

#### STATE OF MICHIGAN

# DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY KALAMAZOO DISTRICT OFFICE



July 8, 2020

VN-010802

## **VIA EMAIL**

Mr. David H. Fox
Director, Licensing and Compliance
Eagle Creek Renewable Energy (ECRE)
Two Bethesda Metro Center, Suite 1330
Bethesda, Maryland 20814
david.fox@eaglecreekre.com

Dear Mr. Fox:

SUBJECT: Violation Notice-Morrow Dam

FERC Project No. 9000 - Emergency Drawdown

Property Location: Comstock Township, Kalamazoo County, MI

Thank you for your time on the phone on June 26, 2020 to discuss the ongoing drawdown of Morrow Lake and the associated concerns regarding resulting downstream impacts. As you are aware, beginning on October 31, 2019 and ending November 22, 2019, the normal impoundment elevation in Morrow Lake was lowered approximately 9-feet. The lake has remained in this extended drawdown status since that time. The Michigan Department of Environment, Great Lakes, and Energy (EGLE) and Michigan Department of Natural Resources (MDNR) staff continue to receive complaints about sedimentation in the Kalamazoo River downstream of Morrow Dam. On May 15, 2020, ECRE notified staff from EGLE, Water Resources Division (WRD), and the MDNR Fisheries Division that the drawdown, originally intended to last only 4 months, would continue at least until the expected completion of the in-kind replacement of tainter gates 3 and 4 by December 31, 2020.

On June 30, and July 7 2020, EGLE staff with the Remediation and Redevelopment Division (RRD), Superfund Program collected turbidity readings from upstream of the dam in Galesburg to downstream of Morrow Dam in the City of Allegan. The data shows elevated turbidity levels downstream of the dam compared to the levels in upstream and river tributaries, suggesting that the drawdown is a significant source of suspended sediment in the river system.

On July 1, 2020, EGLE and MDNR staff conducted an inspection on the Kalamazoo River downstream of the Morrow Dam. The purpose of the inspection was to respond to ongoing concerns and to evaluate the property for compliance with Part 301, Inland Lakes and Streams, Part 31, Water Resources Protection, and Part 303, Wetlands Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, and the administrative rules for Parts 301 and 31. At the time of the

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inspection, WRD staff observed unnatural turbidity associated with heavily sediment laden water downstream of the Morrow Dam. The discharge of sediment laden water and unnatural turbidity into waters of the state is a violation of Part 31. Discharge of fill material within the 100-year floodplain requires authorization under the Floodplain Regulatory Authority found in Part 31. Unauthorized placement of fill material on bottomlands of a river is a violation of Part 301.

Part 301 provides an exemption for temporary drawdowns of impoundments controlled by dams licensed and regulated by the Federal Energy Regulatory Commission (FERC). To qualify for the exemption, the dam owner (licensee) must consult with and address any concerns of the State during the development of the drawdown plan, and avoid and minimize to the extent practical adverse environmental impacts including to stream flow, aquatic resources, and timing. The state was not consulted before, but rather after or at best concurrently before the start of the drawdown. EGLE understands the emergency nature of the initial drawdown but finds that the timing of the drawdown and the resulting impacts to aquatic resources and stream flow caused avoidable or mitigatable adverse impacts to resources downstream of the dam.

As the work has resulted in the diminishment of an inland lake and the draining of surface water from wetlands, the project did not meet the exemption as detailed above, and no permits have been issued for the work. EGLE has therefore determined that the drawdown was conducted in violation of Part 301, Part 31, and Part 303.

EGLE would like to emphasize the following concerns related to the extended drawdown of Morrow Lake and orders the following actions:

## Immediate Corrective Measures:

- 1. Plan for immediately seeding and stabilizing the exposed bottomlands areas of the impoundment with a seed mix of Michigan species to prevent continued sedimentation from overland flow during storm events.
- 2. Monitor and reduce offsite mobilization of sediment and turbidity during the drawdown period. Measures considered should include, but not be limited to, erosion control blankets, bioengineering, turbidity curtains, bank stabilization measures, sediment traps, re-impoundment of Morrow Lake, and/or other measures to prevent offsite migration of impounded sediments." Measures shall include the installation of electronic turbidity meters at locations both upstream and downstream of the dam. ECRE shall work with EGLE and MDNR to establish a turbidity monitoring plan that includes both seven-day average and momentary thresholds for action. The plan should include immediate notification to EGLE and MDNR upon exceedance of thresholds, and an action plan to reduce turbidity.
- 3. Plan for assessing and stabilizing the developing river channel that is head cutting through the sediments of the impoundment, including assessments of any lateral migration, instability of the bed and banks.
- 4. Plan for analyzing and comparing the pre-drawdown and post-drawdown impoundment bathymetry, and an analysis of the bed and bank scour that has

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- occurred as a result of the drawdown. ECRE must analyze and quantify the amount of sediment mobilized as a result of the extended drawdown.
- 5. Analysis of the feasibility of raising water levels in the impoundment to a higher elevation to re-impound currently exposed areas and prevent bank and bed erosion through the channel forming erosional process now occurring.
- As part of your response, please provide details on all alternatives that exist, including re-impoundment, to achieve reduced offsite mobilization of sediment. Furthermore, provide details on when re-impoundment is anticipated to commence.

A plan to address items 1 - 6 above shall be submitted to our office no later than 10 days from the date of this notice.

Long-Term Assessment of Resource Impacts and Corrective Measures:

- 7. Plan to assess the volume, location, depth and composition of sediments mobilized downstream of Morrow Dam during the drawdown.
- 8. Surface water sampling downstream of the dam, including, but not limited to Polychlorinated Biphenyls (PCBs) and hydrocarbons (oil compounds)
- 9. Plan to mitigate for the impacts to natural resources due to the drawdown, including downstream impacts to receiving waters and impacts related to the initial and extended drawdown of the impoundment.

A plan to address items 7-9 shall be submitted to our office no later than 30 days from the date of this notice, July 8, 2020. The plan shall include, for EGLE approval, a preliminary timeline and schedule for action items identified in the plan including surveying, sampling, and mitigation.

For Superfund questions or issues you can contact Mr. Daniel Peabody, EGLE RRD Superfund, 517-285-3924, <a href="PeabodyD@michigan.gov">PeabodyD@michigan.gov</a>; the EPA Region 5 Regional Project Manager for the Superfund Site is Mr.Jim Saric, 312-886-0992, <a href="Saric.James@epa.gov">Saric.James@epa.gov</a>

To discuss any of the items in this letter further, or if you have any questions, please contact me at 269-569-3609 or at <a href="mailto:HaroldsonD@michigan.gov">HaroldsonD@michigan.gov</a>. Thank you for your attention to this matter.

Sincerely,

Derek Haroldson Kalamazoo District Office Water Resources Division

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## DH:SE

cc: Senator Sean McCann

Representative Brandt Iden

Ms. Michelle Mohney, Comstock Township Clerk

Mr. James Baker, City of Kalamazoo

Mr. Tom Weaver, United States Geological Survey

Ms. Kimberly Bose, FERC

Ms. Angela Damron, FERC

Mr. John Zygaj, FERC

Ms. Jessica Pruden, U.S. Fish and Wildlife Service

Mr. Scott Hicks, U.S. Fish and Wildlife Service

Ms. Lisa Williams, U.S. Fish and Wildlife Service

Ms. Cheryl Vosburg, Kalamazoo River Watershed Council

Ms. Elizabeth Binoniemi-Smith, Match-E-Be-Nash-She-Wish Band of Pottawatomi

Mr. John Rodwan, Nottawaseppi Huron Band of the Pottawatomi

Ms. Jodi Smet, ECRE

Mr. Jay Wesley, MDNR

Mr. Brian Gunderman, MDNR

Mr,. Matt Diana, MDNR

Mr,. Jessica Mistak, MDNR

Ms. Kesiree Thiamkeelakul, MDNR

Mr. Kyle Kruger, MDNR

Ms. Amy Lounds, EGLE

Mr. Luis Saldivia, EGLE

Mr. Kyle Alexander, EGLE

Mr. Luke Trumble, EGLE

Mr. John Bavha. EGLE

Mr. Chris Lantinga, EGLE

Mr. Dan Peabody, EGLE