Ballston Spa
Scott

March 7, 2006

Mr. Scott Deyette, P.E.
Remedial Engineer
Remedial Bureau C
Division of Environmental Remediation
New York State of Environmental Conservation
625 Broadway
Albany, New York 12233-7014

RE: National Grid USA Non-Owned Former MGP Site
Ballston Spa, New York
Supplemental Site Characterization Work Plan

Dear Mr. Deyette:

National Grid USA (NGRID), is pleased to provide this letter work plan for supplemental characterization at the non-owned Ballston Spa former manufactured gas plant (MGP) site in Ballston Spa, New York. The work plan has been developed to address issues raised by the New York State Department of Environmental Conservation (NYSDEC) following review of the last data report (October 2005) for the site.

Background

Four soil borings (B/MW-101, B/MW-102, B/MW-103, and B-104) were installed at the site in May 2005, during initial site characterization activities. These borings are presented on Figure 1, along with summarized analytical results.

B/MW-101, installed along the western side of the parking area, did not contain detectable physical impacts (tar, sheen, or odor). The analytical sample collected there, from 7.0 to 8.0 feet below ground surface (bgs) confirmed this, as no organic compounds were detected. Glacial till was encountered at 8.1 feet bgs. Even though the subsurface soil was not saturated throughout the interval, NGRID and NYSDEC discussed the matter and the boring was converted to a monitoring well with a five foot screen penetrating approximately 1.0 feet into the till. The monitoring well at B/MW-101 did not produce groundwater.

B/MW-102 was installed along the eastern site boundary. Slight to moderate MGP-related odors were apparent between 3.0 and 12.0 feet bgs. The analytical soil sample collected from 8.0 to 9.0 feet bgs, where a moderate naphthalene odor was apparent, contained nearly 81 milligrams per kilogram (mg/kg) of benzene, toluene, ethylbenzene, and xylenes (BTEX). Almost 15 mg/kg of total polycyclic aromatic hydrocarbon (PAHs) compounds were detected in the soil sample. The groundwater analytical sample collected from this well in June 2005 contained almost 16 micrograms per liter (µg/l) of BTEX. Total PAHs in groundwater were not detected.

B/MW-103 was installed along the northern site boundary. There was no visual or olfactory evidence of MGP-impacts. The analytical soil sample collected from 9.0 to 10.0 feet bgs was free of detectable BTEX. Less than 1 mg/kg of total PAHs were detected in the sample. The groundwater analytical sample collected from this well did not contain detectable BTEX. Total PAH concentrations were 24.3 µg/l.

B-104 was installed inside the apparent footprint of the former gas holder. No visual or olfactory evidence of MGP-impacts was noted. The analytical soil sample collected from 7.0 to 8.0 feet bgs was free of detectable BTEX but did contain 164.8 mg/kg of detected total PAHs.

The data described above provide a general indication of impacts at the site. However, because impacts are present at boundaries, they do not completely define the extent of impacts. Subsurface soil, soil vapor, and groundwater requires additional characterization, as follows:

Groundwater flow direction is inconclusive because one of the three existing wells was dry.
Extent of subsurface impacts at the north and east site boundaries is uncertain.

- Soil vapor impacts may exist along the western edge of the parking lot near occupied buildings.

Proposed Scope of Work (SOW)

Additional Soil Borings/Well

We propose to install four borings. Boring B-105 will be installed east of MW-102, on the Rougie property. Boring B-106 will be installed north of MW-103, in the Village of Ballston Spa parking area. Boring B-107 will be installed on the south side of the assumed location of the former holder. B-108 will be installed at the approximate location of the former retort house. If additional contamination is encountered, we are prepared to install additional borings.

Finally, a deeper well (MW-101R) will be installed in the southwest corner of the parking lot (the best location for triangulation), to ensure that a groundwater sample can be collected and a water level can be measured. The proposed locations are presented in Figure 1. These are conceptual locations only. The final locations will be based on additional groundwater flow direction information and limitations caused by overhead and/or underground utilities.

Methods

Most soil borings/wells will be installed using a GeoProbe Model 6600, though a truck-mounted hollow-stem auger is expected to be necessary to install a deeper well at B/MW-101R, to penetrate till. MW-101R will be installed as close to MW-101 as possible while

still avoiding the overhead line and maintaining a reasonable triangulation among the wells.

B/MW-101R will be installed first, so that water levels can be measured in the field, before installing B-106. Ideally, the actual groundwater flow pattern will be discernable and this information will assist in determining the optimal location for B-106. We will also arrange to determine the water level elevation at Kayaderosseras creek.

Each soil boring sample will be continuously logged, screened with an organic vapor meter, and photographed. One analytical soil sample will be collected from each boring to document subsurface conditions. The samples will be analysed for BTEX (EPA Method 8260B) and total PAHs (EPA Method 8270C). Appropriate Quality Assurance/Quality Control (QA/QC) samples will be collected. All data will be validated.

B/MW-101R will be converted to a permanent 2-inch monitoring well. No analytical samples will be collected from the soil at this location, as a sample was already collected at B/MW-101. The well screen will be 2-inches diameter, 5 or 10 feet long, 10 slot screens (0.01-inch slot size), and manufactured of polyvinyl chloride (PVC). The sand pack will consist of #1 Morie sand extending to at least one foot above the screen (two feet maximum). A one to two foot bentonite seal will be placed above the sand pack, and it will be hydrated before the remaining annulus is tremie-grouted to ground surface. The well will be installed so that the well screen straddles the water table. Well construction will be finished with flush-mount locking well covers.

Soil Vapor Sampling

Three soil vapor samples will be collected below the asphalt pavement at the points shown in Figure 1. Soil vapor samples will be collected in general accordance with the Draft NYSDOH Soil Vapor Guidance. The sample interval depth will be determined in the field based on the apparent depth of the basement floor of the adjacent buildings.

Prior to the collection of the soil vapor samples, the integrity of each soil vapor sample port will be confirmed through tracer gas monitoring. Each soil vapor sampling port will be evacuated of air at a rate that does not exceed 0.2 liters per minute. Soil vapor samples will be collected at each port using certified-clean Summa® canisters with a 6 liter capacity. Each Summa® canister air sample will be collected over an approximate 8-hour period through a calibrated flow control valve provided by the laboratory. The sample rate will not exceed 0.2 liters per minute.

QA/QC samples will include a blind duplicate.

Soil vapor air samples will be shipped to Air Toxics in Folsom, CA. The air samples will be analyzed for VOCs, including naphthalene, by EPA method TO-15. In addition, sub-slab vapor samples will be analyzed for the tracer gas. Air Toxics will provide New York State Category B data deliverables for the air analyses that will be provided in both electronic and printed format.

Groundwater Sampling

Groundwater samples will be collected at the existing and new well a minimum of two weeks after well development. The samples will be collected using low-flow sampling methods. The samples will be analysed for BTEX (EPA Method 8260B) and PAHs (EPA Method 8270C). Appropriate Quality Assurance/Quality Control (QA/QC) samples will be collected and analysed.

Community Air Monitoring Plan

In accordance with New York State Department of Health (NYSDOH) requirements for a Community Air Monitoring Plan (CAMP), a perimeter air-monitoring plan will be implemented at the site during intrusive field activities. The objective of the perimeter air-monitoring plan 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 involved with the site field activities) from potential airborne contaminant releases as a direct result of field activities. The plan will be implemented and conducted consistent with the methods and equipment applied in May 2005.

Health and Safety Plan

The Health and Safety Plan (HASP) developed for May 2005 site investigation will be used again. Phone numbers will be checked to ensure they are current and accurate.

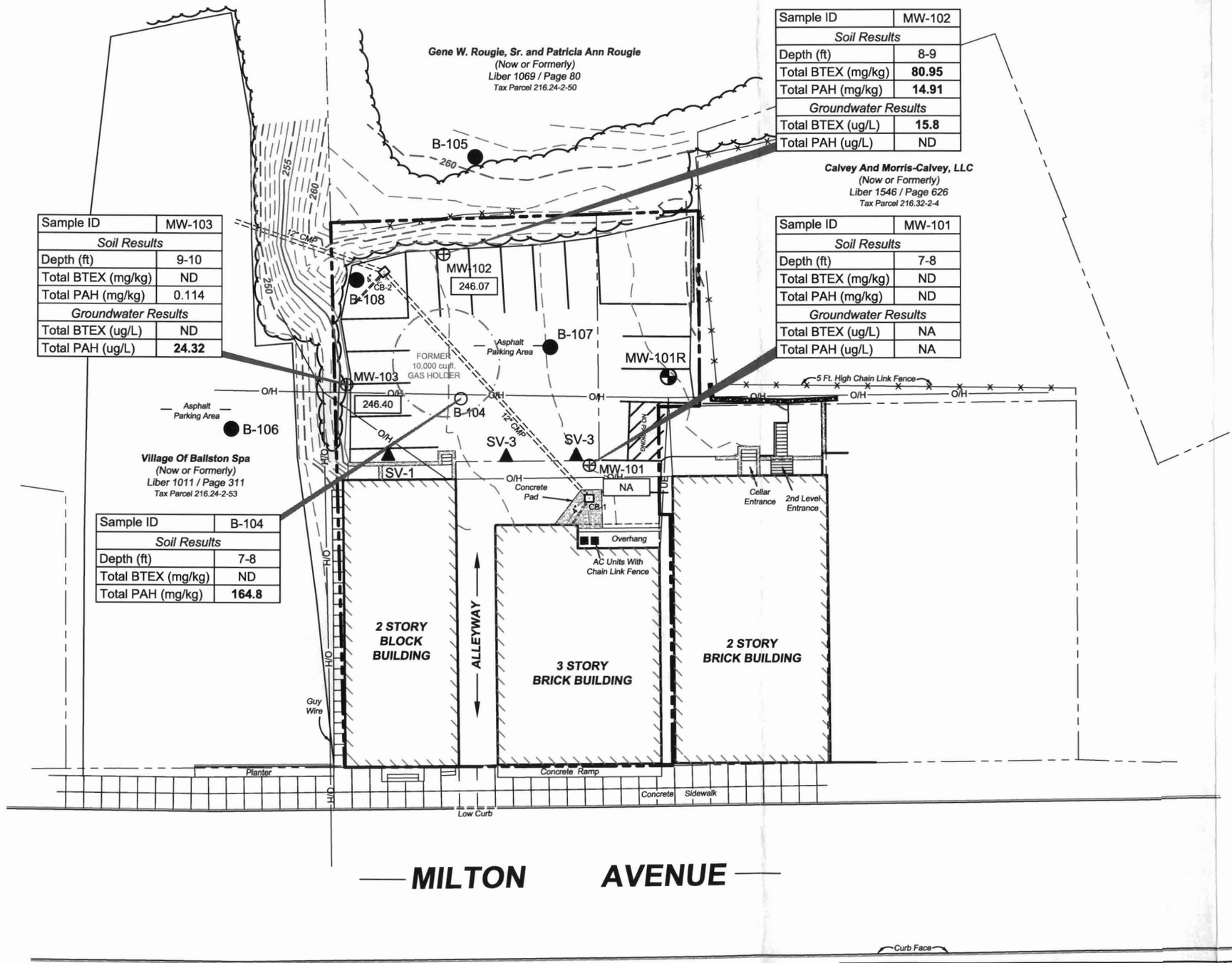
Reporting

When field work is completed, analytical data will be validated and summarized in a Data Useability Summary Report (DUSR). Site physical information will be reduced. The data and information will be compiled in figures and tables, as appropriate, and presented to NYSDEC for comment. Assuming that the extent of site impacts has been defined, then planning of remedial design, if necessary, will begin.

Please call me (315-428-3355) if you have any questions or require additional information.

Sincerely,

Dr. Edward Neuhauser
Principal Environmental Engineer



Sample ID	MW-103
Soil Results	
Depth (ft)	9-10
Total BTEX (mg/kg)	ND
Total PAH (mg/kg)	0.114
Groundwater Results	
Total BTEX (ug/L)	ND
Total PAH (ug/L)	**24.32**

Sample ID	B-104
Soil Results	
Depth (ft)	7-8
Total BTEX (mg/kg)	ND
Total PAH (mg/kg)	**164.8**

Sample ID	MW-102
Soil Results	
Depth (ft)	8-9
Total BTEX (mg/kg)	**80.95**
Total PAH (mg/kg)	**14.91**
Groundwater Results	
Total BTEX (ug/L)	**15.8**
Total PAH (ug/L)	ND

Sample ID	MW-101
Soil Results	
Depth (ft)	7-8
Total BTEX (mg/kg)	ND
Total PAH (mg/kg)	ND
Groundwater Results	
Total BTEX (ug/L)	NA
Total PAH (ug/L)	NA

LEGEND:

	PROPERTY BOUNDARY
	EXISTING BUILDING
	CHAIN-LINK FENCE
255	SURFACE CONTOUR
UE	UNDERGROUND ELECTRIC LINE
O/H	OVERHEAD ELECTRIC LINE
⊕ MW-101	MONITORING WELL LOCATION
246.01	GROUNDWATER ELEVATION
NA	NOT ANALYZED
ND	NOT DETECTED
(BOLD) 24.32	ONE OR MORE COMPOUNDS EXCEEDS NEW YORK STATE SOIL CLEANUP OBJECTIVE
⊕ MW-101R	PROPOSED REPLACEMENT MONITORING WELL LOCATION
● B-105	PROPOSED SOIL BORING LOCATION
▲ SV-3	PROPOSED SOIL VAPOR SAMPLE LOCATION

NOTE:
MW-101 WAS DRY DURING THE JUNE 2005 SAMPLING EVENT.

SOURCE:
LANDS OF THOMAS J. PRAY AND DEBRA COTTRELL, MILTON AVENUE, VILLAGE OF BALLSTON SPA - SARATOGA COUNTY, STATE OF NEW YORK; PREPARED BY SNYDER ENGINEERING & LAND SURVEYING, LLP, ONEIDA, NEW YORK, SCALE: 1"=20', DATED MAY 19, 2005, REVISION DATED 7/7/05.

0 30 60
SCALE, FEET

BALLSTON SPA NON-OWNED FORMER MGP SITE
MILTON AVENUE
BALLSTON SPA, NEW YORK

NIAGARA MOHAWK - A NATIONAL GRID COMPANY
SYRACUSE, NEW YORK

GEI Consultants
Project 045400-1007

DATA SUMMARY AND PROPOSED ADDITIONAL SAMPLING LOCATIONS

March 2006 Figure 1

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