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Subject: Dupont Barksdale 02-04-000156
Date: Monday, February 5, 2024 3:24:00 PM

Brad and Cary,

The Department has completed an initial review of the Interim Remedial Action Plan, The Derivation of Site-Specific Soil Residual Contaminant Levels, and the Background Soil Screening Criteria submittals for the DuPont Barksdale Works Facility and provide the following comments/requests;

- The IRAP does not include a comprehensive groundwater monitoring plan and proposal for monitored natural attenuation (MNA). In several of our previous calls, we discussed the need for a groundwater monitoring plan. A plan will need to be included in the IRAP. Figures that show groundwater flow and extent of groundwater contamination shall be included. In addition, it appears groundwater sampling was conducted in fall of 2023. This data should be discussed and added to the tables submitted in the IRAP. The tables would also be easier to interpret if there was only one sample point per page.
- Please include historical tabulated sediment sample results that include appropriate regulatory limits. Sample locations should also be shown on appropriate figures.
- Appendix D of the IRAP contains the “Derivation of Site-Specific Soil Residual Contaminant Levels Report and Background Soil Screening Criteria Memo”. DNR cannot approve the proposed site-specific RCLs at this time. Approval of SS-RCLs is contingent upon approval of a site-wide groundwater monitoring plan and proposal for MNA as a remedial response for groundwater. Without applying MNA as a performance standard for groundwater, we cannot approve SS-RCLs, as many of the proposed SS-RCLs for direct contact will exceed groundwater pathway RCLs. Without an approved performance standard for groundwater (such as MNA), then the groundwater pathway RCLs will apply and be the applicable soil standards statewide if lower than direct contact RCLs.
- In the IRAP, Section 1.3.2.1 Groundwater Protection, first paragraph, states: “Wisconsin Department of Natural Resources publication PUB-RR-528 Guidance on Soil Performance Standards (WDNR, 2004) states “It may not be necessary to determine the generic or site-specific numeric RCLs for contaminants as long as all contaminant pathways for those contaminants in an area are addressed by the remedial action, provided the remedial action remains in place, is maintained as appropriate and remains effective.” Because the entire community hydraulically downgradient and side gradient (to the north) of the Barksdale Works is connected to a municipal water supply, the system meets the criteria of a performance standard as described in PUB-RR-528.” The connection of the community to a municipal water supply is not considered a soil performance standard as described in RR-528 or in Wis. Admin. Code ch. NR 720.08(1). The municipal system is not acting as a remedial system as it is not remediating on-site groundwater, nor is it acting as a cap or cover to limit infiltration in order to minimize the leaching of soil contaminants to groundwater.
- The IRAP identifies the primary contaminants of concern as NNOCs, arsenic, and lead. The “Background Soil Screening Criteria for the Former DuPont Barksdale Works Facility” presents proposed background levels for many inorganic compounds. Site-Specific RCLs for arsenic (3.8

mg/kg) and lead (13.9 mg/kg) were previously approved by DNR. Evaluation of background concentrations for additional inorganic compounds does not appear to be warranted at this time, unless a site investigation report identifies additional compounds as COCs.

- DNR previously approved use of site-specific RCLs for lead (1,500 mg/kg) and arsenic (2.5 mg/kg) for those areas of the Barksdale property designated as recreational use in the original SS-RCL request, based on use of 60 days/yr for exposure frequency. We recommend updating the SS-RCL lead given the updated guidance from EPA: <https://www.epa.gov/superfund/updated-soil-lead-guidance-cercla-sites-and-rcra-corrective-action-facilities>. The updated version of the Integrated Exposure Uptake Biokinetic Model for Lead in Children (IEUBKv2) with 5 µg/dL as the 95th percentile target blood lead level can be used to update the SS-RCLs for lead.
- Additionally, the Eurofins Denver lab is not approved for the method being utilized for groundwater analysis. The lab is analyzing Nitroaromatics and Nitramines via method 8321B using LC/MS. The Denver lab currently only has I lab certification for this method using LC, not LC/MS. Please ensure lab analysis is conducted using a lab with WI certification for the methods being used.

When the above items are addressed, review of the submittals will continue. Please note that no Current Condition Reports will be reviewed, or NFA's documented until the IRAP and SSRCLS are approved.

Thanks,

Phil

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