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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)  
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 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 constitutes the fourth semi-annual remedy selection progress report and documents activities completed during the period of 12 March 2021 through 14 September 2021. 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:

- Discussions between Haley & Aldrich and SIGECO representatives pertaining to the construction details and impact of various closure by removal alternatives outlined in the CMA have been ongoing.
- Supplemental field investigation to delineate N&E by further evaluating the construction details of the existing French drain and the hydraulic connection between the Ash Pond and the French drain;
- Incorporated the French drain N&E evaluation into the refined hydrogeologic framework and groundwater flow and solute transport model to update remediation timeframes and updated the Groundwater Modeling Report to incorporate the findings of the French drain evaluation into the corrective measures alternatives and to report on the resulting effect on post-closure groundwater flow and groundwater quality over time.

- Completed the determination of the nature and extent (N&E) of the Appendix IV SSLs pursuant to § 257.95(g). Groundwater samples were collected from the N&E monitoring wells in May 2021. The analytical results were used to supplement and enhance the evaluation of the extent of groundwater impacts and assessment of corrective measures. Groundwater characterization and the evaluation of the N&E of Appendix IV constituents is now complete and included the following during this reporting period:
  - Sampling/analysis & evaluation of groundwater from CCR-AP-2IR, FD-PZ-1, FD-PZ-2, FD-PZ-3A, FD-PZ-3B and FD-PZ-4, the French drain manhole (MH-1) and one additional down-gradient MH (MH-2) near train tracks;
  - Ash Pond cross-sections were modified to update the hydrogeologic framework; groundwater flow mapping was refined to document the influence of the French drain.
- Discussion and follow-up activities between Haley & Aldrich and SIGECO representatives to further evaluate the details and feasibility of potential corrective measures identified by the completed CMA and the on-going evaluation of nature and extent and site-specific conditions.
- Scheduled the public meeting for 18 October 2021;

## PLANNED ACTIVITIES

Anticipated activities for the upcoming six months include the following:

- Conduct semiannual groundwater sampling in November 2021 consistent with 257.95(b) and (d)(1).
- Collect, as needed, additional soil, groundwater, and/or surface water samples to better define the naturally occurring physical, chemical, and biological factors responsible for attenuating molybdenum and lithium.
- Hold public meeting on 18 October 2021 and evaluate community input provided at meeting as part of the selection of remedy process.
- At least thirty days (30) after the completion of the public meeting, SIGECO will select a remedy that, at a minimum meets the standards outlined in §257.97(b).
- 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).
- Within ninety days (90) of selecting a remedy under §257.97, SIGECO will initiate remedial activities following the procedures outlined in §257.98.