C.T. MALE ASSOCIATES, P.C.

50 Century Hill Drive, P.O. Box 727, Latham, New York 12110-0727 518.786.7400 FAX 518.786.7299 ctmale@ctmale.com



April 23, 2007

Mr. Ian Beilby, P.E. Environmental Engineer

NYSDEC - Division of Environmental Remediation 625 Broadway, 12th Floor Albany, New York 12233-7013

Re: Work Plan Amendment for Soil Gas Sampling (Revised) ERP Site No. E447036 Clinton South Parking Lot, 314 Clinton Street, Schenectady, NY CTM Project No. 05.5551

Dear Mr. Beilby,

On behalf of the City of Schenectady and Schenectady Metroplex Development Authority, C.T. Male Associates, P.C. (C.T. Male) previously submitted a Work Plan Amendment (March 16, 2007) associated with soil gas sampling activities to be completed at the 314 Clinton Street property (Site). This amendment has been revised to incorporate changes requested by the New York State Department of Environmental Conservation (NYSDEC) as noted in its April 20, 2007 correspondence. The specific scope of work presented herein was developed in accordance with the Remedial Investigation (RI) Work Plan prepared for the Site, and based on the findings of the recently completed RI, as presented in C.T. Male's report entitled, Remedial Investigation Report, ERP Site #E447036, Clinton South Parking Lot, 314 Clinton Street, City of Schenectady, Schenectady County, New York, dated January 2007.

Soil gas sampling will be performed on select areas of the Site to evaluate soil gas in these areas for the presence of volatile organic compounds (VOCs), and to evaluate the potential for intrusion of VOCs into future structures built on the Site. The RI identified the following VOCs in surface/near-surface soil samples and/or subsurface soil/fill toluene; mixed xylenes; trichloroethene; cis-1,2-dichloroethene; material samples: tetrachloroethene; acetone; and methylene chloride. Concentrations of these

Mr. Ian Beilby, P.E. NYSDEC – Division of Environmental Remediation 314 Clinton Street/Work Plan Amendment for Soil Gas Sampling (Revised) April 23, 2007 Page 2

compounds were above the laboratory method detection limits, but below applicable regulatory Standards, Criteria and Guidance (SCG) levels. These compounds were identified in four areas of the Site: the northern portion, in the general area of the former gasoline filling station (SS-1, GP-1); the easternmost portion, near the tersection of Clinton Street and the pedestrian walkway (SS-3); the westernmost portion, near the intersection of Hamilton Street and Broadway (GP-12); and the central-southern portion, in the general area of the former dry cleaning operation (SS-9, GP-6). These areas will be the focus of the proposed soil gas sampling activities. Proposed soil gas sampling locations are shown on the attached figure.

Field work for the soil gas sampling activities will be performed in accordance with the health and safety protocol established and presented in the Site Specific Health and Safety Plan contained within the RI/AA Work Plan for this project. Soil gas sampling will be performed in accordance with the protocols established in the Field Sampling Plan contained within the RI/AA Work Plan for this project, presented in the following section.

Soil Gas Sampling Methodology

To facilitate the soil gas sample collection, a temporary sample point method will be used. Batch certified clean, 6-liter Summa canisters will be obtained from an ELAP approved laboratory. At each sampling location, a hole approximately one inch in diameter will be drilled through the pavement and sub-base material into the underlying soil to a depth of approximately 4 feet below the ground surface. Field personnel will then verify that groundwater is not present within the hole at this depth. Polypropylene tubing, connected to the Summa canister equipped with a laboratory calibrated flow regulator, will be inserted into the hole to a depth between 3 and 4 feet below the ground surface. Porous backfill material will be used to create a sampling zone between 3 and 4 feet below the ground surface. The tubing will be sealed in place using a bentonite slurry from 3 feet below grade to the surface to prevent outdoor air infiltration. The area atop of the pavement immediately surrounding the hole will be enclosed with a 5-gallon pail, sealed and filled with helium tracer gas to evaluate the integrity of the seal at the surface. The sample tubing will extend through a sealed penetration in the side or top of the 5-gallon pail.

Mr. Ian Beilby, P.E. NYSDEC – Division of Environmental Remediation 314 Clinton Street/Work Plan Amendment for Soil Gas Sampling (Revised) April 23, 2007 Page 3

After the tubing has been inserted and sealed, the tubing will be purged to remove the amount of vapor in the sample probe and tubing at a flow rate of no more than 0.2 liters/minute (L/min). A portable monitoring device will then be connected to the tubing to field analyze a vapor sample for the presence of the tracer gas prior to collecting the sample for laboratory analysis to confirm adequate seal at the surface. Once the monitoring device indicates that the tracer gas is not detected in the air drawn from the sub-slab sampling point, a 6-liter Summa canister will be attached to the tubing and the sample will be collected for a period of 1 to 2 hours. Following termination of the collection of the laboratory analysis sample, the portable monitoring device will be reconnected to the tubing from the sampling point to confirm the seal was maintained and that the ambient air/tracer gas did not enter the sampling point. Upon completion of sampling, the tubing will be removed and the holes will be sealed with bentonite and the surface will be repaired with concrete.

Quality assurance/quality control (QA/QC) samples will be collected during the sampling and consist of one duplicate sample, an ambient air sample and a trip/field blank. The duplicate sample will be collected in the same manner as the other samples except the tubing will be split using a tee-fitting. The tee-fitting will direct the vapor being extracted to each of the Summa canisters concurrently. The trip/field blank is provided by the lab, retained with the samples unopened, and returned to the lab for analysis to evaluate for the presence of compounds not relating to the Site.

The soil gas samples will be shipped to a NYSDOH Environmental Laboratory Approval Program (ELAP) certified laboratory, and analyzed for volatile organic compounds by EPA Method TO-15 (full scan). A chain of custody record will be completed to track the samples from the time of collection until they are received at the laboratory. Pressure readings pre- and post-sample collection will also be recorded on the chain of custody record. The analytical results will be prepared by the laboratory consistent with those requirements for ASP Category B deliverable packages. Data validation of the analytical results will be performed in accordance with NYSDEC Data Usability Summary Report guidelines.

C.T. MALE ASSOCIATES, P.C.

Mr. Ian Beilby, P.E. NYSDEC – Division of Environmental Remediation 314 Clinton Street/Work Plan Amendment for Soil Gas Sampling (Revised) April 23, 2007 Page 4

The field activities and findings from the soil gas sampling will be summarized in a letter report, which will include tabularized analytical data and a map depicting the actual soil gas sampling locations. Please contact the undersigned at (518) 786-7400 with any questions or comments concerning the proposed scope of work.

Respectfully submitted,

C.T. Male Associates, P.C.

John L. Favreau

Sr. Environmental Scientist

Kirk Moline Project Manager

Attachment: Proposed Soil Gas Sampling Locations Map

cc: Jayme Lahut

Michael Sterthous, Esq.

k:\projects\055551\admin\RI Workplan\Final Workplan Docs\WP Amendment\L_WP Amendment Soil Gas Revised.doc

ATTACHMENT PROPOSED SOIL GAS SAMPLING LOCATIONS

