State of Wisconsin DEPARTMENT OF NATURAL RESOURCES 1701 North 4th Street Superior WI 54880

Tony Evers, Governor Preston D. Cole, Secretary Telephone 608-266-2621 Toll Free 1-888-936-7463 TTY Access via relay - 711



January 28, 2021

Mr. Greg Prom Superior Water Light and Power Company 2915 Hill Avenue Superior, WI 54880

SUBJECT: Remedial Action Options Report – Upland Area, Superior Water Light and Power Manufactured Gas Plant Winter Street and USH 53, Superior, WI BRRTS ID: 02-16-275446

Dear Mr. Prom,

The Wisconsin Department of Natural Resources (DNR) has completed a review of the January 2021 Remedial Action Options Report - Upland Area (RAOR), submitted to the DNR on your behalf by Foth Infrastructure and Environment, LLC (Foth). The RAOR evaluates remedial action options for the upland portion of the former Superior Water Light and Power (SWL&P) Manufactured Gas Plant (Site) only.

The term "Site" is used in this letter as defined in §NR700.03 (56) and includes the area of contamination near the former gas holders and Horton sphere as well as the area of contamination north and east of the former manufactured gas plant including the BNSF ROW, City of Superior property, wastewater treatment plant (WWTP) property and retention pond, Cutler Laliberte McDougal Corporation properties, Lakehead Concrete Works and the area of contaminated sediment in the slip west of the WWTP where manufactured gas plant contamination was detected.

The DNR completed a review of a draft RAOR, submitted to the DNR in November 2020 and provided comments in a letter dated December 1, 2020. The January 2021 RAOR appears to have addressed many of the concerns expressed by the DNR in the December 1, 2020 letter. Therefore, the DNR approves the remedial option selected by SWL&P under Wis. Admin. Code § NR722.15 (2) (d) with the following conditions:

- 1. The selected remedial action proposes the use of air sparging / vapor extraction and excavation within a portion of the Site to remediate contamination in soil and groundwater. If the proposed remedial action is not effective at remediating Site contamination to meet the requirements of Wis. Admin. Code §NR722.09 (2) or §NR726.05 (4) the DNR may require additional remedial action.
- 2. If, following the proposed remedial action, Wis. Admin. Code ch. NR140 Enforcement Standards or Preventive Action Limits continue to be exceeded, the DNR will consider the range of options available to it under Wis. Admin. Code §§ NR 140.24 and NR 140.26 when evaluating what further actions may be necessary.



- 3. In order to protect human health and safety during and following the remedial action the DNR is requiring the following continuing obligations on the Site at this time under Wis. Admin. Code § NR 722.15 (2) (e):
 - a. Structural Impediments on the BNSF Railroad, Cutler Laliberte McDougal Corporation, City of Superior Garage, City of Superior WWTP and Lakehead Concrete Works properties, including railroad infrastructure, sanitary and storm sewers, WWTP infrastructure and treatment lagoon, and other improvements, are preventing complete investigation and active remedial action in all areas of the Site. Under Wis. Admin Code §NR722.15(2)(e) 2., the DNR is requiring, as necessary, an investigation of the extent of contamination and performance of any necessary remedial action if a structural impediment that prevented a complete site investigation or remedial action is removed.
 - b. Land use and Zoning on the Site properties is industrial and the RAOR proposes use of Wis. Admin. Code ch. NR720 industrial direct contact Residual Contaminant Levels as cleanup goals for soil remedial action above four feet below grade. The DNR is requiring, under Wis. Admin. Code § NR722.15(2) (e) 3., that DNR be notified prior to a change in land use at the Site. This requirement will apply to all affected Site properties.
 - c. The proposed remedial action at the Site will likely leave contamination in place at the completion of remedial action activities. Therefore, under Wis. Admin. Code § NR722.15(2) (e) 4., the DNR is requiring an evaluation of the need for vapor control technology be conducted for any new construction on the Site.
 - d. Under Wis. Admin. Code § NR722.15 (2) (e) 5., the DNR is also applying continuing obligations for soil and groundwater contamination that is expected to remain on Site following implementation of the proposed remedial action.
 - e. Under Wis. Admin, Code § NR 722.15 (2) (e) 6. and § NR722.17, the DNR is requiring submittal of the information necessary for listing the Site and all properties and rights of way within the Site on the department database including appropriate fees associated with a database listing required in Wis. Admin. Code NR749.
- 4. The DNR is requiring, under Wis. Admin. Code NR722.15 (2) (e) (5), notification of continuing obligations contained in 3a through 3d above be given to affected property owners within the Site as required in Wis. Admin. Code ch. NR725. These notifications are necessary to ensure public health and safety during and following remedial action activities. These notifications can be made concurrent with remedial action design but should be made as soon as possible as to not delay approval of the remedial action design.
- 5. In order to ensure the protection of human health and safety, a robust system of monitoring indoor and outdoor air, soil vapor, and utility corridors will be necessary during and following active remedial action activities. Adequate monitoring established during excavation and along and in utility corridors, buildings and other structures during air sparging / vapor extraction as necessary to ensure human health and safety in the area affected by and in the area of the remedial action. A plan for monitoring will need to be included in the Design Report required under Wis. Admin. Code § NR724.09.
- 6. A long-term groundwater monitoring plan is required under Wis. Admin. Code § NR724.17 and should be included in the Design Report.
- 7. Consideration should be given during remedial action design to enlarging the area of proposed excavation of PAH contaminated soils northeast of the former manufactured gas plant. Expanding this area to

include the PAH contamination in the area of B-126, SLIF-26, and MW-8 would address more of the high PAH soil contamination and facilitate a more complete remedial action not as reliant on biodegradation of PAHs which is expected to be rate limited due to the nature of these compounds.

- 8. In order to determine whether contamination remaining following the remedial action continues to be a threat to human health or the environment, the DNR expects confirmation sampling be conducted within the excavated areas as well as in the area of the air sparging / soil vapor extraction system following active remedial action. This sampling is also necessary to document residual contamination concentrations for purposes of the continuing obligations database package. A plan for confirmation sampling should be included in the Design Report required under Wis. Admin. Code § NR724.09.
- 9. A plan for the operation and maintenance of the remedial action system is required in Wis. Admin. Code § NR 724.13 (2). This plan outlines all remedial action operation, monitoring and maintenance activities through case closure. This plan should also include a plan for how the decision to shut down the air sparge / vapor extraction system will be made. Typical operation of an air sparging / vapor extraction system, at the time of system shutdown, includes cycling the system to observe the expected rebound of contaminant concentrations to determine if further active sparging / vapor extraction is warranted.
- If the results of the remedial action do not satisfy the case closure requirements contained in Wis. Amin. Code ch. NR726, the DNR may conclude under Wis. Admin. Code §726.13 (2) (b) that additional response actions are necessary.
- 11. The remedial action must comply with all other applicable requirements of Wis. Admin. Code chs. NR700 NR758.

The DNR appreciates the opportunity to comment on the RAOR. Please contact me at john.sager@wisconsin.gov or call me at 715-919-7239 if you have questions or if you would like to discuss the contents of this letter.

Sincerely,

John Sager Hydrogeologist Remediation and Redevelopment Program

C: File Erin Hughes, Foth