



HALEY & ALDRICH, INC.  
400 Augusta Street  
Suite 100  
Greenville, SC 29601  
864.214.8750

14 September 2023  
File No. 0129420

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 on 15 April 2019 in response to a statistically significant level (SSL) of an Appendix IV constituent exceeding Groundwater Protection Standards (GWPS). 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 Coal Combustion Residual (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 40 CFR §257.97(a), the owner or operator of a 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 March 2023 through 14 September 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 semi-annual groundwater sampling in May 2023 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, 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);

- collected additional groundwater and solid phase samples to support the selection of a groundwater remedy in conjunction with planned ash pond closure design;
- implemented a groundwater level monitoring program to evaluate potential effects of EAP closure on groundwater elevation and aquifer geochemistry during construction dewatering operations;
- completed slug tests to determine aquifer characteristics at four well locations across the EAP; and
- analyzed slug tests to support an update of the site conceptual groundwater flow and transport model.

## 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 semi-annual groundwater sampling in November 2023 consistent with 40 CFR §257.95(b) and (d)(1);
- evaluate groundwater and solid phase analytical results in support of remedy selection; and
- evaluate groundwater level monitoring program data in support of remedy selection.

Enclosure:

Attachment A – F.B. Culley Generating Station East Ash Pond Selection of Remedy Schedule

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**ATTACHMENT A**  
**F.B. Culley Generating Station East Ash Pond**  
**Selection of Remedy Schedule**

**ATTACHMENT A  
F.B. CULLEY EAP SELECTION OF REMEDY SCHEDULE  
F.B. CULLEY GENERATING STATION**

<b>SEPTEMBER 15, 2023</b> <b>FB CULLEY EAP - POST CMA, REMEDY SELECTION SUPPORT</b>		2023												2024												2025											
		Jan	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>1</b>	<b>Selection of Remedy (257.97)</b>	[Gantt bar: Jan 2023 to May 2024]																																			
1.1	MNA effectiveness confirmation	[Gantt bar: Apr 2023 to Dec 2023]																																			
1.2	Run laboratory analysis	[Gantt bar: May 2023 to Oct 2023]																																			
1.3	Evaluate supplementary GW remedy	[Gantt bar: May 2023 to Dec 2023]																																			
1.4	Evaluate results	[Gantt bar: Jul 2023 to Dec 2023]																																			
1.5	Prepare Selection of Remedy Report	[Gantt bar: Dec 2023 to Feb 2024]																																			
1.6	Specify a schedule for implementing and completing remedial activities	[Gantt bar: Feb 2024 to Mar 2024]																																			
1.7	CenterPoint Selection of Remedy review	[Gantt bar: Mar 2024 to Apr 2024]																																			
1.8	Certify the selected remedy	[Star: May 2024]																																			
<b>2</b>	<b>Implementation of the Corrective Action Program (257.98)</b>	Initiate Corrective Action Program with ash pond dewatering and removal																																			
2.1	Establish and Implement Corrective Action Groundwater Monitoring Program	[Gantt bar: Apr 2023 to Dec 2025]																																			
2.2	Remedy performance monitoring	[Stars: Apr 2023, Nov 2023, May 2024, Nov 2024, May 2025, Nov 2025]																																			
2.3	Evaluate Results	[Text: Assessment monitoring event (Apr 2023), Initial performance monitoring event (May 2024)]																																			
<b>3</b>	<b>Post Closure (257.98)</b>	[Gantt bar: Aug 2024 to Dec 2025]																																			
3.1	Certify Closure Completion (compliance with GWPS)	[Gantt bar: Aug 2024 to Dec 2025]																																			
3	Post Closure Groundwater Monitoring for 30 Years	[Stars: Nov 2024, May 2025, Nov 2025]																																			