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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 first semi-annual remedy selection progress report and is comprised of activities during the period of 13 September 2019 through 13 March 2020. 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 2019. 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 of the N&E monitoring wells is ongoing.
- 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.
- Conducted site reconnaissance survey to understand the location and installation of a French drain system installed during construction of the generating station to manage shallow groundwater between the upgradient Ash Pond and the downgradient generating station.

- Conducted site reconnaissance survey, during which time Haley & Aldrich representatives inspected the tunnel system constructed to convey coal from the coal pile storage area to the generating station and the water management system associated with this feature.
- Developed an investigation program to evaluate the effect these water management improvements have on groundwater flow downgradient of the Ash Pond.

PLANNED ACTIVITIES

Anticipated activities for the upcoming six months include the following:

- Install four, shallow/deep piezometer nests upgradient and downgradient of the French drain to evaluate its effect on shallow groundwater flow and contaminant transport.
- Install two push point piezometers adjacent to the creek below the Ash Pond in the vicinity of the previously installed staff gauge to evaluate groundwater/surface water interactions.
- Install an additional well at the downgradient property line per 257.95(g)(1)(iii).
- Collect 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.
- Update and refine the hydrogeologic framework, groundwater flow and solute transport model, remediation timeframes, and corrective action cost estimates.
- Upon completion of the Integrated Resource Plan study and report, 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.