

## ADMINISTRATIVE RULES Fiscal Estimate & Economic Impact Analysis

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1. Type of Estimate and Analysis

May 7, 2019

Original    Updated    Corrected

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2. Administrative Rule Chapter, Title and Number

Chapter NR 111 - Cooling Water Intake Structures, WY-19-14

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3. Subject

Implementation of 40 CFR Parts 122-125: National Pollution Discharge Elimination System—Regulations Addressing Cooling Water Intake Structures for New Facilities (New Facilities Rule) and Final Regulations To Establish Requirements for Cooling Water Intake Structures at Existing Facilities and Amend Requirements at Phase I (New) Facilities; Final Rule (Existing Facilities Rule).

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4. Fund Sources Affected

GPR    FED    PRO    PRS    SEG    SEG-S

5. Chapter 20, Stats. Appropriations Affected

NA

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6. Fiscal Effect of Implementing the Rule

No Fiscal Effect    Increase Existing Revenues    Increase Costs  
 Indeterminate    Decrease Existing Revenues    Could Absorb Within Agency's Budget  
 Decrease Cost

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7. The Rule Will Impact the Following (Check All That Apply)

State's Economy    Specific Businesses/Sectors  
 Local Government Units    Public Utility Rate Payers  
 Small Businesses (if checked, complete Attachment A)

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8. Would Implementation and Compliance Costs Be Greater Than \$20 million?

Yes    No

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9. Policy Problem Addressed by the Rule

The primary purpose of this rule is to adopt the EPA's New Facilities and Existing Facilities Rules in order to be consistent with the Clean Water Act

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10. 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.

This rule is expected to impact regulated entities, including power plants, paper mills, and other manufacturing industries with substantial cooling water use. The department will solicit comments on this FE/EIA from these groups during the comment period.

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11. Identify the local governmental units that participated in the development of this EIA.

The department will solicit comments on this FE/EIA during the comment period.

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12. 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)

This rule implements federal requirements under the Clean Water Act, so the rule itself will not impose any additional economic or fiscal impact besides what the federal government requirements imposed.

The federal rule is expected to increase compliance costs for regulated entities, including power plants, paper mills, and other manufacturing industries with substantial cooling water use. It is estimated it will cost approximately \$13 million per year for all facilities in the state to come into compliance with the federal regulations. A detailed assessment of compliance cost imposed by the federal requirement under the Clean Water Act in Wisconsin is presented in the appendix attached to this form (appendix A).

There are isolated changes from the federal rule, but the department does not expect the changes to add any cost.

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## **ADMINISTRATIVE RULES**

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The federal rule is expected to increase compliance costs for regulated entities, including power plants, paper mills, and other manufacturing industries with substantial cooling water use.

Estimates presented in this analysis represent the typical (average) costs of compliance with the federal rule. Several assumptions were made in this analysis based on compliance alternatives that present the lowest cost of compliance and efficiency in compliance. The most important assumptions include:

The department assumed that many permittees will comply by installing submerged passive screen intakes or traveling screens with fish return and that a small number of permittees will need to install cooling towers. Some permittees in the state might choose to install technologies different than assumed here. To the extent that permittees install different technologies and to the extent costs are significantly different from the assumed technologies, estimates of costs on the statewide basis will be higher or lower than assumed. As a further example, the department estimated costs for traveling screens based on a flow of 90 million gallons per day. To the extent that permittees have flow rates greater or less than the assumed flow, estimates of costs on the statewide basis will be higher or lower than assumed.

Costs of compliance, in general, consist of capital costs and cost of operation and maintenance (O&M). The permittees that are subject to these requirements will, in almost all cases, annualize the capital costs over a period estimated to be 10 to 30 years. To estimate annual capital cost and O&M cost per year on a total statewide basis, the Department estimated costs for four likely scenarios which represent four categories of complexity and cost of compliance. Capital costs were annualized based on 20 years and 5% discount rate. The department used estimates for O&M cost per year that were prepared by EPA for the rule. Therefore, the annual costs are the total of annual capital costs and O&M cost per year.

The cost of compliance for a specific individual permittee will, in most cases, start when the department issues the permit requiring compliance with the regulation. The details will depend on the permittee's size and impacts on the fish and shellfish in the location where the intake is located. Note that the requirements for an individual permittee will be based on a case-by-case permittee-specific determination in the permit based on standards for minimizing impingement and Best Professional Judgment (BPJ) for minimizing entrainment. Compliance with the entrainment standard is expected to result from compliance with the impingement standard or is expected to require only process changes that have little or no capital costs.

For this analysis, the department assumed that permittees fall into four categories based on estimate of complexity and cost of compliance.

- Some facilities are assumed to be in compliance and have no capital costs and operate a cooling water intake structure (CWIS) that has low cost of O&M. Therefore, capital costs were assumed zero and O&M costs were assumed one-half of the national average provided by EPA.
- Some facilities are assumed to be in compliance and have no capital costs and operate a CWIS that has average cost of O&M. Therefore, capital costs were assumed zero and O&M costs were assumed the national average provided by EPA.
- Some facilities are assumed to need to make modest capital investment to comply and operate a CWIS that has average cost of O&M. Therefore, capital costs were estimated for a typical technology and O&M costs were assumed the national average provided by EPA. The department considered submerged passive screen intakes and traveling screens with fish return as two examples of modest capital investment to comply.
- Some facilities are assumed to need to make significant investment to comply and operate a CWIS that has average cost of O&M. Therefore, capital costs were estimated for the most costly technology and O&M costs were assumed the national average provided by EPA. The department assumed a recirculating system provided by a cooling tower as the

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most expensive capital investment to comply.

All capital and O&M costs are in 2019 dollars. As noted above, permittees will typically annualize capital costs. The main result of this is that the maximum costs in a two-year period will probably occur in the long term when all facilities have received permits and selected and installed a compliance strategy and have started both payment of debt and O&M cost per year.

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13. Benefits of Implementing the Rule and Alternative(s) to Implementing the Rule  
Wisconsin's Pollution Discharge Elimination System is required to maintain compliance with federal law under the Clean Water Act. Implementing the proposed rule will ensure that Wisconsin's program will comply with new federal requirements, which is essential to maintaining the state program's federally delegated status. Additional benefits of implementing the rule are providing easy access to applicable rules for the regulated community and the public and incorporating adjustments that make the rule easier to understand and implement in Wisconsin.

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14. Long Range Implications of Implementing the Rule  
The long range implications of this rule are the same as the short range implications. The proposed changes will make Wisconsin rules consistent with Federal rules with minor editorial changes to improve readability and clarity and implementation.

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15. Compare With Approaches Being Used by Federal Government  
These changes mirror changes to federal rules.

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16. Compare With Approaches Being Used by Neighboring States (Illinois, Iowa, Michigan and Minnesota)  
All neighboring states will implement the federal rules.

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