

February 1, 2016

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 Addendum  
Patchogue Former MGP Site  
NYSDEC Site No. 1-52-182  
Village of Patchogue, Suffolk County, New York

Dear Ms. Lukowski:

This letter serves as an addendum to the off-site investigation letter work plan dated August 8, 2013 prepared by Brown and Caldwell Associates (BC). The off-site investigation activities were conducted on the property, 212 West Main Street, located immediately adjacent to and east of the Patchogue Former Manufactured Gas Plant (MGP) Site formerly occupied by Above All Store Fronts, Inc. The activities detailed in the August 8, 2013 work plan were implemented on May 7 and 8, 2014. The results of these activities were summarized in a letter summary report which was submitted to the New York State Department of Environmental Conservation (NYSDEC) and dated June 18, 2014. Since the performance of these activities, the owner of the 212 West Main Street property has provided National Grid with limited access to the property to perform additional investigative activities.

The activities contained in this work plan addendum are being performed to provide additional delineation of the off-site impacts previously observed on the off-site property. Specifically, indications of MGP-related impacts including visible non-aqueous phase liquid (NAPL)-like material were observed in the subsurface soils and groundwater during the field activities conducted on the off-site property during the May 2014 field activities. Based on these noted impacts, as summarized in the June 18, 2014 letter, National Grid has elected to perform additional characterization and delineation of the observed impacts. The scope of work for these proposed additional activities are described in this work plan addendum. The main objective of these additional delineation activities to be performed on the 212 West Main Street property is to define the extent of visible MGP-related impacts pursuant to the March 2011 Record of Decision (ROD).

The investigation activities 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”).
- DER-10/Technical Guidance for Site Investigation and Remediation (NYSDEC, May 2010).

The site-specific Health and Safety Plan (HASP) for the Site will be updated for the activities described below. The HASP will include procedures for community air monitoring that will be conducted in general accordance with the New York State Department of Health’s (NYSDOH’s) Generic Community Air Monitoring Plan [Appendix 1A of “DER-10/Technical Guidance for Site Investigation and Remediation” (NYSDEC, May 2010)].

### Property Access

As described below, the proposed activities include the drilling of soil borings on the 212 West Main Street property located east of the former MGP site. National Grid has obtained access with the Owner of the 212 West Main Street property to allow for performance of the work.

### Utility Mark-Outs and Clearance

Prior to conducting the intrusive activities described below, New York 811, the Village of Patchogue, and the 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, post-hole digger, etc.). Physical clearance will be used to remove the soil at the proposed drilling locations to a depth of 5 feet below grade or shallower depending on the depth to groundwater saturated soil conditions. Saturated soil conditions have been observed as shallow as 3 feet below grade on the off-site property. In addition, as performed during previous investigation activities on the off-site property, a surface geophysical survey contractor will also be contracted to attempt to identify and mark locations of potential subsurface structures, piping, utilities and other potential subsurface impediments within the proposed investigation areas. The survey contractor will mark out a radius of 10 feet from each proposed boring location.

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, results of the surface geophysics and completion of the physical clearance efforts.

### Soil Borings

Investigation activities on the off-site property will be performed, to supplement the investigation activities performed in May 2014 to further evaluate the extent of impacts in accordance with the off-site removal criteria previously established in the NYSDOC’s March 2011 ROD. The off-site excavation will remove visual co-mingled MGP-related impacts and petroleum impacts in soil to a depth of approximately 9 feet bgs. Petroleum impacts were not caused by the former MGP. In

order to complete delineation efforts using these criteria, soil borings are proposed at two locations at the approximate positions shown on Figure 1. The borings are proposed to delineate impacts southeast of soil boring SB-206 where viscous NAPL-like material was observed partially coating pieces of wood and sand grains. The soils from this location also exhibited an iridescent sheen and a naphthalene-like odor was recorded during the logging of soils from this location. These visible indicators of NAPL-like material, and naphthalene-like olfactory impacts, were observed in the depth interval from 3.5 to 4 feet below grade.

If impacts meeting the ROD criteria for the off-site excavation 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.

Depending on drilling equipment access conditions, the soil borings will be either be advanced using direct-push technology (e.g., Geoprobe<sup>®</sup>) or conventional drilling methods (e.g., hollow-stem augers) and continuously sampled with either a four-foot long sampler (e.g., Dual Tube<sup>®</sup> or Macrocore<sup>®</sup>) or two-foot long split-spoon sampler, respectively. The soil borings will be advanced from ground surface to a minimum depth of 10 feet below grade. 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 below grade. 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) per the FSP. The samples will also be field screened for indications of MGP-related impacts and/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 or to a sealable polyethylene plastic bag (e.g., Ziploc<sup>®</sup>). 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, or through the plastic bag, and the maximum instrument reading recorded. Visible 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 referring to the NYSDEC’s general guidance “Field Descriptions of Samples for Former Manufactured Gas Plant (MGP) Sites”.

Per the August 8, 2013 letter work plan, no analytical samples will be collected from the proposed soil borings. 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 the field work, including borings completed and relevant observations associated with the borings such as depths and descriptions of impacts (if encountered), will be submitted via e-mail to the NYSDEC within two to three days following completion of the field efforts. Upon review and evaluation of the results and findings from the off-site investigations activities, materials will be prepared and submitted to the NYSDEC in the form of a letter summary report that will discuss the results of the investigation. The materials will include:

- Soil boring logs;
- Updated geologic cross-sections incorporating observations from the off-site investigation;
- 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 results from the proposed off-site investigation borings.

#### **Schedule**

Field activities will be scheduled following approval of this work plan and coordination with the owner of the off-site property. It is anticipated that up to two 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 "Sarah Aldridge", with a stylized flourish at the end.

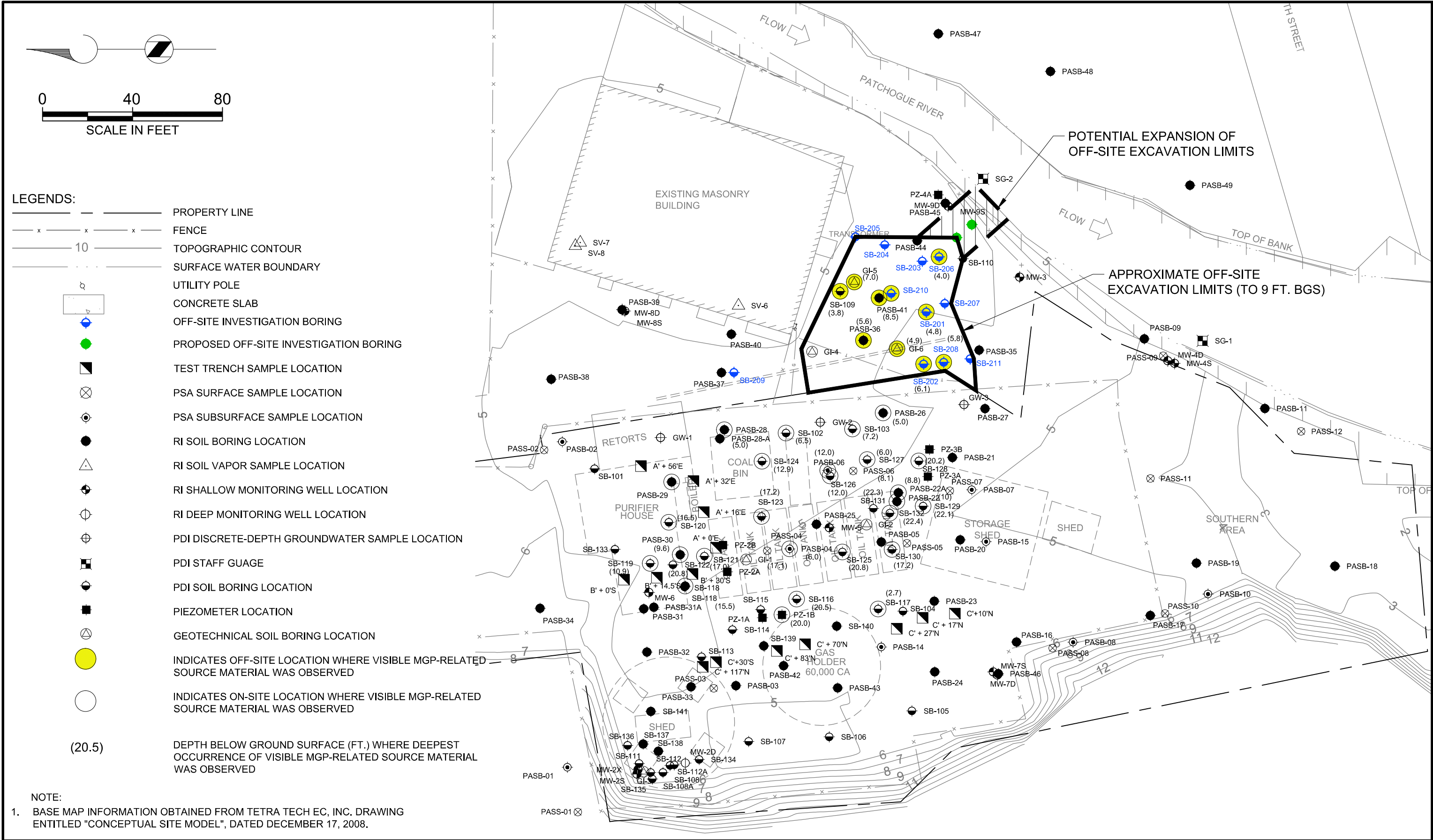
Sarah Aldridge  
Project Manager, Site Investigation and Remediation

#### **Attachments**

cc: J. Nealon, NYSDOH  
A. Juchatz, SCDHS  
R. Milito, SCDHS  
F. Murphy, Esq., National Grid

T. Leissing, National Grid  
S. Deyette, NYSDEC





SCALE: 1" = 40'

142128

DATE: FEB. 1, 2016

NATIONAL GRID

PATCHOGUE FORMER MGP SITE  
234 WEST MAIN STREET  
VILLAGE OF PATCHOGUE, NEW YORK

## PROPOSED OFF-SITE INVESTIGATION LOCATIONS

FIGURE

1