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

September 14, 2020 File No. 129342

TO: Indianapolis Power & Light Company

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

The Indianapolis Power & Light Company (IPL) initiated corrective measures for the Ash Pond System at the Harding Street Generating Station (HSGS) on April 15, 2019 in response to a statistically significant level (SSL) of an Appendix IV constituent 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, IPL 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 second semi-annual remedy selection progress report and is comprised of activities during the period of March 14, 2020 through September 12, 2020. 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 May 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 exceedances and compared to GWPS. Any new parameters that exceed GWPS will be considered in selection of the final remedy.
- Efforts to determine the nature and extent (N&E) of the Appendix IV SSLs continued pursuant to § 257.95(g). In April 2020, three (3) N&E nested monitoring wells were installed off-site at the Hanson Aggregates facility. Groundwater samples were collected from the N&E monitoring wells and piezometers in May and August 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. Groundwater characterization of the N&E monitoring wells is ongoing;

- Porewater and groundwater samples were collected in May and August 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; and
- Three samples of the shale armoring the south slope of Pond 2 were collected in August 2020 and analyzed to provide additional data to define the extent to which shale armoring contributes to groundwater impacts.

PLANNED ACTIVITIES

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

- Continue efforts to finalize N&E by evaluating the groundwater analytical data collected during the November 2020 semi-annual assessment monitoring sampling event;
- Fill remaining data gaps to determine the surface water/groundwater interaction between Harding Street and Hanson Aggregate quarry to the south;
- As appropriate, refine the conceptual site model 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 IPL's progress and status regarding a selection of remedy.