

April 12, 2013

Mr. R. Scott Deyette New York State Department of Environmental Conservation Division of Environmental Remediation Remedial Bureau C, 11th Floor 625 Broadway Albany, New York 12233-7014

Subject: Supplemental Site Characterization Activities

Former Bay Ridge Holder Station B Site

Brooklyn, New York NYSDEC Site No. 224058 Index No. A2-0552-0606

# Dear Mr. Deyette:

National Grid is pleased to provide you this summary work plan letter describing additional field investigation activities to be undertaken at the Former Bay Ridge Holder Station B Site (the Site) in Brooklyn, New York (Figure 1). The additional services to be conducted are based upon discussions within National Grid regarding the preparation of an environmental easement for a portion of the Site. The supplemental investigation activities are being performed to better define potential environmental impacts, in particular lead, in the portion of the Site where the northwestern portion of Holder No. 4 was originally located. To further evaluate these areas, AECOM has prepared the following work plan and will be performing the described field activities.

## ADVANCEMENT OF ADDITIONAL SOIL BORINGS

Five additional soil borings (SB-126 through SB-130) will be advanced at the Site to assist in evaluating if impacts to the soil are present within or adjacent to the footprint of Holder No. 4. The locations of the proposed soil borings are shown on Figure 2. Table 1 provides summary information regarding the borings, including their designations, sampling rationale, anticipated completion depth, and the laboratory analyses to be performed.

Based upon the previous sampling activities conducted at the Site, it is anticipated that the borings completed in the overburden soil will be advanced to depths no greater than 20 feet below ground surface (bgs) to delineate the vertical and horizontal extent of impacts, in particular lead concentrations previously detected in fill materials within the Holder No. 4 footprint. Soil borings will be terminated if the former holder foundation is encountered.

The subsurface borings will be advanced using a direct-push (Geoprobe<sup>TM</sup>) drilling rig equipped with Macro-Core<sup>TM</sup> samplers. Continuous soil samples will be collected from the ground surface to the bottom of the borehole for both field characterization (photoionization detector screening and observations) and for the collection of samples for chemical analyses.

Soil samples obtained will be logged by a geologist who will record such data as the presence of fill material or subsurface structures, the nature of each geologic unit encountered, observations regarding moisture content, the results of PID soil headspace readings, and visual and olfactory observations regarding the presence of hydrocarbon-like or other residuals. The soils will be

logged in accordance with the National Grid protocols (KeySpan, 2005) as detailed in the Field Sampling and Analytical Plan (FSAP) located in Appendix C of the approved January 2010 Site Characterization Work Plan.

Three subsurface soil samples are proposed for laboratory analysis from each soil boring. The first sample will be collected at the depth of greatest apparent contamination from the 0 to 5 feet bgs interval. It is anticipated that second and third subsurface soil samples will be collected from depths greater than 5 feet bgs in each soil boring. Samples will be collected from the most apparently impacted intervals based on PID screening and field observations. If impacts are not encountered, a sample will be collected from a depth of 15 feet bgs. The final sample will be collected at the first clean interval (if impacts are encountered) or at the bottom of the boring.

Soil samples will be analyzed for:

- Benzene, Toluene, Ethylbenzene, and Xylene (BTEX) compounds (USEPA Method 8260);
- Polycyclic Aromatic Hydrocarbon (PAH) compounds (USEPA Method 8270);
- Resource Conservation and Recovery Act (RCRA) metals; and
- Free cyanide (extraction by USEPA Method 9012 and analysis by Microdiffusion, ASTM International method D4282-02).

Upon completion, the soil borings will be tremie-grouted to grade with bentonite grout with native soil restoration at the surface.

A comprehensive data package (ASP Category B) for the soil samples will be submitted by the laboratory for validation by a qualified chemist. A Data Usability Summary Report (DUSR) will be prepared by AECOM for the analytical samples. Data will be managed in a database and compared to the NYSDEC criteria and standards used in the approved March 2012 Site Characterization Results Report.

At the completion of the supplemental investigation and validation of the laboratory data, a summary results report will be prepared for submission to the NYSDEC. The summary letter will include:

- A brief site description and history.
- Summary information regarding previous investigations and site characterization work performed at the Site.
- Descriptions of the field activities performed. A summary of all field observations, field measurements, and laboratory analytical data summarized in tabular format. Soil analytical results, managed in a database, will be compared to the NYSDEC soil cleanup criteria presented in the March 2012 Site Characterization Results Report.
- An integration of field observations and measurements with laboratory analytical data to evaluate the nature and extent of impacts, if any.
- A set of conclusions for the supplemental site investigation activities, primarily to determine if the proposed environmental easement should include all of the Former No. 4 Holder.

Appendices to the summary results report will include all pertinent data used to support the supplemental investigation efforts, including validated laboratory analytical results, DUSRs, and stratigraphic boring logs.

## COMPLAINCE WITH APPROVED SITE CHARACTERIZATION WORK PLAN

Any additional sampling and quality assurance protocols, along with supplemental field activities not describe above (such as waste classification sampling and surveying activities) will be in accordance with the approved January 2010 Site Characterization Work Plan. The results obtained from this additional sampling will be included on the summary results report.

If you have any questions, comments or require any additional information, please do not hesitate to contact me at (718) 963-5453 or via electronic mail at <a href="mailto:donald.campbell@nationalgrid.com">donald.campbell@nationalgrid.com</a>.

Sincerely,

Donald Campbell Project Manager

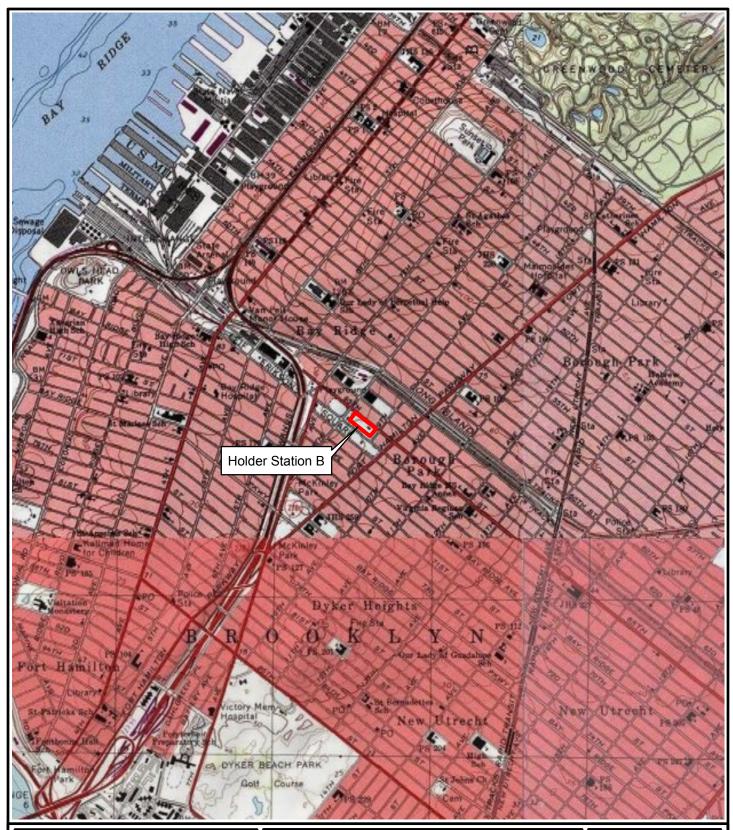
Site Investigation and Remediation

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Enclosures

Cc -

N. Abrams, AECOM (w/ enclosure – electronic copy only) AECOM File 60137360





**A**ECOM

Site Location - Supplemental Investigation National Grid Bay Ridge Former Gas Holder Station B Brooklyn, NY

Data Source: USGS Topographic Quadrangles - Jersey City, 1981; Brooklyn, 1979; The Narrows, 1981; Coney Island, 1979.

Scale:	Date:	Project Number:	
1"=2000'	04/10/2013	60137360	

Figure Number:

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# Table 1 Proposed Supplemental Site Characteristic Sample Location, Rationale, and Analytical Sample Summary Former Bay Ridge Holder Station B Site, Brooklyn, New York

Location ID	Sample ID	Completion Depth (Feet)	Sample Depth (Feet)	No. of Samples	Analyses	Rationale
SB-126 SB-126 (depth)	OD 400	20 feet maximum	Upper five feet	3	BTEX, PAHs, RCRA 8 Metals, and Free CN	Evaluate soils within the footprint of Holder No. 4
			Zone of worst case impacts			
	(doptii)		First clean or botton of boring			
SB-127 SB-127 (depth)	00.407	20 feet maximum	Upper five feet	3	BTEX, PAHs, RCRA 8 Metals, and Free	Evaluate soils within the footprint of Holder No. 4
	_		Zone of worst case impacts			
		First clean or botton of boring	1	CIV	140. 4	
SB-128 SB-128 (depth)		Upper five feet		DTEV DALL DODA ON A L		
		20 feet maximum	Zone of worst case impacts	3	BTEX, PAHs, RCRA 8 Metals, and Free CN	Evaluate soils along the exterior perimeter footprint of Holder No. 4
	(deptil)		First clean or botton of boring			
SB-129 SB-129 (depth)		Upper five feet		DTEV DAIL DODA ON A L		
		I 20 teet maximiim I	Zone of worst case impacts	3	BTEX, PAHs, RCRA 8 Metals, and Free CN	Evaluate soils along the exterior perimeter footprint of Holder No. 4
	(deptil)		First clean or botton of boring			
SB-130 SB-130 (depth)	27.444	I 20 feet maximum I	Upper five feet	3	BTEX, PAHs, RCRA 8 Metals, and Free CN	Evaluate soils along the exterior perimeter footprint of Holder No. 4
			Zone of worst case impacts			
	(deptii)		First clean or botton of boring			

### **Notes**

No. - number

ID - identification

RCRA - Resource Conservation and Recovery Act

SB - Soil Boring (Subsurface Soil)

BTEX - Benzene, Toluene, Ethylbenzene, and Xylenes

PAHs - Polycyclic Aromatic Hydrocarbons

CN - cyanide