

The statement of scope for this rule, SS 060-22, was approved by the Governor on June 30, 2022, published in Register No. 799A3 on July 18, 2022, and approved by the Natural Resources Board on October 26, 2022. This rule was approved by the Governor on insert date.

ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCES BOARD  
AMENDING; AND REPEALING AND RECREATING RULES

The Wisconsin Natural Resources Board proposes an order to **amend** NR 660.11 (1) and (Note) and 661.0021 (1) (a); and to **repeal and recreate** NR 660.11 (2), (3), (4), (5), (6) and (7) and 661.0021 (1) (c) and (d) relating to incorporating federal hazardous waste regulations promulgated since the previous authorization of the Wisconsin hazardous waste program, relating to updated test methods, and affecting small business.

**WA-11-21**

**Analysis Prepared by the Department of Natural Resources**

- 1. Statute Interpreted:** Sections 227.14 (1m), 289.06, 289.24, 289.30, and 289.41, Stats.
- 2. Statutory Authority:** Sections 227.11 (2) (a), 227.14 (1m), 287.03 (1) (a), 289.05, 289.06, 289.21, 289.24, 289.30, 289.31, 289.33, 289.41, 289.43, 289.61, 289.63, 291.001, 291.05, and 291.07, Stats.
- 3. Explanation of Agency Authority:** The proposed rules and revisions would replace and update current state rules that comprehensively regulate the generation, transportation, recycling, treatment, storage, and disposal of hazardous and universal wastes. As authorized by s. 227.14 (1m), Stats., the format of the proposed rules is similar to the federal regulations published in the code of federal regulations by the U.S. Environmental Protection Agency (EPA) under the federal Resource Conservation and Recovery Act (RCRA).

When the Wisconsin legislature passed the Hazardous Waste Management Act in 1977 it set out a declaration of policy in what is now s. 291.001, Stats., regarding hazardous waste management. It found that hazardous wastes, when mismanaged, pose a substantial danger to the environment and public health and safety. To provide for proper management of hazardous waste within the state, the legislature called upon the department to develop and administer a regulatory program that met nine specific objectives.

Section 227.11 (2) (a), Stats., provides that a state agency “may promulgate rules interpreting the provisions of any statute enforced or administered by the agency, if the agency considers it necessary to effectuate the purpose of the statute,” subject to certain restrictions.

Section 287.03 (1) (a), Stats., directs the department to promulgate rules to implement the Solid Waste Reduction, Recovery and Recycling program pursuant to ch. 287, Stats.

Sections 289.05 and 289.06, Stats., direct the department to promulgate rules establishing solid waste management standards. Pursuant to ss. 291.05 and 291.07, Stats., the department is required to promulgate rules for the implementation of RCRA and the methods of treatment or disposal of particular hazardous wastes.

Section 291.001, Stats., calls for a program that: (1) Relies upon private industry or local units of government to provide hazardous waste management services, (2) Requires the transportation, storage, treatment and disposal of hazardous wastes to be performed only by licensed operators, (3) Requires generators of hazardous waste to utilize operators licensed to transport, treat, store or dispose of

hazardous wastes, (4) Does not interfere with, control or regulate the manufacturing processes which generate hazardous wastes, (5) Ensures the maintenance of adequate records on, and the reporting of, the disposition of all hazardous wastes either generated in or entering this state, (6) Encourages to the extent feasible, the reuse, recycling or reduction of hazardous wastes, (7) Provides adequate care and protection of disposal facilities after the facilities cease to accept hazardous wastes, (8) Provides members of the public and units of local government an opportunity to review and comment upon the construction, operation and long-term care of hazardous waste management facilities, and (9) Meets the minimum requirements of RCRA.

In furtherance of these stated objectives, the legislature adopted a number of statutes setting out general and specific hazardous waste rulemaking authority. Section 291.05, Stats., for instance, requires the department to adopt by rule EPA's criteria for identifying the characteristics of hazardous waste, and to adopt EPA's lists of hazardous wastes and hazardous constituents, with limited exceptions. Rules governing hazardous waste transportation are also mandated, as are rules governing specific aspects of hazardous waste generation, treatment, storage and disposal, corrective action, licensing, closure, long term care, and license and plan review and approval fees.

Since hazardous wastes are a subset of solid wastes, rulemaking authority in various sections of ch. 289, Stats., is also relied upon by the department, in particular authority relating to hazardous waste facility location, design, construction, operation, maintenance, closure, long-term care, negotiation and arbitration, financial responsibility and licensing and recycling.

**4. Related Statutes or Rules:** Chapters 287, 289, 291, 292, and 299, Stats., and chs. NR 2, 140, 141, 149, 500 to 538, 662 to 670, 700 to 754 and 812, Wis. Adm. Code.

**5. Plain Language Analysis:** The rule incorporates into state law changes made to federal hazardous waste regulations by EPA in the following Federal Register, to the extent allowed by state law:

Modernizing Ignitable Liquids Determinations, July 7, 2020 (85 FR 40594)

This rule updates the flash point test methods from 1978, 1979, and 1980 (required for determining if a liquid waste is an ignitable hazardous waste) to include current ASTM International (ASTM) standards. The rule will also define the term "aqueous" as "50% water by weight." Included in the rule are updates to correct cross references to U.S. Department of Transportation (DOT) regulations and to remove obsolete information in the ignitability regulation. Finally, the rule contains alternatives to the use of mercury thermometers in the air sampling and stack emissions methods 0010, 0011, 0020, 0023A, and 0051 in SW-846. (Relaxation; EPA Checklist 243).

**6. Summary of, and Comparison with, Existing or Proposed Federal Statutes and Regulations:** The rule revisions incorporate new RCRA hazardous waste regulations as promulgated on July 7, 2020, and adopted by EPA effective September 8, 2020, and clarify definitions and DOT language in the current rules.

The EPA directs states to comply with federal RCRA hazardous waste regulations, and Wisconsin state statutes direct the department to adopt and administer rules that are at least as stringent as the EPA's RCRA regulations. The rule would capture promulgated federal hazardous waste regulations within state administrative rules and would enable the department to retain EPA authorization to administer the federal hazardous waste program in Wisconsin.

The current ignitability test method required in state rules refers to outdated standards and utilizes instrumentation that is no longer readily commercially available. For example, the standards require the use of mercury thermometers, which are becoming more difficult to acquire and calibrate due to their use and availability being phased out for environmental, health, and safety concerns. The adoption of the Modernizing Ignitable Liquid Determinations final federal rule would expand existing allowable test methods while retaining the current allowable procedures to provide entities increased flexibility.

The exclusion for specific aqueous alcohols from regulation as ignitable hazardous waste has been in place at the federal and state levels to allow some waste streams, such as latex paints and alcoholic beverages, to fall outside of RCRA regulation. These waste streams have low flash points but are unable to sustain combustion. The proposed rule change defines “aqueous” as “50% water by weight” and narrows the types of alcohol that would qualify as a hazardous waste, thereby potentially reducing the applicability of these requirements to certain entities. This rule would have no effect on the applicability of the discharge prohibitions presented in the Clean Water Act (CWA) national pretreatment standards for existing and new sources of pollution.

The EPA updates to the ignitability regulations correct cross references to DOT regulations and remove obsolete information. Specifically, 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.

The rule revisions to incorporate both new and revised federal regulations as adopted by EPA will allow the department to maintain federal authorization of the hazardous waste program for these rules and to maintain program primacy. The proposed rule revisions are intended to meet the requirements of RCRA.

#### **7. If Held, Summary of Comments Received During Preliminary Comment Period**

**and at Public Hearing on the Statement of Scope:** The department held an online preliminary public hearing on the statement of scope on October 6, 2022, at 2:00 p.m. Ninety-six people registered for the hearing and 73 members of the public attended the hearing.

There were no comments in support or opposition.

**8. Comparison with Similar Rules in Adjacent States:** Minnesota, Illinois, and Michigan have state-managed hazardous waste programs. In that capacity, these states are working to promulgate an equivalent to this rule and include these regulations as part of their respective EPA authorized programs. The status of rulemaking in each state is found below. Iowa does not have RCRA hazardous waste program authorization from EPA. Instead, EPA’s Region 7 office administers and enforces the RCRA hazardous waste management requirements in Iowa.

Minnesota, Michigan, and Illinois have not adopted the Modernizing Ignitable Liquid Rule.

Summary of neighboring states	Iowa		Illinois		Michigan		Minnesota	
Rule Change - Date	Adopted	EPA Authorized	Adopted	EPA Authorized	Adopted	EPA Authorized	Adopted	EPA Authorized
Modernizing Ignitable Liquids Determinations, July 7, 2020. Checklist 243	N/A	N/A	N	N	N	N	N	N

**9. Summary of Factual Data and Analytical Methodologies Used and How Any Related Findings Support the Regulatory Approach Chosen:** The proposed rules will maintain consistency with federal rules and allow RCRA program authorization by the EPA. Currently 15 states have adopted the Modernizing Ignitable Liquids Determinations rule. The updated language will ease regulatory requirements and provide alternate methods and equipment for making ignitable waste determinations, clarify the definition of aqueous solutions and ensure consistency with DOT requirements. The department solicited comments from businesses interested in the Modernizing Ignitable Liquids Determination as part of the development of this rule.

The proposed language will align with language in the Federal Register (85 FR 40594), making it easier for facilities to understand and comply with the requirements.

**10. Analysis and Supporting Documents Used to Determine the Effect on Small Business or in Preparation of an Economic Impact Report:** The determination that these rules will have little or no impact on small businesses was reached through analysis of the reports created by EPA during the promulgation process at the federal level, and the evaluation of impacted state entities and business sectors. Each federal revision contains an economic impact assessment, fiscal estimate, and language discussing which sectors, businesses, and entities will be affected by the change. This information was published in the Federal Register on July 7, 2020 (85 FR 40594). While small businesses in Wisconsin will be subject to the hazardous waste regulations, this rule is considered a relaxation and clarification, and as such will have little to no adverse economic impacts on such businesses.

This rule increases flexibility in the regulations. Small businesses will have the option to follow the Modernizing Ignitable Liquid Determinations requirements instead of the more stringent hazardous waste regulations. Because the rule will allow alternate methods for ignitable determinations, the cost of replacing outdated equipment will be eliminated or reduced. 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.

**11. Effect on Small Business (initial regulatory flexibility analysis):** The proposed rule will have little to no impact and will most likely create a cost savings for small businesses. 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 in Wisconsin that may potentially test ignitable waste streams to ensure proper waste determinations, which would be impacted by the rule.

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 waste.

**12. Agency Contact Person:** Cathy Baerwald, Department of Natural Resources, Southeastern Region Headquarters, 1027 W. St. Paul Ave., Milwaukee, WI 53233-2641; [Catherine.Baerwald@wisconsin.gov](mailto:Catherine.Baerwald@wisconsin.gov); (414) 333-6805

**13. Place where comments are to be submitted and deadline for submission:**

Written comments may be submitted at the public hearings, by regular mail, or by email to:

Cathy Baerwald  
Department of Natural Resources  
Southeastern Region Headquarters  
1027 W. St. Paul Ave.  
Milwaukee, WI 53233-2641  
[Catherine.Baerwald@wisconsin.gov](mailto:Catherine.Baerwald@wisconsin.gov)  
(414) 333-6805

Comments may be submitted to the department contact person listed above or to [DNRAAdministrativeRulesComments@wisconsin.gov](mailto:DNRAAdministrativeRulesComments@wisconsin.gov) until the deadline given in the upcoming notice of public hearing. The notice of public hearing and deadline for submitting comments will be published in the Wisconsin Administrative Register and on the department's website, at <https://wi.gov/calendar/hearings/>. Comments may also be submitted through the Wisconsin Administrative Rules Website at <https://docs.legis.wisconsin.gov/code/chr/active>.

The consent of the Attorney General will be requested for the incorporation by reference of

- ASTM D8174-18 Standard Test Method for Finite Flash Point Determination of Liquid Wastes by Small Scale Closed Cup Tester, incorporated by reference for s. NR 661.0021 (1). This test method covers the procedure for a flash point test, within the range of –20 to 70 °C, of liquid wastes using a small-scale closed cup tester. This test method is not applicable for liquid waste that forms a surface film.
- ASTM D8175-18, Standard Test Method for Finite Flash Point Determination of Liquid Wastes by Pensky-Martens Closed Cup Tester, incorporated by reference for s. NR 661.0021 (1). This test method covers the procedure for a finite flash point test, within the range of 20 to 70 °C, of liquid wastes using a manual or automated Pensky-Martens closed cup tester. This test method contains two procedures and is applicable to liquid waste, liquid phase(s) of multi-phase waste, liquid waste with suspended solids, or liquid waste that tends to form a surface film under test conditions.
- ASTM E681-85, Standard Test Method for Concentration Limits of Flammability of Chemicals (Vapors and gases), incorporated by reference for s. NR 661.0021 (1). This test method is used to determine the upper and lower concentration limits of flammability for chemicals having sufficient vapor pressure to form flammable mixtures with air.
- Method 1010B, December 2018, incorporated by reference for s. NR 661.0021. Method 1010B lists the Pensky-Martens flash point methods, which are ASTM Standards D93–79, D93–80, and D8175–18.
- Method 1020C, December 2018, incorporated by reference for s. NR 661.0021. lists the Setaflash (small-scale) closed cup flash point methods, which are the ASTM Standards D3278–78 and D8174–18. 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.
- Method 0011, August 2018 and Update I, incorporated by reference for ch. NR 666 Appendix IX. Method 0011 is a method for collection of selected ketones and aldehydes from an emission source.
  - Method 0023A, August 2018 and Update II, incorporated by reference for s. NR 666.104 and ch. NR 666 Appendix IX. Method 0023A is a method for collection of polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofuran from an emission source.
  - Method 0051, Revision 1, August 2018, incorporated by reference for s. NR 666.107 and ch. NR 666 Appendix IX. Method 0051 is a method for collection of hydrogen chloride and chlorine in stack gas emission samples from hazardous waste incinerators and combustors.
  - Method 1330A, Extraction Procedure for Oily Wastes, dated July 1992 and in Update I, incorporation by reference approved for appendix IX to part 261.
  - Method 9071B, n-Hexane Extractable Material (HEM) for Sludge, Sediment, and Solid Samples, dated April 1998 and in Update IIIA, incorporated by reference for ch. 661 Appendix IX. This method may be used to quantify low concentrations of oil and grease in soil, sediments, sludges, and other solid materials amenable to chemical drying and solvent extraction with n-hexane. Method 9071 employs n-hexane as the extraction solvent with Soxhlet extraction and the results of this method are termed “n-hexane extractable material (HEM).” “HEM” is used synonymously with “oil and grease. Method 9071 is suitable for extracting relatively non-volatile hydrocarbons, vegetable oils, animal fats, waxes, soaps, greases, biological lipids, and related materials and is not recommended for measuring materials that volatilize at temperatures below 85 degrees Celsius. Steel Tank Institute, “Standards for Dual Wall Underground Storage Tanks,” 2006, incorporated by reference for s. NR 661.0193 (4). These standard addresses underground double containment (atmospheric-type) vessels with built-in interstitial monitoring capability for the purpose of giving advance notice to avoid environmental contamination.
  - Method 1311, July 1992, and Update I, incorporated by reference for ss. NR 661.0024, 668.07, 668.40 and 661 Appendix IX. This method is used for assessing the presence of an ignitable liquid for wastes that do not yield a free liquid phase using Method 9095 (i.e., Paint Filter Liquids Test or PFLT).
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## RULE TEXT

### SECTION 1. NR 660.11 (1) and (Note) are amended to read:

**NR 660.11 (1)** This section is adopted under ss. 227.21 (2) (b) and 291.05, Stats., to incorporate by reference testing, monitoring, and other technical standards, established by the federal government and technical societies and organizations, to which reference is made under chs. NR 660 to ~~670-679~~. ~~Some materials~~ Materials that are incorporated by reference under other references are hereby incorporated by reference and made a part of this subsection.

**Note:** Copies of these materials are available for inspection in the ~~offices-office~~ office of the ~~Department of Natural Resources, Madison, Wisconsin,~~ the Legislative Reference Bureau, or may be obtained for personal use at the addresses noted.

**SECTION 2. NR 660.11 (2), (3), (4), (5), (6) and (7) are repealed and recreated to read:**

**NR 660.11 (2)** The following materials are available for purchase from the American Society for Testing and Materials, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428–2959, (877) 909-2786, [www.astm.org](http://www.astm.org):

(a) ASTM D93–79, Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester, incorporated by reference for s. NR 661.0021.

(b) ASTM D93–80, Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester, incorporated by reference for s. NR 661.0021.

(c) ASTM D1946–82, Standard Method for Analysis of Reformed Gas by Gas Chromatography, incorporated by reference for ss. NR 664.1033 and 665.1033.

(d) ASTM D2267–88, Standard Test Method for Aromatics in Light Naphthas and Aviation Gasolines by Gas Chromatography, incorporated by reference for s. NR 664.1063.

(e) ASTM D2382–83, Standard Test Method for Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method), incorporated by reference for ss. NR 664.1033 and 665.1033.

(f) ASTM D2879–92, Standard Test Method for Vapor Pressure—Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, incorporated by reference for s. NR 665.1084.

(g) ASTM D3278–78, Standard Test Methods for Flash Point for Liquids by Setaflash Closed Tester, incorporated by reference for s. NR 661.0021 (1).

(h) ASTM D8174-18, Standard Test Method for Finite Flash Point Determination of Liquid Wastes by Small Scale Closed Cup Tester, incorporated by reference for s. NR 661.0021 (1).

(i) ASTM D8175-18, Standard Test Method for Finite Flash Point Determination of Liquid Wastes by Pensky-Martens Closed Cup Tester, incorporated by reference for s. NR 661.0021 (1).

(j) ASTM E168–88, Standard Practices for General Techniques of Infrared Quantitative Analysis, incorporated by reference for s. NR 664.1063.

(k) ASTM E169–87, Standard Practices for General Techniques of Ultraviolet-Visible Quantitative Analysis, incorporated by reference for s. NR 664.1063.

(L) ASTM E260–85, Standard Practice for Packed Column Gas Chromatography, incorporated by reference for s. NR 664.1063.

(m) ASTM E681-85, Standard Test Method for Concentration Limits of Flammability of Chemicals (Vapors and gases), incorporated by reference for s. NR 661.0021 (1).

(n) ASTM E926–88, Standard Test Methods for Preparing Refuse-Derived Fuel (RDF) Samples for Analyses of Metals, Test Method C—Bomb, Acid Digestion Method.

(o) ASTM D140-70, Standard Practice for Sampling Bituminous Materials, incorporated by reference for ch. NR 661 Appendix I.

(p) ASTM D346-75, Standard Practice for Collection and Preparation of Coke Samples for Laboratory Analysis, incorporated by reference for ch. NR 661 Appendix I.

(q) ASTM D420-69, Guide to Site Characterization for Engineering, Design, and Construction Purposes, incorporated by reference for ch. NR 661 Appendix I.

(r) ASTM D1452-65, Standard Practice for Soil Investigation and Sampling by Auger Borings, incorporated by reference for ch. NR 661 Appendix I.

(s) ASTM D2234-76, Standard Practice for Collection of a Gross Sample of Coal, incorporated by reference for ch. NR 661 Appendix I.

(t) ASTM D2879-86, Standard Test Method for Vapor Pressure—Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, incorporated by reference for ch. NR 664 and subch. BB of ch. NR 665.

(u) ASTM G21-70 (1984a), Standard Practice for Determining Resistance of Synthetic Polymer Materials to Fungi, incorporated by reference for ch. NR 664 and subch. N of ch. NR 665.



(v) ASTM G22-76 (1984b), Standard Practice for Determining Resistance of Plastics to Bacteria, incorporated by reference for ch. NR 664 and subch. N of ch. NR 665.

(3) The following materials are available for purchase from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161; or for purchase from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, (202) 512-1800:

(a) APTI Course 415: Control of Gaseous Emissions, EPA Publication EPA-450/2-81-005, December 1981, incorporated by reference for ss. NR 664.1035, 665.1035, 670.024, and 670.025.

(b) Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised, October 1992, EPA Publication No. EPA-450/R-92-019, incorporated by reference for ch. NR 666 Appendix IX.

(c) The following methods as published in the test methods compendium known as “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,” EPA Publication SW-846, Third Edition:

1. Method 0011, Revision 1, August 2018, incorporated by reference for ch. NR 666 Appendix IX.

2. Method 0023A, Revision 2, August 2018, incorporated by reference for s. NR 666.104 and ch. NR 666 Appendix IX.

3. Method 0050, December 1996, and Update III, incorporated by reference for s. NR 666.107 and ch. NR 666 Appendix IX.

4. Method 0051, Revision 1, August 2018, incorporated by reference for s. NR 666.107 and ch. NR 666 Appendix IX.

5. Method 0060, December 1996, and Update III, incorporated by reference for s. NR 666.106 and ch. NR 666 Appendix IX.

6. Method 0061, December 1996 and Update III incorporated by reference for s. NR 666.106 and ch. NR 666 Appendix IX.

7. Method 1010B, December 2018, incorporated by reference for s. NR 661.0021.

8. Method 1020C, December 2018, incorporated by reference for s. NR 661.0021.
9. Method 1110A, November 2004 and Update IIIB, incorporated by reference for s. NR 661.0022.
10. Method 1311, July 1992, and Update I, incorporated by reference for ss. NR 661.0024, 668.07, 668.40 and ch. 661 Appendix IX.
11. Method 1330A, Extraction Procedure for Oily Wastes, dated July 1992 and in Update I, incorporated by reference for ch. 661 Appendix IX.
12. Method 9010C, dated November 2004 and Update IIIB, incorporated by reference for ss. NR 668.40, 668.44, and 668.48.
13. Method 9012B, November 2004 and Update IIIB, incorporated by reference for ss. NR 668.40, 668.44, and 668.48.
14. Method 9040C, November 2004 and Update IIIB, incorporated by reference for s. NR 661.0022.
15. Method 9060A, November 2004 and Update IIIB, incorporated by reference for ss. NR 664.1034, 664.1063, 665.1034, and 665.1063
16. Method 9071B, n-Hexane Extractable Material (HEM) for Sludge, Sediment, and Solid Samples, dated April 1998 and in Update IIIA, incorporated by reference for ch. 661 Appendix IX.
17. Method 9095B, November 2004 and Update IIIB, incorporated by reference for ss. NR 664.0190, 664.0314, 665.0190, 665.0314, 665.1081, 667.0190 (1), and 668.32.

**Note:** A suffix of “A” in the method number indicates revision one (the method has been revised once). A suffix of “B” in the method number indicates revision two (the method has been revised twice). A suffix of “C” in the method number indicates revision three (the method has been revised three times). A suffix of “D” in the method number indicates revision four (the method has been revised four times).

**(4)** The following materials are available for purchase from the National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269–9101, (800) 344-3555, [www.nfpa.org/](http://www.nfpa.org/).

(a) Flammable and Combustible Liquids Code (NFPA 30), (1977), incorporated by reference for ss. NR 662.016 (2), 664.0198, and 665.0198, subch. H of ch. NR 666, and s. NR 667.0202 (2).

(b) Flammable and Combustible Liquids Code (NFPA 30), (1981), incorporated by reference for ss. NR 662.016 (2), 664.0198, and 665.0198, subch. H of ch. NR 666, and s. NR 667.0202 (2).

(5) The following materials are available for purchase from the Organization for Economic Co-operation and Development, Environment Directorate, 2 rue André Pascal, F-75775 Paris Cedex 16, France, [www.oecd-ilibrary.org/](http://www.oecd-ilibrary.org/):

(a) Guidance Manual for the Control of Transboundary Movements of Recoverable Wastes, copyright 2009, Annex B: OECD Consolidated List of Wastes Subject to the Green Control Procedure and Annex C: OECD Consolidated List of Wastes Subject to the Amber Control Procedure, incorporated by reference for ss. NR 662.082 (1), 662.083 (2), (4), and (7), and NR 662.084 (2) and (4).

(6) The following materials are available for purchase from the American Petroleum Institute, 1220 L Street, Northwest, Washington, DC 20005:

(a) API Publication 2517, Third Edition, February 1989, Evaporative Loss from External Floating-Roof Tanks, incorporated by reference for s. NR 665.1084.

(b) American Petroleum Institute Publication, Guide for Inspection of Refinery Equipment, Chapter XIII, “Atmospheric and Low-Pressure Storage Tanks,” 4th edition, 1981, incorporated by reference for s. NR 661.0191 (2).

(7) The following materials are available for purchase from the Steel Tank Institute, 944 Donata Court, Lake Zurich, IL 60047:

(a) Steel Tank Institute, “Standards for Dual Wall Underground Storage Tanks,” 2006, incorporated by reference for s. NR 661.0193 (4).

**SECTION 3. NR 661.0021 (1) (a) is amended to read:**

**NR 661.0021 (1) (a)** It is a liquid, other than ~~an aqueous~~ a solution containing less than 24 percent alcohol by volume and at least 50 percent water by weight, and that has a flash point less than 60° C/60 degrees Celsius or 140° F/140 degrees Fahrenheit, as determined by ~~a Pensky-Martens Closed Cup Tester, using the test method specified in ASTM Standard D 93-79 or D 93-80, incorporated by reference~~

~~in s. NR 660.11, or a Setafash Closed Cup Tester, using the test method specified in ASTM Standard D 3278-78 using one of the following ASTM standards: ASTM D93-79, D93-80, D3278-78, D8174-18, or D8175-18 as specified in SW-846 Test Methods 1010B or 1020C, incorporated by reference in under s. NR 660.11.~~

**SECTION 4. NR 661.0021 (1) (c) and (d) are repealed and recreated to read:**

**NR 661.0021 (1) (c)** It is an ignitable compressed gas. A compressed gas is all of the following:

1. A compressed gas is a material or mixture having in the container an absolute pressure exceeding 40 pounds per square inch at 70 degrees Fahrenheit or, regardless of the pressure at 70 degrees Fahrenheit, having an absolute pressure exceeding 104 p.s.i. at 130 degrees Fahrenheit; or a liquid flammable material having a vapor pressure exceeding 40 p.s.i. absolute at 100 degrees Fahrenheit as determined by ASTM Test D-323.

2. A compressed gas shall be characterized as ignitable if any one of the following occurs:

a. Either a mixture of 13 percent or less, by volume, with air forms a flammable mixture or the flammable range with air is wider than 12 percent, regardless of the lower limit. These limits shall be determined at atmospheric temperature and pressure. The method of sampling and test procedure shall be the ASTM E681-85, incorporated by reference under s. NR 660.11, or other equivalent methods approved by the associate administrator of the pipeline and hazardous materials safety administration with the U.S. department of transportation.

b. It is determined to be flammable or extremely flammable under 49 CFR 173.115 (l).

(d) It is an oxidizer. An oxidizer for the purpose of this subchapter is a substance that yields oxygen readily to stimulate the combustion of organic matter, for example, a chlorate, permanganate, inorganic peroxide, or a nitrate. An oxidizer is any of the following:

1. An organic compound containing the bivalent -O-O- structure and that may be considered a derivative of hydrogen peroxide when one or more of the hydrogen atoms have been replaced by organic radicals shall be classed as an organic peroxide unless it has any of the following characteristics:

a. The material meets the definition of a division 1.1, 1.2, or 1.3 explosive, as defined under s. NR 661.0023 (1) (h), in which case it shall be classed as an explosive.

b. The material is forbidden to be offered for transportation under 49 CFR 172.101 and 49 CFR 173.21.

c. It is determined that the predominant hazard of the material containing an organic peroxide is other than that of an organic peroxide.

d. According to data on file with the pipeline and hazardous materials safety administration in the U.S. department of transportation, it has been determined that the material does not present a hazard in transportation.

**SECTION 5. EFFECTIVE DATE.** This rule takes effect on the first day of the month following publication in the Wisconsin Administrative Register as provided in s. 227.22 (2) (intro.), Stats.

**SECTION 6. BOARD ADOPTION.** This rule was approved and adopted by the State of Wisconsin Natural Resources Board on [DATE].

Dated at Madison, Wisconsin \_\_\_\_\_.

STATE OF WISCONSIN

DEPARTMENT OF NATURAL RESOURCES

BY \_\_\_\_\_

Steven Little, Deputy Secretary