

September 5, 2024

SEMIANNUAL REMEDY SELECTION PROGRESS REPORT FLY ASH POND SYSTEM BALDWIN 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 March 6, 2024 and September 5, 2024 at the Fly Ash Pond System (FAPS) at the Baldwin Power Plant.

As stated in the previous Semiannual Remedy Selection Progress Reports, a Corrective Measures Assessment (CMA) was completed for the FAPS to address a statistically significant level (SSL) for total lithium pursuant to Title 40 of the Code of Federal Regulations (40 C.F.R.) § 257.96. An SSL for lithium has not been identified at the FAPS since the determination dated January 17, 2021, associated with the Q3 2020 Assessment Monitoring sampling event, in accordance with 40 C.F.R. § 257.95. Consequently, further evaluation of total lithium for corrective action is not warranted for the FAPS.

The FAPS is located in the State of Illinois and is also subject to the state's CCR program, Title 35 of the Illinois Administrative Code (35 I.A.C.) § 845. An application for an operating permit required by 35 I.A.C § 845.230 was submitted for the FAPS to the Illinois Environmental Protection Agency (IEPA) by October 31, 2021 and is pending approval. 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/. An evaluation of background groundwater quality was completed and presented in the operating permit application, and subsequently updated following the installation of an additional monitoring well to characterize background groundwater quality. Quarterly groundwater sampling for compliance in accordance with 35 I.A.C. § 845.640 was initiated at the FAPS during Quarter 2, 2023. Exceedances of groundwater protection standards for boron, sulfate, and fluoride established under 35 I.A.C. § 845 were determined and require corrective action through a permitting process administered by IEPA. Therefore, future remedy selection will take into consideration compliance with both 40 C.F.R. § 257 and 35 I.A.C. § 845.

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 in accordance with 35 I.A.C. § 845.660. The 35 I.A.C. § 845 CMA was submitted to IEPA on April 24, 2024. A corrective action plan will be submitted to IEPA on or before April 24, 2025 that meets the requirements of both 40 C.F.R. § 257 and 35 I.A.C. § 845.