

- ii. Describe the concentration(s) and types of soil contaminants found in the upper four feet of the soil column. 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.

Through a preliminary assessment conducted jointly between the WDNR and USEPA, it was determined that dry cleaning wastes containing tetrachloroethene were improperly dumped on the ground prior to 1985 suggesting that the contaminant concentrations would be the greatest at the ground surface.

Additional soil sampling was conducted following the 1986 soil excavation. The Sigma Group collect and analyzed a total of seventeen (17) soil samples from sixteen (16) stand alone soil borings. None of the sample results exceeded any enforcement thresholds and all the results were either non-detect or had laboratory qualified detections. REI also collected a soil sample during the advancement of boring MW5. Analytical results were non-detect for all analyzed parameters.

- iii. Identify the ch. NR 720, Wis. Adm. Code, method used to establish the soil cleanup standards for this site. This includes a soil performance standard established in accordance with s. NR 720.08, a Residual Contaminant Level (RCL) established in accordance with s. NR 720.10 that is protective of groundwater quality, or an RCL established in accordance with s. NR 720.12 that is protective of human health from direct contact with contaminated soil. Identify the land use classification that was used to establish cleanup standards. Provide a copy of the supporting calculations/information in Attachment C.

Refer to information provided in Attachment C.6a-e.

C. Groundwater

- i. Describe degree and extent of groundwater contamination. Relate this to known or suspected sources and known or potential receptors/migration pathways. Specifically address any potential or existing impacts to water supply wells or interception with building foundation drain systems.

The groundwater monitoring well network consists of ten (10) water table monitoring wells, nine (9) piezometers and grab samples from soil Geoprobe borings or temporary wells installed in Geoprobe borings. Groundwater samples were first collected in 1986 and groundwater sampling has been conducted sporadically for the last thirty-seven (37) years. The contaminant of concern is tetrachloroethene and the tetrachloroethene concentrations in the groundwater have been shown to be stable to decreasing in all wells and the graphical representation is included in Attachment A.7a.

Tetrachloroethene concentrations remain above the ES of 5.0 ppb at sampling locations MW1, MW2, MW3, PZ1, PZ2 and PZ4, with PZ4 having the highest tetrachloroethene concentrations at 15.7 ppb. MW4, the corresponding groundwater monitoring well nested with PZ4, was non-detect for tetrachloroethene after the last sampling event.

The average depth to groundwater is greater than 17 feet and extent of the dissolved phase contaminant plume does not intersect any known utility corridors. Groundwater with dissolved phase tetrachloroethene detections does likely discharge into Lake Minocqua to the east.

- ii. Describe the presence of free product at the site, including the thickness, depth, and locations. Identify the depth and location of the smear zone.

No free product was encountered during the site investigation.

D. Vapor

- i. Describe how the vapor migration pathway was assessed, including locations where vapor, soil gas, or indoor air samples were collected. If the vapor pathway was not assessed, explain reasons why.

On April 2, 2021, REI personnel collected sub-slab vapor samples from two (2) sub-slab vapor sampling ports (VP-1 and VP-2). Laboratory analytical results identified low-level detects of VOC's in vapor samples from each sample location, however the concentrations did not exceed the WDNR Small Commercial Sub-Slab Vapor Risk Screening Levels.

On April 2, 2021, REI personnel also collected a sewer gas sample from the bathroom sink of the subject building. The vapor sample was submitted for laboratory analysis (TO-15). None of the detected concentrations exceed the WDNR Small Commercial Sub-Slab Vapor Risk Screening Levels.

At the request of the WDNR Peer Review Group (PRG), REI personnel returned to the subject property on May 15, 2024 to collect a second round of sub-slab samples from VP-1 and VP-2, along with the corresponding Indoor Air sample. Laboratory analytical confirmed low-level detects of VOC's in vapor samples from each sample location. The results from sample location VP-1 documented PCE concentrations exceeding the WDNR Residential Sub-Slab Vapor Risk Screening Levels, but not the WDNR Small Commercial Sub-Slab Vapor Risk Screening Levels. Additionally, the PCE concentrations had reduced over time. The results from sample location VP-2 documented PCE concentrations