



WPDES PERMIT

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
**PERMIT TO DISCHARGE UNDER THE WISCONSIN POLLUTANT DISCHARGE
ELIMINATION SYSTEM**

Wisconsin Power and Light Co Columbia Energy

is permitted, under the authority of Chapter 283, Wisconsin Statutes, to discharge from a facility
located at
W8375 Murray Rd, Pardeeville, Wisconsin
to
Wisconsin River and floodplain marsh in Section 27, T12N, R9E, Columbia County

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 _____
Nate Willis
Wastewater Section Supervisor

Date Permit Signed/Issued

PERMIT TERM: EFFECTIVE DATE - April 01, 2026

EXPIRATION DATE - March 31, 2031

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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, Waste Type/Sample Contents and Treatment Description (as applicable)
702	INFLUENT: Wisconsin River water intake structure for non-contact cooling water located on the east bank of the Wisconsin River. At Sampling Point 702, the permittee shall calculate the total daily intake flow rate prior to use in the facility. The permittee shall collect representative grab samples of the intake water for total recoverable mercury and total phosphorus from a sampling location prior to use in the facility.

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 702 - WIS. RIVER INFLUENT

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Phosphorus, Total		mg/L	Quarterly	Grab	Only required if there is a discharge from Outfall 001
Mercury, Total Recoverable		ng/L	1/ 6 Months	Grab	See Mercury Monitoring section
Flow Rate		MGD	Daily	Calculated	Flow rate is calculated based on pump runtime

1.2.1.1 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.

1.2.1.2 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 Wisconsin River cooling water intake system which consists of the following:

- Location: Eastern shore of the Wisconsin River at 43°28'38.8"N 89°26'09.7"W

- General Description: Water first passes through a 46 feet long and 8 feet deep bar grate made of 4-inch by 3/8-inch steel bars spaced 2 5/8-inches apart. After the bar grate water travels through a 2,365-foot long canal with a bottom width of 8 feet. At the end of the intake canal water is transferred to the cooling pond through a pumphouse equipped with 3/8-inch mesh static screens and three pumps.
- Maximum Design Intake Flow (DIF): 43.2 **MGD**
- Maximum Design Intake Velocity: 1.8 fps

1.2.1.3 Cooling Water Intake BTA (Best Technology Available) Determination

The Department has determined that the Wisconsin River cooling water intake, as described above in subsection 1.2.1.3, represents BTA for minimizing impingement mortality and entrainment in accordance with the requirements in section s. 283.31(6), Wis. Stats. and ch. NR 111, Wis. Adm. Code.

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 ch. NR 111, Wis. Adm. Code. **In subsequent permit reissuance applications, the permittee shall provide all the information required in s. NR 111.40, Wis. Adm. Code.**

Note: Based on flow conditions at the time of this permit reissuance, this includes ss. NR 111.41(1) through (7) and (13), Wis. Adm. Code.

Exemptions from some permit application requirements are possible in accordance with s. NR 111.42(1), 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 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. If a weekly inspection is not possible due to employee safety concerns, the inspection shall be conducted as soon as it is safe to do so.

1.3.3 Reporting Requirements for Cooling Water Intake

The permittee shall adhere to the reporting requirements listed below.

1.3.3.1 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. 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.

1.3.4 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.

1.3.5 Endangered Species Act

Nothing in this permit authorizes take for the purpose of a facility's compliance with the Endangered Species Act.

2 In-Plant Requirements

2.1 Sampling Point(s)

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)
102	BLANK: Field blank sample needed to check for contamination of the samples collected from the discharge outfalls and/or the intake
101	IN-PLANT: Domestic Sewage Treatment Plant Effluent to Cooling Pond. A 24-hr flow proportional composite sampler is located after the media filter bed. Grab samples are taken after UV disinfection prior to discharge to the cooling pond. Flow is measured at the composite sampler.
301	IN-PLANT: Oil/water separator effluent and wastewater from the Units 1 and 2 air heater wash sumps, chemical waste sumps, and on-site coal ash landfill leachate to the cooling pond. Flow is measured by magnetic meter prior to discharge to the cooling pond.
401	IN-PLANT: Discharge of Recycled Cooling Tower Wastewater to Cooling Pond. A representative grab sample is taken prior to discharge to the cooling pond. Reported flow is calculated using pump run times.
501	IN-PLANT: On-site landfill leachate and landfill contact water discharging to Sample Point 301. A representative grab sample of leachate and contact water is taken prior to discharge to the oil water separator. Sample point is included to report leachate and contact water specific parameters prior to the combined wastewater Sample Point 301.

2.2 Monitoring Requirements and Limitations

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

2.2.1 Sampling Point 102 - Effluent Field Blank

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Mercury, Total Recoverable		ng/L	1/ 6 Months	Blank	

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 Sampling Point 101 - SEWAGE TRT SYSTEM EFFLUENT

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		gpd	3/Week	Total Daily	
E. Coli	Geometric Mean - Monthly	126 #/100 ml	Weekly	Grab	
Suspended Solids, Total	Monthly Avg	30 mg/L	3/Week	24-Hr Comp	
Suspended Solids, Total	Weekly Avg	45 mg/L	3/Week	24-Hr Comp	
BOD ₅ , Total	Monthly Avg	30 mg/L	3/Week	24-Hr Comp	
BOD ₅ , Total	Weekly Avg	45 mg/L	3/Week	24-Hr Comp	

2.2.2.1 Requirements for Domestic Sewage Treatment Plant

- In addition to the limitations above, the sewage treatment plant shall achieve a minimum of **85% removal**, on a monthly average, of the amount of BOD and suspended solids in the raw wastewater to the sewage treatment plant. Monitoring for the pollutant in the raw wastewater shall be of the same sample frequency and sample type as that for the pollutant in the effluent. All information regarding this 85% removal minimum limit is to be maintained at the facility and is only required to be reported to the WDNR when requested.
- Disinfection** of the sanitary treatment system effluent shall be provided from May 1 through September 30 of each year. Monitoring requirements and the limitation for E. Coli apply only during the period in which disinfection is required.

Under no circumstances may the introduction of wastes prohibited by s. NR 211.10, such as corrosive or explosive pollutants, excessive heat, oils, etc., be allowed into the waste treatment system.

2.2.3 Sampling Point 301 - OIL/WATER SEPARATOR

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Daily	Total Daily	
Suspended Solids, Total	Daily Max	100 mg/L	Weekly	Grab	
Suspended Solids, Total	Monthly Avg	30 mg/L	Weekly	Grab	
Oil & Grease (Hexane)	Daily Max	20 mg/L	Weekly	Grab	
Oil & Grease (Hexane)	Monthly Avg	10 mg/L	Weekly	Grab	
pH Field	Daily Max	9.0 su	Weekly	Grab	
pH Field	Daily Min	6.0 su	Weekly	Grab	

2.2.4 Sampling Point 401 - COOLING TOWER WW TO POND

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Monthly	Calculated	
Chlorine, Free Available	Daily Max	0.5 mg/L	Monthly	Grab	Monitoring applies in months where chlorine is used
Chlorine, Free Available	Monthly Avg	0.2 mg/L	Monthly	Grab	Monitoring applies in months where chlorine is used
Zinc, Total Recoverable	Daily Max	1.0 mg/L	Monthly	Grab	Monitoring applies in months where chemicals containing zinc are used
pH Field	Daily Max	9.0 su	Weekly	Grab	
pH Field	Daily Min	6.0 su	Weekly	Grab	

2.2.4.1 Priority Pollutants

No detectable amount of the 126 priority pollutants may be discharged from sampling point 401 except for zinc. Sampling for the 126 priority pollutants listed in NR 215.03, Wis. Adm. Code, including zinc, is required only if contained in chemicals used for condenser cooling system maintenance. The priority pollutant sample type shall be “composite” or “grab” as appropriate for each pollutant.

2.2.4.2 Sample Point 401 Monitoring Requirement

The table 2.2.4 monitoring is required only when there is a discharge from a cooling tower to the cooling pond during the reporting period.

2.2.4.3 Intake pH

When the intake water from the Wisconsin River exceeds a pH of 9.0 su, the discharge from sample point 401 shall be deemed in compliance with the permit if it does not exceed the pH of the intake water.

2.2.4.4 Time of Chlorine Discharge

Neither free available chlorine nor total residual chlorine shall be discharged from any unit for more than 2 hours in any one day and not more than one unit in any plant may discharge free available nor total residual chlorine at any one time, except when chlorinating for macro-invertebrate control (as allowed in s. NR 290.12(2)(c), Wisconsin Adm. Code) in accordance with a Department approved macro-invertebrate management plan. The time of chlorine discharge may be reported as being equivalent to the time of chlorine addition to the unit, or alternatively, as the time that detectable levels of chlorine, using the analysis methods specified in this permit’s “Chlorine Compliance and Analysis Methods” Standard Condition, are present in the discharge from the unit. The time of free available chlorine or total residual chlorine discharge shall be evaluated and summed for each unit and each day that chlorine is present in the discharge.

2.2.4.5 Sample Point 401 Free Available Chlorine Sampling Procedure

Sample Point 401 testing for Free Available Chlorine is only required when a chlorine containing compound is discharged due to sanitizing the cooling tower during the month. In that event, at least one grab sample for free available chlorine shall be collected that is representative of the maximum discharge concentration of a chlorine

discharge event. A continuous monitor may be used to determine the peak value and length of chlorine discharge as long as it duplicates the accuracy of a NR 219 approved method.

2.2.5 Sampling Point 501 - LANDFILL LEACHATE LP-1

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Volume		gal	2/Year	Calculated	
Arsenic, Total Recoverable		µg/day	2/Year	Grab	
BOD ₅ , Total		mg/L	2/Year	Grab	
Conductivity		µmhos/cm	2/Year	Grab	
pH Field		su	2/Year	Grab	
Alkalinity, Total as CaCO ₃ Dissolved		mg/L	2/Year	Grab	
Boron, Total Recoverable		µg/L	2/Year	Grab	
Cadmium, Total Recoverable		µg/L	2/Year	Grab	
Chloride		mg/L	2/Year	Grab	
Hardness, Total as CaCO ₃		mg/L	2/Year	Grab	
Iron, Total Recoverable		µg/L	2/Year	Grab	
Lead, Total Recoverable		µg/L	2/Year	Grab	
Manganese, Total Recoverable		µg/L	2/Year	Grab	
Mercury, Total Recoverable		µg/L	2/Year	Grab	
Selenium, Total Recoverable		µg/L	2/Year	Grab	
Suspended Solids, Total		mg/L	2/Year	Grab	
Antimony, Total Recoverable		µg/L	2/Year	Grab	
Beryllium, Total Recoverable		µg/L	2/Year	Grab	
Cobalt, Total Recoverable		µg/L	2/Year	Grab	
Fluoride		mg/L	2/Year	Grab	
Molybdenum, Total Recoverable		µg/L	2/Year	Grab	
Radium 226 & 228 Total		pCi/L	2/Year	Grab	
Sulfate, Total		mg/L	2/Year	Grab	

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Thallium, Total Recoverable		µg/L	2/Year	Grab	
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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, Waste Type/Sample Contents and Treatment Description (as applicable)
001	EFFLUENT: Discharge of recycled cooling water from the cooling pond to the floodplain marsh of the Wisconsin River. Monitoring is not required when the outfall is not in use.

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 - RECYCLED COOLING WTR TO MARSH

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Daily	Calculated	
pH Field	Daily Max	9.0 su	Daily	Grab	
pH Field	Daily Min	6.0 su	Daily	Grab	
Halogen, Total Residual as Cl ₂	Daily Max	19 µg/L	Monthly	Grab	
Halogen, Total Residual as Cl ₂	Weekly Avg	7.3 µg/L	Monthly	Grab	
Zinc, Total Recoverable	Daily Max	240 µg/L	Quarterly	Grab	
Zinc, Total Recoverable	Weekly Avg	125 µg/L	Quarterly	Grab	
Zinc, Total Recoverable	Daily Max	6.1 lbs/day	Quarterly	Grab	
Zinc, Total Recoverable	Weekly Avg	3.2 lbs/day	Quarterly	Grab	
Mercury, Total Recoverable		ng/L	1/ 6 Months	Grab	
Phosphorus, Total		mg/L	Monthly	Grab	
Temperature Maximum	Daily Max	75 deg F	Daily	Continuous	Limit applies in January and February
Temperature Maximum	Daily Max	77 deg F	Daily	Continuous	Limit applies in March and November
Temperature Maximum	Daily Max	79 deg F	Daily	Continuous	Limit applies in April
Temperature Maximum	Daily Max	82 deg F	Daily	Continuous	Limit applies in May and September

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Temperature Maximum	Daily Max	84 deg F	Daily	Continuous	Limit applies in June and August
Temperature Maximum	Daily Max	85 deg F	Daily	Continuous	Limit applies in July
Temperature Maximum	Daily Max	80 deg F	Daily	Continuous	Limit applies in October
Temperature Maximum	Daily Max	76 deg F	Daily	Continuous	Limit applies in December
Temperature Maximum	Weekly Avg	73 deg F	Daily	Continuous	Limit applies in September
Temperature Maximum	Weekly Avg	49 deg F	Daily	Continuous	Limit applies in November, December, and January
Temperature Maximum	Weekly Avg	50 deg F	Daily	Continuous	Limit applies in February
Temperature Maximum	Weekly Avg	52 deg F	Daily	Continuous	Limit applies in March
Temperature Maximum	Weekly Avg	55 deg F	Daily	Continuous	Limit applies in April
Temperature Maximum	Weekly Avg	65 deg F	Daily	Continuous	Limit applies in May
Temperature Maximum	Weekly Avg	76 deg F	Daily	Continuous	Limit applies in June
Temperature Maximum	Weekly Avg	81 deg F	Daily	Continuous	Limit applies in July and August
Temperature Maximum	Weekly Avg	61 deg F	Daily	Continuous	Limit applies in October
PFOS		ng/L	Once	Grab	
PFOA		ng/L	Once	Grab	

3.2.1.1 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), 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.

3.2.1.2 Effluent Temperature Monitoring

For manually measuring effluent temperature, grab samples should be collected at 6 evenly spaced intervals during the 24-hour period. Alternative sampling intervals may be approved if the permittee can show that the maximum effluent temperature is captured during the sampling interval. 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. In either case, report the maximum temperature measured during the day on the DMR. For seasonal discharges collect measurements either manually or continuously during the period of operation and report the daily maximum effluent temperature on the DMR.

3.2.1.3 Effluent Temperature Limitations

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.

3.2.1.4 PFOS/PFOA Sampling and Reporting Requirements

For grab samples, as defined per s. NR 218.04(10), Wis. Adm. Code, a single sample at a location as defined by the sample point description shall be taken during the time of the day most representative to capture all potential discharges. If extra equipment besides the sample bottle is used to collect the sample, it is recommended that a one-time equipment blank is collected with the first sample. An equipment blank would be collected by passing laboratory-verified PFAS-free water over or through field sampling equipment before the collection of a grab sample to evaluate potential contamination from the equipment used during sample.

If any equipment blanks are performed, these results shall be reported in the comments section of the eDMR and shall also be documented in the reports submitted as part of the PFOS/PFOA Minimization Plan Determination of Need schedule of the permit.

3.2.1.5 Polychlorinated Biphenyls

There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.

3.2.1.6 Additives

The permittee shall maintain a record of the dosage rate of all additives used on a monthly basis. The additives may be changed during the term of the permit following procedures in the 'Additives' subsection of the Standard Requirements.

3.2.1.7 Total Maximum Daily Load (TMDL) Limits

Columbia Energy Center has no phosphorus allocation in the Wisconsin River TMDL. However, since this outfall is a non-contact cooling water outfall it is considered a pass through facility. The facility may not discharge any additional phosphorus beyond that which is present in the intake.

3.2.1.8 Intake pH

When the intake water from the Wisconsin River exceeds a pH of 9.0 su, the permittee shall sample the intake water pH and determine if the source water is the cause of the pH exceedance. If the intake water also exceeds 9.0 su and is within 1.0 su of the effluent result, then the discharge from sample point 001 shall be deemed in compliance with the permit.

3.2.1.9 Halogen, Total Residual as Chlorine

Acceptable test methods for determining Halogens, Total Residual as Cl₂ are the same as those for measuring Chlorine, Total Residual. These methods are listed for Chlorine, Total Residual in chapter NR 219, Table B, Wisconsin Administrative Code. The preferred test methods are the Spectrophotometric, DPD; the Electrode; and the Back Titration with amperometric endpoint.

3.2.1.10 Time of Chlorine Discharge

Neither free available chlorine nor total residual chlorine shall be discharged from any unit for more than 2 hours in any one day and not more than one unit in any plant may discharge free available nor total residual chlorine at any one time, except when chlorinating for macro-invertebrate control (as allowed in s. NR 290.12(2)(c), Wisconsin Adm. Code) in accordance with a Department approved macro-invertebrate management plan. The time of chlorine

discharge may be reported as being equivalent to the time of chlorine addition to a unit, or alternatively, as the time that detectable levels of chlorine, using the analysis methods specified in this permit's "Chlorine Compliance and Analysis Methods" Standard Condition, are present in the discharge. The time of free available chlorine or total residual chlorine discharge shall be evaluated and summed for each unit and each day that chlorine is present in the discharge from any unit.

3.2.1.11 Metals Analysis

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.

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)
003	Seepage from the cooling pond to groundwater
110	Seepage of coal pile runoff from Settling Basin

4.2 Monitoring Requirements and Limitations

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

4.2.1 Seepage Flow Estimates

The permittee shall use the methods described in their Land Management Plan to estimate the seepage to groundwater for each land treatment outfall.

4.2.2 Sampling Point (Outfall) 003 - COOLING POND SEEPAGE, Absorption Pond (Seepage Cell)

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		gal/ac/day	Annual	Calculated	
Zinc Dissolved		mg/L	Annual	Grab	Sample taken within the cooling pond, along the western shoreline
Mercury Dissolved		mg/L	Annual	Grab	Sample taken within the cooling pond, along the western shoreline
Arsenic, Total Recoverable		mg/L	Annual	Grab	Sample taken within the cooling pond, along the western shoreline

4.2.3 Sampling Point (Outfall) 110 - COAL PILE RUNOFF SEEPAGE,

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Arsenic, Total Recoverable		mg/L	Annual	Grab	See Sampling Procedure section
Sulfate Dissolved		mg/L	Annual	Grab	See Sampling Procedure section
Mercury, Total Recoverable		ng/L	Annual	Grab	See Sampling Procedure section
Iron, Total Recoverable		mg/L	Annual	Grab	See Sampling Procedure section
Copper, Total Recoverable		mg/L	Annual	Grab	See Sampling Procedure section
Chloride Dissolved		mg/L	Annual	Grab	See Sampling Procedure section
Molybdenum, Total Recoverable		ug/L	Annual	Grab	See Samping Procedure section
Selenium, Total Recoverable		ug/L	Annual	Grab	See Sampling Procedure section
Flow Rate		gal/ac/day	Annual	Calculated	See Sampling Procedure section

4.2.3.1 Sampling Procedure

The permittee shall use the Synthetic Precipitation Leaching Procedure (SPLP) as described in EPA Method 1312 to determine the representative amount of each parameter that would be going into groundwater.

5 Schedules

5.1 Annual Certification Statements and Reports

Submit an annual certification statement and report by January 31st of each year as specified by the Annual Certification Statements and Reports section, in accordance with the following schedule.

Required Action	Due Date
Submit Annual Certification Statement and Report #1: Submit an annual certification statement signed by the authorized representative with information on the following for the previous year: (a) Water intake structure technologies are being maintained and operated as set forth in this permit, or a justification to allow a modification of practices. Include a summary of the inspections required under paragraph 1.3.2. (b) If there are substantial modifications to the operations of any unit that impacts the cooling water withdrawals or operation of the water intake structure, provide a summary of those changes. (c) If the information contained in the previous year's annual certification is still applicable, the certification may simply state as such.	01/31/2027
Submit Annual Certification Statement and Report #2: Submit second annual certification statement	01/31/2028
Submit Annual Certification Statement and Report #3: Submit third annual certification statement	01/31/2029
Submit Annual Certification Statement and Report #4: Submit fourth annual certification statement	01/31/2030
Submit Annual Certification Statement and Report #5: Submit fifth annual certification statement	01/31/2031
Ongoing Annual Certification Statements and Reports: Continue to submit Annual Certification Statements and Reports until permit reissuance has been completed	

5.2 Land Treatment Management Plan

A management plan is required for the land treatment system.

Required Action	Due Date
Land Treatment Management Plan: Submit a management plan to optimize the land treatment system performance and demonstrate compliance with Wisconsin Administrative Code NR 214.	08/01/2026

5.3 Land Treatment Annual Report

Required Action	Due Date
Submit Annual Land Treatment Report #1: Submit the Annual Land Treatment Report by January 31st for the previous calendar year.	01/31/2027
Submit Annual Land Treatment Report #2: Submit the Annual Land Treatment Report by January 31st for the previous calendar year.	01/31/2028

Submit Annual Land Treatment Report #3: Submit the Annual Land Treatment Report by January 31st for the previous calendar year.	01/31/2029
Submit Annual Land Treatment Report #4: Submit the Annual Land Treatment Report by January 31st for the previous calendar year.	01/31/2030
Submit Annual Land Treatment Report #5: Submit the Annual Land Treatment Report by January 31st for the previous calendar year.	01/31/2031
Ongoing Annual Land Treatment Reports: Continue to submit the Annual Land Treatment Report by January 31st for the previous calendar year until permit reissuance has been completed	

5.4 Combustion Residual Leachate ELG

Required Action	Due Date
Feasibility Report: The permittee shall submit a report investigating the feasibility of ceasing the discharge of combustion residual leachate by the date required by this schedule is investigated.	01/01/2027
Progress Report #1: The permittee shall submit a report detailing any progress that has been made in complying with the federal ELGs for combustion residual leachate.	01/01/2028
Progress Report #2: The permittee shall submit a report detailing any progress that has been made in complying with the federal ELGs for combustion residual leachate.	01/01/2029
Progress Report #3: The permittee shall submit a report detailing any progress that has been made in complying with the federal ELGs for combustion residual leachate.	01/01/2030
Progress Report #4: The permittee shall submit a report detailing any progress that has been made in complying with the federal ELGs for combustion residual leachate.	01/01/2031
Compliance With Federal ELG: Unless the department concurs that ceasing the discharge of combustion residual leachate by this date is infeasible and has provided the permittee with an alternative date, or the permittee has submitted a signed affidavit stating that they will cease coal combustion by December 31, 2034, the permittee shall cease the discharge of combustion residual leachate by this date.	03/31/2031

6 Standard Requirements

Chapter 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), Wis. Adm. Code.

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 completed by a laboratory certified or registered in accordance with the requirements of ch. NR 149, Wis. Adm. Code. Groundwater sampling shall be performed in accordance with procedures contained in s. NR 140.16, Wis. Adm. Code, and the WDNR publications, Groundwater Sampling Desk Reference (PUBL-DG-037-96) and Groundwater Sampling Field Manual (PUBL-DG-038-96). The analytical methodologies used shall enable the laboratory to quantitate all substances for which monitoring is required at levels below the effluent limitation and/or groundwater standard. If the required level cannot be met by any of the methods available in ch. 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 fees under ch. NR 101, Wis. Adm. Code, a reporting limit of 2.0 mg/L for BOD₅ and 2.5 mg/L 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 preventive 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, except in cases of Water Quality Trading, wherein the applicable periods are January through June and July through December.]

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:

- 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.
- 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.
- 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.
- 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 Total Residual Chlorine Requirements

When total residual chlorine (TRC) limit(s) or monitoring are included in a permit, the permittee shall comply with the following conditions:

- The permittee shall perform TRC monitoring required in this permit using an approved method from ch. NR 219, Wis. Adm. Code, which produces a detection limit that is less than or equal to the permitted limit or produces the lowest economically feasible detection limit if the approved methods cannot meet the permit limit. If the facility cannot achieve a detection limit less than or equal to the permit limit using the approved methods, contact the laboratory accreditation program for guidance.
- The permittee shall determine the limit of detection (LOD) as specified in s. NR 149.48 (2)(b), Wis. Adm. Code, or the permittee shall contact the laboratory accreditation program for information on how to determine a verified detection limit allowed just for TRC. If the verified detection limit is determined using the special procedure, then the LOD and limit of quantitation (LOQ) shall be set to be equal to the verified detection limit determined from this special procedure.
- The permittee shall determine compliance with the TRC limit(s) as follows:

- a) If the facility determines a statistical LOD as specified in s. NR 149.48 (2)(b), Wis. Adm. Code, and the measured TRC levels are less than the LOD, the permittee shall report the results as less than the LOD (<LOD). For this situation the LOQ shall be established at 3.33 times the LOD or at the concentration of the lowest standard in the calibration curve. TRC levels that are < LOD are in compliance with the TRC limit.
- b) If the facility determines the verified detection limit using the laboratory accreditation program special procedure, this verified detection limit shall be reported as the LOD and LOQ. If the measured TRC levels are less than the LOD, the permittee shall report the results as < LOD. TRC levels that are < LOD are in compliance with the TRC limit.
- c) If the facility determines the statistical LOD as specified in s. NR 149.48 (2)(b), Wis. Adm. Code, and the measured TRC levels are greater than the statistical LOD but less than the LOQ, TRC levels are in compliance with the TRC limit - except when the measured levels are consistently reported between the LOD and LOQ. When the measured TRC levels are consistently reported between the LOD and LOQ, the facility shall take action to determine the reliability of detected results (such as resampling and/or re-calculating dosages) and shall adjust the chemical feed system if necessary to reduce the chances of detecting levels between the statistical LOD and LOQ.
- d) If the facility determines the statistical LOQ as specified in s. NR 149.48 (2)(b), Wis. Adm. Code, or determines the verified detection limit using the laboratory accreditation program special procedure, TRC measured levels that are greater than the statistical LOQ and the TRC limit, are not in compliance with the TRC limit. The permittee shall report the level as a limit exceedance.
- e) If the facility determines the statistical LOD as specified in s. NR 149.48 (2)(b), Wis. Adm. Code, and the measured level is < LOD, then a "0" (zero) value may be substituted for any test result less than the statistical LOD when calculating the average or mass discharge values. Calculated values shall then be compared directly to the average or mass limits to determine compliance.
- f) If the facility determines the verified detection limit using the laboratory accreditation program special procedure and the measured level is < LOD (set equal to the verified detection limit), then a "0" (zero) value may be substituted for any test result less than the LOD when calculating the average or mass discharge values. Calculated values shall then be compared directly to the average or mass limits to determine compliance.

6.3.8 Compliance with Phosphorus Limitation

Compliance with the concentration limitation for phosphorus shall be determined as a rolling twelve-month average and shall be calculated as follows:

First, determine the pounds of phosphorus for an individual month by multiplying the average of all the concentration values for phosphorus (in mg/L) for that month by the total flow for the month in Million Gallons times the conversion factor of 8.34.

Then, the monthly pounds of phosphorus determined in this manner shall be summed for the most recent 12 months and inserted into the numerator of the following equation.

$$\text{Average concentration of P in mg/L} = \frac{\text{Total lbs of P discharged (most recent 12 months)}}{\text{Total flow in MG (most recent 12 months) X 8.34}}$$

The compliance calculation shall be performed each month with a reported discharge volume after substituting data from the most recent month(s) for the oldest month(s). A calculated value in excess of the concentration limitation will be considered equivalent to a violation of a monthly average.

6.3.9 Additives

In the event that the permittee wishes to commence use of a water treatment additive, or increase the usage of the additives greater than indicated in the permit application, the permittee must get a written approval from the Department prior to initiating such changes. This written approval shall provide authority to utilize the additives at the specific rates until the permit can be either reissued or modified in accordance with s. 283.53, Stats. Restrictions on the use of the additives may be included in the authorization letter.

6.3.10 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. All laboratories are required to utilize EPA Method 1633A for sampling PFAS in sludge.

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.

6.4 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

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

6.4.1.3 Annual Total Chloride per Cell or per Zone

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

6.4.2 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.

6.4.3 Nitrogen Loading Requirements for Absorption Ponds

Since all forms of nitrogen in wastewater can be converted to nitrate nitrogen in the groundwater in the vicinity of an absorption pond, the average concentration of the sum of all nitrogen species in the absorption pond discharge shall be limited to minimize the concentration of nitrate+nitrite nitrogen in the groundwater to the extent that is technically and economically feasible and will prevent exceedance of the 2 mg/L groundwater preventive action limit.

6.4.4 Absorption Pond Discharge Restrictions

The volume of discharge to the absorption pond system shall be limited so that the discharge volume combined with the precipitation from a 10-year frequency, 24-hour duration rainfall event does not reduce the available freeboard to less than 1 foot below the top of the dike.

6.4.5 Discharges to the Absorption Pond System

No discharge to the absorption pond system may have physical or chemical characteristics which prevent the proper operation of the system.

6.4.6 Absorption Pond Management Plan

The absorption pond treatment system shall be operated and managed in accordance with a Department approved management plan. The management plan shall be consistent with the conditions listed in this permit and s. NR 214.12(5), Wis. Adm. Code which requires a load/rest schedule, weed control and removal, etc. If operational changes are needed, the management plan shall be amended by submitting a written request to the Department for approval.

7 Summary of Reports Due

FOR INFORMATIONAL PURPOSES ONLY

Description	Date	Page
Annual Certification Statements and Reports -Submit Annual Certification Statement and Report #1	January 31, 2027	14
Annual Certification Statements and Reports -Submit Annual Certification Statement and Report #2	January 31, 2028	14
Annual Certification Statements and Reports -Submit Annual Certification Statement and Report #3	January 31, 2029	14
Annual Certification Statements and Reports -Submit Annual Certification Statement and Report #4	January 31, 2030	14
Annual Certification Statements and Reports -Submit Annual Certification Statement and Report #5	January 31, 2031	14
Annual Certification Statements and Reports -Ongoing Annual Certification Statements and Reports	See Permit	14
Land Treatment Management Plan -Land Treatment Management Plan	August 1, 2026	14
Land Treatment Annual Report -Submit Annual Land Treatment Report #1	January 31, 2027	14
Land Treatment Annual Report -Submit Annual Land Treatment Report #2	January 31, 2028	14
Land Treatment Annual Report -Submit Annual Land Treatment Report #3	January 31, 2029	15
Land Treatment Annual Report -Submit Annual Land Treatment Report #4	January 31, 2030	15
Land Treatment Annual Report -Submit Annual Land Treatment Report #5	January 31, 2031	15
Land Treatment Annual Report -Ongoing Annual Land Treatment Reports	See Permit	15
Combustion Residual Leachate ELG -Feasibility Report	January 1, 2027	15
Combustion Residual Leachate ELG -Progress Report #1	January 1, 2028	15
Combustion Residual Leachate ELG -Progress Report #2	January 1, 2029	15
Combustion Residual Leachate ELG -Progress Report #3	January 1, 2030	15
Combustion Residual Leachate ELG -Progress Report #4	January 1, 2031	15
Combustion Residual Leachate ELG -Compliance With Federal ELG	March 31, 2031	15
Wastewater Discharge Monitoring Report	no later than the date indicated on the form	17

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:
South Central Region, 3911 Fish Hatchery Rd, Fitchburg, WI 53711-5397