



Notification of Completion of Closure

**Belle River Power Plant Diversion Basin
4505 King Road
China Township, Michigan**

August 2024

A handwritten signature in blue ink that reads "Vincent E. Buening".

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Executive Summary

DTE Electric Company (DTE Electric) completed coal combustion residuals (CCR) removal activities at the Belle River Power Plant Diversion Basin CCR unit (DB) in 2023 in accordance with the *Belle River Power Plant Diversion Basin Closure Plan* (Burns & McDonnell, May 2023, (Revised September 2023)). The CCR removal from the DB was initiated in May 2023 and completed by July 2023 as documented in the September 15, 2023 *Certification of CCR Removal in Preparation of Closure of the Belle River Diversion Basin* (Burns & McDonnell, September 2023). The excavation of CCR material was completed down to the underlying native clay and included removal of a cemented ash layer ranging in thickness from 1.5-2.0 feet. After excavation was complete, the slopes of the basin were finish graded and seeded and the DB was repurposed into a non-CCR wastewater basin.

The DB remained in detection monitoring throughout the closure. Additionally as part of the closure, Appendix IV parameters were analyzed during the October 2023 and April 2024 closure groundwater monitoring events to demonstrate that the Groundwater Protection Standards (GWPSs) are met after CCR removal in accordance with §257.102(c). No exceedances of the GWPSs were detected for the Appendix IV parameters in either monitoring event. Therefore, in accordance with §257.102(h), this report serves as the Notification of Completion of Closure, documenting that closure has been completed at the DB in accordance with the Closure Plan and in compliance with §257.102(c).

1.0 Introduction

As documented in the *Certification of CCR Removal in Preparation of Closure of the Belle River Diversion Basin* (Burns & McDonnell, September 2023) (BRPP DB CCR Removal Certification), DTE Electric Company (DTE Electric) commenced closure construction activities in the second calendar quarter of 2023 and completed the removal of CCR from the Belle River Power Plant Diversion Basin CCR unit (DB) in July 2023. The closure activities were performed in accordance with the *Belle River Power Plant Diversion Basin Closure Plan* (Closure Plan) (Burns & McDonnell, September 2023) prepared under §257.102(b) and 257.102(c) of the CCR rule (USEPA, April 2015), as amended. After CCR removal, the basin slopes were finish graded and seeded. The diversion basin has been repurposed as a non-CCR impoundment and has resumed receiving non-CCR waste streams.

Additionally, as documented in the 2023 Annual Groundwater Monitoring Report (2023 Annual Report) (TRC, January 2024) and the 2024 Annual Groundwater Monitoring Report (2024 Annual Report) (TRC, August 2024) groundwater monitoring performed from October 2023 to April 2024, demonstrates that concentrations of Appendix IV parameters do not exceed the groundwater protection standards (GWPSs). Therefore, closure of the DB was conducted in accordance with §257.102(c), which states:

Closure by removal of CCR. *An owner or operator may elect to close a CCR unit by removing and decontaminating all areas affected by releases from the CCR unit. CCR removal and decontamination of the CCR unit are complete when constituent concentrations throughout the CCR unit and any areas affected by releases from the CCR unit have been removed and groundwater monitoring concentrations do not exceed the groundwater protection standard established pursuant to § 257.95(h) for constituents listed in Appendix IV to this part.*

This Notification of Completion of Closure has been prepared to document the closure activities at the DB and to provide certification from a qualified professional engineer that closure of the surface impoundment has been successfully completed, per §257.102(f)(3).

2.0 Coal Combustion Residual (CCR) Removal

Closure by removal activities related to the DB began in the second calendar quarter of 2023 following the procedures laid out in the Closure Plan. The removal of CCR from the DB was completed in July 2023 as described in the BRPP DB CCR Removal Certification. The DB has been repurposed as a non-CCR impoundment and continues to receive non-CCR waste streams.

As described in the BRPP DB CCR Removal Certification, DTE Electric retained Barton Malow Company (BMC) to remove ponded CCR waste from the DB and retained Burns & McDonnell as the engineer to certify that ponded CCR waste in the DB has been removed in accordance with Section 4.1 of the Closure Plan. CCR material was removed by excavation, down to the underlying clay, which included the removal of a cemented ash layer ranging in thickness from 1.5 to 2.0 feet and was underlain by a very soft clay material. Over excavation of the underlying native clay was completed with the cemented ash removal to ensure completion of CCR removal and to allow mechanical equipment to safely exit the basin. Excavated material was disposed of in the Range Road Landfill (a licensed coal ash landfill) located north of the plant. After CCR removal was complete, the basin slopes were finish graded and seeded.

Burns & McDonnell completed inspections on June 29, 2023, and July 11, 2023, to verify the removal of CCR. At the completion of CCR removal aerial surveys were completed by BMC to document the finished excavation grade. One additional inspection was completed on July 19, 2023, to document the removal of slope material which had been blocked by the bypass pumping system equipment as documented in the BRPP DB CCR Removal Certification.

3.0 Compliance with Groundwater Protection Standards

Per §257.102(c), closure of a CCR impoundment is not deemed complete until groundwater concentrations associated with the unit do not exceed the GWPSs established pursuant to §257.95(h) for Appendix IV constituents.

While the DB has remained in detection monitoring throughout its operation, the closure must demonstrate that groundwater concentrations do not exceed the Appendix IV constituent GWPSs established under §257.95(h) after the closure of the CCR impoundment pursuant to §257.102(c). TRC calculated background statistical limits and developed Appendix IV GWPSs for the DB in accordance with §257.95(h). Two consecutive post-CCR removal groundwater sampling events for Appendix IV constituents were completed in October 2023 and April 2024 to demonstrate that the GWPSs are met for closure of the DB in accordance with §257.102(c) (TRC, July 2024).

The 2023 Annual Report and 2024 Annual Report document that all semiannual groundwater monitoring sampling for Appendix IV constituents in the second semiannual groundwater monitoring event in 2023 and the first semiannual groundwater monitoring event in 2024 have not shown any Appendix IV constituents to be present at any monitoring wells at statistically significant levels above the GWPSs in accordance with §257.95(h). Therefore, the DB has met the groundwater performance requirements for closure of a CCR surface impoundment based on: 1) not having groundwater monitoring concentrations exceed the GWPSs for two consecutive events after CCR unit closure, and 2) not being required to enter assessment of corrective measures, evaluate remedies, or implement corrective actions under §257.96 through 257.98 because no releases to groundwater have been detected.

Based on the reported results in the 2023 Annual Report and 2024 Annual Report, concentrations of Appendix IV constituents have not exceeded the GWPSs established pursuant to §257.95(h) for two consecutive semiannual monitoring events. Therefore, the DB has met the closure performance standard per §257.102(c).

4.0 Post-Closure Care Requirements

Post-closure care requirements do not apply to the DB. The post-closure care section in the CCR rule (§257.104(a)(2)) states the following: “An owner or operator of a CCR unit that elects to close a CCR unit by removing CCR as provided by §257.102(c) is not subject to the post-closure care criteria under this section.”

5.0 Conclusions

Closure of the DB was performed and completed in accordance with the Closure Plan. The DB has been repurposed to receive non-CCR waste streams.



There were no exceedances of GWPSs for the Appendix IV parameters for two consecutive semiannual closure groundwater monitoring events during the second semiannual 2023 and first semiannual 2024 monitoring periods. Therefore, groundwater monitoring at the DB will be discontinued in 2024 and, upon EGLE-approval, the monitoring well network will be properly decommissioned. As of the certification date of this report (see Section 6.0), the DB will be deemed closed under 40 CFR §257 and is not subject to post-closure care requirements or any other requirements under 40 CFR §257 of the CCR rule.

6.0 Closure Certification

**Notification of Completion of Closure Report Certification
Belle River Power Plant Diversion Basin
China Township, Michigan**

CERTIFICATION

I hereby certify in accordance with §257.102(f)(3) that the Belle River Power Plant Diversion Basin CCR unit was closed in accordance with the requirements of §257.102(c) of the CCR rule and the written Closure Plan as developed under §257.102(b). To the best of my knowledge, information, and belief, the information contained herein is true and correct and this document has been prepared in accordance with generally accepted good engineering practices.

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| Name: David B. McKenzie, P.E. | Expiration Date: December 17, 2025 |   |
| Company: TRC Engineers Michigan, Inc. | Date: <i>August 29, 2024</i> | |

7.0 References

- Burns & McDonnell Michigan, Inc. (BMcD). September 15, 2023. Diversion Basin Closure Plan Revision 1. Prepared for DTE Electric Company.
- BMcD. September 15, 2023. Certification of CCR Removal in Preparation of Closure of the Belle River Diversion Basin. Prepared for DTE Electric Company.
- TRC. January 31, 2024. 2023 Annual Groundwater Monitoring Report Belle River Power Plant Diversion Basin 4505 King Road China Township, Michigan. Prepared for DTE Electric.
- TRC. August 30, 2024. 2024 Annual Groundwater Monitoring Report Belle River Power Plant Diversion Basin 4505 King Road China Township, Michigan. Prepared for DTE Electric.
- DTE Electric Company. May 18, 2023. Notification of Intent to Close the Belle River Power Plant Diversion Basin.
- USEPA. April 2015. 40 CFR Parts 257 and 261. Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule. 80 Federal Register 74 (April 17, 2015), pp. 21301-21501 (80 FR 21301).