



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
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CHICAGO, IL 60604-3590


REPLY TO THE ATTENTION OF:

NOV 09 2017

WN-15J

MEMORANDUM

SUBJECT: Wisconsin Legal Authority Review - Review and Recommendation of Resolution for Issue 2

FROM: Candice Bauer, Chief 
NPDES Permits Branch Section 2

TO: File

Issue 2 (Expression of Limits, 40 C.F.R. § 122.45)

In EPA's July 11, 2011 letter to the Wisconsin Department of Natural Resources (WDNR), Issue 2 stated the following:

The federal rule at 40 C.F.R. § 122.45 addresses a variety of topics, such as the duration over which effluent limitations are to be expressed, pollutants in intake water, internal waste streams, and mass limitations. EPA did not find Wisconsin statutory or code provisions that implement 40 C.F.R. § 122.45. The State needs to promulgate rules to include a provision equivalent to 40 C.F.R. § 122.45, or document the specific basis on which the State has the necessary authority to implement the federal regulatory provision as described.

Letter from Susan Hedman, Regional Administrator, U.S. EPA, to Cathy Stepp, Secretary, WDNR (July 11, 2011) (on file with U.S. EPA).

Comparison between the Federal and State Provisions

Wisconsin has amended and/or created Wis. Admin. Code NR §§ 205.065, 205.066, 106.04 (3m), 106.06(7) and 106.07 to be consistent with 40 C.F.R. § 122.45. As can be seen in the table below, Wis. Admin. Code NR §§ 205 and 106 now address a variety of topics, including the duration over which effluent limitations are to be expressed, pollutants in intake water, internal waste streams, and mass limitations.

Table 1: Comparison between the Federal and State Rules

40 C.F.R. § 122.45	Wis. Admin. Code
<p>(a) Outfalls and discharge points. All permit effluent limitations, standards and prohibitions shall be established for each outfall or discharge point of the permitted facility, except as otherwise provided under § 122.44(k) (BMPs where limitations are infeasible) and paragraph (i) of this section (limitations on internal waste streams).</p>	<p>NR 205.065 (1) EFFLUENT LIMITATIONS IN PERMITS. The department shall impose permit effluent limitations or effluent standards for discharges of pollutants on the discharge point of the permitted facility except as provided in sub. (2).</p>
<p>(b) Production-based limitations. (1) In the case of POTWs, permit effluent limitations, standards, or prohibitions shall be calculated based on design flow.</p> <p>(2)(i) Except in the case of POTWs or as provided in paragraph (b)(2)(ii) of this section, calculation of any permit limitations, standards, or prohibitions which are based on production (or other measure of operation) shall be based not upon the designed production capacity but rather upon a reasonable measure of actual production of the facility. For new sources or new dischargers, actual production shall be estimated using projected production. The time period of the measure of production shall correspond to the time period of the calculated permit limitations; for example, monthly production shall be used to calculate average monthly discharge limitations.</p> <p>(ii)(A)(1) The Director may include a condition establishing alternate permit limitations, standards, or prohibitions based upon anticipated increased (not to exceed maximum production capability) or decreased production levels. . . .</p> <p>(B) If the Director establishes permit conditions under paragraph (b)(2)(ii)(A) of this section:</p> <p>(1) The permit shall require the permittee to notify the Director at least two business days prior to a month in which the permittee expects to operate at a level higher than the lowest</p>	<p>NR 205.065 (3) CALCULATION OF EFFLUENT LIMITATIONS FOR POTWS. For continuous dischargers as defined in s. NR 205.03 (9g) and subject to ch. NR 210, effluent limitations shall be based on the maximum effluent flow, expressed as a daily average, that is anticipated to occur for 12 continuous months during the design life of the treatment facility unless it is demonstrated to the department that such a design flow rate is not representative of projected flows at the facility.</p> <p>NR 205.065 (4) CALCULATION OF EFFLUENT LIMITATIONS FOR OTHER CONTINUOUS DISCHARGES. For all other discharges not subject to ch. NR 210, effluent limitations shall be calculated based on actual representative flow values except as provided in pars. (a) and (b).</p> <p>(a) For new discharges, production-based effluent limitations shall be estimated using projected production.</p> <p>(b) If a facility is expanding or decreasing production levels, the department may use an estimated alternative production value to calculate production-based effluent limitations.</p> <p>NR 205.066 (2) PRODUCTION LIMIT DOCUMENTATION. If limits are calculated under s. NR 205.065 (4) (a) or (b) the permittee shall submit with the DMR the level of production that actually occurred during each month limits are effective.</p> <p>NR 205.066 (3) EXCEEDANCE OF PRODUCTION LIMITS. The permittee shall comply with the</p>

<p>production level identified in the permit. The notice shall specify the anticipated level and the period during which the permittee expects to operate at the alternate level. If the notice covers more than one month, the notice shall specify the reasons for the anticipated production level increase. New notice of discharge at alternate levels is required to cover a period or production level not covered by prior notice or, if during two consecutive months otherwise covered by a notice, the production level at the permitted facility does not in fact meet the higher level designated in the notice.</p> <p>(2) The permittee shall comply with the limitations, standards, or prohibitions that correspond to the lowest level of production specified in the permit, unless the permittee has notified the Director under paragraph (b)(2)(ii)(B)(1) of this section, in which case the permittee shall comply with the lower of the actual level of production during each month or the level specified in the notice.</p> <p>(3) The permittee shall submit with the DMR the level of production that actually occurred during each month and the limitations, standards, or prohibitions applicable to that level of production.</p>	<p>limitations, standards, and prohibitions calculated under s. NR205.065 (4) (b) unless the permittee has notified the department in writing of an anticipated exceedance of the estimated alternative design flow used to calculate limits, in which case the permittee may comply with an alternative design flow, not to exceed the production level specified in the notice. Written notifications must be submitted to the department at least two business days prior to a month in which the permittee expects to operate at a level higher than the lowest production level identified in the permit and shall specify the anticipated level, period during which the permittee expects to operate at the alternate level, and the reasons for the anticipated production level increase. Notice of increased discharge must be submitted to the department for all exceedances not covered in previous notifications.</p>
<p>(c) Metals. All permit effluent limitations, standards, or prohibitions for a metal shall be expressed in terms of "total recoverable metal" as defined in 40 CFR part 136 unless:</p> <p>(1) An applicable effluent standard or limitation has been promulgated under the CWA and specifies the limitation for the metal in the dissolved or valent or total form; or</p> <p>(2) In establishing permit limitations on a case-by-case basis under § 125.3, it is necessary to express the limitation on the metal in the dissolved or valent or total form to carry out the provisions of the CWA; or</p>	<p>NR 205.065 (9) METALS. All permit effluent limitations, standards, or prohibitions for a metal shall be expressed in terms of total recoverable in a permit unless any of the following conditions apply:</p> <p>(a) An applicable effluent standard or limitation has been promulgated and specifies the limitation for the metal in dissolved or valent or total form.</p> <p>(b) In establishing permit limitations on a case-by-case basis, it is necessary to express the limitation for the metal in the dissolved or valent or total form to carry out the provisions of the federal Clean Water Act or ch. 283, Stats.</p>

<p>(3) All approved analytical methods for the metal inherently measure only its dissolved form (e.g., hexavalent chromium).</p>	<p>(c) All approved analytical methods for the metal inherently measure only the dissolved form of the pollutant.</p> <p>See also revised NR 106.06 (7).</p>
<p>(d) Continuous discharges. For continuous discharges all permit effluent limitations, standards, and prohibitions, including those necessary to achieve water quality standards, shall unless impracticable be stated as:</p> <p>(1) Maximum daily and average monthly discharge limitations for all dischargers other than publicly owned treatment works; and</p> <p>(2) Average weekly and average monthly discharge limitations for POTWs.</p>	<p>NR 205.065 (7) EFFLUENT LIMIT EXPRESSION. Effluent limitations shall be expressed in accordance with this subsection except if the department determines it is impracticable, or if the department determines that different time periods for expressing limitations are needed to ensure compliance with the applicable water quality standard and different time periods are established in another rule provision for a specific pollutant. Water quality-based effluent limitations for toxic pollutants shall be expressed in a permit in accordance with ch. NR 106. Effluent limitations shall be expressed in accordance with all of the following:</p> <p>(a) For continuous dischargers as defined in s. NR 205.03 (9g) and subject to ch. NR 210, limitations shall be expressed as average weekly and average monthly discharge limitations.</p> <p>(b) For continuous discharges as defined in s. NR 205.03 (9g) and not subject to ch. NR 210, limitations shall be expressed as daily maximum and average monthly discharge limitations.</p> <p>Note: An example of a different time period for expressing limits for a specific pollutant or parameter is phosphorus limitations as specified in s. NR 217.14.</p> <p>See also revised NR 106.07 (3), (4) and (10).</p>
<p>(e) Non-continuous discharges. Discharges which are not continuous, as defined in § 122.2, shall be particularly described and limited, considering the following factors, as appropriate:</p>	<p>NR 205.065 (7)(c) For seasonal discharges, discharges proportional to stream flow, or other unusual discharge situations that do not meet the definition of a continuous discharge in s. NR 205.03 (9g), limitations shall be expressed on a case-by-case basis. When determining</p>

<p>(1) Frequency (for example, a batch discharge shall not occur more than once every 3 weeks);</p> <p>(2) Total mass (for example, not to exceed 100 kilograms of zinc and 200 kilograms of chromium per batch discharge);</p> <p>(3) Maximum rate of discharge of pollutants during the discharge (for example, not to exceed 2 kilograms of zinc per minute); and</p> <p>(4) Prohibition or limitation of specified pollutants by mass, concentration, or other appropriate measure (for example, shall not contain at any time more than 0.1 mg/l zinc or more than 250 grams (1/4 kilogram) of zinc in any discharge).</p>	<p>limitations the department shall consider all of the following factors:</p> <ol style="list-style-type: none"> 1. Frequency and duration of discharge. 2. Total mass of discharge. 3. Maximum flow rate of discharge. 4. Whether the pollutant is subject to other limitations expressed by mass, concentration, or other appropriate measure in the permit. <p>See also revised NR 106.07 (5).</p>
<p>(f) Mass limitations. (1) All pollutants limited in permits shall have limitations, standards or prohibitions expressed in terms of mass except:</p> <ol style="list-style-type: none"> (i) For pH, temperature, radiation, or other pollutants which cannot appropriately be expressed by mass; (ii) When applicable standards and limitations are expressed in terms of other units of measurement; or (iii) If in establishing permit limitations on a case-by-case basis under § 125.3, limitations expressed in terms of mass are infeasible because the mass of the pollutant discharged cannot be related to a measure of operation (for example, discharges of TSS from certain mining operations), and permit conditions ensure that dilution will not be used as a substitute for treatment. <p>(2) Pollutants limited in terms of mass additionally may be limited in terms of other units of measurement, and the permit shall require the permittee to comply with both limitations.</p>	<p>NR 205.065 (8) MASS LIMITATIONS. (a) All pollutants limited in permits shall have limitations, standards, or prohibitions expressed in terms of mass, except for any of the following situations:</p> <ol style="list-style-type: none"> 1. Pollutants limited in permits that cannot be appropriately expressed by mass such as pH, chlorine, temperature, radiation, or other pollutants. 2. When applicable standards and limitations are expressed in terms of other units of measurement. 3. If limitations expressed in terms of mass are infeasible because the mass of the pollutant discharged cannot be related to a measure of operation. <p>(b) If a mass limit is included in the permit for a pollutant, the pollutant may also be limited in terms of other units of measurement in the permit, and the permit shall require the permittee to comply with both limitations.</p> <p>See also revised NR 106.07 (2).</p>

(g) *Pollutants in intake water.* (1) Upon request of the discharger, technology-based effluent limitations or standards shall be adjusted to reflect credit for pollutants in the discharger's intake water if:

(i) The applicable effluent limitations and standards contained in 40 CFR subchapter N specifically provide that they shall be applied on a net basis; or

(ii) The discharger demonstrates that the control system it proposes or uses to meet applicable technology-based limitations and standards would, if properly installed and operated, meet the limitations and standards in the absence of pollutants in the intake waters.

(2) Credit for generic pollutants such as biochemical oxygen demand (BOD) or total suspended solids (TSS) should not be granted unless the permittee demonstrates that the constituents of the generic measure in the effluent are substantially similar to the constituents of the generic measure in the intake water or unless appropriate additional limits are placed on process water pollutants either at the outfall or elsewhere.

(3) Credit shall be granted only to the extent necessary to meet the applicable limitation or standard, up to a maximum value equal to the influent value. Additional monitoring may be necessary to determine eligibility for credits and compliance with permit limits.

(4) Credit shall be granted only if the discharger demonstrates that the intake water is drawn from the same body of water into which the discharge is made. The Director may waive this requirement if he finds that no environmental degradation will result.

(5) This section does not apply to the discharge of raw water clarifier sludge generated from the treatment of intake water.

NR 205.065 (5) INTAKE WATER CREDIT. If requested by the permittee in the permit application for issuance or reissuance, technology-based effluent limitations shall, for each substance or parameter, be adjusted to reflect the discharger's intake water if all of the following conditions are met:

- (a) Antidegradation requirements in ch. NR 207 are satisfied, if applicable.
- (b) The permittee does not discharge raw water clarifier sludge generated from the treatment of intake water.
- (c) The permittee demonstrates that the applicable technology-based effluent limitation for the pollutant would be met in the absence of the pollutant in the intake water.
- (d) The permittee demonstrates that the constituents of the pollutant in the effluent are substantially similar to the constituents of the pollutant in the intake water. The permittee shall also demonstrate that the intake water is drawn from the same waterbody as defined in s. NR 106.03 (11m) from into which the discharge is made.

NR 205.065 (6) MAXIMUM INTAKE WATER CREDIT. If intake credit is granted pursuant to sub. (5), that intake credit cannot exceed the maximum value equal to the influent value, and shall be no greater than the value necessary to comply with the applicable permit effluent limitation. Additional monitoring may be included in the permits to determine eligibility for credits and compliance with the applicable limits.

<p>(h) Internal waste streams. (1) When permit effluent limitations or standards imposed at the point of discharge are impractical or infeasible, effluent limitations or standards for discharges of pollutants may be imposed on internal waste streams before mixing with other waste streams or cooling water streams. In those instances, the monitoring required by § 122.48 shall also be applied to the internal waste streams.</p> <p>(2) Limits on internal waste streams will be imposed only when the fact sheet under § 124.56 sets forth the exceptional circumstances which make such limitations necessary, such as when the final discharge point is inaccessible (for example, under 10 meters of water), the wastes at the point of discharge are so diluted as to make monitoring impracticable, or the interferences among pollutants at the point of discharge would make detection or analysis impracticable.</p>	<p>NR 205.065 (2) INTERNAL WASTE STREAMS. The department may impose permit effluent limitations or effluent standards for discharges of pollutants on an internal waste stream when all of the following are true:</p> <ul style="list-style-type: none"> (a) Imposing effluent limitations or standards at the point of discharge is impractical or infeasible. (b) The internal waste stream has not mixed with other waste streams or cooling water streams. (c) The fact sheet under ch. NR 201 states the reasons why it is necessary to impose effluent limitations or standards on an internal waste stream. <p>NR 106.04 (3m) In lieu of imposing limitations at the point of discharge when imposition of limitations at the point source discharge location is impracticable or infeasible, the department may impose water quality-based effluent limitations on an internal waste stream before that waste stream mixes with other waste streams or cooling water streams. Monitoring requirements as specified in s. NR 106.07(1) shall also be applied to the internal waste streams in these instances.</p>
<p>(i) Disposal of pollutants into wells, into POTWs or by land application. Permit limitations and standards shall be calculated as provided in § 122.50.</p>	<p>This requirement is being addressed in rule package 5.</p>

Wisconsin has made numerous additions to its regulations to fill gaps between them and their federal counterparts at 40 C.F.R. § 122.45. The regulations added by Wisconsin are sufficient to bring the state and federal rules into alignment.

Rule Package 4, Public Notice, Hearing, and Comment

WDNR published a public hearing notice on proposed revisions to Wis. Admin. Code chapters NR 106, 205, and 212 on November 16, 2015 in the Wisconsin Administrative Register. 719A3 Wis. Admin. Register CR15-85 (November 16, 2015). The public comment period was open from November 17 through December 18, 2015, and a public hearing was held in Madison, Wisconsin on December 7, 2015. Wis. Nat. Res. Bd., Agenda Item No. 3.A.3 at 5, Jan. 4 2016, Correspondence/Memorandum, Attachment

to Order WT-11-12. At the December 7, 2015 public hearing, two members of the public attended, one providing verbal testimony. *Id.* Additionally, during the comment period, written comments were received from the Wisconsin Legislative Council Rules Clearing House, EPA, Marshfield Wastewater Utility, Municipal Environmental Group – Wastewater Division, and Wisconsin Manufacturers and Commerce. Wis. Nat. Res. Bd., Agenda Item No. 3.A.3 at 1, Jan. 4 2016, Response to Comments on Rule Package WT-11-12 [Rule Package 4], Attachment to Order WT-14-12. WDNR responded to the written comments in a written response summary, which adequately explained the reasons why certain rule changes were made in response to comments received and why other comments did not warrant changes. *Id.*

Conclusion

Based on EPA’s review of Wisconsin’s provisions above, EPA concludes that Issue 2 is resolved.

Additional Notes

Wis. Admin. Code NR §§ 205.065(7)(a) and (b) do not apply if WDNR determines that different time periods for expressing limitations are needed to ensure compliance with the applicable water quality standard and different time periods are established in another rule provision for a specific pollutant or if WDNR determines that expression of limitations is impracticable. A “Note” is included at the end of Wis. Admin. Code NR § 205.065(7), as follows, “Note: An example of a different time period for expressing limits for a specific pollutant or parameter is phosphorus limitations as specified in s. NR 217.14.”