

**Triennial Standards Review:
Draft Prioritized List for 2024-2026 Cycle, for public comment period
1-22-2024**

Every three years, the DNR reviews Wisconsin's water quality standards or related guidance to determine which standards need development or revision, as required by the federal Clean Water Act. This comprehensive evaluation, called the Triennial Standards Review (TSR), is an essential process to keep Wisconsin's surface waters swimmable, fishable, and drinkable. This review helps DNR staff focus efforts to integrate the latest science, technology, and federal requirements into how the state regulates water quality. In addition, the review assists the staff with work-planning and identifying needed actions for moving projects forward. Water quality standards set the appropriate level of protection for Wisconsin's lakes, rivers, and streams.

Components of water quality standards reviewed as part of the Triennial Standards Review include the following:

- designated uses – goals and expectations established for each waterbody
- water quality criteria – narrative and numeric benchmarks established to protect the designated uses
- antidegradation – policy or procedure established to protect high-quality waters
- water quality variances – short-term changes to permit limits or water quality standards when criteria are unattainable.

Streamlined process this cycle

This cycle, the DNR is employing a more streamlined process than in the past few cycles. Comments are being sought using the more traditional approach via a standard public comment period and public hearing, consistent with state and federal law. In previous TSR cycles, program staff used a multi-step process that included an online survey for the public to rank topics. The water quality program evaluated the necessity and value this additional step added to the process and determined that to make the best use of limited staff resources this step was not feasible for this cycle.

Specifically, the DNR is interested in comments on the following questions:

1. **Prioritization of Water Quality Standards topics for 2024-2026:** See Section 1 for the DNR's draft list of topics that it expects to prioritize during 2024-2026, and a description of those topics. Comments are encouraged on the topics and the department's draft prioritization of work into Categories A to C. If you think these topics should be prioritized differently, please explain why.
2. **Phosphorus multi-discharger variance:** See Section 2A. The DNR is currently undertaking a formal review of its phosphorus multi-discharger variance as required under s. 283.16(3), Wis. Stats. The DNR and the Department of Administration are reviewing the 2015 determination that attaining the phosphorus water quality standard is infeasible because it would require major facility upgrades that would cause substantial and widespread adverse social and economic impacts.
 - If you are aware of any information regarding treatment technologies that have become reasonably available that may enable point sources or categories of point sources to comply with more-stringent phosphorus effluent limitations, please submit that information.

- For the above technologies, please also submit information as to whether the treatment technology is cost effective.
3. **Facilities with individual variances:** See Section 2B for a list of facilities with individual variances (for phosphorus, chloride, mercury, arsenic, copper). Are you aware of any new or updated information or data pertaining to any facility's variance or the following components of a variance?
- Pollutant Control Technologies
 - Pollutant Sources
 - Flow or Water levels
 - Economic Conditions
 - Best Management Practices
4. **Designated Uses:** See topic description in Section 1, Category A. The DNR is working to prioritize updates to its designated uses in chs. NR 102 and 104, Wis. Adm. Code. This is a topic that DNR is proposing for continued work during this TSR cycle. Comments regarding waterbodies that may need a designated use update may be submitted as part of this TSR comment period and may then be included in a code revision if appropriate. A list of waterbodies currently designated as Limited Aquatic Life or Limited Forage Fish can be found in Tables 3 to 8 in ch. NR 104:
https://docs.legis.wisconsin.gov/code/admin_code/nr/100/104.pdf.

Topics that are not within the scope of the Triennial Standards Review

The comment period for the Triennial Standards Review does not cover topics other than those that fit within the surface water quality standards umbrella described above. While important, topics that are outside of the scope of the TSR include: management practices for agriculture or stormwater, in-lake management such as plant management or invasive species, drinking water, or groundwater. These types of topics are handled by other DNR or local programs.

SECTION 1: PRIORITIZATION CATEGORIES FOR 2024-2026

Topics for potential work during 2024-2026 have been categorized into the prioritization categories A through C, as follows. Descriptions of each topic are below the bulleted list.

***For public comment:** Do you agree that the topics are appropriately prioritized into the categories as shown? If you think these topics should be prioritized differently, please explain why.*

Category A: Priorities for upcoming cycle - Preliminary work is in progress

- Antidegradation Rule Revisions
- Human Health Criteria Revision/Development
- Biological Thresholds for Streams & Rivers
- Designated Uses Structure/Process Revisions

Category B: Priorities for further exploratory work as time/resources allow

- Antidegradation Implementation Guidance
- Cyanobacteria (Harmful Algal Blooms) Guidance
- Nitrogen-related topics (any of the following)
 - Total Nitrogen Criteria Development
 - Nitrate (Aquatic Life Toxicity) Criteria Development

- Ammonia Criteria Revision
- PFAS Compounds (other than PFOS and PFOA) Criteria Development
- Neonicotinoid Insecticides Criteria Development

Category C: Not priorities for this cycle

- Aluminum Criteria Development
- Aquatic Life Water Quality Criteria Revision/Development
- Bifenthrin Criteria Development
- Chlorantraniliprole Criteria Development
- Copper Criteria Revision
- Outstanding/Exceptional Resource Waters Process Revision (guidance)
- Microplastics Criteria Development
- Pharmaceuticals Criteria Development
- Sulfate Criteria Development
- Total Suspended Solids Criteria Development

CATEGORY A: PRIORITIES FOR UPCOMING CYCLE – PRELIMINARY WORK IS IN PROGRESS

Antidegradation Policy and Implementation Rule Revision

Status: DNR work complete; Legislative process pending

Updates to the state’s antidegradation policy and associated procedures have been needed to clarify when antidegradation review is required and to make Wisconsin’s rules consistent with federal antidegradation requirements. A Scope Statement was approved by the Governor’s office in May 2021 to begin work on this rule. From 2021-2023, an internal workgroup was convened, and the following steps were completed: draft rule development, external Advisory Committee meetings, Economic Impact Analysis development, public hearing and comment period, and final rule development. The Natural Resources Board adopted the rule package in September 2023, and it was submitted to the Legislature for their consideration in late 2023; the legislative process is currently underway.

Human Health Criteria Revision/Development

Status: In progress

DNR has reviewed EPA’s 2015 recommendations on how states should calculate human health criteria (HHC) – i.e., water quality standards that protect human health while swimming or eating locally-caught fish. This review encompasses multiple efforts, including: 1) making updates to Wisconsin’s existing HHC based on the latest toxicological information, 2) adopting HHC for chemicals which EPA has criteria and/or a drinking water standard and Wisconsin does not, 3) evaluating the most appropriate fish consumption rates to be protective of all state and tribal fish consumers, and 4) updating water consumption rate and average body weight to be consistent with EPA’s latest recommendations.

DNR has completed efforts 1) and 2) above and expects to begin rulemaking to update and adopt criteria in the upcoming triennial cycle. In pursuit of effort 3), DNR has collaborated with staff from other Great Lakes states, the Great Lakes Indian Fish and Wildlife Commission (GLIFWC), and EPA to review fish consumption rate information and is working towards compiling a white paper detailing this data for use in future criteria. DNR

also worked with the Department of Health Services (WDHS) to gather body weight data. Rulemaking to accomplish efforts 3 and 4 is likely several years away.

Biological Thresholds for Streams & Rivers

DNR is updating its biological assessment tools for streams and rivers. This work began as part of the Waterbody Assessment rule package promulgated in 2022, which initially covered both flowing waters and lakes. However, although that rule promulgated bioassessment metrics for lakes, the process identified a need for further revisions to the stream fish assessment tools. DNR is nearing completion of its revisions to its fish indices of biotic integrity (IBIs), and once complete, expects to initiate rulemaking to codify the Fish IBIs as well as existing Macroinvertebrate IBIs (for aquatic insect) for streams and rivers. The fish IBI updates were needed because over the past several decades, the DNR has developed several Fish IBIs for use in different stream types; however, these were developed using different methods and different scoring scales. These revisions better align the IBIs with one another, using consistent, EPA-recommended methods and a much larger dataset for the IBI development and testing.

Designated Uses Structure/Process Revision

Under the Clean Water Act, DNR assigns all waterbodies a set of designated uses to establish the appropriate water quality goals for the waterbody. DNR is considering developing a new Scope Statement to re-start work on updating the state's designated use classification system for aquatic life and the list of waters assigned "limited" uses. This rule package would revise the categories to better capture the various types of waterbodies and aquatic communities found in Wisconsin. The work could include consideration of a designated use for waters supporting wild rice. The package may also update designated uses for certain individual waterbodies. Significant progress was made on this rule during earlier rulemaking efforts (put on hold when the Scope Statement expired in 2019), including preparation of draft rule language and discussion with an Advisory Committee. Further exploratory work was done during the 2021-2023 cycle but DNR has not yet developed a new Scope Statement for this project.

CATEGORY B: PRIORITIES FOR FURTHER EXPLORATORY WORK AS TIME/RESOURCES ALLOW

Antidegradation Implementation Guidance

After the Antidegradation Rule is promulgated, implementation guidance will likely be necessary. This is time-sensitive and should be completed in the near-term. With the rule's 6-month delay in the effective date following promulgation, it is roughly estimated that the rule would become effective by December 2024. Guidance may be needed for both the wastewater and storm water programs.

Cyanobacterial (Harmful Algal Blooms) Guidance

EPA released human health recreational ambient water quality criteria or swimming advisory values for microcystin and cylindrospermopsin in May 2019. The criteria are for use as the basis for swimming advisories for notification purposes and are designed to protect children from the harmful effects of chronic exposure to microcystin and cylindrospermopsin. States may apply the recommendations as advisory levels or may adopt them as state water quality standards.

DNR previously completed a review of EPA's recommendations and determined to apply the values as swimming advisories rather than as statewide criteria. This decision was made because cyanobacterial harmful algal blooms that produce cyanobacterial toxins are often a response to or correlated with other water quality impairments/issues for which criteria already exist or are potentially forthcoming (i.e., phosphorus, nitrogen, chlorophyll). DNR recommends that local and tribal public health agencies use these swimming advisories for notification purposes in recreational waters to protect the public. In the upcoming cycle, DNR plans to develop guidance to assist with implementation of these recommendations.

Nitrate/Nitrogen Criteria Development

The EPA water quality criteria guidance requires all states to develop nitrogen criteria as well as phosphorus criteria. Nitrogen/nitrate criteria development was ranked as the highest priority topic in the 2021-2023 TSR. In 2022, DNR convened an internal workgroup to review the status of existing data in Wisconsin for various forms of nitrogen and related biological endpoints. The workgroups identified current gaps in DNR's monitoring program for various waterbody types and other next steps that would be needed to move the state closer to readiness for nitrogen criteria development. It also conducted a review of nitrogen criteria established by other states. Following these recommendations, in summer 2023, DNR and EPA Region 5 staff developed two projects for EPA's N-STEPS program, which provides technical assistance to states for exploring nutrient data. These projects focus on inland lakes and large rivers (described further below), and this work is expected to begin in 2024.

During the 2024-2026 cycle, DNR expects to continue background exploratory work on some of the following nitrogen-related topics. The DNR will also explore best practices for implementation of water quality criteria, while taking a holistic approach in evaluating how treating for one form of nitrogen may affect concentrations of other forms.

- **Total Nitrogen (TN) criteria development for eutrophication (Aquatic Life criteria)**

The main concern with excess bioavailable nitrogen in aquatic systems is nitrogen's role in eutrophication. The ecological effects of eutrophication often manifest as low dissolved oxygen (DO) levels and excessive algal growth.

 - ***TN for Lakes:*** Staff have done preliminary data review and currently have a project proposal submitted to EPA's N-STEPS program to explore TN criteria for inland lakes. This project will explore how EPA's national nutrient model for lakes (2021) may work with Wisconsin's lake data and existing lake type categories.
 - ***TN for Mississippi River:*** There have been several studies on effects of TN and biological endpoints like aquatic plants, duckweed, and fish, which could provide the basis for recommended TN values for the Mississippi River.
 - ***TN for Other Large Rivers:*** Staff have done preliminary work gathering data and currently have a project proposal submitted to EPA's N-STEPS program to explore correlations between TN, chl-a, and other biological endpoints, and explore levels of TN that would be protective for large rivers.
 - ***TN for Wadeable Streams:*** More stream monitoring will be done to fill data gaps on TN and relevant biological endpoints in streams.
- **Nitrate criteria development-Aquatic Toxicity (Aquatic Life criteria)**

Nitrate causes toxicity to aquatic life by reducing oxygen transport by an organism's blood. Data review indicates that sufficient data are available to consider criteria development.

- **Ammonia criteria revision (Aquatic Life)**

EPA has proposed revised criteria for ammonia based on protection of mussels. This is an important environmental issue, and mussels are in most waters in the state. Technical information is largely available, but work may need to be done to determine if there are some non-mussel waters where a revised criteria would not apply, and to address implementation issues.

Per- and polyfluoroalkyl Substances (PFAS, other than PFOS and PFOA) Criteria Development:

In 2022 DNR promulgated water quality criteria for two compounds within the broad category of PFAS—PFOS and PFOA—to protect human health. The toxicity and occurrence of other PFAS compounds are under active evaluation by EPA, WDHS, and other divisions within DNR. These manmade substances have been used to repel oil and water in a variety of industrial and consumer products, such as carpet and clothing treatments, food packaging, and cookware. They are also contained in firefighting foams. They are extremely persistent in the environment and bioaccumulate in humans and wildlife. Health-based advisories, criteria, and screening levels for other PFAS compounds have been developed by other states. Addressing potential public health risks from sites contaminated with PFAS is an ongoing priority for DNR, and criteria for other PFAS compounds would be helpful in assessing risk to human health. If sufficient data are available to develop criteria for other PFAS compounds, criteria development may be undertaken as resources allow.

Neonicotinoid Insecticides

Agricultural use of neonicotinoid insecticides like clothianidin, imidacloprid, and thiamethoxam has been implicated in global reductions in pollinator populations and they are thought to be similarly toxic to aquatic invertebrates. EPA's Office of Pesticide Programs (OPP) released revised aquatic life benchmarks for aquatic invertebrates for clothianidin and imidacloprid in 2016 and thiamethoxam in 2017. Although aquatic life benchmarks are not water quality criteria, the data contained within OPP's risk assessments undergo rigorous peer-review and can be used to develop water quality criteria for the protection of aquatic life. In the previous TSR cycle, staff began reviewing OPP's aquatic life benchmark data and other available toxicity data to determine whether developing surface water thresholds or criteria to protect aquatic life would be beneficial. Work on this topic is expected to continue, as neonicotinoids are used extensively in Wisconsin agriculture and have been detected with increasing frequency in groundwater and surface water, particularly in the Central Sands region of the state. It is deemed to be a priority for further exploratory work because of its widespread use and pervasiveness in the environment, impacts to aquatic insects, and availability of national and local research.

CATEGORY C: NOT PRIORITIES FOR THIS CYCLE

Aluminum Criteria Development

In December 2018, EPA published national recommended ambient water quality criteria for the protection of aquatic life from the toxic effects of aluminum. The 2018 criteria incorporate more recent toxicity studies conducted since the previous recommended criteria published in 1988. EPA's 2018 recommended criteria for total recoverable aluminum are equation-based and account for the effects of pH, hardness and dissolved organic carbon on aluminum toxicity. EPA has also developed a draft technical support document on implementation of these criteria. Wisconsin's water quality standards currently do not

include aluminum criteria to protect aquatic life. This has been ranked as a low priority in the past, as it is not a pollutant of particular concern for DNR's permit program.

Aquatic Life Water Quality Criteria Revision/Development

This topic could have two separate components: A) Develop water quality criteria for the protection of aquatic life for substances for which EPA has developed or revised criteria based on new toxicological data but for which there is currently no Wisconsin standard. Topics that could be considered include acrolein, carbaryl, diazinon, nonylphenol, and tributyltin. B) Revise existing Wisconsin water quality criteria for the protection of aquatic life for substances for which EPA has new toxicological data. Topics that could be considered include cadmium and selenium. [Note: Individual substances that are listed as stand-alone topics (i.e., aluminum, ammonia, copper) could also fall under this category.] DNR has prioritized development/updating of Human Health Criteria (for which background work has already been completed) before undertaking the Aquatic Life Criteria process.

Bifenthrin Criteria Development

Recent research has suggested that the pesticide bifenthrin is contributing to reduced macroinvertebrate numbers and species richness in Midwestern waters. For example, the Mississippi River is experiencing a decline in the population of burrowing mayflies, which has important implications for ecosystem health due to their importance as a food source for fish and wildlife. Bifenthrin use continues to increase in Wisconsin and the Midwest. DNR plans to first focus efforts on development of criteria for neonicotinoid insecticides before considering whether there is enough available data to develop criteria for other insecticides like bifenthrin and chlorantraniliprole (below).

Chlorantraniliprole Criteria Development

Chlorantraniliprole is an insecticide used on agricultural crops, turf grass and in lawn and landscape products and applications. In EPA's Office of Pesticide Programs' ecological risk assessment for chlorantraniliprole, risks to freshwater invertebrates from chronic exposure were identified. Chlorantraniliprole has been detected in numerous groundwater samples in sandy irrigated agricultural areas and in stream water samples collected by the Department of Agriculture, Trade, and Consumer Protection. DNR plans to first focus efforts on development of criteria for neonicotinoid insecticides before considering whether there is enough available data to develop criteria for other insecticides like bifenthrin (above) and chlorantraniliprole.

Copper Criteria Revision

EPA recommends that states use the Biotic Ligand Model (BLM) for calculating site-specific criteria for copper. The BLM characterizes the impacts of local water conditions on copper bioavailability by incorporating additional water conditions (e.g., temperature, pH, DOC, alkalinity) as inputs within the model and mechanistically modeling their impacts on bioavailability. A limited pilot study of this model has been done using Wisconsin data, but further study would likely be needed to determine the feasibility of using this model to calculate criteria, given its extensive data requirements. New methods for combining multiple linear regressions with the BLM (similar to regressions used with aluminum) have recently become available and may warrant further investigation. This topic has been a low priority due to the substantial data needs required to apply the BLM, coupled with the small number of facilities whose WPDES permits contain copper limits.

Outstanding/Exceptional Resource Waters Process Revision

Federal law requires states to identify and protect “High Quality Waters.” In Wisconsin, these waters are referred to as Outstanding or Exceptional Resource Waters (ORW/ERWs) and are enumerated in ss. NR 102.10 and NR 102.11, Wis. Adm. Code, respectively. The department’s existing guidance on classifying waters as ORW/ERW is outdated, and these methods should be updated so that the process is clear and based on current scientific understanding. Although DNR had expected to address this topic during previous TSR cycles, staff time has been prioritized toward other rulemaking needs, such as the Antidegradation rule and Bioassessments rule. Continued vacancies limit the staff time expected to be available to work on this project in the upcoming cycle.

Microplastics Criteria Development

Microplastics are pieces of synthetic materials or small manufactured plastic particles comprised of polyethylene, polypropylene, polyvinyl chloride, polystyrene, and polyethylene terephthalate that are <5 mm in size. Microplastics have been studied in the Great Lakes and some Wisconsin rivers, and likely occur in waterbodies throughout the state. Research from entities outside of the DNR cites evidence of ingestion of microplastics by wildlife with implications for physical harm and possible food chain transport. If additional data on microplastics for Wisconsin waterbodies and information about harmful levels for organisms become available, exploratory work toward potential criteria development for protection of human health, aquatic life, or wildlife may be included for work plans in future TSR cycles.

Pharmaceuticals Criteria Development

Pharmaceutical byproducts and personal care products (PPCPs) have been found throughout the Great Lakes. Existing research illustrates that these products are a cause for concern as they have been linked to several problems such as intersex fish. Developing water quality standards for pharmaceuticals and their byproducts would be proactive and protective of humans and wildlife. Although DNR recognizes that PPCPs in Wisconsin waters is of potential concern, this is a very broad topic and there is not yet enough information available on the toxic effects and/or prevalence of individual PPCPs or classes of PPCPs to begin work. DNR now has an Office of Emerging Contaminants, which stays abreast of scientific literature around such topics. If more information about individual PPCPs or classes of PPCPs becomes available, this topic may become a higher priority in future TSR cycles.

Sulfate Criteria Development

Wild rice (*Zizania palustris*) is a critically important natural resource, particularly to Native American Tribes who depend on it for subsistence and whose lifeway and history are inseparable from the traditions of harvesting and consuming this food. It is also a key food source for wildlife. Wild rice seedling emergence, seedling survival, biomass, growth, viable seed production, and seed mass have been shown to be negatively correlated with sulfate concentrations in water. Development of water quality criteria for sulfates may support the preservation and restoration of wild rice in Wisconsin. In 2021, DNR completed a multi-year Strategic Analysis of Wild Rice Management, which outlines considerations related to development of a Wild Rice Designated Use and/or sulfate criteria in section 7.2.6. These topics may also be considered as part of the ongoing development of the Wild Rice Management Plan, which will “establish specific goals, objectives, and strategies for northern and southern wild rice management throughout all of Wisconsin.” In addition to the longstanding Joint State/Tribal Wild Rice Management Committee and DNR’s Wild Rice Advisory Committee, the DNR has now hired a Wild Rice and Habitat Coordinator for the

St. Louis Estuary. The Water Quality Standards program plans to continue to participate in discussions around these topics as needed to determine the best course forward.

Total Suspended Solids (TSS) Criteria Development

In 2022, DNR convened an internal workgroup to review existing data in Wisconsin for total suspended solids and related parameters. The workgroup identified the level of data available for various waterbody types and began exploring topics around data, criteria, and implementation. It also conducted a review of criteria for TSS and related parameters established by other states. This project was put on hold in late 2022 due to program vacancies that led to Water Quality Standards staff time being redirected to other topic items (primarily, completing the Antidegradation rule). Due to ongoing vacancies and prioritizing nitrogen exploration at this time, further work on TSS is not a high priority at this time but some work may continue as resources allow.

SECTION 2: VARIANCES

Water quality standards variances temporarily allow a permitted facility to discharge a pollutant at a level higher than the effluent limit that would normally be applied to meet the water quality standard for that pollutant. Variances are allowed under state and federal laws and all variances must be approved by the EPA. A permitted facility can qualify for a variance if it satisfies the federal and state eligibility criteria. To receive approval for a variance, a facility must develop a plan that effectively reduces discharges of the pollutant over time through source reduction, operational changes, and other pollutant minimization activities. A variance is appropriate when a facility is unable to meet the water quality standard for a given pollutant and a solution for treatment or source reduction is not readily achievable for reasons allowed under state and federal laws (e.g., widespread economic impacts). Variances provide an opportunity for the facility to work towards improving water quality in an economical manner.

As part of the Triennial Standards Review, the public is asked whether they have knowledge of technological solutions that are now reasonably available and cost effective that would reduce the need for any of the following variances. Variances are administered under ss. 283.15 and 283.16, Wis. Stats.

To learn more, visit the webpage for [water quality variances](#).

2A: Multi-Discharger Variance (MDV) for Phosphorus

The phosphorus MDV extends the timeline for complying with low-level phosphorus limits. In exchange, point sources commit to stepwise reductions of phosphorus in their discharge and contribute resources to help reduce discharges of phosphorus from nonpoint sources. For instance, dischargers might help agricultural nonpoint sources reduce phosphorus pollution through county payments or through installation of phosphorus reduction projects.

The phosphorus MDV is implemented under s. 283.16, Wis. Stats., and it is similar to individual variances which are granted under s. 283.15, Wis. Stats. However, multiple point sources can be covered under the MDV, whereas an individual variance only applies to a single facility.

Wisconsin received federal approval for a phosphorus MDV in 2017. Pursuant to s. 283.16(2m), Wis. Stats., through the Triennial Standards Review the DNR must request comments on the

MDV to consider whether a formal review of the variance under s. 283.16(3), Wis. Stats., is necessary. The DNR is currently engaged in review, and is therefore asking the public for information on new treatment technologies that are readily available and cost effective.

The review will re-evaluate the initial determination that compliance with the phosphorus standard, as applied to point sources via water quality-based effluent limitations (WQBELs), causes substantial and widespread adverse social and economic impacts on a statewide basis. The review is being conducted by the Department of Administration (DOA) in consultation with the DNR and will re-evaluate compliance costs for categories of point sources that cannot achieve compliance with WQBELs for phosphorus without a major facility upgrade. Entities that provided comments to DOA in 2023 do not need to resubmit those as part of the TSR.

Current information regarding the DOA reevaluation effort is available at:

<https://doa.wi.gov/Pages/StatewideMDV.aspx>

For more information on the MDV, see:

<https://dnr.wisconsin.gov/topic/Wastewater/phosphorus/StatewideVariance.html>

For public comment:

- *If you are aware of any information regarding treatment technologies that have become reasonably available that may enable point sources or categories of point sources to comply with more-stringent phosphorus effluent limitations, please submit that information.*
- *For the above technologies, please also submit information as to whether the treatment technology is cost effective.*

2B: Individual Variances

Individual variances are variances that the DNR issues individually to single facilities. Pursuant to s. 283.15(11), Wis. Stats., the DNR will also accept comments on individual variances as part of the Triennial Standards Review. Currently, Wisconsin has individual variances in place for the pollutants shown below. A brief description of the pollutants for which Wisconsin has variances and a list of facilities that have individual variances are provided below.

For public comment: *Are you aware of any new or updated information or data pertaining to any facility's variance or the following components of a variance?*

- *Pollutant Control Technologies*
- *Pollutant Sources*
- *Flow or Water levels*
- *Economic Conditions*
- *Best Management Practices*

Arsenic

This naturally occurring substance is most often found in groundwater that has been contaminated through contact with bedrock and glacial deposit. Arsenic is known to have the highest concentrations in northeastern and southeastern Wisconsin.

Chloride

Facilities can apply for variances to chloride water quality standards which provide additional time to meet the limit through creative source reduction measures. Common sources of excess

chloride include inflow and infiltration to municipal sewers during snow melt, road salting practices, water softener backwash, and certain other industrial processes often associated with food processing.

Copper

Wastewater treatment facilities in the northern and northwestern regions of the state commonly discharge levels of copper above the water quality criteria. This is primarily because the water in these areas of the state is very soft and has a higher potential to corrode copper pipes, and because the state’s copper criteria is more stringent in waters with lower hardness levels due to higher toxicity to aquatic life under these conditions.

Mercury

Many wastewater treatment facilities in Wisconsin are not able to meet the restrictive mercury limit in their effluent for a variety of reasons. Facilities can apply for variances to mercury water quality standards which provide additional time to meet the limit through creative pollutant minimization strategies. Common mercury sources include dental and medical facilities, laboratories, and household products.

Phosphorus

Many facilities are not currently able to meet phosphorus effluent limits due to the need for major upgrades that are necessary to achieve compliance with the limits. Some facilities are eligible to apply for the phosphorus MDV, but those that are not may still be eligible for an individual phosphorus variance. Under an individual phosphorus variance, the facility works toward source reduction measures through optimization at the treatment plant and identification of sources throughout the collection system.

Facilities with individual variances as of January 2024 (updated quarterly)

Facility Name	Permit No.	County	Variance Pollutant
ALMA WASTEWATER TREATMENT FACILITY	0022101-10	Buffalo	Phosphorus
ANTIGO CITY OF	0022144-10	Langlade	Mercury
APPLETON WASTEWATER TREATMENT FACILITY	0023221-08	Outagamie	Mercury
ARGYLE WASTEWATER TREATMENT FACILITY	0022225-09	Lafayette	Phosphorus
ARLINGTON WASTEWATER TREATMENT FACILITY	0021512-09	Columbia	Chloride
ARPIN WASTEWATER TREATMENT FACILITY	0031267-07	Wood	Phosphorus
AUGUSTA WASTEWATER TREATMENT FACILITY	0023272-09	Eau Claire	Phosphorus
AVOCA WASTEWATER TREATMENT FACILITY	0060151-09	Iowa	Phosphorus
AZTALAN BIO, LLC	0002038-09	Jefferson	Mercury
BARABOO WASTEWATER TREATMENT FACILITY	0020605-10	Sauk	Mercury
BILLERUD WISCONSIN LLC	0037991-07	Wood	Mercury
BLUE MOUNDS WASTEWATER TREATMENT FACILITY	0031658-08	Dane	Chloride
BORREGAARD USA, INC.	0003450-08	Marathon	Mercury
BRILLION WASTEWATER TREATMENT FACILITY	0020443-09	Calumet	Chloride
BROOKFIELD, CITY OF	0023469-09	Waukesha	Chloride
BROWNSVILLE WASTEWATER TREATMENT FACILITY	0021601-08	Dodge	Chloride

BROWNTOWN WASTEWATER TREATMENT FACILITY	0032051-07	Green	Phosphorus
CASCADES TISSUE GROUP WISCONSIN INC	0003077-10	Eau Claire	Mercury
CASHTON WASTEWATER TREATMENT FACILITY	0020915-11	Monroe	Phosphorus
CASSVILLE WASTEWATER TREATMENT FACILITY	0021423-09	Grant	Phosphorus
CEDAR GROVE WASTEWATER TRTMNT FACIL	0020711-09	Sheboygan	Chloride
CHELSEA SANITARY DISTRICT	0035718-06	Taylor	Phosphorus
CHILTON WASTEWATER TREATMENT FACILITY	0022799-08	Calumet	Chloride
CLAYTON VILLAGE OF	0036706-10	Polk	Phosphorus
CLEVELAND WASTEWATER TREATMENT FACILITY	0030848-09	Manitowoc	Arsenic
CLYMAN WASTEWATER TREATMENT FACILITY	0020702-08	Dodge	Chloride
CUBA CITY WASTEWATER TREATMENT FACILITY	0022217-10	Grant	Chloride
DAIRYLAND POWER COOP ALMA SITE	0040223-08	Buffalo	Mercury
DALE SANITARY DISTRICT NO 1 WWTF	0030830-07	Outagamie	Chloride
DALLAS VILLAGE OF	0023698-09	Barron	Phosphorus
DEERFIELD WASTEWATER TREATMENT FACILITY	0023744-09	Dane	Chloride
DENMARK WASTEWATER TREATMENT FACILITY	0021741-08	Brown	Chloride
DICKEYVILLE WASTEWATER TREATMENT FACILITY	0023817-10	Grant	Chloride
DODGEVILLE WASTEWATER TREATMENT FACILITY	0026913-08	Iowa	Chloride
DUNN PAPER - LADYSMITH, LLC	0003204-09	Rusk	Mercury
EAST TROY WASTEWATER TREATMENT FACILITY	0020397-10	Walworth	Chloride
ELK MOUND WASTEWATER TREATMENT FACILITY	0023914-09	Dunn	Copper
ERCO WORLDWIDE (USA) INC - PORT EDWARDS	0003565-09	Wood	Mercury
ESSITY PROFESSIONAL HYGIENE NORTH AMERICA LLC	0037389-09	Winnebago	Mercury
FAIRWATER WASTEWATER TREATMENT FACILITY	0021440-08	Fond Du Lac	Chloride
FARMINGTON SANITARY DISTRICT WWTF	0029106-10	La Crosse	Phosphorus
FENNIMORE WASTEWATER TREATMENT FACILITY	0023981-08	Grant	Chloride
FONTANA WALWORTH WATER POLLUTION CONTROL COMMISSION	0036021-07	Walworth	Chloride
GAYS MILLS WASTEWATER TREATMENT FACILITY	0022268-10	Crawford	Phosphorus
GIBBSVILLE SANITARY DISTRICT	0031577-09	Sheboygan	Phosphorus
GLEN FLORA VILLAGE OF	0029963-10	Rusk	Phosphorus
GRATIOT WASTEWATER TREATMENT FACILITY	0024139-10	Lafayette	Phosphorus
HARTFORD WATER POLLUTION CONTROL FACILITY	0020192-09	Washington	Chloride
HEART OF THE VALLEY METRO SEWERAGE DISTRICT	0031232-09	Outagamie	Mercury
HOLLAND SD 1 WASTEWATER TREATMENT FACILITY	0028207-07	Brown	Chloride
HUDSON WASTEWATER TREATMENT FACILITY	0024279-10	St. Croix	Mercury
IXONIA UTILITY DISTRICT #1 WWTF	0031038-10	Jefferson	Chloride
KOMATSU MINING CORP. GROUP	0025321-08	Milwaukee	Mercury
LARSEN WINCHESTER SD WWTF	0031925-06	Winnebago	Chloride
LIME RIDGE WASTEWATER TREATMENT FACILITY	0036447-07	Sauk	Phosphorus

MADISON METROPOLITAN SEWERAGE DISTRICT WWTF	0024597-09	Dane	Chloride
MADISON METROPOLITAN SEWERAGE DISTRICT WWTF	0024597-09	Dane	Mercury
MAPLE GROVE ESTATES SANITARY DISTRICT	0036552-06	La Crosse	Chloride
MELLEN CITY OF	0020311-10	Ashland	Mercury
MENOMONIE WASTEWATER TREATMENT FACILITY	0024708-10	Dunn	Mercury
MERRILL CITY OF	0020150-10	Lincoln	Mercury
MERRILLAN WASTEWATER TREATMENT FACILITY	0024732-10	Jackson	Phosphorus
MILLADORE WASTEWATER TREATMENT FACILITY	0022381-10	Wood	Phosphorus
MONTFORT WASTEWATER TREATMENT FACILITY	0024821-08	Grant	Phosphorus
MOUNT CALVARY WASTEWATER TREATMENT FACILITY	0035963-08	Fond Du Lac	Chloride
MOUNT HOREB WASTEWATER TREATMENT FACILITY	0020281-08	Dane	Chloride
MULE HIDE MFG. COMPANY	0003034-09	Chippewa	Mercury
NEW HOLSTEIN WASTEWATER TREATMENT FACILITY	0020893-09	Calumet	Chloride
NORWAY TN SANITARY DISTRICT 1 WWTF	0031470-08	Racine	Chloride
OAKDALE WASTEWATER TREATMENT FACILITY	0031259-09	Monroe	Copper
OAKDALE WASTEWATER TREATMENT FACILITY	0031259-09	Monroe	Phosphorus
OCONOMOWOC WASTEWATER TREATMENT PLNT	0021181-09	Waukesha	Chloride
OCONTO UTILITY COMMISSION WWTF	0022861-09	Oconto	Mercury
ONTARIO WASTEWATER TREATMENT FACILITY	0020753-10	Vernon	Phosphorus
OOSTBURG WASTEWATER TREATMENT PLANT	0022233-07	Sheboygan	Chloride
ORFORDVILLE WASTEWATER TREATMENT FACILITY	0021709-09	Rock	Phosphorus
OSHKOSH WASTEWATER TREATMENT PLANT	0025038-09	Winnebago	Mercury
PACKAGING CORPORATION OF AMERICA	0002810-09	Lincoln	Mercury
PADDOCK LAKE WASTEWATER TRTMNT FAC	0025062-10	Kenosha	Chloride
PHELPS SANITARY DISTRICT #1	0029050-10	Vilas	Copper
PHILLIPS PLATING CORPORATION	0041149-08	Price	Phosphorus
POPLAR VILLAGE OF	0049760-05	Douglas	Phosphorus
POTOSI-TENNYSON SEWAGE COMMISSION WWTF	0021547-09	Grant	Phosphorus
POTTER WASTEWATER TREATMENT FACILITY	0029025-09	Calumet	Chloride
PRAIRIE DU CHIEN WASTEWATER TREATMENT FACILITY	0020257-09	Crawford	Mercury
READSTOWN WASTEWATER TREATMENT FACILITY	0021661-10	Vernon	Phosphorus
REEDSBURG WASTEWATER TREATMENT FACILITY	0020371-10	Sauk	Mercury
RIB LAKE VILLAGE OF	0029017-10	Taylor	Phosphorus
RIB MOUNTAIN METRO SEWAGE DISTRICT WWTF	0035581-07	Marathon	Mercury

RICHLAND CENTER WASTEWATER TREATMENT FACILITY	0020109-09	Richland	Mercury
RIPON WASTEWATER TREATMENT FACILITY	0021032-09	Fond Du Lac	Chloride
ROCKDALE WASTEWATER TREATMENT FACILITY	0026352-09	Dane	Phosphorus
ROSENDALE WASTEWATER TREATMENT FACILITY	0028428-09	Fond Du Lac	Chloride
ROXBURY SANITARY DISTRICT #1 WWTF	0028975-09	Dane	Phosphorus
SALEM LAKES, VILLAGE - SALEM WWTP	0031496-08	Kenosha	Mercury
SAXON SANITARY DISTRICT #1	0031704-09	Iron	Phosphorus
SIREN VILLAGE OF	0028924-10	Burnett	Phosphorus
SLINGER WASTEWATER TREATMENT FACILITY	0020290-10	Washington	Chloride
SOLDIERS GROVE WASTEWATER TREATMENT FACILITY	0022241-10	Crawford	Phosphorus
SOUTH WAYNE WASTEWATER TREATMENT FACILITY	0022292-09	Lafayette	Phosphorus
ST JOSEPH SANITARY DISTRICT	0031186-09	La Crosse	Phosphorus
ST NAZIANZ WASTEWATER TREATMENT FACILITY	0022195-09	Manitowoc	Chloride
ST PAPER LLC	0000531-08	Oconto	Mercury
STETSONVILLE, VILLAGE OF	0060216-10	Taylor	Phosphorus
STEVENS POINT WASTEWATER TREATMENT FACILITY	0029572-09	Portage	Mercury
STOUGHTON WASTEWATER TREATMENT FACILITY	0020338-09	Dane	Mercury
SULLIVAN WASTEWATER TREATMENT FACILITY	0025585-08	Jefferson	Chloride
SUPERIOR SEWAGE DISPOSAL SYSTEM	0025593-09	Douglas	Mercury
SUSSEX WASTEWATER TREATMENT FACILITY	0020559-08	Waukesha	Chloride
THE PROCTER & GAMBLE PAPER PRODUCTS CO	0001031-09	Brown	Mercury
THREE LAKES SANITARY DISTRICT #1	0022853-10	Oneida	Copper
TOMAH WASTEWATER TREATMENT FACILITY	0021318-09	Monroe	Mercury
TWIN LAKES WASTEWATER TREATMENT FAC	0021695-10	Kenosha	Chloride
TYCO FIRE PRODUCTS LP	0001040-08	Marinette	Arsenic
TYCO FIRE PRODUCTS LP	0001040-08	Marinette	Mercury
UNION GROVE VILLAGE	0028291-10	Racine	Chloride
UNION GROVE VILLAGE	0028291-10	Racine	Mercury
WATERTOWN WASTEWATER TREATMENT FACILITY	0028541-09	Jefferson	Mercury
WAUKESHA CITY	0029971-09	Waukesha	Chloride
WAUPACA WASTEWATER TREATMENT FACILITY	0030490-08	Waupaca	Mercury
WAUSAU WATER WORKS WW TREATMENT FACILITY	0025739-09	Marathon	Mercury
WEST BEND CITY	0025763-11	Washington	Chloride
WHITewater GENERATING STATION	0049069-06	Jefferson	Mercury
WILTON WASTEWATER TREATMENT FACILITY	0022462-10	Monroe	Phosphorus
WISCONSIN ELECTRIC POWER CO OAK CR PLNT ELM RD GEN STATION	0000914-08	Milwaukee	Mercury
WISCONSIN ELECTRIC POWER CO OAK CR PLNT ELM RD GEN STATION	0000914-08	Milwaukee	Arsenic

WISCONSIN POWER AND LIGHT EDGEWATER GENERATING STATION	0001589-09	Sheboygan	Arsenic
WISCONSIN PUBLIC SERVICE CORP WESTON	0042765-08	Marathon	Mercury
WISCONSIN RAPIDS WWTF	0025844-10	Wood	Mercury
WOLF TREATMENT PLANT	0028452-09	Shawano	Mercury
YORKVILLE SEWER UTILITY DISTRICT NO 1	0029831-09	Racine	Chloride