Volkert, David G - DNR

From:

Sellwood, Alyssa A - DNR

Sent:

Friday, February 05, 2016 1:18 PM

To:

Volkert, David G - DNR Evanson, Theresa A - DNR

Cc: Subject:

RE: OHM - Oconomowoc vapor results

Hi Dave

After reviewing the information you provided, I offer the following recommendations:

- Collect another round of gas data from the two wells this winter/spring and use a larger (6-liter) Summa canister to collect sample.
 - o The larger Summa canister appropriate for sampling from the large void space of the well casing
 - o The winter/spring will give us confidence on any seasonal variability
 - o The second data point is also appropriate because of elevated detection limit in the September samples.
 - If a dilution is required in this set of samples, it might be appropriate to see if lab can tell us what is in the sample that is causing the elevated detection limit
- The method looks good, but I off the following suggestion (if not already part of their procedure)
 - Allow time between purging and sample collection (under sealed conditions) to make sure sample is collected at equilibrium
- The attenuation factor currently used for small commercial is 0.01, so their VRSL of 18,000 ug/m³ is acceptable
 - o Notes on Table 2 should be corrected to say attenuation factor of 0.01 (the VRSL is right but stated attenuation factor is off by factor of 10)
 - FYI, the attenuation factor for soil gas is likely to change to 0.03 in our revision to RR-800, and then the VRSL of 6,000 ug/m³ you calculated would apply

The results of the next sampling event will determine if VI Assessment is complete. If results remain below the current VRSL, then I believe there is sufficient data to support that the VI Assessment is complete for these off-site properties. (However, if the results approach the future anticipate VRSL of 6,000 ug/m³ we should discuss if another sampling round is appropriate).

Glad to discuss further if needed.

We are committed to service excellence.

Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Alyssa Sellwood Phone: 608.266.3084

Alyssa.Sellwood@wisconsin.gov

From: Volkert, David G - DNR

Sent: Friday, February 05, 2016 8:22 AM

To: Sellwood, Alyssa A - DNR **Cc:** Evanson, Theresa A - DNR

Subject: OHM - Oconomowoc vapor results

Hi Alyssa,

In the past, Terry provided some help on sampling vapors from monitoring wells for this case. I believe the consultant conducted the vapor sampling appropriately from the wells. If you have the time, can you take a

look at their procedures? I am including their Supplemental SI report. The vapor sampling procedures begin on p. 3. Photographs of their sampling apparatus start on p. 49 of the report. The tabulated data from the MW vapor sampling is on the last page of the report. Although not listed on the table the units are in ug/m³.

They used a deep vapor risk screening level for comparison. I believe Terry said that is not applicable anymore. If you compare their values to the quick look up tables for sub-slab VRSL at a small commercial facility ($PCE - 6,000 \text{ ug/m}^3$), their numbers are an order of magnitude less. Currently are these the appropriate VRSLs to use for standards in this type of vapor sampling? How many more sampling events should I require for this type of vapor sampling?

I am also attaching two cross sections from the original SIR. In the area where MW-15 & MW-17 are located, sand of varying grain size is predominantly present.

The vapors beneath the Pick N Save pose a risk, but because there is a good exchange of air in the building and an active remedial action for the soil and GW is planned, Terry said we could forego a vapor mitigation system at this time. We will have to re-evaluate it after the remedy is implemented.

Please let me know if you are unable to review this or if you would like additional information, thanks.

We are committed to service excellence.

Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Dave Volkert
Hydrogeologist
Wisconsin Department of Natural Resources
Phone: (262) 574-2166
david.volkert@wisconsin.gov

