RAMBOLL

ENVIRONMENT
& HEALTH

September 5, 2024

SEMIANNUAL REMEDY SELECTION PROGRESS REPORT
POND SYSTEM
MIAMI FORT POWER PLANT

In accordance with Title 40 of the Code of Federal Regulations (40 C.F.R.) § 257.97(a), the owner or operator of a coal combustion residuals (CCR) unit must prepare a semiannual 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. § 257 over the groundwater protection standards established in accordance with 40 C.F.R. § 257.95(h).

This report is for activities occurring between March 6, 2024 and September 5, 2024 at the Pond System located at the Miami Fort Power Plant.

As stated in the March 5, 2020 Semiannual Remedy Selection Progress Report, a Corrective Measures Assessment (CMA) was completed for Basin A of the Pond System on September 5, 2019, to address SSLs for total cobalt and total molybdenum (see related notification dated February 6, 2019), as required by 40 C.F.R. § 257.96. The CMA was revised on November 12, 2020, to reflect the characterization of the Pond System as a single multi-unit comprised of Basins A and B, including an Alternative Source Demonstration (ASD) for SSLs of arsenic (identified for Basin B) and molybdenum. The CMA was revised again on November 30, 2020, to include additional information related to site geology and hydrogeology and apply evaluation criteria to potential corrective measures. An ASD was subsequently completed on April 14, 2024 to address an arsenic exceedance identified at the Pond System following Assessment Monitoring in the third quarter of 2023, as stated in the notification letter dated February 14, 2024, at an additional well that was not included in the ASD attached to the 2020 CMA.

As stated in the September 5, 2020 Semiannual Remedy Selection Progress Report, selection of the source control measure continues to be in the feasibility study phase and will incorporate groundwater flow and transport modeling that is in development. In addition, existing groundwater and source water data were reviewed, as well as identification and collection of additional groundwater and source water samples to evaluate the feasibility of potential corrective measures in combination with the source control measures considered in the CMA.

Additional background groundwater quality data and sampling and analysis results continue to be incorporated into the groundwater flow and transport model referenced above, including an additional 23 soil borings, three temporary standpipe piezometers, and one monitoring well completed in July 2023. This model will be used to facilitate the further evaluation and selection of a groundwater remedy.

As stated in the notification letter dated August 28, 2024, SSLs for total arsenic and total cobalt were identified at the Pond System following Assessment Monitoring completed during the reporting period in accordance with 40 C.F.R. § 257.95, consistent with related observations during previous reporting periods.