

From: [Martinez, Joseph J - DNR](#)
To: [Robert Cigale](#)
Subject: Krystal Kleeners - Vapor Intrusion Comments (02-68-576741)
Date: Tuesday, August 11, 2020 3:06:00 PM
Attachments: [image001.png](#)
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Bob,

Below are some comments regarding the vapor intrusion investigation at the Krystal Kleeners site. I want to be clear that these are my thoughts and are not the result of a peer review session. I understand that additional soil and groundwater sampling has recently occurred or will occur in the suspected source area near the former dry-cleaning machine. Please call me to discuss after you have a chance to review this email.

- As noted in a separate email, vapor sampling at the day-care facility to the south may be delayed for now due to coronavirus. The results of additional SI at the source property should be evaluated to determine if vapor sampling of the day-care is warranted immediately and/or prior to case closure.
- Based on the relatively small size of the tenant spaces along with the small-commercial VRSL exceedances in the 143 and 145 tenant spaces, it appears that mitigation of the entire 143 and 145 spaces will be necessary prior to closure. I recommend additional PFE and indoor air sampling to provide commissioning data to determine if the current VMS is adequate to mitigate the entirety of both spaces. I also recommend collecting additional sub-slab and indoor air samples from these spaces concurrent with PFE testing to better understand current site conditions.
- The conceptual site model indicates that there is a foundational wall which separates the former dry-cleaner (145 tenant space) and the eastern adjacent tenant space (147). It is believed that this foundation is limiting eastward vapor migration. Since there has only been one sub-slab sample collected from the 147 space, I recommend collecting another sub-slab sample, an indoor-air sample, and an additional PFE measurement from the 147 tenant space to confirm that the foundational wall is limiting eastward vapor migration.
- Only one sub-slab sample has been collected from the 141 tenant space. This sample identified PCE at a concentration which exceeds the residential VRSL, but is below the small commercial VRSL. I recommend collecting an additional sub-slab sample, indoor air sample, and a PFE measurement from this space to help delineate the degree and extent of vapor contamination and determine whether the VMS has any influence in this area.
- Based on the residential VRSL exceedance in the 141 tenant space, I also recommend collecting a sub-slab sample, indoor air sample, and PFE measurement from the 139 tenant space to further define the degree and extent of vapor contamination and determine whether the VMS has any influence in this area.
- As stated in the WDNR Closure Not Recommended letter, dated January 3, 2020, an evaluation of the potential for utilities to act as a preferential migration pathway should be completed.
- As noted in the WDNR Closure Not Recommended letter, dated January 3, 2020, Wis. Admin.

Code § NR 726.05(8)(b)1 requires remedial action be taken to reduce the mass and concentration of volatile compounds to the extent practicable in situations where a VRSL exceedance has been identified. This requirement will need to be addressed prior to case closure. The results of the additional source investigation should be evaluated to determine appropriate remedial actions.

- In summary, I recommend collecting sub-slab samples concurrent with indoor air samples and PFE measurements at the 147, 145, 143, 141, and 139 tenant spaces.

-Joe

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