S2C2 inc.

Streamlined Site Characterization & Closure

November 9, 2011

Mr. Gregory B. MacLean, P.E.
Environmental Engineer II
New York State Department of Environmental Conservation
Division of Environmental Remediation - Region 8
6274 East Avon-Lima Road
Avon, New York 14414

RE: Supplemental Remedial Investigation Activities at Carlson Park in Rochester, NY. (NYSDEC VCP Number V00514-8)

Dear Greg:

This letter addendum is intended to provide a description of supplemental Remedial Investigation (RI) activities that 100 Carlson Road, LLC proposes to conduct during the remainder of 2011 as part of ongoing RI activities being implemented at the Carlson Park Site (the Site). All of the proposed supplemental RI activities addressed herein were discussed at an informal meeting with you on October 19, 2011. These activities represent an expansion of the Scope of Work outlined in the Supplemental Work Plan for Initial Bedrock Evaluation Activities dated February 28, 2010 (Supplemental Work Plan), and other supplemental Work Plan Addendum letters dated September 2010 and August 2011. The Supplemental Work Plan, and subsequent addendum letters, are all addenda to the original Voluntary Cleanup Program Remedial Investigation Work Plan for Carlson Park, dated October 2004 (RI Work Plan). Accordingly, we request that this letter be considered an additional attachment to the Supplemental Work Plan.

The remainder of this letter provides a description of the additional RI activities currently being proposed. It is intended that information obtained during these activities will assist in identifying and focusing additional RI activities to be conducted in the Spring/Summer of 2012, including additional bedrock evaluation activities.

Summary of Proposed Supplemental RI Activities:

- Shallow bedrock groundwater evaluation in the vicinity of location BR-6;
- Additional adaptive overburden groundwater sampling to the west and southwest of Buildings 5 and 14; and
- Installation of an overburden piezometer/groundwater monitoring well near the downgradient edge of the dissolved TCE plume in overburden groundwater situated east of the facility buildings.

Description of Proposed Supplemental RI Activities:

Please note that all of the currently proposed supplemental RI activities will be conducted using methods and procedures similar to those previously used as part of the original RI Work Plan and/or the Supplemental Work Plan and addenda, or as otherwise described herein. The approximate locations of all currently proposed supplemental RI activities are presented on the attached Figure.

Shallow Bedrock Groundwater Evaluation in the Vicinity of Location BR-6.

Elevated concentrations of dissolved TCE were previously identified in shallow bedrock groundwater at location BR-6 situated along the eastern property boundary of the Site. Such concentrations indicate that TCE may also be present in the form of a Dense Non-Aqueous Phase Liquid (DNAPL) at or proximal to the BR-6 location as well. An evaluation of overburden groundwater quality in that area did not indicate the presence of groundwater quality impacts in the overburden groundwater overlying the bedrock in that portion of the Site.

The primary objective of the proposed additional shallow bedrock groundwater evaluation activities in this portion of the Site is to attempt to better characterize and delineate the highly impacted shallow bedrock groundwater zone identified to be present at BR-6. This will be done in order to help identify the source of these impacts, and to identify appropriate locations to conduct additional, deeper bedrock evaluation activities. More specifically, this task is intended to evaluate whether or not there is a connection between the impacts observed in shallow bedrock at BR-6 and the localized area of DNAPL previously identified to be present at the bedrock surface beneath a loading area at Building 2, or if the shallow bedrock impacts at BR-6 are potentially associated with other on-site and/or off-site, sources.

In order to meet the objectives of this task, an adaptive shallow bedrock groundwater sampling approach is proposed for this area. This approach will entail the initial advancement of three shallow bedrock borings within approximately 50 feet of BR-6, as indicated on the attached figure. Based upon bedrock groundwater quality observations made at these locations (including analytical results from groundwater grab samples, visual observations, and photo ionization detector (PID) readings of drill cuttings and return water, etc.), additional locations may be selected to undergo similar evaluation as appropriate for the completion of this task. Such adaptive sampling activities will be continued until the task objectives have been met, or until property boundaries are reached, whichever occurs first. Accordingly, the actual number and location of shallow bedrock groundwater evaluation points will be determined in the field and will be based upon information obtained as field work progresses.

At each shallow bedrock evaluation location, hollow-stem auger drilling will be utilized to advance a boring of 6” or greater in diameter to at least the bedrock surface. An attempt will be made to extend the borings approximately one to two feet below the bedrock surface using the augers. The bedrock surface has been identified to typically range from 16 to 20 feet

below grade in this portion of the Site. Temporary 4" or 6" steel or PVC casing will be set at the base of the boring and sealed with bentonite. Once the temporary casing has been set and sealed, a 4" borehole will be advanced through the casing, and extended into bedrock to a depth of approximately 10 feet below the base of the temporary casing. Such borehole advancement is anticipated to be conducted with the use of roller bit drilling (using water or air as the drilling fluid). Groundwater grab sampling will then be conducted within the shallow bedrock borehole. Groundwater samples will be analyzed on a rapid turnaround basis with the use of Method 8260B-modified (mobile laboratory) or Method 8260B (fixed base laboratory). If it appears that the bentonite seal on the temporary casing is not completely isolating overlying overburden groundwater from the shallow bedrock groundwater, then an inflatable packer assembly may be utilized to help isolate the shallow bedrock groundwater. If a packer assembly is used, an attempt may be also be made to collect groundwater grab samples from two intervals within the shallow bedrock borehole. All downhole equipment will be decontaminated between locations, and an effort will be made to use temporary materials as much as possible.

As mentioned above, available data from previous overburden investigation activities conducted in the area where the shallow bedrock evaluation borings are planned have not identified substantial groundwater quality impacts. Therefore, the introduction of impacts from the overburden into the shallow bedrock boreholes during drilling activities is considered unlikely. However, observations and PID measurements of the overburden drill cuttings will be made during drilling as a precaution to screen for impacts. If these observations suggest there may be such impacts, additional measures may be taken to reduce the potential for introduction of impacts from the overburden into the bedrock, as appropriate.

Once sampling has been completed at the temporary shallow bedrock locations, the boreholes will be abandoned via tremie-grouting and the temporary casings will be removed. The locations of all temporary boring will subsequently be surveyed by GPS.

Additional Adaptive Overburden Groundwater Sampling to the West and Southwest of Buildings 5 and 14.

As specifically requested by NYSDEC during a meeting on August 24, 2010, subsequent limited additional adaptive overburden groundwater sampling was conducted in an area west, north, and southwest of Building 6 in October and November 2010. During that time frame, overburden depth discrete groundwater grab sampling was conducted at a total of 21 additional locations (i.e., HS-40 to 60). Analytical Results from that sampling suggests that the origin of shallow overburden groundwater quality impacts observed to be present west of Buildings 5 and 6 may be related and/or contiguous to an area of shallow groundwater quality impacts previously identified west of Building 7.

The purpose for conducting this task is to complete the upgradient delineation of this overburden groundwater plume in order to evaluate its lateral extent and to help assess its origin. The area of focus for this depth-discrete shallow groundwater adaptive sampling

program will be between the SW corner of Building 5 and SW of Building 14, and west of that area into the open parking lot. This general area is also depicted on the enclosed figure. It is anticipated that rapid turnaround on-site VOC screening analysis (i.e., Method 8260B-modified) will be conducted as has previously been done. The actual number of locations to be sampled, and depth of such sampling, will be dependent upon the saturated thickness of the overburden and the analytical results obtained from any such overburden groundwater.

Installation of an overburden piezometer/groundwater monitoring well.

The installation of an additional piezometer/overburden groundwater monitoring well is proposed for a location situated just east of the southern portion of Building 10, as approximately shown on the attached figure. This location is believed to be along the downgradient edge of the overburden groundwater plume originating near a loading area at Building 2. Accordingly, this location is intended to serve as a long-term shallow groundwater monitoring point, and will ultimately become part of a more comprehensive groundwater monitoring well network. In addition, given this location, it is hoped that hydraulic information obtained from this point will be useful in continuing to evaluate potential influences from the sump situated in Building 10, and to help evaluate and monitor overburden groundwater conditions between the downgradient edge of this plume and the vicinity of BR-3.

As mentioned above, all supplemental RI activities proposed in this Work Plan addendum will be completed in a similar manner as previously conducted as part of the ongoing RI activities being completed at the Site, and will be consistent with the methodologies presented in prior Work Plans and/or addendums as previously approved by NYSDEC for this Site. We currently anticipate conducting these supplemental RI activities either just before or after Thanksgiving week. Please feel free to contact me at (908) 625-3192 if you have any questions or comments concerning this matter, or if you require any additional information.

Sincerely,
S2C2 Inc.

Steven B. Gelb

Steven B. Gelb
Project Manager

CC: Jim Goff

Building 14
Building 5
Building 6
Building 8
Building 7
Building 1
Building 2
Building 3
Building 4
Building 9
Building 10A
Building 10
MWBR-08 A
MWBR-01 A
PZ-02
PZ-01
MWBR-02 A
MWBR-03
OB & A
MWBR-07 A
MWBR-05
OB, A & B
MWBR-04 A
MWBR-06 A

Legend

Proposed Locations
- Temp. Shallow Bedrock Eval. Location
- Piezometer
- Overburden GW Evaluation Area

Existing Locations
- Bedrock Well - A
- Bedrock Well - B
- Roads
- Railroad
- Sidewalks
- Buildings
- Property Boundary

0 55 110 220 330 440 Feet

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CARLSON PARK FACILITY
CARLSON ROAD
ROCHESTER, NEW YORK

TITLE
PROPOSED OVERBURDEN AND SHALLOW BEDROCK EVALUATION LOCATIONS - FALL 2011

FIGURE 1

SCALE 1:1,800