

June 8, 2009

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

Re: Lake Avenue Non-Owned Former MGP site

Saratoga Springs, New York

VCO D0-0001-0011 Site #: V00475

Supplemental Remedial and Pre-Design Investigation Work Plan

Dear Mr. Deyette:

National Grid is submitting for your review and approval this letter work plan to conduct Supplemental Remedial Investigation (SRI) and Pre-Design (PD) Sampling at the Saratoga Springs (Lake Avenue) Non-Owned Former MGP site in Saratoga Springs, New York (Site). The Site location is shown in Figure 1. The current Site conditions and proposed sample locations are shown in Figure 2.

Remedial Investigation (RI) activities were conducted in December 2008 and the draft RI report was transmitted to the New York State Department of Environmental Conservation (NYSDEC) and New York State Department of Health (NYSDOH) in April 2009. A draft Remedial Action Work Plan (RAWP) to address the former gas holder is currently being developed. The SRI/PD activities will be conducted to generate supporting information for the proposed remedial action.

This SRI/PD letter work plan describes how we plan to achieve the following goals:

- Further delineate and characterize the nature and extent of contamination in the vicinity of the former gas works building.
- Investigate soil conditions immediately adjacent to and downgradient of the garage floor drain from the west side of the Central Fire Station garage.
- Characterize the water and tar inside the former holder foundation.
- Collect groundwater level measurements at the site.

# 1.0 Supplemental Remedial Investigation/Pre-Design Sampling

The SRI/PD will be conducted in accordance with the NYSDEC-approved Remedial Investigation Work Plan (RIWP) dated December 8, 2008, that includes the Health and Safety Plan, Quality Assurance Project Plan, and Field Sampling Plan.

In accordance with NYSDEC and NYSDOH requirements for a Community Air Monitoring Plan, perimeter air monitoring will be conducted from upwind and downwind locations. A

Mr. R. Scott Deyette New York State Department of Environmental Conservation June 8, 2009 Page 2

portable photoionization detector (PID) will be utilized to monitor the levels of organic vapors in the ambient air and a Mini RAM<sup>TM</sup> PM-10 (or equivalent) particle detector will be used to count inhalable particles of dust during the fieldwork. A PID will be used for screening of soil samples.

#### 1.1 Subsurface Soil Sampling

A minimum of six soil borings (GP-34-09 through GP-39-09) will be installed to evaluate subsurface soil conditions in the vicinity of the former gas works building and adjacent to the sewer line on the west side of the Central Fire Station. The locations of the proposed subsurface soil borings are shown in Figure 2.

One subsurface soil boring (GP-34-09) will be installed adjacent to GP-20-04 and GP-21-05 to a depth of 5 feet below ground to evaluate shallow subsurface soils.

One subsurface soil boring (GP-35-09) will be installed adjacent to the stone retaining wall downgradient and west of GP-20-04 and GP-21-05. One subsurface boring (GP-36-09) will be installed near the brick planter. Two subsurface soil borings (GP-37-09 and GP-38-09) will be installed within the footprint of the gas works building approximately 20 feet east of GP-20-04 and GP-21-05. These borings will support enhanced characterization of impacts.

One subsurface soil boring (GP-39-09) will be installed adjacent to and downgradient of the drainage line from the garage on the west side of the Central Fire Station (Figure 2).

The boring depths of GP-35-09 through GP-39-09 will be a minimum of 35 feet, to advance beyond the deepest impact observed in the past (25 feet bgs at GP-21-05), and confirm the continuity and thickness of the confining unit. The borings will be continuously logged (lithology and physical observations of potential MGP-related impacts) and screened with a PID. Digital photographs of each sample will be recorded.

If visual or olfactory evidence of impacts are present at any boring, another boring will be installed at a "step-out" distance of approximately 10 feet (total distances will be limited by the Site boundaries).

A minimum of three analytical samples will be collected from each boring as follows:

- Within the 0.0 to 5.0 feet below ground interval, to document shallow soil quality.
- Within the 5.0 to 10.0 feet below ground interval, to document deeper soil quality.
- Just below the surface of the confining unit, to verify its confining properties.

If physical impacts are apparent, sampling will include collection of a composite sample above the impacts and a discrete sample of the most apparent impacts.

Mr. R. Scott Deyette New York State Department of Environmental Conservation June 8, 2009 Page 3

All samples will be analyzed for the following parameters:

- Benzene, Ethylbenzene, Toluene, and Xylenes (BTEX) via Environmental Protection Agency (EPA) Method 8260B.
- Polycyclic Aromatic Hydrocarbons (PAHs) via EPA method 8270C.

Adjacent to the garage floor drainage, analytical samples may be augmented with "fingerprinting" if hydrocarbon odors are apparent.

Quality assurance/quality control samples will include one blind duplicate, one Matrix Spike/Matrix Spike Duplicate (MS/MSD), and one rinsate blank.

The subsurface soil samples will be submitted to TestAmerica Laboratories in Shelton, Connecticut for analysis. TestAmerica is a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) accredited laboratory.

Aquifer Drilling and Testing, Inc. (ADT) of Troy, New York, will install the subsurface soil borings with a GeoProbe<sup>®</sup> Model 6600 drill rig or similar equipment. The GeoProbe<sup>®</sup> will traverse the site on mats to prevent damage to the lawn. Survey Associates, LLC will survey and stake the locations of existing borings in the vicinity of the gas works building before drilling begins. This will ensure that new borings are installed in the optimal locations.

### 1.2 Observation/Recovery Well Sampling

Water and DNAPL samples will be collected from OR-01-08 for waste characterization. The samples will be analyzed for the following parameters:

- TCLP VOCs (EPA Methods 1311 TCLP and 8260B)
- TCLP SVOCs (EPA Methods 1311 TCLP and 8270C)
- TCLP Metals (EPA Methods 1311 TCLP and 6010)
- TCLP Mercury (EPA Methods 1311 TCLP and 7470A)
- Polychlorinated Biphenyls (EPA Method 8082)
- Pesticides and Herbicides (EPA Method 8081 and 8151)
- Total Cyanide (EPA Method 9012)
- Mercury (EPA Method 7471A)
- Corrosivity, Reactivity (EPA Method 9012 and 9034)
- Ignitability (EPA Method 1030)
- Temperature (EPA Method 1030)
- pH (EPA Method 9045)
- Paint filter test (EPA Method 9095)

Mr. R. Scott Deyette New York State Department of Environmental Conservation June 8, 2009 Page 4

- Total Petroleum Hydrocarbons (EPA Method 8015)
- Percent Solids (EPA Method E160.3)
- Percent Sulfur (EPA Method 9038)
- Total British Thermal Units (BTUs) (ASTM-D240-87)

A bailer will be used to collect a sample of the water.

Dense, non-aqueous phase liquid (DNAPL) was present at a depth of 7.71 feet below ground, and it was very viscous. The installation depth of OR-01-08 was 16 feet below ground. GEI will attempt to determine whether the DNAPL extends all the way to its base. Small diameter, disposable plastic pipe or threaded rods will be used to do so. The DNAPL sample will be collected from the surface of the pipe or rod.

#### 1.3 Groundwater Elevation Measurements

Groundwater elevation measurements will be collected from the three on-site monitoring wells (MW-01-03, MW-02-03, and MW-03-03) and two off-site monitoring wells (MW-A and MW-C). Off-site well MW-B has been destroyed.

The purpose of these measurements is to confirm the direction of groundwater flow at the site.

## 2.0 Schedule and Reporting

We anticipate that field work can start within approximately 2 weeks of receiving NYSDEC approval, and hope to conduct the work in early June 2009. A number of factors can affect the actual start date, including the approval of this work plan, property access, and/or weather that may hamper collection of subsurface soil samples. National Grid will have to coordinate access with the Saratoga Springs Fire Department. The field work is expected to take a maximum of 2 days.

After completion of the field activities and receipt/validation of the laboratory analytical data, we will generate a brief letter report of findings for your review. A copy of this letter will be provided in the appendices of the final RAWP.

Sincerely,

Xe \*

Edward Neuhauser Project Manager

c: Deanna Ripstein, NYSDOH

John Ripp, GEI Jerry Zak, GEI

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