

July 30, 2025

Subject:

Semiannual Progress Report - Selection of Remedy
JH Campbell Pond A CCR Unit

This Semiannual Progress Report, prepared as a requirement of §257.97(a) of 40 CFR Parts 257 and 261, Disposal of Coal Combustion Residuals from Electric Utilities, under subtitle D of the Resource Conservation and Recovery Act (RCRA), also known as the Coal Combustion Residuals (CCR) Rule, describes progress toward selecting and designing remedies for the Pond A CCR unit that triggered Assessment of Corrective Measures (ACM) under the CCR Rule at the JH Campbell Solid Waste Disposal Area. Based on the schedule of self-implementation prescribed in the CCR Rule, a progress report is required to be prepared semiannually upon completion of the Assessment of Corrective Measures Report until the remedy is selected. It is noteworthy that remedy selection for the Pond A, prescribed by the CCR Rule, is being undertaken in coordination with a Michigan Department of Environment, Great Lakes, and Energy (EGLE) Consent Agreement 115-01-2018, which was executed on December 28, 2018.

Consumers Energy (CE) reported statistically significant exceedances above the groundwater protection standard (GWPS) for a single Appendix IV constituent, arsenic, in the "Notification of Appendix IV Constituent Exceeding Groundwater Protection Standard per §257.95(g)" (Consumers Energy Company, January 2019).

Unit with GWPS Exceedance	Constituent	# of Downgradient Wells Observed
Pond A	Arsenic	1 of 6

Subsequently, the Assessment of Corrective Measures Report (TRC, September 2019) was completed on September 11, 2019 for Pond A. Five remedial approaches were evaluated and presented based on source control by construction of a final cover and certifying the closure in place for Pond A.

Semi-annual progress reports have been completed by placing the document in the operating record and making it available on the CE public-facing website starting with the 2019 Annual Groundwater Monitoring and Corrective Action Report and Fourth Quarter Hydrogeological Monitoring Report (TRC, 2020).

Assessment Activities

CE closed Pond A according to the “*JH Campbell Generating Facility Pond A Closure Plan, West Olive, Michigan*” (Golder, October 2016) and an updated closure plan detailing the final cover system was submitted to EGLE in February 2019. The state closure certification as required by Paragraph 4.2 of Consent Agreement WMRPD No. 115-01-2018 was approved by EGLE on November 25, 2019.

Post-closure increases in Appendix III constituents (e.g. boron) at multiple well locations and direct exceedances of the selenium GWPS in JHC-MW-15011R, JHC-MW-15009R, and JHC-MW-15008R and arsenic at JHC-MW-15006 that have not yet resulted in a statistically significant exceedance suggest a detectable influence from the immediately adjacent, upgradient, closed, pre-existing CCR units on-site. The closed, pre-existing units are not regulated CCR units under the RCRA CCR Rule, but remedial action is being taken under Consent Agreement WMRPD No. 115-01-2018. A remedial action plan (RAP) for these units was submitted to EGLE on September 30, 2021. In a letter sent June 10, 2022, CE committed to revising elements of the RAP based on comments received and ongoing discussion with EGLE. Ongoing discussions have continued with EGLE since then, with the latest version of the RAP submitted to EGLE on July 11, 2025.

Conclusions

Arsenic at JHC-MW-15011/R continues to demonstrate attenuation in visual downward concentration trends and has shown a statistically significant decrease to concentrations below the GWPS (upper confidence limit is below the GWPS). Nature and extent sampling data indicate that arsenic is not detected above the GWPS immediately downgradient from Pond A.

Groundwater monitoring data since the installation of the final cover indicates an observable influence from immediately adjacent, upgradient, closed, pre-existing units. Remedial action for the upgradient units is being taken under Consent Agreement WMRPD No. 115-01-2018.

Remedy Selection Process

The ACM Report identified a final cover system as the primary corrective action for Pond A, but also considered five technically feasible groundwater management alternatives to address the potential for residual arsenic. The first alternative was to monitor post-source control groundwater concentration improvements (e.g. no additional measures required once source control was completed), but four other alternatives were retained in the event GWPS could not be achieved for all constituents in all monitoring wells in the groundwater monitoring system.

Consumers Energy held a public meeting on May 28, 2025 to discuss the results of the corrective measures assessment for site-wide corrective actions that are inclusive of remedies for Pond A consistent with §257.96(e). The remedy for Pond A will be formally selected per §257.97 once the preferred option has been approved by EGLE through a corrective action order.

References

Consumers Energy Company. January 14, 2019. Notification of Appendix IV Constituent Exceeding Groundwater Protection Standard per §257.95(g), JH Campbell Pond A CCR Unit.

Golder Associates. October 2016. JH Campbell Generating Facility Pond A Closure Plan, West Olive, Michigan. Prepared for Consumers Energy Company.

TRC Environmental Corporation. September 2019. Assessment of Corrective Measures, Consumers Energy Company JH Campbell Ponds 1-2 North and 1-2 South and Pond A Coal Combustion Residual Units. Prepared for Consumers Energy Company.