



WPDES PERMIT

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

UW MADISON CHARTER STREET HEATING PLANT

is permitted, under the authority of Chapter 283, Wisconsin Statutes, to discharge from a facility
located at

117 N CHARTER STREET

to

Lake Monona via City of Madison storm sewers (Yahara River and Lake Monona Watershed, LR08 – Lower Rock
River Basin) in Dane 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

Tim Ryan
Wastewater Field Operations Supervisor

Date Permit Signed/Issued

PERMIT TERM: EFFECTIVE DATE – April 1, 2025

EXPIRATION DATE – March 31, 2030

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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)
701	Intake UW Charter Street: Water is withdrawn from Lake Mendota through the cooling water intake structure (CWIS) located approximately 592 feet offshore. The CWIS consists of three pipes with 31-inch diameter cylindrical screens, which are made of a 1-inch-wide mesh. The water then goes through a tee into a 24-inch diameter pipe made of concrete. Intake Structure Crib Location: 43°04'44.0"N, 89°24'03.0"W. Flow reported from the UW Charter Street Heating Plant flow meter only.
702	Intake Walnut Street: Water is withdrawn from Lake Mendota through the cooling water intake structure (CWIS) located approximately 592 feet offshore. The CWIS consists of three pipes with 31-inch diameter cylindrical screens, which are made of a 1-inch-wide mesh. The water then goes through a tee into a 24-inch diameter pipe made of concrete. Intake Structure Crib Location: 43°04'44.0"N, 89°24'03.0"W. Sample point is for intake water used by the Walnut Street Heating Plant (WSHP).
703	Intake West Campus: Water is withdrawn from Lake Mendota through the cooling water intake structure (CWIS) located approximately 592 feet offshore. The CWIS consists of three pipes with 31-inch diameter cylindrical screens, which are made of a 1-inch-wide mesh. The water then goes through a tee into a 24-inch diameter pipe made of concrete. Intake Structure Crib Location: 43°04'44.0"N, 89°24'03.0"W. Sample point is for intake water used by the West Campus Cogeneration Facility (WCCF) operated by Madison Gas & Electric.
704	Intake Total: Water is withdrawn from Lake Mendota through the cooling water intake structure (CWIS) located approximately 592 feet offshore. The CWIS consists of three pipes with 31-inch diameter cylindrical screens, which are made of a 1-inch-wide mesh. The water then goes through a tee into a 24-inch diameter pipe made of concrete. Intake Structure Crib Location: 43°04'44.0"N, 89°24'03.0"W. Sample Point reporting calculated total values for the intake structure.

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 701 - Lake Mendota Offshore Intake – UW Charter Madison

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Daily	Continuous	
Intake Water Used Exclusively For Cooling		% Flow	Annual	Calculated	

1.2.1.1 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 Lake Mendota cooling water intake system which consists of the following:

- Location: The intake is located approximately 592 feet offshore in Lake Mendota north of the Water Science and Engineering Laboratory
- General Description: The CWIS consists of three upturned pipes with cylindrical screens at the ends.
- Major Components: The facility uses variable speed pumps and cooling towers
- Maximum Design Intake Flow (DIF): 10.61 MGD
- Maximum Design Intake Velocity: 5.2 feet per second

1.2.1.2 Cooling Water Intake BTA (Best Technology Available) Determination

The Department believes that the Lake Mendota Offshore Intake cooling water intake, as described above in subsection 1.2.1.1, represents BTA for minimizing adverse environmental impact in accordance with the requirements in section s. 283.31(6), Wis. Stats. and section 316(b) of the Clean Water Act.

1.2.2 Sampling Point 702 – Lake Mendota Offshore Intake – Walnut Street; 703 – Lake Mendota Offshore Intake - West Campus

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Annual	Total Annual	Report on the March eDMR annually.
Intake Water Used Exclusively For Cooling		% Flow	Annual	Calculated	Report on the March eDMR annually.

1.2.2.1 Cooling Water Intake Structure Requirements

The permittee shall meet all requirements from section 1.2.1.1 and 1.2.1.2.

1.2.3 Sampling Point 704 – Lake Mendota Intake - Total

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Annual	Calculated	Report total intake water flow on the March eDMR annually.
Intake Water Used Exclusively For Cooling		% Flow	Annual	Calculated	Report on the March eDMR annually the total for all intake water.

1.2.3.1 Cooling Water Intake Structure Requirements

The permittee shall meet all requirements from section 1.2.1.1 and 1.2.1.2.

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 subch. II of ch. NR 111, Wis. Adm. Code. **In subsequent permit reissuance applications, the permittee shall provide all the information required in ss. NR 111.41(1) through (7) and (13), Wis. Adm. Code.**

Also include an alternatives analysis report for compliance with the entrainment BTA requirements with the permit application. This alternatives analysis for entrainment BTA shall examine the options for compliance with the entrainment BTA requirement and propose a candidate entrainment BTA to the Department for consideration during its next BTA determination. The analysis must, at least narratively, address and consider the factors listed in s. NR 111.41(13)(a), Wis. Adm. Code, and may consider the factors listed in s. NR 111.41(13)(b), Wis. Adm. Code. The analysis must evaluate, at a minimum, closed-cycle recirculating systems, fine mesh screens with a mesh size of 2mm or smaller, variable speed pumps, water reuse or alternate sources of cooling water, and any additional technology identified by the department at a later date. Exemptions from some permit application requirements are possible in accordance with s. 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 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.

1.3.3 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 March 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 or Wisconsin's Endangered Species Law. Refer to s. NR 111.16(4), Wis. Adm. Code.

2 Surface Water Requirements

2.1 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: Noncontact cooling water (NCCW), without additives. Grab samples taken in chiller room. Flow meter located in the chiller room. Outfall 001 is an optional outfall, not currently in regular use. It serves as a backup for primary Outfall 004 and located just south of the Cooling Tower and Water Treatment Building. Monitoring only required if discharge occurs.
004	Effluent: Noncontact cooling water (NCCW), without additives. Grab samples taken in chiller room. Flow meter located in the chiller room. Primary noncontact cooling water (NCCW) outfall. Flow meter located in chiller room.

2.2 Monitoring Requirements and Effluent Limitations

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

2.2.1 Sampling Point (Outfall) 001 - Optional NCCW outfall & 004 – Primary NCCW

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Daily	Continuous	
Oil & Grease (Hexane)	Daily Max	10 mg/L	Monthly	Grab	
Temperature Maximum	Daily Max	103 deg F	Daily	Continuous	Limit effective August starting in 2029.
Temperature Maximum	Weekly Avg	76 deg F	Daily	Continuous	Limit effective January starting in 2029.
Temperature Maximum	Weekly Avg	71 deg F	Daily	Continuous	Limit effective February starting in 2029.
Temperature Maximum	Weekly Avg	74 deg F	Daily	Continuous	Limit effective March starting in 2029.
Temperature Maximum	Weekly Avg	75 deg F	Daily	Continuous	Limit effective April.
Temperature Maximum	Weekly Avg	85 deg F	Daily	Continuous	Limit effective May starting in 2029.
Temperature Maximum	Weekly Avg	89 deg F	Daily	Continuous	Limit effective June starting in 2029.
Temperature Maximum	Weekly Avg	92 deg F	Daily	Continuous	Limit effective July starting in 2029.
Temperature Maximum	Weekly Avg	93 deg F	Daily	Continuous	Limit effective August starting in 2029.
Temperature Maximum	Weekly Avg	86 deg F	Daily	Continuous	Limit effective September starting in 2029.

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Temperature Maximum	Weekly Avg	74 deg F	Daily	Continuous	Limit effective October.
Temperature Maximum	Weekly Avg	66 deg F	Daily	Continuous	Limit effective November starting in 2029.
Temperature Maximum	Weekly Avg	73 deg F	Daily	Continuous	Limit effective December starting in 2029.

2.2.1.1 Effluent Temperature Monitoring

For monitoring temperature continuously, collect measurements in accordance with s. NR 218.04(13), Wis. Adm. Code. 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 eDMR. For intermittent discharges collect measurements either manually or continuously during the period of operation and report the daily maximum effluent temperature on the eDMR.

2.2.1.2 Effluent Temperature Limitations

The effluent limitations for ‘Temperature, Maximum’ become effective on January 1, 2029 as specified in the Schedules section for all months except April and October. Weekly average limits in April and October are in effect and retained. Monitoring is required daily upon permit reissuance year-round.

3 Schedules

3.1 Annual Certification Statements and Reports for Intake Structure

Submit an annual certification statement and report by March 31st of each year as specified by Section 1.3.3.1, Annual Certification Statement and Report, in accordance with the following schedule.

Required Action	Due Date
Submit Annual Certification Statement and Report: Submit an annual certification statement and report on the water intake structures. The annual certification shall include a summary of maintenance and operation of water intake structure technologies, a summary of visual or remote inspections conducted, and a summary of any substantial modifications to the operation of any units that will impact cooling water withdrawals or operation of the water intake structure. This annual certification shall also include a summary of intake water utilized at the UW Charter Street facility in April and October for additional cooling as well as total annual flow (MGD) of intake water withdrawn and percent used for cooling for UW Charter Street facility, Walnut Street Heating Plant and West Campus Cogeneration Facility.	03/31/2026
Submit Annual Certification Statement and Report: Submit the annual certification statement as defined above.	03/31/2027
Submit Annual Certification Statement and Report: Submit the annual certification statement as defined above.	03/31/2028
Submit Annual Certification Statement and Report: Submit the annual certification statement as defined above.	03/31/2029
Ongoing Annual Certification Statements and Reports: Continue to submit Annual Certification Statements and Reports until permit reissuance has been completed.	03/31/2030

3.2 Temperature Limits

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.	04/01/2026
Action Plan: Submit an action plan for complying with all effluent temperature limits that remain following the Department's review for necessity.	04/01/2027
Initiate Actions: Initiate actions identified in the plan.	04/01/2028
Achieve Compliance: Complete actions necessary to achieve compliance with effluent temperature limits.	04/01/2029

4 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.

4.1 Reporting and Monitoring Requirements

4.1.1 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.

4.1.2 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.

4.1.3 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.

4.1.4 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.

4.1.5 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.

4.1.6 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.

4.1.7 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.

4.2 System Operating Requirements

4.2.1 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.**

4.2.2 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.

4.2.3 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.

4.2.4 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.

4.2.5 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.

4.2.6 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).

4.2.7 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.

4.2.8 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.

4.2.9 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.

4.3 Surface Water Requirements

4.3.1 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.

4.3.2 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.

4.3.3 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.

UW MADISON CHARTER STREET HEATING PLANT

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.

4.3.4 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).

4.3.5 Visible Foam or Floating Solids

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

4.3.6 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.

4.3.7 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.

5 Summary of Reports Due

FOR INFORMATIONAL PURPOSES ONLY

Description	Date	Page
Annual Certification Statements and Reports for Intake Structure -Submit Annual Certification Statement and Report	March 31, 2026	6
Annual Certification Statements and Reports for Intake Structure -Submit Annual Certification Statement and Report	March 31, 2027	6
Annual Certification Statements and Reports for Intake Structure -Submit Annual Certification Statement and Report	March 31, 2028	6
Annual Certification Statements and Reports for Intake Structure -Submit Annual Certification Statement and Report	March 31, 2029	6
Annual Certification Statements and Reports for Intake Structure -Ongoing Annual Certification Statements and Reports	March 31, 2030	6
Temperature Limits -Report on Effluent Discharges	April 1, 2026	6
Temperature Limits -Action Plan	April 1, 2027	6
Temperature Limits -Initiate Actions	April 1, 2028	6
Temperature Limits -Achieve Compliance	April 1, 2029	6
Wastewater Discharge Monitoring Report	no later than the date indicated on the form	7

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