nationalgrid

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Lead Engineer
Environmental Department

June 29, 2009

Mr. Charles Post
Engineering Geologist
New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau C, 11th Floor
625 Broadway
Albany, NY 12233-7014

Re: Proposed Sediment and Seep Sampling Work Plan
Watertown (Anthony St.) Non-Owned Former MGP
Site # V004736
Watertown, Jefferson County

Dear Mr. Post:

This letter presents National Grid's proposed scope of work for collecting additional data to support the Remedial Investigation (RI) of the Anthony Street Non-Owned Former Manufactured Gas Plant (MGP) site located on J.B. Place in Watertown, New York. The fundamental elements of the scope of work presented herein were largely agreed upon during the site meeting between the New York State Department of Environmental Conservation (NYSDEC), National Grid, and ARCADIS on June 17, 2009. This letter formalizes the scope discussed during that meeting.

As discussed during the meeting, the proposed scope of work will consist of three components:

1. Evaluating the presence and construction of the sewer lines located between the site and the Black River;

2. Collecting sediment samples from below the surface water along the southern edge of the Black River riverbank; and

3. Collecting ground water seep samples from the Black River riverbank.

These three components are discussed separately below.

Sewer Line Construction

We currently have alignment and invert elevation information for the sewer lines that run through the parking lot located between the Empsall Plaza building and City Center Drive. Figure 1 shows the alignment of the sewer lines. We still need to obtain information regarding sewer lines that may exist beneath and to the north of City Center Drive. National Grid will contact the City of Watertown Engineering Department and/or Department of Public Works (DPW) offices to attempt

to obtain this information. If unsuccessful, we will contract a New York State licensed surveyor to locate sewer lines and determine invert elevations in reference to the datum established for the site (i.e., NAVD 1988).

National Grid will prepare a plan view figure to be included in the letter report for the fieldwork discussed in this letter. The figure will show the sewer lines with measured invert elevations and the elevation of bedrock encountered in soil borings, test pits, and monitoring wells. This figure will be used to evaluate the potential for sewer lines to be providing a preferential pathway for migration of MGP-related materials.

Sediment Sampling

As discussed during the June 17th meeting, National Grid will attempt to collect 3 to 5 sediment samples along the southern edge of the Black River. The area proposed for sediment sampling is shown on attached **Figure 1**. Much of this area of the river contains high energy and there does not appear to be substantial "sampleable" sediment deposits. As we discussed, the sampling work will be conducted from the land (i.e., not by boat). We will attempt to collect sediment samples from accessible lower energy areas where sediment deposits may exist. As you know, we identified a few of these areas during our meeting. The first step in sampling will be to probe river bottom in the area shown on the figure to determine if sediment exists. If substantial sediment deposits exist, then samples will be collected using sediment core sampling techniques. If little to no sediment exists, then samples will be collected using dredge-type sampling equipment. Collected samples will be analyzed for Target Compound List (TCL) volatile organic compounds (VOCs), TCL semi-VOCs (SVOCs), and total cyanide.

National Grid agrees to collect a sample of the tar-like material located at the toe of the slope, near the southern edge of the river. This material is located approximately 100 feet downriver from the Adirondack Rafters building. Based on visual observation, it appears this material is a degraded stack of roofing shingles. However, as requested, we will collect a sample of this material for analysis of TCL VOCs, TCL SVOCs, and total cyanide, in order to verify that it is not coal tar residuals. A forensic chemist will evaluate the analytical results to confirm that the material is non-MGP.

Seep Sampling

National Grid will attempt to collect 3 to 5 ground water seep samples from the riverbank located in the area shown on **Figure 1**. At least one seep sample will be collected near the Adirondack Rafters building. This sample will be collected by digging a hole in the soft overburden materials, allowing the hole to fill with water, then collecting the water into sample containers. The remaining seep sample(s) will be collected downstream from the Adirondack Rafters building along the bedrock seepage face. There were not many seeps observed during the June 17th meeting; however, there were several wet areas and puddled water located on the rock surface (at least 6-inches above the river level) in the area shown on Figure 1. There was one active seep with dripping water located on the rock face near the rapids shown on Figure 1. The area of the rapids represents the lowest hydraulic head area in vicinity of the site. As such, it is reasonable to assume

that ground water beneath the site is moving in the direction of this area of lower hydraulic head. The field crew will bring various types of sampling equipment to attempt to collect the seep samples, including disposable syringes, plastic sheet (to direct flow), poly ethylene tubing, and peristaltic pumps. Seep samples will be analyzed for TCL VOCs, TCL SVOCs, and total cyanide.

Field Methods and Sampling Protocol

Where applicable, the sampling activities will be conducted in general accordance with the NYSDEC-approved *Generic Site Characterization/IRM Work Plan for Site Investigations at Non-Owned Former MGP Sites* and supporting appendices (Field Sampling Plan [FSP] and Quality Assurance Project Plan [QAPP]), dated November 2002. Given the scope of the fieldwork, the field crew may need to improvise while in the field to meet the objectives of the sampling program, particularly during the seep sampling. The Generic FSP does not contain a protocol for seep sampling and, as such, the approach for the seep sampling will need to be developed in the field based on field conditions.

As described in the QAPP, sediment and seep samples will be submitted for laboratory analysis using United States Environmental Protection Agency (USEPA) SW-846 Methods as referenced in the most recent edition of the NYSDEC Analytical Services Protocol (ASP), with Category B analytical laboratory reports. As previously mentioned, sediment and seep samples will be analyzed for TCL VOCs, TCL SVOCs, and total cyanide. A Data Usability Summary Report (DUSR) of the laboratory data packages will be prepared and the results of the DUSR will be incorporated into data tables prepared for the project.

The sediment and seep sample (including quality assurance/quality control [QA/QC] samples) will be collected, packaged, handled, and shipped in general accordance with the QA/QC protocols and presented in the FSP and QAPP.

Schedule and Reporting

The proposed fieldwork will be conducted as soon as possible after National Grid has received NYSDEC's approval of this proposed scope of work, and the river level has reached a flow of approximately 2,500 cubic feet per second (cfs) or less. The river flow (as measured by the USGS gauging station near the Vanduzee Street bridge) during our site meeting on June 17, 2009 was approximately 2,500 cfs. It will be difficult to navigate the shoreline safely and reach all of the potential sediment and seep sampling areas if the river flow is much higher than 2,500 cfs. We request that a NYSDEC representative be present during the sampling work so that we can mutually agree upon sampling locations in the field.

A letter report will be prepared once field activities are completed and laboratory data are received and validated. If National Grid recognizes that additional work is warranted based on the results of the work proposed in this letter, then we will postpone submittal of the letter report and discuss a path forward with NYSDEC. The letter report will include a discussion of the completed fieldwork, the results and conclusions of the work, and an evaluation of the bedrock surface elevation in relation to the sewer line invert elevations. The text discussion will be supported by

tables summarizing the analytical results of the sediment and seep samples and a figure showing the sediment and seep sampling locations. As previously mentioned, the report will also contain a figure showing invert elevation of the sewer lines located between the site and the river and elevations of the bedrock surface encountered at investigations completed to date at the site.

Please contact me by phone at 315.428.5652 or by email at Steven.Stucker@us.ngrid.com if you have any questions.

Sincerely,

Steven P. Stucker
Environmental Department

Attachments

Cc w/att.:
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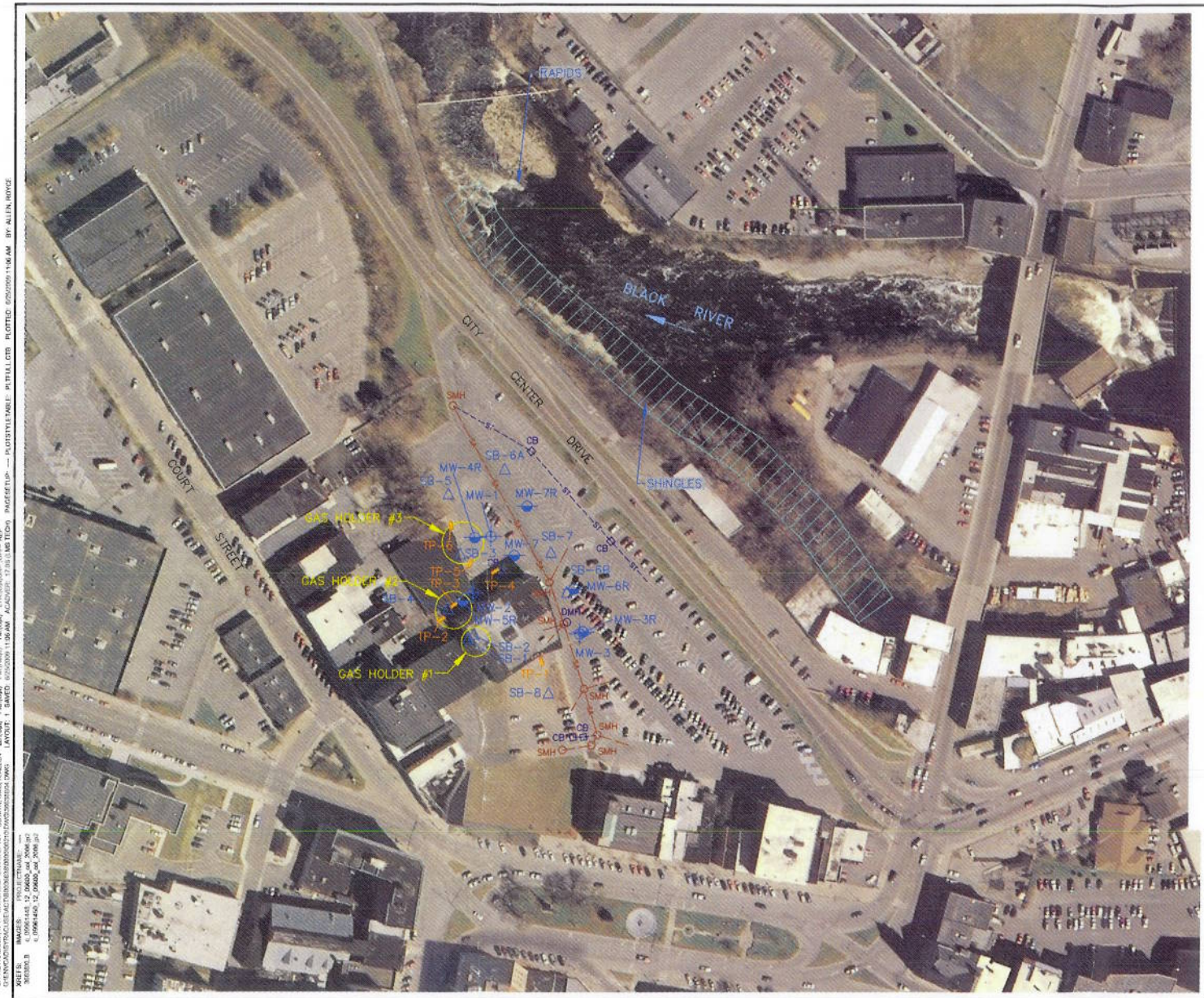

LEGEND:

- PROPOSED AREA FOR SEDIMENT AND SEEP SAMPLING
- SOIL BORING
- OVERBURDEN MONITORING WELL
- BEDROCK MONITORING WELL
- TEST PIT LOCATION
- SA — SANITARY SEWER LINE
- ST — STORM SEWER LINE

NOTES:

1. ALL HISTORICAL FEATURES ARE FROM SANBORN MAPS PROVIDED BY THE SANBORN LIBRARY, LLC PRODUCED BY ENVIRONMENTAL DATA RESOURCES, INC. (EDR).
2. BASE MAP IS FROM A SURVEY DONE BY WCT SURVEYORS, P.C., CANTON, NEW YORK ON APRIL 5, 2004, FILE # 103-218. UPDATED WITH SURVEY DONE BY C.T.MALE ON 11/12/08.
3. ELEVATIONS SHOWN ARE BASED ON NAVD 88 DATUM AS DETERMINED FROM STATIC GPS OBSERVATIONS AS PROCESSED BY THE NATIONAL GEODETIC SURVEY OPUS PROGRAM.
4. LOCATIONS OF ALL HISTORICAL FEATURES ARE APPROXIMATE.
5. AERIAL DOWNLOADED FROM THE "GIS CLEARINGHOUSE SITE", IN STATE PLANE NAD 83 COORDINATE SYSTEM ON 6/24/09.

0 150' 300'

GRAPHIC SCALE

NATIONAL GRID
WATERTOWN (ANTHONY STREET) FORMER MGP SITE
REMEDIAL INVESTIGATION

SEDIMENT AND SEEP SAMPLING AREA

ARCADIS

FIGURE 1