WPDES PERMIT

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

PERMIT TO DISCHARGE UNDER THE WISCONSIN POLLUTANT DISCHARGE ELIMINATION SYSTEM

Dairyland Power Coop Alma site

is permitted, under the authority of Chapter 283, Wisconsin Statutes, to discharge from a facility located at
500 Old State Hwy 35, Alma, Wisconsin, 54610
to
Mississippi River, located in the Mississippi River Basin

in accordance with the effluent limitations, monitoring requirements and other conditions set forth in this permit.

The permittee shall not discharge after the date of expiration. If the permittee wishes to continue to discharge after this expiration date an application shall be filed for reissuance of this permit, according to Chapter NR 200, Wis. Adm. Code, at least 180 days prior to the expiration date given below.

State of Wisconsin Department of Natural Resources
For the Secretary

By _____
Jason Knutson, P.E.
Wastewater Supervisor

_____
Date Permit Signed/Issued

PERMIT TERM: EFFECTIVE DATE – July 1, 2024 **EXPIRATION DATE – June 30, 2029**

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1 Influent Requirements - Cooling Water Intake Structure (CWIS)

1.1 Sampling Point(s)

Sampling Point Designation	
Sampling Point Number	**Sampling Point Location, WasteType/Sample Contents and Treatment Description (as applicable)**
703	INTAKE: Intake screening system and intake water monitoring

1.2 Monitoring Requirements and BTA Determinations

The permittee shall comply with the following monitoring requirements.
The intake(s) has been reviewed for compliance with BTA (Best Technology Available) standards and the BTA determination(s) is listed below.

1.2.1 Sampling Point 703 - Cooling Water Intake

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Mercury, Total Recoverable		µg/L	Monthly	Grab	
Temperature Average		deg F	Daily	Continuous	
Flow Rate		MGD	Daily	Measure	
Intake Water Used Exclusively For Cooling		% Flow	Daily	Calculated	

1.2.1.1 Total Metals Analyses

Measurements of total metals and total recoverable metals shall be considered as equivalent.

1.2.1.2 Mercury Monitoring

The permittee shall collect and analyze all mercury samples according to the data quality requirements of ss. NR 106.145(9) and (10), Wisconsin Administrative Code. The limit of quantitation (LOQ) used for the effluent and field blank shall be less than 1.3 ng/L, unless the samples are quantified at levels above 1.3 ng/L. The permittee shall collect at least one mercury field blank for each set of mercury samples (a set of samples may include combinations of intake, influent, effluent or other samples all collected on the same day). The permittee shall report results of samples and field blanks to the Department on Discharge Monitoring Reports.

1.2.1.3 CWIS - Authority to Operate and Description

The permittee shall at all times properly operate and maintain all water intake facilities. The permittee shall give advance notice to the Department of any planned changes in the location, design, operation, or capacity of the intake structure. The permittee is authorized to use the cooling water intake system which consists of the following:

- Location: on the east shore of the Mississippi River and oriented parallel to the river flow. A skimmer wall is located at the face of the intake and drops down to EL. 659.0 feet above sea level. The invert of the structure

is EL. 640.0 feet above sea level. The invert of each of the four fourteen feet wide traveling screens is also at the El. 640.0 feet.

- General Description: The intake was **installed** in 1977 and has had no major construction since.
- Major Components: The intake screen is 3/8 inch mesh with a screen flow-through area of 1120 square feet at flat pool. The traveling screens are rotated and are cleaned using a double pressure spray wash system. The low pressure spray jets operate at 346 gpm at 25 psi to remove fish from the screens and into a fish sluice for return to the Mississippi River. Approximately 99.9% of the water withdrawn is used for cooling.
- Maximum Design Intake Flow (DIF): 499 ft^3/sec.
- Maximum Through-Screen Design Intake Velocity: 0.93 ft/sec

1.2.1.4 Operation of the modified traveling screens

The modified traveling screens shall be operated in an optimized manner in accordance with the optimization study. This means use of either continuous rotation at 2.4 meters per minute or with holds. The spray pressure shall be 20 psi under all circumstances except during limited periods when removal of debris or ice necessitates a higher spray pressure.

1.2.1.5 Cooling Water Intake BTA (Best Technology Available) Determination

The department has determined that with regards to minimizing adverse environmental impacts in accordance with the requirements in s. 283.31(6), Wis. Stats., and section 316(b) of the Clean Water Act the intake structure is BTA for impingement mortality as long as the permittee operates in intake in accordance with Section 1.2.1.4, and is BTA for entrainment.

1.3 Cooling Water Intake Structure Standard Requirements

The following requirements and provisions apply to all water intake structures identified as sampling points in subsection 1.1.

1.3.1 Future BTA for Cooling Water Intake Structure

BTA determinations for entrainment and impingement mortality at cooling water intake structures will be made in each permit reissuance, in accordance with 40 CFR §125.90-98. **In subsequent permit reissuance applications, the permittee shall provide all the information required in s. NR 111.41(1)-(12), Wis. Adm. Code.**

Exemptions from some permit application requirements are possible in accordance with NR 111.42(1)(a), Wis. Adm. Code, where information already submitted is sufficient. If an exemption is desired, a request for reduced application material requirements must be submitted at least 2 years and 6 months prior to permit expiration. Past submittals and previously conducted studies may satisfy some or all of the application material requirements.

1.3.2 Cooling Water Intake Structure Application Materials

BTA determinations for entrainment and impingement mortality at cooling water intake structures will be made in each permit reissuance, in accordance with NR 111 Subchapter 2 Wis. Adm. Code. **In subsequent permit reissuance applications, the permittee shall provide all the information required in NR 111.40 (2) Wis. Adm. Code.**

Exemptions from some permit application requirements are possible in accordance with NR 111.42(1)(a), where information already submitted is sufficient. If an exemption is desired, a request for reduced application material requirements must be submitted at least 2 years and 6 months prior to permit expiration. Past submittals and previously conducted studies may satisfy some or all of the application material requirements.

1.3.3 Entrainment Monitoring

Monthly (once per month) entrainment monitoring is required as part of an entrainment characterization study (s. NR 111.41(8), Wis. Adm. Code) during the last two years of the permit (2027-2028) for the months of April **through** September unless an exemption is granted under section 1.3.1 of the permit**.**

This entails quantification and identification of all life stages of entrained fish and shellfish, including eggs, to the lowest taxon possible. The entrainment sampling point may not be at or immediately preceding the discharge.

1.3.4 Impingement Mortality Monitoring

Impingement mortality monitoring is required as part of the impingement technology performance optimization study on a bi-weekly (twice per week) basis during the years 2027 and 2028 unless an exemption is granted under section 1.3.1 of the permit. This entails quantification and identification of all life stages of fish and shellfish, to the lowest taxon possible, that are impinged against the modified traveling screens. NR111.41(5) Wis. Adm Code.

1.3.5 Visual or Remote Inspections

The permittee shall conduct a weekly visual inspection or employ a remote monitoring device during periods when the cooling water intake is in operation. The inspection frequency shall be weekly to ensure the intakes are maintained and operated to function as designed.

1.3.6 Reporting Requirements for Cooling Water Intake

The permittee shall adhere to the reporting requirements listed below:

1.3.6.1 Discharge Monitoring Reports (DMRs)

Report the results of the compliance monitoring for impingement mortality and entrainment on the monthly DMR in the General Remarks section.

1.3.6.2 Annual Certification Statement and Report

Submit an annual certification statement signed by the authorized representative with information on the following, no later than January 31st for the previous year:

- Certification that water intake structure technologies are being maintained and operated as set forth in this permit, or a justification to allow a modification of the practices (such as when spray pressures of >20 psi are necessary on the modified traveling screen spray nozzles). Include a summary of the required Visual or Remote Inspections.
- If there are substantial modifications to the operation of any unit that impacts the cooling water withdrawals or operation of the water intake structure, provide a summary of those changes.
- If the information contained in the previous year's annual certification is still applicable, the certification may simply state as such.
- Compliance monitoring results for impingement mortality and entrainment characterization during the years 2026 and 2027 unless an exemption is granted under NR 111.41(8) Wis. Adm code.

1.3.7 Intake Screen Discharges and Removed Substances

Floating debris and accumulated trash collected on the cooling water intake trash rack shall be removed and disposed of in a manner to prevent any pollutant from the material from entering the waters of the State pursuant to s. NR 205.07 (3) (a), Wis. Adm. Code, except that backwashes may contain fine materials that originated from the intake water source such as sand, silt, small vegetation or aquatic life. Fine debris, aquatic organisms, and vegetation that cannot reasonably be sorted from living fish may be returned to the surface waters with the backwash via outfalls 003 and 004.

1.3.8 Endangered Species Act

Nothing in this permit authorizes take for the purpose of a facility's compliance with the Endangered Species Act. Refer to NR 111.16(4).

2 In-Plant Requirements

2.1 Sampling Point(s)

Sampling Point Designation	
Sampling Point Number	**Sampling Point Location, WasteType/Sample Contents and Treatment Description (as applicable)**
101	FIELD BLANK: Sample point for reporting results of mercury field blanks collected using standard sample handling procedures.

2.2 Monitoring Requirements and Limitations

The permittee shall comply with the following monitoring requirements and limitations.

2.2.1 Sampling Point 101 - FIELD BLANK

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Mercury, Total Recoverable		µg/L	Monthly	Blank	See "Mercury Monitoring" section

2.2.1.1 Mercury Monitoring

The permittee shall collect and analyze all mercury samples according to the data quality requirements of ss. NR 106.145(9) and (10), Wisconsin Administrative Code. The limit of quantitation (LOQ) used for the effluent and field blank shall be less than 1.3 ng/L, unless the samples are quantified at levels above 1.3 ng/L. The permittee shall collect at least one mercury field blank for each set of mercury samples (a set of samples may include combinations of intake, influent, effluent or other samples all collected on the same day). The permittee shall report results of samples and field blanks to the Department on Discharge Monitoring Reports.

2.2.2 Sample Point Number: 106- Low Volume Wastewater

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		MGD	Daily	Estimated	
Suspended Solids, Total	Daily Max	100 mg/L	Daily	24-Hr Comp	
Suspended Solids, Total	Monthly Avg	30 mg/L	Daily	24-Hr Comp	
Oil & Grease (Hexane)	Daily Max	20 mg/L	Quarterly	Grab	
Oil & Grease (Hexane)	Monthly Avg	15 mg/L	Quarterly	Grab	
Mercury, Total Recoverable	Daily Max	4.6 ng/L	Monthly	Grab	Sample Point Number 101 will be used to report the effluent field blank.
Iron, Total Recoverable	Daily Max	1.0 mg/L	See Permit Note	24-Hr Comp	Samples are only required on days with a metal cleaning wastewater is discharged to the river.
Copper, Total Recoverable	Daily Max	100 µg/L	Daily	24-Hr Comp	Samples are only required on days with a metal cleaning wastewater is discharged to the river.
Copper, Total Recoverable	Daily Max	1.2 lb/Day	Daily	Calculated	Samples are only required on days with a metal cleaning wastewater is discharged to the river.
PFOS		ng/L	Monthly	Grab	Monitoring only. See PFOS/PFOA Minimization Plan Determination of Need schedule.
PFOA		ng/L	Monthly	Grab	Monitoring only. See PFOS/PFOA Minimization Plan Determination of Need schedule.

2.2.2.1 Metals Analyses

Unless specified otherwise in the table above, metals analyses shall measure metals as total recoverable. Measurements of total metals and total recoverable metals shall be considered as equivalent.

2.2.2.2 Sample Analysis

Samples shall be analyzed using a method which provides adequate sensitivity so that results can be quantified at a level of quantitation below the calculated/potential effluent limit, unless not possible using the most sensitive approved method.

2.2.2.3 Mercury Monitoring

The permittee shall collect and analyze all mercury samples according to the data quality requirements of ss. NR 106.145(9) and (10), Wis. Adm. Code. The limit of quantitation (LOQ) used for the effluent and field blank shall be

less than 1.3 ng/L, unless the samples are quantified at levels above 1.3 ng/L. The permittee shall collect at least one mercury field blank for each set of mercury samples (a set of samples may include combinations of intake, influent, effluent or other samples all collected on the same day). The permittee shall report results of samples and field blanks to the Department on Discharge Monitoring Reports.

2.2.2.4 Mercury Variance – Implement Pollutant Minimization Program Plan

This permit contains a variance to the water quality-based effluent limit (WQBEL) for mercury approved in accordance with s. 283.15, Stats. As conditions of this variance the permittee shall (a) maintain effluent quality at or below the interim effluent limitation specified in the table above, (b) implement the mercury pollutant minimization measures specified below, (c) follow the Pollutant Minimization Program Plan dated December 21, 2023 and (d) perform the actions listed in the schedule. (See the Schedules section herein.)
Mercury pollutant minimization measures:

1. Provide an update of the Mercury Pollutant Minimization Efforts.
2. Update the Mercury PMP.
3. Submit Annual Status Reports.
4. To the maximum extend feasible, use wastewater as makeup water to the bottom ash transport water system.
5. Precipitator upgrade – Improved recycling efforts to reduce landfill requirements.
6. Continue use of water treatment chemicals with the lowest concentration mercury available.
7. Continue efforts to conserve site water use to help minimize wastewater volumes.
8. Continue to evaluate emerging technologies for treating mercury in the effluent.

2.2.2.5 PFOS/PFOA Sampling and Reporting Requirements

When effluent PFOS and PFOA samples are collected using a grab sample, per s. NR 106.995, Wis. Adm. Code, an equipment blank shall be collected by passing laboratory-verified PFAS-free water over or through field sampling equipment before the collection of field samples to evaluate potential contamination from the equipment used during sample. An equipment blank only needs to be collected once per sampling setup. Additional equipment blanks will only need to be collected when any portion of the sampling equipment that comes in contact with the sample is replaced. The permittee shall notify the department in the comment section of the DMR if sampling equipment is/isn't changed during the reporting period.

2.2.2.6 PFOS/PFOA Minimization Plan Determination of Need

The permittee shall monitor PFOS and PFOA as specified in the table above and report on the effluent concentrations including trends in monthly and annual average PFOS and PFOA concentrations as specified in the PFOS/PFOA Minimization Plan Determination of Need Schedule.

If, after reviewing the data, the Department determines that a minimization plan for PFOS and PFOA is necessary based on the procedures in s. NR 106.98(4), Wis. Adm. Code, the Department will notify the permittee in writing that a PFOS and PFOA minimization plan that satisfies the requirements in s. NR 106.99, Wis. Adm. Code, is required. The permittee shall submit an initial plan for Department approval no later than 90 days after written notification was sent from the Department in accordance with s. NR 106.985(2)(a), Wis. Adm. Code. Pursuant to s. NR 106.985(2)(b), Wis. Adm. Code, as soon as possible after Department approval of the PFOS and PFOA minimization plan, the Department will modify or revoke and reissue the permit in accordance with public notice procedures under ch. 283, Wis. Stats., and ch. NR 203, Wis. Adm. Code, to include the PFOS and PFOA minimization plan and other related terms and condition.

If, however, the Department determines that a PFOS and PFOA minimization plan is unnecessary based on the procedures in s. NR 106.98(4), Wis. Adm. Code, the Department shall notify the permittee that no further action is required. Per s. NR 106.98(3)(a), Wis. Adm. Code, the Department may reduce monitoring frequency to once every 3 months (quarterly) on a case-by-case basis, but only after at least 12 representative results have been generated. If the permittee requests a reduction in monitoring and the Department agrees a reduction would be appropriate, the permit

may be modified in accordance with public notice procedures under ch. 283, Wis. Stats., and ch. NR 203, Wis. Adm. Code, to incorporate this change.

3 Surface Water Requirements

3.1 Sampling Point(s)

The discharge(s) shall be limited to the waste type(s) designated for the listed sampling point(s).

Sampling Point Designation	
Sampling Point Number	**Sampling Point Location, WasteType/Sample Contents and Treatment Description (as applicable)**
001	EFFLUENT: East bank of the Mississippi River, South of J.P. Madgett screenhouse. N44° 18.363' W91° 54.787'. Non-contact condenser cooling water from J.P. Madgett. No treatment provided. Temperature and pH are collected from the northwest corner of the outfall structure prior to water entering river. Treated low volume wastewaters from Sampling Point 106 may be discharged through this outfall.
002	COAL PILE RUNOFF: East bank of the Mississippi River, North of J.P. Madgett screenhouse. N44° 18.435' W91° 54.797'. Coal pile runoff from Alma 1-5. Treatment consists of settling. Temperature probe is mounted on northwest corner of screen house on river side of travelling water screens.
003	SCREEN BACKWASH: East bank of the Mississippi River, at the J.P. Madgett screenhouse. N44° 18.370' W91° 54.815'. J.P. Madgett intake screen backwash. No treatment provided.
004	SCREEN BACKWASH: East bank of the Mississippi River at the J.P. Madgett screenhouse. N44° 18.370' W91° 54.815'.J.P.Madgett fish return, screen backwash. No treatment provided.
005	DE-ICING WATER: East bank of the Mississippi River, at the J.P. Madgett screenhouse. N44° 18.370' W91° 54.815'. J.P. Madgett intake de-icing water. No treatment provided.
006	EFFLUENT: East bank of the Mississippi River, South of J.P. Madgett screenhouse. N44° 18.183' W91° 54.808'. Boiler blowdown, demineralization wastewater, coal ash landfill leachate, stormwater, metal cleaning wastewater, and other power plant low volume wastewaters. Treatment consists of pH adjustments and settling. Wastewater from 006 may be diverted after treatment to combine with outfall 001 after being sampled at Sampling Points 006 and 106, prior to comingling with the non-contact condenser cooling water being sampled at outfall 001. During months when these waste streams are combined the water quality based effluent limits at outfall 001 are applicable, but the limits at outfall 006 are not applicable. Grab samples are pulled from secondary lagoon weir prior to water cascading over weir teeth. Composite sample is pulled between the secondary weir and the parshall flume.
007	COAL PILE RUNOFF: South of the bottom ash dewatering building. Outfall discharges to the Mississippi river backwater area. N44° 17.948' W91° 54.719'. J.P. Madgett coal pile runoff. Treatment consists of settling. Samples are collected at end of pipe.

3.2 Monitoring Requirements and Effluent Limitations

The permittee shall comply with the following monitoring requirements and limitations.

3.2.1 Sampling Point (Outfall) 001 - CONDENSER COOLING WATER - JPM

Monitoring Requirements and Effluent Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		MGD	Daily	Continuous	
Temperature Maximum		deg F	Daily	Continuous	

Monitoring Requirements and Effluent Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
pH Field	Daily Max	9.0 su	Weekly	Grab	
pH Field	Daily Min	6.0 su	Weekly	Grab	

3.2.1.1 Combined Discharge

Treated low volume wastewater that is normally discharged from Outfall 006 may be discharged from Outfall 001. The permittee is permitted to begin or cease combining the two waste streams only on the 1st of a month. The treated low volume wastewater shall be sampled at Sampling Point 106 prior to commingling with condenser cooling water.

3.2.1.2 Effluent Temperature Monitoring

For monitoring temperature continuously, collect measurements in accordance with s. NR 218.04(13). This means that discrete measurements shall be recorded at intervals of not more than 15 minutes during the 24-hour period. Report the maximum temperature measured during the day on the DMR.

3.2.2 Sampling Point (Outfall) 002 - COAL PILE RUNOFF - ALMA

Monitoring Requirements and Effluent Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		MGD	Daily	Estimated	See Section 2.2.2.1.
Suspended Solids, Total	Daily Max	50 mg/L	Daily	24-Hr Comp	Sample required Daily during any coal pile runoff discharge to the river.
pH Field	Daily Max	9.0 su	Weekly	Grab	
pH Field	Daily Min	6.0 su	Weekly	Grab	

3.2.2.1 Flow Rate

The flow rate shall be sampled and reported during times of discharge.

3.2.3 Sampling Point (Outfall) 003 - INTAKE SCREEN BACKWASH - JPM; 004- FISH RETURN - JPM; 005- DE-ICING WATER - JPM

Monitoring Requirements and Effluent Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		MGD	Monthly	Estimated	

3.2.4 Sampling Point (Outfall) 006 - TREATED PROCESS WW

Monitoring Requirements and Effluent Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		MGD	Daily	Continuous	
Chlorine, Total Residual	Daily Max	38 ug/L	Daily	Grab	

Monitoring Requirements and Effluent Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Chlorine, Total Residual	Monthly Avg	38 ug/L	Daily	Grab	
Temperature Maximum	Daily Max		Daily	Continuous	Monitoring only from the effective date of this permit through 06/30/2028. Limits become effective on 07/01/2028 per the compliance schedule. See temperature sections and table below.
Temperature Maximum	Weekly Avg		Monthly	Calculated	Monitoring only from the effective date of this permit through 06/30/2028 per the compliance schedule. Limits become effective on 07/01/2028. See temperature sections and table below.
Phosphorus, Total	Monthly Avg	0.19 mg/L	Monthly	24-Hr Flow Prop Comp	
Phosphorus, Total	6-Month Avg	0.064 mg/L	Monthly	24-Hr Flow Prop Comp	
Phosphorus, Total	6-Month Avg	0.08 lbs/day	Monthly	Calculated	
pH (Minimum)	Daily Min	4.0 su	Daily	Continuous	See Section 3.2.4.4
pH (Maximum)	Daily Max	11 su	Daily	Continuous	See Section 3.2.4.4
pH Total Exceedance Time Minutes	Monthly Total	446 minutes	Monthly	Calculated	
pH Exceedances Greater Than 60 Minutes	Daily Max	0 Number	Daily	Calculated	
Mercury, Total Recoverable	Daily Max	4.6 ng/L	Monthly	Grab	Sample Point Number 101 will be used to report the effluent field blank.

3.2.4.1 Combined Discharge

Low volume wastewater that is normally discharged from Outfall 006 may be combined with condenser cooling water and discharged from Outfall 001 for entire months. The permittee is permitted to begin or cease combining the two waste streams only on the 1st of a month. Because this sampling point (006) is the same physical sampling point as Sampling Point 106, during months when a discharge occurs through Outfall 006, the permittee shall monitor for the parameters required by both Sampling Points 106 and 006 and report each parameter's results on the discharge monitoring report under each sampling point at which the parameter is required to be reported. During months when wastewater from Outfall 006 is combined with and discharged from Outfall 001, no samples or reporting are required for Outfall 006; rather, the permittee shall comment on the DMR that the wastewater is being combined for each month.

3.2.4.2 Effluent Temperature Monitoring

Collect measurements in accordance with s. NR 218.04(13). This means that discrete measurements shall be recorded at intervals of not more than 15 minutes during the 24-hour period. Report the maximum temperature measured during the day on the DMR.

3.2.4.3 Effluent Temperature Limitations

The effluent limitations for "Temperature, Maximum" become effective on the effective date of the permit. Monitoring is required continuous upon permit reissuance. Daily maximum temperatures shall be reported so that applicable daily maximum limits can be compared to the reported daily maximum temperatures and applicable weekly average limits can be compared to the weekly averages of the reported daily maximum temperatures.

Month	weekly maximum °F	Daily maximum °F
January	**59**	86
February	59	87
March	59	87
April	**58**	90
May	**70**	**91**
June	**77**	**90**
July	**82**	**90**
August	**82**	**89**
September	**78**	**91**
October	**67**	88
November	**54**	89
December	59	90

3.2.4.4 Continuous pH Monitoring

The permittee shall maintain the pH of the discharge within the range of 6.0 to 9.0 standard units (s.u.) except excursions are permitted subject to the following conditions:

- The pH is monitored continuously;
- The total time during which the pH is outside the range of 6.0 to 9.0 s.u. shall not exceed 446 minutes in any calendar month;
- No individual pH excursion outside the range of 6.0 to 9.0 s.u. shall exceed 60 minutes in duration;
- No individual pH excursion shall be outside the range of 4.0 to 11.0 s.u.; and
- On a daily basis, the permittee shall report the minimum and maximum pH, the total time that the pH is outside the range of 6.0 to 9.0 s.u. and the number of pH excursions outside the range of 6.0 to 9.0 that exceed 60 minutes in duration.

3.2.5 Sampling Point (Outfall) 007 - COAL PILE RUNOFF - JPM

Monitoring Requirements and Effluent Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Suspended Solids, Total	Daily Max	50 mg/L	Daily	24-Hr Flow Prop Comp	
Flow Rate		MGD	Daily	Estimated	
pH Field	Daily Max	9.0 su	Weekly	Grab	
pH Field	Daily Min	6.0 su	Weekly	Grab	

4 Land Treatment Requirements

4.1 Sampling Point(s)

The discharge(s) shall be limited to the waste type(s) designated for the listed sampling point(s).

Sampling Point Designation	
Sampling Point Number	**Sampling Point Location, Waste Description/Sample Contents and Treatment Description (as applicable)**
008	Seepage from the, formerly Alma 1-5 coal pile runoff basin now overflow, coal storage pile to groundwater.
009	Seepage from the J.P. Madgett coal storage pile runoff basin to groundwater.

4.2 Monitoring Requirements and Limitations

The permittee shall comply with the following monitoring requirements and limitations.

4.2.1 Sampling Point (Outfall) 008 - COAL PILE RUNOFF BSN - ALMA and 009- COAL PILE RUNOFF BSN - JPM, Other

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		MGD	Monthly	Estimated	

Daily Log – Monitoring Requirements and Limitations All discharge and monitoring activity shall be documented on log sheets. Originals of the log sheets shall be kept by the permittee as described under "Records Retention" in the Standard Requirements section, and if requested, made available to the Department.				
Parameters	**Limit**	**Units**	**Sample Frequency**	**Sample Type**
Start to End Time	-	Date, Hour	Daily	Log

Annual Report – Monitoring Requirements and Limitations The Annual Report is due by January 31st of each year for the previous calendar year.				
Parameters	**Limit**	**Units**	**Sample Frequency**	**Sample Type**
Total Volume Per Zone	-	Gallons	Annual	Total Annual

5 Schedules

5.1 Cooling Water Intake Structure (CWIS) Annual Certification Statement

Submit an annual certification statement as required by the influent 'Annual Certification Statement and Report' section of the permit.

Required Action	Due Date
Annual Certification Statement: Submit an Annual Certification on the water intake structure, as required by section 1.3.3.1.	01/31/2025
Annual Certification Statement: Submit an Annual Certification on the water intake structure, as required by section 1.3.3.1.	01/31/2026
Application Materials Exemption Request: Submit a statement by the due date on whether or not the permittee wishes to request a 316(b) application materials exemption. If no exemption is being requested, all applicable requirements in s. NR 111.40(2)(c), Wis. Adm. Code shall be submitted with the application for reissuance of this permit.	09/30/2026
Annual Certification Statement: Submit an Annual Certification on the water intake structure, as required by section 1.3.3.1.	01/31/2027
Annual Certification Statement: Submit an Annual Certification on the water intake structure, as required by section 1.3.3.1.	01/31/2028
Annual Certification Statement: Submit the application materials required in NR 111.40(2)(c), Wis. Adm. Code with the application for reissuance of this permit.	10/03/2028

5.2 Mercury Pollutant Minimization Program

As a condition of the variance to the water quality based effluent limitation(s) for mercury granted in accordance with s. NR 106.145(6), Wis. Adm. Code, the permittee shall perform the following actions.

Required Action	Due Date
Annual Mercury Progress Reports: Submit an annual mercury progress report related to the pollutant minimization activities for the previous year. The annual mercury progress report shall: Indicate which mercury pollutant minimization activities or activities outlined in the Pollutant Minimization Program Plan have been implemented and state which, if any, activities from the Pollutant Minimization Program Plan were not pursued and why; Include an assessment of whether each implemented pollutant minimization activity appears to be effective or ineffective at reducing pollutant discharge concentrations and identify actions planned for the upcoming year; Identification of barriers that have limited program effectiveness and adjustments to the program that will be implemented during the next year to help address these barriers; Include an analysis of trends in total effluent mercury concentrations based on mercury sampling; and Include an analysis of how influent and effluent mercury varies with time and with significant loading of mercury. The first annual mercury progress report is to be submitted by the Due Date.	01/31/2025
Annual Mercury Progress Report #2: Submit a mercury progress report, related to the pollutant	01/31/2026

minimization activities for the previous year, as defined above.	
Annual Mercury Progress Report #3: Submit a mercury progress report, related to the pollutant minimization activities for the previous year, as defined above.	01/31/2027
Annual Mercury Progress Report #4: Submit a mercury progress report, related to the pollutant minimization activities for the previous year, as defined above.	01/31/2028
Final Mercury Report: Submit a final report documenting the success in reducing mercury concentrations in the effluent, as well as the anticipated future reduction in mercury sources and mercury effluent concentrations. The report shall: Summarize mercury pollutant minimization activities that have been implemented during the current permit term and state which, if any, activities from the Pollutant Minimization Program Plan were not pursued and why; Include an assessment of which pollutant minimization activities appear to have been effective or ineffective. Evaluate any needed changes to the pollutant reduction strategy accordingly; Identification of barriers that have limited program effectiveness and adjustments to the program that will be implemented during the next variance term (if applicable) to help address these barriers; Include an analysis of trends in mercury concentrations based on sampling and data during the current permit term; and Include an analysis of how influent and effluent mercury varies with time and with significant loadings of mercury. If the permittee intends to reapply for a mercury variance per s. NR 106.145, Wis. Adm. Code, for the reissued permit, a detailed Pollutant Minimization Program Plan outlining the pollutant minimization activities proposed for the upcoming permit term shall be submitted along with the final report. An updated pollutant minimization plan shall: Include an explanation of why or how each pollutant minimization activity will result in reduced discharge of the target pollutant; Evaluate any new available information on pollutant sources, timing, and concentration to update the mass balance assumptions and expected sources of the pollutant, and Identify any information needs that would help to better determine pollutant sources and make plans to collect that information.	03/31/2028
Annual Mercury Reports After Permit Expiration: In the event that this permit is not reissued by the date the permit expires, the permittee shall continue to submit annual mercury reports for the previous year following the due date of Annual Mercury Progress Reports listed above. Annual Mercury Progress reports shall include the information as defined above.	

5.3 PFOS/PFOA Minimization Plan Determination of Need

Submit sampling data to be used to determine the need for PFOS and PFOA monitoring and limits.

Required Action	Due Date
Report on Effluent Discharge: Submit a report on effluent PFOS and PFOA concentrations and include an analysis of trends in monthly and annual average PFOS and PFOA concentrations. This	09/30/2025

analysis should also include a comparison to the applicable narrative standard in s. NR 102.04(8)(d), Wis. Adm. Code. This report shall include all additional PFOS and PFOA data that may be collected including any influent, intake, in-plant, collection system sampling, and blank sample results.	
Report on Effluent Discharge and Evaluation of Need: Submit a final report on effluent PFOS and PFOA concentrations and include an analysis of trends in monthly and annual average PFOS and PFOA concentrations of data collected over the last 24 months. The report shall also provide a comparison on the likelihood of the facility needing to develop a PFOS/PFOA minimization plan. This report shall include all additional PFOS and PFOA data that may be collected including any influent, intake, in-plant, collection system sampling, and blank sample results. The permittee shall also submit a request to the department to evaluate the need for a PFOS/PFOA minimization plan. If the Department determines a PFOS/PFOA minimization plan is needed based on a reasonable potential evaluation, the permittee will be required to develop a minimization plan for Department approval no later than 90 days after written notification was sent from the Department. The Department will modify or revoke and reissue the permit to include PFOS/PFOA minimization plan reporting requirements along with a schedule of compliance to meet WQBELs. Effluent monitoring of PFOS and PFOA shall continue as specified in the permit until the modified permit is issued. If, however, the Department determines there is no reasonable potential for the facility to discharge PFOS or PFOA above the narrative standard in s. NR 102.04(8)(d), Wis. Adm. Code, no further action is required and effluent monitoring of PFOS and PFOA shall continue as specified in the permit.	09/30/2026

5.4 Temperature Limits (Industrial Facilities)

This compliance schedule requires the permittee to achieve compliance by the specified date

Required Action	Due Date
Report on Effluent Discharges: Submit a report on effluent temperature with conclusions regarding compliance. If the Department determines that because of data variability, 24 months of monitoring data is required to determine the need for temperature limits, the Department will so notify the permittee in writing and all dates in the permit schedule will be extended by 12 months. Informational Note - Refer to the Surface Water subsection regarding 'Determination of Need for Effluent Limits' for information concerning a Department determination on the need for limits and pursuing re-evaluation of limits per NR 106 Subchapters V & VI or NR 102.26, Wis. Adm. Code.	07/01/2025
Action Plan: Submit an action plan for complying with all effluent temperature limits that remain following the Department's review for necessity.	07/01/2026
Construction Plans: Submit construction plans (if construction is required for complying with effluent temperature limits) and include plans and specifications with the submittal.	07/01/2027
Initiate Actions: Initiate actions identified in the plan.	01/01/2028
Complete Actions: Complete actions necessary to achieve compliance with effluent temperature limits.	07/01/2028

6 Standard Requirements

NR 205, Wisconsin Administrative Code (Conditions for Industrial Dischargers): The conditions in ss. NR 205.07(1) and NR 205.07(3), Wis. Adm. Code, are included by reference in this permit. The permittee shall comply with all of these requirements. Some of these requirements are outlined in the Standard Requirements section of this permit. Requirements not specifically outlined in the Standard Requirement section of this permit can be found in ss. NR 205.07(1) and NR 205.07(3).

6.1 Reporting and Monitoring Requirements

6.1.1 Monitoring Results

Monitoring results obtained during the previous month shall be summarized and reported on a Department Wastewater Discharge Monitoring Report. The report may require reporting of any or all of the information specified below under 'Recording of Results'. This report is to be returned to the Department no later than the date indicated on the form. A copy of the Wastewater Discharge Monitoring Report Form or an electronic file of the report shall be retained by the permittee.

Monitoring results shall be reported on an electronic discharge monitoring report (eDMR). The eDMR shall be certified electronically by a responsible executive or officer, manager, partner or proprietor as specified in s. 283.37(3), Wis. Stats., or a duly authorized representative of the officer, manager, partner or proprietor that has been delegated signature authority pursuant to s. NR 205.07(1)(g)2, Wis. Adm. Code. The 'eReport Certify' page certifies that the electronic report form is true, accurate and complete.

If the permittee monitors any pollutant more frequently than required by this permit, the results of such monitoring shall be included on the Wastewater Discharge Monitoring Report.

The permittee shall comply with all limits for each parameter regardless of monitoring frequency. For example, monthly, weekly, and/or daily limits shall be met even with monthly monitoring. The permittee may monitor more frequently than required for any parameter.

6.1.2 Sampling and Testing Procedures

Sampling and laboratory testing procedures shall be performed in accordance with Chapters NR 218 and NR 219, Wis. Adm. Code and shall be performed by a laboratory certified or registered in accordance with the requirements of ch. NR 149, Wis. Adm. Code. Groundwater sample collection and analysis shall be performed in accordance with ch. NR 140, Wis. Adm. Code. The analytical methodologies used shall enable the laboratory to quantitate all substances for which monitoring is required at levels below the effluent limitation. If the required level cannot be met by any of the methods available in NR 219, Wis. Adm. Code, then the method with the lowest limit of detection shall be selected. Additional test procedures may be specified in this permit.

6.1.3 Recording of Results

The permittee shall maintain records which provide the following information for each effluent measurement or sample taken:

- the date, exact place, method and time of sampling or measurements;
- the individual who performed the sampling or measurements;
- the date the analysis was performed;
- the individual who performed the analysis;
- the analytical techniques or methods used; and
- the results of the analysis.

6.1.4 Reporting of Monitoring Results

The permittee shall use the following conventions when reporting effluent monitoring results:

- Pollutant concentrations less than the limit of detection shall be reported as < (less than) the value of the limit of detection. For example, if a substance is not detected at a detection limit of 0.1 mg/L, report the pollutant concentration as < 0.1 mg/L.
- Pollutant concentrations equal to or greater than the limit of detection, but less than the limit of quantitation, shall be reported and the limit of quantitation shall be specified.
- For purposes of calculating NR 101 fees, the 2 mg/l lower reporting limits for BOD5 and Total Suspended Solids shall be considered to be limits of quantitation
- For the purposes of reporting a calculated result, average or a mass discharge value, the permittee may substitute a "0" (zero) for any pollutant concentration that is less than the limit of detection. However, if the effluent limitation is less than the limit of detection, the department may substitute a value other than zero for results less than the limit of detection, after considering the number of monitoring results that are greater than the limit of detection and if warranted when applying appropriate statistical techniques.
- If no discharge occurs through an outfall, flow related parameters (e.g. flow rate, hydraulic application rate, volume, etc.) should be reported as "0" (zero) at the required sample frequency specified for the outfall. For example: if the sample frequency is daily, "0" would be reported for any day during the month that no discharge occurred.

6.1.5 Records Retention

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings or electronic data records for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the application for the permit for a period of at least 3 years from the date of the sample, measurement, report or application, except for sludge management forms and records, which shall be kept for a period of at least 5 years.

6.1.6 Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or correct information to the Department.

6.1.7 Reporting Requirements – Alterations or Additions

The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is only required when:

- The alteration or addition to the permitted facility may meet one of the criteria for determining whether a facility is a new source.
- The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification requirement applies to pollutants which are not subject to effluent limitations in the existing permit.
- The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use of disposal sites not reported during the permit application process nor reported pursuant to an approved land application plan. Additional sites may not be used for the land application of sludge until department approval is received.

6.2 System Operating Requirements

6.2.1 Noncompliance Reporting

The permittee shall report the following types of noncompliance by a telephone call to the Department's regional office within 24 hours after becoming aware of the noncompliance:

- any noncompliance which may endanger health or the environment;
- any violation of an effluent limitation resulting from a bypass;
- any violation of an effluent limitation resulting from an upset; and
- any violation of a maximum discharge limitation for any of the pollutants listed by the Department in the permit, either for effluent or sludge.

A written report describing the noncompliance shall also be submitted to the Department as directed at the end of this permit within 5 days after the permittee becomes aware of the noncompliance. On a case-by-case basis, the Department may waive the requirement for submittal of a written report within 5 days and instruct the permittee to submit the written report with the next regularly scheduled monitoring report. In either case, the written report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times; the steps taken or planned to reduce, eliminate and prevent reoccurrence of the noncompliance; and if the noncompliance has not been corrected, the length of time it is expected to continue.
A scheduled bypass approved by the Department under the 'Scheduled Bypass' section of this permit shall not be subject to the reporting required under this section.
NOTE: Section 292.11(2)(a), Wisconsin Statutes, requires any person who possesses or controls a hazardous substance or who causes the discharge of a hazardous substance to notify the Department of Natural Resources **immediately** of any discharge not authorized by the permit. **The discharge of a hazardous substance that is not authorized by this permit or that violates this permit may be a hazardous substance spill. To report a hazardous substance spill, call DNR's 24-hour HOTLINE at 1-800-943-0003**.

6.2.2 Bypass

Except for a controlled diversion as provided in the 'Controlled Diversions' section of this permit, any bypass is prohibited and the Department may take enforcement action against a permittee for such occurrences under s. 283.89, Wis. Stats. The Department may approve a bypass if the permittee demonstrates all the following conditions apply:

- The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities or adequate back-up equipment, retention of untreated wastes, reduction of inflow and infiltration, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance. When evaluating feasibility of alternatives, the department may consider factors such as technical achievability, costs and affordability of implementation and risks to public health, the environment and, where the permittee is a municipality, the welfare of the community served; and
- The bypass was reported in accordance with the 'Noncompliance Reporting' section of this permit.

6.2.3 Scheduled Bypass

Whenever the permittee anticipates the need to bypass for purposes of efficient operations and maintenance and the permittee may not meet the conditions for controlled diversions in the 'Controlled Diversions' section of this permit, the permittee shall obtain prior written approval from the Department for the scheduled bypass. A permittee's written request for Department approval of a scheduled bypass shall demonstrate that the conditions for unscheduled bypassing are met and include the proposed date and reason for the bypass, estimated volume and duration of the bypass, alternatives to bypassing and measures to mitigate environmental harm caused by the bypass. The department may require the permittee to provide public notification for a scheduled bypass if it is determined there is significant public interest in the proposed action and may recommend mitigation measures to minimize the impact of such bypass.

6.2.4 Controlled Diversions

Controlled diversions are allowed only when necessary for essential maintenance to assure efficient operation provided the following requirements are met:

- Effluent from the wastewater treatment facility shall meet the effluent limitations established in the permit. Wastewater that is diverted around a treatment unit or treatment process during a controlled diversion shall be recombined with wastewater that is not diverted prior to the effluent sampling location and prior to effluent discharge;
- A controlled diversion may not occur during periods of excessive flow or other abnormal wastewater characteristics;
- A controlled diversion may not result in a wastewater treatment facility overflow; and
- All instances of controlled diversions shall be documented in wastewater treatment facility records and such records shall be available to the department on request.

6.2.5 Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training as required in ch. NR 114, Wis. Adm. Code, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

6.2.6 Operator Certification

The wastewater treatment facility shall be under the direct supervision of a state certified operator. In accordance with s. NR 114.53, Wis. Adm. Code, every WPDES permitted treatment plant shall have a designated operator-in-charge holding a current and valid certificate. The designated operator-in-charge shall be certified at the level and in all subclasses of the treatment plant, except laboratory. Treatment plant owners shall notify the department of any changes in the operator-in-charge within 30 days. Note that s. NR 114.52(22), Wis. Adm. Code, lists types of facilities that are excluded from operator certification requirements (i.e. private sewage systems, pretreatment facilities discharging to public sewers, industrial wastewater treatment that consists solely of land disposal, agricultural digesters and concentrated aquatic production facilities with no biological treatment).

6.2.7 Spill Reporting

The permittee shall notify the Department in accordance with ch. NR 706 (formerly NR 158), Wis. Adm. Code, in the event that a spill or accidental release of any material or substance results in the discharge of pollutants to the waters of the state at a rate or concentration greater than the effluent limitations established in this permit, or the spill or accidental release of the material is unregulated in this permit, unless the spill or release of pollutants has been reported to the Department in accordance with s. NR 205.07 (1)(s), Wis. Adm. Code.

6.2.8 Planned Changes

In accordance with ss. 283.31(4)(b) and 283.59, Stats., the permittee shall report to the Department any facility expansion, production increase or process modifications which will result in new, different or increased discharges of pollutants. The report shall either be a new permit application, or if the new discharge will not violate the effluent limitations of this permit, a written notice of the new, different or increased discharge. The notice shall contain a description of the new activities, an estimate of the new, different or increased discharge of pollutants and a description of the effect of the new or increased discharge on existing waste treatment facilities. Following receipt of this report, the Department may modify this permit to specify and limit any pollutants not previously regulated in the permit.

6.2.9 Duty to Halt or Reduce Activity

Upon failure or impairment of treatment facility operation, the permittee shall, to the extent necessary to maintain compliance with its permit, curtail production or wastewater discharges or both until the treatment facility operations are restored or an alternative method of treatment is provided.

6.3 Surface Water Requirements

6.3.1 Permittee-Determined Limit of Quantitation Incorporated into this Permit

For pollutants with water quality-based effluent limits below the Limit of Quantitation (LOQ) in this permit, the LOQ calculated by the permittee and reported on the Discharge Monitoring Reports (DMRs) is incorporated by reference into this permit. The LOQ shall be reported on the DMRs, shall be the lowest quantifiable level practicable, and shall be no greater than the minimum level (ML) specified in or approved under 40 CFR Part 136 for the pollutant at the time this permit was issued, unless this permit specifies a higher LOQ.

6.3.2 Appropriate Formulas for Effluent Calculations

The permittee shall use the following formulas for calculating effluent results to determine compliance with average concentration limits and mass limits and total load limits:

Weekly/Monthly/Six-Month/Annual Average Concentration = the sum of all daily results for that week/month/six-month/year, divided by the number of results during that time period. [Note: When a six-month average effluent limit is specified for Total Phosphorus the applicable periods are May through October and November through April.]

Weekly Average Mass Discharge (lbs/day): Daily mass = daily concentration (mg/L) x daily flow (MGD) x 8.34, then average the daily mass values for the week.

Monthly Average Mass Discharge (lbs/day): Daily mass = daily concentration (mg/L) x daily flow (MGD) x 8.34, then average the daily mass values for the month.

Six-Month Average Mass Discharge (lbs/day): Daily mass = daily concentration (mg/L) x daily flow (MGD) x 8.34, then average the daily mass values for the six-month period. [Note: When a six-month average effluent limit is specified for Total Phosphorus the applicable periods are May through October and November through April.]

Annual Average Mass Discharge (lbs/day): Daily mass = daily concentration (mg/L) x daily flow (MGD) x 8.34, then average the daily mass values for the entire year.

Total Monthly Discharge: = monthly average concentration (mg/L) x total flow for the month (MG/month) x 8.34.

Total Annual Discharge: = sum of total monthly discharges for the calendar year.

12-Month Rolling Sum of Total Monthly Discharge: = the sum of the most recent 12 consecutive months of Total Monthly Discharges.

6.3.3 Effluent Temperature Requirements

Weekly Average Temperature – If temperature limits are included in this permit, Weekly Average Temperature shall be calculated as the sum of all daily maximum results for that week divided by the number of daily maximum results during that time period.

Cold Shock Standard – Water temperatures of the discharge shall be controlled in a manner as to protect fish and aquatic life uses from the deleterious effects of cold shock pursuant to Wis. Adm. Code, s. NR 102.28. 'Cold Shock' means exposure of aquatic organisms to a rapid decrease in temperature and a sustained exposure to low temperature that induces abnormal behavior or physiological performance and may lead to death.

Rate of Temperature Change Standard – Temperature of a water of the state or discharge to a water of the state may not be artificially raised or lowered at such a rate that it causes detrimental health or reproductive effects to fish or aquatic life of the water of the state pursuant to Wis. Adm. Code, s. NR 102.29.

6.3.4 Energy Emergency Events

The Department will use enforcement discretion whenever there are exceedances of effluent temperature limitations for the electric generating facility during an energy emergency warning or when an energy emergency event has been declared under a Federal Energy Regulatory Commission order (Standard EOP-002, North American Electric Reliability Corporation).

6.3.5 Visible Foam or Floating Solids

There shall be no discharge of floating solids or visible foam in other than trace amounts.

6.3.6 Surface Water Uses and Criteria

In accordance with NR 102.04, Wis. Adm. Code, surface water uses and criteria are established to govern water management decisions. Practices attributable to municipal, industrial, commercial, domestic, agricultural, land development or other activities shall be controlled so that all surface waters including the mixing zone meet the following conditions at all times and under all flow and water level conditions:

a) Substances that will cause objectionable deposits on the shore or in the bed of a body of water, shall not be present in such amounts as to interfere with public rights in waters of the state.

b) Floating or submerged debris, oil, scum or other material shall not be present in such amounts as to interfere with public rights in waters of the state.

c) Materials producing color, odor, taste or unsightliness shall not be present in such amounts as to interfere with public rights in waters of the state.

d) Substances in concentrations or in combinations which are toxic or harmful to humans shall not be present in amounts found to be of public health significance, nor shall substances be present in amounts which are acutely harmful to animal, plant or aquatic life.

6.3.7 PFOS and PFOA Requirements

The laboratory performing the analysis on any samples shall be certified for the applicable PFAS compounds in the aqueous matrix by the Wisconsin Laboratory Certification Program established under s. 299.11, Wis. Stats., in accordance with s. NR 149.41, Wis. Adm. Code. If the EPA Office of Water publishes a 1600 series isotope dilution method for the analysis of PFAS in wastewater, the department recommends the use of the EPA method.

The department may reject any sample results if results are produced by a laboratory that is not in compliance with certification requirements under ch. NR 149, Wis. Adm. Code.

6.3.8 Reopener Clause

Pursuant to s. 283.15(11), Wis. Stat. and 40 CFR 131.20, the Department may modify or revoke and reissue this permit if, through the triennial standard review process, the Department determines that the terms and conditions of this permit need to be updated to reflect the highest attainable condition of the receiving water.

6.4 Land Treatment Requirements for Industrial Discharges

NR 214, Wisconsin Administrative Code: The requirements of this section are based on ss. NR 214.12-16, Wis. Adm. Code, and apply to wastewater discharges to designed and constructed absorption pond, ridge & furrow, spray irrigation, overland flow and subsurface absorption treatment systems.

6.4.1 Formulas for Land Treatment Calculations

The permittee shall use the following formulas for land treatment calculations, unless an alternate calculation method is approved by the Department in the Land Treatment Management Plan.

6.4.1.1 Monthly Average Hydraulic Application Rate

Determine the monthly average hydraulic application rate (in gal/acre/day) for each outfall by calculating the total gallons of wastewater applied onto the site for the month, dividing that total by the number of wetted acres loaded during the month, and then dividing this resulting value by the number of days in the month. Enter this calculated monthly value on the Discharge Monitoring Report form in the box for the last day of the month, in the "Hydraulic Application Rate" column.

6.4.1.2 Annual Total Nitrogen per Cell or per Zone

$$\frac{\text{(annual ave. concentration in mg/L) (tot. annual flow in million gallons per cell or zone) (8.34)}}{\text{acreage of cell or zone}} = \text{lbs/ac/yr}$$

6.4.1.3 Annual Total Chloride per Cell or per Zone

$$\frac{\text{(annual ave. concentration in mg/L) (tot. annual flow in million gallons per cell or zone) (8.34)}}{\text{acreage of cell or zone}} = \text{lbs/ac/yr}$$

6.4.2 Land Treatment Annual Report

Annual Land Treatment Reports are due by January 31st of each year for the previous calendar year.

6.4.3 Chloride Requirements for Land Treatment Systems

Since chloride is not significantly treated by the soil, the chloride level of the wastewater treated on land shall be minimized to the extent that is technically and economically feasible. The goal is to protect groundwater quality and prevent exceedance of the 125 mg/L groundwater preventive action limit.

7 Summary of Reports Due

FOR INFORMATIONAL PURPOSES ONLY

Description	Date	Page
Cooling Water Intake Structure (CWIS) Annual Certification Statement - Annual Certification Statement	January 31, 2025	16
Cooling Water Intake Structure (CWIS) Annual Certification Statement - Annual Certification Statement	January 31, 2026	16
Cooling Water Intake Structure (CWIS) Annual Certification Statement - Application Materials Exemption Request	September 30, 2026	16
Cooling Water Intake Structure (CWIS) Annual Certification Statement - Annual Certification Statement	January 31, 2027	16
Cooling Water Intake Structure (CWIS) Annual Certification Statement - Annual Certification Statement	January 31, 2028	16
Cooling Water Intake Structure (CWIS) Annual Certification Statement - Annual Certification Statement	October 3, 2028	16
Mercury Pollutant Minimization Program -Annual Mercury Progress Reports	January 31, 2025	16
Mercury Pollutant Minimization Program -Annual Mercury Progress Report #2	January 31, 2026	17
Mercury Pollutant Minimization Program -Annual Mercury Progress Report #3	January 31, 2027	17
Mercury Pollutant Minimization Program -Annual Mercury Progress Report #4	January 31, 2028	17
Mercury Pollutant Minimization Program -Final Mercury Report	March 31, 2028	17
Mercury Pollutant Minimization Program -Annual Mercury Reports After Permit Expiration	See Permit	17
PFOS/PFOA Minimization Plan Determination of Need -Report on Effluent Discharge	September 30, 2025	18
PFOS/PFOA Minimization Plan Determination of Need -Report on Effluent Discharge and Evaluation of Need	September 30, 2026	18
Temperature Limits (Industrial Facilities) -Report on Effluent Discharges	July 1, 2025	18
Temperature Limits (Industrial Facilities) -Action Plan	July 1, 2026	18
Temperature Limits (Industrial Facilities) -Construction Plans	July 1, 2027	18
Temperature Limits (Industrial Facilities) -Initiate Actions	January 1, 2028	18
Temperature Limits (Industrial Facilities) -Complete Actions	July 1, 2028	18
Annual Land Treatment Reports	by January 31st of each year for the previous calendar year	24
Wastewater Discharge Monitoring Report	no later than the date	18

	indicated on the form	

Report forms shall be submitted electronically in accordance with the reporting requirements herein. Any facility plans or plans and specifications for municipal, industrial, industrial pretreatment and non industrial wastewater systems shall be submitted to the Bureau of Water Quality, P.O. Box 7921, Madison, WI 53707-7921. All other submittals required by this permit shall be submitted to:
West Central Region, 1300 W. Clairemont Ave, Eau Claire, WI 54701