State of Wisconsin **DEPARTMENT OF NATURAL RESOURCES** 3911 Fish Hatchery Road Fitchburg WI 53711-5397

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May 30, 2023

File Ref: FID 111049180

Columbia County

Approval

Mr. Jeff Maxted **Alliant Energy Corporation** 4902 North Biltmore Lane Madison, WI 53718-2148

> Subject: Conditional Construction Documentation Approval for Phase 2, Modules 10 and 11 Liner,

> > Dry Ash Disposal Facility, Columbia Energy Center, License #3025

Dear Mr. Maxted:

The Department of Natural Resources (department) approves the construction documentation for the construction of the Phase 2, Modules 10 and 11 (approx. 8.1 acres) composite liner for the Columbia Energy Center Dry Ash Disposal Facility. Please include the attached approval in the written operating record for the landfill.

The report documents the preparation of the subbase, construction of the 2 foot clay liner, installation of the geosynthetic clay liner (GCL), installation of the 60-mil HDPE geomembrane, installation of a 32 oz/sy needlepunched nonwoven geotextile (leachate collection trench only), installation of four leachate headwells (North LH 10, South LH 10, North LH 11 and South LH 11), placement of the granular drainage layer, and installation of the leachate collection system piping (6-inch diameter SDR 11 HDPE pipe).

The GCL used for the project was BentoLiner CAR-NWL35, which contains a polymer-enhanced granular sodium bentonite. This type of GCL was used due to the GCL's compatibility with coal combustion byproducts.

The following activities are yet to be completed within the landfill modules and will be documented upon completion:

- Installation of an electrical transformer and underground utility east of Module 10 to power the leachate collection pumps.
- Installation of the leachate collection pump system, including force main piping, vaults, and electrical components. Temporary pumps are currently installed in the riser piping and leachate is pumped to the leachate/surface water pond.
- Installation of telemetry and transducers to leachate headwells for Modules 10 and 11. The leachate headwells will be hand measured until the transducers are installed.



Please keep in mind that this approval does not relieve you of obligations to meet all other applicable federal, state and local permits or regulatory requirements. If you have any questions regarding this approval, please contact Ann Bekta at (608) 287-4492 or email at Ann.Bekta@wisconsin.gov.

Sincerely,

Bridget Kelly

Waste and Materials Management Program Supervisor South Central Region

cc: Eric Sandvig – <u>EricSandvig@alliantenergy.com</u>

Brian Clepper - <u>BrianClepper@alliantenergy.com</u>

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Tyler Sullivan – DNR/WA (e-copy) Ann Bekta – DNR/WA (e-copy)

BEFORE THE STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

CONDITIONAL CONSTRUCTION DOCUMENTATION APPROVAL FOR PHASE 2, MODULES 10 AND 11 LINER OF THE WISCONSIN POWER AND LIGHT (WPL) COLUMBIA DRY ASH DISPOSAL LANDFILL (#3025)

FINDINGS OF FACT

The Department of Natural Resources (department) finds that:

- 1. Wisconsin Power and Light (WPL) owns and operates a non-hazardous solid waste disposal facility located in Section 27, T12N, R9E, Town of Pacific, Columbia County, Wisconsin. This facility is jointly owned with Wisconsin Public Service Corporation and Madison Gas and Electric Company.
- 2. The department conditionally approved a plan of operation for the facility on June 30, 1983. The plan of operation was updated on November 2, 2000, January 28, 2011, and July 28, 2022.
- 3. On February 9, 2023, Alliant Energy, on behalf of WPL, submitted a construction documentation report for Phase 2, Modules 10 and 11 liner as required by ch. NR 516, Wis. Adm. Code. The plan review fee of \$1,100 and construction inspection fee of \$2,750 (5 x \$550) was received by the department on February 16, 2023.
- 4. The information submitted in connection with the construction documentation includes:
 - a. A SCS Engineers report entitled "Construction Documentation Report, 2022 Module 10 and 11 Liner Construction, Columbia Dry Ash Disposal Facility, Pardeeville, Wisconsin" with associated drawings dated and received by the department February 9, 2023.
 - b. A SCS Engineers report entitled "Phase 2, Modules 10 and 11 Liner Construction Documentation Report Addendum #1 Dry Ash Disposal Facility (WDNR License #3025) Wisconsin Power and Light Company Columbia Energy Center Portage, Wisconsin" dated May 22, 2023 which was received by the department on May 23, 2023.
- 5. Additional documents considered in connection with the construction documentation includes:
 - a. The October 20, 2022, Geosynthetic Preconstruction Report Addendum #1 for Phase 2, Modules 10 and 11 liner construction.
 - b. The September 27, 2022, Geosynthetic Preconstruction Report for Phase 2, Modules 10 and 11 liner construction.
 - c. An August 31, 2022, Alliant Energy letter containing monitoring well construction (MW-93A, MW-93B, and MW-312) and abandonment (MW-1AR) documentation.

- d. The March 11, 2021, leachate pond capacity evaluation required by Condition 1 of the department's June 6, 2018 plan of operation approval modification. The evaluation recommended placing intermediate/final cover when the waste reaches final grades, managing water levels in the pond, and installing a rain cover in Modules 5 and 6.
- e. The department's June 6, 2018, plan of operation approval modification for a rain cover system above the completed liner and leachate collection system.
- f. The department's November 13, 2015, plan of operation approval modification for the New Haven clay borrow source.
- g. The department's September 14, 2011, plan of operation approval to add 2 feet of clay to the composite liner system.
- h. The department's May 2, 2011, letter to WPL regarding applicable regulations for upgrading the liner design due to flue gas desulfurization wastes being accepted at the site.
- i. The department's July 28, 2022, plan of operation update approval.
- The department files for the Columbia Energy Center Landfill (License #3025).
- 6. The special conditions below are needed to ensure that the facility is constructed in compliance with the applicable portions of chs. NR 500-538, Wis. Adm. Code. If the special conditions set forth below are complied with the applicant will have demonstrated that the facility has been constructed in substantial compliance with the conditional plan of operation approval.

CONCLUSIONS OF LAW

- 1. The department has authority under s. 289.30, Stats., and ch. NR 516, Wis. Adm. Code, to require that the owner of a solid waste disposal facility demonstrate that the facility has been constructed in substantial compliance with the conditional plan of operation approval.
- 2. The department has the authority to approve construction documentation with special conditions if the conditions are needed to ensure compliance with the applicable portions of chs. NR 500 538, Wis. Adm. Code.
- 3. The conditions of approval set forth below are needed to ensure compliance with the applicable portions of chs. NR 500-538, Wis. Adm. Code.
- 4. In accordance with the foregoing, the department has the authority to issue the following construction documentation approval.

CONDITIONAL CONSTRUCTION DOCUMENTATION APPROVAL

The department hereby approves the construction documentation report for Phase 2, Modules 10 and 11 liner for the WPL Columbia Dry Ash Disposal Facility in accordance with NR 500-538, Wis. Adm. Code and the following condition:

- 1. Within 30 days of completion, a letter documenting the installation of the following items shall be submitted to the department for concurrence:
 - a. Installation of an electrical transformer and underground utility east of Module 10 to power the leachate collection pumps.
 - b. Installation of the leachate collection pump system, including force main piping, vaults, and electrical components.
 - c. Installation of telemetry and transducers to leachate headwells in Phase 2, Modules 10 and 11.

This approval is based on the information available to the department as of the date of approval. If additional information, project changes or other circumstances indicate a possible need to modify this approval, the department may ask you to provide further information relating to this activity. Likewise, the department accepts proposals to modify approvals, as provided for in state statutes and administrative codes.

NOTICE OF APPEAL RIGHTS

If you believe you have a right to challenge this decision made by the department, you should know that Wisconsin statutes and administrative codes establish time periods and requirements for reviewing department decisions.

To seek judicial review of the department's decision, sections 227.52 and 227.53, Stats., establish criteria for filing a petition for judicial review. You have 30 days after the decision is mailed or otherwise served by the department to file your petition with the appropriate circuit court and serve the petition on the department. The petition shall name the Department of Natural Resources as the respondent.

Dated: May 30, 2023

DEPARTMENT OF NATURAL RESOURCES For the Secretary

Bridget Kelly

Waste and Materials Management Program Supervisor South Central Region

Ann Bekta, P.E.

Waste Management Engineer

South Central Region