

below both the WDNR Residential and Small Commercial Sub-Slab Vapor Risk Screening Levels.

Vapor samples from the sanitary sewer were not collected as it was determined that the sanitary sewer main for the subject property may preferentially contain tetrachloroethene vapors. The Minocqua Cleaners - St Germain Street investigation (BRRTS 02-44-000052) had instituted a remedial action which discharges untreated water containing dry cleaning solvents into the same sanitary sewer line servicing the subject property. Based on this knowledge, sanitary sewer vapor samples were not required for this investigation.

- ii. Identify the applicable DNR action levels and the land use classification used to establish them. Describe where the DNR action levels were reached or exceeded (e.g., sub slab, indoor air or both).

Based on the Town of Minocqua Zoning Map the subject property and the surrounding properties are zoned Business B-1. As such the WDNR Small Commercial Sub-Slab Vapor Risk Screening Levels (June 2019) were used as the vapor action levels for this site.

E. Surface Water and Sediment

- i. Identify whether surface water and/or sediment was assessed and describe the impacts found. If this pathway was not assessed, explain why.

The nearest surface water is Lake Minocqua is located immediately east of and adjacent to the subject property. While the extent of groundwater contamination exceeding the NR140 Preventive Action Limit does appear to extend westerly into Lake Minocqua no surface water or sediment samples were collected as part of this site investigation.

- ii. Identify any surface water and/or sediment action levels used to assess the impacts for this pathway and how these were derived. Describe where the DNR action levels were reached or exceeded.

No surface water or sediment samples were collected as part of this site investigation.

4. Remedial Actions Implemented and Residual Levels at Closure

- A. General: Provide a brief summary of the remedial action history. List previous remedial action report submittals by name and date. Identify remedial actions undertaken since the last submittal for this project and provide the appropriate documentation in Attachment C.

On September 16, 1986, contaminated soil was removed under the direction and supervision of the WDNR Project Manager who was on site during the excavation activities and personally field screened the sidewall and base samples to determine excavation extents.

Much of the early site investigation work was conducted with direct WDNR oversight. Unfortunately, much of the soil data was determined using a WDNR operated field screening instrument with minimal samples submitted for laboratory analysis. Most of the samples submitted for laboratory analysis did not include an accurate reference location or depth to allow the sample collection location to be determined.

The focus of the WDNR led soil investigation were two (2) specific areas. One location was south of the building and the second location was southeast of the building, near the power pole and MW1 (soil boring B-1). Both locations are shown on Figure B.2.b and the identified locations are estimated locations based on the interpretation of the WDNR Project Managers hand drawn data.

Based on the information in the WDNR site file, the soil excavation was completed on September 16, 1986. No confirmation samples were collected for laboratory analysis to confirm the adequacy of the excavation. The WDNR Project Manager directed the excavations and noted that the soil was excavated to a depth of approximately eleven (11) feet below ground surface (bgs) in the excavation south of the building. Elevated field meter detections were noted at approximately nine (9) feet (300-500 ppm), and by eleven (11) feet the field meter detections had reduced to 3-4 ppm.

The second excavation, southeast of the building near the power pole and MW1, was excavated to a depth of approximately four (4) feet with field screening reading of 2-3 ppm. Refer to Section C.6a-e for documentation specific to the removal and management of the impacted soils.

- B. Describe any immediate or interim actions taken at the site under ch NR 708, Wis. Adm. Code.

None taken

- C. Describe the *active* remedial actions taken at the source property, including: type of remedial system(s) used for each media affected; the size and location of any excavation or in-situ treatment; the effectiveness of the systems to address the contaminated media and substances; operational history of the systems; and summarize the performance of the active remedial actions. Provide any system performance documentation in Attachment A.7.

None taken