ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCES BOARD

REPEALING, RENUMBERING AND AMENDING, AMENDING, REPEALING AND RECREATING AND CREATING RULES

The statement of scope for this rule, WT-31-10 was published in Register No. 662 on February 28, 2011.

The Wisconsin Natural Resources Board proposes an order to repeal NR 106.145 (2) (b) 2.; to consolidate, renumber and amend NR 106.145 (2) (b) (intro.) and 1., to amend NR 106.145 (1) (b), and (2) (title); to repeal and recreate NR 106.06 (2) (a), (b), (6) and 106.10; and to create NR 106.03 (4m), (11m), and 106.06 (2) (br); relating to calculating water quality based effluent limitations for point source discharges to surface waters.

WT-31-10

Analysis Prepared by the Department of Natural Resources

1. Statutes interpreted: ss. 283.01, 283.11 (2), 283.13 (5), 283.31, Stats .

2. Statutory authority: ss. 227.11 (2) (a), 283.11 (2), 283.13 (5) and 283.31 (3), (4), Stats.

3. Explanation of agency authority: Chapter 283, Stats., grants authority to the department to establish, administer and maintain a Wisconsin Pollutant Discharge Elimination System (WPDES) Permit Program consistent with the requirements of the federal water pollution control act of 1972, commonly known as the Clean Water Act, and amendments to the act. Section 283.11 requires that rules promulgated by the department as they relate to point source discharges must comply with the Clean Water Act and regulations adopted under that act. Section 283.13 (5), Stats., authorizes the department to establish more stringent water quality based effluent limitations (WQBELs) and to require compliance with such limitations if these limitations are necessary to comply with any state or federal law, rule or regulation. Section 283.31(3), and (4), Stats., provides authority to issue permits that require compliance with effluent limitations and standards for point source discharges to surface waters and any more stringent limitations needed to comply with state or federal water quality standards or any applicable federal law or regulation. The department also has general authority to promulgate rules under s. 227.11 (2) (a), Stats., that interpret the specific statutory authority granted in ch. 283, Stats.

4. Related statute or rule:

These rule changes relate directly to the WPDES Permit program and the regulation of wastewater discharges. Chapter NR 106, Wis. Adm, Code, contains the procedures used by the Bureau of Water Quality to calculate water quality based effluent limitations for WPDES permits issued to point source discharges to surface waters under ch. 283, Stats. Related statutes and rules include: s. 281.15, Stats., which authorizes the department to promulgate water quality standards for waters of the state. Water quality standards for surface waters are set in chs. NR 102 to 105, Wis. Adm. Code.

5. Plain language analysis:

The primary purpose of these proposed rule changes to ch. NR 106, Wis. Adm. Code, is to be consistent with federal requirements for calculating and implementing water quality based effluent limitations for point source discharges to surface waters included in WPDES Permits.

In a letter dated July 18, 2011, U.S. Environmental Protection Agency (EPA) identified 75 potential issues or deficiencies in Wisconsin's statutory and regulatory authority for the WPDES Permit Program. EPA directed the department to either make rule changes to address these inconsistencies or deficiencies or obtain a statement from the Attorney General's Office verifying that the existing rules are consistent with federal regulations. The proposed rules address four of the 75 issues identified in EPA's July 18, 2011, letter.

In addition to making some minor clarifications and cross-referencing corrections to the Administrative Code for uniformity, these proposed rule changes will:

• Revise s. NR 106.06(2) to phase out (with some exceptions) mixing zone allowances for discharges of bioaccumulative chemicals of concern (BCCs) in the Great Lakes system. While Wisconsin is already adhering to the requirements of the federal Great Lakes Water Quality Initiative (GLI), the proposed rules formally adopt the GLI requirements. When Wisconsin last made changes to NR 106, a footnote in the rule indicated that such changes would be promulgated.

• Modify s. NR 106.06(6) provisions that regulate pollutant discharges when a pollutant is present in the intake water used as the water supply for industrial and municipal dischargers. The proposed rules adopt the federal requirements for establishing effluent limitations.

• Remove the exemption from regulation in s. NR 106.10(1) and (2) for noncontact cooling water (NCCW) containing chlorine or other chemical additives present at levels consistent with those in public water supplies, as required by a Dane County Circuit Court Stipulation and Order in Case No. 12-CV-0569, Midwest Environmental Defense Center v. WDNR, et. al. (March 2, 2012) and federal regulations.

• Remove the special definition of "representative data" for purposes of determining reasonable potential to exceed effluent limitations for mercury in s. NR 106.145(1) and (2), as required by a Dane County Circuit Court Order in Case No. 12-CV-3654, Midwest Environmental Defense Center v. WDNR, (July 1, 1014) and federal regulations.

6. Summary and comparison with existing and proposed federal regulations:

The table below sets forth the sections of ch. NR 106 that the department is proposing to revise, the issue number in EPA's July 18, 2011, letter that identifies the need for the proposed revision, and the issue and corresponding federal regulation that the department has considered in proposing these rules:

Wis. Adm. Code Section	EPA Issue Number	Issue	Federal Code Section
106.06(2)	71	BCC Mixing Zone Phase-outs	40 C.F.R. Part 132, Appendix F, Procedure 3, paragraph C (Mixing Zones for Bioaccumulative Chemicals of Concern (BCCs))
106.06(6)			
106.03(11m)	10	Pollutants in Intake Water	40 C.F.R. 132.6, Appendix F, Procedure 5, paragraphs D and E (Consideration of Intake Pollutants)
106.10(1) & (2)			
	17	Non-contact Cooling Water Exemption	40 C.F.R. 122.44(d)(1)(i) (Requiring WQBELs for all pollutants which cause or have the reasonable potential to cause or contribute to an excursion above any state water quality standard)
106.145(1) & (2)	8	Mercury Reasonable Potential Determination	40 C.F.R. Part 132, Appendix F, Procedure 5 (Reasonable potential determination procedures)

In 1995, EPA issued Final Water Quality Guidance for the Great Lakes System. The federal Guidance conforms with key treaty provisions agreed to by the United States and Canada in the Great Lakes Water Quality Agreement, a binational agreement establishing common water quality objectives for the Great Lakes. Section 118(c) of the Clean Water Act, 33 U.S.C. 1268(c), requires all Great Lakes states, including Wisconsin, to adopt procedures consistent with the federal Water Quality Guidance for the Great Lakes System. If a Great Lakes state fails to adopt the federal guidance, EPA must promulgate the federal standard for the state.

In 2000, EPA overpromulgated sections of ss. NR 106.06 and 106.10 at 40 C.F.R. 132.6. In Issue 10 of EPA's letter, EPA directed Wisconsin to amend state rules to cure the disapproval of the provisions of s. NR 106.06 regarding consideration of intake pollutants in determining reasonable potential. In Issue 17, EPA directed Wisconsin to revise s. NR 106.10 so it conforms to 40 C.F.R. 122.44(d) regarding reasonable potential determinations.

In a February 17, 2009 letter, EPA objected to Wisconsin's existing mercury reasonable potential rule in s. NR 106.145 as inconsistent with federal requirements. In Issue 8 of EPA's letter, EPA directed Wisconsin to amend the rule to cure EPA's 2009 disapproval.

Section NR 106.06(2) currently contains a note expressing the State's intent to develop a rule to phase out mixing zones for existing dischargers of bioaccumulative chemicals of concern (BCCs) to comply with the federal Great Lakes Water Quality Initiative (GLI). In Issue 71 of EPA's letter, EPA directed Wisconsin to establish a rule to phase out mixing zones for BCCs for discharges within the Great Lakes basin.

The department believes adoption of the proposed rules will address EPA's concerns. The department will have to seek EPA approval for the proposed rules.

7. Comparison of similar rules in adjacent states:

All of the other EPA Region 5 states or adjacent states (Illinois, Indiana, Iowa, Michigan, Minnesota and Ohio) are subject to EPA regulations implementing the Clean Water Act and the National Pollutant

Discharge Elimination System (NPDES) Program. All other states bordering the Great Lakes system (Illinois, Indiana, Michigan, Minnesota, New York, Ohio and Pennsylvania), are subject to the GLI. See 40 CFR Part 132 (setting forth requirements that Great Lakes States must adopt). The proposed rules will align Wisconsin's WPDES regulations with federal regulations.

8. Summary of factual data and analytical methodologies:

A discussion of EPA's reasons for issuing the federal Water Quality Guidance for the Great Lakes System and the data underlying EPA's analysis are included in "Final Water Quality Guidance for the Great Lakes System: Supplementary Information Document" (SID) (EPA 1995). See also 60 Fed. Reg. 15366 to 15385 (1995) (concerning the history of the Great Lakes Water Quality Initiative and EPA's adoption of Final Water Quality Guidance for the Great Lakes System).

9. Analysis and supporting documentation used to determine effect on small business or in preparation of an economic impact analysis:

A notice soliciting comments regarding potential economic impacts of these proposed rule changes was sent to all industrial and municipal facilities currently regulated by a Wisconsin Pollutant Discharge Elimination System (WPDES) Permit.

DNR's System for Wastewater Applications, Monitoring and Permits (SWAMP) was used to compile existing WPDES permit holders with non-contact cooling water discharge outfalls. These data were used to determine which facilities may have impact from this rule. Many of the provisions of the proposed rule revision are already implemented by the Department when setting water quality based limits as required by EPA under Federal law.

The proposed revisions to s. NR 106.06 contain provisions relating to discharges within the Great Lakes system and outside the Great Lakes system. The department solicited information on economic impacts if the department were to adopt the proposed rules and, as an alternative, if the department were to follow proposed s. NR 106.06(6)(c)(1) statewide. The proposed rule contains different standards for determining permit limits for certain discharges outside the Great Lakes system, to allow permittees outside the Great Lakes system greater flexibility than is required by federal law for dischargers within the Great Lakes system. This rule does not specify monitoring frequency or compliance schedule timelines to allow for case by case assessment to ensure adequate environmental protection and reasonable reporting requirements.

10. Effect on small business:

The potential impacted facilities include facilities with non-contact cooling water outfalls or certain substances present in their intake water. Some of these facilities do not currently have treatment processes and may require upgrades or modifications to the facility to meet effluent limitations. Small businesses without treatment processes would be more likely to have economic impacts from changes required to meet WPDES permit limits. However, the department is currently required to use the procedures in the federal law when developing water quality based effluent limits and, as a result, many of the facilities impacted by these changes have already had permits reissued in compliance with the federal law.

11. A copy of any comments and opinion prepared by the Board of Veterans Affairs under s. 45.03 (2m), Stats., for rules proposed by the Department of Veterans Affairs:

Not Applicable.

12. Agency contact:

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13. Place where comments are to be submitted and deadline for submission:

Written comments may be submitted at the public hearing, by regular mail, fax, or email to:

Jennifer Jerich

Wisconsin Department of Natural Resources

Bureau of Water Quality

N7725 Highway 28

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Written comments may also be submitted to the Department using the Wisconsin Administrative Rules Internet Web site at http://adminrules.wisconsin.gov.

A hearing and comments submission deadline is currently planned for December 2015.

SECTION 1. NR 106.03 (4m) and (11m) are created to read:

NR 106.03 (4m) "Great Lakes system" includes all the surface waters within the drainage basin of the Great Lakes.

(11m) "Same waterbody" means two hydrologically connected points with similar water quality characteristics in which a pollutant can travel between in a reasonable period of time without significantly changing chemically or physically. Hydrological connections can include surface and groundwater connections.

SECTION 2. NR 106.06 (2) (a) and (b) are repealed and recreated to read:

NR 106.06 (2) Limitations for bioaccumulative chemicals of concern (BCCs). (a) For purposes of this subsection, the following definitions apply:

1. "New discharge" means any point source that first received WPDES permit coverage from the department after November 6, 2000. It does not include a discharge from a publicly owned treatment works if the discharge from the treatment works is caused by a project that is correcting or preventing a public health problem.

2. "Existing discharge" means any point source that currently has a WPDES permit and that has continually had WPDES permit coverage since November 6, 2000 or earlier. It also includes a discharge from a publicly owned treatment works that becomes permitted after November 6, 2000 if the discharge from the treatment works is caused by a project that is correcting or preventing a public health problem.

3. "Expanded discharge" means any increase in concentration, level or loading of a BCC, which would exceed a limitation specified in a current WPDES permit, or which, according to the procedures in s. NR 106.05, would result in the establishment of a new limitation in a reissued or modified WPDES permit. It does not include an expanded discharge from a publicly owned treatment works if the expanded discharge from the treatment works is caused by a project that is correcting or preventing a public health problem.

(b) Notwithstanding any other provisions in chs. NR 102 and 106, there shall be no mixing zones for effluent limitations for new discharges of BCCs or for the expanded portions of existing discharges of BCCs into waters of the Great Lakes system. Effluent limitations for new discharges of BCCs and for expanded portions of existing discharges shall equal the most stringent applicable water quality criterion or secondary value for the BCC. Effluent limitations for an expansion of an existing discharge of BCCs shall be determined by means of a mass balance where the limitation for the existing portion of a

permitted discharge that meets the provisions of par. (br) 1. or 2. shall be determined using the requirements of sub. (4) and the limitation for any expanded portion of the discharge may not exceed the most stringent criterion or value for that BCC.

Note: An example of a project that is preventing or correcting a public health problem is a situation where a community with failing septic systems connects to a POTW, as defined in s. 106.59, to avert a potential public health threat from the failing systems.

SECTION 3. NR 106.06 (2) (br) is created to read:

NR 106.06 (2) (br) Effluent limitations for existing discharges of BCCs into waters of the Great Lakes system, may not include a mixing zone or exceed the most stringent applicable water quality criteria or secondary values for BCCs, except as provided under subd. 1. or 2.

1. Water conservation. A mixing zone may be granted and an effluent limitation may exceed the most stringent water quality criterion or secondary value for a discharged BCC if the permittee demonstrates in the permit application that failure to grant a mixing zone for the BCC would preclude water conservation measures that would lead to an overall load reduction of the BCC, even though a higher concentration of the BCC occurs in the effluent.

2. Technical and economic considerations. A mixing zone may be granted and an effluent limitation may exceed the most stringent water quality criterion or secondary value for the discharged BCC, provided the permittee demonstrates and the department concurs that all the following conditions are met:

a. For the BCC discharged, the permittee is in compliance with and will continue to comply with the WPDES permit requirements and this chapter.

b. The permittee has reduced and will continue to reduce loadings of the BCC for which a mixing zone is requested to the maximum extent possible, such that any additional controls or pollution prevention measures to reduce or ultimately eliminate the BCC discharged would result in unreasonable economic effects on the discharger or the affected community because the controls or measures are not feasible or cost-effective.

3. Approval Requirements. If the department approves a mixing zone for a BCC under this paragraph, the following requirements shall be met:

a. The approved mixing zone is no larger than necessary to account for the technical constraints and economic effects identified under subd. 2.

b. All water quality criteria or secondary values for the BCC shall be met at the edge of an approved mixing zone or be consistent with the applicable U.S. environmental protection agency (EPA) approved total maximum daily load (TMDL).

c. The permit shall contain a numeric effluent limitation for the BCC, determined using the requirements of sub. (4) and the limit shall not be less stringent than the limit that was effective on November 6, 2000.

d. The WPDES permit may, as appropriate, require the discharger to implement an ambient water quality monitoring plan to ensure compliance with water quality criteria and consistency with any applicable TMDL, including the evaluation of alternative means for reducing the BCC from other sources in the watershed.

e. Any mixing zone for a BCC approved by the department pursuant to this paragraph shall be limited to one permit term unless the permittee applies for a mixing zone approval at the next reissuance and the department approves the mixing zone in the subsequent permit applications in accordance with the requirements of this paragraph.

f. The corresponding permit fact sheet for an approved mixing zone shall specify the mixing provisions used in calculating the permit limits and shall identify each BCC for which a mixing zone is approved.

SECTION 4. NR 106.06 (6) is repealed and recreated to read:

NR 106.06 (6) Effluent Limitations Based Upon Elevated Background Concentrations. Whenever the representative background concentration for a toxic or organoleptic substance in the receiving water is determined to be greater than any applicable water quality criterion or secondary value for that substance the calculation of an effluent limitation and the determination of the need for the limitation in a permit shall be performed subject to all of the following:

(a) If the department has developed an EPA approved TMDL for the toxic or organoleptic substance in the receiving water, an effluent limitation for that substance shall be consistent with the TMDL.

(b) If no EPA approved TMDL has been developed and if the intake source of the wastewater is all from the same waterbody as the receiving water of the discharge, the department may determine that the discharge does not have a reasonable potential to cause or contribute to an excursion above the applicable water quality criterion or secondary value for the substance, and may determine that a numeric limitation is not necessary, provided the permittee has demonstrated that all of the following conditions are met:

1. The permittee withdraws 100 percent of the intake water containing the substance from the same waterbody into which the discharge is made.

2. The permittee does not contribute any additional mass of the identified intake substance to its wastewater.

3. The permittee does not alter the identified intake substance chemically or physically in a manner that would cause adverse water quality impacts to occur that would not occur if the substance were left in-stream.

4. The permittee does not contribute to a statically significant increase the identified intake substance concentration, as determined by the department, at the edge of the mixing zone or at the point of discharge if a mixing zone is not allowed, as compared to the concentration of the substance in the intake water, unless the increased concentration does not cause or contribute to an excursion of water quality standard for that substance.

5. The timing and location of the discharge would not cause adverse water quality impacts to occur that would not occur if the identified intake substance were left in the receiving waterbody.

(c) 1. If no TMDL has been developed and the conditions in par. (b) are not met, an effluent limitation shall be included in the permit if the department determines that the discharge has a reasonable potential to cause or contribute to an excursion above the applicable water quality criterion or secondary value for the substance. The limitation shall be included in the permit in accordance with the any of the following that applies:

1. For discharges within the Great Lakes system, the effluent limitation for that substance shall be equal to the most stringent applicable water quality criterion or secondary value.

2. For discharges outside of the Great Lakes system:

a. When all of the intake source of the wastewater is from the same waterbody as the receiving water of the discharge, the effluent limitation for that substance shall equal the representative background concentration of that substance in the receiving water.

b. When all of the intake source of the wastewater is from a waterbody that is different than the receiving water of the discharge, the effluent limitation for that substance shall be equal to the lowest applicable water quality criterion or secondary value.

c. When the intake source of the wastewater is in part from the same waterbody as the receiving water and in part from a different waterbody, the effluent limitation may be derived using subd. 2.a and b. to reflect the flow-weighted average of each source of the wastewater, provided that adequate monitoring to determine compliance can be established and is included in the permit.

(d) The determination of representative background concentrations for toxic or organoleptic substances in this subsection shall be statistically ($P \leq 0.01$) or otherwise appropriately determined as the reasonably expected maximum background concentration for that substance.

(e) For purposes of this subsection, an intake pollutant in the source water is considered to be from the same waterbody as the receiving water of the discharge if the permittee successfully demonstrates all of the following to the department:

1. That the pollutant would have reached the outfall point in the receiving water within a reasonable period had it not been withdrawn by the permittee,

2. That the background concentration of the pollutant in the receiving water is at a similar concentration level to that in the intake water,

3. That other water quality characteristics, including temperature, pH and hardness are similar in the intake water and the receiving water.

Note: The term “same waterbody” may include a hydrologic connection between groundwater and surface water. See definition in s. NR 106.03 (11m).

SECTION 5. NR 106.10 is repealed and recreated to read:

NR 106.10 Noncontact cooling water additives. The department shall establish water quality based effluent limitations for toxic and organoleptic substances in noncontact cooling water discharges as follows:

(1) For toxic and organoleptic substances commonly added by suppliers of drinking water systems and present in the noncontact cooling water, a water quality based effluent limitation calculated under s. NR 106.06 that is based on the applicable water quality criterion or secondary value shall be included in the permit unless the permittee demonstrates at least one of the following:

(a) The concentration of the substance in the intake water is dissipated within the system that supplies the intake water to the permittee and is consistently less than the water quality based effluent limitation.

(b) An effluent limitation is not necessary as determined using the reasonable potential procedures in s. NR 106.05.

(c) Prior to reaching the receiving water, the substance dissipates or is removed to a level that is below the water quality based effluent limitation.

(2) For other toxic and organoleptic substances intentionally added to noncontact cooling water by the permittee, the department shall follow the procedures specified in s. NR 106.05 and s. NR 106.06 to calculate a water quality based effluent limitation and determine whether the limitation is necessary in the permit. If there is no water quality criterion for an additive and there are potential water quality impacts from the additive, the department shall establish a secondary value for the additive in accordance with ch. NR 105 and calculate a limitation based on that value. All of the following requirements apply to the use and discharge of additives:

(a) A permittee shall obtain written approval from the department prior to use of the additive.

(b) A permittee shall provide the department with dosage information and safety data sheets and toxicological data, as requested by the department to meet minimum data requirements specified in s. NR 105.05(4) and 105.06(6), Wis. Adm. Code, for each additive for which approval is sought.

(c) Prior to increasing the usage of an additive in amounts greater than authorized by the department, a permittee shall get written approval from the department for the increased usage.

(d) After reissuance, if a permittee wants to use a new additive not previously approved by the department, the permittee shall get written approval from the department prior to use of the additive.

(e) A permittee may only use additives in accordance with the conditions of the department approval and any applicable permit terms. If the department does not approve use of the additive, the additive may not be discharged.

SECTION 6. NR 106.145 (1) (b) is amended to read:

NR 106.145 (1) (b) Representative data on the relatively low concentrations of mercury in wastewater are rare and methods for collecting that data have only recently been developed difficult to obtain due

to specialized sample collection methods required and the precision and sensitivity of laboratory analyses.

SECTION 7. NR 106.145 (2) (title) is amended to read:

NR 106.145 (2) DETERMINING THE NECESSITY OF FOR MERCURY EFFLUENT LIMITATIONS.

SECTION 8. NR 106.145 (2) (b) (intro.) and 1. are consolidated, renumbered and amended to read:

(2) (b) For the determination under par. (a), the department shall use representative data that comply with all of the following:

1. Data shall meet the sampling and analysis requirements of subs. (9) and (10).

SECTION 9. NR. 106.145 (2) (b) 2. is repealed.

14. Effective Date: This rule shall take effect on the first day of the month following publication in the Wisconsin administrative register as provided in s. 227.22 (2) (intro.), Stats.

15. Board Adoption: This rule was approved and adopted by the State of Wisconsin Natural Resources Board on _____.