

May 29, 2001

Mr. John Helmeset, P.E. MGP Remediation Section Division of Environmental Remediation **NYSDEC** 50 Wolf Road Albany, NY 1233-7010

Re:

NYSEG Cortland/Homer Former MGP site

Supplemental Site Investigation

S&W No 90103.0

Dear Mr. Helmeset:

On behalf of NYSEG, Stearns & Wheler is enclosing the Work Plan relating to additional on-site work at the above-referenced facility. As agreed, NYSEG will complete additional investigation that will include soil borings, monitoring well installation, groundwater sampling, and indoor air monitoring.

As you are aware, NYSEG has recently completed a comprehensive river sediment investigation adjacent to and downstream of the site. We are confident that the scope set forth in the enclosed Work Plan, together with the completed sediment investigation, will enable us to reach an appropriate site remedy.

We are prepared to schedule the work once the Department has reviewed and accepted the enclosed plan. If you have any questions in the meantime, please feel free to call.

Very truly yours

Daniel P. Ours, C.P.G.

Project Hydrogeologist

DPO/lsj

cc: Tracy Blazicek, NYSEG (w/enclosures)

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WORK PLAN ADDENDUM SUPPLEMENTAL REMEDIAL INVESTIGATION (SRI) PHASE 2 NYSEG – CORTLAND/HOMER FORMER MGP May 2001

INTRODUCTION

NYSEG conducted a Supplemental Remedial Investigation (SRI, 1999) at its former Cortland/Homer MGP facility. Although the SRI fulfilled the requirements of the Work Plan for the project, data gaps were identified that require additional field investigation. NYSEG has proposed to complete a second phase of SRI at the site. The intent of this second phase will be to:

- 1. further address issues relating to possible MGP impacts to sediment in the Tioughnioga River;
- 2. improve understanding of chemical conditions of site groundwater as they relate to natural attenuation and the extent of groundwater impacts upgradient and cross gradient;
- 3. further investigate the source area, near the I.D. Booth building, for the possible presence of residual NAPL;
- 4. better define the underlying silty clay layer, which behaves as a confining unit.

NYSEG is in the process of completing the expanded river sediment investigation. This work plan sets forth additional investigation elements that are to be completed on-site, apart from the river sediment investigation scope that has already been accepted by NYSDEC.

The remainder of this document describes the field activities necessary to address the identified on-site data gaps, in the area in and around the I.D Booth building and between the building and the river. It is intended to be an addendum to the approved Work Plan for the SRI, dated August 1999. All aspects and requirements of the Work Plan, including the Health & Safety Plan and the Site Sampling Plan will be observed and followed during this phase of field work.

METHODS

A. WESTERN SEDIMENTS

NYSEG will complete sediment probing within the wet area west of the I.D Booth building, and will record observation in a field log. Three surface water and sediment samples will be collected. Sediment will be analyzed for TCL VOCs and PAHs, plus total cyanide, TOC, and TPH. The sediment samples will be collected from the top 3 inches below the sediment water interface. Surface water samples will be analyzed for VOCs, PAHs, and total cyanide.

B. NAPL (SOIL BORING) INVESTIGATION

NYSEG proposes to advance eight (8) Geoprobe borings around the exterior of the I.D. Booth building, plus additional borings within and around the former relief holder area.

Exterior Borings. Six exterior borings will be along the western edge of the building, and one each at the southeast and northeast corners of the building. At least four (4) of the western edge borings will be advanced down to the silty clay "till" layer, located approximately 40 feet deep, to confirm its presence. Each of the southeast and northeast borings will also be advanced down to the silty clay. Soil samples will be collected continuously, visually examined, and screened with a PID. Descriptions and PID results will be recorded in a boring log, including visual evidence of NAPL. One soil sample from each boring, based on "worst case" observations, will be submitted for laboratory analysis for VOCs, PAH compounds, and cyanide.

Interior Borings. NYSEG will also investigate areas in the I.D. Booth building where residual materials might still be present. Specific interior locations have been targeted based on a review of site history and the layout of the former plant and operating processes. The former relief holder is regarded as the most obvious potential source of MGP residual, although it is emphasized that according to available information the contents of the holder were removed and the holder was subsequently cleaned out prior to being dismantled (Stearns & Wheler Historical Summary, April 2001). Although this casts doubt that residual material remains in the holder, a boring will be advanced within the holder to confirm no residual remains. The boring will advance through the floor by driving a split spoon sampler, and will penetrate to the bottom of the relief holder. Soil samples will be collected continuously, and screened with a PID. Observations will be recorded in boring logs. One sample from the boring, preferably near the bottom where residuals, if any, are expected to accumulate, will be submitted for laboratory analysis for PAHs, cyanide, and TCLP benzene.

An additional boring will be advanced west of the relief holder, in an area adjacent to a former coal storage shed, and where a possible former tar well was identified (Stearns & Wheler, April 2001). This boring will be advanced to a depth comparable to the depth at which the relief holder floor was encountered.

The distribution holder, located near the southern end of the I.D Booth building and partially extending outside into the fenced storage yard, was investigated and identified in previous studies by boring and test pitting, and NYSEG believes the information from those previous efforts can be relied upon to characterize that area. Please recall that it was mutually decided in the field, by NYSEG and NYSDEC during completion of the SRI, that additional investigation of the distribution holder was not needed. It is further noted that historical accounts indicate that the distribution holder did not contain residual material at the time it was dismantled, but it was nonetheless cleaned before decommissioning (Stearns & Wheler, April 2001). As the relief holder and coal storage

area are the only identified areas where large quantities of MGP materials were concentrated, NYSEG will focus supplemental investigation efforts specifically on those areas. This strategy is in good agreement with analytical data from past investigations, which show groundwater impacts largely centered about the area immediately downgradient of these two areas (Stearns & Wheler, March 2000), and which have called out subsurface soil impacts downgradient of this same general area (RETEC, April 1992). Thus, previous analytical data indicate a source area in proximity to the proposed borings consistent with historical operational information.

Riverbank Borings. To further investigate possible NAPL impact adjacent to the river, NYSEG will advance four (4) additional soil borings, down to the silty clay layer, with two located north of MW-17 and two located south of MW-18. These borings will be spaced roughly 50 feet from each other and from the above referenced wells. Soil samples will be collected continuously, and visually examined and screened with a PID. Visual observation, including identification of NAPL, if present, will be recorded in boring logs. One sample from each boring, based on "worst-case" observation, will be submitted for laboratory analysis for VOCs, PAHs, and total cyanide. If NAPL is observed in any boring, that boring will be converted into a groundwater monitoring well, screened at the top of the silty clay layer.

C. GROUNDWATER

NYSEG proposes to install two additional upgradient monitoring wells, to satisfy two basic data needs: 1) to confirm the present of the underlying silty clay layer; 2) to provide a confirmatory background water quality data point for deeper groundwater upgradient of the site. As implied, the new upgradient wells will be screened near the top of the silty clay layer, to supplement the existing upgradient well which is installed at an intermediate depth. Deep wells are proposed, in response to concerns that DNAPL may be present near the top of the silty clay, which could release dissolved contaminants into the deep groundwater. The new upgradient wells are proposed approximately 50 feet north of the existing well MW-1 (proposed as MW-25), and also southwest of the I.D. Booth storage yard (MW-26), off the northwest corner of Natoli's Market.

In addition, two well couplets, each consisting of a water table well and a deep well, will be installed, one located south of existing well MW-21 (MW-27S/D), and one located north of existing well MW-15, respectively. These wells are considered to be cross gradient, and will help determine the lateral limits of groundwater impact. The deep wells in each couplet will be advanced down to the silty clay layer, to confirm its presence.

During the drilling of the upgradient wells and the deep couplet wells, soil samples will be collected continuously, and screened with a PID. One soil sample from each of these three borings will be submitted for laboratory analysis for TCL VOCs, PAHs and total cyanide. The shallower borings in each couplet will be advanced without soil sampling,

as they will be paired with an adjacent deep boring from which soil samples will have been collected.

The six new monitoring wells will be developed following their installation. At least one week following development, the new wells will be sampled, along with the 17 existing wells on site. All of the groundwater samples will be analyzed for TCL VOCs and SVOCs, total cyanide, and total sulfide. In addition, water samples will be collected for the natural attenuation parameters dissolved oxygen, dissolved carbon dioxide, iron, manganese, nitrate, and sulfate.

D. INDOOR SOIL VAPOR INVESTIGATION

Soil vapor samples will be collected from below the floor in the I.D Booth/Verizon building to help assess the possibility of exposure to airborne constituents that might emanate from the above-cited potential sources. A maximum of six soil vapor sample locations are tentatively proposed, to be determined in the field and as agreed to by NYSEG, NYSDEC, and NYSDOH. For now, three locations are offered, based on the most probable locations of residuals. One location is proposed within the former relief holder area. A second location is proposed between the relief holder and the former coal storage area, where a former tar well was reportedly located. A third location is where a possible tar well ("tar storage vessel", Stearns & Wheler, April 2001) was identified in the southern portion of the Verizon building. Apart from these three areas, no likely sources of residual impacts have been identified inside the building. However, NYSEG is prepared to collect three additional samples, as noted above, if suitable locations can be identified. It may be more appropriate to collect the 3 additional air samples from floor penetrations, drains, or sumps in place of advancing borings through the floor.

PHASE 2 SRI REPORT

The results of the above sampling efforts will be incorporated into a comprehensive report that will include historical summaries of site and past analytical results, and tie those historical assessments together with the more recent (March 2000 and this proposed plan) SRI findings. Included will be figures showing all of the new sampling locations, boring logs for the sediment and soil boring sampling programs, and laboratory reports for sediment, soil, surface water, and groundwater analyses. If it appears that additional sampling is needed to resolve issues relating to the river sediment impacts, specific areas requiring follow up sampling will be called out and additional sediment samples can be collected if needed. We will further assess the findings of the already-completed (through Step IIA) Fish and Wildlife Impact Analysis (FWIA) against the more recent findings, and determine which, if any, further FWIA steps (IIB, C, and D) are prescribed by the standard protocol, based on new information.

Overall, NYSEG believes that the scope of this proposed work, coupled with the findings of previous studies, will provide information sufficient to complete the characterization of the site and conduct a feasibility study.