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November 2, 2015

Ms. Tara Blum Environmental Engineer NYSDEC Region 7 – Division of Environmental Remediation 615 Erie Boulevard West Syracuse, NY 13204-2400

# Re: Proposed Work Plan Sims Matchplate Brownfield Site NYSDEC Site No. B-00072-7

File: 119.334.006

Dear Ms. Blum:

On behalf of the City of Syracuse, C&S Engineers, Inc. is submitting this proposed scope of work for final site investigation work and the determination of an appropriate remedial approach at the Sims Matchplate Brownfield site. The objective of this work is to complete the investigative phase of the Environmental Restoration Program so that the City can complete its obligations under the existing State Assistance Contract (SAC). The scope of work described below was developed after a meeting with NYSDEC on September 2, 2015.

# Surface Soil Investigation

To supplement previous subsurface investigations, this site investigation will also include characterization of surface soils across the site. Eight surface soil samples will be collected from the 0" to 6" interval below the vegetative cover across the site. Tentative locations are shown on Figure 1. Actual locations will be determined in the field based on the results of plume delineation. Analysis of the soil samples will be for United State Environmental Protection Agency (USEPA) Target Compound List (TCL) VOCs, SVOCs, Herbicides/Pesticides, PCBs and Target Analyte List (TAL) Metals.

## **Subsurface Investigation**

The intent of the subsurface investigation is to delineate the vertical and areal extent of trichloroethylene (TCE) impacted soil and groundwater now that the buildings and floor slabs have been removed and drilling access to all areas is available. The subsurface investigation at the Site will be conducted using a truck-mounted or track-mounted GeoProbe<sup>TM</sup> unit (i.e., direct-push drilling method). Up to three days of drilling will be completed working radially inward toward the Courtyard area. Based on our understanding of the site, the boreholes will be advanced to a maximum depth of approximately 20 feet. During prior work at the site, there had been no detected presence of TCE within the glacial till unit at this depth. If screening of the retrieved soil samples suggests that volatile organic compounds (VOCs) are present at the 20-foot depth, the boring will be extended until the presence of such VOCs is no longer detected.

Each borehole will be sampled continuously. Retrieved soil samples will be visually examined to assess subsurface conditions and physical properties of the strata. These properties include: color, moisture content, grain size, density and evidence of volatile organic vapors via conventional headspace analysis techniques using a photoionization detector (PID) equipped with an 11.7 eV lamp.

C&S will subcontract the drilling services with a qualified firm, and that firm will place a call to Dig Safely NY to mark out site utilities.

# Sampling and Analyses

#### Soil

A maximum of two soil samples (depending on field conditions) per borehole will be collected for analysis based on the proposed grid (Figure 1 attached) for a maximum of up to 64 soil samples during the subsurface investigation, assuming approximately ten boreholes per day. The sampling interval will be determined in the field based on visual examination of the samples and the results of PID screening. Analysis of the soil samples will be for TCL VOCs using USEPA Method 8260C.

#### Groundwater

C&S will sample four existing monitoring wells (MW-3, MW-5, MW-6, and MW-7) at the site using USEPA low-flow techniques, assuming that those wells are in acceptable condition. In addition, C&S will collect groundwater samples from up to four of the other available wells (MW-1, MW-2 and MW-4) and/or from the direct push boreholes, if indicated by soil conditions (i.e., PID headspace measurements) and by the presence of sufficient free water within the bore hole. Groundwater samples will be submitted for analysis of TCL VOCs consistent with ASP protocols.

Upon completion of this delineation program, each boring location will be located via hand-held GPS to allow accurate placement on the existing site plan. The relative elevations of the groundwater surface at all usable monitoring wells will be measured and the apparent direction of groundwater flow will be identified.

## **Reporting**

Subsequent to the completion of field work and receipt of laboratory data, C&S will prepare a letter report for submittal to the New York State Department of Environmental Conservation (NYSDEC). That report will include the investigation results as well as an update to the Remedial Alternatives Analysis (RAA) for the site based on the data generated. Note that we have assumed that the letter report will suffice to meet the NYSDEC requirements and that a rewrite of the previously submitted report will not be necessary.

Please contact us should you have any questions regarding this proposed scope of work

Sincerely, C&S ENGINEERS, INC.

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Robert M. Palladine, Jr. Senior Principal Environmental Services Group

cc: Owen Kearney, City of Syracuse Harry Warner, NYSDEC Region 7 Richard E. Jones, NYSDOH Mark Colmerauer, C&S







Sims Matchplate Brownfield Site NYSDEC Site No. B-00072-7

Proposed Sample Location Map

