



September 2, 2021

## **SEMI-ANNUAL REMEDY SELECTION PROGRESS REPORT OAK GROVE STEAM ELECTRIC STATION – FGD PONDS**

In accordance with Title 40 Code of Federal Regulations (C.F.R.) § 257.97(a), the owner or operator of a coal combustion residuals (CCR) unit must prepare a semi-annual report describing the progress in selecting and designing a remedy for statistically significant levels (SSLs) of constituents listed in Appendix IV of 40 C.F.R. Part 257 over the groundwater protection standards established in accordance with 40 C.F.R. § 257.95(h).

This report is for the FGD Ponds at the Oak Grove Steam Electric Station.

As stated in the notification dated February 6, 2019, SSLs for cobalt and lithium were identified at the FGD Ponds during 2018 assessment monitoring completed in accordance with 40 C.F.R. § 257.95. However, no SSLs were identified for cobalt in subsequent semi-annual assessment monitoring completed during 2019 and 2020. No SSLs were identified for lithium in subsequent semi-annual assessment monitoring events in 2019; however, an SSL notification for lithium was posted on August 21, 2020 based on the first 2020 semi-annual assessment monitoring event results. An Alternate Source Demonstration (ASD) was completed in accordance with 40 C.F.R. § 257.95(g)(3)(ii) on October 20, 2020 which indicated that a source other than the FGD Ponds caused the lithium SSL observed at the site. Based on the absence of SSLs identified for cobalt during 2020 semi-annual assessment monitoring and the ASD completed for lithium, there are no SSLs currently identified for the FGD Ponds.

In response to the 2018 cobalt and lithium SSLs, an Assessment of Corrective Measures (ACM) report was completed for the FGD Ponds in September 2019 as required by 40 C.F.R. § 257.96. The ACM report identified a potential source control remedy of retrofitting the liner system in FGD-A Pond and potential groundwater remedies consisting of monitored natural attenuation (MNA), groundwater extraction and treatment or a vertical hydraulic barrier. Based on the results of the ASD for lithium in October 2020, the ACM was updated and placed into the operating record on May 27, 2021. As described above, cobalt is not currently present at SSLs at the FGD Ponds; however, Luminant continues to evaluate potential remedies for cobalt based on 2018 SSLs. Cobalt concentrations in groundwater will continue to be monitored in accordance with the CCR rule to confirm that the concentrations remain below the GWPS in the future. These monitoring results, along with updated statistical analysis and alternate source demonstrations (if applicable), will be considered as part of the remedy selection process.

A public meeting was held on October 29, 2019 at the Pridgeon Center in Franklin, Texas to discuss the results of the ACM in accordance with 40 C.F.R. § 257.96(e).

A retrofit plan for FGD-A Pond was originally posted to the operating record on March 31, 2020, and subsequently revised and posted on July 19, 2021. Retrofit activities are scheduled to commence by mid-September 2021.

A feasibility study to evaluate MNA as a potential groundwater remedy for the 2018 cobalt SSL at the FGD Ponds is currently being performed in accordance with U.S. Environmental Protection Agency guidance that recommends that the overall feasibility of MNA as a groundwater response technology be evaluated based on the following multi-tiered approach:



## Luminant

- 1) Demonstrate active constituent removal from groundwater and dissolved plume stability (Tier I).
- 2) Determine the mechanisms and rates of the operative attenuation processes (Tier II).
- 3) Determine the long-term capacity for attenuation and the stability of immobilized constituents (Tier III).
- 4) Prepare a long-term MNA performance monitoring plan (Tier IV).

A Tier I MNA evaluation report was completed in December 2019 and a Tier II/III MNA evaluation report was completed in June 2021 for the Ash Pond Area. A remedy selection report and Tier IV long-term MNA performance monitoring plan are currently in preparation.