Memo

Date: Tuesday, July 28, 2026

To: Lansing Board of Water & Light

From: HDR

Subject: Erickson Power Station Semiannual Progress Report for Selection of Remedy per 40 CFR §257.97(a)

Erickson had three CCR impoundments that are subject to the U.S. Environmental Protection Agency's (EPA's) Coal Combustion Residuals (CCR) Rule specified in 40 CFR §257, the Forebay, Retention Basin, and Clear Water Pond (CWP) (**Figure 1, Figure 2**). The CCR impoundments triggered assessment of corrective measures and therefore are the subject of this remedy selection semiannual progress report.

The purpose of this Memo is to provide an update since the completion of the *Conceptual Site Model and Assessment of Corrective Measures* Report (ACM Report) on November 25, 2021 and posted to BWL's public website (HDR, 2021). Since the ACM Report, a phased remedial investigation program has been implemented to support remedy selection. This is the semiannual progress update describing progress in the first half of 2026 toward selecting a remedy for corrective action, as required by 40 CFR §257.97(a) of the CCR Rule.

BWL completed numerous tasks in the first half of 2026 to further characterize the impact to groundwater to further the assessment of corrective measures. Between January and June 2026, BWL completed the following tasks:

- Updated the Hydrogeologic Monitoring Plan.
- Completed a subsurface utility exploration (SUE) survey to document underground utilities for use in remediation feasibility planning.
- Performed Tier I and II Evaluations for Monitored Natural Attenuation (MNA) of the site contaminants of concern related to the former CCR surface impoundments.
- Completed soil and groundwater sampling and completed bench tests to evaluate the treatability of groundwater in-situ via potential reagents.
- Completed the first semiannual assessment monitoring event and subsequent analysis in February 2026.
- Performed sampling and analysis for higher frequency background monitoring for newly installed monitoring wells MW-19 series multi-level wells and MW-7D.
- Updated the numerical groundwater flow ad transport model and ran remediation alternatives simulations.

- Developed a draft Remediation Alternatives Feasibility Study.

Remediation Feasibility Study

To evaluate the cost of the remediation options at Erickson and determine a final path forward for remediation, a draft remediation feasibility study (RFS) was prepared and submitted on June 30, 2026. The RFS evaluated the three remedy alternatives proposed in the Assessment of Corrective Measures (ACM) published for the site; monitored natural attenuation (MNA), extraction and treatment with surface water discharge, and extraction and treatment with groundwater discharge. The RFS evaluated the alternatives for their effectiveness in achieving the remedial action objectives, the practicality of implementation of the remedial option, and cost with an Advancement of Cost Engineering Internation Class 5 estimate. The draft RFS will assist BWL budget forecast and elevate into the design phase in the second half of 2026 with the selected remedy to follow.

Nature and Extent Characterization

Groundwater monitoring network data currently suggest that the plume is delineated to the east and south of the former CCR impoundments when using the groundwater contour lines to help determine plume boundaries.

BWL evaluated potential paths in order to continue to delineate the groundwater plume to the north of the MW-18 wells and in May 2025, a new monitoring well cluster (MW-19A, MW-19B, MW-19C, and MW-19D) and new piezometer (MW-20) were installed on the northern Erickson property boundary, north of the wetlands (**Figure 2**). These were sited north of the wetland to avoid wetland disturbance and associated long permitting timelines. Background sampling events for the MW-19 series wells was completed in January 2026 and the wells were included in the semiannual assessment monitoring sampling event completed in February 2026 and data indicate that there are no statistical exceedances of GPS at the MW-19 series wells.

BWL is currently in the process of coordinating access agreements with the Eaton County Drain Commissioner for access associated with wetland delineation and monitoring wells and associated roads.

BWL communicated via phone, email and certified mail to potentially impacted landowner, Reith-Riley (RR) directly to the east of the impoundments to secure an access agreement for BWL to continue plume delineation. RR declined all requests for access to their parcel. Subsequently, BWL notified Mr. David Willard, District Geologist, EGLE, Material Management Division (MMD), of BWL inability to secure access to RR parcel for further groundwater investigation.

Groundwater Extraction and Treatment Data Collection

To assist in evaluating the feasibility of groundwater extraction and treatment as a viable remedy for site groundwater, a discharge options evaluation remains underway. This evaluation provides a high-level assessment of potential discharge pathways for the treated groundwater, including direct discharge to surface water under a National Discharge Elimination System (NPDES) permit and discharge back to the subsurface (e.g. through reinjection or infiltration) within the site boundaries. Notably, discharge to the POTW has been ruled out based on feedback from Delta Township staff to BWL, due to volume capacity limitations of the Delta Township wastewater system.

Groundwater Model Development

A three-dimensional numerical MODFLOW groundwater flow and transport model was updated and calibrated between January and June 2026 to support remedial conceptual design alternatives. The objectives of the modeling are to simulate the potential extent of the plumes, and to evaluate the effectiveness of each potential corrective measure to reduce groundwater concentrations over time with the goal of selecting the best remedy, or combination of remedies, for implementation. Additionally, the model allows for evaluations of conceptual design variations of an alternative.

Monitored Natural Attenuation Evaluation

Between January and June 2026, BWL continued to collect and evaluate additional data to continue the MNA investigation. An initial evaluation of the MNA data collected was detailed in Monitored Natural Attenuation Evaluation: Insights from Initial Data (HDR, 2025d). This memo included a Tier I MNA evaluation of boron, which concluded with a recommendation to advance boron to a Tier II MNA evaluation and to complete a comprehensive Tier I MNA Evaluation for the remaining site COCs (lithium, molybdenum, sulfate, and total dissolved solids). The comprehensive Tier I MNA evaluation for all site contaminants finalized on March 26, 2026.

Additionally, a Tier II MNA evaluation is currently in progress. Well solids were collected from 13 site monitoring wells (MW-3, MW-5, MW-6, MW-7, MW-7C, MW-7D, MW-12, MW-12B, MW-14, MW-18A, MW-18B, MW-18C, and MW-18D) in October 2025 and submitted to Anchor QEA's laboratory in Portland, Oregon. Based on the sample recovery results from the October 2025 samples, additional well solids sample collection was performed in November 2025 at 5 of the monitoring wells (MW-3, MW-7C, MW-12B, MW-18B, and MW-18C) and also submitted to Anchor QEA. Well solids from 8 of the monitoring wells (MW-3, MW-5, MW-7C, MW-12, MW-12B, MW-14, MW-18B, and MW-18C) were then advanced to a Phase 1 screening analysis, utilizing:

- X-ray fluorescence (XRF)
- Laser-induced breakdown spectroscopy (LIBS)

Based on the Phase 1 screening results, well solids samples from 7 of these wells (MW-3, MW-7C, MW-12, MW-12B, MW-14, MW-18B, and MW-18C) were advanced to Phase 2 analysis, including:

- Selective sequential extraction (SSE)
- Scanning electron microscopy with energy dispersive spectrometry (SEM with EDS)
- X-ray diffraction (XRD)

Anchor QEA sent the results of these analyses to HDR in February 2026 and were incorporated into the Tier II MNA evaluation.

Three rounds of MNA groundwater samples were additionally collected from site monitoring wells within the groundwater plume. The first round of these MNA groundwater sampling events was conducted in November 2025, with the second and third rounds of completed by April 2026. These groundwater samples were delivered to Eurofins Laboratories of Cleveland, Ohio for analysis of dissolved metals, sulfide, total organic carbon, nitrate, and nitrite not included in the assessment monitoring program. The Tier II MNA evaluation is expected to be completed in August 2026.

Based on the findings of the Tier II MNA evaluation, additional analysis of the MNA remedial method is recommended and will progress with a Tier III MNA evaluation. Additional well solids were collected from wells within the groundwater contamination plume at MW-3, MW-7, MW-7C, MW-17 series wells, MW-18 series wells, and MW-19 series wells. These samples will be for use in an adsorption capacity and desorption treatability study. It is anticipated that further work supporting the Tier III MNA evaluation, including collection of additional groundwater samples, will be conducted concurrent with the August 2026 second semiannual sampling event. The Tier III MNA evaluation is expected complete in the fourth quarter 2027.

In-Situ Treatability Data Collection

BWL coordinated with Evonik Industries in 2025 to develop a work plan to evaluate the potential for in-situ treatment of site COCs. In September 2025, a 6 kg soil sample was collected from 50-60 feet below ground surface (the screened interval of MW-7C) during the drilling and installation of the new shallow bedrock monitoring well MW-7D. In October 2025, 19 liters of groundwater was collected from MW-7C into two 9.5 liter nitrogen flushed stainless steel canisters, and both the soil and groundwater samples were submitted to ReSolution Partners, LLC's (RSP) lab in Madison, Wisconsin. Subsamples of the groundwater and homogenized soil sample were submitted to CT Laboratories in Baraboo, Wisconsin, for baseline characterization of:

- Boron, lithium, and molybdenum by EPA Method 6010C
- Sulfate by EPA Method 300

In November 2025, RSP commenced a first phase of bench-scale batch testing of the soil and groundwater samples in combination with a variety of different reagents. The purpose of these batch tests are to investigate the efficacy of different reagents and dosages in lowering the aqueous concentrations of site COCs in the presence of the soil and groundwater samples collected from the site. The first phase of batch testing includes two suites of tests: one suite includes reagents (EHC®, MetaFix® I-3, acetic acid) intended to target boron, molybdenum, and sulfate, with the other suite including reagents (TSP, $FeSO_4$, $MnSO_4$, $KHCO_3$, CaO, TMT15®) intended to target lithium. The results of the first phase of batch testing was determined to be ineffective after treatability bench testing determined an appropriate reagent for treatment was not identified. Therefore, neither a second phase of batch testing nor field-scale pilot test are warranted to further investigate the potential for in-situ treatability of site groundwater.

Regulator Coordination

Beginning in March 2026, BWL initiated monthly meetings with Michigan EGLE MMD in an effort to advance agency reviews of monitoring documents and remediation progress.

In addition, BWL presented the site background and monitoring status to the EGLE Remediation Advisory Team (RAT) on June 24, 2026. During this meeting, BWL requested EGLE's review of the 2024 Alternate Source Demonstration and sought feedback on any remaining agency concerns to facilitate development and future approval of the Remedial Action Plan.

Next Steps Towards Remedy Selection

BWLs efforts to install additional monitoring wells offsite have been unsuccessful as adjacent landowners have not allowed the installation of monitoring wells offsite of the BWL property, aside from the MW-100-series monitoring well cluster installed in May 2023. Nevertheless, BWL has continued to install wells along their property boundaries to continue to evaluate the potential extent of contamination. Data collected from wells along the eastern, western, and southern boundaries of the site suggest the plume outer edge is very near the wells in these directions and data collected from wells along the northern property demonstrate that the plume has not extended to Millett Highway and therefore the plume edge is between well MW-18 and MW-19, closer to MW-18 based on concentrations.

The following activities are proposed to be completed or initiated in the next 6-month period:

- Continue semiannual groundwater assessment monitoring;
- Complete statistical analysis for MW-7D;\
- Evaluation of potential alternate sources of selenium exceedance at the MW-15 monitoring well;
- Update of the site background threshold values (BTVs) with data collected through the first semiannual assessment monitoring event in 2026;
- Continue the tiered III MNA evaluation to assess viability of MNA as a remedial option;
- Develop and implement an extracted groundwater treatability work plan;
- Complete a wetland delineation and potential wetland permitting for proposed extraction wells and corrective action monitoring wells;
- Hold a meeting to present remediation alternatives to the public; and
- Submit a Remedial Action Plan to EGLE.

References

HDR, 2020. Groundwater Protection Standards and Determination of SSLs per §257.95g [Memorandum]. November 23, 2020.

HDR, 2021. Conceptual Site Model and Assessment of Corrective Measures. November 5, 2021.

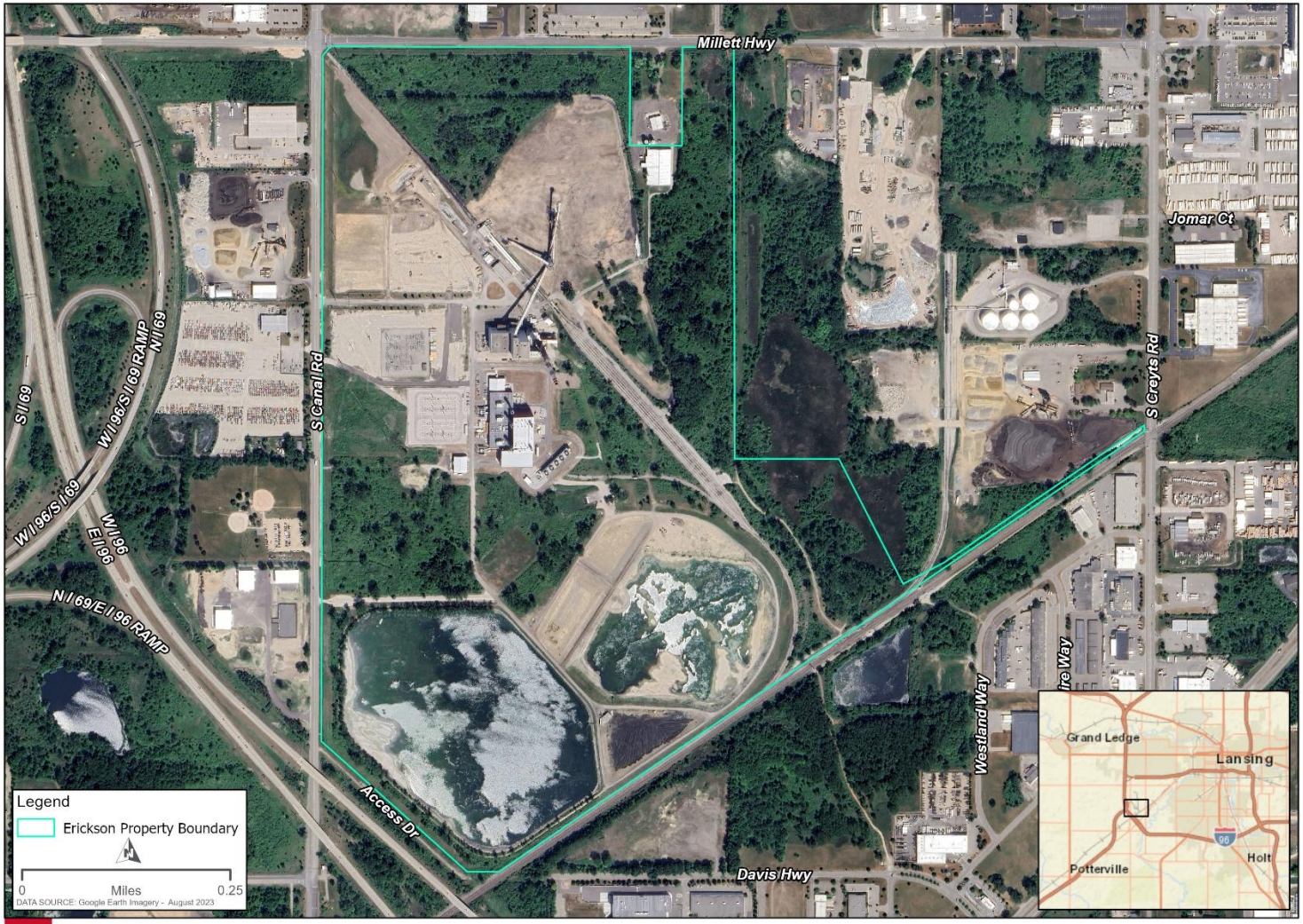

Figure 1. Vicinity Map for Erickson Power Station

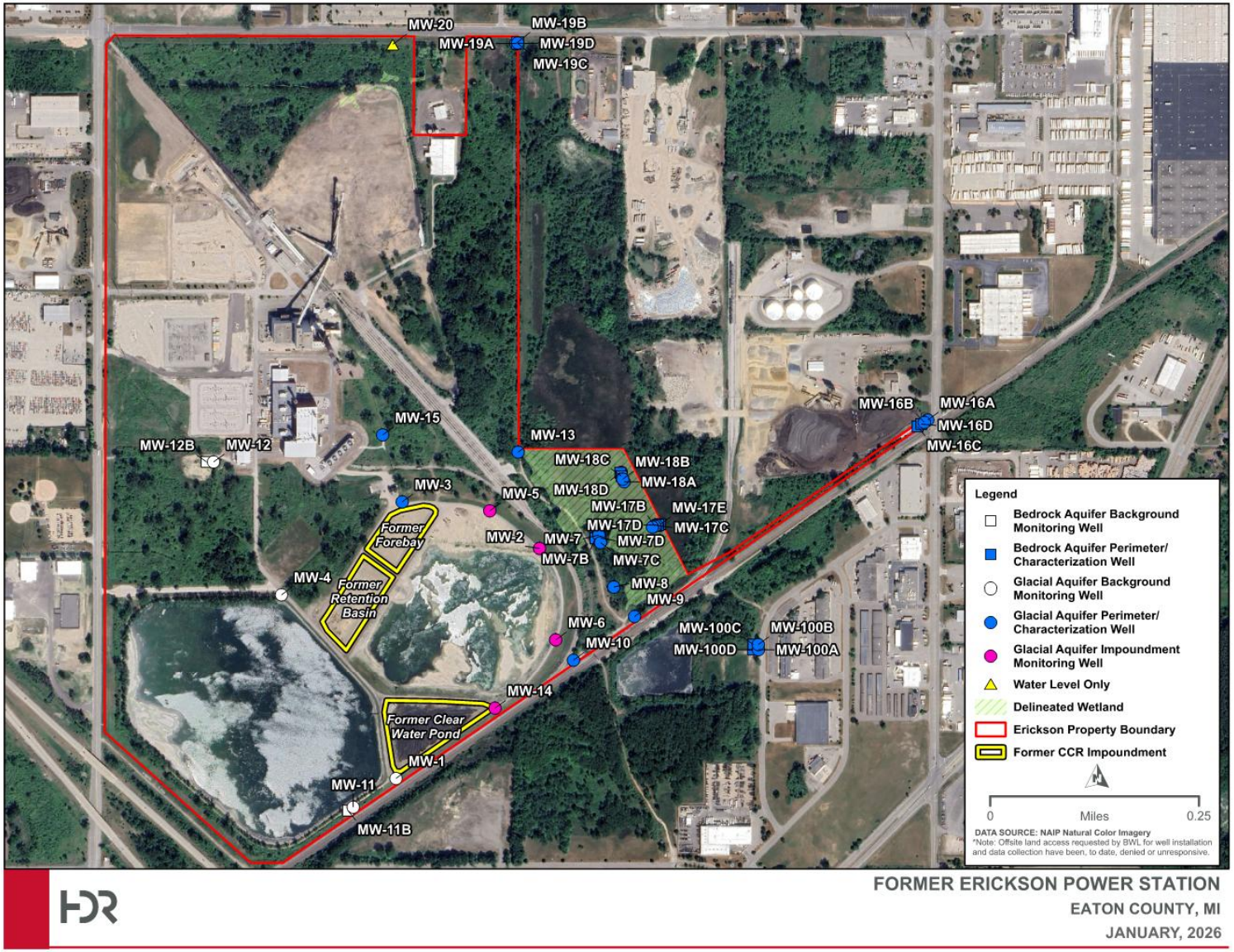

Figure 2. CCR Units and Monitoring Wells