



December 22, 2021

Mr. Richard Peters
5317 Radcliffe Dr
Greendale WI 53129

SUBJECT: Approval with Comments of Remedial Action Options and Design Report
Former Peters Dry Cleaners 5094 West College Avenue, Greendale, WI 53192
DNR BRRTS# 02-41-284323; DNR FID#: 341045210

Dear Mr. Peters:

On September 2, 2021, The Wisconsin Department of Natural Resources (DNR) received *Remedial Action Options and Design Report* (the Report) for the above-referenced site. The Report was prepared on your behalf by EnviroForensics, LLC (EnviroForensics). The Report was submitted in response to the DNR's *Approval of Remedial Action Options Report Change Order* dated October 9, 2020. The DNR reviewed the Report for regulatory compliance with Wis. Admin. Code chs. NR 722 and 724, and grants a conceptual approval of the remedial action design plan and provides you with recommendations and feedback pertaining to the plan, as detailed below.

Summary of Remedial Action Options and Design Report

The Report identifies and evaluates a range of remedial options. The Report proposes a remedial action design plan that uses a combination of options as described below.

- Excavation and disposal: the source area under the site building will be excavated to the extent practicable, considering the safety and technical concerns of an interior excavation. The areal extent of the excavation will be limited by the building walls and the heavy equipment in the building's kitchen area, and the vertical extent of the excavation will be limited by the stability of the excavation's side walls. It is expected that the excavation will be advanced to between 6 and 9 feet below ground surface (bgs). Excavated soil will generally be disposed of off-site as hazardous waste. Some soil may be disposed of in a RCRA Subtitle D landfill pending manifest approval.
- In-Situ Chemical Reduction: the material that is to be used to backfill the excavation will be mixed with an in-situ chemical reduction (ISCR) reagent, specifically Provect-IR. This backfill amendment is intended to treat residual source area impacts and may treat nearby shallow groundwater through advection.
- Infiltration cap: The site building, which overlies the most impacted area, will act as an infiltration cap.
- Performance monitoring: post-remediation groundwater monitoring is proposed to be conducted at select monitoring wells. The post-remediation groundwater monitoring is proposed to be conducted semi-annually for a period of two years.
- Installation of a passive vapor mitigation system is proposed at the on-site building.

Review of Remedial Action Design Plan

Based on the DNR's review of the remedial action design plan, as presented in the Report, the DNR provides the following comments:

- Confirmation samples must be collected from the base and sidewalls of the excavation in order to determine the extent and degree of residual soil contamination.
- Amending the backfill material with an ISCR reagent will require a Wisconsin Pollutant Discharge Elimination System (WPDES) general permit under Wis. Stat. § 283.31(1), an approval to inject materials under Wis. Admin. Code § NR 812.05, and a temporary exemption to inject groundwater under Wis. Admin. Code § NR 140.28(5).
- The DNR concurs with the use of the site building as an infiltration cap, but notes that per Wis. Admin. Code § NR 724.13, a maintenance plan will be required for the cap.
- The DNR concurs with the proposal to conduct post-remediation groundwater monitoring. The results of the post-remediation groundwater monitoring should be evaluated for compliance with the case closure criteria contained in Wis. Admin. Code § NR 726.05(6).
- Sub-slab vapor samples collected to date have not identified contaminants at concentrations exceeding the applicable vapor risk screening level (VRSL) and indoor air samples collected to date have not identified contaminants at concentrations exceeding the applicable vapor action level (VAL). The DNR concurs with the proposal to install a passive vapor mitigation system at the on-site building. Based on current data, the vapor mitigation system will not be required as a continuing obligation because no VRSL or VAL exceedances have been identified to date.

This approval does not guarantee the reimbursement of costs under the Dry Cleaner Environmental Response Program. On October 27, 2020, the DNR sent you a letter regarding the status of the Dry Cleaner Environmental Response Fund (DERF). Refer to the October 27, 2020 letter for information regarding the financial viability of the DERF. Additional updated information regarding the financial viability of the DERF can be found under the fund stats tab located at the following link: <https://dnr.wisconsin.gov/aid/DERF.html>.

The DNR appreciates your efforts to restore the environment. If you have any questions regarding this letter, please contact me, the DNR project manager, at (414) 704-4348 or via email at connor.mulcahy@wisconsin.gov.

Sincerely,



Connor Mulcahy
Project Manager – Hydrogeologist
Remediation & Redevelopment Program
Southeast Region, Milwaukee

cc: Rob Hoverman, Enviroforensics, LLC (electronic)