King, Matthew A (DEC)

From: Kopcow, Dan <dkopcow@geiconsultants.com>
Sent: Thursday, May 07, 2020 2:52 PM
To: King, Matthew A (DEC)
Cc: Holden, Jeffrey; Brad Walker (walkerb@natfuel.com); Tanya B. Alexander (alexandert@natfuel.com)
Subject: National Fuel Gas Hornell - Additional Shallow Soil Sampling Work Plan
Attachments: Hornell Addl Shallow Soil Sampling Work Plan 5-7-20.pdf

Hi Matt, hope you're staying safe. On behalf of National Fuel Gas, we are preparing the 95% Remedial Design and hope to submit to you for review later this month.

Also, we are providing the attached Additional Shallow Soil Sampling Work Plan for your review. This Work Plan will also be provided as an attachment to the 95% Remedial Design but we wanted to discuss with you sooner in hopes we can get it approved and implemented so that the results can be in the Final Remedial Design.

As you recall, the Hornell ROD requires soils in the uppermost foot of the site soils to meet commercial SCOs as part of the remediation. When scoping the SPDI, we discussed whether and to what extent to characterize shallow soils to evaluate what soils outside the support of excavation (SOE) boundary may require removal to meet that requirement. Samples were ultimately collected to delineate the residential properties to the south and within the regulator parcel to the west. However, a decision was made to limit assessment/delineation sampling to the north and east of the SOE considering the potential that the selected remediation contractor may elect to strip soils in this area to create a staging and support area, thus making pre-delineation unnecessary in such areas. We have discussed this topic with the selected contractor (ENTACT), and they confirmed that no soil stripping would be planned for the purpose of creating staging areas. Rather, they would likely build up the grade by placing geotextile fabric and stone to create working surfaces. Further, they were concerned that, without advanced delineation of any required shallow soil removal areas, the need to "chase" soils during implementation could create conflicts with the site layout. For example, they may establish foundation support areas for ISS silos, and then later determine those foundations fall within a required shallow soil removal area.

Based on the above, the Work Plan includes additional shallow soil sampling to assess the need for and extent of shallow soil removal in the north and eastern portions of the site. The target areas are outside the sheet pile boundary that will surround the around the area where deeper soil excavation and ISS are planned. Collection of these shallow soil samples can easily be completed in a day of field effort using manual methods. The resulting data will then be used to identify in the 100% design whether and to what extent shallow soil excavation may be required in these areas to meet ROD requirements.

We would like to schedule a call with you to discuss the Work Plan as well as some thoughts about the potential reuse of some site excavated soils as backfill on site. We will provide additional information about the soil reuse in advance of the call. Can you please provide me some available dates and times?

Thanks.

GEI50

DANIEL KOPCOW, P.E., PMP
Vice President/Branch Manager
607.216.8976 cell: 607.206.9075
1301 Trumansburg Road, Suite N, Ithaca, NY 14850

Work Plan for Additional Shallow Soil Sampling

On behalf of National Fuel Gas Distribution Corporation (NFG), GEI Consultants, Inc., P.C. (GEI) has prepared this Work Plan for Additional Shallow Soil Sampling for the Hornell Former Manufactured Gas Plant (MGP) Site.

Per the selected remedy in the New York State Department of Environmental Conservation's (NYSDEC) Record of Decision (ROD), a site cover will be required to allow for commercial use in areas where the upper one foot of exposed surface soil will exceed commercial Soil Cleanup Objectives (SCOs). Analytical results from prior soil investigations support delineation of the extent of soil removal targeted on residential properties to the south and the regulator parcel to the west. Shallow soils within the planned sheet pile support of excavation boundary will also be addressed by planned remedial activities in that area, including placement of a clean soil cover as part of the restoration. However, limited data exist to determine the extent of shallow soil removal that may be required to achieve the ROD-specified commercial SCO for soils located to the north and east outside the support of excavation boundary shown on the 95% Remedial Design Drawings. As such, additional shallow soil sampling is proposed to assess the need for and extent of shallow soil remediation in these areas. Sampling is also proposed at the 1- to 2-foot depth increment at most locations to assess the vertical extent of remediation that may be required. Whereas data for samples from the 0- to 1-foot depth will be compared to the commercial SCOs to assess the need for removal, data for samples from the 1- to 2-foot depth interval will be compared to the remedial goal of 500 parts per million (ppm) total for the 17 priority pollutant polycyclic aromatic hydrocarbons (PAHs) to assess whether deeper removal may be required in any areas. If the deeper samples do not indicate the need for soil removal, they can serve as delineation for the vertical extent on cases where shallow soils exceed one or more SCOs.

Nineteen samples are proposed from 10 locations. Figure 1 shows the proposed sampling locations and Table 1 summarizes the sampling and analysis plan and rationale. Note that, as discussed in Table 1, analyses for four samples from two locations will be contingent on the results of other samples; the contingent samples will initially be placed on hold with the laboratory and then released for analysis, if warranted, based on the results for adjacent samples.

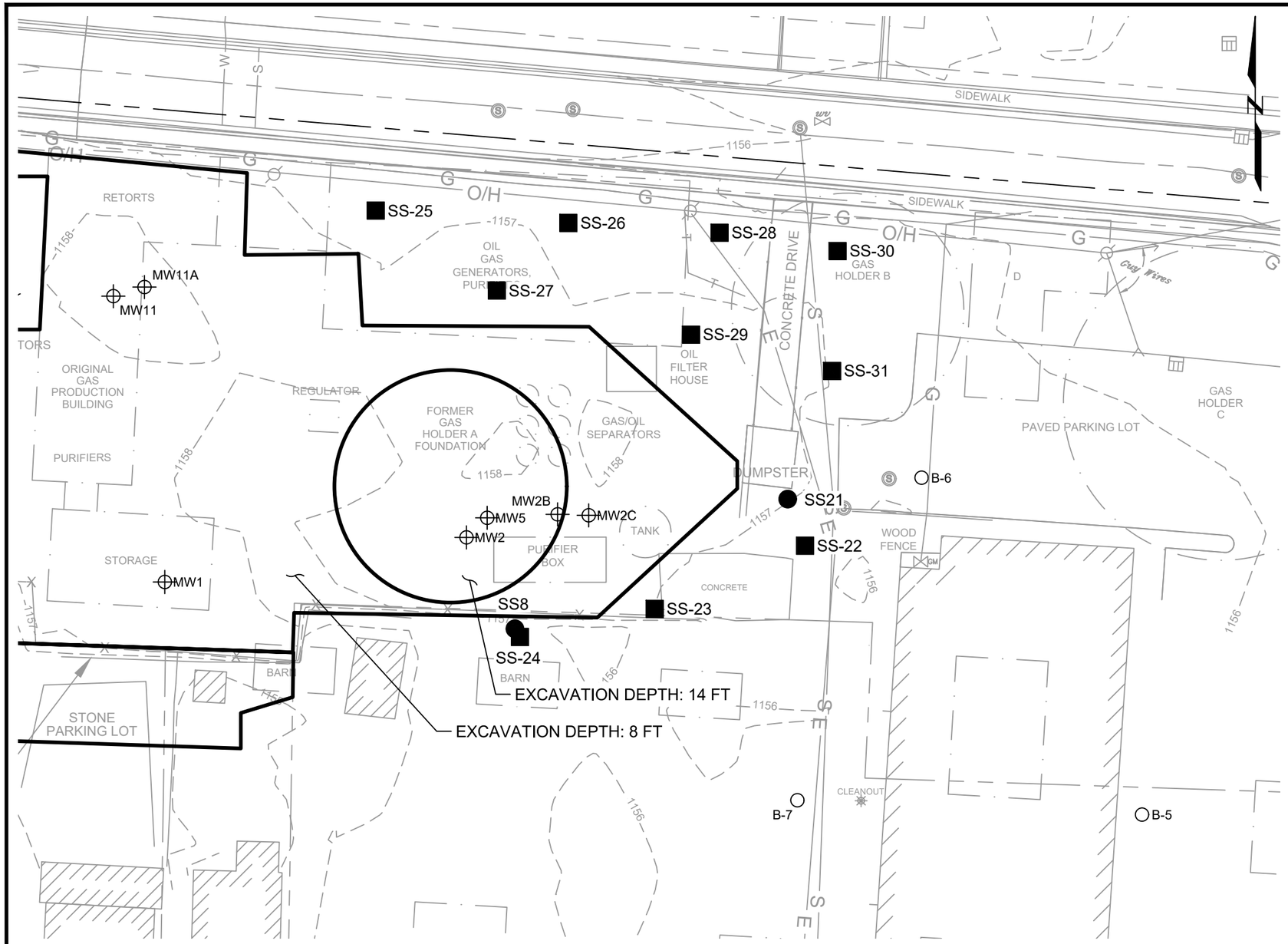
Quality assurance/quality control (QA/QC) samples will be collected as part of the soil sampling. One each of a rinse blank, matrix spike, matrix spike duplicate, and blind duplicate will be collected and analyzed for the full list of parameters for which the soils will be analyzed.

Shallow samples will be collected manually using a hand auger or trowel. Sample locations and/or depth increments may be adjusted in the field based on site conditions but consistent with the purpose of the investigations. Locations will be recorded using GPS and measured from existing known points. Sampling information, including the measured locations and a description of the soil at each location at a minimum, will be recorded in the field logbook. Samples will be sent to Eurofins TestAmerica for analysis with NYSDEC ASP Category B laboratory reporting deliverables and will be reviewed by GEI for data quality.

Work Plan for Additional Shallow Soil Sampling

The results of the investigations described above will be used (in combination with site physical features as needed) to confirm or refine the limits of soil removal outside the support of excavation boundary in the northern and eastern portions of the site. A summary of results and a proposal for refining the excavation areas will be submitted to the NYSDEC within four weeks of sample data receipt. Pending NYSDEC concurrence, the extent of shallow soil removal to achieve commercial SCOs will be reflected in the 100% Remedial Design Drawings.

Figure



LEGEND:

- APPROXIMATE PROPERTY BOUNDARIES
- CHAIN-LINK FENCE
- EXISTING STRUCTURE
- HISTORIC STRUCTURES (APPROXIMATE)
- O/H — ELECTRIC LINE
- S — SANITARY SEWER LINE
- G — GAS LINE
- W — WATER LINE
- UTILITY POLE
- GAS METER
- WATER VALVE
- MANHOLE
- DROP INLET
- 1156 — GROUND SURFACE ELEVATION (NAVD 88)
- CLEANOUT
- PROPOSED SURFACE SOIL SAMPLING LOCATION
- PRIOR SURFACE SOIL SAMPLING LOCATION (FOR REFERENCE PURPOSES ONLY; NOT ALL PRIOR SAMPLE LOCATIONS ARE DEPICTED ON THIS FIGURE)
- MONITORING WELL

SOURCE:

1. SURVEY PREPARED FOR GEI CONSULTANTS, INC. BY WILLIAM J TUCKER, II PLS #50369, CLEAR CREEK LAND SURVEYING, L.L.C., SPRINGVILLE, N.Y. DATED FEBRUARY 11, 2011.
2. SURVEY PREPARED FOR GEI CONSULTANTS, INC. BY WILLIAM J TUCKER, II PLS #50369, CLEAR CREEK LAND SURVEYING, L.L.C., 7449 MILL STREET, CANEADEA, N.Y., DATED NOVEMBER 26, 2018.
3. CITY OF HORNELL, STEUBEN COUNTY, NY TAX MAP NO. 166.06 DATED OCT. 18, 2008.
4. *MODIFICATION TO ORDER ON CONSENT AND ADMINISTRATIVE SETTLEMENT, ATTACHMENT 1* BETWEEN NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, OFFICE OF GENERAL COUNSEL, AND NATIONAL FUEL GAS DATED OCT. 21, 2010.
5. SANBORN FIRE INSURANCE MAPS FROM 1888 TO 1961.

0 30 60

SCALE: 1" = 30'

Shallow Sampling Delineation - 95% Design Document
Hornell Former MGP Site
Hornell, New York

National Fuel Gas Distribution Company

GEI Consultants

SHALLOW SAMPLING
SCOPE OF WORK

Project 1801687 | May 2020 | Fig. 1

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Table

National Fuel Gas Distribution Corporation
Hornell Former Manufactured Gas Plant Site

Table 1
Summary of Proposed Shallow Soil Delineation Samples

Investigation Area	Sample IDs	Sample Depths	Analyte(s)	Rationale
Southeast of SOE Boundary	SS-22 and SS-23	0-1’	PAH by SW-846 Method 8270D BTEX by SW-846 Method 8260C Metals by SW-846 Methods 6010C/7471B Cyanide by SW-846 Method 9012B	Assess/delineate shallow soils above commercial SCOs around prior sampling location SS-21, where benzo(a)pyrene exceeded the commercial SCO (1.7 mg/kg).
		1-2’	PAH by SW-846 Method 8270D	Assess potential for soils below 1’ deep to exceed 500 ppm total PAHs or serve as vertical delineation.
Prior RI sample location SS8	SS-24	0-1’	Arsenic by SW-846 Methods 6010C	SS-8 was collected from 0-2” and exceeded commercial SCO for arsenic (16 mg/kg). SS-24 will assess whether the 0-1’ increment exceeds SCO. Sampling for total PAHs at deeper increments is not needed because data from SPDI test pits TP-9 through TP-11 indicate no visible or analytical presence of PAH impacts above remedial goals.
Northeast of SOE Boundary	SS-25 through SS-29	0-1’	PAH by SW-846 Method 8270D BTEX by SW-846 Method 8260C Metals by SW-846 Methods 6010C/7471B Cyanide by SW-846 Method 9012B	Assess/delineate shallow soils above commercial SCOs.
		1-2’	PAH by SW-846 Method 8270D	Assess potential for soils below 1’ deep to exceed 500 ppm total PAHs or serve as vertical delineation.
Northeast of SOE and east of concrete driveway	SS-30 and SS-31	0-1’	PAH by SW-846 Method 8270D BTEX by SW-846 Method 8260C Metals by SW-846 Methods 6010C/7471B Cyanide by SW-846 Method 9012B	Assess/delineate shallow soils above commercial SCOs. Samples will be released for analysis and comparison to commercial SCOs dependent on results of SS-28 and SS-29 (i.e., if SS-28 and/or SS-29 exceed at least one commercial SCO, SS-30 and SS-31 will be analyzed for that constituent group.)
		1-2’	PAH by SW-846 Method 8270D	An additional sample at 1-2’ will be collected and held for analysis for PAHs. Samples will be released for analysis only if visual impacts are observed or the results from SS-28 and/or SS-29 exceed 500 ppm PAHs.