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TO: Southern Indiana Gas and Electric Company (SIGECO)

FROM: Haley & Aldrich, Inc.
[Steven F. Putrich, P.E., Project Principal
Mark Miesfeldt, P.G., Lead Hydrogeologist]

SUBJECT: Notification of Statistically Significant Levels of Appendix IV Constituents
Pursuant to 40 CFR§ 257.95(g) and 40 CFR § 257.105(h)(8)
A.B. Brown Generating Station, West Franklin, Indiana

Southern Indiana Gas and Electric Company (SIGECO) is implementing the 17 April 2015 U.S. Environmental Protection Agency (U.S. EPA) Federal Coal Combustion Residuals (CCR) Rule (40 CFR § 257 and 261) for the A.B. Brown Generating Station, in Posey County near West Franklin, Indiana. SIGECO provided Haley & Aldrich, Inc. with assessment monitoring data collected from a groundwater monitoring system constructed at the Ash Pond that meets the requirements of 40 CFR §257.91 and 40 CFR §257.93. This notification documents the results of statistical tests conducted to determine if Appendix IV groundwater monitoring constituents detected in samples collected from wells located downgradient of the Ash Pond are present at a statistically significant levels (SSL) above groundwater protection standards (GWPS) consistent with the requirements in 40 CFR § 257.95.

As required by 40 CFR § 257.95(b) and 40 CFR § 257.95(d)(1), two rounds of groundwater sampling and analysis were completed by October 15, 2018. GWPSs, pursuant to 40 CFR § 257.95(d)(2) and in accordance with Phase I, Part 1 CCR Rule Revisions dated 17 July 2018, effective 16 August 2018, were generated for each Appendix IV constituent detected during assessment monitoring. The GWPSs were set at the maximum contaminant level (MCL) or risk screening level (RSL) for those constituents that did not have a promulgated MCL since the background values for the detected Appendix IV constituents did not exceed those values.

For the Ash Pond, which was in Assessment Monitoring in 2018, analytical results from downgradient wells were compared to each respective GWPS. If the detected constituent was greater than the GWPS for that Unit, pursuant to 40 CFR § 257.93 (f)(5), the confidence interval method was used to evaluate if that Appendix IV constituent was present at a statistically significant level (SSL). Based on the comparisons outlined above, the results of the statistical analyses conducted for those detected Appendix IV constituents confirm that molybdenum and lithium are present at statistically significant levels above GWPSs in one or more wells downgradient of the Ash Pond.