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

July 27, 2021

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

Re: ***Newly-Identified 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 an 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 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 proposed to prepare this SWMU Assessment Plan to evaluate the horizontal and vertical extent of PCB-containing soil in the area northeast of DK-21. National Grid also agreed to evaluate the existing monitoring well network at the site and propose additional groundwater investigation efforts, if needed, to evaluate potential groundwater issues associated with the newly-identified SWMU. National Grid intends to implement the SWMU assessment activities in a phased manner. Initially, soil characterization activities will be completed. The soil characterization results will be used to evaluate and identify the approach for any required groundwater assessment efforts.

Relevant background information regarding site history and the newly-identified SWMU is presented below followed by National Grid's approach for characterizing the extent of PCB-containing soil in the area northeast of the DK-21 warehouse building.

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 has 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 southern parcel located along Kensington Avenue is presented as Figure 2.

Northern Parcel

Based on available site history, the earliest recorded use of the northern parcel included several residential homes and a filling station that were located in the northeast corner of the parcel by the early 1900s. The Stewart Motor Car Company (Stewart) developed the remaining portion of the northern parcel beginning around 1912 and eventually displaced the homes and filling station located in the northeast corner of the parcel. Stewart used the northern parcel for automobile and truck manufacturing from approximately 1912 to 1939, operating from three main buildings that continue to be used by National Grid (current buildings DK-1 through DK-3). Stewart ceased production in 1939 and later that year, the property and buildings were purchased by Buffalo Electric Corporation (Predecessor to National Grid). National Grid and predecessor utility companies have continuously operated the northern parcel as a utility service center since 1939, with the tree main buildings currently used as crew headquarters, office space, storage areas, and work sops.

Southern Parcel

The southern parcel was initially developed as a warehousing facility by Cyphers Incubator Company in the early 1910's. Richards and Boynton Company (Richardson and Boynton), a manufacturer for home heating boilers acquired the southern parcel shortly after initial development. A Sanborn Fire Insurance Map from 1934 indicates that the current buildings located on the parcel were largely complete, with the following operations indicated:

- Machining/grinding and shipping (current Buildings DK-13, DK-15, and DK-17).
- Core Room and clay/pattern (current building DK-19).
- Foundry (current building DK-21).

Richardson and Boynton filed for bankruptcy in 1939, and Hewitt-Robins, Inc. (Hewitt-Robins) acquired the property and buildings in the mid-1940's. Hewitt-Robins used the southern parcel for manufacturing of latex and foam rubber products. Niagara Mohawk Power Corporation (predecessor to National Grid) purchased the southern parcel and buildings from Hewitt-Robins in 1975. Factory areas purchased from Hewitt-Robins (buildings DK-13, DK-15, DK-16, DK-17, DK-19, and DK-21) reportedly had dirt floors when the buildings were purchased by National Grid. Following purchase, National Grid modified the buildings to add floors, partitions and office space, hydraulic lifts, etc. National Grid continues to use the buildings located on the southern parcel as offices, vehicle maintenance garage, workshops, and storage/warehouse areas.

Previous RCRA Corrective Action Activities

National Grid historically stored and handled PCB-containing electrical equipment and generated PCB-containing used oil at both the northern and southern property parcels. In 1982, National Grid submitted a Hazardous Waste Treatment, Storage and Disposal Facility (TSDF) Permit for a tank storage operation located in building DK-14. The permit submittal resulted in the Dewey/Kensington Service Center being designated as an interim-status TSDF. NYSDEC action on National Grid's permit submittal was delayed as the agency focused on higher-priority commercial TSDF sites. NYSDEC review of the permit application resulted in public hearings during 1989 where several community groups expressed opposition to approval of the permit. Pursuant to a decision by a New York Administrative Law Judge, the NYSDEC ultimately issued a Part 373 Hazardous Waste Management Permit (Part 373 Permit No. 9-1402-00397/00001-0) in late 1990 which allowed National Grid to continue to operate the TSDF for a period of 18 months. The TSDF was closed in December 1992 in accordance with a NYSDEC-approved Closure Plan and National Grid has continued to operate as a large quantity less-than 90-day hazardous waste generator since that time. The Hazardous Waste Permit identified existing SWMUs at the facility (mostly solid waste and petroleum storage related areas) which were not judged to represent potential environmental concerns.

During 1989, National Grid collected soil samples in response to oil spill at building DK-4 located along the west side of the northern property parcel. Initial soil samples identified the presence of PCBs and subsequent characterization efforts delineated PCBs at concentrations up to 230 parts per million (ppm) on National Grid's property. PCBs were also identified on the adjacent St. Mary's School athletic field immediately west of the northern parcel. Subsequent response measures were implemented which achieved the removal of PCBs exceeding 1 ppm on the St. Mary's athletic field and removal of PCBs exceeding 10 ppm on National Grid's property. Following completion of the soil excavation activities (concurrent with the permit review efforts summarized above), the NYSDEC listed the service center property as a New York State Listed Inactive Hazardous Waste Site (Site Code 915144) with a Site Classification Code of 5 (indicating no further action required). On October 3, 2011, National Grid received official notification that the site was deleted from the New York State Registry of Inactive Hazardous Waste Disposal Sites.

In September 1992, excavation activities at the facility in the vicinity of building DK-13 (primarily utilized as a vehicle maintenance garage) revealed petroleum-impacted gravel and a broken vent line connected to an underground waste oil storage tank. The waste oil tank was subsequently removed, and four groundwater monitoring wells (ESI-1, ESI-2, ESI-3, and ESI-4) were installed in the vicinity of the former tank to supplement an existing monitoring well (MW-1) and to facilitate periodic groundwater monitoring in this area. During 1994, National Grid conducted soil and groundwater investigation activities which identified the presence of several volatile organic compounds (VOCs) and PCBs in groundwater at concentrations above NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1 – Ambient Water Quality Standards and Guidance Values (NYSDEC, 1998,

amended 2000). The groundwater exceedances associated with the former DK-13 waste oil storage tank were designated as SWMU #7 at the facility.

In November 1997, National Grid entered into the existing Order on Consent with NYSDEC to guide future site monitoring and to establish a framework for implementing additional site investigation or remediation. As mandated in the Consent Order, semi-annual (spring and fall) groundwater monitoring events were conducted for monitoring wells located in the western portion of the Kensington Avenue parcel. The monitoring frequency and list of wells sampled during each groundwater monitoring event has been modified through time, as agreed to by NYSDEC. Currently, groundwater monitoring is conducted during one annual event and site inspections are conducted semi-annually.

Newly-Identified SWMU

As discussed during a June 24, 2021 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 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, National Grid completed 13 soil borings to depths of up to 8 feet below grade. PCB analytical results for samples collected from the 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. The DK-21 pavement project has been postponed while National Grid implements the proposed SWMU Assessment Efforts described below.

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 of New York, Inc. (ARCADIS) on behalf of National Grid. Based on the previous soil sampling results (presented on Figure 3), SWMU assessment efforts will focus on an approximately 46,575-square foot (1.07 acre) area as indicated on Figure 4. National Grid proposes to complete approximately 23 soil borings within the assessment area based on an approximately 45-foot by 45-foot sampling grid as shown on Figure 4. The actual location of the boring to be completed within each sampling grid 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.). The proposed SWMU assessment activities will include:

- Preparing a project-specific Health and Safety Plan (HASP).
- 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 23 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 using bgs 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 two sample intervals, representing material from the first soil encountered below asphalt/pavement to a depth of approximately 2-feet bgs and from 2 to 4-feet bgs. 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 two-foot sampling interval at each boring will be containerized in clean laboratory-supplied glassware and submitted to Alpha Analytical (Alpha). Arcadis will also collect and submit quality control samples [blind duplicates and matrix spike/matrix spike duplicates (MS/MSD)] at a frequency of one per twenty field samples. The recovered soil samples for the shallow interval (material from the first soil encountered beneath asphalt/pavement to a depth of 2 feet bgs) and from the 4 to 6-foot bgs interval at each boring location will initially be analyzed for PCBs using United States Environmental Protection Agency (USEPA) SW-846 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. Analytical results for samples that are analyzed for PCBs will be reported using NYSDEC Analytical Services Protocol Category B data deliverables.

- 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.

- 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 that 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.

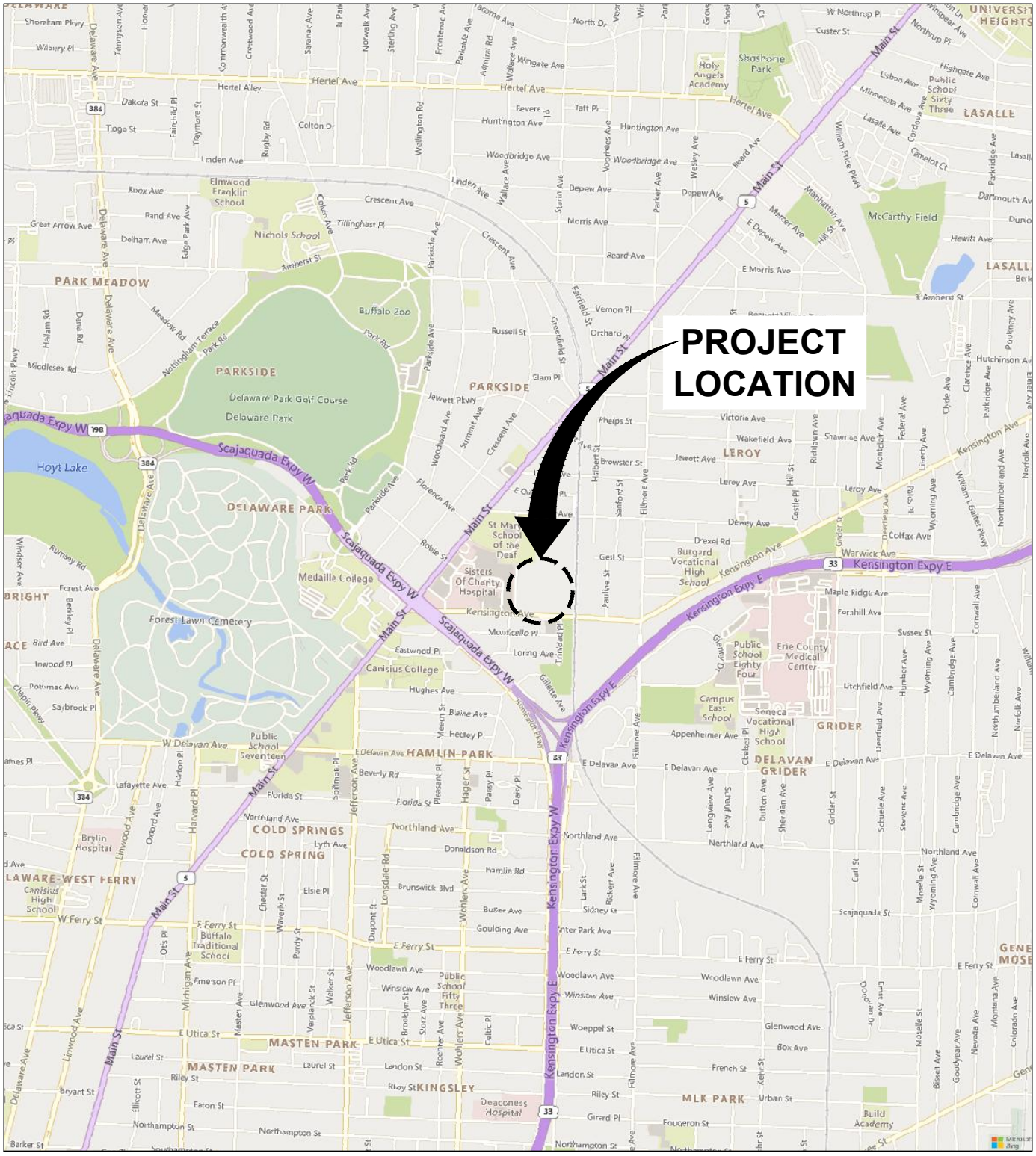
Please do not hesitate to contact me at 315-428-5652 if you have any questions or require additional information.

Sincerely,

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

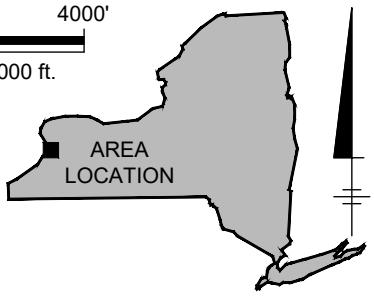
cc: Stan Radon, NYSDEC
Megan Kuczka, NYSDEC
Lisa Montesano, National Grid
Brian Stearns, P.E., National Grid
Michael Jones, Arcadis

Enclosures:
Figure 1 – Site Location Map
Figure 2 – Facility layout Plan
Figure 3 – Existing Soil Analytical Data
Figure 4 – Proposed Soil Boring Locations



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

ARCADIS

FIGURE 1

C:\Users\ksartori\ACCDocs\Arcadis\AUS-NATIONAL GRID-KENSINGTON AVE-BUFFALO New York\Project Files\2021\01-In Progress\01-DWG\B-SWIP-F01-SLM.dwg LAYOUT: 1 SAVED: 7/22/2021 12:41 PM ACADVER: 24.0S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 7/22/2021 12:44 PM BY: SARTORI, KATHERINE

XREFS: IMAGES:

NOTE:

1. IMAGERY OBTAINED FROM © 2021 MICROSOFT CORPORATION © 2021 MAXAR ©CNES (2021) DISTRIBUTION AIRBUS DS © 2021 TOM TOM.

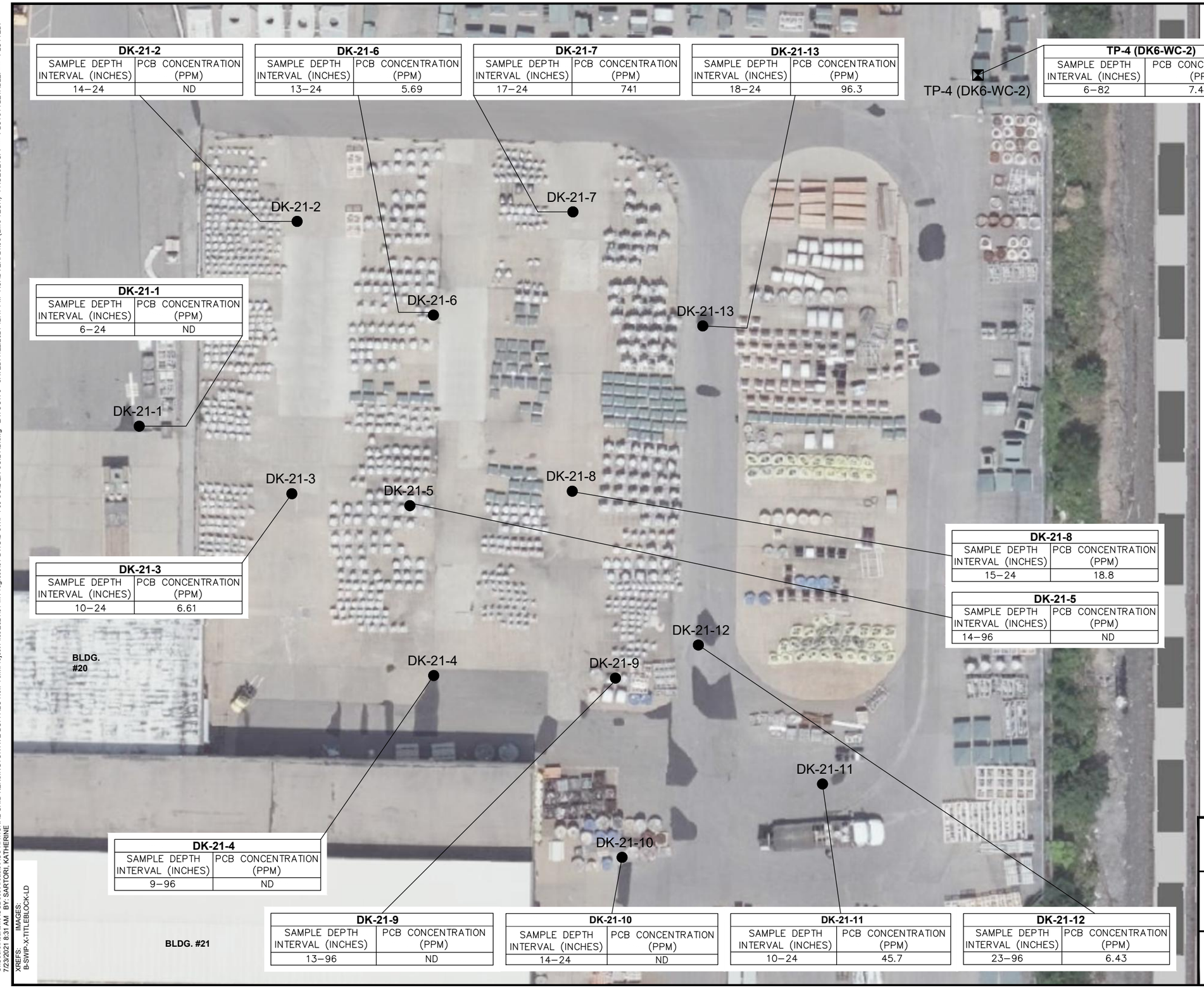
0 50' 100'
GRAPHIC SCALE

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

FACILITY LAYOUT PLAN

ARCADIS

FIGURE
2



DK-21-2	
SAMPLE DEPTH INTERVAL (INCHES)	PCB CONCENTRATION (PPM)
14–24	ND

DK-21-6	
SAMPLE DEPTH INTERVAL (INCHES)	PCB CONCENTRATION (PPM)
13–24	5.69

DK-21-7	
SAMPLE DEPTH INTERVAL (INCHES)	PCB CONCENTRATION (PPM)
17–24	741

DK-21-13	
SAMPLE DEPTH INTERVAL (INCHES)	PCB CONCENTRATION (PPM)
18–24	96.3

TP-4 (DK6-WC-2)	
SAMPLE DEPTH INTERVAL (INCHES)	PCB CONCENTRATION (PPM)
6–82	7.47

DK-21-1	
SAMPLE DEPTH INTERVAL (INCHES)	PCB CONCENTRATION (PPM)
6–24	ND

DK-21-3	
SAMPLE DEPTH INTERVAL (INCHES)	PCB CONCENTRATION (PPM)
10–24	6.61

DK-21-8	
SAMPLE DEPTH INTERVAL (INCHES)	PCB CONCENTRATION (PPM)
15–24	18.8

DK-21-5	
SAMPLE DEPTH INTERVAL (INCHES)	PCB CONCENTRATION (PPM)
14–96	ND

DK-21-4	
SAMPLE DEPTH INTERVAL (INCHES)	PCB CONCENTRATION (PPM)
9–96	ND

DK-21-9	
SAMPLE DEPTH INTERVAL (INCHES)	PCB CONCENTRATION (PPM)
13–96	ND

DK-21-10	
SAMPLE DEPTH INTERVAL (INCHES)	PCB CONCENTRATION (PPM)
14–24	ND

DK-21-11	
SAMPLE DEPTH INTERVAL (INCHES)	PCB CONCENTRATION (PPM)
10–24	45.7

DK-21-12	
SAMPLE DEPTH INTERVAL (INCHES)	PCB CONCENTRATION (PPM)
23–96	6.43

LEGEND:

- EXISTING SOIL SAMPLING LOCATION
- EXISTING TEST PIT

NOTES:

1. SOIL PROBES LOCATIONS ARE APPROXIMATE.
2. IMAGERY OBTAINED FROM © 2021 MICROSOFT CORPORATION © 2021 MAXAR ©CNES (2021) DISTRIBUTION AIRBUS DS © 2021 TOM TOM.
2, ND = NOT DETECTED.
4. PPM = PARTS PER MILLION.
5. EXISTING SOIL SAMPLES DK–21–1 THROUGH DK–21–13 COLLECTED IN MARCH 2021 BY GZA GEOENVIRONMENTAL SERVICES OF N.Y.
6. EXISTING SOIL SAMPLE DK–6 TEST PIT (TP–4) COLLECTED IN OCTOBER 2020 BY GZA GEOENVIRONMENTAL SERVICES OF N.Y.

0 10' 20'
GRAPHIC SCALE

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

EXISTING SOIL ANALYTICAL DATA

ARCADIS

FIGURE 3

LEGEND:

- EXISTING SOIL SAMPLING LOCATION
- EXISTING TEST PIT
- PROPOSED SOIL BORING LOCATION

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

PROPOSED SOIL BORING LOCATIONS

ARCADIS

FIGURE
4