From: Schultz, Josie M - DNR

Sent: Tuesday, June 29, 2021 9:53 AM

To: Hodgson, Scott A.

Subject: RE: Smoke-Out Cleaners, BRRTS 02-05-552214, Follow-up

Hi Scott,

Thanks for the update on the RADR submittal; see my answers to your questions below in blue. Please submit a workplan for future vapor work you plan to perform, so I can provide comments and feedback.

As always, feel free to give me a call to discuss.

Thanks, Josie

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Josie Schultz

Cell Phone: (920) 366-5685 Josie.Schultz@Wisconsin.gov



From: Hodgson, Scott A. <Scott.Hodgson@terracon.com>

Sent: Monday, June 28, 2021 9:36 AM

To: Schultz, Josie M - DNR < josie.schultz@wisconsin.gov>

Subject: RE: Smoke-Out Cleaners, BRRTS 02-05-552214, Follow-up

Good Morning Josie,

We are real close to getting you the remedial action documentation report for this site. We will be at the site on Wednesday to perform the fifth post-injection groundwater sampling round. We are currently considering when and how to collect the data you request below and I have several questions related to that.

- How close is WDNR to having new VALs and VRSLs for TCE? We have been told for more than a
 year that they were coming soon, but what if they are not out at the time of closure? Would the
 site close under the current VALs, VRSLs and be subject to reopening? This will certainly drive
 decisions regarding the SSDS.
 - a. There are no plans for VALs and VRSLs to be updated in the near future
- 2. Same guestions for revised ESs and PALs for TCE.
 - a. Due to the pandemic, changes to the ES and PAL for TCE and PCE have been postponed. We hope to see these changes within the next year, however a concrete date is not available.

- 3. For #1 below, vacuum testing shows consistent influence at VP8; however, the system was not designed to capture vapors all the way north to VP3 and vacuum readings at that point are consistently 0. At an intermediate vacuum monitoring point between VP8 and VP3, we do show vacuum when the groundwater is high, but not when groundwater is low. As such, what about a sub-slab sample at VP3 as opposed to (as I am guessing you are suggesting) an additional drop point and blower to control sub-slab vapors in the vicinity of VP3. If sub-slab sampling, with system shut down or with system running—could make arguments either way. Depending on new TCE VALs and ESs, long-term SSDS operation may be required, such that a VP3 sub-slab sample with the system running may be best to evaluate whether another drop point and blower would be necessary for long-term control.
 - a. My greatest concern with VP-3 is that it detected PCE narrowly below the VRSL (5,960 ug/m3) on 9/29/2016. Is there any other way that better communication can be obtained beneath the slab, such as sealing cracks in the floor or installing a larger blower? Seeing as this is a newer building, cracks likely aren't an issue, but smoke/tracer testing may help pinpoint if there is any short-circuiting.
 - b. If you're planning to sample post-injection sub-slab vapors to determine if the SSDS is required long-term, I would recommend waiting until the system has been turned off / decommissioned to obtain a sub-slab sample from VP-3. I don't see obtaining a vapor sample from VP-3 while the system is running providing us with much information.
- 4. For #4 below, we will be getting more information on this later this week, particularly where the holding tank for that building is and type of business(es).
- 5. For #5, there is a holding tank for the building, no septic field. Laterals from each business space in the building run to the holding tank without any apparent cleanout. As such, are you suggesting a vapor sample (30 minute?) from the headspace in the tank?
 - a. I'm not familiar with obtaining headspace samples from a holding tank. Generally, we would prefer a method outlined in RR-649, which was recently published this month; pages 12-13 of RR-649 offer options for sanitary vapor sampling. I would recommend sampling vapors within a drain nearest to the dry cleaner discharge. If vapors are present, then additional sampling down-pipe will be required, so you may want to consider sampling from multiple points during this single event.

Thanks.

Scott A. Hodgson, P.G.
Senior Project Manager I Environmental Services
Terracon
9856 S. 57th Street I Franklin, WI 53132

9856 S. 57th Street I Franklin, WI 53132 D (414) 209 7640 I F (414) 423 0566 I M (920) 791 9206* sahodgson@terracon.com I www.terracon.com

*Note new mobile number

From: Schultz, Josie M - DNR < josie.schultz@wisconsin.gov>

Sent: Thursday, March 4, 2021 5:05 PM

To: Hodgson, Scott A. <Scott.Hodgson@terracon.com>

Subject: Smoke-Out Cleaners, BRRTS 02-05-552214, Follow-up

Thanks for taking the time to discuss Smoke-Out Cleaners last Tuesday. Based on our conversation, and a follow-up conversation I had with the Vapor Team Leader, Jennifer Borski, and the regional peer review group, DNR has the following comments and recommendations prior to considering closure:

- 1. Verify through pressure field extension testing data that the existing VMS captures VP-8 (PCE/TCE >> VRSL) up to VP-3 (PCE/TCE < VRSLs).
- 2. Additional indoor air sampling at the Badger Scale unit immediately to the south is needed due to TCE > VRSL. A second event should be collected to supplement the previous IA event performed by Giles in 10/2017. If the intent remains to shut down the VMS, DNR suggests the IA sampling at Badger Scale wait to be combined with the decommissioning sampling. The intent being to verify no exposure is occurring after interim & RA.
- 3. The adjacent building to the east is less than 100 ft from the soil source. It is unclear if a VI investigation is needed at this location with the operating VMS and injection performed. We need more information about the business in that location and sanitary lateral information for further consideration. If post-injection soil data is collected in addition to sub-slab vapor data, this should be further considered when evaluating whether a VI investigation is needed at the adjacent building.
- 4. The sanitary sewer preferential pathway should be investigated since this is a former active dry cleaner. If the septic includes a drain field, the drain field should also be investigated if found to be impacted. If the septic is a holding tank, we still need to consider vapor migration into occupied spaces from the sewer, if found to be impacted. This would include a vapor grab sample from the sanitary clean-out.
- 5. Please review Appendix F of RR-800, decommissioning guidelines for a sub-slab depressurization system (SSDS): collect at least three rounds of sub-slab samples (2-4 weeks post shut-down; 2-6 months & 1 year with at least two events during the heating season).
- 6. DNR will need to review at least 8 rounds of quarterly post-injection groundwater monitoring data prior to considering site closure before all injection compounds have been spent.

Additional consideration:

• Although the dry cleaner machine was removed prior to the injection and Smoke Out Cleaners no longer operates as an active dry cleaner, they do still operate as a dry store (i.e., drop off location). Assuming they continue to hold dry-cleaned items for customer pick-up and the business does not vacate prior to the closure request, we are still unable to have the indoor air assessed within this unit. As such, the appropriate continuing obligation(s) will need to be assigned at the time of case closure to limit use of the unit to the dry cleaner. The indoor air of the unit will need to be assessed prior to a change of use to another commercial business that does not utilize PCE. DNR will likely consider s. NR 716.15(2)(m) for "future risk". Since the contaminants of concern are chlorinated solvents, DNR may require the property owner be required to submit an annual inspection form (4400-303) verifying occupancy for this unit.

Please feel free to contact me if you have any questions or concerns with the above information.

Thank you, Josie

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Josie M. Schultz

Hydrogeologist – Northeast Region Remediation and Redevelopment Team Wisconsin Department of Natural Resources 2984 Shawano Avenue, Green Bay, WI 54313-6727

Cell: 920-366-5685

Josie.Schultz@Wisconsin.gov



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