State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
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September 16, 2022

Mr. Robert Reuschlein
Jomblee, Inc.
4930 Ascot Lane
Madison, WI 53711
Email only to: bobreuschlein@gmail.com

Subject: Review of information provided in "Request for Technical Assistance Meeting"
Pershing Plaza Shopping Center, 7536 Pershing Boulevard, Kenosha
DNR BRRTS Activity #: 02-30-582211; FID #: 230007690

Dear Mr. Reuschlein:

The Department of Natural Resources (DNR) has completed its review of the June 28, 2022 "Request for Technical Assistance Meeting" (the Request) submitted for the Arctic Laundry & Cleaners site. The Request summarizes field investigation activities conducted to investigate chlorinated volatile organic compound (CVOC) contamination resulting from spills of tetrachloroethene (PCE) caused by a tenant that operated as a dry-cleaner. These field activities included advancing soil borings, installing groundwater monitoring wells, and collecting soil, groundwater, air, and sub-slab vapor samples. A sub-slab mitigation system was installed at the space formerly occupied by the drycleaner. The Request concluded that the site investigation is now complete and that conducting a remedial action to address residual contamination is not practicable at this time. DNR concurrence with these conclusions was requested.

The DNR reviewed the information presented in the Request and the case file and determined that further work must be conducted before a request for case closure could be submitted. Groundwater sampling is needed to define the extent of PFAS contamination, additional information must be provided to demonstrate that sub-slab depressurization system is operating as expected, and sub-slab vapor sampling is needed beyond the area influenced by the depressurization system to assess risk. Additionally, options for completing a remedial action to reduce the source of vapor contamination must be presented. This letter provides details regarding these items.

Soil Contamination

Additional soil sampling is not required to complete the site investigation. The estimated extent of soil contamination depicted on figures should be expanded closer to boring locations where clean samples were collected to provide adequate notice to future excavators on the potential for contamination.

Groundwater Contamination

Additional groundwater samples must be collected from MW-4 for PFAS analysis to confirm the presence of these contaminants at this site and to assess plume stability. Further groundwater sampling must also be completed to define the degree and extent of PFAS contamination. At this time, additional sampling to investigate CVOC contamination in groundwater is not required.

Vapor Contamination

Documentation of the construction and commissioning of the sub-slab depressurization system (SSDS) must be provided. This must include a description of how the pressure field extension (PFE) of the SSDS was evaluated and an assessment as to whether indoor air samples in the 7536 and 7540 tenant spaces are needed to confirm that the SSDS is operating effectively. See DNR guidance document RR-800, "Addressing Vapor Intrusion at Remediation & Redevelopment Sites in Wisconsin" for information on commissioning these systems.

In tenant spaces in which an applicable VRSL has been exceeded (7536 and 7540), it must be confirmed that the PFE of the SSDS extends across the entire footprint of the tenant space. If the PFE does not extend across the entire footprint of the tenant space, a minimum of two additional sub-slab vapor samples must be collected from the areas where PFE does not extend to confirm that contamination does not remain outside of the system's area of influence.

Tenant spaces 7532 and 7600 did not have applicable VRSL exceedances for their first round of sub-slab vapor sampling. A minimum of two total rounds of sub-slab vapor sampling are needed to confirm that applicable VRSLs are not exceeded in these spaces. Additionally, sample port VP-4 is not positioned in a location where sampling would rule out a vapor risk to the 7532 tenant space. To demonstrate that these tenant spaces are not at risk for vapor intrusion, conduct the following activities:

- Install an additional vapor sampling port near the southern wall of the 7532 unit to confirm that contaminated vapors are not migrating under this tenant space. A minimum of two rounds of sub-slab vapor sampling must be conducted at this new location.
    - Conducting one or more rounds of sub-slab sampling at VP-4 should be considered if vapor contamination is confirmed at this new location.
- Conduct a minimum of one additional round of sub-slab vapor sampling at VP-5 to confirm that vapor contamination remains below applicable VRSLs.

Completion of the site investigation may require the collection of soil vapor and/or indoor air samples in the garage / storage area. Describe the layout of this area, specifically noting if portions of the garage have been dug down to form a lower area or if there are any elevated areas or an upper floor. Describe whether the SSDS's area of influence extends to this area. Providing photos of the interior would be helpful. Based on the layout of the area, the information obtained regarding the commissioning of the system, and the extent of known contamination in the area, propose whether indoor air or sub-slab vapor samples would need to be collected.

Identify where the sanitary sewer located west of the building (near MW-3) leads to and how it connects to the main utility line. As utilities transect areas of known contamination, and as contaminant concentrations measured in soil vapor are relatively high when compared to the vapor risk screening levels, the collection of one or more vapor samples within the sanitary should be collected to assess if this is a potential migration pathway.

Propose a Remedial Action

You must evaluate remedial options for reducing the risk of vapor intrusion at the on-site building to satisfy the requirement of Wis. Admin. Code § NR 726.05(8). The maintenance of an impervious barrier over residual soil contamination and operation of a sub-slab depressurization system is not considered a valid remedial action for this purpose as it does not reduce contaminant mass or the potential for vapor intrusion. The DNR requests you reevaluate potential remedial options, following the process outlined in Wis. Admin. Code § NR 722.07 and NR 722.09, to determine what could be a practicable means of reducing contamination impacting sub-slab vapors. The DNR must approve of the assessment and any actions taken before case closure can be requested. When evaluating proposed remedial actions the DNR will consider that that contaminated soil at this site is located at shallow depths and appears to be generally accessible.

Submittals to the DNR

A site investigation and remedial action options report must be submitted to document all field investigation activities conducted by the Sigma Group and Giles Engineering Associates (including any soil boring logs, well construction forms, or laboratory reports not previously submitted), describe the commissioning and construction of the sub-slab mitigation system, describe the results of environmental samples that will be collected, and provide a detailed analysis of potential remedial options. A review fee may be provided with this report if you would like the DNR to provide recommendations for completing the site investigation (if needed) or for taking next steps to complete this project.

We appreciate your efforts to protect the environment at this site. If you have any questions regarding this review or wish to discuss any of these requests in further detail, please contact me by calling (414) 405-0764, or by email at paul.grittner@wisconsin.gov.

Sincerely,

Paul Grittner
Hydrogeologist
Remediation & Redevelopment Program

cc: Kelly M. Hayden, Giles Engineering Associates – khayden@gilesengr.com