

August 8, 2013

Ms. Elizabeth Lukowski  
Remedial Project Manager  
New York State Department of Environmental Conservation  
Division of Environmental Remediation, Remedial Bureau C, Section A  
625 Broadway, 11th Floor  
Albany, NY 12233-7014

Subject: Off-Site Investigation Work Plan  
Patchogue Former MGP Site  
NYSDEC Site No. 1-52-182  
Village of Patchogue, Suffolk County, New York

Dear Ms. Lukowski:

This letter presents a work plan for off-site investigation activities at the Patchogue Former Manufactured Gas Plant (MGP) site (hereinafter referred to as the "Site"). These activities are being performed in response to Comment No. 5 from the New York State Department of Environmental Conservation (NYSDEC) in their letter to National Grid dated June 12, 2013, which provided comments on the report entitled "Remedial Design Report, 50-75% Submission, NYSDEC Site No. 1-52-182, Village of Patchogue, Suffolk County, New York" (Brown and Caldwell Associates, December 2012). Specifically, the NYSDEC stated that "A clean line must be established for the excavation limits of the off-site excavation" and requested that, due to the impacts observed at recent geotechnical soil borings located proximal to the excavation limits shown in the 50-75% Remedial Design Report (i.e., GI-5 and GI-6), modifications to the southern and eastern limits of the off-site excavation is necessary. The NYSDEC specifically requested to either extend the southern and eastern excavation limits to soil boring locations that are considered to be un-impacted (e.g., PASB-35 and PASB-44), or conduct additional delineation of the off-site impacts. National Grid has elected to perform additional delineation of the observed impacts and this letter describes the proposed off-site investigation activities.

The activities associated with the off-site investigation and a schedule for their implementation are presented in the following sections. Work will be conducted in accordance with the following plans:

- Generic Field Sampling Plan for Site Investigations at Non-Owned Former MGP Sites, (Foster Wheeler, November, 2002) (referred to as "FSP").
- Generic Quality Assurance Project Plan for Site Investigations at Non-Owned Former MGP Sites, (Foster Wheeler, November, 2002) (referred to as "QAPP").

The site-specific Health and Safety Plan (HASP) for the Site will be updated for the activities described below, which will include procedures for community air monitoring that will be conducted in accordance with the New York State Department of Health's Generic Community Air Monitoring Plan (Appendix 1A of the NYSDEC's Technical Guidance for Site Investigation and Remediation).

### **Property Access**

As described below, planned activities include the drilling of soil borings on the off-site property located east of the former MGP site. Upon approval of this work plan, National Grid will notify the property owner of the planned activities and renew, as necessary, the access agreement with the owner of this property.

### **Utility Mark-Outs and Clearance**

Prior to conducting the intrusive activities described below, New York 811, the Village of Patchogue, and Suffolk County Water Authority will be contacted to clear underground utilities. In addition, clearance of subsurface utilities in the area of the proposed drilling locations will be confirmed by physical means (e.g., hand auger, vacuum soil extraction). Physical clearance will be used to remove the soil at the proposed drilling locations to a depth of 5' below ground surface.

Some of the proposed drilling locations may be adjusted to provide for adequate clearance from underground and aboveground utilities. The final locations for the drilling locations will be determined in the field following the mark-out of underground utilities and completion of the physical clearance efforts.

### **Soil Borings**

Off-site investigation activities will be performed, via the implementation of a soil boring program, to further evaluate the extent of impacts observed on the off-site property to the east of the former MGP site. Soil borings are proposed at three locations at the approximate positions shown on Figure 1. The borings are proposed to delineate impacts between GI-5 and PASB-44 and between GI-6 and PASB-35. If impacts are observed in the borings, "step-out" borings will be completed to further evaluate the extent of the impacts.

As mentioned above, the locations of these borings may be modified based on the utility mark-outs and clearance activities.

The soil borings will be advanced using direct-push technology (e.g., Geoprobe<sup>®</sup>) and continuously sampled with a four-foot long, sampler (e.g., Dual Tube<sup>®</sup> or Macrocore<sup>®</sup>) to a minimum of 10 feet below ground surface (bgs). However, in the event that impacts are identified near the base of the boring, efforts will be made to further evaluate the vertical extent of impacts by extending the borings deeper than 10 feet bgs. The soil samples will be described in the field to characterize soil

type, including grain size, texture, and apparent moisture content. Soil samples will be logged in accordance with the Burmister Soil Classification System and classified using the Unified Soil Classification System (USCS) as per the FSP. The samples will also be field screened for indications of MGP-related impacts or other impacts based on appearance, odors or vapor concentration measurements using a calibrated photoionization detector (PID). Head-space screening of the soil will be conducted using the PID by immediately transferring a representative subsample of the soil to a clean glass jar and sealing its lid with aluminum foil. To allow the sample to equilibrate, it will remain sealed for a period of approximately 15 minutes. The tip of the PID will be inserted through the foil and the maximum instrument reading recorded. Visible non-aqueous phase liquid (NAPL), if encountered, will be noted and described with regard to color, odor, viscosity, consistency, and distribution in the sample (i.e., degree of NAPL saturation).

In addition to the above-described soil sample classification/characterization methods, the soil samples will be described in accordance with the NYSDEC's standard "Field Descriptions of Samples for Former Manufactured Gas Plant (MGP) Sites".

No analytical samples will be collected during the proposed field investigation. Upon completion, the soil borings will be filled with cement/bentonite grout and marked for surveying.

### **Survey**

Surveying of the soil borings that are completed, including any "step-out" borings that are drilled will be performed following completion of the drilling program. The survey will include location coordinates, and ground surface elevation data. Coordinates will be referenced to the State Plane coordinate system for New York using the North American Datum of 1983 (NAD 1983) in units of feet. Elevations will be referenced to the North American Vertical Datum of 1988 (NAVD88) in units of feet. The survey will be performed by a New York State licensed surveyor.

### **Data Evaluation and Reporting**

A summary of each day's field work, including borings completed and relevant observations associated with the borings such as depths and descriptions of impacts, will be submitted via e-mail to the NYSDEC before the start of the next day's work. Upon review and evaluation of the findings from the off-site investigations activities, materials will be prepared and submitted to the NYSDEC as part of the 95% Remedial Design Report (RDR). The materials will include:

- Soil boring logs;
- Updated geologic cross-section C-C' incorporating observations from the off-site investigation; and
- Revised Remedial Action Plan (i.e., Drawing C-108 from the 50-75% RDR) depicting modified limits for the off-site excavation area based on observations from the proposed off-site investigation borings.

Ms. Elizabeth Lukowski

August 8, 2013

Page 4

### **Schedule**

Field activities will be scheduled following approval of this work plan and coordination with the property owner to the east of the Site. It is anticipated that approximately three days will be required to complete the physical clearance activities and completion of the soil borings.

If you should have any questions, comments or require any additional information, please do not hesitate to contact me (516) 545-2586.

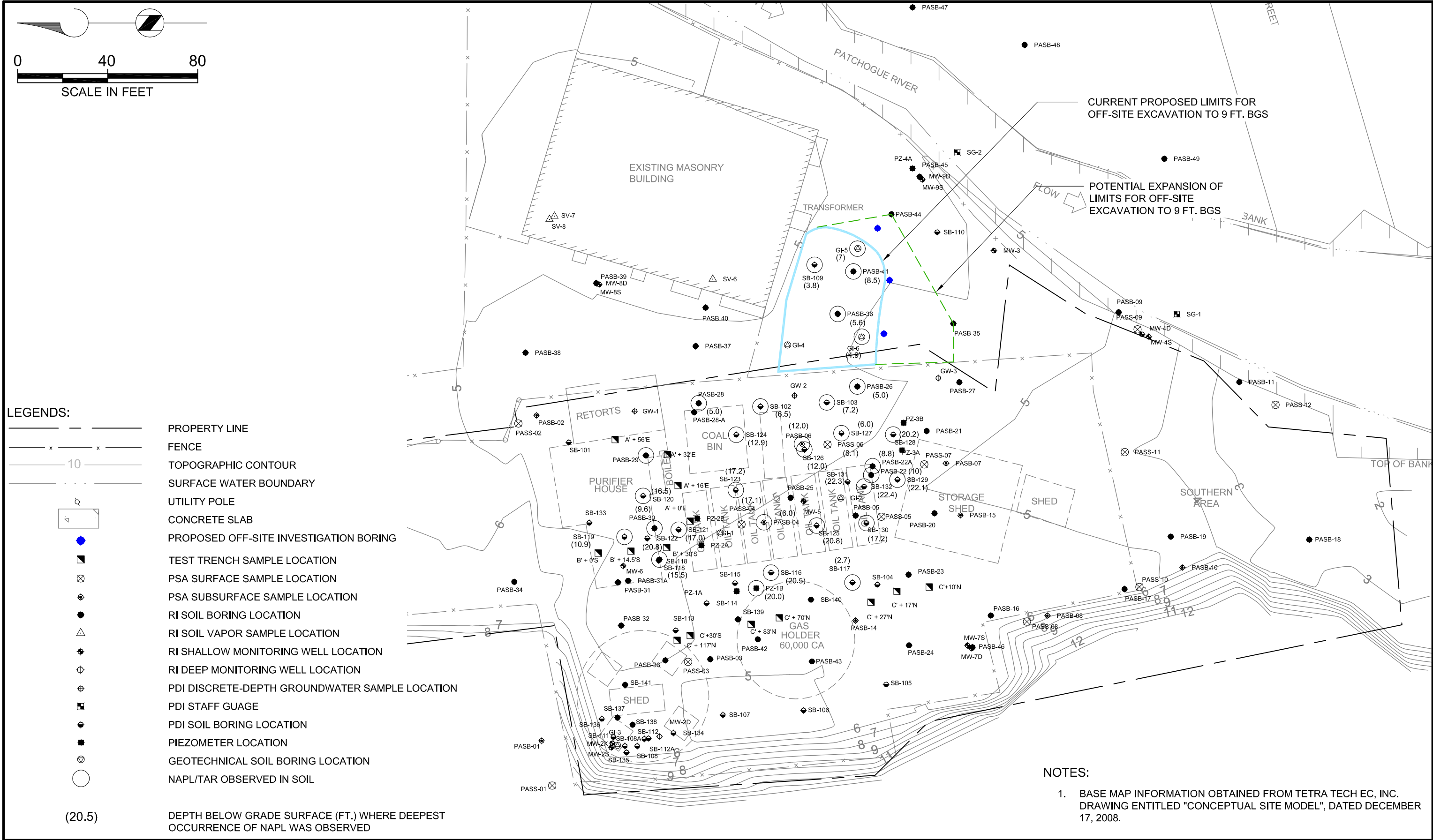
Sincerely,

A handwritten signature in black ink, appearing to read "WJ Ryan", followed by the word "FOR" in a similar handwritten style.

William J. Ryan  
Project Manager, Site Investigation and Remediation

### **Attachment**

cc: J. Nealon, NYSDOH  
A. Juchatz, SCDHS  
R. Milito, SCDHS  
G. Heitzman, NYSDEC  
G. Cross, NYSDEC  
S. Deyette, NYSDEC



SCALE: 1" = 40'  
142128  
DATE: August 8, 2013

PROPOSED OFF-SITE INVESTIGATION LOCATIONS

FIGURE

1