

March 5, 2025

SEMIANNUAL REMEDY SELECTION PROGRESS REPORT WEST ASH POND SYSTEM HENNEPIN POWER PLANT

The owner or operator of a coal combustion residuals (CCR) unit must prepare a semiannual report describing the progress in selecting and designing a groundwater corrective action remedy and developing a corrective action plan.

This report is for activities occurring between September 6, 2024 and March 5, 2025 at the Old West Ash Pond (Pond No. 1 and Pond No. 3) (OWAP) and Old West Polishing Pond (OWPP), collectively referred to as the West Ash Pond System (WAPS), at Hennepin Power Plant.

As stated in the notification letter dated January 4, 2025, statistically significant levels (SSLs) for total arsenic and total lithium were identified at the WAPS following Assessment Monitoring completed in Quarter 3 of 2024 in accordance with Title 40 of the Code of Federal Regulations (40 C.F.R.) § 257.95. Somewhat inconsistent with previous reporting periods, an SSL for total cadmium was identified during previous reporting periods, but this SSL was not confirmed for the current reporting period. Alternative Source Demonstrations (ASDs) for the previous total cadmium SSL were prepared and submitted with related documentation to the WAPS operating record.

As stated in previous Semiannual Remedy Selection Progress Reports, a Corrective Measures Assessment (CMA) was completed for the WAPS on September 5, 2019, to address SSLs for total arsenic, total lithium, and total molybdenum (see related notification dated February 6, 2019), as required by 40 C.F.R. § 257.96. The CMA evaluated closure-in-place with a geomembrane cover system in accordance with the Closure and Post Closure Care Plan submitted to the Illinois Environmental Protection Agency (IEPA) in January 2018. IEPA approved the Closure and Post Closure Care Plan on June 19, 2018. Closure construction began in August of 2019 and was completed in November of 2020.

An application for an operating permit for the WAPS required by Title 35 of the Illinois Administrative Code (35 I.A.C.) § 845.230 was submitted to the Illinois Environmental Protection Agency (IEPA) by October 31, 2021 and is pending approval. An evaluation of background groundwater quality was completed and presented in the operating permit application. The operating permit application and related documents can be found on the company's publicly available CCR website: <https://www.luminant.com/ccr/illinois-ccr/>.

Quarterly groundwater sampling for compliance evaluation in accordance with 35 I.A.C. § 845.650 was initiated at the WAPS during Quarter 2, 2023. Exceedances of groundwater protection standards established under 35 I.A.C. § 845 were determined and require corrective action through a permitting process administered by IEPA. Accordingly, a CMA was completed in accordance with 35 I.A.C. § 845.660 and submitted to IEPA on May 8, 2024.

In accordance with 40 C.F.R. § 257.97, remedy selection is to be completed as soon as feasible following completion of the CMA. As required by 35 I.A.C. § 845.670, a corrective action plan that identifies the selected remedy must be submitted to IEPA within one year after completing the CMA. Activities currently ongoing in support of developing the corrective action plan include development of a corrective action alternatives analysis, human health and ecological risk assessment, and supporting technical documents. Accordingly, a public meeting will be held prior to selection of a remedy in accordance with 35 I.A.C. § 845.660(d) and a corrective action plan will be submitted to IEPA on or before May 8, 2025 that meets the requirements of both 40 C.F.R. § 257 and 35 I.A.C. § 845.