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Mr. Amen Omorogbe, Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
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Revised
9/16/08
awaiting D&H
comments

ENVIRONMENTAL

Subject:
Catskill Former Manufactured Gas Plant Site #C420027
Water Street, Village of Catskill, Greene County, New York
Brownfield Cleanup Agreement A4-0553-0606

Date:
September 10, 2008

Dear Mr. Omorogbe:

Contact:
David Cornell

The purpose of this supplemental work scope is to further delineate the extent of non-aqueous phase liquid (NAPL)-impacted soils at the Central Hudson Gas & Electric Corporation (Central Hudson) Catskill Former MGP site. The supplemental investigation will help support and refine the findings of the January 2008 *Remedial Investigation Report*. All work will be conducted in accordance with the June 2007 *Site Characterization Work Plan* that was approved by the New York State Department of Environmental Conservation (NYSDEC) on June 26, 2007.

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Area A

Our ref:
B0020530.0000.00006

A minimum of eight (8) soil borings will be advanced within Area A and on the adjacent property to the south of Area A (Former Millworks Building) to further delineate the extent of NAPL observed during the Remedial Investigation (RI). The following is a breakdown of the boring locations.

- Two (2) borings will be advanced east of SB-1 along Water Street to further delineate NAPL occurrence along the eastern edge of Area A.
- Two (2) borings will be advanced west of MW-1 and SB-14, adjacent to Catskill Creek to further delineate the extent of NAPL in the southwest portion of Area A.
- A minimum of four (4) borings will be advanced on the adjacent property to the south of Area A, occupied by the former mill works building, to further delineate the extent of NAPL to the south. Three (3) of the borings will be advanced to the

Imagine the result

west of the former mill works building and one (1) of the borings will be advanced to the east of the building along Water Street. Should NAPL be encountered in these borings, additional "step out" locations to the south may be warranted. Decisions to install additional borings will be made by Central Hudson in concurrence with the NYSDEC inspector on site.

Area B

Central Hudson does not currently have access to Area B despite numerous good faith attempts to gain access from Thomas Thornton (owner). As a result, Central Hudson has formally requested assistance from NYSDEC (August 26, 2008 letter) to obtain access to Area B. It is anticipated that prior to initiating this supplemental investigation, the NYSDEC will have gained access to Area B. Once access has been granted, Central Hudson proposes the following investigation activities in Area B.

- Advance one (1) boring to the east of the former gas holder location (east of the existing art studio). Should NAPL be encountered in this boring, then additional "step out" locations to the south may be warranted. Decisions to install additional borings will be made by Central Hudson in concurrence with the NYSDEC inspector on site.
- Advance one (1) boring west of the former gas holder location (west of the existing art studio) (Area B). Should NAPL be encountered in this boring, then additional "step out" locations to the south may be warranted. Decisions to install additional borings will be made by Central Hudson in concurrence with the NYSDEC inspector on site.

Why not have a boring west of the holder?

The exact locations of the soil borings will be refined in the field based on adjacent boring observations, accessibility, underground utilities, subsurface foundations, and NYSDEC concurrence.

Soil samples will be collected continuously at each boring location from grade to their final depth using a 2-inch diameter by 4-foot long MacroCore® sampler. Soil recovered from each 4-foot interval will be visually characterized for color, texture, and moisture content in accordance with the Unified Soil Classification System (USCS), and headspace-screened with a photoionization detector (PID) to determine the relative concentration of volatile organic vapors in the sample. The geologic composition, headspace screening results, and the presence of visible staining,

NAPL, and obvious odors encountered in the soil will be documented in the field notes.

If there are visual indications of potential MGP-impacts found at boring locations, then soil samples will be collected for the analysis of target compound list (TCL) volatile organic compounds (VOCs) and TCL semivolatile organic compounds (SVOCs). In addition, 20 percent of the soil samples will also be analyzed for target analyte list (TAL) inorganics (including total cyanide). Up to 10 soil samples will be analyzed from the most visibly impacted/highest PID intervals, and up to 10 additional soil samples will be collected and analyzed to delineate the vertical extent of chemical constituents both above and below visually impacted intervals. These delineation samples will be selected based on visual observations and PID screening measurements. If no evidence of contamination is observed during the investigation (visual presence of NAPL and/or elevated PID readings), then at least 5 samples will be obtained and analyzed at various locations on and off the site. Therefore, a total of up to 20 subsurface soil samples will be collected and analyzed. The samples will be identified, handled, packaged, and shipped using standard chain-of-custody procedures.

*Specify minimum
- boring terminal
A depth?
- 10% of clean
soil before terminal
hor.
- COPY DO#*

In addition to the subsurface samples, two (2) surface soil samples will be collected in unpaved portions of Area B to determine the presence and level of MGP-related constituents in surface soil. Surface soil samples will be collected from the 0 to 2-inch depth interval below the vegetative cover. Samples collected will be analyzed for TCL VOCs and TCL SVOCs. One of the two surface soil samples will also be analyzed for TAL inorganics (including total cyanide). The proposed sampling location will be determined in the field based on conditions encountered and discussions with the NYSDEC. The samples will be identified, handled, packaged, and shipped using standard chain-of-custody procedures.

The laboratory procedures will be in accordance with the latest NYSDEC Analytical Services Protocol (ASP) methods, quality assurance/quality control (QA/QC) requirements, and Category B reporting deliverables. An Environmental Laboratory Approval Program (ELAP) -approved laboratory will be used to analyze the soil samples. All laboratory data will be validated using the most recent versions of the United States Environmental Protection Agency (USEPA) functional guidelines for data validation with NYSDEC ASP QA/QC and Category B reporting deliverable requirements as guidance, where appropriate. The validation will also include the preparation of a NYSDEC data usability report of the analytical data.

While completing the supplemental investigation, field personnel will mark all investigation locations. A licensed New York State surveyor will then survey the marked locations. Horizontal coordinates will be tied to New York State Plane Central (3102) coordinate system (NAD 83). All elevations will be established with respect to the 1929 National Geodetic Vertical Datum.

A figure depicting the proposed investigation locations is attached as Figure 1.

If you have any questions, please contact me at ARCADIS or Adam Etringer at Central Hudson.

Sincerely,

ARCADIS



David A. Cornell
Geologist

DAC/plf
Attachment

Copies:

Adam Etringer, Central Hudson
Wayne Mancroni, Central Hudson
Nancy Gensky, ARCADIS

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