ARCADIS Design & Consultancy for natural and built assets

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Environment

Subject:
RG&E/112 Riverside Drive Former MGP Site
Geneseo, New York
Additional Site Characterization
NYSDEC Site #V00730

Date:
June 12, 2017

Contact:
Bruce W. Ahrens

Phone:
585.662.4034

Email:
bruce.ahrens@arcadis.com

Our ref:
66ENERGE.EN00

Dear Ms. Verrigni:

On behalf of Rochester Gas and Electric (RG&E), this letter presents a scope of work to complete additional site characterization activities at the at the 112 Riverside Drive former manufactured gas plant (MGP) site located in Geneseo, New York. The scope of work presented herein was developed based on the analytical results received from one of the sub-slab soil vapor sampling locations (SV-7) during the recent sampling event. Elevated volatile organic compounds (VOCs) were reported for soil vapor sample SV-7, which was located above the presumed location of a former gas holder associated with the former MGP operations. Preliminary review of the VOC analytes present in the soil vapor sample suggests the source of the vapors is a petroleum/gasoline product (i.e., not MGP related). However, RG&E proposes to collect soil samples to document the subsurface conditions within the suspected footprint of the former holder and around SV-7, to determine what degree area impacts exist or if the data presented can be attributed to an anomaly.

This letter provides applicable information and detail, where appropriate, of the soil sampling objectives, proposed sampling locations, along with analytical and reporting requirements. Field activities will be performed consistent with the requirements of the existing Department-approved *Site Characterization Work Plan for 112 Riverside Drive in Geneseo, New York* dated March 2016 (SC Work Plan), and supporting documents.

# 1. SCOPE OF WORK

## 1.1 Project Planning

A geophysical survey (GPR/EM) and One Call (811) were completed during previous site characterization field activities to locate public utilities; however, consistent with RG&E's and Arcadis' utility clearance protocols, One Call (811) will again be called to mark utilities outside the building adjacent to the proposed work area to confirm locations.

In addition, Arcadis will attend a site kick-off meeting with RG&E and a knowledgeable representative from FTT Manufacturing to select sampling locations where the FTT representative confirms that no private utilities exist beneath the floor slab. This meeting will occur during the first morning of field activities.

## 1.2 Soil Boring Installation

Three soil borings will be advanced within the presumed perimeter of the former gas holder located within the FTT Manufacturing facility footprint as shown on **Figure 1**. Actual locations may vary based on the configuration of the building interior and/or obstructions/private utilities encountered during the site kick-off meeting. Holes will be cored in the concrete floor to access the subsurface. The objectives of the borings will be to:

- Investigate whether the former gas holder floor exists
- Evaluate the subsurface conditions in the suspected area of the former gas holder and around SV-7.

Due to overhead height restrictions within in the building (9 to 9.5 feet), a low-profile drill rig will be required. Soil borings will be advanced using either direct-push technology (DPT) or mud rotary with 2-inch diameter by 4-foot-long macrocore samplers to continuously collect soil at each boring from grade to their final depth. Soil borings will be advanced either to the bottom of the holder (if present) or to the top of competent rock (that will be determined based on refusal). Soil recovered from each 4-foot interval will be visually characterized for color, texture, and moisture content as described in the *Field Sampling Plan* (FSP). Soil samples will be headspace-screened with a photoionization detector. The presence of staining, non-aqueous phase liquid, and obvious odors encountered in the soil will be noted/recorded.

Site restoration will be performed at the completion of the site activities; the concrete floor will be replaced in kind. The locations of the soil borings will be triangulated from permanent structures (e.g., walls, dock door, etc.) using a tape measure and will vary slightly from this plan.

Due to the limited scope of the indoor sub-slab soil vapor sampling, tasks associated with community air monitoring and citizen participation are not proposed.

## 1.3 Soil Sampling and Analyses

Up to two soil samples from each soil boring will be submitted for laboratory analysis, based on conditions encountered (one sample from the soil/bedrock or soil/holder bottom interface, and one additional sample to document extent of impacts, if any).

Samples will be submitted to an Environmental Laboratory Accreditation Program-certified laboratory under proper chain-of-custody. Laboratory analyses will be performed in accordance with United States Environmental Protection Agency SW-846 methodologies. Analytical test methods, sample handling procedures, required quality assurance/quality control (QA/QC) samples, and laboratory protocols are described in the FSP and *Quality Assurance Project Plan* (QAPP).

A summary of the sampling and analysis requirements is provided in **Table 1**.

### 1.4 IDW Waste Management

All investigation-derived waste (IDW) generated during the investigation will be containerized in Department of Transportation-approved 55-gallon drums provided by RG&E's driller, labeled as IDW (contents, generator, location, and date for appropriate offsite transportation and disposal) by Arcadis, and temporarily staged in a secure location. RG&E will arrange for waste sampling, transportation, and disposal.

## 2. REPORTING

The analytical data packages and associated QA/QC information will be reviewed to determine if they meet the project-specific criteria for data quality and use as identified in the approved QAPP. A DUSR summarizing the review results will be prepared as described in the SCWP and included as an appendix.

The existing draft *Site Characterization Report* (SCR) will be revised to include the additional tables, figures, and logs for the additional data collected, along with descriptions of the additional data collected.

## 3. SCHEDULE

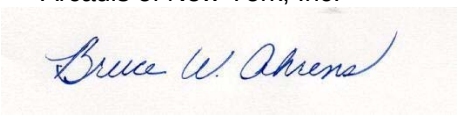
Based on the property owner's request to complete the site characterization as quickly as possible, an expedited review/approval of the scope of work described above is requested. RG&E would like to schedule the drilling program to be conducted the week of June 26 to 30, based on equipment availability.

A draft SCR will be submitted to the RGE within 30 days after receipt and validation of the site characterization data from the contract laboratory.

Please feel free to contact either Chris Keipper at 585.771.4560 or me at 585.662.4034 with any questions you may have.

Sincerely,

Arcadis of New York, Inc.



Bruce W. Ahrens
Associate Vice President

Copies:
Amen Omorogbe, P.E, NYSDEC
Keith White, Arcadis of New York, Inc.
Nicholas (Klaus) Beyrle, Arcadis of New York, Inc.

Enclosures:

**Tables**

1 Sampling and Analysis Summary

**Figures**

1 Soil Sampling Locations

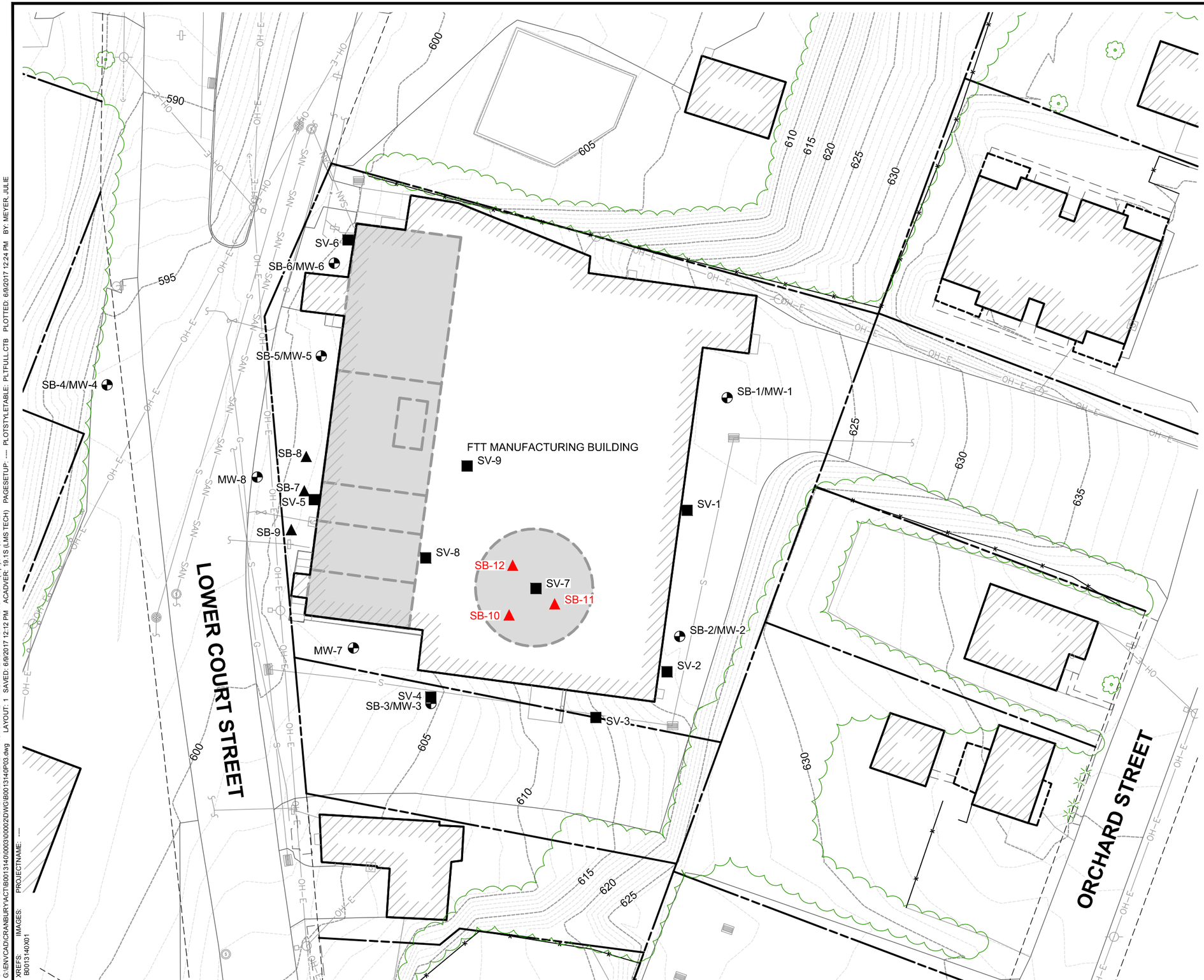
**Table 1**
**Sampling and Analysis Summary**

| Site Characterization | Media | Laboratory Analysis | Quantity of Samples* | Field QA/QC Samples | | | Laboratory QA/QC Samples | | Total |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Trip Blanks[1] | Field Blind Dups[3] | Equip Rinse Blanks[2] | MS/MSD | MSB/LCS | |
| SB-10, SB-11, SB-12 | Soil | TCL VOCs | 6 | 2 | 1 | 0 | 1 / 1 | 0 | 11 |
| | | TCL SVOCs | 6 | 0 | 1 | 0 | 1 / 1 | 0 | 11 |
| | | TAL Metals | 6 | 0 | 1 | 0 | 1 / 1 | 0 | 11 |
| | | Total Cyanide | 6 | 0 | 1 | 0 | 1 / 1 | 0 | 11 |
| | | C3-C10 PIANO (Gasoline Range Distribution) | 3 | 0 | 0 | 0 | 0 / 0 | 0 | 3 |
| | | TPH GRO/DRO | 3 | 0 | 0 | 0 | 0 / 0 | 0 | 3 |
| | | C8-C44 (Full Scan GC/MS) | 3 | 0 | 0 | 0 | 0 / 0 | 0 | 3 |

**Notes:**

1. One trip blank will be collected per cooler per day of samples for TCL VOC analysis (assume 2 days).
2. Equipment rinse blanks will be collected at a frequency of one per 20 if re-use equipment; not required if using disposable equipment (table assumes disposable equipment will be used)
3. Blind duplicate will be collected at a frequency of one per 20 and sent to the laboratory for analysis

TCL VOC analysis by USEPA SW-846 Method 8260B
TCL SVOC analysis by USEPA SW-846 Method 8270C
TAL Metals by USEPA Method 6000/7000
Total Cyanide by USEPA Method 9013A




**LEGEND:**

- PROPERTY LINE
- RIGHT-OF-WAY LINE
- BUILDING LINE
- FENCE LINE
- VEGETATION
- SANITARY SEWER LINE
- STORM SEWER LINE
- WATER LINE
- OVERHEAD ELECTRIC LINE
- NATURAL GAS LINE
- CONTOUR LINE-MAJOR
- CONTOUR LINE-MINOR
- SANITARY SEWER MANHOLE AND C.O.
- STORM SEWER MANHOLE AND INLET
- WATER HYDRANT, VALVE, AND VAULT
- ELECTRIC PULLBOX, METER, AND MANHOLE
- GAS METER AND VALVE
- UTILITY POLE, GUY, LIGHT POLE, AND TOP MOUNT LIGHT
- FORMER MGP STRUCTURE
- MONITORING WELL LOCATION
- PREVIOUS SOIL VAPOR SAMPLING LOCATION
- EXISTING SOIL BORING LOCATION
- PROPOSED SOIL BORING LOCATION

**NOTES:**

1. UNDERGROUND UTILITIES SHOWN HEREON WERE PLOTTED FROM VISIBLE EVIDENCE LOCATED AT THE TIME OF THE FIELD SURVEY, AND DESIGNATION MARKINGS BY A SUBSURFACE UTILITY ENGINEERING FIRM.
2. FORMER LOCATIONS AND SCALE OF GAS WORKS STRUCTURES FROM SANBORN LIBRARY, LLC 1913 MAP. LOCATIONS ARE APPROXIMATE.

**SOURCE:**

1. BASEMAP INFORMATION PROVIDED BY FISHER ASSOCIATES, LLC. DATED NOVEMBER, 2015. FILENAME: RIVERSIDE DRIVE.DWG. GEOREFERENCED TO NEW YORK STATE PLANE NAD83 COORDINATE SYSTEM.

0 40' 80'

GRAPHIC SCALE

ROCHESTER GAS & ELECTRIC
RIVERSIDE DRIVE FORMER MGP SITE
-

# SOIL SAMPLING LOCATIONS

ARCADIS Design & Consultancy for natural and built assets

FIGURE 1

CITY:CRANBURY-NJ DIV/GROUP:ENVCAD DB:JMEYER LD:JMEYER PIC:KWHITE PM:B.AHRENS TM:B.AHRENS LYR:(Opt)ON=*;OFF=*REF*
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