

## ADMINISTRATIVE RULES Fiscal Estimate & Economic Impact Analysis

<p>1. Type of Estimate and Analysis <input type="checkbox"/> Original <input checked="" type="checkbox"/> Updated <input type="checkbox"/> Corrected</p>	<p>2. Date September 25, 2020</p>
<p>3. Administrative Rule Chapter, Title and Number (and Clearinghouse Number if applicable) NR 159 – Management of Class B Firefighting Foam</p>	
<p>4. Subject Emergency Rule: Regulating firefighting foam that contains certain contaminants. WA-06-20(E)</p>	
<p>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</p>	<p>6. Chapter 20, Stats. Appropriations Affected --</p>
<p>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</p>	
<p>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)</p>	
<p>9. Estimate of Implementation and Compliance to Businesses, Local Governmental Units and Individuals, per s. 227.137(3)(b)(1). \$2,346,800 per year on average is reasonably expected with \$4,000,000 per year as the higher end of the range.</p> <p>Some aspects of the economic cost of storage, containment, treatment and disposal for entities that use foam for testing purposes are unclear and an estimate at this time will be unreliable. The department will engage entities impacted by this rule to estimate the economic cost of storage, containment, treatment and disposal for entities that use foam for testing purposes and any additional costs that may be reasonably expected during the permanent rulemaking phase.</p> <p>Fiscal Impact on the State: The proposed emergency rule is intended to be substantially self-implementing and no additional costs are expected.</p>	
<p>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</p>	
<p>11. Policy Problem Addressed by the Rule PFAS (perfluoroalkyl and polyfluoroalkyl substances) are a group of synthetic chemicals used in industry and consumer products worldwide since the 1950s. They do not break down in the environment for extremely long periods of time and they accumulate in the human body. Exposure to certain PFAS may cause adverse health effects. Some firefighting foams currently used to extinguish flammable liquid fires, including Class B and Class A/B foams, include intentionally added PFAS, meaning PFAS is a constituent of the foam.</p> <p>This rule implements s. 299.48, Wis. Stats., which prohibits the use or discharge of firefighting foam that contains intentionally added PFAS with two primary exceptions: foam that contains intentionally added PFAS may be used (1) for testing purposes or (2) as part of an emergency firefighting or fire prevention operation. Section 299.48, Wis. Stats., requires the department to promulgate rules to implement and administer s. 299.48, including rules to determine appropriate containment, treatment, and disposal or storage measures for testing facilities.</p>	

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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.

Potentially affected parties include three main types of sectors: entities using foam for emergency fire fighting or fire prevention operations; entities using foam for testing, including foam and foam equipment testing facilities that test firefighting foam effectiveness or test a firefighting foam delivery system or equipment; and entities that contain, treat, and dispose or store foam or foam contaminated materials from a testing facility or generated as a result of testing foam. Comments on an EIA for the permanent rule will be solicited from all sectors. The following entities, in addition to broader inquiries, were contacted for comments on draft emergency rule language and will be solicited during the development of the EIA for the permanent rule package:

- WI Airport Management Association
- WI Fire Chiefs Association
- League of Wisconsin Municipalities
- WI Towns Association
- WI Technical College System
- WI Department of Safety and Professional Services
- WI Department of Transportation
- Major private entities in the manufacturing and testing industry
- Wisconsin Manufacturers & Commerce

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

The department will continue to work with local governments and fire department associations that may be potentially impacted when developing the economic impact analysis for the permanent rule. Local governments and fire departments may be impacted by costs of containment, storage, treatment and disposal if they conduct testing on foam or foam equipment. While the rule does not mandate the disposal of firefighting foam with intentionally added PFAS, costs for disposal may be higher than they would have been prior to the adoption of s. 299.48, Wis. Stats., (if it was formerly discharged to the ground or to a sewer) based on the requirements for appropriate disposal in the emergency rule.

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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)

The discharge of PFAS to the environment imposes costs on both public and private entities and members of the public. Under ch. 292, Wis. Stats., any person who uses firefighting foam with intentionally added PFAS that results in a hazardous substance discharge to the environment must take the actions necessary to restore the environment to the extent practicable and minimize the harmful effects from the discharge to the air, lands or waters of this state. The costs for appropriate containment, treatment, disposal and storage of firefighting foam containing intentionally added PFAS under s. 299.48, Wis. Stats., and the proposed emergency rule are anticipated to be less than the costs that otherwise would result from uncontrolled discharges of PFAS to the environment.

The primary economic implications of the rule are related to containment, treatment, and disposal or storage measures for foam containing intentionally added PFAS for testing facilities or for public or private entities that conduct those activities. While these measures will impose additional costs, the emergency rule timeframe did not allow for comprehensive cost estimates and the department intends to provide a more detailed and accurate impact summary with the permanent rule following additional stakeholder engagement.

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(A) Economic Impact on Specific Business and Business Sectors: Entities using foam for testing, including foam and foam equipment testing facilities that test firefighting foam effectiveness or test a firefighting foam delivery system or equipment; Entities that contain, treat, and dispose or store foam or foam contaminated materials from a testing facility or generated as a result of testing foam.

- i. Prohibitions and use: no economic impact anticipated: The rule does not ban use for firefighting or fire prevention, does not require disposal and conditionally allows for testing of fire suppression systems.
- ii. Notification: minimal economic impact if any: Public or private systems must immediately report discharges to the environment as a result of testing. Notification cost is anticipated to be minimal to none.
- iii. Recordkeeping: minimal to no additional economic impacts: Management of existing documentation of Safety Data Sheets does not create new paperwork requirements. Record keeping cost that may be reasonably expected is indeterminate even though we anticipate it to be minimal to none.
- iv. Storage: minimal additional economic impact expected on managing foam generated as a result of testing: New requirements for facilities may lead to the purchase of additional storage/containers needed for foam, additional labor costs associated with labeling and inspection, and the purchase of materials to prevent discharge to the environment. There will be additional costs associated with these requirements but are not anticipated to be significant. Direct economic estimates based on the types of storage, the expected storage volume, and labor costs will be solicited and evaluated by the department in advance of the permanent rule.
- v. Containment, treatment and disposal: moderate economic impact expected, additional estimates under solicitation and evaluation by the department: It is estimated that there are approximately 150-200 fixed fire suppression systems within public and private facilities that utilize Class B firefighting foam. A limited survey of facilities with fixed foam systems indicated that these fixed systems are primarily in areas with existing containment, resulting in minimal to no economic impact. Industry experts estimated that system testing and resultant foam disposal costs will increase for these facilities, and cost approximately \$3,000 to \$20,000 per facility. Assuming 200 facilities in the State, the statutory and rule requirements would range in impact from approximately \$600,000 to \$4,000,000 per year, with the midpoint estimate of \$2,300,000. However, costs are expected to lessen over time with adoption of alternative methods such as surrogate and water equivalency testing and using replacement foams that do not contain PFAS.

Additionally, some manufacturers with foam testing operations in Wisconsin have been phasing out the use of PFAS in foam products and testing, which may increase as alternatives become more readily available. Any current system tests that generate Class B foam with intentionally added PFAS must use appropriate containment, treatment, and disposal or storage methods. Although they are not small businesses, the department is aware of only a few foam manufacturing facilities in Wisconsin that would conduct testing. One manufacturer is developing its own treatment facility and others may be using contractors to collect and manage foam generated from testing. The foam manufacturer building a new testing facility expressed to the department that it had plans to transition from manufacturing foam with PFAS to manufacturing and testing foams that are PFAS-free.

For the purposes of this analysis, the department assumes three foam treatment facilities will be active in Wisconsin. These treatment facilities either manufacture or accept foam used for testing purposes and must appropriately store, contain, treat and dispose of the foam. To ensure appropriate treatment measures, the rule requires periodic sampling for detection of PFAS compounds that is estimated to cost around \$300 per week or \$15,600 per year. This sampling could total \$46,800 per year; however, such sampling may already be occurring at these facilities. If that is the case, only a portion of the total of \$46,800 would be attributable to the rule provisions.

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#### (B) Economic and Fiscal Impact on Local Government Units and Public Entities

- i. Prohibitions and use: no additional economic impacts are anticipated: The rule does not ban use for firefighting or fire prevention and does not require disposal. A recent fire department survey sent to the state's 825 fire departments determined that they could dispose of approximately 30,000 gallons of firefighting foam concentrate in the aggregate, but these costs are discretionary.
- ii. Notification: no additional economic impacts are anticipated: Fire departments must report discharges to the environment and provide safety data sheets, but costs are anticipated to be minimal to none.
- iii. Recordkeeping: no additional economic impacts are anticipated: Management of existing documentation such as Safety Data Sheets does not create new paperwork requirements.
- iv. Storage: minimal additional economic impacts from this rule are anticipated: If fire departments use foam for testing purposes, new requirements for storage may lead to the purchase of additional storage/containers needed for foam, additional labeling and inspection, and the purchase of materials to prevent discharge to the environment. There will be additional costs associated with these requirements but these costs are not anticipated to be significant. Direct economic estimates will be solicited and evaluated by the department in advance of the permanent rule.
- v. Containment, treatment and disposal: minimal additional economic impacts are anticipated: Fire departments may choose to keep foam for emergency firefighting use. Disposal costs are discretionary. If fire departments use foam for testing purposes, they must use appropriate containment, treatment, and disposal or storage methods for foam generated by testing. Direct economic estimates for potential management of foam generated by testing will be solicited and evaluated by the department in advance of the permanent rule.

#### (C) Fiscal Impact on the department: The proposed emergency rule is intended to be substantially self-implementing and no additional costs are expected.

- i. Prohibitions and use: self-implementing, no fiscal impact: The department's Forestry Division determined that it currently does not use any firefighting foam with intentionally added PFAS.
- ii. Notification and recordkeeping: no fiscal impact
- iii. Recordkeeping: no fiscal impact

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

Section 299.48 (5), Wis. Stats., requires the department to promulgate rules to implement and administer the section, including to determine appropriate containment, treatment, and disposal or storage measures for testing facilities.

Benefits of implementing the rule include reduction in the discharge of PFAS to the environment and the very significant potential costs of remediating discharges. PFAS accumulate in the environment and in the human body, and exposure to certain PFAS may cause adverse health effects.

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#### 16. Long Range Implications of Implementing the Rule

Long range fiscal implications of the rule are related to containment, treatment, and disposal or storage measures. The benefits of implementing the rule could lead to overall fiscal benefit because of the reduction of PFAS in the environment - and reduced need for clean-up - and less impact on human health.

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#### 17. Compare With Approaches Being Used by Federal Government

The federal Defense Authorization Act of 2020 included several PFAS-related provisions, largely because PFAS contamination of water supplies has been identified at or around several military installations. The Act specifies in section 323 that PFAS-containing firefighting foam may only be released for purposes of an emergency response. A non-emergency release of PFAS foam may be made for the purposes of testing of equipment or training of personnel, if complete containment, capture, and proper disposal mechanisms are in place to ensure no foam is released into the environment. It also requires the military to develop a fluorine-free foam specification by January 31, 2023 and sets a deadline for banning the use on military bases in the future.

The Defense Authorization Act establishes guidelines for the proper disposal of firefighting foam at military sites and directs the military to develop guidance to address these issues. Specifically, all incineration of firefighting foam containing PFAS chemicals must be conducted at a temperature range adequate to break down PFAS chemicals, while also ensuring the maximum degree of reduction in emission of PFAS chemicals and must be conducted in accordance with the Clean Air Act at a facility permitted to receive the waste. The Act also requires the Environmental Protection Agency (EPA) to publish interim guidance on the destruction and disposal of PFAS substances and materials, which is expected before the end of 2020.

The Federal Aviation Administration (FAA) Reauthorization Act of 2018 was passed on October 5, 2018 and states that no later than three years after the date of enactment, the FAA shall no longer require the use of fluorinated chemicals (found in PFAS) to meet the performance standards accepted under federal regulations. As a result of this change, the FAA and FAA-regulated facilities will no longer be required to use firefighting foams that contain PFAS.

State definitions of "environmental pollution" and "discharge" of a "hazardous substance" are not the same as the definition of a hazardous substance in the federal Superfund law and in some other states' laws. When discharged to the environment in Wisconsin, certain PFAS meet the definitions of a hazardous substance and/or environmental pollution under state statutes (s. 292.01, Wis. Stats.). There is no comparative federal law that specifically prohibits the use or discharge of firefighting foam that contains intentionally added PFAS.

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

Illinois has legislation pending, SB3154, that would, on and after January 1, 2021, prohibit the knowing manufacture, sale, offering for sale, distribution for sale, or distribution for use of a Class B firefighting foam containing intentionally added PFAS. This legislation would also require manufacturers of Class B firefighting foam containing PFAS to register with the Illinois EPA and pay to the EPA an annual registration fee of \$5,000. There is also separate legislation pending that would require the creation of groundwater quality standards to limit two PFAS, PFOA (perfluorooctanoic acid) and PFOS (perfluorooctanesulfonic acid) to 70 ppt combined or individually; and that directs the Dept. of Public Health to establish maximum contaminant levels (MCLs) in public water systems for PFOA and PFOS, and other PFAS.

Indiana's House Bill 1189 was signed into law on March 30, 2020. This law prohibits the use of Class B firefighting foam containing an intentionally added PFAS: (1) for training purposes; and (2) for testing purposes, unless the testing facility has implemented appropriate measures to prevent releases of the firefighting foam to the environment. Indiana also has non-binding guidance that sets screening levels for three PFAS per EPA's health advisory level of 70 ppt.

As of January 2020, Iowa has a non-binding guidance "action plan" to identify and minimize PFAS exposures, prevent future releases, and provide education and outreach. HF 2241 failed to pass last session that would have prohibited the manufacture and sale of firefighting foam containing PFAS, prohibit the use of PFAS foam for training purposes, and require manufacturers of firefighter protective equipment to disclose the inclusion of PFAS in their

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products. Iowa DNR is developing a plan to assess risk to public water supplies from PFAS and may sample the higher risk facilities in the future.

Michigan has created by executive order a PFAS action team to identify, recommend, and implement responses to PFAS contamination. Three bills focused on fire departments and fire fighter activities have moved through the MI legislature: House Bill 4389 establishes a PFAS firefighting foam collection program at the Department of Environment, Great Lakes, and Energy (EGLE), and requires reporting of the use of firefighting foams within 48 hours including the following information: the purpose for the PFAS foam use, where it was used, how much was used, how much water was used, the brand and manufacturer of the product used, and the proposed process for cleanup and disposal. House Bill 4390 bars the use of PFAS firefighting foam in firefighting training, and requires proper training for the emergency use, handling, storage, disposal and cleanup of PFAS foam. House Bill 4391 calls for rulemaking to be promulgated by the Department of Labor to establish best practices for handling & storing PFAS foam by emergency responders, ban the use of PFAS foam for training purposes, and to end the use of PFAS foam for equipment calibration unless certain stringent conditions have been met.

Michigan recently announced it had collected and disposed of over 30,000 gallons of PFAS-containing firefighting foam through a clean sweep type program. Michigan recommends that fire departments use only Class A foam unless Class B foam is needed to protect human life or critical infrastructure, and that they train only with Class A foams.

Minnesota passed legislation that took effect July 1, 2020 requiring that any Class B firefighting foam containing PFAS that is used on a fire must be reported to the State Fire Reporting System within 24 hours. It also prohibits use of PFAS-containing firefighting foam for testing and training unless appropriate containment, treatment, and disposal measures are implemented to prevent releases of foam to the environment. Minnesota has not created additional guidance or rules to describe appropriate containment, treatment, and disposal measures. Minnesota also has non-binding guidance identifying maximum levels of PFBS, PFHxS, PFOS, and PFOA in drinking water.

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19. Contact Name Kate Strom Hiorns	20. Contact Phone Number 608-261-8449
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## **ADMINISTRATIVE RULES**

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#### **ATTACHMENT A**

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1. Summary of Rule's Economic and Fiscal Impact on Small Businesses (Separately for each Small Business Sector, Include Implementation and Compliance Costs Expected to be Incurred)

The department does not know how many of the potentially impacted entities meet the statutory definition of small business. However, in an effort to develop a conservative estimate, the department assumed a majority are small businesses. Based on this assumption, the department reasonably expects that the impact on small businesses will be on average \$2,331,200 per year with \$4,000,000 per year as the higher end of the range.

Small businesses impacted by this rule include various facilities that use Class B firefighting foam in their fixed fire suppression systems. These would be facilities that have a need for suppression of possible liquid (gasoline, oil) fires. Small businesses would also be entities using foam for testing, including foam and foam equipment testing facilities that test firefighting foam effectiveness or test a firefighting foam delivery system or equipment; and entities that contain, treat, and dispose or store foam or foam contaminated materials from a testing facility or generated as a result of testing foam.

Containment, treatment and disposal: moderate economic impact expected, additional estimates under solicitation and evaluation by the department: It is estimated that there are approximately 150-200 fixed fire suppression systems within public and private facilities that utilize Class B firefighting foam. A limited survey of facilities with fixed foam systems indicated that these fixed systems are primarily in areas with existing containment, resulting in minimal to no economic impact. Industry experts estimated that system testing and resultant foam disposal costs will increase for these facilities, and cost approximately \$3,000 to \$20,000 per facility. Assuming 200 facilities in the State, the statutory and rule requirements would range in impact from approximately \$600,000 to \$4,000,000 per year, with the midpoint estimate of \$2,300,000. However, costs are expected to lessen over time with adoption of alternative methods such as surrogate and water equivalency testing and using replacement foams that do not contain PFAS.

Additionally, some manufacturers with foam testing operations in Wisconsin have been phasing out the use of PFAS in foam products and testing, which may increase as alternatives become more readily available. Any current system tests that generate Class B foam with intentionally added PFAS must use appropriate containment, treatment, and disposal or storage methods. Although they are not small businesses, the department is aware of only a few foam manufacturing facilities in Wisconsin that would conduct testing. One manufacturer is developing its own treatment facility and others may be using contractors to collect and manage foam generated from testing.

For the purposes of this small business analysis, the department assumes two foam treatment facilities (contractors) will be active in Wisconsin that are small businesses. (One other treatment facility is a manufacturer of foam and is not a small business.) These treatment facilities will accept foam used for testing purposes and must appropriately store, contain, treat and dispose of the foam. To ensure appropriate treatment measures, the rule requires periodic sampling for detection of PFAS compounds that is estimated to cost around \$300 per week or \$15,600 per year. This sampling could total \$31,200 per year; however, such sampling may already be occurring at these facilities. If that is the case, only a portion of the total of \$31,200 would be attributable to the rule provisions.

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2. Summary of the data sources used to measure the Rule's impact on Small Businesses

Emails and calls were made to industry experts and facilities with fixed foam systems to determine foam amounts; any existing containment, storage, treatment, and disposal activities; testing activities; and current and potential costs. Industry sectors and foam manufacturing facilities were also contacted for comments on draft emergency rule language during rule development.

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Additional comments on an EIA for the permanent rule will be solicited from potentially affected parties, which include three main types of sectors: entities using foam for emergency fire fighting or fire prevention operations; entities using foam for testing, including foam and foam equipment testing facilities that test firefighting foam effectiveness or test a firefighting foam delivery system or equipment; and entities that contain, treat, and dispose or store foam or foam contaminated materials from a testing facility or generated as a result of testing foam.

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3. Did the agency consider the following methods to reduce the impact of the Rule on Small Businesses?

- Less Stringent Compliance or Reporting Requirements
- Less Stringent Schedules or Deadlines for Compliance or Reporting
- Consolidation or Simplification of Reporting Requirements
- Establishment of performance standards in lieu of Design or Operational Standards
- Exemption of Small Businesses from some or all requirements
- Other, describe:

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4. Describe the methods incorporated into the Rule that will reduce its impact on Small Businesses

This rule is self-implementing and allows entities to choose containment, storage, treatment, and disposal methods that fit best with their facility designs and needs, while at the same time providing standards that will prevent discharge of foam to the environment. The provided standards and methods for the prevention of discharge of foam to the environment can help business avoid more costly cleanup procedures. The reporting and recordkeeping requirements provided in the rule impact all entities and increased associated costs are estimated to be minimal to none.

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5. Describe the Rule's Enforcement Provisions

Under authorization in ch. 299, Wis. Stats., the rule shall be enforced by the attorney general (s. 299.95) and penalties and remedies may be assessed under s. 299.97, Wis. Stats.

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6. Did the Agency prepare a Cost Benefit Analysis (if Yes, attach to form)

- Yes  No
-