1. Type of Estimate and Analysis		2. Date		
⊠ Original □ Updated □Corrected		January 23, 2024		
3. Administrative Rule Chapter, Title and Number (and Clearinghouse Number if applicable)				
Chs. NR 660-679 – Environmental Protection – Hazardous Waste Management				
4. Subject				
Revisions to chs. NR 660 to 679 to incorporate federal hazardous waste regulations promulgated since the previous				
authorization of the Wisconsin hazardous waste program, relating to updated test methods.				
WA-11-21				
		6. Chapter 20, Stats. Appropriations Affected		
GPR FED PRO PRS SEG SEG-S	NA			
7. Fiscal Effect of Implementing the Rule				
☑ No Fiscal Effect ☐ Increase Existing Revenues	Increase	e Costs 🗌 Decrease Costs		
Indeterminate Decrease Existing Revenues	Could Absorb Within Agency's Budget			
8. The Rule Will Impact the Following (Check All That Apply)				
□ State's Economy				
□ Local Government Units	Public Utility Rate Payers			
Small Businesses (if checked, complete Attachment A)				
0. Estimate of Implementation and Compliance to Ducinescent Level Covernmental Units and Individuals near a 207 (2)(h)(4)				

9. Estimate of Implementation and Compliance to Businesses, Local Governmental Units and Individuals, per s. 227.137(3)(b)(1).
\$ 0. There will be little to no economic effect. Wisconsin is revising this rule to align with federal regulations.
Compliance with these proposed hazardous waste management regulations is optional and may provide cost savings for impacted entities particularly by the small businesses. The proposed rules will maintain consistency with federal rules and ensure Resource Conservation and Recovery Act (RCRA) program authorization through the U.S. Environmental Protection Agency (EPA).

Laboratories performing flash point and ignitability tests will be able to use updated testing methods. The cost of replacing and repairing outdated instrumentation and equipment will be reduced. There are 16 certified and 2 registered laboratories with the state that are accredited for flashpoint testing, and 10 treatment, storage, and disposal facilities (TSDFs) in Wisconsin that may test ignitable waste streams to ensure proper waste determinations which would be impacted by the rule. This rule will allow either current or ASTM standards D8174–18 and D8175–18 in methods 1010A and 1020B to be used for determining if an ignitable liquid is a hazardous waste. Because the rule will modify SW–846 test methods while also retaining the current procedures, laboratories will benefit from the flexibility of choosing different methods for determinations without any added costs. A generator or laboratory may choose to use any of the ASTM standards listed in Methods 1010B and 1020C. ASTM D8174–18 is a test method to determine the flash point of liquid wastes using a small-scale (Setaflash) apparatus. ASTM D8175–18 is a test method used to determine the flash point of liquid wastes using a Pensky-Martens apparatus. ASTM E681–85 is a test method used to determine the upper and lower concentration limits of flammability for chemicals having sufficient vapor pressure to form flammable mixtures with air. Because those performing ignitable testing can determine to use an updated method or an older method, no additional cost is anticipated. A cost savings may incur due to not having to utilize obsolete equipment and instruments and incur the expense of subsequent upkeep and repair of testing apparatus.

EPA's analysis in 85 FR 40594 shows qualitative benefits to human health and the environment through the reduced use of mercury thermometers. This is included in the addition of Methods 0010, 0011, 0020, 0023A, and 0051 for air sampling and stack emissions testing. The changes will allow the use of non-mercury thermometers or mercury thermometers in these particular test methods, providing flexibility.

There would be no anticipated fiscal impact of cross-referencing hazardous waste regulation language with Department of Transportation language.

The proposed rule will change the definition of an aqueous waste, and most consumable alcohols will no longer be considered hazardous wastes. This will lead to a reduction in the cost of disposing of alcohols, and a cost savings for the alcohols handling business.

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)?

🗌 Yes 🛛 No

11. Policy Problem Addressed by the Rule

The rule will address updated flash point test methods for determining ignitable wastes. This includes updating equipment while getting rid of obsolete equipment that can no longer be fixed because parts may no longer be available. These test methods will also ensure accurate testing and results.

The rule will also update the definition of an aqueous waste so certain alcohols will no longer be included, which will result in a cost savings on disposal.

Part of the rule package will correct cross references to DOT regulations, which will result in no additional cost. The update to DOT cross references will remove obsolete information in the ignitability regulations and make technical corrections to language. Because the rule will not create new or change existing requirements, there is no anticipated effect on any regulated entity affected by the DOT updates.

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.

This rule is expected to have a positive economic impact on certified and registered labs, environmental consulting services, hazardous waste TSDFs and all regulated classes of hazardous waste generators that conduct testing activities to determine the ignitability characteristics of certain wastes.

- Hazardous waste generators as defined in s. NR 660.10 (50), Wis. Adm. Code.
- Certified and registered labs as defined in s. 299.11, Wis. Stats. (NAICS code 541380).
- Disposal facilities as defined in s. NR 660.10 (27), Wis. Adm. Code, including treatment, storage, and disposal facilities (NAICS code 562211).
- Transporters as defined in s. NR 660.10 (125), Wis. Adm. Code.

Other sectors that may benefit by taking advantage of the flexibility of the proposed rule include:

- Environmental Consulting Services (NAICS code 541620).
- Engineering Services (NAICS code 541330).
- Research and Development in the Physical, Engineering, and Life Sciences (except Biotechnology) (NAICS code 541712).
- Petroleum Refineries (NAICS code 324110).
- Other Electric Power Generation (NAICS code 221118).
- All Other Support Services (NAICS code 561990).

The above entities were broadly solicited for comment during the preliminary public hearing held on October 6, 2022. They will be contacted for comments during the economic impact comment solicitation period.

13. Identify the Local Governmental Units that Participated in the Development of this EIA. Local government units will be given the opportunity to participate in the development of the EIA during the EIA comment solicitation period.

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)

EPA prepared an economic analysis in the federal register (85 FR 40594) of the potential costs and benefits associated with the Modernizing Ignitable Liquid Determinations rule, which would be adopted as part of this proposed rule revision. The federal rule provided additional clarity to hazardous waste identification and updated test methods while also retaining current procedures to provide entities increased flexibility in testing requirements. EPA's economic analysis indicates that the rule will cause "minimal impact," with little or no change in market prices or production, and projects implementation will result in cost savings. For commercial labs, the EPA indicates "either no change in cost or a cost savings due to the flexibility afforded by the rule." EPA's analysis also shows qualitative benefits to human health and the environment through the reduced use of mercury thermometers. The department does not expect the other parts of the rule to affect any entities because they do not create new requirements or change existing requirements. EPA does not expect the rule to result in an adverse impact to a significant number of small entities. According to the federal register, the analysis indicates either no change in costs or a cost savings, due to the flexibility afforded by the rule. EPA has therefore concluded that this action will either "relieve regulatory burden or have no net regulatory burden for all directly regulated small entities."

Specific Businesses and Business Sector (Private Businesses)

Businesses affected by modernizing ignitable testing methods would include labs that perform ignitability testing and TSDFs that check waste for ignitability. These methods would update testing methods and allow other testing procedures that would reduce the burden of fixing and acquiring outdated equipment.

Businesses affected by a change in the definition of an aqueous waste would include sellers of alcohol such as department, convenience, and grocery stores that generally are small or very small quantity generators of hazardous waste. This change in definition would assist in making accurate waste determinations and decrease amounts and costs of hazardous waste generated and disposed of by the business.

All businesses that transport hazardous waste would be affected by the alignment with DOT regulations which is anticipated to help clarify requirements across multiple agencies. No economic impact is expected with this rule change.

The proposed flexibilities to hazardous waste management regulations are optional and may provide cost savings for impacted entities.

Impacts on Public Utility Rate Payers

Public utility rate payers would not be impacted by the rule changes.

Impacts on Local Governmental Units

Impacts on local governments would be minimal, applying mainly to municipalities that operate laboratories performing ignitability tests. The change in the definition to aqueous waste would have minimal to no effect on governmental units sending waste through a transporter. Proposed changes will help reduce confusion and make regulations standard across agencies, which will help ease requirements enacted by multiple agencies.

Fiscal Impact and Impact on State Economy

No fiscal impact or impact on the state economy is expected.

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

The rule will allow laboratories that perform ignitability tests the option of using newer methods for hazardous waste determinations. This will provide flexibility for labs by eliminating the need for outdated equipment that is difficult to maintain and acquire, and no longer accessible due to environmental, health and/or safety concerns. If the rule is not adopted, labs will find it harder to access instrumentation for testing; and outdated equipment that have hazardous components will continue to be used by personnel.

The rule will update Wisconsin code to refer to two new standards covering use of Pensky-Martens (1010B) and Setaflash (1020C) test methods. The current methods, 1010A and 1020B, will remain available for any laboratories that wish to use them. The new standards will not require the use of mercury-containing thermometers. Instead, the standards will specify the use of either a temperature-measuring device or a liquid-in-glass thermometer with an accuracy of better than 0.5° C up to 70° C.

Changing the definition of an aqueous waste will curtail designating certain alcohols as hazardous waste. This will relieve both the regulatory and cost burdens of managing and disposing certain alcohols as hazardous wastes.

Correcting cross references and removing obsolete references to DOT regulations will have a positive impact by clarifying information that may seem confusing to generators of hazardous ignitable waste by aligning rule language with language used by the DOT. The proposed rule change would modify the criteria for ignitable compressed gases and oxidizers to adhere more closely to the corresponding definitions in the DOT Hazardous Materials Regulations. It will also delete outdated or unnecessary information pertaining to ignitable liquid.

16. Long Range Implications of Implementing the Rule

No significant long-range implications are expected, as this is an optional and alternative management standard, allowing for regulatory flexibility. No additional costs to generators are projected and while it is difficult to quantify long-range impacts, the alternative management standards are likely to:

- Clarify regulations for generators who must follow requirements from different agencies. By aligning DOT language with hazardous waste regulations, the rule allows for generators to easily manage and transport ignitable hazardous waste. This will also be a benefit in that ignitable waste will be more accurately classified.
- Relieve regulatory burdens for small businesses that may generate and dispose of alcohol-containing waste streams by changing the definition of aqueous hazardous waste. This will also divert alcohol waste from landfills with no impact on discharge prohibitions in the Clean Water Act. Alcohol wastes will no longer be overclassified as hazardous wastes.
- Assist in achieving accurate lab results from updating ignitability testing methods. Labs will not have to take extra time to find and maintain outdated equipment. This is expected to achieve a cost savings by offering more outlets to obtain modern testing equipment. It will be harder for labs to find current instrumentation and personnel to fix outdated equipment in the future as newer tools are being developed and marketed. Because newer instruments use less hazardous material, this will benefit the health and safety of personnel working on the equipment and reduce medical costs.

17. Compare With Approaches Being Used by Federal Government

The federal government adopted the Modernizing Ignitable Liquids Determination rule, which was promulgated on July 7, 2020, and effective September 8, 2020. Wisconsin will be consistent with these federal rules upon adoption. Provisions are equivalent to existing federal rules. The changes will assist with Wisconsin's hazardous waste program authorization from EPA.

18. Compare With Approaches Being Used by Neighboring States (Illinois, Iowa, Michigan and Minnesota) Iowa is not authorized to implement a hazardous waste program, and as a result they are not required to adopt these changes. Minnesota, Michigan, and Illinois have not adopted the Modernizing Ignitable Liquid Rule. The Board Order Analysis contains a detailed comparison.

19. Contact Name	20. Contact Phone Number
Cathy Baerwald	(414) 333-6805

This document can be made available in alternate formats to individuals with disabilities upon request.

ATTACHMENT A

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 proposed rule will have little to no economic impact and will most likely be a cost savings for small businesses if complied. Laboratories performing flash point and ignitability tests will be able to use updated testing methods. The cost of replacing and repairing outdated instrumentation and equipment will be reduced.

There would be no fiscal impact of cross-referencing hazardous waste regulation language with DOT language.

Changing the definition of an aqueous waste will likely reduce the cost of disposing of alcohols as hazardous wastes.

This rule will be equivalent to current federal regulations, which have undergone an economic impact analysis with conclusions as follows:

- The Regulatory Impact Analysis in the federal register (85 FR 40594), which pertains to the flexibility of allowing updated methods to determine ignitable liquids, indicates that the rules "will either relieve regulatory burden or have no net regulatory burden for all directly regulated small entities."
- The EPA "does not expect the rule to result in an adverse impact to a significant number of small entities" and "does not expect the other parts of this action to affect any entity because they do not create new requirements or change existing requirements."

EPA identified 217 unique commercial laboratories that conduct ignitability testing under either Method 1010A or 1020 and determined a cost savings for laboratories nationwide. The final action is an "annualized cost savings of about \$78,500 to \$477,000. Wisconsin currently has 16 certified and 2 registered laboratories that are currently accredited for flashpoint testing. Ten TSDFs may also be impacted by the rule. Based on the EPA nationwide analysis, and the number of TSDFs, certified and registered laboratories performing ignitable tests, the estimated cost savings in Wisconsin would be \$6,500 to \$40,000 per year. Estimated federal economic impacts are presented in the Regulatory Impact Analysis and in Section VI of the federal register, 85 FR 40594.

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

The Regulatory Impact Analysis in the federal register (85 FR 40594) pertains to updating the regulations for the identification of ignitable hazardous waste and modernizing the RCRA test methods that currently require the use of mercury thermometers. The rule will allow the use of updated SW– 846 test methods while also retaining the current procedures to provide small businesses increased flexibility. Potentially affected economic sectors include testing laboratories (NAICS code 541380), environmental consulting services (NAICS code 541620), and hazardous waste treatment and disposal facilities (NAICS code 562211). It is anticipated that facilities will not be affected by the change in definition of aqueous waste and cross-referencing with DOT language because these rules do not create new requirements or change existing requirements.

EPA uses a Regulatory Impact Analysis to determine the cost effect on entities affected by the rule. The Modernizing Ignitable Liquids Determination uses a combination of data from laboratory accreditation organizations and correspondence with the personnel of commercial, EPA, and state laboratories. An estimate of the cost savings of the federal rule was determined as the difference between affected facilities' baseline and policy-case costs associated with ignitability testing and maintenance of mercury-containing thermometers. Next, the EPA estimated the costs to facilities

in the potentially regulated universe. Finally, EPA estimated the costs and cost savings of the final rule by comparing the estimated costs of conducting ignitability tests under the baseline and proposed rule.

To estimate costs in the baseline and proposed-rule scenarios, EPA estimated two broad categories of costs:

• Per-facility costs are costs that are incurred for each facility potentially affected by the rule. They include one-time costs (e.g., costs of purchasing a new apparatus and training staff in its use), as well as ongoing costs (e.g., costs of calibrating mercury-containing thermometers).

• Per-test costs are costs that are incurred for each ignitability test conducted by a facility potentially affected by the final rule. They include costs associated with labor, solvent for cleaning the flash point test apparatus, and certified reference material.

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: The department, to meet the statutory requirement to maintain authorization of the federal hazardous waste program in WI, must adopt rules at least equivalent to EPA's RCRA regulations. This strictly limits the agency's authority to modify or reduce requirements.

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

Small businesses, such as laboratories and consultants, will have the option of using other methods for ignitable determinations. For commercial labs, the Regulatory Impact Analysis in the federal register (85 FR 40594) indicates either no change in costs or a cost savings, due to the flexibility afforded by the rule. There are 16 certified and 2 registered laboratories with the state that are accredited for flashpoint testing, and 10 TSDFs in Wisconsin that may potentially test ignitable waste streams to ensure proper waste determinations which would be impacted by the rule.

The change to the definition of aqueous waste will provide relief to businesses that generate waste streams that include alcohol or other similar liquid content in that the generators of this waste stream will not have to make a waste determination and incur the cost of hazardous waste disposal. No impact is anticipated in the cross-referencing RCRA and DOT regulations since no new requirements will be enacted, and small businesses will only have to follow one set of requirements.

5. Describe the Rule's Enforcement Provisions

Enforcement of the administrative rules will follow the department's stepped enforcement procedures and EPA policy.

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