

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

March 12, 2021
File No. 129342

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.

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 to prepare a semi-annual report describing the progress in selecting and designing the remedy. This report constitutes the third semi-annual remedy selection progress report and is comprised of activities during the period of September 13, 2020 through March 11, 2021. 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:

- Continued Assessment Monitoring: Evaluated the results of the November 2020 sampling event and any GWPS exceedances. 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 from the N&E monitoring wells and piezometers that were installed off-site at the Hanson Aggregates facility in November 2020 to define the lateral extent of Appendix IV constituents. 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. In February 2021, representatives from AES Indiana and Hanson participated in a virtual meeting to discuss the need for additional off-site N&E monitoring wells at the Hanson Aggregates facility. A subsequent site visit was conducted

to field locate the four (4) proposed N&E nested monitoring wells. Groundwater characterization of the N&E monitoring wells is ongoing;

- Pressure transducers were installed in three (3) off-site nested monitoring wells to obtain groundwater elevation data to evaluate groundwater/surface water interactions 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 installation of two (2) additional piezometers/stream gauge pairs along the White River; and
- Porewater and groundwater samples were collected in November 2020 from the seven (7) nested piezometers within the limits of Ash Pond System and analyzed to provide data to refine the understanding of the vertical groundwater flow characteristics and solute transport.

PLANNED ACTIVITIES

Anticipated activities which will support CMA and selection of remedy for the upcoming six months include the following:

- Continue Assessment Monitoring: Collect groundwater samples in May 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 finalize N&E which will support CMA and selection of remedy:
 - Install four (4) additional off-site N&E nested monitoring wells (shallow, intermediate, deep) at the Hanson Aggregates facility;
 - Collect two (2) rounds of groundwater samples from the newly installed off-site wells to refine N&E and better understand the processes to reduce Appendix IV concentrations;
 - Evaluate the groundwater analytical data collected during the May 2021 semi-annual assessment monitoring sampling event that will include any new N&E monitoring wells.
- Continue the use of pressure transducers for collection of groundwater elevations from the three (3) off-site monitoring well clusters to determine the surface water/groundwater interaction between Harding Street and Hanson Aggregate quarry to the south and support the CSM;
- As appropriate, refine the CSM and associated groundwater modeling;
- 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;
- 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; and
- Provide a semi-annual progress report that summarizes AES Indiana's progress and status regarding a selection of remedy.