

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

NOTICE OF FINAL DETERMINATION TO REISSUE A WISCONSIN POLLUTANT DISCHARGE ELIMINATION SYSTEM (WPDES) GENERAL PERMIT No. WI-0046507-06-0

General Permit Name: Noncontact cooling water or condensate and boiler water

Receiving Water And Location: Surface waters and groundwaters in Wisconsin.

Brief Description of Facilities Covered under General Permit: The general permit is intended to cover wastewater discharges from noncontact cooling waters and other similar discharges such as air compressors, welders, etc. to surface waters or groundwaters in the state of Wisconsin. Approximately 330 noncontact cooling water facilities were covered under the previous permit.

Permit Drafter's Name, Address and Phone: Amanda Minks, 101 S. Webster St. PO Box 7921, Madison, WI, 53707-7921, (608) 264-9223

Date Permit Signed/Issued: June 28, 2017 (Typo Corrected Version Signed July 27, 2017)

Date of Effectiveness: October 1, 2017

Date of Expiration: September 30, 2022

Following the public notice period the Department has made a final determination to reissue the Noncontact Cooling Water WPDES General Permit. The information from the WPDES permit file, comments received on the proposed permit and applicable Wis. Adm. Codes were used as a basis for this final determination.

The Department has the authority to issue, modify, suspend, revoke and reissue or terminate WPDES permits and to establish effluent limitations and permit conditions under ch. 283, Wis. Stats.

The following is a summary of significant comments and any significant changes which have been made in the terms and conditions set forth in the draft permit. Corrections to typographical errors are listed at the end of this document. These corrections were made in July 2017 and the general permit was then re-published on the DNR web site.

Changes Initiated by the Department:

Clarification was added to Section 5 of the permit to help clarify the permitting process to permittees regarding the process to request coverage under this general permit, transfer coverage, and terminate coverage. See standard requirements 5.2-5.7.

Clarification was added to Section 5 of the permit to inform permittees that site-specific data gathered during this permit term will be used to help inform future permitting decisions. This may impact future coverage under the noncontact cooling water general permit. See standard requirement 5.24.

A monthly average TSS limit equal to 40 mg/L limit was added to Appendix E of the permit. This was added for consistency with the TSS limits specified in Table 3.1. This limit is needed to comply with 40 CFR 122.45(d), and did not increase the restrictiveness of the TSS limitations in question.

Section 2.6.1 was modified to inform permittees that where reserve capacity is not present in the TMDL to absorb the new discharge, the permittee will need to seek coverage under an individual WPDES permit.

Section 1.2.9 was clarified that adverse effects to federally-listed endangered and threatened species under the Endangered Species Act includes causing an incidental take of these species.

Comments Received from the Applicant, Individuals or Groups

Comment: The Probst Group provided comment that insufficient notice was given to the current NCCW general permit holder.

Department Response: Thank you for your comment. In 2015, the Department conducted an intensive effort to update its database of NCCW general permit holders. This effort included several letters and emails to the authorized representative and facility operators on file, and follow-up phone conversations where needed. DNR databases were updated as a result of this outreach effort. The Department followed standard public noticing procedures for the NCCW permit. The permit was noticed for 30 days, was published in both the Wisconsin State Journal and Milwaukee Journal Sentinel, and was posted online in the permit notice page. Additionally, an email was sent to all authorized representative and facility operators for NCCW permit holders within the DNR database to inform them of the public comment opportunity. If for some reason, facilities did not receive this email it may be due to the email being filtered to a junk folder, a failure to the permittee responding to the 2015 effort to improve DNR databases, or staffing changes at the facility in question. Please feel free to work with the regional DNR general permit conveyers to address this issue, or contact Trevor Moen at Trevor.Moen@wisconsin.gov.

Comment: The Probst Group and WMC provided comment regarding the proposed issuance and expiration date of the permit.

Department Response: This was an error made in the public noticed permit. The proposed permit effective date has been modified to October 1, 2017. This will provide time for applicants to submit updated NCCW requests for coverage, or requests for individual WPDES permit coverage if the facility can no longer receive coverage under the NCCW general permit given the revised eligibility conditions.

Comment: The Probst Group commented that they would like to include ABI Blue Pond Dye and ABI Bio Boost Phosphate Cleaner to the additive list in Table 2.1.2.

Department Response: The Department reached out to all NCCW general permit holders within DNR's database, as refined in the 2015 outreach effort, that has been approved to use additives to gather SDS sheets for these additives. Whenever ecotoxicity data was provided, a secondary use value was calculated and included in Table 2.1.2. Table 2.1.2 is not meant to be a comprehensive list of all additives that can be used. Other additives may be approved on a case-by-case basis as stated in Section 2.1.3 of the permit. Table 2.1.2 will be updated at the time of permit reissuance to reflect new additives that were approved for use during this permit term. The Department did receive the supplemental information provided by the Probst Group for these additives. However, ecotoxicity data was not provided so it is not possible to calculate a secondary use value or include them in Table 2.1.2 at this time. No changes were made as a result of this comment.

Comment: The Probst Group commented that the term "sector" may be confused with business sector pursuant to NR 221 – NR 297, Wis. Adm. Code.

Department Response: The Department changed the terminology to "discharger-specific" instead of "sector-specific" requirements to avoid this confusion.

Comment: The Probst Group commented that site-specific coverage letters should be generated for facilities to clearly indicate which appendices and requirements they are subject to.

Department Response: The Department concurs with this comment, and has drafted standard templates for use to generate these site-specific coverage letters.

Comment: The Probst Group commented that Appendix A should be clarified that limited aquatic life (LAL) systems does not include wastewater effluent channels.

Department Response: The Department concurs with this comment, and has made this distinction in the public noticed factsheet. For clarity, the Department has also made this distinction in Appendix A of the final permit.

Comment: WMC and WE Energies provided comment that the surface water monitoring requirements in Table 3.1 are too onerous and that the Department should consider maintaining the previous permit

language that only discharges of boiler blowdown or boiler bleed-off should be subject to TSS and pH monitoring.

Department Response: Pursuant to s. NR 205.066, Wis. Adm. Code, the department shall on a case-by-case basis include the monitoring frequency to be required for effluent limitations in a permit. Many NCCW facilities rely on municipal water for cooling. TSS concentrations in municipal water are not expected to exceed the TSS limit for single pass-through NCCW systems. However, multiple-loop NCCW systems can concentrate TSS in the influent, thereby leading to an exceedance in TSS WQBEL. It is also noted that comments received by WE Energies also alluded to the potential that some NCCW discharges may be exceeding the TSS WQBEL that previously were not required for TSS. The Department agrees with the commenter that in some cases TSS concentrations will be far below the TSS WQBEL. Footnote (g) in Table 3-1 was modified to say that in such cases TSS monitoring may be suspended all together once sufficient representative data is available to make this site-specific determination. The Department finds that the same general principles apply for pH monitoring. Many NCCW discharges use acids, basis, and non-biocide additives. Monitoring for pH is the only way to ensure that these discharges are not causing or contributing to a water quality standards violation. Again, pH monitoring may be reduce or suspended once sufficient representative data is available to make this site-specific determination.

Comment: WMC and WE Energies provided comment that the groundwater monitoring requirements in Table 4.1 are too onerous and that the Department should consider removing TSS monitoring for groundwater discharges.

Department Response: After reviewing available data for NCCW discharges, the potential for NCCW to cause or contribute to groundwater standards, and WPDES permitting requirements in other general permits, the Department concurs that TSS and ammonia monitoring are not required. There is no potential for NCCW discharges to cause TSS/ammonia concerns in groundwater. However, pH monitoring was added to this permit as pH changes can have significant impact on redox reactions within the soil structure and can impact metal sequestration, damage soil structure, and have other deleterious impacts. Subsection (c) in Table 4-1 was modified to reflect these changes.

Comment: WMC commented that the Department should consider better aligning section 1.2.12 of the draft permit to language in the federal regulations (40 CFR 125.91(a) and (b)).

Department Response: One purpose of section 1.2.12 is to limit coverage under the general permit to those facilities that are not subject to the federal 316(b) standards under 40 CFR 122.21 (r) and 40 CFR 125.80-98. It achieves this by mirroring the applicability criteria in 40 CFR 125.91 (a). Section 1.2.12.1 contains the criteria in 40 CFR 125.91 (a) (1) and (2). The criterion in 40 CFR 125.91 (a) (3) is implicitly included in the general permit, as only point sources may be covered by a WPDES permit. The language in 40 CFR 125.91 (b) simply clarifies what constitutes “use of cooling water,” and this may be used in determining applicability of this general permit.

Section 1.2.12 also contains criteria in addition to those found in 40 CFR 125.91, which are included in order to ensure that any facilities covered under the general permit operate intakes whose location, design, construction, and capacity represent the best technology available (BTA) for minimizing adverse environmental impacts, pursuant to Wis. Stat. 283.31 (6). BTA determinations for facilities not subject to the federal regulations are made on a case-by-case basis under 283.31 (6), Wis. Stats. The nature of the general permit makes case-by-case determinations problematic. The criteria in section 1.2.12 were included as a means of determining whether facilities’ intakes represent the BTA for minimizing adverse environmental impact or if further case-by-case analysis is warranted through issuance of an individual permit.

Comment: WMC commented that the Department should consider additional flexibility in section 1.2.12 by including other alternatives. Also, the Department cannot arbitrarily prohibit a facility from withdrawing water during certain time periods such as spawning periods (see section 1.2.12.3.3).

Department Response: By restricting the applicability of the draft permit, the department does not prohibit facilities from utilizing other technologies as BTA or from withdrawing water during certain times of the year. Such facilities can transition to an individual permit, where BTA determinations can be made on a site-specific, case-by-case basis, allowing more flexibility. The general permit provides coverage to those facilities whose intake structures clearly represent the best technology available, as demonstrated by their satisfaction of the criteria in 1.2.12. While the Department recognizes the difficulties associated with transitioning from a general to individual permit, the broad scope of the general permit warrants a conservative approach for determining coverage.

Comment: WMC commented that the Capacity Utilization Rate is related to the annual average electrical output of a generating unit and should not be misconstrued as a provision to define the timing of when pumps are utilized for cooling water withdrawal.

Department Response: The Department recognizes that capacity utilization rate, in a colloquial sense, is calculated based on electrical output, and this draft permit does not define capacity utilization rate in any other sense. However, continuous operation of pumps at a facility, even despite significant reduction in capacity utilization rate, does not result in any reduction in impingement or entrainment rates. In making a BTA determination under 283.31 (6), Wis. Stats., it is logical for the state to consider rates and times of water withdrawal relative to periods of peak abundance of fish, larvae, and eggs in its best professional judgment.

Comment: WE Energies commented that the proposed GP potentially applies to all discharges of air conditioning condensate. The Department should clarify if this is its intention, or provide additional guidance regarding permit applicability. In addition, more information is requested to justify permit coverage of air conditioner condensate water discharges.

Department Response: Section 1.1.1 of the general permit clearly indicates noncontact condensates. Sub C of the public noticed factsheet states that “discharges of condensates include air conditioner condensate” may be covered under this general permit. This permit language is consistent with permitting language of the previous NCCW general permit. The Department has the obligation to regulate discharges to waters of the state to ensure that they do not cause or contribute to a water quality standards violation. Discharges of air conditioner condensate may seek coverage under this general permit, or may seek an individual WPDES permit. No changes were made as a result of this comment.

Comment: WE Energies commented that estimates of additives should be accepted instead of precise measurements, particularly for sources that do not directly manage additives.

Department Response: Section 2.1 is designed to regulate additives used by the NCCW discharger, not within the municipal water supply. Clarification was added to the permit to avoid this confusion. Additionally, Section 2.1.4.2 was modified to allow facilities covered by this general permit to report the quantity of the pollutant added to the effluent or the quantity of the pollutant measured in the effluent stream to provide additional flexibility for these dischargers.

Comment: WE Energies also provided comment on typographical errors made to the public noticed permit. These errors were corrected in the final permit.

Typographical Errors Corrected in General Permit (July 2017):

1. Typo: Subsection 2.1 Surface Water Additives (page 5) – The first sentence now refers to ‘non-biocides’ instead of biocides. Also, the last sentence now references 2.1.4 instead of 2.14.

2.Clarification: Subsection 2.2 Reporting Monitoring Results (page 8) – This paragraph has been clarified as follows: “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...”

3.Typeo: Subsection 2.6 Impaired Waters & TMDL Requirements (page 9) – The ‘Note’ now references Appendices D-E instead of D-F.

4.Typeo: Section 3 Monitoring Requirements and Limitations (page 9) – The second sentence has been corrected as follows: “Samples taken in compliance with the monitoring requirements specified in Table 3.1 ~~and~~ shall be taken at each outfall...”

5.Typeo: Table 3.1 Limitations and Monitoring Requirements (page 10) – The Oil and Grease superscripts (c,g) have been removed because they do not pertain to this parameter.

6.Clarification: Tables 3.1 and 4.1 (pages 10 & 11) – These tables include a monthly requirement for Water Treatment Additives with a sample type of ‘Record Usage’. The sample type has been clarified as follows: ‘Record Usage in a Daily Log’.

7.Clarification: Table 3.1 (page 10) – Footnote “(d)” has been clarified as follows: “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.” (This is the language used in Appendices A-G.)

8.Clarification: Table 3.1 (page 10) – Footnote “(e)” has been clarified by adding the following: “A required change in sample frequency will be transmitted by letter from the Department to the permittee.”

9.Typeo: Table 3.1 (page 11) – Footnote “(f)” now references Part 6 instead of Part 5.

10.Clarification: Standard Requirement 5.4 Reporting Monitoring Results (page 12) – The ‘Reporting Monitoring Results’ requirements have been replaced with ‘See Section 2.2 Reporting Monitoring Results’ to eliminate redundancy.

11.Clarification: Standard Requirement 5.4 ‘Note’ (page 12) – The ‘Note’ has been revised to state “The Department requires monitoring results to be reported on an eDMR.” Also, the note has been updated with the new signatory requirements.

12.Typeo: Standard Requirement 5.17 Reporting of Monitoring Results (page 16) – Subsection 5.17.2 has been corrected as follows: “For example, if a substance is not detected ~~as~~ at a detection limit of 0.1 mg/L...”

13.Typeo: Appendix A - Temperature, Table A.2 (page 19) – The ‘Sample Type’ superscript has been changed from “(a)” to “(b)”.

14.Typeo: Appendix B - Temperature, Table B.2 (page 21) – The ‘Sample Type’ superscript has been changed from “(a)” to “(b)”.

15.Typeo: Appendix F – Chlorine, Table F.2 (page 32) – The ‘Daily Max’ superscript is missing a parentheses “(e)”. This has been corrected.

17.Typeo: Appendix G – Arsenic, Table G.2 (page 34) – The parameter ‘Arsenic, Total Residual’ has been changed to ‘Arsenic, Total Recoverable’. Also, arsenic has a superscript “(b)”, but the footnote for “(b)” is missing. Footnote ‘b’ has been added.

Typographical Errors Corrected in Fact Sheet (July 2017):

- 1)Page 5 – Water Treatment Additives: This subsection now refers to section 2.1.4 instead of 2.14.
- 2)Page 6 – Monitoring Reporting: This subsection has been revised to only allow the permittee to submit all data under an Annual Report “if authorized in writing by the Department”. Also, the last 2 sentences have been struck that state there is no eDMR system available.
- 3)Page 8 – Table 3.1 (oil & grease): The superscripts for oil & grease (c,g) have been removed.
- 4)Page 9 – Table 3.1 (Additives): The Sample Type has been revised to include “Record Usage in a Daily Log”
- 5)Page 9 – Table 3.1 (Footnote d): This footnote has been revised to include the statement “If authorized in writing by the Department the facility may submit all monitoring datain an Annual Report”
- 6)Page 9 – Table 3.1 (Footnote e): The footnote now includes: “A required change in Sample Frequency will be transmitted by letter from the Department to the permittee.”
- 7)Page 9 – Table 3.1 (Footnote f): The reference to Part 5 has been changed to Part 6.
- 8)Page 11 – Oil and Grease: This subsection now includes: “A required change in Sample Frequency will be transmitted by letter from the Department to the permittee.”
- 9)Page 12 – Table 4.1 (Additives): The Sample Type has been revised to include: “Record Usage in a Daily Log”
- 10)Page 18: This page has been revised by striking the sentence that states the Department is working to convert from paper DMRs to electronic submittals.