



August 16, 2018

Ms. Susan Doolin
Packard Way Cleaners, Ltd.
HCRI Box 73
Pembine, WI 54156

Subject: Review of "Site Investigation Update and Interim Remedial Action Plan" dated June 6, 2018
Former Packard Way Cleaners
3650/3652 East Barnard Avenue, Cudahy, WI 53110
BRRTS #: 02-41-515150, FID #: 241490920

Dear Ms. Doolin:

On June 19, 2018, the Wisconsin Department of Natural Resources (DNR) received a "Site Investigation Update and Interim Remedial Action Plan" (the Submittal), prepared by EnviroForensics, LLC (EnviroForensics), for the property at 3650/3652 East Barnard Avenue, Cudahy, WI (the Property). Soil and groundwater contaminated with chlorinated volatile organic compounds (CVOCs) associated with the former dry cleaning operation have been identified both onsite and offsite of the Property. The Submittal includes an update of the supplement site investigation activities completed between July 2015 and January 2018, as well as an interim remedial action plan. According to the Submittal, concurrence and approval from the DNR is being sought for the proposed interim remedial strategy. A fee was paid to the DNR to review the Submittal and provide a written response. The DNR provides the following comments regarding the Submittal.

Interim Remedial Action Plan

According to the Submittal, EnviroForensics recommends an interim remedial action to prevent high concentrations of CVOCs in soil from impacting shallow groundwater. Multiple excavation areas have been proposed to target higher concentration CVOC impacts in the vadose zone, with the primary objective of removing source area soil that may continually support the dissolved phase impacts.

In addition to the Submittal, the DNR received a "Hazardous Waste Exemption Request for Soil Disposal" (the Request) submittal on July 19, 2018. The DNR reviewed and subsequently approved the Request in a July 30, 2018, letter.

EnviroForensics proposes to implement the following activities specific to the interim remedial action: excavate source areas soil impacted with CVOCs and dispose of the materials according to the July 30, 2018, approval letter, collect confirmation soil samples from the excavation areas, backfill with clean soil and reinstall concrete as a cap at the surface, reinstall three (3) monitoring wells and one (1) piezometer within the excavation area, and perform groundwater monitoring to evaluate trends of dissolved CVOC concentrations.

Based on the current available information, the DNR concurs with the proposed interim remedial action strategy as detailed in the Submittal.

Site Investigation Update

According to the Submittal, EnviroForensics mobilized to the site multiple times between July 2015 and January 2018 and completed the following activities: conducted a vapor intrusion assessment at 3658 E. Barnard Avenue, attempted to gain access to 3648 E. Barnard Avenue, advanced six (6) soil borings, installed five (5) new permanent monitoring wells, converted four (4) preexisting temporary wells to permanent wells, collected periodic water level measurements and groundwater samples from nine (9) monitoring wells and two (2) piezometers, collected a sample from the site basement sump, and advanced eleven (11) soil borings and hand augers for the purpose of characterizing soil for potential disposal options.

Based on the current available information provided in the Submittal, additional site investigation activities will need to be completed to define the degree and extent of contamination, per Wis. Admin. Code § NR 716.11.

- 1) Define the horizontal and vertical extent of soil contamination to the north and east of the existing data delineated by the extent of contamination line shown on Figure 3 of the Submittal. Consideration should be given as to the transport, distribution, and migration pathway of the contaminants of concern.
- 2) Define the degree and extent of groundwater contamination to the north and east of the existing data delineated by the extent of contamination lines shown on Figure 5 of the Submittal. Given the interpreted direction of groundwater flow (east-northeast), consideration should be given to the installation of Wis. Admin. Code ch. NR 141 compliant side-gradient and downgradient monitoring well(s).
- 3) Complete an assessment of the vapor intrusion pathway per RR-800 of the surrounding properties based on the results of the soil and groundwater investigation, taking into consideration the proximity to the CVOC contamination. In addition, provide supporting documentation regarding the previous attempts to contact the property owner at 3648 E. Barnard Avenue for site access. If the property owner has refused or failed to respond to at least 2 previous written access requests for vapor intrusion sampling, the DNR may assist in the 3rd/final request.

Please be aware the review of the Submittal relates only to contamination that has been currently identified based on the available information. Obvious signs of contamination observed during site activities or at any other time during the project must be reported to the DNR. Additional investigation may be required to define the degree and extent of any newly discovered release areas. A determination will also need to be made as to whether a proposed remedial action plan will adequately address any newly discovered contamination.

We appreciate your efforts to restore the environment at this site. If you have any questions regarding this letter, please contact me at (414) 263-8524 or by email at trevor.nobile@wisconsin.gov.

Sincerely,



Trevor Nobile, P.G., CPG
Project Manager - Hydrogeologist
Remediation & Redevelopment Program
cc: DNR SER File