



HALEY & ALDRICH, INC.
400 Augusta Street
Suite 100
Greenville, SC 29601
864.214.8750

15 March 2023

File No. 129420

TO: Southern Indiana Gas and Electric Company

FROM: Haley & Aldrich, Inc.

SUBJECT: Semi-Annual Remedy Selection Progress Report Pursuant to 40 CFR §257.97(a)
A.B. Brown Generating Station - Ash Pond

The Southern Indiana Gas and Electric Company (SIGECO) initiated an evaluation of the nature and extent of contamination and an assessment of corrective measures for the Ash Pond at the A.B. Brown Generating Station on 15 April 2019 in response to a statistically significant level (SSL) of an Appendix IV constituent exceeding Groundwater Protection Standards. Pursuant to 40 Code of Federal Regulations (CFR) §257.96(a), a demonstration of need for a 60-day extension for the assessment of corrective measures was completed on 12 July 2019. The Corrective Measures Assessment (CMA) Report was completed and placed in the facility operating record on 13 September 2019.

Following completion of the CMA, SIGECO must, as soon as feasible, select a remedy that meets the standards listed in 40 CFR §257.97(b). Pursuant to §257.97(a), the owner or operator of a Coal Combustion Residual (CCR) management unit that has completed a CMA for groundwater shall prepare a semi-annual report describing the progress made in selecting and designing the remedy. This report documents activities completed in support of selecting and designing a remedy during the period from 14 September 2022 through 15 March 2023. A summary of the progress in selecting a remedy is provided below.

SUMMARY OF ACTIONS COMPLETED

The following actions have been completed during this reporting period:

- Completed semiannual groundwater sampling in November 2022 consistent with 40 CFR § 257.95(b) and (d)(1);
- Evaluated groundwater analytical results to supplement and enhance the site conceptual model and groundwater characterization, refine the groundwater flow and solute transport model, and assess potential corrective measures;
- Installed sixteen new monitoring wells downgradient of the Ash Pond to inform selection of remedy by determining whether the horizontal well in-situ treatment technology is viable and appropriate to supplement the CMA alternative;
- Collected solid phase samples to determine aquifer matrix characteristics to update the flow and transport model with additional site-specific data gathered as part of the horizontal well in-situ treatment technology feasibility assessment;

- Completed sixteen slug tests and a short-term pump test to determine aquifer characteristics; and
- Analyzed slug tests and short-term pump test to support an update of the groundwater flow and transport model.

PLANNED ACTIVITIES

Anticipated activities for the upcoming six months include the following:

- Conduct semiannual groundwater sampling in May 2023 consistent with §257.95(b) and (d)(1);
- Update the flow and transport model with additional site-specific data to continue evaluating potential remedial alternatives;
- Evaluate geochemical data collected during site specific studies completed to continue evaluating potential remedial alternatives;
- Once a remedy has been selected, a final remedy selection report will be generated explaining how the remedy meets the standards outlined in §257.97(b); and,
- Within 90 days of selecting a remedy under §257.97, SIGECO will initiate remedial activities following the procedures outlined in §257.98.