



September 2, 2021

SEMI-ANNUAL REMEDY SELECTION PROGRESS REPORT MARTIN LAKE STEAM ELECTRIC STATION – A1 AREA LANDFILL

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 A1 Area Landfill (A1 LF) at the Martin Lake Steam Electric Station.

As stated in the notification dated February 6, 2019, SSLs for arsenic, barium, cobalt, and lithium were identified at the A1 LF during 2018 assessment monitoring completed in accordance with 40 C.F.R. § 257.95. However, no SSLs for arsenic, barium or lithium were identified in subsequent semi-annual assessment monitoring events completed in 2019 and 2020. As stated in the notifications dated October 7, 2019, February 7, 2020, September 16, 2020 and January 6, 2021, an SSL for cobalt was identified at the A1 LF during 2019 and 2020 assessment monitoring completed in accordance with 40 C.F.R. § 257.95.

In response to the SSL, an Assessment of Corrective Measures (ACM) report was completed for the A1 LF in September 2019 as required by 40 C.F.R. § 257.96. The ACM report concluded that the source control remedy would be closure in place with a low-permeability cap system and the groundwater remedy would be monitored natural attenuation (MNA), groundwater extraction and treatment or a vertical hydraulic barrier.

A public meeting was held on November 13, 2019 at the Henderson Chamber of Commerce in Henderson, Texas to discuss the results of the of the ACM in accordance with 40 C.F.R. § 257.96(e).

Areas of the A1 LF are closed in place with a low-permeability cap system as they reach design capacity.

A feasibility study to evaluate MNA as a potential groundwater remedy for the A1 LF 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:

- 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 A1 LF. A remedy selection report and Tier IV long-term MNA performance monitoring plan are currently in preparation.