

March 26, 2021

VIA EMAIL
Kari.Fleming@wisconsin.gov

Wisconsin Department of Natural Resources
Attn: Kari Fleming
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**RE: Comments of the Municipal Environmental Group – Wastewater Division
Disinfection Guidance, EGAD No. 3400-2021-XX**

Ms. Fleming:

I am submitting these comments on behalf of the Municipal Environmental Group–Wastewater Division (MEG Wastewater). MEG Wastewater is an organization of approximately 100 municipalities statewide who own and operate wastewater treatment plants. MEG represents facilities ranging in size from small sanitary districts to larger utilities.

While MEG appreciates the opportunity to comment on the Disinfection Guidance (the “Guidance”), MEG has significant concerns about the legality, process, and implications of the Guidance. These concerns are explained further below.

1. The standards and policies established in the Guidance must be promulgated through a formal rulemaking process.

A “Rule” is defined as: “a regulation, standard, statement of policy, or general order of general application that has the force of law and that is issued by an agency to implement, interpret, or make specific legislation enforced or administered by the agency” Wis. Stat. § 227.01(13). An agency such as the department may not “implement or enforce any standard, requirement, or threshold, including as a term or condition of any license issued by the agency, unless that standard, requirement, or threshold is explicitly required or explicitly permitted by statute or by a rule that has been promulgated in accordance with this subchapter” Wis. Stat. § 227.10(2m).

It bears noting that the rules pertaining to disinfection were modified less than a year ago to incorporate the new bacteria standards. This rulemaking process included extensive discussion and debate regarding disinfection requirements. As part of that process, the department considered revisions to language regarding the disinfection season in NR 210.06. These revisions were removed from the rule

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language after comments from MEG and others that such revisions fell outside of the scope of that rulemaking. The department cannot now circumvent that rulemaking process through guidance.

Nonetheless, throughout the Guidance, language that the department uses to purportedly interpret current department regulations runs contrary to and attempts to revise these regulations. Guidance cannot contradict regulations, nor can revisions to regulations be accomplished through guidance. For the reasons explained herein, the department cannot proceed with the Guidance as currently written and, to the extent it wishes to proceed with the revision of disinfection standards, such revisions must be promulgated through a formal, properly scoped rulemaking process.

A. Regulatory framework for disinfection requirements

Wis. Admin. Code § NR 102.04(5)(a) provides that “[a]ll surface waters shall be suitable for supporting recreational use and shall meet the criteria specified in sub. (6).” However, paragraph (b) provides an exception: “Whenever the department determines, in accordance with the procedures specified in s. NR 210.06(3), that wastewater disinfection is not required to protect recreational uses, the criteria specified in par. (a) and in chs. NR 103 and 104 do not apply.” § NR 102.04(5)(b).

Section NR 210.06(3) provides a list of factors that the department uses to “identify[] risks to human and animal health,” to determine whether disinfection is required. These factors include, among many:

- (a) Proximity of the wastewater outfall to swimming beaches and other waters which have a high level of human contact recreational activities.
- (b) Proximity of the wastewater outfall to public drinking water supply intakes. At a minimum, whenever *a drinking water intake* is within a radius of 5 miles of a wastewater outfall in a lake or impoundment or within 20 miles downstream of a wastewater outfall on a flowing surface water, disinfection shall be provided.

§ 201.06(3)(a)-(b) (emphasis added.)

Where disinfection is required based on the factors described above, NR 210.06 provides for a default disinfection period of May 1 to September 30. As the Guidance notes:

Section NR 210.06(1), Wis. Adm. Code, sets the default time frames which serve as the starting point for disinfection decisions. It states that *unless otherwise determined by the Department*, facilities shall disinfect May 1 through September 30 annually to support recreational use or year-round to also protect public drinking water supplies.

Draft Guidance at 4 (emphasis added). The default disinfection period in NR 210.06 “may be adjusted in a WPDES permit *where necessary to protect human and animal health.*” Wis. Admin. Code § NR 210.06(1)(c) (emphasis added.)

Through the Guidance, the department is unlawfully contradicting and attempting to revise the regulatory requirements identified above in a number of ways.

B. The Guidance creates a broad definition of “proximity of the wastewater outfall” that exceeds the department’s regulatory authority.

In its application of the factor at NR 210.06(1)(a) regarding proximity of a wastewater outfall to swimming beaches and other waters with a high level of human contact recreational activities, the Guidance provides as follows:

[I]t is recommended that recreational activities occurring within a radius of 5 miles of a wastewater outfall in a nonflowing waterbody or within 20 miles downstream of an outfall on a flowing surface water should be considered in close proximity in most cases.

Guidance at 6.

There is no basis in NR 210.06 for the department to define “close proximity” as a radius of within 5 miles of a wastewater outfall in a nonflowing waterbody and 20 miles downstream of an outfall on a flowing surface water. As noted above, this radius standard is explicitly incorporated into the evaluation of “proximity” as it relates to drinking water intakes in paragraph (b), but it is not included in the evaluation of proximity in regards to paragraph (a). In promulgating this rule, the department could have, but did not, use the same radius standard to evaluate proximity of wastewater outfalls to waters with high levels of human contact recreational activities. The fact that the radius standard is made explicit with respect to drinking water intakes supports the conclusion that it is not intended to apply in other scenarios. Attempting to import this standard into paragraph (a) in the Guidance is unlawful and outside of the scope of the department’s authority.

C. The Guidance creates a broad definition of “human contact recreational activities” that exceeds the department’s regulatory authority and is contrary to EPA guidance.

The Guidance also defines “human contact recreational activities” far more broadly than is provided for under the regulations. By its plain language, this factor pertains to the proximity of a wastewater outfall *to swimming beaches and other waters with a high level of human contact recreational activities*. In this context, “other waters with a high level of human contact recreation” means activities similar to swimming, where immersion and ingestion are of significant concern. The department, however, is now defining “human contact recreational activities” to include activities that do not have a high probability of ingestion or immersion:

These activities include: swimming, diving, water skiing, jet skiing, canoeing, kayaking, tubing, polar plunges, water play by children, wading for fishing or hunting, or similar activities where immersion or ingestion (accidental or otherwise) can occur.

Guidance at 6. The Guidance further provides that where waters “flow through or are adjacent to parks or residential areas” the potential is greater for human contact recreational activities. Guidance at 6. This definition is so broad as to potentially require disinfection of a discharge into a waterbody in which no one swims, but persons walking along a shoreline in a park adjacent to the waterbody might accidentally fall in.

The department supports this broad definition with the explanation that while “[s]ome recreational activities may have more potential for ingestion or immersion than others, [] it is important to recognize that Wisconsin’s designated use is not tiered for different activities and does not differentiate between recreation types.” Guidance at 6. While the regulations may not specifically differentiate between recreation types, the potential for ingestion or immersion is *crucial* in the identification of risks to human health and the determination as to whether disinfection is required. *See* NR 210.06(3) (the factors enumerated are intended to help the department “*identify[] risks to human and animal health.*”) Waterbodies in which a person wades for hunting do not carry the same potential for human health risks as a waterbody used extensively for swimming and should not be treated the same for the purpose of determining whether disinfection is necessary.

Finally, this interpretation of “human contact recreational activities” advanced in the Guidance runs contrary to established EPA guidance. The initial disinfection standards originated from EPA Quality Criteria for Water 1986. The 1986 guidance set bacteria standards based on risks associated with swimming in surface waters: “a criterion can be adopted which establishes upper limits for densities of indicator bacteria in water that are associated with *acceptable health risks for swimmers.*”

EPA issued revised guidance in 2012 entitled, “Recreational Water Quality Criteria (RWQC)”, in which EPA provided that:

EPA’s 2012 RWQC recommendations are national recommendations for all waterbody types designated for swimming, bathing, surfing, or similar water contact activities (referred to throughout [the guidance] as “primary contact recreational use”).

2012 RWQC at 3. The 2012 RWQC defined “primary contact recreation” as “activities where *immersion and ingestion are likely* and where there is a *high degree of bodily contact with the water* such as swimming, bathing, surfing, water skiing, tubing, skin diving, water play by children or similar water-contact activities.” 2012 RWQC at 6. EPA’s development of pathogen criteria was developed based on this primary contact recreation standard. For example, EPA explained in the 2012 RWQC that it relied upon studies examining “the number of days following *the swimming event* in which illness may have been observed ...” 2012 RWQC at 14 (emphasis added.)

In contrast to the Guidance, EPA has focused its recreational use criteria on those activities in which there is a high likelihood of immersion and ingestion. The Guidance’s expansion of the definition of human contact recreational activities runs contrary to that approach.

D. The Guidance fails to account for the exception from disinfection provided for in NR 102.04(5) and 210.06(3).

The Guidance states that “permittees cannot be exempted from disinfection requirements because no one is thought to be recreating in the receiving waterbody.” Guidance at 4, 6. As the basis for this statement, the Guidance cites to NR 102.04(5)(a) for the proposition that all surface waters shall be suitable for supporting recreational use and shall meet criteria. While this is true, the Guidance fails to acknowledge in its statement the explicit exception in paragraph (b):

Exceptions. Whenever the department determines, in accordance with the procedures specified in s. NR 210.06(3), that wastewater disinfection is not required to protect recreational uses, the criteria [for supporting recreational uses] do not apply.

The procedures specified in NR 210.06(3) enumerate factors “the department shall use in the determination of the need for effluent disinfection.” These factors include: proximity of wastewater outfalls to swimming beaches and other waters with a high level of human contact recreational activities; sanitary survey results conducted in the vicinity of outfalls and sites used for recreational purposes; and the classification of the receiving water and downstream waters (i.e. is the receiving water a wastewater effluent channel in which little to no recreation is likely to occur?). § NR 210.06(3)(a), (f), (g). These factors require an evaluation of the recreational uses in the waterbody. Thus, whether persons do in fact recreate in the waterbody is a crucial component in determining whether or not disinfection is required, and under the rules, permittees could be exempted from disinfection requirements if no one is recreating in the waterbody in which the permittee discharges. The Guidance contradicts the rules governing disinfection requirements in this regard and cannot stand as written.

E. The Guidance improperly “weights” the factors in NR 210.06(3).

As explained above, NR 210.06(3) provides a list of factors for department consideration when evaluating whether disinfection is required for a discharger. Nothing in the code even suggests, let alone provides explicit authority for, the proposition that any one of these factors should be weighted more heavily than another in the evaluation process. Nonetheless, the Guidance provides that when recreational activities occur within the defined radius “disinfection should be required regardless of most other factors (i.e., this should outweigh other factors that might otherwise suggest disinfection isn’t necessary).” Guidance at 6.

As stated above, the radius standard is not contained in NR 210.06 and cannot be imposed through a guidance document. Moreover, the department does not have the authority to determine that this newly created standard should be weighted more heavily than the other factors provided for in NR 210.06(3). There is simply no basis in the regulations for weighting these factors, and providing as such exceeds the department’s authority in a guidance document.

F. The Guidance makes year round disinfection the standard, contrary to NR 210.06(1).

The default disinfection season in NR 210.06(1), from May 1 to September 30, is designed to protect the recreational uses of waterbodies by limiting bacteria levels when people are engaging in immersive recreational activities such as swimming. The department may modify the default disinfection season, but only “*where necessary to protect human and animal health.*” § NR 210.06(1)(c) (emphasis added.)

The Guidance provides that the “presence” of human contact recreational activities “could trigger the need for an extended disinfection period if they are occurring outside of the default recreation season.” The “presence” of activities is, however, not the standard articulated under NR 210.06(1). To extend the disinfection season, the department must determine that such an extension is “necessary to protect human and animal health.” This requires a determination by the department based on an evaluation of the particular waterbody, the type of recreational activities occurring, and the impact on human and

animal health. The department cannot revise the regulatory language through this Guidance by providing that the mere “presence” of activities is sufficient to impose an extended disinfection season.

This is particularly problematic in light of the expansive definition of human contact recreational activities described above. Under the Guidance, disinfection would be required year round if there was the “presence” of activities where immersion might occur (accidental or otherwise). This could, again, be read so broadly as to require year round disinfection of a discharge into a waterbody in which no one swims, but persons have been observed to walk along a shoreline in a park adjacent to the waterbody and might accidentally fall in. In this scenario there is no basis for determining, in the absence of significant other facts, that an extended disinfection season is “necessary to protect human and animal health.”

2. This Guidance will have significant detrimental impacts on municipal wastewater treatment plants.

For all of the reasons explained above, the Guidance exceeds the scope of the department’s authority as currently drafted. In addition to issues of legality, it is important to note that the changes to the long-standing interpretation of disinfection requirements advanced in the Guidance would have significant detrimental impacts to municipal wastewater treatment plants across the state.

At this time, there are approximately 125 wastewater treatment plants that are exempt from disinfection requirements. And, most of the plants that do disinfect and do not discharge in proximity to a drinking water intake are only required to disinfect during the standard disinfection season of May 1 to September 30. For both communities that would be required to install disinfection under the Guidance and those for whom the season would be extended, the cost of wastewater treatment could drastically increase. The costs of installing a disinfection system or upgrading the system in place is substantial and often a very poor economy of scale for smaller plants. For example, the cost of installing a UV system or converting from chlorination to UV for a small wastewater treatment plant can range from \$0.5-\$0.75 million and significantly more when engineering costs are included. In addition to installation costs, many communities estimate that the cost of yearly equipment replacement for UV systems and the energy costs to run those systems would double if the disinfection season were extended year round.

There are also significant challenges and hazards associated with disinfecting outside of the standard season. Treatment plants that use chlorine could face challenges with winterizing chlorine piping systems, in addition to the health hazards associated with working with chlorine. There are also significant operational challenges and hazards associated with year-round operation and maintenance of UV systems. Because UV systems have largely been seasonal facilities, the infrastructure for these systems is often located outdoors. If year round maintenance is required, treatment plants will need to undertake snow removal and ice control, and workers could face serious safety concerns conducting maintenance in the winter months.

Particularly given the significant impact the Guidance could have on municipal wastewater treatment plants, it is insufficient and unreasonable to advance these new standards and policies through the guidance process with limited public input opportunities. To the extent the department wishes to revise

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its approach to disinfection requirements, it must do so through a formal rulemaking process, including a reliable estimate of the fiscal impacts, and give stakeholders the opportunity to fully participate. MEG and its members would very much appreciate the opportunity to participate in this process to ensure that the department has all of the information necessary to make informed and supportable decisions regarding disinfection requirements.

Thank you for your consideration of these comments.

Sincerely,

STAFFORD ROSENBAUM LLP

A handwritten signature in black ink, appearing to read "Vanessa D. Wishart". The signature is written in a cursive, flowing style.

Vanessa D. Wishart

Paul G. Kent

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