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## MEMORANDUM

26 March 2024  
File No. 0129420

TO: Southern Indiana Gas and Electric Company

FROM: Haley & Aldrich, Inc.

SUBJECT: Semiannual Remedy Selection Progress Report Pursuant to 40 CFR §257.97(a)  
F.B. Culley Generating Station – West Ash Pond

The Southern Indiana Gas and Electric Company (SIGECO) initiated an assessment of corrective measures for the former West Ash Pond (WAP) at the F.B. Culley Generating Station on 30 October 2020 in response to a statistically significant level (SSL) of Appendix IV constituents exceeding Groundwater Protection Standards (GWPS). Pursuant to 40 Code of Federal Regulations (CFR) §257.96(a), a demonstration for the need of a 60-day extension for the assessment of corrective measures was certified by a qualified professional engineer. The Corrective Measures Assessment (CMA) Report was completed and placed in the facility operating record on 26 February 2021.

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 40 CFR §257.97(a), the owner or operator of a Coal Combustion Residual management unit that has completed a CMA for groundwater but has not selected a remedy shall prepare a semiannual report describing the progress in selecting and designing the remedy. This report summarizes activities completed during the period of 24 August 2023 through 25 February 2024. Progress in selecting a remedy is summarized below.

### Summary of Actions Completed

The following actions have occurred during this reporting period:

- SIGECO continued communication with the adjacent property owner to the west of the former WAP (down-gradient) to pursue an off-site Right-of-Entry (ROE) access agreement;
- Completed semiannual groundwater sampling in November 2023 consistent with 40 CFR §257.95(b) and (d)(1);
- Completed surface water sampling in August 2023 as described in the *Work Plan for Surface Water Sampling at the F.B. Culley WAP* that was drafted in April 2023 and finalized in October 2023 and approved by Indiana Department of Environmental Management (IDEM) in November 2023.

- Received surface water laboratory analytical results in September 2023 and submitted a West Ash Pond Surface Water Sampling Results report to IDEM in January 2024.
- Completed statistical testing to determine if statistically significant increases of Appendix III constituents were identified at the boundary of the Closed in Place (CiP) unit and if Appendix IV constituent SSLs are present downgradient of the former WAP above GWPS (consistent with 40 CFR § 257.95).
- Submitted a *Groundwater Flow Evaluation Work Plan* and a *Bedrock Characterization Work Plan* to IDEM in January 2024 per IDEM's request to provide supplemental site information regarding the nature and extent of plume migration at the site.

## Planned Activities

Anticipated activities for the upcoming six months include the following:

- Conduct semiannual groundwater sampling in May 2024 consistent with 40 CFR § 257.95(b) and (d)(1);
- If possible, obtain ROE access agreement from adjacent property owner west of the former WAP;
- If ROE is obtained, implement an off-site N&E field investigation to determine if Appendix IV constituents extend off-site;
- Initiate performance of the work described in the *Groundwater Flow Evaluation Work Plan* and a *Bedrock Characterization Work Plan* once approved by IDEM.
- Continue to evaluate groundwater flow conditions, groundwater/surface water interactions, the N&E of Appendix IV constituents greater than the GWPS, and the potential for off-site migration; and,
- Evaluate analytical data to quantify potential improvements to groundwater quality after pond closure and how those changes may affect the potential corrective measures.