



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

AUG 29 2018

REPLY TO THE ATTENTION OF

WN-15J

MEMORANDUM

SUBJECT: Wisconsin Legal Authority Review - Review and Recommendation of Resolution for Issue 20

FROM: Candice Bauer, Chief NPDES Permits Branch Section 2

TO: File

Issue 20 (Adjustment to Technology Limits)

In EPA's July 11, 2011 letter to the Wisconsin Department of Natural Resources (WDNR), Issue 20 stated the following:

The federal rule at 40 C.F.R. § 122.50 provides for an adjustment to effluent limitations when part of a discharger's process wastewater is disposed into wells or POTWs or by land application. EPA did not find an equivalent Wisconsin statutory or code provision. The response to this letter must include the State's plan, with a schedule and milestones, for promulgating a rule equivalent to 40 C.F.R. § 122.50 if Wisconsin permits or wants to permit part of a discharger's process wastewater to be disposed into wells or POTWs or by land application.

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

To address Issue 20, Wisconsin repealed and recreated Wis. Admin. Code NR § 220.15. Table 1, below, compares Wis. Admin. Code NR § 220.15 with its federal counterpart 40 C.F.R. § 122.50.

Table 1: Side by Side Comparison of Federal and State Regulations

Table with 3 columns: 40 C.F.R. § 122.50, Wis. Admin. Code NR § 220.15, EPA Comment. Row 1: Disposal of pollutants into wells, into publicly owned treatment works or by land application (applicable to State NPDES programs, see § 123.25) vs Disposal of pollutants into publicly owned treatment works, or by land treatment systems. EPA Comment: Wisconsin State law does not allow the injection of wastewater directly into private or public wells so they are omitted as a disposal option by

| 40 C.F.R. § 122.50: | Wis. Admin. Code NR § 220.15: | EPA Comment   |
|---------------------|-------------------------------|---|
|                     |                               | <p>State rule. Wis. Admin Code NR § 812.05 prohibits disposal of pollutants into wells. Wells, as defined at Wis. Admin Code NR § 812.05(1)(b) are not land treatment systems.</p> <p>The State rule refers to "land treatment systems," and "land spreading systems" whereas the federal regulation refers to "land application." Wis. Admin Code NR § 214.03(24) defines a land treatment system as that which "utilizes the physical, chemical and biological abilities of the soil to decompose pollutants in the wastes."</p> <p>"Landspreading" systems are a subcategory of land treatment systems and are further defined at 214.03(26):</p> <p>"Landspreading system" means a system where a controlled quantity of liquid waste or by-product solid is uniformly applied onto, or incorporated into, the soil surface of designated sites by means of a vehicle with a spreader bar, spray gun or subsurface injector. The wastes are to be applied for the benefit of the vegetative cover. Landspreading systems also include those systems where liquid wastes are occasionally applied through temporary irrigation piping at a frequency similar to that of application by vehicles."</p> <p>Federal regulations do not define land application but recognize it as a form of treatment in the preamble to the rule.</p> |

| 40 C.F.R. § 122.50:  | Wis. Admin. Code NR § 220.15:   | EPA Comment  |
|--|---|--|
|  | (1) In this section, "surface waters" means waters of the state, excluding groundwater.   | This clarification was added to address EPA's concern that the State's inclusion in groundwater as part of "surface waters of the state" would alter the nature of this variable for purposes of making calculations in this section. The addition of this provision resolves EPA's concern. |
| (a) When part of a discharger's process wastewater is not being discharged into waters of the United States or contiguous zone because it is disposed into a well, into a POTW, or by land application thereby reducing the flow or level of pollutants being discharged into waters of the United States, applicable effluent standards and limitations for the discharge in an NPDES permit shall be adjusted to reflect the reduced raw waste resulting from such disposal. Effluent limitations and standards in the permit shall be calculated by one of the following methods: | (2) When part of a discharger's process wastewater is not being discharged into surface waters of the state because it is disposed into a POTW or land treatment system, thereby reducing the flow or level of pollutants being discharged into surface waters of the state, applicable effluent standards and limitations for the discharge in a WPDES permit shall be adjusted to reflect the reduced raw waste resulting from such disposal. Effluent limitations and standards in the permit shall be calculated by one of the following methods: | Wis. Admin. Code NR § 220.15(2) is consistent with 40 C.F.R. § 122.50(a).  |
| (1) If none of the waste from a particular process is discharged into waters of the United States, and effluent limitations guidelines provide separate allocation for wastes from that process, all allocations for the process shall be eliminated from calculation of permit effluent limitations or standards.   | (a) If none of the waste from a particular process is discharged into surface waters of the state, and effluent limitations guidelines provide separate allocation for wastes from that process, all allocations for the process shall be eliminated from calculation of permit effluent limitations or standards.  | Wis. Admin. Code NR § 220.15(2)(a) is consistent with 40 C.F.R. § 122.50(a)(1).  |



| 40 C.F.R. § 122.50:   | Wis. Admin. Code NR § 220.15:  | EPA Comment   |
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| <p>(2) In all cases other than those described in paragraph (a)(1) of this section, effluent limitations shall be adjusted by multiplying the effluent limitation derived by applying effluent limitation guidelines to the total waste stream by the amount of wastewater flow to be treated and discharged into waters of the United States, and dividing the result by the total wastewater flow. Effluent limitations and standards so calculated may be further adjusted under part 125, subpart D to make them more or less stringent if discharges to wells, publicly owned treatment works, or by land application change the character or treatability of the pollutants being discharged to receiving waters. This method may be algebraically expressed as:</p> $P = \frac{E \times N}{T}$ <p>where P is the permit effluent limitation, E is the limitation derived by applying effluent guidelines to the total wastestream, N is the wastewater flow to be treated and discharged to waters of the United States, and T is the total wastewater flow.</p> | <p>(b) In all cases other than those described in par. (a), effluent limitations shall be adjusted by multiplying the effluent limitation derived by applying effluent limitation guidelines to the total waste stream by the amount of wastewater flow to be treated and discharged into surface waters of the state, and dividing the result by the total wastewater flow. This method is expressed algebraically as:</p> $P = \frac{E \times N}{T}$ <p>Where:<br/> P is the final, adjusted permit effluent limitation,<br/> <br/> E is the limitation derived by applying effluent guidelines to the total wastestream,<br/> <br/> N is the wastewater flow to be treated and discharged to surface waters, and<br/> <br/> T is the total wastewater flow.</p> | <p>Wis. Admin. Code NR § 220.15(2)(b) is consistent with 40 C.F.R. § 122.50(a)(2).</p> <p>The reference to part 125, subpart D refers to fundamentally different factors under sections 301(b)(1)(A), 301(b)(2)(A) and (E) of the Act. Although not included in this paragraph, the State rule includes a similar paragraph to account for fundamentally different factors that is addressed in Wis. Admin. Code NR § 220.15(2)(c).</p> |
|   | <p>(c) In addition to the adjustment in par. (b), effluent limitations and standards may be further adjusted under a fundamentally different factors</p>   | <p>The federal counterpart to this is included at 40 C.F.R. § 125.50(a)(2) (i.e. language referring to part 125, subpart D).</p>  |

| 40 C.F.R. § 122.50:  | Wis. Admin. Code NR § 220.15:  | EPA Comment   |
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|  | variance under s. NR 220.20 to make them more or less stringent if discharges to POTWs or land treatment systems change the character or treatability of the pollutants being discharged.                            |   |
| (b) Paragraph (a) of this section does not apply to the extent that promulgated effluent limitations guidelines:   | (3) Sub. (2) does not apply to the extent that effluent limitations guidelines do any of the following:  | Wis. Admin. Code NR § 220.15(3) is consistent with 40 C.F.R. § 122.50(b).   |
| (1) Control concentrations of pollutants discharged but not mass; or   | (a) Control concentrations of pollutants discharged but not mass.  | Wis. Admin. Code NR § 220.15(3)(a) is consistent with 40 C.F.R. § 122.50(b)(1).   |
| (2) Specify a different specific technique for adjusting effluent limitations to account for well injection, land application, or disposal into POTWs.                     | (b) Specify a different specific technique for adjusting effluent limitations to account for, land application, or disposal into POTWs.  | The state rule refers to "land application" in this instance whereas "land treatment system" is referred to elsewhere throughout the rule. The State's definition of "land spreading system" clearly includes such systems that make applications to land, consistent with the federal regulations. |
| (c) Paragraph (a) of this section does not alter a discharger's obligation to meet any more stringent requirements established under §§122.41, 122.42, 122.43, and 122.44. | (4) This section does not alter a permittee's obligation to meet any more stringent limitations or requirements established under other WPDES permit program regulations, including those under chs. NR 204 and 214. | Wis. Admin. Code NR § 220.15(4) is consistent with 40 C.F.R. § 122.50(c).   |

As can be seen in Table 1, Wisconsin aligned its regulations for the adjustment of effluent limitations when a discharger's process wastewater is disposed into POTWs or by land application with their federal counterparts. Wisconsin did not promulgate similar regulations for the disposal into wells because Wisconsin does not allow the disposal of wastewater into wells.



## Rule Package 5, Public Notice, Hearing, and Comment

WDNR published a public hearing notice on proposed revisions to Wis. Admin. Code chapters NR 106, 200, 205, 207, 210, 220, 221, 225, 228, 231, 236, 239, 240, 245, 247, 250, 258, 261, 268, 269, 275, 276, 277, 280, 281, 284, 286, 290, 294, 295, and 296 on January 9, 2017 in the Wisconsin Administrative Register. 733A2 Wis. Admin. Reg. CR 17-002 (January 9, 2017). The public comment period was open through March 1, 2017, and public hearings were held in Green Bay, Wisconsin on February 6, 2017 and Madison, Wisconsin on February 7, 2017. Wis. Nat. Res. Bd., Agenda Item No. 2.A.1, July 10, 2017, Correspondence/Memorandum Attachment to Order WT-12-12. At the Green Bay hearing no one appeared in person. *Id.* Two members of the public attended the Madison hearing without providing oral comments. *Id.* Four entities, other than the Wisconsin Legislative Council Rules Clearing House, provided written comments: US EPA, Wisconsin Manufacturers & Commerce, WE Energies, and Midwest Environmental Advocates. Wis. Nat. Res. Bd., Agenda Item No. 2.A.1, July 10, 2017, Response to Comments on Rule Package 5, Attachment to Order WT-12-12. WDNR responded to the written comments in a written response summary, which adequately explained why certain rule changes were made in response to the comments received, and why other comments did not warrant changes. *Id.* After Wisconsin completed rulemaking, the revised regulations were published in the Wisconsin Administrative Register on April 30, 2018. 748B Wis. Admin. Reg. CR 17-002 (April 30, 2018).

## Conclusion

Based on EPA's review of Wisconsin's provisions above, EPA concludes that Issue 20 is resolved.

## Additional Notes

As noted in the table the State rule refers to "land treatment system" whereas the federal regulation refers to "land application." 40 C.F.R. § 122.50 does not include a definition for "land application" but the preambles for the various federal rulemaking packages provide context regarding the meaning of this term. Initially, the proposed federal regulation did not include disposal of pollutants via land application. See 43 Fed. Reg. 37099 (1978). The regulation was revised based on public comments received to include land application as a disposal option. See 44 Fed. Reg. 32870 (1979). Subsequent revision to the rule included recognizing land application as a "form of treatment." See 47 Fed. Reg. 52082 (1982). Wisconsin defines "land treatment system" to mean "a system that utilizes the physical, chemical and biological abilities of the soil to decompose pollutants in the wastes..." Wis. Admin. Code NR § 214.03(26), and includes various examples of such systems. Wisconsin's use of "land treatment system" appears to be at least as stringent as the term "land application" as it is understood with respect to 40 C.F.R. § 122.50.