

**MEMORANDUM – Operating Record (40 CFR 257.105(h)(12))**

September 20, 2023  
File No. 0133274-014

TO: AES Indiana – Harding Street Generating Station

FROM: Haley & Aldrich, Inc.

SUBJECT: Semi-Annual Remedy Selection Progress Report Pursuant to 40 CFR §257.97(a)  
Harding Street Generating Station - Ash Pond System

Indianapolis Power & Light Company d/b/a AES Indiana (AESI) initiated corrective measures for the Ash Pond System at the Harding Street Generating Station (HSGS) on April 15, 2019, in response to statistically significant levels (SSL) of Appendix IV constituents (antimony, arsenic, lithium and molybdenum) exceeding Groundwater Protection Standards (GWPS). 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 July 12, 2019. The Corrective Measures Assessment (CMA) Report was completed and placed in the facility operating record on September 13, 2019, and subsequently amended on October 11, 2019.

In accordance with the Federal CCR Rule, following completion of the CMA, AES Indiana 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 is required to 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 March 21, 2023, through September 19, 2023. A summary of the progress made in selecting a remedy is provided below.

**SUMMARY OF ACTIONS COMPLETED**

The following activities have been completed during this reporting period:

- Completed the statistical analysis of the November 2022 sampling results for the presence of Appendix IV constituents to be present at concentrations above GWPS.
- Continued Assessment Monitoring: Collected groundwater samples and evaluated the results from the May 2023 sampling event in support of ongoing groundwater monitoring compliance and nature and extent (N&E) evaluations. Final laboratory results were placed in the facility’s CCR operating record. The groundwater monitoring data for the May 2023 sampling event is being evaluated for statistically significant levels compared to GWPS. Any new constituents that exceed GWPS will be considered in selection of the final remedy.
- Groundwater samples were collected from the supplemental monitoring wells (MW-2IL, MW-2D1, MW-5D, MW-6I, MW-6D, MW-7D1, MW-8D, MW-9SR, MW-12D1, MW-14I, MW-14IL, MW-14D1) in July/August 2023.
- AESI continued to further establish N&E on-site along the western property boundary pursuant to § 257.95(g):

- Completed installation of supplemental N&E nested monitoring wells. The nested wells (MW-18) consisted of three (3) monitoring wells that were completed in June 2023;
- Completed hydraulic conductivity testing on nested monitoring wells (MW-18) in July 2023 to provide data to refine estimates of aquifer parameters and groundwater flow patterns;
- Groundwater samples were collected in June and August 2023 from the newly installed N&E nested wells along the western property boundary.
- Efforts to determine the off-site N&E of the Appendix IV SSLs continued pursuant to §257.95(g):
  - Groundwater samples were collected in May 2023 from the eleven (11) N&E nested monitoring wells that were installed off-site at the Harding Street Quarry formerly known as Hanson Aggregates (Quarry) to define the lateral extent of Appendix IV constituents;
  - Groundwater samples were collected in August 2023 from N&E nested wells MW-109 and MW-110 at the Quarry.

The N&E groundwater analytical results will be used to supplement and enhance the evaluation of the extent of groundwater impacts, assessment of corrective measures, and selection of remedy. Groundwater characterization of the N&E monitoring wells is ongoing, as the results of each sampling event are used to inform what additional steps, if any, are necessary to fully delineate N&E of Appendix IV constituents.

- Evaluated groundwater analytical results to supplement and enhance the site conceptual model and groundwater characterization, refine the groundwater flow and solute transport model, and assess potential corrective measures.
- Continued preliminary closure by removal beneficial use considerations.

## PLANNED ACTIVITIES

Anticipated activities which will support CMA and selection of remedy for the upcoming six months include the following (subject to change):

- Collect supplemental soil and groundwater data from select N&E locations to further evaluate groundwater treatment technologies.
- Complete the statistical analysis of the May 2023 sampling event to evaluate groundwater for the presence of SSLs above GWPS downgradient of the Ash Pond System.
- Continue Assessment Monitoring by collecting groundwater samples in November 2023 from the existing CCR well network and the fifteen (15) supplemental monitoring wells that were installed to enhance the existing CCR well network. The groundwater data will be evaluated for statistically significant levels compared to GWPS. Any new constituents that exceed GWPS will be considered in selection of the final remedy.
- Continue efforts to further establish N&E off-site on the Hanson property which will support CMA and selection of remedy:
  - Continue to collect groundwater samples from the eleven (11) N&E nested monitoring wells installed off-site at the Quarry to further define the lateral extent of Appendix IV constituents, refine the groundwater flow and solute transport model, and assess potential corrective measures.

- Continue sampling of N&E wells which will support CMA and selection of remedy.
- Evaluate the groundwater analytical data collected during the November 2023 semi-annual assessment monitoring sampling event.
- Incorporate the supplemental groundwater data into the groundwater flow and solute transport model and provide additional data to support the groundwater Site Conceptual Model (SCM).
- Complete the Nature and Extent Report which will provide a comprehensive summary of data evaluation and SCM.
- Continue to perform an engineering review of the potential CMA remedial alternatives. For these reviews, emphasis will be placed on understanding and reacting to impacts of newly gathered analytical results, and on identifying and evaluating applicability of emerging technologies and their impacts on the CMA and selection of remedy process.
- Estimate quantity of Appendix IV material released as required under 40 CFR §257.95(g)(1)(ii) and place in the facility's CCR operating record.
- Begin preparation and schedule/hold a Public Meeting to discuss the results of the CMA in accordance with §257.96(e).
- Provide a semi-annual progress report that summarizes AESI's progress and status regarding a selection of remedy.