



ENVIRONMENTAL STRATEGIES CONSULTING LLC

11911 Freedom Drive, Suite 900 • Reston, Virginia 20190 • (703) 709-6500 • Fax (703) 709-8505

June 16, 2006

Mr. James E. Burke, P.E.
Environmental Engineer
New York State Department of Environmental Conservation
Region 7
615 Erie Boulevard West
Syracuse, NY 13204-2400

Re: May 8, 2006 NYSDEC Correspondence - Response to NYSDEC Comments
March 10, 2006 Proposed Supplemental Geophysical Survey –
Emerson Power Transmission Facility, Ithaca, New York

Dear Mr. Burke:

This letter responds to the comments raised in the May 8, 2006, correspondence from the New York State Department of Environmental Conservation (NYSDEC) on the proposed supplemental geophysical survey work plan for the Emerson Power Transmission facility in Ithaca, New York (March 10, 2006). The comments are listed below, followed by our responses.

NYSDEC Comment 1

The plan outlines work that will further evaluate the conductive zones in eight areas identified by ESC as “having signatures and shapes consistent with water bearing zones.” While the Department agrees that these may be water bearing zones, it does not rule out the possibility that the other zones identified by the July and September 2005 survey are being more conductive than the surrounding subsurface may also be hydraulically conductive. The Department reserves the right to ask further definition around these zones if it is deemed necessary.

Response

No response necessary.

NYSDEC Comment 2

Azimuthal Square Array Direct Resistivity (USGS WRIR 01-4183, pg. 14 of 61) should be considered as a method to further define the three dimensional nature of the conductive subsurface features. Contact Christopher Magee (518-402-9549) of our Albany office for more details.

Response

This approach is addressed in the March 10, 2006, work plan; we assume it was overlooked by the Department. Specifically, the work plan states: "The major conductive zones, which exhibited resistivity signatures and shapes consistent with potential water-bearing fractures onsite (7A, 2A, and 12A/2D) and offsite (6F, 10A, 9C, 11B, and 11E), will be further evaluated using closely spaced ER survey lines oriented in a grid around the area where each major conductive zone was identified." In these areas, Emerson will use multiple electrode arrays including the dipole-dipole, Wenner, as well as the *Square-Array Direct-Current Resistivity Method* to detect and orient water-bearing fractures in bedrock. The results from the combined arrays will be used to develop 3-dimensional profiles of each fracture-like conductive zone. The 3-D profiles will add in determining the trend (strike) of the fractures and the potential interconnectivity with other identified conductive zones.

NYSDEC Comment 3

The work plan should state a report shall be prepared with the results of the survey along with a time frame for the report preparation and submittal.

Response

A report will be prepared detailing that the survey findings. The report will be submitted to the Department 12 weeks following completion of the survey.

NYSDEC Comment 4

The work plan should state that included within the report will be recommendations for additional monitoring wells and how the data will be analyzed to evaluate the best locations for these monitor wells.

Response

This comment was addressed in our previous response dated March 20, 2006, which states:

Following the completion of the supplemental geophysical survey, Emerson will develop a work plan, which will include 1 to 3 exploratory bedrock borings to confirm the supplemental ER image results. Rock cores will be collected and logged in accordance with Environmental Strategies SOPs and will include a description of the rock core, a characterization of the observed fractures, the percent of core recovery, and the calculated rock quality designation. The final location and number of exploratory borings required to confirm the ER image results will be determined in the field. The fracture-like anomalies will be the focus of the confirmation borings.

In addition, based on the results of the supplemental ER survey, Emerson will propose installing additional bedrock groundwater monitoring wells within the

confirmed water-bearing fractures. These monitoring wells will serve to evaluate groundwater quality within the identified migration pathways and will be used to determine if affected groundwater is migrating in these areas. The number and location of the proposed additional monitoring wells will be detailed in a work plan that will be submitted to NYSDEC.

The location of each proposed well will be based on resistivity measurements, profile signatures, and projected trends of the identified anomalies. Proposed locations will be plotted on the transect figures and x and y coordinates provided to a surveyor for locating and marking in the field.

NYSDEC Comment 5

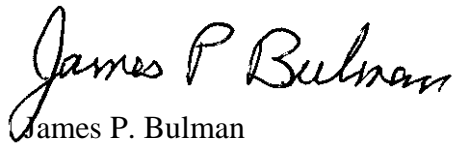
The work plan should state that the Department will be notified before the commencement of field work so a Department representative could be scheduled to observe the work.

Response

Emerson will notify the Department prior the commencement of the field work.

We look forward to receiving approval to conduct the supplemental geophysical survey. Please contact us, if you have any questions.

Sincerely yours,



James P. Bulman
Executive Partner

JPB:sph:slp

k:\client\emerson\ithaca\er\supplemental\letter1.hw755010.2006-6-16.pdf

cc: Mr. Derek Chase, Emerson
Henriette Hamel, NYSDOH



ENVIRONMENTAL STRATEGIES CONSULTING LLC

11911 Freedom Drive, Suite 900 • Reston, Virginia 20190 • (703) 709-6500 • Fax (703) 709-8505

June 16, 2006

Mr. James E. Burke, P.E.
Environmental Engineer
New York State Department of Environmental Conservation
Region 7
615 Erie Boulevard West
Syracuse, NY 13204-2400

Re: Semi-Annual Progress Report – Response to NYSDEC Comments
Emerson Power Transmission Facility, Ithaca, New York

Dear Mr. Burke:

Emerson has reviewed the May 8, 2006, correspondence from the New York State Department of Environmental Conservation (NYSDEC), which provides comments on the semiannual progress report for July 2005 through January 2006 for the Emerson Power Transmission facility. Listed below are the comments, followed by our responses.

NYSDEC Comment 1

Previous correspondence from the State (12/28/05) recommended that nine (9) new and four (4) existing off-site monitoring wells be added to the list of extraction and monitoring wells sampled and reported routinely on a semi-annual basis. Please provide rationale for not including these wells as part of an ongoing monitoring program. The effectiveness of improvements to the 2-phase extraction system that are anticipated to occur during 2006 can be measured in part through continued monitoring of strategic on and off site wells.

Response

The 13 wells recommended for further monitoring were sampled in late December 2005 and will be included in the January through June 2006 semiannual progress report that will be submitted to NYSDEC in July 2006. In addition, the 13 wells will continue to be monitored on a semiannual basis and included in the progress reports. The next sampling event is scheduled for July 2006.

NYSDEC Comment 2

Improvements to the treatment system should include modifications that will decrease system “downtime” during winter months.

Response

The planned treatment system modifications and enhancements will not only decrease the “downtime” in winter months, but will enhance the overall runtime of the system.

NYSDEC Comment 3

Elevated levels of VOCs significantly above State standards persist in many of the on-site wells, including:

-Extraction Wells 1, 2, and 3

-Monitoring Wells 2, 3-31, 3-100, 3-150

Design modifications to the treatment system should maximize VOC mass removal efforts in areas of highest concentrations at the wells noted above. It is understood that this effort is occurring during 2006 via use of the results from the aquifer pump test.

Response

System upgrades will be designed to enhance volatile organic compound (VOC) mass removal from areas of highest VOC concentration is the B and C zones. Additional testing will be proposed to clarify the understanding of VOC mass within the deeper zone fractures (i.e., MW-3-100 and MW-3-150).

NYSDEC Comment 4

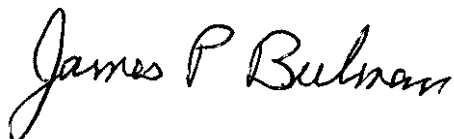
Please submit an electric copy of the report.

Response

A CD-Rom copy of the semiannual progress report (progress report 19) for the 2-PHASE™ extraction system was submitted to the Department in May 2006. The file was too large to submit electronically.

Please do not hesitate to contact us if you have any questions.

Sincerely yours,



James P. Bulman
Executive Partner

JPB:sph:lpf

k:\client\emerson\ithaca\progress reports\letter2.hw755010.2006-6-16.pdf

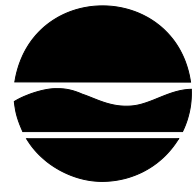
cc: Mr. Derek Chase, Emerson
Henriette Hamel, NYSDOH

**New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 7**

615 Erie Boulevard West, Syracuse, New York 13204-2400

Phone: (315) 426-7551 • **FAX:** (315) 426-7499

Website: www.dec.state.ny.us



Denise M. Sheehan
Commissioner

July 28, 2006

Mr. Derek E. Chase
Director, Environmental Affairs
Emerson Power Transmission
8000 West Florissant Avenue
PO Box 4100
St. Louis, MO 63136-8506

**Re: Emerson Power Transmission Facility
(C) Ithaca, Tompkins County
R & D Building Indoor Air Sampling Results**

Dear Mr. Chase:

The NYS Departments' of Environmental Conservation and Health have reviewed your comment response letter of June 26, 2006 on the referenced matter. Your letter adequately addresses the comments contained in the State's May 8, 2006 letter. Accordingly, the approach detailed in your response to comment #3 is approved. Please submit the results from the November 2006 planned sampling event to the State within thirty (30) days of receiving validated sample results.

If there are any questions on this letter, please contact this office at (315) 426-7550.

Sincerely,

James E. Burke, P.E.
Regional Hazardous Waste Remediation Engineer

JEB:dld

cc: Henri Hamel (NYSDOH)

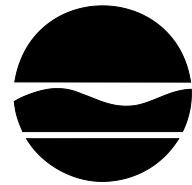
ec: Mary Jane Peachey (NYSDEC)
Karen Cahill (NYSDEC)
Carl Cuipylo (NYSDEC)
Geoff Laccetti (NYSDOH)
Mark VanValkenburg (NYSDOH)

**New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 7**

615 Erie Boulevard West, Syracuse, New York 13204-2400

Phone: (315) 426-7551 • **FAX:** (315) 426-7499

Website: www.dec.state.ny.us



Denise M. Sheehan
Commissioner

July 26, 2006

Mr. Derek E. Chase
Director, Environmental Affairs
Emerson Power Transmission
8000 West Florissant Avenue
PO Box 4100
St. Louis, MO 63136-8506

**Re: Emerson Power Transmission Facility
(C) Ithaca, Tompkins County
Supplemental Geophysical Survey Workplan (3/06)**

Dear Mr. Chase:

The NYS Department of Environmental Conservation (NYSDEC) has reviewed your comment response letter of June 16, 2006 on the referenced matter. Your letter adequately addresses the comments contained in the NYSDEC's May 8, 2006 letter. Accordingly, the referenced Supplemental Geophysical Survey Workplan is approved. Please conduct the work and submit the final report in accordance with the schedule included in the workplan and June 16th letter.

If there are any questions on this letter, please contact this office at (315) 426-7550.

Sincerely,

James E. Burke, P.E.
Regional Hazardous Waste Remediation Engineer

JEB:dld

cc: Henri Hamel (NYSDOH)
ec: Mary Jane Peachey (NYSDEC)
Karen Cahill (NYSDEC)
Carl Cuipylo (NYSDEC)
Geoff Laccetti (NYSDOH)
Mark VanValkenburg (NYSDOH)