# nationalgrid

May 4, 2012

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

## Re: Front Street Former Holder Station, NYSDEC Site No. 224063 Supplemental Site Characterization Work Plan

Mr. Deyette:

In 2011, on behalf of National Grid, URS Corporation (URS) completed a site characterization at the National Grid Front Street Former Holder Station site (the Site) in Brooklyn, NY (see Figure 1). The *Draft Site Characterization Report* was submitted to the New York State Department of Environmental Conservation (NYSDEC) in December 2011 for review and comment or approval. The NYSDEC reviewed the report and provided their response in a letter dated March 23, 2012.

In their response letter, NYSDEC stated their concern regarding the detection of elevated levels of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs) and metals in a groundwater grab sample from soil boring FS-SB-2, located in former Holder No. 5 (see Figure 2). Further, NYSDEC requested that National Grid develop a work plan to either install a permanent monitoring well at this location and resample the groundwater, or remove the water from within the holder so as not to interfere with potential future development of the Site.

National Grid has prepared this Supplemental Site Characterization Work Plan to provide details for the proposed installation and sampling of a permanent monitoring well within the former Holder No. 5.

## **SCOPE OF WORK**

URS will mobilize to the Site to install and sample a permanent monitoring well at the boring FS-SB-2 location. All field work will be performed in accordance with the existing Field Sampling Plan, Health and Safety Plan, and Quality Assurance Plan previously prepared for the Site Characterization.

## 1.0 Drilling and Well Installation

The new well will be installed at the FS-SB-2 location. Prior to drilling, the well borehole will be manually pre-cleared to a depth of 5 feet to identify and avoid subsurface utilities. The well borehole will then be advanced using 4<sup>1</sup>/<sub>4</sub>-inch inside diameter hollow stem augers to the base of the holder foundation, a depth of approximately 19 feet below grade.

Upon reaching the final depth, a 2-inch diameter polyvinyl chloride (PVC) well will be installed through the inside of the augers. The well will be constructed using 10-slot well screen and a No. 1 sand pack. The well screen will be installed such that approximately the upper one-third of the screen spans the water table. A minimum 2-foot thick bentonite seal will be placed above the sand pack and the remainder of the annulus backfilled with a cement/bentonite grout. The well will be finished with a locking cap and flush-mount road box.

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#### 2.0 Well Development and Sampling

At least 48-hours following completion of well installation, the new monitoring well will be developed by pumping until the discharged water is sediment-free and the indicator parameters (pH, temperature, and specific conductivity) have reached steady state. A turbidity meter will be used to monitor effectiveness of development. A turbidity reading of <50 Nephelometric Turbidity Units (NTU) and steady state pH, temperature, and specific conductivity readings will be used as a guide for discontinuing well development. Development water will be containerized in 55-gallon drums for off-site disposal.

A groundwater sample will be collected from the newly installed well approximately two weeks after well development. The groundwater sample will be collected using the low-flow sampling procedure. The groundwater will be analyzed for Target Compound List (TCL) VOCs, TCL SVOCs, and Target Analyte List (TAL) metals. No field QA/QC samples will be collected; laboratory batch QA/QC samples will be used to evaluate data quality.

#### 3.0 Investigation-Derived Waste Characterization and Disposal

All investigation-derived wastes (IDW) including soil cuttings, decontamination water, and development water, will be contained in 55-gallon drums and temporarily staged at an approved location or picked up by the waste transportation and disposal contractor at the end of each workday. Samples of IDW will be collected for proper waste characterization. National Grid's IDW contractor will be responsible for removing all containers of IDW from the work site as needed.

#### 4.0 <u>Deliverables</u>

The draft supplemental site characterization report will be amended for submittal to NYSDEC within four (4) weeks of receipt of the analytical data package. Supporting data, including the analytical data; boring, well construction, development and purge logs; and field notes will be included in the amended draft report.

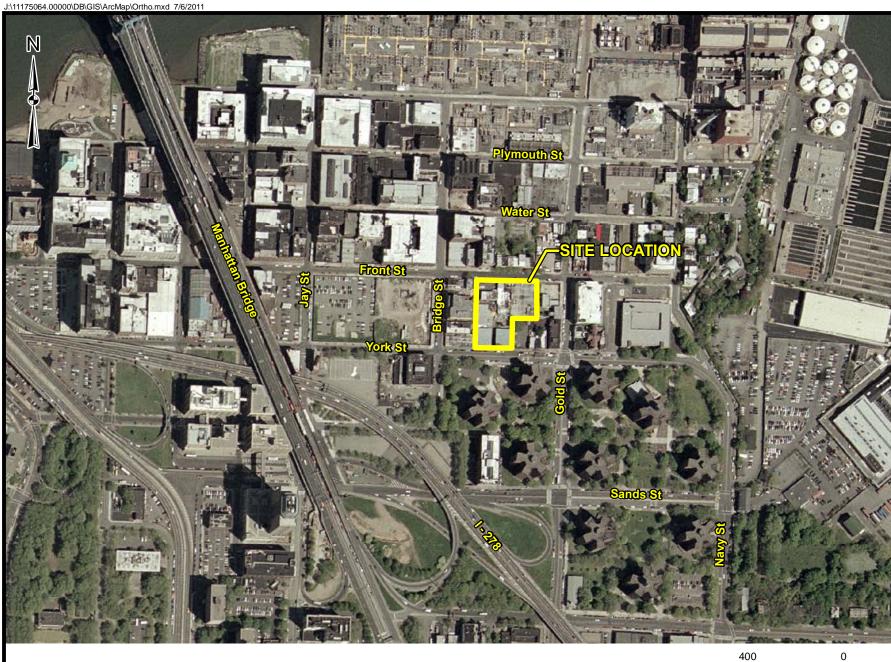
The report will include a summary of investigative procedures and a revised discussion of the analytical data collected during the site characterization, revised qualitative human health exposure assessment, and updated conclusions and recommendations.

Please contact me with any questions regarding this matter.

Sincerely,

Kodeld Campbell

Donald Campbell Project Manager



FRONT STREET FORMER GAS HOLDER SITE

SITE ORTHOPHOTO

URS

400 Feet

FIGURE 1



