

ADMINISTRATIVE RULES Fiscal Estimate & Economic Impact Analysis

1. Type of Estimate and Analysis <input type="checkbox"/> Original <input checked="" type="checkbox"/> Updated <input type="checkbox"/> Corrected	2. Date February 20, 2023
3. Administrative Rule Chapter, Title and Number (and Clearinghouse Number if applicable) Chapter NR 811 – Requirements for the Operation and Design of Community Water Systems CR 22-074	
4. Subject Revisions to chapter NR 811 to update, correct, and clarify existing code requirements and add requirements for new technologies related to community drinking water system sources, source water quality, storage, treatment, and distribution. (DG-22-20)	
5. Fund Sources Affected <input type="checkbox"/> GPR <input type="checkbox"/> FED <input type="checkbox"/> PRO <input type="checkbox"/> PRS <input type="checkbox"/> SEG <input type="checkbox"/> SEG-S	6. Chapter 20, Stats. Appropriations Affected n/a
7. Fiscal Effect of Implementing the Rule <input checked="" type="checkbox"/> No Fiscal Effect <input type="checkbox"/> Increase Existing Revenues <input type="checkbox"/> Increase Costs <input type="checkbox"/> Decrease Costs <input type="checkbox"/> Indeterminate <input type="checkbox"/> Decrease Existing Revenues <input type="checkbox"/> Could Absorb Within Agency's Budget	
8. The Rule Will Impact the Following (Check All That Apply) <input type="checkbox"/> State's Economy <input checked="" type="checkbox"/> Specific Businesses/Sectors <input checked="" type="checkbox"/> Local Government Units <input type="checkbox"/> Public Utility Rate Payers <input checked="" type="checkbox"/> Small Businesses (if checked, complete Attachment A)	
9. Estimate of Implementation and Compliance to Businesses, Local Governmental Units and Individuals, per s. 227.137(3)(b)(1). \$1,435,600 (10 year cumulative estimate) Most of the rule revisions are to clarify existing requirements and would not result in costs. Other rule revisions may lead to an estimated total cost of \$1,435,720 over 10 years. Please see question 14 for details.	
10. Would Implementation and Compliance Costs Businesses, Local Governmental Units and Individuals Be \$10 Million or more Over Any 2-year Period, per s. 227.137(3)(b)(2)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
11. Policy Problem Addressed by the Rule The primary objectives of revisions to ch. NR 811, Wis. Adm. Code, are to correct, clarify and update design and construction standards and address new technologies related to community drinking water systems. Specific objectives include: <ol style="list-style-type: none">a. Modify, add, and clarify NSF/ANSI Standard 61 certification requirements for all materials or products that come into contact with finished water.b. Modify, add, and clarify groundwater well design standards including siting, construction, rehabilitation, reconstruction and abandonment.c. Modify, add, and clarify groundwater and surface water treatment facility design standards including construction, reconstruction, treatment technologies, facility layout, equipment, piping, storage and disposal of waste.d. Modify, add, and clarify finished water storage design standards including siting, construction, rehabilitation, reconstruction, and decommissioning.e. Modify, add, and clarify distribution and transmission system design standards including separation distance to potential contamination sources, installation, construction, location of appurtenances, rehabilitation technologies, testing, and abandonment.f. Modify, add, and clarify drinking water system building construction requirements.g. Modify, add, and clarify source water quality treatment requirements.	

ADMINISTRATIVE RULES Fiscal Estimate & Economic Impact Analysis

- h. Modify, add, and clarify exemptions or alternative code requirements for other-than-municipal community drinking water systems.
- i. Remove code requirements that may be conflicting or are no longer applicable.
- j. Address grammatical errors and inconsistencies.

12. Summary of the Businesses, Business Sectors, Associations Representing Business, Local Governmental Units, and Individuals that may be Affected by the Proposed Rule that were Contacted for Comments.

During the solicitation for public comments process, the department contacted the following organizations for comment on the economic impact of the proposed rule:

- Wisconsin Rural Water Association
- Wisconsin Section of the American Water Works Association
- Municipal Environmental Group – Water Division
- Municipal Community Water Systems
- Other-than-Municipal Community Water Systems

13. Identify the Local Governmental Units that Participated in the Development of this EIA.

During the rule drafting process, all community water systems (1,030 in Wisconsin) and stakeholders were invited to provide comments to the department's identified areas of code revisions and proposed rule revisions. Select surface water systems were contacted to determine the cost of proposed changes to the requirements for surface water plant intakes. A select water system that installed nitrate treatment systems in the past 10 years was contacted regarding the cost of implementing a change in the requirements for installation of nitrate treatment systems.

During the solicitation for comment on the EIA, two municipal water systems provided comments.

14. Summary of Rule's Economic and Fiscal Impact on Specific Businesses, Business Sectors, Public Utility Rate Payers, Local Governmental Units and the State's Economy as a Whole (Include Implementation and Compliance Costs Expected to be Incurred)

(A) Economic Impact on Businesses:

The businesses that would be affected by the rule consist of other-than-municipal (OTM) water systems, which are privately owned community water systems. The majority of the economic impacts of the proposed rule are a compliance benefit or cost saving for the OTM water system.

The only rule revision that would create an additional cost to OTM water systems is the new requirement to have a continuous nitrate analyzer installed with nitrate removal treatment systems. Over the past 10 years, one OTM water system has installed a nitrate removal system. For a conservative estimate, the department expects 3 times as many OTM nitrate removal system proposals in the next 10 years. The average cost for a continuous nitrate analyzer is approximately \$25,000. Therefore the projected economic impact over the next 10 years for businesses would be approximately \$75,000.

(B) Economic Impacts on Local Governments, Utility Rate Payers, and Public Entities:

The majority of the rule revisions clarify existing regulatory requirements, and do not result in a change of department implementation of the rule. There is no anticipated economic impact for rule revisions that are proposed for clarification

ADMINISTRATIVE RULES

Fiscal Estimate & Economic Impact Analysis

only.

The specific rule revisions that are reasonably expected to incur implementation and compliance costs for community water systems are detailed below:

The department is proposing to require that community water systems install screens on chemical storage tanks equipped with overflows, which prevent insects and debris from entering the chemical storage tanks. This would only affect large water systems that have chemical storage tanks large enough to be equipped with overflows. Assuming that in the next 10 years, 100 large water systems in the state submit for plan review to modify their chemical storage tanks and each system would need to purchase approximately 20 square feet of 24-mesh screen to cover the overflow, which costs approximately \$100, the anticipated economic impact would be \$10,000.

The department is proposing to require that new or modified nitrate treatment systems be required to install a continuous nitrate analyzer to ensure that the entry point water is below the maximum contaminant level for nitrate at all times. Continuous nitrate analyzers for water systems cost approximately \$25,000. In the past 10 years, the department has received 8 requests for approval to install nitrate treatment systems. For a conservative estimate, the department expects 24 requests for nitrate removal systems in the next 10 years. Therefore, the anticipated economic impact would be \$600,000.

The department is proposing to update the ozone water treatment system compressor filter requirements to align with the Great Lakes – Upper Mississippi River Board of State and Provincial Public Health and Environmental Manager Recommended Standards for Water Works (10 States Standards). A compressor filter that meets existing code requirements costs approximately \$60. A new compressor filter that would meet proposed code requirements costs approximately \$360. In the past 10 years, 2 water systems have proposed modifications to ozone water treatment systems. In the next 10 years, the department expects to have 2 more modifications to ozone treatment systems, which would result in an additional cost of approximately \$720.

The department is proposing to update the elevated tank construction requirements to require that condensate platform drains discharge to the ground surface separate from the elevated tank overflow pipe. From consultation with an elevated tank contractor, it is estimated that modifying existing tanks to meet the proposed requirement would cost \$5,000 to \$7,500 per tank. Approximately 25% of elevated tanks in the state would require this change. At a rate of 40 tank projects per year, the department anticipates 10 tanks per year or a total of 100 tank projects over the next 10 years would require this change. At \$7,500 per tank, the cost over 10 years would be \$750,000.

(C) State Economy:

The department does not anticipate negative impacts to the state's economy. The maintenance of safe drinking water protects public health and the environment and helps avoid future costs.

(d) Fiscal Impacts:

There are no fiscal impacts to this rule. This rule will not require additional state staff to implement or affect state revenues.

ADMINISTRATIVE RULES

Fiscal Estimate & Economic Impact Analysis

15. Benefits of Implementing the Rule and Alternative(s) to Implementing the Rule

Implementing the revised rule will replace outdated or incorrect existing code requirements, address new technologies, and provide additional protections to ensure that all customers of public water systems in the state are provided with safe drinking water.

There are many outdated, incorrect, and no longer enforced code requirements in ch. NR 811, Wis. Adm. Code, that are proposed to be replaced with this code revision. These revisions will allow for additional flexibility in the justification and design of water treatment systems.

There are a number of new technologies that are not currently addressed by ch. NR 811, Wis. Adm. Code. The department has been approving these technologies for new installations on a case-by-case basis. The department is proposing revisions to address new technologies. Specific code revisions include allowing the use and providing specific requirements for radar and sonic chemical usage measurement systems, allowing the use of fiberglass reservoirs, and addressing the reclassified PVC material and pressure class specifications.

The proposed code revisions include additional requirements for community water systems that will provide additional protections for customers. Specific new requirements that would provide additional protections include requiring a continuous nitrate analyzer for systems that treat or blend for nitrates, including additional separation distances between wells and water mains to potential contamination sources, and adding design requirements for elevated tanks to prevent insects and debris from entering the tank.

16. Long Range Implications of Implementing the Rule

The long range implication will be the same as the short range implication of this rule.

17. Compare With Approaches Being Used by Federal Government

The U.S. Environmental Protection Agency (EPA) granted Wisconsin primary enforcement authority (primacy) for the federal Safe Drinking Water Act, which Wisconsin does through creation, maintenance, and enforcement of state statutes and administrative rules governing safe drinking water. As a primacy state, Wisconsin must enforce state regulations that assure that the design and construction of new or modified public water system facilities will be capable of compliance with the state primary drinking water regulations. (40 C.F.R. § 142.10(b)(5)).

18. Compare With Approaches Being Used by Neighboring States (Illinois, Iowa, Michigan and Minnesota)

The revisions are in alignment with the 10 States Standards, which is a guide for the design and preparation of plans and specifications for public water supply systems in the Great Lakes region.

The four states surrounding Wisconsin – Illinois, Michigan, Iowa, and Minnesota – use the 10 States Standards as the regulatory requirements for community water systems. A brief comparison with the four surrounding states is provided below on the most substantive changes proposed in these rule revisions.

- The surrounding states require that the total developed groundwater source capacity shall equal or exceed the design maximum day demand with the largest producing well out of service. For apartment units, condominium units, and manufactured (mobile) homes it is difficult to determine the maximum day demand. The department is proposing that the minimum pumping capacity for apartment units, condominium units, and manufactured (mobile) homes be 1 gallon per minute per living unit, which is generally deemed adequate capacity by department experience and industry standards.
 - The surrounding states regulate nitrate treatment systems through the appropriate treatment requirements listed
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ADMINISTRATIVE RULES Fiscal Estimate & Economic Impact Analysis

in the 10 States Standards. The existing and proposed rules for nitrate treatment in ch. NR 811, Wis. Adm. Code, largely follow the requirements listed in the 10 States Standards. However, the department is proposing to add a requirement that nitrate treatment or blending systems be provided with a continuous nitrate analyzer to ensure that entry point water is continuously meeting the maximum contaminant level for nitrate, which is an acute contaminant. This additional protection is not part of surrounding states' regulations, but will provide additional protections for water consumers in Wisconsin.

- The surrounding states regulate packed tower aeration design with the requirements listed in the 10 States Standards. Wisconsin currently does not have specific design requirements for packed tower aeration systems and is proposing to adopt the requirements listed in the 10 States Standards.
- The surrounding states regulate pressure filtration design with the requirements listed in the 10 States Standards. Wisconsin currently does not have specific design requirements for pressure filtration systems and is proposing to adopt the requirements listed in the 10 States Standards.
- The surrounding states regulate anion exchange system design with the requirements listed in the 10 States Standards. Wisconsin currently does not have specific design requirements for anion exchange systems and is proposing to adopt the requirements listed in the 10 States Standards.

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