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Stantec

June 30, 2005

Ms. Charlotte Theobold
New York State Department of Environmental Conservation
Division of Environmental Remediation
6274 East Avon-Lima Road
Avon, New York 14414-9519

RE: Revised Work Plan for a Sub-Slab Soil Vapor Survey at 389 Gregory Street
NYSDEC Site No. 828091
Former Davidson's Collision
Rochester, NY

Dear Charlotte:

On behalf of the City of Rochester (City), Stantec Consulting Services, Inc. (Stantec) is pleased to submit this Revised Work Plan for a Sub-Slab Soil Vapor Survey (Work Plan) to be performed at 389 Gregory Street (owned by John Trickey) adjacent to the former Davidson's Collision, 399 Gregory Street, Rochester, New York (Site).

Site Background

It is our understanding that for the purpose of conducting this Sub-Slab Soil Vapor Survey (Survey), Site background information (i.e. geology, hydrogeology, geography, identified environmental contamination, etc.) will be obtained from the existing Site data which was summarized in the December 2004 Remedial Investigation Work Plan.

Pre-Sampling Building Inspection

On December 13, 2004 representatives from Stantec and the City initially observed the 389 Gregory Street building basement during a walkthrough. A follow up telephone conversation with John Trickey indicates that the basement slab consists of approximately 99% concrete and 1% soils (from where a former boiler was removed).

It is understood that a pre-sampling building inspection, in accordance with Section 2.11.1 of the New York State Department of Health Guidance for Evaluating Soil Vapor Intrusion in the State of New York, Public Comment Draft, February 2005 (NYSDOH Guidance), will be required prior to performing this Survey. The pre-sampling inspection will include the identification, and documentation, of the building's foundation type, sump(s), HVAC system(s), air flows, building and utilities layouts, and building additions, if any. The pre-sampling inspection will also include a visual and olfactory inspection of the surrounding area to identify potential exposure pathways or sensitive receptors of soil vapors. In addition, photo-ionization detector (PID) readings will be collected near where products are stored or used in the building.

Given the potential for commercially available products, such as solvents, oils, etc. to contain volatile organic compounds (VOCs) for which we will be analyzing, careful attention will be given to the presence of such products as potential sources of VOC findings. The NYSDOH's Appendix B "Indoor Air Quality Questionnaire and Building Inventory," will be completed for the building during the pre-sampling inspection.

Sump Water Sampling

Stantec plans to collect one (1) water sample from the sump located within the building for laboratory analysis to update the characterization of the sump water since the last sampling event in September 1991. The sump pump will be activated, and allowed to run for at least two hours, prior to sampling the sump water to ensure that a representative sample of the sub-slab conditions is encountered as opposed to stagnant water present in the sump. Stantec will activate the sump and collect the sample on the same day as the soil vapor, and indoor and outdoor air sampling, but after those sampling events have been completed. The sump water sample will be analyzed for Target Compound List (TCL) VOCs by EPA Method 8260 and TCL semi-volatile organic compounds (SVOCs) at an ELAP accredited laboratory.

Soil Sampling

As stated above, Stantec plans to use the information provided in the Site Investigations previously performed at the Site. Stantec is not proposing to collect any subsurface soil samples from areas beneath the foundation or slab of the building at this time.

Sub-Slab Soil Vapor Sampling

Upon access to the building, air quality will be initially screened using a calibrated photoionization detector (PID). Indoor air will be screened immediately above any significant cracks or slab penetrations found in the floor. Areas indicating readings above background values will be visibly marked to delineate possible vapor entrance points into the building.

Sub-slab sampling will follow the protocols outlined in Sections 2.6.2 and 2.7.2 of the NYSDOH Guidance document. The area surrounding the sub-slab sampling point will be inspected for any penetrations (cracks, floor drains, utility perforations, sumps, etc.) prior to installing the sub-slab vapor probe. The floor penetration will be completed with a rotary hammer drill. Following penetration of the floor, a temporary vapor probe consisting of soil gas tubing (i.e. ¼ I.D. laboratory grade HDPE) will be installed at a depth not exceeding two inches into the sub-slab material, and sealed with non-shrinking bentonite cement grout (no caulk). The tubing will be capped and the grout will be allowed to set for approximately 24 hours. Prior to collecting the sample, Stantec will use a tracer gas application (helium) to verify the integrity of the seal of the soil vapor tubing for quality assurance/quality control prior to sampling the sub-slab soil vapor in accordance with Section 2.7.5 of the NYSDOH Guidance document. A portable helium monitoring device will be attached to the vapor tubing, helium will be released into the adjacent ambient air for a two-minute duration and the monitoring device will be operated for a minimum two-minute duration. Following the successful completion of the integrity test, one to three volumes (the volume of the sample probe and tube) will be purged prior to collecting the sample to ensure that the sample is representative of the sub-slab vapor environment. The sample will be collected over a period of approximately two hours. The flow rates for both purging and collecting will not exceed 0.2 liters

per minute. The sample will be collected using a laboratory-certified clean, Summa® canister and analyzed for the entire suite of EPA Method TO-15 analytes by an ELAP Certified Laboratory.

One sub-slab soil vapor sample is planned at this time. The proposed sample will be centrally located within the foundation footprint of the building to most effectively prevent the infiltration of outdoor air and subsequent dilution and/or inference of the sample.

Indoor Air Sampling

Indoor air sampling will follow the protocols outlined in Sections 2.6.3 and 2.7.3 of the NYSDOH Guidance document. Stantec plans to collect two (2) indoor air samples within the building: one sample from the basement near the sub-slab vapor sample location and one sample from a centrally located position on the first floor of the building. The sample will be collected over a period of approximately two hours. Personnel will avoid lingering in the immediate area of the sampling devices to minimize their undue influence on the samples. The flow rate for collecting the indoor air samples will not exceed 0.2 liters per minute. The sample volume will be 6 liters. The samples will be collected using laboratory-certified clean, Summa® canisters and analyzed for the entire suite of EPA Method TO-15 analytes by an ELAP Certified Laboratory. The indoor air samples will be collected concurrently with the sub-slab vapor and outdoor air samples.

Similar to the procedures stated for the Sub-Slab Vapor Sampling above, indoor air will be screened using a calibrated PID immediately adjacent to any significant cracks or penetrations found in the perimeter walls, windows, doors, or any other possible entrance point for outdoor air to enter the building. Areas indicating readings above background values will be visibly marked with chalk to delineate possible vapor entrance points into the building.

Outdoor Air Sampling

Outdoor air sampling will follow the protocols outlined in Sections 2.6.4 and 2.7.4 of the NYSDOH Guidance document. Stantec plans to collect one (1) outdoor air sample. The sample will be collected over a period of approximately two hours. Personnel will avoid lingering in the immediate area of the sampling devices to minimize their undue influence on the samples. The flow rate for collecting the outdoor air sample will not exceed 0.2 liters per minute. The sample volume will be 6 liters. The sample will be collected using a laboratory-certified clean, Summa® canister and analyzed for the entire suite of EPA Method TO-15 analytes by an ELAP Certified Laboratory. The outdoor air sample will be collected simultaneously with the sub-slab vapor and indoor air samples at an upwind location immediately adjacent to the building.

Vapor and Air Sample Analytical Program

The vapor and air samples will be collected using a 6-liter Summa canister capable of attaining low-level detection limits. The time interval for sampling will be approximately two hours at a flowrate not to exceed 0.007 cubic feet per minute (0.2 L/min.). Airflow into the canisters will be controlled and monitored with in-line gauges and flow controllers. Volatile organic compound analyses will be performed using USEPA Method TO-15. The analyses will be performed for the entire suite of VOCs according USEPA Method TO-15. The laboratory will seek to attain Method Reporting Limits (MRLs) of 1.0 $\mu g/m^3$, which are comparable to those typically achieved for indoor air samples. However, depending upon contaminant levels, MRL's may be higher. Samples will be submitted to an ELAP-certified laboratory to perform the laboratory analyses. The data set will

be reported in $\mu g/m^3$. It is understood that the soil vapor and air sample data will require validation, however, no additional QA/QC samples are proposed at this time.

Reporting

Following receipt of the laboratory data, a report will be prepared. The report will describe the field observations recorded at the time of sampling, the sampling procedures followed, the analytical results, and a site sketch showing the sampling locations. Copies of the report will be submitted to the NYSDEC, NYSDOH and MCDOH. Following review and approval by the NYSDEC, a copy of the report will be forwarded to the owner and building tenant for their information.

Schedule

Stantec intends to conduct the fieldwork contingent on receipt of approval to proceed from the NYSDEC and coordination of a suitable date with the owner of the property, NYSDEC, NYSDOH, and MCDOH. The fieldwork is expected to take one day to complete. The laboratory analysis is expected to take approximately four weeks. A letter report will be prepared and forwarded to the NYSDEC and other agencies within approximately two weeks of receipt of the laboratory data.

The City of Rochester recognizes that if the sampling event occurs outside of the heating season for Upstate New York (November 1-March 31), the results may not be used to rule out exposures within the building. Therefore, if this occurs, the results may need to be verified through re-sampling during the next heating season to ensure that unhealthy exposures are not present inside the building.

Should you have any questions or require further information, please contact me or Kevin Ignaszak, P.E. at (585) 475-1440.

Sincerely,

Michael P. Storonsky
Senior Associate

cc: Joseph Albert, Monroe County Department of Health
Richard Elliott, Monroe County Department of Health
Tamara Girard, NYS Dept. of Health-Troy
Mark Gregor, City of Rochester
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