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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 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 in selecting and designing the remedy. This report constitutes the third semi-annual remedy selection progress report and documents activities completed during the period of 14 September 2020 through 12 March 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:

- Efforts to determine the nature and extent (N&E) of the Appendix IV SSLs continued pursuant to § 257.95(g). Groundwater samples were collected from the N&E monitoring wells in November 2020. The analytical results will be 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 ongoing and included the following during this reporting period:
  - Sampling/analysis & evaluation of groundwater from PZ-1, the French drain manhole (MH) near PZ-1 and one additional down-gradient MH near train tracks;
  - Ash Pond cross-sections were prepared to update the hydrogeologic framework; groundwater flow mapping was refined in the vicinity of the French drain.
- Discussions as to how site dewatering activities would be incorporated into the overall closure operation;

- 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.
- Continued preparations for the public meeting;

## 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).
- Supplemental field investigation to delineate N&E by further evaluating the existing French drain, the potential for a preferential flow pathway at the soft zone/void encountered at the CCR-AP-2 well pair, and the hydraulic connection between the Ash Pond and the French drain;
- 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.
- Incorporate the N&E evaluation into the refined hydrogeologic framework and groundwater flow and solute transport model to update remediation timeframes, and corrective action cost estimates.
- In consideration of the Integrated Resource Plan study and report that was completed in June 2020 and the resulting future electricity generation planning activities that have begun, along with water and waste routing and treatment changes that are being developed for the future site planning and in consideration of the CCR Part A Rule that was published in August 2020, evaluate the effects of anticipated future generation on the availability of equipment and effect on water flows and treatment systems as they relate to the potential corrective actions.
- Hold public meeting and begin to evaluate community input provided at meeting as part of the selection of remedy process.