Pfeiffer, Jane K - DNR

From: Pfeiffer, Jane K - DNR

Sent: Tuesday, November 7, 2023 10:33 AM

To: Pratap Singh

Cc: Que El-Amin; Shane LaFave; Robert Reineke; Angy Singh; Robert Fedorchak; Mylotta, Pamela A -

DNR; Hoverman, Robert R - DNR (Rob); Nobile, Trevor W - DNR

Subject: CWC - East Block (02-41-263675) - DNR Review of Soil Borings Report for Hotspot Areas

Greetings Dr. Singh,

Thank you for discussing the *Soil Borings Report for Hotspot Areas* (Report) with me during our phone call on 11/03/23. As we discussed, the DNR reviewed the Report, which was presented to the DNR without a technical assistance fee on 10/26/23, and has the below feedback:

- 1. Page 3 of the Report indicates that additional soil sampling will be completed to determine whether the soil is characteristic of hazardous waste under the hallway near Units 1048, 1056, and 1049. The DNR recommends that the results of this additional soil sampling be evaluated by K. Singh prior to any excavations in this hallway area. These results are necessary to determine the appropriate storage, transportation, and disposal requirements under RCRA. Note that if an area that is characteristic of hazardous waste is excavated and mixed/stored with other soil that is not characteristic of hazardous waste, then all of this soil will be considered hazardous waste and must be handled appropriately.
- 2. Page 3 of the Report states that the planned source removal is "likely to eliminate the majority of risks associated with the TCE vapors entering the living space." However, the soil sampling results presented in the Report appear to indicate that there is a considerable mass of TCE remaining from 4-8 ft bgs in the western portion of Building 1B. In consideration with the soil data presented in the Report, the DNR recommends that CWC consider performing targeted, deeper remedial soil excavations up to 8 feet below ground surface (ft bgs) at locations where TCE was identified at relatively high concentrations up to this depth (e.g., GP-6, GP-9, GP-10, GP-12, GP-13, and GP-14). A targeted, deeper remedial excavation at GP-10 specifically is highly recommended. TCE was identified at 1,900 mg/kg at 4 ft bgs and at 840 mg/kg at 8 ft bgs at GP-10. The remedial excavations in this area are planned to occur up to 4 ft bgs, which means a considerable mass of TCE may be left in the soil near GP-10. The DNR also recommends that these deeper excavations be paired with a targeted destructive technology (i.e., reductive dechlorination). Note that the DNR recommends that the destructive technology be applied to the areas of highest identified soil contamination regardless of the vertical limits applied for the remedial soil excavation.
 - a. Based on discussion provided in previous reports for CWC East Block, the DNR understands that CWC is concerned that an excavation deeper than 4 ft bgs may compromise the structural integrity of the building. Consider whether this recommended targeted approach for a deeper remedial excavation at certain sample locations may be feasible given the structural limitations.
- 3. Incorporate the following documentation updates in future submittals, as appropriate:
 - a. Include a comprehensive soil data figure(s) in future submittals. Presenting all soil data for a given area of the site on one figure allows for better representation of the extent and degree of soil contamination.
 - b. The boring logs submitted in the Report are all for sample location GP-1. Provide updated boring logs to show all of the borings logs for GP-1 to GP-16.
 - c. The detailed engineering notes/legends present at the top of several figures in the Report appear to limit the available space to provide more relevant site data. Please remove these features from future figures and/or move them to separate page(s), as needed.
 - d. Ensure that all relevant features are labeled on the figure's legend. For example, the red and blue lines shown on Figure 2B of the Report are not labeled on its legend. Further, Figure 2C does not include the depicted yellow box in its legend.

- e. In the future interim/remedial action documentation report, present information the following calculations that have been performed:
 - i. Calculations for soil volume (cubic yards) to weight (tons) conversion and the TCE concentration (mg/kg) to mass (pounds).
 - ii. Calculations for determining 1.1 mg/kg TCE as the median value, used to determine total mass and % removal.
- 4. As a reminder, per Wis. Admin. Code § NR 716.14, CWC must submit all sampling results within 10 business days of receiving laboratory data.

This information should be incorporated and considered in CWC's next applicable report(s). Please reach out should you have any questions.

Thank you, Jane

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