

# Streamlined Site Characterization & Closure

September 15, 2010

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 is intended to provide a summary of supplemental Remedial Investigation (RI) activities that 100 Carlson Road, LLC proposes to conduct 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 a meeting with the New York State Department of Environmental Conservation (NYSDEC) on August 24, 2010. 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), which were completed this past summer. The Supplemental Work Plan was an addendum to the 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 attachment to the Supplemental Work Plan. The remainder of this letter contains a summary and brief description of the additional supplemental RI activities currently being proposed.

## Summary of Proposed Supplemental RI Activities:

- Expanded Overburden Groundwater Evaluation in the vicinity of location BR-3;
- Additional Adaptive Shallow Groundwater Sampling in the area west and north of Building 6; and
- Additional Bedrock Evaluation Activities at selected locations along the Property Boundaries.

# Brief Description of Proposed Supplemental RI Activities:

Please note that all of the currently proposed supplemental RI activities will be conducted in a similar manner as those previously conducted as part of the original RI Work Plan and/or the Supplemental Work Plan. The approximate locations of all currently proposed supplemental RI activities are presented on the attached Figure.

Elevated concentrations of dissolved TCE were previously identified in shallow overburden groundwater at location BR-3 situated along the eastern property boundary of the Site. An extensive adaptive overburden groundwater sampling program was conducted beneath a parking area north, west, and south of this location in an attempt to better delineate this shallow plume, and to help identify the source of these impacts. The results of such adaptive sampling activities indicated that the highest dissolved TCE concentrations found to be present in shallow overburden groundwater in this area were at location BR-3. Given the placement of this location at the property boundary, it is currently unknown whether the source of these impacts is from an on-site or off-site location. In addition, due to the fact that an operating sump in Building 10 may be influencing groundwater flow in the surrounding overburden, the specific local shallow groundwater flow patterns may not currently be clearly defined in this area. The additional supplemental RI activities proposed herein are intended to provide information that can be used to better define local shallow groundwater flow patterns in this area, and to further evaluate the extent and configuration of shallow groundwater quality impacts previously observed to be present in this area.

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Several activities are proposed to meet the objectives of this task, and include the following: the placement of two on-site piezometers, an adaptive shallow groundwater sampling program within the public right-of-way along the northern portion of Hampden Road, and limited additional shallow groundwater quality delineation activities just southwest of location BR-3. The two proposed piezometers are intended to provide water table elevation data between the eastern property boundary (as measured in the overburden well installed at location BR-3) and Building 10. It is anticipated that such information will be useful in assessing local shallow groundwater flow patterns, and potential impacts that the sump situated in Building 10 may be having on such flow patterns.

Adaptive overburden groundwater sampling activities to be conducted along Hampden Road are intended to help determine the potential lateral extent of shallow groundwater quality impacts east of location BR-3. The adaptive sampling activities will involve the collection of depth-discrete groundwater grab samples from the overburden through the use of temporary points. Water elevation data obtained from these temporary points will also be used to help assess shallow groundwater flow patterns at that time.

Additional shallow groundwater quality delineation activities will be conducted in a localized area southwest of location BR-3 (as indicated on the Figure). Information obtained from these depth-discrete sampling points will be used to help verify a previously observed separation between the dissolved TCE plume originating near the eastern edge of Building 2, and the shallow groundwater quality impacts observed near BR-3.

Additional Adaptive Shallow Groundwater Sampling in the Area West and North of Building 6.

As specifically requested by NYSDEC during our meeting on August 24, 2010, an attempt will be made to conduct limited additional adaptive shallow groundwater sampling in an area west and north



of Building 6. Previous similar depth-discrete shallow groundwater sampling conducted in this general area in 2005 indicated that the extent of saturated overburden was limited in this area, and where saturated overburden was present, the pattern of dissolved TCE in shallow groundwater was sporadic. Due to these conditions, only limited locations were sampled in this area in 2005 (i.e., locations HS-34 and HS-21) west and north of Building 6, respectively. The purpose of the proposed additional adaptive groundwater sampling activities in this area is intended to supplement information obtained in 2005, in an effort to obtain additional delineation information of dissolved TCE in shallow overburden groundwater west and north of Building 6. The actual number of locations to be sampled, and depth of such sampling, will be dependent upon the presence of saturated overburden and the analytical results obtained from any such overburden groundwater.

#### Additional Bedrock Evaluation Activities at Selected Locations Along the Property Boundary.

As part of the initial bedrock evaluation activities recently completed at the Site, a variety of bedrock and bedrock groundwater information was obtained at five locations (BR-1 through BR-5). Such information was obtained through a combination of bedrock coring and packer-testing, downhole geophysical surveying, and groundwater monitoring well installation and sampling. Based upon the information previously obtained, it is proposed that similar information be obtained at an additional four locations at this time. Each of these locations will also be situated along the property boundaries of the Site at the approximate locations shown on the attached Figure. One location will be situated west of BR-1, and another south of location BR-5. Information obtained from these two locations is intended to help assess the lateral extent of previously identified bedrock groundwater quality impacts. An additional bedrock evaluation location will be placed between locations BR-2 and BR-3. Given the poor yield observed in the shallow bedrock groundwater monitoring well installed at location BR-3, coupled with initial water level information measured in the existing bedrock groundwater monitoring well network, this location is intended to provide additional information at a location that is suspected of being near the hydraulically downgradient portion of the property. The fourth bedrock evaluation location to be added at this time will be situated near the southwest corner of the property. This location is intended to represent a hydraulically upgradient point within the property. Information obtained from this point, evaluated with information obtained from the other on-site locations, is intended to allow a more comprehensive understanding of the overall bedrock conditions present at the property.

In addition to the four new bedrock evaluation locations mentioned above, it is also proposed that an additional shallow bedrock groundwater monitoring well be installed at location BR-5. The shallow bedrock groundwater monitoring well previously installed at that location (MWBR-5A) has displayed groundwater quality and yield characteristics which are significantly different than those displayed at a similar depth interval during packer-testing activities conducted in that area just prior to the installation of this well. Well MWBR-5A was installed approximately eight feet north of the packer testing location. Consequently, it is proposed that the additional shallow bedrock groundwater monitoring well to be installed at this location be situated approximately 10 feet west of the original bedrock coring/packer-testing location.



### Short-Term Water Level Monitoring.

In addition to the three tasks described above, once all the additional groundwater monitoring wells and/or piezometers have been installed, selected locations will be identified to undergo detailed short-term water level monitoring. This monitoring is primarily intended to help understand what hydraulic impacts, if any, the sump situated beneath Building 10 may be having on local overburden and/or bedrock groundwater. Such data may also provide information pertaining to the degree of hydraulic interconnection of the water-bearing fracture zones identified in bedrock at the various drilling locations. Pressure transducers equipped with data logging capability will be installed in the selected wells/piezometers and the sump itself. These transducers will be programmed to measure and record water levels at a frequency to be determined based upon observations of the sump pump operation. Water elevations will then be monitored and recorded at these locations for a period of approximately 2 weeks to 1 month. This data will be evaluated together with local precipitation and barometric pressure data measured at a nearby weather station over the same time frame.

As mentioned above, all supplemental RI activities proposed in this Work Plan attachment 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 the prior Work Plans as previously approved by NYSDEC for this Site.

This concludes the description of additional supplemental RI activities currently proposed to be conducted at the Carlson Park Site this autumn. Any additional field activities which may be required at the Site in the future will be determined once the results from these activities have been evaluated together with information previously obtained.

We currently anticipate conducting these supplemental RI activities (excluding groundwater monitoring well sampling) between September 20<sup>th</sup> and October 15<sup>th</sup>. It is anticipated that a complete round of bedrock groundwater monitoring well sampling will be conducted approximately one month after the new wells have been installed and developed.

Please feel free to contact me at (908) 253-3200 ext.11 if you have any questions or comments concerning this matter, or if you require any additional information.

Sincerely, S2C2 Inc.

Steven B. Gelb Project Manager

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