March 10, 2022
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 constitutes the fifth semi-annual remedy selection progress report and is comprised of activities completed during the period of September 14, 2021, through March 10, 2022. 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 May 2021 sampling results for the presence of Appendix IV constituents to be present at concentrations above GWPS.
- Continued Assessment Monitoring: Evaluated the results of the November 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 November 2021 from the nine (9) 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;

  - Completed hydraulic conductivity testing at the four (4) newest N&E nested monitoring wells that were installed off-site at Hanson to better understand aquifer characteristics; and
  - Completed the use of pressure transducers in three (3) off-site nested monitoring well locations. The groundwater elevation data was used 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 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 nature & extent of Appendix IV constituents.

- Completed a hydraulic assessment to define the N&E of Appendix IV SSL along the western property boundary. Site-wide groundwater and surface water elevations were collected during September and October 2021.
- Began updating and calibrating the groundwater flow model by incorporating data from the off-site N&E nested monitoring well locations.
- Initiated an engineering review that included an initial mass balance evaluation and investigation of regulatory permitting considerations associated with CMA remedy options.

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 November 2021 sampling event to evaluate groundwater for the presence of SSLs above GWPS downgradient of the Ash Pond System.
- Continue Assessment Monitoring by collect groundwater samples in May 2022 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 sampling of N&E wells which will support CMA and selection of remedy: Evaluate the groundwater analytical data collected during the November 2021 and May 2022 semi-annual assessment monitoring sampling events.
- As appropriate, refine the CSM and associated groundwater flow and solute transport model.
- Continue to perform an engineering review of the potential CMA alternatives. For these reviews, emphases will be placed on understanding and reacting to impacts of newly gathered analytical results, and on identifying and researching applicability of emerging technologies and their impacts on the CMA and selection of remedy process.
- Communicate with Hanson regarding off-site N&E activities.
- 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 AESI's progress and status regarding a selection of remedy.