Geotechnical
Environmental
Water Resources
Ecological

December 5, 2011

Mr. Scott Deyette
New York State Department of Environmental Conservation
Remedial Bureau C
625 Broadway
Albany, NY 12233-7014

RE: Canal Street Former MGP Site - Fort Edward, New York
Pre-Design Investigation Work Plan
NYSDEC Site #V00472
Index #: D0-0001-0011

Dear Mr. Deyette:

On behalf of National Grid, this letter provides a Work Plan for the Pre-Design Investigation (PDI) of off-site impacts associated with the Canal Street Former Manufactured Gas Plant (MGP) site in the Village of Fort Edward, New York.

Site Background

The Canal Street site is a small, 1.6 acre MGP site located at 22 Canal Street. The MGP was operated between about 1900 and 1924.

Former MGP structures, pipes, and associated soils located on the MGP site property were investigated and removed during previous investigation activities and two Interim Remedial Measures (IRMs). The site history, physical setting, and results of the investigation and IRM activities were summarized in an IRM Construction Completion Report (MWH, 2011a).

Additional investigation activities were conducted on adjacent off-site properties. The investigation activities conducted on adjacent off-site properties included test pit investigation activities on properties to the east and south of the MGP site. The results of this test pit investigation were reported in a Technical Memorandum dated April 12, 2011 (MWH, 2011b). Background samples were collected and analyzed for benzene, toluene, ethylbenzene, xylene (BTEX) and polycyclic aromatic hydrocarbons (PAHs) from adjacent off-site properties, with no exceedances of New York State Department of Environmental Conservation (NYSDEC) Residential Soil Cleanup Objectives (RSCOs). These results were reported in a Technical Memorandum dated October 3, 2011 (MWH, 2011c).

National Grid will prepare a Remedial Action Work Plan (RAWP) which will provide a comprehensive plan to address the remaining off-site MGP impacts. This will be used by the NYSDEC to select a site remedy and prepare a Decision Document. Once public comment and a Decision Document have been obtained, National Grid will prepare plans and

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specifications for bidding of the remediation contract and will proceed with the remediation and implementation of any required institutional and engineering controls.

We anticipate the remedy will involve excavation in two off-site areas; one located south and one located east of the National Grid owned property. During a site walk on September 14, 2011 with representatives of National Grid, NYSDEC, MWH and GEI, it was determined that a PDI would be necessary to further define the nature and extent of MGP impacts in the property located to the east of the MGP site (East Property – Former Robinson and O'Mara Parcels). The focus of the PDI will be on the clay pipe in the East Property, and the former septic tank in the South Property. Removal of these structures with visual confirmation of the excavation limits will be the goal of the RAWP. The details of the proposed PDI are described below.

East Property – Former Robinson and O'Mara Parcels

The goal of further investigation on the East Property will be to determine the location of the end of the clay pipe, and assess potential associated MGP impacts, so that specifications and design drawings can be prepared that establish the limits of excavation. It is essential that the dimensions and limits of the MGP impacts be well defined by this task, and that non-MGP-related impacts be excluded from the areas to be excavated. The known terminus of the clay pipe near the exposed combined sewer outfall (CSO) pipe will serve as the starting location for traversing the pipe and determining whether or not the clay pipe is presently parallel to the CSO. In the previous excavations in the CSO area, Test Pit #7, Test Pit #8 and Test Pit # 9, the clay pipe was found at depths ranging from 1 foot to 6 inches (MWH, 2011b, Table 1). Therefore, we will conduct hand borings and shallow hand-dug trenches to make these observations.

Soil containing ash that may be from background, non-MGP sources but found close to the clay pipe, will be sampled for laboratory evaluation. The laboratory evaluation will consist of microscopic examination and characterization of the ash with regard to its origin and association with the MGP or non-MGP sources. The goal of this analysis will be to determine whether or not the ash is associated with the former MGP operations. A description of wood and coal ash as found in the Northeastern US and the laboratory evaluation method is attached (LSP Association, 1999).

In addition, two samples of ash-containing soil collected from near the clay pipe will be analyzed for MGP constituents of concern as follows:

- BTEX – Method 8260B ASP Category B Deliverable
- 17 PAHs – Method 8270C ASP Category B Deliverable
- Total Cyanide – Method 9012A ASP Category B Deliverable

At each test trench location where the clay tile pipe or other MGP residual materials are discovered, the condition of the piping and soils will be documented with photographs. The depth of the pipe invert will be measured from grade, and the approximate distance from the prior test pits or other known landmarks will be measured and recorded.

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Figure 1 depicts the approximate test trench locations.

Additional PDI Activities

The soils in the eastern off-site area and southern off-site areas anticipated to be within the limits of remedial excavation will be sampled and characterized as required for off-site disposal. These sampling locations are shown on Figure 1. We anticipate off-site disposal at a combination of the Town of Colonie Landfill and ESMI New York. Additional samples may need to be collected and analyzed during site remediation.

Backfill soil from a local borrow source will also be sampled and analyzed during the PDI, in accordance with NYSDEC requirements in DER-10, Appendix 5.

The PDI activities will include examining drawings at the Ft. Edward/ Washington County sewer district to determine sewer connections from the cottage on the southern off-site property (McCue property) to the tank and/or to the nearby Washington County sewer pump station. This information will be used in the design documents to instruct the remediation contractor to either cut-and-cap the piping, or to re-route the piping from the building, as appropriate.

PDI locations and additional property boundaries will be surveyed so that accurate design drawings can be prepared.

Due to the hand exploration and minimal disturbance of soils, it does not appear that a full Community Air Monitoring Program (CAMP) will be necessary during the PDI. The field crew will conduct work space monitoring with a photo-ionization detector (PID) and dust meter to provide for the CAMP.

Health and Safety

The PDI work will be conducted in accordance with a site-specific Health and Safety Plan (HASP). We anticipate that the work will be conducted in Level D personal protective equipment (PPE). All open test trenches will be considered “exclusion zones” and secured using stakes and caution tape. Spoils removed from the trenches and hand borings will be placed on polyethylene sheeting to facilitate cleaning up around the sampling locations. Test trenches will be backfilled before the end of each day.

Reporting

The preliminary results of the PDI will be reported via email to the NYSDEC. The final results will be documented in the RAWP. The laboratory results for ash characterization will be reported in an ASP Category B Deliverable package, in accordance with NYSDEC data deliverable requirements. A Data Usability Summary Report (DUSR) will be prepared for these analyses.

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Please feel free to contact me at any time at (607) 216-8956 with any questions you may have regarding the information provided in this Work Plan. Please direct the Department's official comments or response to Mr. Steve Stucker, National Grid's Project Manager for the site.

Sincerely,

GEI CONSULTANTS, INC.

John T. Finn

John T. Finn, P.E.
Senior Project Manager

JTF:mlr

Attachment: Figure 1 – Proposed Test Trench and Waste Characterization Locations

cc: Steve Stucker – National Grid
Deanna Ripstein – NYSDOH

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References

LSP Association, 1999. Report on Methods for Evaluating Application of the Coal Ash and Wood Ash Exemption Under the Massachusetts Contingency Plan, October 19, 1999.

MWH Americas, Inc. (MWH), 2011a. Interim Remedial Measure (IRM) Construction Completion Report, Fort Edward, NY (Canal Street) Former MGP Site, October 2011.

MWH, 2011b. Technical Memorandum - Adjacent Property Test Pit Investigation, Interim Remedial Measure (IRM), Fort Edward (Canal St.) Non-Owned Former MGP Site, April 12, 2011.

MWH, 2011c. Technical Memorandum - Clay Pipe Excavation Documentation and Off-Site Background Samples (9/13/2011), Fort Edward (Canal St.) Non-Owned Former MGP Site, Fort Edward, Washington County, Site #V00472, October 3, 2011.

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LEGEND:

- TP-A — PREVIOUS TEST PIT
- NG-BG-E1 — BACKGROUND PAH/BTEX SAMPLE
- NG PIPE-2 — CLAY PIPE EXCAVATION DOCUMENTATION SAMPLE
- PROPOSED TEST TRENCH
- PROPOSED WASTE CHARACTERIZATION SAMPLE

TM# 171.06-3-7
NOW OR FORMERLY
GIRARD
BK. 867, PG. 257

TM# 171.06-3-8
NOW OR FORMERLY
CHASE
BK. 648, PG. 262

TM# 171.06-3-9
NOW OR FORMERLY
DU FORE
BK. 427, PG. 246

TM# 171.06-3-10
NOW OR FORMERLY
REA
BK. 632, PG. 28

TM# 171.06-3-13

TM# 171.06-3-11

TM# 171.06-3-12
NOW OR FORMERLY
ROBINSON
BK. 548, PG. 80

TM# 171.06-3-14
NOW OR FORMERLY
O'MARA

TM# 171.06-3-15

S83° 13' 00"E 67.06'

S83° 59' 11"E 132.58'

S00° 51' 06"W
24.87'

S86° 29' 07"E 113.23'

S22°57'48"E 214.00'

N11° 51' 01"W 229.06'

CANAL STREET

NIAGARA MOHAWK POWER CORP.
BK. 892, PG. 141 AREA = 1.53± ACRES

PEAT-LINED TRENCH
EXCAVATED IN 2010

130 × 30

130 × 128

PIPE EXCAVATED
IN 2010

NG PIPE-1
4" CLAY PIPE

NG PIPE-2

PIPE LOCATION
3/23/2011 276±
LINEAR FEET

TP#1
TP#2
TP#3
TP#4
TP#5
TP#6
TP#7
TP#8
TP#9
TP#10

NG-BG-E1
NG-BG-E2
NG-BG-E3
NG-BG-E4
NG-BG-E5

WASHINGTON CO. SEWER
AUTHORITY CSO

N87° 55' 24"W 347.76'

APPROXIMATE SEPTIC
LOCATION AS PER
HOMEOWNER

NG-BG-S1
NG-BG-S2
NG-BG-S3
NG-BG-S4
NG-BG-S5

TP-B

BURIAL

TM# 171.06-3-31
NOW OR FORMERLY
MCCUE
BK. 876, PG. 175

TM# 171.06-3-29
ZURMUHLEN, FREDERIC
44-46 NOTRE DAME ST
(APARTMENT BUILDING)

TM# 171.06-3-30.3
NOW OR FORMERLY
SUPRENANT

18" CLAY PIPE

TP-A

SOURCE:

1. FIGURE BASED ON FIGURE 1 OF MWH TECHNICAL MEMORANDUM--ADJACENT PROPERTY TEST PIT INVESTIGATION IRM, APRIL 12, 2011.

0 50 100
SCALE, FEET

FORT EDWARD (CANAL STREET)
FORMER MGP SITE
FORT EDWARD, NEW YORK

nationalgrid

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Project 116820-1-1102

PROPOSED TEST TRENCH LOCATIONS

November 2011 Figure 1

I:\Project\National Grid\Fort Edward - Canal Street\Fort Edward - Proposed Test Trench Locations.dwg