From: Ackerman, Jeffrey A - DNR

To: "jeff.miesen@moundcitybank.com"; Kollasch, Tony

Cc: Gilkey, Keith

Subject: Questions about the Soil Vapor Extraction Pilot Test - Highway Cleaners (Boscobel)

Date: Monday, October 4, 2021 11:11:00 AM

Hello Jeff and Tony,

This is in response to <u>SCS's soil vapor extraction (SVE) pilot test status report</u> (report). I have several questions about the report and the project status.

Some statements in the report appear inaccurate. The most significant regard the test duration, a reported lack of issues, and the completeness of the vapor testing.

The March 16, 2021 Soil Vapor Extraction System Pilot Test Work Plan stated:

• "Samples of the extracted gas will be obtained from the exhaust of the SVE blower at 15 minutes, 1 hour, 2 hours and 4 hours..."

The report states:

- "The samples were collected at approximately 15 minutes, 1 hour, and 2 hours after startup."
- "...the SVE blower was turned off after 3 hours and 40 minutes of operation."
- "The scope was performed consistent with the March 16, 2021 Soil Vapor Extraction System Pilot Test Work Plan...",

The scope was not compliant with the workplan. The planned 4 hour sample not collected. On the field notes in attachment D, page 83 of the report, a power failure is noted. This significant issue precluding completion of the test is not only missing from the report narrative, it seems contradicted by it.

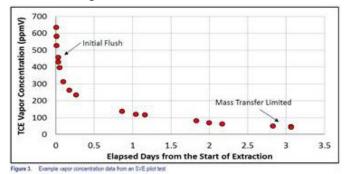
The 4 hour sample is an important missing piece of data. It would have helped establish likely trends in soil vapor concentrations over time and aided in assessing the efficacy of any proposed system.

Work not done in compliance with NR 700 rule series (including requirements for following workplans, approvals, and reporting requirements) is not eligible for reimbursement through the dry cleaner environmental response program, per s. NR 169.03, Wis. Adm. Code. As the pilot test work stands, it appears out of compliance with NR 700 requirements.

Additional questions regarding the report and pilot test:

- 1. What is the likelihood that any SVE system can remove 22.5 pounds per year at this site, as calculated by SCS? How does this estimate compare with the likely mass of contaminants in soil near the SVE wells?
- 2. What is the basis for a vapor removal rate of 8 cubic feet per minute? Why was this chosen for the pilot test, and why is this suggested for each well of a full-scale system?
- 3. How many pore volumes of soil vapor were removed from the source area during the pilot test?

4. How will soil vapor concentrations likely diminish with time with continued soil vapor extraction? Might the trend be consistent with those illustrated in EPA guidance?



- 5. What is the status of the budget for the project?
- 6. What is SCS's plan for fixing the alleged non-compliant work?

I suggest a teleconference to address these concerns and find a way forward.

Please contact me with a proposed time.

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