



April 25, 2019

Mr. Tom Schafer  
4300 Oakland, LLC  
2551 North Wahl Avenue  
Milwaukee, WI 53081

Subject: Review of the Remedial Action Options Report/ Revised Remedial Action Plan  
Former Shorewood Queensway Drycleaning Site, 4300 North Oakland Avenue,  
Shorewood, WI

FID: 241094590, BRRTS: 02-41-552089

Dear Mr. Schafer:

The Wisconsin Department of Natural Resources (DNR) has completed a review of the *Remedial Action Option Report (July 18, 2018)* and the *Revised Remedial Action Plan (April 24, 2019)*. The reports and associated technical assistance review fee of \$1,050 were provided on your behalf by Fehr Graham Engineering & Environmental (Fehr Graham). The DNR review remedial action option and remedial action plans at hazardous substance discharge sites for compliance with Wis. Stats. § 291.11, and Wis. Admin. code chapters NR 700 through NR 749. Based on the information submitted, the DNR has determined that the remedial action options and remedial action plan and associated reports meet applicable code requirements.

Per Wis. Admin. Code ch. NR 722, standards for selecting remedial actions, Fehr Graham recommended treatment, excavation, and offsite disposal of contaminated soil, followed by placement of residual chemicals in the excavation base, clean soil replacement, and post-excavation groundwater monitoring. The Tasks to complete the remedial action are:

- Task 1: Injection Permit, Local Permit, Landfill Approval, Project Set Up: The DNR WPDES/Injection permit will be obtained from Mr. Binyoti Amungwafor (DNR) as a separate application with a \$700 required fee before proceeding with the soil treatment.
- Task 2: Excavation and Soil Treatment
- Task 3: Chemical Treatment of the Excavation Base, Backfill, and Replacement Well Installation
- Task 4: Semi-Annual Groundwater Monitoring and Vapor Assessments
- Task 5: Reporting
- Task 6: Case Closure Request
- Task 7: Well Abandonment

The DNR concurs with the Remedial Action Plan (April 24, 2019) proposed by Fehr Gram.

### Hazardous Waste Determination

A request for a hazardous waste determination was also submitted along with the remedial action option and remedial design report submitted in July 2018 and revised on February 8, 2019. The reports and

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associated technical assistance review fee of \$1,050 were provided on your behalf by Fehr Graham Engineering & Environmental (Fehr Graham) as required under Wis. Admin. Code Chapter NR 749.

The Hazardous Waste Determination applies to chlorinated volatile organic compounds (CVOCs) contamination identified in soil and groundwater at the site specifically tetrachloroethene (PCE) used in the drycleaning process at the site.

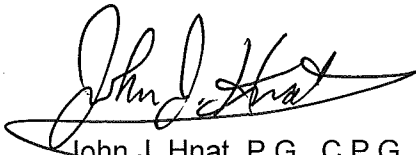
Fehr Graham interviewed the former owner on the operations of the facility from 1977 to 2017. Operations were discontinued in 2017, and the facility sold to the current owner. Fehr Graham will treat the PCE soil contamination insitu and will sample the insitu soils for total VOCs and TCLP VOCs. Fehr Graham has proposed the following for the treatment of contaminated soils:

- Soil with PCE below 14 mg/kg will be directly landfilled.
- If the total levels of PCE, TCE, and VC are less than 20 times the TCLP concentrations (less than 14 mg/kg for PCE, 10 mg/kg for TCE, and 4.0 mg/kg for VC), TCLP testing may not be necessary, as the soil will be considered by default to be able to pass the TCLP criteria due to the method's 20 times dilution in the sampling process.
- Soil with PCE above 14 mg/kg will be treated, followed by retesting.
- If testing results are below the direct contact threshold (contained out) values of 153 mg/kg for PCE, 8.8 mg/kg for TCE, and 2.0 mg/kg for VC, and levels pass the TCLP criteria of 0.7 mg/l for PCE, 0.5 mg/l for TCE, and 0.2 mg/l for VC, the soil material can be accepted for landfill disposal at a Subtitle D facility in Wisconsin.
- If treated soil concentrations fail to pass these criteria, additional treatment to these soils will be completed. The retreated soil must meet the LDR restriction of ten (10) times the universal treatment standards of Wis. Admin. Code § NR 668.48, which is 60 mg/kg for the three compounds (PCE, TCE, and VC) and pass the TCLP limits.

The DNR concurs with the Hazardous Waste Determination proposed by Fehr Graham.

If you have any questions or comments, please feel free to contact me at the above address or at (414) 263-8644. Please refer to the FID number at the top of this letter in any future correspondence. Future correspondence should be sent directly to the Remediation and Redevelopment Environmental Program Assistant Jennifer Dorman (414-263-8683) at the above address.

Sincerely,



John J. Hnat, P.G., C.P.G.  
Project Manager/Hydrogeologist  
Southeast Region  
Remediation and Redevelopment Program

C: Ken Ebbott – Fehr Graham  
WDNR SER Files