**State of Wisconsin**
DEPARTMENT OF NATURAL RESOURCES
3911 Fish Hatchery Road
Fitchburg, Wi 53711

Tony Evers, Governor
Preston D. Cole, Secretary
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711

WISCONSIN
DEPT. OF NATURAL RESOURCES

January 11, 2019

File Ref: 02-13-561778

Ms. Jane Rach
Summit Credit Union
2424 Rimrock Rd
Madison, WI 53713

Re:     Response to *Interim Remediation Design Report*
        Former Waun-A-Clean Inc., 205 S Klein Dr, Waunakee, Wisconsin

Dear Ms. Rach:

The Wisconsin Department of Natural Resources (DNR) received the *Interim Remediation Design Report* from Seymour Environmental Services, Inc. (Seymour), along with a technical assistance request and review fee on November 13, 2018. The report presents recommendations for interim source area remedial actions for soil and groundwater on the above property; the technical assistance request solicits DNR's comments regarding the report and proposed remediation methods.

The proposed approach uses an Accelerated Remediation Technologies, Inc. (ART) design, an integrated system wherein individual wells are instrumented for multiple remedial technologies targeting both soil and groundwater, including soil vapor extraction, air sparging, and in-situ air stripping to remove volatile compounds of concern from soil and groundwater. Based on our review of the report, we have the following comments:
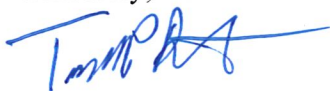
- In general, we recommend de-coupling the soil and groundwater remediation systems at this site, so that each can be operated and optimized independently as additional data become available and site conditions evolve during remediation.

- The proposed soil vapor extraction (SVE) system approach will likely be effective for treating source area vadose zone soil contamination. However, we recommend in-field pilot testing to collect data to refine system design before full implementation of the system. We will support expedited implementation of source area soil remediation system.

- The proposed groundwater remediation system, using the ART design, may be effective in treating groundwater within and adjacent to the wells, but we have concerns about the suitability of this approach for the site. We recommend that additional groundwater investigation be conducted with two objectives: first, a focused evaluation of physical and geochemical conditions of the soil and bedrock aquifers in the source area with the objective of supporting an appropriate remedial design for treating source area groundwater; and second, a concurrent assessment of the horizontal and vertical extent of groundwater contamination, including

consideration of the site in the context of the regional groundwater flow regime. For example, while the currently inferred groundwater flow direction within the bedrock at the site is to the north, the regional groundwater flow in the bedrock aquifer system is likely generally toward the south-southeast, toward Lake Mendota. Further investigation is necessary to resolve this possible incongruency, as the implications with respect to groundwater remediation and potential receptors are significant.

- Ch. NR 712, Wis. Adm. Code, requires that a professional engineer (PE) review and certify design reports submitted under ch. NR 724. This report lacks the required certification. We suggest that a review by a qualified PE could identify and address the technical issues we have noted, and potentially others.

- s. NR 724.05(2)(a), Wis. Adm. Code, requires concurrent submittal of the design report along with design plans and specifications, operation and maintenance plan, and long-term monitoring plan. We can discuss alternatives to this requirement, but we suggest that a rigorous engineering analysis early in the planning stages could ultimately reduce remediation costs.

I would be happy to discuss the site with you, in person or by telephone. Please feel free to contact me at (608) 275-3490, or at TrevorA.Bannister@wisconsin.gov.

Sincerely,

Trevor Bannister
Hydrogeologist
Remediation & Redevelopment Program


cc:     Robyn Seymour, Seymour Environmental Services, Inc.