

Dillon Plamann

From: Dillon Plamann
Sent: Tuesday, December 07, 2021 5:57 PM
To: Amungwafor, Binyoti - DNR
Cc: Wauwatosa Laundry
Subject: Wauwatosa Laundry, BRRTS #02-41-552235 - Vapor Screening

Good evening Binyoti,

We have finished the vapor screening process for the Wauwatosa Laundry site. Please review our findings and recommendations and let us know if you have any additional input. We would like to conduct the second round of vapor sub-slab vapor sampling during this upcoming heating season (by February 2022).

VAPOR SCREENING

Fehr Graham has completed vapor intrusion screening based on the *RR-800 Addressing Vapor Intrusion at Remediation & Redevelopment Sites in Wisconsin* guidance document for the Wauwatosa Laundry site and Adjacent sites. Below is a summary of information used to complete the vapor screening, the list of the sites screened, and conclusions and recommendations if additional vapor testing is warranted at each site.

Geology/Hydrogeology

As described in the *Site Investigation Report*, the Site geology has been evaluated to a depth of 35 feet at piezometer PZ-102. The geology at the Site consists of clayey fill underlain by silty clay native glacial till with occasional silt or sand lenses.

The depth to water is approximately 6 to 10 feet below grade. The groundwater flow direction is to the south and measured hydraulic conductivity values are approximately 10^{-4} centimeters/second (cm/sec).

Sites Screened for Vapor Intrusion

- Wauwatosa Laundry Site, 6726 W. North Avenue

Commercial building over soil and groundwater contamination. Three (3) sub-slab vapor samples were collected from the site building in 2016. Results display no sub-slab vapor exceedances for the Small Commercial standards.

- North adjacent, 2320 N. 68th Street

Residential building approximately 85 feet from soil contamination. No known vapor analytical data collected.

- East adjacent, 6706 W. North Avenue

Commercial building approximately 100 feet from soil contamination. No known vapor analytical data collected.

- Southwest adjacent, 6731 W. North Avenue

Commercial building approximately 100 feet from soil contamination. No known vapor analytical data collected.

- Southeast adjacent, 6715 W. North Avenue

Commercial building approximately 100 feet from soil contamination. No known vapor analytical data collected.

- West adjacent, 6734 W. North Avenue

Commercial building over soil and groundwater contamination. Four (4) sub-slab vapor samples were collected from the site building in 2011. Results display no sub-slab vapor exceedances for the Small Commercial standards.

Conclusions and Recommendations

At the Wauwatosa Laundry Site, 6726 W. North Avenue, three (3) sub-slab vapor samples were collected from within the site building in 2016. Results display no sub-slab vapor exceedances for the Small Commercial standards. The building is considered a commercial building over soil and groundwater contamination. WDNR guidance recommends that two (2) rounds of sub-slab vapor sampling be collected, with one (1) round collected during the heating season (i.e., winter).

Therefore, Fehr Graham recommends completing an additional round of sub-slab vapor sampling during the heating season at the Wauwatosa Laundry site building. This work has already been approved by Wauwatosa Laundry and DERF.

At the west adjacent site building, 6734 W. North Avenue, four (4) sub-slab vapor samples were collected from within the site building in 2011. Results display no sub-slab vapor exceedances for the Small Commercial standards. The building is considered a commercial building over soil and groundwater contamination. WDNR guidance recommends that two (2) rounds of sub-slab vapor sampling be collected, with one (1) round collected during the heating season (i.e., winter). **Therefore, Fehr Graham recommends completing an additional round of sub-slab vapor sampling during the heating season at the west adjacent site building. A change order will need to be submitted for approval by Wauwatosa Laundry and DERF to complete this work.**

The east adjacent site building (6706 W. North Avenue), southwest adjacent site building (6731 W. North Avenue), and the southeast adjacent site building (6715 W. North Avenue) are all commercial buildings located approximately 100 feet from soil and groundwater contamination. In addition, sub-slab vapor results display no sub-slab vapor exceedances for the Small Commercial standards in the Wauwatosa Laundry building (6726 W. North Avenue) or the west adjacent site building (6734 W. North Avenue). **Therefore, Fehr Graham recommends no further vapor investigation in the east and south adjacent site buildings.**

The north adjacent site building (2320 N. 68th Street) is a residential building located approximately 70 feet from soil and groundwater contamination. Based on WDNR guidance, additional vapor investigation would normally be warranted in this building. However, based on the most current sub-slab vapor results for the Wauwatosa Laundry Site building (6726 W. North Avenue) and west adjacent site building (6734 W. North Avenue), only one (1) sub-slab vapor sample exceeded the Residential sub-slab vapor standard, PCE at VP-B, situated adjacent to the drycleaning machine, the exceedance of which is delineated by VP-A to the north that displays no Residential sub-slab vapor standard exceedances. **Therefore, Fehr Graham recommends no further vapor investigation in the north adjacent site building.**

Thank you,

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