic Acid (PFBA)	NA	NA	NA	NA	NA	NA	ND	0.000792	ND	0.000758	ND	0.000753	ND	0.000789	ND	0.00071	ND	0.000794						
Perfluoropentanoic Acid (PFPeA)	NA	NA	NA	NA	NA	NA	ND	0.000386	ND	0.000379	ND	0.000376	ND	0.000384	ND	0.000355	ND	0.000397						
Perfluorobutanesulfonic Acid (PFBS)	NA	NA	NA	NA	NA	NA	ND	0.000198	ND	0.00019	ND	0.000188	ND	0.000197	ND	0.000177	ND	0.000198						
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:4)	NA	NA	NA	NA	NA	NA	ND	0.000792	ND	0.000758	ND	0.000753	ND	0.000789	ND	0.00071	ND	0.000794						
Perfluorohexanoic Acid (PFHxA)	NA	NA	NA	NA	NA	NA	ND	0.000198	ND	0.00019	ND	0.000188	ND	0.000197	ND	0.000177	ND	0.000198						
Perfluoropentanesulfonic Acid (PFPeS)	NA	NA	NA	NA	NA	NA	ND	0.000198	ND	0.00019	ND	0.000188	ND	0.000197	ND	0.000177	ND	0.000198						
Perfluoroheptanoic Acid (PFHpA)	NA	NA	NA	NA	NA	NA	ND	0.000198	ND	0.00019	ND	0.000188	ND	0.000197	ND	0.000177	ND	0.000198						
Perfluorohexanesulfonic Acid (PFHxS)	NA	NA	NA	NA	NA	NA	ND	0.000198	ND	0.00019	ND	0.000188	ND	0.000197	ND	0.000177	ND	0.000198						
Perfluorooctanoic Acid (PFOA)	0.00066	NA	0.0066	0.033	0.5	0.6	ND	0.000198	ND	0.00019	ND	0.000188	ND	0.000197	ND	0.000177	ND	0.000198						
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2)	NA	NA	NA	NA	NA	NA	ND	0.000792	ND	0.000758	ND	0.000753	ND	0.000789	ND	0.00071	ND	0.000794						
Perfluoroheptanesulfonic Acid (PFHpS)	NA	NA	NA	NA	NA	NA	ND	0.000198	ND	0.00019	ND	0.000188	ND	0.000197	ND	0.000177	ND	0.000198						
Perfluorononanoic Acid (PFNA)	NA	NA	NA	NA	NA	NA	ND	0.000198	ND	0.00019	ND	0.000188	ND	0.000197	ND	0.000177	ND	0.000198						
Perfluorooctanesulfonic Acid (PFOS)	0.00088	NA	0.0088	0.044	0.44	0.44	ND	0.000198	ND	0.00019	ND	0.000188	ND	0.000197	ND	0.000177	ND	0.000198						
Perfluorodecanoic Acid (PFDA)	NA	NA	NA	NA	NA	NA	ND	0.000198	ND	0.00019	ND	0.000188	ND	0.000197	ND	0.000177	ND	0.000198						
1H,1H,2H,2H-Perfluorodecane sulfonic Acid (8:2)	NA	NA	NA	NA	NA	NA	ND	0.000792	ND	0.000758	ND	0.000753	ND	0.000789	ND	0.00071	ND	0.000794						
Perfluorononanesulfonic Acid (PFNS)	NA	NA	NA	NA	NA	NA	ND	0.000198	ND	0.00019	ND	0.000188	ND	0.000197	ND	0.000177	ND	0.000198						
N-Methyl Perfluorooctanesulfonamideacetocetic Ac	NA	NA	NA	NA	NA	NA	ND	0.000198	ND	0.00019	ND	0.000188	ND	0.000197	ND	0.000177	ND	0.000198						
Perfluoroundecanoic Acid (PFUnA)	NA	NA	NA	NA	NA	NA	ND	0.000198	ND	0.00019	ND	0.000188	ND	0.000197	ND	0.000177	ND	0.000198						
Perfluorodecane sulfonic Acid (PFDS)	NA	NA	NA	NA	NA	NA	ND	0.000198	ND	0.00019	ND	0.000188	ND	0.000197	ND	0.000177	ND	0.000198						
Perfluorooctanesulfonamide (PFOSA)	NA	NA	NA	NA	NA	NA	ND	0.000198	ND	0.00019	ND	0.000188	ND	0.000197	ND	0.000177	ND	0.000198						
N-Ethyl Perfluorooctanesulfonamideacetocetic Acid	NA	NA	NA	NA	NA	NA	ND	0.000198	ND	0.00019	ND	0.000188	ND	0.000197	ND	0.000177	ND	0.000198						
Perfluorododecanoic Acid (PFDoA)	NA	NA	NA	NA	NA	NA	ND	0.000198	ND	0.00019	ND	0.000188	ND	0.000197	ND	0.000177	ND	0.000198						
Perfluorotridecanoic Acid (PFTrDA)	NA	NA	NA	NA	NA	NA	ND	0.000198	ND	0.00019	ND	0.000188	ND	0.000197	ND	0.000177	ND	0.000198						
Perfluorotetradecanoic Acid (PFTeDA)	NA	NA	NA	NA	NA	NA	ND	0.000198	ND	0.00019	ND	0.000188	ND	0.000197	ND	0.000177	ND	0.000198						
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	NA	NA	NA	NA	NA	NA	ND	0.000792	ND	0.000758	ND	0.000753	ND	0.000789	ND	0.00071	ND	0.000794						
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	NA	NA	NA	NA	NA	NA	ND	0.000792	ND	0.000758	ND	0.000753	ND	0.000789	ND	0.00071	ND	0.000794						
Perfluorododecane sulfonic Acid (PFDS)	NA	NA	NA	NA	NA	NA	ND	0.000198	ND	0.00019	ND	0.000188	ND	0.000197	ND	0.000177	ND	0.000198						
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid	NA	NA	NA	NA	NA	NA	ND	0.000792	ND	0.000758	ND	0.000753	ND	0.000789	ND	0.00071	ND	0.000794						
11-Chloroicosadecafluoro-3-Oxaundecane-1-Sulfonic Acid	NA	NA	NA	NA	NA	NA	ND	0.000792	ND	0.000758	ND	0.000753	ND	0.000789	ND	0.00071	ND	0.000794						
N-Methyl Perfluorooctane Sulfonamide (NMeFOS)	NA	NA	NA	NA	NA	NA	ND	0.000198	ND	0.00019	ND	0.000188	ND	0.000197	ND	0.000177	ND	0.000198						
N-Ethyl Perfluorooctane Sulfonamide (NEtFOS)	NA	NA	NA	NA	NA	NA	ND	0.000198	ND	0.00019	ND	0.000188	ND	0.000197	ND	0.000177	ND	0.000198						
N-Methyl Perfluorooctanesulfonamide Ethanol (NMeFOS-Et)	NA	NA	NA	NA	NA	NA	ND	0.00198	ND	0.0019	ND	0.00188	ND	0.00197	ND	0.00177	ND	0.00198						
N-Ethyl Perfluorooctanesulfonamide Ethanol (NEtFOS-Et)	NA	NA	NA	NA	NA	NA	ND	0.00198	ND	0.0019	ND	0.00188	ND	0.00197	ND	0.00177	ND	0.00198						
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	NA	NA	NA	NA	NA	NA	ND	0.000396	ND	0.000379	ND	0.000376	ND	0.000394	ND	0.000355	ND	0.000397						
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	NA	NA	NA	NA	NA	NA	ND	0.000396	ND	0.000379	ND	0.000376	ND	0.000394	ND	0.000355	ND	0.000397						
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEE)	NA	NA	NA	NA	NA	NA	ND	0.000396	ND	0.000379	ND	0.000376	ND	0.000394	ND	0.000355	ND	0.000397						
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	NA	NA	NA	NA	NA	NA	ND	0.000396	ND	0.000379	ND	0.000376	ND	0.000394	ND	0.000355	ND	0.000397						
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	NA	NA	NA	NA	NA	NA	ND	0.000989	ND	0.000948	ND	0.000941	ND	0.000986	ND	0.00092	ND	0.000992						
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	NA	NA	NA	NA	NA	NA	ND	0.00495	ND	0.00474	ND	0.0047	ND	0.00493	ND	0.00444	ND	0.00496						
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	NA	NA	NA	NA	NA	NA	ND	0.00495	ND	0.00474	ND	0.0047	ND	0.00493	ND	0.00444	ND	0.00496						

* Comparison is not performed on parameters with non-numeric criteria.

NY-UNRES: New York NYCRR Part 375 New York Unrestricted use Criteria Criteria per 6 NYCRR Part 375 Environmental Remediation
 NY-RESR: New York NYCRR Part 375 Residential Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation
 NY-RESRR: New York NYCRR Part 375 Restricted-Residential Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation
 NY-RESC: New York NYCRR Part 375 Commercial Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation
 NY-RESI: New York NYCRR Part 375 Industrial Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation

TABLE 4

NATIVE SOIL SAMPLING RESULTS
1803 ELMWOOD AVENUE BCP - C915394
CITY OF BUFFALO, NEW YORK



SAMPLE ID:	SB-13-7FT	SB-14-3FT	SB-15-4FT	SB-16-3FT	SB-18-7FT	SB-19-7FT
LAB ID:	L2428514-02	L2428242-15	L2428242-10	L2428242-14	L2428514-10	L2428729-02
COLLECTION DATE:	5/22/2024	5/21/2024	5/21/2024	5/21/2024	5/22/2024	5/23/2024
SAMPLE DEPTH:	7 FT	3 FT	4 FT	3 FT	7 FT	7 FT
SAMPLE MATRIX:	NATIVE SOIL					

ANALYTE	NY-UNRES	NY-RESGW	NY-RESR	NY-RESRR	NY-RESC	NY-RESI	SB-13-7FT						SB-14-3FT						SB-15-4FT						SB-16-3FT						SB-18-7FT						SB-19-7FT					
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Result	Fig	RL	Result	Fig	RL	Result	Fig	RL	Result	Fig	RL	Result	Fig	RL	Result	Fig	RL	Result	Fig	RL	Result	Fig	RL												
VOLATILE ORGANICS BY EPA 5035																																										
Methylene chloride	0.05	0.05	51	100	500	1000	ND		0.0046	ND		0.0053	ND		0.0049	ND		0.0047	ND		0.0062	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
1,1-Dichloroethane	0.27	0.27	19	26	240	480	ND		0.00093	ND		0.0011	ND		0.00098	ND		0.00095	ND		0.0012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Chloroform	0.37	0.37	10	49	350	700	ND		0.0014	ND		0.0016	ND		0.0015	ND		0.0014	ND		0.0018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Carbon tetrachloride	0.76	0.76	1.4	2.4	22	44	ND		0.00093	ND		0.0011	ND		0.00098	ND		0.00095	ND		0.0012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Tetrachloroethene	1.3	1.3	5.5	19	150	300	ND		0.00046	ND		0.00053	ND		0.00049	ND		0.00047	ND		0.00062	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Chlorobenzene	1.1	1.1	100	100	500	1000	ND		0.00046	ND		0.00053	ND		0.00049	ND		0.00047	ND		0.00062	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
1,2-Dichloroethane	0.02	0.02	2.3	3.1	30	60	ND		0.00093	ND		0.0011	ND		0.00098	ND		0.00095	ND		0.0012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
1,1,1-Trichloroethane	0.68	0.68	100	100	500	1000	ND		0.00046	ND		0.00053	ND		0.00049	ND		0.00047	ND		0.00062	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Benzene	0.06	0.06	2.9	4.8	44	89	ND		0.00046	ND		0.00053	ND		0.00049	ND		0.00047	ND		0.00062	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Toluene	0.7	0.7	100	100	500	1000	ND		0.00093	ND		0.0011	ND		0.00098	ND		0.00095	ND		0.0012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Ethylbenzene	1	1	30	41	390	780	ND		0.00093	ND		0.0011	ND		0.00098	ND		0.00095	ND		0.0012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Vinyl chloride	0.02	0.02	0.21	0.9	13	27	ND		0.00093	ND		0.0011	ND		0.00098	ND		0.00095	ND		0.0012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
1,1-Dichloroethene	0.33	0.33	100	100	500	1000	ND		0.00093	ND		0.0011	ND		0.00098	ND		0.00095	ND		0.0012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
trans-1,2-Dichloroethene	0.19	0.19	100	100	500	1000	ND		0.0014	ND		0.0016	ND		0.0015	ND		0.0014	ND		0.0018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Trichloroethene	0.47	0.47	10	21	200	400	ND		0.00046	ND		0.00053	ND		0.00049	ND		0.00047	ND		0.00062	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
1,2-Dichlorobenzene	1.1	1.1	100	100	500	1000	ND		0.0018	ND		0.0021	ND		0.002	ND		0.0019	ND		0.0025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
1,3-Dichlorobenzene	2.4	2.4	17	49	280	560	ND		0.0018	ND		0.0021	ND		0.002	ND		0.0019	ND		0.0025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
1,4-Dichlorobenzene	1.8	1.8	9.8	13	130	250	ND		0.0018	ND		0.0021	ND		0.002	ND		0.0019	ND		0.0025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Methyl tert butyl ether	0.93	0.93	62	100	500	1000	ND		0.0018	ND		0.0021	ND		0.002	ND		0.0019	ND		0.0025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
pim-Xylene	NA	NA	NA	NA	NA	NA	ND		0.0018	ND		0.0021	ND		0.002	ND		0.0019	ND		0.0025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
o-Xylene	NA	NA	NA	NA	NA	NA	ND		0.00093	ND		0.0011	ND		0.00098	ND		0.00095	ND		0.0012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
cis-1,2-Dichloroethene	0.25	0.25	59	100	500	1000	ND		0.00093	ND		0.0011	ND		0.00098	ND		0.00095	ND		0.0012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Acetone	0.05	0.05	100	100	500	1000	ND		0.0093	ND		0.011	ND		0.0098	0.0046	J	0.0095	ND		0.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
2-Butanone	0.12	0.12	100	100	500	1000	ND		0.0093	ND		0.011	ND		0.0098	ND		0.0095	ND		0.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
n-Butylbenzene	12	12	100	100	500	1000	ND		0.00093	ND		0.0011	ND		0.00098	ND		0.00095	ND		0.0012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
sec-Butylbenzene	11	11	100	100	500	1000	ND		0.00093	ND		0.0011	ND		0.00098	ND		0.00095	ND		0.0012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
tert-Butylbenzene	5.9	5.9	100	100	500	1000	ND		0.0018	ND		0.0021	ND		0.002	ND		0.0019	ND		0.0025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
n-Propylbenzene	3.9	3.9	100	100	500	1000	ND		0.00093	ND		0.0011	ND		0.00098	ND		0.00095	ND		0.0012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
1,3,5-Trimethylbenzene	8.4	8.4	47	52	190	380	ND		0.0018	ND		0.0021	ND		0.002	ND		0.0019	ND		0.0025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
1,2,4-Trimethylbenzene	3.6	3.6	47	52	190	380	ND		0.0018	ND		0.0021	ND		0.002	ND		0.0019	ND		0.0025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
1,4-Dioxane	0.1	0.1	9.8	13	130	250	ND		0.074	ND		0.086	ND		0.078	ND		0.076	ND		0.099	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
SEMIVOLATILE ORGANICS BY GC/MS																																										
Acenaphthene	20	98	100	100	500	1000	ND		0.16	ND		0.17	ND		0.16	ND		0.16	ND		0.15	ND		0.16	ND		0.16	ND		0.16	ND		0.16	ND		0.16						
Hexachlorobenzene	0.33	3.2	0.33	1.2	6	12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12						
Fluoranthene	100	1000	100	100	500	1000	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12						
Naphthalene	12	12	100	100	500	1000	ND		0.2	ND		0.21	ND		0.2	ND		0.2	ND		0.19	ND		0.2	ND		0.19	ND		0.2	ND		0.2	ND		0.2						
Benzo(a)anthracene	1	1	1	1	5.6	11	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12						
Benzo(a)pyrene	1	22	1	1	1	1.1	ND		0.16	ND		0.17	ND		0.16	ND		0.16	ND		0.15	ND		0.16	ND		0.16	ND		0.16	ND		0.16	ND		0.16						
Benzo(b)fluoranthene	1	1.7	1	1	5.6	11	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12						
Benzo(k)fluoranthene	0.8	1.7	1	3.9	56	110	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12						
Chrysene	1	1	1	3.9	56	110	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12						
Acenaphthylene	100	107	100	100	500	1000	ND		0.16	ND		0.17	ND		0.16	ND		0.16	ND		0.15	ND		0.16	ND		0.16	ND		0.16	ND		0.16	ND		0.16						
Anthracene	100	1000	100	100	500	1000	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12	ND		0.12						
Benzo(ghi)perylene	100	1000	100	100	500	1000	ND		0.16	ND		0.17	ND		0.16	ND		0.16	ND		0.15	ND		0.16	ND		0.16	ND		0.16	ND		0.16	ND		0.16						
Fluorene	30	386	100																																							

TABLE 4

NATIVE SOIL SAMPLING RESULTS
 1803 ELMWOOD AVENUE BCP - C915394
 CITY OF BUFFALO, NEW YORK



SAMPLE ID:	SB-13-7FT	SB-14-3FT	SB-15-4FT	SB-16-3FT	SB-18-7FT	SB-19-7FT
LAB ID:	L2428514-02	L2428242-15	L2428242-10	L2428242-14	L2428514-10	L2428729-02
COLLECTION DATE:	5/22/2024	5/21/2024	5/21/2024	5/21/2024	5/22/2024	5/23/2024
SAMPLE DEPTH:	7 FT	3 FT	4 FT	3 FT	7 FT	7 FT
SAMPLE MATRIX:	NATIVE SOIL					

ANALYTE	NY-UNRES	NY-RESGW	NY-RESR	NY-RESRR	NY-RESC	NY-RESI	SB-13-7FT			SB-14-3FT			SB-15-4FT			SB-16-3FT			SB-18-7FT			SB-19-7FT			
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	
CHLORINATED HERBICIDES BY GC																									
2,4,5-TP (Silvex)	3.8	3.8	58	100	500	1000	ND		0.196	-		-	ND		0.202	-		-	-	-	-	-	-	-	-
ORGANOCHLORINE PESTICIDES BY GC																									
Delta-BHC	0.04	0.25	100	100	500	1000	ND		0.00181	-		-	ND		0.0019	-		-	-	-	-	-	-	-	-
Lindane	0.1	0.1	0.28	1.3	9.2	23	ND		0.000755	-		-	ND		0.000792	-		-	-	-	-	-	-	-	-
Alpha-BHC	0.02	0.02	0.097	0.48	3.4	6.8	ND		0.000755	-		-	ND		0.000792	-		-	-	-	-	-	-	-	-
Beta-BHC	0.036	0.09	0.072	0.36	3	14	ND		0.00181	-		-	ND		0.0019	-		-	-	-	-	-	-	-	-
Heptachlor	0.042	0.38	0.42	2.1	15	29	ND		0.000906	-		-	ND		0.00095	-		-	-	-	-	-	-	-	-
Aldrin	0.005	0.19	0.019	0.097	0.68	1.4	ND		0.00181	-		-	ND		0.0019	-		-	-	-	-	-	-	-	-
Endrin	0.014	0.06	2.2	11	89	410	ND		0.000755	-		-	ND		0.000792	-		-	-	-	-	-	-	-	-
Dieldrin	0.005	0.1	0.039	0.2	1.4	2.8	ND		0.00113	-		-	ND		0.00119	-		-	-	-	-	-	-	-	-
4,4'-DDE	0.0033	17	1.8	8.9	62	120	ND		0.00181	-		-	ND		0.0019	-		-	-	-	-	-	-	-	-
4,4'-DDD	0.0033	14	2.6	13	92	180	ND		0.00181	-		-	ND		0.0019	-		-	-	-	-	-	-	-	-
4,4'-DDT	0.0033	136	1.7	7.9	47	94	ND		0.00181	-		-	ND		0.0019	-		-	-	-	-	-	-	-	-
Endosulfan I	2.4	102	4.8	24	200	920	ND		0.00181	-		-	ND		0.0019	-		-	-	-	-	-	-	-	-
Endosulfan II	2.4	102	4.8	24	200	920	ND		0.00181	-		-	ND		0.0019	-		-	-	-	-	-	-	-	-
Endosulfan sulfate	2.4	1000	4.8	24	200	920	ND		0.000755	-		-	ND		0.000792	-		-	-	-	-	-	-	-	-
cis-Chlordane	0.094	2.9	0.91	4.2	24	47	ND		0.00226	-		-	ND		0.00238	-		-	-	-	-	-	-	-	-
POLYCHLORINATED BIPHENYLS BY GC																									
Aroclor 1016	0.1	3.2	1	1	1	25	ND		0.055	ND	0.0603	ND	0.0578	ND	0.0558	ND	0.0558	ND	0.0558	ND	0.0558	ND	0.0578	ND	0.0578
Aroclor 1221	0.1	3.2	1	1	1	25	ND		0.055	ND	0.0603	ND	0.0578	ND	0.0558	ND	0.0558	ND	0.0558	ND	0.0558	ND	0.0578	ND	0.0578
Aroclor 1232	0.1	3.2	1	1	1	25	ND		0.055	ND	0.0603	ND	0.0578	ND	0.0558	ND	0.0558	ND	0.0558	ND	0.0558	ND	0.0578	ND	0.0578
Aroclor 1242	0.1	3.2	1	1	1	25	ND		0.055	ND	0.0603	ND	0.0578	ND	0.0558	ND	0.0558	ND	0.0558	ND	0.0558	ND	0.0578	ND	0.0578
Aroclor 1248	0.1	3.2	1	1	1	25	ND		0.055	ND	0.0603	ND	0.0578	ND	0.0558	ND	0.0558	ND	0.0558	ND	0.0558	ND	0.0578	ND	0.0578
Aroclor 1254	0.1	3.2	1	1	1	25	ND		0.055	ND	0.0603	ND	0.0578	ND	0.0558	ND	0.0558	ND	0.0558	ND	0.0558	ND	0.0578	ND	0.0578
Aroclor 1260	0.1	3.2	1	1	1	25	ND		0.055	ND	0.0603	ND	0.0578	ND	0.0558	ND	0.0558	ND	0.0558	ND	0.0558	ND	0.0578	ND	0.0578
Aroclor 1262	0.1	3.2	1	1	1	25	ND		0.055	ND	0.0603	ND	0.0578	ND	0.0558	ND	0.0558	ND	0.0558	ND	0.0558	ND	0.0578	ND	0.0578
Aroclor 1268	0.1	3.2	1	1	1	25	ND		0.055	ND	0.0603	ND	0.0578	ND	0.0558	ND	0.0558	ND	0.0558	ND	0.0558	ND	0.0578	ND	0.0578
PCBs, Total	0.1	3.2	1	1	1	25	ND		0.055	ND	0.0603	ND	0.0578	ND	0.0558	ND	0.0558	ND	0.0558	ND	0.0558	ND	0.0578	ND	0.0578
TOTAL METALS																									
Arsenic, Total	13	16	16	16	16	16	4.56		0.899	4.92	1.01	2.95	0.975	2.7	0.949	4.72	0.904	3.68	0.914						
Barium, Total	350	820	350	400	400	10000	106		0.899	194	1.01	188	0.975	91	0.949	80.8	0.904	110	0.914						
Beryllium, Total	7.2	47	14	72	590	2700	0.466		0.45	0.791	0.507	0.65	0.487	0.577	0.475	0.43	J	0.452	0.603	0.457					
Cadmium, Total	2.5	7.5	2.5	4.3	9.3	60	0.171	J	0.899	0.276	J	1.01	0.287	J	0.975	0.313	J	0.949	0.186	J	0.904	0.137	J	0.914	
Chromium, Total	NA	NA	NA	NA	NA	NA	20.1		0.899	22.9	1.01	19.9	0.975	19	0.949	18.9	0.904	18.7	0.914						
Copper, Total	50	1720	270	270	270	10000	21.8		0.899	25.1	1.01	21.6	0.975	19.9	0.949	23.3	0.904	20.8	0.914						
Lead, Total	63	450	400	400	1000	3900	11.9		4.5	11.8	5.07	12.4	4.87	11.4	4.75	12.2	4.52	11	4.57						
Manganese, Total	1600	2000	2000	2000	10000	10000	430		0.899	475	1.01	607	0.975	562	0.949	374	0.904	471	0.914						
Mercury, Total	0.18	0.73	0.81	0.81	2.8	5.7	ND		0.075	ND	0.096	ND	0.094	ND	0.093	ND	0.075	ND	0.075	0.075					
Nickel, Total	30	130	140	310	310	10000	28.9		2.25	36.2	2.54	33.8	2.44	30	2.37	25.3	2.26	23.7	2.29						
Selenium, Total	3.9	4	36	180	1500	6800	ND		1.8	0.441	J	2.03	ND	1.95	0.351	J	1.9	ND	1.81	ND	1.83				
Silver, Total	2	8.3	36	180	1500	6800	ND		0.45	ND	0.507	ND	0.487	ND	0.475	ND	0.452	ND	0.457						
Zinc, Total	109	2480	2200	10000	10000	10000	68.6		4.5	66.9	5.07	62.5	4.87	62.8	4.75	78.8	4.52	63.6	4.57						
GENERAL CHEMISTRY																									
Chromium, Trivalent	30	NA	36	180	1500	6800	20.1		0.951	22.9	1.02	19.9	0.991	19	0.959	18.9	0.954	18.7	0.942						
Solids, Total	NA	NA	NA	NA	NA	NA	84.1		0.1	78.1	0.1	80.7	0.1	83.4	0.1	83.9	0.1	84.9	0.1						
Cyanide, Total	27	40	27	27	27	10000	ND		1.1	ND	1.2	ND	1.2	ND	1.2	ND	1.2	ND	1.1						
Chromium, Hexavalent	1	800	22	110	400	800	ND		0.951	ND	1.02	ND	0.991	ND	0.959	ND	0.954	ND	0.942						

TABLE 4

NATIVE SOIL SAMPLING RESULTS
1803 ELMWOOD AVENUE BCP - C915394
CITY OF BUFFALO, NEW YORK



SAMPLE ID:	SB-13-7FT	SB-14-3FT	SB-15-4FT	SB-16-3FT	SB-18-7FT	SB-19-7FT
LAB ID:	L2428514-02	L2428242-15	L2428242-10	L2428242-14	L2428514-10	L2428729-02
COLLECTION DATE:	5/22/2024	5/21/2024	5/21/2024	5/21/2024	5/22/2024	5/23/2024
SAMPLE DEPTH:	7 FT	3 FT	4 FT	3 FT	7 FT	7 FT
SAMPLE MATRIX:	NATIVE SOIL					

ANALYTE	NY-UNRES	NY-RESGW	NY-RESR	NY-RESRR	NY-RESC	NY-RESI																				
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Result	Fig	RL																	
PERFLUORINATED ALKYL ACIDS BY EPA 1633																										
Perfluorobutanoic Acid (PFBA)	NA	NA	NA	NA	NA	NA	ND		0.000726	ND		0.00079	ND		0.000793	ND		0.000793	ND		0.000754	ND		0.000761		
Perfluoropentanoic Acid (PFPeA)	NA	NA	NA	NA	NA	NA	ND		0.000363	ND		0.000395	ND		0.000396	ND		0.000396	ND		0.000377	ND		0.00038		
Perfluorobutanesulfonic Acid (PFBS)	NA	NA	NA	NA	NA	NA	ND		0.000182	ND		0.000198	ND		0.000198	ND		0.000198	ND		0.000188	ND		0.00019		
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:)	NA	NA	NA	NA	NA	NA	ND		0.000726	ND		0.00079	ND		0.000793	ND		0.000793	ND		0.000754	ND		0.000761		
Perfluorohexanoic Acid (PFHxA)	NA	NA	NA	NA	NA	NA	ND		0.000182	ND		0.000198	ND		0.000198	ND		0.000198	ND		0.000188	ND		0.00019		
Perfluoropentanesulfonic Acid (PFPeS)	NA	NA	NA	NA	NA	NA	ND		0.000182	ND		0.000198	ND		0.000198	ND		0.000198	ND		0.000188	ND		0.00019		
Perfluoroheptanoic Acid (PFHpA)	NA	NA	NA	NA	NA	NA	ND		0.000182	ND		0.000198	ND		0.000198	ND		0.000198	ND		0.000188	ND		0.00019		
Perfluorohexanesulfonic Acid (PFHxS)	NA	NA	NA	NA	NA	NA	ND		0.000182	ND		0.000198	ND		0.000198	ND		0.000198	ND		0.000188	ND		0.00019		
Perfluorooctanoic Acid (PFOA)	0.00066	NA	0.0066	0.033	0.5	0.6	ND		0.000182	ND		0.000198	ND		0.000198	ND		0.000198	ND		0.000188	ND		0.00019		
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2)	NA	NA	NA	NA	NA	NA	ND		0.000726	ND		0.00079	ND		0.000793	ND		0.000793	ND		0.000754	ND		0.000761		
Perfluoroheptanesulfonic Acid (PFHpS)	NA	NA	NA	NA	NA	NA	ND		0.000182	ND		0.000198	ND		0.000198	ND		0.000198	ND		0.000188	ND		0.00019		
Perfluorononanoic Acid (PFNA)	NA	NA	NA	NA	NA	NA	ND		0.000182	ND		0.000198	ND		0.000198	ND		0.000198	ND		0.000188	ND		0.00019		
Perfluorooctanesulfonic Acid (PFOS)	0.00088	NA	0.0088	0.044	0.44	0.44	ND		0.000182	ND		0.000198	ND		0.000198	ND		0.000198	ND		0.000188	ND		0.00019		
Perfluorodecanoic Acid (PFDA)	NA	NA	NA	NA	NA	NA	ND		0.000182	ND		0.000198	ND		0.000198	ND		0.000198	ND		0.000188	ND		0.00019		
1H,1H,2H,2H-Perfluorodecane sulfonic Acid (8:)	NA	NA	NA	NA	NA	NA	ND		0.000726	ND		0.00079	ND		0.000793	ND		0.000793	ND		0.000754	ND		0.000761		
Perfluorononanesulfonic Acid (PFNS)	NA	NA	NA	NA	NA	NA	ND		0.000182	ND		0.000198	ND		0.000198	ND		0.000198	ND		0.000188	ND		0.00019		
N-Methyl Perfluorooctanesulfonamidoacetic Ac	NA	NA	NA	NA	NA	NA	ND		0.000182	ND		0.000198	ND		0.000198	ND		0.000198	ND		0.000188	ND		0.00019		
Perfluoroundecanoic Acid (PFUnA)	NA	NA	NA	NA	NA	NA	ND		0.000182	ND		0.000198	ND		0.000198	ND		0.000198	ND		0.000188	ND		0.00019		
Perfluorodecane sulfonic Acid (PFDS)	NA	NA	NA	NA	NA	NA	ND		0.000182	ND		0.000198	ND		0.000198	ND		0.000198	ND		0.000188	ND		0.00019		
Perfluorooctanesulfonamide (PFOSA)	NA	NA	NA	NA	NA	NA	ND		0.000182	ND		0.000198	ND		0.000198	ND		0.000198	ND		0.000188	ND		0.00019		
N-Ethyl Perfluorooctanesulfonamidoacetic Acid	NA	NA	NA	NA	NA	NA	ND		0.000182	ND		0.000198	ND		0.000198	ND		0.000198	ND		0.000188	ND		0.00019		
Perfluorododecanoic Acid (PFDoA)	NA	NA	NA	NA	NA	NA	ND		0.000182	ND		0.000198	ND		0.000198	ND		0.000198	ND		0.000188	ND		0.00019		
Perfluorotridecanoic Acid (PFTrDA)	NA	NA	NA	NA	NA	NA	ND		0.000182	ND		0.000198	ND		0.000198	ND		0.000198	ND		0.000188	ND		0.00019		
Perfluorotetradecanoic Acid (PFTeDA)	NA	NA	NA	NA	NA	NA	ND		0.000182	ND		0.000198	ND		0.000198	ND		0.000198	ND		0.000188	ND		0.00019		
Hexafluoropropylene Oxide Dimer Acid (HFPO-)	NA	NA	NA	NA	NA	NA	ND		0.000726	ND		0.00079	ND		0.000793	ND		0.000793	ND		0.000754	ND		0.000761		
4,8-Dioxo-3h-Perfluorononanoic Acid (ADONA)	NA	NA	NA	NA	NA	NA	ND		0.000726	ND		0.00079	ND		0.000793	ND		0.000793	ND		0.000754	ND		0.000761		
Perfluorododecane sulfonic Acid (PFDoS)	NA	NA	NA	NA	NA	NA	ND		0.000182	ND		0.000198	ND		0.000198	ND		0.000198	ND		0.000188	ND		0.00019		
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic	NA	NA	NA	NA	NA	NA	ND		0.000726	ND		0.00079	ND		0.000793	ND		0.000793	ND		0.000754	ND		0.000761		
11-Chloroicosadecafluoro-3-Oxaundecane-1-Sulfo	NA	NA	NA	NA	NA	NA	ND		0.000726	ND		0.00079	ND		0.000793	ND		0.000793	ND		0.000754	ND		0.000761		
N-Methyl Perfluorooctane Sulfonamide (NMeFOS)	NA	NA	NA	NA	NA	NA	ND		0.000182	ND		0.000198	ND		0.000198	ND		0.000198	ND		0.000188	ND		0.00019		
N-Ethyl Perfluorooctane Sulfonamide (NEtFOS)	NA	NA	NA	NA	NA	NA	ND		0.000182	ND		0.000198	ND		0.000198	ND		0.000198	ND		0.000188	ND		0.00019		
N-Methyl Perfluorooctanesulfonamido Ethanol (N	NA	NA	NA	NA	NA	NA	ND		0.00182	ND		0.00198	ND		0.00198	ND		0.00198	ND		0.00188	ND		0.0019		
N-Ethyl Perfluorooctanesulfonamido Ethanol (N	NA	NA	NA	NA	NA	NA	ND		0.00182	ND		0.00198	ND		0.00198	ND		0.00198	ND		0.00188	ND		0.0019		
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	NA	NA	NA	NA	NA	NA	ND		0.000363	ND		0.000395	ND		0.000396	ND		0.000396	ND		0.000377	ND		0.00038		
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	NA	NA	NA	NA	NA	NA	ND		0.000363	ND		0.000395	ND		0.000396	ND		0.000396	ND		0.000377	ND		0.00038		
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEE)	NA	NA	NA	NA	NA	NA	ND		0.000363	ND		0.000395	ND		0.000396	ND		0.000396	ND		0.000377	ND		0.00038		
Nonafluoro-3,6-Dioxahexanoic Acid (NFDHA)	NA	NA	NA	NA	NA	NA	ND		0.000363	ND		0.000395	ND		0.000396	ND		0.000396	ND		0.000377	ND		0.00038		
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	NA	NA	NA	NA	NA	NA	ND		0.000988	ND		0.000991	ND		0.000991	ND		0.000991	ND		0.000943	ND		0.000951		
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	NA	NA	NA	NA	NA	NA	ND		0.00454	ND		0.00494	ND		0.00496	ND		0.00496	ND		0.00471	ND		0.00476		
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	NA	NA	NA	NA	NA	NA	ND		0.00454	ND		0.00494	ND		0.00496	ND		0.00496	ND		0.00471	ND		0.00476		

* Comparison is not performed on parameters with non-numeric criteria.

NY-UNRES: New York NYCRR Part 375 New York Unrestricted use Criteria Criteria per 6 NYCRR Part 375 Environmental Remediation
 NY-RESR: New York NYCRR Part 375 Residential Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation
 NY-RESRR: New York NYCRR Part 375 Restricted-Residential Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation
 NY-RESC: New York NYCRR Part 375 Commercial Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation
 NY-RESI: New York NYCRR Part 375 Industrial Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation

ADDITIONAL RI SOIL SAMPLING RESULTS
1803 ELMWOOD AVENUE BCP - C915394
CITY OF BUFFALO, NEW YORK



ANALYTE	SAMPLE ID:					SB-05A-N1-5FT			SB-05A-N1-6FT			SB-05A-N1-8FT			SB-05A-N2-2FT			SB-05A-N2-7FT			
	COLLECTION DATE:					10/9/2025			10/9/2025			10/9/2025			10/9/2025			10/9/2025			
	SAMPLE DEPTH:					5 FT			6 FT			8 FT			2 FT			7 FT			
	SAMPLE MATRIX:					HFM			NATIVE SOIL			NATIVE SOIL			HFM			NATIVE SOIL			
	NY-UNRES	NY-RESR	NY-RESR	NY-RESR	NY-RESR	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	
VOLATILE ORGANICS BY GC/MS																					
Methylene chloride	0.05	51	100	500	1000	ND		0.0066	ND		0.006	ND	0.0057	ND	0.0065	ND	0.0052	ND		0.0052	
1,1-Dichloroethane	0.27	19	26	240	480	ND		0.0013	ND		0.0012	ND	0.0011	ND	0.0013	ND	0.001	ND		0.001	
Chloroform	0.37	10	49	350	700	ND		0.002	ND		0.0018	ND	0.0017	ND	0.002	ND	0.0016	ND		0.0016	
Carbon tetrachloride	0.76	1.4	2.4	22	44	ND		0.0013	ND		0.0012	ND	0.0011	ND	0.0012	ND	0.001	ND		0.001	
Tetrachloroethane	1.3	5.5	19	150	300	ND		0.00066	ND		0.0006	ND	0.00057	ND	0.00055	ND	0.00052	ND		0.00052	
Chlorobenzene	1.1	100	100	500	1000	ND		0.00066	ND		0.0006	ND	0.00057	ND	0.00055	ND	0.00052	ND		0.00052	
1,2-Dichloroethane	0.02	2.3	3.1	30	60	ND		0.0013	ND		0.0012	ND	0.0011	ND	0.0013	ND	0.001	ND		0.001	
1,1,1-Trichloroethane	0.68	100	100	500	1000	ND		0.00066	ND		0.0006	ND	0.00057	ND	0.00055	ND	0.00052	ND		0.00052	
Benzene	0.06	2.9	4.8	44	89	0.00036	J	0.00066	ND		0.0006	ND	0.00057	0.0005	J	0.00065	ND	0.00052	ND		0.00052
Toluene	0.7	100	100	500	1000	ND		0.0013	ND		0.0012	ND	0.0011	ND	0.0012	ND	0.001	ND		0.001	
Ethylbenzene	1	30	41	390	780	ND		0.0013	ND		0.0012	ND	0.0011	ND	0.0013	ND	0.001	ND		0.001	
Vinyl chloride	0.02	0.21	0.9	13	27	ND		0.0013	0.0064		0.0012	ND	0.0011	0.0025	0.0013	ND	0.001	ND		0.001	
1,1-Dichloroethene	0.33	100	100	500	1000	ND		0.0013	ND		0.0012	ND	0.0011	ND	0.0013	ND	0.001	ND		0.001	
trans-1,2-Dichloroethene	0.19	100	100	500	1000	ND		0.002	0.00047	J	0.0018	ND	0.0017	ND	0.002	ND	0.0016	ND		0.0016	
Trichloroethene	0.47	10	21	200	400	0.00066		0.00066	0.00081		0.0006	ND	0.00057	0.00039	J	0.00065	ND	0.00052	ND		0.00052
1,2-Dichlorobenzene	1.1	100	100	500	1000	ND		0.00066	ND		0.0006	ND	0.00057	ND	0.00055	ND	0.00052	ND		0.00052	
1,3-Dichlorobenzene	2.4	17	48	280	560	ND		0.0026	ND		0.0024	ND	0.0023	ND	0.0026	ND	0.0021	ND		0.0021	
1,4-Dichlorobenzene	1.8	9.8	13	130	250	ND		0.0026	ND		0.0024	ND	0.0023	ND	0.0026	ND	0.0021	ND		0.0021	
Methyl tert butyl ether	0.93	62	100	500	1000	ND		0.0026	ND		0.0024	ND	0.0023	ND	0.0026	ND	0.0021	ND		0.0021	
p/m-Xylene	NA	NA	NA	NA	NA	ND		0.0026	ND		0.0024	ND	0.0023	ND	0.0026	ND	0.0021	ND		0.0021	
o-Xylene	NA	NA	NA	NA	NA	ND		0.0013	ND		0.0012	ND	0.0011	ND	0.0013	ND	0.001	ND		0.001	
cis-1,2-Dichloroethene	0.25	59	100	500	1000	0.00049	J	0.0013	0.0044		0.0012	0.0019	0.0011	0.00074	J	0.0013	0.00052	J		0.001	
Acetone	0.05	100	100	500	1000	0.043		0.013	0.026		0.012	0.0029	J	0.011	0.013	0.013	0.001			0.001	
2-Butanone	0.12	100	100	500	1000	0.0057	J	0.013	0.023		0.012	ND	0.011	0.032	0.013	ND	0.01			0.01	
n-Butylbenzene	12	100	100	500	1000	ND		0.0013	ND		0.0012	ND	0.0011	ND	0.0013	ND	0.001	ND		0.001	
sec-Butylbenzene	11	100	100	500	1000	ND		0.0013	ND		0.0012	ND	0.0011	ND	0.0013	ND	0.001	ND		0.001	
tert-Butylbenzene	5.9	100	100	500	1000	ND		0.0026	ND		0.0024	ND	0.0023	ND	0.0026	ND	0.0021	ND		0.0021	
n-Propylbenzene	3.9	100	100	500	1000	ND		0.0013	ND		0.0012	ND	0.0011	ND	0.0013	ND	0.001	ND		0.001	
1,3,5-Trimethylbenzene	8.4	47	52	190	380	ND		0.0026	ND		0.0024	ND	0.0023	ND	0.0026	ND	0.0021	ND		0.0021	
1,2,4-Trimethylbenzene	3.6	47	52	190	380	ND		0.0026	ND		0.0024	ND	0.0023	ND	0.0026	ND	0.0021	ND		0.0021	
SEMIVOLATILE ORGANICS BY GC/MS																					
Acenaphthene	20	100	100	500	1000	ND		0.18	ND		0.16	ND	0.16	0.044	J	0.17	ND	0.15		0.15	
Hexachlorobenzene	0.33	0.33	1.2	6	12	ND		0.14	ND		0.12	ND	0.12	ND	0.13	ND	0.11	ND		0.11	
Fluoranthene	100	100	100	500	1000	ND		0.14	ND		0.12	ND	0.12	0.28		0.13	0.071	J		0.11	
Naphthalene	12	100	100	500	1000	ND		0.23	ND		0.2	ND	0.19	0.12	J	0.21	ND	0.19		0.19	
Benzo[a]anthracene	1	1	1	5.6	11	ND		0.14	ND		0.12	ND	0.12	0.17		0.13	0.05	J		0.11	
Benzo[a]pyrene	1	1	1	1	1.1	ND		0.18	ND		0.16	ND	0.16	0.096	J	0.17	ND	0.15		0.15	
Benzo[b]fluoranthene	1	1	1	5.6	11	ND		0.14	ND		0.12	ND	0.12	0.16		0.13	0.053	J		0.11	
Benzo[k]fluoranthene	0.8	1	3.9	56	110	ND		0.14	ND		0.12	ND	0.12	0.048	J	0.13	ND	0.11		0.11	
Chrysene	1	1	3.9	56	110	ND		0.14	ND		0.12	ND	0.12	0.19		0.13	0.054	J		0.11	
Acenaphthylene	100	100	100	500	1000	ND		0.18	ND		0.16	ND	0.16	ND		0.17	ND	0.15		0.15	
Anthracene	100	100	100	500	1000	ND		0.14	ND		0.12	ND	0.12	0.092	J	0.13	ND	0.11		0.11	
Benzo[ghi]perylene	100	100	100	500	1000	ND		0.18	ND		0.16	ND	0.16	0.039	J	0.17	ND	0.15		0.15	
Fluorene	30	100	100	500	1000	ND		0.23	ND		0.2	ND	0.19	0.074	J	0.21	ND	0.19		0.19	
Phenanthrene	100	100	100	500	1000	ND		0.14	0.042	J	0.12	ND	0.12	0.3		0.13	0.065	J		0.11	
Dibenz[a,h]anthracene	0.33	0.33	0.33	0.56	1.1	ND		0.14	ND		0.12	ND	0.12	ND		0.13	ND	0.11		0.11	
Indeno[1,2,3-cd]pyrene	0.5	0.5	0.5	0.56	1.1	ND		0.18	ND		0.16	ND	0.16	0.037	J	0.17	ND	0.15		0.15	
Pyrene	100	100	100	500	1000	ND		0.14	ND		0.12	ND	0.12	0.22		0.13	0.059	J		0.11	
Dibenzofuran	7	14	59	350	1000	ND		0.23	ND		0.2	ND	0.19	0.031	J	0.21	ND	0.19		0.19	
Peritachlorophenol	0.8	2.4	6.7	6.7	55	ND		0.18	ND		0.16	ND	0.16	ND		0.17	ND	0.15		0.15	
Phenol	0.33	100	100	500	1000	ND		0.23	ND		0.2	ND	0.19	ND		0.21	ND	0.19		0.19	
2-Methylphenol	0.33	100	100	500	1000	ND		0.23	ND		0.2	ND	0.19	ND		0.21	ND	0.19		0.19	
3-Methylphenol/4-Methylphenol	0.33	34	100	500	1000	ND		0.33	0.063	J	0.29	ND	0.28	ND		0.31	ND	0.28		0.28	
1,4-Dioxane	0.1	9.8	13	130	250	ND		0.034	ND		0.03	ND	0.029	ND		0.032	ND	0.029		0.029	
TOTAL METALS																					
Arsenic, Total	13	16	16	16	16	2.39		1.07	2.9		0.948	6.02	0.896	4.3	0.995	4.72	0.939			0.939	
Barium, Total	350	350	400	400	10000	10.6		1.07	65.4		0.948	85.6	0.896	47.1	0.995	110	0.939			0.939	
Beryllium, Total	7.2	14	72	590	2700	0.068	J	0.533	0.477		0.474	0.537	0.448	0.419	J	0.497	0.62	0.469		0.469	
Calcium, Total	2.5	2.5	4.3	9.3	60	ND		1.07	ND		0.948	ND	0.896	ND		0.995	ND	0.939		0.939	
Chromium, Total	NA	NA	NA	NA	NA	1.71		1.07	12.8		0.948	16.9	0.896	11.6	0.995	19	0.939			0.939	
Copper, Total	50	270	270	270	10000	2.24		1.07	14		0.948	25.7	0.896	6.9	0.995	25.3	0.939			0.939	
Lead, Total	63	400	400	1000	3900	20.4		5.33	7.32		4.74	12	4.48	19.2	4.97	14.5	4.69			4.69	
Manganese, Total	1600	2000	2000	10000	10000	149		1.07	354		0.948	464	0.896	338	0.995						

ADDITIONAL RI SOIL SAMPLING RESULTS
1803 ELMWOOD AVENUE BCP - C915394
CITY OF BUFFALO, NEW YORK



ANALYTE	SAMPLE ID:					SB-05A-S1-SFT			SB-05A-S1-6FT			SB-05A-S1-8FT			SB-05A-S2-SFT			SB-05A-S2-7FT			
	COLLECTION DATE:					10/9/2025			10/9/2025			10/9/2025			10/10/2025			10/10/2025			
	SAMPLE DEPTH:					5 FT			6 FT			8 FT			5 FT			7 FT			
	SAMPLE MATRIX:					HFM			NATIVE SOIL			NATIVE SOIL			HFM			NATIVE SOIL			
	NY-UNRES	NY-RESR	NY-RESR	NY-RESR	NY-RESR	Result	Flg	RL													
VOLATILE ORGANICS BY GC/MS																					
Methylene chloride	0.05	51	100	500	1000	ND		0.005	ND		0.0067	ND		0.0046	ND		0.0061	ND		0.0075	
1,1-Dichloroethane	0.27	19	26	240	480	ND		0.0099	ND		0.0013	ND		0.0092	ND		0.0012	ND		0.0015	
Chloroform	0.37	10	49	350	700	ND		0.0015	ND		0.0062	ND		0.0014	ND		0.0018	ND		0.0023	
Carbon tetrachloride	0.76	1.4	2.4	22	44	ND		0.0099	ND		0.0013	ND		0.0092	ND		0.0012	ND		0.0015	
Tetrachloroethane	1.3	5.5	19	150	300	ND		0.0005	ND		0.0067	ND		0.0046	ND		0.0061	ND		0.0075	
Chlorobenzene	1.1	100	100	500	1000	ND		0.0005	ND		0.0067	ND		0.0046	ND		0.0061	ND		0.0075	
1,2-Dichloroethane	0.02	2.3	3.1	30	60	ND		0.0099	ND		0.0013	ND		0.0092	ND		0.0012	ND		0.0015	
1,1,1-Trichloroethane	0.68	100	100	500	1000	ND		0.0005	ND		0.0067	ND		0.0046	ND		0.0061	ND		0.0075	
Benzene	0.06	2.9	4.8	44	89	ND		0.0005	ND		0.0067	ND		0.0046	ND		0.0061	ND		0.0075	
Toluene	0.7	100	100	500	1000	ND		0.0099	ND		0.0013	ND		0.0092	ND		0.0012	ND		0.0015	
Ethylbenzene	1	30	41	390	780	ND		0.0099	ND		0.0013	ND		0.0092	ND		0.0012	ND		0.0015	
Vinyl chloride	0.02	0.21	0.9	13	27	ND		0.0099	ND		0.0013	ND		0.0092	ND		0.0012	ND		0.0015	
1,1-Dichloroethene	0.33	100	100	500	1000	ND		0.0099	ND		0.0013	ND		0.0092	ND		0.0012	ND		0.0015	
trans-1,2-Dichloroethene	0.19	100	100	500	1000	ND		0.0015	ND		0.002	ND		0.0014	ND		0.0018	ND		0.0023	
Trichloroethene	0.47	10	21	200	400	0.016		0.0005	0.002		0.0067	ND		0.0046	0.014		0.0061	0.0025		0.0075	
1,2-Dichlorobenzene	1.1	100	100	500	1000	ND		0.002	ND		0.0027	ND		0.0018	ND		0.0024	ND		0.003	
1,3-Dichlorobenzene	2.4	17	48	280	560	ND		0.002	ND		0.0027	ND		0.0018	ND		0.0024	ND		0.003	
1,4-Dichlorobenzene	1.8	9.8	13	130	250	ND		0.002	ND		0.0027	ND		0.0018	ND		0.0024	ND		0.003	
Methyl tert butyl ether	0.93	62	100	500	1000	ND		0.002	ND		0.0027	ND		0.0018	ND		0.0024	ND		0.003	
p/m-Xylene	NA	NA	NA	NA	NA	NA		0.002	ND		0.0027	ND		0.0018	ND		0.0024	ND		0.003	
o-Xylene	NA	NA	NA	NA	NA	ND		0.0099	ND		0.0013	ND		0.0092	ND		0.0012	ND		0.0015	
cis-1,2-Dichloroethene	0.25	59	100	500	1000	ND		0.0099	NA		0.0013	ND		0.0092	ND		0.0012	ND		0.0015	
Acetone	0.05	100	100	500	1000	ND		0.0099	0.056		0.0092	0.0059		0.0092	ND		0.0012	0.03		0.015	
2-Butanone	0.12	100	100	500	1000	ND		0.0099	0.006		0.013	ND		0.0092	ND		0.012	0.0051		0.015	
n-Butylbenzene	12	100	100	500	1000	ND		0.0099	ND		0.0013	ND		0.0092	ND		0.0012	ND		0.0015	
sec-Butylbenzene	11	100	100	500	1000	ND		0.0099	ND		0.0013	ND		0.0092	ND		0.0012	ND		0.0015	
tert-Butylbenzene	5.9	100	100	500	1000	ND		0.002	ND		0.0027	ND		0.0018	ND		0.0024	ND		0.003	
n-Propylbenzene	3.9	100	100	500	1000	ND		0.0099	ND		0.0013	ND		0.0092	ND		0.0012	ND		0.0015	
1,3,5-Trimethylbenzene	8.4	47	52	190	380	ND		0.002	ND		0.0027	ND		0.0018	ND		0.0024	ND		0.003	
1,2,4-Trimethylbenzene	3.6	47	52	190	380	ND		0.002	ND		0.0027	ND		0.0018	ND		0.0024	ND		0.003	
SEMIVOLATILE ORGANICS BY GC/MS																					
Acenaphthene	20	100	100	500	1000	ND		0.14	ND		0.19	ND		0.15	ND		0.14	ND		0.19	
Hexachlorobenzene	0.33	0.33	1.2	6	12	ND		0.1	ND		0.14	ND		0.11	ND		0.1	ND		0.14	
Fluoranthene	100	100	100	500	1000	ND		0.1	ND		0.14	ND		0.11	ND		0.1	ND		0.14	
Naphthalene	12	100	100	500	1000	ND		0.18	ND		0.24	ND		0.19	ND		0.18	ND		0.24	
Benzo(a)anthracene	1	1	1	5.6	11	ND		0.1	ND		0.14	ND		0.11	ND		0.1	ND		0.14	
Benzo(a)pyrene	1	1	1	1	1.1	ND		0.14	ND		0.19	ND		0.15	ND		0.14	ND		0.19	
Benzo(b)fluoranthene	1	1	1	5.6	11	ND		0.1	ND		0.14	ND		0.11	ND		0.1	ND		0.14	
Benzo(k)fluoranthene	0.8	1	3.9	56	110	ND		0.1	ND		0.14	ND		0.11	ND		0.1	ND		0.14	
Chrysene	1	1	3.9	56	110	ND		0.1	ND		0.14	ND		0.11	ND		0.1	ND		0.14	
Acenaphthylene	100	100	100	500	1000	ND		0.14	ND		0.19	ND		0.15	ND		0.14	ND		0.19	
Anthracene	100	100	100	500	1000	ND		0.1	ND		0.14	ND		0.11	ND		0.1	ND		0.14	
Benzo(g,h)perylene	100	100	100	500	1000	ND		0.14	ND		0.19	ND		0.15	ND		0.14	ND		0.19	
Fluorene	30	100	100	500	1000	ND		0.18	ND		0.24	ND		0.19	ND		0.18	ND		0.24	
Phenanthrene	100	100	100	500	1000	0.04		0.1	ND		0.14	ND		0.11	ND		0.1	ND		0.14	
Dibenz(a,h)anthracene	0.33	0.33	0.33	0.56	1.1	ND		0.1	ND		0.14	ND		0.11	ND		0.1	ND		0.14	
Indeno(1,2,3-cd)pyrene	0.5	0.5	0.5	5.6	11	ND		0.14	ND		0.19	ND		0.15	ND		0.14	ND		0.19	
Pyrene	100	100	100	500	1000	ND		0.1	ND		0.14	ND		0.11	ND		0.1	ND		0.14	
Dibenzofuran	7	14	59	350	1000	ND		0.18	ND		0.24	ND		0.19	ND		0.18	ND		0.24	
Peritrichlorophenol	0.8	2.4	6.7	6.7	55	ND		0.14	ND		0.19	ND		0.15	ND		0.14	ND		0.19	
Phenol	0.33	100	100	500	1000	ND		0.18	ND		0.24	ND		0.19	ND		0.18	ND		0.24	
2-Methylphenol	0.33	100	100	500	1000	ND		0.18	ND		0.24	ND		0.19	ND		0.18	ND		0.24	
3-Methylphenol/4-Methylphenol	0.33	34	100	500	1000	ND		0.25	ND		0.34	ND		0.28	ND		0.25	ND		0.34	
1,4-Dioxane	0.1	9.8	13	130	250	ND		0.026	ND		0.035	ND		0.029	ND		0.026	ND		0.036	
TOTAL METALS																					
Arsenic, Total	13	16	16	16	16	1.57		0.838	4.53		1.15	4.98		0.908	1.7		0.839	3.19		1.12	
Barium, Total	350	350	400	400	10000	9.69		0.838	54.7		1.15	130		0.908	9.86		0.839	126		1.12	
Beryllium, Total	7.2	14	72	590	2700	0.081		0.419	0.513		0.573	0.58		0.454	0.078		0.42	0.724		0.563	
Cadmium, Total	2.5	2.5	4.3	9.3	60	ND		0.838	ND		1.15	ND		0.908	ND		0.839	ND		1.12	
Chromium, Total	NA	NA	NA	NA	NA	2		0.838	14		1.15	17.2		0.908	2.28		0.839	18.3		1.12	
Copper, Total	50	270	270	270	10000	1.88		0.838	12.9		1.15	23.9		0.908	1.92		0.839	23.4		1.12	
Lead, Total	63	400	400	1000	3900	25.1		4.19	33.6		5.73	10.3		4.54	22.1		4.2	14.5		5.63	
Manganese, Total	1600	2000	2000	10000	10000	182		0.838	299		1.15	489		0.908	160		0.839	1140		1.12	
Mercury, Total	0.18	0.81	0.81	2.8	5.7	ND		0.067	0.125		0.092	ND		0.075	ND		0.082	ND		0.093	
Nickel, Total	30	140	310	310	10000	2.55		2.1	14.3		2.87	24.1		2.27	6.85		2.1	26.2		2.81	
Selenium, Total	3.9	36	160	1500	6800	ND		1.68	ND		2.29	ND		1.82	ND		1.68	ND		2.25	
Silver, Total	2																				

ADDITIONAL RI SOIL SAMPLING RESULTS
1803 ELMWOOD AVENUE BCP - C915394
CITY OF BUFFALO, NEW YORK



ANALYTE	SAMPLE ID:					SB-05A-W1-2.5FT			SB-05A-W1-7FT			SB-07A-6FT			DUP-A		
	COLLECTION DATE:					10/9/2025			10/9/2025			10/10/2025			10/10/2025		
	SAMPLE DEPTH:					2.5 FT			7 FT			6 FT					
	SAMPLE MATRIX:					HFM			NATIVE SOIL			HFM			HFM		
	NY-UNRES	NY-RESR	NY-RESRR	NY-RESR	NY-RESL	Result	Fig	RL	Result	Fig	RL	Result	Fig	RL	Result	Fig	RL
VOLATILE ORGANICS BY GC/MS																	
Methylene chloride	0.05	51	100	500	1000	ND		0.0055	ND		0.0054	ND		0.0048	ND		0.0077
1,1-Dichloroethane	0.27	19	26	240	480	ND		0.0011	ND		0.0011	ND		0.0097	ND		0.0015
Chloroform	0.37	10	49	350	700	ND		0.0016	0.0017	J	0.0016	ND		0.0014	ND		0.0023
Carbon tetrachloride	0.76	1.4	2.4	23	44	ND		0.0011	ND		0.0011	ND		0.0097	ND		0.0015
Tetrachloroethene	1.3	5.5	19	150	300	ND		0.0095	ND		0.0054	ND		0.0048	ND		0.0077
Chlorobenzene	1.1	100	100	500	1000	ND		0.0055	ND		0.0054	ND		0.0048	ND		0.0077
1,2-Dichloroethane	0.02	2.3	3.1	30	60	ND		0.0011	ND		0.0011	ND		0.0097	ND		0.0015
1,1,1-Trichloroethane	0.68	100	100	500	1000	ND		0.0055	ND		0.0054	ND		0.0048	ND		0.0077
Benzene	0.06	2.9	4.8	44	89	ND		0.0055	ND		0.0054	ND		0.0048	ND		0.0077
Toluene	0.7	100	100	500	1000	ND		0.0011	ND		0.0011	ND		0.0097	ND		0.0015
Ethylbenzene	1	30	41	390	780	ND		0.0011	ND		0.0011	ND		0.0097	ND		0.0015
Vinyl chloride	0.02	0.21	0.9	13	27	ND		0.0011	ND		0.0011	ND		0.0097	ND		0.0015
1,1-Dichloroethene	0.33	100	100	500	1000	ND		0.0011	ND		0.0011	ND		0.0097	ND		0.0015
trans-1,2-Dichloroethene	0.19	100	100	500	1000	ND		0.0016	ND		0.0016	ND		0.0014	ND		0.0023
Trichloroethene	0.47	10	21	200	400	0.0015		0.0055	0.013		0.0054	0.021		0.0048	0.051		0.0077
1,2-Dichlorobenzene	1.1	100	100	500	1000	ND		0.0022	ND		0.0022	ND		0.0019	ND		0.0031
1,3-Dichlorobenzene	2.4	17	49	280	560	ND		0.0022	ND		0.0022	ND		0.0019	ND		0.0031
1,4-Dichlorobenzene	1.8	9.8	13	130	250	ND		0.0022	ND		0.0022	ND		0.0019	ND		0.0031
Methyl tert butyl ether	0.93	62	100	500	1000	ND		0.0022	ND		0.0022	ND		0.0019	ND		0.0031
p/m-Xylene	NA	NA	NA	NA	NA	NA		0.0022	ND		0.0022	ND		0.0019	ND		0.0031
o-Xylene	NA	NA	NA	NA	NA	ND		0.0011	ND		0.0011	ND		0.0097	ND		0.0015
cis-1,2-Dichloroethene	0.25	59	100	500	1000	0.0010		0.0011	ND		0.0048	J		0.0097	0.0043		0.0015
Acetone	0.05	100	100	500	1000	0.0058		0.0011	ND		0.011	ND		0.0097	ND		0.015
2-Butanone	0.12	100	100	500	1000	ND		0.011	ND		0.011	ND		0.0097	ND		0.015
n-Butylbenzene	12	100	100	500	1000	ND		0.0011	ND		0.0011	ND		0.0097	ND		0.0015
sec-Butylbenzene	11	100	100	500	1000	ND		0.0011	ND		0.0011	ND		0.0097	ND		0.0015
tert-Butylbenzene	5.9	100	100	500	1000	ND		0.0022	ND		0.0022	ND		0.0019	ND		0.0031
n-Propylbenzene	3.9	100	100	500	1000	ND		0.0011	ND		0.0011	ND		0.0097	ND		0.0015
1,3,5-Trimethylbenzene	8.4	47	52	190	380	ND		0.0022	ND		0.0022	ND		0.0019	ND		0.0031
1,2,4-Trimethylbenzene	3.6	47	52	190	380	ND		0.0022	ND		0.0022	ND		0.0019	ND		0.0031
SEMIVOLATILE ORGANICS BY GC/MS																	
Acenaphthene	20	100	100	500	1000	ND		0.16	0.02	J	0.15	ND		0.17	ND		0.16
Hexachlorobenzene	0.33	0.33	1.2	6	12	ND		0.12	ND		0.11	ND		0.13	ND		0.12
Fluoranthene	100	100	100	500	1000	ND		0.12	0.2		0.11	ND		0.13	ND		0.12
Naphthalene	12	1	1	500	1000	ND		0.2	ND		0.19	ND		0.22	ND		0.21
Benzofluoranthene	1	1	1	5.6	11	ND		0.12	0.1	J	0.11	ND		0.13	ND		0.12
Benzofluorene	1	1	1	1	1.1	ND		0.16	0.076	J	0.15	ND		0.17	ND		0.16
Benzofluoranthene	1	1	1	5.6	11	ND		0.12	0.12		0.11	ND		0.13	ND		0.12
Benzofluoranthene	0.8	1	3.9	56	110	ND		0.12	0.033	J	0.11	ND		0.13	ND		0.12
Chrysene	1	1	3.9	56	110	ND		0.12	0.097	J	0.11	ND		0.13	ND		0.12
Acenaphthylene	100	100	100	500	1000	ND		0.16	ND		0.15	ND		0.17	ND		0.16
Anthracene	100	100	100	500	1000	ND		0.12	0.036	J	0.11	ND		0.13	ND		0.12
Benzofluorene	100	100	100	500	1000	ND		0.16	0.047	J	0.15	ND		0.17	ND		0.16
Fluorene	30	100	100	500	1000	ND		0.2	0.028	J	0.19	ND		0.22	ND		0.21
Phenanthrene	100	100	100	500	1000	ND		0.12	0.21		0.11	ND		0.13	ND		0.12
Dibenzofluoranthene	0.33	0.33	0.33	0.56	1.1	ND		0.12	ND		0.11	ND		0.13	ND		0.12
Indeno(1,2,3-cd)pyrene	0.5	0.5	0.5	0.56	1.1	ND		0.16	0.048	J	0.15	ND		0.17	ND		0.16
Pyrene	100	100	100	500	1000	ND		0.12	0.15		0.11	ND		0.13	ND		0.12
Dibenzofuran	7	14	59	350	1000	ND		0.2	ND		0.19	ND		0.22	ND		0.21
Pentachlorophenol	0.8	2.4	6.7	6.7	55	ND		0.16	ND		0.15	ND		0.17	ND		0.16
Phenol	0.33	100	100	500	1000	ND		0.2	ND		0.19	ND		0.22	ND		0.21
2-Methylphenol	0.33	100	100	500	1000	ND		0.2	ND		0.19	ND		0.22	ND		0.21
3-Methylphenol/4-Methylphenol	0.33	34	100	500	1000	ND		0.29	ND		0.27	ND		0.31	ND		0.3
1,4-Dioxane	0.1	9.8	13	130	250	ND		0.03	ND		0.028	ND		0.032	ND		0.031
TOTAL METALS																	
Arsenic, Total	13	16	16	16	16	3.89		0.944	7.49		0.901	2.24		1.02	1.5		0.995
Barium, Total	350	350	400	400	10000	94.5		0.944	50.5		0.901	18		1.02	12.7		0.995
Beryllium, Total	7.2	14	72	500	2700	0.534		0.472	0.649		0.45	0.131	J	0.511	0.086	J	0.497
Cadmium, Total	2.5	2.5	4.3	9.3	60	ND		0.944	ND		0.901	ND		1.02	ND		0.995
Chromium, Total	NA	NA	NA	NA	NA	15.8		0.944	6.6		0.901	4.11		1.02	2.39		0.995
Copper, Total	50	270	270	270	10000	20.6		0.944	16.1		0.901	2.91		1.02	1.7		0.995
Lead, Total	63	400	400	1000	3900	9.75		4.72	48.9		4.5	20.3		5.11	15.4		4.97
Manganese, Total	1600	2000	2000	10000	10000	474		0.944	691		0.901	184		1.02	124		0.995
Mercury, Total	0.18	0.81	0.81	2.8	5.7	ND		0.086	0.092		0.084	ND		0.102	ND		0.089
Nickel, Total	30	140	310	310	10000	23.5		2.36	8.64		2.25	3.91		2.55	2.43	J	2.49
Selenium, Total	3.9	36	180	1500	6900	ND		1.89	ND		1.8	ND		2.04	ND		1.99
Silver, Total	2	36	180	1500	6800	ND		0.472	ND		0.45	ND		0.511	ND		0.497
Zinc, Total	109	2200	10000	10000	10000	54.1		4.72	67.6		4.5	12.3		5.11	9.9		4.97
Solids, Total	NA	NA	NA	NA	NA	83.4		0.1	87.7		0.1	75.6		0.1	78.3		0.1

NY-RESR: New York NYCRR Part 375 Commercial Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environment
 NY-RESL: New York NYCRR Part 375 Industrial Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environment
 NY-RESRR: New York NYCRR Part 375 Residential Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environment
 NY-RESR: New York NYCRR Part 375 Restricted-Residential Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environment
 NY-UNRES: New York NYCRR Part 375 New York Unrestricted use Criteria per 6 NYCRR Part 375 Environmental Rem

ADDITIONAL RI SOIL SAMPLING RESULTS
1803 ELMWOOD AVENUE BCP - C915394
CITY OF BUFFALO, NEW YORK



ANALYTE	SAMPLE ID:					SB-07A-E1-3FT			SB-07A-E1-7FT			SB-07A-N1-4FT			SB-07A-N1-7FT						
	COLLECTION DATE:					10/10/2025			10/10/2025			10/10/2025			10/10/2025						
	SAMPLE DEPTH:					8 FT			3 FT			7 FT			4 FT			7 FT			
	SAMPLE MATRIX:					NATIVE SOIL			HFM			NATIVE SOIL			HFM			NATIVE SOIL			
	NY-UNRES	NY-RESR	NY-RESR	NY-RESC	NY-RESC	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	
VOLATILE ORGANICS BY GC/MS																					
Methylene chloride	0.05	51	100	500	1000	ND		0.007	ND		0.0072	ND		0.008	ND		0.0068	ND		0.0061	
1,1-Dichloroethane	0.27	19	26	240	480	ND		0.0014	ND		0.0014	ND		0.0016	ND		0.0014	ND		0.0012	
Chloroform	0.37	10	49	350	700	ND		0.0021	ND		0.0022	ND		0.0024	ND		0.002	ND		0.0018	
Carbon tetrachloride	0.76	1.4	2.4	22	44	ND		0.0014	ND		0.0014	ND		0.0016	ND		0.0014	ND		0.0012	
Tetrachloroethane	1.3	5.5	19	150	300	ND		0.0007	ND		0.00072	ND		0.0008	ND		0.00068	ND		0.00061	
Chlorobenzene	1.1	100	100	500	1000	ND		0.0007	ND		0.00072	ND		0.0008	ND		0.00068	ND		0.00061	
1,2-Dichloroethane	0.02	2.3	3.1	30	60	ND		0.0014	ND		0.0014	ND		0.0016	ND		0.0014	ND		0.0012	
1,1,1-Trichloroethane	0.68	100	100	500	1000	ND		0.0007	ND		0.00072	ND		0.0008	ND		0.00068	ND		0.00061	
Benzene	0.06	2.9	4.8	44	89	ND		0.0007	0.00031	J	0.00072	ND		0.0008	ND		0.00068	ND		0.00061	
Toluene	0.7	100	100	500	1000	ND		0.0014	ND		0.0014	ND		0.0016	ND		0.0014	ND		0.0012	
Ethylbenzene	1	30	41	390	780	ND		0.0014	0.00023	J	0.0014	ND		0.0016	ND		0.0014	ND		0.0012	
Vinyl chloride	0.02	0.21	0.9	13	27	ND		0.0014	ND		0.0014	ND		0.0016	ND		0.0014	ND		0.0012	
1,1-Dichloroethene	0.33	100	100	500	1000	ND		0.0014	ND		0.0014	ND		0.0016	ND		0.0014	ND		0.0012	
trans-1,2-Dichloroethene	0.19	100	100	500	1000	ND		0.0021	ND		0.0022	ND		0.0024	ND		0.002	ND		0.0018	
Trichloroethene	0.47	10	21	200	400	0.0026		0.0007	ND		0.00072	0.00036	J	0.0008	0.011		0.00068	0.0042		0.00061	
1,2-Dichlorobenzene	1.1	100	100	500	1000	ND		0.0026	ND		0.0029	ND		0.0032	ND		0.0027	ND		0.0024	
1,3-Dichlorobenzene	2.4	17	48	280	560	ND		0.0028	ND		0.0029	ND		0.0032	ND		0.0027	ND		0.0024	
1,4-Dichlorobenzene	1.8	9.8	13	130	250	ND		0.0028	ND		0.0029	ND		0.0032	ND		0.0027	ND		0.0024	
Methyl tert butyl ether	0.93	62	100	500	1000	ND		0.0028	ND		0.0029	ND		0.0032	ND		0.0027	ND		0.0024	
o/m-Xylene	NA	NA	NA	NA	NA	NA		0.0028	ND		0.0029	ND		0.0032	ND		0.0027	ND		0.0024	
p-Xylene	NA	NA	NA	NA	NA	NA		0.0014	ND		0.0014	ND		0.0016	ND		0.0014	ND		0.0012	
cis-1,2-Dichloroethene	0.25	59	100	500	1000	0.00061	J	0.0014	ND		0.0014	ND		0.0016	ND		0.0014	0.00049	J	0.0012	
Acetone	0.05	100	100	500	1000	0.0078		0.014	0.0074	J	0.014	0.005		0.016	ND		0.014	0.038		0.012	
2-Butanone	0.12	100	100	500	1000	0.0022		0.014	ND		0.014	0.016		0.016	ND		0.014	0.0075	J	0.012	
n-Butylbenzene	12	100	100	500	1000	ND		0.0014	ND		0.0014	ND		0.0016	ND		0.0014	ND		0.0012	
sec-Butylbenzene	11	100	100	500	1000	ND		0.0014	ND		0.0014	ND		0.0016	ND		0.0014	ND		0.0012	
tert-Butylbenzene	5.9	100	100	500	1000	ND		0.0028	ND		0.0029	ND		0.0032	ND		0.0027	ND		0.0024	
n-Propylbenzene	3.9	100	100	500	1000	ND		0.0014	ND		0.0014	ND		0.0016	ND		0.0014	ND		0.0012	
1,3,5-Trimethylbenzene	8.4	47	52	190	380	ND		0.0028	ND		0.0029	ND		0.0032	ND		0.0027	ND		0.0024	
1,2,4-Trimethylbenzene	3.6	47	52	190	380	ND		0.0028	ND		0.0029	ND		0.0032	ND		0.0027	ND		0.0024	
SEMIVOLATILE ORGANICS BY GC/MS																					
Acenaphthene	20	100	100	500	1000	ND		0.16	ND		0.14	ND		0.17	ND		0.17	ND		0.18	
Hexachlorobenzene	0.33	0.33	1.2	6	12	ND		0.12	ND		0.1	ND		0.13	ND		0.13	ND		0.13	
Fluoranthene	100	100	100	500	1000	ND		0.12	ND		0.1	ND		0.13	ND		0.13	ND		0.13	
Naphthalene	12	100	100	500	1000	ND		0.2	ND		0.18	ND		0.21	ND		0.22	ND		0.22	
Benzo(a)anthracene	1	1	1	5.6	11	ND		0.12	ND		0.1	ND		0.13	ND		0.13	ND		0.13	
Benzo(a)pyrene	1	1	1	1	1.1	ND		0.16	ND		0.14	ND		0.17	ND		0.17	ND		0.18	
Benzo(b)fluoranthene	1	1	1	5.6	11	ND		0.12	ND		0.1	ND		0.13	ND		0.13	ND		0.13	
Benzo(k)fluoranthene	0.8	1	3.9	56	110	ND		0.12	ND		0.1	ND		0.13	ND		0.13	ND		0.13	
Chrysene	1	1	3.9	56	110	ND		0.12	ND		0.1	ND		0.13	ND		0.13	ND		0.13	
Acenaphthylene	100	100	100	500	1000	ND		0.16	ND		0.14	ND		0.17	ND		0.17	ND		0.18	
Anthracene	100	100	100	500	1000	ND		0.12	ND		0.1	ND		0.13	ND		0.13	ND		0.13	
Benzo(g,h)perylene	100	100	100	500	1000	ND		0.16	ND		0.14	ND		0.17	ND		0.17	ND		0.18	
Fluorene	30	100	100	500	1000	ND		0.2	ND		0.18	ND		0.21	ND		0.22	ND		0.22	
Phenanthrene	100	100	100	500	1000	ND		0.12	ND		0.1	ND		0.13	ND		0.13	ND		0.13	
Dibenz(a,h)anthracene	0.33	0.33	0.33	0.56	1.1	ND		0.12	ND		0.1	ND		0.13	ND		0.13	ND		0.13	
Indeno(1,2,3-cd)pyrene	0.5	0.5	0.5	0.5	1.1	ND		0.16	ND		0.14	ND		0.17	ND		0.17	ND		0.18	
Pyrene	100	100	100	500	1000	ND		0.12	ND		0.1	0.021	J	0.13	ND		0.13	ND		0.13	
Dibenzofuran	7	14	59	350	1000	ND		0.2	ND		0.18	ND		0.21	ND		0.22	ND		0.22	
Perinaphthol	0.8	2.4	6.7	6.7	55	ND		0.16	ND		0.14	ND		0.17	ND		0.17	ND		0.18	
Phenol	0.33	100	100	500	1000	ND		0.2	ND		0.18	ND		0.21	ND		0.22	ND		0.22	
2-Methylphenol	0.33	100	100	500	1000	ND		0.2	ND		0.18	ND		0.21	ND		0.22	ND		0.22	
3-Methylphenol/4-Methylphenol	0.33	34	100	500	1000	ND		0.3	ND		0.25	ND		0.31	ND		0.31	ND		0.32	
1,4-Dioxane	0.1	9.8	13	130	250	ND		0.031	ND		0.026	ND		0.032	ND		0.033	ND		0.033	
TOTAL METALS																					
Arsenic, Total	13	16	16	16	16	3.17		0.975	2.82		0.824	2.4		1.02	2.03		1.05	5.44		1.07	
Barium, Total	350	350	400	400	10000	105		0.975	9.34		0.824	51		1.02	13.6		1.05	129		1.07	
Beryllium, Total	7.2	14	72	590	2700	0.587	J	0.488	0.076	J	0.412	0.437	J	0.509	0.114	J	0.524	0.898		0.536	
Calcium, Total	2.5	2.5	4.3	9.3	60	0.168	J	0.975	ND		0.824	ND		1.02	ND		1.05	0.178	J	1.07	
Chromium, Total	NA	NA	NA	NA	NA	15.9		0.975	4.36		0.824	14.1		1.02	4.09		1.05	23.7		1.07	
Copper, Total	50	270	270	270	10000	17.9		0.975	3.39		0.824	8.77		1.02	2.48		1.05	28.6		1.07	
Lead, Total	63	400	400	1000	3900	9.96		4.88	11.1		4.12	11.9		5.09	27		5.24	17.4		5.36	
Manganese, Total	1600	2000	2000	10000	10000	532		0.975	224		0.824	164		1.02	164		1.05	370		1.07	
Mercury, Total	0.18	0.81	0.81	2.8	5.7	ND		0.096	ND		0.081	ND		0.097	ND		0.099	ND		0.086	
Nickel, Total	30	140	310	310	10000	20.6		2.44	7.83		2.06	13.9		2.55	3.2		2.62	33.4		2.68	
Selenium, Total	3.9	36	160	1500	6800	ND		1.25	ND		1.65	ND		2.04	ND		2.1				

TABLE 6

INITIAL RI GROUNDWATER SAMPLING RESULTS
 1803 ELMWOOD AVENUE BCP - C915394
 CITY OF BUFFALO, NEW YORK



SAMPLE ID:	MW-01			DUP-A			MW-02			MW-03			MW-04			MW-05		
COLLECTION DATE:	6/24/2024			6/24/2024			6/25/2024			6/25/2024			6/24/2024			6/24/2024		
SAMPLE MATRIX:	GROUNDWATER			GROUNDWATER			GROUNDWATER			GROUNDWATER			GROUNDWATER			GROUNDWATER		
ANALYTE	NY-AWQS			NY-AWQS			NY-AWQS			NY-AWQS			NY-AWQS			NY-AWQS		
(ug/l)	Result	Fig	RL	Result	Fig	RL	Result	Fig	RL									
VOCS																		
Methylene chloride	5	ND	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5
1,1-Dichloroethane	5	ND	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5
Chloroform	7	ND	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5
Carbon tetrachloride	5	ND	0.5	ND	0.5	0.5	ND	0.5	0.5	ND	0.5	0.5	ND	0.5	0.5	ND	0.5	0.5
1,2-Dichloropropane	1	ND	1	ND	1	1	ND	1	1	ND	1	1	ND	1	1	ND	1	1
Dibromochloromethane	50	ND	0.5	ND	0.5	0.5	ND	0.5	0.5	ND	0.5	0.5	ND	0.5	0.5	ND	0.5	0.5
1,1,2-Trichloroethane	1	ND	1.5	ND	1.5	1.5	ND	1.5	1.5	ND	1.5	1.5	ND	1.5	1.5	ND	1.5	1.5
Tetrachloroethene	5	ND	0.5	ND	0.5	0.5	ND	0.5	0.5	ND	0.5	0.5	ND	0.5	0.5	ND	0.5	0.5
Chlorobenzene	5	ND	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5
Trichlorofluoromethane	5	ND	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5
1,2-Dichloroethane	0.6	ND	0.5	ND	0.5	0.5	ND	0.5	0.5	ND	0.5	0.5	ND	0.5	0.5	ND	0.5	0.5
1,1,1-Trichloroethane	5	ND	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5
Bromodichloromethane	50	ND	0.5	ND	0.5	0.5	ND	0.5	0.5	ND	0.5	0.5	ND	0.5	0.5	ND	0.5	0.5
trans-1,3-Dichloropropene	0.4	ND	0.5	ND	0.5	0.5	ND	0.5	0.5	ND	0.5	0.5	ND	0.5	0.5	ND	0.5	0.5
cis-1,3-Dichloropropene	0.4	ND	0.5	ND	0.5	0.5	ND	0.5	0.5	ND	0.5	0.5	ND	0.5	0.5	ND	0.5	0.5
Bromoform	50	ND	2	ND	2	2	ND	2	2	ND	2	2	ND	2	2	ND	2	2
1,1,2,2-Tetrachloroethane	5	ND	0.5	ND	0.5	0.5	ND	0.5	0.5	ND	0.5	0.5	ND	0.5	0.5	ND	0.5	0.5
Benzene	1	ND	0.5	ND	0.5	0.5	ND	0.5	0.5	ND	0.5	0.5	ND	0.5	0.5	ND	0.5	0.5
Toluene	5	ND	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5
Ethylbenzene	5	ND	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5
Chloromethane	NA	ND	2.5	ND	2.5	1.5	J	2.5	1.4	J	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5
Bromomethane	5	ND	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5
Vinyl chloride	2	ND	1	ND	1	1	ND	1	0.4	J	1	0.24	J	1	1	ND	1	1
Chloroethane	5	ND	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5
1,1-Dichloroethene	5	ND	0.5	ND	0.5	0.5	ND	0.5	0.5	ND	0.5	0.5	ND	0.5	0.5	ND	0.5	0.5
trans-1,2-Dichloroethene	5	ND	2.5	ND	2.5	2.5	ND	2.5	2.1	J	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5
Trichloroethene	5	5.4	0.5	3.2	0.5	14	0.5	7.2	0.5	0.94	0.5	0.94	0.5	0.5	0.5	ND	0.5	0.5
1,2-Dichlorobenzene	3	ND	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5
1,3-Dichlorobenzene	3	ND	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5
1,4-Dichlorobenzene	3	ND	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5
Methyl tert butyl ether	10	ND	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5
p/m-Xylene	5	ND	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5
o-Xylene	5	ND	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5
cis-1,2-Dichloroethene	5	5.1	2.5	3.8	2.5	2.2	J	2.5	9.3	2.5	8.2	2.5	2.5	2.5	ND	2.5	2.5	
Styrene	5	ND	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5
Dichlorodifluoromethane	5	ND	5	ND	5	5	ND	5	5	ND	5	5	ND	5	5	ND	5	5
Acetone	50	ND	5	ND	5	5	ND	5	5	ND	5	5	ND	5	5	ND	5	5
Carbon disulfide	60	ND	5	ND	5	5	ND	5	5	ND	5	5	ND	5	5	ND	5	5
2-Butanone	50	ND	5	ND	5	5	ND	5	5	ND	5	5	ND	5	5	ND	5	5
4-Methyl-2-pentanone	NA	ND	5	ND	5	5	ND	5	5	ND	5	5	ND	5	5	ND	5	5
2-Hexanone	50	ND	5	ND	5	5	ND	5	5	ND	5	5	ND	5	5	ND	5	5
Bromochloromethane	5	ND	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5
1,2-Dibromoethane	0.0006	ND	2	ND	2	2	ND	2	2	ND	2	2	ND	2	2	ND	2	2
1,2-Dibromo-3-chloropropane	0.04	ND	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5
Isopropylbenzene	5	ND	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5
1,2,3-Trichlorobenzene	5	ND	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5
1,2,4-Trichlorobenzene	5	ND	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5
Methyl Acetate	NA	ND	2	ND	2	2	ND	2	2	ND	2	2	ND	2	2	ND	2	2
Cyclohexane	NA	ND	10	ND	10	10	ND	10	10	ND	10	10	ND	10	10	ND	10	10
1,4-Dioxane	NA	ND	250	ND	250	250	ND	250	250	ND	250	250	ND	250	250	ND	250	250
Freon-113	5	ND	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5	ND	2.5	2.5
Methyl cyclohexane	NA	ND	10	ND	10	10	ND	10	10	ND	10	10	ND	10	10	ND	10	10

TABLE 6

INITIAL RI GROUNDWATER SAMPLING RESULTS
1803 ELMWOOD AVENUE BCP - C915394
CITY OF BUFFALO, NEW YORK



ANALYTE	SAMPLE ID:	MW-01			DUP-A			MW-02			MW-03			MW-04			MW-05				
		COLLECTION DATE:	6/24/2024			6/24/2024			6/25/2024			6/25/2024			6/24/2024			6/24/2024			
			SAMPLE MATRIX:	GROUNDWATER			GROUNDWATER														
	NY-AWQS	(ug/l)	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	
1,4 DIOXANE BY 8270E-SIM																					
1,4-Dioxane	NA	ND			0.15	ND			0.15	ND			0.15	ND			0.144	0.685	0.156	ND	0.144
SVOCs BY GC/MS																					
Bis(2-chloroethyl)ether	1	ND			2	ND			2	ND			2	ND			2	ND			2
3,3'-Dichlorobenzidine	5	ND			5	ND			5	ND			5	ND			5	ND			5
2,4-Dinitrotoluene	5	ND			5	ND			5	ND			5	ND			5	ND			5
2,6-Dinitrotoluene	5	ND			5	ND			5	ND			5	ND			5	ND			5
4-Chlorophenyl phenyl ether	NA	ND			2	ND			2	ND			2	ND			2	ND			2
4-Bromophenyl phenyl ether	NA	ND			2	ND			2	ND			2	ND			2	ND			2
Bis(2-chloroisopropyl)ether	5	ND			2	ND			2	ND			2	ND			2	ND			2
Bis(2-chloroethoxy)methane	5	ND			5	ND			5	ND			5	ND			5	ND			5
Hexachlorocyclopentadiene	5	ND			20	ND			20	ND			20	ND			20	ND			20
Isophorone	50	ND			5	ND			5	ND			5	ND			5	ND			5
Nitrobenzene	0.4	ND			2	ND			2	ND			2	ND			2	ND			2
NDPA/DPA	50	ND			2	ND			2	ND			2	ND			2	ND			2
n-Nitrosodi-n-propylamine	NA	ND			5	ND			5	ND			5	ND			5	ND			5
Bis(2-ethylhexyl)phthalate	5	ND			3	ND			3	ND			3	ND			3	ND			3
Butyl benzyl phthalate	50	ND			5	ND			5	ND			5	ND			5	ND			5
Di-n-butylphthalate	50	ND			5	ND			5	ND			5	ND			5	ND			5
Di-n-octylphthalate	50	ND			5	ND			5	ND			5	ND			5	ND			5
Diethyl phthalate	50	ND			5	ND			5	ND			5	ND			5	ND			5
Dimethyl phthalate	50	ND			5	ND			5	ND			5	ND			5	ND			5
Biphenyl	NA	ND			2	ND			2	ND			2	ND			2	ND			2
4-Chloroaniline	5	ND			5	ND			5	ND			5	ND			5	ND			5
2-Nitroaniline	5	ND			5	ND			5	ND			5	ND			5	ND			5
3-Nitroaniline	5	ND			5	ND			5	ND			5	ND			5	ND			5
4-Nitroaniline	5	ND			5	ND			5	ND			5	ND			5	ND			5
Dibenzofuran	NA	ND			2	ND			2	ND			2	ND			2	ND			2
1,2,4,5-Tetrachlorobenzene	5	ND			10	ND			10	ND			10	ND			10	ND			10
Acetophenone	NA	ND			5	ND			5	ND			5	ND			5	ND			5
2,4,6-Trichlorophenol	NA	ND			5	ND			5	ND			5	ND			5	ND			5
p-Chloro-m-cresol	NA	ND			2	ND			2	ND			2	ND			2	ND			2
2-Chlorophenol	NA	ND			2	ND			2	ND			2	ND			2	ND			2
2,4-Dichlorophenol	1	ND			5	ND			5	ND			5	ND			5	ND			5
2,4-Dimethylphenol	50	ND			5	ND			5	ND			5	ND			5	ND			5
2-Nitrophenol	NA	ND			10	ND			10	ND			10	ND			10	ND			10
4-Nitrophenol	NA	ND			10	ND			10	ND			10	ND			10	ND			10
2,4-Dinitrophenol	10	ND			20	ND			20	ND			20	ND			20	ND			20
4,6-Dinitro-o-cresol	NA	ND			10	ND			10	ND			10	ND			10	ND			10
Phenol	1	ND			5	ND			5	ND		0.82	J	5	ND		5	ND			5
2-Methylphenol	NA	ND			5	ND			5	ND			5	ND			5	ND			5
3-Methylphenol/4-Methylphenol	NA	ND			5	ND			5	ND			5	ND			5	ND			5
2,4,5-Trichlorophenol	NA	ND			5	ND			5	ND			5	ND			5	ND			5
Carbazole	NA	ND			2	ND			2	ND			2	ND			2	ND			2
Atrazine	7.5	ND			10	ND			10	ND			10	ND			10	ND			10
Benzaldehyde	NA	ND			5	ND			5	ND			5	ND			5	ND			5
Caprolactam	NA	ND			10	ND			10	ND			10	ND			10	ND			10
2,3,4,6-Tetrachlorophenol	NA	ND			5	ND			5	ND			5	ND			5	ND			5
SVOCs BY GC/MS-SIM																					
Acenaphthene	20	ND			0.1	ND			0.1	ND			0.1	ND			0.1	ND			0.1
2-Chloronaphthalene	10	ND			0.2	ND			0.2	ND			0.2	ND			0.2	ND			0.2
Fluoranthene	50	ND			0.1	ND			0.1	ND			0.1	ND			0.1	ND			0.1
Hexachlorobutadiene	0.5	ND			0.5	ND			0.5	ND			0.5	ND			0.5	ND			0.5
Naphthalene	10	ND			0.1	ND			0.1	ND			0.1	ND			0.1	ND			0.1
Benzo(a)anthracene	0.002	ND			0.1	ND			0.1	ND			0.1	ND			0.1	ND			0.1
Benzo(a)pyrene	0	ND			0.1	ND			0.1	ND			0.1	ND			0.1	ND			0.1
Benzo(b)fluoranthene	0.002	ND			0.1	ND			0.1	ND			0.1	ND			0.1	ND			0.1
Benzo(k)fluoranthene	0.002	ND			0.1	ND			0.1	ND			0.1	ND			0.1	ND			0.1
Chrysene	0.002	ND			0.1	ND			0.1	ND			0.1	ND			0.1	ND			0.1
Acenaphthylene	NA	ND			0.1	ND			0.1	ND			0.1	ND			0.1	ND			0.1
Anthracene	50	ND			0.1	ND			0.1	ND			0.1	ND			0.1	ND			0.1
Benzo(ghi)perylene	NA	ND			0.1	ND			0.1	ND			0.1	ND			0.1	ND			0.1
Fluorene	50	ND			0.1	ND			0.1	ND			0.1	ND			0.1	ND			0.1
Phenanthrene	50	ND			0.1	ND			0.1	ND			0.1	ND			0.1	ND			0.1
Dibenzo(a,h)anthracene	NA	ND			0.1	ND			0.1	ND			0.1	ND			0.1	ND			0.1
Indeno(1,2,3-cd)pyrene	0.002	ND			0.1	ND			0.1	ND			0.1	ND			0.1	ND			0.1
Pyrene	50	ND			0.1	ND			0.1	ND			0.1	ND			0.1	ND			0.1
2-Methylnaphthalene	NA	ND			0.1	ND			0.1	ND			0.1	ND			0.1	ND			0.1
Pentachlorophenol	1	ND			0.8	ND			0.8	ND			0.8	ND			0.8	ND			0.8
Hexachlorobenzene	0.04	ND			0.8	ND			0.8	ND			0.8	ND			0.8	ND			0.8
Hexachloroethane	5	ND			0.8	ND			0.8	ND			0.8	ND			0.8	ND			0.8

TABLE 6

INITIAL RI GROUNDWATER SAMPLING RESULTS
 1803 ELMWOOD AVENUE BCP - C915394
 CITY OF BUFFALO, NEW YORK



ANALYTE	SAMPLE ID:	MW-01			DUP-A			MW-02			MW-03			MW-04			MW-05		
	COLLECTION DATE:	6/24/2024			6/24/2024			6/25/2024			6/25/2024			6/24/2024			6/24/2024		
	SAMPLE MATRIX:	GROUNDWATER			GROUNDWATER			GROUNDWATER			GROUNDWATER			GROUNDWATER			GROUNDWATER		
	NY-AWQS																		
	(ug/l)	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL
HERBICIDES																			
2,4-D	50	-	-	-	-	-	-	ND	10	-	-	-	-	-	-	-	-	-	-
2,4,5-T	35	-	-	-	-	-	-	ND	2	-	-	-	-	-	-	-	-	-	-
2,4,5-TP (Silvex)	NA	-	-	-	-	-	-	ND	2	-	-	-	-	-	-	-	-	-	-
PESTICIDES																			
Delta-BHC	0.04	-	-	-	-	-	-	ND	0.014	-	-	-	-	-	-	-	-	-	-
Lindane	0.05	-	-	-	-	-	-	ND	0.014	-	-	-	-	-	-	-	-	-	-
Alpha-BHC	0.01	-	-	-	-	-	-	ND	0.014	-	-	-	-	-	-	-	-	-	-
Beta-BHC	0.04	-	-	-	-	-	-	ND	0.014	-	-	-	-	-	-	-	-	-	-
Heptachlor	0.04	-	-	-	-	-	-	ND	0.014	-	-	-	-	-	-	-	-	-	-
Aldrin	0	-	-	-	-	-	-	ND	0.014	-	-	-	-	-	-	-	-	-	-
Heptachlor epoxide	0.03	-	-	-	-	-	-	ND	0.014	-	-	-	-	-	-	-	-	-	-
Endrin	0	-	-	-	-	-	-	ND	0.029	-	-	-	-	-	-	-	-	-	-
Endrin aldehyde	5	-	-	-	-	-	-	ND	0.029	-	-	-	-	-	-	-	-	-	-
Endrin ketone	5	-	-	-	-	-	-	ND	0.029	-	-	-	-	-	-	-	-	-	-
Dieldrin	0.004	-	-	-	-	-	-	ND	0.029	-	-	-	-	-	-	-	-	-	-
4,4'-DDE	0.2	-	-	-	-	-	-	ND	0.029	-	-	-	-	-	-	-	-	-	-
4,4'-DDD	0.3	-	-	-	-	-	-	ND	0.029	-	-	-	-	-	-	-	-	-	-
4,4'-DDT	0.2	-	-	-	-	-	-	ND	0.029	-	-	-	-	-	-	-	-	-	-
Endosulfan I	NA	-	-	-	-	-	-	ND	0.014	-	-	-	-	-	-	-	-	-	-
Endosulfan II	NA	-	-	-	-	-	-	ND	0.029	-	-	-	-	-	-	-	-	-	-
Endosulfan sulfate	NA	-	-	-	-	-	-	ND	0.029	-	-	-	-	-	-	-	-	-	-
Methoxychlor	35	-	-	-	-	-	-	ND	0.143	-	-	-	-	-	-	-	-	-	-
Toxaphene	0.06	-	-	-	-	-	-	ND	0.143	-	-	-	-	-	-	-	-	-	-
cis-Chlordane	NA	-	-	-	-	-	-	ND	0.014	-	-	-	-	-	-	-	-	-	-
trans-Chlordane	NA	-	-	-	-	-	-	ND	0.014	-	-	-	-	-	-	-	-	-	-
Chlordane	0.05	-	-	-	-	-	-	ND	0.143	-	-	-	-	-	-	-	-	-	-
POLYCHLORINATED BIPHENYLS																			
Aroclor 1016	0.09	ND		0.071	ND		0.071	ND		0.071	ND		0.071	ND		0.071	ND		0.071
Aroclor 1221	0.09	ND		0.071	ND		0.071	ND		0.071	ND		0.071	ND		0.071	ND		0.071
Aroclor 1232	0.09	ND		0.071	ND		0.071	ND		0.071	ND		0.071	ND		0.071	ND		0.071
Aroclor 1242	0.09	ND		0.071	ND		0.071	ND		0.071	ND		0.071	ND		0.071	ND		0.071
Aroclor 1248	0.09	ND		0.071	ND		0.071	ND		0.071	ND		0.071	ND		0.071	ND		0.071
Aroclor 1254	0.09	ND		0.071	ND		0.071	ND		0.071	ND		0.071	ND		0.071	ND		0.071
Aroclor 1260	0.09	ND		0.071	ND		0.071	ND		0.071	ND		0.071	ND		0.071	ND		0.071
Aroclor 1262	0.09	ND		0.071	ND		0.071	ND		0.071	ND		0.071	ND		0.071	ND		0.071
Aroclor 1268	0.09	ND		0.071	ND		0.071	ND		0.071	ND		0.071	ND		0.071	ND		0.071
PCBs, Total	NA	ND		0.071	ND		0.071	ND		0.071	ND		0.071	ND		0.071	ND		0.071

TABLE 6

INITIAL RI GROUNDWATER SAMPLING RESULTS
 1803 ELMWOOD AVENUE BCP - C915394
 CITY OF BUFFALO, NEW YORK



SAMPLE ID:	MW-01	DUP-A			MW-02			MW-03			MW-04			MW-05		
COLLECTION DATE:	6/24/2024	6/24/2024			6/25/2024			6/25/2024			6/24/2024			6/24/2024		
SAMPLE MATRIX:	GROUNDWATER															
NY-AWQS																
ANALYTE	(ug/l)	Result	Flg	RL	Result	Flg	RL									
DISSOLVED METALS																
Aluminum, Dissolved	NA	4.26	J	10	8.09	J	10	177		10	30.8		10	10.4		10
Antimony, Dissolved	3	0.59	J	4	1.67	J	4	ND		4	ND		4	0.45	J	4
Arsenic, Dissolved	25	0.62		0.5	1		0.5	0.66	J	1	3.13		1	0.72		0.5
Barium, Dissolved	1000	47.92		0.5	46.05		0.5	99.66		0.5	85.06		0.5	59.93		0.5
Beryllium, Dissolved	3	ND		0.5	ND		0.5									
Cadmium, Dissolved	5	ND		0.2	ND		0.2									
Calcium, Dissolved	NA	230000		100	276000		100	176000		100	58900		100	89400		100
Chromium, Dissolved	50	0.22	J	1	0.25	J	1	0.51	J	1	ND		1	ND		1
Cobalt, Dissolved	NA	0.51		0.5	0.55		0.5	0.2	J	0.5	0.61		0.5	0.53		0.5
Copper, Dissolved	200	5.2		1	8.24		1	3.58		1	1.78		1	5.97		1
Iron, Dissolved	300	ND		50	ND		50	191		50	31.9	J	50	ND		50
Lead, Dissolved	25	ND		1	ND		1									
Magnesium, Dissolved	35000	287000		700	340000		700	264000		700	30000		700	188000		700
Manganese, Dissolved	300	239.5		1	318.8		1	42.53		1	258.4		1	122.2		1
Mercury, Dissolved	0.7	ND		0.2	ND		0.2									
Nickel, Dissolved	100	1.38	J	2	1.62	J	2	1.73	J	2	1.44	J	2	9.6		2
Potassium, Dissolved	NA	14900		100	16900		100	11200		100	5200		100	10300		100
Selenium, Dissolved	10	5.85		5	6.99		5	2.15	J	5	ND		5	ND		5
Silver, Dissolved	50	ND		0.4	ND		0.4									
Sodium, Dissolved	20000	151000		100	185000		100	118000		100	83400		100	188000		100
Thallium, Dissolved	0.5	ND		1	ND		1									
Vanadium, Dissolved	NA	ND		5	ND		5									
Zinc, Dissolved	2000	24.37		10	43.79		10	13.39		10	10.2		10	9.5	J	10
TOTAL METALS																
Aluminum, Total	NA	43.8		10	171		10	2280		10	266		10	238		10
Antimony, Total	3	ND		4	0.52	J	4	ND		4	ND		4	ND		4
Arsenic, Total	25	0.81		0.5	0.82		0.5	1.89		0.5	3.5		0.5	1.01		0.5
Barium, Total	1000	54.82		0.5	45.58		0.5	113.8		0.5	95.66		0.5	71.3		0.5
Beryllium, Total	3	ND		0.5	ND		0.5	0.12	J	0.5	ND		0.5	ND		0.5
Cadmium, Total	5	0.06	J	0.2	0.06	J	0.2	ND		0.2	ND		0.2	0.06	J	0.2
Calcium, Total	NA	240000		100	276000		100	178000		100	57800		100	72900		100
Chromium, Total	50	0.56	J	1	0.77	J	1	3.72		1	0.64	J	1	1.01		1
Cobalt, Total	NA	0.85		0.5	1.14		0.5	2.02		0.5	0.8		0.5	1.17		0.5
Copper, Total	200	5.83		1	7.91		1	7.36		1	2.94		1	8.28		1
Iron, Total	300	49.9	J	50	210		50	3900		50	453		50	564		50
Lead, Total	25	ND		1	0.6	J	1	4.63		1	0.62	J	1	0.78	J	1
Magnesium, Total	35000	297000		280	384000		280	246000		280	29500		280	173000		280
Manganese, Total	300	298.9		1	433.8		1	121.5		1	282.8		1	133.1		1
Mercury, Total	0.7	ND		0.2	ND		0.2									
Nickel, Total	100	2		2	1.81	J	2	6.09		2	1.9	J	2	13.96		2
Potassium, Total	NA	15800		100	17900		100	11400		100	5180		100	9790		100
Selenium, Total	10	6.4		5	7.76		5	3.27	J	5	ND		5	ND		5
Silver, Total	50	ND		0.4	ND		0.4									
Sodium, Total	20000	183000		100	202000		100	110000		100	82300		100	213000		100
Thallium, Total	0.5	ND		1	ND		1									
Vanadium, Total	NA	ND		5	ND		5	5.52		5	ND		5	ND		5
Zinc, Total	2000	28.7		10	37.35		10	29.24		10	13.26		10	11.82		10
GENERAL CHEMISTRY																
Cyanide, Total	200	-		-	-		-	ND		5	-		-	-		-
Cyanide, Dissolved	NA	-		-	-		-	ND		5	-		-	-		-
Chromium, Hexavalent	50	-		-	-		-	ND		10	-		-	-		-
Chromium, Hexavalent (Unfiltered)	NA	-		-	-		-	ND		10	-		-	-		-

TABLE 6

INITIAL RI GROUNDWATER SAMPLING RESULTS
 1803 ELMWOOD AVENUE BCP - C915394
 CITY OF BUFFALO, NEW YORK



ANALYTE	NY-AWQS	MW-01		DUP-A			MW-02			MW-03			MW-04			MW-05			
		COLLECTION DATE:	6/24/2024		6/24/2024			6/25/2024			6/25/2024			6/24/2024					
		SAMPLE MATRIX:	GROUNDWATER		GROUNDWATER			GROUNDWATER			GROUNDWATER			GROUNDWATER					
(ug/l)	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	
PERFLUORINATED ALKYL ACIDS																			
Perfluorobutanoic Acid (PFBA)	NA	0.00732		0.00597	0.00827		0.0061	0.00791		0.00619	0.015		0.00612	0.00509	J	0.0062	0.00333	J	0.00602
Perfluoropentanoic Acid (PFPeA)	NA	0.00797		0.00301	0.00732		0.00301	0.0021	J	0.00309	0.0452		0.00306	0.0033		0.0031	0.000956	J	0.00301
Perfluorobutanesulfonic Acid (PFBS)	NA	0.00154		0.00151	0.00134	J	0.0015	0.00135	J	0.00155	0.00161		0.00153	ND		0.00155	ND		0.0015
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	NA	ND		0.00603	ND		0.00601	ND		0.00619	ND		0.00612	ND		0.0062	ND		0.00602
Perfluorohexanoic Acid (PFHxA)	NA	0.012		0.00151	0.0115		0.0015	0.00454		0.00155	0.0246		0.00153	0.0045		0.00155	0.00181		0.0015
Perfluoropentanesulfonic Acid (PFPeS)	NA	ND		0.00151	ND		0.0015	ND		0.00155	0.000704	J	0.00153	ND		0.00155	ND		0.0015
Perfluoroheptanoic Acid (PFHpA)	NA	0.0028		0.00151	0.00258		0.0015	0.00166		0.00155	0.0201		0.00153	0.0022		0.00155	ND		0.0015
Perfluorohexanesulfonic Acid (PFHxS)	NA	ND		0.00151	ND		0.0015	0.00145	J	0.00155	0.00548		0.00153	0.000605	J	0.00155	ND		0.0015
Perfluorooctanoic Acid (PFOA)	0.0067	0.00494		0.00151	0.00447		0.0015	0.0052		0.00155	0.0148		0.00153	0.00529		0.00155	0.00126	J	0.0015
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	NA	ND		0.00603	ND		0.00601	ND		0.00619	0.0282		0.00612	ND		0.0062	ND		0.00602
Perfluoroheptanesulfonic Acid (PFHpS)	NA	ND		0.00151	ND		0.0015	ND		0.00155	ND		0.00153	ND		0.00155	ND		0.0015
Perfluorononanoic Acid (PFNA)	NA	0.00058	J	0.00151	0.000556	J	0.0015	0.000951	J	0.00155	0.0116		0.00153	0.00069	J	0.00155	ND		0.0015
Perfluorooctanesulfonic Acid (PFOS)	0.0027	0.00131	J	0.00151	0.00094	J	0.0015	0.00247		0.00155	0.0077		0.00153	0.00384		0.00155	ND		0.0015
Perfluorodecanoic Acid (PFDA)	NA	ND		0.00151	ND		0.0015	ND		0.00155	ND		0.00153	ND		0.00155	ND		0.0015
1H,1H,2H,2H-Perfluorodecane sulfonic Acid (8:2FTS)	NA	ND		0.00603	ND		0.00601	ND		0.00619	ND		0.00612	ND		0.0062	ND		0.00602
Perfluorononanesulfonic Acid (PFNS)	NA	ND		0.00151	ND		0.0015	ND		0.00155	ND		0.00153	ND		0.00155	ND		0.0015
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	NA	ND		0.00151	ND		0.0015	ND		0.00155	ND		0.00153	ND		0.00155	ND		0.0015
Perfluoroundecanoic Acid (PFUnA)	NA	ND		0.00151	ND		0.0015	ND		0.00155	ND		0.00153	ND		0.00155	ND		0.0015
Perfluorodecane sulfonic Acid (PFDS)	NA	ND		0.00151	ND		0.0015	ND		0.00155	ND		0.00153	ND		0.00155	ND		0.0015
Perfluorooctanesulfonamide (PFOSA)	NA	ND		0.00151	ND		0.0015	ND		0.00155	ND		0.00153	0.000551	JF	0.00155	ND		0.0015
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	NA	ND		0.00151	ND		0.0015	ND		0.00155	ND		0.00153	ND		0.00155	ND		0.0015
Perfluorododecanoic Acid (PFDoA)	NA	ND		0.00151	ND		0.0015	ND		0.00155	ND		0.00153	ND		0.00155	ND		0.0015
Perfluorotridecanoic Acid (PFTDA)	NA	ND		0.00151	ND		0.0015	ND		0.00155	ND		0.00153	ND		0.00155	ND		0.0015
Perfluorotetradecanoic Acid (PFTeDA)	NA	ND		0.00151	ND		0.0015	ND		0.00155	ND		0.00153	ND		0.00155	ND		0.0015
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	NA	ND		0.00603	ND		0.00601	ND		0.00619	ND		0.00612	ND		0.0062	ND		0.00602
4,8-Dioxo-3h-Perfluorononanoic Acid (ADONA)	NA	ND		0.00603	ND		0.00601	ND		0.00619	ND		0.00612	ND		0.0062	ND		0.00602
Perfluorododecane sulfonic Acid (PFDoS)	NA	ND		0.00151	ND		0.0015	ND		0.00155	ND		0.00153	ND		0.00155	ND		0.0015
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	NA	ND		0.00603	ND		0.00601	ND		0.00619	ND		0.00612	ND		0.0062	ND		0.00602
11-Chlorooctadecafluoro-3-Oxandecane-1-Sulfonic Acid (11Cl-PF3OUD)	NA	ND		0.00603	ND		0.00601	ND		0.00619	ND		0.00612	ND		0.0062	ND		0.00602
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	NA	ND		0.00151	ND		0.0015	ND		0.00155	ND		0.00153	ND		0.00155	ND		0.0015
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	NA	ND		0.00151	ND		0.0015	ND		0.00155	ND		0.00153	ND		0.00155	ND		0.0015
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	NA	ND		0.0151	ND		0.015	ND		0.0155	ND		0.0153	ND		0.0155	ND		0.015
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	NA	ND		0.0151	ND		0.015	ND		0.0155	ND		0.0153	ND		0.0155	ND		0.015
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	NA	ND		0.00301	ND		0.00301	ND		0.00309	ND		0.00306	ND		0.0031	ND		0.00301
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	NA	ND		0.00301	ND		0.00301	ND		0.00309	ND		0.00306	ND		0.0031	ND		0.00301
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	NA	ND		0.00301	ND		0.00301	ND		0.00309	ND		0.00306	ND		0.0031	ND		0.00301
Nonafluoro-3,6-Dioxahexanoic Acid (NFDHA)	NA	ND		0.00301	ND		0.00301	ND		0.00309	ND		0.00306	ND		0.0031	ND		0.00301
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	NA	ND		0.00754	ND		0.00752	ND		0.00774	ND		0.00765	ND		0.00776	ND		0.00753
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	NA	ND		0.0377	ND		0.0376	ND		0.0387	ND		0.0388	ND		0.0388	ND		0.0376
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	NA	ND		0.0377	ND		0.0376	ND		0.0387	ND		0.0388	ND		0.0388	ND		0.0376

* Comparison is not performed on parameters with non-numeric criteria.

NY-AWQS: New York TOGS 111 Ambient Water Quality Standards criteria reflects all addendum to criteria through June 2004.

TABLE 7

ADDITIONAL RI GROUNDWATER SAMPLING RESULTS
1803 ELMWOOD AVENUE BCP - C915395
CITY OF BUFFALO, NEW YORK



ANALYTE	SAMPLE ID:	MW-01A			DUP-A			MW-02A			MW-05A			TRIP BLANK			FIELD BLANK		
	COLLECTION DATE:	10/27/2025			10/27/2025			10/27/2025			10/27/2025			10/27/2025			10/27/2025		
	SAMPLE MATRIX:	WATER			WATER														
	NY-AWQS	Result	Flg	RL	Result	Flg	RL												
VOCS																			
Methylene chloride	5	ND		2.5	ND		2.5												
1,1-Dichloroethane	5	ND		2.5	ND		2.5												
Chloroform	7	ND		2.5	ND		2.5												
Carbon tetrachloride	5	ND		0.5	ND		0.5												
Tetrachloroethene	5	ND		0.5	ND		0.5												
Chlorobenzene	5	ND		2.5	ND		2.5												
1,2-Dichloroethane	0.6	ND		0.5	ND		0.5												
1,1,1-Trichloroethane	5	ND		2.5	ND		2.5												
Benzene	1	ND		0.5	ND		0.5												
Toluene	5	ND		2.5	ND		2.5	ND		2.5	16	J	5	ND		2.5	ND		2.5
Ethylbenzene	5	ND		2.5	ND		2.5												
Vinyl chloride	2	0.6	J	1	ND		1	ND		1	ND		2	ND		1	ND		1
1,1-Dichloroethene	5	ND		0.5	ND		0.5												
trans-1,2-Dichloroethene	5	ND		2.5	ND		2.5												
Trichloroethene	5	0.33	J	0.5	19		0.5	19		0.5	ND		1	ND		0.5	ND		0.5
1,2-Dichlorobenzene	3	ND		2.5	ND		2.5												
1,3-Dichlorobenzene	3	ND		2.5	ND		2.5												
1,4-Dichlorobenzene	3	ND		2.5	ND		2.5												
Methyl tert butyl ether	10	ND		2.5	ND		2.5												
p/m-Xylene	5	ND		2.5	ND		2.5												
o-Xylene	5	ND		2.5	ND		2.5												
cis-1,2-Dichloroethene	5	2	J	2.5	2.4	J	2.5	2.4	J	2.5	ND		5	ND		2.5	ND		2.5
Acetone	50	11		2	3.9	J	5	1.5	J	5	210		10	ND		5	ND		5
n-Butane	5	ND		5	ND		5	ND		5	4.7	J	10	ND		5	ND		5
n-Butylbenzene	5	ND		2.5	ND		2.5												
sec-Butylbenzene	5	ND		2.5	ND		2.5												
tert-Butylbenzene	5	ND		2.5	ND		2.5												
n-Propylbenzene	5	ND		2.5	ND		2.5												
1,3,5-Trimethylbenzene	5	ND		2.5	ND		2.5												
1,2,4-Trimethylbenzene	5	ND		2.5	ND		2.5												
SVOCs																			
Dibenzofuran	NA	ND		2	ND		2												
Phenol	1	ND		5	1.3	J	5	ND		5	3.4	J	5	ND		5	ND		5
2-Methylphenol	NA	ND		5	ND		5												
3-Methylphenol/4-Methylphenol	NA	ND		5	ND		5	ND		5	3.2	J	5	ND		5	ND		5
Acenaphthene	20	ND		0.1	ND		0.1	ND		0.1	0.15	J	0.5	ND		0.1	ND		0.1
Fluoranthene	50	ND		0.1	ND		0.1	ND		0.1	0.32	J	0.5	ND		0.1	ND		0.1
Naphthalene	10	0.08	J	0.1	0.04	J	0.1	0.04	J	0.1	0.24	J	0.5	ND		0.1	ND		0.1
Benzo[a]anthracene	0.002	0.04	J	0.1	ND		0.1	ND		0.1	0.5		0.5	ND		0.1	ND		0.1
Benzo[a]pyrene	0	ND		0.1	ND		0.1	ND		0.1	ND		0.5	ND		0.1	ND		0.1
Benzo[b]fluoranthene	0.002	0.05	J	0.1	ND		0.1	ND		0.1	ND		0.5	ND		0.1	ND		0.1
Benzo[k]fluoranthene	0.002	0.04	J	0.1	ND		0.1	ND		0.1	ND		0.5	ND		0.1	ND		0.1
Chrysene	0.002	ND		0.1	ND		0.1	ND		0.1	ND		0.5	ND		0.1	ND		0.1
Acenaphthylene	NA	ND		0.1	ND		0.1	ND		0.1	ND		0.5	ND		0.1	ND		0.1
Anthracene	50	0.04	J	0.1	ND		0.1	ND		0.1	0.13	J	0.5	ND		0.1	ND		0.1
Benzo[e]perylene	NA	0.05	J	0.1	0.04	J	0.1	ND		0.1	ND		0.5	ND		0.1	ND		0.1
Fluorene	50	ND		0.1	ND		0.1	ND		0.1	ND		0.5	ND		0.1	ND		0.1
Phenanthrene	50	ND		0.1	ND		0.1	ND		0.1	0.4	J	0.5	ND		0.1	ND		0.1
Dibenz[a,h]anthracene	NA	0.06	J	0.1	ND		0.1	ND		0.1	ND		0.5	ND		0.1	ND		0.1
Indeno[1,2,3-cd]pyrene	0.002	0.06	J	0.1	ND		0.1	ND		0.1	ND		0.5	ND		0.1	ND		0.1
Pyrene	50	ND		0.1	ND		0.1	ND		0.1	0.24	J	0.5	ND		0.1	ND		0.1
Penta-chlorophenol	1	ND		0.8	ND		0.8	ND		0.8	0.63	J	4	ND		0.8	ND		0.8
Hexachlorobenzene	0.04	ND		0.8	ND		0.8	ND		0.8	ND		4	ND		0.8	ND		0.8
PCBs																			
Aroclor 1016	0.09	ND		0.071	ND		0.071												
Aroclor 1221	0.09	ND		0.071	ND		0.071												
Aroclor 1232	0.09	ND		0.071	ND		0.071												
Aroclor 1242	0.09	ND		0.071	ND		0.071												
Aroclor 1248	0.09	ND		0.071	ND		0.071												
Aroclor 1254	0.09	ND		0.071	ND		0.071												
Aroclor 1260	0.09	ND		0.071	ND		0.071												
Aroclor 1262	0.09	ND		0.071	ND		0.071												
Aroclor 1268	0.09	ND		0.071	ND		0.071												
PCBs, Total	NA	ND		0.071	ND		0.071												
TOTAL METALS																			
Arsenic, Total	25	1.61		0.5	1.12		0.5	0.63		0.5	1.35		0.5	ND		0.5	ND		0.5
Barium, Total	1000	35.05		0.5	80.35		0.5	127.6		0.5	84.62		0.5	ND		0.5	ND		0.5
Beryllium, Total	3	ND		0.5	ND		0.5												
Cadmium, Total	5	ND		0.2	ND		0.2	ND		0.2	0.07	J	0.2	ND		0.2	ND		0.2
Chromium, Total	50	2.78		1	1.31		1	0.51	J	1	1.69		1	ND		1	ND		0.3
Copper, Total	200	20.92		1	7.56		1	13.43		1	2.35		1	ND		1	ND		1
Lead, Total	25	ND		1	1.07		1	ND		1	3.01		1	ND		1	ND		1
Manganese, Total	300	079.2		1	561.8		1	179.6		1	168.8		1	ND		1	ND		1
Mercury, Total	0.7	0.1	J	0.2	ND		0.2	ND		0.2									
Nickel, Total	100	6.94		2	3.69		2	1.13	J	2	1.7	J	2	ND		2	ND		2
Selenium, Total	10	ND		5	ND		5												
Silver, Total	50	ND		0.4	ND		0.4												
Zinc, Total	2000	109.3		20	32.53		20	38.21		20	144.7		20	ND		20</			

TABLE 8A

Soil Vapor Data Summary
Matrix A
1803 Elmwood Avenue BCP - C915394
City of Buffalo, New York



ANALYTE	SAMPLE ID:		SSV-01-20240510			IA-01-20240510			SSV-02-20240510			IA-02-20240510			SSV-03-20240510			IA-03-20240510			OA-01-20240510		
	COLLECTION DATE:		5/10/2024			5/10/2024			5/10/2024			5/10/2024			5/10/2024			5/10/2024			5/10/2024		
	NY-IAC-A (ug/m3)	NY-SSC-A (ug/m3)	SOIL VAPOR			AIR			SOIL VAPOR			AIR			SOIL VAPOR			AIR			AIR		
		Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	
VOLATILE ORGANICS IN AIR																							
1,1-Dichloroethene	6	ND		0.59	-		-	ND		0.59	-		-	ND		0.59	-		-	-		-	
cis-1,2-Dichloroethene	6	ND		0.59	-		-	ND		0.59	-		-	ND		0.59	-		-	-		-	
Carbon tetrachloride	6	ND		0.94	-		-	ND		0.94	-		-	ND		0.94	-		-	-		-	
Trichloroethene	6	270		32	-		-	1.1		0.81	-		-	ND		0.81	-		-	-		-	
VOLATILE ORGANICS IN AIR BY SIM																							
1,1-Dichloroethene	0.2	-		-	ND		0.16	-		-	ND		0.16	-		-	ND		0.16	ND		0.16	
cis-1,2-Dichloroethene	0.2	-		-	ND		0.16	-		-	ND		0.16	-		-	ND		0.16	ND		0.16	
Carbon tetrachloride	0.2	-		-	0.44		0.19	-		-	0.44		0.19	-		-	0.5		0.19	0.5		0.19	
Trichloroethene	0.2	-		-	0.59		0.16	-		-	ND		0.16	-		-	0.21		0.16	0.21		0.16	

ND = Analyte was not detected at the reporting limit

NY-IAC-A: New York DOH Matrix A Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.

NY-SSC-A: New York DOH Matrix A Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.

Bold = Concentration above NY-IAC-A only (No further action)

Bold & Italicized = Concentration above NY-SSC-A only (No further action)

Yellow Box = Concentration above both NY-IAC-A and NY-SSC-A (Monitor or Mitigate)

TABLE 8B

Soil Vapor Data Summary
Matrix B
1803 Elmwood Avenue BCP - C915394
City of Buffalo, New York



ANALYTE	SAMPLE ID:		SSV-01-20240510			IA-01-20240510			SSV-02-20240510			IA-02-20240510			SSV-03-20240510			IA-03-20240510			OA-01-20240510		
	COLLECTION DATE:		5/10/2024			5/10/2024			5/10/2024			5/10/2024			5/10/2024			5/10/2024			5/10/2024		
	SAMPLE MATRIX:		SOIL VAPOR			AIR			SOIL VAPOR			AIR			SOIL VAPOR			AIR			AIR		
	NY-IAC-B (ug/m3)	NY-SSC-B (ug/m3)	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL
VOLATILE ORGANICS IN AIR																							
Methylene chloride		100	1.4	0.52		-	-		1.2	0.52		-	-		1.5	0.52		-	-		-	-	
1,1,1-Trichloroethane		100	ND	0.82		-	-		3.9	0.82		-	-		ND	0.82		-	-		-	-	
Tetrachloroethene		100	0.75	J	1	-	-		7.4	1		-	-		ND	1		-	-		-	-	
VOLATILE ORGANICS IN AIR BY SIM																							
Methylene chloride	3		-	-		1.1	0.52		-	-		1.2	0.52		-	-		1.6	0.52		1.6	0.52	
1,1,1-Trichloroethane	3		-	-		ND	0.82		-	-		ND	0.82		-	-		ND	0.82		ND	0.82	
Tetrachloroethene	3		-	-		ND	1		-	-		ND	1		-	-		ND	1		ND	1	

ND = Analyte was not detected at the reporting limit

NY-IAC-B: New York DOH Matrix B Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.

NY-SSC-B: New York DOH Matrix B Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.

Bold = Concentration above NY-IAC-B only (No further action)

Bold & Italicized = Concentration above NY-SSC-B only (No further action)

Yellow Box = Concentration above both NY-IAC-B and NY-SSC-B (Monitor or Mitigate)

TABLE 8C

Soil Vapor Data Summary
Matrix C
1803 Elmwood Avenue BCP - C915394
City of Buffalo, New York



ANALYTE	SAMPLE ID:		SSV-01-20240510			IA-01-20240510			SSV-02-20240510			IA-02-20240510			SSV-03-20240510			IA-03-20240510			OA-01-20240510							
	COLLECTION DATE:		5/10/2024			5/10/2024			5/10/2024			5/10/2024			5/10/2024			5/10/2024			5/10/2024							
	NY-IAC-C (ug/m3)	NY-SSC-C (ug/m3)	SOIL VAPOR			AIR			SOIL VAPOR			AIR			SOIL VAPOR			AIR			AIR							
		Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL			
VOLATILE ORGANICS IN AIR																												
Vinyl chloride		6	ND		0.38	-		-		ND		0.38	-		-		ND		0.38	-		-		-		-		
VOLATILE ORGANICS IN AIR BY SIM																												
Vinyl chloride		0.2	-		-	ND		0.1	-		-		ND		0.1	-		-		ND		0.1	ND		0.1	ND		0.1

ND = Analyte was not detected at the reporting limit

NY-IAC-C: New York DOH Matrix C Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.

NY-SSC-C: New York DOH Matrix C Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.

Bold = Concentration above NY-IAC-C only (No further action)

Bold & Italicized = Concentration above NY-SSC-C only (No further action)

Yellow Concentration above both NY-IAC-C and NY-SSC-C (Monitor or Mitigate)

TABLE 8D

Soil Vapor Data Summary
Matrix D
1803 Elmwood Avenue BCP - C915394
City of Buffalo, New York



ANALYTE	SAMPLE ID:		SSV-01-20240510			IA-01-20240510			SSV-02-20240510			IA-02-20240510			SSV-03-20240510			IA-03-20240510			OA-01-20240510		
	COLLECTION DATE:		5/10/2024			5/10/2024			5/10/2024			5/10/2024			5/10/2024			5/10/2024			5/10/2024		
	SAMPLE MATRIX:		SOIL VAPOR			AIR			SOIL VAPOR			AIR			SOIL VAPOR			AIR			AIR		
	NY-IAC-D (ug/m3)	NY-SSC-D (ug/m3)	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL
VOLATILE ORGANICS IN AIR																							
Benzene	60		4.4		0.48	-		-	16		4.8	-		-	ND		0.48	-		-	-		-
Ethylbenzene	60		0.74		0.65	-		-	23		6.5	-		-	ND		0.65	-		-	-		-
Naphthalene	60		-		-	-		-	-		-	-		-	-		-	-		-	-		-
Cyclohexane	60		25		0.52	-		-	13		5.2	-		-	ND		0.52	-		-	-		-
Isooctane (2,2,4-Trimethylpentane)	60		ND		0.7	-		-	ND		0.7	-		-	ND		0.7	-		-	-		-
1,2,4-Trimethylbenzene	60		0.69	J	0.74	-		-	ND		0.74	-		-	0.84		0.74	-		-	-		-
1,3,5-Trimethylbenzene	60		ND		0.74	-		-	ND		0.74	-		-	ND		0.74	-		-	-		-
o-Xylene	60		1.1		0.65	-		-	22		6.5	-		-	0.52	J	0.65	-		-	-		-
VOLATILE ORGANICS IN AIR BY SIM																							
Benzene	2		-		-	ND		0.48	-		-	0.35	J	0.48	-		-	0.32	J	0.48	ND		0.48
Ethylbenzene	2		-		-	ND		0.65	-		-	ND		0.65	-		-	ND		0.65	ND		0.65
Naphthalene	2		-		-	-		-	-		-	-		-	-		-	-		-	-		-
Cyclohexane	2		-		-	ND		0.52	-		-	ND		0.52	-		-	ND		0.52	ND		0.52
Isooctane (2,2,4-Trimethylpentane)	2		-		-	ND		0.7	-		-	0.51	J	0.7	-		-	1.3		0.7	ND		0.7
1,2,4-Trimethylbenzene	2		-		-	ND		0.74	-		-	0.59	J	0.74	-		-	0.54	J	0.74	ND		0.74
1,3,5-Trimethylbenzene	2		-		-	ND		0.74	-		-	ND		0.74	-		-	ND		0.74	ND		0.74
o-Xylene	2		-		-	ND		0.65	-		-	ND		0.65	-		-	0.52	J	0.65	0.48	J	0.65

ND = Analyte was not detected at the reporting limit

J = Analyte detected below quantitation limits

NY-IAC-D: New York DOH Matrix D Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, February 2024.

NY-SSC-D: New York DOH Matrix D Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, February 2024.

Bold = Concentration above NY-IAC-D only (No further action)

Bold & Italicized = Concentration above NY-SSC-D only (No further action)

Yellow Box = Concentration above both NY-IAC-D and NY-SSC-D (Monitor or Mitigate)

TABLE 8E

Soil Vapor Data Summary
Matrix E
1803 Elmwood Avenue BCP - C915394
City of Buffalo, New York



ANALYTE	SAMPLE ID:		SSV-01-20240510			IA-01-20240510			SSV-02-20240510			IA-02-20240510			SSV-03-20240510			IA-03-20240510			OA-01-20240510		
	COLLECTION DATE:		5/10/2024			5/10/2024			5/10/2024			5/10/2024			5/10/2024			5/10/2024			5/10/2024		
	SAMPLE MATRIX:		SOIL VAPOR			AIR			SOIL VAPOR			AIR			SOIL VAPOR			AIR			AIR		
	NY-IAC-E (ug/m3)	NY-SSC-E (ug/m3)	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL
VOLATILE ORGANICS IN AIR																							
m&p-Xylene		200	3		1.3	-		-	82		13	-		-	1.5		1.3	-		-	-		-
Heptane		200	14		6.1	-		-	32		6.1	-		-	120		25	-		-	-		-
Hexane		200	16		5.3	-		-	37		5.3	-		-	530		48	-		-	-		-
VOLATILE ORGANICS IN AIR BY SIM																							
m&p-Xylene	6		-		-	ND		1.3	-		-	0.61	J	1.3	-		-	1.3	J	1.3	1.1	J	1.3
Heptane	6		-		-	ND		0.61	-		-	ND		0.61	-		-	0.61		0.61	ND		0.61
Hexane	6		-		-	ND		0.53	-		-	0.35	J	0.53	-		-	1.7		0.53	0.88		0.53

ND = Analyte was not detected at the reporting limit

J = Analyte detected below quantitation limits

m&p-Xylene were analyzed together for this comparison.

NY-IAC-E: New York DOH Matrix E Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, February 2024.

NY-SSC-E: New York DOH Matrix E Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, February 2024.

Bold = Concentration above NY-IAC-E only (No further action)

Bold & Italicized = Concentration above NY-SSC-E only (No further action)

Yellow Box = Concentration above both NY-IAC-E and NY-SSC-E (Monitor or Mitigate)

TABLE 8F

Soil Vapor Data Summary
Matrix F
1803 Elmwood Avenue BCP - C915394
City of Buffalo, New York



ANALYTE	SAMPLE ID:		SSV-01-20240510			IA-01-20240510			SSV-02-20240510			IA-02-20240510			SSV-03-20240510			IA-03-20240510			OA-01-20240510				
	COLLECTION DATE:		5/10/2024			5/10/2024			5/10/2024			5/10/2024			5/10/2024			5/10/2024			5/10/2024				
	NY-IAC-F (ug/m3)	NY-SSC-F (ug/m3)	SOIL VAPOR			AIR			SOIL VAPOR			AIR			SOIL VAPOR			AIR			AIR				
		Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL
VOLATILE ORGANICS IN AIR																									
Toluene		300	5.4	0.57	-	-	-	83	23	-	-	-	0.57	-	-	-	-	-	-	-	-	-	-	-	-
VOLATILE ORGANICS IN AIR BY SIM																									
Toluene		10	-	-	1.1	0.57	-	-	-	-	1.4	0.57	-	-	-	-	2.6	0.57	2	0.57	-	-	-	-	

ND = Analyte was not detected at the reporting limit

J = Analyte detected below quantitation limits

NY-IAC-F: New York DOH Matrix F Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, February 2024.

NY-SSC-F: New York DOH Matrix F Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, February 2024.

Bold = Concentration above NY-IAC-F only (No further action)

Bold & Italicized = Concentration above NY-SSC-F only (No further action)

Yellow Box = Concentration above both NY-IAC-F and NY-SSC-F (Monitor or Mitigate)

TABLE 9

**CONCRETE SAMPLING RESULTS
1803 ELMWOOD AVENUE BCP - C915394
CITY OF BUFFALO, NEW YORK**



ANALYTE	NY-UNRES	NY-RESR	NY-RESRR	NY-RESC	NY-RESI	C-01-20240717			C-02-20240717			C-03-20240717			DUP-A-20240717			C-04-20240717			
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Result	Fig	RL	Result	Fig	RL	Result	Fig	RL	Result	Fig	RL	Result	Fig	RL	
POLYCHLORINATED BIPHENYLS BY GC																					
Aroclor 1016	0.1	1	1	1	25	ND		0.0946	ND		0.0876	ND		0.0967	ND		0.0955	ND		0.0934	
Aroclor 1221	0.1	1	1	1	25	ND		0.0946	ND		0.0876	ND		0.0967	ND		0.0955	ND		0.0934	
Aroclor 1232	0.1	1	1	1	25	ND		0.0946	ND		0.0876	ND		0.0967	ND		0.0955	ND		0.0934	
Aroclor 1242	0.1	1	1	1	25	0.247		0.0946	0.051	J	0.0876	ND		0.0967	ND		0.0955	0.039	J	0.0934	
Aroclor 1248	0.1	1	1	1	25	ND		0.0946	ND		0.0876	ND		0.0967	ND		0.0955	ND		0.0934	
Aroclor 1254	0.1	1	1	1	25	0.506		0.0946	0.128		0.0876	0.0398	J	0.0967	0.149		0.0955	0.248	IP	0.0934	
Aroclor 1260	0.1	1	1	1	25	0.615		0.0946	0.173		0.0876	ND		0.0967	0.0797	J	0.0955	0.418		0.0934	
Aroclor 1262	0.1	1	1	1	25	ND		0.0946	ND		0.0876	ND		0.0967	ND		0.0955	ND		0.0934	
Aroclor 1268	0.1	1	1	1	25	0.379		0.0946	0.0585	J	0.0876	ND		0.0967	0.0339	J	0.0955	0.463		0.0934	
PCBs, Total	0.1	1	1	1	25	1.75		0.0946	0.411	J	0.0876	0.0398	J	0.0967	0.263	J	0.0955	1.17	J	0.0934	

* Comparison is not performed on parameters with non-numeric criteria.

NY-RESC: New York NYCRR Part 375 Commercial Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

NY-RESI: New York NYCRR Part 375 Industrial Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

NY-RESR: New York NYCRR Part 375 Residential Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

NY-RESRR: New York NYCRR Part 375 Restricted-Residential Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

NY-UNRES: New York NYCRR Part 375 New York Unrestricted use Criteria Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

TABLE 9

CONCRETE SAMPLING RESULTS
1803 ELMWOOD AVENUE BCP - C915394
CITY OF BUFFALO, NEW YORK



SAMPLE ID:	C-05-20240717	C-06-20240717	C-07-20240717	C-08-20240717
LAB ID:	L2440109-06	L2440109-07	L2440109-08	L2440109-09
COLLECTION DATE:	7/17/2024	7/17/2024	7/17/2024	7/17/2024
SAMPLE DEPTH:	CONCRETE SURFACE	CONCRETE SURFACE	CONCRETE SURFACE	CONCRETE SURFACE
SAMPLE MATRIX:	CONCRETE	CONCRETE	CONCRETE	CONCRETE

ANALYTE	NY-UNRES	NY-RESR	NY-RESRR	NY-RESC	NY-RESI	C-05-20240717			C-06-20240717			C-07-20240717			C-08-20240717			
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Result	Fig	RL	Result	Fig	RL	Result	Fig	RL	Result	Fig	RL	
POLYCHLORINATED BIPHENYLS BY GC																		
Aroclor 1016	0.1	1	1	1	25	ND		0.0935	ND		0.0974	ND		0.101	ND		0.103	
Aroclor 1221	0.1	1	1	1	25	ND		0.0935	ND		0.0974	ND		0.101	ND		0.103	
Aroclor 1232	0.1	1	1	1	25	ND		0.0935	ND		0.0974	ND		0.101	ND		0.103	
Aroclor 1242	0.1	1	1	1	25	ND		0.0935	0.0164	JIP	0.0974	0.0638	J	0.101	ND		0.103	
Aroclor 1248	0.1	1	1	1	25	ND		0.0935	ND		0.0974	ND		0.101	ND		0.103	
Aroclor 1254	0.1	1	1	1	25	0.319		0.0935	0.0911	J	0.0974	0.154		0.101	0.118		0.103	
Aroclor 1260	0.1	1	1	1	25	0.238		0.0935	0.143		0.0974	0.125		0.101	0.182		0.103	
Aroclor 1262	0.1	1	1	1	25	ND		0.0935	ND		0.0974	ND		0.101	ND		0.103	
Aroclor 1268	0.1	1	1	1	25	0.156		0.0935	0.194		0.0974	0.048	J	0.101	0.0969	J	0.103	
PCBs, Total	0.1	1	1	1	25	0.713		0.0935	0.488	J	0.0974	0.391	J	0.101	0.397	J	0.103	

* Comparison is not performed on parameters with non-numeric criteria.

NY-RESC: New York NYCRR Part 375 Commercial Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Envir
 NY-RESI: New York NYCRR Part 375 Industrial Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environr
 NY-RESR: New York NYCRR Part 375 Residential Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Envir
 NY-RESRR: New York NYCRR Part 375 Restricted-Residential Criteria, New York Restricted use Criteria per 6 NYCRR Pa
 NY-UNRES: New York NYCRR Part 375 New York Unrestricted use Criteria Criteria per 6 NYCRR Part 375 Environmenta

Appendices

Appendix A

Duct Sealant Product Information & Safety Data Sheet

Duct Sealing Compound

Duct Sealing Compound is a gray, permanently soft, non-toxic compound which will adhere to most clean dry surfaces. Duct Sealing Compound will not adversely affect other plastic materials or corrode metals. It also has no adverse effect to human skin.



Part #	Pkg Qty	Description
DS-130	30 pugs	1 lb Pugs
DS-530	6 pugs	5 lb Pugs

Properties	Test Method	Value
Base:		Non-drying synthetic polymers and oils
Fillers:		Saturated mineral fillers and other inert ingredients
Specific Gravity:	ASTM D71-72	1.65 to 1.7
Cone penetration:	ASTM D217-52T	Load of 300 gm..5 sec. @ 25°F; 100 - 115 mm/10
Temperature usage range:	25°F to +120° F	Recommended
Temperature tolerance range:	-30°F to +175° F	Will not slump at +275°F
Flash Point:		Over 550 °F (285 °C)

Features and Benefits

- FDA Approved: As listed in CFR, Title 21, being composed of ingredients acceptable for packaging and transporting food.
- U.S.D.A. Acceptable: Chemically acceptable to the U.S.D.A. for use in meat and poultry processing areas under Federal Inspection.
- Dielectric Strength: Approx. 200 volts per mil (ASTM D149-64) or 10 KV.
- Chemical Resistance: Excellent resistance to water, alcohols, mild acids and bases.
- Vehicle Bleedout: None
- Non-Corrosive: Will not corrode Metals.
- Non-Irritant: No irritation to eyes or skin as listed in CFR, Title 16, Appraisal of the safety of chemicals in food, drugs, and cosmetics.
- Paintability: Yes.
- Protects terminal boxes, pot heads and bushings from corrosive elements.
- Deadens switch gear panel noise.
- Dough-like compound is easily "thumbed" over holes and gaps.
- Will not harden or form a skin under normal conditions.
- Not for use outdoors.

Uses

Duct Sealing Compound is used primarily by the building and specifically by the electrical trade to seal around electrical boxes, flashings, and service mast entries, etc. It can be shaped by hand to any form and reused if necessary. It has countless other applications in the refrigeration, heating and cooling, plumbing, and metal fabrication fields as well as being an excellent general purpose sealant around the home. It may be painted immediately after application and will not bleedthrough the dry paint.

Forms

Duct Sealing Compound is individually wrapped and placed in plastic bags with convenient reusable clips to seal out dirt and moisture that might contaminate the product. Sealer is available in one and five pound packages, packed fifty pounds net per carton. Also in bulk upon request.



DS-530, 130, 110N - Safety Data Sheet (SDS, GHS Format)

May be used to comply with OSHA's Hazard Communication Standards 29 CRP 1910.1200. Standards must be consulted for specific requirements.

Section 1 - Identification

Supplier/Manufacturer's Name & Address: GB Electric N85 W12545 Westbrook Crossing Menomonee Falls, WI 53051	Emergency Telephone Number: (800)-4249300
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Chemical Family: Butyl Rubber Composite	Date Prepared: 01/01/2015
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Product Use: Thumb Grade Sealer	Product Name: #1003
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Section 2 – Hazards Identificaiton

Hazardous Components: None	ACGIH TLV: n/a
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GHS Ratings: Health: 5 Flammability: 5 Reactivity: 5
HMS Ratings: Health: 1 Flammability: 0 Reactivity: 0

The primary components utilized in the manufacturing of this product are inert inorganic minerals, water, surfactants and polyisobutylene. These materials are believed to be non-hazardous and are listed under TOSCA regulations.

Effects of Acute Exposure to Product:	n/a
Effects of chronic Exposure to Product:	None known.
Exposure Limits:	None established.
Irritability of Product:	None known.
Sensitization to Product:	None known.
Carcinogenicity:	No evidence.
Teratogenicity:	None known
Reproductive Toxicity:	None known
Mutagenicity:	None known
Synergistic Products:	None known

Section 3 – Composition/Physical Properties

None of the components of this product are hazardous as defined by OSHA Hazard Communication Standard (29 CFR 1910. 1200). If more information is required by a nurse or physician in the event of a medical emergency, contact us at the number listed in Section 1.

CAS Number:	n/a
Chemical Name:	n/a
Percent by Weight:	n/a

Section 4 – First Aid Measures

Specific Measures:

Eye Contact:	Do not remove, seek medical attention immediately.
Skin contact:	If too sensitive, seek medical attention.
Inhalation:	n/a
Ingestion:	Not likely, but if ingested, could constipate or create a blockage. Seek medical attention.

GHS Health Rating: 5
 HMIS Health Rating: 1

Section 5 – Fire Fighting Measures

Extinguishing Media: Use water, Foam, Carbon Dioxide, or dry chemical. Nitrogen oxides and carbon monoxides may be involved.

GHS Flammability Rating: 5
 HMIS Flammability Rating: 0

Section 6 – Accidental Release Measures

Leak or Spill Procedure: As the product is a solid, a spill is not really possible. If the material is dumped or falls into an undesirable location and is no longer usable, dispose of the material as described in Section 13 of this document.

Section 7 – Handling and Storage

Handling Procedures & Equipment:	Wash hands with soap and water before eating.
Storage Requirements:	Store in a cool, dry place.

Section 8 – Exposure Controls and Personal Protection



Personal Protective Equipment:

HMIS “B” RATING

Gloves (specify):	Cotton or other protective gloves.
Respirator (specify):	None needed.
Eye (specify):	Glasses or goggles recommended. Good industrial practice should be observed.
Footwear (specify):	Industrial shoes to protect skin from adhesive contact.
Clothing (specify):	Long sleeves, long trousers to protect skin from contact.
Other (specify):	None known



Section 9 – Physical and Chemical Properties

Physical State:	Solid	Odor & Appearance:	Dark gray thumable solid with no odor.
Vapor Pressure:	n/a	Vapor Density:	n/a
pH:	n/a	Evaporation Rate:	n/a
Specific Gravity:	1.78 g/cc	Coeff. Water/Oil Dist.:	n/a
VOC (Grams/Liter):	n/a	Boiling Point (C):	n/a
Solubility in Water:	Insoluble	Odor Threshold (ppm):	n/a
Freezing Point (C):	n/a	Volatiles by Wt. (%):	2
Flash Point (C):	310 COC		

Section 10 – Stability and Reactivity

Chemical Stability: Stable, no chemical decomposition.

Possibility of hazardous reactions: None are known.

Hazardous decomposition products: None are known.

GHS Reactivity Rating: 5

HMIS Reactivity Rating: 0

Section 11 – Toxicological Information

Route of Entry: Skin Contact () Skin Absorption () Eye Contact () Inhalation () Ingestion ()

Effects of Acute Exposure to Product: n/a

Effects of chronic Exposure to Product: None known.

Exposure Limits: None established.

Irritability of Product: None known.

Sensitization to Product: None known.

Carcinogenicity: No evidence.

Teratogenicity: None known

Reproductive Toxicity: None known

Mutagenicity: None known

Synergistic Products: None known



Section 12 – Ecological Information

Ecotoxicity: There is no evidence that this product is harmful to the environment.

Bio-accumulative potential: There is no evidence to suggest bioaccumulation will occur.

Mobility: Accidental dropping may lead to mixing with soil, but there is no evidence that this would cause adverse ecological effects.

Section 13 – Disposal Considerations

To the best of our knowledge the product is not considered a hazardous waste based on U.S. EPA Hazardous Waste Regulations 40 CFR 261. Dispose of in accordance with all local, state and federal regulations.

Section 14 – Transport Information

DOT Shipping Regulation: Not Regulated

IATA Shipping Regulation: Not Regulated –material not dangerous (non-hazardous)

Section 15 – Regulatory Information

OSHA This product or its components are non-hazardous

SARA (311 or 312) CAS Number: n/a

Chemical Name: n/a

Percent by Weight: n/a

Proposition 65: This product does not contain any chemicals known to the state of California to cause cancer or birth defects

EU Directives Meets the RoHS requirements

Canada: CEPA & DSL Not regulated

Section 16 – Other Information

Prepared By: Sealers, INC

Phone Number: (314) 752-4667

Date: 01/01/2015

Appendix B

Concrete Recycling Sampling & Approval

Jesse Alt-Winzig

From: k.rawe86@gmail.com
Sent: Monday, January 13, 2025 1:28 PM
To: 'Mary Szustak'
Cc: 'C. Mark Hanna'
Subject: RE: 1803 Elmwood Avenue

Mary,

I reviewed the recent test reports for the 3 composite samples (CC-01, CC-02, CC-03). Based on the test reports **no surficial removal is needed** for you to bring the concrete into Swift River Associates, Inc. for processing/recycling. I have the following questions:

1. Who will be paying our **Tip Fee invoice per Quote: \$ 200.00/tandem dump truck load?**
2. The contractor or Environmental Advantage must have an Account with us. We can send you our Credit Application.
3. When is the concrete scheduled to be brought in?
4. What Trucking company will be bringing the concrete in?
5. Terms:
 - A. A signed purchase order is required
 - B. Payment – Net 30 days
 - C. Quote good for 60 days

Ken

Kenneth Rawe Jr. P.E.
Swift River Associates Inc.
4051 River Rd.
Tonawanda, NY 14150
716-875-0902 office
716-875-0088 fax
716-818-4419 cell

From: Mary Szustak <mszustak@envadvantage.com>
Sent: Friday, January 10, 2025 2:31 PM
To: k.rawe86@gmail.com
Cc: 'C. Mark Hanna' <mhanna@envadvantage.com>
Subject: RE: 1803 Elmwood Avenue

Ken,

We were out to sample the concrete at the site referenced below in 1/2/25.

We completed a total of six (6) samples to depth and submitted three (3) composite samples as follows:

CC-01 – was a composite of the two previous locations C-01 & C-04 where surficial samples had exhibited PCB's > 1mg/kg

CC-02 – was a composite from two samples collected in the vicinity of two previous locations C-02 & C-03, which also is nearby to C-01 & C-04

CC-03 - was a composite from two samples collected in the vicinity of two previous locations C-05 & C-08.

I have attached a figure that shows the location and PCB result of the original surficial samples completed by C&S in July 2024 (this has previously been shared with you) AND the locations of the most recent samples collected earlier this month. At the bottom of the figure, I have added a table summarizing the results from this most recent January 2025 sampling. Separately a table is attached summarizing the January 2025 results and the Pace Analytical Laboratory report. **Please Note:** Pace reports PCB detections to PPB. I have converted the detections to PPM on the attached figure and table to match the regulatory levels in Part 375.

CC-01 (composite of the two previous locations C-01 & C-04 where surficial samples had exhibited PCB's > 1mg/kg), and CC-03 (composite from samples collected in the vicinity of two previous locations C-05 & C-08) presented total PCBs concentrations below unrestricted use SCOs when sampled to depth.

CC-02 (composite from samples collected in the vicinity of two previous locations C-02 & C-03, which also is nearby to C-01 & C-04), presented total PCBs concentrations above unrestricted use SCOs when sampled to depth, however BELOW residential use SCOs when sampled to depth. PCB's concentrations in CC-02 were lower than those previously reported from surficial samples C-02 & C-03.

We would like to move forward with pricing out the remediation for this project, please let us know if any surficial removal is needed for us to bring the material into Swift River for processing/recycling.

Please let us know if we can provide any additional information to keep things moving along,

Thanks,

Mary Szustak, Project Manager
Site Services Team Lead
Environmental Advantage, Inc.
3636 N. Buffalo Road
Orchard Park, NY 14127
Phone (716) 667-3130 ext.106
Fax (716) 667-3156
Cell (716) 997-0777
mszustak@envadvantage.com
www.envadvantage.com

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From: Mary Szustak <mszustak@envadvantage.com>
Sent: Tuesday, December 17, 2024 9:42 AM
To: 'k.rawe86@gmail.com' <k.rawe86@gmail.com>
Subject: RE: 1803 Elmwood Avenue

Thanks Ken,

We will get out there and sample soon.

Mary Szustak, Project Manager
Site Services Team Lead
Environmental Advantage, Inc.
3636 N. Buffalo Road
Orchard Park, NY 14127
Phone (716) 667-3130 ext.106
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From: k.rawe86@gmail.com <k.rawe86@gmail.com>
Sent: Tuesday, December 17, 2024 9:35 AM
To: 'Mary Szustak' <mszustak@envadvantage.com>
Cc: Liz Rawe <swiftriverassociates@gmail.com>
Subject: RE: 1803 Elmwood Avenue

Mary,
14,400 SF x avg. depth of .67 FT = 357.33CY.
The 2 areas where PCB's over 1mg/kg – one representative sample.
The other areas – two representative samples.

Ken

Kenneth Rawe Jr. P.E.
Swift River Associates Inc.
4051 River Rd.
Tonawanda, NY 14150
716-875-0902 office
716-875-0088 fax
716-818-4419 cell

From: Mary Szustak <mszustak@envadvantage.com>
Sent: Friday, December 13, 2024 12:12 PM
To: k.rawe86@gmail.com
Subject: RE: 1803 Elmwood Avenue

Ken,

We are planning on going back out to this site to collect additional concrete samples. We want to sample to depth instead of just the surface to get accurate characterization samples.

The two areas where PCB's were over 1 mg/kg at the surface, we want to scarify / mill down to remove the surficial PCB contamination and then collect a sample to confirm the material is clean (this will be down the road as an initial step to the removal of the entire pad).

Do you have an indication of how many samples you would need to see to be able to formally accept the material?

The goal is to collect those samples now, that way when remediation starts we will start with milling those 2 areas, take confirmatory samples, then begin to bust up the floor on the opposite side of the building while e are waiting for the results of the confirmation samples. If PCB contamination is still present after milling – these areas will be saw cut out and sent to the landfill.

Thanks,

Mary Szustak, Project Manager
Site Services Team Lead
Environmental Advantage, Inc.
3636 N. Buffalo Road
Orchard Park, NY 14127
Phone (716) 667-3130 ext.106
Fax (716) 667-3156
Cell (716) 997-0777
mszustak@envadvantage.com
www.envadvantage.com

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From: k.rawe86@gmail.com <k.rawe86@gmail.com>
Sent: Friday, December 6, 2024 4:20 PM
To: 'Mary Szustak' <mszustak@envadvantage.com>
Cc: Liz Rawe <swiftriverassociates@gmail.com>
Subject: FW: 1803 Elmwood Avenue

Mary,

I reviewed your attached concrete slab surface sample test reports. I think your idea to cut out the 2 locations over 1mg/kg and landfill is the way to go. Since the rest of the slab has been power washed then the balance of the concrete should be able to be recycled as it has been our experience that staining does not penetrate deep into the concrete. A re-sampling of a few areas and test results would prove the point. Swift River would accept the concrete slab material as described above as follows: **QUOTE: \$ 200.00/ tandem dump truck load.**

Ken

Kenneth Rawe Jr. P.E.
Swift River Associates Inc.
4051 River Rd.
Tonawanda, NY 14150
716-875-0902 office
716-875-0088 fax

716-818-4419 cell

From: Mary Szustak <mszustak@envadvantage.com>
Sent: Friday, December 6, 2024 1:46 PM
To: k.rawe86@gmail.com
Subject: 1803 Elmwood Avenue

Ken,

We spoke a little while back about a BCP Site we are working on. Attached is some limited concrete data from surface samples that were collected. The Site is the interior of a building that was most recently used as a machine shop.

Ideally, we would like to bring the concrete in for recycle. The plan is to either mill down or scarify the top layer to remove the top surface and any staining. Potentially, we may saw cut out the 2 locations where we had a result over 1mg/kg and send those for landfill disposal. Material removed from the top via milling or scarifying would also go for landfill disposal.

The entire slab has been power washed and looks entirely different than when the concrete samples were collected. There is a chance that if we repeated some of the sampling we would get results under UUSCOs.

Could you give us some guidance here on what we would need to do for swift river to be able to accept this material?

The concrete ranges from 6” – 14” in depth, I would say an average of 8”, and the area is approximately 14,400 sqft.

Thanks,

Mary Szustak, Project Manager
Site Services Team Lead
Environmental Advantage, Inc.
3636 N. Buffalo Road
Orchard Park, NY 14127
Phone (716) 667-3130 ext.106
Fax (716) 667-3156
Cell (716) 997-0777
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Table 1
Summary of Analytical Testing
O' Connell Building - 1803 Elmwood Avenue, Buffalo, NY

LOCATION	UUSCO	RUSCO	CUSCO	CONCRETE COMPOSITE-01	CONCRETE COMPOSITE-02	CONCRETE COMPOSITE-03
SAMPLING DATE				1/2/2025	1/2/2025	1/2/2025
LAB SAMPLE ID				L2500346-01	L2500346-02	L2500346-03
SAMPLE TYPE				Concrete	Concrete	Concrete
COMPOSITE				C-01 & C-04	C-02 & C-03	C-05 & C-08
Polychlorinated Biphenyls by GC (mg/kg)						
Aroclor 1016	0.1	1	1	ND	ND	ND
Aroclor 1221	0.1	1	1	ND	ND	ND
Aroclor 1232	0.1	1	1	ND	ND	ND
Aroclor 1242	0.1	1	1	ND	ND	ND
Aroclor 1248	0.1	1	1	ND	ND	ND
Aroclor 1254	0.1	1	1	ND	0.0421J	ND
Aroclor 1260	0.1	1	1	ND	0.0593JIP	ND
Aroclor 1262	0.1	1	1	ND	ND	ND
Aroclor 1268	0.1	1	1	0.0208J	0.077J	ND
PCBs, Total	0.1	1	1	0.0208J	0.178J	ND

Legend

- Concrete Samples
- BCP Boundary

C-08-20240717					
L2440109-09					
7/17/2024					
CONCRETE SURFACE					
CONCRETE					
	NY-UNRES	NY-RESC			
ANALYTE	(mg/kg)	(mg/kg)	Result	Flg	RL
POLYCHLORINATED BIPHENYLS BY GC					
Aroclor 1254	0.1	1	0.118		0.103
Aroclor 1260	0.1	1	0.182		0.103
PCBs, Total	0.1	1	0.397	J	0.103

C-06-20240717					
L2440109-07					
7/17/2024					
CONCRETE SURFACE					
CONCRETE					
	NY-UNRES	NY-RESC			
ANALYTE	(mg/kg)	(mg/kg)	Result	Flg	RL
POLYCHLORINATED BIPHENYLS BY GC					
Aroclor 1260	0.1	1	0.143		0.0974
Aroclor 1268	0.1	1	0.194		0.0974
PCBs, Total	0.1	1	0.488	J	0.0974

C-04-20240717					
L2440109-05					
7/17/2024					
CONCRETE SURFACE					
CONCRETE					
	NY-UNRES	NY-RESC			
ANALYTE	(mg/kg)	(mg/kg)	Result	Flg	RL
POLYCHLORINATED BIPHENYLS BY GC					
Aroclor 1254	0.1	1	0.248	IP	0.0934
Aroclor 1260	0.1	1	0.418		0.0934
Aroclor 1268	0.1	1	0.463		0.0934
PCBs, Total	0.1	1	1.17	J	0.0934

C-02-20240717					
L2440109-02					
7/17/2024					
CONCRETE SURFACE					
CONCRETE					
	NY-UNRES	NY-RESC			
ANALYTE	(mg/kg)	(mg/kg)	Result	Flg	RL
POLYCHLORINATED BIPHENYLS BY GC					
Aroclor 1254	0.1	1	0.128		0.0876
Aroclor 1260	0.1	1	0.173		0.0876
PCBs, Total	0.1	1	0.411	J	0.0876

C-07-20240717					
L2440109-08					
7/17/2024					
CONCRETE SURFACE					
CONCRETE					
	NY-UNRES	NY-RESC			
ANALYTE	(mg/kg)	(mg/kg)	Result	Flg	RL
POLYCHLORINATED BIPHENYLS BY GC					
Aroclor 1254	0.1	1	0.154		0.101
Aroclor 1260	0.1	1	0.125		0.101
PCBs, Total	0.1	1	0.391	J	0.101

C-05-20240717					
L2440109-06					
7/17/2024					
CONCRETE SURFACE					
CONCRETE					
	NY-UNRES	NY-RESC			
ANALYTE	(mg/kg)	(mg/kg)	Result	Flg	RL
POLYCHLORINATED BIPHENYLS BY GC					
Aroclor 1254	0.1	1	0.319		0.0935
Aroclor 1260	0.1	1	0.238		0.0935
Aroclor 1268	0.1	1	0.156		0.0935
PCBs, Total	0.1	1	0.713		0.0935

C-01-20240717					
L2440109-01					
7/17/2024					
CONCRETE SURFACE					
CONCRETE					
	NY-UNRES	NY-RESC			
ANALYTE	(mg/kg)	(mg/kg)	Result	Flg	RL
POLYCHLORINATED BIPHENYLS BY GC					
Aroclor 1242	0.1	1	0.247		0.0946
Aroclor 1254	0.1	1	0.506		0.0946
Aroclor 1260	0.1	1	0.615		0.0946
Aroclor 1268	0.1	1	0.379		0.0946
PCBs, Total	0.1	1	1.75		0.0946

Location	JUSCO	RUSCO	CUSCO	CC-01	CC-02	CC-03
Sample Date				1/2/2025	1/2/2025	1/2/2025
Lab Sample ID				L2500346-01	L2500346-02	L2500346-03
Composite Loc				C-01 & C-04	C-02 & C-03	C-05 & C-08
Polychlorinated Biphenyls by GC (mg/kg)						
Aroclor 1016	0.1	1	1	ND	ND	ND
Aroclor 1221	0.1	1	1	ND	ND	ND
Aroclor 1232	0.1	1	1	ND	ND	ND
Aroclor 1242	0.1	1	1	ND	ND	ND
Aroclor 1248	0.1	1	1	ND	ND	ND
Aroclor 1254	0.1	1	1	ND	0.0421J	ND
Aroclor 1260	0.1	1	1	ND	0.0593JIP	ND
Aroclor 1262	0.1	1	1	ND	ND	ND
Aroclor 1268	0.1	1	1	0.0208J	0.077J	ND
PCBs, Total	0.1	1	1	0.0208J	0.178J	ND

- CC-01 - Total Depth Composite #1 (C-01 & C-04 Locations)
- CC-02 - Total Depth Composite #2
- CC-03 - Total Depth Composite #3
- Surficial Waste Characterization Composite (C-01 & C-04 Locations)
- Manual Auger (after Coring) Soil/Fill Composite Location
- Previous Concrete Sample Location (C&S)



Figure 6 | Concrete Sample Locations & Results
1803 Elmwood Avenue BCP



Sources: . Created by C&S Engineers, Inc. Modified: 9/20/24 at 12:54 PM



ANALYTICAL REPORT

Lab Number:	L2500346
Client:	Environmental Advantage, Inc. 3636 North Buffalo Road Orchard Park, NY 14127
ATTN:	Mark Hanna
Phone:	(716) 667-3130
Project Name:	1803 ELMWOOD AVE BCP C915394
Project Number:	01314
Report Date:	01/10/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: 1803 ELMWOOD AVE BCP C915394
Project Number: 01314

Lab Number: L2500346
Report Date: 01/10/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2500346-01	CONCRETE COMPOSITE-01	CONCRETE	1803 ELMWOOD AVE BCP C915394	01/02/25 10:20	01/03/25
L2500346-02	CONCRETE COMPOSITE-02	CONCRETE	1803 ELMWOOD AVE BCP C915394	01/02/25 09:45	01/03/25
L2500346-03	CONCRETE COMPOSITE-03	CONCRETE	1803 ELMWOOD AVE BCP C915394	01/02/25 09:20	01/03/25

Project Name: 1803 ELMWOOD AVE BCP C915394
Project Number: 01314

Lab Number: L2500346
Report Date: 01/10/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: 1803 ELMWOOD AVE BCP C915394
Project Number: 01314

Lab Number: L2500346
Report Date: 01/10/25

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Caitlin Walukevich

Title: Technical Director/Representative

Date: 01/10/25

ORGANICS

PCBS

Project Name: 1803 ELMWOOD AVE BCP C915394
Project Number: 01314

Lab Number: L2500346
Report Date: 01/10/25

SAMPLE RESULTS

Lab ID: L2500346-01
Client ID: CONCRETE COMPOSITE-01
Sample Location: 1803 ELMWOOD AVE BCP C915394

Date Collected: 01/02/25 10:20
Date Received: 01/03/25
Field Prep: Not Specified

Sample Depth:

Matrix: Concrete
Analytical Method: 1,8082A
Analytical Date: 01/06/25 19:27
Analyst: EMR
Percent Solids: 97%

Extraction Method: EPA 3540C
Extraction Date: 01/05/25 09:15
Cleanup Method: EPA 3665A
Cleanup Date: 01/06/25
Cleanup Method: EPA 3660B
Cleanup Date: 01/06/25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	97.8	8.69	1	A
Aroclor 1221	ND		ug/kg	97.8	9.80	1	A
Aroclor 1232	ND		ug/kg	97.8	20.7	1	A
Aroclor 1242	ND		ug/kg	97.8	13.2	1	A
Aroclor 1248	ND		ug/kg	97.8	14.7	1	A
Aroclor 1254	ND		ug/kg	97.8	10.7	1	A
Aroclor 1260	ND		ug/kg	97.8	18.1	1	A
Aroclor 1262	ND		ug/kg	97.8	12.4	1	A
Aroclor 1268	20.8	J	ug/kg	97.8	10.1	1	B
PCBs, Total	20.8	J	ug/kg	97.8	8.69	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	102		30-150	A
2,4,5,6-Tetrachloro-m-xylene	76		30-150	B
Decachlorobiphenyl	111		30-150	B

Project Name: 1803 ELMWOOD AVE BCP C915394
Project Number: 01314

Lab Number: L2500346
Report Date: 01/10/25

SAMPLE RESULTS

Lab ID: L2500346-02
Client ID: CONCRETE COMPOSITE-02
Sample Location: 1803 ELMWOOD AVE BCP C915394

Date Collected: 01/02/25 09:45
Date Received: 01/03/25
Field Prep: Not Specified

Sample Depth:

Matrix: Concrete
Analytical Method: 1,8082A
Analytical Date: 01/06/25 19:38
Analyst: EMR
Percent Solids: 96%

Extraction Method: EPA 3540C
Extraction Date: 01/05/25 09:15
Cleanup Method: EPA 3665A
Cleanup Date: 01/06/25
Cleanup Method: EPA 3660B
Cleanup Date: 01/06/25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	91.1	8.09	1	A
Aroclor 1221	ND		ug/kg	91.1	9.13	1	A
Aroclor 1232	ND		ug/kg	91.1	19.3	1	A
Aroclor 1242	ND		ug/kg	91.1	12.3	1	A
Aroclor 1248	ND		ug/kg	91.1	13.7	1	A
Aroclor 1254	42.1	J	ug/kg	91.1	9.96	1	B
Aroclor 1260	59.3	JIP	ug/kg	91.1	16.8	1	A
Aroclor 1262	ND		ug/kg	91.1	11.6	1	A
Aroclor 1268	77.0	J	ug/kg	91.1	9.44	1	A
PCBs, Total	178	J	ug/kg	91.1	8.09	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	61		30-150	A
Decachlorobiphenyl	77		30-150	A
2,4,5,6-Tetrachloro-m-xylene	64		30-150	B
Decachlorobiphenyl	89		30-150	B

Project Name: 1803 ELMWOOD AVE BCP C915394
Project Number: 01314

Lab Number: L2500346
Report Date: 01/10/25

SAMPLE RESULTS

Lab ID: L2500346-03
Client ID: CONCRETE COMPOSITE-03
Sample Location: 1803 ELMWOOD AVE BCP C915394

Date Collected: 01/02/25 09:20
Date Received: 01/03/25
Field Prep: Not Specified

Sample Depth:

Matrix: Concrete
Analytical Method: 1,8082A
Analytical Date: 01/06/25 19:50
Analyst: EMR
Percent Solids: 94%

Extraction Method: EPA 3540C
Extraction Date: 01/05/25 09:15
Cleanup Method: EPA 3665A
Cleanup Date: 01/06/25
Cleanup Method: EPA 3660B
Cleanup Date: 01/06/25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	99.3	8.82	1	A
Aroclor 1221	ND		ug/kg	99.3	9.95	1	A
Aroclor 1232	ND		ug/kg	99.3	21.0	1	A
Aroclor 1242	ND		ug/kg	99.3	13.4	1	A
Aroclor 1248	ND		ug/kg	99.3	14.9	1	A
Aroclor 1254	ND		ug/kg	99.3	10.9	1	A
Aroclor 1260	ND		ug/kg	99.3	18.3	1	A
Aroclor 1262	ND		ug/kg	99.3	12.6	1	A
Aroclor 1268	ND		ug/kg	99.3	10.3	1	A
PCBs, Total	ND		ug/kg	99.3	8.82	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	78		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	86		30-150	B

Project Name: 1803 ELMWOOD AVE BCP C915394
Project Number: 01314

Lab Number: L2500346
Report Date: 01/10/25

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8082A
 Analytical Date: 01/06/25 18:52
 Analyst: EMR

Extraction Method: EPA 3540C
 Extraction Date: 01/05/25 09:15
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/06/25
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/06/25

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-03 Batch: WG2016544-1						
Aroclor 1016	ND		ug/kg	89.9	7.98	A
Aroclor 1221	ND		ug/kg	89.9	9.01	A
Aroclor 1232	ND		ug/kg	89.9	19.1	A
Aroclor 1242	ND		ug/kg	89.9	12.1	A
Aroclor 1248	ND		ug/kg	89.9	13.5	A
Aroclor 1254	ND		ug/kg	89.9	9.84	A
Aroclor 1260	ND		ug/kg	89.9	16.6	A
Aroclor 1262	ND		ug/kg	89.9	11.4	A
Aroclor 1268	ND		ug/kg	89.9	9.32	A
PCBs, Total	ND		ug/kg	89.9	7.98	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	51		30-150	A
Decachlorobiphenyl	67		30-150	A
2,4,5,6-Tetrachloro-m-xylene	55		30-150	B
Decachlorobiphenyl	69		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: 1803 ELMWOOD AVE BCP C915394
Project Number: 01314

Lab Number: L2500346
Report Date: 01/10/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-03 Batch: WG2016544-2 WG2016544-3									
Aroclor 1016	84		91		40-140	8		50	A
Aroclor 1260	97		103		40-140	6		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		86		30-150	A
Decachlorobiphenyl	89		106		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		84		30-150	B
Decachlorobiphenyl	88		104		30-150	B



INORGANICS & MISCELLANEOUS

Project Name: 1803 ELMWOOD AVE BCP C915394
Project Number: 01314

Lab Number: L2500346
Report Date: 01/10/25

SAMPLE RESULTS

Lab ID: L2500346-01
Client ID: CONCRETE COMPOSITE-01
Sample Location: 1803 ELMWOOD AVE BCP C915394

Date Collected: 01/02/25 10:20
Date Received: 01/03/25
Field Prep: Not Specified

Sample Depth:
Matrix: Concrete

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	96.6		%	0.100	NA	1	-	01/04/25 19:31	121,2540G	SJB



Project Name: 1803 ELMWOOD AVE BCP C915394
Project Number: 01314

Lab Number: L2500346
Report Date: 01/10/25

SAMPLE RESULTS

Lab ID: L2500346-02
Client ID: CONCRETE COMPOSITE-02
Sample Location: 1803 ELMWOOD AVE BCP C915394

Date Collected: 01/02/25 09:45
Date Received: 01/03/25
Field Prep: Not Specified

Sample Depth:
Matrix: Concrete

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	96.3		%	0.100	NA	1	-	01/04/25 19:31	121,2540G	SJB



Project Name: 1803 ELMWOOD AVE BCP C915394
Project Number: 01314

Lab Number: L2500346
Report Date: 01/10/25

SAMPLE RESULTS

Lab ID: L2500346-03
Client ID: CONCRETE COMPOSITE-03
Sample Location: 1803 ELMWOOD AVE BCP C915394

Date Collected: 01/02/25 09:20
Date Received: 01/03/25
Field Prep: Not Specified

Sample Depth:
Matrix: Concrete

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	93.6		%	0.100	NA	1	-	01/04/25 19:31	121,2540G	SJB



Lab Duplicate Analysis

Batch Quality Control

Project Name: 1803 ELMWOOD AVE BCP C915394
Project Number: 01314

Lab Number: L2500346
Report Date: 01/10/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG2016493-1 QC Sample: L2500346-01 Client ID: CONCRETE COMPOSITE-01						
Solids, Total	96.6	96.8	%	0		20

Project Name: 1803 ELMWOOD AVE BCP C915394**Lab Number:** L2500346**Project Number:** 01314**Report Date:** 01/10/25**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information**Cooler** **Custody Seal**

A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2500346-01A	Plastic 2oz unpreserved for TS	A	NA		4.8	Y	Absent		TS(7)
L2500346-01B	Glass 60mL/2oz unpreserved	A	NA		4.8	Y	Absent		NYTCL-8082-3540C(365)
L2500346-02A	Plastic 2oz unpreserved for TS	A	NA		4.8	Y	Absent		TS(7)
L2500346-02B	Glass 60mL/2oz unpreserved	A	NA		4.8	Y	Absent		NYTCL-8082-3540C(365)
L2500346-03A	Plastic 2oz unpreserved for TS	A	NA		4.8	Y	Absent		TS(7)
L2500346-03B	Glass 60mL/2oz unpreserved	A	NA		4.8	Y	Absent		NYTCL-8082-3540C(365)

Project Name: 1803 ELMWOOD AVE BCP C915394
Project Number: 01314

Lab Number: L2500346
Report Date: 01/10/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



Project Name: 1803 ELMWOOD AVE BCP C915394
Project Number: 01314

Lab Number: L2500346
Report Date: 01/10/25

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



Project Name: 1803 ELMWOOD AVE BCP C915394
Project Number: 01314

Lab Number: L2500346
Report Date: 01/10/25

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: 1803 ELMWOOD AVE BCP C915394
Project Number: 01314

Lab Number: L2500346
Report Date: 01/10/25

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

EPA 624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625.1: alpha-Terpineol

EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270E: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

SM 2540D: TSS.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

MADEP-APH.

Nonpotable Water: EPA RSK-175 Dissolved Gases

Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Alpha SOP 23528

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables).

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522, EPA 537.1.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Project Manager.



ANALYTICAL REPORT

Lab Number:	L2500348
Client:	Environmental Advantage, Inc. 3636 North Buffalo Road Orchard Park, NY 14127
ATTN:	Mark Hanna
Phone:	(716) 667-3130
Project Name:	1803 ELMWOOD AVE BCP C915394
Project Number:	01314
Report Date:	01/10/25

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: 1803 ELMWOOD AVE BCP C915394
Project Number: 01314

Lab Number: L2500348
Report Date: 01/10/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2500348-01	CONCRETE WASTE CHARACTERIZATION	CONCRETE	1803 ELMWOOD AVE, BUFFALO	01/02/25 10:30	01/03/25

Project Name: 1803 ELMWOOD AVE BCP C915394
Project Number: 01314

Lab Number: L2500348
Report Date: 01/10/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: 1803 ELMWOOD AVE BCP C915394
Project Number: 01314

Lab Number: L2500348
Report Date: 01/10/25

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Caitlin Walukevich

Title: Technical Director/Representative

Date: 01/10/25

ORGANICS

VOLATILES

Project Name: 1803 ELMWOOD AVE BCP C915394
Project Number: 01314

Lab Number: L2500348
Report Date: 01/10/25

SAMPLE RESULTS

Lab ID: L2500348-01
 Client ID: CONCRETE WASTE CHARACTERIZATION
 Sample Location: 1803 ELMWOOD AVE, BUFFALO

Date Collected: 01/02/25 10:30
 Date Received: 01/03/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Concrete
 Analytical Method: 1,8260D
 Analytical Date: 01/08/25 12:31
 Analyst: LAC
 Percent Solids: 97%
 TCLP/SPLP Ext. Date: 01/07/25 05:16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	102		70-130
dibromofluoromethane	101		70-130

Project Name: 1803 ELMWOOD AVE BCP C915394
Project Number: 01314

Lab Number: L2500348
Report Date: 01/10/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 01/08/25 05:23
Analyst: MCM
TCLP/SPLP Extraction Date: 01/07/25 05:16

Extraction Date: 01/07/25 05:16

Parameter	Result	Qualifier	Units	RL	MDL
TCLP Volatiles by EPA 1311 - Westborough Lab for sample(s): 01 Batch: WG2017629-5					
Chloroform	ND		ug/l	7.5	2.2
Carbon tetrachloride	ND		ug/l	5.0	1.3
Tetrachloroethene	ND		ug/l	5.0	1.8
Chlorobenzene	ND		ug/l	5.0	1.8
1,2-Dichloroethane	ND		ug/l	5.0	1.3
Benzene	ND		ug/l	5.0	1.6
Vinyl chloride	ND		ug/l	10	0.71
1,1-Dichloroethene	ND		ug/l	5.0	1.7
Trichloroethene	ND		ug/l	5.0	1.8
1,4-Dichlorobenzene	ND		ug/l	25	1.9
2-Butanone	ND		ug/l	50	19.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	106		70-130
dibromofluoromethane	103		70-130

Lab Control Sample Analysis Batch Quality Control

Project Name: 1803 ELMWOOD AVE BCP C915394
Project Number: 01314

Lab Number: L2500348
Report Date: 01/10/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Volatiles by EPA 1311 - Westborough Lab Associated sample(s): 01 Batch: WG2017629-3 WG2017629-4								
Chloroform	99		96		70-130	3		20
Carbon tetrachloride	100		100		63-132	0		20
Tetrachloroethene	110		100		70-130	10		20
Chlorobenzene	110		100		75-130	10		25
1,2-Dichloroethane	100		100		70-130	0		20
Benzene	110		100		70-130	10		25
Vinyl chloride	100		98		55-140	2		20
1,1-Dichloroethene	100		100		61-145	0		25
Trichloroethene	110		100		70-130	10		25
1,4-Dichlorobenzene	110		100		70-130	10		20
2-Butanone	100		95		63-138	5		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	93		98		70-130
Toluene-d8	102		101		70-130
4-Bromofluorobenzene	101		102		70-130
dibromofluoromethane	94		94		70-130



PCBS

Project Name: 1803 ELMWOOD AVE BCP C915394
Project Number: 01314

Lab Number: L2500348
Report Date: 01/10/25

SAMPLE RESULTS

Lab ID: L2500348-01
Client ID: CONCRETE WASTE CHARACTERIZATION
Sample Location: 1803 ELMWOOD AVE, BUFFALO

Date Collected: 01/02/25 10:30
Date Received: 01/03/25
Field Prep: Not Specified

Sample Depth:

Matrix: Concrete
Analytical Method: 1,8082A
Analytical Date: 01/06/25 20:35
Analyst: EMR
Percent Solids: 97%

Extraction Method: EPA 3540C
Extraction Date: 01/05/25 10:20
Cleanup Method: EPA 3665A
Cleanup Date: 01/06/25
Cleanup Method: EPA 3660B
Cleanup Date: 01/06/25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	96.0	8.52	1	A
Aroclor 1221	ND		ug/kg	96.0	9.61	1	A
Aroclor 1232	ND		ug/kg	96.0	20.3	1	A
Aroclor 1242	ND		ug/kg	96.0	12.9	1	A
Aroclor 1248	ND		ug/kg	96.0	14.4	1	A
Aroclor 1254	361		ug/kg	96.0	10.5	1	B
Aroclor 1260	352		ug/kg	96.0	17.7	1	B
Aroclor 1262	ND		ug/kg	96.0	12.2	1	A
Aroclor 1268	484		ug/kg	96.0	9.94	1	B
PCBs, Total	1200		ug/kg	96.0	8.52	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		30-150	A
Decachlorobiphenyl	101		30-150	A
2,4,5,6-Tetrachloro-m-xylene	79		30-150	B
Decachlorobiphenyl	111		30-150	B

Project Name: 1803 ELMWOOD AVE BCP C915394
Project Number: 01314

Lab Number: L2500348
Report Date: 01/10/25

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8082A
Analytical Date: 01/06/25 20:01
Analyst: EMR

Extraction Method: EPA 3540C
Extraction Date: 01/05/25 10:20
Cleanup Method: EPA 3665A
Cleanup Date: 01/06/25
Cleanup Method: EPA 3660B
Cleanup Date: 01/06/25

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG2016573-1						
Aroclor 1016	ND		ug/kg	87.4	7.76	A
Aroclor 1221	ND		ug/kg	87.4	8.76	A
Aroclor 1232	ND		ug/kg	87.4	18.5	A
Aroclor 1242	ND		ug/kg	87.4	11.8	A
Aroclor 1248	ND		ug/kg	87.4	13.1	A
Aroclor 1254	ND		ug/kg	87.4	9.56	A
Aroclor 1260	ND		ug/kg	87.4	16.2	A
Aroclor 1262	ND		ug/kg	87.4	11.1	A
Aroclor 1268	ND		ug/kg	87.4	9.06	A
PCBs, Total	ND		ug/kg	87.4	7.76	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83		30-150	A
Decachlorobiphenyl	93		30-150	A
2,4,5,6-Tetrachloro-m-xylene	86		30-150	B
Decachlorobiphenyl	93		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: 1803 ELMWOOD AVE BCP C915394

Lab Number: L2500348

Project Number: 01314

Report Date: 01/10/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG2016573-2 WG2016573-3									
Aroclor 1016	85		84		40-140	1		50	A
Aroclor 1260	95		95		40-140	0		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		77		30-150	A
Decachlorobiphenyl	97		94		30-150	A
2,4,5,6-Tetrachloro-m-xylene	79		77		30-150	B
Decachlorobiphenyl	96		92		30-150	B

METALS



Project Name: 1803 ELMWOOD AVE BCP C915394**Lab Number:** L2500348**Project Number:** 01314**Report Date:** 01/10/25**SAMPLE RESULTS**

Lab ID: L2500348-01

Date Collected: 01/02/25 10:30

Client ID: CONCRETE WASTE CHARACTERIZATION

Date Received: 01/03/25

Sample Location: 1803 ELMWOOD AVE, BUFFALO

Field Prep: Not Specified

Sample Depth:

TCLP/SPLP Ext. Date: 01/06/25 23:10

Matrix: Concrete

Percent Solids: 97%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab											
Arsenic, TCLP	ND		mg/l	1.00	0.0190	1	01/09/25 12:06	01/09/25 16:07	EPA 3015	1,6010D	DMC
Barium, TCLP	0.382	J	mg/l	0.500	0.0210	1	01/09/25 12:06	01/09/25 16:07	EPA 3015	1,6010D	DMC
Cadmium, TCLP	ND		mg/l	0.100	0.0100	1	01/09/25 12:06	01/09/25 16:07	EPA 3015	1,6010D	DMC
Chromium, TCLP	ND		mg/l	0.200	0.0210	1	01/09/25 12:06	01/09/25 16:07	EPA 3015	1,6010D	DMC
Lead, TCLP	ND		mg/l	0.500	0.0270	1	01/09/25 12:06	01/09/25 16:07	EPA 3015	1,6010D	DMC
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	01/09/25 11:48	01/09/25 15:08	EPA 7470A	1,7470A	MJR
Selenium, TCLP	ND		mg/l	0.500	0.0350	1	01/09/25 12:06	01/09/25 16:07	EPA 3015	1,6010D	DMC
Silver, TCLP	ND		mg/l	0.100	0.0280	1	01/09/25 12:06	01/09/25 16:07	EPA 3015	1,6010D	DMC



Project Name: 1803 ELMWOOD AVE BCP C915394
Project Number: 01314

Lab Number: L2500348
Report Date: 01/10/25

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab for sample(s): 01 Batch: WG2018093-1									
Arsenic, TCLP	ND	mg/l	1.00	0.0190	1	01/09/25 12:06	01/09/25 15:56	1,6010D	DMC
Barium, TCLP	ND	mg/l	0.500	0.0210	1	01/09/25 12:06	01/09/25 15:56	1,6010D	DMC
Cadmium, TCLP	ND	mg/l	0.100	0.0100	1	01/09/25 12:06	01/09/25 15:56	1,6010D	DMC
Chromium, TCLP	ND	mg/l	0.200	0.0210	1	01/09/25 12:06	01/09/25 15:56	1,6010D	DMC
Lead, TCLP	ND	mg/l	0.500	0.0270	1	01/09/25 12:06	01/09/25 15:56	1,6010D	DMC
Selenium, TCLP	ND	mg/l	0.500	0.0350	1	01/09/25 12:06	01/09/25 15:56	1,6010D	DMC
Silver, TCLP	ND	mg/l	0.100	0.0280	1	01/09/25 12:06	01/09/25 15:56	1,6010D	DMC

Prep Information

Digestion Method: EPA 3015
TCLP/SPLP Extraction Date: 01/06/25 23:10

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab for sample(s): 01 Batch: WG2018095-1									
Mercury, TCLP	ND	mg/l	0.0010	0.0005	1	01/09/25 11:48	01/09/25 14:55	1,7470A	MJR

Prep Information

Digestion Method: EPA 7470A
TCLP/SPLP Extraction Date: 01/06/25 23:10



Lab Control Sample Analysis Batch Quality Control

Project Name: 1803 ELMWOOD AVE BCP C915394

Project Number: 01314

Lab Number: L2500348

Report Date: 01/10/25

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 Batch: WG2018093-2								
Arsenic, TCLP	88		-		75-125	-		20
Barium, TCLP	103		-		75-125	-		20
Cadmium, TCLP	92		-		75-125	-		20
Chromium, TCLP	102		-		75-125	-		20
Lead, TCLP	91		-		75-125	-		20
Selenium, TCLP	83		-		75-125	-		20
Silver, TCLP	97		-		75-125	-		20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 Batch: WG2018095-2								
Mercury, TCLP	92		-		80-120	-		

Matrix Spike Analysis Batch Quality Control

Project Name: 1803 ELMWOOD AVE BCP C915394

Lab Number: L2500348

Project Number: 01314

Report Date: 01/10/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG2018093-3 QC Sample: L2500348-01 Client ID: CONCRETE WASTE CHARACTERIZATION												
Arsenic, TCLP	ND	1.2	1.05	88	-	-	-	-	75-125	-	-	20
Barium, TCLP	0.382J	20	21.3	106	-	-	-	-	75-125	-	-	20
Cadmium, TCLP	ND	0.53	0.471	89	-	-	-	-	75-125	-	-	20
Chromium, TCLP	ND	2	2.01	100	-	-	-	-	75-125	-	-	20
Lead, TCLP	ND	5.3	4.92	93	-	-	-	-	75-125	-	-	20
Selenium, TCLP	ND	1.2	1.01	84	-	-	-	-	75-125	-	-	20
Silver, TCLP	ND	0.5	0.501	100	-	-	-	-	75-125	-	-	20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG2018095-3 QC Sample: L2500348-01 Client ID: CONCRETE WASTE CHARACTERIZATION												
Mercury, TCLP	ND	0.025	0.0220	88	-	-	-	-	75-125	-	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 1803 ELMWOOD AVE BCP C915394

Project Number: 01314

Lab Number: L2500348

Report Date: 01/10/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG2018093-4 QC Sample: L2500348-01 Client ID: CONCRETE WASTE CHARACTERIZATION						
Arsenic, TCLP	ND	ND	mg/l	NC		20
Barium, TCLP	0.382J	0.386J	mg/l	NC		20
Cadmium, TCLP	ND	ND	mg/l	NC		20
Chromium, TCLP	ND	ND	mg/l	NC		20
Lead, TCLP	ND	ND	mg/l	NC		20
Selenium, TCLP	ND	ND	mg/l	NC		20
Silver, TCLP	ND	ND	mg/l	NC		20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG2018095-4 QC Sample: L2500348-01 Client ID: CONCRETE WASTE CHARACTERIZATION						
Mercury, TCLP	ND	ND	mg/l	NC		20

INORGANICS & MISCELLANEOUS

Project Name: 1803 ELMWOOD AVE BCP C915394
Project Number: 01314

Lab Number: L2500348
Report Date: 01/10/25

SAMPLE RESULTS

Lab ID: L2500348-01
Client ID: CONCRETE WASTE CHARACTERIZATION
Sample Location: 1803 ELMWOOD AVE, BUFFALO

Date Collected: 01/02/25 10:30
Date Received: 01/03/25
Field Prep: Not Specified

Sample Depth:
Matrix: Concrete

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	97.4		%	0.100	NA	1	-	01/04/25 19:31	121,2540G	SJB



Lab Duplicate Analysis

Batch Quality Control

Project Name: 1803 ELMWOOD AVE BCP C915394

Project Number: 01314

Lab Number: L2500348

Report Date: 01/10/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG2016493-1 QC Sample: L2500346-01 Client ID: DUP Sample						
Solids, Total	96.6	96.8	%	0		20

Project Name: 1803 ELMWOOD AVE BCP C915394**Lab Number:** L2500348**Project Number:** 01314**Report Date:** 01/10/25**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2500348-01A	Plastic 2oz unpreserved for TS	A	NA		4.8	Y	Absent		TS(7)
L2500348-01B	Vial Large Septa unpreserved (4oz)	A	NA		4.8	Y	Absent		TCLP-EXT-ZHE(14)
L2500348-01C	Glass 250ml/8oz unpreserved	A	NA		4.8	Y	Absent		NYTCL-8082-CNCRT(365)
L2500348-01X	Vial unpreserved Extracts	A	NA		4.8	Y	Absent		TCLP-VOA(14)
L2500348-01X9	Tumble Vessel	A	NA		4.8	Y	Absent		-
L2500348-01Y	Vial unpreserved Extracts	A	NA		4.8	Y	Absent		TCLP-VOA(14)
L2500348-01Z	Plastic 120ml HNO3 preserved Extracts	A	NA		4.8	Y	Absent		CD-CI(180),AS-CI(180),BA-CI(180),HG-C(28),PB-CI(180),CR-CI(180),SE-CI(180),AG-CI(180)

Project Name: 1803 ELMWOOD AVE BCP C915394
Project Number: 01314

Lab Number: L2500348
Report Date: 01/10/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



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Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

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Project Name: 1803 ELMWOOD AVE BCP C915394
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Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

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REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

EPA 624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625.1: alpha-Terpineol

EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270E: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

SM 2540D: TSS.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

MADEP-APH.

Nonpotable Water: EPA RSK-175 Dissolved Gases

Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Alpha SOP 23528

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables).

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522, EPA 537.1.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Project Manager.

Appendix C

Health and Safety Plan

**Health and Safety Plan
for
1803 Elmwood Avenue BCP**

**1803 Elmwood Avenue
Buffalo, Erie County, New York**

Prepared by



C&S Engineers, Inc.
141 Elm Street, Suite 100
Buffalo, New York 14203

February 2026

EMERGENCY PHONE NUMBERS

Emergency Medical Service911

Police Department.....911

Fire Department.....911

Kenmore Mercy Hospital(716) 447-6100

National Response Center(800) 424-8802

Poison Control Center(800) 222-1222

Center for Disease Control(800) 311-3435

NYSDEC Region 9 (Buffalo, New York).....(716) 851-7201

C&S Engineers.....(716) 847-1630

Daniel Keane.....(716) 566-9231

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FIGURES

Figure 1 Site Location

Figure 2 Site Detail

Attachment A – Map and Directions to Hospital

Appendix A – Excavation / Trenching Guideline

Appendix B – Guidance on Incident Investigation and Reporting

SECTION 1 – GENERAL INFORMATION

This Health and Safety Plan (HASP) addresses health and safety considerations for the activities that personnel employed by C&S Engineers, Inc., (C&S) may be engaged in during site investigation at the 1803 Elmwood Avenue, located in Buffalo, New York (Site). **Figure 1** and **Figure 2** shows the location and layout of the Site. This HASP will be implemented by the Health and Safety Officer (HSO) during site work.

Compliance with this HASP is required of C&S personnel who enter this Site. The content of the HASP may change or undergo revision based upon additional information made available to the health, safety, and training (H&S) committee, monitoring results or changes in the technical scope of work. Any changes proposed must be reviewed by the H&S committee.

1.1 Responsibilities

Project Manager.....	Jesse Alt-Winzig Phone: (716) 847-1630
Health and Safety Manager.....	Mike Sherlock Phone: (315) 703-4210 Cell: (315) 420-3455
Site Health and Safety Officer.....	Jesse Alt-Winzig Phone: (716) 847-1630
Emergency Coordinator.....	Jesse Alt-Winzig Phone: (716) 847-1630

SECTION 2 - HEALTH AND SAFETY PERSONNEL

The following information briefly describes the health and safety designations and general responsibilities for this Site.

2.1 Project Manager (PM)

The PM is responsible for the overall project including the implementation of the HASP. Specifically, this includes allocating adequate manpower, equipment, and time resources to conduct Site activities safely.

2.2 Health and Safety Manager

- ◆ Has the overall responsibility for coordinating and reporting health and safety activities and the health and safety of Site Workers.
- ◆ Must have completed, at a minimum, the OSHA 30-Hour Construction Safety Training, and either the 24-Hour training course for the Occasional Hazardous Waste Site Worker or the 40-Hour training course for the Hazardous Waste Operations Worker that meets OSHA 29 CFR 1910.
- ◆ Must have completed the 8-Hour Site supervisor/manager's course for supervisors and managers having responsibilities for hazardous waste Site operations and management.
- ◆ Directs and coordinates health and safety monitoring activities.
- ◆ Ensures that field teams utilize proper personal protective equipment (PPE).
- ◆ Conducts initial on-site specific training prior to Site Workers commencing work.
- ◆ Conducts and documents daily and periodic safety briefings.
- ◆ Ensures that field team members comply with this HASP.
- ◆ Immediately notifies the Project Manager of all accident/incidents.
- ◆ Determines upgrading or downgrading of PPE based on Site conditions and/or real time monitoring results.
- ◆ Ensures that monitoring instruments are calibrated daily or as the manufacturer's instructions determine.
- ◆ Provides daily summaries of field operations and progress to the Project Manager.
- ◆ Submits and maintains all documentation required in this HASP and any other pertinent health and safety documentation.

2.3 Health and Safety Officer (HSO)

- ◆ Must be designated by the Health and Safety Manager and at a minimum, have the 40-Hour training course for the Hazardous Waste Operations Worker that meets OSHA 29 CFR 1910, as well as the OSHA 10-Hour Construction Safety Training.
- ◆ Must schedule and attend a Pre-Construction Safety Meeting with the Health and Safety Manager to discuss the Subcontractor Safety Requirements and must attend the Weekly Subcontractor Coordination Meeting.
- ◆ Responsible for ensuring subcontractors and their lower tier contractors comply with project safety requirements.

- ◆ Must make frequent and regular inspections of their work areas and activities and ensure hazards that are under their control are corrected immediately and all other hazards are reported to the Project Manager and Health and Safety Manager.
- ◆ Must report all work related injuries, regardless of severity, to the Project Manager and the Health and Safety Manager within 24 hours after they occur.

2.4 Emergency Coordinator

- ◆ Will at a minimum, have the 40-Hour training course for the Hazardous Waste Operations Worker that meets OSHA 29 CFR 1910, as well as the OSHA 10-Hour Construction Safety Training.
- ◆ The Emergency Coordinator or his on-site designee will, in coordination with 1803-1807 Elmwood Avenue LLC & MOD-PAC Corporation, implement the emergency response procedures outlined in Section 12 whenever conditions at the Site warrant such action.
- ◆ The Emergency Coordinator or his on-site designee will be responsible for assuring the evacuation, emergency treatment, emergency transport of C&S personnel as necessary, and notification of emergency response units (refer to phone listing in the beginning of this HASP) and the appropriate management staff.

2.5 Site Workers

- ◆ Report any unsafe or potentially hazardous conditions to the Health and Safety Manager.
- ◆ Maintain knowledge of the information, instructions, and emergency response actions contained in the HASP.
- ◆ Comply with rules, regulations, and procedures as set forth in this HASP, including any revisions that are instituted.
- ◆ Prevent unauthorized personnel from entering work Site.

SECTION 3 - PERTINENT SITE INFORMATION

3.1 Site Location and General History

The Site consists of approximately 0.655 acres of a larger parcel totaling approximately 8.53 acres of land addressed at 1803 Elmwood Avenue in the City of Buffalo, Erie County, New York. The larger parcel, known as SBL #78.70-3-20.11, is bound to the west by an industrial parcel occupied by MOD-PAC Corp. and the Nardin Academy outside sports complex, to the south by Brinks Security Company and the CSX railroad tracks, to the east with commercial buildings occupied by various private tenants, and to the north by commercial buildings occupied by various private tenants and a small community of residential structures. The Site is bound to the north, west, and south by the industrial parcel occupied by MOD-PAC Corp., and to the east by portions of the larger Site parcel, developed with both commercial and industrial buildings occupied by MOD-PAC Corp., Nardin Academy and various other private tenants. The area within the BCP boundary is developed with one structure. The site is located within an urban area, utilized for industrial, commercial, and residential purposes.

The Site includes an approximate +/-14,400 square-foot warehouse structure, currently utilized for storage by MOD-PAC Corp. since late-2021. The Site structure occupies the northern portion of the BCP area and was originally constructed by 1935. Exterior Site features consist of the exterior of the building, as well as asphalt, concrete paved areas, and railroad spurs. The entire Site is covered in hardscape surfaces.

Figure 1 shows the location of the Site and **Figure 2** shows the Project Area and Site Boundaries.

The Site and surrounding properties were originally developed as a radiator manufacturing plant, occupied by American Radiator Co., since 1912 and was utilized as such until approximately 1959 when the plant reportedly closed. During that time, structural improvements were erected on-site which included four buildings that were situated in the central portion of the site associated with the foundry to the west of the subject site.

A portion of the current Site structure was constructed by 1935, utilized as a crane building, with a later addition by 1959.

Following the closure of American Radiator in 1959, American Radiator and Standard Stamping Plant (1803 Elmwood Avenue) and Office (1807 Elmwood Avenue), totaling 55-acres at the corner of Elmwood and Hertel Avenues (including the Site), were sold to Irving Levick, Buffalo real estate investor and chairman of Sattler's Department Store. Levick planned to move some warehousing operations out of his Seneca Warehouse (701 Seneca Street; formerly the Larkin Warehouse) to the Elmwood Avenue property, which would reportedly fill more than half of the plant. The Elmwood Avenue property became known as the Seneca Warehouse and Industrial Center, Inc.

The Site was part of a larger property formerly occupied by Sattler's Home Furnishing City utilized as a department store as well as for warehousing. Five of the six Sattler's Department Store locations reportedly closed in 1982. Reportedly, Niagara Machine occupied the Site structure prior to 1990; however, the time frame of occupancy is not known.

The former larger parcel was leased to Buffalo Industrial Leasing Corp. in 1977. Several sections were sold off to MOD-PAC Corp. in the 1980s, and Newbuff Holdings Corp. purchased the larger Site parcel in 1992. Newbuff Holdings began leasing the subject site to O'Connell Machinery Company, Inc. in 1998 and 1803-1807 Elmwood Avenue LLC in 2003.

Upon acquisition of the Site and larger Site parcel by Newbuff Associates in 1992, the Site was utilized as commercial spaces for multiple tenants. Since 1992, AIRSEP (1992-1996), Goodwill (1996-1998), Mack Pallet (1996-1998), and O’Connell Machinery Co, Inc. (1998-2021) have occupied the Site structure. The Site had previously been under a 50-year lease agreement with 1803-1807 Elmwood Avenue LLC beginning in 2003. 1803-1807 Elmwood Avenue LLC purchased the Site and portions of the larger site parcel on November 1, 2022. The Site structure is currently used for storage by MOD-PAC Corp. 1803-1807 Elmwood Avenue LLC is solely owned by MOD-PAC Corp.

The following table summarizes the historical and current operations on the Site based on the October 2022 Phase I ESA:

Table 3-1: Historical Owner & Occupant Summary

Years	Owner / Occupants
1939-1963	American Radiator & Standard Corporation
1963-1964	Irving Levick
1964-1967	Senvick Corporation
1967	Landeb, Inc.
1967-1979	Arnold Raynor & Marvin B. Tepper
1979-1986	Helen Schmincke
1986-1992	Martin C. Barrell & Donald C. Shack
1992-2004	Newbuff Holdings Corporation AIRSEP – Lessor (1992-1996) Goodwill – Lessor 1996-1998 Mack Pallet – Lessor (1996-1998) O’Connell Machinery Company, Inc. – Lessor (1998-2021) 1803-1807 Elmwood Avenue LLC – Lessor (2003-2022)
2004-2022	Newbuff Associates LLC
2022-Present	1803-1807 Elmwood Avenue LLC c/o MOD-PAC Corp.

The applicant purchased the Site in November 2022. The most recent operators at the Site consist of Newbuff Associates LLC, including commercial tenants AIRSEP, Goodwill, Mack Pallet, O’Connell Machining, and 1803-1807 Elmwood Avenue LLC..

The soil across the Site generally consists of HFM generally present directly beneath hardscape surfaces, extending to seven feet below grade. The HFM was observed across the majority of the exterior of the Site. Consistent with HFM found in cities in the Northeast US, this historic fill contains SVOC and metal contamination, as shown in recent sampling. No discrete contamination layer was observed within the fill, and therefore, the extent of contamination within the fill material is difficult to identify due to its heterogeneous nature.

There is also a potential for HFM to be present beneath the building footprint. Impacts related to HFM beneath the building footprint will be documented as part of the Remedial Investigation.

SECTION 4 - HAZARD ASSESSMENT AND HAZARD COMMUNICATION

Hazards to workers during site work include typical construction-related hazards such as slip-trip-fall, equipment malfunction, faulty electrical grounding, and heat/cold/excessive noise exposure. In addition to those typical construction-related hazards, there is also the potential for chemical exposures associated with environmental conditions. The most likely routes of chemical exposure during site work tasks include skin adsorption and inhalation of airborne dust particles.

It is difficult to draw a correlation between the concentrations of contaminants found in one media and the potential for exposure to these contaminants to site workers. However, their potential presence indicates that the potential for exposure to these compounds exist, and the requirements for protective measures and monitoring of exposure is based on this potential.

SECTION 5 – TRAINING

5.1 Site-Specific Training

Training will be provided that specifically addresses the activities, procedures, monitoring, and equipment for the Site operations prior to going on site. Training will include familiarization with Site and facility layout, known and potential hazards, and emergency services at the Site, and details all provisions contained within this HASP. This training will also allow Site Workers to clarify anything they do not understand and to reinforce their responsibilities regarding safety and operations for their particular activity.

5.2 Safety Briefings

C&S project personnel will be given briefings by the HSO on a daily or as needed basis to further assist Site workers in conducting their activities safely. Pertinent information will be provided when new operations are to be conducted. Changes in work practices must be implemented due to new information made available, or if Site or environmental conditions change. Briefings will also be given to facilitate conformance with prescribed safety practices. When conformance with these practices is not occurring or if deficiencies are identified during safety audits, the project manager will be notified.

SECTION 6 - PERSONAL PROTECTIVE EQUIPMENT

6.1 General

The level of protection to be worn by field personnel will be defined and controlled by the HSO. Depending upon the type and levels of material present or anticipated at the site, varying degrees of protective equipment will be needed. If the possible hazards are unknown, a reasonable level of protection will be taken until sampling and monitoring results can ascertain potential risks. The levels of protection listed below are based on USEPA Guidelines. A list of the appropriate clothing for each level is also provided.

Level A protection must be worn when a reasonable determination has been made that the highest available level of respiratory, skin, eye, and mucous membrane protection is needed. It should be noted that while Level A provides maximum available protection, it does not protect against all possible hazards. Consideration of the heat stress that can arise from wearing Level A protection should also enter into the decision making process. Level A protection includes:

- ◆ Open circuit, pressure-demand self-contained breathing apparatus (SCBA)
- ◆ Totally encapsulated chemical resistant suit
- ◆ Gloves, inner (surgical type)
- ◆ Gloves, outer, chemical protective
- ◆ Boots, chemical protective

Level B protection must be used when the highest level of respiratory protection is needed, but hazardous material exposure to the few unprotected areas of the body (e.g., the back of the neck) is unlikely. Level B protection includes:

- ◆ Open circuit, pressure-demand SCBA or pressure airline with escape air bottle
- ◆ Chemical protective clothing: Overalls and long sleeved jacket; disposal chemical resistant coveralls; coveralls; one or two piece chemical splash suit with hood
- ◆ Gloves, inner (surgical type)
- ◆ Gloves, outer, chemical protective
- ◆ Boots, chemical protective

Level C must be used when the required level of respiratory protection is known, or reasonably assumed to be, not greater than the level of protection afforded by air purifying respirators; and hazardous materials exposure to the few unprotected areas of the body (e.g. the back of the neck) is unlikely. Level C protection includes:

- ◆ Full or half face air-purifying respirator
- ◆ Chemical protective clothing: Overalls and long-sleeve jacket; disposable chemical resistant coveralls; coveralls; one or two piece chemical splash suit
- ◆ Gloves, inner (surgical type)
- ◆ Gloves, outer, chemical protective
- ◆ Boots, chemical protective

Level D is the basic work uniform. It cannot be worn on any site where respiratory or skin hazards exist. Level D protection includes:

- ◆ Safety boots/shoes
- ◆ Safety glasses
- ◆ Hard hat with optional face shield

Note that the use of SCBA and airline equipment is contingent upon the user receiving special training in the proper use and maintenance of such equipment.

6.2 Personal Protective Equipment – Site Specific

Level D with some modification will be required when working in the work zone on this Site. In addition to the basic work uniform specified by Level D protection, Nitrile gloves will be required when contact with soil or ground water is likely. Hearing protection will be worn when power equipment is used to perform subsurface investigation work. An upgrade to a higher level (Level C) of protection may occur if determined necessary by the HSO.

SECTION 7 - MONITORING PROCEDURES

7.1 Monitoring During Site Operations

All Site environmental monitoring should be accompanied by periodic meteorological monitoring of appropriate climatic conditions.

6.1.1 Excavation & Intrusive Operations

Monitoring will be performed by the HSO or remedial observer during the conduct of work. A photoionization detector (PID) equipped with an appropriate map (e.g. 10.6 or 11.7 eV) will be utilized to monitor for the presence of volatile organic vapors within the breathing zone. Excavation spoils will also be monitored by use of the PID. The PID will be field checked for calibration accuracy three times per day (morning, lunch, and end of day). If subsurface conditions warrant, a combustible gas indicator (CGI) with oxygen alarm may also be used to monitor the borehole for the presence of combustible gases. Similar monitoring of fluids produced during well development will also be conducted.

7.2 Action Levels

If readings on the PID exceed 10 ppm for more than fifteen minutes consecutively, then personal protective equipment should be upgraded to Level C. The air purifying respirator used with Level C protective equipment must be equipped with organic vapor cartridges. If readings on the explosive gas meter are within a range of 10%-25% of the LEL then continuous monitoring will be implemented. Readings above 25% of the LEL indicate the potential for an explosive condition. Sources of ignition should be removed and the Site should be evacuated.

7.3 Personal Monitoring Procedures

Personal monitoring shall be performed as a contingency measure in the event that VOC concentrations are consistently above the 10 ppm action level as detected by the PID. If the concentration of VOCs is above this action level, then amendments to the HASP must be made before work can continue at the Site.

SECTION 8 – COMMUNICATIONS

Cell phones will be the primary means of communicating with emergency support services/facilities.

SECTION 9 - SAFETY CONSIDERATIONS FOR SITE OPERATIONS

9.1 General

Standard safe work practices that will be followed include:

- ◆ Do not climb over/under drums, or other obstacles.
- ◆ Do not enter the work zone alone.
- ◆ Practice contamination avoidance, on and off-site.
- ◆ Plan activities ahead of time, use caution when conducting concurrently running activities.
- ◆ No eating, drinking, chewing or smoking is permitted in work zones.
- ◆ Due to the unknown nature of waste placement at the Site, extreme caution should be practiced during excavation activities.
- ◆ Apply immediate first aid to any and all cuts, scratches, abrasions, etc.
- ◆ Be alert to your own physical condition. Watch your buddy for signs of fatigue, exposure, etc.
- ◆ A work/rest regimen will be initiated when ambient temperatures and protective clothing create a potential heat or cold stress situation.
- ◆ No work will be conducted without adequate natural light or without appropriate supervision.
- ◆ Task safety briefings will be held prior to onset of task work.
- ◆ Ignition of flammable liquids within or through improvised heating devices (barrels, etc.) or space heaters is forbidden.
- ◆ Entry into areas of spaces where toxic or explosive concentrations of gases or dust may exist without proper equipment is prohibited.
- ◆ Any injury or unusual health effect must be reported to the Site health and safety officer.
- ◆ Prevent splashing or spilling of potentially contaminated materials.
- ◆ Use of contact lenses is prohibited while on site.
- ◆ Beards and other facial hair that would impair the effectiveness of respiratory protection are prohibited if respiratory protection is necessary.
- ◆ Field crew members should be familiar with the physical characteristics of investigations, including:
 - ◆ Wind direction in relation to potential sources
 - ◆ Accessibility to co-workers, equipment, and vehicles
 - ◆ Communication
 - ◆ Hot zones (areas of known or suspected contamination)
 - ◆ Site access
 - ◆ Nearest water sources
- ◆ The number of personnel and equipment in potentially contaminated areas should be minimized consistent with site operations.

9.2 Field Operations

The HSO or designee will be present on-site during all intrusive work (e.g., drilling operations, excavations, trenching) and will provide monitoring to oversee that appropriate levels of protection and safety procedures are utilized by C&S personnel. The use of salamanders or other equipment with an open flame is prohibited and the use of protective clothing, especially hard hats and boots, will be required during drilling, excavation, or other heavy equipment operations.

SECTION 10 - DECONTAMINATION PROCEDURES

Decontamination involves physically removing contaminants and/or converting them chemically into innocuous substances. Only general guidance can be given on methods and techniques for decontamination. Decontamination procedures are designed to:

- ◆ Remove contaminant(s).
- ◆ Avoid spreading the contamination from the work zone.
- ◆ Avoid exposing unprotected personnel outside of the work zone to contaminants.

Contamination avoidance is the first and best method for preventing spread of contamination from a hazardous site. Each person involved in site operations must practice the basic methods of contamination avoidance listed below. Additional precautions may be required in the HASP.

- ◆ Know the limitations of all protective equipment being used.
- ◆ Do not enter a contaminated area unless it is necessary to carry out a specific objective.
- ◆ When in a contaminated area, avoid touching anything unnecessarily.
- ◆ Walk around pools of liquids, discolored areas, or any area that shows evidence of possible contamination.
- ◆ Walk upwind of contamination, if possible.
- ◆ Do not sit or lean against anything in a contaminated area. If you must kneel (e.g., to take samples), use a plastic ground sheet.
- ◆ If at all possible, do not set sampling equipment directly on contaminated areas. Place equipment on a protective cover such as a ground cloth.
- ◆ Use the proper tools necessary to safely conduct the work.

Specific methods that may reduce the chance of contamination are:

- ◆ Use of remote sampling techniques.
- ◆ Opening containers by non-manual means.
- ◆ Bagging monitoring instruments.
- ◆ Use of drum grapplers.
- ◆ Watering down dusty areas.

Equipment which will need to be decontaminated includes tools, monitoring equipment, and personal protective equipment. Items to be decontaminated will be brushed off, rinsed, and dropped into a plastic container supplied for that purpose. They will then be washed with a detergent solution and rinsed with clean water. Monitoring instruments may be wrapped in plastic bags prior to entering the field in order to reduce the potential for contamination. Instrumentation that is contaminated during field operations will be carefully wiped down. Heavy equipment, if utilized for operations where it may be contaminated, will have prescribed decontamination procedures to prevent contaminant materials from potentially leaving the Site. On-site contractors, such as drillers or backhoe operators, will be responsible for decontaminating all construction equipment prior to demobilization.

SECTION 11 – DISPOSAL PROCEDURES

All discarded materials, waste materials, or other objects shall be handled in such a way as to reduce or eliminate the potential for spreading contamination, creating a sanitary hazard, or causing litter to be left on-site. All potentially contaminated materials, e.g., clothing, gloves, etc., will be bagged or drummed as necessary and segregated for proper disposal. All contaminated waste materials shall be disposed of as required by the provisions included in the contract and consistent with regulatory provisions. All non-contaminated materials shall be collected and bagged for appropriate disposal. Investigation Derived Waste (IDW) will be managed and characterized. Characterization of IDW may require TCLP sampling and analysis consistent with the work plan for the Site and DER-10 Technical Guidance for Site Investigation and Remediation.

SECTION 12 - EMERGENCY RESPONSE PROCEDURES

As a result of the hazards at the Site, and the conditions under which operations are conducted, there is the possibility of emergency situations. This section establishes procedures for the implementation of an emergency plan.

12.1 Emergency Coordinator

Emergency Coordinator:..... Jesse Alt-Winzig Work Phone: (716) 847-1630

The Emergency Coordinator or his on-site designee will, in concert with 1803-1807 Elmwood Avenue LLC & MOD-PAC Corp., implement the emergency response procedures whenever conditions at the Site warrant such action. The Emergency Coordinator or his on-site designee will be responsible for assuring the evacuation, emergency treatment, emergency transport of C&S personnel as necessary, and notification of emergency response units (**refer to phone listing** in the beginning of this HASP) and the appropriate management staff.

12.2 Evacuation

In the event of an emergency situation, such as fire, explosion, significant release of toxic gases, etc., all personnel will evacuate and assemble in a designated assembly area. The Emergency Coordinator or his on-site designee will have authority to contact outside services as required. Under no circumstances will incoming personnel or visitors be allowed to proceed into the area once the emergency signal has been given. The Emergency Coordinator or his on-site designee must see that access for emergency equipment is provided and that all ignition sources have been shut down once the emergency situation is established. Once the safety of all personnel is established, the Fire Department and other emergency response groups will be notified by telephone of the emergency.

12.3 Potential or Actual Fire or Explosion

Immediately evacuate the Site and notify local fire and police departments, and other appropriate emergency response groups, if LEL values are above 25% in the work zone or if an actual fire or explosion has taken place.

12.4 Environmental Incident (spread or release of contamination)

Control or stop the spread of contamination if possible. Notify the Emergency Coordinator and the Project Manager. Other appropriate response groups will be notified as appropriate.

12.5 Personnel Injury

Emergency first aid shall be applied on-site as necessary. Then, decontaminate (en route if necessary) and transport the individual to nearest medical facility if needed. The ambulance/rescue squad shall be contacted for transport as necessary in an emergency. A map of directions to the nearest hospital is shown in **Attachment A**.

12.6 Personnel Exposure

- ◆ *Skin Contact:* Use copious amounts of soap and water. Wash/rinse affected area thoroughly, and then provide appropriate medical attention. Eyes should be thoroughly rinsed with water for at least 15 minutes.
- ◆ *Inhalation:* Move to fresh air and/or, if necessary, decontaminate and transport to emergency medical facility.
- ◆ *Ingestion:* Decontaminate and transport to emergency medical facility.
- ◆ *Puncture Wound/Laceration:* Decontaminate, if possible, and transport to emergency medical facility.

12.7 Adverse Weather Conditions

In the event of adverse weather conditions, the HSO will determine if work can continue without sacrificing the health and safety of field workers.

12.8 Incident Investigation and Reporting

In the event of an incident, procedures discussed in the Medical Emergency/Incident Response Protocol, presented in **Appendix B** of this HASP, shall be followed.

SECTION 13 – COMMUNITY RELATIONS

13.1 Community Health and Safety Plan

13.1.1 Community Health and Safety Monitoring

As part of the site work, three general types of efforts are scheduled, including, non-intrusive reconnaissance tasks, sampling or monitoring tasks (monitoring point sampling), and intrusive tasks (test trenching, subsurface borings, monitoring well installation). During completion of general reconnaissance and sampling or monitoring tasks, potential for health and safety risks to off-site landowners or the local community are not anticipated.

During completion of intrusive efforts at or adjacent to the Site; health and safety monitoring efforts will be concentrated on the area or areas in which intrusive efforts are being completed. Since the air pathway is the most available and likely avenue for the release of potential contaminants to the atmosphere at or near the Site, in addition to limiting public or community access to the areas in which intrusive efforts are completed, health and safety measures will primarily consist of monitoring the air pathway for worker exposure.

13.1.2 Community Air Monitoring Plan

Efforts will be taken to complete field work in a manner which will minimize the creation of airborne dust or particulates. Under dry conditions, work areas may be wetted to control dust. During periods of extreme wind, intrusive field work may be halted until such time as the potential for creating airborne dust or particulate matter as a result of remedial activities is limited. Periodic monitoring following the guidelines of the site's Community Air Monitoring Plan (CAMP) will be implemented during all non-intrusive Site remedial activities.

During completion of Site remediation, a CAMP will be implemented for the duration of intrusive activities. These additional air monitoring activities will include establishment of background conditions, continuous monitoring for volatile organic compounds and/or particulates at the downwind work area (exclusion zone) perimeter, recording of monitoring data, and institution and documentation of response levels and appropriate actions consistent with NYSDOH guidance.

SECTION 14 - AUTHORIZATIONS

Personnel authorized to enter the Site while operations are being conducted must be approved by the HSO. Authorization will involve completion of appropriate training courses, medical examination requirements, and review and sign-off of this HASP. No C&S personnel should enter the work zone alone. Each site visitor should check in with the HSO or Project Manager prior to entering the work zones.

FIGURE 1

SITE LOCATION MAP



Figure 1 | Site Location

1803 Elmwood Avenue BCP



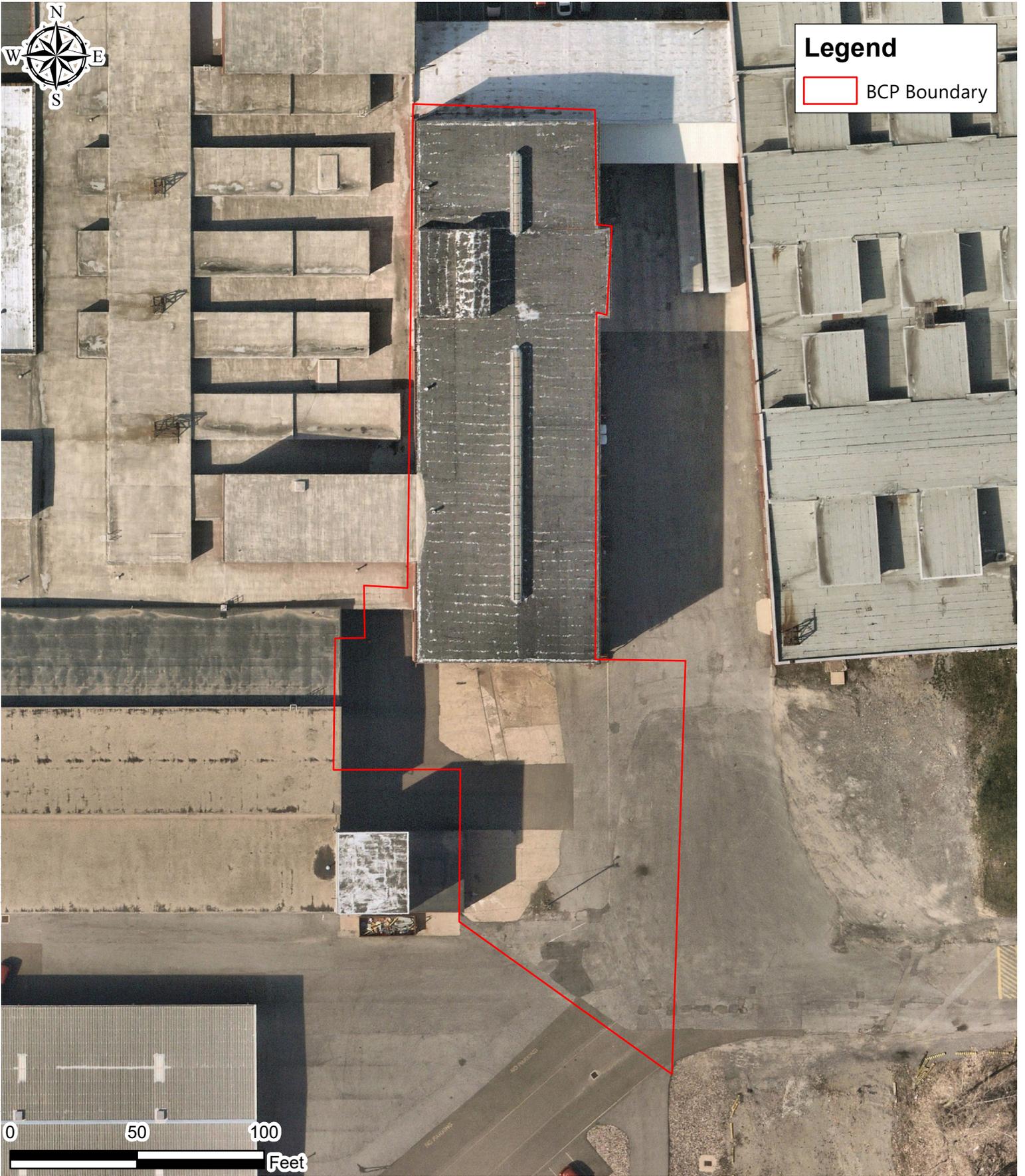
FIGURE 2

SITE DETAIL PHOTO



Legend

 BCP Boundary



Document Path: F:\Project\513 - MOD-PAC\503\500\5001 - 1803 Elmwood Ave. BCP\BWP\Planning\Site\GIS\Project\Figure 2 - Site Map.mxd

Sources: . Created by C&S Engineers, Inc.
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Figure 2 | Site Map

1803 Elmwood Avenue BCP



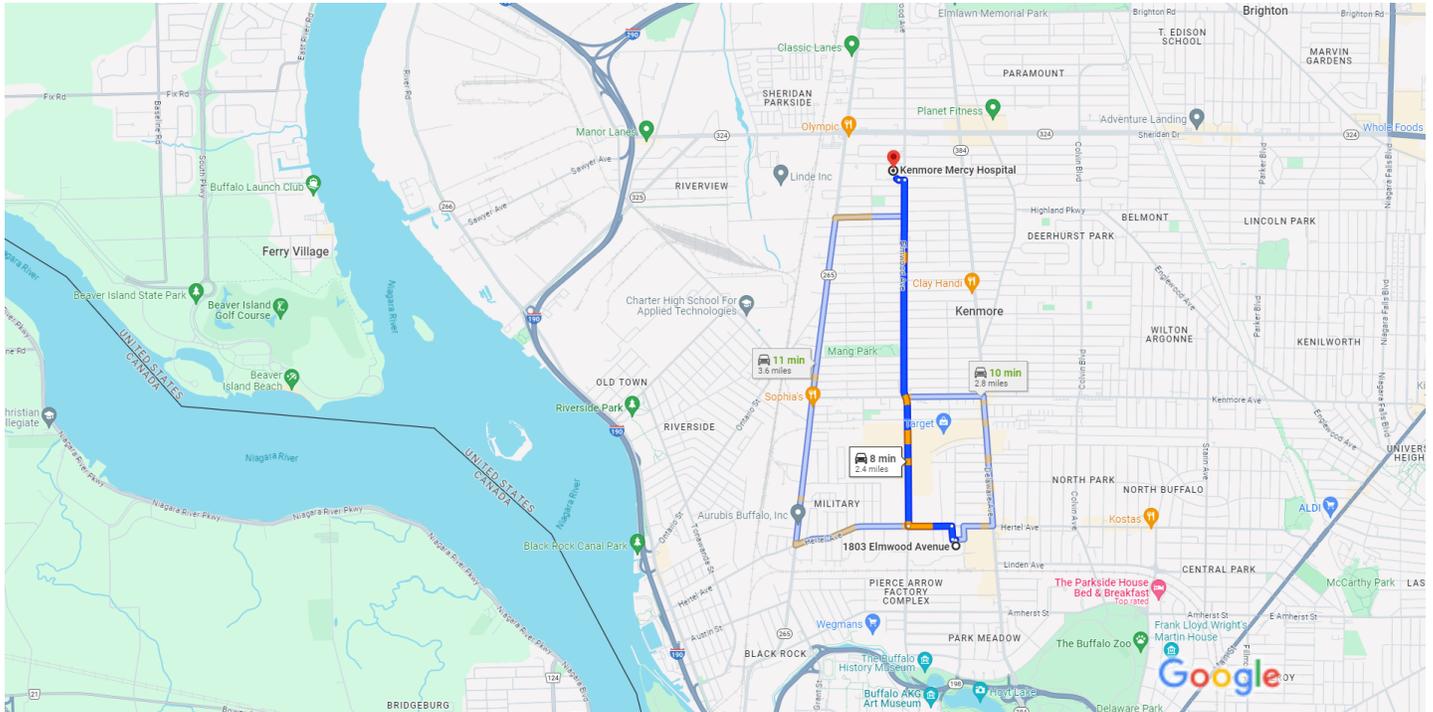
ATTACHMENT A

MAP TO HOSPITAL



1803 Elmwood Ave, Buffalo, NY 14207 to Kenmore Mercy Hospital, 2950 Elmwood Ave, Buffalo, NY 14217

Drive 2.4 miles, 8 min



Map data ©2023 Google 2000 ft

1803 Elmwood Ave
Buffalo, NY 14207

- ↑ 1. Head west toward Rosalia St
112 ft
- ↑ 2. Continue onto Rosalia St
404 ft
- ↶ 3. Turn left onto Hertel Ave
0.3 mi
- ↷ 4. Turn right onto Elmwood Ave
Pass by McDonald's (on the left in 0.4 mi)
2.0 mi
- ↶ 5. Turn left
177 ft
- ↷ 6. Turn right
Destination will be on the right
82 ft

Kenmore Mercy Hospital
2950 Elmwood Ave, Buffalo, NY 14217

Appendix A

EXCAVATION / TRENCHING GUIDELINE

**C&S ENGINEERS, INC. HEALTH & SAFETY GUIDELINE #14
EXCAVATION/TRENCHING OPERATIONS**

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C&S ENGINEERS, INC.
EXCAVATION/TRENCHING OPERATIONS

1.0 PURPOSE

To establish safe operating procedures for excavation/trenching operations at C&S work sites.

2.0 SCOPE

Applies to all C&S activity where excavation or trenching operations take place.

3.0 DEFINITIONS

Excavation — Any manmade cavity or depression in the earth's surface, including its sides, walls, or faces, formed by earth removal and producing unsupported earth conditions by reasons of the excavation.

Trench — A narrow excavation made below the surface of the ground. In general, the depth is greater than the width, but the width of a trench is not greater than 15 feet.

4.0 RESPONSIBILITY EMPLOYEES

Employees — All employees must understand and follow the procedures outlined in this guideline during all excavation and trenching operations.

Health and Safety Coordinator/Officer (HSC/HSO) - The HSC/HSO is responsible for ensuring that these procedures are implemented at each work site.

5.0 GUIDELINES

5.1 Hazards Associated With Excavation/Trenching

The principal hazards associated with excavation/trenching are:

- Suffocation, crushing, or other injury from falling material.
- Damage/failure of installed underground services and consequent hazards.
- Tripping, slipping, or falling.
- Possibility of explosive, flammable, toxic, or oxygen-deficient atmosphere in excavation.

5.2 Procedures Prior to Excavation

1. Underground Utilities

- Determine the presence and location of any underground chemical or utility pipes, electrical, telephone, or instrument wire or cables.
- If the local DigSafely NY is unable to locate private/domestic or plant utilities, then an independent utility locating service must be contacted and mobilized to the site.
- Identify the location of underground services by stakes, markers or paint.
- Arrange to de-energize or isolate underground services during excavation. If not possible, or if location is not definite, method of excavation shall be established to minimize hazards by such means as:
 - a) Use of hand tools in area of underground services.
 - b) Insulating personnel and equipment from possible electrical contact.
 - c) Use of tools or equipment that will reduce possibility of damage to underground services and hazard to worker.

2. Identify Excavation Area — Areas to be excavated shall be identified and segregated by means of barricades, ropes, and/or signs to prevent access of unauthorized personnel and equipment. Suitable means shall be provided to make barriers visible at all times.
3. Surface Water Provide means of diverting surface water from excavation.
4. Shoring/Bracing — Shoring or bracing that may be required for installed equipment adjacent to the excavation shall be designed by a competent person.
5. Structural Ramps — Structural ramps that are used solely by employees as a means of access to or egress from the excavation shall be designed by a competent person.

5.3 Procedures For Doing The Excavation

1. **Determine the need for shoring/sloping** — the type of soil will establish the need for shoring, slope of the excavation, support systems, and equipment to be used. The soil condition may change as the excavation proceeds. Appendices A, B, C, D, E, and F of the OSHA Excavation Regulation, 29 CFR 1926 Subpart P, are to be used in defining shoring and sloping requirements.
2. **Mobile equipment** — For safe use of mobile industrial equipment in or near the excavation, the load carrying capacity of soil shall be established and suitable protection against collapse of soil provided by the use of mats, barricades, restricting the location of equipment, or shoring.
3. Excavated material (spoil) shall be stored at least two (2) feet from the edge of the excavation.
4. All trench (vertical sides) excavations greater than five (5) feet deep shall be shored.

5. The excavation shall be inspected daily for changes in conditions, including the presence of ground water, change in soil condition, or effects of weather such as rain or freeze. A safe means of continuing the work shall be established based on changes in condition. Typically test trench excavations made as part of an environmental subsurface investigation are made and backfilled the same day.
6. Appropriate monitoring for gas, toxic, or flammable materials will be conducted to establish the need for respiratory equipment, ventilation, or other measures required to continue the excavation safely.
7. Adequate means of dewatering the excavation shall be provided by the contractor as required.
8. A signal person shall be provided to direct powered equipment if working in the excavation with other personnel.
9. A signal person shall be provided when backfilling excavations to direct powered equipment working in the excavation with other personnel.
10. Warning vests will be worn when employees are exposed to public vehicular traffic.
11. Employees shall stand away from vehicles being loaded or unloaded, and shall not be permitted underneath loads handled by lifting or dragging equipment.
12. Emergency rescue equipment, such as breathing apparatus, a safety harness and line, or a basket stretcher, shall be readily available if hazardous atmospheric conditions exist or may be expected to develop. The specifics will be determined by the HSC/HSM.
13. Walkways or bridges with standard guardrail shall be provided where employees or equipment are required or permitted to cross over excavations.

5.4 Entering the Excavation

No C&S Engineers, Inc., employee shall enter an excavation which fails to meet the requirements of Section 5.3 of this guideline.

6.0 REFERENCES

29 CFR 1926, Subpart P - Excavations

7.0 ATTACHMENTS

29 CFR 1926 Subpart P - Appendices A, B, F



[Regulations \(Standards - 29 CFR\) - Table of Contents](#)

● Part Number:	1926
● Part Title:	Safety and Health Regulations for Construction
● Subpart:	P
● Subpart Title:	Excavations
● Standard Number:	1926 Subpart P App A
● Title:	Soil Classification

(a) Scope and application - (1) Scope. This appendix describes a method of classifying soil and rock deposits based on site and environmental conditions, and on the structure and composition of the earth deposits. The appendix contains definitions, sets for requirements, and describes acceptable visual and manual tests for use in classifying soils.

(2) Application. This appendix applies when a sloping or benching system is designed in accordance with the requirements set for 1926.652(b)(2) as a method of protection for employees from cave-ins. This appendix also applies when timber shoring for excavations designed as a method of protection from cave-ins in accordance with appendix C to subpart P of part 1926, and when aluminum shoring is designed in accordance with appendix D. This Appendix also applies if other protective systems are designed and selected from data prepared in accordance with the requirements set forth in 1926.652(c), and the use of the data is predicated on the soil classification system set forth in this appendix.

(b) Definitions. The definitions and examples given below are based on, in whole or in part, the following; American Society for Testing and Materials (ASTM) Standards D653-85 and D2488; The Unified Soils Classification System; The U.S. Department of Agriculture (USDA) Textural Classification Scheme; and The National Bureau of Standards Report BSS-121.

"Cemented soil" means a soil in which the particles are held together by a chemical agent, such as calcium carbonate, such that a hand-size sample cannot be crushed into powder or individual soil particles by finger pressure.

"Cohesive soil" means clay (fine grained soil), or soil with a high clay content, which has cohesive strength. Cohesive soil does not crumble, can be excavated with vertical sideslopes, and is plastic when moist. Cohesive soil is hard to break up when dry, and exhibits significant cohesion when submerged. Cohesive soils include clayey silt, sandy clay, silty clay, clay and organic clay.

"Dry soil" means soil that does not exhibit visible signs of moisture content.

"Fissured" means a soil material that has a tendency to break along definite planes of fracture with little resistance, or a material that exhibits open cracks, such as tension cracks, in an exposed surface.

"Granular soil" means gravel, sand, or silt (coarse grained soil) with little or no clay content. Granular soil has no cohesive strength. Some moist granular soils exhibit apparent cohesion. Granular soil cannot be molded when moist and crumbles easily when dry.

"Layered system" means two or more distinctly different soil or rock types arranged in layers. Micaceous seams or weakened planes in rock or shale are considered layered.

"Moist soil" means a condition in which a soil looks and feels damp. Moist cohesive soil can easily be shaped into a ball and rolled into small diameter threads before crumbling. Moist granular soil that contains some cohesive material will exhibit signs of cohesion between particles.

"Plastic" means a property of a soil which allows the soil to be

deformed or molded without cracking, or appreciable volume change.

"Saturated soil" means a soil in which the voids are filled with water. Saturation does not require flow. Saturation, or near saturation, is necessary for the proper use of instruments such as a pocket penetrometer or shear vane.

"Soil classification system" means, for the purpose of this subpart, a method of categorizing soil and rock deposits in a hierarchy of Stable Rock, Type A, Type B, and Type C, in decreasing order of stability. The categories are determined based on an analysis of the properties and performance characteristics of the deposits and the characteristics of the deposits and the environmental conditions of exposure.

"Stable rock" means natural solid mineral matter that can be excavated with vertical sides and remain intact while exposed.

"Submerged soil" means soil which is underwater or is free seeping.

"Type A" means cohesive soils with an unconfined, compressive strength of 1.5 ton per square foot (tsf) (144 kPa) or greater. Examples of cohesive soils are: clay, silty clay, sandy clay, clay loam and, in some cases, silty clay loam and sandy clay loam. Cemented soils such as caliche and hardpan are also considered Type A. However, no soil is Type A if:

- (i) The soil is fissured; or
- (ii) The soil is subject to vibration from heavy traffic, pile driving, or similar effects; or
- (iii) The soil has been previously disturbed; or
- (iv) The soil is part of a sloped, layered system where the layers dip into the excavation on a slope of four horizontal to one vertical (4H:1V) or greater; or
- (v) The material is subject to other factors that would require it to be classified as a less stable material.

"Type B" means:

- (i) Cohesive soil with an unconfined compressive strength greater than 0.5 tsf (48 kPa) but less than 1.5 tsf (144 kPa); or
- (ii) Granular cohesionless soils including: angular gravel (similar to crushed rock), silt, silt loam, sandy loam and, in some cases, silty clay loam and sandy clay loam.
- (iii) Previously disturbed soils except those which would otherwise be classed as Type C soil.
- (iv) Soil that meets the unconfined compressive strength or cementation requirements for Type A, but is fissured or subject to vibration; or
- (v) Dry rock that is not stable; or
- (vi) Material that is part of a sloped, layered system where the layers dip into the excavation on a slope less steep than four horizontal to one vertical (4H:1V), but only if the material would otherwise be classified as Type B.

"Type C" means:

- (i) Cohesive soil with an unconfined compressive strength of 0.5 tsf (48 kPa) or less; or
- (ii) Granular soils including gravel, sand, and loamy sand; or
- (iii) Submerged soil or soil from which water is freely seeping; or
- (iv) Submerged rock that is not stable, or
- (v) Material in a sloped, layered system where the layers dip into the excavation or a slope of four horizontal to one vertical (4H:1V) or steeper.

"Unconfined compressive strength" means the load per unit area at which a soil will fail in compression. It can be determined by laboratory testing, or estimated in the field using a pocket penetrometer, by thumb penetration tests, and other methods.

"Wet soil" means soil that contains significantly more moisture than moist soil, but in such a range of values that cohesive material will slump or begin to flow when vibrated. Granular material that would exhibit cohesive properties when moist will lose those cohesive properties when wet.

(c) Requirements - (1) Classification of soil and rock deposits. Each soil and rock deposit shall be classified by a competent person as Rock, Type A, Type B, or Type C in accordance with the definitions set forth in paragraph (b) of this appendix.

(2) Basis of classification. The classification of the deposits shall be made based on the results of at least one visual and at least one laboratory analysis. Such analyses shall be conducted by a competent person using tests described in paragraph (d) below, or in other recognized methods of soil classification and testing such as those adopted by the American Society for Testing Materials, or the U.S. Department of Agriculture textural classification system.

(3) Visual and manual analyses. The visual and manual analyses, such as those noted as being acceptable in paragraph (d) of this appendix, shall be designed and conducted to provide sufficient quantitative and qualitative information as may be necessary to identify properties, factors, and conditions affecting the classification of the deposits.

(4) Layered systems. In a layered system, the system shall be classified in accordance with its weakest layer. However, each layer shall be classified individually where a more stable layer lies under a less stable layer.

(5) Reclassification. If, after classifying a deposit, the properties, factors, or conditions affecting its classification change in any way, the deposit shall be reclassified as necessary to reflect the changed circumstances.

(d) Acceptable visual and manual tests. - (1) Visual tests. Visual analysis is conducted to determine qualitative information regarding an excavation site in general, the soil adjacent to the excavation, the soil forming the sides of the open excavation, and the soil taken from excavated material.

(i) Observe samples of soil that are excavated and soil in the sides of the excavation. Estimate the range of particle sizes and the amounts of the particle sizes. Soil that is primarily composed of fine-grained material is cohesive material. Soil composed of coarse-grained sand or gravel is granular material.

(ii) Observe soil as it is excavated. Soil that remains in clumps when excavated is cohesive. Soil that breaks up easily and does not form clumps is granular.

(iii) Observe the side of the opened excavation and the surface area adjacent to the excavation. Crack-like openings such as tensile cracks could indicate fissured material. If chunks of soil spall off a vertical side, the soil could be fissured. Small spalls are evidence of moisture in the ground and are indications of potentially hazardous situations.

(iv) Observe the area adjacent to the excavation and the excavation itself for evidence of existing utility and other underground structures and to identify previously disturbed soil.

(v) Observe the opened side of the excavation to identify layered systems. Examine layered systems to identify if the layers slope away from the excavation. Estimate the degree of slope of the layers.

(vi) Observe the area adjacent to the excavation and the sides of the opened excavation for evidence of surface water, water seepage, or the location of the level of the water table.

(vii) Observe the area adjacent to the excavation and the area within the excavation for sources of vibration that may affect the stability of the excavation face.

(2) Manual tests. Manual analysis of soil samples is conducted to determine quantitative as well as qualitative properties of soil and to provide more information in order to classify soil properly.

(i) Plasticity. Mold a moist or wet sample of soil into a ball and attempt to roll it into threads as thin as 1/8-inch in diameter. Cohesive material can be successfully rolled into threads without crumbling. For example, if at least a two inch (50 mm) length of 1/8-inch diameter thread can be held on one end without tearing, the soil is cohesive.

(ii) Dry strength. If the soil is dry and crumbles on its own or with moderate pressure into individual grains or fine powder, it is granular (a combination of gravel, sand, or silt). If the soil is dry and falls into clumps which break up into smaller clumps, but the smaller clumps can only be broken up with difficulty, it may be clay in any combination with gravel, sand or silt. If the dry soil breaks into clumps which break up into small clumps and which can only be broken with difficulty, and there is no visual indication the soil is fissured, the soil is considered unfissured.

(iii) Thumb penetration. The thumb penetration test can be used to estimate the unconfined compressive strength of cohesive soil. This test is based on the thumb penetration test described in American Society for Testing and Materials (ASTM) Standard designation "Standard Recommended Practice for Description of Soils (Visual - Manual Procedure)." Type A soils with an unconfined compressive strength of 1.5 tsf can be readily indented by the thumb; however, they can be penetrated by the thumb only with very great effort. Type B soils with an unconfined compressive strength of 0.5 tsf can be easily penetrated several inches by the thumb, and can be molded by finger pressure. This test should be conducted on an undisturbed soil sample, such as a large clump of spoil, as soon as practical after excavation to keep to a minimum the effects of exposure to drying influences. If the excavation is later exposed to wetting influences (e.g., flooding), the classification of the soil must be changed accordingly.

(iv) Other strength tests. Estimates of unconfined compressive strength of soils can also be obtained by use of a pocket penetrometer using a hand-operated shearvane.

(v) Drying test. The basic purpose of the drying test is to differentiate between cohesive material with fissures, unfissured cohesive material, and granular material. The procedure for the drying test involves drying a sample of soil that is approximately one inch thick (2.5 to six inches (15.24 cm) in diameter until it is thoroughly dry:

(A) If the sample develops cracks as it dries, significant fissures are indicated.

(B) Samples that dry without cracking are to be broken by hand. If considerable force is necessary to break a sample, the soil has a high cohesive material content. The soil can be classified as an unfissured cohesive material and the unconfined compressive strength determined.

(C) If a sample breaks easily by hand, it is either a fissured cohesive material or a granular material. To distinguish between the two, pulverize the dried clumps of the sample by hand or by stepping on them. If the clumps do not pulverize easily, the material is cohesive. If they pulverize easily into very small fragments, the material is granular.

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● Part Number:	1926
● Part Title:	Safety and Health Regulations for Construction
● Subpart:	P
● Subpart Title:	Excavations
● Standard Number:	1926 Subpart P App B
● Title:	Sloping and Benching

(a) **Scope and application.** This appendix contains specifications for sloping and benching when used as methods of protecting working in excavations from cave-ins. The requirements of this appendix apply when the design of sloping and benching protective is to be performed in accordance with the requirements set forth in § 1926.652(b)(2).

(b) **Definitions.**

Actual slope means the slope to which an excavation face is excavated.

Distress means that the soil is in a condition where a cave-in is imminent or is likely to occur. Distress is evidenced by such phenomena as the development of fissures in the face of or adjacent to an open excavation; the subsidence of the edge of an excavation; the slumping of material from the face or the bulging or heaving of material from the bottom of an excavation; the spalling of material from the face of an excavation; and raveling, i.e., small amounts of material such as pebbles or little clumps of material suddenly separating from the excavation and trickling or rolling down into the excavation.

Maximum allowable slope means the steepest incline of an excavation face that is acceptable for the most favorable site conditions for protection against cave-ins, and is expressed as the ratio of horizontal distance to vertical rise (H:V).

Short term exposure means a period of time less than or equal to 24 hours that an excavation is open.

(c) **Requirements -- (1) Soil classification.** Soil and rock deposits shall be classified in accordance with appendix A to subpart I of 1926.

(2) **Maximum allowable slope.** The maximum allowable slope for a soil or rock deposit shall be determined from Table B-1 of this appendix.

(3) **Actual slope.** (i) The actual slope shall not be steeper than the maximum allowable slope.

(ii) The actual slope shall be less steep than the maximum allowable slope, when there are signs of distress. If that situation occurs, the actual slope shall be cut back to an actual slope which is at least 1/2 horizontal to one vertical (1/2H:1V) less steep than the maximum allowable slope.

(iii) When surcharge loads from stored material or equipment, operating equipment, or traffic are present, a competent person shall determine the degree to which the actual slope must be reduced below the maximum allowable slope, and shall assure that such reduction is achieved. Surcharge loads from adjacent structures shall be evaluated in accordance with § 1926.651(i).

(4) **Configurations.** Configurations of sloping and benching systems shall be in accordance with Figure B-1.

**TABLE B-1
MAXIMUM ALLOWABLE SLOPES**

SOIL OR ROCK TYPE	MAXIMUM ALLOWABLE SLOPES (H:V)(1) FOR EXCAVATIONS LESS THAN 20 FEET DEEP(3)
STABLE ROCK	VERTICAL (90°)
TYPE A (2)	3/4:1 (53°)
TYPE B	1:1 (45°)
TYPE C	1 1/2:1 (34°)

Footnote(1) Numbers shown in parentheses next to maximum allowable slopes are angles expressed in degrees from the horizontal. Angle rounded off.

Footnote(2) A short-term maximum allowable slope of 1/2H:1V (63°) is allowed in excavations in Type A soil that are 12 feet (3.67 m) or less in depth. Short-term maximum allowable slopes for excavations greater than 12 feet (3.67 m) in depth shall be 3/4H:1V (53°).

Footnote(3) Sloping or benching for excavations greater than 20 feet deep shall be designed by a registered professional engineer.

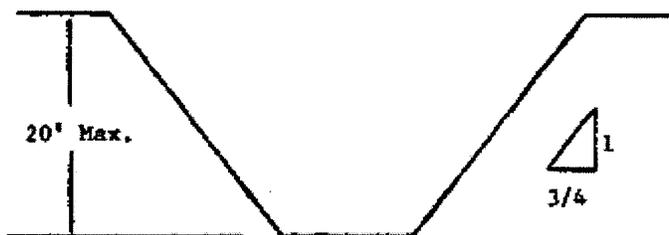
Figure B-1

Slope Configurations

(All slopes stated below are in the horizontal to vertical ratio)

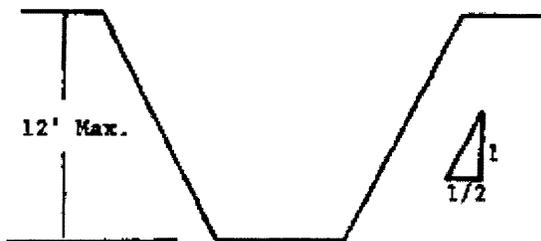
B-1.1 Excavations made in Type A soil.

1. All simple slope excavation 20 feet or less in depth shall have a maximum allowable slope of 3/4:1.



SIMPLE SLOPE -- GENERAL

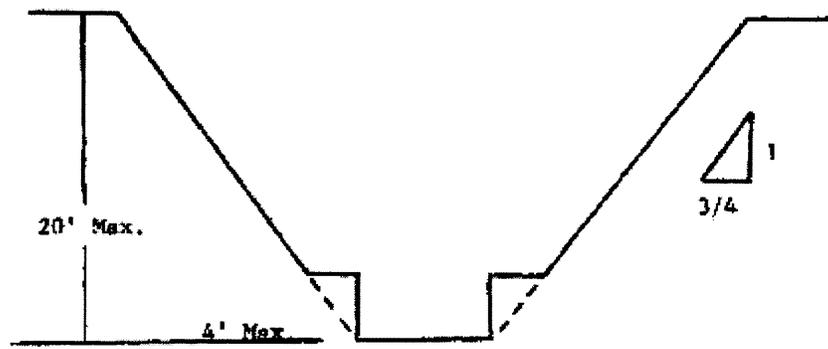
Exception: Simple slope excavations which are open 24 hours or less (short term) and which are 12 feet or less in depth shall have maximum allowable slope of 1/2:1.



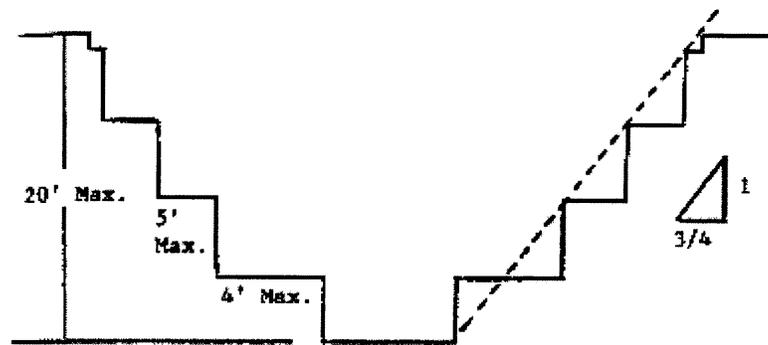
SIMPLE SLOPE -- SHORT TERM

2. All benched excavations 20 feet or less in depth shall have a maximum allowable slope of 3/4 to 1 and maximum bench dimensions

follows:

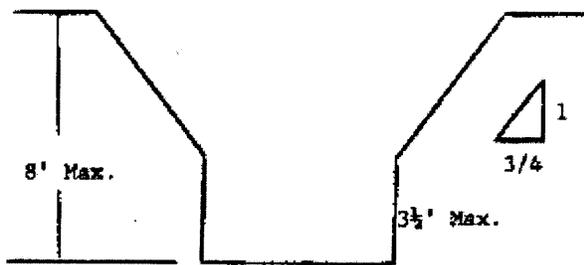


SIMPLE BENCH



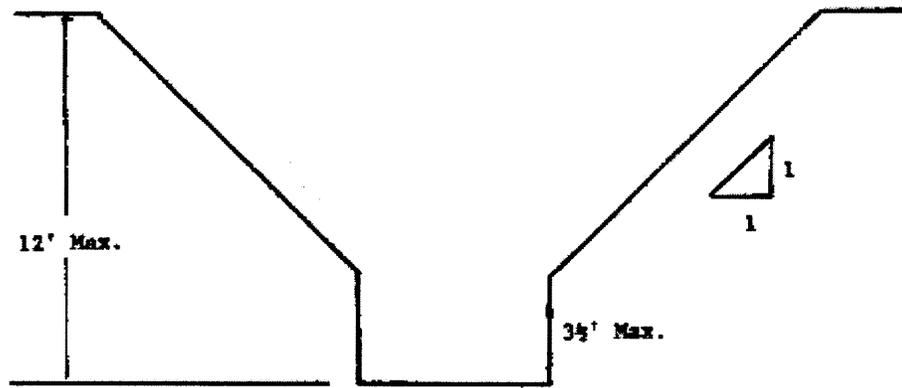
MULTIPLE BENCH

3. All excavations 8 feet or less in depth which have unsupported vertically sided lower portions shall have a maximum vertical side feet.



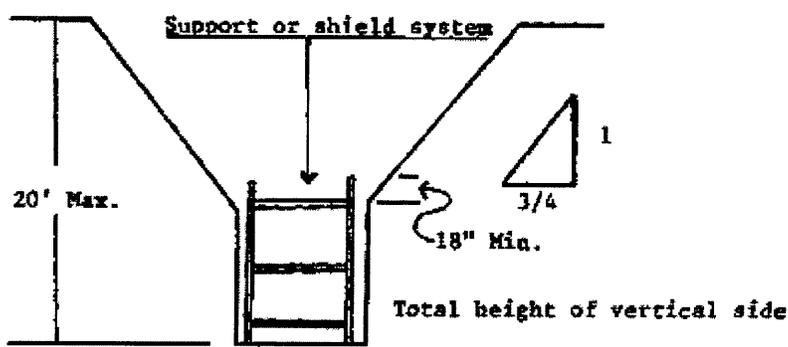
UNSUPPORTED VERTICALLY SIDED LOWER PORTION -- MAXIMUM 8 FEET IN DEPTH)

All excavations more than 8 feet but not more than 12 feet in depth with unsupported vertically sided lower portions shall have a allowable slope of 1:1 and a maximum vertical side of 3 1/2 feet.



UNSUPPORTED VERTICALLY SIDED LOWER PORTION -- MAXIMUM 12 FEET IN DEPTH)

All excavations 20 feet or less in depth which have vertically sided lower portions that are supported or shielded shall have a maximum allowable slope of 3/4:1. The support or shield system must extend at least 18 inches above the top of the vertical side.

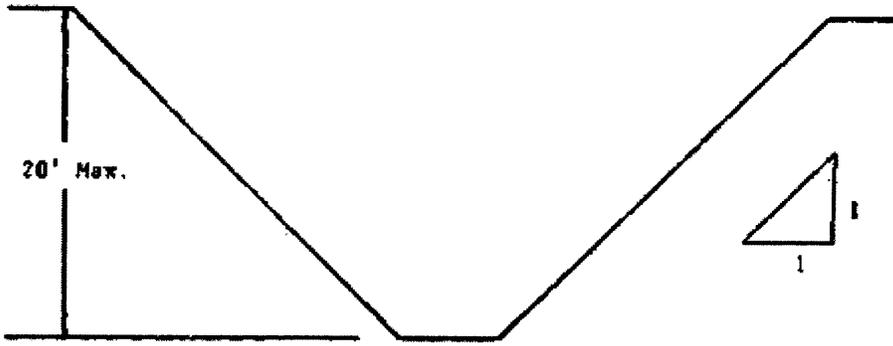


SUPPORTED OR SHIELDED VERTICALLY SIDED LOWER PORTION

4. All other simple slope, compound slope, and vertically sided lower portion excavations shall be in accordance with the other options permitted under § 1926.652(b).

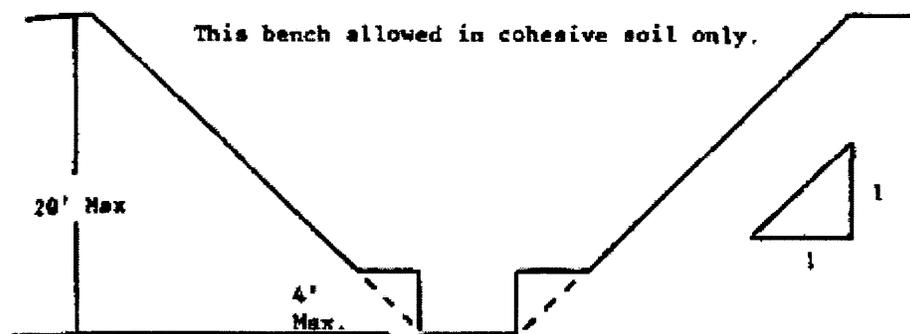
B-1.2 Excavations Made in Type B Soil

1. All simple slope excavations 20 feet or less in depth shall have a maximum allowable slope of 1:1.

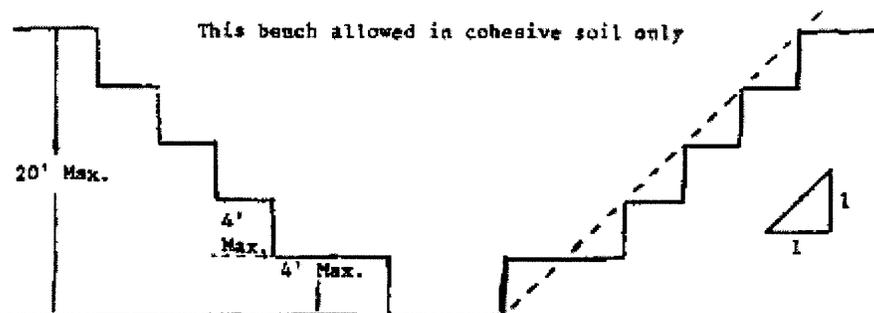


SIMPLE SLOPE

2. All benched excavations 20 feet or less in depth shall have a maximum allowable slope of 1:1 and maximum bench dimensions

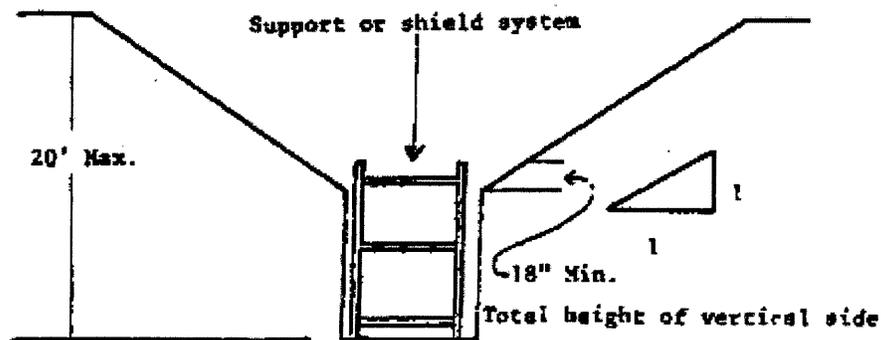


SINGLE BENCH



MULTIPLE BENCH

3. All excavations 20 feet or less in depth which have vertically sided lower portions shall be shielded or supported to a height at least 18 inches above the top of the vertical side. All such excavations shall have a maximum allowable slope of 1:1.

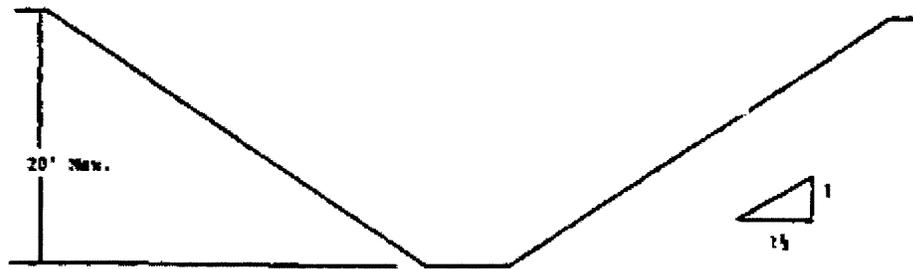


VERTICALLY SIDED LOWER PORTION

4. All other sloped excavations shall be in accordance with the other options permitted in § 1926.652(b).

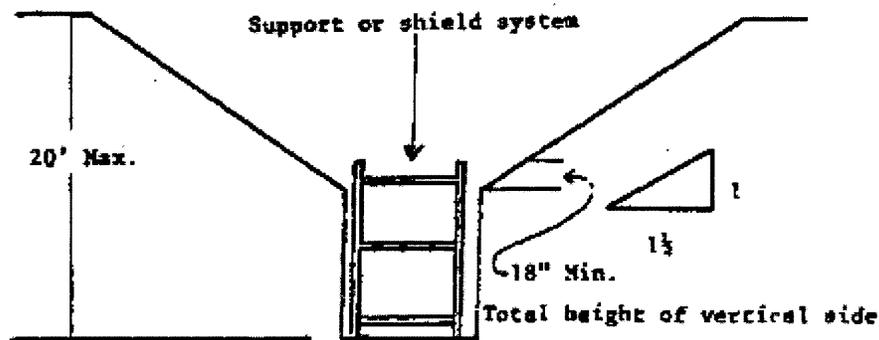
B-1.3 Excavations Made in Type C Soil

1. All simple slope excavations 20 feet or less in depth shall have a maximum allowable slope of 1½:1.



SIMPLE SLOPE

2. All excavations 20 feet or less in depth which have vertically sided lower portions shall be shielded or supported to a height at least 18 inches above the top of the vertical side. All such excavations shall have a maximum allowable slope of 1 1/2:1.

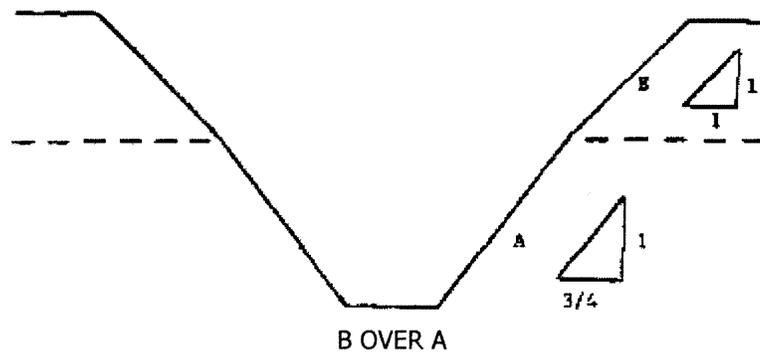


VERTICAL SIDED LOWER PORTION

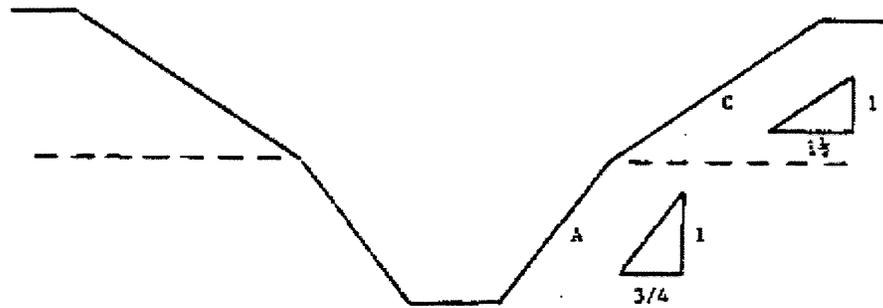
3. All other sloped excavations shall be in accordance with the other options permitted in § 1926.652(b).

B-1.4 Excavations Made in Layered Soils

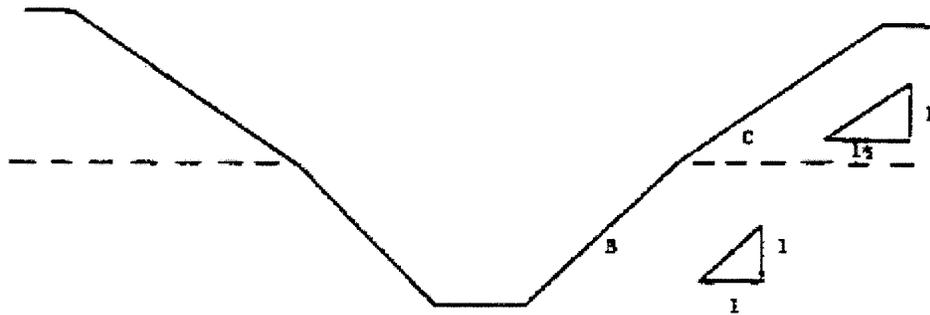
1. All excavations 20 feet or less in depth made in layered soils shall have a maximum allowable slope for each layer as set forth b



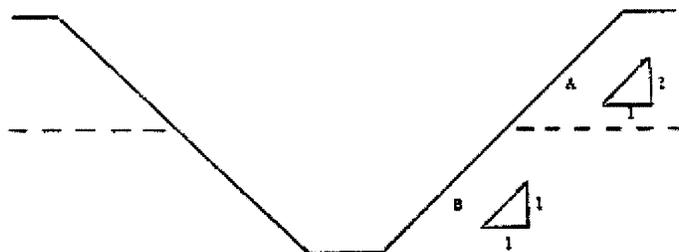
B OVER A



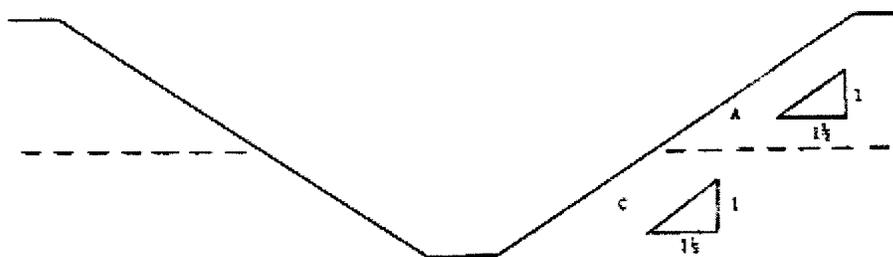
C OVER A



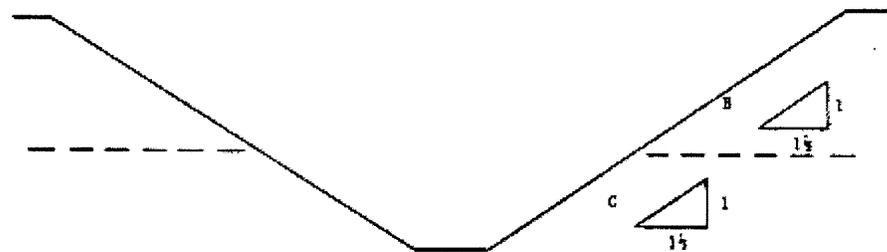
C OVER B



A OVER B



A OVER C



B OVER C

2. All other sloped excavations shall be in accordance with the other options permitted in § 1926.652(b).

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- **Part Number:** 1926
- **Part Title:** Safety and Health Regulations for Construction
- **Subpart:** P
- **Subpart Title:** Excavations
- **Standard Number:** 1926 Subpart P App F
- **Title:** Selection of Protective Systems

The following figures are a graphic summary of the requirements contained in subpart P for excavations 20 feet or less in depth. Protective systems for use in excavations more than 20 feet in depth must be designed by a registered professional engineer in accordance with 1926.652(b) and (c).

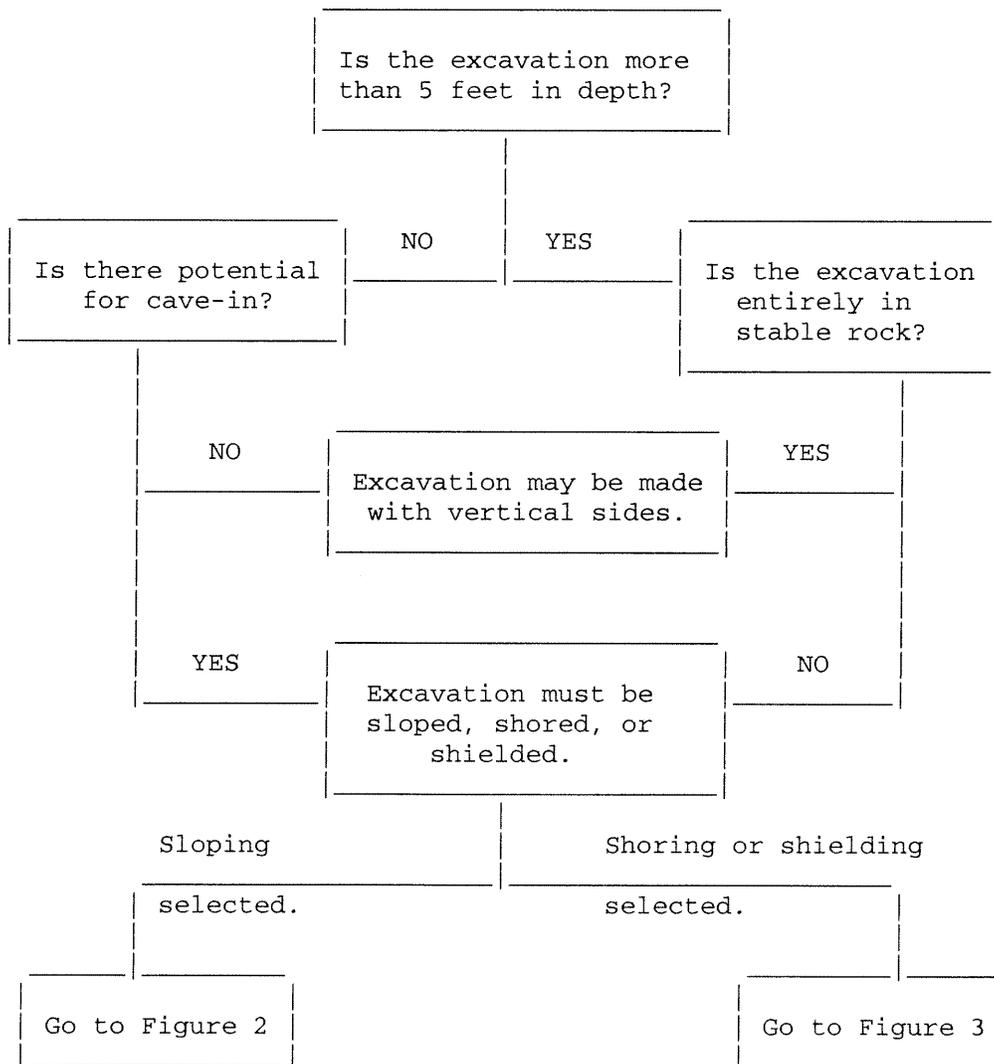


FIGURE 1 - PRELIMINARY DECISIONS

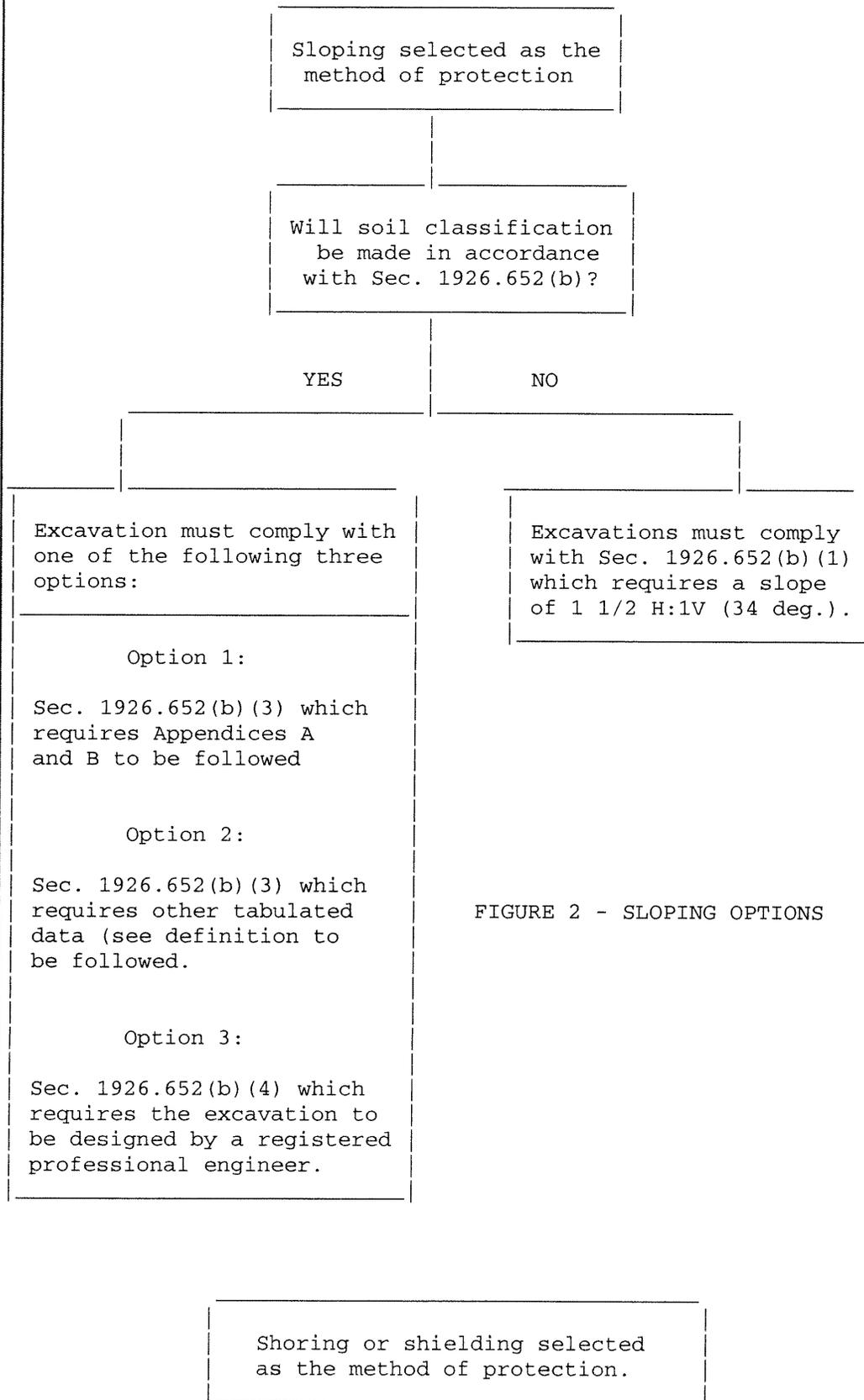


FIGURE 2 - SLOPING OPTIONS

Soil Classification is required when shoring or shielding is used. The excavation must comply with one of the following four options:

Option 1

Sec. 1926.652(c)(1) which requires Appendices A and C to be followed (e.g. timber shoring).

Option 2

Sec. 1926.652(c)(2) which requires manufacturers data to be followed (e.g. hydraulic shoring, trench jacks, air shores, shields).

Option 3

Sec. 1926.652(c)(3) which requires tabulated data (see definition) to be followed (e.g. any system as per the tabulated data).

Option 4

Sec. 1926.652(c)(4) which requires the excavation to be designed by a registered professional engineer (e.g. any designed system).

FIGURE 3 - SHORING AND SHIELDING OPTIONS

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Appendix B

GUIDANCE ON INCIDENT INVESTIGATION AND REPORTING

MEDICAL EMERGENCY / INCIDENT

RESPONSE PROTOCOL

1.0 PURPOSE

From time to time employees of C&S Engineers, Inc. will sustain an injury while working on the job. While every effort is being made to prevent this, in the event of an injury or illness on the job, the following procedures will be implemented. This format may also be utilized in the event of a property damage incident.

2.0 SCOPE

This guideline applies to all C&S Engineers, Inc. job sites and employees.

3.0 GUIDELINES

Upon notification or awareness of an incident/accident with injuries or illness the Emergency Coordinator or his On-Site Designee will:

1. Ensure that the injured employee is receiving immediate first aid and medical care.
2. Notify Emergency Services (911) if injuries are severe.
3. Stabilize the work area; ensure that no one else can be injured.
4. Notify the Project Manager at the earliest possible convenience.
5. Notify the Owner/Client at the earliest possible convenience.

To assist the Health and Safety Manager in the root cause analysis, the Emergency Coordinator or his On-Site Designee will also make an attempt to:

1. Obtain the names and phone numbers of witnesses.
2. Preserve the accident scene if possible for analysis.

3.1 *Injury Management*

1. If the patient is stable with non-life threatening injuries, the foreman will ensure the employee is transported to the emergency medical facility listed in Section 1 of the HASP. Directions to the nearest emergency medical facility are located in **Attachment A** of the HASP.

At no time will an injured employee drive themselves to medical care.

2. If the patient has serious or life threatening injuries, the emergency coordinator or his on-site designee will notify the emergency services for the area for treatment and transport to a hospital or emergency room. Serious injuries can be considered but not limited to head injuries, loss of consciousness, severe laceration or amputation, fractured bones, burns and eye injuries.

3. Following the treatment and care of the injured employee, the emergency coordinator or his on-site designee and the project manager will initiate the completion of the first injury report. The Health & Safety Manager will assist.

3.2 Project Manager

1. Upon notification of a personal injury or illness on the job site, will notify C&S Engineers, Inc, President and Corporate Legal and C&S Companies Health and Safety Manager.
2. Will report to the worksite to initiate the first injury report.
3. Will report to the treatment facility to check on the well being of the injured employee.
4. The project manager will ensure that the treatment facility is aware that this is a workers compensation case.
5. Will assist the Health and Safety Manager in the analysis of the incident.

3.3 Health & Safety Manager

1. Upon notification of the personal injury will determined if it is necessary to report to the treatment facility or the accident site, depending on the nature of the injuries and the circumstances of the accident.
2. Will report to the worksite to begin a root cause analysis investigation of the accident.
3. The investigation may include interview of witnesses, field crew , and project manager, the photographing of the scene, reconstruction of the accident scene, using test instruments and taking measurements. The Health and Safety Manager may draw diagrams from the information learned.
4. The Health and Safety Manager will work with the owner/client as necessary to investigate the accident.
5. The Health & Safety manager will ensure that the site is safe to resume work.
6. The Health & Safety Manager shall initiate the New York State Compensation form requirements (C-2) and forward a copy of the C-2 to the C & S Engineers, Inc. controller for transmittal to the Compensation Carrier within 8 hrs of notification of the incident or by the end of the next business day.
7. The Health and Safety manager, upon completion of the investigation, will provide the
8. Project Manager with a written investigative report (copy to the President)
9. The accident will be reviewed at the next Project Managers meeting with the intent to prevent further or similar events on other projects.
10. The Health & Safety Manager will assess the incident to determine OSHA record ability and make record if necessary on the OSHA 300 form, within five working days.

4.0 INCIDENT RESPONSE

4.1 Purpose

To prevent the occurrence of accidents on C&S Engineers, Inc., work sites and to establish a procedure for investigation and reporting of incidents occurring in, or related to C&S work activities.

4.2 Scope

Applies to all incidents related to C&S Engineers, Inc. work activities.

4.3 Definitions

Accident - An undesired event resulting in personal injury and/or property damage, and/or equipment failure.

Fatality - An injury or illness resulting in death of the individual.

Incident - Any occurrence which results in, or could potentially result in, the need for medical care or property damage. Such incidents shall include lost time accidents or illness, medical treatment cases, unplanned exposure to toxic materials or any other significant occurrence resulting in property damage or in "near misses."

Incidence Rate - the number of injuries, illnesses, or lost workdays related to a common exposure base of 100 full-time workers. The rate is calculated as:

$$N/EH \times 200,000$$

N = number of injuries and illnesses or lost workday cases; EH = total hours worked by all associates during calendar year. 200,000 = base for 100 full-time equivalent workers (working 40 hours per week, 50 weeks per year).

Injury - An injury such as a cut, fracture, sprain, amputation, etc. which results from a work accident or from a single instantaneous event in the work environment.

Lost Workday Case - A lost workday case occurs when an injured or ill employee experiences days away from work beginning with the next scheduled work day. Lost workday cases do not occur unless the employee is effected beyond the day of injury or onset of illness.

Recordable Illness - An illness that results from the course of employment and must be entered on the OSHA 300 Log and Summary of Occupational Injuries and Illnesses. These illnesses require medical treatment and evaluation of work related injury. For example, dermatitis, bronchitis, irritation of eyes, nose, and throat can result from work and non-work related incidents.

Recordable Injury - An injury that results from the course of employment and must be entered on the OSHA 300 Log and Summary of Occupational Injuries and Illnesses. These injuries require medical treatment; may involve loss of consciousness; may result in restriction of work or motion or transfer to another job; or result in a fatality.

Near Miss - An incident which, if occurring at a different time or in a different personnel or equipment configuration, would have resulted in an incident.

4.4 Responsibilities

Employees - It shall be the responsibility of all C&S Engineers, Inc. employees to report all incidents as soon as possible to the HSC, regardless of the severity.

Human Resources - has overall responsibility for maintaining accident/ incident reporting and investigations according to current regulations and recording injuries/ illness on the OSHA 300 log, and posting the OSHA 300 log.

Emergency Coordinator - It is the responsibility of the Emergency Coordinator to investigate and prepare an appropriate report of all accidents, illnesses, and incidents occurring on or related to C&S Engineers, Inc. work. The Emergency Coordinator shall complete **Attachment A** within 24 hours of the incident occurrence.

Health and Safety Manager (HSM) - It is the responsibility of the HSM to investigate and prepare an appropriate report of all lost time injuries and illnesses and significant incidents occurring on or related to C&S Companies. The HSM shall maintain the OSHA 300 form.

Project Managers (PM) - It shall be the PM's responsibility to promptly correct any deficiencies in personnel, training, actions, or any site or equipment deficiencies that were determined to cause or contribute to the incident investigated.

5.0 GUIDELINES

5.1 Incident Investigation

The Project Manager will immediately investigate the circumstances surrounding the incident and will make recommendations to prevent recurrence. The HSM shall be immediately notified by telephone if a serious accident/ incident occurs. The incident shall be evaluated to determine whether it is OSHA recordable. If the incident is determined to be OSHA 300 recordable, it shall be entered on the OSHA 300 form.

The Project Manager with assistance from the HSM must submit to the office an incident report form pertaining to any incident resulting in injury or property damage.

5.2 Incident Report

The completed incident report must be completed by the Project Manager within 12 hours of the incident and distributed to the HSM, and Human Resources. This form shall be maintained by Human Resources for at least five years for all OSHA recordable cases. This form serves as an equivalent to the OSHA 101 form.

5.3 Incident Follow-up Report

The Incident Follow-Up Report (**Attachment B**) shall be distributed with the Incident Report within one week of the incident. Delay in filing this report shall be explained in a brief memorandum.

5.4 Reporting of Fatalities or Multiple Hospitalization Accidents

Fatalities or accidents resulting in the hospitalization of three or more employees must be reported to OSHA verbally or in writing within 8 hours. The report must contain 1) circumstances surrounding the accident(s), 2) the number of fatalities, and 3) the extent of any injuries.

5.5 OSHA 300A Summary Form

Recordable cases must be entered on the log within six workdays of receipt of the information that a recordable case has occurred. The OSHA log must be kept updated to within 45 calendar days.

OSHA 300 forms must be updated during the 5 year retention period, if there is a change in the extent or outcome of an injury or illness which affects an entry on a log. If a change is necessary, the original entry should be lined out and a corrected entry made on that log. New entries should be made for previously unrecorded cases that are discovered or for cases that initially weren't recorded but were found to be recordable after the end of the year. Log totals should also be modified to reflect these changes.

5.6 Posting

The log must be summarized at the end of the calendar year and the summary must be posted from February 1 through May 31.

5.7 OSHA 300A

Facilities selected by the Bureau of Labor Statistics (BLS) to participate in surveys of occupational injuries and illnesses will receive the OSHA 300A. The data from the annual summary on the OSHA 300 log should be transferred to the OSHA 300A, other requested information provided and the form returned as instructed by the BLS.

5.8 Access to OSHA Records

All OSHA records (accident reporting forms and OSHA 300 logs) should be available for inspection and copying by authorized Federal and State government officials.

Employees, former employees, and their representatives must be given access for inspection and copying to only the log, OSHA No. 300, for the establishment in which the employee currently works or formerly worked.

6.0 REFERENCES

29 CFR Part 1904

7.0 ATTACHMENTS

Attachment A - Incident Investigation Form
Attachment B - Incident Follow-Up Report
Attachment C - Establishing Recordability

ATTACHMENT A

INCIDENT INVESTIGATION FORM

Accident investigation should include:

Location: _____

Time of Day: _____

Accident Type: _____

Victim: _____

Nature of Injury: _____

Released Injury: _____

Hazardous Material: _____

Unsafe Acts: _____

Unsafe Conditions: _____

Policies, Decisions: _____

Personal Factors: _____

Environmental Factors: _____

ATTACHMENT B
INCIDENT FOLLOW-UP REPORT

Date _____

Foreman: _____

Date of Incident: _____

Site: _____

Brief description of incident: _____

Outcome of incident: _____

Physician's recommendations: _____

Date the injured returned to work: _____

Project Manager Signature: _____

Date: _____

ATTACH ANY ADDITIONAL INFORMATION TO THIS FORM

ATTACHMENT C

ESTABLISHING RECORDABILITY

1. Deciding whether to record a case and how to classify the case.

Determine whether a fatality, injury or illness is recordable.

A fatality is recordable if:

- Results from employment

An injury is recordable if:

- Results from employment and
- It requires medical treatment beyond first aid or
- Results in restricted work activity or job transfer, or
- Results in lost work day or
- Results in loss of consciousness

An illness is recordable if:

- It results from employment

2. Definition of "Resulting from Employment"

Resulting from employment is when the injury or illness results from an event or exposure in the work environment. The work environment is primarily composed of: 1) The employer's premises, and 2) other locations where associates are engaged in work-related activities or are present as a condition of their employment.

The employer's premises include company rest rooms, hallways, cafeterias, sidewalks and parking lots. Injuries occurring in these places are generally considered work related.

The employer's premises EXCLUDES employer controlled ball fields, tennis courts, golf courses, parks, swimming pools, gyms, and other similar recreational facilities, used by associates on a voluntary basis for their own benefit, primarily during off work hours.

Ordinary and customary commute, is not generally considered work related.

Employees injured or taken ill while engaged in consuming food, as part of a normal break or activity is not considered work related. Employees injured or taken ill as the result of smoking, consuming illegal drugs, alcohol or applying make up are generally not considered work related. Employee injured by an authorized horseplay is generally not considered work related, however, an employee injured as a result of a fight or other workplace violence act, may be considered work related.

Associates who travel on company business are considered to be engaged in work related activities all the time they spend in the interest of the company. This includes travel to and from customer contacts, and entertaining or being entertained for purpose of promoting or discussing business. Incidents occurring during normal living activities (eating, sleeping, recreation) or if the associate deviates from a reasonably direct route of travel are not considered OSHA recordable.

3. Distinction between Medical Treatment and First Aid.

First aid:

Any one-time treatment, and any follow up visit for the purpose of observation, of minor scratches, cuts, burns, splinters, etc., which do not ordinarily require medical care. Such one time treatment, and follow up visit for the purpose of observation, is considered first aid even though provided by a physician or registered professional personnel.

Medical Treatment (recordable):

- a) Must be treated only by a physician or licensed medical personnel.
- b) Impairs bodily function (i.e. normal use of senses, limbs, etc.).
- c) Results in damage to physical structure of a non-superficial nature (fractures).
- d) Involves complications requiring follow up medical treatment.

Appendix D

Community Air Monitoring Plan

Community Air Monitoring Plan

for

**1803 Elmwood Avenue
1803 Elmwood Avenue SBL #78.70-3-20.11
Buffalo, Erie County, New York**

Site No. C915394

December 2023

Community Air Monitoring Plan

Overview

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil / waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate

surrogate, such as isobutylene. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

2. If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/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 must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m³ above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m³ above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust

suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m³ of the upwind level and in preventing visible dust migration.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

Fugitive Dust and Particulate Monitoring

A program for suppressing fugitive dust and particulate matter monitoring at hazardous waste sites is a responsibility on the remedial party performing the work. These procedures must be incorporated into appropriate intrusive work plans. The following fugitive dust suppression and particulate monitoring program should be employed at sites during construction and other intrusive activities which warrant its use:

1. Reasonable fugitive dust suppression techniques must be employed during all site activities which may generate fugitive dust.

2. Particulate monitoring must be employed during the handling of waste or contaminated soil or when activities on site may generate fugitive dust from exposed waste or contaminated soil. Remedial activities may also include the excavation, grading, or placement of clean fill. These control measures should not be considered necessary for these activities.

3. Particulate monitoring must be performed using real-time particulate monitors and shall monitor particulate matter less than ten microns (PM10) with the following minimum performance standards:

- (a) Objects to be measured: Dust, mists or aerosols;
- (b) Measurement Ranges: 0.001 to 400 mg/m³ (1 to 400,000 :ug/m³);
- (c) Precision (2-sigma) at constant temperature: +/- 10 :g/m³ for one second averaging; and +/- 1.5 g/m³ for sixty second averaging;
- (d) Accuracy: +/- 5% of reading +/- precision (Referred to gravimetric calibration with SAE fine test dust (mmd= 2 to 3 :m, g= 2.5, as aerosolized);
- (e) Resolution: 0.1% of reading or 1g/m³, whichever is larger;
- (f) Particle Size Range of Maximum Response: 0.1-10;
- (g) Total Number of Data Points in Memory: 10,000;
- (h) Logged Data: Each data point with average concentration, time/date and data point number;
- (i) Run Summary: overall average, maximum concentrations, time/date of maximum, total number of logged points, start time/date, total elapsed time (run duration), STEL concentration and time/date occurrence, averaging (logging) period, calibration factor, and tag number;
- (j) Alarm Averaging Time (user selectable): real-time (1-60 seconds) or STEL (15 minutes), alarms required;

- (k) Operating Time: 48 hours (fully charged NiCd battery); continuously with charger;
- (l) Operating Temperature: -10 to 50°C (14 to 122°F); and
- (m) Particulate levels will be monitored upwind and immediately downwind at the working site and integrated over a period not to exceed 15 minutes.

4. In order to ensure the validity of the fugitive dust measurements performed, there must be appropriate Quality Assurance/Quality Control (QA/QC). It is the responsibility of the remedial party to adequately supplement QA/QC Plans to include the following critical features: periodic instrument calibration, operator training, daily instrument performance (span) checks, and a record-keeping plan.

5. The action level will be established at 150 ug/m³ (15 minutes average). While conservative, this short-term interval will provide a real-time assessment of on-site air quality to assure both health and safety. If particulate levels are detected in excess of 150 ug/m³, the upwind background level must be confirmed immediately. If the working site particulate measurement is greater than 100 ug/m³ above the background level, additional dust suppression techniques must be implemented to reduce the generation of fugitive dust and corrective action taken to protect site personnel and reduce the potential for contaminant migration. Corrective measures may include increasing the level of personal protection for on-site personnel and implementing additional dust suppression techniques (see paragraph 7). Should the action level of 150 ug/m³ continue to be exceeded work must stop and DER must be notified as provided in the site design or remedial work plan. The notification shall include a description of the control measures implemented to prevent further exceedances.

6. It must be recognized that the generation of dust from waste or contaminated soil that migrates off-site, has the potential for transporting contaminants off-site. There may be situations when dust is being generated and leaving the site and the monitoring equipment does not measure PM-10 at or above the action level. Since this situation has the potential to allow for the migration of contaminants off-site, it is unacceptable. While it is not practical to quantify total suspended particulates on a real-time basis, it is appropriate to rely on visual observation. If dust is observed leaving the working site, additional dust suppression techniques must be employed.

7. The following techniques have been shown to be effective for the controlling of the generation and migration of dust during construction activities:

- (a) Applying water on haul roads;
- (b) Wetting equipment and excavation faces;
- (c) Spraying water on buckets during excavation and dumping;
- (d) Hauling materials in properly tarped or watertight containers;
- (e) Restricting vehicle speeds to 10 mph;
- (f) Covering excavated areas and material after excavation activity ceases; and
- (g) Reducing the excavation size and/or number of excavations.

Experience has shown that the chance of exceeding the 150ug/m³ action level is remote when the above-mentioned techniques are used. When techniques involving water application are used, care must be taken not to use excess water, which can result in unacceptably wet conditions. Using atomizing sprays will prevent overly wet conditions, conserve water, and provide an effective means of suppressing the fugitive dust.

8. The evaluation of weather conditions is necessary for proper fugitive dust control. When extreme wind conditions make dust control ineffective, as a last resort remedial actions may need to be suspended. There may be situations that require fugitive dust suppression and particulate monitoring requirements with action levels more stringent than those provided above. Under some circumstances, the contaminant concentration and/or toxicity may require additional monitoring to protect site personnel and the public. Additional integrated sampling and chemical analysis of the dust may also be in order. This must be evaluated when a health and safety plan is developed and when appropriate suppression and monitoring requirements are established for protection of health and the environment.

Special Requirements:

In addition or in combination with the above, the following special requirements apply 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 will 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 will be considered to prevent exposures related to the work activities and to control dust and odors. Consideration will 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 will occur within the occupied structure(s). Depending upon the nature of contamination, chemical-specific colorimetric tubes of sufficient sensitivity may be necessary for comparing the exposure point concentrations with appropriate pre-determined response levels (response actions should also be pre-determined). Background readings in the occupied spaces must be taken prior to commencement of the planned work. Any unusual background readings should be discussed with NYSDOH prior to commencement of the work.
- If total particulate concentrations opposite the walls of occupied structures or next to intake vents exceed 150 mcg/m³, work activities will 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.

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 are 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, shall be understood and the monitoring locations established accordingly. In these situations, exhaust fans or other engineering controls will be used to create negative air pressure within the work area during remedial activities. Additionally, the planned work will be implemented during hours (e.g. weekends or evenings) when building occupancy is at a minimum.