

From: Borski, Jennifer - DNR
Sent: Tuesday, December 3, 2019 2:48 PM
To: Beggs, Tauren R - DNR
Cc: Schultz, Josie M - DNR
Subject: RE: Please Review for Vapor/Air Investigation: Jagemann Plating Co Inc, BRRTS # 02-36-555544

Tauren,

Thanks for taking the time to discuss this site today with me and Josie. I understand you are working with the responsible party to perform additional soil and groundwater investigation to define the degree and extent of metals and VOCs. Additional vapor investigation is also needed at this site, including verification the mitigation system installed within the basement area in 2015 is protective for the office workers. We specifically discussed the following actions:

- Photo document the vapor mitigation system and current manometer reading to compare against initial reading;
- Verify historical documentation of the system design is adequate for future operation & maintenance or provide supplemental documentation;
- Develop a long-term operation, maintenance & monitoring plan for the system;
- Sample indoor air within the basement and office areas (non-manufacturing area) (IA-4, IA-5 & IA-6 + additional locations) to verify the mitigation system is protective;
- Resample SSV-1 and SSV-2 to determine if the mitigation system is effectively reducing sub-slab vapor concentrations beyond the office area;
- Perform additional sub-slab vapor sampling within the southern manufacturing area on-site (not the new addition), including around B-12/MW-14 and along preferential pathways; and
- Enhance the off-site SSV/IA vapor investigation based on interior utility laterals, interior layout & building use.

Additional investigation or interim actions (mitigation) may be needed based on findings.

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Jennifer Borski

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From: Beggs, Tauren R - DNR <Tauren.Beggs@wisconsin.gov>
Sent: Tuesday, August 20, 2019 8:45 AM
To: Borski, Jennifer - DNR <Jennifer.Borski@wisconsin.gov>
Cc: Walden, James E -DNR <jamese.walden@wisconsin.gov>; Schultz, Josie M - DNR <josie.schultz@wisconsin.gov>
Subject: Please Review for Vapor/Air Investigation: Jagemann Plating Co Inc, BRRTS # 02-36-555544

Hi Jennifer,

Per our phone discussion last week, I have finally had time to compile the soil, groundwater, and vapor/air data collected at the above referenced site in order to review the vapor pathway. I will provide a bit of background and what has been done for vapor/air so far.

Link to Summary of Data:

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Background:

There was water seeping into a pit (referred to as groundwater pit on figure) in the boiler room due to improper drainage of rainwater from the roof of the building. About a month after the rain water was diverted, water was still seeping into the pit. A camera was used to check the underground piping and it was found that a pipe (clay drain tile) running from a plating area to the wastewater treatment system was cracked. The pipe carried rinse water overflow from one of the plating areas. The pipe was laid out on a bed of clay and was installed at the time the building was constructed (The plating facility has been operating here since approximately 1945). It was believed that the rinse water from the plating tanks was leaking out of the drain tile and flowing in the clay bed until it hit the sand/soil below the boiler room floor. Water was pumped out of the pit into the floor drain leading to the wastewater treatment system. Water was sampled from the groundwater pit and results had highly elevated metals. A case was opened in 2010. Investigation of soil and groundwater in this area also found chlorinated volatile organic compounds (CVOCs). It was later indicated that chlorinated solvents were no longer used at the site circa 1980; a detergent has been used since.

Vapor Investigation:

February 9, 2014:

- Three paired discreet sub-slab and indoor air samples collected within the east and west side production areas and the former waste water treatment plant room. Outdoor air sample also collected. Sub-slab on the east side production area and former waste water treatment plant room exceeded the industrial VRSL for TCE; paired indoor air samples were below the VAL. Vapor ports were left in-place.
- Indoor air collected in basement and first floor of east side office area and basement storage area adjacent to the mechanical room. Sub-slab could not be collected due to high groundwater table. All indoor air samples were above the VAL.

October 21, 2015:

- Sub-slab depressurization system installed to mitigate vapors in the east basement of the administrative offices area of the building by Radon Abatement. Sealing of floor penetrations and cracks and sealing of the sump crock was completed. Communication testing completed pre- and post-installation.

April 27, 2017:

- Proposed sampling off-site to the south
- Proposed indoor air sampling to show system on-site in the office area was operating effectively.

August 21, 2018:

- Paired sub-slab and indoor air sampling off-site to the south. Building had one addition so one location was installed in the original building and one location installed in the addition towards the north side of the building. Outdoor air sample also collected. Either no detections or detections below VRSLs and VALs.

January 24, 2019:

- Second round of sub-slab sampling. Either no detections or detections below VRSLs.

I need to find out if the consultant ever sampled the indoor air where the vapor mitigation system was installed. I don't have documentation of that even though they proposed it back in 2017.

Other issues that may be of concern for vapor for this site:

- Not enough vapor sample points under the existing on-site buildings.
- Possible migration of vapors through backfill of gas line on south side of the property.
 - October 10, 2014 report from consultant states large sanitary sewer line is located along the south side of the building which discharges the treated waste water from the on-site WWTP to the City sanitary sewer. B-10, B-7, PZ-4, and MW-4 installed along various points of this utility. Soil from these borings did not have any detections of VOCs. GW contamination was found in MW-8 and MW-2 adjacent to the building, which is significantly lower than concentrations identified in MW-1. Doesn't appear utilities are acting as a preferential pathway.
- Unclear where private utilities or other potential migration pathways are under the building.
- Soil and groundwater investigation in the building is not complete. Consultant keeps stating it is not feasible to sample within building around B-12/TW-12/MW-14 area.

If you have any questions, please let me know. I appreciate you taking a look at this.

Regards,

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Tauren R. Beggs

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