



October 6, 2023

Roers Companies
c/o: Shane LaFave
110 Cheshire Lane, Suite 120
Minnetonka, MN 55305
Via Email Only to shane@roerscompanies.com

Subject: Soil Sampling Plan Review
Community Within the Corridor - East Block
2748 N. 32nd Street, Milwaukee, WI 53210
BRRTS #02-41-263675, FID #241025400

Dear Mr. LaFave:

On September 14, 2023, the Wisconsin Department of Natural Resources (DNR) received *Soil Sampling Plan* prepared by K. Singh & Associates, Inc. on behalf of Community Within the Corridor (CWC) for the subject site. The *Soil Sampling Plan* was submitted in response to the DNR's September 7, 2023, *Remedial Action Options Report Review* letter. On September 22, 2023, the DNR sent CWC an email with preliminary comments on the soil sampling plan that was presented, as CWC requested immediate feedback for work that was planned for the week of September 17, 2023. On September 22, 2023, CWC presented additional information and an updated sampling plan, per the DNR's feedback presented in the September 22, 2023, email (collectively, the Report). The DNR has reviewed the Report along with previously submitted reports and analytical data for this site for regulatory compliance with Wis. Admin. Code § NR 662.011 and concurs with the soil sampling plan presented in the Report, as specified in the comments below:

Hazardous Waste Determination Clarifications

The soil that will be generated as a part of the planned remedial excavations, as outlined in the Report, must be evaluated to determine whether the soil is a characteristic hazardous waste prior to excavation and disposal, based on the following:

1. Based on their investigations to-date, K. Singh has concluded that because the source of TCE contamination and the date of discharge to the soil are not known, the soil located in the remedial excavation area does not meet the definition of a "listed" hazardous waste, as defined in Wis. Admin. Code ch. NR 661.
2. The Report references applying "contained out" criteria to the planned soil excavations and subsequent soil disposal activities. As the DNR explained in the *Review of Updated Remedial Action Design Report* letter, dated June 8, 2021, a "contained out" request does not apply to the TCE contaminated soil within the remedial excavation areas at this site, because K. Singh has determined that the soil was not contaminated with a "listed" waste. Therefore, the DNR reviewed the Report as a request for waste determination concurrence, not as a request for a "contained out" determination. Furthermore, any concurrence that the DNR may provide on a given waste determination does not negate the generator's responsibility for correctly classifying a solid waste under Wis. Admin. Code § NR 662.011 and properly

managing soils. For information on making a waste determination, see RR-705, *Guidance for Hazardous Waste Remediation*.

- a. The Report indicates that the DNR “rescinded their earlier contained out determination.” However, as indicated in the September 7, 2023, DNR letter, the DNR’s June 2021 hazardous waste determination concurrence letter only applies to the soil presented for evaluation in CWC’s May 11, 2021, report. It is not appropriate to apply a characteristic hazardous waste determination that evaluated soil outside the proposed limits of excavation. Any further characteristic waste determinations must be based on analysis of the material proposed for excavation and disposal.

Characteristic hazardous waste determinations must be made by the generator based on data that is specific to each proposed area of soil excavation and subsequent disposal, and evaluated using the most relevant data that may be available. Soil data from excavation confirmation soil sample HS-5 identified TCE at 220 ppm, which underscores the importance of analyzing soil in this area to determine if it would be considered a characteristic hazardous waste when generated.

- b. The Report references the “contained out” value for soil containing TCE is 8.8 ppm. For your future reference for soils generated at locations that meet the definition of a “listed” waste, the updated “contained out” value for soil containing TCE is 8.41 ppm. See RR-705 for additional details on using health-based standards for contained out decisions.
3. Upon excavation, any soil that exhibits a characteristic of hazardous waste (i.e., toxicity) would be considered a hazardous waste. The toxicity characteristic leaching procedure (TCLP) is used to test whether contaminated soil exceeds regulatory limits, thereby considered hazardous for disposal. The listed TCLP toxicity regulatory limit for TCE, under the Resource Conservation and Recovery Act (RCRA), is 0.5 ppm. Generally, further evaluation is needed prior to soil excavation and disposal when total TCE in soil, from an “unlisted” source, exceeds 10 ppm at a given soil sample location. A concentration of 10 ppm for total TCE is determined based on RCRA’s “20 times” rule. More specifically, for TCE, any soil sample that is greater than 20 times the toxicity characteristic TCLP value of 0.5 ppm (i.e., 10 ppm), should be analyzed using TCLP to determine whether the soil is a characteristic hazardous waste prior to excavation and disposal.
 4. Per Wis. Admin. Code NR § 668.49, soil that exhibits a characteristic of hazardous waste when generated must meet Land Disposal Restrictions (LDRs) prior to placement in a land disposal unit (i.e. landfill). Alternative LDR standards for soil exhibiting the toxicity characteristic for TCE are ten times the Universal Treatment Standard or 62 ppm.

Next Steps

In consideration of administrative code requirements, the DNR is requesting the implementation of the following schedule:

- Per Wis. Admin. Code § NR 716.14, CWC must submit all sampling results within 10 business days of receiving laboratory data.
- Paragraph 4 of Section III of the Emergency Order issued by the DNR on March 31, 2023, requires CWC to demonstrate that the installed VMS is preventing exceedance of the vapor action level (VAL) for TCE throughout the entire building under all expected occupied building operating conditions and that vapor concentrations of TCE will remain below the residential VAL throughout the entire building. In accordance with this paragraph and per Wis. Admin. Code ch. NR 724, submit a VMS commissioning plan to the DNR. Per Wis. Admin. Code §§ NR 708.11(4)(b)-(c) and 724.07(1), DNR review of the commissioning plan is required prior to proceeding with implementation of the first round of system commissioning. Include a proposed commissioning schedule within the commissioning plan, along with a technical assistance fee for DNR review and response, per Wis. Admin. Code ch. NR 749.

- The commissioning plan should also demonstrate that the supplemental VMS, planned within Building 1B, will be effective at preventing vapor intrusion in the event it is to be used as a back-up system.
- Completing system commissioning prior to/alongside the planned remedial soil excavations being completed may skew the commissioning data. VMS commissioning should not be completed for the site until after the remedial soil excavations are completed and the building floor is sealed.
- As a reminder, the HVAC system at the site building should be fully operational prior to system commissioning so that the commissioning data is collected under all expected occupied building operating conditions. The plan should describe how the HVAC system will be operated during commissioning activities.
- Per Wis. Admin. Code § NR 724.15, submit a construction documentation or as-built report within 60 days after the date that construction of all interim remedial actions is completed. The as-built report should include the VMS commissioning summary report, or be provided prior to CWC requesting DNR's approval of the VMS commissioning summary report.
 - Submit an interim operating, maintenance, and monitoring (OM&M) plan for all VMS components that includes the information specified in Wis. Admin. Code §§ NR 724.13(2) and 724.17, as applicable. CWC's OM&M plan should be submitted as part of the as-built report.
 - Wisconsin Admin. Code § 724.13(1)(d) provides that “[v]apor mitigation systems (VMS) and remedial actions designed to address vapor migration shall be monitored at a frequency determined by the department, to measure whether the action taken has been effective in meeting the vapor action level.” In consideration of the site-specific conditions present at the site, including high levels of TCE in the soil beneath the building, short term exposure health risks of TCE, complexity of the building structure and VMSs, and documented exceedances of the vapor action level (VAL) for TCE in residential buildings, the DNR has determined that CWC must monitor the VMSs on a continuous basis, as was outlined in the DNR's May 8, 2023, *Technical Assistance Provided – Review of Emergency Corrective Action Plan* letter. Please determine and document how continuous monitoring will be achieved. It is strongly recommended that continuous monitoring of the VMSs includes audible alarms to alert building occupants of system failures as well as instrumentation, such as telemetry, to allow immediate notification of a person directly responsible for arranging repairs in the event of a system malfunction. Per Wis. Admin. Code § NR 724.13(2)(c), include a contingency plan in the OM&M plan for anticipated or potential operation and maintenance problems, including a plan for how CWC will address a loss of electrical power to the system. It is strongly recommended that a backup power system is considered for the VMS to address this potential situation.

The DNR appreciates the actions you are taking to restore the environment at this site. If you have any questions concerning this site or this letter, please contact me, the DNR Project Manager, at (414) 435-8021, or by email at jane.pfeiffer@wisconsin.gov.

Sincerely,



Jane K. Pfeiffer
Project Manager – Hydrogeologist
Remediation & Redevelopment Program

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