STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

GENERAL PERMIT TO DISCHARGE UNDER THE WISCONSIN POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of Chapter 283, Wisconsin Statutes, any facility discharging

NONCONTACT COOLING WATER OR CONDENSATE AND BOILER WATER

located in the State of Wisconsin and meeting the applicability criteria listed in this General Permit, is permitted to discharge these wastewaters directly to surface waters of the state and/or indirectly to groundwater of the state in accordance with the effluent limitations, monitoring requirements and other conditions set forth in this permit.

State of Wisconsin Department of Natural Resources
For the Secretary

By Sharon L. Gayan
Sharon L. Gayan, Director
Bureau of Water Quality

July 27, 2017
Date of Signature

EFFECTIVE DATE: October 1, 2017 **EXPIRATION DATE: September 30, 2022**

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1. APPLICABILITY CRITERIA

1.1 Facilities Covered

With exceptions listed in Subsection 1.2 below, this permit applies to discharges in Wisconsin that are not on Tribal land and meet the following conditions:

1.1.1 Discharges of noncontact cooling waters, noncontact condensates, boiler water (blowdown and bleed-off), or other similar wastewaters to surface waters and wetlands;

1.1.2 Discharges of noncontact cooling waters, noncontact condensates, boiler water (blowdown and bleed-off), or other similar wastewaters to groundwater;

1.1.3 Discharges of reverse osmosis permeate from the concentration of whey provided the permeate is not combined with any wash water or other process wastewater and the calculated effluent limitations in this general permit are more restrictive than the applicable technology-based limitations;

1.1.4 Other similar discharges expressly approved in writing by the Wisconsin Department of Natural Resources (Department).

1.2 Facilities Not Covered

This permit does not apply to discharges that meet any of the following conditions:

1.2.1 Discharges of process wastewaters;

1.2.2 Discharges of water from boiler cleaning operations;

1.2.3 Discharges of air compressor condensate contaminated with oil and grease;

1.2.4 Discharges of water treated with biocides other than chlorination;

1.2.5 Discharges of reverse osmosis permeate where the Department has determined that more restrictive technology-based limitations are applicable;

1.2.6 Discharges to natural wetlands where the Department has determined that the discharge of pollutants will not meet the wetland protection requirements of ch. NR 103, Wis. Adm. Code;

1.2.7 Discharges directly to outstanding resource waters as defined in s. NR 102.10, Wis. Adm. Code, or discharges that would lower the water quality of downstream outstanding resource waters;

1.2.8 Discharges directly to exceptional resource waters as defined in s. NR 102.11, Wis. Adm. Code, or discharges that would lower the water quality of downstream exceptional resource waters;

1.2.9 Discharges of pollutants not authorized under this permit in quantities that exceed water quality standards;

1.2.10 Discharges that will adversely affect including causing an incidental take of any species that are federally-listed as endangered and threatened under the Endangered Species Act;

1.2.11 Discharges from land within Tribal Land. (Note: The U.S. EPA regulates discharges within Tribal Land (land owned by or held in trust for the tribes and land within recognized reservation boundaries));

1.2.12 Unless discharges can certify all of the following in writing to the Department, discharges that operate a cooling water intake structure or receive cooling water from an independent supplier that operates an intake structure that has not already been found to meet best technology available (BTA) requirements by the Department cannot be covered under this general permit:

1.2.12.1 The discharger uses cooling water from one or more surface water intake structures that is designed to withdraw no more than 2 MGD from a water of the state OR the discharger uses less than 25% of the water that they withdraw exclusively for cooling;

1.2.12.2 Each cooling water intake structure has a maximum <u>design</u> intake velocity of 0.5 feet per second (fps) **<u>OR</u>** a maximum <u>actual</u> intake velocity of 0.5 fps, demonstrated via measured or calculated values which show the maximum intake velocity as water passes through the entrance to the intake system, measured perpendicular to the opening, does not exceed 0.5 fps.

1.2.12.3 The discharge meets at least one of the following:

1.2.12.3.1 The cooling water intake structure is located on a river or stream and withdraws less than or equal to 5% of the mean annual flow of the source water.

1.2.12.3.2 The cooling water intake structure is located on a lake or reservoir where the total quantity of the water withdrawn

is restricted to a level necessary to maintain the natural thermal stratification or turnover patterns (where present) except in cases where the disruption is beneficial.

1.2.12.3.3 The facility operates at < 8% capacity utilization rate or at full capacity only for portions of days during a few months or less on an annual basis. If located in a spawning area, the period of cooling water intake operation must not correspond with times when spawning is occurring (depending on species present, usually between April – August).

1.2.12.3.4 The facility operates a closed-cycle recirculating system that only requires make-up water (with $\geq$ 3 cycles of concentration on at least a daily basis). Cycles of concentration (COC) can be measured as the ratio of chloride levels in the recirculated water or blowdown relative to the chloride levels in the source water, or makeup water; or the make-up water volume divided by the blowdown volume (provided there aren't other water loses); or the blowdown water conductivity divided by the make-up water conductivity.

2. REQUIREMENTS FOR ALL COVERED DISCHARGES

The following requirements apply to all discharges covered by this permit that use a non-biocide additive to the source water. Facilities discharging to either groundwater or surface waters are required to meet the following requirements whenever non-biocide additives are used.

2.1 Surface Water Additives

2.1.1 Use of Non-Biocide Water Treatment Additives

The use of non-biocide water treatment additives are prohibited under this general permit unless the use of the water treatment additive is approved, in writing, by the Department, is a non-biocide specified in Table 2.1.2, or is solely a pH adjuster. Table 2.1.2 provides a list of additives that have been approved for use in NCCW discharges in accordance with the Secondary Acute Value at the time of permit reissuance. Additives not included on Table 2.1.2 are not necessarily prohibited, but must be reviewed and approved by the Department prior to use in accordance with section 2.1.3. Upon approval, the permittee shall comply with the conditions specified in the approval. If the additive is solely a pH adjuster, the additive may be used in accordance with labeled instructions so long as the record requirements in section 2.1.4 are met.

Separate Department approval is not required additives that are solely pH adjusters.

2.1.2 Additives previously reviewed and approved by the Department for use in accordance with use restrictions and label instructions.

Additive	Manufacturer	Secondary Acute Value[1]
Bulab 9540	Buckman Laboratories, Inc.	2.96 mg/L
ChemTreat BL-1770	ChemTreat, Inc.	54.4 mg/L
Formula 159	Garratt Callahan	39.1 mg/L
Formula 44	Garratt Callahan	65.1 mg/L
Continuum AEC 213	GE Water & Process Technologies	29.1 mg/L
Gengard GN8143	GE Water & Process Technologies	20.6 mg/L
Inhibitor AZ8104	GE Water & Process Technologies	1.93 mg/L
Lakeland T-4450	Lakeland Chemical Specialties Inc.	6.15 mg/L
3D Trasar 3DT283	NALCO	444.8 mg/L
3D Trasar 3DTBR06	NALCO	332 mg/L
NALCO 1720	NALCO	29.4 mg/L
NALCO BC1011	NALCO	115.9 mg/L
Nalco Stabrex ST70	NALCO	0.2 mg/L
Scale-Guard Plus 60123	NALCO	52.9 mg/L
Tri-ACT 1820	NALCO	14.4 mg/L
Tri-ACT 1830	NALCO	30.0 mg/L
Advantage Plus 1465	Solenis	5.89 mg/L
Millsperse 950	Solenis	7.69 mg/L
Biotrol 407	U.S. Water Services	0.17 mg/L
Tower MP 560	U.S. Water Services	380.1 mg/L
LA2764	UNIVAR	0.04 mg/L

1- The use restriction is the maximum concentration allowed to be present in the discharge.

2.1.3 Approval of Water Treatment Additives

Water treatment additive discharge concentrations shall comply with applicable secondary values and standards in ss. NR 105.05 and NR 102.04, Wis. Adm. Code, for surface water discharges, and shall comply with human health standards ch. NR 140, Wis. Adm. Code, for discharges to groundwater. The permittee shall provide the following information regarding water treatment additives to receive Department approval:

2.1.3.1 A Safety Data Sheet (SDS) with the commercial name of the additive to be used;

2.1.3.2 The amount or concentration of the additive to be used;

2.1.3.3 Anticipated discharge concentration of the additive;

2.1.3.4 The proposed frequency of usage of the additive; and

2.1.3.5 Aquatic life toxicity tests, including a description of the test species, test types, and results intended for use in performing an additive review as described in "Water Quality Review Procedures for Additives", available on-line at: http://dnr.wi.gov/topic/wastewater/Guidance.html.

2.1.4 Additive Usage Record

The following water treatment additive records shall be maintained by the permittee and made available to the Department upon request:

2.1.4.1 Name and manufacturer of each additive used; and

2.1.4.2 Daily maximum and monthly average quantity of each additive used, on a monthly basis. Additive use may be recorded as the quantity of the pollutant added to the effluent or the quantity of the pollutant measured in the effluent stream.

2.1.5 Chlorination

Facilities may use chlorine for the purposes of controlling microbial or algal growth and/or use a water supply containing chlorine provided the facility complies with all of the requirements in Appendix F of this general permit. Separate Department approval is not required for use of chlorine. Appendix F only addresses chlorine. It does not address dechlorination chemicals. Therefore, the use of dechlorination chemicals is still subject to the procedures and requirements of this section.

2.2 Reporting Monitoring Results

Monitoring results of the discharge obtained during the specified reporting period shall be summarized and reported on the Discharge Monitoring Report (DMR) system or other equivalent form or reporting system when approved by the Department. Monitoring results shall be reported consistent with the monitoring frequency specified in this permit. The monitoring report is to be returned to the Department no later than the 15th day of the month following the end of the reporting period or by the submittal date indicated on the eDMR form, whichever is later. If specified in the limitations and monitoring tables in this permit and authorized in writing by the Department, the permittee may submit monitoring data to the Department in an annual report via the eDMR system or equivalent form or reporting system approved by the Department provided the permittee has complied with all terms of this permit and there are no noncompliance events occurred during that timeframe. Annual reports must be submitted to the Department no later than February 15th for the previous year. Any exceedance that occurs during the calendar year must be reported to the Department in accordance with section 2.3 below. If the Department approves submitting a paper DMR form, the original (and one copy if specified on the form) shall be submitted to the return address printed on the form.

2.3 Exceedance Reporting

The permittee shall report exceedances of any limits for each parameter regardless of monitoring frequency (refer to Standard Requirement 5.13 for noncompliance notification). The permittee shall report any noncompliance with these requirements to the Department's district office within 24 hours after becoming aware of the noncompliance pursuant to 5.13. For example, monthly, weekly, and/or daily limits shall be met even when only monitoring once per quarter. The permittee may monitor more frequently than required for any parameter.

2.4 Visible Foam and Floating Solids

There shall be no discharge of visible foam or floating solids in other than trace amounts to a surface water of the state.

2.5 Surface Water Intake

The Department has determined that the applicability requirements for cooling water intake structures in 1.2.12 constitute BTA for dischargers using water from a cooling water intake structure. The permittee shall comply with these applicability criteria at all times. The permittee shall report any noncompliance with these requirements to the Department's district office within 24 hours after becoming aware of the noncompliance pursuant to 5.13.

2.6 Impaired Waters & TMDL Requirements for Surface Water Discharges

For all pollutants of concern except phosphorus and total suspended solids (TSS), the permittee shall report, on an annual discharge monitoring report, if the facility has discharged a detectable pollutant of concern to an impaired

surface water or a surface water with a State and U.S. EPA approved TMDL allocation.

Note: A "pollutant(s) of concern" means a pollutant that is contributing to the impairment of a water body. The section 303(d) list of Wisconsin impaired surface water bodies may be obtained by contacting the Department or by searching for the section 303(d) list on the Department's Internet site. The Department updates the section 303(d) list approximately every two years. The updated list is effective upon approval by U.S. EPA. The current link to the section 303(d) list is: http://dnr.wi.gov/topic/impairedwaters/.

Note: Phosphorus and TSS TMDL requirements are specified in Appendices D-E of this permit.

2.6.2 A permittee may not initiate a new wastewater discharge of a pollutant of concern to an impaired water body or significantly increase an existing discharge of a pollutant of concern to an impaired water body unless the new or increased discharge does not contribute to the receiving water impairment or the discharge is consistent with a State and Federal approved TMDL allocation for the impaired water body. Any new or significantly increased pollutant of concern discharge to an impaired surface water authorized under this general permit shall be consistent with the wasteload allocation in the U.S. EPA approved TMDL for general permittees within the basin. A facility shall notify the Department of the intent to create a new or increased discharge of a pollutant of concern either through the Request for Coverage for the general permit or in writing to the Department. The discharge may not be initiated until the Department has confirmed, in writing, that the discharge is consistent with the approved wasteload allocations and/or reserve capacity for the TMDL in question. If allocation or reserve is not available to accommodate the new discharge, the facility must seek individual permit coverage.

2.7 Discharger Specific Requirements

The permittee is responsible for compliance with any permit requirement including numeric effluent limits stipulated in the relevant discharger-specific appendices of Part 6 of this permit.

3. MONITORING REQUIREMENTS AND LIMITATIONS FOR ALL SURFACE WATER DISCHARGES

Discharges to surface water shall meet the requirements outlined in this section, including the limitations and monitoring requirements specified in Table 3.1. Samples taken in compliance with the monitoring requirements specified in Table 3.1 shall be taken at each outfall following treatment (if applicable) and prior to discharge to the

surface water. The samples taken shall be representative of the normal operating conditions for the discharge.

3.1 Limitations and Monitoring Requirements for Surface Water Discharges

Parameter[(f)]	Daily Minimum Limit	Daily Maximum Limit	Monthly Average Limit	Sample Frequency	Sample Type[(a,b)]
Flow (Gallons Per Day)	-	-	-	Quarterly[(c,d)]	Estimate
Total Suspended Solids (mg/L) [(f,g,h)]	-	40 mg/L	40 mg/L	Quarterly[(c,d)]	Grab
pH[(g)]	6.0 s.u.	9.0 s.u.	-	Quarterly[(c,d)]	Grab
Total Phosphorus (mg/L) [(f)]	-	-	-	Annually	Grab
Oil and Grease (mg/L)	-	15 mg/L	15 mg/L	Annually[(e)]	Grab
BOD_5	-	-	-	Annually	Grab
Ammonia Nitrogen (mg/L)	-	-	-	Annually	Grab
Water Treatment Additives	-	-	-	Monthly[(d)]	Record Usage in a Daily Log
Temperature[(f,g)]	-	-	-	Quarterly[(c,d)]	Grab

(a) Estimate means a reasonable approximation of the average daily flow based on a water balance, an uncalibrated weir, calculations from the velocity and cross section of the discharge, intake water meter readings, discharge water meter readings or any other method approved by the Department.

(b) A grab sample means a single sample taken at one moment of time or a combination of several smaller samples of equal volume taken in less than a two-minute period. This sample should represent the highest effluent concentration known or expected to occur under normal operating conditions. If the outfall location is not accessible, the permittee may approximate effluent concentrations based on influent concentrations. This estimation method may only be used for discharges that do not significantly concentrate the pollutant during the treatment process.

(c) Quarterly sample frequency means performing the associated monitoring four times per year; once anytime during each of the four annual quarters (Jan.-Feb.-March, April-May-June, July-Aug.-Sept., Oct.-Nov.-Dec.). If there is no discharge during a quarter, the permittee shall state this on the discharge monitoring report form.

(d) If authorized in writing by the Department, the facility may submit all monitoring data collected during the calendar year in an annual DMR or eDMR submittal to the Department. If a noncompliance event occurs during the calendar year, the permittee must notify the Department in accordance with the standard requirements specified in Section 5 of this permit. Additive usage limitations are included in section 2 of this permit.

(e) The sample frequency for oil & grease shall be annually, except that: (1) the monitoring frequency shall be **once each quarter for 4 calendar quarters** beginning the quarter following receipt of any sample result showing an oil

& grease discharge above 7.5 mg/L. A required change in sample frequency will be transmitted by letter from the Department to the permittee. An increased monitoring frequency is independent of the Department's enforcement response to permit noncompliance should the result exceed the specified limit. More frequent monitoring or a different sample type may be specified in an order or stipulation resulting from enforcement of permit noncompliance.

(f) Additional temperature, phosphorus, and TSS limits and monitoring requirements are applicable for specific dischargers covered under this permit. See Part 6 of this permit for details.

(g) If no exceedances occur in two years of permit coverage, monitoring for pH, TSS, and temperature may be reduced to annual sampling or suspended if authorized by the Department by letter.

(h) To demonstrate compliance with TSS limits, the facility may gather TSS data in the influent and effluent to demonstrate that the discharge is not significantly increasing the amount of TSS. A permit violation will not occur in these cases.

4. MONITORING REQUIREMENTS FOR ALL GROUNDWATER DISCHARGES

Discharges to groundwater shall meet the requirements outlined in this section, including the monitoring requirements specified in Table 4.1. Samples taken in compliance with the monitoring requirements specified in Table 4.1 shall be taken at each outfall following treatment (if applicable) and prior to discharge to the groundwater. The samples taken shall be representative of the normal operating conditions for the discharge.

4.1 Monitoring Requirements for Groundwater Discharges

Parameter	Daily Maximum Limit	Sample Frequency	Sample Type[a,b]
Flow (Gallons Per Day)	-	Annually	Estimate
Oil and Grease (mg/L)[c]	-	Annually	Grab
pH[c]	-	Annually	Grab
Water Treatment Additives	-	Monthly	Record Usage in a Daily Log

(a) Estimate means a reasonable approximation of the average daily flow based on a water balance, an uncalibrated weir, calculations from the velocity and cross section of the discharge, intake water meter readings, discharge water meter readings or any other method approved by the Department.

(b) A grab sample means a single sample taken at one moment of time or a combination of several smaller samples of equal volume taken in less than a two-minute period. This sample should represent the highest effluent concentration known or expected to occur under normal operating conditions. If the outfall location is not accessible, the permittee may approximate effluent concentrations based on influent concentrations. This estimation method may only be used for discharges that do not significantly concentrate the pollutant during the treatment process.

(c)	After reviewing the results of two years of discharge monitoring, the Department may waive, by letter, monitoring for oil and grease or pH.

5. STANDARD REQUIREMENTS

5.1 NR 205, Wisconsin Administrative Code

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, except for s. NR 205.07(1)(n), which does not apply to facilities covered under general permits. Selected s. NR 205.07, Wis. Adm. Code, requirements are listed below for convenience.

5.2 Request for Coverage

Any facilities that meet the activities covered under this permit must submit a request for coverage. All notices of intent/requests of coverage must be submitted to the Department regional office that regulates the proposed discharge location. The notice of intent/request for coverage can be found at the Department website:
http://dnr.wi.gov/topic/wastewater/GeneralPermits.html.

Note: The Department is in the process of developing and requiring online notices of intent/requests for coverage to discharge under this general permit. The Department will notify permittees when this requirement becomes available.

5.3 Department Coverage Determination

Until the Department issues a Letter of Determination that grants coverage for a pollutant discharge to waters of the state, the discharge is not authorized under this permit. All discharges shall submit a request for coverage to the Department to receive coverage under general permit WI-0044938-6.

5.4 Reporting Monitoring Results

See Section 2.2 ‘Reporting Monitoring Results’.

Note: The Department requires monitoring results to be reported on an electronic Discharge Monitoring Report (eDMR). The eDMR shall be certified electronically by a responsible executive officer, manager, partner or proprietor as specified in s. 283.37(3), Wis. Stats., or a duly authorized representative with a ‘eReport Certify’ page that certifies that the electronic report form is true, accurate and complete.

5.5 Delegation of Signature Authority

The permittee must provide written permission for a duly authorized representative to submit specific documents on the behalf of a responsible executive, officer, manager, partner, or proprietor of a permitted facility. An executive, officer, manager, partner, or proprietor can only delegate signature

authority to duly authorized representative if that person has responsibility for the overall operation of the facility or activity regulated by this general permit. The written permission shall specify the name of the individual and their employment position. The written permission must be submitted to the Department or together with the submittal of any required documents. If there are any changes to this permission, a new written permission shall be submitted to the Department.

5.6 Permit Coverage Transfers

A permittee who will no longer control the permitted facility may request that permit coverage be transferred to the person who will control the facility. The transfer request shall be signed and certified by both the permittee and the new owner or operator and sent via mail to the Department. The Department will then send a letter to the previous owner stating that their coverage is terminated under this general permit. The transfer request shall contain the following information:

- The name and address of the facility.
- The Facility Identification Number.
- The names of the persons involved in the transfer, their signatures, and date of signatures.
- A description of any significant changes in the operation of the facility.
- A statement of acknowledgement by the transferee that it will be the permittee of record and is responsible for compliance with the permit.

If nothing has changed at the facility, the Department will send a letter of determination that grants coverage and approval to the new owner or operator. If there have been sufficient changes at the permitted facility, the new owner should submit a request for coverage to the Department.

5.7 Permit Coverage Terminations

If a permittee no longer requires coverage under this general permit, then permittee must request that their coverage be terminated under this general permit. All coverage termination requests must be signed and certified by the permittee and sent via mail to the Department. The Department will then send a letter to the permittee stating that their coverage is terminated under this general permit.

5.8 Inspection and Entry

The permittee shall allow an authorized representative of the Department, upon the presentation of credentials, to enter the permittee's premises, have access to records, and inspect and monitor the discharge as described in s. NR 205.07(1)(d), Wis. Adm. Code.

5.9 Recording of Results

For each effluent measurement or sample taken, the permittee shall record the following information as required in s. NR 205.07(1)(e), Wis. Adm. Code:

5.9.2 The date, exact place, method and time of sampling or measurements;

5.9.3 The individual who performed the sampling or measurements;

5.9.4 The date the analysis was performed;

5.9.5 The individual who performed the analysis;

5.9.6 The analytical techniques or methods used;

5.9.7 The limit of detection of the analytical techniques or methods used; and

5.9.8 The result of the analysis.

5.10 Retention and Submittal of Reports, Records and Monitoring Results

The permittee shall retain records of all monitoring required by this permit and report monitoring results as set forth in s. NR 205.07(1)(f) and (r), Wis. Adm. Code, and as described below. Reports, records and monitoring results required by this permit shall be retained by the permittee for the duration of this permit or three years after this data is generated, whichever is longer.

5.11 Authorized Signature

Reports, records, and monitoring results required by this permit shall be signed by the permittee's authorized representative or, in his or her absence as described in s. NR 205.07(1)(g), Wis. Adm. Code.

5.12 Water Quality Sampling and Testing Procedures

Sampling and laboratory testing procedures shall be performed as specified in s. NR 205.07(1)(p), Wis. Adm. Code, and as set forth below. Sampling and analysis of effluent samples shall be performed as specified in chapters NR 218 and NR 219, Wis. Adm. Code, respectively, and shall be performed by a laboratory certified or registered in accordance with the requirements of ch. NR 149, Wis. Adm. Code.

5.13 Noncompliance and Spill Notification:

5.13.2 The permittee shall not exceed the surface water quality standards in chs. NR 102, NR 105, NR 106 or NR 207, Wis. Adm. Code, or the groundwater quality standards in ch. NR 140, Wis. Adm. Code;

5.13.3 The permittee shall, as required in s. NR 205.07(1)(s), Wis. Adm. Code, and as set forth below, report the following types of noncompliance by a telephone call, fax or e-mail to the Department's

district office within 24 hours after becoming aware of the noncompliance;

5.13.3.1 Any noncompliance which may endanger the health or the environment;

5.13.3.2 Any violation of an effluent limitation resulting from an upset or unanticipated bypass;

5.13.3.3 Any violation of a discharge limitation for any of the pollutants listed by the Department in the permit.

5.13.4 A written report describing the noncompliance shall also be submitted to the Department's district office 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 the 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.

5.13.5 The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with the permit requirements.

5.14 Duty to Halt or Reduce Activity

Upon failure or impairment of treatment facility operation, the permittee shall, as required in s. NR 205.07(3)(e), Wis. Adm. Code, and 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.

5.15 Planned Changes

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 as set forth in s. NR 205.07(3)(c), Wis. Adm. Code.

5.16 More Frequent Monitoring

If the permittee monitors any parameter more frequently than required by the permit, using test procedures specified in ch. NR 204 or 219, Wis. Adm. Code, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the eDMR or other

equivalent form or reporting system when expressly approved by the Department.

5.17 Reporting of Monitoring Results

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

5.17.2 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.

5.17.3 Pollutant concentrations equal to or greater than the limit of detection, but less than the limit of quantification, shall be reported and the limit of quantification shall be specified.

5.17.4 For purposes of calculating ch. NR 101 fees, the 2 mg/L lower reporting limits for BOD_5, and Total Suspended Solids shall be considered to be limits of quantification.

5.17.5 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.

5.18 Continuation of an Expired General Permit

As provided in s. NR 205.08(9), Wis. Adm. Code, the terms and conditions of this general permit shall continue to apply until this general permit is reissued or revoked or until an individual permit is issued for the discharge to which the general permit applied. The status of expired general permits and forms for requesting continued permit coverage can be accessed at the Department's web site: http://dnr.wi.gov/topic/wastewater/generalpermits.html.

5.19 Enforcement

Any violation of this permit is enforceable under ss. 283.89 and 283.91, Wis. Stats.

5.20 Severability

The provisions of this permit are severable, and, if any provisions of this permit or the application of any provisions of this permit to any circumstance is held invalid, the remainder of this permit shall not be affected thereby.

5.21 Property Rights

As set forth in s. NR 205.07(1)(c), Wis. Adm. Code, this permit does not convey any property rights of any sort or any exclusive privilege.

5.22 Unsafe Ice Conditions

Permittees shall not discharge to waters that cause unnatural ice conditions that are potentially hazardous to human health.

5.23 Cold Shock Standard

Water temperatures of discharges shall be controlled in a manner as to protect fish and aquatic life uses from the deleterious effects of cold shock.

5.24 Future Coverage under a General Permit

In cases where site-specific data gathered under this general permit indicate that a site-specific water quality-based effluent limitation is needed, coverage under this general permit may be terminated and the permittee may need to seek coverage under an individual WPDES permit upon permit reissuance.

6. DISCHARGER-SPECIFIC REQUIREMENTS FOR SURFACE WATER DISCHARGES

Permittees must comply with the applicable Part 6 discharger-specific requirements as defined in the following appendices. The discharger-specific requirements are in addition to any requirements specified elsewhere in this permit. The most restrictive of these conditions apply. For reference, all appendices contained within this permit are specified in Table 6.1. A permittee seeking coverage under this reissued general permit or an applicant applying for first time coverage under this general permit shall submit sufficient information to which discharger-specific appendices apply with the Request for Coverage.

Table 6.1 List of Appendices

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APPENDIX A. EFFLUENT TEMPERATURE LIMITS FOR DISCHARGES TO LIMITED AQUATIC LIFE WATERS

1. DISCHARGER APPLICABILITY CRITERIA

A.1 Facilities Covered by this Appendix

A.1.1 Discharges covered under this general permit that discharge to a limited aquatic life system codified in ch. NR 104, Wis. Adm. Code, that are not considered wastewater effluent channels and discharge above 86°F at any point in time;

A.1.2 Other similar discharges to other surface waters expressly identified in writing by the Department at the time of permit coverage.

2. DISCHARGER REQUIREMENTS

Discharges covered in this appendix shall meet the requirements outlined in this section, including the effluent limitations and monitoring requirements specified in Table A.2. Samples taken in compliance with the monitoring requirements shall be taken at each outfall following treatment (if applicable) and prior to discharge to surface waters. The samples taken shall be representative of the discharge that consists solely of the effluent before mixing with any other water.

A.2 Limitations and Monitoring Requirements for Surface Water Discharges

Limitations for Surface Water Discharges		Monitoring Requirements	
Parameter	Daily Maximum	Sample Frequency[a,c,d]	SampleType[b]
Temperature (°F)	86	Quarterly	Grab

(a) Quarterly sample frequency means monitoring four times per year; once anytime during each of the four annual quarters (Jan.-Feb.-Mar., Apr.-May-Jun., Jul.-Aug.-Sep., Oct.-Nov.-Dec.). If there is no discharge during a quarter, the permittee shall state this on the discharge monitoring report form.

(b) A grab sample means a single sample taken at one moment of time. This sample should represent the highest effluent temperature known or expected to occur under normal operating conditions.

(c) If no noncompliance events occur in two years of permit coverage, temperature monitoring may be reduced to annual sampling if authorized by the Department by letter; This monitoring frequency may be extended into subsequent permit terms.

(d) If authorized in writing by the Department, the facility may submit all monitoring data collected during the calendar year in an annual DMR or eDMR submittal to the Department. If a noncompliance event occurs during the calendar year, the permittee must notify the Department in accordance with the standard requirements specified in Section 5 of this permit.

A.3 Compliance with Temperature Limitations

Compliance schedules may be granted to facilities that need time to achieve compliance with thermal limitations specified in Table A.2 and have been previously covered under Wisconsin Pollutant Discharge Elimination System (WPDES) General Permit WI-0044938. If existing permittees determine that temperature limits are not readily achievable, the permittee shall submit to the Department justification for the need of a compliance schedule with the Request for Coverage. Upon submittal and approval by the Department, the following compliance schedule will become effective.

A.3.1 Temperature Limits Compliance

Required Action	**Due Date**
Report on Effluent Discharges: Submit a report on effluent temperature with conclusions regarding compliance.	12 months after date of coverage
Action Plan: Submit an action plan for complying with applicable temperature limits.	18 months after date of coverage
Initiate Actions: Initiate actions identified in the plan.	24 months after date of coverage
Complete Actions: Complete actions necessary to achieve compliance with effluent temperature limits.	36 months after date of coverage

APPENDIX B. EFFLUENT TEMPERATURE LIMITS FOR DISCHARGES OF HIGH HEAT

1. DISCHARGER APPLICABILITY CRITERIA

B.1 Facilities Covered by this Appendix

B.1.1 Discharges covered under this permit and discharge above 120°F at any point in time;

B.1.2 Other similar discharges to other surface waters expressly required in writing by the Department at the time of permit coverage.

2. DISCHARGER REQUIREMENTS

Discharges covered in this appendix shall meet the requirements outlined in this section, including the effluent limitations and monitoring requirements specified in Table B.2. Samples taken in compliance with the monitoring requirements shall be taken at each outfall following treatment (if applicable) and prior to discharge to surface waters. The samples taken shall be representative of the discharge that consists solely of the effluent before mixing with any other water.

B.2 Limitations and Monitoring Requirements for Surface Water Discharges

Limitations for Surface Water Discharges		Monitoring Requirements	
Parameter	Daily Maximum	Sample Frequency[a,c,d]	Sample Type[b]
Temperature (°F)	120	Quarterly	Grab

(a) Quarterly sample frequency means monitoring four times per year; once anytime during each of the four annual quarters (Jan.-Feb.-Mar., Apr.-May-Jun., Jul.-Aug.-Sep., Oct.-Nov.-Dec.). If there is no discharge during a quarter, the permittee shall state this on the discharge monitoring report form.

(b) A grab sample means a single sample taken at one moment of time. This sample should represent the highest effluent temperature known or expected to occur under normal operating conditions.

(c) If no noncompliance events occur in two years of permit coverage, temperature monitoring may be reduced to annual sampling if authorized by the Department by letter; This monitoring frequency may be extended into subsequent permit terms.

(d) If authorized in writing by the Department, the facility may submit all monitoring data collected during the calendar year in an annual DMR or eDMR submittal to the Department. If a noncompliance event occurs during the calendar year, the permittee must notify the Department in accordance with the standard requirements specified in Section 5 of this permit.

B.3 Compliance with Temperature Limitations

Compliance schedules may be granted to facilities that need time to achieve compliance with thermal limitations specified in Table B.2 and have been previously covered under Wisconsin Pollutant Discharge Elimination System (WPDES) General Permit WI-0044938. If existing permittees determine that temperature limits are not readily achievable, the permittee shall submit to the Department justification for the need of a compliance schedule with the Request for Coverage. Upon submittal, the following compliance schedule will become effective.

B.3.1 Temperature Limits Compliance

Required Action	**Due Date**
Report on Effluent Discharges: Submit a report on effluent temperature with conclusions regarding compliance.	12 months after date of coverage
Action Plan: Submit an action plan for complying with applicable temperature limits.	18 months after date of coverage
Initiate Actions: Initiate actions identified in the plan.	24 months after date of coverage
Complete Actions: Complete actions necessary to achieve compliance with effluent temperature limits.	36 months after date of coverage

B.4 Best Management Plan

Discharges covered in this appendix shall submit a report to the Department 18 months after date of coverage describing the effluent temperature and flow to the receiving water and potential source reductions or best management practices (BMP) that could be installed to reduce these temperature loadings. This may include modifications to the effluent flow, timing of discharge, alternative discharge locations, or changes in operation, among other things. Upon approval, the facility shall implement practices in the BMP plan.

APPENDIX C. TEMPERATURE REQUIREMENTS FOR OTHER DISCHARGES COVERED IN THIS GENERAL PERMIT

1. DISCHARGER APPLICABILITY CRITERIA

C.1 Facilities Covered by this Appendix

C.1.1 Discharges that directly enter into a low-dilution receiving waters where the stream flow to effluent flow ratio (Qs:Qe) is less than 30:1;

C.1.2 Discharges to inland lakes or harbors to the Great Lakes;

C.1.3 Discharges to surface waters listed on the 303(d) impaired waters list for temperature impairment;

C.l.4 Other similar discharges expressly required in writing by the Department at the time of permit coverage.

2. DISCHARGER REQUIREMENTS

Discharges covered in this appendix shall meet the requirements outlined in this section, including the effluent monitoring requirements specified in Table C.2. Samples taken in compliance with the monitoring requirements shall be taken at each outfall following treatment (if applicable) and prior to discharge to surface waters. The samples taken shall be representative of the discharge that consists solely of the effluent before mixing with any other water.

C.2 Limitations and Monitoring Requirements for Surface Water Discharges

Limitations for Surface Water Discharges		Monitoring Requirements	
Parameter	Daily Maximum	Sample Frequency[b,c]	Sample Type[a]
Temperature (°F)	--	Monthly	Grab

(a) A grab sample means a single sample taken at one moment of time. This sample should represent the highest effluent temperature known or expected to occur under normal operating conditions.

(b) Temperature monitoring may be reduced to annual sampling if authorized by the Department by letter; This monitoring frequency may be extended into subsequent permit terms.

(c) If authorized in writing by the Department, the facility may submit all monitoring data collected during the calendar year in an annual DMR or eDMR submittal to the Department. If a noncompliance event occurs during the calendar year, the permittee must notify the Department in accordance with the standard requirements specified in Section 5 of this permit.

C.3 Best Management Plan

Discharges covered in this appendix shall submit a report to the Department 18 months after date of coverage describing the effluent temperature and flow to the receiving water and potential source reductions or best management practices (BMP) that could be installed to reduce these temperature loadings. This may include modifications to the effluent flow, timing of discharge, alternative discharge locations, or changes in operation, among other things. Upon approval, the facility shall implement practices in the BMP plan.

APPENDIX D. PHOSPHORUS LIMITS ABSENT A U.S. EPA APPROVED TMDL

1. DISCHARGER APPLICABILITY CRITERIA

D.1 Facilities Covered by this Appendix

D.1.1 Discharges that use phosphorus-containing additives and discharge to a surface water listed on the 303(d) impaired waters list for phosphorus impairment absent a total maximum daily load (TMDL);

D.1.2 Discharges that use municipal water containing polyphosphate additives as its source water and discharge to a surface water listed on the 303(d) impaired waters list for phosphorus impairment absent a TMDL;

D.1.3 Discharges that operate a cooling tower or have other technology which could significantly concentrate phosphorus within the treatment process and discharge to a surface water listed on the 303(d) impaired waters list for phosphorus impairment absent a TMDL;

D.1.4 Other similar discharges expressly required in writing by the Department at the time of permit coverage.

2. DISCHARGER REQUIREMENTS

Discharges covered in this appendix shall meet the requirements outlined in this section, including the effluent limitations and monitoring requirements specified in Table D.2. Samples taken in compliance with the monitoring requirements shall be taken at each outfall following treatment (if applicable) and prior to discharge to surface waters. The samples taken shall be representative of the discharge that consists solely of the effluent before mixing with any other water.

D.2 Limitations and Monitoring Requirements for Surface Water Discharges

Limitations for Surface Water Discharges			Monitoring Requirements	
Parameter	Monthly Average	Six-Month Average	Sample Frequency[a,c, d]	Sample Type[b]
Total Phosphorus (mg/L)	See item D.2.1		Quarterly	Grab

(a) Quarterly sample frequency means monitoring four times per year; once anytime during each of the four annual quarters (Jan.-Feb.-Mar., Apr.-May-Jun., Jul.-Aug.-Sep., Oct.-Nov.-Dec.). If there is no discharge during a quarter, the permittee shall state this on the discharge monitoring report form.

(b) A grab sample means a single sample taken at one moment of time or a combination of several smaller samples of equal volume taken in less than a two-minute period. This sample should represent the highest effluent concentration known or expected to occur under normal operating conditions. If the outfall location is not accessible, the permittee may approximate effluent concentrations based on influent TP concentrations. This

estimation method may only be used for discharges that do not use phosphorus-containing additives or significantly concentrate phosphorus during the treatment process.

(c) If authorized in writing by the Department, the facility may submit all monitoring data collected during the calendar year in an annual DMR or eDMR submittal to the Department. If a noncompliance event occurs during the calendar year, the permittee must notify the Department in accordance with the standard requirements specified in Section 5 of this permit.

(d) If no noncompliance events occur in two years of permit coverage, phosphorus monitoring may be reduced to annual sampling if authorized by the Department by letter; This monitoring frequency may be extended into subsequent permit terms.

D.2.1 Phosphorus limits shall be set equal to the applicable phosphorus water quality criteria pursuant to s. NR 102.06, Wis. Adm. Code as described in sections D.2.1.1-D.2.1.6.

D.2.1.1 The six-month average effluent phosphorus limit shall be 0.1 mg/L and the monthly average effluent phosphorus limit shall be 0.3 mg/L for discharges to waters designated as rivers in s. NR 102.06(3)(a), Wis. Adm. Code.

D.2.1.2 The six-month average effluent phosphorus limit shall be 0.04 mg/L and the monthly average effluent phosphorus limit shall be 0.12 mg/L for discharges to waters designated as drainage lakes, seepage lakes or reservoirs that are not stratified (s. NR 102.06(4), Wis. Adm. Code).

D.2.1.3 The six-month average effluent phosphorus limit shall be 0.03 mg/L and the monthly average effluent phosphorus limit shall be 0.09 mg/L for discharges to waters designated as drainage lakes or reservoirs that are stratified (s. NR 102.06(4), Wis. Adm. Code).

D.2.1.4 The six-month average effluent phosphorus limit shall be 0.02 mg/L and the monthly average effluent phosphorus limit shall be 0.06 mg/L for discharges to waters designated as stratified, seepage lakes (s. NR 102.06(4), Wis. Adm. Code).

D.2.1.5 The six-month average effluent phosphorus limit shall be 0.015 mg/L and the monthly average effluent phosphorus limit shall be 0.045 mg/L for discharges to waters designated as stratified, two-story fishery lakes (s. NR 102.06(4), Wis. Adm. Code).

D.2.1.6 The six-month average effluent phosphorus limit shall be 0.075 mg/L and the monthly average effluent phosphorus limit shall be 0.225 mg/L for discharges to all waterbody types not specified above.

D.3 Compliance with Phosphorus Limitations

Compliance schedules may be granted to facilities that need time to achieve compliance with phosphorus limitations specified in Table D.2 and have been previously covered under WPDES General Permit WI-0044938. Compliance schedules for phosphorus limitations will likely be necessary given the stringency of the applicable limits. If existing permittees determine that phosphorus limits are not readily achievable, the permittee shall submit to the Department justification for the need of a compliance schedule with the Request for Coverage. Upon submittal and Department approval, the following compliance schedule will become effective.

D.3.1 Phosphorus Limits Compliance

Required Action	Date Due
Operational Evaluation Report: The permittee shall prepare and submit to the Department for approval an operational evaluation report. The report shall include an evaluation of collected effluent data, possible source reduction measures, operational improvements or other minor facility modifications that will optimize reductions in phosphorus discharges from the facility during the period prior to complying with final phosphorus water quality based effluent limits (WQBELs) and where possible, enable compliance with final phosphorus WQBELs by 36 months after the date of coverage. The report shall provide a plan and schedule for implementation of the measures, improvements, and modifications as soon as possible, but not later than 36 months after the date of coverage, and state whether the measures, improvements and modifications will enable compliance with final phosphorus WQBELs. Regardless of whether they are expected to result in compliance, the permittee shall implement the measures, improvements, and modifications in accordance with the plan and schedule specified in the operational evaluation report. If the operational evaluation report concludes that the facility can achieve final phosphorus WQBELs using the existing cooling system with only source reduction measures, operational improvements and minor facility modifications, the permittee shall comply with the final phosphorus WQBEL by 36 months after the date of coverage and is not required to comply with the milestones identified below for years 3 through 9 of this compliance schedule ('Preliminary Compliance Alternatives Plan', 'Final Compliance Alternatives Plan', 'Treatment Plant Upgrade to Meet WQBELs', 'Final Plans and Specifications, 'Complete Construction, 'Achieve Compliance').	12 months after date of coverage
Study of Feasible Alternatives: If the Operational Evaluation Report concludes that the permittee cannot achieve final phosphorus WQBELs with source reduction measures, operational improvements and other minor facility modifications, the permittee shall initiate a study of feasible alternatives for meeting final phosphorus WQBELs and comply with the remaining required actions of this schedule of compliance. If the Department disagrees with the conclusion of the report, and determines that the permittee can achieve final phosphorus WQBELs using the existing system with only source reduction measures, operational improvements, and minor facility modifications, the Department may revoke coverage under the general permit and issue an individual permit to include an implementation schedule for achieving the final	12 months after date of coverage

phosphorus WQBELs sooner than 108 months after the date of coverage.	
Compliance Alternatives, Source Reduction, Improvements and Modifications Status: The permittee shall submit a 'Compliance Alternatives, Source Reduction, Operational Improvements and Minor Facility Modification' status report to the Department. The report shall provide an update on the permittee's: (1) progress implementing source reduction measures, operational improvements and minor facility modifications to optimize reductions in phosphorus discharges and, to the extent that such measures, improvements and modifications will not enable compliance with the WQBELs, (2) status evaluating feasible alternatives for meeting phosphorus WQBELs.	24 months after date of coverage
Preliminary Compliance Alternatives Plan: The permittee shall submit a preliminary compliance alternatives plan to the Department. If the plan concludes upgrading of the permittee's facility is necessary to achieve final phosphorus WQBELs, the submittal shall include a preliminary engineering design report. If the plan concludes Adaptive Management will be used, the submittal shall include a completed Watershed Adaptive Management Request form (Form 3200-139) without the Adaptive Management Plan. If water quality trading will be undertaken, the plan must state that trading will be pursued. If adaptive management or water quality trading is pursued, coverage under this general permit will be revoked and the WPDES permit holder will be covered under an individual variance.	36 months after date of coverage
Final Compliance Alternatives Plan: The permittee shall submit a Final Compliance Alternatives Plan to the Department. If the plan concludes upgrading of the permittee's facility is necessary to meet final phosphorus WQBELs, the submittal shall include a final engineering design report addressing the treatment plant upgrades, and a facility plan if required pursuant to ch. NR 108.02(13), Wis. Adm. Code. If the plan concludes Adaptive Management will be implemented, the submittal shall include a completed Watershed Adaptive Management Request form (Form 3200-139) and an engineering report addressing any treatment system upgrades necessary to meet interim limits pursuant to s. NR 217.18, Wis. Adm. Code. If the plan concludes water quality trading will be used, the submittal shall identify potential trading partners.	48 months after date of coverage
Progress Report on Plans & Specifications: Submit progress report regarding the progress of preparing final plans and specifications.	60 months after date of coverage
Final Plans and Specifications: The permittee shall submit final construction plans to the Department for approval pursuant to s. 281.41, Wis. Stats., specifying treatment plant upgrades that must be constructed to achieve compliance with final phosphorus WQBELs, and a schedule for completing construction of the upgrades by the complete construction date specified in this table, below. (Note: Permit modification, revocation and reissuance is subject to s. 283.53(2), Wis. Stats.)	72 months after date of coverage

Treatment Plant Upgrade to Meet WQBELs: The permittee shall initiate construction of the upgrades. The permittee shall obtain approval of the final construction plans and schedule from the Department pursuant to s. 281.41 Wis. Stats. Upon approval of the final construction plans and schedule by the Department pursuant to s. 281.41, Wis. Stats., the permittee shall construct the treatment plant upgrades in accordance with the approved plans and specifications.	76 months after date of coverage
Construction Upgrade Progress Report: The permittee shall submit a progress report on construction upgrades.	87 months after date of coverage
Complete Construction: The permittee shall complete construction of wastewater treatment system upgrades.	108 months after date of coverage
Achieve Compliance: The permittee shall achieve compliance with final phosphorus WQBELs.	108 months after date of coverage

D.4. New or Expanding Discharges

A permittee covered under this appendix shall request coverage under an individual WPDES permit to initiate a new discharge or significantly increase TP loadings or concentrations to a phosphorus impaired surface water. The discharge cannot occur prior to coverage under an individual WPDES permit.

APPENDIX E. PHOSPHORUS OR TSS LIMITS WITHIN U.S. EPA APPROVED TMDL WATERSHEDS

1. DISCHARGER APPLICABILITY CRITERIA

E.1 Facilities Covered by this Appendix

E.1.1 Discharges within a U.S. EPA approved TMDL watershed where NCCW general permit discharges are covered by a lumped allocation for either phosphorus or total suspended solids (TSS);

E.1.2 Other similar discharges expressly required in writing by the Department at the time of permit coverage.

2. DISCHARGER REQUIREMENTS

Discharges covered in this appendix shall meet the requirements outlined in this section, including the effluent limitations and monitoring requirements specified in Table E.2. Samples taken in compliance with the monitoring requirements shall be taken at each outfall following treatment (if applicable) and prior to discharge to surface waters. The samples taken shall be representative of the discharge that consists solely of the effluent before mixing with any other water.

E.2 Limitations and Monitoring Requirements for Surface Water Discharges

Parameter	Daily Maximum Limit	Monthly Average Limit	Sample Frequency[a,c,d]	Sample Type[b]
Total Suspended Solids (mg/L) [e]	40 mg/L	40 mg/L	Quarterly	Grab
Total Phosphorus (mg/L)	--	--	Quarterly	Grab

(a) Quarterly sample frequency means monitoring four times per year; once anytime during each of the four annual quarters (Jan.-Feb.-Mar., Apr.-May-Jun., Jul.-Aug.-Sep., Oct.-Nov.-Dec.). If there is no discharge during a quarter, the permittee shall state this on the discharge monitoring report form.

(b) A grab sample means a single sample taken at one moment of time or a combination of several smaller samples of equal volume taken in less than a two-minute period. This sample should represent the highest effluent concentration known or expected to occur under normal operating conditions. If the outfall location is not accessible, the permittee may approximate effluent concentrations based on influent TP and TSS concentrations. This estimation method may only be used for discharges that do not use phosphorus-containing additives or significantly concentrate phosphorus or TSS during the treatment process.

(c) If authorized in writing by the Department, the facility may submit all monitoring data collected during the calendar year in an annual DMR or eDMR submittal to the Department. If a noncompliance event occurs during the calendar year, the permittee must notify the Department in accordance with the standard requirements specified in Section 5 of this permit.

(d) If no noncompliance events occur in two years of permit coverage, phosphorus monitoring may be reduced to annual sampling if authorized by the Department by letter; This monitoring frequency may be extended into subsequent permit terms.

(e) To demonstrate compliance with TSS limits, the facility may gather TSS data in the influent to demonstrate that the discharge is not significantly increasing the amount of TSS in the effluent. A permit violation will not occur in these cases.

E.3 Optimization

Discharges covered in this appendix shall submit a report to the Department 36 months after date of coverage describing potential source reductions or best management practices (BMP) that could be installed to reduce phosphorus and TSS loadings. This may include modifications to the effluent flow, timing of discharge, alternative discharge locations, or changes in operation, among other things. Upon approval, the facility shall implement practices in the BMP plan.

E.4 New or Expanding Discharges

A permittee covered under this appendix shall notify the Department of the intent to initiate a new discharge or significantly increase TSS and TP loadings or concentrations. Upon written authorization, initiation of the new or increased discharge may occur so long as the other permit requirements in this permit are met.

Note: Some discharges may need to seek coverage under an individual WPDES permit prior to discharge due to a lack of available allocation.

APPENDIX F. CHLORINE LIMITATIONS

1. DISCHARGER APPLICABILITY CRITERIA

F.1 Facilities Covered by this Appendix

F.1.1 Discharges that add chlorine for the purposes of disinfection and discharge to a surface water or to a storm sewer that enters a surface water less than 1900 ft from the discharge point;

F.1.2 Discharges that use municipal water containing chlorine additives as its source water and discharge to a surface water or to a storm sewer that enters a surface water less than 1900 ft from the discharge point;

F.1.3 Other similar discharges expressly identified in writing by the Department at the time of permit coverage.

2. DISCHARGER REQUIREMENTS

Discharges covered in this appendix shall meet the requirements outlined in this section, including the effluent limitations and monitoring requirements specified in Table F.2. Samples taken in compliance with the monitoring requirements shall be taken at each outfall following treatment (if applicable) and prior to discharge to surface waters. The samples taken shall be representative of the discharge that consists solely of the effluent before mixing with any other water.

F.2. Limitations and Monitoring Requirements for Surface Water Discharges

Limitations for Surface Water Discharges			Monitoring Requirements	
Parameter	Daily Maximum	Monthly Average	Sample Frequency[a,d,e]	Sample Type[c]
Chlorine, Total Residual[b]	38 µg/L[e]	38 µg/L[e]	Quarterly	Grab

(a) Quarterly sample frequency means monitoring four times per year; once anytime during each of the four annual quarters (Jan.-Feb.-Mar., Apr.-May-Jun., Jul.-Aug.-Sep., Oct.-Nov.-Dec.). If there is no discharge during a quarter, the permittee shall state this on the discharge monitoring report form.

(b) Test methods for total residual chlorine, approved in ch. NR 219 - Table B, Wis. Adm. Code, normally achieve a limit of detection of about 20 to 50 micrograms per liter and a limit of quantitation of about 100 micrograms per liter. Reporting of test results and compliance with effluent limitations for chlorine residual and total residual halogens shall be as follows:

- Sample results which show no detectable levels are in compliance with the limit. These test results shall be reported on Wastewater Discharge Monitoring Report forms as "< 100 µg/L". (Note: 0.1 mg/L converts to 100 µg/L)
- Samples showing detectable traces of chlorine are in compliance if measured at less than 100 µg/L, unless there is a consistent pattern of detectable values in this range. These values shall also be reported on Wastewater Discharge Monitoring Report forms as "<100 µg/L." The facility operating staff shall record actual readings on logs maintained at the plant, shall take action to

determine the reliability of detected results (such as re-sampling and/or calculating dosages), and shall adjust the chemical feed system if necessary to reduce the chances of detects.

- Samples showing detectable levels greater than 100 µg/L shall be considered as exceedances, and shall be reported as measured.
- To calculate average or mass discharge values, a "0" (zero) may be substituted for any test result less than 100 µg/L. Calculated values shall then be compared directly to the average or mass limitations to determine compliance.

(c) A grab sample means a single sample taken at one moment of time. This sample should represent the highest effluent concentration known or expected to occur under normal operating conditions. If the outfall location is not accessible, the permittee may approximate effluent concentrations based on influent chlorine concentrations. This estimation method may only be used for discharges that do not directly add chlorine or significantly concentrate chlorine during the treatment process.

(d) If authorized in writing by the Department, the facility may submit all monitoring data collected during the calendar year in an annual DMR or eDMR submittal to the Department. If a noncompliance event occurs during the calendar year, the permittee must notify the Department in accordance with the standard requirements specified in Section 5 of this permit.

(e) If no noncompliance events occur in two years of permit coverage, chlorine monitoring may be reduced to annual sampling if authorized by the Department by letter; This monitoring frequency may be extended into subsequent permit terms.

F.3 Compliance with Chlorine Limitations

Compliance schedules may be granted to facilities that need time to achieve compliance with chlorine limitations specified in Table F.2, and have been previously covered under WPDES General Permit WI-0044938. If existing permittees determine that chlorine limits are not readily achievable, the permittee shall submit to the Department justification for the need of a compliance schedule with the Request for Coverage. Upon submittal, the following compliance schedule will become effective.

F.3.1 Chlorine Limits Compliance

Required Action	**Due Date**
Report on Effluent Discharges: Submit a report on effluent chlorine with conclusions regarding compliance.	12 months after date of coverage
Action Plan: Submit an action plan for complying with applicable chlorine limits.	18 months after date of coverage
Initiate Actions: Initiate actions identified in the plan.	24 months after date of coverage
Complete Actions: Complete actions necessary to achieve compliance with effluent chlorine limits.	36 months after date of coverage

APPENDIX G. ARSENIC REQUIREMENTS

1. DISCHARGER APPLICABILITY CRITERIA

G.1 Facilities Covered by this Appendix

G.1.1 Discharges of arsenic directly to Lake Michigan or a harbor to Lake Michigan;

G.1.3 Other similar discharges expressly required in writing by the Department at the time of permit coverage.

2. DISCHARGER REQUIREMENTS

Discharges covered in this appendix shall meet the requirements outlined in this section, including the effluent monitoring requirements specified in Table G.2. Samples taken in compliance with the monitoring requirements shall be taken at each outfall following treatment (if applicable) and prior to discharge to surface waters. The samples taken shall be representative of the discharge that consists solely of the effluent before mixing with any other water.

G.2. Monitoring Requirements for Surface Water Discharges

Limitations for Surface Water Discharges		Monitoring Requirements	
Parameter	Limitation	Sample Frequency[a,d,e]	Sample Type[c]
Arsenic, Total Recoverable [b]	-	Quarterly	Grab

(a) Quarterly sample frequency means monitoring four times per year; once anytime during each of the four annual quarters (Jan.-Feb.-Mar., Apr.-May-Jun., Jul.-Aug.-Sep., Oct.-Nov.-Dec.). If there is no discharge during a quarter, the permittee shall state this on the discharge monitoring report form.

(b) Samples shall be analyzed using a method that enables the laboratory to quantitate effluent 'Arsenic, Total Recoverable'. If total recoverable arsenic cannot be quantitated by any of the methods available in NR 219, Wis. Adm. Code, then the method with the lowest level of detection shall be selected.

(c) A grab sample means a single sample taken at one moment of time. This sample should represent the highest effluent concentration known or expected to occur under normal operating conditions. If the outfall location is not accessible, the permittee may approximate effluent concentrations based on influent arsenic concentrations. This estimation method may only be used for discharges that do not directly add arsenic or significantly concentrate arsenic during the treatment process.

(d) If authorized in writing by the Department, the facility may submit all monitoring data collected during the calendar year in an annual DMR or eDMR submittal to the Department. If a noncompliance event occurs during the calendar year, the permittee must notify the Department in accordance with the standard requirements specified in Section 5 of this permit.

(e) If no noncompliance events occur in two years of permit coverage, arsenic monitoring may be reduced to annual sampling if authorized by the Department by letter; This monitoring frequency may be extended into subsequent permit terms.

G.3 Optimization

Discharges covered in this appendix shall submit a report to the Department 36 months after date of coverage describing the effluent arsenic and flow to the receiving water and potential source reductions or best management practices (BMP) that could be installed to reduce these arsenic loadings. This may include modifications to the effluent flow, timing of discharge, alternative discharge locations, or changes in operation, among other things. Upon approval, the facility shall implement practices in the BMP plan.