



December 2, 2020

Mr. Shane LaFave (via electronic mail)  
c/o Mr. Brian Roers  
Community Within the Corridor Limited Partnership  
110 Cheshire Ln., Ste. 120  
Minnetonka, MN 55305

Subject: Review of Vapor Investigation Work Plan  
Wisconsin Industries Pension Plan & Trust  
2748 N. 32nd St., Milwaukee, WI  
DNR BRRTS #02-41-263675, FID #241025400

Dear Mr. LaFave:

On November 12, 2020, the Wisconsin Department of Natural Resources (DNR) received a 'Sub-Slab Vapor Investigation Work Plan' (VIWP), submitted by K. Singh & Associates, Inc. (K. Singh), on behalf of the Community Within the Corridor Limited Partnership, for the property described above. The DNR received the applicable technical assistance fee for providing review and response, in accordance with Wis. Admin. Code § NR 749.04(1).

### **Background**

The VIWP proposes site investigation activities, including sub-slab vapor sampling, to evaluate the potential risk posed by vapor intrusion at the site. The VIWP was developed due to the potential redevelopment of the property for residential use. A historic hazardous discharge existed on the property and was addressed under BRRTS #02-41-263675 which was closed in August 2008 with continuing obligations applied to closure, including maintaining a cap over the contaminated area and mitigating vapor intrusion. A sub-slab depressurization system (SSDS) consisting of two drop points was installed at the site prior to case closure. The VIWP notes that the eastern portion of the SSDS is not currently operating. K. Singh proposes to reactivate the eastern portion of the SSDS and replace the western portion of the SSDS with a parking garage ventilation system. K. Singh proposes to submit a report once the investigation is complete.

### **DNR Comments**

The DNR concurs that the actions outlined in the work plan should be completed, incorporating the following considerations and modifications. Please respond to this letter to indicate your concurrence with the requested modifications.

- The vapor sampling was proposed to be completed in two stages, with 38 samples collected during the first stage, and up to 12 samples collected in the second stage. We generally agree with the proposed sub-slab vapor sample locations, but we recommend collecting all 50 samples in one stage as the extent of vapor migration needs to be thoroughly defined since the proposed use is changing to residential, migration pathways and subsurface utilities are unknown at this time, and potential source areas are unknown within the building.
- Only four sub-slab samples (SS-21, SS-22, SS-23, SS-48) were proposed in the gym. Collect one additional sample in the center of the gym for a total of five samples.

- The VIWP states that the existing sub-slab depressurization system (SSDS) will be shut off for a minimum of 48 hours prior to the proposed sub-slab vapor sampling activities. The DNR requests that the existing SSDS be turned off for a minimum of two weeks prior to the start of any sub-slab vapor sampling to allow adequate time for sub-slab vapor conditions to stabilize.
- Information regarding utilities at the site was not included in the VIWP. The DNR requests that you conduct an assessment to determine whether utilities are acting as preferential migration pathways at the site. The locations of utilities in relation to known areas of contamination should be considered when conducting this assessment. The utility assessment may identify the need for additional sampling locations. The utility assessment, including a figure showing the location of all utilities will be required to be submitted with the investigation report.
- The DNR understands that four elevator shafts currently exist within the building. Collect a sub-slab vapor sample near each elevator pit. Additionally, the DNR recommends collecting an indoor air sample within each elevator pit utilizing a passive sampler over a sampling period of two weeks. Because passive samples can be collected over a longer duration than active samples, they can average out the variability of indoor air. This may be useful in evaluating chronic exposure in residential settings. Elevators are considered discrete entry points and can act like a syringe that draws in sub-slab vapors and carries them to overlying occupied spaces of the building so it's important to thoroughly investigate each elevator for vapor migration. Construction documentation for each elevator pit should be submitted with the investigation report.
- The VIWP states the sub-slab vapor samples will be analyzed for chlorinated volatile organic compounds (CVOCs). The vapor samples should be analyzed for all volatile contaminants of concern at the site, including but not limited to CVOCs, naphthalene, and benzene.
- The VIWP does not mention whether the vapor probes will remain in place after the samples are collected. We recommend you leave the probes in place for future sampling events. The DNR recommends a minimum of one additional round of sub-slab vapor sampling after redevelopment is complete, HVAC systems are installed and operating, and the building is under standard operating conditions.
- The VIWP states that radius of influence measurements will be collected in the vicinity of the operating vapor mitigation system. The DNR agrees with the proposal to collect radius of influence measurements. Final mitigation system commissioning, including radius of influence measurements will be required after the building redevelopment is complete and HVAC systems are operating under standard HVAC settings. The HVAC systems must be operating while these measurements are collected as HVAC systems influence the movement of vapors into the building.
- The VIWP and the document 'Additional Information re: Decommissioning of Current Sub-Slab Depressurization System and Implementation of Parking Garage Ventilation at Community Within the Corridor,' dated September 15, 2020, propose to replace the existing western vapor mitigation system with a parking garage ventilation system during redevelopment. The DNR cannot concur with this proposal at this time. Based on previous vapor risk screening level exceedances of CVOCs, an active sub-slab depressurization system appears to be needed in this area. A parking garage ventilation system is not as protective as a sub-slab depressurization system at sites with residual CVOCs. Further analysis of whether and how to incorporate the parking garage ventilation into the site vapor mitigation strategy should be conducted after the planned vapor investigation is completed.
- After your consultant completes the first phase of the investigation, they should submit a report with the results in a table and on a map. The report should include their evaluation of the results and recommendations for next steps.

A vapor investigation can be an iterative process. Vapor investigation activities may indicate that further assessment is needed to define the degree and extent of contamination. We appreciate your efforts to protect the environment at this site. We are happy to continue working with you during these additional investigation activities. If you have any questions, please contact me at (414) 639-4156 or [david.hanson@wisconsin.gov](mailto:david.hanson@wisconsin.gov).

Sincerely,



David Hanson  
Redevelopment Specialist  
Remediation & Redevelopment Program

e-copy: Que El-Amin, Scott Crawford, Inc., email: [que@scott-crawford.com](mailto:que@scott-crawford.com)  
Pratap Singh, Ph.D., K. Singh & Associates, Inc., email: [psingh@ksinghengineering.com](mailto:psingh@ksinghengineering.com)  
Robert Reineke, K. Singh & Associates, Inc., email: [rreineke@ksinghengineering.com](mailto:rreineke@ksinghengineering.com)  
Pamela Mylotta, DNR, email: [pamela.mylotta@wisconsin.gov](mailto:pamela.mylotta@wisconsin.gov)