

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

September 14, 2021
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 (AES Indiana) 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 constitutes the fourth semi-annual remedy selection progress report and is comprised of activities completed during the period of March 12, 2021, through September 13, 2021. 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 2020 sampling results for the presence of Appendix IV constituents to be present at concentrations above GWPS.
- Continued Assessment Monitoring: Evaluated the results of the May 2021 sampling event to ensure the reliability of the results. Final laboratory results were placed in the facility’s CCR operating record. The groundwater monitoring data 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.
- Efforts to determine the off-site nature and extent (N&E) of the Appendix IV SSLs continued pursuant to § 257.95(g). Groundwater samples were collected in May 2021 from the five (5) N&E nested monitoring wells that were installed off-site at the Hanson Aggregates facility (Hanson) to define the lateral extent of Appendix IV constituents. Four (4) additional off-site nested monitoring wells were installed at Hanson in June/July 2021 to refine N&E and better understand the processes responsible for reducing Appendix IV constituents. Groundwater samples were collected from the newly installed N&E wells in August 2021. The 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.

- Soil samples were collected from the exploratory borings during the installation of the newly installed off-site monitoring wells and submitted for laboratory analyses. The analytical results will be used in the geochemical modeling necessary to support selection of the final remedy.
- Continued the use of pressure transducers in three (3) off-site nested monitoring well locations to obtain groundwater elevation data to evaluate the hydraulic connection between various saturated intervals and the White River to provide additional data to support the groundwater conceptual site model (CSM).
- The hydraulic assessment to define the N&E of Appendix IV SSL along the western property boundary continued with the collection and evaluation of groundwater elevations and surface water elevations along the White River during March, May and July 2021.
- Initiated meeting with Indiana Department of Environmental Management (IDEM) to provide a high-level overview of potential CMA remedy options and seek input on key conceptual design elements in those remedies and their associated permitting and compliance scenarios.

PLANNED ACTIVITIES

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

- Complete the statistical analysis of the May 2021 sampling event to evaluate groundwater for the presence of SSLs above GWPS downgradient of the Ash Pond System.
- Continue Assessment Monitoring: Collect groundwater samples in November 2021 from the 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 establish N&E which will support CMA and selection of remedy:
 - Establish horizontal and vertical survey coordinates for the newly installed wells, complete hydraulic conductivity testing, and collect an additional round of groundwater samples to refine N&E and better understand aquifer characteristics, groundwater flow patterns, and the processes responsible for reducing Appendix IV concentrations; and
 - Evaluate the groundwater analytical data collected during the August 2021 off-site sampling event and the November 2021 semi-annual assessment monitoring sampling event.
- Complete collection of groundwater elevation data using pressure transducers from the three (3) off-site monitoring well clusters. Results will be used to determine the surface water/groundwater interaction between Harding Street and Hanson Aggregate quarry to the south and support the CSM.
- Complete the hydraulic assessment to define the N&E of Appendix IV SSL along the western property boundary.
- As appropriate, refine the CSM and associated groundwater flow and solute transport model.
- Continue to perform an engineering review of the seven (7) potential CMA alternatives. For these reviews, emphases will be placed on understanding and reacting to impacts of newly

gathered analytical results, identifying and researching applicability of emerging technologies and their impacts on the CMA and selection of remedy process.

- Continue permit applicability review and risk assessment for CMA options.
- 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.
- Provide a semi-annual progress report that summarizes AES Indiana's progress and status regarding a selection of remedy.