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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)  
F.B. Culley Generating Station - East 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 East Ash Pond (EAP) at the F.B. Culley Generating Station (FBC) 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.

Pursuant to the Federal CCR Rule, 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 15 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 in support of ongoing groundwater monitoring compliance and nature and extent evaluations 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;
- Completed statistical analysis to determine if Appendix IV SSLs are present downgradient from the EAP above the GWPS (consistent with 40 CFR § 257.95);
- Completed an aquifer pump test to determine aquifer characteristics to refine the conceptual site model;

- Collected groundwater samples and measured water quality parameters during a 72-hour pump test period to evaluate potential effects of ash pond dewatering on the geochemistry of the groundwater system; and,
- Updated the groundwater flow and solute transport model to support groundwater remedy evaluation and support ash pond closure.

## PLANNED ACTIVITIES

A conceptual schedule for completion of the Selection of Remedy process is included as Attachment A. 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);
- Continue evaluating potential remedial alternatives in conjunction with planned ash pond closure design;
- 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.

Attachment A - F.B. Culley EAP selection of remedy schedule

**ATTACHMENT A**  
**F.B. Culley EAP selection of remedy schedule**

