



Steven P. Stucker, C.P.G.
Lead Environmental Engineer

July 1, 2022

Mr. Matt King
Division of Environmental Remediation
NYSDEC, Region 9
270 Michigan Avenue
Buffalo, NY 14203-2999

Re: Supplemental SWMU Assessment Plan
National Grid Dewey/Kensington Service Center
RCRA Corrective Action Order on Consent # R9-4407-96-09

Dear Mr. King:

This letter presents a Supplemental SWMU Assessment Plan to further characterize polychlorinated biphenyl- (PCB)-containing soil in an area northeast of the warehouse building (building DK-21) at the National Grid Company (National Grid) Dewey/Kensington Service Center in Buffalo, New York. The area northeast of building DK-21 was not previously identified as a Solid Waste Management Unit (SWMU) in the 6NYCRR Part 373 Hazardous Waste Management Permit for a former Hazardous Waste Treatment, Storage and Disposal Facility (TSDF) at the service center that was closed in 1992. Pursuant to Paragraph XV of the existing RCRA Corrective Action Order on Consent for the property between National Grid and the New York State Department of Environmental Conservation (NYSDEC) (Index No. R9-4407-96-09), National Grid submitted a June 24, 2021 letter to the NYSDEC which provided written notification regarding the discovery of the newly-identified SWMU at the facility. In the June 24, 2021 letter, National Grid committed to preparing a SWMU Assessment Plan to evaluate the horizontal and vertical extent of PCB-containing soil in the area northeast of DK-21. The SWMU Assessment Plan was submitted to the NYSDEC on July 27, 2021 and was subsequently revised to address NYSDEC comments provide in an October 20, 2021 letter to National Grid. The final SWMU Assessment Plan was submitted to the NYSDEC on January 24, 2022. The SWMU Assessment sampling activities were implemented by Arcadis of New York (Arcadis) during February 2022. This Supplemental SWMU Assessment Plan outlines additional soil investigation efforts to address datagaps identified by the previous soil sampling conducted for the new SWMU area.

Relevant background information is presented below followed by National Grid's approach for implementing additional soil characterization efforts.

Background Information

The Dewey/Kensington Service Center is located at 114 Kensington Avenue between Dewey and Kensington Avenues in Buffalo, New York. A site location map is presented as Figure 1. A city of

Buffalo Atlas (tax map) from 1891 indicates that the current service center property was an undeveloped area located in the eastern portion of the St. Mary's Benevolent Society/Providence Retreat (St. Mary's) property. By the early 1900's, the property had been subdivided into two separate parcels, including a northern parcel located along Dewey Avenue and a southern parcel located along Kensington Avenue. A facility layout plan is presented as Figure 2.

Previous SWMU Investigation Results

As discussed in the June 24, 2021 notification letter, National Grid is planning to implement a paving project (the DK-21 Pavement Improvement Project) which will include the replacement of deteriorated pavement/concrete subbase material to support the installation of new pavement in the area north and northeast of the DK-21 warehouse building. The planned work will also include the replacement of four catch basins in the area. To characterize soil that was planned for removal within the pavement project area, GZA GeoEnvironmental of New York (GZA) completed 13 soil borings to depths of up to 8 feet below grade. PCB analytical results for samples collected from the GZA soil borings are shown on the Figure 3. PCBs were detected at 7 of the 13 borings at concentrations ranging from 5.69 ppm to 741 ppm.

Based on the results from the initial 13 soil boring samples, a total of 23 soil borings were completed by Arcadis in February 2022 as outlined in the SWMU Assessment Plan. Analytical results for soil samples that were analyzed for PCBs and emerging contaminants (including PFAS and 1,4-dioxane) are presented in Table 1 and PCB results are shown on Figure 4. PCBs were detected in 22 out of the 23 soil borings at concentrations ranging from 0.085 ppm to 50,000 ppm. There were no detections of PFAS or 1,4 Dioxane at concentrations exceeding NYSDEC screening levels.

The overall distribution of PCB results from initial samples conducted by GZA and the SWMU assessment sampling conducted by Arcadis is shown on Figure 5. The DK-21 pavement project has been postponed while National Grid implements the proposed Supplemental SWMU Assessment efforts to further characterize the horizontal and vertical extent PCB-containing soil in the area northeast of DK-21.

Additional SWMU Assessment Activities

Additional SWMU assessment efforts to characterize the horizontal and vertical extent of PCB-containing soil in the area northeast of DK-21 will be conducted by Arcadis on behalf of National Grid. Eight additional soil borings will be completed at the proposed boring locations shown on Figure 5. One soil boring (B-24) will be completed to further evaluate the elevated PCB detection at soil boring location B-02. The remaining borings (B-25 through B-31) will be completed to evaluate PCB concentrations in soil to the north of soil boring location B-05 and to delineate the extent of PCBs exceeding a concentration of 100 ppm at boring locations B-02 and B-10. The 100 ppm PCB delineation goal was selected based on the applicable USEPA soil cleanup objective for soil located below a cap in a low-occupancy area. The actual location of the borings to be completed will be selected based on access (National Grid is not proposing to relocate equipment to facilitate sampling), the presence of existing underground or overhead

utilities, and based on the judgement of sampling personnel to focus on previous sampling results or suspect areas (based on surface staining, low points, or cracks in existing pavement, etc.).

A project-specific Health and Safety Plan was previously prepared for the SWMU assessment field activities completed during February 2022 and will be used for the supplemental assessment efforts. The supplemental SWMU assessment activities will be conducted using the New York State Department of Health Generic Community Air Monitoring Plan (CAMP) included as Appendix 1A to the NYSDEC Division of Environmental Remediation Technical Guidance for Site Investigation and Remediation (DER-10, May 2010). The Generic CAMP is included as Attachment A.

The proposed supplemental SWMU assessment activities will include:

- Mobilizing to the site to identify proposed soil boring locations using Global Positioning System (GPS) methods and completing a geophysical survey to mark out utilities in the vicinity of proposed soil borings using ground penetrating radar and electroconductivity surveying methods. Concurrent with the geophysical survey, Arcadis will complete additional utility location efforts, including notifying Dig-Safe New York, visually observing aboveground and surface features at the site, and reviewing existing National Grid utility drawings.
- Mobilizing to the site approximately one week following completion of the geophysical survey and completing approximately 8 soil borings to an anticipated depth of approximately 12 feet below ground surface (bgs) or to refusal using direct-push sampling methods. Prior to completing each soil boring, Arcadis will soft dig to a depth of approximately 4 feet below ground surface (bgs) using compressed air or vacuum excavation methods. Arcadis will then advance a 4-foot long macrocore sampler by direct push methods to a depth of approximately 12 feet bgs (or to refusal) at each sampling location.
- The soft dig cuttings from each boring will be segregated into sample intervals, representing material from the first soil encountered below asphalt/pavement to a depth of approximately 0.5-feet and from 0.5 to 2-feet and 2 to 4-feet. The recovered soil cores at each location will also be segregated into 2-foot sampling intervals. The soil samples recovered from each 2-foot sampling interval (for both the soft dig cuttings and the recovered soil cores) will be visually characterized. Observations relative to the soil type (e.g., gravel, coarse sand, fine sand, etc.) and grain size characteristics (e.g., size sorting, and texture) will be noted. Other observations, including sedimentary structures, organic matter, and moisture will also be documented, as appropriate. The soft dig soil cuttings and the recovered soil cores will also be screened using a photoionization detector (PID).
- The samples recovered from each sampling interval at each boring will be containerized in clean laboratory-supplied glassware and submitted to Eurofins/TestAmerica (TestAmerica) laboratories in Amherst, New York. The recovered soil samples for the shallow interval (material from the first soil encountered beneath asphalt/pavement to a depth of 0.5 feet) and from the 4 to 6-foot interval at each boring location will initially be analyzed for PCBs using United States Environmental Protection Agency (USEPA) Method 8082. Additional samples from each boring may also be selected for

laboratory analysis for PCBs based on elevated PID readings and/or obvious impacts [e.g., odors, staining, or sheens]. Samples that are not initially designated for PCB analysis will be archived for potential latter analysis based on the analytical results for the initial samples. No additional samples for analysis of emerging contaminants are proposed based on the initial soil sampling results summarized in Table 1.

- Soil cuttings, disposable sampling equipment, used personal protective equipment, and decontamination water generated during the field sampling activities will be containerized in 55-gallon drums. The drums will be labeled appropriately based on their contents and will be staged on-site temporarily for subsequent waste profiling, transportation, and off-site disposal by National Grid's waste disposal Contractor.
- Analytical results for samples that are analyzed for PCBs will be reported using NYSDEC Analytical Services Protocol Category B data deliverables. Following receipt of all analytical results from the laboratory, An Arcadis data validator will review the results and prepare a Data Usability Summary Report (DUSR) for each sample delivery group. Arcadis will prepare a SWMU Assessment Report to document both the February 2022 sampling and the supplemental assessment efforts. The SWMU Assessment Summary Report will include a summary of the sampling efforts, data summary tables and figures, DUSRs, and waste disposal documentation. The SWMU Assessment Report include conclusions and recommendations for any additional soil characterization sampling or groundwater investigation efforts that are indicated by the sampling results.

Following receipt of NYSDEC approval of this supplemental SWMU Assessment Plan, National Grid will proceed the implementation of the field activities described above. National Grid will notify the NYSDEC at least two weeks prior to initiating the on-site field activities.

Please do not hesitate to contact me at 315-428-5652 if you have any questions or require additional information.

Sincerely,



Steven P. Stucker, C.P.G.
Lead Environmental Engineer

Mr. Matt King

July 1, 2022

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cc: Stan Radon, NYSDEC
Megan Kuczka, NYSDEC
Lisa Montesano, National Grid
Brian Stearns, P.E., National Grid
Michael Jones, Arcadis

Enclosures:

Table 1 – PCB Results B-01 to B-23
Figure 1 – Site Location Map
Figure 2 – Facility layout Plan
Figure 3 – Previous Soil Analytical Data
Figure 4 – Soil Boring Data
Figure 5 – PCB Distribution/Proposed Sample Locations

Table

Table 1

National Grid

Dewey/Kensington Avenue Service Center

Summary of Soil Sample Analytical Results

Location ID: Sample Depth(Feet): Date Collected: Sample Name:	DER10 Restricted Residential Use	Units	B-1 1.2 - 1.7 02/16/22 B-1 (1.2-1.7)	B-1 1.7 - 3.7 02/16/22 B-1 (1.7-3.7)	B-2 1.3 - 1.8 02/15/22 B-2 (1.3-1.8)	B-2 1.8 - 3.8 02/15/22 B-2 (5.8-7.0)	B-2 3.8 - 5.87 02/15/22 B-2 (5.8-7.0)	B-2 5.8 - 7 02/15/22 B-2 (5.8-7.0)	B-3 0.4 - 1.9 02/10/22 B-3 (1.-4-1.9)	B-3 3.9 - 5.9 02/10/22 B-3 (3.9-5.9)
PCBs										
PCB-1016	--	mg/kg	0.20 U	0.20 U	2.3 U	2.8 U	0.53 U	5,100 U	0.27 U	0.21 U
PCB-1221	--	mg/kg	0.20 U	0.20 U	2.3 U	2.8 U	0.53 U	5,100 U	0.27 U	0.21 U
PCB-1232	--	mg/kg	0.20 U	0.20 U	2.3 U	2.8 U	0.53 U	5,100 U	0.27 U	0.21 U
PCB-1242	--	mg/kg	0.20 U	0.20 U	2.3 U	2.8 U	0.53 U	50,000	0.27 U	0.13 J
PCB-1248	--	mg/kg	4.7	0.24	35	15	1.6	5,100 U	9.0	0.21 U
PCB-1254	--	mg/kg	0.20 U	0.20 U	2.3 U	2.8 U	0.53 U	5,100 U	0.27 U	0.21 U
PCB-1260	--	mg/kg	0.20 U	0.20 U	2.3 U	2.8 U	0.53 U	5,100 U	0.27 U	0.21 U
Total PCBs	1	mg/kg	4.7	0.24	35	15	1.6	50,000	9.0	0.13 J
PFAS										
6:2 Fluorotelomer sulfonic acid	--	ng/g	NA	NA	0.23 U	NA	NA	NA	NA	NA
8:2 Fluorotelomer sulfonic acid	--	ng/g	NA	NA	0.23 U	NA	NA	NA	NA	NA
NEtFOSAA	--	ng/g	NA	NA	0.23 U	NA	NA	NA	NA	NA
NMeFOSAA	--	ng/g	NA	NA	0.23 U	NA	NA	NA	NA	NA
Perfluorobutanesulfonic acid	--	ng/g	NA	NA	0.45 U	NA	NA	NA	NA	NA
Perfluorobutanoic acid	--	ng/g	NA	NA	0.23 U	NA	NA	NA	NA	NA
Perfluorodecanesulfonic acid	--	ng/g	NA	NA	0.23 U	NA	NA	NA	NA	NA
Perfluorodecanoic acid	--	ng/g	NA	NA	0.23 U	NA	NA	NA	NA	NA
Perfluorododecanoic acid	--	ng/g	NA	NA	0.23 U	NA	NA	NA	NA	NA
Perfluoroheptanesulfonic acid	--	ng/g	NA	NA	0.23 U	NA	NA	NA	NA	NA
Perfluoroheptanoic acid	--	ng/g	NA	NA	0.23 U	NA	NA	NA	NA	NA
Perfluorohexanesulfonic acid	--	ng/g	NA	NA	0.23 U	NA	NA	NA	NA	NA
Perfluorohexanoic acid	--	ng/g	NA	NA	0.23 U	NA	NA	NA	NA	NA
Perfluorononanoic acid	--	ng/g	NA	NA	0.23 U	NA	NA	NA	NA	NA
Perfluorooctanesulfonamide	--	ng/g	NA	NA	0.23 U	NA	NA	NA	NA	NA
Perfluorooctanesulfonic acid	--	ng/g	NA	NA	0.056 J	NA	NA	NA	NA	NA
Perfluorooctanoic acid	--	ng/g	NA	NA	0.23 U	NA	NA	NA	NA	NA
Perfluoropentanoic acid	--	ng/g	NA	NA	0.23 U	NA	NA	NA	NA	NA
Perfluorotetradecanoic acid	--	ng/g	NA	NA	0.23 U	NA	NA	NA	NA	NA
Perfluorotridecanoic acid	--	ng/g	NA	NA	0.23 U	NA	NA	NA	NA	NA
Perfluoroundecanoic acid	--	ng/g	NA	NA	0.23 U	NA	NA	NA	NA	NA
Total PFAS	--	ng/g	NA	NA	0.056 J	NA	NA	NA	NA	NA
SVOCs										
1,4-Dioxane	100	ug/kg	NA	NA	550 U	NA	NA	NA	NA	NA

Notes

J = Estimated value. Compound detected at a concentrations above method detection limit but below analytical reporting limit

U = compound not detected at the indicated detection limit

NA = Not Available

Table 1

National Grid

Dewey/Kensington Avenue Service Center

Summary of Soil Sample Analytical Results

Location ID: Sample Depth(Feet): Date Collected: Sample Name:	DER10 Restricted Residential Use	Units	B-4 1 - 1.5 02/10/22 B-4 (1.0-1.5)	B-4 1.5 - 3.5 02/10/22 B-4 (1.5-3.5)	B-4 3.5 - 5.5 02/10/22 B-4 (3.5-5.5)	B-5 0.7 - 1.2 02/08/22 B-5 (0.7-1.2)	B-5 3.2 - 5.2 02/08/22 B-5 (3.2-5.2)	B-6 1 - 1.5 02/16/22 B-6 (1.0-1.5)	B-6 1.5 - 3.5 02/16/22 B-6 (1.5-3.5)	B-7 1.2 - 1.7 02/15/22 B-7 (1.2-1.7)
PCBs										
PCB-1016	--	mg/kg	1.1 U	NA	0.25 U	11 UF1	0.27 U	0.24 U	0.28 U	0.24 U
PCB-1221	--	mg/kg	1.1 U	NA	0.25 U	11 U	0.27 U	0.24 U	0.28 U	0.24 U
PCB-1232	--	mg/kg	1.1 U	NA	0.25 U	11 U	0.27 U	0.24 U	0.28 U	0.24 U
PCB-1242	--	mg/kg	14	NA	0.66	62	0.27 U	0.34	0.28	0.24 U
PCB-1248	--	mg/kg	1.1 U	NA	0.25 U	11 U	0.27 U	0.24 U	0.28 U	6.4
PCB-1254	--	mg/kg	1.1 U	NA	0.25 U	11 U	0.27 U	0.24 U	0.28 U	0.24 U
PCB-1260	--	mg/kg	1.1 U	NA	0.25 U	11 U	0.27 U	0.24 U	0.28 U	0.24 U
Total PCBs	1	mg/kg	14	NA	0.66	62	ND	0.34	0.28	6.4
PFAS										
6:2 Fluorotelomer sulfonic acid	--	ng/g	NA	0.39 [0.35 U]	NA	NA	0.25 U	0.24 U	NA	NA
8:2 Fluorotelomer sulfonic acid	--	ng/g	NA	0.26 U [0.35 U]	NA	NA	0.25 U	0.24 U	NA	NA
NEtFOSAA	--	ng/g	NA	0.036 J [0.047 J]	NA	NA	0.25 U	0.24 U	NA	NA
NMeFOSAA	--	ng/g	NA	0.26 U [0.35 U]	NA	NA	0.25 U	0.24 U	NA	NA
Perfluorobutanesulfonic acid	--	ng/g	NA	0.52 U [0.70 U]	NA	NA	0.50 U	0.49 U	NA	NA
Perfluorobutanoic acid	--	ng/g	NA	0.26 U [0.35 U]	NA	NA	0.25 U	0.24 U	NA	NA
Perfluorodecanesulfonic acid	--	ng/g	NA	0.26 U [0.35 U]	NA	NA	0.25 U	0.24 U	NA	NA
Perfluorodecanoic acid	--	ng/g	NA	0.26 U [0.35 U]	NA	NA	0.25 U	0.24 U	NA	NA
Perfluorododecanoic acid	--	ng/g	NA	0.26 U [0.35 U]	NA	NA	0.25 U	0.24 U	NA	NA
Perfluoroheptanesulfonic acid	--	ng/g	NA	0.26 U [0.35 U]	NA	NA	0.25 U	0.24 U	NA	NA
Perfluoroheptanoic acid	--	ng/g	NA	0.26 U [0.35 U]	NA	NA	0.25 U	0.24 U	NA	NA
Perfluorohexanesulfonic acid	--	ng/g	NA	0.26 U [0.35 U]	NA	NA	0.25 U	0.24 U	NA	NA
Perfluorohexanoic acid	--	ng/g	NA	0.26 U [0.35 U]	NA	NA	0.25 U	0.24 U	NA	NA
Perfluorononanoic acid	--	ng/g	NA	0.26 U [0.35 U]	NA	NA	0.25 U	0.24 U	NA	NA
Perfluooctanesulfonamide	--	ng/g	NA	0.26 U [0.35 U]	NA	NA	0.25 U	0.24 U	NA	NA
Perfluorooctanesulfonic acid	--	ng/g	NA	0.057 J [0.065 J]	NA	NA	0.25 U	0.24 U	NA	NA
Perfluorooctanoic acid	--	ng/g	NA	0.26 U [0.35 U]	NA	NA	0.030 J	0.033 J	NA	NA
Perfluoropentanoic acid	--	ng/g	NA	0.26 U [0.35 U]	NA	NA	0.25 U	0.24 U	NA	NA
Perfluorotetradecanoic acid	--	ng/g	NA	0.26 U [0.35 U]	NA	NA	0.25 U	0.24 U	NA	NA
Perfluorotridecanoic acid	--	ng/g	NA	0.26 U [0.35 U]	NA	NA	0.25 U	0.24 U	NA	NA
Perfluoroundecanoic acid	--	ng/g	NA	0.26 U [0.35 U]	NA	NA	0.25 U	0.24 U	NA	NA
Total PFAS	--	ng/g	NA	0.48 J [0.11 J]	NA	NA	0.030 J	0.033 J	NA	NA
SVOCs										
1,4-Dioxane	100	ug/kg	NA	640 U [870 U]	NA	NA	120 U	120 U	NA	NA

Notes

J = Estimated value. Compound detected at a concentration

U = compound not detected at the indicated detection limit

NA = Not Available

Table 1

National Grid

Dewey/Kensington Avenue Service Center

Summary of Soil Sample Analytical Results

Location ID: Sample Depth(Feet): Date Collected: Sample Name:	DER10 Restricted Residential Use	Units	B-7 1.7 - 3.7 02/15/22 B-7 (1.7-3.7)	B-7 3.7 - 5.1 02/15/22 B-7 (3.7-5.1)	B-8 1.5 - 2 02/14/22 B-8 (1.5-2.0)	B-8 2 - 4 02/14/22 B-8 (2.0-4.0)	B-9 1 - 1.5 02/10/22 B-9 (1.0-1.5)	B-9 3.5 - 5.5 02/10/22 B-9 (3.5-5.5)	B-10 1.1 - 1.6 02/08/22 B-10 (1.1-1.6)	B-10 3.6 - 5.6 02/08/22 B-10 (3.6-5.6)
PCBs										
PCB-1016	--	mg/kg	NA	0.22 U	2.6 U	0.30 U	1.2 U	0.23 U	14 U [13 U]	0.29 U
PCB-1221	--	mg/kg	NA	0.22 U	2.6 U	0.30 U	1.2 U	0.23 U	14 U [13 U]	0.29 U
PCB-1232	--	mg/kg	NA	0.22 U	2.6 U	0.30 U	1.2 U	0.23 U	14 U [13 U]	0.29 U
PCB-1242	--	mg/kg	NA	0.22 U	41	3.3	14	0.15 J	110 [110]	0.35
PCB-1248	--	mg/kg	NA	0.22 U	2.6 U	0.30 U	1.2 U	0.23 U	14 U [13 U]	0.29 U
PCB-1254	--	mg/kg	NA	0.22 U	2.6 U	0.30 U	1.2 U	0.23 U	14 U [13 U]	0.29 U
PCB-1260	--	mg/kg	NA	0.22 U	2.6 U	0.30 U	1.2 U	0.29	14 U [13 U]	0.29 U
Total PCBs	1	mg/kg	NA	ND	41	3.3	14	0.44 J	110 [110]	0.35
PFAS										
6:2 Fluorotelomer sulfonic acid	--	ng/g	0.25 U	NA	NA	NA	NA	NA	NA	NA
8:2 Fluorotelomer sulfonic acid	--	ng/g	0.25 U	NA	NA	NA	NA	NA	NA	NA
NEtFOSAA	--	ng/g	0.25 U	NA	NA	NA	NA	NA	NA	NA
NMeFOSAA	--	ng/g	0.25 U	NA	NA	NA	NA	NA	NA	NA
Perfluorobutanesulfonic acid	--	ng/g	0.51 U	NA	NA	NA	NA	NA	NA	NA
Perfluorobutanoic acid	--	ng/g	0.031 J	NA	NA	NA	NA	NA	NA	NA
Perfluorodecanesulfonic acid	--	ng/g	0.25 U	NA	NA	NA	NA	NA	NA	NA
Perfluorodecanoic acid	--	ng/g	0.031 J	NA	NA	NA	NA	NA	NA	NA
Perfluorododecanoic acid	--	ng/g	0.25 U	NA	NA	NA	NA	NA	NA	NA
Perfluoroheptanesulfonic acid	--	ng/g	0.25 U	NA	NA	NA	NA	NA	NA	NA
Perfluoroheptanoic acid	--	ng/g	0.039 J	NA	NA	NA	NA	NA	NA	NA
Perfluorohexanesulfonic acid	--	ng/g	0.25 U	NA	NA	NA	NA	NA	NA	NA
Perfluorohexanoic acid	--	ng/g	0.049 J	NA	NA	NA	NA	NA	NA	NA
Perfluorononanoic acid	--	ng/g	0.10 J	NA	NA	NA	NA	NA	NA	NA
Perfluorooctanesulfonamide	--	ng/g	0.25 U	NA	NA	NA	NA	NA	NA	NA
Perfluorooctanesulfonic acid	--	ng/g	0.22 J	NA	NA	NA	NA	NA	NA	NA
Perfluorooctanoic acid	--	ng/g	0.11 J	NA	NA	NA	NA	NA	NA	NA
Perfluoropentanoic acid	--	ng/g	0.031 J	NA	NA	NA	NA	NA	NA	NA
Perfluorotetradecanoic acid	--	ng/g	0.25 U	NA	NA	NA	NA	NA	NA	NA
Perfluorotridecanoic acid	--	ng/g	0.25 U	NA	NA	NA	NA	NA	NA	NA
Perfluoroundecanoic acid	--	ng/g	0.25 U	NA	NA	NA	NA	NA	NA	NA
Total PFAS	--	ng/g	0.61 J	NA	NA	NA	NA	NA	NA	NA
SVOCs										
1,4-Dioxane	100	ug/kg	130 U	NA	NA	NA	NA	NA	NA	NA

Notes

J = Estimated value. Compound detected at a concentration

U = compound not detected at the indicated detection limit

NA = Not Available

Table 1

National Grid

Dewey/Kensington Avenue Service Center

Summary of Soil Sample Analytical Results

Location ID: Sample Depth(Feet): Date Collected: Sample Name:	DER10 Restricted Residential Use	Units	B-11 1.2 - 1.7 02/16/22 B-11 (1.2-1.7)	B-11 3.7 - 5.7 02/16/22 B-11 (3.7-5.7)	B-12 1.3 - 1.8 02/15/22 B-12 (1.3-1.8)	B-12 3.8 - 5.8 02/15/22 B-12 (3.8-5.8)	B-13 1.1 - 1.6 02/10/22 B-13 (1.1-1.6)	B-13 3.6 - 5.6 02/10/22 B-13 (3.6-5.6)	B-14 1.3 - 1.8 02/09/22 B-14 (1.3-1.8)
PCBs									
PCB-1016	--	mg/kg	0.23 U [0.21 U]	0.23 U	2.7 U	0.26 U	2.4 U	0.24 U	1.3 U
PCB-1221	--	mg/kg	0.23 U [0.21 U]	0.23 U	2.7 U	0.26 U	2.4 U	0.24 U	1.3 U
PCB-1232	--	mg/kg	0.23 U [0.21 U]	0.23 U	2.7 U	0.26 U	2.4 U	0.24 U	1.3 U
PCB-1242	--	mg/kg	0.41 [0.21 U]	0.50	2.7 U	0.085 J	1.9 J	0.24	1.3 U
PCB-1248	--	mg/kg	0.23 U [0.21 U]	0.23 U	25	0.26 U	2.4 U	0.24 U	13
PCB-1254	--	mg/kg	0.23 U [0.21 U]	0.23 U	2.7 U	0.26 U	2.4 U	0.24 U	1.3 U
PCB-1260	--	mg/kg	0.23 U [0.21 U]	0.23 U	2.7 U	0.26 U	34	0.16 J	1.3 U
Total PCBs	1	mg/kg	0.41 [ND]	0.50	25	0.085 J	36 J	0.40 J	13
PFAS									
6:2 Fluorotelomer sulfonic acid	--	ng/g	NA	NA	NA	NA	NA	0.25 U	NA
8:2 Fluorotelomer sulfonic acid	--	ng/g	NA	NA	NA	NA	NA	0.25 U	NA
NEtFOSAA	--	ng/g	NA	NA	NA	NA	NA	0.25 U	NA
NMeFOSAA	--	ng/g	NA	NA	NA	NA	NA	0.25 U	NA
Perfluorobutanesulfonic acid	--	ng/g	NA	NA	NA	NA	NA	0.51 U	NA
Perfluorobutanoic acid	--	ng/g	NA	NA	NA	NA	NA	0.25 U	NA
Perfluorodecanesulfonic acid	--	ng/g	NA	NA	NA	NA	NA	0.25 U	NA
Perfluorodecanoic acid	--	ng/g	NA	NA	NA	NA	NA	0.25 U	NA
Perfluorododecanoic acid	--	ng/g	NA	NA	NA	NA	NA	0.25 U	NA
Perfluoroheptanesulfonic acid	--	ng/g	NA	NA	NA	NA	NA	0.25 U	NA
Perfluoroheptanoic acid	--	ng/g	NA	NA	NA	NA	NA	0.25 U	NA
Perfluorohexanesulfonic acid	--	ng/g	NA	NA	NA	NA	NA	0.25 U	NA
Perfluorohexanoic acid	--	ng/g	NA	NA	NA	NA	NA	0.25 U	NA
Perfluorononanoic acid	--	ng/g	NA	NA	NA	NA	NA	0.25 U	NA
Perfluooctanesulfonamide	--	ng/g	NA	NA	NA	NA	NA	0.25 U	NA
Perfluooctanesulfonic acid	--	ng/g	NA	NA	NA	NA	NA	0.25 U	NA
Perfluoroctanoic acid	--	ng/g	NA	NA	NA	NA	NA	0.25 U	NA
Perfluoropentanoic acid	--	ng/g	NA	NA	NA	NA	NA	0.25 U	NA
Perfluorotetradecanoic acid	--	ng/g	NA	NA	NA	NA	NA	0.25 U	NA
Perfluorotridecanoic acid	--	ng/g	NA	NA	NA	NA	NA	0.25 U	NA
Perfluoroundecanoic acid	--	ng/g	NA	NA	NA	NA	NA	0.25 U	NA
Total PFAS	--	ng/g	NA	NA	NA	NA	NA	0.51 U	NA
SVOCs									
1,4-Dioxane	100	ug/kg	NA	NA	NA	NA	NA	120 U	NA

Notes

J = Estimated value. Compound detected at a concentration

U = compound not detected at the indicated detection limit

NA = Not Available

Table 1

National Grid

Dewey/Kensington Avenue Service Center

Summary of Soil Sample Analytical Results

Location ID: Sample Depth(Feet): Date Collected: Sample Name:	DER10 Restricted Residential Use	Units	B-14 3.8 - 5.8 02/09/22 B-14 (3.8-5.8)	B-15 1 - 1.5 02/08/22 B-15 (1.0-1.5)	B-15 5.5 - 7.5 02/08/22 B-15 (5.5-7.5)	B-16 1.2 - 1.7 02/16/22 B-16 (1.2-1.7)	B-16 1.7 - 3.7 02/16/22 B-16 (1.7-3.7)	B-16 3.7 - 5.7 02/16/22 B-16 (3.7-5.7)	B-17 1.3 - 1.8 02/15/22 B-17 (1.3-1.8)
PCBs									
PCB-1016	--	mg/kg	2.8 U	1.4 U	2.5 U	0.22 U	NA	0.32 U	0.27 U
PCB-1221	--	mg/kg	2.8 U	1.4 U	2.5 U	0.22 U	NA	0.32 U	0.27 U
PCB-1232	--	mg/kg	2.8 U	1.4 U	2.5 U	0.22 U	NA	0.32 U	0.27 U
PCB-1242	--	mg/kg	29	1.4 U	36	1.5	NA	8.5	0.27 U
PCB-1248	--	mg/kg	2.8 U	19	2.5 U	0.22 U	NA	0.32 U	0.27 U
PCB-1254	--	mg/kg	2.8 U	1.4 U	2.5 U	0.22 U	NA	0.32 U	0.27 U
PCB-1260	--	mg/kg	2.8 U	1.4 U	2.5 U	0.22 U	NA	0.32 U	0.27 U
Total PCBs	1	mg/kg	29	19	36	1.5	NA	8.5	ND
PFAS									
6:2 Fluorotelomer sulfonic acid	--	ng/g	1.0	NA	NA	NA	0.24 U	NA	NA
8:2 Fluorotelomer sulfonic acid	--	ng/g	0.24 U	NA	NA	NA	0.24 U	NA	NA
NEtFOSAA	--	ng/g	0.035 J	NA	NA	NA	0.24 U	NA	NA
NMeFOSAA	--	ng/g	0.24 U	NA	NA	NA	0.24 U	NA	NA
Perfluorobutanesulfonic acid	--	ng/g	0.48 U	NA	NA	NA	0.47 U	NA	NA
Perfluorobutanoic acid	--	ng/g	0.24 U	NA	NA	NA	0.24 U	NA	NA
Perfluorodecanesulfonic acid	--	ng/g	0.24 U	NA	NA	NA	0.13 J	NA	NA
Perfluorodecanoic acid	--	ng/g	0.24 U	NA	NA	NA	0.038 J	NA	NA
Perfluorododecanoic acid	--	ng/g	0.24 U	NA	NA	NA	0.15 J	NA	NA
Perfluoroheptanesulfonic acid	--	ng/g	0.24 U	NA	NA	NA	0.24 U	NA	NA
Perfluoroheptanoic acid	--	ng/g	0.24 U	NA	NA	NA	0.24 U	NA	NA
Perfluorohexanesulfonic acid	--	ng/g	0.24 U	NA	NA	NA	0.24 U	NA	NA
Perfluorohexanoic acid	--	ng/g	0.24 U	NA	NA	NA	0.24 U	NA	NA
Perfluorononanoic acid	--	ng/g	0.24 U	NA	NA	NA	0.24 U	NA	NA
Perfluoroctanesulfonamide	--	ng/g	0.24 U	NA	NA	NA	0.24 U	NA	NA
Perfluoroctanesulfonic acid	--	ng/g	0.12 J	NA	NA	NA	0.16 J	NA	NA
Perfluoroctanoic acid	--	ng/g	0.24 U	NA	NA	NA	0.24 U	NA	NA
Perfluoropentanoic acid	--	ng/g	0.24 U	NA	NA	NA	0.24 U	NA	NA
Perfluorotetradecanoic acid	--	ng/g	0.24 U	NA	NA	NA	0.029 J	NA	NA
Perfluorotridecanoic acid	--	ng/g	0.24 U	NA	NA	NA	0.24 U	NA	NA
Perfluoroundecanoic acid	--	ng/g	0.24 U	NA	NA	NA	0.067 J	NA	NA
Total PFAS	--	ng/g	1.2 J	NA	NA	NA	0.57 J	NA	NA
SVOCs									
1,4-Dioxane	100	ug/kg	120 U	NA	NA	NA	120 U	NA	NA

Notes

J = Estimated value. Compound detected at a concentration

U = compound not detected at the indicated detection limit

NA = Not Available

Table 1

National Grid

Dewey/Kensington Avenue Service Center

Summary of Soil Sample Analytical Results

Location ID: Sample Depth(Feet): Date Collected: Sample Name:	DER10 Restricted Residential Use	Units	B-17 3.8 - 5.8 02/15/22 B-17 (3.8-5.8)	B-18 1.2 - 1.7 02/09/22 B-18 (1.2-1.7)	B-18 1.7 - 3.7 02/09/22 B-18 (1.7-3.7)	B-18 3.7 - 5.7 02/09/22 B-18 (3.7-5.7)	B-19 1.3 - 1.8 02/09/22 B-19 (1.3-1.8)	B-19 3.8 - 5.8 02/09/22 B-19 (3.8-5.8)	B-20 1.9 - 2.4 02/08/22 B-20 (1.9-2.4)
PCBs									
PCB-1016	--	mg/kg	NA	0.25 U	0.22 U	0.26 U	5.2 U	0.24 U	0.21 U
PCB-1221	--	mg/kg	NA	0.25 U	0.22 U	0.26 U	5.2 U	0.24 U	0.21 U
PCB-1232	--	mg/kg	NA	0.25 U	0.22 U	0.26 U	5.2 U	0.24 U	0.21 U
PCB-1242	--	mg/kg	NA	0.25 U	0.22 U	0.26 U	5.2 U	0.80	0.21 U
PCB-1248	--	mg/kg	NA	4.0	0.22 U	0.26 U	83	0.24 U	0.21 U
PCB-1254	--	mg/kg	NA	0.25 U	0.51	0.26 U	5.2 U	0.24 U	0.21 U
PCB-1260	--	mg/kg	NA	0.25 U	0.22 U	0.26 U	5.2 U	0.24 U	0.17 J
Total PCBs	1	mg/kg	NA	4.0	0.51	ND	83	0.80	0.17 J
PFAS									
6:2 Fluorotelomer sulfonic acid	--	ng/g	0.26 U	NA	0.61	NA	NA	NA	NA
8:2 Fluorotelomer sulfonic acid	--	ng/g	0.26 U	NA	0.22 U	NA	NA	NA	NA
NEtFOSAA	--	ng/g	0.26 U	NA	0.22 U	NA	NA	NA	NA
NMeFOSAA	--	ng/g	0.26 U	NA	0.22 U	NA	NA	NA	NA
Perfluorobutanesulfonic acid	--	ng/g	0.52 U	NA	0.44 U	NA	NA	NA	NA
Perfluorobutanoic acid	--	ng/g	0.26 U	NA	0.22 U	NA	NA	NA	NA
Perfluorodecanesulfonic acid	--	ng/g	0.26 U	NA	0.22 U	NA	NA	NA	NA
Perfluorodecanoic acid	--	ng/g	0.26 U	NA	0.077 J	NA	NA	NA	NA
Perfluorododecanoic acid	--	ng/g	0.26 U	NA	0.22 U	NA	NA	NA	NA
Perfluoroheptanesulfonic acid	--	ng/g	0.26 U	NA	0.22 U	NA	NA	NA	NA
Perfluoroheptanoic acid	--	ng/g	0.26 U	NA	0.22 U	NA	NA	NA	NA
Perfluorohexanesulfonic acid	--	ng/g	0.26 U	NA	0.22 U	NA	NA	NA	NA
Perfluorohexanoic acid	--	ng/g	0.26 U	NA	0.22 U	NA	NA	NA	NA
Perfluorononanoic acid	--	ng/g	0.032 J	NA	0.22 U	NA	NA	NA	NA
Perfluoroctanesulfonamide	--	ng/g	0.26 U	NA	0.22 U	NA	NA	NA	NA
Perfluoroctanesulfonic acid	--	ng/g	0.061 J	NA	0.66	NA	NA	NA	NA
Perfluoroctanoic acid	--	ng/g	0.074 J	NA	0.033 J	NA	NA	NA	NA
Perfluoropentanoic acid	--	ng/g	0.26 U	NA	0.22 U	NA	NA	NA	NA
Perfluorotetradecanoic acid	--	ng/g	0.26 U	NA	0.22 U	NA	NA	NA	NA
Perfluorotridecanoic acid	--	ng/g	0.26 U	NA	0.22 U	NA	NA	NA	NA
Perfluoroundecanoic acid	--	ng/g	0.26 U	NA	0.22 U	NA	NA	NA	NA
Total PFAS	--	ng/g	0.17 J	NA	1.4 J	NA	NA	NA	NA
SVOCs									
1,4-Dioxane	100	ug/kg	130 U	NA	110 U	NA	NA	NA	NA

Notes

J = Estimated value. Compound detected at a concentration

U = compound not detected at the indicated detection limit

NA = Not Available

Table 1

National Grid

Dewey/Kensington Avenue Service Center

Summary of Soil Sample Analytical Results

Location ID: Sample Depth(Feet): Date Collected: Sample Name:	DER10 Restricted Residential Use	Units	B-20 4.4 - 6.4 02/08/22 B-20 (4.4-6.4)	B-21 1.2 - 1.7 02/11/22 B-21 (1.2-1.7)	B-21 1.2 - 1.7 02/14/22 FD-02142022	B-21 3.7 - 5.7 02/14/22 B-21 (3.7-5.7)	B-22 0.8 - 1.3 02/14/22 B-22 (0.8-1.3)	B-22 3.3 - 5.3 02/14/22 B-22 (3.3-5.3)	B-22 5.3 - 7.3 02/14/22 B-22 (5.3-7.3)	B-23 0.8 - 1.3 02/08/22 B-23 (0.8-1.3)
PCBs										
PCB-1016	--	mg/kg	0.26 U	0.21 U	0.27 U	0.26 U	2.1 U	NA	0.23 U	1.4 U
PCB-1221	--	mg/kg	0.26 U	0.21 U	0.27 U	0.26 U	2.1 U	NA	0.23 U	1.4 U
PCB-1232	--	mg/kg	0.26 U	0.21 U	0.27 U	0.26 U	2.1 U	NA	0.23 U	1.4 U
PCB-1242	--	mg/kg	0.22 J	0.21 U	0.27 U	0.26 U	2.1 U	NA	0.23 U	1.4 U
PCB-1248	--	mg/kg	0.26 U	0.21 U	0.90	0.26 U	2.1 U	NA	0.23 U	1.4 U
PCB-1254	--	mg/kg	0.26 U	0.58	0.27 U	0.26 U	2.1 U	NA	0.23 U	1.4 U
PCB-1260	--	mg/kg	0.26 U	0.21 U	0.43	0.26 U	25	NA	0.23 U	12
Total PCBs	1	mg/kg	0.22 J	0.58	1.3	ND	25	NA	ND	12
PFAS										
6:2 Fluorotelomer sulfonic acid	--	ng/g	0.24 U	NA	NA	NA	NA	0.21 U	NA	NA
8:2 Fluorotelomer sulfonic acid	--	ng/g	0.24 U	NA	NA	NA	NA	0.21 U	NA	NA
NEtFOSAA	--	ng/g	0.24 U	NA	NA	NA	NA	0.21 U	NA	NA
NMeFOSAA	--	ng/g	0.24 U	NA	NA	NA	NA	0.21 U	NA	NA
Perfluorobutanesulfonic acid	--	ng/g	0.48 U	NA	NA	NA	NA	0.43 U	NA	NA
Perfluorobutanoic acid	--	ng/g	0.033 J	NA	NA	NA	NA	0.21 U	NA	NA
Perfluorodecanesulfonic acid	--	ng/g	0.24 U	NA	NA	NA	NA	0.21 U	NA	NA
Perfluorodecanoic acid	--	ng/g	0.24 U	NA	NA	NA	NA	0.21 U	NA	NA
Perfluorododecanoic acid	--	ng/g	0.24 U	NA	NA	NA	NA	0.21 U	NA	NA
Perfluoroheptanesulfonic acid	--	ng/g	0.24 U	NA	NA	NA	NA	0.21 U	NA	NA
Perfluoroheptanoic acid	--	ng/g	0.24 U	NA	NA	NA	NA	0.21 U	NA	NA
Perfluorohexanesulfonic acid	--	ng/g	0.24 U	NA	NA	NA	NA	0.21 U	NA	NA
Perfluorohexanoic acid	--	ng/g	0.24 U	NA	NA	NA	NA	0.21 U	NA	NA
Perfluorononanoic acid	--	ng/g	0.24 U	NA	NA	NA	NA	0.21 U	NA	NA
Perfluoroctanesulfonamide	--	ng/g	0.24 U	NA	NA	NA	NA	0.21 U	NA	NA
Perfluoroctanesulfonic acid	--	ng/g	0.24 U	NA	NA	NA	NA	0.21 U	NA	NA
Perfluoroctanoic acid	--	ng/g	0.047 J	NA	NA	NA	NA	0.055 J	NA	NA
Perfluoropentanoic acid	--	ng/g	0.24 U	NA	NA	NA	NA	0.21 U	NA	NA
Perfluorotetradecanoic acid	--	ng/g	0.24 U	NA	NA	NA	NA	0.21 U	NA	NA
Perfluorotridecanoic acid	--	ng/g	0.24 U	NA	NA	NA	NA	0.21 U	NA	NA
Perfluoroundecanoic acid	--	ng/g	0.24 U	NA	NA	NA	NA	0.21 U	NA	NA
Total PFAS	--	ng/g	0.080 J	NA	NA	NA	NA	0.055 J	NA	NA
SVOCs										
1,4-Dioxane	100	ug/kg	120 U	NA	NA	NA	NA	110 U	NA	NA

Notes

J = Estimated value. Compound detected at a concentration

U = compound not detected at the indicated detection limit

NA = Not Available

Table 1

National Grid

Dewey/Kensington Avenue Service Center

Summary of Soil Sample Analytical Results

Location ID: Sample Depth(Feet): Date Collected: Sample Name:	DER10 Restricted Residential Use	Units	B-23 5.3 - 7.3 02/08/22 B-23 (5.3-7.3)
PCBs			
PCB-1016	--	mg/kg	0.30 U
PCB-1221	--	mg/kg	0.30 U
PCB-1232	--	mg/kg	0.30 U
PCB-1242	--	mg/kg	0.30 U
PCB-1248	--	mg/kg	0.30 U
PCB-1254	--	mg/kg	0.30 U
PCB-1260	--	mg/kg	0.30 U
Total PCBs	1	mg/kg	ND
PFAS			
6:2 Fluorotelomer sulfonic acid	--	ng/g	NA
8:2 Fluorotelomer sulfonic acid	--	ng/g	NA
NEtFOSAA	--	ng/g	NA
NMeFOSAA	--	ng/g	NA
Perfluorobutanesulfonic acid	--	ng/g	NA
Perfluorobutanoic acid	--	ng/g	NA
Perfluorodecanesulfonic acid	--	ng/g	NA
Perfluorodecanoic acid	--	ng/g	NA
Perfluorododecanoic acid	--	ng/g	NA
Perfluoroheptanesulfonic acid	--	ng/g	NA
Perfluoroheptanoic acid	--	ng/g	NA
Perfluorohexanesulfonic acid	--	ng/g	NA
Perfluorohexanoic acid	--	ng/g	NA
Perfluorononanoic acid	--	ng/g	NA
Perfluoroctanesulfonamide	--	ng/g	NA
Perfluoroctanesulfonic acid	--	ng/g	NA
Perfluoroctanoic acid	--	ng/g	NA
Perfluoropentanoic acid	--	ng/g	NA
Perfluorotetradecanoic acid	--	ng/g	NA
Perfluorotridecanoic acid	--	ng/g	NA
Perfluoroundecanoic acid	--	ng/g	NA
Total PFAS	--	ng/g	NA
SVOCs			
1,4-Dioxane	100	ug/kg	NA

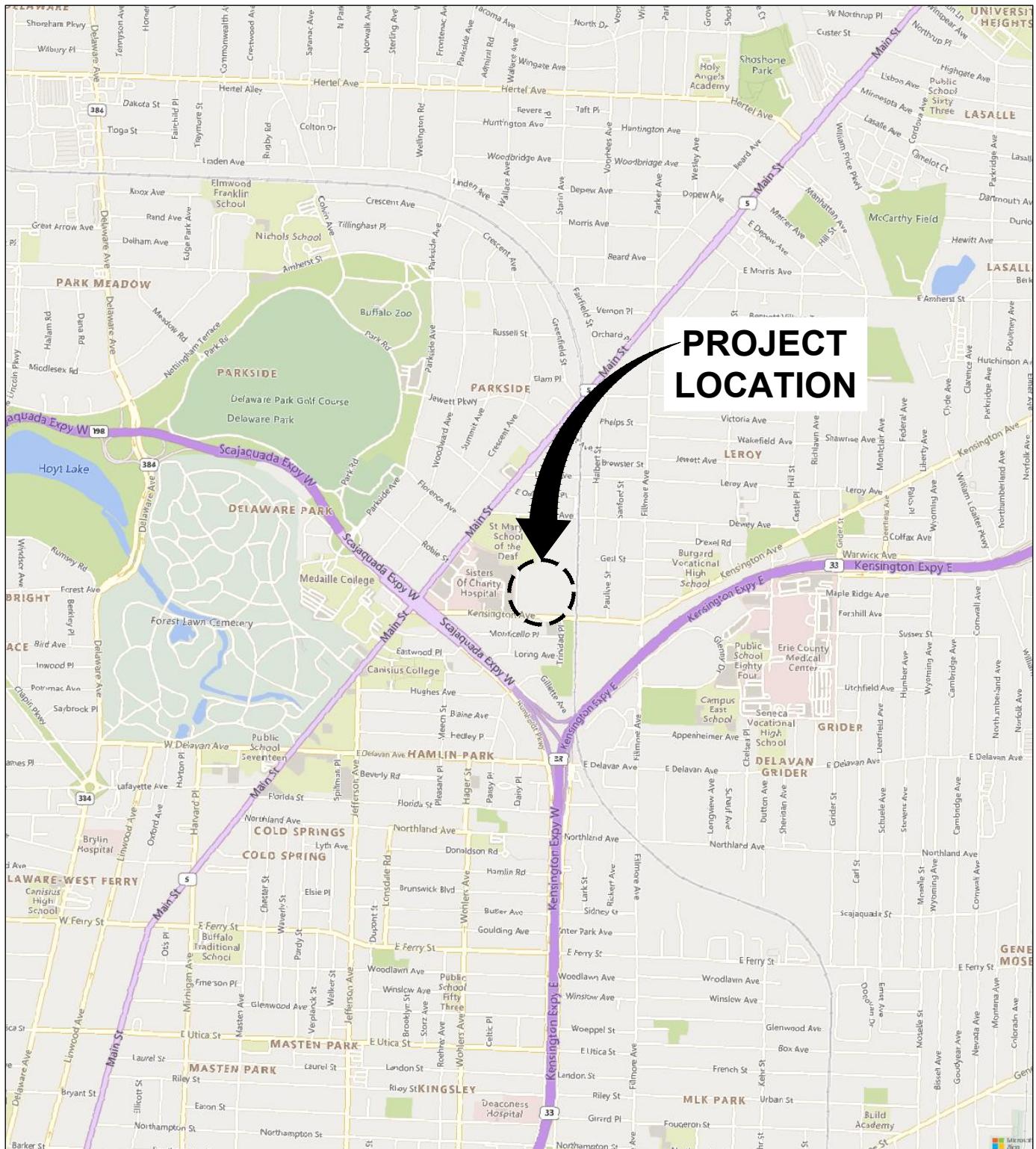
Notes

J = Estimated value. Compound detected at a concentration

U = compound not detected at the indicated detection limit

NA = Not Available

:][i fYg



0 2000' 4000'

Approximate Scale: 1 in. = 2000 ft.

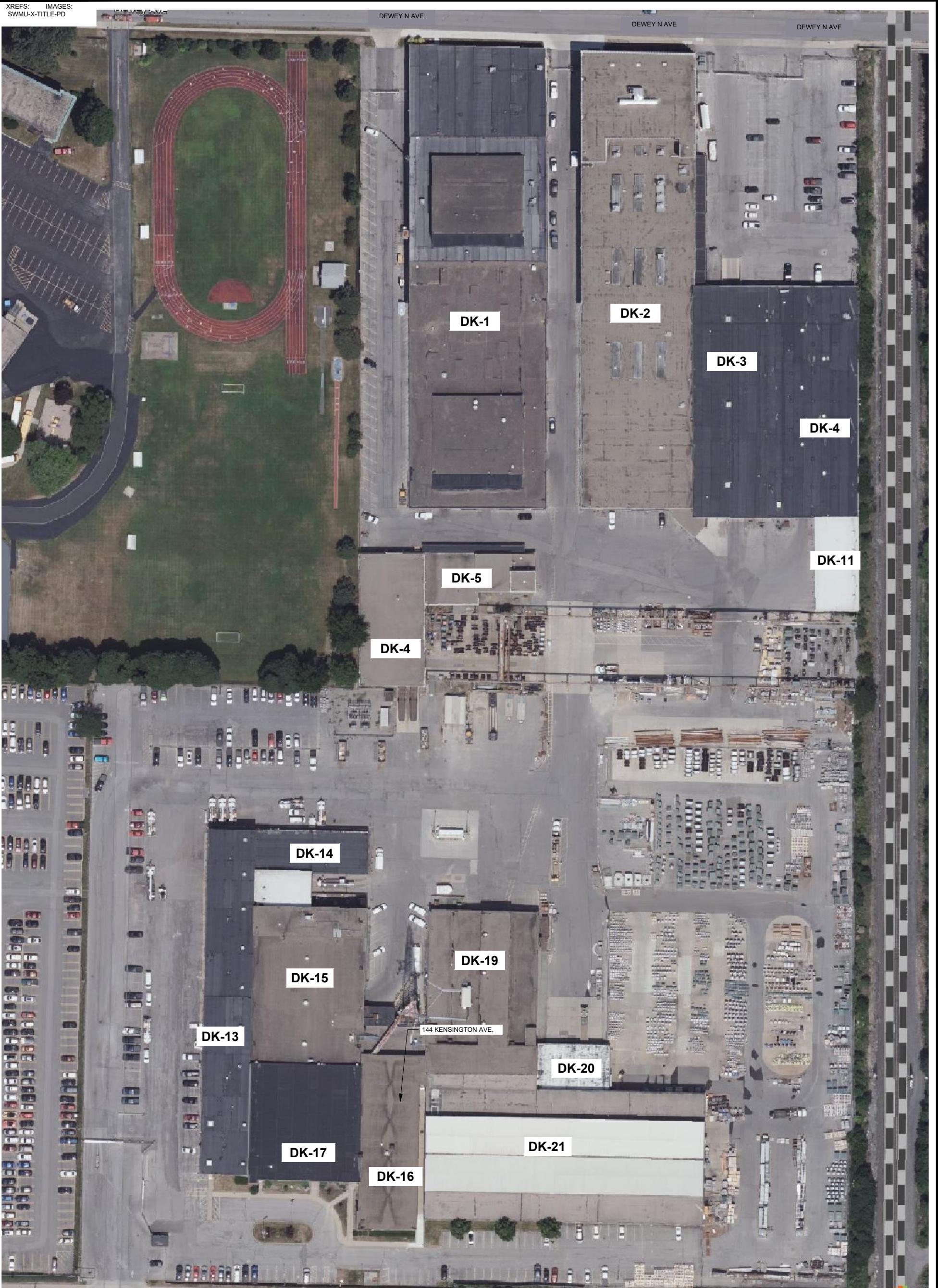


NATIONAL GRID DEWEY/KENSINGTON SERVICE CENTER CITY OF BUFFALO, ERIE COUNTY, NEW YORK **SWMU ASSESSMENT PLAN**

SITE LOCATION MAP

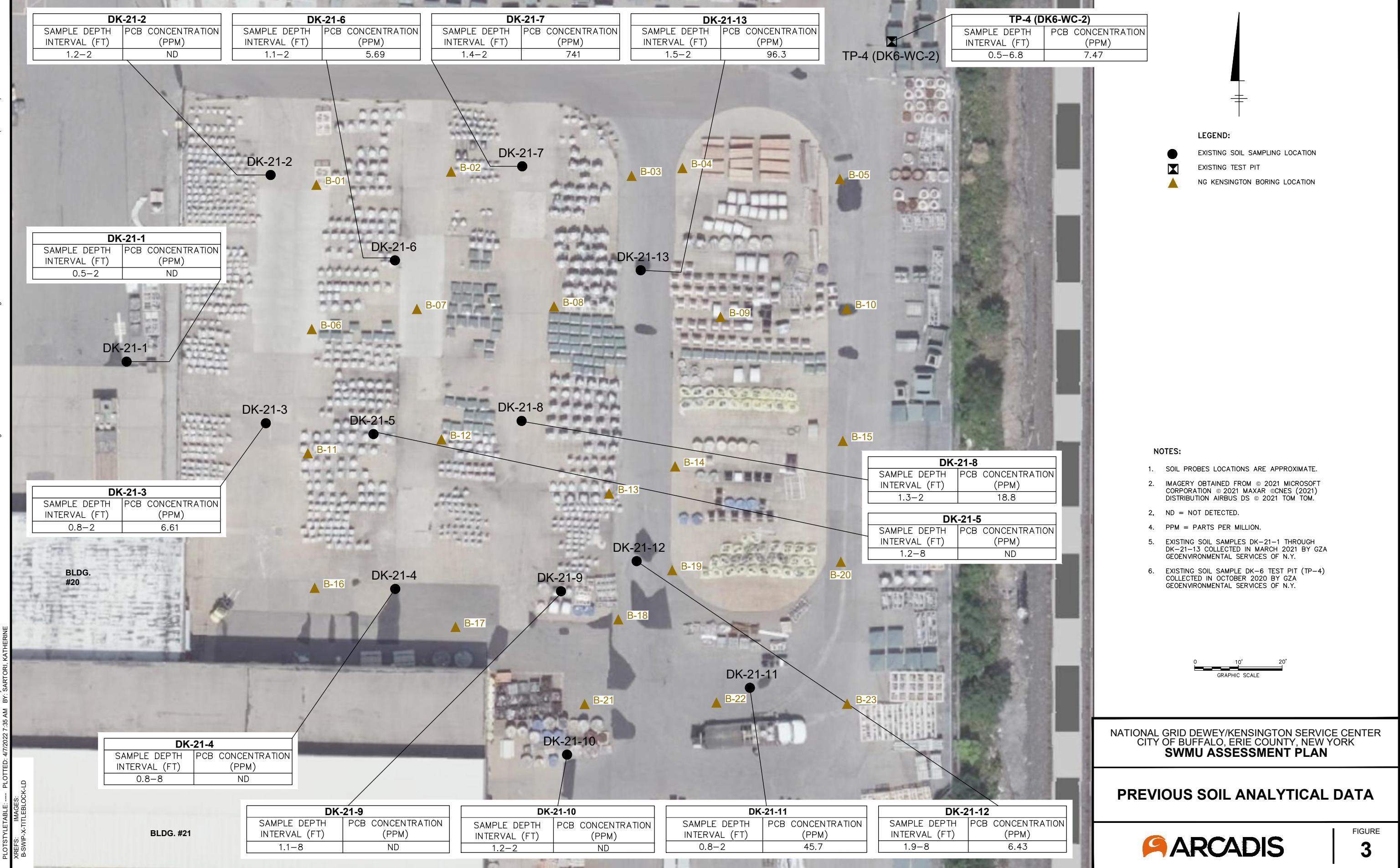
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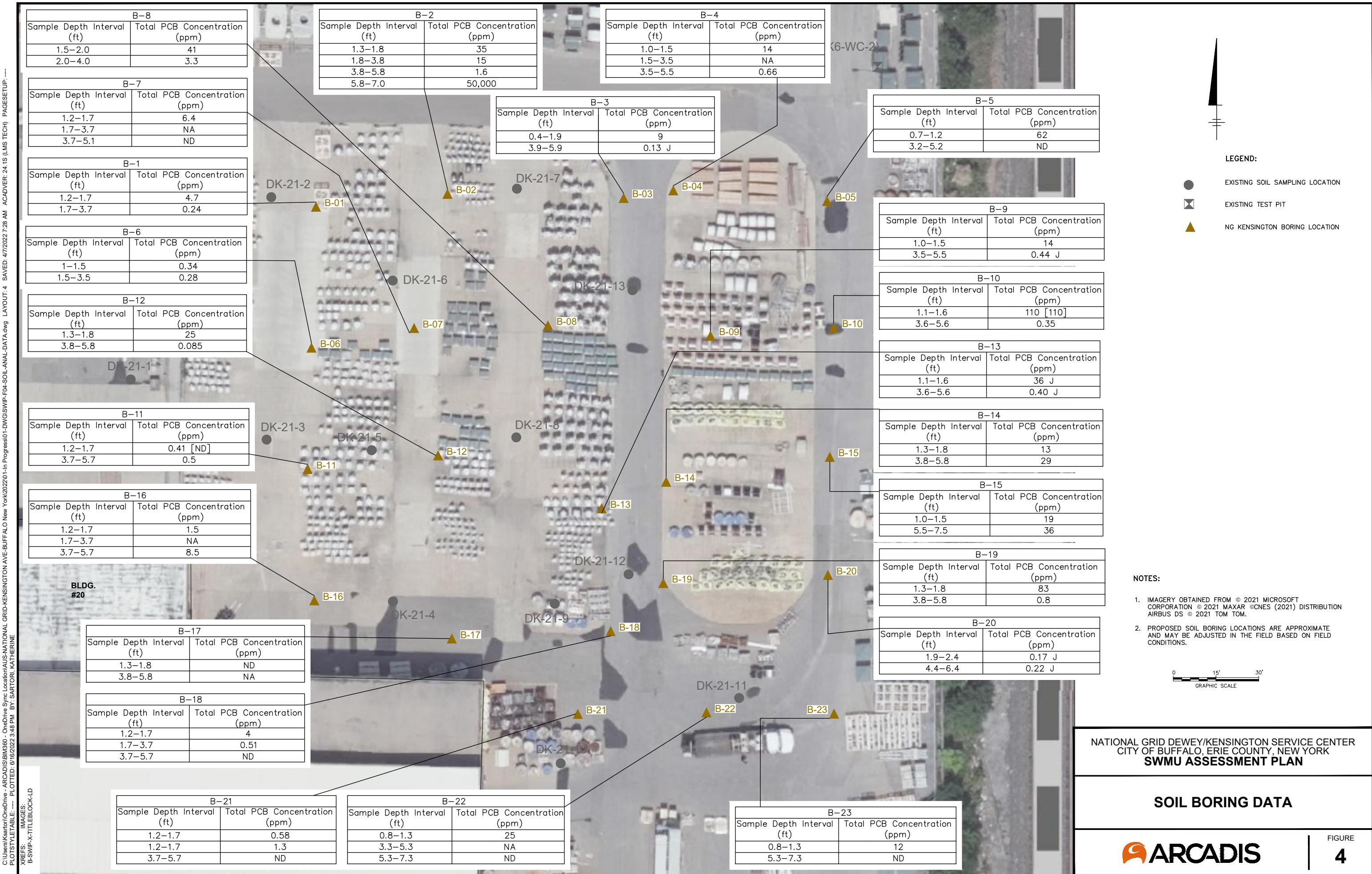
FIGURE
1

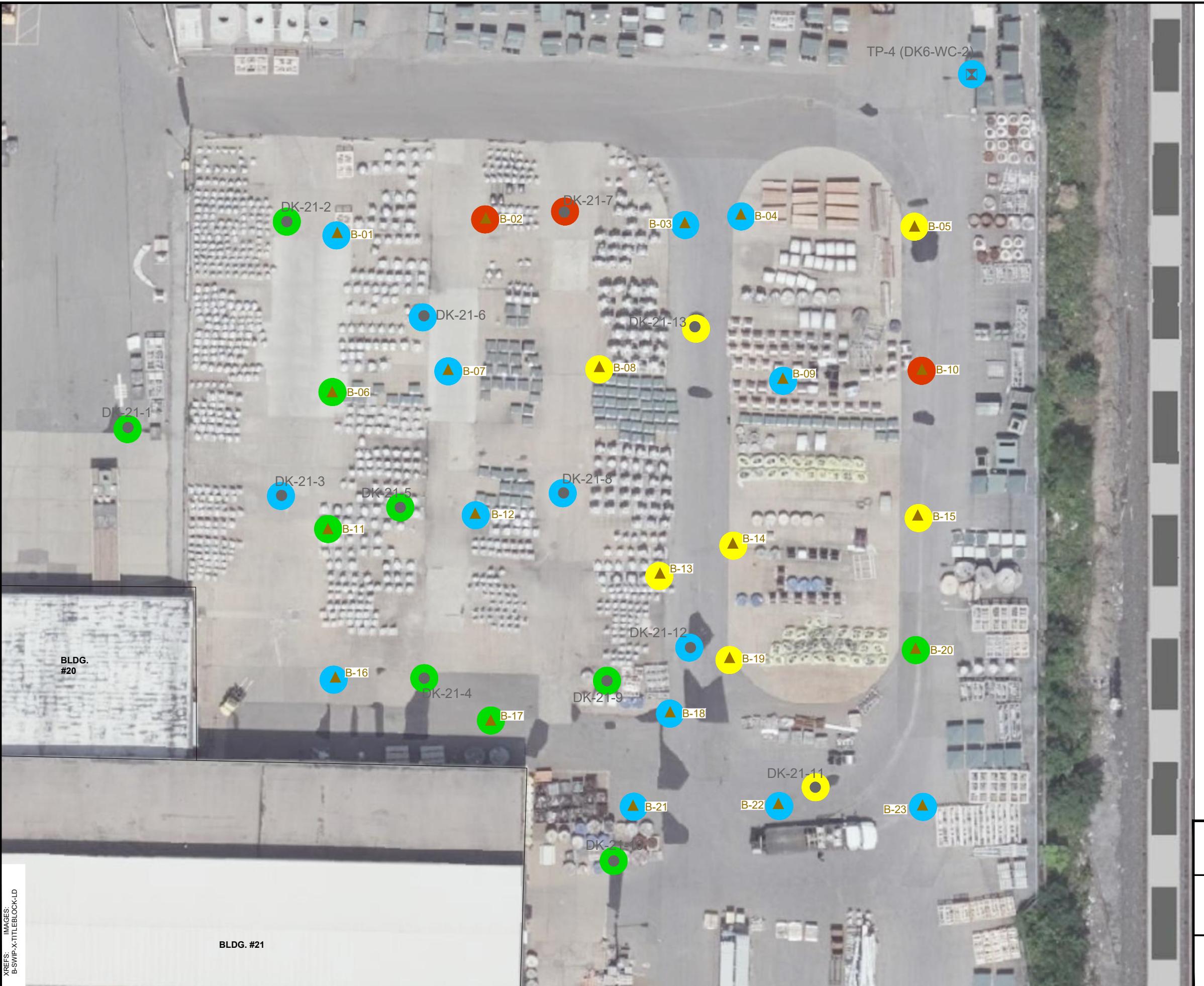


NATIONAL GRID DEWEY/KENSINGTON SERVICE CENTER
CITY OF BUFFALO, ERIE COUNTY, NEW YORK
SWMU ASSESSMENT PLAN

FACILITY LAYOUT PLAN







NOTES:

1. IMAGERY OBTAINED FROM © 2021 MICROSOFT CORPORATION © 2021 MAXAR ©CNES (2021) DISTRIBUTION AIRBUS DS © 2021 TOM TOM.
2. PROPOSED SOIL BORING LOCATIONS ARE APPROXIMATE AND MAY BE ADJUSTED IN THE FIELD BASED ON FIELD CONDITIONS.

0 15' 30'
GRAPHIC SCALE

NATIONAL GRID DEWEY/KENSINGTON SERVICE CENTER
CITY OF BUFFALO, ERIE COUNTY, NEW YORK
SWMU ASSESSMENT PLAN

**PCB DISTRIBUTION PROPOSED
BORING LOCATIONS**

Attachment A

Generic Community Air Monitoring Plan

Appendix 1A
New York State Department of Health
Generic Community Air Monitoring Plan

Overview

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical- specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate DEC/NYSDOH staff.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. “Periodic” monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or

overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

2. If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.
2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.
3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

December 2009