State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
2300 N. Dr. Martin Luther King, Jr. Drive
Milwaukee Wi 53212-3128

Scott Walker, Governor Daniel L. Meyer, Secretary

Telephone 608-266-2621 Toll Free 1-888-936-7463 TTY Access via relay - 711



December 19, 2018

Mr. Steven Dukatt Carol Investment Corporation 1410 South Clinton Street Chicago, IL 60045

Subject:

Review of Design Report Addendum/Remedial Action Plan

Sunrise Shopping Center

2410-2424 10th Avenue & 1009 Marquette Avenue, South Milwaukee, WI

BRRTS #s: 02-41-576336 & 02-41-579429, FID #: 241828620

Dear Mr. Dukatt:

On October 31, 2018, the Wisconsin Department of Natural Resources (DNR) received a report titled *Design Report Addendum/Remedial Action Plan* (RAP), dated October 18, 2018. The RAP was prepared on your behalf by your consultant, DAI Environmental, Inc. (DAI). A Technical Assistance fee was submitted for DNR review and a written response. The RAP documents the selected remedial actions that were detailed in the *Remedial Action Options Report* (RAOR) submitted by DAI, dated April 2, 2018.

RAP Summary

The RAP includes a summary of the pilot-scale testing activities and results and proposes chemical injection as the full-scale remedial method, with RemOx® as the selected chemical oxidant. The pilot-scale testing was conducted on July 19 and 20, 2018. Injections points were installed within the building and outside the tenant space, within the alley to the west of the building. Post-injection confirmation soil and groundwater sampling was conducted to assess the amount of contaminant reduction.

The RAP proposes installing Class V underground injection control wells within the tenant space and outside the building to conduct additional chemical injection. These wells and the proposed injection activities are intended to reduce contaminant concentrations in the shallow and deeper subsurface soils and in groundwater within the vicinity of monitoring well MW-5. Post-injection confirmation soil and groundwater sampling will be conducted at the conclusion of the chemical treatment to assess the remedial progress and determine the need for additional treatment.

The DNR has reviewed the RAP for compliance with Wis. Admin. Code ch. NR 724, which explains the requirements for design, implementation, operation, maintenance, and monitoring of remedial actions. The DNR concurs with the remedial method described within the RAP and provides the following comments:

- The DNR approves the proposed additional injection events, as described within the RAP. If significant deviations from the remedial actions as described in the RAP occur, additional approvals and/or exemptions may be necessary.
- The DNR recommends a combination of confirmation soil sampling at previously sampled locations to determine reduction in concentration in addition to sampling at new locations to delineate the residual plume extent.



- The DNR understands that the following remedial actions, as described within the RAOR, will also be conducted:
 - A barrier maintenance plan will be completed and submitted along with the future closure request. The barrier maintenance plan will use the existing asphalt pavement and building foundation to address soil contamination at several separate locations at the site.
 - A sub-slab depressurization system is proposed to be installed within the 2410 and 2412 tenant spaces. The final design and construction details will be discussed in a report complying with Wis. Admin. Code § NR 724.15.
 - Water that is captured by the Ace Hardware sump is currently discharged to the municipal storm sewer system. Sampling of the collected sump water indicated exceedances of the Wis. Admin. Code ch. NR 140 enforcement standard for tetrachloroethene. DAI proposes to install a carbon filter process that is intended to remove volatile organic compounds from the sump water prior to discharge to the municipal sewer.
- As mentioned in the site investigation report review letter dated April 24, 2018, the DNR suggests that efforts be made to seal and vent the sump in the Ace Hardware basement. Additionally, the DNR suggests completing post-injection sampling of the sump water.
- The DNR suggests collecting post-injection sub-slab vapor samples to determine present concentrations and assess the effectiveness of the injection event(s) on reducing vapor intrusion.
- The DNR understands that DAI will continue to conduct the quarterly groundwater sampling events.
- Once the remedial actions are determined to be complete, the remedial activities and the accompanying confirmation results should be documented in a Remedial Action Documentation Report. The additional remedial options as described within the RAOR should also be discussed. This report should be in compliance with Wis. Admin. Code § NR 724.15.

The DNR appreciates your efforts to address the contamination at this site. If you have any questions regarding this letter, please contact me, the DNR Project Manager, at (414) 263-8699 or by email at riley.neumann@wisconsin.gov.

Singerely,

cc:

Riley/D. Neumann Hydrogeologist

Remediation & Redevelopment Program

Tom DePaul & Chris Cailles, DAI (electronic)