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GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

GRAND RAPIDS DISTRICT OFFICE



LIESL EICHLER CLARK
DIRECTOR

November 13, 2020

VIA EMAIL AND U.S. MAIL

Mr. Dave Walters
Grand Haven Board of Light and Power
1700 Eaton Drive
Grand Haven, MI 49417

Dear Mr. Walters:

SUBJECT: Grand Haven Board of Light and Power (GHBLP), JB Simms Generating Station, Additional Closure Plan Information: Unit 3 Ash Impoundment Closure Activities, Ottawa County

Staff of the Michigan Department of Environment, Great Lakes and Energy (EGLE), Materials Management Division (MMD) have reviewed your Impoundment Unit 3 - CCR Closure by Removal Construction Quality Assurance and Analytical Sampling Plan, dated October 21, 2020.

The purpose of the technical review is to evaluate compliance with the requirements for coal ash impoundments contained in Part 115, Solid Waste Management, Michigan Compiled Laws 324.11501 et seq. of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended and administrative rules (Part 115).

Section 2.0

While the closure requirements of Part 11519c and 40 CFR 257 Subpart D are self-implementing, EGLE has steadfastly recommended to GHBLP to have plans approved prior to work being conducted so that future required certifications can be approved and time, effort and resources are expended wisely by both GHBLP and EGLE. This is particularly important due to the impending deadline to achieve closure, discussed below. To achieve this shared goal of reaching closure in a timely manner and to address previous deviations from the requirements of Part 115, EGLE has proposed entry of a consent order with enforceable schedules to enable GHBLP to reach closure with certainty that it meets state law requirements for closure.

The wetted boundary of the impoundments is not sufficient to establish the area which must be removed and decontaminated. No supporting documentation about spills, releases or cleanout procedures has been established, which would prove that this is an acceptable boundary.

Section 2.3

The underground spillway is proposed to be left in place. More description and details on this plan are needed for EGLE to determine if this would be acceptable or would create a pathway for surface waters to come into contact with the soils and CCR Waste underlying the ponds.

Section 4.0

It is not clear that a CQAT will be present to oversee removal activities on each day of construction. Given the size and scope of the Unit 3 removal and decontamination, it is necessary for a CQAT to be onsite during all excavation activities to document removal of the waste.

A summary of dewatering is one of the items listed for Field Reports to contain information on. EGLE is unaware of proposed dewatering activities for this portion of the project. Please clarify.

Section 4.1

What does the following sentence mean: "Photographs approved by GHBLP security will be provided to the CQA Officer for inclusion in the CCR Removal Certification Report."? Does this mean the site security determines what photographs will be in the report?

Section 5.0

EGLE has previously discussed utilizing multiple lines of evidence to document removal of CCR materials and liners contaminated with CCR waste or CCR waste leachate. The proposed framework is not sufficient for EGLE to concur that all of these regulated materials have been appropriately removed. A minimum framework to be considered would include all of the following elements:

1. Appropriate gridding of the site.
2. Documentation of the base excavation elevations where CCR and contaminated liners are no longer present. In this case the base elevation of the liner is available from the Liner Documentation Report. (elevation 585.0 top of liner – 3'0" thickness = elevation 582.0). The base excavation elevation once completed to visual standards needs to be documented through survey of each grid point.
3. Photographic documentation of the entire excavation area in sufficient detail to show broad excavation activities. As an example, drone photography has been utilized very successfully at other sites.
4. Photography of individual grid points (or some agreed upon subset of grid points if the number of grid points is excessive).
5. Another line of evidence such as colorimetric testing (if applicable to the subsoil/liner interface), microscopy (if applicable to the subsoil/liner interface), grain size analysis (if applicable to the subsoil/liner interface), analytical testing of indicator parameters of releases (if applicable). GHBLP must choose a method that provides a defensible demonstration that all regulated materials have been removed.

Section 5.2

At what temperature will the soil samples be oven dried and for how long? Why would particles retained on the #30 sieve be excluded?

For colorimetric testing a new calibration standard would be necessary to differentiate the appropriate waste boundary. EGLE strongly recommends that discussions take

place to confirm that EGLE accepts the methodology for documentation as part of the closure certification process. The one sample used for comparison with colorimetric testing does not appear to be representative of a clay liner. The magnified image of the soils shows quartz particles that are not representative of clay materials. Please provide additional information on how this sample is representative of the clay liner or provide additional baseline testing of the other clay liner samples. (Please note that a 200 sieve which is the dividing line for clay is 0.074 mm.)

Section 6.2.2

The acceptance criteria for analytical testing of the remaining clay liner is not sufficient. The acceptance criteria need to be based on the appropriate Part 201 cleanup criteria and not just Maximum Contaminant Levels or drinking water values. Given the proximity to the wetlands and the river it is necessary to also consider the Groundwater Surface Water Interface criteria.

A section on how to address failed analytical testing is required.

CTL Memo

- The memo states that a portion of each sample was dried and pulverized. How and why was the sample pulverized?
- The pictures depicting u3E-CS-03 does not visually appear to be clay soils. Was there a grain size analysis run on any of these samples?
- Would samples compared with microscopy be washed prior to examination photography?

Unit 3 Closure Construction Drawings

- A plan with grid points within the excavation area is needed.
- No location for where each previous colorimetry sample was taken has been provided.
- Figure 3 states, "UNIT 3 EAST AND WEST BOTTOM ASH IMPOUNDMENT (SEE NOTE 14)." There is no NOTE 14.
- As discussed above, EGLE has information from GHBLP's Documentation of Liner Report, updated January 2018, that the top of liner elevation is 585.0 and it is 3.0 feet thick. This conflicts with the elevations depicted in each of the cross sections on Sheets 5, 6, and 7.
- The side slope of the liner in the Liner Documentation Report is depicted as 1V : 2H and not 3H : 1V shown on the cross sections.
- The legend for Sheet 2 indicates (through a blue dashed line with intermittent directional arrows) that there are proposed storm water control directions, but the symbol is not shown on any of the map figures (no arrows at least). Will there be storm water controls put in place?

Pursuant to MCL 324.11519b(8), GHBLP must submit its closure certification with sufficient time to be reviewed and approved by EGLE by December 28, 2020. If GHBLP does not submit an approvable closure certification in this time frame and receive approval, Unit 3 must be licensed by December 28, 2020. In order to meet the licensure deadline of December 28, 2020, an administratively complete application package was due by September 29, 2020. EGLE has not received an application to date.

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This letter details the state law requirements under Part 115 with which GHBLP must comply for Unit 3. Compliance with state law does not obviate the obligation that GHBLP comply with federal law, including the United States Environmental Protection Agency's coal combustion residuals program and its closure requirements.

If you have any questions, please contact me at via email at unseldt@michigan.gov or by telephone at 616-490-8097.

Sincerely,

A handwritten signature in black ink that reads "Timothy J. Unseld". The signature is written in a cursive style with a large, stylized 'T' and 'U'.

Timothy J. Unseld, Environmental Engineer
Grand Rapids District Office
Materials Management Division

cc: Mr. Eric Booth, GHBLP
Ms. Tiffany Johnson, Golder & Associates
Mr. Margie Ring, EGLE
Ms. Alex Clark, EGLE
Mr. Fred Sellers, EGLE
Mr. Kent Walters, EGLE