

September 5, 2023

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, 2023 and September 5, 2023 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 Alternate Source Demonstration for SSLs of total arsenic (identified for Basin B) and total molybdenum. The CMA was revised again on November 30, 2020, to include additional information related to site geology and hydrogeology, apply evaluation criteria to potential corrective measures, and provide an independent evaluation of monitored natural attenuation (MNA).

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 MNA. These data indicate that site-specific conditions appear favorable for implementation of MNA in combination with the source control measures considered in the CMA. A summary of the findings of the MNA evaluation completed to date was provided as an attachment to the March 5, 2022 progress report.

The results of the MNA evaluation, additional background groundwater quality data, and sampling and analysis results from additional monitoring wells, continue to be incorporated into the groundwater flow and transport model referenced above. Observations from a field investigation conducted in July 2023, including completion of an additional 23 soil borings, three temporary standpipe piezometers, and one monitoring well, will also be incorporated. This model will be used to facilitate the further evaluation and selection of a groundwater remedy.

As stated in the notification letter dated August 17, 2023, 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.