

**ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCES BOARD REPEALING, RENUMBERING, AMENDING, REPEALING AND RECREATING AND CREATING RULES**

The Wisconsin Natural Resources Board proposes an order to repeal NR 661 - Appendices II and III, 664.0056(9), 664.1061(2)(a), 665.0056(9), 665.0200 (note), 665.0314(1), 665.1061(2)(a), 665.1061(4), 665.1062(b), 668 - Appendix VIII, 670.014(1)(Note), 679.10(2)(a)2.(Note), 679.44(3)(Note), 679.63(3)(Note), to renumber, NR 661.32(intro.), 662.194(4) to (6), 664.0065(10), 664.1061(2)(b) and (c), 665.0056(10), 665.0314(2) to (7), 665.1061(2)(b) and (c), 665.1062(1)(a), 665.1102(3), 666.903(3) to (17), 673.09(1), to amend, NR 660.10(43)(b) and (70m), 660.10(107), 660.10(133)(c) and (139), 660.31(2), 661.03(1)(b)5., 661.04(1)(i)3., 661.04(6)(i)(intro.), 661.07(1)(a), 661.09(3), 661.21(1)(a), 661.22(1), 661.32(1) table., 661.35(2)(b)3., 661.38(3)(g)(intro.), 661 - Appendix I (6) and (7), 661 - Appendix VII, 661 - Appendix VIII, 662.041(3)(f), 662.190(1), 662.194(3)(intro.), 662.220(5)(a), 662.220(6)(intro.) and (a), 663.10(1) and (4), 664.0001(7)(k)3., 664.0052(2), 664.0072(6)(a), 664.0073(2)(intro.) (a), (b), (f), (h) and (j), 664.0098(4) and (7)(b) and (c), 664.0099(6) and (7), 664.0100(7), 664.0113(5)(e), 664.0115, 664.0120, 664.0143(6)(a)2. and (11), 664.0144(2)(intro.), 664.0145(6)(a)2. and (11), 664.0147(5), 664.0151(7), 664.0190(1), 664.0191(1) and (2)(e)2., 664.0192(1)(intro.) and (2)(intro.), 664.0193(9)(b), 664.0196(6), 664.0251(3)(intro.), 664.0314, 664.0340(2)(a), 664.0343(1)(b), 664.0347(4), 664.0554(3)(b), 664.0571(1) to (3), 664.0573(1)(d)2. and (7), 664.0574(1), 664.1034(3)(a)2. and 4., (4)(a)3. and (6), 664.1062(1), 664.1063(4)(b), 664.1101(3)(b), 664 - Appendix IX, 665.0001(3)(n)3., 665.0052(2), 665.0072(6)(a), 665.0073(2)(intro.) (a), (b), (f), (g) and (h), 665.0090(4)(a) and (c), 665.0093(4)(b) and (e), 665.0113(5)(e), 665.0115, 665.0120, 665.0143(5)(a)2. and (10), 665.0145(5)(a)2. and (10), 665.0147(5), 665.0190(1), 665.0191(1) and (2)(e)2., 665.0192(1)(intro.) and (2)(intro.), 665.0193(9)(b), 665.0196(6), 665.0221(1), 665.0224(1), 665.0259(1), 665.0301(1), 665.0303(1), 665.0314(1), (3) and (6)(intro.), 665.0340(2)(a), 665.0441(1) to (3), 665.0443(1)(d)2. and (7), 665.0444(1), 665.1034(3)(a)2. and 4., (4)(a)3., and (6), 665.1063(4)(b), 665.1081(25), 665.1084(1)(c)2.c., 665.1084(2)(c)2.c., 665.1084(3)(c)1., 665.1101(3)(b), 666.023(2), 666.080(1)(a) to (e), 666.100(2)(a), 666.100(4)(a)2., 666.102(2)(a) and (5)(j), 666.103(4) and (11), 666.106(1), 666.112(2)(a)(intro.) and (b)1., 666.205(1)(a)4., 666.902(3), 666.903(1)(Note), 666.903(11)(intro.) and (a), (12) and (13), 666.905(1)(intro.), 666.905(1)(d) and (f)(intro.), 666.905(3)(c), 666 - Appendix IX, Section 1.0 and Section 4.0 (intro.), 666 - Appendix IX, Section 9.3, 666 Appendix IX, Sections 10.3 (2); 10.5 (1) 5th bullet; (2) 2nd bullet; (5) 3rd and 5th bullets; 10.6 (1) 4th bullet and (5) 3rd and 4th bullets, 668.01(6)(c), 668.05(3)(b)6, 668.07(1)(a), (b) and (c)1., 668.07(1)(d), 668.07(2)(f), 668.09(1) and (4)(intro.), 668.30(4)(c), 668.32(2)(d), 668.33(2)(c), 668.35(2)(c), 668.36(2)(c), 668.38(4)(c), 668.39(2), 668.39(6)(c), 668.40(2), 668.40 - Table, waste codes F001, F002, F003, F004, F005, F032, F039, K031, K142, K157 and K175, 668.40 - Table, 668.40 - Table, waste codes U121, U404 and footnote 7, 668.44(8)(intro.), (10) and (13), 668.45 - Table 1, footnote 6, 668.48 - Table, 668.49(1) and (4), 668.50(7), 668 - Appendix VII, Table 1, waste codes F032, F033, F0334, F035 and K088, 668 - Appendix IX (title) and (Note), 670.001(2), 670.001(3)(b)8.c., 670.002(14) and (19), 670.010(1) and (8), 670.014(1), 670.016(1), 670.019(3)(a)3., 4., and (5), 670.022(intro.) and (1)(b)2.b., 670.024(4)(c), 670.026(3)(o), 670.040(2), 670.041(intro.), 670.042(1)(a)(intro.) and 2., (2)(b)(intro.) and (g)(intro.), (3)(b)(intro.), and (5)(b)3., 670.062(intro.) and (2)(b)1.c. and d., 670.066(3)(b)1. and 2., 670.235(title), (1)(a)(intro.), and (2)(a)(intro.), 670.405(3)(a), 670.415(2)(intro.), 670.431(1), (2) and (3), 670.432(1), 670 - Appendix I, F. 5. a., 670 - Appendix II, 673.01(1)(c), 673.04, 673.09(6), 673.09(9) and (11)(c), 673.12(1)(c)2. and (3)(c)3., 673.13(3)(intro.), (a), and, (b)(intro.), 673.18(8), 673.32(2)(d) and (e), 673.33(1)(c)2., 673.33(3)(intro.), (a) and (b)(intro.), 673.38(8), 673.61(4), 679.10(2)(a)2. and (9), 679.44(3)(intro.), 679.53(3)(intro.), 679.63(3)(intro.), to repeal and recreate, NR 660.11, 661 - Table of Contents, 661.03(1)(b)4.a., b, d, f. and g., 661.04(2)(o), 662 - Table of Contents, 664.0193(1), 664.0195(2), (3) and (4), 665.0193(1), 665.0195, 665.1084(1)(c)3., 665.1084(2)(c)3., 666.100(7)(b), 670 - Table of Contents, 670.042(10), 670.066(intro.), 673.33(3)(c), 673.33(3)(c), 673.34(4), and to create, NR 660.10(9m), (19d), (19g) and (19j), 660.10(77m), 660.10(83m), 660.10(108m), 660.10(145m), 661.04(1)(v), 661.04(1)(z), 661.04(2)(r), 661.32(2), (3)h and (4)., 661.39 through .41, 662.010(10), 662.021, 662.200 to 662.216, 662.220(2)(g), 664.0016(1)(d), 664.0073(2)(r) and (s), 664.0195(5) to (7), 664.0340(2)(e), 664.1050(8), 665.0016(1)(d), 665.0073(2)(o), 665.1050(7), 666.070(2)(b)(Note), 666.080(2), 666.100(2)(c) and (d), 666.905(intro.), 666.905(1)(a)(Note), 666.905(2)(Note), 666.905(3)(c)(Note), 667, 668.20, 670.002(23m), 670.010(13), 670.032(2)(c), 670.041(2)(c), 670.042(11), 670.051(5), 670.067, 670.235(3), 670 - Subchapter J, 670.504, 670 - Appendix I, L9 and O., 673.09(1g), 673.09(6m), 673.13(3)(d), 673.33(3)(d), relating to the generation, transportation, recycling, treatment, storage and disposal of hazardous waste and used oil.

**WA-40-10**Analysis Prepared by the Department of Natural Resources

**1. Statutes interpreted:** Sections 227.14 (1m), 289.06, 289.24, 289.30, 289.41, 289.46 and 289.67, Stats., ch. 291, Stats., and s. 299.53, 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, 291.05, 291.07, 291.25, 299.05 and 299.53, Stats.

**3. Explanation of agency authority to promulgate the proposed rules under the statutory authority:** The proposed rules replace and update current rules that comprehensively regulate the generation, transportation, recycling, treatment, storage and disposal of hazardous waste and used oil. 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 US Environmental Protection Agency (EPA) under the 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 9 specific objectives.

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 use 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 its objectives, the legislature adopted a number of statutes setting out general and specific hazardous waste rulemaking authority. Some of these rulemaking provisions are mandatory, while others are discretionary. Section 291.05, Stats., 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. Discretionary rulemaking authority was granted to prohibit certain methods of treatment or disposal of particular wastes, and to exempt by rule certain persons who generate, transport, treat, store or dispose of hazardous wastes if such action does not present a significant hazard to public health and safety or the environment.

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 that authority relating to hazardous waste facility location, design, construction, operation, maintenance, closure, long term care, negotiation and arbitration, financial responsibility and licensing and recycling. Finally, the department also relies in part on rulemaking authority in s. 299.53, Stats., to regulate used oil.

**4. Related statute or rule:** Chapters 160, 287, 289, 292, 293 and 299, Stats., and chs. NR 2, 140, 141, 500 to 538, 700 to 754 and 812, Wis. Adm. Code.

**5. Plain language analysis of proposed rule:** The rule incorporates into state law changes made to federal hazardous waste regulations by the U.S. Environmental Protection Agency in the following Federal Registers, to the extent allowed by state law:

- A.** National Emissions Standards for Hazardous Air Pollutants: Surface Coatings of Automobiles and Light Duty Trucks, April 26, 2004 (Relaxation)

**Summary:** Air emission values have been set for surface coating operations for automobiles and light duty trucks for seven compounds. Hazardous waste treatment, storage and disposal facilities will now be exempt from these air emissions standards under hazardous waste regulations. (Relaxation)

- B.** Identification and Listing of Hazardous Waste; Dyes or Pigments Production Wastes; Land Disposal Restrictions for Newly Identified Wastes; CERCLA Hazardous Substances Designation and Reportable Quantities; Designation of Five Chemicals as Appendix VIII Constituents; Addition of Four Chemicals to the Treatment Standards of F039 and the Universal Treatment Standards, February 24, 2005; and corrections to rule, June 6, 2005

**Summary:** Non-wastewaters from the production of certain dyes, pigments and colorants are now listed hazardous wastes under the federal regulations. If the constituent of concern triggers the regulatory threshold, it shall be managed as listed hazardous wastes, unless disposed in a licensed landfill or licensed incinerator. There are also five constituents being added to the list of toxic hazardous wastes. The five constituents have established treatment standards for land disposal and are hazardous substances under Superfund. The one pound reportable quantity has been maintained.

- C.** Waste Management System: Testing and Monitoring Activities; Final Rule: Methods Innovation Rule and SW 846 Final Update IIIB; Final Rule, June 14, 2005

**Summary:** Testing and monitoring requirements are more flexible to allow for use of analytical methods outside of the approved federal methods in SW 846 for both hazardous and non-hazardous wastes for land disposal and for air emissions at hazardous waste combustors. This allows for a more performance based approach to compliance, making it easier and more cost effective without compromising human health and environmental protection. (Relaxation)

- D.** Hazardous Waste Management System; Modification of Hazardous Waste Program; Mercury Containing Equipment; Final Rule, August 5, 2005

**Summary:** Mercury containing equipment (for instance, thermostats, blood pressure cuffs and mercury switches) have been added to the list of universal waste under the federal hazardous waste regulations. This will allow for less stringent requirements for storage, transportation and collection of these items resulting in better handling and compliance. (Relaxation)

- E.** Hazardous Waste Management System; Identification and Listing of Hazardous Waste; Recycling Used Oil Management Standards, July 30, 2003

**Summary:** The federal regulations clearly state that used oil contaminated with <50 ppm polychlorinated biphenyl (PCBs) is considered used oil unless it has been diluted and the source is >50 ppm. If the used oil is contaminated with PCBs to over 50 ppm, it is regulated at the federal

level only. In addition, businesses that generate very small amounts of hazardous wastes can mix it with their used oil and manage the mixture as used oil for recycling purposes. Initial marketers of used oil fuel (on-specification) shall keep records of the facilities where they deliver their fuel.

**F. Hazardous Waste Management System; Standardized Permit for RCRA Hazardous Waste Management Facilities; Final Rule, September 8, 2005**

**Summary:** The rule allows for a standardized permit for treatment, storage and disposal facilities that generate, store and non-thermally treat hazardous waste on-site in tanks, containers and containment buildings. This rule will also allow these facilities to accept wastes for treatment from other locations under the same ownership. The standardized permit will streamline the process by allowing facilities to obtain and modify permits more easily. (Relaxation)

**G. Revision of Wastewater Treatment Exemptions for Hazardous Waste Mixtures (“Headworks Exemptions”), October 4, 2005**

**Summary:** This rule determines which methods of managing hazardous waste mixtures produce discharges that can safely be handled under nonhazardous waste standards.

This rule added two solvents to a larger list of solvents that when mixed with wastewaters are now exempt from the definition of hazardous wastes. These exemptions are provided because the wastewater treatment system can easily and effectively treat the miniscule amounts of the solvents posing negligible risk to the environment. Generators now have the option to directly measure solvent chemicals at the headworks of the wastewater treatment system to determine if wastewater is an exempt mixture. Facilities that claim the *de minimis* exemption shall identify the listed wastes in their wastewater discharge permit application or eliminate their wastewater discharge.

Combustion units scrubber waters from the burning of the exempt solvents are also exempt from regulation as hazardous wastes. Eligibility for the *de minimis* exemption is extended to other listed hazardous wastes (beyond discarded commercial chemical products) and to non-manufacturing facilities. (Relaxation)

**H. National Emissions Standards for Hazardous Air Pollutants: Final Standards for Hazardous Air Pollutants for Hazardous Waste Combustors (Phase I Final replacement standards and Phase II); Final Rule**

**Summary:** Hazardous waste combustors are a major source of hazardous air pollutants that can cause adverse health effects. This rule sets standards for hazardous waste combustor air emissions by using emission control devices.

**I. Resource Conservation and Recovery Act Burden Reduction Initiative; Final Rule, April 4, 2006**

**Summary:** Reduced the paperwork burden for federal and state hazardous waste programs and regulated community by streamlining the information collected to implement the hazardous waste program. (Relaxation)

**J. Hazardous Waste and Used Oil; Corrections to Errors in the Code of Federal Regulations, July 14, 2006**

**Summary:** This rule corrects errors in the hazardous waste and used oil regulations, as a result of printing omissions, typographical errors, misspellings, citations to paragraphs and other references that have been deleted or moved to new locations without correcting the citations, and similar mistakes appearing in numerous final rules. This final rule does not create new regulatory requirements.

- K.** Hazardous Waste Management System; Modification of the Hazardous Waste Program; Cathode Ray Tubes, July 28, 2006

**Summary:** A cathode ray tube (CRT) is the glass video display component of an electronic device (usually a computer or television monitor). This rule amends hazardous waste regulations to streamline management requirements for recycling of used CRTs and glass removed from CRTs, if certain conditions are met. This rule is intended to encourage recycling and reuse of used CRTs and CRT glass. (Relaxation)

- L.** Academic Laboratories Generator Standards; Final Rule, December 1, 2008. Checklist 220; Technical Corrections to the Standards Applicable to Generators of Hazardous Waste; Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material at Laboratories Owned by Colleges and Universities and Other Eligible Academic Entities Formally Affiliated with Colleges and Universities, December 20, 2010.

**Summary:** This rule makes six technical corrections to an alternative set of hazardous waste generator requirements applicable to laboratories owned by eligible academic entities. These changes correct errors published in the Final rule, including omissions and redundancies, and removal of an obsolete reference. These technical corrections will improve the clarity of the Academic Laboratories rule. (Relaxation)

- M.** Conditional Exclusions from Solid Waste and Hazardous Waste for Solvent-Contaminated Wipes, July 1, 2013 (effective date January 31, 2014)

**Summary:** This rule modifies federal hazardous waste regulations to exclude solvent-contaminated wipes that are cleaned and reused and revises the definition of hazardous waste to conditionally exclude solvent-contaminated wipes that are disposed. The goal is to provide a consistent regulatory framework that is appropriate to the low level of risk posed by solvent-contaminated wipes and to reduce overall compliance costs for industry, many of which are small businesses. (Relaxation)

**6. Summary of and preliminary comparison with any existing or proposed federal regulation:** The rule revisions incorporate new regulations adopted by EPA between 2002 and 2006 (except L and M which were adopted 2010 and 2014, respectively), and correct errors in the current rules. The new rules will include minor revisions to the Land Disposal Restrictions; technical revisions to the Hazardous Air Pollutant rules for combustors; an amendment to the used oil recycling rule; add a new waste to the hazardous waste listings; add a new material to the universal waste rule; revise a laboratory analytical test method; and add a conditional exclusion for cathode ray tubes that are recycled. To the extent possible, the Department intends to adopt the content and format of the federal regulations, to be equivalent.

**7. Comparison of similar rules in adjacent states (Minnesota, Iowa, Illinois and Michigan):** Minnesota, Illinois, and Michigan have state hazardous waste programs. In that capacity, they are working to promulgate these rules and include these regulations as part of their EPA authorized program. The status of this process in each state is found below. Iowa does not have RCRA hazardous waste authorization from EPA. Instead, EPA's Region 7 office administers and enforces the RCRA hazardous waste management requirements in Iowa.

Summary of neighboring states	Iowa*		Illinois		Michigan		Minnesota	
	Adopted	Authorized	Adopted	Authorized	Adopted	Authorized	Adopted	Authorized
A. National Emissions Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light Duty Trucks, April 26, 2004	N/A	N/A	Y	N	Y	Y (1/07/08)	N	N
B. Identification and Listing of Hazardous Waste; Dyes or Pigments Production Wastes; Land Disposal Restrictions for Newly Identified Wastes; CERCLA Hazardous Substance Designation and Reportable Quantities; Designation of Five Chemicals as Appendix VIII Constituents; Addition of Four Chemicals to the Treatment Standards of F039 and the Universal Treatment Standards, February 24, 2005, and corrections to rule, June 16, 2005	N/A	N/A	Y	N	Y	Y (3/02/10)	N	N
C. Hazardous Waste Management System; Testing and Monitoring Activities; Methods Innovation Rule and SW-846 Final Update IIIB, June 14, 2005	N/A	N/A	Y	N	Y	Y (3/02/10)	N	N
D. Hazardous Waste Management System; Modification of the Hazardous Waste Program; Mercury Containing Equipment, August 5, 2005	N/A	N/A	Y	N	Y	Y (3/02/10)	N	N
E. Hazardous Waste Management System; Identification and Listing of Hazardous Waste; Recycling Used Oil Management Standards, July 30, 2003	N/A	N/A	N	N	Y	Y (3/02/10)	N	N
F. Hazardous Waste Management System; Standardized Permit for RCRA Hazardous Waste Management Facilities, September 8, 2005	N/A	N/A	N	N	N	N	N	N
G. Revision of Wastewater Treatment Exemptions for Hazardous Waste Mixtures ('Headworks Exemptions'), October 4, 2005	N/A	N/A	Y	N	Y	Y (3/02/10)	N	N
H. National Emission Standards for Hazardous Air Pollutants: Final Standards for Hazardous Air Pollutants for Hazardous Waste Combustors (Phase I Final Replacement Standards and Phase II), October 12, 2005	N/A	N/A	Y	N	Y	Y (3/02/10)	N	N
I. Resource Conservation and Recovery Act Burden Reduction Initiative, April 4, 2006	N/A	N/A	Y	N	Y	Y (3/02/10)	N	N
J. Hazardous Waste and Used Oil; Corrections to Errors in the Code of Federal Regulations, July 14, 2006	N/A	N/A	Y	N	Y	Y (3/02/10)	N	N
K. Hazardous Waste Management System; Modification of the Hazardous Waste Program; Cathode Ray Tubes, July 28, 2006	N/A	N/A	Y	N	Y	Y (3/02/10)	N	N
L. Academic Laboratories Generator Standards; Final Rule, December 1, 2008. Checklist 220; Technical Corrections to the Standards Applicable to Generators of Hazardous Waste; Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material at Laboratories Owned by Colleges and Universities and Other Eligible Academic Entities Formally Affiliated With Colleges and Universities, December 20, 2010	N/A	N/A	Y	N	Y	N	N	N
M. Conditional Exclusions from Solid Waste and Hazardous Waste for Solvent-Contaminated Wipes, July 1, 2013 (effective date January 31, 2014)	N/A	N/A	N	N	N	N	N	N

**8. Summary of the factual data and analytical methodologies that the agency used in support of the proposed rule and how any related findings support the regulatory approach chosen for the proposed rule:** The proposed rules are required by statute to maintain consistency with federal rules and ensure program authorization through the Resource Conservation and Recovery Act (RCRA).

**9. Any analysis and supporting documentation that the agency used in support of the agency's determination of the rule's effect on small businesses under s. 227.114, Stats., or that was used when the agency prepared an economic impact report:** The determination that these rules will have no impact on small businesses was reached through analysis of the report created by EPA during the promulgation

process at the federal level. Each revision contains an economic impact assessment, fiscal estimate, and language discussing which sectors, businesses, and entities will be affected by the change. Without exception, there was no indication that small businesses will in any way be affected by these rules.

**10. Anticipated costs incurred by private sector:** It has been determined that promulgation of these rules will result in minimal additional costs to the private sector. Federal rules require an economic impact analysis for promulgation, and without exception all of these changes were deemed by federal analysis to cause "minimal impact, with little or no change in market prices or production." Additionally, several of the rule changes are actually relaxations (A, C, D, F, G, I, K, L, M as described in section 5) - and as such will actually result in either direct (decreased regulatory costs) or indirect (administrative time savings) cost savings for businesses and entities in affected business sectors.

Additionally, the majority of these changes (and all that are not relaxations) were promulgated under the authority of RCRA as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA). Regulations promulgated under HSWA are immediately effective in all states, regardless of state authorization status. So, entities and businesses in affected sectors have already implemented many of the changes and will thus be unaffected by these rules.

**11. Effect on small business, including how the rule will be enforced:** The effect of these proposed rules will be minimal and may be advantageous to small business, as they are by in large administrative in nature and nine of the changes are relaxations of existing rules. Additionally, they don't directly affect procedures or alter fee schedules in such a way that there would be any negative effect on the small business community of Wisconsin.

**12. Agency contact person (including e-mail and telephone number):**

Ed Lynch, Section Chief  
Hazardous Waste Prevention and Management  
[Edward.lynch@wisconsin.gov](mailto:Edward.lynch@wisconsin.gov)  
(608)267-0545

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SECTION 1. NR 660.10 (9m), (19d), (19g) and (19j) are created to read:

**NR 660.10 (9m)** "Cathode ray tube" or "CRT" means a vacuum tube, composed primarily of glass, which is the visual or video display component of an electronic device. A used, intact CRT means a CRT whose vacuum has not been released. A used, broken CRT means glass removed from its housing or casing whose vacuum has been released.

**(19d)** "CRT collector" means a person who receives used, intact CRTs for recycling, repair, resale or donation.

**(19g)** "CRT glass manufacturer" means an operation or part of an operation that uses a furnace to manufacture CRT glass.

**(19j)** "CRT processing" means conducting all of the following activities:

- (a) Receiving broken or intact CRTs.
- (b) Intentionally breaking intact CRTs or further breaking or separating broken CRTs.
- (c) Sorting or otherwise managing glass removed from CRT monitors.

SECTION 2. NR 660.10 (43) (b) and (70m) are amended to read:

**NR 660.10 (43)** (b) For the purpose of implementing corrective action under ss. NR 664.0101 or 667.0101, all contiguous property under the control of the owner or operator seeking a license under ch. 291, Stats., and 42 USC 6928 (h). This definition also applies to facilities implementing corrective action under s. 291.37, Stats., and 42 USC 6928(h).

**(70m)** “Large quantity generator” means a generator who does one or more of the following:

(a) Generates ~~more than~~ 1,000 kilograms (2,205 pounds) or more of hazardous waste in a calendar month.

(b) Generates in a calendar month more than 1 ~~kilograms~~ kilogram (2.2 pounds) of acute hazardous waste or more than 100 kilograms (220 pounds) of any residue or contaminated soil, waste or other debris resulting from the clean-up of a spill, into or on any land or water, of any acute hazardous wastes listed in s. NR 661.31, 661.32 or 661.33 (5).

(c) Accumulates at any time more than 1 ~~kilograms~~ kilogram (2.2 pounds) of acute hazardous waste or more than 100 kilograms (220 pounds) of any residue or contaminated soil, waste or other debris resulting from the clean-up of a spill, into or on any land or water, of any acute hazardous wastes listed in s. NR 661.31, 661.32 or 661.33 (5).

SECTION 3. NR 660.10 (77m) is created to read:

**NR 660.10 (77m)** “Mercury-containing equipment” means a device or part of a device (including thermostats, but excluding batteries and lamps) that contains elemental mercury integral to its function.

SECTION 4. NR 660.10 (83m) is created to read:

**NR 660.10 (83m)** “No free liquids”, as used in ss. NR 661.04 (1) (z) and NR 661.04 (2) (r), means that solvent-contaminated wipes may not contain free liquids as determined by Method 9095B Paint Filter Liquids Test in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods”, EPA SW-846, incorporated by reference in s. NR 660.11, and that there is no free liquid in the container holding the wipes. No free liquids may also be determined using another standard or test method as defined by the department.

SECTION 5. NR 660.10 (107) is amended to read:

**NR 660.10 (107)** “Small quantity generator” means a generator who does all of the following:

(a) Generates more than 100 kilograms (220 pounds) but less than 1,000 kilograms (2,205 pounds) of ~~non-acute~~ hazardous waste in a calendar month.

(b) Accumulates no more than 6,000 kilograms (13,320 pounds) of ~~non-acute~~ hazardous waste at any time.

SECTION 6. NR 660.10 (108m) is created to read:



**NR 660.10 (108m)** “Solvent-contaminated wipe” means:

(1) A wipe that, after use or after cleaning up a spill, is any of the following:

(a) Contains one or more of the F001 to F005 solvents listed in s. NR 661.31 or the corresponding P- or U-listed solvents listed in s. NR 661.33.

(b) Exhibits a hazardous characteristic found in subch. C of ch. NR 661, when that characteristic results from a solvent listed in ch. NR 661.

(c) Exhibits only the hazardous waste characteristic of ignitability found in s. NR 661.21 due to the presence of one or more solvents that are not listed in ch. NR 661.

(2) Solvent-contaminated wipes that contain listed hazardous waste other than solvents, or exhibit the characteristic of toxicity, corrosivity or reactivity due to contaminants other than solvents, are not eligible for the exclusions at ss. NR 661.04 (1) (z) and NR 661.04 (2) (r).

SECTION 7. NR 660.10 (133) (c) and (139) are amended to read:

**NR 660.10 (133)** (c) Thermostats and mercury-containing equipment as described in s. NR 673.04.

**(139)** “Very small quantity generator” means a generator who ~~generates~~ does all of the following:

(a) Generates in a calendar month no more than 100 kilograms (220 pounds) of non-acute hazardous waste or no more than 1 kilogram (2.2 pounds) of acute hazardous waste listed in ss. NR 661.31 to 661.33 in a calendar month.

(b) Generates in a calendar month no more than 1 kilogram (2.2 pounds) of acute hazardous waste and no more than 100 kilograms (220 pounds) of residue or contaminated soil, waste or other debris resulting from the clean-up of a spill, into or on any land or water, of any acute hazardous wastes listed in s. NR 661.31, 661.32 or 661.33 (5).

(c) Accumulates at any time no more than 1 kilogram (2.2 pounds) of acute hazardous waste and no more than 100 kilograms (220 pounds) of residue or contaminated soil, waste or other debris resulting from the clean-up of a spill, into or on any land or water, of any acute hazardous wastes listed in s. NR 661.31, 661.32 or 661.33 (5).

SECTION 8. NR 660.10 (145m) is created to read:

**NR 660.10 (145m)** “Wipe” means a woven or non-woven shop towel, rag, pad, or swab made of wood pulp, fabric, cotton, polyester blends, or other material.

SECTION 9. NR 660.11 is repealed and recreated to read:

**NR 660.11 Incorporation by reference.** (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 in chs. NR 660 to 670. Some materials that are incorporated by reference in 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 of the department of natural resources, Madison, Wisconsin, or may be obtained for personal use at the addresses noted.

(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.

(a) ASTM D–93–79 or D–93–80, Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester, incorporated by reference for s. NR 661.21.

(b) ASTM D–1946–82, Standard Method for Analysis of Reformed Gas by Gas Chromatography, incorporated by reference for ss. NR 664.1033 and 665.1033.

(c) ASTM D 2267–88, Standard Test Method for Aromatics in Light Naphthas and Aviation Gasolines by Gas Chromatography, incorporated by reference for s. NR 664.1063.

(d) ASTM D 2382–83, 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.

(e) ASTM D 2879–92, Standard Test Method for Vapor Pressure—Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, incorporated by reference for s. NR 665.1084.

(f) ASTM D–3278–78, Standard Test Methods for Flash Point for Liquids by Setaflash Closed Tester, incorporated by reference for s. NR 661.21 (1).

(g) ASTM E 168–88, Standard Practices for General Techniques of Infrared Quantitative Analysis, incorporated by reference for s. NR 664.1063.

(h) ASTM E 169–87, Standard Practices for General Techniques of Ultraviolet-Visible Quantitative Analysis, incorporated by reference for s. NR 664.1063.

(i) ASTM E 260–85, Standard Practice for Packed Column Gas Chromatography, incorporated by reference for s. NR 664.1063.

(j) ASTM E 926–88, Standard Test Methods for Preparing Refuse-Derived Fuel (RDF) Samples for Analyses of Metals, Test Method C—Bomb, Acid Digestion Method.

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

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

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

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

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

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

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

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

**(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) 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.

**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).

1. Method 1311, September 1992, and Update I, incorporated by reference for ss. NR 661.24, 668.07 and 268.40.

2. Method 0011, December 1996, and Update III, incorporated by reference for ch. NR 666, Appendix IX.

3. Method 0023A, December 1996, and Update III, incorporated by reference for s. NR 666.104 and ch. NR 666, Appendix IX.

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

5. Method 0051, December 1996 and Update III, incorporated by reference for s. NR 666.107 and ch. NR 666, Appendix IX.

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

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

8. Method 1110A, November 2004 and Update IIIB, incorporated by reference for s. NR 661.22.

9. Method 9010C, dated November 2004 and Update IIIB, incorporated by reference for ss. NR 668.40, 668.44 and 668.48.

10. Method 9012B, November 2004 and Update IIIB, incorporated by reference for ss. NR 668.40, 668.44 and 668.48.

11. Method 9040C, November 2004 and Update IIIB, incorporated by reference for s. NR 661.22.

12. Method 9060A, November 2004 and Update IIIB, incorporated by reference for ss. NR 664.1034, 664.1063, 665.1034 and 665.1063.

13. 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.

(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.

(a) Flammable and Combustible Liquids Code (1977 or 1981), incorporated by reference for ch. NR 662, subch. S, ss. NR 664.0198 and 665.0198, ch. NR 666, subch. H and s. NR 667.0202 (2).

(5) 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.

(6) The following materials are available for purchase from the Environmental Protection Agency, Research Triangle Park, NC.

(a) 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.

(7) The following materials are available for purchase from the Organisation for Economic Co-operation and Development, Environment Directorate, 2 rue Andre Pascal, 75775 Paris Cedex 16, France.

(a) OECD Green List of Wastes (revised May 1994), Amber List of Wastes and Red List of Wastes (both revised May 1993) as set forth in Appendix 3, Appendix 4 and Appendix 5, respectively, to the OECD Council Decision C (92)39/FINAL (Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations), incorporated by reference for s. NR 662.089.

(8) The following Code of Federal Regulation Appendices are available for purchase from Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, (866) 512-1800.

(a) 40 CFR part 51, Appendix M, Method 204 Criteria for and Verification of a Permanent or Temporary Total Enclosure incorporated by reference for chs. NR 664, subch. CC and 665, subch. CC.

(b) 40 CFR part 51, Appendix W Guideline on Air Quality Models (Revised), incorporated by reference for ch. NR 666, subch. H.

(c) 40 CFR part 60, Appendix A Test Methods, incorporated by reference for ch. NR 666, Appendix IX.

(d) 40 CFR part 60, Appendix A, Methods 1 to 5 Various Titles, incorporated by reference for ch. NR 666, subch. H.

(e) 40 CFR part 60, Appendix A, Method 1 Sample and Velocity Traverses for Stationary Sources, incorporated by reference for ch. NR 666, Appendix IX.

(f) 40 CFR part 60, Appendix A, Method 2 Determination of Stack Gas Velocity and volumetric Flow Rate (Type S Pitot Tube) incorporated by reference for chs. NR 664, subch. AA and 665, subch. AA.

(g) 40 CFR part 60, Appendix A, Method 2A Direct Measurement of Gas Volume through Pipes and Small Ducts, incorporated by reference for chs. NR 664, subch. AA and 665, subch. AA.

(h) 40 CFR part 60, Appendix A, Method 2C Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube) incorporated by reference for chs. NR 664, subch. AA and 665, subch. AA.

(i) 40 CFR part 60, Appendix A, Method 2D Measurement of Gas Volume Flow Rates in Small Pipes and Ducts, incorporated by reference for chs. NR 664, subch. AA and 665, subch. AA.

(j) 40 CFR part 60, Appendix A, Method 3 Gas Analysis for the Determination of Dry Molecular Weight, incorporated by reference for ch. NR 664, subch. O and ch. NR 666, Appendix IX.

(k) 40 CFR part 60, Appendix A, Method 3A, Determination of Oxygen and Carbon Dioxide Concentrations in Emissions from Stationary Sources (Instrumental Analyzer Procedure), incorporated by reference for ch. NR 666, Appendix IX.

(L) 40 CFR part 60, Appendix A, Method 10 Determination of Carbon Monoxide Emissions from Stationary Sources, incorporated by reference for ch. NR 666, Appendix IX.

(m) 40 CFR part 60, Appendix A, Method 10A Determination of Carbon Monoxide Emissions in Certifying Continuous Emission Monitoring Systems at Petroleum Refineries, incorporated by reference for ch. NR 666, Appendix IX.

(n) 40 CFR part 60, Appendix A, Method 10B Determination of Carbon Monoxide Emissions from Stationary Sources, incorporated by reference for ch. NR 666, Appendix IX.

(o) 40 CFR part 60, Appendix A, Method 18 Measurement of Gaseous Organic Compound Emissions by Gas Chromatography, incorporated by reference for chs. NR 664, subch. AA and 665, subch. AA.

(p) 40 CFR part 60, Appendix A, Method 21 Determination of Volatile Organic Compounds Leaks, incorporated by reference for chs. NR 664, subchs. AA, BB and CC and 665, subchs. AA, BB and CC.

(q) 40 CFR part 60, Appendix A, Method 22 Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares, incorporated by reference for chs. NR 664, subchs. AA and DD and 665, subchs. AA and DD.

(r) 40 CFR part 60, Appendix A, Method 25D Determination of the Volatile Organic Concentration of Waste Samples, incorporated by reference for chs. NR 664, subch. CC and 665, subch. CC.

(s) 40 CFR part 60, Appendix A, Method 25E Determination of Vapor Phase Organic concentration in Waste Samples, incorporated by reference for ch. NR 665, subch. CC.

(t) 40 CFR part 60, Appendix A, Method 27 Determination of Vapor Tightness of Gasoline Delivery Tank using Pressure-Vacuum Test, incorporated by reference for ch. NR 664, subch. CC.

(u) 40 CFR part 63, Appendix A, Method 301 Field Validation of Pollutant Measurement Methods from Various Waste Media, incorporated by reference for ch. NR 665, subch. CC.

(v) 40 CFR part 63, Appendix C Determination of the Fraction Biodegraded (Fbio) in a Biological Treatment Unit, incorporated by reference for ch. NR 665, subch. CC.

(w) 40 CFR part 63, Appendix D Alternative Validation Procedure for EPA Waste and Wastewater Methods, incorporated by reference for ch. NR 665, subch. CC.

(x) 40 CFR part 136, Appendix A, Method 624 Purgeables, incorporated by reference for ch. NR 665, subch. CC.

(y) 40 CFR part 136, Appendix A, Method 625 Base/Neutrals and Acids, incorporated by reference for ch. NR 665, subch. CC.

(z) 40 CFR part 136, Appendix A, Method 1624 Volatile Organic Compounds by Isotope Dilution GC/MS, incorporated by reference for ch. NR 665, subch. CC.

(za) 40 CFR part 136, Appendix A, Method 1625 Semivolatile Organic Compounds by Isotope Dilution GC/MS, incorporated by reference for ch. NR 665, subch. CC.

SECTION 10. NR 660.31 (2) is amended to read:

**NR 660.31 (2)** The department may grant requests for a variance from classifying as a solid waste those materials that are reclaimed and then reused as feedstock within the original production process in which the materials were generated if the reclamation operation is an essential part of the production process. This determination will be based on all of the following criteria:

(a) How economically viable the production process would be if it were to use virgin materials, rather than reclaimed materials.

~~(b) The prevalence of the practice on an industry-wide basis.~~

~~(c)~~ (b) The extent to which the material is handled before reclamation to minimize loss.

~~(d)~~ (c) The time periods between generating the material and its reclamation, and between reclamation and return to the original primary production process.

~~(e)~~ (d) The location of the reclamation operation in relation to the production process.

~~(f)~~ (e) Whether the reclaimed material is used for the purpose for which it was originally produced when it is returned to the original process, and whether it is returned to the process in substantially its original form.

~~(g)~~ (f) Whether the person who generates the material also reclaims it.

~~(h)~~ (g) Other relevant factors.

SECTION 11. Chapter NR 661, Table of Contents, is repealed and recreated to read:

### **Chapter NR 661**

## **HAZARDOUS WASTE IDENTIFICATION AND LISTING**

### **Subchapter A — General**

NR 661.01 Purpose and scope.

NR 661.02 Definition of solid waste.

NR 661.03 Definition of hazardous waste.

- NR 661.04 Exclusions.
- NR 661.06 Requirements for recyclable materials.
- NR 661.07 Residues of hazardous waste in empty containers.
- NR 661.08 PCB wastes regulated under federal toxic substances control act.
- NR 661.09 Requirements for universal waste.

**Subchapter B — Criteria for Identifying the Characteristics of Hazardous Waste and for Listing Hazardous Waste**

- NR 661.10 Criteria for identifying the characteristics of hazardous waste.
- NR 661.11 Criteria for listing hazardous waste.

**Subchapter C — Characteristics of Hazardous Waste**

- NR 661.20 General.
- NR 661.21 Ignitability characteristic.
- NR 661.22 Corrosivity characteristic.
- NR 661.23 Reactivity characteristic.
- NR 661.24 Toxicity characteristic.

**Subchapter D — Lists of Hazardous Wastes**

- NR 661.30 General.
- NR 661.31 Hazardous wastes from non-specific sources.
- NR 661.32 Hazardous wastes from specific sources.
- NR 661.33 Discarded commercial chemical products, off-specification species, container residues and spill residues thereof.
- NR 661.35 Deletion of certain hazardous waste codes following equipment cleaning and replacement.

**Subchapter E—Exclusions and Exemptions**

- NR 661.38 Comparable or syngas fuel exclusion.
- NR 661.39 Conditional exclusion for used, broken cathode ray tubes (CRTs) and processed CRT glass undergoing recycling.
- NR 661.40 Conditional exclusion for used, intact cathode ray tubes (CRTs) exported for recycling.
- NR 661.41 Notification and recordkeeping for used, intact cathode ray tubes (CRTs) exported for reuse.

SECTION 12. NR 661.03 (1) (b) 4. a., b., d., f. and g. are repealed and recreated to read:

**NR 661.03 (1) (b) 4. a.** One or more of the following solvents listed in s. NR 661.31: benzene, carbon tetrachloride, tetrachloroethylene, trichloroethylene, or the scrubber waters derived-from the combustion of these spent solvents, provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed one part per million, or the total measured concentration of these solvents entering the headworks of the facility's wastewater treatment system (at facilities subject to regulation under the Clean Air Act, as amended, at 40 CFR parts 60, 61 or 63, or at facilities subject to an enforceable limit in a state operating permit that minimizes fugitive emissions), does not exceed 1 part per million on an average weekly basis. Any facility that uses benzene as a solvent and claims this exemption shall use an aerated biological wastewater treatment system and shall use only lined surface impoundments or tanks prior to secondary clarification in the wastewater treatment system. Facilities that choose to measure concentration levels shall file a copy of their sampling and analysis plan with the department. A facility shall file a copy of a revised sampling and analysis plan only if the initial plan is rendered inaccurate by changes in the facility's

operations. The sampling and analysis plan shall include the monitoring point location (headworks), the sampling frequency and methodology and a list of constituents to be monitored. A facility is eligible for the direct monitoring option once they receive confirmation that the sampling and analysis plan has been received by the department. The department may reject the sampling and analysis plan if it finds that the sampling and analysis plan fails to include the above information or the plan parameters would not enable the facility to calculate the weekly average concentration of these chemicals accurately. If the department rejects the sampling and analysis plan or if the department finds that the facility is not following the sampling and analysis plan, the department shall notify the facility to cease the use of the direct monitoring option until such time as the bases for rejection are corrected.

b. One or more of the following spent solvents listed in s. NR 661.31: methylene chloride, 1,1,1 trichloroethane, chlorobenzene, o-dichlorobenzene, cresols, cresylic acid, nitrobenzene, toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, spent chlorofluorocarbon solvents, 2-ethoxyethanol, or the scrubber waters derived-from the combustion of these spent solvents, provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed 25 parts per million, or the total measured concentration of these solvents entering the headworks of the facility's wastewater treatment system (at facilities subject to regulation under the Clean Air Act as amended, at 40 CFR parts 60, 61 or 63, or at facilities subject to an enforceable limit in a state operating permit that minimizes fugitive emissions), does not exceed 25 parts per million on an average weekly basis. Facilities that choose to measure concentration levels shall file a copy of their sampling and analysis plan with the department. A facility shall file a copy of a revised sampling and analysis plan only if the initial plan is rendered inaccurate by changes in the facility's operations. The sampling and analysis plan shall include the monitoring point location (headworks), the sampling frequency and methodology and a list of constituents to be monitored. A facility is eligible for the direct monitoring option once they receive confirmation that the sampling and analysis plan has been received by the department. The department may reject the sampling and analysis plan if it finds that the sampling and analysis plan fails to include the above information or the plan parameters would not enable the facility to calculate the weekly average concentration of these chemicals accurately. If the department rejects the sampling and analysis plan or if the department finds that the facility is not following the sampling and analysis plan, the department shall notify the facility to cease the use of the direct monitoring option until such time as the bases for rejection are corrected.

d. A discarded hazardous waste, commercial chemical product or chemical intermediate listed in ss. NR 661.31 to 661.33, arising from de minimis losses of these materials. For purposes of this subdivision paragraph, de minimis losses are inadvertent releases to a wastewater treatment system, including those from normal material handling operations (for example, spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves or other devices used to transfer materials); minor leaks of process equipment, storage tanks or containers; leaks from well maintained pump packings and



seals; sample purgings; relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment; and rinsate from empty containers or from containers that are rendered empty by that rinsing. Any manufacturing facility that claims an exemption for de minimis quantities of wastes listed in ss. NR 661.31 to 661.32, or any nonmanufacturing facility that claims an exemption for de minimis quantities of wastes listed in subch. D shall either have eliminated the discharge of wastewaters or have included in its WPDES permit application or submission to its pretreatment control authority the constituents for which each waste was listed (in ch. NR 661, Appendix VII); and the constituents in the table Treatment Standards for Hazardous Wastes in s. NR 668.40 for which each waste has a treatment standard (for instance, land disposal restriction constituents). A facility is eligible to claim the exemption once the department has been notified of possible de minimis releases via the WPDES permit application or the pretreatment control authority submission. A copy of the WPDES permit application or the submission to the pretreatment control authority shall be placed in the facility's on-site files.

f. One or more of the following wastes listed in s. NR 661.32: wastewaters from the production of carbamates and carbamoyl oximes (EPA Hazardous Waste No. K157), provided that the maximum weekly usage of formaldehyde, methyl chloride, methylene chloride and triethylamine (including all amounts that cannot be demonstrated to be reacted in the process, destroyed through treatment, or is recovered, for instance, what is discharged or volatilized) divided by the average weekly flow of process wastewater prior to any dilution into the headworks of the facility's wastewater treatment system does not exceed a total of 5 parts per million by weight or the total measured concentration of these chemicals entering the headworks of the facility's wastewater treatment system (at facilities subject to regulation under the Clean Air Act as amended, at 40 CFR parts 60, 61 or 63, or at facilities subject to an enforceable limit in a state operating permit that minimizes fugitive emissions), does not exceed 5 parts per million on an average weekly basis. Facilities that choose to measure concentration levels shall file copy of their sampling and analysis plan with the department. A facility shall file a copy of a revised sampling and analysis plan only if the initial plan is rendered inaccurate by changes in the facility's operations. The sampling and analysis plan shall include the monitoring point location (headworks), the sampling frequency and methodology and a list of constituents to be monitored. A facility is eligible for the direct monitoring option once they receive confirmation that the sampling and analysis plan has been received by the department. The department may reject the sampling and analysis plan if it finds that the sampling and analysis plan fails to include the above information or the plan parameters would not enable the facility to calculate the weekly average concentration of these chemicals accurately. If the department rejects the sampling and analysis plan or if the department finds that the facility is not following the sampling and analysis plan, the department shall notify the facility to cease the use of the direct monitoring option until such time as the bases for rejection are corrected.

g. Wastewaters derived from the treatment of one or more of the following wastes listed in s. NR 661.32: organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates and decantates) from the production of carbamates and carbamoyl oximes (EPA Hazardous Waste No. K156)

provided that the maximum concentration of formaldehyde, methyl chloride, methylene chloride and triethylamine prior to any dilutions into the headworks of the facility's wastewater treatment system does not exceed a total of 5 milligrams per liter or the total measured concentration of these chemicals entering the headworks of the facility's wastewater treatment system (at facilities subject to regulation under the Clean Air Act as amended, at 40 CFR parts 60, 61 or 63, or at facilities subject to an enforceable limit in a state operating permit that minimizes fugitive emissions), does not exceed 5 milligrams per liter on an average weekly basis. Facilities that choose to measure concentration levels shall file copy of their sampling and analysis plan with the department. A facility shall file a copy of a revised sampling and analysis plan only if the initial plan is rendered inaccurate by changes in the facility's operations. The sampling and analysis plan shall include the monitoring point location (headworks), the sampling frequency and methodology, and a list of constituents to be monitored. A facility is eligible for the direct monitoring option once they receive confirmation that the sampling and analysis plan has been received by the department. The department may reject the sampling and analysis plan if it finds that the sampling and analysis plan fails to include the above information or the plan parameters would not enable the facility to calculate the weekly average concentration of these chemicals accurately. If the department rejects the sampling and analysis plan or if the department finds that the facility is not following the sampling and analysis plan, the department shall notify the facility to cease the use of the direct monitoring option until such time as the bases for rejection are corrected.

SECTION 13. NR 661.03 (1) (b) 5. is amended to read:

**NR 661.03 (1) (b) 5.** Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in subch. D. Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, by using an analytical method from EPA SW-846, incorporated by reference in s. NR 660.11, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in ch. NR 661 Appendix VIII).

~~a. The rebuttable presumption does not apply to metalworking oils or fluids containing chlorinated paraffins, if they are processed, through a tolling agreement, to reclaim metalworking oils or fluids. The presumption does apply to metalworking oils or fluids if the oils or fluids are recycled in any other manner, or disposed.~~

~~b. The rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units where the CFCs are destined for reclamation. The rebuttable presumption does apply to used oils contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units.~~

SECTION 14. NR 661.04 (1) (i) 3. e. is amended to read:

**NR 661.04 (1) (i) 3. e.** Prior to operating under this exclusion, the plant owner or operator submits to the department a one-time notification stating that the plant intends to claim the exclusion, giving the date on which the plant intends to begin operating under the exclusion and containing the following language: “I have read the applicable rule establishing an exclusion for wood preserving wastewaters and spent wood preserving solutions and understand it requires me to comply at all times with the conditions set out in the rule.” The plant shall maintain a copy of that document in its on-site records ~~for a period of no less than 3 years from the date specified in the notice~~ until closure of the facility. The exclusion applies only so long as the plant meets all of the conditions. If the plant goes out of compliance with any condition, it may apply to the department for reinstatement. The department may reinstate the exclusion upon finding that the plant has returned to compliance with all conditions and that the violations are not likely to recur.

SECTION 15. NR 661.04 (1) (v) is created to read:

**NR 661.04 (1) (v).**

1. Used, intact CRTs as defined in s. NR 660.10 are not solid wastes unless they are disposed, or unless they are speculatively accumulated as defined in s. NR 661.01 (3) (h) by CRT collectors or glass processors.
2. Used, intact CRTs as defined in s. NR 660.10 are not solid wastes when exported for recycling provided that they meet the requirements of s. NR 661.40.
3. Used, broken CRTs as defined in s. NR 661.10 are not solid wastes provided that they meet the requirements of s. NR 661.39.
4. Glass removed from CRTs is not a solid waste provided that it meets the requirements of s. NR 661.39(3).

SECTION 16. NR 661.04 (1) (z) is created to read:

**NR 661.04 (1) (z)** Solvent-contaminated wipes that are sent for cleaning and reuse are not solid wastes from the point of generation, provided that:

1. The solvent-contaminated wipes, when accumulated, stored, and transported, are contained in non-leaking, closed containers that are labeled “Excluded Solvent-Contaminated Wipes”. The containers shall be able to contain free liquids, should free liquids occur. During accumulation, a container is considered closed when there is complete contact between the fitted lid and the rim, except when it is necessary to add or remove solvent-contaminated wipes. When the container is full, or when the solvent-contaminated wipes are no longer being accumulated, or when the container is being transported, the container shall be sealed with all lids properly and securely affixed to the container and all openings tightly bound or closed sufficiently to prevent leaks and emissions.
2. The solvent-contaminated wipes may be accumulated by the generator for up to 180 days from the start date of accumulation for each container prior to being sent for cleaning.

3. At the point of being sent for cleaning on-site or at the point of being transported off-site for cleaning, the solvent-contaminated wipes shall contain no free liquids, as defined in s. NR 660.10.

4. Free liquids removed from the solvent-contaminated wipes or from the container holding the wipes shall be managed according to the applicable regulations found in chs. NR 660 to 673.

5. Generators shall maintain at their site all of the following documentation:

- a. Name and address of the laundry or dry cleaner that is receiving the solvent-contaminated wipes.
- b. Documentation that the 180-day accumulation time limit in subd. 2. is being met.
- c. Description of the process the generator is using to ensure the solvent-contaminated wipes contain no free liquids at the point of being laundered or dry cleaned on-site or at the point of being transported off-site for laundering or dry cleaning.

6. The solvent-contaminated wipes are sent to a laundry or dry cleaner whose discharge, if any, is regulated under 33 USC 1311 and 33 USC 1342 or 33 USC 1317.

SECTION 17. NR 661.04 (2) (o) is repealed and recreated to read:

**NR 661.04 (2) (o)** Leachate or gas condensate collected from landfills where certain solid wastes have been disposed, provided that:

1. The solid wastes disposed would meet one or more of the listing descriptions for hazardous waste codes K169, K170, K171, K172, K174, K175, K176, K177, K178 and K181 if these wastes had been generated after the effective date of the listing.

2. The solid wastes described in subd. 1. were disposed prior to the effective date of the listing.

3. The leachate or gas condensate do not exhibit any characteristic of hazardous waste nor are derived from any other listed hazardous waste.

4. Discharge of the leachate or gas condensate, including leachate or gas condensate transferred from the landfill to a POTW by truck, rail or dedicated pipe is regulated under ch. 283, Stats., or 33 USC 1317 (b) or 1342.

5. As of February 13, 2001, leachate or gas condensate derived from K169–K172 is no longer exempt if it is stored or managed in a surface impoundment prior to discharge. As of November 21, 2003, leachate or gas condensate derived from K176, K177 and K178 is no longer exempt if it is stored or managed in a surface impoundment prior to discharge. After February 26, 2007, leachate or gas condensate derived from K181 is no longer exempt if it is stored or managed in a surface impoundment prior to discharge. One exception to these requirements is the following: if the surface impoundment is used to temporarily store leachate or gas condensate in response to an emergency situation (for example, shutdown of wastewater treatment system), provided the impoundment has a double liner, and provided the leachate or gas condensate is removed from the impoundment and continues to be managed in compliance with the conditions of this subdivision after the emergency ends.

SECTION 18. NR 661.04 (2) (r) is created to read:

**NR 661.04 (2) (r)** Solvent-contaminated wipes, except for wipes that are hazardous waste due to the presence of trichloroethylene, that are sent for disposal are not hazardous wastes from the point of generation provided that:

1. The solvent-contaminated wipes, when accumulated, stored and transported, are contained in non-leaking, closed containers that are labeled “Excluded Solvent- Contaminated Wipes”. The containers shall be able to contain free liquids, should free liquids occur. During accumulation, a container is considered closed when there is complete contact between the fitted lid and the rim, except when it is necessary to add or remove solvent-contaminated wipes. When the container is full, or when the solvent-contaminated wipes are no longer being accumulated, or when the container is being transported, the container shall be sealed with all lids properly and securely affixed to the container and all openings tightly bound or closed sufficiently to prevent leaks and emissions.
2. The solvent-contaminated wipes may be accumulated by the generator for up to 180 days from the start date of accumulation for each container prior to being sent for disposal.
3. At the point of being transported for disposal, the solvent-contaminated wipes shall contain no free liquids, as defined in s. NR 660.10.
4. Free liquids removed from the solvent-contaminated wipes or from the container holding the wipes shall be managed according to the applicable regulations found in chs. NR 660 to 673.
5. Generators shall maintain at their site all of the following documentation:
  - a. Name and address of the landfill or combustor that is receiving the solvent-contaminated wipes.
  - b. Documentation that the 180 day accumulation time limit in subd. 2. is being met.
  - c. Description of the process the generator is using to ensure solvent-contaminated wipes contain no free liquids at the point of being transported for disposal.
6. The solvent-contaminated wipes are sent for disposal to any of the following:
  - a. To a municipal solid waste landfill regulated under 40 CFR part 258, including 40 CFR 258.40, or to a hazardous waste landfill regulated under chs. NR 664 or 665.
  - b. To a municipal waste combustor or other combustion facility regulated under 42 USC 7429, or to a hazardous waste combustor, boiler, or industrial furnace regulated under chs. NR 664, 665 or subch. H of ch. NR 666.

SECTION 19. NR 661.04 (6) (i) (intro.) is amended to read:

**NR 661.04 (6) (i) (intro.)** The facility prepares and submits a report to the department by March 15 of each year that ~~estimates the number of studies and the amount of waste expected to be used in treatability studies during the current year, and~~ includes all of the following information for the previous calendar year:

SECTION 20. NR 661.07 (1) (a) is amended to read:

**NR 661.07 (1)** (a) Any hazardous waste remaining in either an empty container or an inner liner removed from an empty container, as defined in sub. (2), is not subject to this chapter, chs. NR 662 to 665, ~~667~~, 668 or 670, or s. NR 660.07.

SECTION 21. NR 661.09 (3) is amended to read:

**NR 661.09 (3)** Thermostats and mercury-containing equipment as described in s. NR 673.04.

SECTION 22. NR 661.21 (1) (a) is amended to read:

**NR 661.21 (1)** (a) It is a liquid, other than an aqueous solution containing less than 24 percent alcohol by volume, and has a flash point less than 60°C (140°F) as determined by a Pensky-Martens closed cup tester, using the test method specified in ASTM D93-79 or D93-80 (incorporated by reference in s. NR 660.11) or a Setaflash closed cup tester, using the test method specified in ASTM D3278-78 (incorporated by reference in s. NR 660.11), ~~or as determined by an equivalent test method approved by the department under procedures set forth in ss. NR 660.20 and 660.21.~~

SECTION 23. NR 661.22 (1) is amended to read:

**NR 661.22 (1)** A solid waste exhibits the corrosivity characteristic if a representative sample of the waste has ~~any~~ either of the following properties:

(a) It is aqueous and has a pH less than or equal to 2 or greater than or equal to 12.5, as determined by a pH meter using Method 9040C in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods”, EPA SW-846, incorporated by reference in s. NR 660.11.

(b) It is a liquid and corrodes steel (SAE 1020) at a rate greater than 6.35 mm (0.250 inch) per year at a test temperature of 55°C (130°F) as determined by ~~the test method specified in NACE (national association of corrosion engineers) Standard TM-01-69 as standardized~~ Method 1110A in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods”, EPA SW-846, incorporated by reference in s. NR 660.11.

SECTION 24. NR 661.32 (intro.) is renumbered NR 661.32 (1) (intro.).

SECTION 25. NR 661.32 (1) table is amended to add the following entry under the heading “organic chemicals”, and inserted after the entry K175:

Industry and EPA hazardous waste number	Hazardous waste	Hazard code
K181	<u>Nonwastewaters from the production of dyes or pigments (including nonwastewaters commingled at the point of generation with nonwastewaters corresponding sub. (3) levels, as determined on a calendar year basis. These wastes will not be hazardous if the nonwastewaters are: (1) disposed in a solid waste landfill unit subject to the design criteria in 40 CFR 258.40, (2) disposed in a hazardous waste</u>	T

	<p><u>landfill unit subject to either s. NR 664.0301 or 665.0301, (3) disposed in other solid waste landfill units that meet the design criteria in 40 CFR 258.40, s. NR 664.0301 or s. NR 665.0301, or (4) treated in a combustion unit that is licensed under s. 291.25, Stats., or an onsite combustion unit that is licensed under the Clean Air Act, 42 USC 7401 to 7671q. For the purposes of this listing, dyes or pigments production is defined in sub. (2) (a). Subsection (4) describes the process for demonstrating that a facility's nonwastewaters are not K181. This listing does not apply to wastes that are otherwise identified as hazardous under ss. NR 661.21 to 661.24 and ss. NR 661.31 to 661.33 at the point of generation. Also, the listing does not apply to wastes generated before any annual mass loading limit is met.</u></p>
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SECTION 26. NR 661.32 (2), (3)(h) and (4) are created to read:

**NR 661.32 (2) LISTING SPECIFIC DEFINITIONS.** (a) For the purposes of the K181 listing under sub. (3), dyes or pigments production is defined to include manufacture of the following product classes: dyes, pigments or FDA certified colors that are classified as azo, triarylmethane, perylene or oranthraquinone classes. Azo products include azo, monoazo, diazo, triazo, polyazo, azoic, benzidine and pyrazolone products. Triarylmethane products include both triarylmethane and triphenylmethane products. Wastes that are not generated at a dyes or pigments manufacturing site, such as wastes from the offsite use, formulation and packaging of dyes or pigments, are not included in the K181 listing.

**(3) K181 LISTING LEVELS.** Nonwastewaters containing constituents in amounts equal to or exceeding the following levels during any calendar year are subject to the K181 listing, unless the conditions in the K181 listing are met:

Constituent	Chemical Abstracts No.	Mass Levels (kg/yr)
Aniline.....	62-53-3	9,300
o-Anisidine.....	90-04-0	110
4-Chloroaniline.....	106-47-8	4,800
p-Cresidine.....	120-71-8	660
2,4-Dimethylaniline ...	95-68-1	100
1,2-Phenylenediamine	95-54-5	710
1,3-Phenylenediamine	108-45-2	1,200

**(4) PROCEDURES FOR DEMONSTRATING THAT DYES OR PIGMENT NONWASTEWATERS ARE NOT K181.** The procedures described in pars. (a) to (c) and (e) establish when nonwastewaters from the production of dyes and pigments would not be hazardous. These procedures apply to wastes that are not disposed in landfill units or treated in combustion units as specified in sub. (1). If the nonwastewaters are disposed in landfill units or treated in combustion units as described in sub. (1), then the nonwastewaters are not hazardous. In order to demonstrate that it is meeting the landfill disposal or combustion conditions contained in the K181 listing description, the generator shall maintain documentation as described in par. (d).

(a) *Determination based on no K181 constituents.* Generators that have knowledge (for example, knowledge of constituents in wastes based on prior sampling and analysis data or information about raw

materials used, production processes used and reaction and degradation products formed) that their wastes contain none of the K181 constituents listed in sub. (3) can use their knowledge to determine that their waste is not K181. The generator shall document the basis for all K181 waste determinations on an annual basis and keep each annual documentation for three years.

(b) *Determination for generated quantities of 1,000 metric tons per year or less for wastes that contain K181 constituents.* If the total annual quantity of dyes or pigment nonwastewaters generated is 1,000 metric tons or less, the generator may use knowledge of the wastes (for example, knowledge of constituents in wastes based on prior analytical data or information about raw materials used, production processes used and reaction and degradation products formed) to conclude that annual mass loadings for the K181 constituents are below the listing levels of sub. (3). To make this determination, the generator shall do all of the following:

1. Each year document the basis for determining that the annual quantity of nonwastewaters expected to be generated will be less than 1,000 metric tons.
2. Track the actual quantity of nonwastewaters generated from January 1 through December 31 of each year. If, at any time within the year, the actual waste quantity exceeds 1,000 metric tons, the generator shall comply with the requirements of par. (c) for the remainder of the year.
3. Keep a running total of the K181 constituent mass loadings over the course of the calendar year.
4. Keep all of the following records on site for the three most recent calendar years in which the hazardous waste determinations are made:
  - a. The quantity of dyes or pigment nonwastewaters generated.
  - b. The relevant process information used.
  - c. The calculations performed to determine annual total mass loadings for each K181 constituent in the nonwastewaters during the year.

(c) *Determination for generated quantities greater than 1,000 metric tons per year for wastes that contain K181 constituents.* If the total annual quantity of dyes or pigment nonwastewaters generated is greater than 1,000 metric tons, the generator shall perform all of the steps described in subds. 1. to 11. in order to make a determination that its waste is not K181.

1. Determine which K181 constituents listed in sub. (3) are reasonably expected to be present in the wastes based on knowledge of the wastes (for example, based on prior sampling and analysis data or information about raw materials used, production processes used and reaction and degradation products formed).

2. If 1,2-phenylenediamine is present in the wastes, the generator may use either knowledge or sampling and analysis procedures to determine the level of this constituent in the wastes. For determinations based on use of knowledge, the generator shall comply with the procedures for using knowledge described in par. (b) and keep the records described in par. (b) 4. For determinations based on sampling and analysis, the generator shall comply with the sampling and analysis and recordkeeping requirements described below.



3. Develop a waste sampling and analysis plan (or modify an existing plan) to collect and analyze representative waste samples for the K181 constituents reasonably expected to be present in the wastes. At a minimum, the plan shall include all of the following:

- a. A discussion of the number of samples needed to characterize the wastes fully.
- b. The planned sample collection method to obtain representative waste samples.
- c. A discussion of how the sampling plan accounts for potential temporal and spatial variability of the wastes.
- d. A detailed description of the test methods to be used, including sample preparation, clean up (if necessary) and determinative methods.

4. Collect and analyze samples in accordance with the waste sampling and analysis plan.

- a. The sampling and analysis shall be unbiased, precise and representative of the wastes.
- b. The analytical measurements shall be sufficiently sensitive, accurate and precise to support any claim that the constituent mass loadings are below the listing levels of sub. (3).

5. Record the analytical results.

6. Record the waste quantity represented by the sampling and analysis results.

7. Calculate constituent-specific mass loadings (product of concentrations and waste quantity).

8. Keep a running total of the K181 constituent mass loadings over the course of the calendar year.

9. Determine whether the mass of any of the K181 constituents listed in sub. (3) generated between January 1 and December 31 of any year is below the K181 listing levels.

10. Keep all of the following records on site for the three most recent calendar years in which the hazardous waste determinations are made:

- a. The sampling and analysis plan.
- b. The sampling and analysis results (including QA/QC data).
- c. The quantity of dyes or pigment nonwastewaters generated.
- d. The calculations performed to determine annual mass loadings.

11. Nonhazardous waste determinations shall be conducted annually to verify that the wastes remain nonhazardous.

a. The annual testing requirements are suspended after three consecutive successful annual demonstrations that the wastes are nonhazardous. The generator can then use knowledge of the wastes to support subsequent annual determinations.

b. The annual testing requirements are reinstated if the manufacturing or the waste treatment processes are significantly altered, resulting in an increase of the potential for the wastes to exceed the listing levels.

c. If the annual testing requirements are suspended, the generator shall keep records of the process knowledge information used to support a nonhazardous determination. If testing is reinstated, a description of the process change shall be retained.

(d) *Recordkeeping for the landfill disposal and combustion exemptions.* For the purposes of meeting the landfill disposal and combustion condition set out in the K181 listing description, the generator shall

maintain on site for three years documentation demonstrating that each shipment of waste was received by a landfill unit that is subject to or meets the landfill design standards set out in the listing description, or was treated in combustion units as specified in the listing description.

(e) *Waste holding and handling.* During the interim period, from the point of generation to completion of the hazardous waste determination, the generator is responsible for storing the wastes appropriately. If the wastes are determined to be hazardous and the generator has not complied with the hazardous waste requirements during the interim period, the generator may be subject to an enforcement action for improper management.

SECTION 27. NR 661.35 (2) (b) 3. is amended to read:

**NR 661.35 (2) (b) 3.** ~~All of the~~ The following analytical requirements:

a. Test rinses ~~according to Method 8290 in EPA SW-846, incorporated by reference in s. NR 660.11 by using an appropriate method, for example by using an analytical method from EPA SW-846, incorporated by reference in s. NR 660.11.~~

b. “Not detected” means at or below the following lower method calibration limit (MCL) in Method 8290, Table 1 limits (MCLs): the 2,3,7,8-TCDD-based MCL—0.01 parts per trillion (ppt), sample weight of 1,000 g, IS spiking level of 1 ppt, final extraction volume of 10–50 µL. For other congeners—multiply the values by 1 for TCDF/PeCDD/PeCDF, by 2.5 for HxCDD/HxCDF/HpCDD/HpCDF and by 5 for OCDD/OCDF.

SECTION 28. NR 661.38 (3) (g) (intro.) is amended to read:

**NR 661.38 (3) (g) Waste analysis plans.** The generator of a comparable or syngas fuel shall develop and follow a written waste analysis plan which describes the procedures for sampling and analysis of the hazardous waste to be excluded. ~~The waste analysis plan shall be developed according to the applicable sections of “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods”, EPA SW-846, incorporated by reference in s. NR 660.11.~~ The plan shall be followed and retained at the facility excluding the waste.

SECTION 29. NR 661.39, 661.40 and 661.41 are created to read:

**NR 661.39 Conditional exclusion for used, broken cathode ray tubes (CRTs) and processed CRT glass undergoing recycling.** Used, broken CRTs are not solid wastes if they meet the following conditions:

(1) **PRIOR TO PROCESSING.** These materials are not solid wastes if they are destined for recycling and if they meet the following requirements:

(a). The broken CRTs shall be either:

1. Stored in a building with a roof, floor and walls.

2. Placed in a container (for instance, a package or a vehicle) that is constructed, filled and closed to minimize releases to the environment of CRT glass (including fine solid materials).

(b) *Labeling*. Each container in which the used, broken CRT is contained shall be labeled or marked clearly with one of the following phrases: “Used cathode ray tubes – contains leaded glass ” or “Leaded glass from televisions or computers.” The container shall also be labeled: “Do not mix with other glass materials.”

(c) *Transportation*. The used, broken CRTs shall be transported in a container meeting the requirements of pars. (a) 2. and (b).

(d) *Speculative accumulation and use constituting disposal*. The used, broken CRTs are subject to the limitations on speculative accumulation as defined in s. NR 661.01 (3) (h). If they are used in a manner constituting disposal, they are subject to all applicable requirements of subch. C of ch. NR 666 instead of the requirements of this section.

(e) *Exports*. In addition to the applicable conditions specified in pars. (a) to (d), exporters of used, broken CRTs shall comply with the following requirements:

1. Notify EPA of an intended export before the CRTs are scheduled to leave the United States. Submit a complete notification 60 days before the initial shipment is intended to be shipped off-site. This notification may cover export activities extending over a 12 month or lesser period. The notification shall be in writing, signed by the exporter and include the following information:

a. Name, mailing address, telephone number and EPA ID number (if applicable) of the exporter of the CRTs.

b. The estimated frequency or rate at which the CRTs are to be exported and the period of time over which they are to be exported.

c. The estimated total quantity of CRTs specified in kilograms.

d. All points of entry to and departure from each foreign country through which the CRTs will pass.

e. A description of the means by which each shipment of the CRTs will be transported (for example, mode of transportation vehicle such as air, highway, rail, water and types of containers such as drums, boxes, tanks).

f. The name and address of the recycler and any alternate recycler.

g. A description of the manner in which the CRTs will be recycled in the foreign country that will be receiving the CRTs.

h. The name of any transit country through which the CRTs will be sent and a description of the approximate length of time the CRTs will remain in the country and the nature of their handling while there.

2. Notifications submitted by mail should be sent to the following mailing address: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division, (Mail Code 2254A), Environmental Protection Agency, 1200 Pennsylvania Ave., NW, Washington, DC 20460. Hand-delivered notifications should be sent to: Office of Enforcement and

Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division, (Mail Code 2254A), Environmental Protection Agency, Ariel Rios Bldg., Room 6144, 1200 Pennsylvania Ave., NW, Washington, DC. In both cases, the following shall be prominently displayed on the front of the envelope: “Attention: Notification of Intent to Export CRTs.”

3. Upon request by EPA, the exporter shall furnish to EPA any additional information which a receiving country requests in order to respond to a notification.

4. EPA will provide a complete notification to the receiving country and any transit countries. A notification is complete when EPA determines the notification satisfies the requirements of subd. 1. Where a claim of confidentiality is asserted with respect to any notification information required by subd. 1., EPA may find the notification not complete until any claim is resolved in accordance with 40 CFR 260.2.

5. The export of CRTs is prohibited unless the receiving country consents to the intended export. When the receiving country consents in writing to the receipt of the CRTs, EPA will forward an acknowledgment of consent to export CRTs to the exporter. Where the receiving country objects to receipt of the CRTs or withdraws a prior consent, EPA will notify the exporter in writing. EPA will also notify the exporter of any responses from transit countries.

6. When the conditions specified on the original notification change, the exporter shall provide EPA with a written re-notification of the change, except for changes to the telephone number in subd. 1. a. and decreases in the quantity indicated pursuant to subd. 1. c. The shipment may not take place until consent of the receiving country to the changes has been obtained, except for changes to information about points of entry and departure and transit countries pursuant to subd. 1. d. and h., and the exporter of CRTs receives from EPA a copy of the acknowledgment of consent to export CRTs, reflecting the receiving country’s consent to the changes.

7. A copy of the acknowledgment of consent to export CRTs shall accompany the shipment of CRTs. The shipment shall conform to the terms of the acknowledgment of consent.

8. If a shipment of CRTs cannot be delivered for any reason to the recycler or the alternate recycler, the exporter of CRTs shall re-notify EPA of a change in the conditions of the original notification to allow shipment to a new recycler in accordance with subd. 6. and obtain another acknowledgment of consent to export CRTs.

9. Exporters shall keep copies of notifications and acknowledgments of consent to export CRTs for a period of three years following receipt of the acknowledgment of consent.

**(2) REQUIREMENTS FOR USED CRT PROCESSING.** Used, broken CRTs undergoing CRT processing as defined in s. NR 660.10 are not solid wastes if they meet the following requirements:

(a) *Storage.* Used, broken CRTs undergoing processing are subject to the requirement of sub. (1) (d).

(b) *Processing*

1. All activities specified in pars. (b) and (c) of the definition of CRT processing in s. NR 660.10 (19j) shall be performed within a building with a roof, floor and walls.

2. No activities may be performed that use temperatures high enough to volatilize lead from CRTs.

(3) PROCESSED CRT GLASS SENT TO CRT GLASS MAKING OR LEAD SMELTING: Glass from used CRTs that is destined for recycling at a CRT glass manufacturer or a lead smelter after processing is not a solid waste unless it is speculatively accumulated as defined in s. NR 661.01 (3) (h).

(4) USE CONSTITUTING DISPOSAL. Glass from used CRTs that is used in a manner constituting disposal is subject to the requirements of subch. C of ch. NR 666 instead of the requirements of this section.

**NR 661.40 Conditional exclusion for used, intact cathode ray tubes (CRTs) exported for recycling.** Used, intact CRTs exported for recycling are not solid wastes if they meet the notice and consent conditions of s. NR 661.39 (1) (e), and if they are not speculatively accumulated as defined in s. NR 661.01 (3) (h).

**NR 661.41 Notification and recordkeeping for used, intact cathode ray tubes (CRTs) exported for reuse.** (1) Persons who export used, intact CRTs for reuse shall send a one-time notification to the EPA regional administrator. The notification shall include a statement that the notifier plans to export used, intact CRTs for reuse, the notifier’s name, address and EPA ID number, if applicable, and the name and phone number of a contact person.

(2) Persons who export used, intact CRTs for reuse shall keep copies of normal business records, such as contracts, demonstrating that each shipment of exported CRTs will be reused. This documentation shall be kept for a period of at least 3 years from the date the CRTs were exported.

SECTION 30. NR 661, Appendix I (6) and (7) are amended to read:

**NR 661, APPENDIX I (6)** Containerized liquid wastes - “COLIWASA” ~~†\* described in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods”, EPA SW-846, second edition, incorporated by reference in s. NR 660.11~~

(7) Liquid waste in pits, ponds, lagoons and similar reservoirs - “Pond Sampler” ~~†\* described in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods”, EPA SW-846, second edition, incorporated by reference in s. NR 660.11~~

~~†\* These methods are also described in “Samplers and Sampling Procedures for Hazardous Waste Streams”, EPA 600/2-80-018, January 1980, incorporated by reference in s. NR 660.11. This manual also contains additional information on application of these protocols.~~

SECTION 31. NR 661, Appendices II and III are repealed.

SECTION 32. NR 661, Appendix VII is amended to add the following entry, inserted after the entry K178:

EPA hazardous waste number	Hazardous constituents for which listed
K181	Aniline, o-anisidine, 4-chloroaniline, p-cresidine, 2,4-dimethylaniline, 1,2-phenylenediamine,

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1,3-phenylenediamine.

SECTION 33. NR 661, Appendix VIII is amended to add the following entries, inserted in alphabetical order of common name:

Common name	Chemical abstracts name	Chemical abstracts number	Hazardous waste number
<u>o-Anisidine (2-methoxyaniline)</u>	<u>Benzenamine, 2-Methoxy-</u>	<u>90-04-0</u>	
<u>p-Cresidine</u>	<u>2-Methoxy-5-methylbenzenamine</u>	<u>120-71-8</u>	
<u>2,4-Dimethylaniline (2,4-xylydine)</u>	<u>Benzenamine, 2,4-dimethyl-</u>	<u>95-68-1</u>	
<u>1,2-Phenylenediamine</u>	<u>1,2-Benzenediamine</u>	<u>95-54-5</u>	
<u>1,3-Phenylenediamine</u>	<u>1,3-Benzenediamine</u>	<u>108-45-2</u>	

SECTION 34. Chapter NR 662, Table of Contents, is repealed and recreated to read:

### Chapter NR 662

#### HAZARDOUS WASTE GENERATOR STANDARDS

##### Subchapter A — General

NR 662.010 Purpose, scope and applicability.

NR 662.011 Hazardous waste determination.

NR 662.012 EPA identification numbers.

##### Subchapter B — Manifest

NR 662.020 General requirements.

NR 662.022 Number of copies.

NR 662.023 Use of the manifest.

NR 662.027 Waste minimization certification.

##### Subchapter C — Pre-Transport

NR 662.030 Packaging.

NR 662.031 Labeling.

NR 662.032 Marking.

NR 662.033 Placarding.

NR 662.034 Accumulation.

##### Subchapter D — Recordkeeping and Reporting

NR 662.040 Recordkeeping.

NR 662.041 Annual report.

NR 662.042 Exception reporting.

NR 662.043 Additional reporting.

##### Subchapter E — Exports

NR 662.050 Applicability.  
 NR 662.051 Definitions.  
 NR 662.052 General requirements.  
 NR 662.053 Notification of intent to export.  
 NR 662.054 Special manifest requirements.  
 NR 662.055 Exception reports.  
 NR 662.056 Annual reports.  
 NR 662.057 Recordkeeping.  
 NR 662.058 International agreements.

#### **Subchapter F — Imports**

NR 662.060 Imports.

#### **Subchapter G — Farmers**

NR 662.070 Farmers.

#### **Subchapter H — Transfrontier Shipments for Recovery within the OECD**

NR 662.080 Applicability.  
 NR 662.081 Definitions.  
 NR 662.082 General conditions.  
 NR 662.083 Notification and consent.  
 NR 662.084 Tracking document.  
 NR 662.085 Contracts.  
 NR 662.086 Provisions relating to recognized traders.  
 NR 662.087 Reporting and recordkeeping.  
 NR 662.089 OECD waste lists.

#### **Subchapter K — Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material for Laboratories Owned by Eligible Academic Entities**

NR 662.200 Definitions  
 NR 662.201 Applicability  
 NR 662.202 Alternative requirements  
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#### **Subchapter S — Small Quantity Generators**

NR 662.190 Applicability.  
 NR 662.191 Conditional manifest exemption.

NR 662.192 Special accumulation requirements.  
 NR 662.193 Special recordkeeping and reporting requirements.  
 NR 662.194 Special requirements for accumulating in tanks.

**Subchapter V — Very Small Quantity Generators**

NR 662.220 Special requirements for very small quantity generators.

SECTION 35. NR 662.010(10) is created to read:

**NR 662.010 (10)** For purposes of this subsection, the terms “laboratory” and “eligible academic entity” shall have the meaning as defined in s. NR 662.200. The laboratories owned by an eligible academic entity that chooses to be subject to the requirements of subch. K are not subject to the following:

- (a) The requirements of s. NR 662.011 or NR 662.034 (3), for large quantity generators and s. NR 662.011 or NR 662.192(4) for small quantity generators, except as provided in subch. K.
- (b) The conditions of s. NR 662.220 (1) for very small quantity generators, except as provided in subch. K.

SECTION 36. NR 662.021 is created to read:

**NR 662.021** Manifest tracking numbers, manifest printing, and obtaining manifests.

**Note:** For information on manifest tracking numbers, manifest printing or obtaining manifests, refer to 40 CFR 262.21.

SECTION 37. NR 662.041 (3) (f) is amended to read:

**NR 662.041 (3) (f)** A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent the information is available for years prior to ~~1987~~ 1984.

SECTION 38. NR 662.190 (1) is amended to read:

**NR 662.190 (1)** A generator is a small quantity generator in a calendar month if the generator generates greater than 100 kilograms (220 pounds) but less than 1,000 kilograms (2,205 pounds) of ~~non-~~ ~~acutely~~ hazardous waste in that month.

SECTION 39. NR 662.194 (3) (intro.) is amended to read:

**NR 662.194 (3) INSPECTIONS.** (intro.) ~~Generators~~ Except as noted in sub. (4), generators shall inspect all of the following, where present:

SECTION 40. NR 662.194 (4), (5) and (6) are renumbered NR 662.194 (6), (7) and (8), respectively.

SECTION 41. NR 662.200 to 662.216 are created to read:

**NR 662.200 Definitions.** When used in this subchapter, these terms have the following meanings:



(1) “Central accumulation area” means an on-site hazardous waste accumulation area subject to either s. NR 662.034(1) for large quantity generators, or s. NR 662.192 (1) to (3) for small quantity generators. A central accumulation area at an eligible academic entity that chooses to be subject to this subchapter shall also comply with s. NR 662.211 when accumulating unwanted material or hazardous waste.

(2) “College or university” means a private or public, post-secondary, degree-granting academic institution that is accredited by an accrediting agency listed annually by the U.S. department of education.

(3) “Eligible academic entity” means a college or university, or a non-profit research institute that is owned by or has a formal written affiliation agreement with a college or university, or a teaching hospital that is owned by or has a formal written affiliation agreement with a college or university.

(4) “Formal written affiliation agreement” for a non-profit research institute means a written document that establishes a relationship between institutions for the purposes of research or education and is signed by authorized representatives, as defined in s. NR 660.10 (6), from each institution. A relationship on a project-by-project or grant-by-grant basis is not considered a formal written affiliation agreement.

A formal written affiliation agreement for a teaching hospital means a master affiliation agreement and program letter of agreement, as defined by the Accreditation Council for Graduate Medical Education, with an accredited medical program or medical school.

(5) “Laboratory” means an area owned by an eligible academic entity where relatively small quantities of chemicals and other substances are used on a non-production basis for teaching or research (or diagnostic purposes at a teaching hospital) and are stored and used in containers that are easily manipulated by one person. Photo laboratories, art studios and field laboratories are considered laboratories. Areas such as chemical stockrooms and preparatory laboratories that provide a support function to teaching or research laboratories (or diagnostic laboratories at teaching hospitals) are also considered laboratories.

(6) “Laboratory clean-out” means an evaluation of the inventory of chemicals and other materials in a laboratory that are no longer needed or that have expired and the subsequent removal of those chemicals or other unwanted materials from the laboratory. A clean-out may occur for several reasons. It may be on a routine basis (for example, at the end of a semester or academic year) or as a result of a renovation, relocation or change in laboratory supervisor or occupant.

**Note:** A regularly scheduled removal of unwanted material as required by s. NR 662.208 does not qualify as a laboratory clean-out.

(7) “Laboratory worker” means a person who handles chemicals or unwanted material in a laboratory and may include, but is not limited to, faculty, staff, post-doctoral fellows, interns, researchers, technicians, supervisors or managers and principal investigators. A person does not need to be paid or otherwise compensated for work in the laboratory to be considered a laboratory worker. Undergraduate and graduate students in a supervised classroom setting are not laboratory workers.

(8) “Non-profit research institute” means an organization that conducts research as its primary function and files as a non-profit organization under the tax code of 26 USC 501(c)(3).

(9) “Reactive acutely hazardous unwanted material” means an unwanted material that is one of the acutely hazardous commercial chemical products listed in s. NR 661.33 (5) for reactivity.

(10) “Teaching hospital” means a hospital that trains students to become physicians, nurses or other health or laboratory personnel.

(11) “Trained professional” means a person who has completed the applicable RCRA training requirements of s. NR 665.0016 for large quantity generators, or is knowledgeable about normal operations and emergencies according to s. NR 662.192 (1) (e) 3. for small quantity generators and very small quantity generators. A trained professional may be an employee of the eligible academic entity or may be a contractor or vendor who meets the requisite training requirements.

(12) “Unwanted material” means any chemical, mixtures of chemicals, products of experiments or other material from a laboratory that is no longer needed, wanted or usable in the laboratory and that is destined for hazardous waste determination by a trained professional. This also includes unwanted materials including reactive acutely hazardous unwanted materials and materials that may eventually be determined not to be solid waste pursuant to s. NR 661.02, or a hazardous waste pursuant to s. NR 661.03. If an eligible academic entity elects to use another equally effective term in lieu of “unwanted material,” as allowed by s. NR 662.206 (1) (a) 1., the equally effective term has the same meaning and is subject to the same requirements as “unwanted material” under this subchapter.

(13) “Working container” means a small container (for instance, 2 gallons or less) that is in use at a laboratory bench, hood or other work station to collect unwanted material from a laboratory experiment or procedure.

**NR 662.201 Applicability. (1) LARGE QUANTITY GENERATORS AND SMALL QUANTITY GENERATORS.** This subchapter provides alternative requirements to the requirements in ss. NR 662.011 and 662.034 (3) for large quantity generators and ss. NR 662.011 and 662.192 (4) for the hazardous waste determination and accumulation of hazardous waste in laboratories owned by eligible academic entities that choose to be subject to this subchapter, provided that they complete the notification requirements of s. NR 662.203.

(2) VERY SMALL QUANTITY GENERATORS. This subchapter provides alternative requirements to the requirements in s. NR 662.220 (1) for the accumulation of hazardous waste in laboratories owned by eligible academic entities that choose to be subject to this subchapter, provided that they complete the notification requirements of s. NR 662.203.

**NR 662.202 Alternative requirements. (1) LARGE QUANTITY GENERATORS AND SMALL QUANTITY GENERATORS.** Eligible academic entities have the option of complying with this subchapter with respect to its laboratories, as an alternative to complying with the requirements of ss. NR 662.011 and 662.034 (3) for large quantity generators and ss. NR 662.011 and 662.192 (4) for small quantity generators.

(2) VERY SMALL QUANTITY GENERATORS. Eligible academic entities have the option of complying with this subchapter with respect to its laboratories, as an alternative to complying with the requirements of s. NR 662.220 (1).

**NR 662.203 How an eligible academic entity indicates it will be subject to the requirements of this subchapter.** (1) An eligible academic entity shall notify the department in writing, using the RCRA Subtitle C site identification form (EPA Form 8700–12), that it is electing to be subject to the requirements of this subchapter for all the laboratories owned by the eligible academic entity under the same EPA ID number. An eligible academic entity that is a very small quantity generator and does not have an EPA ID number shall notify that it is electing to be subject to the requirements of this subchapter for all the laboratories owned by the eligible academic entity that are on-site, as defined by s. NR 660.10 (85). An eligible academic entity shall submit a separate notification (site identification form) for each EPA ID number (or site, for very small quantity generators) that is electing to be subject to the requirements of this subchapter, and shall submit the site identification form before it begins operating under this subchapter.

(2) When submitting the site identification form, the eligible academic entity shall, at a minimum, fill out all of the following fields on the form:

- (a) Reason for submittal.
- (b) Site EPA ID number (except for very small quantity generators).
- (c) Site name.
- (d) Site location information.
- (e) Site land type.
- (f) North American Industry Classification System (NAICS) code for the site.
- (g) Site mailing address.
- (h) Site contact person.
- (i) Operator and legal owner of the site.
- (j) Type of regulated waste activity.
- (k) Certification.

(3) An eligible academic entity shall keep a copy of the notification on file at the eligible academic entity for as long as its laboratories are subject to this subchapter.

(4) A teaching hospital that is not owned by a college or university shall keep a copy of its formal written affiliation agreement with a college or university on file at the teaching hospital for as long as its laboratories are subject to this subchapter.

(5) A non-profit research institute that is not owned by a college or university shall keep a copy of its formal written affiliation agreement with a college or university on file at the non-profit research institute for as long as its laboratories are subject to this subchapter.

**NR 662.204 How an eligible academic entity indicates it will withdraw from the requirements of this subchapter.** (1) An eligible academic entity shall notify the department in writing, using the RCRA Subtitle C site identification form (EPA Form 8700–12), that it is electing to no longer be subject to the requirements of this subchapter for all the laboratories owned by the eligible academic entity under the same EPA ID number and that it shall comply with the requirements of ss. NR 662.011 and 662.192 (4) for small quantity generators, and ss. NR 662.011 and 662.034 (3) for large quantity generators. An eligible

academic entity that is a very small quantity generator and does not have an EPA identification number shall notify that it is withdrawing from the requirements of this subchapter for all the laboratories owned by the eligible academic entity that are on-site and that it will comply with the requirements of s. NR 662.220 (1). An eligible academic entity shall submit a separate notification (site identification form) for each EPA identification number (or site, for very small quantity generators) that is withdrawing from the requirements of this subchapter and shall submit the site identification form before it begins operating under the requirements of ss. NR 662.011 and 662.192 (4) for small quantity generators, and ss. NR 662.011 and 662.034 (3) for large quantity generators, or s. NR 662.220 (1) for very small quantity generators.

(2) When submitting the site identification form, the eligible academic entity shall at a minimum fill out all of the following fields on the form:

- (a) Reason for submittal.
- (b) Site EPA identification number (except for very small quantity generators).
- (c) Site name.
- (d) Site location information.
- (e) Site land type.
- (f) North American Industry Classification System (NAICS) code for the site.
- (g) Site mailing address.
- (h) Site contact person.
- (i.) Operator and legal owner of the site.
- (j.) Type of regulated waste activity.
- (k.) Certification.

(3) An eligible academic entity shall keep a copy of the withdrawal notice on file at the eligible academic entity for 3 years from the date of the notification.

**NR 662.205 Summary of the requirements of this subchapter.** An eligible academic entity that chooses to be subject to this subchapter is not required to have an interim or operating license issued under ch. NR 670 for the accumulation of unwanted material and hazardous waste in its laboratories, provided the laboratories comply with the provisions of this subchapter and the eligible academic entity has a laboratory management plan in accordance with s. NR 662.214 that describes how the laboratories owned by the eligible academic entity will comply with the requirements of this subchapter.

**NR 662.206 Labeling and management standards for containers of unwanted material in the laboratory.** An eligible academic entity shall manage containers of unwanted material while in the laboratory according to the following requirements:

(1) LABELING. Label unwanted material as follows:

(a) The following information shall be affixed or attached to the container:

1. The words “unwanted material” or another equally effective term that is to be used consistently by the eligible academic entity and that is identified in part I of the laboratory management plan.

2. Sufficient information to alert emergency responders to the contents of the container. Examples of information that would be sufficient to alert emergency responders to the contents of the container include:

- a. The name of the chemical or chemicals.
- b. The type or class of chemical, such as organic solvents or halogenated organic solvents.

(b) The following information may be affixed or attached to the container, but shall at a minimum be associated with the container:

1. The date that the unwanted material first began accumulating in the container.

2. Information sufficient to allow a trained professional to properly identify whether an unwanted material is a solid and hazardous waste and to assign the proper hazardous waste code or codes, according to s. NR 662.011. Examples of information that would allow a trained professional to properly identify whether an unwanted material is a solid or hazardous waste include, but are not limited to:

- a. The name or description of the chemical contents or composition of the unwanted material, or, if known, the product of the chemical reaction.
- b. Whether the unwanted material has been used or is unused.
- c. A description of the manner in which the chemical was produced or processed, if applicable.

**(2) MANAGEMENT OF CONTAINERS IN THE LAB.** An eligible academic entity shall properly manage containers of unwanted material in the laboratory to assure safe storage of the unwanted material to prevent leaks, spills, emissions to the air, adverse chemical reactions and dangerous situations that may result in harm to human health or the environment. Proper container management shall include the following:

(a) Containers are maintained and kept in good condition, and damaged containers are replaced, overpacked or repaired.

(b) Containers are compatible with their contents to avoid reactions between the contents and the container, and are made of or lined with material that is compatible with the unwanted material so that the container's integrity is not impaired.

(c) Containers shall be kept closed at all times, except:

1. When adding, removing or consolidating unwanted material.

2. A working container may be open until the end of the procedure or work shift, or until it is full, whichever comes first, at which time the working container shall either be closed or the contents emptied into a separate container that is then closed.

3. When venting of a container is necessary.

a. For the proper operation of laboratory equipment, such as with in-line collection of unwanted materials from high performance liquid chromatographs.

- b. To prevent dangerous situations, such as build-up of extreme pressure.

**NR 662.207 Training.** An eligible academic entity shall provide training to all individuals working in a laboratory at the eligible academic entity, as follows:

(1) Training for laboratory workers and students shall be commensurate with their duties so they understand the requirements in this subchapter and can implement them.

(2) An eligible academic entity may provide training for laboratory workers and students in a variety of ways, including:

- (a) Instruction by the professor or laboratory manager before or during an experiment.
- (b) Formal classroom training.
- (c) Electronic or written training.
- (d) On-the-job training.
- (e) Written or oral exams.

(3) An eligible academic entity that is a large quantity generator shall maintain documentation for the durations specified in s. NR 665.0016 (5) demonstrating training for all laboratory workers that is sufficient to determine whether laboratory workers have been trained. Examples of documentation demonstrating training may include, but are not limited to, the following:

- (a) Sign-in or attendance sheets for training sessions.
- (b) Syllabus for training session.
- (c) Certificate of training completion.
- (d) Test results.

(4) A trained professional shall:

(a) Accompany the transfer of unwanted material and hazardous waste when the unwanted material and hazardous waste is removed from the laboratory.

(b) Make the hazardous waste determination, pursuant to s. NR 662.011, for unwanted material.

**NR 662.208 Removing containers of unwanted material from the laboratory.** (1) Removing containers of unwanted material on a regular schedule. An eligible academic entity shall either:

(a) Remove all containers of unwanted material from each laboratory on a regular interval, not to exceed 6 months.

(b) Remove containers of unwanted material from each laboratory within 6 months of each container's accumulation start date.

(2) The eligible academic entity shall specify in part I of its laboratory management plan whether it will comply with sub. (1) (a) or (b) for the regular removal of unwanted material from its laboratories.

(3) The eligible academic entity shall specify in part II of its laboratory management plan how it will comply with sub. (1) (a) or (b) and develop a schedule for regular removals of unwanted material from its laboratories.

(4) Removing containers of unwanted material when volumes are exceeded.

(a) If a laboratory accumulates a total volume of unwanted material (including reactive acutely hazardous unwanted material) in excess of 55 gallons before the regularly scheduled removal, the eligible academic entity shall ensure that all containers of unwanted material in the laboratory (including reactive acutely hazardous unwanted material) are:

1. Marked on the label that is associated with the container (or on the label that is affixed or attached to the container) with the date that 55 gallons is exceeded.

2. Removed from the laboratory within 10 calendar days of the date that 55 gallons was exceeded, or at the next regularly scheduled removal, whichever comes first.

(b) If a laboratory accumulates more than one quart of reactive acutely hazardous unwanted material before the regularly scheduled removal, then the eligible academic entity shall ensure that all containers of reactive acutely hazardous unwanted material are:

1. Marked on the label that is associated with the container (or on the label that is affixed or attached to the container) with the date that one quart is exceeded.

2. Removed from the laboratory within 10 calendar days of the date that one quart was exceeded, or at the next regularly scheduled removal, whichever comes first.

**NR 662.209 Where and when to make the hazardous waste determination and where to send containers of unwanted material upon removal from the laboratory. (1) LARGE QUANTITY GENERATORS AND SMALL QUANTITY GENERATORS.** An eligible academic entity shall ensure that a trained professional makes a hazardous waste determination, according to s. NR 662.011, for unwanted material in any of the following areas:

(a) In the laboratory before the unwanted material is removed from the laboratory, according to s. NR 662.210.

(b) Within 4 calendar days of arriving at an on-site central accumulation area, according to s. NR 662.211.

(c) Within 4 calendar days of arriving at an on-site licensed or interim licensed treatment, storage or disposal facility, according to s. NR 662.212.

**(2) VERY SMALL QUANTITY GENERATORS.** An eligible academic entity shall ensure that a trained professional makes a hazardous waste determination, according to s. NR 662.011, for unwanted material in the laboratory before the unwanted material is removed from the laboratory, according to s. NR 662.210.

**NR 662.210 Making the hazardous waste determination in the laboratory before the unwanted material is removed from the laboratory.** If an eligible academic entity makes the hazardous waste determination, according to s. NR 662.011, for unwanted material in the laboratory, it shall comply with the following:

(1) A trained professional shall make the hazardous waste determination, according to s. NR 662.011, before the unwanted material is removed from the laboratory.

(2) If an unwanted material is a hazardous waste, the eligible academic entity shall:

(a) Write the words “hazardous waste” on the container label that is affixed or attached to the container, before the hazardous waste may be removed from the laboratory.

(b) Write the appropriate hazardous waste code or codes on the label that is associated with the container or on the label that is affixed or attached to the container before the hazardous waste is transported off-site.

(c) Count the hazardous waste toward the eligible academic entity’s generator status, according to s. NR 662.220 (2) and (3), in the calendar month that the hazardous waste determination was made.

(3) A trained professional shall accompany all hazardous waste that is transferred from the laboratory or laboratories to an on-site central accumulation area or onsite interim status or permitted treatment, storage or disposal facility.

(4) When hazardous waste is removed from the laboratory:

(a) Large quantity generators and small quantity generators shall ensure the hazardous waste is taken directly from the laboratory or laboratories to an on-site central accumulation area, or on-site licensed or interim licensed treatment, storage or disposal facility, or transported off-site.

(b) Very small quantity generators shall ensure it is taken directly from the laboratory or laboratories to any of the types of facilities listed in s. NR 662.220 (5) (e) for acute hazardous waste or s. NR 662.220 (6) (e) for hazardous waste.

(5) An unwanted material that is a hazardous waste is subject to all applicable hazardous rules when it is removed from the laboratory.

**NR 662.211 Making the hazardous waste determination at an on-site central accumulation area.**

If an eligible academic entity makes the hazardous waste determination, according to s. NR 662.011, for unwanted material at an on-site central accumulation area, it shall comply with the following:

(1) A trained professional shall accompany all unwanted material that is transferred from the laboratory or laboratories to an on-site central accumulation area.

(2) All unwanted material removed from the laboratory or laboratories shall be taken directly from the laboratory or laboratories to the on-site central accumulation area.

(3) The unwanted material becomes subject to the generator accumulation requirements of s. NR 662.034 (1) for large quantity generators or ss. NR 662.190 and 662.192 for small quantity generators as soon as it arrives in the central accumulation area, except for the “hazardous waste” labeling requirements of s. NR 662.192 (1) (d) 2.

(4) A trained professional shall determine, according to s. NR 662.011, if the unwanted material is a hazardous waste within 4 calendar days of the unwanted materials’ arrival at the on-site central accumulation area.

(5) If the unwanted material is a hazardous waste, the eligible academic entity shall:

(a) Write the words “hazardous waste” on the container label that is affixed or attached to the container, within 4 calendar days of arriving at the on-site central accumulation area and before the hazardous waste may be removed from the on-site central accumulation area.

(b) Write the appropriate hazardous waste code or codes on the container label that is associated with the container or on the label that is affixed or attached to the container before the hazardous waste may be treated or disposed of on-site or transported offsite.

(c) Count the hazardous waste toward the eligible academic entity’s generator status, according to s. NR 662.220 (2) and (3) in the calendar month that the hazardous waste determination was made.

(d) Manage the hazardous waste according to all applicable hazardous waste rules.



**NR 662.212 Making the hazardous waste determination at a licensed or interim licensed treatment, storage or disposal facility.** If an eligible academic entity makes the hazardous waste determination, according to s.NR 662.011, for unwanted material at an on-site licensed or interim licensed treatment, storage or disposal facility, it shall comply with the following:

(1) A trained professional shall accompany all unwanted material that is transferred from the laboratory or laboratories to an on-site licensed or interim licensed treatment, storage or disposal facility.

(2) All unwanted material removed from the laboratory or laboratories shall be taken directly from the laboratory or laboratories to the on-site licensed or interim licensed treatment, storage or disposal facility.

(3) The unwanted material becomes subject to the terms of the eligible academic entity's hazardous waste operating license or interim license as soon as it arrives in the on-site treatment, storage or disposal facility.

(4) A trained professional shall determine, according to s. NR 662.011, if the unwanted material is a hazardous waste within 4 calendar days of the unwanted materials' arrival at an on-site licensed or interim licensed treatment, storage or disposal facility.

(5) If the unwanted material is a hazardous waste, the eligible academic entity shall:

(a) Write the words "hazardous waste" on the container label that is affixed or attached to the container (or on the label that is affixed or attached to the container, if that is preferred) within 4 calendar days of arriving at the on-site licensed or interim licensed treatment, storage or disposal facility and before the hazardous waste may be removed from the on-site licensed or interim licensed treatment, storage or disposal facility.

(b) Write the appropriate hazardous waste code or codes on the container label that is associated with the container or on the label that is affixed or attached to the container before the hazardous waste may be treated or disposed on-site or transported off-site.

(c) Count the hazardous waste toward the eligible academic entity's generator status, according to s. NR 662.220 (2) and (3) in the calendar month that the hazardous waste determination was made.

(d) Manage the hazardous waste according to all applicable hazardous waste rules.

**NR 662.213 Laboratory clean-outs.** (1) One time per 12 month period for each laboratory, an eligible academic entity may opt to conduct a laboratory clean-out that is subject to all the applicable requirements of this subchapter, except that:

(a) If the volume of unwanted material in the laboratory exceeds 55 gallons (or 1 quart of reactive acutely hazardous unwanted material), the eligible academic entity is not required to remove all unwanted materials from the laboratory within 10 calendar days of exceeding 55 gallons (or 1 quart of reactive acutely hazardous unwanted material), as required by s. NR 662.208. Instead, the eligible academic entity shall remove all unwanted materials from the laboratory within 30 calendar days from the start of the laboratory clean-out.

(b) For the purposes of on-site accumulation, an eligible academic entity is not required to count a hazardous waste that is an unused commercial chemical product (listed in subch. D of ch. NR 661 or

exhibiting one or more characteristics in subch. C of ch. NR 661) generated solely during the laboratory clean-out toward its hazardous waste generator status, according to s. NR 662.220 (2) and (3). An unwanted material that is generated prior to the beginning of the laboratory clean-out and is still in the laboratory at the time the laboratory clean-out commences shall be counted toward hazardous waste generator status, according to s. NR 662.220 (2) and (3), if it is determined to be hazardous waste.

(c) For the purposes of off-site management, an eligible academic entity shall count all its hazardous waste, regardless of whether the hazardous waste was counted toward generator status under par. (b), and if more than 1 kilogram per month of acute hazardous waste or more than 100 kilograms per month of hazardous waste is generated (for instance, the very small quantity generator limits of subch. V), the hazardous waste is subject to all applicable hazardous waste rules when it is transported off-site.

(d) An eligible academic entity shall document the activities of the laboratory clean-out. The documentation shall, at a minimum, identify the laboratory being cleaned out, the date the laboratory clean-out begins and ends, and the volume of hazardous waste generated during the laboratory clean-out. The eligible academic entity shall maintain the records for a period of 3 years from the date the clean-out ends.

(2) For all other laboratory clean-outs conducted during the same 12-month period in sub. (1), an eligible academic entity is subject to all the applicable requirements of this subchapter, including:

(a) The requirement to remove all unwanted materials from the laboratory within 10 calendar days of exceeding 55 gallons (or 1 quart of reactive acutely hazardous unwanted material), as required by s. NR 662.208.

(b) The requirement to count all hazardous waste, including unused hazardous waste, generated during the laboratory clean-out toward its hazardous waste generator status, according to s. NR 662.220 (2) and (3).

**NR 662.214 Laboratory management plan.** An eligible academic entity shall develop and retain a written laboratory management plan, or revise an existing written plan. The laboratory management plan is a site-specific document that describes how the eligible academic entity will manage unwanted materials in compliance with this subchapter. An eligible academic entity may write one laboratory management plan for all the laboratories owned by the eligible academic entity that have opted into this subchapter, even if the laboratories are located at sites with different EPA ID numbers. The laboratory management plan shall contain two parts with a total of nine elements identified in subs. (1) and (2). In part I of its laboratory management plan, an eligible academic entity shall describe its procedures for each of the elements listed in sub. (1). An eligible academic entity shall implement and comply with the specific provisions that it develops to address the elements in part I of the laboratory management plan. In part II of its laboratory management plan, an eligible academic entity shall describe its best management practices for each of the elements listed in sub. (2). The specific actions taken by an eligible academic entity to implement each element in part II of its laboratory management plan may vary from the procedures described in the eligible academic entity's laboratory management plan, without constituting a violation of this subchapter. An

eligible academic entity may include additional elements and best management practices in part II of its laboratory management plan if it so chooses.

(1) The eligible academic entity shall implement and comply with the specific provisions of part I of its laboratory management plan. In part I of its laboratory management plan, an eligible academic entity shall:

(a) Describe procedures for container labeling according to s. NR 662.206 (1), including:

1. Identifying whether the eligible academic entity will use the term “unwanted material” on the containers in the laboratory. If not using that term, the eligible academic entity shall identify an equally effective term that will be consistently used in lieu of “unwanted material.” The equally effective term, if used, has the same meaning and is subject to the same requirements as “unwanted material.”

2. Identifying the manner in which information that is “associated with the container” will be imparted.

(b) Identify whether the eligible academic entity will comply with s. NR 662.208 (1) (a) or (b) for regularly scheduled removals of unwanted material from the laboratory.

(2) In part II of its laboratory management plan, an eligible academic entity shall:

(a) Describe its intended best practices for container labeling and management, including how the eligible academic entity will manage containers used for in-line collection of unwanted materials, such as with high performance liquid chromatographs and other laboratory equipment (see the required standards in s. NR 662.206).

(b) Describe its intended best practices for providing training for laboratory workers and students commensurate with their duties (see the required standards in s. NR 662.207 (1)).

(c) Describe its intended best practices for providing training to ensure safe on-site transfers of unwanted material and hazardous waste by trained professionals (see the required standards in s. NR 662.207 (4) (a)).

(d) Describe its intended best practices for removing unwanted material from the laboratory, including:

1. For regularly scheduled removals – develop a regular schedule for identifying and removing unwanted materials from its laboratories (see the required standards s. NR 662.208 (1) (a) and (b)).

2. For removals when maximum volumes are exceeded:

a. Describe its intended best practices for removing unwanted materials from the laboratory within 10 calendar days when unwanted materials have exceeded their maximum volumes (see the required standards in s. NR 662.208 (4)).

b. Describe its intended best practices for communicating that unwanted materials have exceeded their maximum volumes.

(e) Describe its intended best practices for making hazardous waste determinations, including specifying the duties of the individuals involved in the process (see the required standards in s. NR 662.011 and ss. NR 662.209 to 662.212).

(f) Describe its intended best practices for laboratory clean-outs, if the eligible academic entity plans to use the incentives for laboratory clean-outs provided in s. NR 662.213, including:

1. Procedures for conducting laboratory clean-outs (see the required standards in s. NR 662.213 (1) (a) to (c)).

2. Procedures for documenting laboratory clean-outs (see the required standards in s. NR 662.213 (1) (d)).

(g) Describe its intended best practices for emergency prevention, including:

1. Procedures for emergency prevention, notification and response, appropriate to the hazards in the laboratory.

2. A list of chemicals that the eligible academic entity has, or is likely to have, that become more dangerous when they exceed their expiration date or as they degrade.

3. Procedures to safely dispose of chemicals that become more dangerous when they exceed their expiration date or as they degrade.

4. Procedures for the timely characterization of unknown chemicals.

(3) An eligible academic entity shall make its laboratory management plan available to laboratory workers, students or any others at the eligible academic entity who request it.

(d) An eligible academic entity shall review and revise its laboratory management plan, as needed.

**NR 662.215 Unwanted material that is not solid or hazardous waste.** (1) If an unwanted material does not meet the definition of solid waste in s. NR 661.02, it is no longer subject to this subchapter or other hazardous waste rules.

(2) If an unwanted material does not meet the definition of hazardous waste in s. NR 661.03, it is no longer subject to this subchapter or other hazardous waste rules, but shall be managed in compliance with any other applicable rules or conditions.

**NR 662.216 Non-laboratory hazardous waste generated at an eligible academic entity.** An eligible academic entity that generates hazardous waste outside of a laboratory is not eligible to manage that hazardous waste under this subchapter, and:

(1) Remains subject to the generator requirements of ss. NR 662.011 and NR 662.034 (3) for large quantity generators and s. NR 662.192 (4) for small quantity generators (if the hazardous waste is managed as satellite accumulation), and all other applicable generator requirements of ch. NR 662, with respect to that hazardous waste.

(b) Remains subject to the reduced requirements of s. NR 662.220 for very small quantity generators, with respect to that hazardous waste.

SECTION 42. NR 662.220 (2) (g) is created to read:

**NR 662.220 (2) (g)** A hazardous waste that is an unused commercial chemical product (listed in subch. D of ch. NR 661 or exhibiting one or more characteristics in subch. C of ch. NR 661) and that is generated solely as a result of a laboratory clean-out conducted at an eligible academic entity according to the requirements of s. NR 662.213. For purposes of this paragraph, the term eligible academic entity shall have the meaning as defined in s. NR 662.200.

SECTION 43. NR 662.220 (5) (a) is amended to read:

**NR 662.220 (5)** (a) ~~Section~~ Sections NR 662.011 and 662.040 (3).

SECTION 44. NR 662.220 (6)664.0016

(intro.) and (a) are amended to read:

**NR 662.220 (6)** STANDARDS FOR GENERATORS OF ~~NON-ACUTELY~~ HAZARDOUS WASTE. In order for a generator who generates 100 kilograms or less of ~~non-acutely~~ hazardous waste during a calendar month to be exempted from subchs. A to S under this section, the generator shall comply with all of the following requirements:

(a) ~~Section~~ Sections NR 662.011 and 662.040 (3).

SECTION 45. NR 663.10 (1) and (4) are amended to read:

**NR 663.10 (1)** This chapter establishes standards which apply to persons transporting hazardous waste within Wisconsin if the transportation requires a manifest under ch. NR 662 or subch. HH of ch. NR 666.

**(4)** A transporter of hazardous waste subject to the manifesting requirements of ch. NR 662, or subject to the universal waste management standards of ch. NR 673, that is being imported from or exported to any of the countries listed in s. NR 662.058 (1) (a) for purposes of recovery is subject to this subchapter and to all other relevant requirements of subch. H of ch. NR 662, including, but not limited to, s. NR 662.084 for tracking documents. Transporters of only universal waste are not required to obtain a hazardous waste transportation license under s. NR 663.13.

SECTION 46. NR 664.0001 (7) (k) 3. is amended to read:

**NR 664.0001 (7)** (k) 3. Thermostats and mercury-containing equipment as described in s. NR 673.04

SECTION 47. NR 664.0016 (1) (d) is created to read:

**NR 664.0016 (1)** (d) For facility employees that receive emergency response training pursuant to occupational safety and health administration (OSHA) rules 29 CFR 1910.120 (p) (8) and (q), the facility is not required to provide separate emergency response training pursuant to this section, provided that the overall facility training meets all the requirements of this section.

SECTION 48. NR 664.0052 (2) is amended to read:

**NR 664.0052 (2)** If the owner or operator has already prepared a spill prevention, control and countermeasures (SPCC) plan according to 40 CFR parts 112 or ~~300~~ 1510, or some other emergency or contingency plan, the owner or operator need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this chapter. The owner or operator may develop one contingency plan which meets all regulatory requirements. The EPA

recommends that the plan be based on the national response team's (NRT) integrated contingency plan guidance. When modifications are made to non-hazardous waste provisions in an integrated contingency plan, the changes do not trigger the need for a hazardous waste license modification.

SECTION 49. NR 664.0056 (9) is repealed.

SECTION 50. NR 664.0056 (10) is renumbered NR 664.0056 (9).

SECTION 51. NR 664.0072 (6) (a) is amended to read:

**NR 664.0072 (6)** (a) Write the facility's EPA ID number in Item 1 of the new manifest. Write the ~~generator's facility's~~ name and mailing address in Item 5 of the new manifest. If the mailing address is different from the ~~generator's facility's~~ site address, then write the ~~generator's facility's~~ site address in the designated space for Item 5.

SECTION 52. NR 664.0073 (2) (intro.), (a), (b), (f), (h) and (j) are amended to read:

**NR 664.0073 (2)** All of the following information shall be recorded, as it becomes available, and maintained in the operating record until closure of the facility for 3 years unless noted as follows:

(a) A description and the quantity of each hazardous waste received, and the methods and dates of its treatment, storage or disposal at the facility as required by ch. NR 664 Appendix I. This information shall be maintained in the operating record until closure of the facility.

(b) The location of each hazardous waste within the facility and the quantity at each location. For disposal facilities, the location and quantity of each hazardous waste shall be recorded on a map or diagram that shows each cell or disposal area. For all facilities, this information shall include cross-references to ~~specific~~ manifest document numbers, if the waste was accompanied by a manifest. This information shall be maintained in the operating record until closure of the facility.

(f) Maintain in the operating record for 3 years the monitoring ~~Monitoring~~, testing or analytical data, and corrective actions where required by subch. F and ss. NR 664.0019, 664.0191, 664.0193, 664.0195, 664.0222, 664.0223, 664.0226, 664.0252 to 664.0254, 664.0302 to 664.0304, 664.0309, 664.0347, 664.0602, 664.1034 (3) to (6), 664.1035, 664.1063 (4) to (9), 664.1064 and 664.1082 to 664.1090. Records and results pertaining to groundwater monitoring and cleanup shall be maintained in the operating record until closure of the facility.

(h) All closure cost estimates under s. NR 664.0142, and, for disposal facilities, all long-term care cost estimates under s. NR 664.0144. This information shall be maintained in the operating record until closure of the facility.

(j) Records of the quantities (and date of placement) for each shipment of hazardous waste placed in land disposal units under an extension to the effective date of any land disposal restriction granted pursuant to s. NR 668.05 or a petition pursuant to s. NR 668.06, and the applicable notice required by a generator

under s. NR 668.07 (1). This information shall be maintained in the operating record until closure of the facility.

SECTION 53. NR 664.0073 (2)(r) and (s) are created to read:

**NR 664.0073 (2)** (r) Monitoring, testing or analytical data where required by s. NR 664.0347 shall be maintained in the operating record for 5 years.

(s) Certifications as required by s. NR 664.0196 (6) shall be maintained in the operating record until closure of the facility.

SECTION 54. NR 664.0098 (4) and (7) (b) and (c) are amended to read:

**NR 664.0098 (4)** The department shall specify the frequencies for collecting samples and conducting statistical tests to determine whether there is statistically significant evidence of contamination for any parameter or hazardous constituent specified in the license under sub. (1) in accordance with s. NR 664.0097 (7). ~~A sequence of at least 4 samples from each well (background and compliance wells) shall be collected at least semi-annually during detection monitoring.~~

(7) (b) Immediately sample the groundwater in all monitoring wells and determine whether constituents in the list of ch. NR 664 Appendix IX are present, and if so, in what concentration. However, the department may allow sampling for a site-specific subset of constituents from the ch. NR 664 Appendix IX list and other representative or related waste constituents.

(c) For any ch. NR 664 Appendix IX compounds found in the analysis pursuant to par. (b), the owner or operator may resample within one month and repeat the analysis for those compounds detected. If the results of the second analysis confirm the initial results, then these constituents will form the basis for compliance monitoring. If the owner or operator does not resample for the compounds found pursuant to par. (b), the hazardous constituents found during this initial ch. NR 664 Appendix IX analysis will form the basis for compliance monitoring.

SECTION 55. NR 664.0099 (6) and (7) are amended to read:

**NR 664.0099 (6)** The department shall specify the frequencies for collecting samples and conducting statistical tests to determine statistically significant evidence of increased contamination in accordance with s. NR 664.0097 (7). ~~A sequence of at least 4 samples from each well (background and compliance wells) shall be collected at least semi-annually during the compliance period of the facility.~~

(7) The owner or operator shall analyze samples from all monitoring wells at the point of standards application for all constituents contained in ch. NR 664 Appendix IX at least annually to determine whether additional hazardous constituents are present in the uppermost aquifer and, if so, at what concentration, pursuant to procedures in s. NR 664.0098 (6). If the owner or operator finds ch. NR 664 Appendix IX constituents in the groundwater that are not already identified in the license as monitoring constituents, the owner or operator may resample within one month and repeat the ch. NR 664 Appendix IX analysis. If the

second analysis confirms the presence of new constituents, the owner or operator shall report the concentration of these additional constituents to the department within 7 days after the completion of the second analysis and add them to the monitoring list. If the owner or operator chooses not to resample, then the owner or operator shall report the concentrations of these additional constituents to the department within 7 days after completion of the initial analysis and add them to the monitoring list.

SECTION 56. NR 664.0100 (7) is amended to read:

**NR 664.0100 (7)** The owner or operator shall report in writing to the department on the effectiveness of the corrective action program. The owner or operator shall submit these reports ~~semi-annually~~ annually.

SECTION 57. NR 664.0113 (5)(e) is amended to read:

**NR 664.0113 (5)(e)** During the period of corrective action, the owner or operator shall provide ~~semi-annual~~ annual reports to the department that describe the progress of the corrective action program, compile all groundwater monitoring data and evaluate the effect of the continued receipt of non-hazardous wastes on the effectiveness of the corrective action.

SECTION 58. NR 664.0115 is amended to read:

**NR 664.0115 Certification of closure.** Within 60 days of completion of closure of each hazardous waste surface impoundment, waste pile and landfill unit, and within 60 days of the completion of final closure, the owner or operator shall submit to the department, by registered mail, a certification that the hazardous waste management unit or facility, as applicable, has been closed in accordance with the specifications in the approved closure plan. The certification shall be signed by the owner or operator and by ~~an independent registered~~ a qualified professional engineer. Documentation supporting the ~~independent registered~~ professional engineer's certification shall be furnished to the department upon request until the department releases the owner or operator from the financial assurance requirements for closure under s. NR 664.0143 (11).

SECTION 59. NR 664.0120 is amended to read:

**NR 664.0120 Certification of completion of long-term care.** No later than 60 days after completion of the established long-term care period for each hazardous waste disposal unit, the owner or operator shall submit to the department, by registered mail, a certification that the long-term care period for the hazardous waste disposal unit was performed in accordance with the specifications in the approved long-term care plan. The owner or operator and ~~an independent registered~~ a qualified professional engineer shall sign the certification. Documentation supporting the ~~independent registered~~ professional engineer's certification shall be furnished to the department upon request until the department releases the owner or operator from the financial assurance requirements for long-term care under s. NR 664.0145 (11).



SECTION 60. NR 664.0143 (6) (a) 2. and (11) are amended to read:

**NR 664.0143 (6)** (a) 2. The owner or operator shall comply with the net worth test requirements of s. 289.41 (4), (6) and (7), Stats., and the minimum security requirements of s. 289.41 (9), Stats., whichever are applicable. The updated net worth test information required under s. 289.41 (4), Stats., shall be submitted annually to the department within 90 days after the close of the company's fiscal year.

**(11)** RELEASE OF THE OWNER OR OPERATOR FROM THE REQUIREMENTS OF THIS SECTION. Within 60 days after receiving certifications from the owner or operator and ~~an independent registered~~ a qualified professional engineer that final closure has been completed in accordance with the approved closure plan, the department will notify the owner or operator in writing that the owner or operator is no longer required by this section to maintain financial assurance for final closure of the facility, unless the department has reason to believe that final closure has not been in accordance with the approved closure plan. The department shall provide the owner or operator a detailed written statement of any reason to believe that closure has not been in accordance with the approved closure plan.

SECTION 61. NR 664.0144 (2) (intro.) is amended to read:

**NR 664.0144 (2)** (intro.) During the active life of the facility, the owner or operator shall adjust the long-term care cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument or instruments used to comply with s. NR 664.0145. For owners or operators of disposal facilities using the net worth test, the long-term care cost estimate shall be updated for inflation as specified in s. 289.41 (5) (d), Stats. The adjustment may be made by recalculating the long-term care cost estimate in current dollars or by using an inflation factor derived from the most recent implicit price deflator for gross domestic product published by the U.S. department of commerce in its *Survey of Current Business* as specified in s. ~~NR 664.0145 (2) pars. (a) and (b)~~. The inflation factor is the result of dividing the latest published annual deflator by the deflator for the previous year.

SECTION 62. NR 664.0145 (6) (a) 2. and (11) are amended to read:

**NR 664.0145 (6)** (a) 2. The owner shall comply with the net worth test requirements of s. 289.41 (4), (6) and (7), Stats., and the minimum security requirements of s. 289.41 (9), Stats., whichever are applicable. The updated net worth test information required under s. 289.41 (4), Stats., shall be submitted annually to the department within 90 days after the close of the company's fiscal year.

**(11)** RELEASE OF THE OWNER OR OPERATOR FROM THE REQUIREMENTS OF THIS SECTION. Within 60 days after receiving certifications from the owner or operator and ~~an independent registered~~ a qualified professional engineer that the long-term care period has been completed for a hazardous waste disposal unit in accordance with the approved plan, the department will notify the owner or operator that the owner or operator is no longer required to maintain financial assurance for long-term care of that unit, unless the department has reason to believe that long term care has not been in accordance with the approved long-

term care plan. The department shall provide the owner or operator with a detailed written statement of any reason to believe that long-term care has not been in accordance with the approved long-term care plan.

SECTION 63. NR 664.0147 (5) is amended to read:

**NT 664.0147 (5) PERIOD OF COVERAGE.** Within 60 days after receiving certifications from the owner or operator and ~~an independent registered~~ a qualified professional engineer that final closure has been completed in accordance with the approved closure plan, the department will notify the owner or operator in writing that the owner or operator is no longer required to maintain liability coverage for that facility, unless the department has reason to believe that closure has not been in accordance with the approved closure plan.

SECTION 64. NR 664.0151 (7) is amended to read:

**NR 664.0151(7)** A letter from the chief financial officer, as specified in s. NR 664.0147 (6) or 665.0147 (6), shall be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

**Letter from Chief Financial Officer**

[For facilities demonstrating financial responsibility through the financial test, address to Wisconsin Department of Natural Resources, the state agency of other affected authorized states and the administrator of affected EPA regions if the facilities are in unauthorized states.]

I am the chief financial officer of [firm’s name and address]. This letter is in support of the use of the financial test to demonstrate financial responsibility for liability coverage as specified in subch. H. of chs. NR 664 and subch. H. of NR 665, Wis. Adm. Code.

[Fill out the following paragraphs regarding facilities and liability coverage. If there are no facilities that belong in a particular paragraph, write “None” in the space indicated. For each facility, include its EPA Identification Number, name and address].

The firm identified above is the owner or operator of the following facilities for which liability coverage for [insert “sudden” or “nonsudden” or “both sudden and nonsudden”] accidental occurrences is being demonstrated through the financial test specified in subch. H. of chs. NR 664 and 665, Wis. Adm. Code: \_\_\_\_\_

The firm identified above guarantees, through the guarantee specified in subch. H. of chs. NR 664 and subch. H. of chs. NR 665, Wis. Adm. Code, liability coverage for [insert “sudden” or “nonsudden” or “both sudden and nonsudden”] accidental occurrences at the following facilities owned or operated by the following: \_\_\_\_\_. The firm identified above is [insert one or more: (1) The direct or higher-tier parent corporation of the owner or operator; (2) owned by the same parent corporation as the parent corporation of the owner or operator, and receiving the following value in consideration of this guarantee \_\_\_\_; or (3) engaged in the following substantial business relationship with the owner or operator \_\_\_\_\_, and receiving

the following value in consideration of this guarantee \_\_\_\_\_. [Attach a written description of the business relationship or a copy of the contract establishing such relationship to this letter.]

This firm [insert “is required” or “is not required”] to file a Form 10K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this firm ends on [month, day]. The figures for the following items marked with an asterisk are derived from this firm’s independently audited, year-end financial statements for the latest completed fiscal year, ended [date].

Part A. Liability Coverage for Accidental Occurrences

[Fill in Alternative I if the criteria of s. NR 664.0147 (6) (a) 1. or 665.0147 (6) (a) 1., Wis. Adm. Code, are used. Fill in Alternative II if the criteria of s. NR 664.0147 (6) (a) 2. or 665.0147 (6) (a) 2., Wis. Adm. Code, are used.]

ALTERNATIVE I

- 1. Amount of annual aggregate liability coverage to be demonstrated \$ \_\_\_\_\_.
- \*2. Current assets \$ \_\_\_\_\_.
- \*3. Current liabilities \$ \_\_\_\_\_.
- 4. Net working capital (line 2 minus line 3) \$ \_\_\_\_\_.
- \*5. Tangible net worth \$ \_\_\_\_\_.
- \*6. If less than 90% of assets are located in the U.S., give total U.S. assets \$ \_\_\_\_\_.
- 7. Is line 5 at least \$10 million? (Yes/No) \_\_\_\_\_.
- 8. Is line 4 at least 6 times line 1? (Yes/No) \_\_\_\_\_.
- 9. Is line 5 at least 6 times line 1? (Yes/No) \_\_\_\_\_.
- \*10. Are at least 90% of assets located in the U.S.? (Yes/No) \_\_\_\_\_. If not, complete line 11.
- 11. Is line 6 at least 6 times line 1? (Yes/No) \_\_\_\_\_.

ALTERNATIVE II

- 1. Amount of annual aggregate liability coverage to be demonstrated \$ \_\_\_\_\_.
- 2. Current bond rating of most recent issuance and name of rating service \_\_\_\_\_.
- 3. Date of issuance of bond \_\_\_\_\_.
- 4. Date of maturity of bond \_\_\_\_\_.
- \*5. Tangible net worth \$ \_\_\_\_\_.
- \*6. Total assets in U.S. (required only if less than 90% of assets are located in the U.S.) \$ \_\_\_\_\_.
- 7. Is line 5 at least \$10 million? (Yes/No) \_\_\_\_\_.
- 8. Is line 5 at least 6 times line 1? \_\_\_\_\_.
- 9. Are at least 90% of assets located in the U.S.? If not, complete line 10. (Yes/No) \_\_\_\_\_.
- 10. Is line 6 at least 6 times line 1? (Yes/No) \_\_\_\_\_.

I hereby certify that the wording of this letter is identical to the wording specified in s. NR 664.0151 (7), Wis. Adm. Code, as such rules were constituted on the date shown immediately below.

[Signature] \_\_\_\_\_

[Name] \_\_\_\_\_

[Title] \_\_\_\_\_

[Date] \_\_\_\_\_

SECTION 65. NR 664.0190 (1) is amended to read:

**NR 664.0190 (1)** Tank systems that are used to store or treat hazardous waste which contains no free liquids and are situated inside a building with an impermeable floor are exempted from the requirements in s. NR 664.0193. To demonstrate the absence or presence of free liquids in the stored or treated waste, the following test shall be used: method Method 9095B (paint filter liquids test) as described in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods”, EPA SW-846, incorporated by reference in s. NR 660.11 ~~shall be used.~~

SECTION 66. NR 664.0191 (1) and (2) (e) 2. are amended to read:

**NR 664.0191 (1)** For each existing tank system that does not have secondary containment meeting the requirements of s. NR 664.0193, the owner or operator shall determine that the tank system is not leaking or is unfit for use. Except as provided in sub. (3), the owner or operator shall obtain and keep on file at the facility a written assessment reviewed and certified by ~~an independent,~~ a qualified ~~registered~~ professional engineer, in accordance with s. NR 670.011 (4), that attests to the tank system’s integrity by March 1, 1992.

**(2) (e) 2.** For other than non-enterable underground tanks and for ancillary equipment, this assessment shall include either a leak test, as described in subd. 1., or other integrity examination, that is certified by ~~an independent,~~ a qualified, ~~registered~~ professional engineer in accordance with s. NR 670.011 (4), that addresses cracks, leaks, corrosion and erosion.

SECTION 67. NR 664.0192 (1) (intro.) and (2) (intro.) are amended to read:

**NR 664.0192 (1) (intro.)** Owners or operators of new tank systems or components shall obtain and submit to the department, at time of submittal of the feasibility and plan of operation report, a written assessment, reviewed and certified by ~~an independent,~~ a qualified ~~registered~~ professional engineer, in accordance with s. NR 670.011 (4), attesting that the tank system has sufficient structural integrity and is acceptable for the storing and treating of hazardous waste. The assessment shall show that the foundation, structural support, seams, connections and pressure controls (if applicable) are adequately designed and that the tank system has sufficient structural strength, compatibility with the wastes to be stored or treated and corrosion protection to ensure that it will not collapse, rupture or fail. This assessment, which will be used by the department to review and approve or disapprove the acceptability of the tank system design, shall include, at a minimum, all of the following information:

**(2) (intro.)** The owner or operator of a new tank system shall ensure that proper handling procedures are adhered to in order to prevent damage to the system during installation. Prior to covering, enclosing or

placing a new tank system or component in use, an independent, qualified installation inspector or ~~an independent, a~~ qualified, ~~registered~~ professional engineer, either of whom is trained and experienced in the proper installation of tank systems or components, shall inspect the system for the presence of any of the following items:

SECTION 68. NR 664.0193 (1) is repealed and recreated to read:

**NR 664.0193 (1)** In order to prevent the release of hazardous waste or hazardous constituents to the environment, secondary containment that meets the requirements of this section shall be provided, except as provided in subs. (6) and (7):

(a) For all new and existing tank systems or components, prior to their being put into service.

(b) For tank systems that store or treat materials that become hazardous wastes, within two years of the hazardous waste listing, or when the tank system has reached 15 years of age, whichever comes later.

SECTION 69. NR 664.0193 (9) (b) is amended to read:

**NR 664.0193 (9) (b)** For other than non-enterable underground tanks, the owner or operator shall either conduct a leak test as in par. (a) or develop a schedule and procedure for an assessment of the overall condition of the tank system by ~~an independent, a~~ qualified ~~registered~~ professional engineer. The schedule and procedure shall be adequate to detect obvious cracks, leaks and corrosion or erosion that may lead to cracks and leaks. The owner or operator shall remove the stored waste from the tank, if necessary, to allow the condition of all internal tank surfaces to be assessed. The frequency of these assessments shall be based on the material of construction of the tank and its ancillary equipment, the age of the system, the type of corrosion or erosion protection used, the rate of corrosion or erosion observed during the previous inspection and the characteristics of the waste being stored or treated.

SECTION 70. NR 664.0195 (2), (3) and (4) are repealed and recreated to read:

**NR 664.0195 (2)** The owner or operator shall inspect at least once each operating day data gathered from monitoring and leak detection equipment (for example, pressure or temperature gauges, monitoring wells) to ensure that the tank system is being operated according to its design.

**Note:** Section NR 664.0015 (3) requires the owner or operator to remedy any deterioration or malfunction found. Section NR 664.0196 requires the owner or operator to notify the department within 24 hours of confirming a leak. Also, if a hazardous substance is released to the environment, 40 CFR part 302 may require the owner or operator to notify the national response center and s. 292.11, Stats., and ch. NR 706 may require the owner or operator to notify the department.

**(3)** In addition, except as noted under sub. (4), the owner or operator shall inspect at least once each operating day:

(a) Above ground portions of the tank system, if any, to detect corrosion or releases of waste.

(b) The construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system (for example, dikes) to detect erosion or signs of releases of hazardous waste (for example, wet spots, dead vegetation).

(4) Owners or operators of tank systems that either use leak detection systems to alert facility personnel to leaks, or implement established workplace practices to ensure leaks are promptly identified, shall inspect at least weekly those areas described in sub. (3) (a) and (b). Use of the alternate inspection schedule shall be documented in the facility's operating record. This documentation shall include a description of the established workplace practices at the facility.

SECTION 71. NR 664.0195 (5) to (7) are created to read:

**NR 664.0195 (5)** Ancillary equipment that is not provided with secondary containment, as described in s. NR 664.0193 (6) (a) to (d), shall be inspected at least once each operating day.

(6) The owner or operator shall inspect cathodic protection systems, if present, according to, at a minimum, all of the following requirements to ensure that they are functioning properly:

(a) The proper operation of the cathodic protection system shall be confirmed within 6 months after initial installation and annually thereafter.

(b) All sources of impressed current shall be inspected or tested, or both, as appropriate, at least bimonthly (that is, every other month).

**Note:** The practices described in the National Association of Corrosion Engineers (NACE) standard, "Recommended Practice (RP-02-85)—Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems" and the American Petroleum Institute (API) Publication 1632, "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems", may be used, where applicable, as guidelines in maintaining and inspecting cathodic protection systems.

(7) The owner or operator shall document in the operating record of the facility an inspection of those items in subs. (1) to (3).

SECTION 72. NR 664.0196 (6) is amended to read:

**NR 664.0196 (6)** CERTIFICATION OF MAJOR REPAIRS. If the owner or operator has repaired a tank system in accordance with sub. (5), and the repair has been extensive (~~e.g. for example~~, installation of an internal liner; repair of a ruptured primary containment or secondary containment vessel), the tank system may not be returned to service unless the owner or operator has obtained a certification by ~~an independent,~~ a qualified, registered, professional engineer in accordance with s. NR 670.011 (4) that the repaired system is capable of handling hazardous wastes without release for the intended life of the system. This certification shall be ~~submitted to the department within 7 days after returning the tank system to use~~ placed in the operating record and maintained until closure of the facility.

SECTION 73. NR 664.0251 (3) (intro.) is amended to read:

**NR 664.0251 (3)** (intro.) The owner or operator of each new waste pile unit ~~on which construction commences after June 1, 1995~~, each lateral expansion of a waste pile unit ~~on which construction commences after June 1, 1995~~ and each replacement of an existing waste pile unit ~~that is to commence reuse after June 1, 1995~~ shall install 2 or more liners and a leachate collection and removal system above and between the liners. ~~“Construction commences” is as defined in s. NR 660.10 under “existing facility”.~~

SECTION 74. NR 664.0314 is amended and renumbered to read

**NR 664.0314 SPECIAL REQUIREMENTS FOR BULK AND CONTAINERIZED LIQUIDS.** ~~(1) Bulk or non-containerized liquid waste or waste containing free liquids may be placed in a landfill prior to April 1, 1988 only if either of the following is met:~~

~~(a) The landfill has a liner and leachate collection and removal system that meet the requirements of s. NR 664.0301 (1).~~

~~(b) Before disposal, the liquid waste or waste containing free liquids is treated or stabilized, chemically or physically (e.g., by mixing with a sorbent solid), so that free liquids are no longer present.~~

~~(2) (1) Effective April 1, 1988, the~~ The placement of bulk or non-containerized liquid hazardous waste or hazardous waste containing free liquids (whether or not sorbents have been added) in any landfill is prohibited.

~~(3) (2)~~ (2) To demonstrate the absence or presence of free liquids in either a containerized or a bulk waste, the following test shall be used: Method 9095 B (paint filter liquids test) as described in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods”, EPA SW-846, incorporated by reference in s. NR 660.11.

~~(4) (3)~~ (3) Containers holding free liquids may not be placed in a landfill unless par. (a), (b), (c) or (d) applies:

(a) All free-standing liquid is handled in one of the following ways:

1. It has been removed by decanting, or other methods.
2. It has been mixed with sorbent or solidified so that free-standing liquid is no longer observed.
3. It has been otherwise eliminated.

(b) The container is very small, such as an ampule.

(c) The container is designed to hold free liquids for use other than storage, such as a battery or capacitor.

(d) The container is a lab pack as defined in s. NR 664.0316 and is disposed of in accordance with s. NR 664.0316.

~~(5) (4)~~ (4) Sorbents used to treat free liquids to be disposed of in landfills shall be nonbiodegradable. Nonbiodegradable sorbents are materials listed or described in par. (a); materials that pass one of the tests in par. (b) or materials that are determined by EPA to be nonbiodegradable through the 40 CFR part 260 petition process.

(a) Nonbiodegradable sorbents are any of the following:

1. Inorganic minerals, other inorganic materials and elemental carbon (~~e.g. for example~~, aluminosilicates, clays, smectites, Fuller's earth, bentonite, calcium bentonite, montmorillonite, calcined montmorillonite, kaolinite, micas (illite), vermiculites, zeolites; calcium carbonate (organic free limestone); oxides or hydroxides, alumina, lime, silica (sand), diatomaceous earth; perlite (volcanic glass); expanded volcanic rock; volcanic ash; cement kiln dust; fly ash; rice hull ash; activated charcoal or activated carbon).

2. High molecular weight synthetic polymers (~~e.g. for example~~, polyethylene, high density polyethylene (HDPE), polypropylene, polystyrene, polyurethane, polyacrylate, polynorborene, polyisobutylene, ground synthetic rubber, cross-linked allylstyrene and tertiary butyl copolymers). This does not include polymers derived from biological material or polymers specifically designed to be degradable.

3. Mixtures of these nonbiodegradable materials.

(b) The sorbent material may be determined to be nonbiodegradable using any of the following tests:

1. ASTM Method G21-70 (1984a)—Standard Practice for Determining Resistance of Synthetic Polymer Materials to Fungi, incorporated by reference in s. NR 660.11.

2. ASTM Method G22-76 (1984b)—Standard Practice for Determining Resistance of Plastics to Bacteria, incorporated by reference in s. NR 660.11.

3. OECD test 301B [CO<sub>2</sub> Evolution (Modified Sturm Test)], incorporated by reference in s. NR 660.11.

~~(6)~~ **(5)** ~~Effective March 1, 1991, the~~ The placement of any liquid which is not a hazardous waste in a landfill is prohibited unless the owner or operator of the landfill demonstrates to the department, or the department determines, that both of the following apply:

(a) The only reasonably available alternative to the placement in the landfill is placement in a landfill or unlined surface impoundment, whether or not operating under an operating license or interim license, which contains, or may reasonably be anticipated to contain, hazardous waste.

(b) Placement in the owner or operator's landfill will not present a risk of contamination of any underground source of drinking water (as that term is defined in 40 CFR 144.3).

SECTION 75. NR 664.0340 (2) (a) is amended to read:

**NR 664.0340 (2)** (a) Except as provided by pars. (b), ~~(c) and (d)~~ to (e), the standards of this chapter do not apply to a new hazardous waste incineration unit that becomes subject to hazardous waste license requirements after October 12, 2005, and no longer applies apply when an owner or operator demonstrates compliance with the maximum achievable control technology (MACT) requirements of 40 CFR part 63, subpart EEE, by conducting a comprehensive performance test and submitting a notification of compliance to the ~~EPA administrator~~ department under 40 CFR 63.1207 (j) and 40 CFR 63.1210 (b) documenting compliance with 40 CFR part 63, subpart EEE. Nevertheless, even after this demonstration of compliance with the MACT standards, hazardous waste license conditions that were based on the standards of this chapter will continue to be in effect until the department removes them from the license or denies, suspends or revokes the license, unless the license expressly provides otherwise.



SECTION 76. NR 664.0340 (2)(e) is created to read:

**NR 664.0340 (2)(e)** The particulate matter standard of s. NR 664.0343 (3) remains in effect for incinerators that elect to comply with the alternative to the particulate matter standard of 40 CFR 63.1206 (b) (14) and 63.1219 (e).

SECTION 77. NR 664.0343 (1)(b) is amended to read:

**NR 664.0343 (1)(b)** An incinerator burning hazardous wastes F020, F021, F022, F023, F026 or F027 shall achieve a destruction and removal efficiency (DRE) of 99.9999% for each principal organic hazardous constituent (POHC) designated (under s. NR 664.0342) in its license. The owner or operator shall demonstrate this performance on POHCs that are more difficult to incinerate than tetra-, penta- and hexachlorodibenzo-p-dioxins and dibenzofurans. The owner or operator shall determine the DRE for each POHC using the equation in par. (a). ~~In addition, the owner or operator of the incinerator shall notify the department of the owner or operator's intent to incinerate hazardous wastes F020, F021, F022, F023, F026 or F027.~~

SECTION 78. NR 664.0347 (4) is amended to read:

**NR 664.0347 (4)** The owner or operator shall record this monitoring and inspection data and place the records in the operating log required by s. NR 664.0073 and maintain it in the operating record for a minimum of 5 years.

SECTION 79. NR 664.0554 (3)(b) is amended to read:

**NR 664.0553 (3)(b)** Certification by ~~an independent, a qualified, registered~~ professional engineer for technical data, such as design drawings and specifications, and engineering studies, unless the department determines, based on information that you provide, that this certification is not necessary to ensure that a staging pile will protect human health and the environment.

SECTION 80. NR 664.0571 (1) to (3) are amended to read:

**NR 664.0571 (1)** For each existing drip pad as defined in s. NR 664.0570, the owner or operator shall evaluate the drip pad and determine that it meets all of the requirements of this subchapter, except the requirements for liners and leak detection systems of s. NR 664.0573 (2). No later than ~~June 1, 1995~~ the effective date of this section [legislative reference bureau inserts date], the owner or operator shall obtain and keep on file at the facility a written assessment of the drip pad, reviewed and certified by ~~an independent, a qualified registered~~ professional engineer that attests to the results of the evaluation. The assessment shall be reviewed, updated and re-certified annually until all upgrades, repairs or modifications necessary to achieve compliance with all of the standards of s. NR 664.0573 are complete. The evaluation

shall document the extent to which the drip pad meets each of the design and operating standards of s. NR 664.0573, except the standards for liners and leak detection systems, specified in s. NR 664.0573 (2).

(2) The owner or operator shall develop a written plan for upgrading, repairing and modifying the drip pad to meet the requirements of s. NR 664.0573 (2), and submit the plan to the department no later than 2 years before the date that all repairs, upgrades and modifications are complete. This written plan shall describe all changes to be made to the drip pad in sufficient detail to document compliance with all the requirements of s. NR 664.0573. The plan shall be reviewed and certified by ~~an independent~~ a qualified ~~registered~~ professional engineer.

(3) Upon completion of all upgrades, repairs and modifications, the owner or operator shall submit to the department, the as-built drawings for the drip pad together with a certification by ~~an independent~~ a qualified ~~registered~~ professional engineer attesting that the drip pad conforms to the drawings.

SECTION 81. NR 664.0573 (1)(d) 2. and (7) are amended to read:

**NR 664.0573 (1)(d) 2.** The owner or operator shall obtain and keep on file at the facility a written assessment of the drip pad, reviewed and certified by ~~an independent~~, a qualified ~~registered~~ professional engineer that attests to the results of the evaluation. The assessment shall be reviewed, updated and recertified annually. The evaluation shall document the extent to which the drip pad meets the design and operating standards of this section, except for sub. (2).

(7) The drip pad shall be evaluated to determine that it meets the requirements of subs. (1) to (6), and the owner or operator shall obtain a statement from ~~an independent~~, a qualified ~~registered~~ professional engineer certifying that the drip pad design meets the requirements of this section.

SECTION 82. NR 664.0574 (1) is amended to read:

**NR 664.0574 (1)** During construction or installation, liners and cover systems (~~e.g. for example~~, membranes, sheets or coatings) shall be inspected for uniformity, damage and imperfections (~~e.g. for example~~, holes, cracks, thin spots or foreign materials). Immediately after construction or installation, liners shall be inspected and certified as meeting the requirements of s. NR 664.0573 by ~~an independent~~ a qualified, ~~registered~~ professional engineer. This certification shall be maintained at the facility as part of the facility operating record. After installation, liners and covers shall be inspected to ensure tight seams and joints and the absence of tears, punctures or blisters.

SECTION 83. NR 664.1034 (3)(a) 2. and 4., (4)(a) 3. and (6) are amended to read:

**NR 664.1034 (3)(a) 2.** Method 18 or Method 25A in Appendix A of 40 CFR part 60, incorporated by reference in s. NR 660.11, for organic content. If Method 25A is used, the organic HAP used as the calibration gas shall be the single organic HAP representing the largest percent by volume of the emissions. The use of Method 25A is acceptable if the response from the high-level calibration gas is at least 20 times

the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale.

4. Determine total organic mass flow rates by the following equation:

a. For sources using Method 18.

$$E_h = Q_{2sd} \left\{ \sum_{i=1}^n C_i MW_i \right\} [0.0416] [10^{-6}]$$

[Drafter's Note: The software used to write the above equation does not allow underscore to be used in subscripts. The subscript for the variable Q is being amended to include the number 2 as shown here:  $Q_{2sd}$ .]

where:

$E_h$  = Total organic mass flow rate, kg/h

$Q_{2sd}$  = Volumetric flow rate of gases entering or exiting control device, determined by Method 2, dscm/h

n = Number of organic compounds in the vent gas

$C_i$  = Organic concentration in ppm, dry basis, of compound i in the vent gas, determined by Method 18

$MW_i$  = Molecular weight of organic compound i in the vent gas, kg/kg-mol

0.0416 = Conversion factor for molar volume, kg-mol/m<sup>3</sup> (at 293 K and 760 mm Hg)

$10^{-6}$  = Conversion from ppm, ~~ppm~~<sup>-1</sup>

b. For sources using Method 25A.

$$E_h = (Q)(C)(MW)(0.0416)(10^{-6})$$

where:

$E_h$  = Total organic mass flow rate, kg/h

$Q$  = Volumetric flow rate of gases entering or exiting control device, as determined by Method 2, dscm/h;

$C$  = Organic concentration in ppm, dry basis, as determined by Method 25A

$MW$  = Molecular weight of propane, 44

0.0416 = Conversion factor for molar volume, kg-mol/m<sup>3</sup> (at 293 K and 760 mm Hg)

$10^{-6}$  = Conversion from ppm.

(4) (a) 3. Analyze each sample and compute the total organic concentration of the sample using Method 9060A ~~or 8260~~ of EPA SW-846, incorporated by reference in s. NR 660.11, or analyze for its individual organic constituents.

(6) When an owner or operator and the department do not agree on whether a distillation, fractionation, thin-film evaporation, solvent extraction or air or steam stripping operation manages a hazardous waste with organic concentrations of at least 10 ppmw based on knowledge of the waste, ~~the procedures in Method 8260 of EPA SW 846, incorporated by reference in s. NR 660.11, may be used to resolve the dispute~~ may be resolved by using direct measurement as specified in sub. (4) (a).

SECTION 84. NR 664.1050 (8) is created to read:

**NR 664.1050 (8)** Purged coatings and solvents from surface coating operations subject to the national emission standards for hazardous air pollutants (NESHAP) for the surface coating of automobiles and light-duty trucks at 40 CFR part 63, subpart III, are not subject to the requirements of this subchapter.

SECTION 85. NR 664.1061 (2)(a) is repealed.

SECTION 86. NR 664.1061 (2)(b) and (c) are renumbered NR 664.1061 (2)(a) and (b), respectively.

SECTION 87. NR 664.1062 (1) is amended to read:

**NR 664.1062 (1)** ~~(a)~~ An owner or operator subject to s. NR 664.1057 may elect for all valves within a hazardous waste management unit to comply with one of the alternative work practices specified in sub. (2) (b) and (c).

~~(b) An owner or operator shall notify the department before implementing one of the alternative work practices.~~

SECTION 88. NR 664.1063 (4)(b) is amended to read:

**NR 664.1063 (4)(b)** Analyze each sample and compute the total organic concentration of the sample using Method 9060A or 8260 of EPA SW-846, incorporated by reference in s. NR 660.11, or analyze for its individual organic constituents.

SECTION 89. NR 664.1101 (3)(b) is amended to read:

**NR 664.1101 (3)(b)** Obtain certification by a qualified ~~registered~~ professional engineer that the containment building design meets the requirements of subs. (1) and (2) and this subsection. ~~For units placed into operation prior to June 1, 1995, this certification shall be placed in the facility's operating record (on-site files for generators who are not formally required to have operating records) no later than July 31, 1995. After June 1, 1995, PE certification shall be required prior to operation of the unit.~~

SECTION 91. NR 664, Appendix IX, is amended to read:

**APPENDIX IX**

**GROUNDWATER MONITORING LIST<sup>4</sup>**

Common name <sup>1</sup>	CAS RN <sup>2</sup>	Chemical abstracts service index name <sup>3</sup>	Suggested methods <sup>5</sup>	PQL (□g/L) <sup>6</sup>
Acenaphthene	83-32-9	Acenaphthylene, 1,2-dihydro-	8100 8270	—200 —10
Acenaphthylene	208-96-8	Acenaphthylene	8100 8270	—200 —10
Acetone	67-64-1	2-Propanone	8240	—100
Acetophenone	98-86-2	Ethanone, 1-phenyl-	8270	—10
Acetonitrile; Methyl cyanide	75-05-8	Acetonitrile	8015	—100

2-Acetylaminofluorene; 2-AAF	53-96-3	Acetamide, N-9H-fluoren-2-yl-	8270	—10
Acrolein	107-02-8	2-Propenal	8030	—5
			8240	—5
Acrylonitrile	107-13-1	2-Propenenitrile	8030	—5
			8240	—5
Aldrin	309-00-2	1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro- 1,4,4a,5,8,8a-hexahydro-(1 $\alpha$ ,4 $\alpha$ , 4a $\beta$ ,5 $\alpha$ ,8 $\alpha$ ,8a $\beta$ )-	8080	—0.05
			8270	—10
Allyl chloride	107-05-1	1-Propene, 3-chloro-	8010	—5
			8240	—100
4-Aminobiphenyl	92-67-1	[1,1'-Biphenyl]- 4-amine	8270	—10
Aniline	62-53-3	Benzenamine	8270	—10
Anthracene	120-12-7	Anthracene	8100	—200
			8270	—10
Antimony	(Total)	Antimony	6010	—300
			7040	—2,000
			7041	—30
Aramite	140-57-8	Sulfurous acid, 2-chloroethyl 2-[4-(1,1-dimethylethyl) phenoxy]-1- methylethyl ester	8270	—10
Arsenic	(Total)	Arsenic	6010	—500
			7060	—10
			7061	—20
Barium	(Total)	Barium	6010	—20
			7080	—1,000
Benzene	71-43-2	Benzene	8020	—2
			8240	—5
Benzo[a]anthracene; Benzo[a]anthracene	56-55-3	Benz[a]anthracene	8100	—200
			8270	—10
Benzo[b]fluoranthene	205-99-2	Benz[e]acephenanthrylene	8100	—200
			8270	—10
Benzo[k]fluoranthene	207-08-9	Benzo[k]fluoranthene	8100	—200
			8270	—10
Benzo[ghi]perylene	191-24-2	Benzo[ghi]perylene	8100	—200
			8270	—10
Benzo[a]pyrene	50-32-8	Benzo[a]pyrene	8100	—200
			8270	—10
Benzyl alcohol	100-51-6	Benzenemethanol	8270	—20
Beryllium	(Total)	Beryllium	6010	—3
			7090	—50
			7091	—2
alpha-BHC	319-84-6	Cyclohexane, 1,2,3,4,5,6- hexachloro-,(1 $\alpha$ ,2 $\alpha$ ,3 $\beta$ ,4 $\alpha$ ,5 $\beta$ , 6 $\beta$ )-	8080	—0.05
			8250	—10
beta-BHC	319-85-7	Cyclohexane, 1,2,3,4,5,6- hexachloro-,(1 $\alpha$ ,2 $\beta$ ,3 $\alpha$ ,4 $\beta$ ,5 $\alpha$ , 6 $\beta$ )-	8080	—0.05
			8250	—40
delta-BHC	319-86-8	Cyclohexane, 1,2,3,4,5,6- hexachloro-,(1 $\alpha$ ,2 $\alpha$ ,3 $\alpha$ ,4 $\beta$ ,5 $\alpha$ , 6 $\beta$ )-	8080	—0.1
			8250	—30
gamma-BHC; Lindane	58-89-9	Cyclohexane, 1,2,3,4,5,6-	8080	—0.05

		hexachloro-, (1 $\alpha$ , 2 $\alpha$ , 3 $\beta$ , 4 $\alpha$ , 5 $\alpha$ , 6 $\beta$ )-	8250	—10
Bis(2-chloroethoxy)methane	111-91-1	Ethane, 1,1'-[methylenebis(oxy)]bis [2-chloro-	8270	—10
Bis(2-chloroethyl)ether	111-44-4	Ethane, 1,1'-oxybis[2-chloro-	8270	—10
Bis(2-chloro-1-methylethyl) ether; 2,2'- Di-chlorodiisopropyl ether	108-60-1	Propane, 2,2'-oxybis[1-chloro-	8010	—100
			8270	—10
Bis(2-ethylhexyl) phthalate	117-81-7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl)ester	8060	—20
			8270	—10
Bromodichloromethane	75-27-4	Methane, bromodichloro-	8010	—1
			8240	—5
Bromoform; Tribromomethane	75-25-2	Methane, tribromo-	8010	—2
			8240	—5
4-Bromophenyl phenyl ether	101-55-3	Benzene, 1-bromo-4-phenoxy-	8270	—10
Butyl benzyl phthalate; Benzyl butyl phthalate	85-68-7	1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester	8060	—5
			8270	—10
Cadmium	(Total)	Cadmium	6010	—40
			7130	—50
			7131	—1
Carbon disulfide	75-15-0	Carbon disulfide	8240	—5
Carbon tetrachloride	56-23-5	Methane, tetrachloro-	8010	—1
			8240	—5
Chlordane	57-74-9	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-	8080	—0.1
			8250	—10
p-Chloroaniline	106-47-8	Benzenamine, 4-chloro-	8270	—20
Chlorobenzene	108-90-7	Benzene, chloro-	8010	—2
			8020	—2
			8240	—5
Chlorobenzilate	510-15-6	Benzeneacetic acid, 4-chloro- $\alpha$ -(4-chlorophenyl)- $\alpha$ -hydroxy-, ethyl ester	8270	—10
p-Chloro-m-cresol	59-50-7	Phenol, 4-chloro-3-methyl-	8040	—5
			8270	—20
Chloroethane; Ethyl chloride	75-00-3	Ethane, chloro-	8010	—5
			8240	—10
Chloroform	67-66-3	Methane, trichloro-	8010	—0.5
			8240	—5
2-Chloronaphthalene	91-58-7	Naphthalene, 2-chloro-	8120	—10
			8270	—10
2-Chlorophenol	95-57-8	Phenol, 2-chloro-	8040	—5
			8270	—10
4-Chlorophenyl phenyl ether	7005-72-3	Benzene, 1-chloro-4-phenoxy-	8270	—10
Chloroprene	126-99-8	1,3-Butadiene, 2-chloro-	8010	—50
			8240	—5
Chromium	(Total)	Chromium	6010	—70
			7190	—500
			7191	—10
Chrysene	218-01-9	Chrysene	8100	—200
			8270	—10
Cobalt	(Total)	Cobalt	6010	—70

			7200	—500
			7201	—10
Copper	(Total)	Copper	6010	—60
			7210	—200
m-Cresol	108-39-4	Phenol, 3-methyl-	8270	—10
o-Cresol	95-48-7	Phenol, 2-methyl-	8270	—10
p-Cresol	106-44-5	Phenol, 4-methyl-	8270	—10
Cyanide	57-12-5	Cyanide	9010	—40
2,4-D; 2,4-Dichlorophenoxyacetic acid	94-75-7	Acetic acid, (2,4- dichlorophenoxy)-	8150	—10
4,4'-DDD	72-54-8	Benzene 1,1'-(2,2-dichloroethylidene) bis[4-chloro-	8080	—0.1
			8270	—10
4,4'-DDE	72-55-9	Benzene, 1,1'-(dichloroethylidene) bis[4-chloro-	8080	—0.05
			8270	—10
4,4'-DDT	50-29-3	Benzene, 1,1'-(2,2,2-trichloroethylidene) bis[4-chloro-	8080	—0.1
			8270	—10
Diallate	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S- (2,3-dichloro-2-propenyl) ester	8270	—10
Dibenz[a,h]anthracene	53-70-3	Dibenz[a,h]anthracene	8100	—200
			8270	—10
Dibenzofuran	132-64-9	Dibenzofuran	8270	—10
Dibromochloromethane; Chlorodibromomethane	124-48-1	Methane, dibromochloro-	8010	—1
			8240	—5
1,2-Dibromo-3-chloropropane; DBCP	96-12-8	Propane, 1,2-dibromo-3-chloro-	8010	—100
			8240	—5
			8270	—10
1,2-Dibromoethane; Ethylene dibromide	106-93-4	Ethane, 1,2-dibromo-	8010	—10
			8240	—5
Di-n-butyl phthalate	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester	8060	—5
			8270	—10
o-Dichlorobenzene	95-50-1	Benzene, 1,2-dichloro-	8010	—2
			8020	—5
			8120	—10
			8270	—10
m-Dichlorobenzene	541-73-1	Benzene, 1,3-dichloro-	8010	—5
			8020	—5
			8120	—10
			8270	—10
p-Dichlorobenzene	106-46-7	Benzene, 1,4-dichloro-	8010	—2
			8020	—5
			8120	—15
			8270	—10
3,3'-Dichlorobenzidine	91-94-1	[1,1'-Biphenyl]- 4,4'- diamine, 3,3'-dichloro-	8270	—20
trans-1,4-Dichloro-2-butene and	110-57-6 and	2-Butene, 1,4-dichloro-, (E)- and	8240	—5
			8010	—10
Dichlorodifluoromethane	75-71-8	Methane, dichlorodifluoro-	8240	—5
1,1-Dichloroethane	75-34-3	Ethane, 1,1-dichloro-	8010	—1
			8240	—5
1,2-Dichloroethane; Ethylene dichloride	107-06-2	Ethane, 1,2-dichloro-	8010	—0.5
			8240	—5

1,1-Dichloroethylene; Vinylidene chloride	75-35-4	Ethene, 1,1-dichloro-	8010	—1
			8240	—5
trans-1,2-Dichloroethylene	156-60-5	Ethene, 1,2-dichloro-, (E)-	8010	—1
			8240	—5
2,4-Dichlorophenol	120-83-2	Phenol, 2,4-dichloro-	8040	—5
			8270	—10
2,6-Dichlorophenol	87-65-0	Phenol, 2,6-dichloro-	8270	—10
1,2-Dichloropropane	78-87-5	Propane, 1,2-dichloro-	8010	—0.5
			8240	—5
cis-1,3-Dichloropropene	10061-01-5	1-Propene, 1,3-dichloro-, (Z)-	8010	—20
			8240	—5
trans-1,3-Dichloropropene	10061-02-6	1-Propene, 1,3-dichloro-, (E)-	8010	—5
			8240	—5
Dieldrin	60-57-1	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1 $\alpha$ ,2 $\beta$ ,2 $\alpha$ ,3 $\beta$ ,6 $\beta$ ,6 $\alpha$ ,7 $\beta$ ,7 $\alpha$ )-	8080	—0.05
			8270	—10
Diethyl phthalate	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester	8060	—5
			8270	—10
O,O-Diethyl O-2-pyrazinyl phosphorothioate; Thionazin Dimethoate	297-97-2	Phosphorothioic acid, O,O- diethyl O-pyrazinyl ester	8270	—10
	60-51-5	Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl] ester	8270	—10
p-(Dimethylamino) azobenzene	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-	8270	—10
7,12-Dimethylbenz[a]anthracene	57-97-6	Benz[a]anthracene, 7,12- dimethyl-	8270	—10
3,3'-Dimethylbenzidine	119-93-7	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-	8270	—10
alpha, alpha-Dimethylphenethylamine	122-09-8	Benzeneethanamine, $\alpha,\alpha$ -dimethyl-	8270	—10
2,4-Dimethylphenol	105-67-9	Phenol, 2,4-dimethyl-	8040	—5
			8270	—10
Dimethyl phthalate	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester	8060	—5
			8270	—10
m-Dinitrobenzene	99-65-0	Benzene, 1,3-dinitro-	8270	—10
4,6-Dinitro-o-cresol	534-52-1	Phenol, 2-methyl-4,6-dinitro-	8040	—150
			8270	—50
2,4-Dinitrophenol	51-28-5	Phenol, 2,4-dinitro-	8040	—150
			8270	—50
2,4-Dinitrotoluene	121-14-2	Benzene, 1-methyl-2,4-dinitro-	8090	—0.2
			8270	—10
2,6-Dinitrotoluene	606-20-2	Benzene, 2-methyl-1,3-dinitro-	8090	—0.1
			8270	—10
Dinoseb; DNBP; 2-sec-Butyl-4,6- dinitrophenol	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-	8150	—1
			8270	—10
Di-n-octyl phthalate	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester	8060	—30
			8270	—10
1,4-Dioxane	123-91-1	1,4-Dioxane	8015	—150
Diphenylamine	122-39-4	Benzenamine, N-phenyl-	8270	—10



Disulfoton	298-04-4	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl]ester	8140	— 2
			8270	— 10
Endosulfan I	959-98-8	6,9-Methano-2,4,3-benzodioxathiepin,6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide,(3 $\alpha$ ,5 $\alpha$ $\beta$ ,6 $\alpha$ ,9 $\alpha$ ,9 $\alpha$ $\beta$ )-	8080	— 0.1
			8250	— 10
Endosulfan II	33213-65-9	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide, (3 $\alpha$ ,5 $\alpha$ ,6 $\beta$ ,9 $\beta$ ,9 $\alpha$ )-	8080	— 0.05
Endosulfan sulfate	1031-07-8	6,9-Methano-2,4,3-benzodioxathiepin,6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3,3-dioxide	8080	— 0.5
			8270	— 10
Endrin	72-20-8	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1 $\alpha$ ,2 $\beta$ ,2 $\alpha$ $\beta$ ,3 $\alpha$ ,6 $\alpha$ ,6 $\alpha$ $\beta$ ,7 $\beta$ ,7 $\alpha$ )-	8080	— 0.1
			8250	— 10
Endrin aldehyde	7421-93-4	1,2,4-Methenocyclopenta[cd]pentalene- 5-carboxaldehyde,2,2a,3,3,4,7-hexachlorodecahydro-, (1 $\alpha$ ,2 $\beta$ ,2 $\alpha$ $\beta$ ,4 $\beta$ ,4 $\alpha$ $\beta$ ,5 $\beta$ ,6 $\alpha$ $\beta$ ,6 $\beta$ ,7R*)-	8080	— 0.2
			8270	— 10
Ethylbenzene	100-41-4	Benzene, ethyl-	8020	— 2
			8240	— 5
Ethyl methacrylate	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester	8015	— 10
			8240	— 5
			8270	— 10
			8270	— 10
Ethyl methanesulfonate	62-50-0	Methanesulfonic acid, ethyl ester	8270	— 10
Famphur	52-85-7	Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl]-O,O-dimethyl ester	8270	— 10
Fluoranthene	206-44-0	Fluoranthene	8100	— 200
			8270	— 10
Fluorene	86-73-7	9H-Fluorene	8100	— 200
			8270	— 10
Heptachlor	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-	8080	— 0.05
			8270	— 10
Heptachlor epoxide	1024-57-3	2,5-Methano-2H-indeno[1,2-b]oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a,-hexahydro-,(1 $\alpha$ ,1 $\beta$ ,2 $\alpha$ ,5 $\alpha$ ,5 $\alpha$ $\beta$ ,6 $\beta$ ,6 $\alpha$ )-	8080	— 1
			8270	— 10
Hexachlorobenzene	118-74-1	Benzene, hexachloro-	8120	— 0.5
			8270	— 10
Hexachlorobutadiene	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	8120	— 5
			8270	— 10
Hexachlorocyclopentadiene	77-47-4	1,3-Cyclopentadiene,1,2,3,4,5,5-	8120	— 5

		hexachloro-	8270	—10
Hexachloroethane	67-72-1	Ethane, hexachloro-	8120	—0.5
			8270	—10
Hexachlorophene	70-30-4	Phenol, 2,2'-methylenebis[3,4,6-trichloro-	8270	—10
Hexachloropropene	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-	8270	—10
2-Hexanone	591-78-6	2-Hexanone	8240	—50
Indeno(1,2,3-cd)pyrene	193-39-5	Indeno[1,2,3-cd]pyrene	8100	—200
			8270	—10
Isobutyl alcohol	78-83-1	1-Propanol, 2-methyl-	8015	—50
Isodrin	465-73-6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a hexahydro-(1 $\alpha$ , 4 $\alpha$ , 4a $\beta$ , 5 $\beta$ , 8 $\beta$ , 8a $\beta$ )-	8270	—10
Isophorone	78-59-1	2-Cyclohexen-1-one, 3,5,5-trimethyl-	8090	—60
			8270	—10
Isosafrole	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-	8270	—10
Kepone	143-50-0	1,3,4-Metheno-2H-cyclobuta-[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-	8270	—10
Lead	(Total)	Lead	6010	—40
			7420	—1,000
			7421	—10
Mercury	(Total)	Mercury	7470	—2
Methacrylonitrile	126-98-7	2-Propenenitrile, 2-methyl-	8015	—5
			8240	—5
Methapyrilene	91-80-5	1,2,Ethanediamine, N,N-dimethyl-N'-2-pyridinyl- N'-(2-thienylmethyl)-	8270	—10
Methoxychlor	72-43-5	Benzene, 1,1'-(2,2,2, trichloroethylidene)bis[4-methoxy-	8080	—2
			8270	—10
Methyl bromide; Bromomethane	74-83-9	Methane, bromo-	8010	—20
			8240	—10
Methyl chloride; Chloromethane	74-87-3	Methane, chloro-	8010	—1
			8240	—10
3-Methylcholanthrene	56-49-5	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-	8270	—10
Methylene bromide; Dibromomethane	74-95-3	Methane, dibromo-	8010	—15
			8240	—5
Methylene chloride; Dichloromethane	75-09-2	Methane, dichloro-	8010	—5
			8240	—5
Methyl ethyl ketone; MEK	78-93-3	2-Butanone	8015	—10
			8240	—100
Methyl iodide; Iodomethane	74-88-4	Methane, iodo-	8010	—40
			8240	—5
Methyl methacrylate	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester	8015	—2
			8240	—5
Methyl methanesulfonate	66-27-3	Methanesulfonic acid, methyl ester	8270	—10
2-Methylnaphthalene	91-57-6	Naphthalene, 2-methyl-	8270	—10
Methyl parathion; Parathion	298-00-0	Phosphorothioic acid, O,O-dimethyl	8140	—0.5

methyl		O-(4-nitrophenyl) ester	8270	—10
4-Methyl-2-pentanone; Methyl isobutyl ketone	108-10-1	2-Pentanone, 4-methyl-	8015	—5
Naphthalene	91-20-3	Naphthalene	8240	—50
			8100	—200
			8270	—10
1,4-Naphthoquinone	130-15-4	1,4-Naphthalenedione	8270	—10
1-Naphthylamine	134-32-7	1-Naphthalenamine	8270	—10
2-Naphthylamine	91-59-8	2-Naphthalenamine	8270	—10
Nickel	(Total)	Nickel	6010	—50
			7520	—400
o-Nitroaniline	88-74-4	Benzenamine, 2-nitro-	8270	—50
m-Nitroaniline	99-09-2	Benzenamine, 3-nitro-	8270	—50
p-Nitroaniline	100-01-6	Benzenamine, 4-nitro-	8270	—50
Nitrobenzene	98-95-3	Benzene, nitro-	8090	—40
			8270	—10
o-Nitrophenol	88-75-5	Phenol, 2-nitro-	8040	—5
			8270	—10
p-Nitrophenol	100-02-7	Phenol, 4-nitro-	8040	—10
			8270	—50
4-Nitroquinoline 1-oxide	56-57-5	Quinoline, 4-nitro-, 1-oxide	8270	—10
N-Nitrosodi-n-butylamine	924-16-3	1-Butanamine, N-butyl-N-nitroso-	8270	—10
N-Nitrosodiethylamine	55-18-5	Ethanamine, N-ethyl-N-nitroso-	8270	—10
N-Nitrosodimethylamine	62-75-9	Methanamine, N-methyl-N-nitroso-	8270	—10
N-Nitrosodiphenylamine	86-30-6	Benzenamine, N-nitroso-N-phenyl-	8270	—10
N-Nitrosodipropylamine; Di-n-propylnitrosamine	621-64-7	1-Propanamine, N-nitroso-N-propyl-	8270	—10
N-Nitrosomethylethylamine	10595-95-6	Ethanamine, N-methyl-N-nitroso-	8270	—10
N-Nitrosomorpholine	59-89-2	Morpholine, 4-nitroso-	8270	—10
N-Nitrosopiperidine	100-75-4	Piperidine, 1-nitroso-	8270	—10
N-Nitrosopyrrolidine	930-55-2	Pyrrolidine, 1-nitroso-	8270	—10
5-Nitro-o-toluidine	99-55-8	Benzenamine, 2-methyl-5-nitro-	8270	—10
Parathion	56-38-2	Phosphorothioic acid, O,O-diethyl-O-(4-nitrophenyl) ester	8270	—10
Polychlorinated biphenyls; PCBs	See Note 74	1,1'-Biphenyl, chloro derivatives	8080	—50
			8250	—100
Polychlorinated dibenzo-p-dioxins; PCDDs	See Note 85	Dibenzo[b,e][1,4]dioxin, chloro derivatives	8280	—0.01
Polychlorinated dibenzofurans; PCDFs	See Note 96	Dibenzofuran, chloro derivatives	8280	—0.01
Pentachlorobenzene	608-93-5	Benzene, pentachloro-	8270	—10
Pentachloroethane	76-01-7	Ethane, pentachloro-	8240	—5
			8270	—10
Pentachloronitrobenzene	82-68-8	Benzene, pentachloronitro-	8270	—10
Pentachlorophenol	87-86-5	Phenol, pentachloro-	8040	—5
			8270	—50
Phenacetin	62-44-2	Acetamide, N-(4-ethoxyphenyl)	8270	—10
Phenanthrene	85-01-8	Phenanthrene	8100	—200
			8270	—10
Phenol	108-95-2	Phenol	8040	—1
			8270	—10

p-Phenylenediamine	106-50-3	1,4-Benzenediamine	8270	—10
Phorate	298-02-2	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester	8140	—2
			8270	—10
2-Picoline	109-06-8	Pyridine, 2-methyl-	8240	—5
			8270	—10
Pronamide	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-	8270	—10
Propionitrile; Ethyl cyanide	107-12-0	Propanenitrile	8015	—60
			8240	—5
Pyrene	129-00-0	Pyrene	8100	—200
			8270	—10
Pyridine	110-86-1	Pyridine	8240	—5
			8270	—10
Safrole	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-	8270	—10
Selenium	(Total)	Selenium	6010	—750
			7740	—20
			7741	—20
Silver	(Total)	Silver	6010	—70
			7760	—100
Silvex; 2,4,5-TP	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-	8150	—2
Styrene	100-42-5	Benzene, ethenyl-	8020	—1
			8240	—5
Sulfide	18496-25-8	Sulfide	9030	10,000
2,4,5-T; 2,4,5-Trichlorophenoxyacetic acid	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-	8150	—2
2,3,7,8-TCDD; 2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6	Dibenzo[b,e][1,4]dioxin, 2,3,7,8-tetrachloro-	8280	—0.005
1,2,4,5-Tetrachlorobenzene	95-94-3	Benzene, 1,2,4,5-tetrachloro-	8270	—10
1,1,1,2-Tetrachloroethane	630-20-6	Ethane, 1,1,1,2-tetrachloro-	8010	—5
			8240	—5
1,1,2,2-Tetrachloroethane	79-34-5	Ethane, 1,1,2,2-tetrachloro-	8010	—0.5
			8240	—5
Tetrachloroethylene; Perchloroethylene; Tetrachloroethene	127-18-4	Ethene, tetrachloro-	8010	—0.5
			8240	—5
2,3,4,6-Tetrachlorophenol	58-90-2	Phenol, 2,3,4,6-tetrachloro-	8270	—10
Tetraethyl dithiopyrophosphate; Sulfotepp	3689-24-5	Thiodiphosphoric acid ([ (HO) <sub>2</sub> P(S) <sub>2</sub> O), tetraethyl ester	8270	—10
Thallium	(Total)	Thallium	6010	—400
			7840	—1,000
			7841	—10
Tin	(Total)	Tin	7870	—8,000
Toluene	108-88-3	Benzene, methyl-	8020	—2
			8240	—5
o-Toluidine	95-53-4	Benzenamine, 2-methyl-	8270	—10
Toxaphene	8001-35-2	Toxaphene	8080	—2
			8250	—10
1,2,4-Trichlorobenzene	120-82-1	Benzene, 1,2,4-trichloro-	8270	—10
1,1,1-Trichloroethane;	71-55-6	Ethane, 1,1,1-trichloro-	8240	—5

Methylchloroform				
1,1,2-Trichloroethane	79-00-5	Ethane, 1,1,2-trichloro-	8010	0.2
			8240	5
Trichloroethylene;	79-01-6	Ethene, trichloro-	8010	1
Trichloroethene			8240	5
Trichlorofluoromethane	75-69-4	Methane, trichlorofluoro-	8010	10
			8240	5
2,4,5-Trichlorophenol	95-95-4	Phenol, 2,4,5-trichloro-	8270	10
2,4,6-Trichlorophenol	88-06-2	Phenol, 2,4,6-trichloro-	8040	5
			8270	10
1,2,3-Trichloropropane	96-18-4	Propane, 1,2,3-trichloro-	8010	10
			8240	5
O,O,O-Triethyl phosphorothioate	126-68-1	Phosphorothioic acid, O,O,O-triethyl ester	8270	10
sym-Trinitrobenzene	99-35-4	Benzene, 1,3,5-trinitro-	8270	10
Vanadium	(Total)	Vanadium	6010	80
			7910	2,000
			7911	40
Vinyl acetate	108-05-4	Acetic acid, ethenyl ester	8240	5
Vinyl chloride	75-01-4	Ethene, chloro-	8010	2
			8240	10
Xylene (total)	1330-20-7	Benzene, dimethyl-	8020	5
			8240	5
Zinc	(Total)	Zinc	6010	20
			7950	50

<sup>1</sup> The rule requirements pertain only to the list of substances. The right hand columns (Methods and PQL) are given for informational purposes only. See also footnotes 5 and 6.

<sup>2</sup> Common names are those widely used in government regulations, scientific publications and commerce; synonyms exist for many chemicals.

<sup>3</sup> Chemical Abstracts Service registry number. Where "Total" is entered, all species in the groundwater that contain this element are included.

<sup>4</sup> CAS index names are those used in the 9th Cumulative Index.

<sup>5</sup> Suggested methods refer to analytical procedure numbers used in EPA SW-846, "Test Methods for Evaluating Solid Waste", incorporated by reference in s. NR 660.11. Analytical details can be found in SW-846 and in documentation on file with EPA. The packed column gas chromatography methods 8010, 8020, 8030, 8040, 8060, 8080, 8090, 8110, 8120, 8140, 8150, 8240 and 8250 were promulgated methods through update IIB of SW-846 and, as of update III, EPA has replaced these methods with "capillary column GC methods", as the suggested methods.

<sup>6</sup> Practical Quantitation Limits (PQLs) are the lowest concentrations of analytes in groundwaters that can be reliably determined within specified limits of precision and accuracy by the indicated methods under routine laboratory operating conditions. The PQLs listed are generally stated to one significant figure. CAUTION: The PQL values in many cases are based only on a general estimate for and not on a determination for individual compounds. PQLs are not a part of the rule.

<sup>74</sup>Polychlorinated biphenyls (CAS RN 1336-36-3). This category contains congener chemicals, including constituents of Aroclor-1016 (CAS RN 12674-11-2), Aroclor-1221 (CAS RN 11104-28-2), Aroclor-1232 (CAS RN 11141-16-5), Aroclor-1242 (CAS RN 53469-21-9), Aroclor-1248 (CAS RN 12672-29-6), Aroclor-1254 (CAS RN 11097-69-1) and Aroclor-1260 (CAS RN 11096-82-5). ~~The PQL shown is an average value for PCB congeners.~~

<sup>85</sup>This category contains congener chemicals, including tetrachlorodibenzo-p-dioxins (see also 2,3,7,8-TCDD), pentachlorodibenzo-p-dioxins and hexachlorodibenzo-p-dioxins. ~~The PQL shown is an average value for PCDD congeners.~~

<sup>96</sup>This category contains congener chemicals, including tetrachlorodibenzofurans, pentachlorodibenzofurans and hexachlorodibenzofurans. ~~The PQL shown is an average value for PCDF congeners.~~

SECTION 92. NR 665.0001 (3)(n) 3. is amended to read:

**NR 665.0001 (3) (n) 3.** Thermostats and mercury-containing equipment as described in s. NR 673.04.

SECTION 93. NR 665.0016 (1) (d) is created to read:

**NR 665.0016 (1) (d)** For facility personnel that receive emergency response training pursuant to occupational safety and health administration (OSHA) regulations 29 CFR 1910.120 (p) (8) and (q), the facility is not required to provide separate emergency response training pursuant to this section, provided that the overall facility training meets all the requirements of this section.

SECTION 94. NR 665.0052 (2) is amended to read:

**NR 665.0052 (2)** If the owner or operator has already prepared a spill prevention, control and countermeasures (SPCC) plan according to 40 CFR part 112 or ~~300~~ 1510 of chapter V, or some other emergency or contingency plan, the owner or operator need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this chapter. The owner or operator may develop one contingency plan which meets all regulatory requirements. The EPA recommends that the plan be based on the national response team's (NRT) integrated contingency plan guidance. When modifications are made to non-hazardous waste provisions in an integrated contingency plan, the changes do not trigger the need for a hazardous waste license modification.

SECTION 95. NR 665.0056 (9) is repealed.

SECTION 96. NR 665.0056 (10) is renumbered NR 665.0056 (9).

SECTION 97. NR 665.0072 (6)(a) is amended to read:

**NR 665.0072 (6)** (a) Write the facility's EPA ID number in Item 1 of the new manifest. Write the ~~generator's~~ facility's name and mailing address in Item 5 of the new manifest. If the mailing address is different from the ~~generator's~~ facility's site address, then write the ~~generator's~~ facility's site address in the designated space for Item 5.

SECTION 98. NR 665.0073 (2) (intro.) (a), (b), (f), (g) and (h) are amended to read:

**NR 665.0073 (2) (intro.)** All of the following information shall be recorded, as it becomes available, and maintained in the operating record until closure of the facility for 3 years unless noted as follows:

(a) A description and the quantity of each hazardous waste received, and the methods and dates of its treatment, storage or disposal at the facility as required by ch. NR 665 Appendix I. This information shall be maintained in the operating record until closure of the facility.

(b) The location of each hazardous waste within the facility and the quantity at each location. For disposal facilities, the location and quantity of each hazardous waste shall be recorded on a map or diagram of each cell or disposal area. For all facilities, this information shall include cross-references to specific manifest document numbers, if the waste was accompanied by a manifest. This information shall be maintained in the operating record until closure of the facility.

**Note:** See s. NR 665.0119 for related requirements.

(f) Maintain in the operating record for 3 years the monitoring ~~Monitoring~~, testing or analytical data, and corrective actions where required by subch. F and by ss. NR 665.0019, ~~665.090~~, 665.0094, 665.0191, 665.0193, 665.0195, ~~665.0222, 665.0223~~, 665.0224, 665.0226, 665.0255, ~~665.0259~~, 665.0260, 665.0276, 665.0278, 665.0280 (4) (a), 665.0302 ~~to~~, 665.0304, 665.0347, 665.0377, 665.1034 (3) to (6), 665.1035, 665.1063 (4) to (9), 665.1064 and 665.1083 to 665.1090. Records and results pertaining to groundwater monitoring and cleanup shall be maintained in the operating record until closure of the facility.

(g) All closure cost estimates under s. NR 665.0142 and, for disposal facilities, all long-term care cost estimates under s. NR 665.0144 shall be maintained in the operating record until closure of the facility.

(h) Records of the quantities (and date of placement) for each shipment of hazardous waste placed in land disposal units under an extension to the effective date of any land disposal restriction granted pursuant to s. NR 668.05, monitoring data required pursuant to a petition under s. NR 668.06 and the applicable notice required by a generator under s. NR 668.07 (1). All of this information shall be maintained in the operating record until closure of the facility.

SECTION 99. NR 665.0073 (2) (o) is created to read:

**NR 665.0073 (2) (o)** Monitoring, testing or analytical data, and corrective action where required by ss. NR 665.0090 and 665.0093 (4) (b) and (e), and the certification as required by s. NR 665.0196 (6) shall be maintained in the operating record until closure of the facility.

SECTION 100. NR 665.0090 (4) (a) and (c) are amended to read:

**NR 665.0090 (4)** (a) ~~By August 1, 1982~~ Within one year after the effective date of this section [legislative reference bureau inserts date], submit to the department a specific plan, certified by a qualified geologist or geotechnical engineer, which satisfies the requirements of s. NR 665.0093 (4) (c), for an alternate groundwater monitoring system. This plan shall be placed in the facility's operating record and be maintained until closure of the facility.

(c) Prepare and submit a written report in accordance with s. NR 665.0093 (4) (e), and place it in the facility's operating record and maintain it until closure of the facility.

SECTION 101. NR 665.0093 (4) (b) and (e) are amended to read:

**NR 665.0093 (4)** (b) Within 15 days after the notification under par. (a), the owner or operator shall develop and submit to the department a specific plan, based on the outline required under sub. (1) and certified by a qualified geologist or geotechnical engineer, for a groundwater quality assessment program at the facility. This plan shall be placed in the facility's operating record and be maintained until closure of the facility.

(e) The owner or operator shall make the first determination under par. (d) as soon as technically feasible, and, within 15 days after that determination, submit to the department a written report containing an assessment of the groundwater quality. This report shall be placed in the facility's operating record and be maintained until closure of the facility.

SECTION 102. NR 665.0113 (5) (e) is amended to read:

**NR 665.0113 (5)** (e) During the period of corrective action, the owner or operator shall provide ~~semi-annual~~ annual reports to the department describing the progress of the corrective action program, compile all groundwater monitoring data and evaluate the effect of the continued receipt of non-hazardous wastes on the effectiveness of the corrective action.

SECTION 103. NR 665.0115 is amended to read:

**NR 665.0115 Certification of closure.** Within 60 days of completion of closure of each hazardous waste surface impoundment, waste pile and landfill unit, and within 60 days of completion of final closure, the owner or operator shall submit to the department, by registered mail, a certification that the hazardous waste management unit or facility, as applicable, has been closed in accordance with the specifications in the approved closure plan. The certification shall be signed by the owner or operator and by ~~an independent~~ registered a qualified professional engineer. Documentation supporting the ~~independent registered~~ professional engineer's certification shall be furnished to the department upon request until the department releases the owner or operator from the financial assurance requirements for closure under s. NR 665.0143 (10).

SECTION 104. NR 665.0120 is amended to read:



**NR 665.0120 Certification of completion of long-term care.** No later than 60 days after the completion of the established long-term care period for each hazardous waste disposal unit, the owner or operator shall submit to the department, by registered mail, a certification that the long-term care period for the hazardous waste disposal unit was performed in accordance with the specifications in the approved long-term care plan. The owner or operator and ~~an independent registered~~ a qualified professional engineer shall sign the certification. Documentation supporting the ~~independent registered~~ professional engineer's certification shall be furnished to the department upon request until the department releases the owner or operator from the financial assurance requirements for long-term care under s. NR 665.0145 (10).

SECTION 105. NR 665.0143 (5) (a) 2. and (10) are amended to read:

**NR 665.0143 (5) (a) 2.** The owner or operator shall comply with the net worth test requirements of s. 289.41 (4), (6) and (7), Stats., and the minimum security requirements of s. 289.41 (9), Stats., whichever are applicable. The updated net worth test information required under s. 289.41 (4), Stats., shall be submitted annually to the department within 90 days after the close of the company's fiscal year.

**(10) RELEASE OF THE OWNER OR OPERATOR FROM THE REQUIREMENTS OF THIS SECTION.** Within 60 days after receiving certifications from the owner or operator and ~~an independent registered~~ a qualified professional engineer that final closure has been completed in accordance with the approved closure plan, the department will notify the owner or operator in writing that the owner or operator is no longer required by this section to maintain financial assurance for final closure of the facility, unless the department has reason to believe that final closure has not been in accordance with the approved closure plan. The department shall provide the owner or operator a detailed written statement of any reason to believe that closure has not been in accordance with the approved closure plan.

SECTION 106. NR 665.0145 (5) (a) 2. and (10) are amended to read:

**NR 665.0145 (5) (a) 2.** The owner shall comply with the net worth test requirements of s. 289.41 (4), (6) and (7), Stats., and the minimum security requirements of s. 289.41 (9), Stats., whichever are applicable. The updated net worth test information required under s. 289.41 (4), Stats., shall be submitted annually to the department within 90 days after the close of the company's fiscal year.

**(10) RELEASE OF THE OWNER OR OPERATOR FROM THE REQUIREMENTS OF THIS SECTION.** Within 60 days after receiving certifications from the owner or operator and ~~an independent registered~~ a qualified professional engineer that the long-term care period has been completed in accordance with the approved long-term care plan, the department will notify the owner or operator in writing that the owner or operator is no longer required by this section to maintain financial assurance for long-term care of that unit, unless the department has reason to believe that long-term care has not been in accordance with the approved long-term care plan. The department will provide the owner or operator a detailed written statement of any reason to believe that long-term care has not been in accordance with the approved long-term care plan.

SECTION 107. NR 665.0147 (5) is amended to read:

**NR 665.0147 (5) PERIOD OF COVERAGE.** Within 60 days after receiving certifications from the owner or operator and ~~an independent registered~~ a qualified professional engineer that final closure has been completed in accordance with the approved closure plan, the department will notify the owner or operator in writing that the owner or operator is no longer required to maintain liability coverage for that facility, unless the department has reason to believe that closure has not been in accordance with the approved closure plan.

SECTION 108. NR 665.0190 (1) is amended to read:

**NR 665.0190 (1)** Tank systems that are used to store or treat hazardous waste which contains no free liquids and are situated inside a building with an impermeable floor are exempted from the requirements in s. NR 664.0193. To demonstrate the absence or presence of free liquids in the stored or treated waste, the following test shall be used: ~~method~~ Method 9095B (paint filter liquids test) as described in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods”, EPA SW-846, incorporated by reference in s. NR 660.11 ~~shall be used.~~

SECTION 109. NR 665.0191 (1) and (2) (e) 2. are amended to read:

**NR 665.0191 (1)** For each existing tank system that does not have secondary containment meeting the requirements of s. NR 665.0193, the owner or operator shall determine that the tank system is not leaking or is unfit for use. Except as provided in sub. (3), the owner or operator shall obtain and keep on file at the facility a written assessment reviewed and certified by ~~an independent, a qualified, registered~~ professional engineer in accordance with s. NR 670.011 (4), that attests to the tank system’s integrity by ~~March 1, 1992~~ January 12, 1988.

**(2) (e) 2.** For other than non-enterable underground tanks and for ancillary equipment, this assessment shall be either a leak test, as described in subd. 1., or an internal inspection or other tank integrity examination certified by ~~an independent, a qualified, registered~~ professional engineer in accordance with s. NR 670.011 (4) that addresses cracks, leaks, corrosion and erosion.

SECTION 110. NR 665.0192 (1) (intro.) and (2) (intro.) are amended to read:

**NR 665.0192 (1)** (intro.) Owners or operators of new tank systems or components shall ensure that the foundation, structural support, seams, connections and pressure controls (if applicable) are adequately designed and that the tank system has sufficient structural strength, compatibility with the wastes to be stored or treated and corrosion protection so that it will not collapse, rupture or fail. The owner or operator shall obtain a written assessment reviewed and certified by ~~an independent, a qualified, registered~~ professional engineer in accordance with s. NR 670.011 (4) attesting that the system has sufficient structural integrity and is acceptable for the storing and treating of hazardous waste. This assessment shall include, at a minimum, all of the following information:

(2) (intro.) The owner or operator of a new tank system shall ensure that proper handling procedures are adhered to in order to prevent damage to the system during installation. Prior to covering, enclosing or placing a new tank system or component in use, an independent, qualified installation inspector or ~~an independent, a qualified, registered~~ professional engineer, either of whom is trained and experienced in the proper installation of tank systems, shall inspect the system or component for the presence of any of the following items:

SECTION 111. NR 665.0193 (1) is repealed and recreated to read:

**NR 665.0193 (1)** In order to prevent the release of hazardous waste or hazardous constituents to the environment, secondary containment that meets the requirements of this section shall be provided (except as provided in subs. (6) and (7)):

(a) For all new and existing tank systems or components, prior to their being put into service.

(b) For tank systems that store or treat materials that become hazardous wastes, within 2 years of the hazardous waste listing, or when the tank system has reached 15 years of age, whichever comes later.

SECTION 112. NR 665.0193 (9) (b) is amended to read:

**NR 665.0193 (9) (b)** For other than non-enterable underground tanks and for all ancillary equipment, the owner or operator shall either conduct a leak test as in par. (a), or develop a schedule and procedure for an assessment of the overall condition of the tank system by an independent, a qualified registered professional engineer. The schedule and procedure shall be adequate to detect obvious cracks, leaks and corrosion or erosion that may lead to cracks and leaks. The owner or operator shall remove the stored waste from the tank, if necessary, to allow the condition of all internal tank surfaces to be assessed. The frequency of these assessments shall be based on the material of construction of the tank and its ancillary equipment, the age of the system, the type of corrosion or erosion protection used, the rate of corrosion or erosion observed during the previous inspection and the characteristics of the waste being stored or treated.

SECTION 113. NR 665.0195 is repealed and recreated to read:

**NR 665.0195 Inspections. (1)** The owner or operator shall inspect, where present, at least once each operating day, data gathered from monitoring and leak detection equipment (for example, pressure or temperature gauges, monitoring wells) to ensure that the tank system is being operated according to its design.

**Note:** Section NR 665.0015 (3) requires the owner or operator to remedy any deterioration or malfunction found. Section NR 665.0196 requires the owner or operator to notify the department within 24 hours of confirming a release. Also, if a hazardous substance is released to the environment, 40 CFR part 302 may require the owner or operator to notify the national response center and s. 292.11, Stats, and ch. NR 706 may require the owner or operator to notify the department.

(2) Except as noted under the sub. (3), the owner or operator shall inspect at least once each operating day:

(a) Overfill and spill control equipment (for example, waste-feed cutoff systems, bypass systems, and drainage systems) to ensure that it is in good working order.

(b) Above ground portions of the tank system, if any, to detect corrosion or releases of waste.

(c) The construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system (for example, dikes) to detect erosion or signs of releases of hazardous waste (for example, wet spots, dead vegetation).

(3) Owners or operators of tank systems that either use leak detection equipment to alert facility personnel to leaks, or implement established workplace practices to ensure leaks are promptly identified, shall inspect at least weekly those areas described in sub. (2) (a) to (c). Use of the alternate inspection schedule shall be documented in the facility's operating record. This documentation shall include a description of the established workplace practices at the facility.

(4) Ancillary equipment that is not provided with secondary containment, as described in s. NR 665.0193(6)(a) to (d), shall be inspected at least once each operating day.

(6) The owner or operator shall document in the operating record of the facility an inspection of those items in subs. (1) and (2).

SECTION 114. NR 665.0196(6) is amended to read:

**NR 665.0196 (6) CERTIFICATION OF MAJOR REPAIRS.** If the owner or operator has repaired a tank system in accordance with sub. (5), and the repair has been extensive (~~e.g. for example~~, installation of an internal liner; repair of a ruptured primary containment or secondary containment vessel), the tank system may not be returned to service unless the owner or operator has obtained a certification by ~~an independent, a qualified, registered~~ professional engineer in accordance with s. NR 670.011 (4) that the repaired system is capable of handling hazardous wastes without release for the intended life of the system. This certification shall be ~~submitted to the department within 7 days after returning the tank system to use~~ placed in the operating record and maintained until closure of the facility.

SECTION 115. NR 665.0200 (Note) is repealed. (Second note following s. NR 665.0200 (2)).

SECTION 116. NR 665.0221 (1) is amended to read:

**NR 665.0221 (1)** The owner or operator of each new surface impoundment unit ~~on which construction commences after June 1, 1995~~, each lateral expansion of a surface impoundment unit ~~on which construction commences after June 1, 1995~~ and each replacement of an existing surface impoundment unit ~~that is to commence reuse after June 1, 1995~~ shall install 2 or more liners and a leachate collection and removal system between the liners, and operate the leachate collection and removal system in accordance with s. NR

664.0221 (3), unless exempted under s. NR 664.0221 (4), (5) or (6). ~~“Construction commences” is as defined in s. NR 660.10 under “existing facility”.~~

SECTION 117. NR 665.0224(1) is amended to read:

**NR 665.0224 (1)** The owner or operator of surface impoundment units subject to s. NR 665.0221 (1) shall ~~submit a response action plan to the department when submitting the proposed action leakage rate under s. NR 665.0222~~ develop and keep on site until closure of the facility a response action plan. The response action plan shall set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan shall describe the actions specified in sub. (2).

SECTION 118. NR 665.0259(1) is amended to read:

**NR 665.0259 (1)** The owner or operator of waste pile units subject to s. NR 665.0254 shall ~~submit a response action plan to the department when submitting the proposed action leakage rate under s. NR 665.0255~~ develop and keep on-site until closure of the facility a response action plan. The response action plan shall set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan shall describe the actions specified in sub. (2).

SECTION 119. NR 665.0301 (1) is amended to read:

**NR 665.0301 (1)** The owner or operator of each new landfill unit ~~on which construction commences after June 1, 1995~~, each lateral expansion of a landfill unit ~~on which construction commences after June 1, 1995~~ and each replacement of an existing landfill unit ~~that is to commence reuse after June 1, 1995~~ shall install 2 or more liners and a leachate collection and removal system above and between the liners, and operate the leachate collection and removal systems in accordance with s. NR 664.0301 (3), unless exempted under s. NR 664.0301 (4), (5) or (6). ~~“Construction commences” is as defined in s. NR 660.10 under “existing facility”.~~

SECTION 120. NR 665.0303(1) is amended to read:

**NR 665.0303 (1)** The owner or operator of landfill units subject to s. NR 665.0301 (1) shall ~~submit a response action plan to the department when submitting the proposed action leakage rate under s. NR 665.0302~~ develop and keep on site until closure of the facility a response action plan. The response action plan shall set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan shall describe the actions specified in sub. (2).

SECTION 121. NR 665.0314 (1) is repealed.

SECTION 122. NR 665.0314(2) to (7) are renumbered NR 665.0314 (1) to (6), respectively, and NR 665.0314 (1), (3) and (6) (intro.) are amended to read:

~~NR 665.0314 (2) (1) Effective April 1, 1988, the~~ **NR 665.0314 (2) (1)** ~~Effective April 1, 1988, the~~ The placement of bulk or non-containerized liquid hazardous waste or hazardous waste containing free liquids (whether or not sorbents have been added) in any landfill is prohibited.

~~(4) (3)~~ **(4) (3)** To demonstrate the absence or presence of free liquids in either a containerized or a bulk waste, the following test shall be used: Method 9095B (paint filter liquids test) as described in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods”, EPA SW-846, incorporated by reference in s. NR 660.11.

~~(7) (6) (intro.) Effective March 1, 1991, the~~ **(7) (6) (intro.)** ~~Effective March 1, 1991, the~~ The placement of any liquid which is not a hazardous waste in a landfill is prohibited unless the owner or operator of the landfill demonstrates to the department, or the department determines, that both of the following apply:

SECTION 123. NR 665.0340 (2) (a) is amended to read:

**NR 665.0340 (2) (a)** Except as provided by pars. (b) and (c), this chapter no longer applies when an owner or operator demonstrates compliance with the maximum achievable control technology (MACT) requirements of 40 CFR part 63, subpart EEE, by conducting a comprehensive performance test and submitting a notification of compliance to the ~~EPA administrator~~ department under 40 CFR 63.1207 (j) and 63.1210 (d) documenting compliance with 40 CFR part 63, subpart EEE.

SECTION 124. NR 665.0441 (1) to (3) are amended to read:

**NR 665.0441 (1)** For each existing drip pad as defined in s. NR 665.0440, the owner or operator shall evaluate the drip pad and determine that it meets all of the requirements of this subchapter, except the requirements for liners and leak detection systems of s. NR 665.0443 (2). No later than ~~June 1, 1995~~ the effective date of this section [legislative reference bureau inserts date], the owner or operator shall obtain and keep on file at the facility a written assessment of the drip pad, reviewed and certified by ~~an independent,~~ a qualified registered professional engineer that attests to the results of the evaluation. The assessment shall be reviewed, updated and re-certified annually until all upgrades, repairs or modifications necessary to achieve compliance with all of the standards of s. NR 665.0443 are complete. The evaluation shall document the extent to which the drip pad meets each of the design and operating standards of s. NR 665.0443, except the standards for liners and leak detection systems, specified in s. NR 665.0443 (2).

**(2)** The owner or operator shall develop a written plan for upgrading, repairing and modifying the drip pad to meet the requirements of s. NR 665.0443 (2), and submit the plan to the department no later than 2 years before the date that all repairs, upgrades and modifications are complete. This written plan shall describe all changes to be made to the drip pad in sufficient detail to document compliance with all the requirements of s. NR 665.0443. The plan shall be reviewed and certified by ~~an independent,~~ a qualified registered professional engineer.

(3) Upon completion of all upgrades, repairs and modifications, the owner or operator shall submit to the department, the as-built drawings for the drip pad together with a certification by ~~an independent,~~ a qualified ~~registered~~ professional engineer attesting that the drip pad conforms to the drawings.

SECTION 125. NR 665.0443 (1) (d) 2. and (7) are amended to read:

**NR 665.0443 (1) (d) 2.** The owner or operator shall obtain and keep on file at the facility a written assessment of the drip pad, reviewed and certified by ~~an independent,~~ a qualified ~~registered~~ professional engineer that attests to the results of the evaluation. The assessment shall be reviewed, updated and recertified annually. The evaluation shall document the extent to which the drip pad meets the design and operating standards of this section, except for sub. (2).

(7) The drip pad shall be evaluated to determine that it meets the requirements of subs. (1) to (6), and the owner or operator shall obtain a statement from ~~an independent,~~ a qualified ~~registered~~ professional engineer certifying that the drip pad design meets the requirements of this section.

SECTION 126. NR 665.0444 (1) is amended to read:

**NR 665.0444 (1)** During construction or installation, liners and cover systems (~~e.g. for example,~~ membranes, sheets or coatings) shall be inspected for uniformity, damage and imperfections (~~e.g. for example,~~ holes, cracks, thin spots or foreign materials). Immediately after construction or installation, liners shall be inspected and certified as meeting the requirements of s. NR 665.0443 by ~~an independent~~ a qualified, ~~registered~~ professional engineer. The certification shall be maintained at the facility as part of the facility operating record. After installation, liners and covers shall be inspected to ensure tight seams and joints and the absence of tears, punctures or blisters

SECTION 127. NR 665.1034 (3) (a) 2. and 4., (4) (a) 3., and (6) are amended to read:

**NR 665.1034 (3) (a) 2.** Method 18 or Method 25A in Appendix A of 40 CFR part 60, incorporated by reference in s. NR 660.11, for organic content. If Method 25A is used, the organic HAP used as the calibration gas shall be the single organic HAP representing the largest percent by volume of the emissions. The use of Method 25A is acceptable if the response from the high-level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale.

4. Determine total organic mass flow rates by the following equation:

a. For sources using Method 18.

$$E_h = Q_{2sd} \left\{ \sum_{i=1}^n C_i MW_i \right\} [0.0416] [10^{-6}]$$

[Drafter’s Note: The software used to write the above equation does not allow underscore to be used in subscripts. The subscript for the variable Q is being amended to include the number 2 as shown here: Q<sub>2sd</sub>.]

where:

$E_h$  = Total organic mass flow rate, kg/h

$Q_{2sd}$  = Volumetric flow rate of gases entering or exiting control device, determined by Method 2, dscm/h

$n$  = Number of organic compounds in the vent gas

$C_i$  = Organic concentration in ppm, dry basis, of compound  $i$  in the vent gas, determined by Method 18

$MW_i$  = Molecular weight of organic compound  $i$  in the vent gas, kg/kg-mol

0.0416 = Conversion factor for molar volume, kg-mol/m<sup>3</sup> (at 293 K and 760 mm Hg)

$10^{-6}$  = Conversion from ppm, ~~ppm~~<sup>-1</sup>

b. For sources using Method 25A.

$E_h = (Q)(C)(MW)(0.0416)(10^{-6})$

where:

$E_h$  = Total organic mass flow rate, kg/h

$Q$  = Volumetric flow rate of gases entering or exiting control device, as determined by Method 2, dscm/h;

$C$  = Organic concentration in ppm, dry basis, as determined by Method 25A

$MW$  = Molecular weight of propane, 44

0.0416 = Conversion factor for molar volume, kg-mol/m<sup>3</sup> (at 293 K and 760 mm Hg)

$10^{-6}$  = Conversion from ppm.

(4) (a) 3. Analyze each sample and compute the total organic concentration of the sample using Method 9060A ~~or 8260~~ of EPA SW-846, incorporated by reference in s. NR 660.11, or analyzed for its individual organic constituents.

(6) When an owner or operator and the department do not agree on whether a distillation, fractionation, thin-film evaporation, solvent extraction or air or steam stripping operation manages a hazardous waste with organic concentrations of at least 10 ppmw based on knowledge of the waste, ~~the procedures in Method 8260 of EPA SW-846, incorporated by reference in s. NR 660.11, may be used to resolve the dispute~~ may be resolved by using direct measurement as specified in sub. (4) (a).

SECTION 128. NR 665.1050 (7) is created to read:

**NR 665.1050 (7)** Purged coatings and solvents from surface coating operations subject to the national emission standards for hazardous air pollutants (NESHAP) for the surface coating of automobiles and light-duty trucks at 40 CFR part 63, subpart III, are not subject to the requirements of this subchapter.

SECTION 129. NR 665.1061 (2) (a) is repealed.

SECTION 130. NR 665.1061 (2) (b) and (c) are renumbered NR 665.1061 (2) (a) and (b), respectively.

SECTION 131. NR 665.1061 (4) is repealed.

SECTION 132. NR 665.1062 (1) (a) is renumbered NR 665.1062 (1).



SECTION 133. NR 665.1062 (b) is repealed.

SECTION 134. NR 665.1063 (4) (b) is amended to read:

**NR 665.1063 (4) (b)** Analyze each sample and compute the total organic concentration of the sample using Method 9060A or 8260 of EPA SW-846, incorporated by reference in s. NR 660.11, or analyze for its individual organic constituents.

SECTION 135. NR 665.1081 (25) is amended to read:

**NR 665.1081 (25)** “Waste stabilization process” means any physical or chemical process used to either reduce the mobility of hazardous constituents in a hazardous waste or eliminate free liquids as determined by Method 9095B (Paint Filter Liquids Test) in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,” of EPA SW-846, ~~third edition, September 1986, as amended by Update I, November 15, 1992,~~ incorporated by reference in s. NR 660.11. A waste stabilization process includes mixing the hazardous waste with binders or other materials, and curing the resulting hazardous waste and binder mixture. Other synonymous terms used to refer to this process are “waste fixation” or “waste solidification”. This does not include the adding of absorbent materials to the surface of a waste, without mixing, agitation or subsequent curing, to absorb free liquid.

SECTION 136. NR 665.1084 (1) (c) 2. c. is amended to read:

**NR 665.1084 (1) (c) 2. c.** Collect and handle all samples according to written procedures prepared by the owner or operator and documented in a site sampling plan. The plan shall describe the procedure for collecting representative samples of the hazardous waste stream which minimizes loss of organics throughout the sample collection and handling process and maintains sample integrity. Maintain a copy of the written sampling plan on-site in the facility operating records. An example of ~~an acceptable sampling plan includes a plan incorporating~~ sample collection and handling procedures ~~according to the requirements in EPA SW-846, for a total volatile organic constituent concentration may be found in Method 25D in Appendix A of 40 CFR part 60, both~~ incorporated by reference in s. NR 660.11.

SECTION 137. NR 665.1084 (1) (c) 3. is repealed and recreated to read:

**NR 665.1084 (1) (c) 3.** ‘Analysis.’ Prepare and analyze each collected sample according to Method 25D in Appendix A of 40 CFR part 60 for the total concentration of volatile organic constituents, or using one or more methods when the individual organic compound concentrations are identified and summed and the summed waste concentration accounts for and reflects all organic compounds in the waste with Henry’s law constant values of at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) [which can also be expressed as  $1.8 \times 10^{-6}$  atmospheres/gram-mole/m<sup>3</sup>] at 25 °C. At the owner or operator’s discretion, the owner or operator may adjust test data obtained by any appropriate method to

discount any contribution to the total volatile organic concentration that is a result of including a Henry's law constant value of less than 0.1 Y/X at 25 °C. To adjust these data, the measured concentration of each individual chemical constituent contained in the waste is multiplied by the appropriate constituent-specific adjustment factor ( $f_{m25D}$ ). If the owner or operator elects to adjust test data, the adjustment shall be made to all individual chemical constituents with a Henry's law constant value greater than or equal to 0.1 Y/X at 25 °C contained in the waste. Constituent specific adjustment factors ( $f_{m25D}$ ) can be obtained by contacting the Waste and Chemical Processes Group, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711. Other test methods may be used if they meet the requirements in subdivision paragraphs a. or b. and provided the requirement to reflect all organic compounds in the waste with Henry's law constant values greater than or equal to 0.1 Y/X [which can also be expressed as  $1.8 \times 10^{-6}$  atmospheres/gram-mole/m<sup>3</sup>] at 25 °C, is met.

a. Any EPA standard method that has been validated according to "Alternative Validation Procedure for EPA Waste and Wastewater Methods," Appendix D of 40 CFR part 63.

b. Any other analysis method that has been validated according to the procedures specified in Section 5.1 or Section 5.3, and the corresponding calculations in Section 6.1 or Section 6.3, of Method 301 in Appendix A of 40 CFR part 63, incorporated by reference in s. NR 660.11. The data are acceptable if they meet the criteria specified in Section 6.1.5 or Section 6.3.3 of Method 301. If correction is required under section 6.3.3 of Method 301, the data are acceptable if the correction factor is within the range 0.7 to 1.30. Other sections of Method 301 are not required.

SECTION 138. NR 665.1084(2)(c)2. c. is amended to read:

**NR 665.1084 (2)(c) 2. c.** Collect and handle all samples according to written procedures prepared by the owner or operator and documented in a site sampling plan. The plan shall describe the procedure for collecting representative samples of the hazardous waste stream which minimizes loss of organics throughout the sample collection and handling process and maintains sample integrity. Maintain a copy of the written sampling plan on-site in the facility operating records. An example of ~~an acceptable sampling plan includes a plan incorporating~~ sample collection and handling procedures for a total volatile organic constituent concentration in EPA SW-846 or may be found in Method 25D in Appendix A of 40 CFR part 60, ~~both~~ incorporated by reference in s. NR 660.11.

SECTION 139. NR 665.1084(2)(c)3. is repealed and recreated to read:

**NR 665.1084 (2)(c) 3.** 'Analysis.' Prepare and analyze each collected sample according to Method 25D in Appendix A of 40 CFR part 60 for the total concentration of volatile organic constituents, or using one or more methods when the individual organic compound concentrations are identified and summed and the summed waste concentration accounts for and reflects all organic compounds in the waste with Henry's law constant values of at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) [which can also be expressed as  $1.8 \times 10^{-6}$  atmospheres/gram-mole/m<sup>3</sup>] at 25 °C. At the owner or

operator's discretion, the owner or operator may adjust test data obtained by any appropriate method to discount any contribution to the total volatile organic concentration that is a result of including a Henry's law constant value of less than 0.1 Y/X at 25 °C. To adjust these data, the measured concentration of each individual chemical constituent contained in the waste is multiplied by the appropriate constituent-specific adjustment factor ( $f_{m25D}$ ). If the owner or operator elects to adjust test data, the adjustment shall be made to all individual chemical constituents with a Henry's law constant value greater than or equal to 0.1 Y/X at 25 °C contained in the waste. Constituent specific adjustment factors ( $f_{m25D}$ ) can be obtained by contacting the Waste and Chemical Processes Group, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711. Other test methods may be used if they meet the requirements in subdivision paragraphs a. or b. and provided the requirement to reflect all organic compounds in the waste with Henry's law constant values greater than or equal to 0.1 Y/X [which can also be expressed as  $1.8 \times 10^{-6}$  atmospheres/gram-mole/m<sup>3</sup>] at 25 °C, is met.

a. Any EPA standard method that has been validated according to "Alternative Validation Procedure for EPA Waste and Wastewater Methods," Appendix D of 40 CFR part 63.

b. Any other analysis method that has been validated according to the procedures specified in Section 5.1 or Section 5.3, and the corresponding calculations in Section 6.1 or Section 6.3, of Method 301 in Appendix A of 40 CFR part 63. The data are acceptable if they meet the criteria specified in Section 6.1.5 or Section 6.3.3 of Method 301. If correction is required under section 6.3.3 of Method 301, the data are acceptable if the correction factor is within the range 0.7 to 1.30. Other sections of Method 301 are not required.

SECTION 140. NR 665.1084 (3) (c) 1. is amended to read:

**NR 665.1084 (3) (c) 1.** 'Sampling.' Collect a sufficient number of samples to be representative of the waste contained in the tank. Collect and handle all samples according to written procedures prepared by the owner or operator and documented in a site sampling plan. The plan shall describe the procedure for collecting representative samples of the hazardous waste which minimizes loss of organics throughout the sample collection and handling process and maintains sample integrity. Maintain a copy of the written sampling plan on-site in the facility operating records. An example of an acceptable sampling plan includes a plan incorporating sample collection and handling procedures in EPA SW-846 or may be found in Method 25D in Appendix A of 40 CFR part 60, both incorporated by reference in s. NR 660.11.

SECTION 141. NR 665.1101 (3) (b) is amended to read:

**NR 665.1101 (3) (b)** Obtain and keep onsite a certification by a qualified registered professional engineer that the containment building design meets the requirements of subs. (1) and (2) and (3). For units placed into operation prior to June 1, 1995, this certification shall be placed in the facility's operating record (on-site files for generators who are not formally required to have operating records) no later than July 31, 1995. After June 1, 1995, PE certification shall be required prior to operation of the unit.

SECTION 142. NR 665.1102(3) is renumbered NR 665.1102 (2).

SECTION 143. NR 666.023 (2) is amended to read:

**NR 666.023 (2)** The use of waste or used oil or other material, which is contaminated with dioxin or any other hazardous waste (~~other than a waste identified solely on the basis of ignitability~~), for dust suppression or road treatment is prohibited.

SECTION 144. NR 666.070 (2) (b) **Note** is created to read:

**NR 666.070 (2) (b) Note:** Hazardous waste transportation licenses are not required for transporting only recyclable materials regulated under this subchapter.

SECTION 145. NR 666.080 (1) (a) to (e) are amended to read:

**NR 666.080 (1)**

If your batteries * * *	And if you * * *	Then you * * *	And you * * *
(a) Will be reclaimed through regeneration (such as by electrolyte replacement).		are exempt from chs. NR 662 (except for <del>s. NR 662.11</del> s. NR 662.011), 663, 664, 665, 666, 668 and 670, and the notification requirements at s. NR 660.07.	are subject to ch. NR 661 and <del>s. NR 662.11</del> s. NR 662.011.
(b) Will be reclaimed other than through regeneration.	generate, collect or transport these batteries.	are exempt from chs. NR 662 (except for <del>s. NR 662.11</del> s. NR 662.011), 663, 664, 665, 666 and 670, and the notification requirements at s. NR 660.07.	are subject to ch. NR 661, <del>s. NR 662.11</del> s. NR 662.011 and applicable provisions under ch. NR 668.
(c) Will be reclaimed other than through regeneration.	store these batteries but you aren't the reclaimer.	are exempt from chs. NR 662 (except for <del>s. NR 662.11</del> s. NR 662.011), 663, 664, 665, 666 and 670, and the notification requirements at s. NR 660.07.	are subject to ch. NR 661, <del>s. NR 662.11</del> s. NR 662.011 and applicable provisions under ch. NR 668.
(d) Will be reclaimed other than through regeneration.	store these batteries before you reclaim them.	shall comply with sub. (2).	are subject to ch. NR 661, <del>s. NR 662.11</del> s. NR 662.011 and applicable provisions under ch. NR 668.
(e) Will be reclaimed other than through regeneration.	don't store these batteries before you reclaim them.	are exempt from chs. NR 662 (except for <del>s. NR 662.11</del> s. NR 662.011), 663, 664, 665, 666 and 670, and the notification requirements at s. NR 660.07.	are subject to ch. NR 661, <del>s. NR 662.11</del> s. NR 662.011 and applicable provisions under ch. NR 668.

SECTION 146. NR 666.080 (2) is created to read:

**NR 666.080 (2)** If I store spent lead-acid batteries before I reclaim them but not through regeneration, which requirements apply? The requirements of this subsection apply to you if you store spent lead-acid batteries before you reclaim them, but you don't reclaim them through regeneration. The requirements are slightly different depending on your hazardous waste license status.

(a) If your facility has an interim license, you shall comply with all of the following:

1. Notification requirements under s. NR 660.07.
2. All applicable provisions in subch. A of ch. NR 665.
3. All applicable provisions in subch. B of ch. NR 665 except s. NR 665.0013 (general waste analysis).
4. All applicable provisions in subchs. C and D of ch. NR 665.
5. All applicable provisions in subch. E of ch. NR 665 except ss. NR 665.0071 and 665.0072 (use of manifest system and manifest discrepancies).
6. All applicable provisions in subchs. F to L of ch. NR 665.
7. All applicable provisions in ch. NR 670.

(b) If your facility has an operating license, you shall comply with all of the following:

1. Notification requirements under s. NR 660.07.
2. All applicable provisions in subch. A of ch. NR 664.
3. All applicable provisions in subch. B of ch. NR 664 except s. NR 664.0013 (general waste analysis).
4. All applicable provisions in subchs. C and D of ch. NR 664.
5. All applicable provisions in subch. E of ch. NR 664 except ss. NR 664.0071 and 664.0072 (use of manifest system and manifest discrepancies).
6. All applicable provisions in subchs. F to L of ch. NR 664.
7. All applicable provisions in ch. NR 670.

SECTION 147. NR 666.100 (2)(a) is amended to read:

**NR 666.100 (2)** (a) Except as provided by ~~par~~ pars. (b), (c) and (d), the standards of this subchapter do not apply to a new hazardous waste boiler or industrial furnace unit that becomes subject to hazardous waste license requirements after October 12, 2005; or no longer apply when an affected source demonstrates compliance with the maximum achievable control technology (MACT) requirements of 40 CFR part 63, subpart EEE, by conducting a comprehensive performance test and submitting to the department a notification of compliance under 40 CFR 63.1207(j) and 63.1210(d) documenting compliance with 40 CFR part 63, subpart EEE. Nevertheless, even after this demonstration of compliance with the MACT standards, hazardous waste license conditions that were based on the standards of this chapter shall continue to be in effect until the conditions are removed from the license or the license is terminated or revoked, unless the license expressly provides otherwise.

SECTION 148. NR 666.100 (2) (c) and (d) are created to read:

**NR 666.100 (2)** (c) If an owner or operator of a boiler or hydrochloric acid production furnace that is an area source under 40 CFR 63.2 and the owner or operator elects not to comply with the emission standards under 40 CFR 63.1216, 63.1217 and 63.1218 for particulate matter, semi-volatile and low volatile metals and total chlorine, the owner or operator remains subject to:

1. Section NR 666.105—Standards to control particulate matter.
2. Section NR 666.106—Standards to control metals emissions, except for mercury.
3. Section NR 666.107—Standards to control hydrogen chloride and chlorine gas.

(d) The particulate matter standard of s. NR 666.105 remains in effect for boilers that elect to comply with the alternative to the particulate matter standard under 40 CFR 63.1216(e) and 63.1217(e).

SECTION 149. NR 666.100 (4) (a) 2. is amended to read:

**NR 666.100 (4)** (a) 2. Sample and analyze the hazardous waste and other feedstocks as necessary to comply with this subsection ~~under procedures specified by Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, incorporated by reference in s. NR 660.11, or alternative methods that meet or exceed the SW-846 method performance capabilities. If SW-846 does not prescribe a method for a particular determination, the owner or operator shall use the best available method by using appropriate methods.~~

SECTION 150. NR 666.100 (7) (b) is repealed and recreated to read:

**NR 666.100 (7)** (b) Sample and analyze the hazardous waste as necessary to document that the waste contains economically significant amounts of the metals and that the treatment recovers economically significant amounts of precious metal.

SECTION 151. NR 666.102 (2) (a) and (5) (j) are amended to read:

**NR 666.102 (2)** (a) The owner or operator shall provide an analysis of the hazardous waste that quantifies the concentration of any constituent identified in ch. NR 661, Appendix VIII that may reasonably be expected to be in the waste. Such constituents shall be identified and quantified if present, at levels detectable by using appropriate analytical procedures ~~prescribed by Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, incorporated by reference in s. NR 660.11. Alternative methods that meet or exceed the method performance capabilities of SW-846 methods may be used. If SW-846 does not prescribe a method for a particular determination, the owner or operator shall use the best available method.~~ The ch. NR 661, Appendix VIII constituents excluded from this analysis shall be identified and the basis for their exclusion explained. This analysis shall be used to provide all information required by this subchapter and ss. NR 670.022 and 670.066 and to enable the department to prescribe such license conditions as necessary to protect human health and the environment. Such analysis shall be

included as a portion of the feasibility and plan of operation report, or, for facilities operating under the interim license standards of this subchapter, as a portion of the trial burn plan that may be submitted before the feasibility and plan of operation report under provisions of s. NR 670.066 (7) as well as any other analysis required by the department in preparing the license. Owners and operators of boilers and industrial furnaces not operating under the interim license standards shall provide the information required by s. NR 670.022 or 670.066 (3) in the feasibility and plan of operation report to the greatest extent possible.

(5) (j) *Recordkeeping*. The owner or operator shall keep in the operating record of the facility all information and data required by this section ~~until closure of the facility~~ for a minimum of 5 years.

SECTION 152. NR 666.103 (4) and (11) are amended to read:

**NR 666.103 (4) PERIODIC RECERTIFICATIONS.** The owner or operator shall conduct compliance testing and submit to the department a recertification of compliance under provisions of sub. (3) within ~~3~~ 5 years from submitting the previous certification or recertification. If the owner or operator seeks to recertify compliance under new operating conditions, the owner or operator shall comply with sub. (3) (h).

(11) **RECORDKEEPING.** The owner or operator shall keep in the operating record of the facility all information and data required by this section ~~until closure the boiler or industrial furnace unit~~ for a minimum of 5 years.

SECTION 153. NR 666.106 (1) is amended to read:

**NR 666.106 (1) GENERAL.** The owner or operator shall comply with the metals standards provided by subs. (2), (3), (4), (5) or (6) for each metal listed in sub. (2) that is present in the hazardous waste at detectable levels ~~by using appropriate analytical procedures specified in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, incorporated by reference in s. NR 660.11.~~

SECTION 154. NR 666.112 (2) (a) (intro.) and (b) 1. are amended to read:

**NR 666.112 (2) (a) Comparison of waste-derived residue with normal residue.** The waste-derived residue may not contain ch. NR 661, Appendix VIII constituents (toxic constituents) that could reasonably be attributable to the hazardous waste at concentrations significantly higher than in residue generated without burning or processing of hazardous waste, using the following procedure. Toxic compounds that could reasonably be attributable to burning or processing the hazardous waste (constituents of concern) include toxic constituents in the hazardous waste, and the organic compounds listed in ch. NR 661 Appendix VIII that may be generated as products of incomplete combustion. ~~Sampling and analyses shall be in conformance with procedures prescribed in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA SW-846, incorporated by reference in s. NR 660.11 (1).~~ For polychlorinated dibenzo-p-dioxins and polychlorinated dibenzo-furans, analyses shall be performed to determine specific congeners and homologues, and the results converted to 2,3,7,8-TCDD equivalent values using the procedure specified in section 4.0 of ch. NR 666 Appendix IX .

(b) 1. 'Nonmetal constituents.' The concentration of each nonmetal toxic constituent of concern (specified in par. (a)) in the waste-derived residue may not exceed the health-based level specified in ch. NR 666 Appendix VII, or the level of detection (~~using analytical procedures prescribed in SW-846~~), whichever is higher. If a health-based limit for a constituent of concern is not listed in ch. NR 666 Appendix VII, then a limit of 0.002 micrograms per kilogram or the level of detection (~~using analytical procedures contained in SW-846, or other appropriate methods~~ which shall be determined using appropriate analytical methods), whichever is higher, shall be used. The levels specified in ch. NR 666 Appendix VII (and the default level of 0.002 micrograms per kilogram or the level of detection for constituents as identified in Note 1 of ch. NR 666 Appendix VII) are administratively stayed under the condition, for those constituents specified in par. (a), that the owner or operator complies with alternative levels defined as the land disposal restriction limits specified in s. NR 668.43 for F039 nonwastewaters. In complying with those alternative levels, if an owner or operator is unable to detect a constituent despite documenting use of best good-faith efforts as defined by applicable department guidance or standards, the owner or operator is deemed to be in compliance for that constituent. Until new guidance or standards are developed, the owner or operator may demonstrate such good faith efforts by achieving a detection limit for the constituent that does not exceed an order of magnitude above the level provided by s. NR 668.43 for F039 nonwastewaters. In complying with the s. NR 668.43 F039 nonwastewater levels for polychlorinated dibenzo-p-dioxins and polychlorinated dibenzo-furans, analyses shall be performed for total hexachlorodibenzo-p-dioxins, total hexachlorodibenzofurans, total pentachlorodibenzo-p-dioxins, total pentachlorodibenzofurans, total tetrachlorodibenzo-p-dioxins and total tetrachlorodibenzofurans.

SECTION 155. NR 666.205 (1)(a) 4. is amended to read:

**NR 666.205 (1) (a) 4.** Within 90 days of ~~August 1, 2006~~ August 12, 1997 or within 90 days of when a storage unit is first used to store waste military munitions, whichever is later, the owner or operator notifies the department of the location of any waste storage unit used to store waste military munitions for which the conditional exemption in this paragraph is claimed.

SECTION 156. NR 666.902 (3) is amended to read:

**NR 666.902 (3)** All hazardous waste shall be stored in containers in a building completely enclosed with a floor, walls and roof to prevent exposure to the elements, or in an equivalent manner, if approved by the department.

SECTION 157. NR 666.903 (1) Note is amended to read:

**NR 666.903 (1) (Note):** This is a one-time notification. ~~Permanent facilities that close for the season~~ Collection facilities are not required to re-submit the form unless there is a change in ownership or facility operations. Form 4430-020 may be obtained from the department by phone (608) 266-2111 or Fax (608) 267-2768.



SECTION 157m. NR 666.903 (3) to (17) are renumbered NR 666.903(2) to (16), and NR 666.903 (11) (intro.) and (a), (12) and (13) are amended to read:

**NR 666.903 ~~(12)~~ (11)** PERSONNEL TRAINING. Train all facility personnel, either by classroom instruction or on the job training, related to job duties to ensure they are thoroughly familiar with proper waste handling procedures and are able to respond effectively to emergencies. Employees shall not work in unsupervised positions until the training is completed. The training shall:

(a) Familiarize staff with proper waste handling procedures and emergency equipment and procedures.

~~(13)~~ **(12)** ANNUAL REPORT. If any hazardous waste is shipped ~~off-site~~ to a licensed or permitted hazardous waste treatment, storage or disposal facility or recycling facility, other than a permanent collection facility, prepare and submit a single copy of an annual report to the department by March 1 of each year. The annual report shall be submitted on department forms and cover generator activities during the previous year.

~~(14)~~ **(13)** RECORDKEEPING. Retain copies of annual reports and results of any ~~certified~~ laboratory hazardous waste analyses for a minimum of ~~three~~ 3 years.

Section

SECTION 158. NR 666.905 (intro.) is created to read:

**NR 666.905 Transportation requirements.** An owner or operator of a collection facility shall ensure delivery of all hazardous waste to a licensed hazardous waste treatment, storage or disposal facility, legitimate recycling facility or permanent collection facility, according to the following:

SECTION 158d. NR 666.905 (1) is amended to read:

**NR 666.905 (1)** An owner or operator of a collection facility who offers hazardous waste for transportation ~~off-site~~ to a licensed or ~~permitted~~ hazardous waste treatment, storage or disposal facility, or recycling facility, shall ~~comply with all of the following:~~

SECTION 158h. NR 666.905 (1) (a) (Note) is created to read:

**NR 666.905 (1) (a) Note:** EPA instructions and notification form 8700-12 may be obtained from: <https://www.epa.gov/hwgenerators/instructions-and-form-hazardous-waste-generators-transporters-and-treatment-storage-and>

SECTION 158p. NR 666.905 (1) (d) and (f) (intro.) are amended to read:

**NR 666.905 (1) (d)** Mark each package of hazardous waste in accordance with the applicable U.S. department of transportation regulations on hazardous materials under 49 CFR part 172, and mark each container of ~~440~~ 119 gallons or less used in the transportation with the following words and information displayed in accordance with the requirements of 49 CFR 172.304:

“HAZARDOUS WASTE—~~State and~~ Federal Law ~~Prohibit~~ Prohibits Improper Disposal. If found, contact the nearest police or public safety authority, ~~state emergency management, state department of natural resources~~ or the U.S. Environmental Protection Agency.

Generator’s Name and Address \_\_\_\_\_.

Generator’s EPA Identification number \_\_\_\_\_.

Manifest ~~Document~~ Tracking Number \_\_\_\_\_.”

(f) (intro.) ~~The~~ Use a manifest that consists of at least the number of copies which will provide the collection facility owner or operator, each transporter, the owner or operator of the designated facility, and the department with one copy each for their records and another final, signed copy to be returned to the collection facility owner or operator. Prepare and use a manifest, OMB control number 2050-0039, on EPA form 8700-22, and if necessary, EPA Form 8700–22A, according to the instructions in the appendix to 40 CFR part 262, and the following:

SECTION 158t. NR 666.905 (2) (Note) is created to read:

**NR 666.905 (2) Note:** Under 49 CFR 171.1 (d) (5), governmental employees who self-transport hazardous materials or hazardous waste are exempt from the DOT hazardous materials requirements (including packaging, labeling, marking, placarding and manifesting) if the transportation is done solely for non-commercial, governmental purposes.

SECTION 158v. NR 666.905 (3) (c) is amended and a (Note) is created to read:

**NR 666.905 (3) (c)** Mark each package of hazardous waste in accordance with the applicable U.S. department of transportation regulations on hazardous materials under 49 CFR part 172, and mark each container of ~~140~~ 119 gallons or less used in the transportation with the following words and information displayed in accordance with the requirements of 49 CFR 172.304:

“HAZARDOUS WASTE ~~State and~~ Federal Law ~~Prohibit~~ Prohibits Improper Disposal. If found, contact the nearest police or public safety authority, ~~state emergency management, state department of natural resources~~ or the U.S. Environmental Protection Agency.

Generator’s Name and Address \_\_\_\_\_.

Generator’s EPA Identification number \_\_\_\_\_.

Manifest ~~Document~~ Tracking Number \_\_\_\_\_.”

**Note:** Under 49 CFR 171.1 (d) (5), governmental employees who self-transport hazardous materials or waste are exempt from the DOT hazardous materials requirements (including packaging, labeling, marking, placarding and manifesting) if the transportation is done solely for non-commercial, governmental purposes.

SECTION 159. NR 666 Appendix IX, Section 1.0 and Section 4.0 (intro.) are renumbered and amended to read:

**NR 666 Appendix IX, SECTION 1.0 INTRODUCTION**

This document presents required methods for demonstrating compliance with the regulations for boilers and industrial furnaces (BIFs) burning hazardous waste in subch. H. Included in this document are:

1. Performance Specifications for Continuous Emission Monitoring (CEM) of Carbon Monoxide, Oxygen, and Hydrocarbons in Stack Gases.

~~2. Sampling and Analytical (S&A) Methods for Multiple Metals, Hexavalent Chromium, HCl and Chlorine, Polychlorinated Dibenzo-p-dioxins and Dibenzofurans, and Aldehydes and Ketones.~~

~~3.~~ 2. Procedures for Estimating the Toxicity Equivalency of Chlorinated Dibenzo-p-dioxin and Dibenzofuran Congeners.

~~4.~~ 3. Hazardous Waste Combustion Air Quality Screening Procedures (HWCAQSP).

~~5.~~ 4. Simplified Land Use Classification Procedure for Compliance with Tier I and Tier II Limits.

~~6.~~ 5. Statistical Methodology for Bevill Residue Determinations.

~~7.~~ 6. Procedures for Determining Default Values for Air Pollution Control System Removal Efficiencies.

~~8.~~ 7. Procedures for Determining Default Values for Partitioning of Metals, Ash, and Total Chloride/Chlorine.

~~9.~~ 8. Alternate Methodology for Implementing Metals Controls.

a. Sampling and analytical methods for multiple metals, hexavalent chromium, HCl and chlorine, polychlorinated dibenzo-p-dioxins and dibenzofurans, and aldehydes and ketones can be found in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Publication SW-846).

Additional methods referenced in subch. H but not included in this document can be found in 40 CFR parts 60 and 61, and "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods", SW-846, incorporated by reference in s. NR 660.11.

b. The CEM performance specifications of section 2.0, the S&A methods of section 3.0 the relevant sampling Methods 0011, 0023A, 0050, 0051, 0060, and 0061 of SW-846, incorporated by reference in s. NR 660.11, and the toxicity equivalency procedure for dioxins and furans of section 4.0 are required procedures for determining compliance with BIF regulations. For the determination of chloride from HCl/Cl<sub>2</sub> emission sampling train, use appropriate methods. For the determination of carbonyl compounds by high-performance liquid chromatography, use appropriate methods. The CEM performance specifications and the S&A methods are interim. The finalized CEM performance specifications and methods will be published in SW-846 or 40 CFR parts 60 and 61.

**SECTION 4.0 PROCEDURE FOR ESTIMATING THE TOXICITY EQUIVALENCE OF CHLORINATED DIBENZO-P-DIOXIN AND DIBENZOFURAN CONGENERS**

PCDDs and PCDFs shall be determined using ~~the method given in section 3.4 of this document~~ whichever is the most recent version between SW-846 Method 0023A (incorporated by reference in s. NR

660.11) as identified, or QAQPS Method 23 in appendix A of 40 CFR part 60. In this method individual congeners or homologues<sup>1</sup> are measured and then summed to yield a total PCDD/PCDF value. No toxicity factors are specified in the method to compute risks from such emissions.

SECTION 160. NR 666 Appendix IX, Section 9.3 is amended to read:

**NR 666 Appendix IX, 9.3 Special Procedures for Ash**

This section: (1) Explains why ash feed rate limits are not applicable to cement and light-weight aggregate kilns; (2) presents the default partitioning values for ash; and (3) explains how to convert the 0.08 gr/dscf, corrected to 7%  $\Theta$  O<sub>2</sub>, PM emission limit to a PM emission rate.

Waiver for Cement and Light-Weight Aggregate Kilns. For cement kilns and light-weight aggregate kilns, raw material feed streams contain the vast majority of the ash input, and a significant amount of the ash in the feed stream is entrained into the kiln exhaust gas. For these devices, the ash content of the hazardous waste stream is expected to have a negligible effect on total ash emissions. For this reason, there is no ash feed rate compliance limit for cement kilns or light-weight aggregate kilns. Nonetheless, cement kilns and light-weight aggregate kilns are required to initially certify that PM emissions are not likely to exceed the PM limit, and subsequently, certify through compliance testing that the PM limit is not exceeded.

Default Partitioning Value for Ash. The default assumption for partitioning of ash depends on the feed stream firing system. There are 2 methods by which materials may be fired into BIFs: Suspension-firing and bed-firing.

The suspension category includes atomized and lanced pumpable liquids and suspension-fired pulverized solids. The default partitioning assumption for materials fired by these systems is that 100% of the ash partitions to the combustion gas.

The bed-fired category consists principally of stoker boilers and raw materials (and in some cases containerized hazardous waste) fed into cement and light-weight aggregate kilns. The default partitioning assumption for materials fired on a bed is that 5% of the ash partitions to the combustion gas.

Converting the PM Concentration-Based Standard to a PM Mass Emission Rate. The emission limit for BIFs is 0.08 gr/dscf, corrected to 7% O<sub>2</sub>, unless a more stringent standard applies [e.g. for example, a New Source Performance Standard (NSPS) or a State standard implemented under the State Implementation Plan (SIP)]. To convert the 0.08 gr/dscf standard to a PM mass emission rate:

1. Determine the flue gas O<sub>2</sub> concentration (% by volume, dry) and flue gas flow rate (dry standard cubic feet per minute); and
2. Calculate the allowable PM mass emission rate by multiplying the concentration-based PM emission standard times the flue gas flow rate times a dilution correction factor equal to  $[(21 - \Theta \text{ O}_2 \text{ concentration from step 1}) / (21 - 7)]$ .

SECTION 161. NR 666 Appendix IX, Sections 10.3 (2), 10.5 (1) 5<sup>th</sup> bullet, (2) 2<sup>nd</sup> bullet, (5) 3<sup>rd</sup> and 5<sup>th</sup> bullets, 10.6 (1) 4<sup>th</sup> bullet, and (5) 3<sup>rd</sup> and 4<sup>th</sup> bullets are amended to read:

**NR 666, Appendix IX, 10.3 (2)** The metal concentrations in the collected kiln dust can be accurately and representatively measured ~~(using procedures specified in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods”, SW 846, incorporated by reference in s. NR 660.11.~~

**10.5 (1) 5<sup>th</sup> bullet**

• Follow ~~the appropriate~~ guidelines described in ~~Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW 846, incorporated by reference in s. NR 660.11,~~ for preparing test plans and waste analysis plans for the following tests:

- Compliance tests to determine limits on metal feed rates in pumpable hazardous wastes and in all hazardous wastes (as well as to determine other compliance parameters);
- Initial tests to determine enrichment factors;
- Quarterly tests to verify enrichment factors;
- Analysis of hazardous waste feedstreams; and
- Daily or weekly monitoring of kiln dust for continuing compliance

**10.5 (2) 2<sup>nd</sup> bullet**

- Simultaneous stack samples and kiln dust samples shall be taken.
  - Stack sampling shall be conducted with the multiple metals train according to procedures provided in section 10.3 of this Methods Manual.
  - Kiln dust sampling shall be conducted as follows:
    - Follow ~~the appropriate~~ sampling and analytical procedures such as those described in ~~SW 846 and~~ the waste analysis plan as they pertain to the condition and accessibility of the dust.
    - Samples should be representative of the last ESP or Fabric Filter in the APCS series.

**10.5 (5) 3<sup>rd</sup> and 5<sup>th</sup> bullets**

- Follow the sampling, compositing, and analytical procedures described in this method and in ~~Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW 846, incorporated by reference in s. NR 660.11~~ other appropriate methods, as they pertain to the condition and accessibility of the kiln dust.
  - Samples shall be collected at least once every 8 hours, and a daily composite shall be prepared according to ~~SW 846~~ appropriate procedures.

**10.6 (1) 4<sup>th</sup> bullet**

• Follow ~~the appropriate~~ procedures described in ~~Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW 846, incorporated by reference in s. NR 660.11,~~ for preparing waste analysis plans for the following tasks:

**10.6 (5) 3<sup>rd</sup> and 4<sup>th</sup> bullets**

- Follow the sampling, compositing, and analytical procedures described in this method and in ~~Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW 846, incorporated by~~

~~reference in s. NR 660.11~~, other appropriate methods as they pertain to the condition and accessibility of the kiln dust.

- Samples shall be collected at least once every 8 hours, and a daily composite prepared according to ~~SW-846~~ appropriate procedures.

SECTION 162. Chapter NR 667 is created to read:

## **CHAPTER NR 667**

### **STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE FACILITIES OPERATING UNDER A STANDARDIZED LICENSE**

#### **Subchapter A—General**

NR 667.0001 What are the purpose, scope and applicability of this chapter?

NR 667.0002 What is the relationship to interim license standards?

NR 267.0003 How does this chapter affect an imminent hazard action?

#### **Subchapter B—General Facility Standards**

NR 667.0010 Does this subchapter apply to me?

NR 667.0011 What must I do to comply with this subchapter?

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### **Subchapter A—General**

**NR 667.0001 Purpose, scope and applicability (1)** The purpose of this chapter is to establish minimum standards which define the acceptable management of hazardous waste under a ch. NR 670 subchapter J standardized license.

(2) This chapter applies to owners and operators of facilities who treat or store hazardous waste under a ch. NR 670, subchapter J standardized license, except as provided otherwise in subch. A of ch. NR 661, or s. NR 664.001(6) and (7).

**NR 667.0002 What is the relationship to interim license standards?** If you are a facility owner or operator who has fully complied with the requirements for an interim license, as defined in s. NR 670.002(13) and rules under s. NR 670.070, comply with the rules specified in ch. NR 665 instead of the rules in this chapter, until final administrative disposition of the standardized license application is made, except as provided under ch. NR 664, subchapter S.

**NR 667.0003 How does this chapter affect an imminent hazard action?** Notwithstanding any other provisions of this chapter, enforcement actions may be brought pursuant to section 7003 of RCRA, and chs. 289 and 291, Stats., and other applicable law.

### **Subchapter B—General Facility Standards**

**NR 667.0010 Does this subchapter apply to me?** This subchapter applies to owner or operators of a facility that treats or stores hazardous waste under a ch. NR 670, subchapter J standardized license, except as provided in s. NR 667.001(2).

**NR 667.0011 What shall I do to comply with this subchapter?** To comply with this subchapter, obtain an identification number, and follow the requirements below for waste analysis, security, inspections, training, special waste handling and location standards.

**NR 667.0012 How do I obtain an identification number?** Apply to the department for an EPA identification number using the EPA form 8700–12. You may obtain information from the department by phone (608) 266-2111. The form is available at: <https://www.epa.gov/hwgenerators/instructions-and-form-hazardous-waste-generators-transporters-and-treatment-storage-and>

**NR 667.0013 What are the waste analysis requirements?** (1) Before treating or storing any hazardous wastes, obtain a detailed chemical and physical analysis of a representative sample of the wastes. At a minimum, the analysis shall contain all the information needed to treat or store the waste to comply with this chapter and ch. NR 668.

(a) You may include data in the analysis that was developed under ch. NR 661, and published or documented data on the hazardous waste or on hazardous waste generated from similar processes.

(b) Repeat the analysis as necessary to ensure that it is accurate and up to date. At a minimum, repeat the analysis if the process or operation generating the hazardous wastes has changed.

(2) Develop and follow a written waste analysis plan that describes the procedures you will follow to comply with sub. (1). Keep the waste analysis plan at the facility. If you receive wastes generated from off-site and are eligible for a standardized license, you also shall have submitted the waste analysis plan with the notice of intent. At a minimum, the plan shall specify all of the following:

(a) The hazardous waste parameters that you will analyze and the rationale for selecting these parameters (that is, how analysis for these parameters will provide sufficient information on the waste's properties to comply with sub. (1)).

(b) The test methods you will use to test for these parameters.

(c) The sampling method you will use to obtain a representative sample of the waste to be analyzed.

You may obtain a representative sample using either:

1. One of the sampling methods described in Appendix I of ch. NR 661.

2. An equivalent sampling method.

(d) How frequently you will review or repeat the initial analysis of the waste to ensure that the analysis is accurate and up to date.

(e) Where applicable, the methods you will use to meet the additional waste analysis requirements for specific waste management methods as specified in ss. NR 664.0017, 664.1034 (4), 664.1063 (4) and 664.1083.

**NR 667.0014 What are the security requirements?** (1) Prevent, and minimize the possibility for, livestock and unauthorized people from entering the active portion of your facility.

(2) Your facility shall have the security requirements in either (a) or (b), and the controlled entry requirement in (c):

(a) A 24-hour surveillance system (for example, television monitoring or surveillance by guards or facility personnel) that continuously monitors and controls entry onto the active portion of the facility.

(b) An artificial or natural barrier (for example, a fence in good repair or a fence combined with a cliff) that completely surrounds the active portion of the facility.

(c) A means to control entry, at all times, through the gates or other entrances to the active portion of the facility (for example, an attendant, television monitors, locked entrance or controlled roadway access to the facility).

(3) Post a sign at each entrance to the active portion of a facility, and at other prominent locations, in sufficient numbers to be seen from any approach to this active portion. The sign shall bear the legend “Danger—Unauthorized Personnel Keep Out.” The legend shall be in English and in any other language predominant in the area surrounding the facility, and shall be legible from a distance of at least 25 feet. You may use existing signs with a legend other than “Danger—Unauthorized Personnel Keep Out” if the legend on the sign indicates that only authorized personnel are allowed to enter the active portion and that entry onto the active portion can be dangerous.

**NR 667.0015 What are the general inspection requirements? (1)** Inspect your facility for malfunctions and deterioration, operator errors and discharges that may be causing, or may lead to either:

(a) Release of hazardous waste constituents to the environment.

(b) A threat to human health. Conduct the inspections often enough to identify problems in time to correct them before they result in harm to human health or the environment.

(2) Develop and follow a written schedule for inspecting, monitoring equipment, safety and emergency equipment and security devices (such as dikes and sump pumps) that are important to preventing, detecting, or responding to environmental or human health hazards.

(a) Keep the written schedule at the facility.

(b) The schedule shall identify the equipment and devices you will inspect and what problems you look for, such as malfunctions or deterioration of equipment (for example, inoperative sump pump or leaking fitting).

(c) The frequency of your inspections may vary for the items on the schedule. However, the frequency should be based on the rate of deterioration of the equipment and the probability of an environmental or human health incident if the deterioration, malfunction, or any operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, shall be inspected daily when in use. At a minimum, the inspection schedule shall include the items and frequencies required in ss. NR 667.0174, 667.0193, 667.0195, 667.1103 and 664.1033, 664.1052, 664.1053, 664.1058, and 664.1083 to 664.1089, where applicable.

(3) Remedy any deterioration or malfunction of equipment or structures that the inspection reveals in time to prevent any environmental or human health hazard. Where a hazard is imminent or has already occurred, take remedial action immediately.

(4) Record all inspections and keep the records for at least 3 years from the date of inspection. At a minimum, include the date and time of the inspection, the name of the inspector, a notation of the observations made and the date and nature of any repairs or other remedial actions.

**NR 667.0016 What training shall my employees have? (1)** Your facility personnel shall successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility’s compliance with the requirements of this chapter. Ensure that this program includes all the elements described in the documents that are required under sub. (4)(c).

(a) A person trained in hazardous waste management procedures shall direct this program, and shall teach facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to their employment positions.

(b) At a minimum, the training program shall be designed to ensure that facility personnel are able to respond effectively to emergencies by including instruction on emergency procedures, emergency equipment and emergency systems, including all of the following, where applicable:

1. Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment.
2. Key parameters for automatic waste feed cut-off systems.
3. Communications or alarm systems.
4. Response to fires or explosions.
5. Response to ground water contamination incidents.
6. Shutdown of operations.

(2) Facility personnel shall complete the program required in sub. (1) within six months after the date of their employment or assignment to a facility, or to a new position at a facility, whichever is later. Employees hired after the effective date of your standardized license may not work in unsupervised positions until they have completed the training requirements of sub. (1).

(3) Facility personnel shall take part in an annual review of the initial training required in sub. (1).

(4) Maintain the following documents and records at your facility:

(a) The job title for each position at the facility related to hazardous waste management and the name of the employee filling each job.

(b) A written job description for each position listed under par. (a). The description shall include the requisite skill, education, or other qualifications and duties of employees assigned to each position.

(c) A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position listed under par. (a).

(d) Records documenting that facility personnel have received and completed the training or job experience required under subs. (1) to (3).

(5) Keep training records on current personnel until your facility closes. Keep training records on former employees for at least 3 years from the date the employee last worked at your facility. Personnel training records may accompany personnel transferred within your company.

**NR 667.0017 What are the requirements for managing ignitable, reactive or incompatible wastes?** (1) Take precautions to prevent accidental ignition or reaction of ignitable or reactive waste by following these requirements:

(a) Separate these wastes and protect them from sources of ignition or reaction, such as open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition (for example, from heat-producing chemical reactions) and radiant heat.

(b) While ignitable or reactive waste is being handled, confine smoking and open flames to specially designated locations.

(c) “No Smoking” signs shall be conspicuously placed wherever there is a hazard from ignitable or reactive waste.

(2) If you treat or store ignitable or reactive waste or mix incompatible waste or incompatible wastes and other materials, take precautions to prevent reactions that:

(a) Generate extreme heat or pressure, fire or explosions, or violent reactions.

(b) Produce uncontrolled toxic mists, fumes, dusts or gases in sufficient quantities to threaten human health or the environment.

(c) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions.

(e) Damage the structural integrity of the device or facility.

(f) Threaten human health or the environment in any similar way.

(3) Document compliance with subs. (1) and (2). You may base this documentation on references to published scientific or engineering literature, data from trial tests (for example bench scale or pilot scale tests), waste analyses (as specified in s. NR 667.0013) or the results of the treatment of similar wastes by similar treatment processes and under similar operating conditions.

**NR 667.0018 What are the standards for selecting the location of my facility?**

**Note:** There is no location standard for seismic considerations in Wisconsin. See Appendix VI of 40 CFR part 264 for more information.

(2) If your facility is located in a 100-year flood plain, it shall be designed, constructed, operated and maintained to prevent washout of any hazardous waste by a 100-year flood.

(a) “100-year flood plain” means any land area that is subject to a one percent or greater chance of flooding in any given year from any source.

(b) “Washout” means the movement of hazardous waste from the active portion of the facility as a result of flooding.

(c) “100-year flood” means a flood that has a one percent chance of being equaled or exceeded in any given year

**Subchapter C—Preparedness and Prevention**

**NR 667.0030 Does this subchapter apply to me?** This subchapter applies to you if you own or operate a facility that treats or stores hazardous waste under a ch. NR 670 subchapter J standardized license, except as provided in s. NR 667.0001 (2).

**NR 667.0031 What are the general design and operation standards?** Design, construct, maintain and operate your facility to minimize the possibility of a fire, explosion or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water that could threaten human health or the environment.

**NR 667.0032 What equipment am I required to have?** Equip your facility with all of the following, unless none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below:

- (1) An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel.
- (2) A device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments or local or state emergency response teams.
- (3) Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas or dry chemicals), spill control equipment and decontamination equipment.
- (4) Water at adequate volume and pressure to supply water hose streams, or foam-producing equipment, or automatic sprinklers or water spray systems.

**NR 667.0033 What are the testing and maintenance requirements for the equipment?** Test and maintain all required facility communications or alarm systems, fire protection equipment, spill control equipment and decontamination equipment, as necessary, to assure its proper operation in time of emergency.

**NR 667.0034 When shall personnel have access to communication equipment or an alarm system?** (1) Whenever hazardous waste is being poured, mixed, spread or otherwise handled, all personnel involved in the operation shall have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless the device is not required under s. NR 667.0032.

(2) If just one employee is on the premises while the facility is operating, that person shall have immediate access to a device, such as a telephone (immediately available at the scene of operation) or a hand-held two-way radio, capable of summoning external emergency assistance, unless not required under s. NR 667.0032.

**NR 667.0035 How do I ensure access for personnel and equipment during emergencies?** Maintain enough aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of facility operation in an emergency, as appropriate, considering the type of waste being stored or treated.

**NR 667.0036 What arrangements shall I make with local authorities for emergencies?** (1) Attempt to make the following arrangements, as appropriate, for the type of waste handled at your facility and the potential need for the services of these organizations:

(a) Arrangements to familiarize police, fire departments and emergency response teams with the layout of the facility, properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to and roads inside the facility and possible evacuation routes.

(b) Agreements designating primary emergency authority to a specific police and a specific fire department where more than one police and fire department might respond to an emergency and agreements with any others to provide support to the primary emergency authority.

(c) Agreements with state emergency response teams, emergency response contractors and equipment suppliers.

(d) Arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses that could result from fires, explosions or releases at the facility.

(2) If state or local authorities decline to enter into such arrangements, document the refusal in the operating record.

#### **Subchapter D—Contingency Plan and Emergency Procedures**

**NR 667.0050 Does this subchapter apply to me?** This subchapter applies to you if you own or operate a facility that treats or stores hazardous waste under a ch. NR 670 subchapter J standardized license, except as provided in s. NR 667.0001 (2).

**NR 667.0051 What is the purpose of the contingency plan and how do I use it?** (1) You shall have a contingency plan for your facility. Design the plan to minimize hazards to human health or the environment from fires, explosions or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water.

(2) Implement the provisions of the plan immediately whenever there is a fire, explosion or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

**NR 667.0052 What must be in the contingency plan?** (1) Your contingency plan shall:

(a) Describe the actions facility personnel will take to comply with ss. NR 667.0051 and 667.0056 in response to fires, explosions or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water at the facility.

(b) Describe all arrangements agreed upon under s. NR 667.0036 by local police departments, fire departments, hospitals, contractors and state and local emergency response teams to coordinate emergency services.

(c) List names, addresses and phone numbers (office and home) of all persons qualified to act as emergency coordinator (see s. NR 667.0055), and keep the list up to date. Where more than one person is listed, name one as primary emergency coordinator and list the others in the order in which they will assume responsibility as alternates.

(d) Include a current list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external) and decontamination equipment), where this equipment is required. In addition, include the location and a physical description of each item on the list and a brief outline of its capabilities.

(e) Include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. Describe signals to be used to begin evacuation, evacuation routes and alternate evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste or fires).

(2) If you have already prepared a Spill Prevention, Control and Countermeasures (SPCC) Plan under 40 CFR part 112, or some other emergency or contingency plan, amend that plan to incorporate hazardous waste management provisions that will comply with the requirements of this subchapter.

**NR 667.0053 Who is required to have copies of the contingency plan?** (1) Maintain a copy of the plan with all revisions at the facility.

(2) Submit a copy with all revisions to all local police departments, fire departments, hospitals, and state and local emergency response teams that may be called upon to provide emergency services.

**NR 667.0054 When shall I amend the contingency plan?** Review, and immediately amend the contingency plan, if necessary, whenever:

(1) The facility operating license is revised.

(2) The plan fails in an emergency.

(3) You change the facility (in its design, construction, operation, maintenance or other circumstances) in a way that materially increases the potential for fires, explosions or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency.

(4) You change the list of emergency coordinators.

(5) You change the list of emergency equipment.

**NR 667.0055 What is the role of the emergency coordinator?** At least one employee shall be either on the facility premises or on call at all times (that is, available to respond to an emergency by reaching the facility within a short period of time) who has the responsibility for coordinating all emergency response measures. This emergency coordinator shall be thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristics of waste handled, the location of all records within the facility and the facility layout. In addition, this person shall have the authority to commit the resources needed to carry out the contingency plan.

**NR 667.0056 What are the required emergency procedures for the emergency coordinator?** (1) Whenever there is an imminent or actual emergency situation, the emergency coordinator (or a designee when the emergency coordinator is on call) shall immediately:

(a) Activate internal facility alarm or communication systems, where applicable, to notify all facility personnel.

(b) Notify appropriate state or local agencies with designated response roles if their help is needed.

(2) Whenever there is a release, fire or explosion, the emergency coordinator shall:

(a) Immediately identify the character, exact source, amount and areal extent of any released materials.

This may be done this by observation or review of facility records or manifests, and, if necessary, by chemical analysis.



(b) Assess possible hazards to human health or the environment that may result from the release, fire or explosion. This assessment shall consider both direct and indirect effects of the release, fire or explosion. For example, the assessment would consider the effects of any toxic, irritating or asphyxiating gases that are generated, or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and heat-induced explosions.

(3) If the emergency coordinator determines that the facility has had a release, fire or explosion which could threaten human health or the environment outside the facility, the emergency coordinator shall report the findings as follows:

(a) If the assessment indicates that evacuation of local areas may be advisable, immediately notify appropriate local authorities and be available to help appropriate officials decide whether local areas should be evacuated.

(b) Immediately notify either the government official designated as the on-scene coordinator for that geographical area, or the National Response Center (using its 24-hour toll free number (800) 424-8802) or Wisconsin Emergency Management (using its 24-hour toll free number (800) 943-0003). The report shall include:

1. Name and telephone number of the reporter.
2. Name and address of facility.
3. Time and type of incident (for example, a release or a fire).
4. Name and quantity of materials involved, to the extent known.
5. The extent of injuries, if any.
6. The possible hazards to human health or the environment outside the facility.

(4) During an emergency, the emergency coordinator shall take all reasonable measures necessary to ensure that fires, explosions and releases do not occur, recur or spread to other hazardous waste at the facility. These measures shall include, where applicable, stopping processes and operations, collecting and containing release waste and removing or isolating containers.

(5) If the facility stops operations in response to a fire, explosion or release, the emergency coordinator shall monitor for leaks, pressure buildup, gas generation or ruptures in valves, pipes, or other equipment, when appropriate.

**NR 667.0057 What shall the emergency coordinator do after an emergency?** (1) Immediately after an emergency, the emergency coordinator shall provide for treating, storing or disposing of recovered waste, contaminated soil or surface water or any other material that results from a release, fire or explosion at the facility.

(2) The emergency coordinator shall ensure that, in the affected area or areas of the facility:

(a) No waste that may be incompatible with the released material is treated, stored or disposed of until cleanup procedures are completed.

(b) All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

**NR 667.0058 What notification and recordkeeping shall I do after an emergency?** (1) Notify the department and appropriate state and local authorities that the facility is in compliance with s. NR 667.0057 (2) before operations are resumed in the affected area or areas of the facility.

(2) Note the time, date and details of any incident that requires implementing the contingency plan in the operating record. Within 15 days after the incident, submit a written report on the incident to the department. Include all of the following in the report:

- (a) The name, address and telephone number of the owner or operator.
- (b) The name, address and telephone number of the facility.
- (c) The date, time and type of incident (for example, fire, explosion).
- (d) The name and quantity of material or materials involved.
- (e) The extent of injuries, if any.
- (f) An assessment of actual or potential hazards to human health or the environment, where this is applicable.
- (g) The estimated quantity and disposition of recovered material that resulted from the incident.

#### **Subchapter E—Recordkeeping, Reporting, and Notifying**

**NR 667.0070 Does this subchapter apply to me?** This subchapter applies to you if you own or operate a facility that stores or non-thermally treats a hazardous waste under a ch. NR 670, subchapter J standardized license, except as provided in s. NR 667.0001 (2). In addition, comply with the manifest requirements of ch. NR 662 whenever you initiate a shipment of hazardous waste from your facility.

**NR 667.0071 Use of the manifest system** (1) If a facility receives hazardous waste accompanied by a manifest, the owner or operator or an agent, shall:

- (a) Sign and date each copy of the manifest to certify that the hazardous waste covered by the manifest was received.
- (b) Note any significant discrepancies in the manifest (as defined in s. NR 667.0072 (1)) on each copy of the manifest.
- (c) Immediately give the transporter at least one copy of the signed manifest;
- (d) Within 30 days after the delivery, send a copy of the manifest to the generator.
- (e) Retain at the facility a copy of each manifest for at least 3 years from the date of delivery.

(2) If a facility receives, from a rail or water (bulk shipment) transporter, hazardous waste which is accompanied by a shipping paper containing all the information required on the manifest (excluding the EPA identification numbers, generator's certification and signatures), the owner or operator or an agent, shall:

(a) Sign and date each copy of the manifest or shipping paper (if the manifest has not been received) to certify that the hazardous waste covered by the manifest or shipping paper was received.

(b) Note any significant discrepancies (as defined in s. NR 667.0072 (1)) in the manifest or shipping paper (if the manifest has not been received) on each copy of the manifest or shipping paper. Note that the department does not intend that the owner or operator of a facility whose procedures under s. NR 667.0013

include waste analysis must perform that analysis before signing the shipping paper and giving it to the transporter. Section NR 667.0072 (2), however, requires reporting an unreconciled discrepancy discovered during later analysis.

(c) Immediately give the rail or water (bulk shipment) transporter at least one copy of the manifest or shipping paper (if the manifest has not been received).

(d) Within 30 days after the delivery, send a copy of the signed and dated manifest to the generator; however, if the manifest has not been received within 30 days after delivery, the owner or operator or an agent, shall send a copy of the shipping paper signed and dated to the generator. Note that ss. NR 662.023 (4) and (5) require the generator to send 3 copies of the manifest to the facility when hazardous waste is sent by rail or water (bulk shipment).

(e) Retain at the facility a copy of the manifest and shipping paper (if signed in lieu of the manifest at the time of delivery) for at least 3 years from the date of delivery.

(3) Whenever a shipment of hazardous waste is initiated from a facility, the owner or operator of that facility shall comply with the requirements of ch. NR 662. The department notes that the provisions of s. NR 662.034 are applicable to the on-site accumulation of hazardous wastes by generators. Therefore, the provisions of s. NR 662.034 only apply to owners or operators who are shipping hazardous waste which they generated at that facility.

(4) Within 3 working days of the receipt of a shipment subject to 40 CFR part 262, subchapter H, the owner or operator of the facility shall provide a copy of the tracking document bearing all required signatures to the notifier, to the Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, Targeting and Data Division (2222A), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460 and to competent authorities of all other concerned countries. The original copy of the tracking document shall be maintained at the facility for at least 3 years from the date of signature.

**NR 667.0072 Manifest discrepancies (1)** Manifest discrepancies are differences between the quantity or type of hazardous waste designated on the manifest or shipping paper and the quantity or type of hazardous waste a facility actually receives. Significant discrepancies in quantity are:

(a) For bulk waste, variations greater than 10 percent in weight.

(b) For batch waste, any variation in piece count, such as a discrepancy of one drum in a truckload. Significant discrepancies in type are obvious differences which can be discovered by inspection or waste analysis, such as waste solvent substituted for waste acid or toxic constituents not reported on the manifest or shipping paper.

(2) Upon discovering a significant discrepancy, the owner or operator shall attempt to reconcile the discrepancy with the waste generator or transporter (for example, with telephone conversations). If the discrepancy is not resolved within 15 days after receiving the waste, the owner or operator shall immediately submit a letter to the department describing the discrepancy and attempts to reconcile it and a copy of the manifest or shipping paper at issue.

**NR 667.0073 What information shall I keep?** (1) Keep a written operating record at your facility.

(2) Record the following information, as it becomes available and maintain the operating record until you close the facility:

(a) A description and the quantity of each type of hazardous waste generated and the methods and dates of its storage or treatment at the facility as required by Appendix I of ch. NR 664.

(b) The location of each hazardous waste within the facility and the quantity at each location.

(c) Records and results of waste analyses and waste determinations you perform as specified in ss. NR 667.0013, 667.0017, 664.1034, 664.1063, 664.1083 and 668.07.

(d) Summary reports and details of all incidents that require implementing the contingency plan as specified in s. NR 667.0058 (2).

(e) Records and results of inspections as required by s. NR 667.0015 (4) (keep these data for a minimum of 3 years).

(f) Monitoring, testing or analytical data and corrective action when required by subch. F and ss. NR 667.0191, 667.0193, 667.0195, 664.1034 (3) to 664.1034 (6), 664.1035, 664.1063 (4) to 664.1063 (9), 664.1064, 664.1088, 664.1089 and 664.1090.

(g) All closure cost estimates under s. NR 667.0142.

(h) A certification, at least annually, that you have a program in place to reduce the volume and toxicity of hazardous waste generated, to the degree that you determine to be economically practicable, and that the proposed method of treatment or storage is that practicable method currently available to minimize the present and future threat to human health and the environment;

(i) For an on-site treatment facility, the information contained in the notice (except the manifest number) and the certification and demonstration, if applicable, required under s. NR 668.07.

(j) For an on-site storage facility, the information in the notice (except the manifest number) and the certification and demonstration, if applicable, required under s. NR 668.07.

(k) For an off-site treatment facility, a copy of the notice and the certification and demonstration, if applicable, required by the generator or the owner or operator under ss. NR 668.07 or 668.08.

(L) For an off-site storage facility, a copy of the notice and the certification and demonstration, if applicable, required by the generator or the owner or operator under ss. NR 668.07 or 668.08.

**NR 667.0074 Who sees the records?** (1) You shall furnish all records, including plans, required under this chapter upon the request of any officer, employee or representative of the department and make them available at all reasonable times for inspection.

(2) The retention period for all records required under this chapter is extended automatically during the course of any unresolved enforcement action involving the facility or as requested by the department.

**NR 667.0075 What reports shall I prepare and to whom do I send them?** The owner or operator shall prepare an annual report and other reports listed in sub. (2).

(1) **ANNUAL REPORT.** Prepare and submit a single copy of an annual report to the department by March 1 of each year. The annual report shall be submitted on forms specified by the department. The report shall cover facility activities during the previous calendar year and shall include:

- (a) The EPA identification number, name, and address of the facility.
- (b) The calendar year covered by the report.
- (c) The method of treatment or storage for each hazardous waste.
- (d) The most recent closure cost estimate under s. NR 667.0142.
- (e) A description of the efforts undertaken during the year to reduce the volume and toxicity of generated waste.

(f) A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent such information is available for the years prior to 1984.

- (g) The certification signed by you.

**Note:** Information on annual reporting is available at: <http://dnr.wi.gov/topic/waste/annualreport.html>

(2) **ADDITIONAL REPORTS.** In addition to submitting the annual reports, you shall also report to the department:

- (a) Releases, fires and explosions as specified in s. NR 667.0058 (2).
- (b) Facility closures specified in s. NR 667.0117.
- (c) As otherwise required by subchs. I, J and DD of this chapter and ch. NR 664, subchs. AA, BB and CC.

(3) For off-site facilities, the EPA identification number of each hazardous waste generator from which the facility received a hazardous waste during the year; for imported shipments, the report shall give the name and address of the foreign generator.

(4) A description and the quantity of each hazardous waste the facility received during the year. For off-site facilities, this information shall be listed by EPA identification number of each generator.

**NR 667.0076 What notifications shall I make?** Before transferring ownership or operation of a facility during its operating life, the owner or operator shall notify the new owner or operator in writing of the requirements of this chapter and ch. NR 670, subch. J.

#### **Subchapter F—Releases from Solid Waste Management Units**

**NR 667.0090 Who shall comply with this section?** This subchapter applies to you if you own or operate a facility that treats or stores hazardous waste under a ch. NR 670, subchapter J standardized license, except as provided in s. NR 667.0001 (2), or unless your facility already has a license that imposes requirements for corrective action under s. NR 664.0101.

**NR 667.0101 What shall I do to address corrective action for solid waste management units? (1)** You shall institute corrective action as necessary to protect human health and the environment for all releases of hazardous waste or constituents from any solid waste management unit at the facility, regardless of the time at which waste was placed in such unit.

(2) The department shall specify corrective action in the supplemental portion of your standardized license in accordance with this section and ch. NR 664, subch. S. The department shall include in the supplemental portion of your standardized license schedules of compliance for corrective action (where corrective action cannot be completed prior to issuance of the license) and assurances of financial responsibility for completing corrective action.

(3) You shall implement corrective action beyond the facility property boundary, where necessary to protect human health and the environment, unless you demonstrate to the satisfaction of the department that, despite your best efforts, you were unable to obtain the necessary permission to undertake such actions. You are not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where off-site access is denied. On-site measures to address such releases will be determined on a case-by-case basis. You shall provide assurances of financial responsibility for corrective action.

(4) You are not required to comply with this section if you are the owner or operator of a remediation waste site unless your site is part of a facility that is subject to a license for treating, storing or disposing of hazardous wastes that are not remediation wastes.

### **Subchapter G—Closure**

**NR 667.0110 Does this subchapter apply to me?** This subchapter applies to you if you own or operate a facility that treats or stores hazardous waste under a ch. NR 670, subchapter J standardized license, except as provided in s. NR 667.0001 (2).

**NR 667.0111 What general standards shall I meet when I stop operating the unit?** You shall close the storage and treatment units in a manner that:

(1) Minimizes the need for further maintenance.

(2) Controls, minimizes or eliminates, to the extent necessary to protect human health and the environment, postclosure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off or hazardous waste decomposition products to the ground or surface waters or to the atmosphere.

(3) Meets the closure requirements of this subchapter and the requirements of ss. NR 667.0176, 667.0201 and 667.1108. If you determine that, when applicable, the closure requirements of ss. NR 667.0201(tanks) or 667.1108 (containment buildings) cannot be met, then you shall close the unit according to the requirements that apply to landfills (s. NR 664.0310). In addition, for the purposes of postclosure care and financial responsibility, the tank system or containment building is then considered to be a landfill and you shall apply for a long-term care license according to ch. NR 670.

**NR 667.0112 What procedures shall I follow?** (1) To close a facility, follow your department-approved closure plan and follow notification requirements.

(a) Submit your closure plan at the time you submit your notice of intent to operate under a standardized license. Final issuance of the standardized license constitutes approval of the closure plan and the plan becomes a condition of the standardized license.

(b) The department's approval of the plan shall ensure that the approved plan is consistent with ss. NR 667.0111 to 667.0115, 667.0176, 667.0201 and 667.1108.

(2) Satisfy the requirements for content of closure plan. The closure plan shall identify steps necessary to perform partial and final closure of the facility. The closure plan shall include, at least:

(a) A description of how each hazardous waste management unit at the facility subject to this subchapter will be closed according to s. NR 667.0111.

(b) A description of how final closure of the facility will be conducted according to s. NR 667.0111. The description shall identify the maximum extent of the operations which will be unclosed during the active life of the facility.

(c) An estimate of the maximum inventory of hazardous wastes ever on site during the active life of the facility and a detailed description of the methods you shall use during partial and final closure, such as methods for removing, transporting, treating, storing or disposing of all hazardous wastes and identification of the types of off-site hazardous waste management units to be used, if applicable.

(d) A detailed description of the steps necessary to remove or decontaminate all hazardous waste residues and contaminated containment system components, equipment, structures and soils during partial or final closure. These steps may include procedures for cleaning equipment and removing contaminated soils, methods for sampling and testing surrounding soils and criteria for determining the extent of decontamination required to satisfy the closure performance standards.

(e) A detailed description of other activities necessary during the closure period to ensure that partial or final closure satisfies the closure performance standards.

(f) A schedule for closure of each hazardous waste management unit and for final closure of the facility. The schedule shall include, at a minimum, the total time required to close each hazardous waste management unit and the time required for intervening closure activities that allow tracking of progress of partial or final closure.

(g) For facilities that use trust funds to establish financial assurance under s. NR 667.0143 and that are expected to close prior to the expiration of the license, an estimate of the expected year of final closure.

(3) You may submit a written notification to the department for a license modification to amend the closure plan at any time prior to the notification of partial or final closure of the facility, following the applicable procedures in s. NR 670.320.

(a) Events leading to a change in the closure plan, and therefore requiring a modification, may include:

1. A change in the operating plan or facility design.
2. A change in the expected year of closure, if applicable.
3. In conducting partial or final closure activities, an unexpected event requiring a modification of the approved closure plan.

(b) The written notification or request shall include a copy of the amended closure plan for review or approval by the department. The department shall approve, disapprove or modify the amended plan according to the procedures in s. NR 670.320.

(4) Notification before final closure.

(a) Notify the department in writing at least 45 days before the date that you expect to begin final closure of a treatment or storage tank, container storage area or containment building.

(b) The date when you expect to begin closure shall be no later than 30 days after the date that any hazardous waste management unit receives the known final volume of hazardous wastes.

(c) If your facility's license is terminated, or if you are otherwise ordered, by the department, or required by judicial decree or final order under 42 USC 6928 to cease receiving hazardous wastes or to close then the requirements of this subsection do not apply. However, you shall close the facility following the deadlines established in s. NR 667.0115 unless earlier deadlines are set in a department order, judicial decree or final order under 42 USC 6928.

**NR 667.0113 Will the public have the opportunity to comment on the plan?** (1) The department shall provide the owner or operator and the public, when the draft standardized license is public noticed, the opportunity to submit written comments on the plan and to the draft license as allowed by s. NR 670.508. The department shall also, in response to a request or at the owner or operator's own discretion, hold a public hearing whenever such a hearing might clarify one or more issues concerning the closure plan and the license.

(2) The department shall give public notice of the hearing 30 days before it occurs. Public notice of the hearing may be given at the same time as notice of the opportunity for the public to submit written comments and the two notices may be combined.

**NR 667.0115 After I stop operating, how long until I shall close?** (1) Within 90 days after the final volume of hazardous waste is sent to a unit, treat or remove from the unit all hazardous wastes following the approved closure plan.

(2) You shall complete final closure activities according to the approved closure plan within 180 days after the final volume of hazardous wastes is sent to the unit. The department may approve an extension of 180 days to the closure period if you comply with all applicable requirements for requesting a modification to the license and demonstrate that:

(a) The final closure activities will take longer than 180 days to complete due to circumstances beyond your control, excluding ground water contamination.

(b) You have taken and will continue to take all steps to prevent threats to human health and the environment from the unclosed, but not operating hazardous waste management unit or facility, including compliance with all applicable license requirements.

(c) The demonstration shall be made at least 30 days prior to the expiration of the initial 180-day period.

(3) Nothing in this subsection precludes you from removing hazardous wastes and decontaminating or dismantling equipment according to the approved final closure plan at any time before or after notification of final closure.

**NR 667.0116 What shall I do with contaminated equipment, structure and soils?** You shall properly dispose of or decontaminate all contaminated equipment, structures and soils during the partial



and final closure periods. By removing any hazardous wastes or hazardous constituents during partial and final closure, you may become a generator of hazardous waste and shall handle that waste following all applicable requirements of ch. NR 662.

**NR 667.0117 How do I certify closure?** Within 60 days of the completion of final closure of each unit under a ch. NR 670 subchapter J standardized license, you shall submit to the department, by registered mail, a certification that each hazardous waste management unit or facility, as applicable, has been closed following the specifications in the closure plan. Both you and a qualified professional engineer shall sign the certification. You shall furnish documentation supporting the independent registered professional engineer's certification to the department upon request until the department releases you from the financial assurance requirements for closure under s. NR 667.0143 (9).

#### **Subchapter H—Financial Requirements**

**NR 667.0140 Who must comply with this subchapter, and briefly, what do they have to do? (1)** The requirements in this subchapter apply to owners and operators who treat or store hazardous waste under a ch. NR 670 subchapter J standardized license, except as provided in s. NR 667.0001 (2) or sub.(4).

(2) The owner or operator shall: (a) Prepare a closure cost estimate as required in s. NR 667.0142.

(b) Demonstrate financial assurance for closure as required in s. NR 667.0143.

(c) Demonstrate financial assurance for liability as required in s. NR 667.0147.

(3) The owner or operator shall notify the department if the owner or operator is named as a debtor in a bankruptcy proceeding under Title 11 of the United States Code (See also s. NR 667.0148).

(4) States and the federal government are exempt from the requirements of this subchapter.

**NR 667.0141 Definitions of terms used in this subchapter.** When used in this subchapter, the following terms have the following meanings:

(1) "Closure plan" means the plan for closure prepared according to the requirements of s. NR 667.0112.

(2) "Current closure cost estimate" means the most recent of the estimates prepared according to s. NR 667.0142 (1), (2) and (3).

(4) "Parent corporation" means a corporation that directly owns at least 50 percent of the voting stock of the corporation which is the facility owner or operator. The latter corporation is deemed a subsidiary of the parent corporation.

(6) The following terms are used in the specifications for the financial tests for closure and liability coverage. The definitions are intended to assist in the understanding of these regulations and are not intended to limit the meanings of terms in a way that conflicts with generally accepted accounting practices:

(a) "Assets" means all existing and all probable future economic benefits obtained or controlled by a particular entity.

(b) "Current plugging and abandonment cost estimate" means the most recent of the estimates prepared according to ch. NR 815.

(c) “Independently audited” refers to an audit performed by an independent certified public accountant according to generally accepted auditing standards.

(d) “Liabilities” means probable future sacrifices of economic benefits arising from present obligations to transfer assets or provide services to other entities in the future as a result of past transactions or events.

(e) “Tangible net worth” means the tangible assets that remain after deducting liabilities. Tangible assets would not include intangibles such as goodwill and rights to patents or royalties.

(7) In the liability insurance requirements, the terms “bodily injury” and “property damage” shall have the meanings given these terms under state law. However, these terms do not include those liabilities which, consistent with standard industry practices, are excluded from coverage in liability policies for bodily injury and property damage. The department intends the meanings of other terms used in the liability insurance requirements to be consistent with their common meanings within the insurance industry. The following definitions of several of the terms are intended to assist in the understanding of these rules and are not intended to limit their meanings in a way that conflicts with general insurance industry usage:

(a) “Accidental occurrence” means an accident, including continuous or repeated exposure to conditions, which results in bodily injury or property damage neither expected nor intended from the standpoint of the insured.

(b) “Legal defense costs” means any expenses that an insurer incurs in defending against claims of third parties brought under the terms and conditions of an insurance policy.

(c) “Sudden accidental occurrence” means an occurrence which is not continuous or repeated in nature.

(8) “Substantial business relationship” means the extent of a business relationship necessary under applicable state statute to make a guarantee contract issued incident to that relationship valid and enforceable. A substantial business relationship shall arise from a pattern of recent or ongoing business transactions, in addition to the guarantee itself, such that a currently existing business relationship between the guarantor and the owner or operator is demonstrated to the satisfaction of the department.

**NR 667.0142 Cost estimate for closure.** (1) The owner or operator shall have at the facility a detailed written estimate, in current dollars, of the cost of closing the facility according to the requirements in ss. NR 667.0111 to 667.0115 and applicable closure requirements in ss. NR 667.0176, 667.0201 and 667.1108.

(a) The estimate shall equal the cost of final closure at the point in the facility’s active life when the extent and manner of its operation would make closure the most expensive, as indicated by the closure plan (see s. NR 667.0112 (2)).

(b) The closure cost estimate shall be based on the costs to the owner or operator of hiring a third party to close the facility. A third party is a party who is neither a parent nor a subsidiary of the owner or operator. (See definition of parent corporation in s. NR 667.0141 (4).)

(c) The closure cost estimate may not incorporate any salvage value that may be realized with the sale of hazardous wastes or non-hazardous wastes, facility structures or equipment, land or other assets associated with the facility at the time of partial or final closure.

(d) The owner or operator may not incorporate a zero cost for hazardous wastes or non-hazardous wastes that might have economic value.

(2) During the active life of the facility, the owner or operator shall adjust the closure cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instruments used to comply with s. NR 667.0143. For owners and operators using the financial test or corporate guarantee, the closure cost estimate shall be updated for inflation within 30 days after the close of the firm's fiscal year and before submission of updated information to the department as specified in s. NR 667.0143 (6) (b) 3. The adjustment may be made by recalculating the maximum costs of closure in current dollars or by using an inflation factor derived from the most recent Implicit Price Deflator for Gross Domestic Product published by the U.S. department of commerce in its Survey of Current Business, as specified in pars. (a) and (b). The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year.

(a) The first adjustment is made by multiplying the closure cost estimate by the inflation factor. The result is the adjusted closure cost estimate.

(b) Subsequent adjustments are made by multiplying the latest adjusted closure cost estimate by the latest inflation factor.

(3) During the active life of the facility, the owner or operator shall revise the closure cost estimate no later than 30 days after the department has approved the request to modify the closure plan, if the change in the closure plan increases the cost of closure. The revised closure cost estimate shall be adjusted for inflation as specified in sub. (2).

(4) The owner or operator shall keep the following at the facility during the operating life of the facility: The latest closure cost estimate prepared according to subs. (1) and (3) and, when this estimate has been adjusted according to sub. (2), the latest adjusted closure cost estimate.

**NR 667.0143 Financial assurance for closure.** The owner or operator shall establish financial assurance for closure of each storage or treatment unit owned or operated. In establishing financial assurance for closure, the owner or operator shall choose from the financial assurance mechanisms in subs. (1) to (7). The owner or operator may also use a combination of mechanisms for a single facility if they meet the requirement in sub. (8), or may use a single mechanism for multiple facilities as in sub. (9). The department shall release the owner or operator from the requirements of this section after the owner or operator meets the criteria under sub. (10).

(1) CLOSURE TRUST FUND. Owners and operators can use the closure trust fund that is specified in s. NR 664.0143 (1) (a) and (b) and (f) to (k). The following provisions also apply:

(a) Payments into the trust fund for a new facility shall be made annually by the owner or operator over the remaining operating life of the facility as estimated in the closure plan, or over 3 years, whichever period is shorter. This period of time is hereafter referred to as the pay-in period.

(b) For a new facility, the first payment into the closure trust fund shall be made before the facility may accept the initial storage. A receipt from the trustee shall be submitted by the owner or operator to the

department before this initial storage of waste. The first payment shall be at least equal to the current closure cost estimate, divided by the number of years in the pay-in period, except as provided in sub. (8) for multiple mechanisms. Subsequent payments shall be made no later than 30 days after each anniversary date of the first payment. The owner or operator determines the amount of each subsequent payment by subtracting the current value of the trust fund from the current closure cost estimate and dividing this difference by the number of years remaining in the pay-in period. Mathematically, the formula is  $\text{Next Payment} = (\text{Current Closure Estimate} - \text{Current Value of the Trust Fund}) \text{ Divided by Years Remaining in the Pay- in Period.}$

(c) The owner or operator of a facility existing on the effective date of this section [legislative reference bureau inserts date] may establish a trust fund to meet the financial assurance requirements in this section. If the value of the trust fund is less than the current closure cost estimate when a final approval of the license is granted for the facility, the owner or operator shall pay the difference into the trust fund within 60 days.

(d) The owner or operator may accelerate payments into the trust fund or deposit the full amount of the closure cost estimate when establishing the trust fund. However, the owner or operator shall maintain the value of the fund at no less than the value that the fund would have if annual payments were made as specified in par. (b) or (c).

(e) The owner or operator shall submit a trust agreement with the wording specified in s. NR 664.0151 (1) (a).

(2) SURETY BOND GUARANTEEING PAYMENT INTO A CLOSURE TRUST FUND. Owners and operators can use the surety bond guaranteeing payment into a closure trust fund, as specified in s. NR 664.0143 (2), including the use of the surety bond instrument specified in s. NR 664.0151 (2) and the standby trust specified in s. NR 664.0143 (2) (c).

(3) SURETY BOND GUARANTEEING PERFORMANCE OF CLOSURE. Owners and operators can use the surety bond guaranteeing performance of closure, as specified in s. NR 664.0143 (3), the submission and use of the surety bond instrument specified in s. NR 664.0151 (3).

(4) CLOSURE LETTER OF CREDIT. Owners and operators can use the closure letter of credit specified in s. NR 664.0143 (4) and the submission and use of the irrevocable letter of credit instrument specified in s. NR 664.0151 (4).

(5) CLOSURE INSURANCE. Owners and operators can use closure insurance, as specified in s. NR 664.0143 (5), utilizing the certificate of insurance for closure specified s. NR 664.0151 (5).

(6) CORPORATE FINANCIAL TEST. An owner or operator that satisfies the requirements of this section may demonstrate financial assurance up to the amount specified in this subsection:

- (a) *Financial component.* 1. The owner or operator shall satisfy one of the following three conditions:
- a. A current rating for its senior unsecured debt of AAA, AA, A or BBB as issued by Standard and Poor's or Aaa, Aa, A or Baa as issued by Moody's Investors Services.
  - b. A ratio of less than 1.5 comparing total liabilities to net worth.

c. A ratio of greater than 0.10 comparing the sum of net income plus depreciation, depletion and amortization, minus \$10 million, to total liabilities.

2. The tangible net worth of the owner or operator shall be greater than:

a. The sum of the current environmental obligations (see par. (b) 1. a.), including guarantees, covered by a financial test plus \$10 million, except as provided in subd. 2.

b. \$10 million in tangible net worth plus the amount of any guarantees that have not been recognized as liabilities on the financial statements provided all of the environmental obligations (see par. (b) 1. a.) covered by a financial test are recognized as liabilities on the owner's or operator's audited financial statements and subject to the approval of the department.

3. The owner or operator shall have assets located in the United States amounting to at least the sum of environmental obligations covered by a financial test as described in par. (b) 1. a.

(b) *Recordkeeping and reporting requirements.* 1. The owner or operator shall submit the following items to the department:

a. A letter signed by the owner's or operator's chief financial officer that lists all the applicable current types, amounts and sums of environmental obligations covered by a financial test. These obligations include liability, closure, post-closure and corrective action cost estimates required for hazardous waste treatment, storage and disposal facilities under ss. NR 664.0101, 664.0142, 664.0144, 664.0147, 665.0142, 665.0144 and 665.0147. The letter shall also provide evidence demonstrating that the firm meets the conditions of either par. (a) 1. a. or b. or (a) 1. c. and 2. and 3.

b. A copy of the independent certified public accountant's unqualified opinion of the owner's or operator's financial statements for the latest completed fiscal year. To be eligible to use the financial test, the owner's or operator's financial statements shall receive an unqualified opinion from the independent certified public accountant. An adverse opinion, disclaimer of opinion or other qualified opinion will be cause for disallowance, with the potential exception for qualified opinions provided in the next sentence. The department may evaluate qualified opinions on a case-by-case basis and allow use of the financial test in cases where the department deems that the matters which form the basis for the qualification are insufficient to warrant disallowing the test. If the department does not allow use of the test, the owner or operator shall provide alternate financial assurance that meets the requirements of this section within 30 days after the notification of disallowance.

c. If the chief financial officer's letter providing evidence of financial assurance includes financial data showing that the owner or operator satisfies par. (a) 1 b. or c. that are different from data in the audited financial statements referred to in subd. 1. b. or any other audited financial statement or data filed with the SEC, then a special report from the owner's or operator's independent certified public accountant to the owner or operator is required. The special report shall be based upon an agreed upon procedures engagement in accordance with professional auditing standards and shall describe the procedures performed in comparing the data in the chief financial officer's letter derived from the independently

audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements, the findings of that comparison and the reasons for any differences.

d. If the chief financial officer's letter provides a demonstration that the firm has assured for environmental obligations as provided in par. (a) 2. b., then the letter shall include a report from the independent certified public accountant that verifies that all of the environmental obligations covered by a financial test have been recognized as liabilities on the audited financial statements, how these obligations have been measured and reported and that the tangible net worth of the firm is at least \$10 million plus the amount of any guarantees provided.

2. The owner or operator of a new facility shall submit the items specified in subd.1. to the department at least 60 days before placing waste in the facility.

3. After the initial submission of items specified in subd. 1., the owner or operator shall send updated information to the department within 90 days following the close of the owner or operator's fiscal year. The department may provide up to an additional 45 days for an owner or operator who can demonstrate that 90 days is insufficient time to acquire audited financial statements. The updated information shall consist of all items specified in subd.1.

4. The owner or operator is no longer required to submit the items specified in this paragraph or comply with the requirements of this section if either:

a. The owner or operator substitutes alternate financial assurance as specified in this section that is not subject to these recordkeeping and reporting requirements.

b. The department releases the owner or operator from the requirements of this section, according to sub. (10).

5. An owner or operator who no longer meets the requirements of par. (a) may not use the financial test to demonstrate financial assurance. Instead an owner or operator who no longer meets the requirements of par. (a), shall:

a. Send notice to the department of intent to establish alternate financial assurance as specified in this section. The owner or operator shall send this notice by certified mail within 90 days following the close the owner or operator's fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements of this section.

b. Provide alternative financial assurance within 120 days after the end of such fiscal year.

6. The department may, based on a reasonable belief that the owner or operator may no longer meet the requirements of par. (a), require at any time the owner or operator to provide reports of its financial condition in addition to or including current financial test documentation as specified in this paragraph. If the department finds that the owner or operator no longer meets the requirements of par. (a), the owner or operator shall provide alternate financial assurance that meets the requirements of this section.

**(7) CORPORATE GUARANTEE.** (a) An owner or operator may meet the requirements of this section by obtaining a written guarantee. The guarantor shall be the direct or higher tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator

or a firm with a substantial business relationship with the owner or operator. The guarantor shall meet the requirements for owners or operators in sub. (6) and shall comply with the terms of the guarantee. The wording of the guarantee shall be identical to the wording in s. NR 664.0151 (8). The certified copy of the guarantee shall accompany the letter from the guarantor's chief financial officer and accountants' opinions. If the guarantor's parent corporation is also the parent corporation of the owner or operator, the letter from the guarantor's chief financial officer shall describe the value received in consideration of the guarantee. If the guarantor is a firm with a substantial business relationship with the owner or operator, this letter shall describe this substantial business relationship and the value received in consideration of the guarantee.

(b) For a new facility, the guarantee shall be effective and the guarantor shall submit the items in par. (a) and the items specified in sub. (6) (b) 1. to the department at least 60 days before the owner or operator places waste in the facility.

(c) The terms of the guarantee shall provide that:

1. If the owner or operator fails to perform closure at a facility covered by the guarantee, the guarantor shall either:

- a. Perform or pay a third party to perform closure (performance guarantee).
- b. Establish a fully funded trust fund as specified in sub. (1) (a) in the name of the owner or operator (payment guarantee).

2. The guarantee shall remain in force for as long as the owner or operator is required to comply with the applicable financial assurance requirements of this subchapter unless the guarantor sends prior notice of cancellation by certified mail to the owner or operator and to the department. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the department as evidenced by the return receipts.

3. If notice of cancellation is given, the owner or operator shall, within 90 days following receipt of the cancellation notice by the owner or operator and the department, obtain alternate financial assurance and submit documentation for that alternate financial assurance to the department. If the owner or operator fails to provide alternate financial assurance and obtain the written approval of such alternative assurance from the department within the 90-day period, the guarantor shall provide that alternate assurance in the name of the owner or operator and submit the necessary documentation for the alternative assurance to the department within 120 days of the cancellation notice.

4. If a corporate guarantor no longer meets the requirements of sub. (6) (a), the owner or operator shall, within 90 days, obtain alternative assurance and submit the assurance to the department for approval. If the owner or operator fails to provide alternate financial assurance within the 90-day period, the guarantor shall provide that alternate assurance within the next 30 days and submit it to the department for approval.

5. The guarantor is no longer required to meet the requirements of this section when either:

- a. The owner or operator substitutes alternate financial assurance as specified in this section.
- b. The owner or operator is released from the requirements of this section according to par. (10).

**(8) USE OF MULTIPLE FINANCIAL MECHANISMS.** An owner or operator may use more than one mechanism at a particular facility to satisfy the requirements of this section. The acceptable mechanisms are trust funds, surety bonds guaranteeing payment into a trust fund, letters of credit, insurance, the financial test, and the guarantee, except owners or operators cannot combine the financial test with the guarantee. The mechanisms shall be as specified in subs. (1), (2), (4), (5), (6) and (7) respectively, except it is the combination of mechanisms rather than a single mechanism that shall provide assurance for an amount at least equal to the cost estimate. If an owner or operator uses a trust fund in combination with a surety bond or letter of credit, the owner or operator may use the trust fund as the standby trust for the other mechanisms. A single trust fund may be established for 2 or more mechanisms. The department may use any or all of the mechanisms to provide for closure of the facility.

**(9) USE OF A FINANCIAL MECHANISM FOR MULTIPLE FACILITIES.** An owner or operator may use a financial mechanism for multiple facilities, as specified in s. NR 664.0143 (8).

**(10) RELEASE OF THE OWNER OR OPERATOR FROM THE REQUIREMENTS OF THIS SECTION.** Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer that final closure has been completed in accordance with the approved closure plan, the department shall notify the owner or operator in writing that the owner or operator is no longer required by this section to maintain financial assurance for final closure of the facility, unless the department has reason to believe that final closure has not been completed in accordance with the approved closure plan. The department shall provide the owner or operator with a detailed written statement of any such reasons to believe that closure has not been conducted in accordance with the approved closure plan.

**NR 667.0147 Liability requirements. (1) COVERAGE FOR SUDDEN ACCIDENTAL OCCURRENCES.** An owner or operator of a hazardous waste treatment or storage facility, or a group of such facilities, shall demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator shall have and maintain liability coverage for sudden accidental occurrences in the amount of at least one million dollars per occurrence with an annual aggregate of at least \$2,000,000, exclusive of legal defense costs. This liability coverage may be demonstrated as specified in pars. (a) to (g):

(a) *Trust fund for liability coverage.* An owner or operator may meet the requirements of this section by obtaining a trust fund for liability coverage as specified in s. NR 664.0147 (10).

(b) *Surety bond for liability coverage.* An owner or operator may meet the requirements of this section by obtaining a surety bond for liability coverage as specified in s. NR 664.0147 (9).

(c) *Letter of credit for liability coverage.* An owner or operator may meet the requirements of this section by obtaining a letter of credit for liability coverage as specified in s. NR 664.0147 (8).

(d) *Insurance for liability coverage.* An owner or operator may meet the requirements of this section by obtaining liability insurance as specified in s. NR 664.0147 (1) (a).

(e) *Financial test for liability coverage.* An owner or operator may meet the requirements of this section by passing a financial test as specified in sub. (6).



(f) *Guarantee for liability coverage.* An owner or operator may meet the requirements of this section by obtaining a guarantee as specified in sub. (7).

(g) *Combination of mechanisms.* An owner or operator may demonstrate the required liability coverage through the use of combinations of mechanisms as allowed by s. NR 664.0147 (1)(f).

(h) An owner or operator shall notify the department in writing within 30 days whenever any of the following occurs:

1. A claim results in a reduction in the amount of financial assurance for liability coverage provided by a financial instrument authorized in pars. (a) to (g).

2. A Certification of Valid Claim for bodily injury or property damages caused by a sudden accidental occurrence arising from the operation of a hazardous waste treatment, storage or disposal facility is entered between the owner or operator and third-party claimant for liability coverage under pars. (a) to (g).

3. A final court order establishing a judgment for bodily injury or property damage caused by a sudden accidental occurrence arising from the operation of a hazardous waste treatment, storage or disposal facility is issued against the owner or operator or an instrument that is providing financial assurance.

(5) **PERIOD OF COVERAGE.** Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer that final closure has been completed according to the approved closure plan, the department shall notify the owner or operator in writing that the owner or operator is no longer required by this section to maintain liability coverage from that facility, unless the department has reason to believe that closure has not been in accordance with the approved closure plan.

(6) **FINANCIAL TEST FOR LIABILITY COVERAGE.** An owner or operator that satisfies the requirements of this subsection may demonstrate financial assurance for liability up to the amount specified in this subsection.

(a) *Financial component.* 1. If using the financial test for only liability coverage, the owner or operator shall have tangible net worth greater than the sum of the liability coverage to be demonstrated by this test plus \$10,000,000.

2. The owner or operator shall have assets located in the United States amounting to at least the amount of liability covered by this financial test.

3. An owner or operator who is demonstrating coverage for liability and any other environmental obligations, including closure under s. NR 667.0143 (6), through a financial test shall meet the requirements of s. NR 667.0143 (6).

(b) *Recordkeeping and reporting requirements.* 1. The owner or operator shall submit the following items to the department:

a. A letter signed by the owner's or operator's chief financial officer that provides evidence demonstrating that the firm meets the conditions of par. (a) 1. and 2. If the firm is providing only liability coverage through a financial test for a facility or facilities with a license under this chapter, the letter should use the wording in s. NR 667.0151 (2). If the firm is providing only liability coverage through a financial test for facilities regulated under this chapter and also chs. NR 664 or 665, it shall use the letter in s. NR

664.0151 (7). If the firm is providing liability coverage through a financial test for a facility or facilities with a license under this chapter, and it assures closure costs or any other environmental obligations through a financial test, it shall use the letter in s. NR 667.0151 (1) for the facilities issued a license under this chapter.

b. A copy of the independent certified public accountant's unqualified opinion of the owner's or operator's financial statements for the latest completed fiscal year. To be eligible to use the financial test, the owner's or operator's financial statements shall receive an unqualified opinion from the independent certified public accountant. An adverse opinion, disclaimer of opinion or other qualified opinion will be cause for disallowance, with the potential exception for qualified opinions provided in the next sentence. The department may evaluate qualified opinions on a case-by-case basis and allow use of the financial test in cases where the department deems that the matters which form the basis for the qualification are insufficient to warrant disallowance of the test. If the department does not allow use of the test, the owner or operator shall provide alternate financial assurance that meets the requirements of this section within 30 days after the notification of disallowance.

c. If the chief financial officer's letter providing evidence of financial assurance includes financial data showing that the owner or operator satisfies pars. (a) 1. and 2. that are different from data in the audited financial statements referred to in subpar. b. or any other audited financial statement or data filed with the Securities and Exchange Commission, then a special report from the owner's or operator's independent certified public accountant to the owner or operator is required. The special report shall be based upon an agreed upon procedures engagement according to professional auditing standards and shall describe the procedures performed in comparing the data in the chief financial officer's letter derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements, the findings of that comparison and the reasons for any differences.

2. The owner or operator of a new facility shall submit the items specified in subd. 1. to the department at least 60 days before placing waste in the facility.

3. After the initial submission of items specified in subd. 1., the owner or operator shall send updated information to the department within 90 days following the close of the owner or operator's fiscal year. The department may provide up to an additional 45 days for an owner or operator who can demonstrate that 90 days is insufficient time to acquire audited financial statements. The updated information shall consist of all items specified in subd. 1.

4. The owner or operator is no longer required to submit the items specified in this paragraph or comply with the requirements of this paragraph when either:

a. The owner or operator substitutes alternate financial assurance as specified in this section that is not subject to these recordkeeping and reporting requirements.

b. The department releases the owner or operator from the requirements of this section in accordance with sub. (10).

5. An owner or operator who no longer meets the requirements of par. (a) may not use the financial test to demonstrate financial assurance. An owner or operator who no longer meets the requirements of par. (a) shall:

a. Send notice to the department of intent to establish alternate financial assurance as specified in this section. The owner or operator shall send this notice by certified mail within 90 days following the close of the owner or operator's fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements of this section.

b. Provide alternative financial assurance within 120 days after the end of such fiscal year.

6. The department may, based on a reasonable belief that the owner or operator may no longer meet the requirements of par. (a), require at any time the owner or operator to provide reports of its financial condition in addition to or including current financial test documentation as specified in this paragraph. If the department finds that the owner or operator no longer meets the requirements of par. (a), the owner or operator shall provide alternate financial assurance that meets the requirements of this section.

**(7) GUARANTEE FOR LIABILITY COVERAGE**

(a) Subject to par. (b) of this section, an owner or operator may meet the requirements of this section by obtaining a written guarantee, hereinafter referred to as guarantee. The guarantor shall be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator or a firm with a substantial business relationship with the owner or operator. The guarantor shall meet the requirements for owners or operators in sub.(6) (a) to (c). The wording of the guarantee shall be identical to the wording specified in s. NR 664.0151 (8) (b). A certified copy of the guarantee shall accompany the items sent to the department as specified in sub. (6) (b). One of these items shall be the letter from the guarantor's chief financial officer. If the guarantor's parent corporation is also the parent corporation of the owner or operator, this letter shall describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter shall describe this "substantial business relationship" and the value received in consideration of the guarantee.

If the owner or operator fails to satisfy a judgment based on a determination of liability for bodily injury or property damage to third parties caused by sudden accidental occurrences arising from the operation guarantee or fails to pay an amount agreed to in settlement of claims arising from or alleged to arise from such injury or damage, the guarantor shall do so up to the limits of coverage.

(b) 1. In the case of corporations incorporated in the United States, a guarantee may be used to satisfy the requirements of this section only if the Attorneys General or Insurance Commissioners of the state in which the guarantor is incorporated, and each state in which a facility covered by the guarantee is located, have submitted a written statement to the department that a guarantee executed as described in this section and s. NR 664.0151 (8) (b) is a legally valid and enforceable obligation in that state.

2. In the case of corporations incorporated outside the United States, a guarantee may be used to satisfy the requirements of this section only if:

a. The non-U.S. corporation has identified a registered agent for service of process in each state in which a facility covered by the guarantee is located and in the state in which it has its principal place of business.

b. The Attorney General or Insurance Commissioner of each state in which a facility covered by the guarantee is located and the state in which the guarantor corporation has its principal place of business, has submitted a written statement to the department that a guarantee executed as described in this section and s. NR 664.0151 (8) (b) is a legally valid and enforceable obligation in that state.

**NR 667.0148 Incapacity of owners or operators, guarantors or financial institutions.** (1) An owner or operator shall notify the department by certified mail of the commencement of a voluntary or involuntary proceeding under Title 11 of the United States Code, naming the owner or operator as debtor, within 10 days after commencement of the proceeding. A guarantor of a corporate guarantee as specified in ss. NR 667.0143 (7) and 667.0147 (7) shall make such a notification if the guarantor is named as debtor, as required under the terms of the corporate guarantee (s. NR 664.0151 (8)).

(2) An owner or operator who fulfills the requirements of s. NR 667.0143 or 667.0147 by obtaining a trust fund, surety bond, letter of credit or insurance policy shall be deemed to be without the required financial assurance or liability coverage in the event of bankruptcy of the trustee or issuing institution, or a suspension or revocation of the authority of the trustee institution to act as trustee or of the institution issuing the surety bond, letter of credit or insurance policy to issue the instruments. The owner or operator shall establish other financial assurance or liability coverage within 60 days after such an event.

**NR 667.0151 Wording of the instruments.** (1) The chief financial officer of an owner or operator of a facility with a standardized license who uses a financial test to demonstrate financial assurance for that facility shall complete a letter as specified in s. NR 667.0143 (6). The letter shall be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

I am the chief financial officer of [name and address of firm]. This letter is in support of this firm's use of the financial test to demonstrate financial assurance for closure costs, as specified in subchapter H of ch. NR 667, Wis. Adm. Code. This firm qualifies for the financial test on the basis of having [insert "a current rating for its senior unsecured debt of AAA, AA, A or BBB as issued by Standard and Poor's or Aaa, Aa, A or Baa as issued by Moody's Investors Services" or "a ratio of less than 1.50 comparing total liabilities to net worth" or "a ratio of greater than 0.10 comparing the sum of net income plus depreciation, depletion and amortization, minus \$10 million, to total liabilities."] This firm [insert "is required" or "is not required"] to file a Form 10K with the Securities and Exchange Commission (SEC) for the latest fiscal year. The fiscal year of this firm ends on [month, day]. The figures for the following items marked with an asterisk are derived from this firm's independently audited, year-end financial statements for the latest completed fiscal year, ended [date]. [If this firm qualifies on the basis of its bond rating, fill in the requested information: "This firm has a rating of its senior unsecured debt of" [insert the bond rating] "from" [insert "Standard and Poor's" or "Moody's"]. Complete Line 1. Total Liabilities below and then skip the

remaining questions in the next section and resume completing the form at the section entitled *Obligations Covered by a Financial Test or Corporate Guarantee.* [If this firm qualifies for the financial test on the basis of its ratio of liabilities to net worth, or sum of income, depreciation, depletion and amortization to net worth, please complete the following section.]

- \*1. Total Liabilities                   \$\_\_\_\_\_
- \*2. Net Worth                           \$\_\_\_\_\_
- \*3. Net Income                         \$\_\_\_\_\_
- \*4. Depreciation                       \$\_\_\_\_\_
- 5. Depletion (if applicable)       \$\_\_\_\_\_
- \*6. Amortization                       \$\_\_\_\_\_
- \*7. Sum of Lines 3, 4, 5 & 6        \$\_\_\_\_\_

[If the above figures are taken directly from the most recent audited financial statements for this firm insert “The above figures are taken directly from the most recent audited financial statements for this firm.” If they are not, insert “The following items are not taken directly from the firms most recent audited financial statements” [insert the numbers of the items and attach an explanation of how they were derived.]

[Complete the following calculations]

- 8. Line 1 ÷ Line 2 = \_\_\_\_\_
- 9. Line 7 ÷ Line 1 = \_\_\_\_\_
- Is Line 8 less than 1.5? \_\_\_Yes \_\_\_No
- Is Line 9 greater than 0.10? \_\_\_Yes \_\_\_No

[If you did not answer Yes to either of these two questions, you cannot use the financial test and need not complete this letter. Instead, you shall notify the department for the facility that you intend to establish alternate financial assurance as specified in s. NR 667.0143. The owner or operator shall send this notice by certified mail within 90 days following the close of the owner or operator’s fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements of this section. The owner or operator shall also provide alternative financial assurance within 120 days after the end of such fiscal year.]

*Obligations Covered by a Financial Test or Corporate Guarantee*

[On the following lines list all obligations that are covered by a financial test or a corporate guarantee extended by your firm. You may add additional lines and leave blank entries that do not apply to your situation.]

Hazardous Waste Facility Name and ID	State	Closure	Long-Term Care	Corrective Action
_____	___	\$_____	\$_____	\$_____
_____				

Hazardous Waste Third Party Liability

Municipal Waste Facilities

	State	Closure	Long-Term Care	Corrective Action
_____	_____	\$_____	\$_____	\$_____
_____				

Petroleum Underground Storage Tanks	State	Closure
_____	_____	\$_____

PCB Storage Facility Name and ID	State	Closure
_____	_____	\$_____

Any financial assurance required under, or as part of an action undertaken under, the Comprehensive Environmental Response, Compensation and Liability Act.

Site name

\_\_\_\_\_

Any other environmental obligations that are assured through a financial test.

Name	Amount	
_____	\$_____	

\*10. Total of all amounts \$\_\_\_\_\_

\*11. Line 10 + \$10,000,000 = \$\_\_\_\_\_

\*12. Total Assets \$\_\_\_\_\_

\*13. Intangible Assets \$\_\_\_\_\_

\*14. Tangible Assets (Line 12-Line 13) \$\_\_\_\_\_

\*15. Tangible Net Worth (Line 14-Line 1) \$\_\_\_\_\_

\*16. Assets in the United States \$\_\_\_\_\_

Is Line 15 greater than Line 11? \_\_\_ Yes \_\_\_ No

Is Line 16 no less than Line 10? \_\_\_ Yes \_\_\_ No

[You must be able to answer Yes to both of these questions to use the financial test for this facility.]

I hereby certify that the wording of this letter is identical to the wording specified in s. NR 667.0151 as such rules were constituted on the date shown immediately below.

[Signature] \_\_\_\_\_

[Name] \_\_\_\_\_

Title] \_\_\_\_\_

[Date] \_\_\_\_\_

[After completion, send a signed copy of the form to the department. In addition, send a signed copy to every authority who (1) requires a demonstration through a financial test for each of the other obligations in the letter that are assured through a financial test, or (2) accepts a guarantee for an obligation listed in this letter.]

(2) The chief financial officer of an owner or operator of a facility with a standardized license who uses a financial test to demonstrate financial assurance only for third party liability for that (or other standardized license) facility or facilities shall complete a letter as specified in s. NR 667.0147 (6). The letter shall be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

I am the chief financial officer of [name and address of firm]. This letter is in support of this firm’s use of the financial test to demonstrate financial assurance for third party liability, as specified in [insert “subchapter H of 40 CFR part 267” or the citation to the corresponding state regulation]. This firm qualifies for the financial test on the basis of having tangible net worth of at least \$10 million more than the amount of liability coverage and assets in the United States of at least the amount of liability coverage. This firm [insert “is required” or “is not required”] to file a Form 10K with the Securities and Exchange Commission (SEC) for the latest fiscal year. The fiscal year of this firm ends on [month, day]. The figures for the following items marked with an asterisk are derived from this firm’s independently audited, year-end financial statements for the latest completed fiscal year, ended [date]

[Please complete the following section.]

- \*1. Total Assets        \$ \_\_\_\_\_
- \*2. Intangible Assets \$ \_\_\_\_\_
- \*3. Tangible Assets  
(Line 1-Line 2)        \$ \_\_\_\_\_
- 4. Total Liabilities    \$ \_\_\_\_\_
- 5. Tangible Net Worth  
(Line 3 -Line 4)      \$ \_\_\_\_\_
- \*6. Assets in the United States \$ \_\_\_\_\_
- 7. Amount of liability coverage \$ \_\_\_\_\_

Is Line 5 At least \$10,000,000 greater than Line 7? ..... \_\_\_ Yes \_\_\_ No

Is Line 6 at least equal to Line 7? .... \_\_\_ Yes \_\_\_ No

[You must be able to answer Yes to both of these questions to use the financial test for this facility.]

I hereby certify that the wording of this letter is identical to the wording specified in s. NR 667.0151 as such rules were constituted on the date shown immediately below.

[Signature] \_\_\_\_\_

[Name] \_\_\_\_\_

Title] \_\_\_\_\_

[Date] \_\_\_\_\_

[After completion, send a signed copy of the form to the department.]

**Subchapter I—Use and Management of Containers**

**NR 667.0170 Does this subchapter apply to me?** This subchapter applies to you if you own or operate a facility that treats or stores hazardous waste in containers under a ch. NR 667 subchapter J standardized license, except as provided in s. NR 667.0001 (2).

**NR 667.0171 What standards apply to the containers?** Standards apply to the condition of the containers, to the compatibility of waste with the containers and to the management of the containers.

**(1) CONDITION OF CONTAINERS.** If a container holding hazardous waste is not in good condition (for example, it exhibits severe rusting or apparent structural defects) or if it begins to leak, you shall either:

- (a) Transfer the hazardous waste from this container to a container that is in good condition.
- (b) Manage the waste in some other way that complies with the requirements of this section.

**(2) COMPATIBILITY OF WASTE WITH CONTAINERS.** To ensure that the ability of the container to contain the waste is not impaired, use a container made of or lined with materials that are compatible and will not react with the hazardous waste to be stored.

**(3) MANAGEMENT OF CONTAINERS.** (a) Always keep a container holding hazardous waste closed during storage, except when you add or remove waste.

(b) Do not open, handle or store a container holding hazardous waste in a manner that may rupture the container or cause it to leak.

**NR 667.0172 What are the inspection requirements?** At least weekly, inspect areas where you store containers, looking for leaking containers and for deterioration of containers and the containment system caused by corrosion or other factors.

**NR 667.0173 What standards apply to the container storage areas?** (1) Design and operate a containment system for your container storage areas according to the requirements in sub. (2), except as otherwise provided by sub. (3).

**(2) The design and operating requirements for a containment system are:**

(a) A base shall underlie the containers that is free of cracks or gaps and is sufficiently impervious to contain leaks, spills and accumulated precipitation until the collected material is detected and removed.

(b) The base shall be sloped, or the containment system shall be otherwise designed and operated to drain and remove liquids resulting from leaks spills, or precipitation, unless the containers are elevated or are otherwise protected from contact with accumulated liquids.

(c) The containment system shall have sufficient capacity to contain 10% of the volume of containers, or the volume of the largest container, whichever is greater. This requirement does not apply to containers that do not contain free liquids.



(d) Prevent run-on into the containment system unless the collection system has sufficient excess capacity, in addition to that required in par. (c), to contain the liquid.

(e) Remove any spilled or leaked waste and accumulated precipitation from the sump or collection area as promptly as is necessary to prevent overflow of the collection system.

(3) Except as provided in sub. (4), you do not need a containment system as defined in sub. (2) for storage areas that store containers holding only wastes with no free liquids, if either:

(a) The storage area is sloped or is otherwise designed and operated to drain and remove liquid resulting from precipitation.

(b) The containers are elevated or are otherwise protected from contact with accumulated liquid.

(4) You shall have a containment system defined by sub. (2) for storage areas that store containers holding FO20, FO21, FO22, FO23, FO26 and FO27 wastes, even if the wastes do not contain free liquids.

**NR 667.0174 What special requirements shall I meet for ignitable or reactive waste?** Locate containers holding ignitable or reactive waste at least 15 meters (50 feet) from your facility property line. Follow the general requirements for ignitable or reactive wastes that are specified in s. NR 667.0017 (1).

**NR 667.0175 What special requirements shall I meet for incompatible wastes?** (1) You may not place incompatible wastes, or incompatible wastes and materials (see Appendix V of ch. NR 664 for examples), in the same container, unless you comply with s. NR 667.0017 (2).

(2) You may not place hazardous waste in an unwashed container that previously held an incompatible waste or material.

(3) Separate a storage container holding a hazardous waste that is incompatible with any waste or with other materials stored nearby in other containers, piles, open tanks or surface impoundments from the other materials, or protect the containers by means of a dike, berm, wall or other device.

**NR 667.0176 What shall I do when I want to stop using the containers?** Remove all hazardous waste and hazardous waste residues from the containment system. Decontaminate or remove remaining containers, liners, bases and soil containing, or contaminated with, hazardous waste or hazardous waste residues.

**NR 667.0177 What air emission standards apply?** Manage all hazardous waste placed in a container according to the requirements of subchs. AA, BB and CC of ch. NR 664. Under a standardized license, the following control devices are permissible: Thermal vapor incinerator, catalytic vapor incinerator, flame, boiler, process heater, condenser and carbon absorption unit.

#### **Subchapter J—Tank Systems**

**NR 667.0190 Does this subchapter apply to me?** This subchapter applies to you if you own or operate a facility that treats or stores hazardous waste in above-ground or on-ground tanks under a ch. NR 667 subchapter J standardized license, except as provided in s. NR 667.000 (2).

(1) You do not have to meet the secondary containment requirements in s. NR 667.0195 if your tank systems do not contain free liquids and are situated inside a building with an impermeable floor. You shall demonstrate the absence or presence of free liquids in the stored or treated waste, using Method 9095B

(Paint Filter Liquids Test) as described in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,” EPA Publication SW-846, as incorporated by reference in s. NR 660.11.

(2) You do not have to meet the secondary containment requirements of s. NR 667.0195 (1) if your tank system, including sumps, as defined in s. NR 660.10, is part of a secondary containment system to collect or contain releases of hazardous wastes.

**NR 667.0191 What are the required design and construction standards for new tank systems or components?** Ensure that the foundation, structural support, seams, connections and pressure controls (if applicable) are adequately designed and that the tank system has sufficient structural strength, compatibility with the waste or wastes to be stored or treated and corrosion protection to ensure that it will not collapse, rupture or fail. Obtain a written assessment, reviewed and certified by a qualified professional engineer, following s. NR 670.011 (4), attesting that the tank system has sufficient structural integrity and is acceptable for the storing and treating of hazardous waste. This assessment shall include, at a minimum, the following information:

(1) Design standards for the construction of tank or tanks and any ancillary equipment.

(2) Hazardous characteristics of the waste or wastes to be handled.

(3) For new tank systems or components in which the external shell of a metal tank or any external metal component of the tank system will be in contact with the soil or with water, a determination by a corrosion expert of:

(a) Factors affecting the potential for corrosion, such as:

1. Soil moisture content.

2. Soil pH.

3. Soil sulfides level.

4. Soil resistivity.

5. Structure to soil potential.

6. Existence of stray electric current.

7. Existing corrosion-protection measures (for example, coating, cathodic protection).

(b) The type and degree of external corrosion protection needed to ensure the integrity of the tank system during the use of the tank system or component, consisting of one or more of the following:

1. Corrosion-resistant materials of construction such as special alloys and fiberglass reinforced plastic.

2. Corrosion-resistant coating (such as epoxy and fiberglass) with cathodic protection (for example, impressed current or sacrificial anodes).

3. Electrical isolation devices such as insulating joints and flanges.

(4) Design considerations to ensure that:

(a) Tank foundations will maintain the load of a full tank.

(b) Tank systems will be anchored to prevent flotation or dislodgment where the tank system is placed in a saturated zone, or is located within a seismic fault zone subject to the standards of s. NR 667.0018 (1).

(c) Tank systems will withstand the effects of frost heave.

**NR 667.0192 What handling and inspection procedures shall I follow during installation of new tank systems?** (1) Ensure that you follow proper handling procedures to prevent damage to a new tank system during installation. Before placing a new tank system or component in use, an independent, qualified installation inspector or an independent, qualified, registered professional engineer, either of whom is trained and experienced in the proper installation of tank systems or components shall inspect the system for the presence of any of the following items:

- (a) Weld breaks.
  - (b) Punctures.
  - (c) Scrapes of protective coatings.
  - (d) Cracks.
  - (e) Corrosion.
  - (f) Other structural damage or inadequate construction or installation.
- (2) Remedy all discrepancies before the tank system is placed in use.

**NR 667.0193 What testing shall I do?** Test all new tanks and ancillary equipment for tightness before you place them in use. If you find a tank system that is not tight, perform all repairs necessary to remedy the leak or leaks in the system before you cover, enclose or place the tank system into use.

**NR 667.0194 What installation requirements shall I follow?** (1) Support and protect ancillary equipment against physical damage and excessive stress due to settlement, vibration, expansion or contraction.

(2) Provide the type and degree of corrosion protection recommended by an independent corrosion expert, based on the information provided under s. NR 667.0191 (3), to ensure the integrity of the tank system during use of the tank system. An independent corrosion expert shall supervise the installation of a corrosion protection system that is field fabricated to ensure proper installation.

(3) Obtain and keep at the facility written statements by those persons required to certify the design of the tank system and to supervise the installation of the tank system as required in subs. (1) and (2), and ss. NR 667.0192 and 667.0193. The written statement shall attest that the tank system was properly designed and installed and that you made repairs under ss. NR 667.0192 and 667.0193. These written statements shall also include the certification statement as required in s. NR 670.011 (4).

**NR 667.0195 What are the secondary containment requirements?** To prevent the release of hazardous waste or hazardous constituents to the environment, provide secondary containment that meets the requirements of this section for all new and existing tank systems.

(1) Secondary containment systems shall be:

(a) Designed, installed and operated to prevent any migration of wastes or accumulated liquid out of the system to the soil, groundwater or surface water at any time during the use of the tank system.

(b) Capable of detecting and collecting releases and accumulated liquids until the collected material is removed.

(2) To meet the requirements of sub. (1), secondary containment systems shall be, at a minimum:

(a) Constructed of or lined with materials that are compatible with the waste or wastes to be placed in the tank system and shall have sufficient strength and thickness to prevent failure owing to pressure gradients (including static head and external hydrological forces), physical contact with the waste to which it is exposed, climatic conditions and the stress of daily operation (including stresses from nearby vehicular traffic).

(b) Placed on a foundation or base capable of providing support to the secondary containment system, resistance to pressure gradients above and below the system and capable of preventing failure due to settlement, compression or uplift.

(c) Provided with a leak-detection system that is designed and operated so that it will detect the failure of either the primary or secondary containment structure or the presence of any release of hazardous waste or accumulated liquid in the secondary containment system within 24 hours.

(d) Sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills or precipitation. Remove spilled or leaked waste and accumulated precipitation from the secondary containment system within 24 hours, or as promptly as possible, to prevent harm to human health and the environment.

**NR 667.0196 What are the required devices for secondary containment and what are their design, operating and installation requirements?** (1) Secondary containment for tanks shall include one or more of the following:

(a) A liner (external to the tank).

(b) A double-walled tank.

(c) An equivalent device. Maintain documentation of equivalency at the facility.

(2) External liner systems shall be:

(a) Designed or operated to contain 100 percent of the capacity of the largest tank within its boundary.

(b) Designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. The additional capacity shall be sufficient to contain precipitation from a 25-year, 24-hour rainfall event.

(c) Free of cracks or gaps.

(d) Designed and installed to surround the tank completely and to cover all surrounding earth likely to come into contact with the waste if the waste is released from the tank or tanks (that is, capable of preventing lateral as well as vertical migration of the waste).

(3) Double-walled tanks shall be:

(a) Designed as an integral structure (that is, an inner tank completely enveloped within an outer shell) so that any release from the inner tank is contained by the outer shell.

(b) Protected, if constructed of metal, from both corrosion of the primary tank interior and of the external surface of the outer shell.

(c) Provided with a built-in continuous leak detection system capable of detecting a release within 24 hours.

**NR 667.0197 What are the requirements for ancillary equipment?** Provide ancillary equipment with secondary containment (for example, trench, jacketing double-walled piping) that meets the requirements of s. NR 667.0195, except for:

(1) Above ground piping (exclusive of flanges, joints, valves and other connections) that are visually inspected for leaks on a daily basis.

(2) Welded flanges, welded joints, and welded connections that are visually inspected for leaks on a daily basis.

(3) Seal less or magnetic coupling pumps and seal less valves, that are visually inspected for leaks on a daily basis.

(4) Pressurized above ground piping systems with automatic shut-off devices (for example, excess flow check valves, flow metering shutdown devices, loss of pressure actuated shut-off devices) that are visually inspected for leaks on a daily basis.

**NR 667.0198 What are the general operating requirements for my tank systems?** (1) You may not place hazardous wastes or treatment reagents in a tank system if they could cause the tank, its ancillary equipment or the containment system to rupture, leak, corrode or otherwise fail.

(2) Use appropriate controls and practices to prevent spills and overflows from tank or containment systems. These include, at a minimum:

(a) Spill prevention controls (for example, check valves, dry disconnect couplings).

(b) Overfill prevention controls (for example, level sensing devices, high level alarms, automatic feed cutoff or bypass to a standby tank).

(c) Sufficient freeboard in uncovered tanks to prevent overtopping by wave or wind action or by precipitation.

(3) Comply with the requirements of s. NR 667.0200 if a leak or spill occurs in the tank system.

**NR 667.0199 What inspection requirements shall I meet?** Comply with the following requirements for scheduling, conducting and documenting inspections.

(1) Develop and follow a schedule and procedure for inspecting overfill controls.

(2) Inspect at least once each operating day:

(a) Aboveground portions of the tank system to detect corrosion or releases of waste.

(b) Data gathered from monitoring and leak detection equipment (for example, pressure or temperature gauges, monitoring wells) to ensure that the tank system is being operated according to its design.

(c) The construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system (for example, dikes) to detect erosion or signs of releases of hazardous waste (for example, wet spots, dead vegetation).

(3) Inspect cathodic protection systems, if present, according to, at a minimum, the following schedule to ensure that they are functioning properly:

(a) Confirm that the cathodic protection system is operating properly within six months after initial installation and annually thereafter.

(b) Inspect or test all sources of impressed current, as appropriate, at least every other month.

(4) Document, in the operating record of the facility, an inspection of those items in subs. (1) to (3).

**NR 667.0200 What shall I do in case of a leak or a spill?** If there has been a leak or a spill from a tank system or secondary containment system, or if either system is unfit for use, remove the system from service immediately and satisfy the following requirements:

(1) Immediately stop the flow of hazardous waste into the tank system or secondary containment system and inspect the system to determine the cause of the release.

(2) Remove the waste from the tank system or secondary containment system.

(a) If the release was from the tank system, within 24 hours after detecting the leak, remove as much of the waste as is necessary to prevent further release of hazardous waste to the environment and to allow inspection and repair of the tank system to be performed.

(b) If the material released was to a secondary containment system, remove all released materials within 24 hours or as quickly as possible to prevent harm to human health and the environment.

(3) Immediately conduct a visual inspection of the release and, based upon that inspection:

(a) Prevent further migration of the leak or spill to soils or surface water.

(b) Remove, and properly dispose of, any visible contamination of the soil or surface water.

(4) Report any release to the environment, except as provided in par. (a) to the department within 24 hours of its detection. If you have reported the release pursuant to ch. NR 706, that report will satisfy this requirement.

(a) You need not report on a leak or spill of hazardous waste if it is:

1. Less than or equal to a quantity of one pound; and

2. Immediately contained and cleaned up.

(b) Within 30 days of detection of a release to the environment, submit a report to the department containing the following information:

1. The likely route of migration of the release.

2. The characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate).

3. The results of any monitoring or sampling conducted in connection with the release (if available). If sampling or monitoring data relating to the release are not available within 30 days, submit these data to the department as soon as they become available.

4. The proximity to down gradient drinking water, surface water and populated areas.

5. A description of response actions taken or planned.

(5) Either close the system or make necessary repairs.

(a) Unless you satisfy the requirements of pars. (b) and (c), close the tank system according to s. NR 667.0201.

(b) If the cause of the release was a spill that has not damaged the integrity of the system, you may return the system to service as soon as you remove the released waste and make any necessary repairs.

(c) If the cause of the release was a leak from the primary tank system into the secondary the secondary containment system, you shall repair the system before returning the tank system to service.

(6) If you have made extensive repairs to a tank system in accordance with sub. (5) (for example, installation of an internal liner or repair of a ruptured primary containment or secondary containment vessel), you may not return the tank system to service unless the repair is certified by a qualified professional engineer in accordance with s. NR 670.011 (4).

(a) The engineer shall certify that the repaired system is capable of handling hazardous wastes without release for the intended life of the system.

(b) You shall submit this certification to the department within seven days after returning the tank system to use.

**NR 667.0201 What shall I do when I stop operating the tank system?** When you close a tank system, remove or decontaminate all waste residues, contaminated containment system components (for example, liners), contaminated soils and structures and equipment contaminated with waste, and manage them as hazardous waste, unless s. NR 661.03 (4) applies. The closure plan, closure activities, cost estimates for closure and financial responsibility for tank systems shall meet all of the requirements specified in subchs. G and H.

**NR 667.0202 What special requirements shall I meet for ignitable or reactive wastes?** (1) You may not place ignitable or reactive waste in tank systems, unless:

(a) You treat, render or mix the waste before or immediately after placement in the tank system so that:

1. You comply with s. NR 667.0017 (2).

2. The resulting waste, mixture or dissolved material no longer meets the definition of ignitable or reactive waste under s. NR 661.21 or 661.23.

(b) You store or treat the waste in such a way that it is protected from any material or conditions that may cause the waste to ignite or react.

(c) You use the tank system solely for emergencies.

(2) If you store or treat ignitable or reactive waste in a tank, comply with the requirements for the maintenance of protective distances between the waste management area and any public ways, streets, alleys or an adjoining property line that can be built upon as required in Tables 2-1 to 2-6 of the National Fire Protection Association's "Flammable and Combustible Liquids Code," (1977 or 1981), as incorporated by reference in s. NR 660.11.

**NR 667.0203 What special requirements shall I meet for incompatible wastes?** (1) You may not place incompatible wastes, or incompatible wastes and materials, in the same tank system, unless you comply with s. NR 667.0017 (2).

(2) You may not place hazardous waste in a tank system that has not been decontaminated and that previously held an incompatible waste or material, unless you comply with s. NR 667.0017 (2).

**NR 667.0204 What air emission standards apply?** Manage all hazardous waste placed in a tank following the requirements of subchs. AA, BB and CC of ch. NR 664. Under a standardized license, the following control devices are permissible: Thermal vapor incinerator, catalytic vapor incinerator, flame, boiler, process heater, condenser and carbon absorption unit.

#### **Subchapter DD—Containment buildings**

**NR 667.1100 Does this subchapter apply to me?** This subchapter applies to you if you own or operate a facility that treats or stores hazardous waste in containment buildings under a ch. NR 667 subchapter J standardized license, except as provided in s. NR 667.0001 (2). Storage or treatment in your containment building is not land disposal as defined in s. NR 668.02 if your unit meets the requirements of ss. NR 667.1101, 667.1102 and 667.1103.

#### **NR 667.1101 What design and operating standards shall my containment building meet?**

Comply with the design and operating standards in this section. The department shall consider standards established by professional organizations generally recognized by the industry such as the American Concrete Institute (ACI) and the American Society of Testing Materials (ASTM) in judging the structural integrity requirements of this section.

(1) The containment building shall be completely enclosed with a floor, walls and a roof to prevent exposure to the elements, (for example, precipitation, wind, run-on), and to assure containment of managed wastes.

(2) The floor and containment walls of the unit, including the secondary containment system, if required under s. NR 667.1103, shall be designed and constructed of manmade materials of sufficient strength and thickness to:

(a) Support themselves, the waste contents, and any personnel and heavy equipment that operates within the unit.

(b) Prevent failure due to:

1. Pressure gradients, settlement, compression or uplift.
2. Physical contact with the hazardous wastes to which they are exposed.
3. Climatic conditions.
4. Stresses of daily operation, including the movement of heavy equipment within the unit and contact of such equipment with containment walls.
5. Collapse or other failure.

(3) All surfaces to be in contact with hazardous wastes shall be chemically compatible with those wastes.

(4) You may not place incompatible hazardous wastes or treatment reagents in the unit or its secondary containment system if they could cause the unit or secondary containment system to leak, corrode or otherwise fail.



(5) A containment building shall have a primary barrier designed to withstand the movement of personnel, waste and handling equipment in the unit during the operating life of the unit and appropriate for the physical and chemical characteristics of the waste to be managed.

(6) If appropriate to the nature of the waste management operation to take place in the unit, an exception to the structural strength requirement may be made for light-weight doors and windows that meet these criteria:

(a) They provide an effective barrier against fugitive dust emissions under s. NR 667.1102 (4).

(b) The unit is designed and operated in a fashion that assures that wastes will not actually come in contact with these openings.

(7) Inspect and record in the facility's operating record, at least once every 7 days, data gathered from monitoring equipment and leak detection equipment, as well as the containment building and the area immediately surrounding the containment building to detect signs of releases of hazardous waste.

(8) Obtain certification by a qualified professional engineer that the containment building design meets the requirements of subs. (1) to (6) and ss. NR 667.1102 and 667.1103.

**NR 667.1102 What other requirements shall I meet to prevent releases?** Use controls and practices to ensure containment of the hazardous waste within the unit, and at a minimum:

(1) Maintain the primary barrier to be free of significant cracks, gaps, corrosion or other deterioration that could cause hazardous waste to be released from the primary barrier.

(2) Maintain the level of the stored or treated hazardous waste within the containment walls of the unit so that the height of any containment wall is not exceeded.

(3) Take measures to prevent personnel or by equipment used in handling the waste from tracking hazardous waste out of the unit. Designate an area to decontaminate equipment and collect and properly manage any rinsate.

(4) Take measures to control fugitive dust emissions such that any openings (such as doors, windows, vents, and cracks) exhibit no visible emissions (see 40 CFR part 60, Appendix A, Method 22—Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares). In addition, operate and maintain all associated particulate collection devices (for example, fabric filter, electrostatic precipitator) with sound air pollution control practices. Effectively maintain this state of no visible emissions at all times during routine operating and maintenance conditions, including when vehicles and personnel are entering and exiting the unit.

**NR 667.1103 What additional design and operating standards apply if liquids will be in my containment building?** If your containment building will be used to manage hazardous wastes containing free liquids or treated with free liquids, as determined by the paint filter test, by a visual examination or by other appropriate means, you shall include:

(1) A primary barrier designed and constructed of materials to prevent the migration of hazardous constituents into the barrier (for example, a geomembrane covered by a concrete wear surface).

(2) A liquid collection and removal system to minimize the accumulation of liquid on the primary barrier of the containment building.

(a) The primary barrier shall be sloped to drain liquids to the associated collection system.

(b) Collect and remove liquids and waste to minimize hydraulic head on the containment system at the earliest practicable time.

(3) A secondary containment system, including a secondary barrier designed and constructed to prevent migration of hazardous constituents into the barrier and a leak detection system capable of detecting failure of the primary barrier and collecting accumulated hazardous wastes and liquids at the earliest practical time.

(a) You may meet the requirements of the leak detection component of the secondary containment system by installing a system that is, at a minimum:

1. Constructed with a bottom slope of one percent or more.

2. Constructed of a granular drainage material with a hydraulic conductivity of  $1 \times 10^{-2}$  cm/sec or more and a thickness of 12 inches (30.5 cm) or more, or constructed of synthetic or geonet drainage materials with a transmissivity of  $3 \times 10^{-5}$  m<sup>2</sup>/sec or more.

(b) If you will be conducting treatment in the building, design the area in which the treatment will be conducted to prevent the release of liquids, wet materials or liquid aerosols to other portions of the building.

(c) Construct the secondary containment system using materials that are chemically resistant to the waste and liquids managed in the containment building and of sufficient strength and thickness to prevent collapse under the pressure exerted by overlaying materials and by any equipment used in the containment building.

**NR 667.1104 How may I obtain a waiver from secondary containment requirements?**

Notwithstanding any other provision of this subchapter, the department may waive requirements for secondary containment for a licensed containment building where:

(1) You demonstrate that the only free liquids in the unit are limited amounts of dust suppression liquids required to meet occupational health and safety requirements.

(2) Containment of managed wastes and dust suppression liquids can be assured without a secondary containment system.

**NR 667.1105 What shall I do if my containment building contains areas both with and without secondary containment?** For these containment buildings, you shall:

(1) Design and operate each area in accordance with the requirements specified in ss. NR 667.1101 to 667.1103.

(2) Take measures to prevent the release of liquids or wet materials into areas without secondary containment.

(3) Maintain in the facility's operating log a written description of the operating procedures used to maintain the integrity of areas without secondary containment.

**NR 667.1106 What shall I do if I detect a release?** Throughout the active life of the containment building, if you detect a condition that could lead to or has caused a release of hazardous waste, repair the condition promptly, according to the following procedures:

(1) Upon detection of a condition that has led to a release of hazardous waste (for example, upon detection of leakage from the primary barrier), you shall:

- (a) Enter a record of the discovery in the facility operating record.
- (b) Immediately remove the portion of the containment building affected by the condition from service.
- (c) Determine what steps you are required to take to repair the containment building, to remove any leakage from the secondary collection system and to establish a schedule for accomplishing the cleanup and repairs.

(d) Within 7 days after the discovery of the condition, notify the department of the condition and within 14 working days, provide a written notice to the department with a description of the steps taken to repair the containment building and the schedule for accomplishing the work.

(2) The department shall review the information submitted, make a determination regarding whether the containment building shall be removed from service completely or partially until repairs and cleanup are complete and notify you of the determination and the underlying rationale in writing.

(3) Upon completing all repairs and cleanup, notify the department in writing and provide verification, signed by a qualified, registered professional engineer, that the repairs and cleanup have been completed according to the written plan submitted in accordance with sub. (1) (d).

**NR 667.1107 Can a containment building itself be considered secondary containment?**

Containment buildings may serve as secondary containment systems for tanks placed within the building under certain conditions.

(1) A containment building may serve as an external liner system for a tank, provided it meets the requirements of s. NR 667.0196 (1).

(2) The containment building shall also meet the requirements of ss. NR 667.0195 (1) and 667.0195 (2) (a) and (b) to be considered an acceptable secondary containment system for a tank.

**NR 667.1108 What shall I do when I stop operating the containment building?** When you close a containment building, remove or decontaminate all waste residues, contaminated containment system components (such as liners), contaminated subsoils and structures and equipment contaminated with waste and leachate, and manage them as hazardous waste unless s. NR 661.03 (4) applies. The closure plan, closure activities, cost estimates for closure and financial responsibility for containment buildings shall meet all of the requirements specified in subchs. G and H.

SECTION 163. NR 668.01 (6) (c) is amended to read:

**NR 668.01 (6) (c)** ~~Thermostats~~ Mercury-containing equipment as described in s. NR 673.04.

SECTION 164. NR 668.05 (3) (b) 6. is amended to read:

**NR 668.05 (3) (b) 6.** The landfill, if disposing of containerized liquid hazardous wastes containing PCBs at concentrations greater than or equal to 50 ppm but less than 500 ppm, also complies with 40 CFR 761.75 and chs. NR 664 and 665.

SECTION 165. NR 668.07 (1) (a), (b) and (c) 1. are amended to read:

**NR 668.07 (1) (a)** A generator of hazardous waste shall determine if the hazardous waste shall be treated before it can be land disposed. This determination shall be done by determining if the hazardous waste meets the treatment standards in s. NR 668.40, 668.45 or 668.49, ~~or if the hazardous waste shall be treated before land disposal.~~ This determination shall be made by testing the waste or using knowledge of the waste. If the generator tests the waste, testing should determine the total concentration of hazardous constituents, or the concentration of hazardous constituents in an extract of the waste obtained using test method 1311 in “Test Methods of Evaluating Solid Waste, Physical/Chemical Methods”, EPA SW-846, incorporated by reference in s. NR 660.11, depending on whether the treatment standard for the waste is expressed as a total concentration or a concentration of hazardous constituent in the waste’s extract. As an alternative to the generator determining if the hazardous waste is required to be treated before it can be land disposed, the generator shall send the waste to a RCRA licensed or permitted hazardous waste treatment facility, where the waste treatment facility shall comply with the requirements of sub. (2) and s. NR 664.0013. In addition, some hazardous wastes shall be treated by particular treatment methods before they can be land disposed and some soils are contaminated by such hazardous wastes. These treatment standards are also found in s. NR 668.40 and are described in detail in s. NR 668.42, Table 1. It is not necessary to test hazardous waste, or soil contaminated by hazardous waste, which is treated under s. NR 668.40 and s. NR 668.42, Table 1, unless the waste or soil is in a waste mixture, in which case the other wastes in the mixture with concentration level treatment standards shall be tested. If a generator is managing a waste or soil contaminated with a waste, that displays a hazardous characteristic of ignitability, corrosivity, reactivity, or toxicity, the generator shall comply with the special requirements of s. NR 668.09 in addition to any applicable requirements in this section.

(b) If the waste or contaminated soil does not meet the applicable treatment ~~standard, then standards or~~ if the generator chooses not to make the determination of whether the waste is required to be treated, the generator shall send a one-time written notice to each treatment or storage facility receiving the waste with the initial waste shipment, and shall place a copy in the generator’s file. The notice shall include the information in column “s. NR 668.07 (1) (b)” of the Generator Paperwork Requirements Table in par. (d). Alternatively, if the generator chooses not to make the determination of whether the waste is required to be treated, the notification shall include the EPA Hazardous Waste Numbers and Manifest Number of the first shipment and shall state “This hazardous waste may or may not be subject to the LDR treatment standards. The treatment facility shall make the determination.” No further notification is necessary until the waste or facility change, in which case a new notification shall be sent and a copy placed in the generator’s file. ¶

~~the contaminated soil does not meet the applicable treatment standards, then the notification shall include the following certification, signed by an authorized representative:~~

~~I certify under penalty of law that I personally have examined this contaminated soil and it [does/does not] contain listed hazardous waste and [does/does not] exhibit a characteristic of hazardous waste and requires treatment to meet the soil treatment standards as provided by s. NR 668.4 (3) [or 40 CFR 268.49 (e)].~~

(c) 1. The generator shall send a one-time written notice to each treatment, storage, or disposal facility receiving the waste with the initial waste shipment, and place a copy in the generator's file. The notice shall include the information in column "s. NR 668.07 (1) (c)" of the Generator Paperwork Requirements Table in ~~s. NR 668.07 (1) (d) par. (d)~~ and the following certification statement, signed by an authorized representative:

SECTION 166. NR 668.07 (1) (d) is amended to read:

**NR 668.07 (1) (d)** If the generator's waste or contaminated soil is not required to meet treatment standards before it is land disposed because the waste or soil qualifies for an exemption, including but not limited to case-by-case extensions under 40 CFR 268.5, disposal in a no-migration unit under 40 CFR 268.6, or a national capacity variance or case-by-case capacity variance under subch. C, then with the initial shipment of waste, the generator shall send a one-time written notice to each land disposal facility receiving the waste. The notice shall include the information indicated in column "s. NR 668.07 (1) (d)" of the Generator Paperwork Requirements Table in ~~par. (d)~~ this paragraph. If the waste changes, the generator shall send a new notice to the receiving facility, and place a copy in the generator's file.

SECTION 167. NR 668.07 (2) (f) is amended to read:

**NR 668.07 (2) (f)** Where the wastes are recyclable materials used in a manner constituting disposal subject to s. NR 666.020 (2) regarding treatment standards and prohibition levels, the owner or operator of a treatment facility (for instance, the recycler) is not required to notify the receiving facility, pursuant to par. (c). With each shipment of wastes the owner or operator of the recycling facility shall for the initial shipment of waste, prepare a one-time ~~submit the certification described in par. (d), and a one-time~~ notice which includes the information in par. (c), except the manifest number, ~~to the department.~~ The certification and notification shall be placed in the facility's on-site files. The recycling facility shall also keep records of the name and location of each entity receiving the hazardous waste-derived product.

SECTION 168. NR 668.09 (1) and (4) (intro.) are amended to read:

**NR 668.09 (1)** The initial generator of a solid waste shall determine each EPA hazardous waste number (waste code) applicable to the waste to determine the applicable treatment standards under subch. D. This determination may be made concurrently with the hazardous waste determination required in s. NR 662.011. For purposes of this chapter, the waste will carry the waste code for any applicable listed waste

(subch. D of ch. NR 661). In addition, where the waste exhibits a characteristic, the waste will carry one or more of the characteristic waste codes (subch. C of ch. NR 661), except when the treatment standard for the listed waste operates in lieu of the treatment standard for the characteristic waste, as specified in sub. (2). If the generator determines that their waste displays a hazardous characteristic, and is not D001 nonwastewaters treated by CMBST, RORGS, OR POLYM under s. NR 668.42, Table 1, then the generator shall determine the underlying hazardous constituents, as defined by s. NR 668.02 (9), in the characteristic waste.

**(4) (intro.)** Wastes that exhibit a characteristic are also subject to s. NR 668.07, except that once the waste is no longer hazardous, a one-time notification and certification shall be placed in the generator's or treater's on-site files and sent to the department. The notification and certification that is placed in the generator's or treater's files shall be updated if the process or operation generating the waste changes or if the approved facility for solid waste disposal receiving the waste changes. ~~However, the generator or treater need only notify the department on an annual basis if such changes occur. The notification and certification shall be sent to the department annually and shall be received by the department no later than December 31.~~

SECTION 169. NR 668.20 is created to read:

**NR 668.20 Waste specific prohibitions – Dyes or pigments production wastes.** (1) Effective August 23, 2005, the waste specified in ch. NR 661 and 40 CFR part 261 as hazardous waste number K181, and soil and debris contaminated with this waste, radioactive wastes mixed with this waste and soil and debris contaminated with radioactive wastes mixed with this waste are prohibited from land disposal.

(2) The requirements of sub. (1) do not apply if:

(a) The wastes meet the applicable treatment standards specified in subch. D of ch. NR 668 D.

(b) The facility has been granted an exemption from a prohibition pursuant to a petition under NR 668.06, with respect to those wastes and units covered by the petition.

(c) The wastes meet the applicable treatment standards established pursuant to a petition granted under NR 668.44.

(d) Hazardous debris has met the treatment standards in NR 668.40 or the alternative treatment standards in NR 668.45

(e) The facility has been granted an extension to the effective date of a prohibition pursuant to NR 668.05, with respect to these wastes covered by the extension.

(3) To determine whether a hazardous waste identified in this subsection exceeds the applicable treatment standards specified in NR 668.40, the initial generator shall test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract of the waste, or the generator may use knowledge of the waste. If the waste contains regulated constituents in excess of the applicable subch. D. of ch. NR 668 levels, the waste is prohibited from land disposal, and all requirements of ch. NR 668 are applicable, except as otherwise specified.

SECTION 170. NR 668.30 (4) (c) is amended to read:

**NR 668.30 (4) (c)** The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under 40 CFR 268.44 (a) to (g) or s. NR 668.44 (8) to (13).

SECTION 171. NR 668.32 (2) (d) is amended to read:

**NR 668.32 (2) (d)** The wastes meet the applicable alternate ~~alternative~~ treatment standards established pursuant to a petition granted under 40 CFR 268.44 (a) to (g) or s. NR 668.44 (8) to (13).

SECTION 172. NR 668.33 (2) (c) is amended to read:

**NR 668.33 (2) (c)** The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under 40 CFR 268.44 (a) to (g) or s. NR 668.44 (8) to (13).

SECTION 173. NR 668.35 (2) (c) is amended to read:

**NR 668.35 (2) (c)** The wastes meet the applicable treatment standards established pursuant to a petition granted under 40 CFR 268.44 (a) to (g) or s. NR 668.44 (8) to (13).

SECTION 174. NR 668.36 (2) (c) is amended to read:

**NR 668.36 (2) (c)** The wastes meet the applicable treatment standards established pursuant to a petition granted under 40 CFR 268.44 (a) to (g) or s. NR 668.44 (8) to (13).

SECTION 175. NR 668.38 (4) (c) is amended to read:

**NR 668.38 (4) (c)** The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under 40 CFR 268.44 (a) to (g) or s. NR 668.44 (8) to (13).

SECTION 176. NR 668.39 (2) is amended to read:

**NR 668.39(2)** On July 8, 1996, the wastes identified in s. NR 661.23 as D003 that are managed in systems other than those whose discharge is regulated under ch. 283, Stats., or that are zero dischargers that engage in CWA-equivalent treatment before ultimate land disposal, are prohibited from land disposal. This prohibition does not apply to unexploded ordnance and other explosive devices which have been the subject of an emergency response. (~~These D-003~~ D003 wastes are prohibited unless they meet the treatment standard of DEACT before land disposal as described in s. NR 668.40).

SECTION 177. NR 668.39 (6) (c) is amended to read:

**NR 668.39 (6) (c)** The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under 40 CFR 268.44 (a) to (g) or s. NR 668.44 (8) to (13).

SECTION 178. NR 668.40 (2) is amended to read:

**NR 668.40 (2)** For wastewaters, compliance with concentration level standards is based on maximums for any one day, except for D004 through D011 wastes for which the previously promulgated treatment standards based on grab samples remain in effect. For all nonwastewaters, compliance with concentration level standards is based on grab sampling. For wastes covered by the waste extract standards, the test method 1311, the toxicity characteristic leaching procedure found in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods”, EPA SW-846, incorporated by reference in s. NR 660.11 shall be used to measure compliance. An exception is made for D004 and D008, for which either of 2 test methods may be used: Method 1311 or Method 1310B, the extraction procedure toxicity test. For wastes covered by a technology standard, the wastes may be land disposed after being treated using that specified technology or an equivalent treatment technology approved by the EPA Administrator under the procedures set forth in 40 CFR 268.42(b).

SECTION 179. NR 668.40, table, waste codes F001, F002, F003, F004, F005, F032, F039, K031, K142, K157 and K175 are amended to read:

**NR 668.40 — Treatment Standards for Hazardous Wastes**

Waste code	Waste description and treatment/Regulatory subcategory <sup>1</sup>	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS <sup>2</sup> number	Concentration in mg/l <sup>3</sup> ; or Technology Code <sup>4</sup>	Concentration in mg/kg <sup>5</sup> unless noted as “mg/l TCLP”; or Technology Code <sup>4</sup>
F001, F002, F003, F004, & F005	F001, F002, F003, F004 and/or F005 solvent wastes that contain any combination of one or more of the following spent solvents: acetone, benzene, n-butyl alcohol, carbon disulfide, carbon tetrachloride, chlorinated fluorocarbons, chlorobenzene, o-cresol, m-cresol, p-cresol, cyclohexanone, o-dichlorobenzene, 2-ethoxyethanol, ethyl acetate, ethyl benzene, ethyl ether, isobutyl alcohol, methanol, methylene chloride, methyl ethyl ketone, methyl isobutyl ketone, nitrobenzene, 2-nitropropane, pyridine, tetrachloroethylene, toluene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, 1,1,2-trichloro-1,2,2-trifluoroethane, trichloroethylene, <del>trichloromono</del> trichlorofluoromethane, and/or xylenes	Acetone	67-64-1	0.28	160
		Benzene	71-43-2	0.14	10
		n-Butyl alcohol	71-36-3	5.6	2.6
		Carbon disulfide	75-15-0	3.8	NA
		Carbon tetrachloride	56-23-5	0.057	6.0
		Chlorobenzene	108-90-7	0.057	6.0
		o-Cresol	95-48-7	0.11	5.6
		m-Cresol (difficult to distinguish from p-cresol)	108-39-4	0.77	5.6
	p-Cresol (difficult to distinguish from m-cresol)	106-44-5	0.77	5.6	



	[except as specifically noted in other subcategories]. See further details of these listings in s. NR 661.31.	Cresol-mixed isomers (Cresylic acid)(sum of o-, m-, and p-cresol concentrations)	1319-77-3	0.88	11.2
F032	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with s. NR 661.35 or potentially cross-contaminated wastes that are otherwise currently regulated as hazardous wastes ( <del>i.e.</del> for instance, F034 or F035), and where the generator does not resume or initiate use of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote or pentachlorophenol.	Acenaphthene	83-32-9	0.059	3.4
		Anthracene	120-12-7	0.059	3.4
		Benz(a)anthracene	56-55-3	0.059	3.4
		Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene)	205-99-2	0.11	6.8
		Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene)	207-08-9	0.11	6.8
		Benzo(a)pyrene	50-32-8	0.061	3.4
		Chrysene	218-01-9	0.059	3.4
		Dibenz(a,h)anthracene	53-70-3	0.055	8.2
		2,4-Dimethyl phenol	105-67-9	0.036	14
		Fluorene	86-73-7	0.059	3.4
		Hexachlorodibenzo-p-dioxins	NA	0.000063, or CMBST <sup>11</sup>	0.001, or CMBST <sup>11</sup>
		Hexachlorodibenzofurans	NA	0.000063, or CMBS T <sup>11</sup>	0.001, or CMBST <sup>11</sup>
		Indeno (1,2,3-c,d) pyrene	193-39-5	0.0055	3.4
		Naphthalene	91-20-3	0.059	5.6
Pentachlorodib	NA	0.000063,	0.001,		

F039	Leachate (liquids that have percolated through land disposed wastes) resulting from the disposal of more than one restricted waste classified as hazardous under subch. D. [Leachate resulting from the disposal of one or more of the following EPA hazardous wastes and no other hazardous wastes retains its EPA hazardous waste numbers: F020, F021, F022, F026, F027 and/or F028].	enzo-p-dioxins		or_CMBST <sup>1</sup> <sub>1</sub>	or_CMBST <sup>11</sup>
		Pentachlorodibenzofurans	NA	0.000035, or_CMBST <sup>1</sup> <sub>1</sub>	0.001, or_CMBST <sup>11</sup>
		Pentachlorophenol	87-86-5	0.089	7.4
		Phenanthrene	85-01-8	0.059	5.6
		Phenol	108-95-2	0.039	6.2
		Pyrene	129-00-0	0.067	8.2
		Tetrachlorodibenzo-p-dioxins	NA	0.000063, or_CMBST <sup>1</sup> <sub>1</sub>	0.001, or_CMBST <sup>11</sup>
		Tetrachlorodibenzofurans	NA	0.000063, or_CMBST <sup>1</sup> <sub>1</sub>	0.001, or_CMBST <sup>11</sup>
		2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
		2,4,6-Trichlorophenol	88-06-2	0.035	7.4
		Arsenic	7440-38-2	1.4	5.0 mg/l TCLP
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Acenaphthylene	208-96-8	0.059	3.4
		Acenaphthene	83-32-9	0.059	3.4
		Acetone	67-64-1	0.28	160
		Acetonitrile	75-05-8	5.6	NA

Acetophenone	96-86-2	0.010	9.7
2-Acetylaminofluorene	53-96-3	0.059	140
Acrolein	107-02-8	0.29	NA
Acrylonitrile	107-13-1	0.24	84
Aldrin	309-00-2	0.021	0.066
4-Aminobiphenyl	92-67-1	0.13	NA
Aniline	62-53-3	0.81	14
Anthracene	120-12-7	0.059	3.4
<u>0-Anisidine (2-methoxyaniline)</u>	<u>90-04-0</u>	<u>0.010</u>	<u>0.66</u>
Aramite	140-57-8	0.36	NA
alpha-BHC	319-84-6	0.00014	0.066
beta-BHC	319-85-7	0.00014	0.066
delta-BHC	319-86-8	0.023	0.066
gamma-BHC	58-89-9	0.0017	0.066
Benzene	71-43-2	0.14	10
Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene)	205-99-2	0.11	6.8
Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene)	207-08-9	0.11	6.8

Benzo(g,h,i)pyrene	191-24-2	0.0055	1.8
Benzo(a)pyrene	50-32-8	0.061	3.4
Bromodichloromethane	75-27-4	0.35	15
Methyl bromide (Bromomethane)	74-83-9	0.11	15
4-Bromophenyl phenyl ether	101-55-3	0.055	15
n-Butyl alcohol	71-36-3	5.6	2.6
Butyl benzyl phthalate	85-68-7	0.017	28
2-sec-Butyl-4,6-dinitrophenol (Dinoseb)	88-85-7	0.066	2.5
Carbon disulfide	75-15-0	3.8	NA
Carbon tetrachloride	56-23-5	0.057	6.0
Chlordane (alpha and gamma isomers)	57-74-9	0.0033	0.26
p-Chloroaniline	106-47-8	0.46	16
Chlorobenzene	108-90-7	0.057	6.0
Chlorobenzilate	510-15-6	0.10	NA
2-Chloro-1,3-butadiene	126-99-8	0.057	NA
Chlorodibromomethane	124-48-1	0.057	15

Chloroethane	75-00-3	0.27	6.0
bis(2-Chloroethoxy)methane	111-91-1	0.036	7.2
bis(2-Chloroethyl)ether	111-44-4	0.033	6.0
Chloroform	67-66-3	0.046	6.0
bis(2-Chloroisopropyl)ether	39638-32-9	0.055	7.2
p-Chloro-m-cresol	59-50-7	0.018	14
Chloromethane (Methyl chloride)	74-87-3	0.19	30
2-Chloronaphthalene	91-58-7	0.055	5.6
2-Chlorophenol	95-57-8	0.044	5.7
3-Chloropropylene	107-05-1	0.036	30
Chrysene	218-01-9	0.059	3.4
o-Cresol	95-48-7	0.11	5.6
<u>p-Cresidine</u>	<u>120-71-8</u>	<u>0.010</u>	<u>0.66</u>
m-Cresol(difficult to distinguish from p-cresol)	108-39-4	0.77	5.6
p-Cresol(difficult to distinguish from m-cresol)	106-44-5	0.77	5.6
Cyclohexanone	108-94-1	0.36	NA
1,2-Dibromo-	96-12-8	0.11	15

3-chloropropane			
Ethylene dibromide (1,2-Dibromoethane)	106-93-4	0.028	15
Dibromomethane	74-95-3	0.11	15
2,4-D (2,4-Dichlorophenoxyacetic acid)	94-75-7	0.72	10
o,p'-DDD	53-19-0	0.023	0.087
p,p'-DDD	72-54-8	0.023	0.087
o,p'-DDE	3424-82-6	0.031	0.087
p,p'-DDE	72-55-9	0.031	0.087
o,p'-DDT	789-02-6	0.0039	0.087
p,p'-DDT	50-29-3	0.0039	0.087
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
Dibenz(a,e)pyrene	192-65-4	0.061	NA
m-Dichlorobenzene	541-73-1	0.036	6.0
o-Dichlorobenzene	95-50-1	0.088	6.0
p-Dichlorobenzene	106-46-7	0.090	6.0
Dichlorodifluoromethane	75-71-8	0.23	7.2
1,1-Dichloroethane	75-34-3	0.059	6.0
1,2-Dichloroethane	107-06-2	0.21	6.0

1,1-Dichloroethylene	75-35-4	0.025	6.0
trans-1,2-Dichloroethylene	156-60-5	0.054	30
2,4-Dichlorophenol	120-83-2	0.044	14
2,6-Dichlorophenol	87-65-0	0.044	14
1,2-Dichloropropane	78-87-5	0.85	18
cis-1,3-Dichloropropylene	10061-01-5	0.036	18
trans-1,3-Dichloropropylene	10061-02-6	0.036	18
Dieldrin	60-57-1	0.017	0.13
Diethyl phthalate	84-66-2	0.20	28
<u>2,4-Dimethylaniline (2,4-xylydine)</u>	<u>95-68-1</u>	<u>0.010</u>	<u>0.66</u>
2,4-Dimethylphenol	105-67-9	0.036	14
Dimethyl phthalate	131-11-3	0.047	28
Di-n-butyl phthalate	84-74-2	0.057	28
1,4-Dinitrobenzene	100-25-4	0.32	2.3
4,6-Dinitro- <i>o</i> -cresol	534-52-1	0.28	160

2,4-Dinitrophenol	51-28-5	0.12	160
2,4-Dinitrotoluene	121-14-2	0.32	140
2,6-Dinitrotoluene	606-20-2	0.55	28
Di-n-octyl phthalate	117-84-0	0.017	28
Di-n-propylnitrosamine	621-64-7	0.40	14
1,4-Dioxane	123-91-1	12.0	170
Diphenylamine (difficult to distinguish from diphenylnitrosamine)	122-39-4	0.92	NA
Diphenylnitrosamine (difficult to distinguish from diphenylamine)	86-30-6	0.92	NA
1,2-Diphenylhydrazine	122-66-7	0.087	NA
Disulfoton	298-04-4	0.017	6.2
Endosulfan I	939-98-8	0.023	0.066
Endosulfan II	33213-6-5	0.029	0.13
Endosulfan sulfate	1031-07-8	0.029	0.13
Endrin	72-20-8	0.0028	0.13
Endrin aldehyde	7421-93-4	0.025	0.13
Ethyl acetate	141-78-6	0.34	33
Ethyl cyanide	107-12-0	0.24	360



(Propanenitrile )			
Ethyl benzene	100-41-4	0.057	10
Ethyl ether	60-29-7	0.12	160
bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
Ethyl methacrylate	97-63-2	0.14	160
Ethylene oxide	75-21-8	0.12	NA
Famphur	52-85-7	0.017	15
Fluoranthene	206-44-0	0.068	3.4
Fluorene	86-73-7	0.059	3.4
Heptachlor	76-44-8	0.0012	0.066
1, 2, 3, 4, 6, 7, 8-Heptachlorodi benzo-p-dioxin (1, 2, 3, 4, 6, 7, 8 HpCDD)	35822-46-9	0.000035	0.0025
1,2,3,4,6,7,8-Heptachlorodi benzofuran (1,2,3,4,6,7,8-HpCDF)	67562-39-4	0.000035	0.0025
1,2,3,4,7,8,9-Heptachlorodi benzofuran (1,2,3,4,7,8,9-HpCDF)	55673-89-7	0.000035	0.0025
Heptachlor epoxide	1024-57-3	0.016	0.066
Hexachlorobenzene	118-74-1	0.055	10
Hexachlorobutadiene	87-68-3	0.055	5.6
Hexachlorocyclopentadiene	77-47-4	0.057	2.4

HxCDDs (All Hexachlorodibenzo-p-dioxins)	NA	0.000063	0.001
HxCDFs (All Hexachlorodibenzofurans)	NA	0.000063	0.001
Hexachloroethane	67-72-1	0.055	30
Hexachloropropylene	1888-71-7	0.035	30
Indeno (1,2,3-c,d) pyrene	193-39-5	0.0055	3.4
Iodomethane	74-88-4	0.19	65
Isobutyl alcohol	78-83-1	5.6	170
Isodrin	465-73-6	0.021	0.066
Isosafrole	120-58-1	0.081	2.6
Kepone	143-50-8	0.0011	0.13
Methacrylonitrile	126-98-7	0.24	84
Methanol	67-56-1	5.6	NA
Methapyrilene	91-80-5	0.081	1.5
Methoxychlor	72-43-5	0.25	0.18
3-Methylcholanthrene	56-49-5	0.0055	15
4,4-Methylene bis(2-chloroaniline)	101-14-4	0.50	30
Methylene chloride	75-09-2	0.089	30
Methyl ethyl ketone	78-93-3	0.28	36
Methyl isobutyl ketone	108-10-1	0.14	33

Methyl methacrylate	80-62-6	0.14	160
Methyl methansulfonate	66-27-3	0.018	NA
Methyl parathion	298-00-0	0.014	4.6
Naphthalene	91-20-3	0.059	5.6
2-Naphthylamine	91-59-8	0.52	NA
p-Nitroaniline	100-01-6	0.028	28
Nitrobenzene	98-95-3	0.068	14
5-Nitro-o-toluidine	99-55-8	0.32	28
p-Nitrophenol	100-02-7	0.12	29
N-Nitrosodiethylamine	55-18-5	0.40	28
N-Nitrosodimethylamine	62-75-9	0.40	NA
N-Nitroso-di-n-butylamine	924-16-3	0.40	17
N-Nitrosomethyl ethylamine	10595-95-6	0.40	2.3
N-Nitrosomorpholine	59-89-2	0.40	2.3
N-Nitrosopiperidine	100-75-4	0.013	35
N-Nitrosopyrrolidine	930-55-2	0.013	35
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin	3268-87-9	0.000063	<del>0.0025</del> <u>0.005</u>

(OCDD)			
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	39001-02-0	0.000063	0.005
Parathion	56-38-2	0.014	4.6
Total PCBs(sum of all PCB isomers, or all Aroclors)	1336-36-3	0.10	10
Pentachlorobenzene	608-93-5	0.055	10
PeCDDs (All Pentachlorodibenzo-p-dioxins)	NA	0.000063	0.001
PeCDFs (All Pentachlorodibenzofurans)	NA	0.000035	0.001
Pentachloronitrobenzene	82-68-8	0.055	4.8
Pentachlorophenol	87-86-5	0.089	7.4
Phenacetin	62-44-2	0.081	16
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
<u>1,3-Phenylenediamine</u>	<u>108-45-2</u>	<u>0.010</u>	<u>0.66</u>
Phorate	298-02-2	0.021	4.6
Phthalic anhydride	85-44-9	0.055	NA
Pronamide	23950-58-5	0.093	1.5
Pyrene	129-00-0	0.067	8.2
Pyridine	110-86-1	0.014	16

Safrole	94-59-7	0.081	22
Silvex (2,4,5-TP)	93-72-1	0.72	7.9
2,4,5-T	93-76-5	0.72	7.9
1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
TCDDs (All Tetrachlorodibenzo-p-dioxins)	NA	0.000063	0.001
TCDFs (All Tetrachlorodibenzofurans)	NA	0.000063	0.001
1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
1,1,2,2-Tetrachloroethane	79-34-6	0.057	6.0
Tetrachloroethylene	127-18-4	0.056	6.0
2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
Toluene	108-88-3	0.080	10
Toxaphene	8001-35-2	0.0095	2.6
Bromoform (Tribromomethane)	75-25-2	0.63	15
1,2,4-Trichlorobenzene	120-82-1	0.055	19
1,1,1-Trichloroethane	71-55-6	0.054	6.0
1,1,2-Trichloroethane	79-00-5	0.054	6.0

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Trichloroethylene	79-01-6	0.054	6.0
Trichloromono fluoromethane	75-69-4	0.020	30
2,4,5- Trichlorophen ol	95-95-4	0.18	7.4
2,4,6- Trichlorophen ol	88-06-2	0.035	7.4
1,2,3- Trichloropropa ne	96-18-4	0.85	30
1,1,2- Trichloro- 1,2,2- trifluoroethane	76-13-1	0.057	30
tris(2,3- Dibromopropy l) phosphate	126-72-7	0.11	NA
Vinyl chloride	75-01-4	0.27	6.0
Xylenes-mixed isomers(sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
Antimony	7440-36-0	1.9	1.15 mg/l TCLP
Arsenic	7440-38-2	1.4	5.0 mg/l TCLP
Barium	7440-39-3	1.2	21 mg/l TCLP
Beryllium	7440-41-7	0.82	NA
Cadmium	7440-43-9	0.69	0.11 mg/l TCLP
Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
Cyanides (Total)7	57-12-5	1.2	590
Cyanides (Amenable)7	57-12-5	0.86	NA

		Fluoride	16964-48-8	35	NA
		Lead	7439-92-1	0.69	0.75 mg/l TCLP
		Mercury	7439-97-6	0.15	0.025 mg/l TCLP
		Nickel	7440-02-0	3.98	11 mg/l TCLP
		Selenium	7782-49-2	0.82	5.7 mg/l TCLP
		Silver	7440-22-4	0.43	0.14 mg/l TCLP
		Sulfide	8496-25-8	14	NA
		Thallium	7440-28-0	1.4	NA
		Vanadium	7440-62-2	4.3	NA
K031	By-product salts generated in the production of MSMA and cacodylic acid.	Arsenic	7440-38-2	<del>4.4</del> 14	5. mg/l TCLP
K142	Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal.	Benzene	71-43-2	0.14	10
		Benz(a)anthracene	56-55-3	0.059	3.4
		Benzo(a)pyrene	50-32-8	0.061	3.4
		Benzo(b)fluoranthene (difficult to distinguish from <del>benzo(k)</del> benzo(k)fluoranthene)	205-99-2	0.11	6.8
		Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene)	207-08-9	0.11	6.8
		Chrysene	218-01-9	0.059	3.4
		Dibenz(a,h)anthracene	53-70-3	0.055	8.2

K157	Wastewaters (including scrubber waters, condenser waters, washwaters and separation waters) from the production of carbamates and carbamoyl oximes. 10	Indeno(1,2,3-cd)pyrene	193-39-5	0.0055	3.4
		Carbon tetrachloride	56-23-5	0.057	6.0
		Chloroform	67-66-3	0.046	6.0
		Chloromethane	74-87-3	0.19	30
		Methomyl	16752-77-5	0.028	0.14
		Methylene chloride	75-09-2	0.089	30
		Methyl ethyl ketone	78-93-3	0.28	36
		<del>o</del> -Phenylenediamine	<del>95-54-5</del>	<del>0.056</del>	<del>5.6</del>
		Pyridine	110-86-1	0.014	16
		Triethylamine	121-44-8	0.081	1.5
K175	Wastewater treatment sludge from the production of vinyl chloride monomer using mercuric chloride catalyst in an acetylene-based process.  All K175 wastewaters	Mercury <sup>12</sup>	7438-97-6	NA	0.025 mg/L TCLP
		pH <sup>12</sup>		NA	pH ≤ 6.0
		<u>Mercury</u>	<u>7438-97-6</u>	<u>0.15</u>	<u>NA</u>

SECTION 180. NR 668.40, table, is amended to add the waste code K181, inserted after the waste code K178:

**NR 668.40 — Treatment Standards for Hazardous Wastes**

Waste code	Waste description and treatment/Regulatory	Regulated hazardous constituent	Wastewaters	Non-wastewaters
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	subcategory <sup>1</sup>	Common name	CAS <sup>2</sup> number	Concentration in mg/l <sup>3</sup> ; or Technology Code <sup>4</sup>	Concentration in mg/kg <sup>5</sup> unless noted as “mg/l TCLP”; or Technology Code <sup>4</sup>
K181	<u>Nonwastewaters from the production of dyes or pigments (including nonwastewaters commingled at the point of generation with nonwastewaters from other processes) that, at the point of generation, contain mass loadings of any of the constituents identified in sub.(3) of NR 661.32 that are equal to or greater than the corresponding sub.(3) levels, as determined on a calendar year basis.</u>	<u>Aniline</u>	<u>62-53-3</u>	<u>0.81</u>	<u>14</u>
		<u>o-Anisidine</u>	<u>90-04-0</u>	<u>0.010</u>	<u>0.66</u>
		<u>(2-methoxyaniline) 4-</u>	<u>106-47-8</u>	<u>0.46</u>	<u>16</u>
		<u>Chloroaniline</u>	<u>120-71-8</u>	<u>0.010</u>	<u>0.66</u>
		<u>p-Cresidine</u>	<u>95-68-1</u>	<u>0.010</u>	<u>0.66</u>
		<u>2,4-Dimethylaniline (2,4-xylydine) 1,2-Phenylenediamine</u>	<u>95-54-5</u>	<u>CMBST; or CHOXD fb (BIODG or CARBN); or BIODG fb CARBN</u>	<u>CMBST; or CHOXD fb (BIODG or CARBN); or BIODG fb CARBN</u>
		<u>1,3-Phenylenediamine</u>	<u>108-45-2</u>	<u>0.010</u>	<u>0.66</u>

SECTION 181. NR 668.40, table, waste codes U121, U404 and footnote 7 are amended to read:

**NR 668.40 — Treatment Standards for Hazardous Wastes**

Waste code	Waste description and treatment/Regulatory subcategory <sup>1</sup>	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS <sup>2</sup> number		
U121	<del>Trichloromonofluoromethane</del> <u>Trichlorofluoromethane</u>	<del>Trichloromonofluoromethane</del> Trichlorofluoromethane	75-69-4	0.020	30
U404	Triethylamine	Triethylamine	<del>101-44-8</del> 121-44-8	0.081	1.5

7 Both cyanides (total) and cyanides (amenable) for nonwastewaters are to be analyzed using Method 9010C or 9012B, found in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods”, EPA SW-846 incorporated by reference in s. NR 660.11, with a sample size of 10 grams and a distillation time of one hour and 15 minutes.

SECTION 182. NR 668.44 (8) (intro.), (10) and (13) are amended to read:

**NR 668.44 (8) (intro.)** Based on a petition filed by a generator or treater of hazardous waste, the ~~EPA administrator~~ department may approve a site-specific variance from an applicable treatment standard if one of the following conditions is met:

(10) After receiving an application for a site-specific variance from a treatment standard, the ~~EPA administrator~~ department may request any additional information or samples which may be required to evaluate the application.

(13) For all variances, the petitioner shall also demonstrate that compliance with any given treatment variance is sufficient to minimize threats to human health and the environment posed by land disposal of the waste. In evaluating this demonstration, the ~~EPA administrator~~ department may take into account whether a treatment variance should be approved if the subject waste is to be used in a manner constituting disposal pursuant to ss. NR 666.020 to 666.023.

SECTION 183. NR 668.45 Table 1, footnote 6 is amended to read:

**NR 668.45 Table 1, Alternative Treatment Standards for Hazardous Debris**

<sup>6</sup>Dioxin-listed wastes are EPA hazardous waste numbers ~~FO20 F020, FO21 F021, FO22 F022, FO23 F023, FO26 F026~~ and ~~FO27 F027~~.

SECTION 184. NR 668.48, table is amended to read:

**NR 668.48 — Universal Treatment Standards**

Regulated constituent common name	CAS <sup>1</sup> Number	Wastewater Standard	Nonwastewater Standard
		Concentration in mg/l <sup>2</sup>	Concentration in mg/kg <sup>3</sup> unless noted as “mg/l TCLP”
<i>Organic Constituents</i>			
Acenaphthylene	208-96-8	0.059	3.4
Acenaphthene	83-32-9	0.059	3.4
Acetone	67-64-1	0.28	160
Acetonitrile	75-05-8	5.6	38
Acetophenone	96-86-2	0.010	9.7
2-Acetylaminofluorene	53-96-3	0.059	140
Acrolein	107-02-8	0.29	NA
Acrylamide	79-06-1	19	23
Acrylonitrile	107-13-1	0.24	84
Aldicarb sulfone <sup>6</sup>	1646-88-4	0.056	0.28
Aldrin	309-00-2	0.021	0.066
4-Aminobiphenyl	92-67-1	0.13	NA
Aniline	62-53-3	0.81	14

<u>o-Anisidine (2-methoxyaniline)</u>	<u>90-04-0</u>	<u>0.010</u>	<u>0.66</u>
Anthracene	120-12-7	0.059	3.4
Aramite	140-57-8	0.36	NA
alpha-BHC	319-84-6	0.00014	0.066
beta-BHC	319-85-7	0.00014	0.066
delta-BHC	319-86-8	0.023	0.066
gamma-BHC	58-89-9	0.0017	0.066
Barban <sup>6</sup>	101-27-9	0.056	1.4
Bendiocarb <sup>6</sup>	22781-23-3	0.056	1.4
Benomyl <sup>6</sup>	17804-35-2	0.056	1.4
Benzene	71-43-2	0.14	10
Benz(a)anthracene	56-55-3	0.059	3.4
Benzal chloride	98-87-3	0.055	6.0
Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene)	205-99-2	0.11	6.8
Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene)	207-08-9	0.11	6.8
Benzo(g,h,i)perylene	191-24-2	0.0055	1.8
Benzo(a)pyrene	50-32-8	0.061	3.4
Bromodichloromethane	75-27-4	0.35	15
Bromomethane/Methyl bromide	74-83-9	0.11	15
4-Bromophenyl phenyl ether	101-55-3	0.055	15
n-Butyl alcohol	71-36-3	5.6	2.6
Butylate <sup>6</sup>	2008-41-5	0.042	1.4
Butyl benzyl phthalate	85-68-7	0.017	28
2-sec-Butyl-4,6-dinitrophenol/Dinoseb	88-85-7	0.066	2.5
Carbaryl <sup>6</sup>	63-25-2	0.006	0.14
Carbenzadim <sup>6</sup>	10605-21-7	0.056	1.4
Carbofuran <sup>6</sup>	1563-66-2	0.006	0.14
Carbofuran phenol <sup>6</sup>	1563-38-8	0.056	1.4
Carbon disulfide	75-15-0	3.8	4.8 mg/l TCLP
Carbon tetrachloride	56-23-5	0.057	6.0
Carbosulfan <sup>6</sup>	55285-14-8	0.028	1.4
Chlordane (alpha and gamma isomers)	57-74-9	0.0033	0.26
p-Chloroaniline	106-47-8	0.46	16
Chlorobenzene	108-90-7	0.057	6.0
Chlorobenzilate	510-15-6	0.10	NA
2-Chloro-1,3-butadiene	126-99-8	0.057	0.28
Chlorodibromomethane	124-48-1	0.057	15
Chloroethane	75-00-3	0.27	6.0
bis(2-Chloroethoxy)methane	111-91-1	0.036	7.2
bis(2-Chloroethyl)ether	111-44-4	0.033	6.0
Chloroform	67-66-3	0.046	6.0

bis(2-Chloroisopropyl)ether	39638-32-9	0.055	7.2
p-Chloro-m-cresol	59-50-7	0.018	14
2-Chloroethyl vinyl ether	110-75-8	0.062	NA
Chloromethane/Methyl chloride	74-87-3	0.19	30
2-Chloronaphthalene	91-58-7	0.055	5.6
2-Chlorophenol	95-57-8	0.044	5.7
3-Chloropropylene	107-05-1	0.036	30
Chrysene	218-01-9	0.059	3.4
<u>p-Cresidine</u>	<u>120-71-8</u>	<u>0.010</u>	<u>0.66</u>
o-Cresol	95-48-7	0.11	5.6
m-Cresol (difficult to distinguish from p-cresol)	108-39-4	0.77	5.6
p-Cresol (difficult to distinguish from m-cresol)	106-44-5	0.77	5.6
m-Cumenyl methylcarbamate <sup>6</sup>	64-00-6	0.056	1.4
Cyclohexanone	108-94-1	0.36	0.75 mg/l TCLP
o,p'-DDD	53-19-0	0.023	0.087
p,p'-DDD	72-54-8	0.023	0.087
o,p'-DDE	3424-82-6	0.031	0.087
p,p'-DDE	72-55-9	0.031	0.087
o,p'-DDT	789-02-6	0.0039	0.087
p,p'-DDT	50-29-3	0.0039	0.087
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
Dibenz(a,e)pyrene	192-65-4	0.061	NA
1,2-Dibromo-3-chloropropane	96-12-8	0.11	15
1,2-Dibromoethane/Ethylene dibromide	106-93-4	0.028	15
Dibromomethane	74-95-3	0.11	15
m-Dichlorobenzene	541-73-1	0.036	6.0
o-Dichlorobenzene	95-50-1	0.088	6.0
p-Dichlorobenzene	106-46-7	0.090	6.0
Dichlorodifluoromethane	75-71-8	0.23	7.2
1,1-Dichloroethane	75-34-3	0.059	6.0
1,2-Dichloroethane	107-06-2	0.21	6.0
1,1-Dichloroethylene	75-35-4	0.025	6.0
trans-1,2-Dichloroethylene	156-60-5	0.054	30
2,4-Dichlorophenol	120-83-2	0.044	14
2,6-Dichlorophenol	87-65-0	0.044	14
2,4-Dichlorophenoxyacetic acid/2,4-D	94-75-7	0.72	10
1,2-Dichloropropane	78-87-5	0.85	18
cis-1,3-Dichloropropylene	10061-01-5	0.036	18
trans-1,3-Dichloropropylene	10061-02-6	0.036	18
Dieldrin	60-57-1	0.017	0.13
Diethyl phthalate	84-66-2	0.20	28
p-Dimethylaminoazobenzene	60-11-7	0.13	NA

<u>2,4-Dimethylaniline (2,4-xylidine)</u>	<u>95-68-1</u>	<u>0.010</u>	<u>0.66</u>
2-4-Dimethyl phenol	105-67-9	0.036	14
Dimethyl phthalate	131-11-3	0.047	28
<del>Dimetilan</del>	<del>644-64-4</del>	<del>0.056</del>	<del>1.4</del>
Di-n-butyl phthalate	84-74-2	0.057	28
1,4-Dinitrobenzene	100-25-4	0.32	2.3
4,6-Dinitro-o-cresol	534-52-1	0.28	160
2,4-Dinitrophenol	51-28-5	0.12	160
2,4-Dinitrotoluene	121-14-2	0.32	140
2,6-Dinitrotoluene	606-20-2	0.55	28
Di-n-octyl phthalate	117-84-0	0.017	28
Di-n-propylnitrosamine	621-64-7	0.40	14
1,4-Dioxane	123-91-1	12.0	170
Diphenylamine (difficult to distinguish from diphenylnitrosamine)	122-39-4	0.92	13
Diphenylnitrosamine (difficult to distinguish from diphenylamine)	86-30-6	0.92	13
1,2-Diphenylhydrazine	122-66-7	0.087	NA
Disulfoton	298-04-4	0.017	6.2
Dithiocarbamates (total) <sup>6</sup>	NA	0.028	28
Endosulfan I	959-98-8	0.023	0.066
Endosulfan II	33213-65-9	0.029	0.13
Endosulfan sulfate	1031-07-8	0.029	0.13
Endrin	72-20-8	0.0028	0.13
Endrin aldehyde	7421-93-4	0.025	0.13
EPTC <sup>6</sup>	759-94-4	0.042	1.4
Ethyl acetate	141-78-6	0.34	33
Ethyl benzene	100-41-4	0.057	10
Ethyl cyanide/Propanenitrile	107-12-0	0.24	360
Ethyl ether	60-29-7	0.12	160
<del>bis(2-Ethylhexyl) phthalate</del>	<del>117-81-7</del>	<del>0.28</del>	<del>28</del>
Ethyl methacrylate	97-63-2	0.14	160
Ethylene oxide	75-21-8	0.12	NA
Famphur	52-85-7	0.017	15
Fluoranthene	206-44-0	0.068	3.4
Fluorene	86-73-7	0.059	3.4
Formetanate hydrochloride <sup>6</sup>	23422-53-9	0.056	1.4
Heptachlor	76-44-8	0.0012	0.066
Heptachlor epoxide	1024-57-3	0.016	0.066
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin(1,2,3,4,6,7,8-HpCDD)	35822-46-9	0.000035	0.0025
1,2,3,4,6,7,8-Heptachlorodibenzofuran (1,2,3,4,6,7,8-HpCDF)	67562-39-4	0.000035	0.0025

1,2,3,4,7,8,9-Heptachlorodibenzofuran (1,2,3,4,7,8,9-HpCDF)	55673-89-7	0.000035	0.0025
Hexachlorobenzene	118-74-1	0.055	10
Hexachlorobutadiene	87-68-3	0.055	5.6
Hexachlorocyclopentadiene	77-47-4	0.057	2.4
HxCDDs (All Hexachlorodibenzo-p-dioxins)	NA	0.000063	0.001
HxCDFs (All Hexachlorodibenzofurans)	NA	0.000063	0.001
Hexachloroethane	67-72-1	0.055	30
<del>Hexachloropropylene</del>	<del>1888-71-7</del>	<del>0.035</del>	<del>30</del>
Indeno (1,2,3-c,d) pyrene	193-39-5	0.0055	3.4
Iodomethane	74-88-4	0.19	65
Isobutyl alcohol	78-83-1	5.6	170
Isodrin	465-73-6	0.021	0.066
Isosafrole	120-58-1	0.081	2.6
Kepone	143-50-0	0.0011	0.13
Methacrylonitrile	126-98-7	0.24	84
Methanol	67-56-1	5.6	0.75 mg/l TCLP
Methapyrilene	91-80-5	0.081	1.5
Methiocarb <sup>6</sup>	2032-65-7	0.056	1.4
Methomyl <sup>6</sup>	16752-77-5	0.028	0.14
Methoxychlor	72-43-5	0.25	0.18
3-Methylcholanthrene	56-49-5	0.0055	15
4,4-Methylene bis(2-chloroaniline)	101-14-4	0.50	30
Methylene chloride	75-09-2	0.089	30
Methyl ethyl ketone	78-93-3	0.28	36
Methyl isobutyl ketone	108-10-1	0.14	33
Methyl methacrylate	80-62-6	0.14	160
Methyl methansulfonate	66-27-3	0.018	NA
Methyl parathion	298-00-0	0.014	4.6
Metolcarb <sup>6</sup>	1129-41-5	0.056	1.4
Mexacarbate <sup>6</sup>	315-18-4	0.056	1.4
Molinate <sup>6</sup>	2212-67-1	0.042	1.4
Naphthalene	91-20-3	0.059	5.6
2-Naphthylamine	91-59-8	0.52	NA
o-Nitroaniline	88-74-4	0.27	14
p-Nitroaniline	100-01-6	0.028	28
Nitrobenzene	98-95-3	0.068	14
5-Nitro-o-toluidine	99-55-8	0.32	28
o-Nitrophenol	88-75-5	0.028	13
p-Nitrophenol	100-02-7	0.12	29
N-Nitrosodiethylamine	55-18-5	0.40	28
N-Nitrosodimethylamine	62-75-9	0.40	2.3

N-Nitroso-di-n-butylamine	924-16-3	0.40	17
N-Nitrosomethylethylamine	10595-95-6	0.40	2.3
N-Nitrosomorpholine	59-89-2	0.40	2.3
N-Nitrosopiperidine	100-75-4	0.013	35
N-Nitrosopyrrolidine	930-55-2	0.013	35
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	3268-87-9	0.000063	0.005
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	39001-02-0	0.000063	0.005
Oxamyl <sup>6</sup>	23135-22-0	0.056	0.28
Parathion	56-38-2	0.014	4.6
Total PCBs (sum of all PCB isomers, or all Aroclors) <sup>8</sup>	1336-36-3	0.10	10
Pebulate <sup>6</sup>	1114-71-2	0.042	1.4
Pentachlorobenzene	608-93-5	0.055	10
PeCDDs (All Pentachlorodibenzo-p-dioxins)	NA	0.000063	0.001
PeCDFs (All Pentachlorodibenzofurans)	NA	0.000035	0.001
Pentachloroethane	76-01-7	0.055	6.0
Pentachloronitrobenzene	82-68-8	0.055	4.8
Pentachlorophenol	87-86-5	0.089	7.4
Phenacetin	62-44-2	0.081	16
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
<del>o</del> -Phenylenediamine	<del>95-54-5</del>	<del>0.056</del>	<del>5.6</del>
<u>1,3-Phenylenediamine</u>	<u>108-45-2</u>	<u>0.010</u>	<u>0.66</u>
Phorate	298-02-2	0.021	4.6
Phthalic acid	100-21-0	0.055	28
Phthalic anhydride	85-44-9	0.055	28
Physostigmine <sup>6</sup>	57-47-6	0.056	1.4
Physostigmine salicylate <sup>6</sup>	57-64-7	0.056	1.4
Promecarb <sup>6</sup>	2631-37-0	0.056	1.4
Pronamide	23950-58-5	0.093	1.5
Propham <sup>6</sup>	122-42-9	0.056	1.4
Propoxur <sup>6</sup>	114-26-1	0.056	1.4
Prosulfocarb <sup>6</sup>	52888-80-9	0.042	1.4
Pyrene	129-00-0	0.067	8.2
Pyridine	110-86-1	0.014	16
Safrole	94-59-7	0.081	22
Silvex/2,4,5-TP	93-72-1	0.72	7.9
1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
TCDDs (All Tetrachlorodibenzo-p-dioxins)	NA	0.000063	0.001
TCDFs (All Tetrachlorodibenzofurans)	NA	0.000063	0.001
1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
1,1,2,2-Tetrachloroethane	79-34-5	0.057	6.0

Tetrachloroethylene	127-18-4	0.056	6.0
2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
Thiodicarb <sup>6</sup>	59669-26-0	0.019	1.4
Thiophanate-methyl <sup>6</sup>	23564-05-8	0.056	1.4
Toluene	108-88-3	0.080	10
Toxaphene	8001-35-2	0.0095	2.6
Triallate <sup>6</sup>	2303-17-5	0.042	1.4
Tribromomethane/Bromoform	75-25-2	0.63	15
1,2,4-Trichlorobenzene	120-82-1	0.055	19
1,1,1-Trichloroethane	71-55-6	0.054	6.0
1,1,2-Trichloroethane	79-00-5	0.054	6.0
Trichloroethylene	79-01-6	0.054	6.0
Trichloromonofluoromethane	75-69-4	0.020	30
2,4,5-Trichlorophenol	95-95-4	0.18	7.4
2,4,6-Trichlorophenol	88-06-2	0.035	7.4
2,4,5-Trichlorophenoxyacetic acid/2,4,5-T	93-76-5	0.72	7.9
1,2,3-Trichloropropane	96-18-4	0.85	30
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.057	30
Triethylamine <sup>6</sup>	<del>101-44-8</del> 121-44-8	0.081	1.5
tris-(2,3-Dibromopropyl) phosphate	126-72-7	0.11	0.10
Vernolate <sup>6</sup>	1929-77-7	0.042	1.4
Vinyl chloride	75-01-4	0.27	6.0
Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
<i>Inorganic Constituents</i>			
Antimony	7440-36-0	1.9	1.15 mg/l TCLP
Arsenic	7440-38-2	1.4	5.0 mg/l TCLP
Barium	7440-39-3	1.2	21 mg/l TCLP
Beryllium	7440-41-7	0.82	1.22 mg/l TCLP
Cadmium	7440-43-9	0.69	0.11 mg/l TCLP
Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
Cyanides (Total) <sup>4</sup>	57-12-5	1.2	590
Cyanides (Amenable) <sup>4</sup>	57-12-5	0.86	30
Fluoride <sup>5</sup>	16984-48-8	35	NA
Lead	7439-92-1	0.69	0.75 mg/l TCLP
Mercury - Nonwastewater from Retort	7439-97-6	NA	0.20 mg/l TCLP
Mercury - All Others	7439-97-6	0.15	0.025 mg/lTCLP
Nickel	7440-02-0	3.98	11. mg/l TCLP
Selenium <sup>7</sup>	7782-49-2	0.82	5.7 mg/l TCLP
Silver	7440-22-4	0.43	0.14 mg/l TCLP
Sulfide <sup>5</sup>	18496-25-8	14	NA



Thallium	7440-28-0	1.4	0.20 mg/l TCLP
Vanadium <sup>5</sup>	7440-62-2	4.3	1.6 mg/l TCLP
Zinc <sup>5</sup>	7440-66-6	2.61	4.3 mg/l TCLP

NA means not applicable.

<sup>1</sup> CAS means Chemical Abstract Services. When the waste code or regulated constituents are described as a combination of a chemical with its salts or esters, the CAS number is given for the parent compound only.

<sup>2</sup> Concentration standards for wastewaters are expressed in mg/l and are based on analysis of composite samples.

<sup>3</sup> Except for metals (EP or TCLP) and cyanides (total and amenable) the nonwastewater treatment standards expressed as a concentration were established, ~~in part~~ in part, based upon incineration in units operated according to the technical requirements of subch. O of ch. NR 664 or 665, or based upon combustion in fuel substitution units operating according to applicable technical requirements. A facility may comply with these treatment standards according to s. NR 668.40 (4). All concentration standards for nonwastewaters are based on analysis of grab samples.

<sup>4</sup> Both cyanides (total) and cyanides (amenable) for nonwastewaters are to be analyzed using Method 9010C or 9012B, found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA SW-846, incorporated by reference in s. NR 660.11, with a sample size of 10 grams and a distillation time of one hour and 15 minutes.

<sup>5</sup> These constituents are not "underlying hazardous constituents" in characteristic wastes, according to the definition at s. NR 668.02 (9).

<sup>6</sup> Between August 26, 1996, and March 4, 1998, these constituents are not "underlying hazardous constituents" as defined at s. NR 668.02 (9).

<sup>7</sup> This constituent is not an underlying hazardous constituent as defined at s. NR 668.02 (9) because its UTS level is greater than its TC level, thus a treatment selenium waste would always be characteristically hazardous, unless it is treated to below its characteristic level.

<sup>8</sup> This standard is temporarily deferred for soil exhibiting a hazardous characteristic due to D004 to D011 only.

SECTION 185. NR 668.49 (1) and (4) are amended to read:

**NR 668.49 (1)** A person shall comply with LDRs prior to placing soil that exhibits a characteristic of hazardous waste, or exhibited a characteristic of hazardous waste at the time it was generated, into a land disposal unit. The following chart describes whether a person is required to comply with LDRs prior to placing soil contaminated by listed hazardous waste into a land disposal unit:

If LDRs	And if LDRs	And if	Then a person
Applied to the listed waste when it contaminated the soil*.	Apply to the listed waste now.	..... <del>or</del> —	Shall comply with LDRs
Didn't apply to the listed waste when it contaminated the soil*.	Apply to the listed waste now.	The soil is determined to contain the listed waste when the soil is first generated.	Shall comply with LDRs.
Didn't apply to the listed waste when it contaminated the soil*.	Apply to the listed waste now.	The soil is determined not to contain the listed waste when the soil is first generated.	Needn't comply with LDRs.
Didn't apply to the listed waste when it contaminated the soil*.	Don't apply to the listed waste now.	..... <del>or</del> —	Needn't comply with LDRs.

\* For dates of LDR applicability, see ch. NR 668, Appendix VII. To determine the date a listed hazardous waste contaminated a volume of soil, use the last date the listed hazardous waste was placed into the land disposal unit or, in the case of an accidental spill, the date of the spill

(4) When applying the soil treatment standards in sub. (3), constituents subject to treatment are any constituents listed in s. NR 668.48, Table UTS that are reasonably expected to be present in any given volume of contaminated soil, except fluoride, selenium, sulfides, vanadium and zinc, and that are present at concentrations greater than ten times the universal treatment standard. PCBs are not ~~constituents a~~ constituent subject to treatment in any given volume of soil which exhibits the toxicity characteristic solely because of the presence of metals.

SECTION 186. NR 668.50 (7) is amended to read:

**NR 668.50 (7)** The prohibition and requirements in this section do not apply to hazardous remediation wastes stored in a staging pile approved pursuant to s. NR 664.0554.

SECTION 187. NR 668 Appendix VII, Table 1, waste codes F032, F033, F0334, F035 and K088 are amended to read:

**Table 1**  
**Effective Dates of Surface Disposed Wastes (Non-Soil and Debris) Regulated in the LDRS Comprehensive List**

Waste code	Waste category	Effective date
F032	All others	<del>May 12, 1999</del> <u>Aug. 12, 1997</u>
<del>F033</del>	<del>Mixed with radioactive wastes</del>	<del>May 12, 1999</del>
<del>F033</del>	All others	<del>May 12, 1997</del>
F034	All others	<del>May 12, 1997</del> <u>Aug. 12, 1997</u>
<u>F035</u>	<u>Mixed with radioactive wastes</u>	<u>May 12, 1999</u>
<u>F035</u>	<u>All others</u>	<u>Aug. 12, 1997</u>
K088	All others	<del>Jan. 8, 1997</del> <u>Oct. 8, 1997</u>

SECTION 188. NR 668, Appendix VIII is repealed.

SECTION 189. NR 668, Appendix IX (title) and (Note) are amended to read:

**NR 668, Appendix IX (title) EXTRACTION PROCEDURE (EP) TOXICITY TEST METHOD AND STRUCTURAL INTEGRITY TEST (METHOD 1310B)**

(Note) The EP (method 1310B) is published in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods”, EPA SW-846, (see s. NR 660.11).

SECTION 189m. Chapter NR 670, Table of Contents, is repealed and recreated to read:

**Chapter NR 670****HAZARDOUS WASTE LICENSING AND DECISIONMAKING PROCEDURES****Subchapter A — General Information**

- NR 670.001 Purpose and scope of subchs. A to I.
- NR 670.002 Definitions.
- NR 670.004 Effect of a license.
- NR 670.005 Noncompliance and program reporting by the department.

**Subchapter B — License Application**

- NR 670.007 Pre-application requirements.
- NR 670.010 General application requirements.
- NR 670.011 Signatories to license applications and reports.
- NR 670.012 Confidentiality of information.
- NR 670.013 Contents of part A of the license application.
- NR 670.014 Contents of the feasibility and plan of operation report: general requirements.
- NR 670.015 Specific feasibility and plan of operation report information requirements for containers.
- NR 670.016 Specific feasibility and plan of operation report information requirements for tank systems.
- NR 670.017 Specific feasibility and plan of operation report information requirements for surface impoundments.
- NR 670.018 Specific feasibility and plan of operation report information requirements for waste piles.
- NR 670.019 Specific feasibility and plan of operation report information requirements for incinerators.
- NR 670.021 Specific feasibility and plan of operation report information requirements for landfills.
- NR 670.022 Specific feasibility and plan of operation report information requirements for boilers and industrial furnaces burning hazardous waste.
- NR 670.023 Specific feasibility and plan of operation report information requirements for miscellaneous units.
- NR 670.024 Specific feasibility and plan of operation report information requirements for process vents.
- NR 670.025 Specific feasibility and plan of operation report information requirements for equipment.
- NR 670.026 Specific feasibility and plan of operation report information requirements for drip pads.
- NR 670.027 Specific feasibility and plan of operation report information requirements for air emission controls for tanks, surface impoundments and containers.
- NR 670.028 Information requirements for long-term care licenses.
- NR 670.029 License denial.

**Subchapter C — License Conditions**

- NR 670.030 Conditions applicable to all operating licenses.
- NR 670.031 Requirements for recording and reporting of monitoring results.
- NR 670.032 Establishing license conditions.
- NR 670.033 Schedules of compliance.

**Subchapter D — Changes to Licenses**

- NR 670.040 Transfer of licenses.
- NR 670.041 Modification or revocation and reissuance of licenses.
- NR 670.042 License modification at the request of the licensee.
- NR 670.043 Revocation, suspension or denial of licenses.

**Subchapter E — Expiration and Continuation of Licenses**

- NR 670.050 Duration of licenses.
- NR 670.051 Continuation of expiring operating licenses.

### **Subchapter F — Special Forms of Licenses**

- NR 670.061 Emergency licenses.
- NR 670.062 Hazardous waste incinerator licenses.
- NR 670.065 Research, development and demonstration licenses.
- NR 670.066 Licenses for boilers and industrial furnaces burning hazardous waste.
- NR 670.067 Standardized licenses for storage and treatment units
- NR 670.068 Remediation Variances.

### **Subchapter G — Interim Licenses**

- NR 670.070 Qualifying for an interim license.
- NR 670.071 Operation during an interim license period.
- NR 670.072 Modifications to an interim license.
- NR 670.073 Termination of an interim license.

### **Subchapter H — Remediation Variances**

- NR 670.079 Remediation Variances.

### **Subchapter I — Integration with Maximum Achievable Control Technology (MACT) Standards**

- NR 670.235 Options for incinerators and cement and lightweight aggregate kilns to minimize emissions from startup, shutdown, and malfunction events.

### **Subchapter J — Standardized Licenses for Storage and Treatment Units**

- NR 670.250 What is a standardized license?
- NR 670.255 Who is eligible for a standardized license?
- NR 670.260 What requirements of ch. NR 670 apply to a standardized license?
- NR 670.270 How do I apply for a standardized license?
- NR 670.273 How may I switch from my individual license to a standardized license?
- NR 670.275 What information shall I submit to the department to support my standardized license application?
- NR 670.280 What are the certification requirements?
- NR 670.290 What general types of information shall I keep at my facility?
- NR 670.300 What container information shall I keep at my facility?
- NR 670.305 What tank information shall I keep at my facility?
- NR 670.310 What equipment information shall I keep at my facility?
- NR 670.315 What air emission control information shall I keep at my facility?
- NR 670.320 How do I modify my standardized license?

### **Subchapter L — General Decisionmaking Procedures**

- NR 670.401 Purpose and scope.
- NR 670.403 License application procedures.
- NR 670.404 Consolidation of EPA permit and department license processing.
- NR 670.405 Modification, revocation and reissuance, or revocation or denial of licenses.
- NR 670.406 Preliminary determination of license applications.
- NR 670.408 Fact sheet.
- NR 670.409 Administrative record.
- NR 670.410 Public notice and public comment period.
- NR 670.411 Public comments and requests for public hearings.
- NR 670.412 Public hearings.
- NR 670.415 Issuance of the operating license.
- NR 670.417 Response to comments.
- NR 670.427 Annual renewal of the operating license.

### Subchapter M — Specific Decisionmaking Procedures

NR 670.431 Pre-application public meeting and notice.  
 NR 670.432 Public notice requirements at the application stage.  
 NR 670.433 Information repository.

SECTION 190. NR 670.001 (2) is amended to read:

**NR 670.001 (2) OVERVIEW OF THE HAZARDOUS WASTE LICENSE PROGRAM.** Not later than 90 days after the promulgation or revision of rules in ch. NR 661, identifying and listing hazardous wastes, generators and transporters of hazardous waste, and owners or operators of hazardous waste treatment, storage or disposal facilities may be required to file a notification of that activity under s. NR 660.07. Treatment, storage or disposal of hazardous waste by any person who has not applied for and received a hazardous waste license is prohibited. A license application consists of two parts, part A (see s. NR 670.013) and a feasibility and plan of operation report (see s. NR 670.014 and applicable sections in ss. NR 670.015 to 670.029). Treatment and storage facilities (TSDs) that are otherwise subject to licensing under ch. 291, Stats., and meet the criteria in pars. (a) or (b) may be eligible for a standardized license under ch. NR 667, subchapter J. For existing HWM facilities, the requirements to submit a license application is satisfied by submitting only part A until the date the department sets for submitting the feasibility and plan of operation report. Part A consists of Forms 1 and 3 of the EPA Consolidated Permit Application Forms. Timely submission of both notification under s. NR 660.07 and part A qualifies owners and operators of existing HWM facilities (who are required to have a license) for an interim license under s. 291.25, Stats. Facility owners and operators with an interim license are treated as having been issued an operating license until the department makes a final determination on the operating license application. Facility owners and operators with interim licenses shall comply with interim license standards set forth at chs. NR 665 and 666. Facility owners and operators with interim licenses are not relieved from complying with other state requirements. For existing HWM facilities, the department shall set a date, giving at least 6 months notice, for submission of the feasibility and plan of operation report. There is no form for the feasibility and plan of operation report; rather, the report shall be submitted in narrative form and contain the information set forth in ss. NR 670.014 to 670.029. Owners or operators of new HWM facilities shall submit the license application at least 180 days before physical construction is expected to commence.

(a) The facility generates hazardous waste and then stores or non-thermally treats the hazardous waste on-site in tanks, containers or containment buildings.

(b) The facility receives hazardous waste generated off-site by a generator under the same ownership as the receiving facility, and then stores or non-thermally treats the hazardous waste in tanks, containers or containment buildings.

**Note:** EPA part A form may be obtained from:

<http://www.epa.gov/epaoswer/hazwaste/data/form8700/8700-12.pdf>

<http://www.epa.gov/epaoswer/hazwaste/data/form8700/8700-23.pdf>, or the department by E-mail: [waste.management@dnr.state.wi.us](mailto:waste.management@dnr.state.wi.us), phone (608) 266-2111 or Fax (608) 266-2111.

SECTION 191. NR 670.001 (3)(b) 8. c. is amended to read:

**NR 670.001 (3) (b) 8. c.** ~~Thermostats~~ Mercury-containing equipment as described in s. NR 673.04.

SECTION 192. NR 670.002 (14) and (19) are amended to read:

**NR 670.002 (14)** “License” means an approval issued by the department under this chapter that grants the licensee permission to operate a hazardous waste treatment, storage or disposal facility. “License” includes an operating license, interim license ~~and~~ emergency license and standardized license.

**(19)** “Permit” means an authorization, license, or equivalent control document issued by EPA or an approved State to implement the requirements of 40 CFR parts 270, 271 and 124. Permit includes permit by rule (40 CFR 270.60) ~~and~~ emergency permit (40 CFR 270.61) and standardized permit (40 CFR part 270 subpart J). Permit does not include RCRA interim status (40 CFR part 270 subpart G), or any permit which has not yet been the subject of final action by EPA, such as a draft permit or a proposed permit.

SECTION 193. NR 670.002 (23m) is created to read:

**NR 670.002 (23m)** “Standardized license” means a license issued by the department under ch. NR 670 authorizing the facility owner or operator to manage hazardous waste. The standardized license may have 2 parts: a uniform portion issued in all cases and a supplemental portion issued at the department’s discretion.

SECTION 194. NR 670.010 (1) and (8) are amended to read:

**(1) NR 670.010 General application requirements.** LICENSE APPLICATION. Any person who is required to have a license (including new applicants and licensees with expiring 10 year operating licenses) shall complete, sign, and submit two copies of the license application to the department as described in this section and ss. NR 670.070 to 670.073. A person currently authorized with an interim license shall submit the feasibility and plan of operation report when required by the department. Procedures for applications, issuance and administration of emergency licenses are found in s. NR 670.061. Procedures for application, issuance and administration of research, development and demonstration licenses are found in s. NR 670.065. Procedures for applications, issuance and administration of standardized licenses are found in subchs. J and M.

**(8) REAPPLICATION FOR AN OPERATING LICENSE.** ~~Any~~ The owner or operator of any HWM facility with an operating license shall either re-submit a license application at least 180 days before the expiration date of the operating license, unless permission for a later date has been granted by the department, or submit a Notice of Intent for a standardized license as described in s. NR 670.051 (5) (a) at least 180 days before the expiration date of the operating license, unless the department allows a later date. The department may not ~~grant permission for~~ allow a facility to submit applications or Notices of Intent to be submitted later than the expiration date of the operating license, except as allowed by s. NR 670.051 (5) (b).

SECTION 195. NR 670.010 (13) is created to read:

**NR 670.010 (13) ADDITIONAL AIR EMISSION REQUIREMENTS.** If the department concludes, based on one or more of the factors listed in par. (a), that compliance with the standards of 40 CFR part 63, subpart EEE alone may not be protective of human health or the environment, the department will require the additional information or assessments necessary to determine whether additional controls are necessary to ensure protection of human health and the environment. This includes information necessary to evaluate the potential risk to human health or the environment resulting from both direct and indirect exposure pathways. The department may also require a licensee or applicant to provide information necessary to determine whether these assessments should be required.

(a) The department will base the evaluation of whether compliance with the standards of 40 CFR part 63, subpart EEE alone is protective of human health or the environment on factors relevant to the potential risk from a hazardous waste combustion unit, including, as appropriate, any of the following factors:

1. Particular site-specific considerations such as proximity to receptors (such as schools, hospitals, nursing homes, day care centers, parks, community activity centers or other potentially sensitive receptors), unique dispersion patterns, and other relevant factors.
2. Identities and quantities of emissions of persistent, bioaccumulative or toxic pollutants considering enforceable controls in place to limit those pollutants.
3. Identities and quantities of non-dioxin products of incomplete combustion most likely to be emitted and to pose significant risk based on known toxicities (confirmation of which should be made through emissions testing).
4. Identities and quantities of other off-site sources of pollutants in proximity of the facility that significantly influence interpretation of a facility-specific risk assessment.
5. Presence of significant ecological considerations, such as the proximity of a particularly sensitive ecological area.
6. Volume and types of wastes, for example wastes containing highly toxic constituents.
7. Other on-site sources of hazardous air pollutants that significantly influence interpretation of the risk posed by the operation of the source in question.
8. Adequacy of any previously conducted risk assessment, given any subsequent changes in conditions likely to affect risk.
9. Other factors as may be appropriate.

SECTION 196. NR 670.014 (1) is amended and to read:

**NR 670.014 (1) GENERAL INFORMATION.** The feasibility and plan of operation report consists of the general information requirements of this section, and the specific information requirements in ss. NR 670.014 to 670.029 applicable to the facility. The feasibility and plan of operation information requirements presented in ss. NR 670.014 to 670.029 reflect the standards promulgated in ch. NR 664. These information requirements are necessary in order for the department to determine compliance with the ch. NR 664 standards. If owners and operators of HWM facilities can demonstrate that the information

prescribed in the feasibility and plan of operation report ~~can not~~ cannot be provided to the extent required, the department may make allowance for submission of the information on a case-by-case basis. Information required in the feasibility and plan of operation report shall be submitted to the department and signed according to s. NR 670.011. Technical data, such as design drawings and specifications, and engineering studies shall be certified by a ~~registered~~ qualified professional engineer. For long-term care licenses, only the information specified in s. NR 670.028 is required in the feasibility and plan of operation report.

SECTION 197 NR 670.014 (1) Note is repealed.

SECTION 198. 670.016(1) is amended to read:

**NR 670.016 (1)** A written assessment that is reviewed and certified by ~~an independent,~~ a qualified, ~~registered~~ professional engineer as to the structural integrity and suitability for handling hazardous waste of each tank system, as required under ss. NR 664.0191 and 664.0192.

SECTION 199. NR 670.019 (3) (a) 3., 4. and (5) are amended to read:

**NR 670.019 (3)** (a) 3. An identification of any hazardous organic constituents listed in ch. NR 661, Appendix VIII, which are present in the waste to be burned, except that the applicant need not analyze for constituents listed in ch. NR 661, Appendix VIII, which would reasonably not be expected to be found in the waste. Identify the constituents excluded from analysis and state the basis for their exclusion. The waste analysis shall rely on ~~the analytical techniques in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA SW 846, incorporated by reference in s. NR 660.11, or their equivalent~~ appropriate analytical methods.

4. An approximate quantification of the hazardous constituents identified in the waste, within the precision produced by ~~the appropriate~~ appropriate analytical methods in ~~"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA SW 846, incorporated by reference in s. NR 660.11.~~

(5) When an owner or operator of a hazardous waste incineration unit becomes subject to hazardous waste licensing requirements after October 12, 2005, or when an owner or operator demonstrates compliance with the air emission standards and limitations in 40 CFR part 63, subpart EEE (i.e. for instance, by conducting a comprehensive performance test and submitting a notification of compliance under 40 CFR 63.1207(j) and 63.1210(d) documenting compliance with 40 CFR part 63, subpart EEE), the requirements of this section do not apply, except those provisions the department determines are necessary to ensure compliance with s. NR 664.0345 (1) and s. NR 664.0345 (3) if the owner or operator elects to comply with s. NR 670.235 (1) (a) 1. to minimize emissions of toxic compounds from startup, shutdown and malfunction events. Nevertheless, the department may apply the rules in this section, on a case-by-case basis, for purposes of information collection according to s. NR 670.010 (11) and s. NR 670.032 (2) (b).

SECTION 200. NR 670.022 (intro.) and (1) (b) 2. b. are amended to read:



**NR 670.022 Specific feasibility and plan of operation report information requirements for boilers and industrial furnaces burning hazardous waste (intro).** When an owner or operator of a cement kiln, lightweight aggregate kiln, solid fuel boiler, liquid fuel boiler or hydrochloric acid production furnace becomes subject to hazardous waste licensing requirements after October 12, 2005, or when an owner or operator of an existing cement or, lightweight aggregate kiln, solid fuel boiler, liquid fuel boiler or hydrochloric acid production furnace demonstrates compliance with the air emission standards and limitations in 40 CFR part 63, subpart EEE (i.e. for instance, by conducting a comprehensive performance test and submitting a notification of compliance under 40 CFR 63.1207(j) and 63.1210(d) documenting compliance with 40 CFR part 63, subpart EEE), the requirements of this section do not apply, except those provisions. The requirements of this section do apply, however, if the department determines certain provisions are necessary to ensure compliance with ss. NR 666.102 (5) (a) and 666.102 (5) (b) 3. if the owner or operator elects to comply with s. NR 670.235 (1) (a) 1. to minimize emissions of toxic compounds from startup, shutdown and malfunction events. Nevertheless, or if the facility is an area source and the owner or operator elects to comply with the ss. NR 666.105, 666.106 and 666.107 standards and associated requirements for particulate matter, hydrogen chloride and chlorine gas and non-mercury metals; or the department may apply the provisions of this section determines certain provisions apply, on a case-by-case basis, for purposes of information collection according to ss. NR 670.010 (11) and (12) and 670.032 (2) (b) and (c).

(1) (b) 2. b. Results of analyses of each waste to be burned, documenting the concentrations of nonmetal compounds listed in ch. NR 661, Appendix VIII, except for those constituents that would reasonably not be expected to be in the waste. Identify the constituents excluded from analysis and explain the basis for their exclusion. The analysis shall rely on ~~the appropriate analytical techniques in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods”, EPA SW-846, incorporated by reference in s. NR 660.11.~~

SECTION 201. NR 670.024 (4)(c) is amended to read:

**NR 670.024 (4) (c)** A design analysis, specifications, drawings, schematics and piping and instrumentation diagrams based on the appropriate sections of APTI Course 415: Control of Gaseous Emissions, incorporated by reference in s. NR 660.11, or other engineering texts acceptable to the department that present basic control device design information. The design analysis shall address the vent stream characteristics and control device operation parameters as specified in s. NR 664.1035 (2) (d) 3.

SECTION 202. NR 670.026 (3)(o) is amended to read:

**NR 670.026 (3) (o)** A certification signed by ~~an independent~~ a qualified, ~~registered~~ professional engineer, stating that the drip pad design meets s. NR 664.0573 (1) to (6).

SECTION 203. NR 670.032 (2) (c) is created to read:

**NR 670.032 (2)** (c) If, as the result of an assessment or assessments or other information, the department determines that conditions are necessary in addition to those required under 40 CFR parts 63, subpart EEE, or ch. NR 664 or 666 to ensure protection of human health and the environment, the department shall include those terms and conditions in a facility license for a hazardous waste combustion unit.

SECTION 204. NR 670.040 (2), is amended to read:

**NR 670.040 (2)** Changes in the ownership or operational control of a facility may be made as a Class 1 modification with prior written approval of the department according to s. NR 670.042 or as a routine change with prior approval under s. NR 670.320. The new owner or operator shall submit a revised license application no later than 90 days prior to the scheduled change. A written agreement containing a specific date for transfer of license responsibility between the current and new licensees shall also be submitted to the department. When a transfer of ownership or operational control occurs, the old owner or operator shall comply with subch. H of ch. NR 664 (Financial Requirements) until notified by the department that the new owner or operator has demonstrated that the owner or operator is complying with that subchapter. The new owner or operator shall demonstrate compliance with subch. H requirements within 6 months of the date of the change of ownership or operational control of the facility. Upon demonstration to the department by the new owner or operator of compliance with subch. H, the department shall notify the old owner or operator that the owner or operator no longer needs to comply with subch. H as of the date of demonstration.

SECTION 205. NR 670.041(intro.) is amended to read:

**NR 670.041 (intro.)** When the department receives any information (for example, inspects the facility, receives information submitted by the licensee as required in the license (see s. NR 670.030), receives a request for revocation and reissuance under s. NR 670.405 or conducts a review of the license file), the department may determine whether one or more of the causes listed in subs. (1) and (2) for modification, or revocation and reissuance or both exist. If cause exists, the department may modify or revoke and reissue the license accordingly, subject to the limitations of sub. (3), and may request an updated application if necessary. When a license is modified, only the conditions subject to modification are reopened. If a license is revoked and reissued, the entire license is reopened and subject to revision and the license is reissued for a new term. (See s. NR 670.405 (3) (b).) If cause does not exist under this section or s. 289.30 (8), Stats., the department may not modify or revoke and reissue the license, except on request of the licensee. If a license modification is requested by the licensee, the department shall approve or deny the request according to the procedures of s. NR 670.042 or s. NR 670.320. Otherwise, a preliminary determination of the feasibility and plan of operation report shall be prepared and other procedures in ss. NR 670.401 to 670.433 followed.

SECTION 206. NR 670.041 (2)(c) is created to read:

**NR 670.041 (2)** (c) The department has received notification under s. NR 670.270 (2) of a facility owner or operator's intent to be covered by a standardized license.

SECTION 207. NR 670.042 (1)(a)(intro.) and 2, (2) (b) (intro.) and (g)(intro.), (3) (b) (intro.) and (5) (b) 3. are amended to read:

**NR 670.042 (1)** (a) (intro.) Except as provided in ~~subd. 2, par. (b)~~, the licensee may put into effect class 1 modifications listed in ch. NR 670 Appendix I if all of the following conditions are met:

2. The licensee shall send a notice of the modification to all persons on the facility mailing list, ~~maintained by the department, as specified in s. NR 670.410 (3) (a) 9.~~ and the appropriate units of state and local government, as specified in ~~s. NR 670.410 (3) (a) 9.~~ s. NR 670.410 (3) (a) 10. This notification shall be made within 90 calendar days after the change is put into effect. For the class I modifications that require prior department approval, the notification shall be made within 90 calendar days after the department approves the request.

(2) (b) (intro.) The licensee shall send a notice of the modification request to all persons on the facility mailing list ~~maintained by the department as specified in s. NR 670.410 (3) (a) 9.~~ and to the appropriate units of state and local government as specified in ~~s. NR 670.410 (3) (a) 9.~~ s. NR 670.410 (3) (a) 10. and shall publish this notice in a major local newspaper of general circulation. This notice shall be mailed and published within 7 days before or after the date of submission of the modification request, and the licensee shall provide to the department evidence of the mailing and publication. The notice shall include all of the following:

(g) (intro.) The department may deny or change the terms of a class 2 license modification request under ~~subd. par. (f) 1. and 3.~~ for any of the following reasons:

(3) (b) (intro.) The licensee shall send a notice of the modification request to all persons on the facility mailing list ~~maintained by the department as specified in s. NR 670.410 (3) (a) 9.~~ and to the appropriate units of state and local government as specified in ~~s. NR 670.410 (3) (a) 9.~~ s. NR 670.410 (3) (a) 10. and shall publish this notice in a major local newspaper of general circulation. This notice shall be mailed and published within 7 days before or after the date of submission of the modification request, and the licensee shall provide to the department evidence of the mailing and publication. The notice shall include all of the following:

(5) (b) 3. The licensee shall send a notice about the temporary authorization request to all persons on the facility mailing list ~~maintained by the department as specified in s. NR 670.410 (3) (a) 9.~~ and to appropriate units of state and local governments as specified in ~~s. NR 670.410 (3) (a) 9.~~ s. NR 670.10 (3) (a) 10. This notification shall be made within 7 days of submission of the authorization request.

SECTION 208. NR 670.042 (10) is repealed and recreated to read:

**NR 670.042 (10)** COMBUSTION FACILITY CHANGES TO MEET 40 CFR PART 63 MACT STANDARDS The following procedures apply to hazardous waste combustion facility license modifications requested under section L (9) of ch. NR 670 Appendix I.

(a) Facility owners or operators shall have complied with the notification of intent to comply (NIC) requirements of 40 CFR 63.1210 that were in effect prior to October 11, 2000, (See 40 CFR part 63.1200 to 63.1499 revised as of July 1, 2000) in order to request a license modification under this section for the purpose of technology changes needed to meet the standards under 40 CFR 63.1203, 63.1204 and 63.1205.

(b) Facility owners or operators shall comply with the notification of intent to comply (NIC) requirements of 40 CFR 63.1210(b) and 63.1212(a) before a license modification may be requested under this section for the purpose of technology changes needed to meet the 40 CFR 63.1215, 63.1216, 63.1217, 63.1218, 63.1219, 63.1220 and 63.1221 standards promulgated on October 12, 2005.

SECTION 209. NR 670.042 (11) is created to read:

**NR 670.042 (11)** WAIVER OF LICENSE CONDITIONS IN SUPPORT OF TRANSITION TO THE PART 63 MACT STANDARDS. (a) The owner or operator may request to have specific facility operating and emissions limits waived by submitting a class 1 license modification request under section L (10) of ch. NR 670 Appendix I. The owner or operator shall:

1. Identify the specific license operating and emissions limits which the owner or operator is requesting to waive.
2. Provide an explanation of why the changes are necessary in order to minimize or eliminate conflicts between the hazardous waste license and MACT compliance.
3. Discuss how the revised provisions will be sufficiently protective.

(b) The department shall approve or deny the request within 30 days of receipt of the request. The department may, at its discretion, extend this 30 day deadline one time for up to 30 days by notifying the facility owner or operator.

(c) To request this modification in conjunction with MACT performance testing where permit limits may only be waived during actual test events and pretesting, as defined under 40 CFR 63.1207(h)(2)(i) and (ii), for an aggregate time not to exceed 720 hours of operation (renewable at the discretion of the department) the owner or operator shall submit a modification request to the department at the same time the test plans are submitted to the department. The department may elect to approve or deny the request contingent upon approval of the test plans.

SECTION 210. NR 670.051 (5) is created to read:

**NR 670.051 (5)** STANDARDIZED LICENSES. (a) The conditions of your expired standardized license continue until the effective date of your new license if all of the following are true:

1. If the department is the license-issuing authority.

2. If you submit a timely and complete notice of intent under s. NR 670.270 (2) requesting coverage under a standardized license.

3. If the department, through no fault on your part, does not issue your license before your previous license expires (for example, where it is impractical to make the license effective by that date because of time or resource constraints).

(b) In some cases, the department may notify you that you are not eligible for a standardized license (see s. NR 670.506). In those cases, the conditions of your expired license will continue if you submit the information specified in sub. (1) (a) (that is, a complete application for a new license) within 60 days after you receive our notification that you are not eligible for a standardized license.

SECTION 211. NR 670.062 (intro.) and (2) (b) 1. c. and d. are amended to read:

**NR 670.062 (intro.) Hazardous waste incinerator licenses.** When an owner or operator of a hazardous waste incineration unit becomes subject to hazardous waste licensing requirements after October 12, 2005, or when an owner or operator of an existing hazardous waste incineration unit demonstrates compliance with the air emission standards and limitations in 40 CFR part 63, subpart EEE (i.e. for instance, by conducting a comprehensive performance test and submitting a notification of compliance under 40 CFR 63.1207(j) and 63.1210(d) documenting compliance with 40 CFR part 63, subpart EEE), the requirements of this section do not apply, except those provisions the department determines are necessary to ensure compliance with ss. NR 664.0345 (1) and 664.0345 (3) if the owner or operator elects to comply with s. NR 670.235 (1) (a) 1. to minimize emissions of toxic compounds from startup, shutdown and malfunction events. The department may apply the provisions of this section, on a case-by-case basis, for purposes of information collection according to ss. NR 670.010 (11) and (13) and 670.032 (2) (b) and (c).

(2) (b) 1. c. An identification of any hazardous organic constituents listed in ch. NR 661 Appendix VIII, which are present in the waste to be burned, except that the applicant need not analyze for constituents listed in ch. NR 661 Appendix VIII, which would reasonably not be expected to be found in the waste. Identify the constituents excluded from analysis and state the basis for the exclusion. The waste analysis shall rely on the appropriate analytical techniques in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods”, EPA SW-846, incorporated by reference in s. NR 660.11, or other equivalent.

d. An approximate quantification of the hazardous constituents identified in the waste, within the precision produced by the appropriate analytical methods in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods”, EPA SW-846, incorporated by reference in s. NR 660.11, or their equivalent.

SECTION 212. NR 670.066 (intro.) is repealed and recreated to read:

**NR 670.066 (Intro.) Licenses for boilers and industrial furnaces burning hazardous waste.** When an owner or operator of a cement kiln, lightweight aggregate kiln, solid fuel boiler or hydrochloric acid production furnace becomes subject to hazardous waste licensing requirements after October 12, 2005 or

when an owner or operator of an existing cement kiln, lightweight aggregate kiln, solid fuel boiler or hydrochloric acid production furnace demonstrates compliance with the air emission standards and limitations in 40 CFR part 63, subpart EEE (for instance, by conducting a comprehensive performance test and submitting a notification of compliance under 40 CFR 63.1207(j) and 63.1210(b) documenting compliance with all applicable requirements of 40 CFR part 63, subpart EEE), the requirements of this section do not apply. The requirements of this section do apply, however, if the department determines certain provisions are necessary to ensure compliance with s. NR 666.102 (5) (a) and (b) 3. if the owner or operator elects to comply with s. NR 670.235 (1) (a) 1. to minimize emissions of toxic compounds from startup, shutdown and malfunction events; or if the facility is an area source and the owner or operator elects to comply with ss. NR 666.105, 666.106 and 666.107 standards and associated requirements for particulate matter, hydrogen chloride, and chlorine gas, and non-mercury metals; or the department determines certain the provisions apply, on a case-by-case basis, for purposes of information collection according to ss. NR 670.010 (11) and (13) and 670.032 (2) (b) and (c).

SECTION 213. NR 670.066 (3) (b) 1. and 2. are amended to read:

**NR 670.066 (3) (b) 1.** An identification of any hazardous organic constituents listed in ch. NR 661, Appendix VIII that are present in the feed stream, except that the applicant need not analyze for constituents listed in ch. NR 661 Appendix VIII that would reasonably not be expected to be found in the hazardous waste. Include an identification of the constituents excluded from analysis and an explanation of the basis for this exclusion. Conduct the waste analysis according to ~~the appropriate~~ analytical techniques in ~~“Test Methods for Evaluating Solid Waste, Physical/Chemical Methods”, EPA SW-846, incorporated by reference in s. NR 660.11, or their equivalent.~~

2. An approximate quantification of the hazardous constituents identified in the waste, within the precision produced by ~~the appropriate~~ analytical methods in ~~“Test Methods for Evaluating Solid Waste, Physical/Chemical Methods”, EPA SW-846, incorporated by reference in s. NR 660.11, or their equivalent.~~

SECTION 214. NR 670.067 is created to read:

**NR 670.067 Standardized licenses for storage and treatment units.** Standardized licenses are special forms of licenses for owners or operators of treatment or storage facilities that:

(1) Generate hazardous waste and then non-thermally treat or store the hazardous waste on-site in tanks, containers or containment buildings.

(2) Receive hazardous waste generated off-site by a generator under the same ownership as the receiving facility and then store or non-thermally treat the hazardous waste in tanks, containers or containment buildings. Standardized license facility owners or operators are regulated under ch. NR 667 and subch. J.

SECTION 215. NR 670.235 (title), (1) (a) (intro.) and (2) (a) (intro.) are amended to read:

**NR 670.235 (Title) Options for incinerators, ~~and cement kilns, and lightweight aggregate kilns,~~ solid fuel boilers, liquid fuel boilers and hydrochloric acid production furnaces to minimize emissions from startup, shutdown, and malfunction events.**

(1) (a) *Revisions to license conditions after documenting compliance with MACT.* (intro.) The owner or operator of a licensed incinerator, cement kiln, ~~or~~ lightweight aggregate kiln, solid fuel boiler, liquid fuel boiler or hydrochloric acid production furnace may request that the department address license conditions that minimize emissions from startup, shutdown and malfunction events under any of the following options when requesting removal of license conditions that are no longer applicable according to ss. NR 664.0340 (2) and 666.100 (2):

(2) (a) *Interim license operations.* (intro.) In compliance with ss. NR 665.0340 and 666.100 (2), the owner or operator of an incinerator, cement kiln, ~~or~~ lightweight aggregate kiln, solid fuel boiler, liquid fuel boiler, or hydrochloric acid production furnace that is operating under the interim license standards of ch. NR 665 or 666 may control emissions of toxic compounds during startup, shutdown and malfunction events under any of the following options after conducting a comprehensive performance test and submitting to the department a notification of compliance documenting compliance with the standards of 40 CFR part 63, subpart EEE:

SECTION 216. NR 670.235 (3) is created to read:

**NR 670.235 (3) NEW UNITS.** Hazardous waste incinerator, cement kiln, lightweight aggregate kiln, solid fuel boiler, liquid fuel boiler or hydrochloric acid production furnace units that become subject to hazardous waste licensing requirements after October 12, 2005 shall control emissions of toxic compounds during startup, shutdown, and malfunction events under either of the following options:

(a) Comply with the requirements specified in 40 CFR 63.1206(c)(2).

(b) Request to include in the hazardous waste license, conditions that ensure emissions of toxic compounds are minimized from startup, shutdown and malfunction events, including releases from emergency safety vents, based on review of information including the source's startup, shutdown and malfunction plan and design. The department will specify that these license conditions apply only when the facility is operating under its startup, shutdown and malfunction plan.

SECTION 217. NR 670, Subchapter J is created to read:

**Subchapter J—Standardized Licenses for Storage and Treatment Units**

**NR 670.250 What is a standardized license?** The standardized license is a special form of license that may consist of 2 parts: a uniform portion that the department issues in all cases and a supplemental portion that the department issues at its discretion. The term “standardized license” is defined in s. NR 670.002 (23m).

(1) **WHAT COMPRISES THE UNIFORM PORTION?** The uniform portion of a standardized license consists of terms and conditions relevant to the unit or units you are operating at your facility and are found in ch.

NR 667. If you intend to operate under the standardized license, comply with the terms and conditions in ch. NR 667.

**(2) WHAT COMPRISES THE SUPPLEMENTAL PORTION?** The supplemental portion of a standardized license consists of site-specific terms and conditions beyond those of the uniform portion that the department may impose on your particular facility, as necessary to protect human health and the environment. If the department issues you a supplemental portion, you shall comply with the site-specific terms and conditions it imposes.

(a) When required under s. NR 667.0101, provisions to implement corrective action shall be included in the supplemental portion.

(b) Unless otherwise specified, these supplemental license terms and conditions apply to your facility in addition to the terms and conditions of the uniform portion of the standardized license and not in place of any of those terms and conditions.

**NR 670.255 Who is eligible for a standardized license? (1)** You may be eligible for a standardized license if either (a) or (b) applies:

(a) You generate hazardous waste and then store or non-thermally treat the hazardous waste on-site in containers, tanks or containment buildings.

(b) You receive hazardous waste generated off-site by a generator under the same ownership as the receiving facility and then store or non-thermally treat the hazardous waste in containers, tanks or containment buildings.

(c) In either case, the department shall inform you of your eligibility when a decision is made on your license application.

**NR 670.260 What requirements of ch. NR 670 do and do not apply to a standardized license?**

The following sections of ch. NR 670 apply to a standardized license:

(1) Subchapter A—General Information: All sections.

(2) Subchapter B—License Application: Sections NR 670.010, 670.011, 670.012, 670.013 and 670.029.

(3) Subchapter C—License Conditions: All sections.

(4) Subchapter D—Changes to Licenses: Sections NR 670.040, 670.041 and 670.043.

(5) Subchapter E—Expiration and Continuation of Licenses: All sections.

(6) Subchapter F—Special Forms of Licenses: Section NR 670.067.

(7) Subchapter G—Interim Licenses: All sections.

(8) Subchapter H—Remediation Variances: Does not apply.

(9) Subchapter J—Standardized Licenses: All sections.

**NR 670.270 How do I apply for a standardized license? (1)** Apply for a standardized license by following the procedures in this subchapter.



(2) Submit a written notice of intent to operate under a standardized license to the department. Include the information and certifications required under this subchapter.

**NR 670.273 How may I switch from my individual license to a standardized license?** Where all licensed units are eligible for the standardized license, the owner or operator may request that the department revoke the individual license and reissue a standardized license, according to s. NR 670.405. Where only some of the individual units are eligible for the standardized license, the owner or operator may request that the department modify the individual license to no longer include those units, and issue a standardized license for the units according to s. NR 670.405.

**NR 670.275 What information shall I submit to the department to support my standardized license application?** The information in subs. (1) to (9) shall be the basis of your standardized license application. Submit the application to the department when you submit your notice of intent under s. NR 670.270 (2) requesting coverage under a standardized license.

(1) The part A information described in s. NR 670.013.

(2) A meeting summary and other materials required by s. NR 670.431.

(3) Documentation of compliance with the location standards of ss. NR 667.0018 and 670.014 (2) (k).

(4) Solid waste management unit information required by s. NR 670.014 (4).

(5) A certification meeting the requirements of s. NR 670.280 and an audit of the facility's compliance status with ch. NR 667 as required by s. NR 670.280.

(6) A closure plan prepared according to subch. G of ch. NR 667.

(7) The most recent closure cost estimate for your facility prepared under s. NR 667.0142 and a copy of the documentation required to demonstrate financial assurance under s. NR 667.0143. For a new facility, you may gather the required documentation 60 days before the initial receipt of hazardous wastes.

(8) If you manage wastes generated offsite, the waste analysis plan.

(9) If you manage waste generated from off-site, documentation showing that the waste generator and the off-site facility are under the same ownership.

**NR 670.280 What are the certification requirements?** Submit a signed certification based on your audit of your facility's compliance with ch. NR 667.

(1) Your certification shall read: "I certify under penalty of law that:

(a) I have personally examined and am familiar with the report containing the results of an audit conducted of my facility's compliance status with ch. NR 667, which supports this certification. Based on my inquiry of those individuals immediately responsible for conducting the audit and preparing the report, I believe that my (include subd. 1. or 2., whichever applies):

1. My existing facility complies with all applicable requirements of ch. NR 667 and shall continue to comply until the expiration of the license.

2. My facility has been designed, and shall be constructed and operated to comply with all applicable requirements of ch. NR 667, and shall continue to comply until expiration of the license.

(b) I shall make all information that I am required to maintain at my facility by ss. NR 670.290 to 670.315 readily available for review by the department and the public.

(c) I shall continue to make all information required by ss. NR 670.290 to 670.315 available until the license expires. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violation.”

(2) Sign this certification following the requirements of s. NR 670.11 (1)(a) to (c).

(3) This certification shall be based upon an audit that you conduct of your facility’s compliance status with ch. NR 667. A written audit report, signed and certified as accurate by the auditor, shall be submitted to the department with the s. NR 670.270 (2) notice of intent.

**NR 670.290 What general types of information shall I keep at my facility?** Keep the following information at your facility:

(1) A general description of the facility.

(2) Chemical and physical analyses of the hazardous waste and hazardous debris handled at the facility. At a minimum, these analyses shall contain all the information you must know to treat or store the wastes properly under the requirements of ch. NR 667.

(3) A copy of the waste analysis plan required by s. NR 667.0013 (2).

(4) A description of the security procedures and equipment required by s. NR 667.0014.

(5) A copy of the general inspection schedule required by s. NR 667.0015 (2). You shall include in the inspection schedule applicable requirements of ss. NR 667.0174, 667.0193, 667.0195, 664.1033, 664.1052, 664.1053, 664.1058 and 664.1088.

(6) A justification of any modification of the preparedness and prevention requirements of subch. C of ch. NR 667.

(7) A copy of the contingency plan required by ch. NR 667, subch. D.

(8) A description of procedures, structures or equipment used at the facility to:

(a) Prevent hazards in unloading operations (for example, use ramps, special forklifts).

(b) Prevent runoff from hazardous waste handling areas to other areas of the facility or environment, or to prevent flooding (for example, with berms, dikes, trenches).

(c) Prevent contamination of water supplies.

(d) Mitigate effects of equipment failure and power outages.

(e) Prevent undue exposure of personnel to hazardous waste (for example, requiring protective clothing).

(f) Prevent releases to atmosphere.

(9) A description of precautions to prevent accidental ignition or reaction of ignitable, reactive or incompatible wastes as required by s. NR 667.0017.

(10) Traffic pattern, estimated volume (number, types of vehicles) and control (for example, show turns across traffic lanes and stacking lanes; describe access road surfacing and load bearing capacity; show traffic control signals).

(12) An outline of both the introductory and continuing training programs you will use to prepare employees to operate or maintain your facility safely as required by s. NR 667.0016. A brief description of how training will be designed to meet actual job tasks under s. NR 667.0016 (1) (c) requirements.

(13) A copy of the closure plan required by s. NR 667.0112. Include, where applicable, as part of the plans, specific requirements in ss. NR 667.0176, 667.0201 and 667.1108.

(15) The most recent closure cost estimate for your facility prepared under s. NR 667.0142 and a copy of the documentation required to demonstrate financial assurance under s. NR 667.0143. For a new facility, you may gather the required documentation 60 days before the initial receipt of hazardous wastes.

(17) Where applicable, a copy of the insurance policy or other documentation that complies with the liability requirements of s. NR 667.0147. For a new facility, documentation showing the amount of insurance meeting the specification of s. NR 667.0147 (1) that you plan to have in effect before initial receipt of hazardous waste for treatment or storage.

(18) A topographic map showing a distance of 1,000 feet around your facility at a scale of 2.5 centimeters (1 inch) equal to not more than 61.0 meters (200 feet). The map shall show elevation contours. The contour interval shall show the pattern of surface water flow in the vicinity of and from each operational unit of the facility. For example, contours with an interval of 1.5 meters (5 feet), if relief is greater than 6.1 meters (20 feet), or an interval of 0.6 meters (2 feet), if relief is less than 6.1 meters (20 feet). The map shall clearly show the following:

- (a) Map scale and date.
- (b) 100-year flood plain area.
- (c) Surface waters including intermittent streams.
- (d) Surrounding land uses (residential, commercial, agricultural, recreational).
- (e) A wind rose (that is, prevailing wind speed and direction).
- (f) Orientation of the map (north arrow).
- (g) Legal boundaries of your facility site.
- (h) Access control (fences, gates).
- (i) Withdrawal wells both on-site and off-site.
- (j) Buildings; treatment, storage or disposal operations; or other structure (such as recreation areas, runoff control systems, access and internal roads, storm, sanitary and process sewerage systems, loading and unloading areas, and fire control facilities)
- (k) Barriers for drainage or flood control.
- (L) Location of operational units within your facility, where hazardous waste is (or will be) treated or stored. (Include equipment cleanup areas.)

**NR 670.300 What container information shall I keep at my facility?** If you store or treat hazardous waste in containers, keep the following information at your facility:

(1) A description of the containment system to demonstrate compliance with the container storage area provisions of s. NR 667.0173. This description shall show the following:

- (a) Basic design parameters, dimensions and materials of construction.
- (b) How the design promotes drainage or how containers are kept from contact with standing liquids in the containment system.
- (c) Capacity of the containment system relative to the number and volume of containers to be stored.
- (d) Provisions for preventing or managing run-on.
- (e) How accumulated liquids can be analyzed and removed to prevent overflow.
- (2) For storage areas that store containers holding wastes that do not contain free liquids, a demonstration of compliance with s. NR 667.0173 (3), including:
  - (a) Test procedures and results or other documentation or information to show that the wastes do not contain free liquids.
  - (b) A description of how the storage area is designed or operated to drain and remove liquids or how containers are kept from contact with standing liquids.
- (3) Sketches, drawings or data demonstrating compliance with s. NR 667.0174 (location of buffer zone (15m or 50ft) and containers holding ignitable or reactive wastes) and s. NR 667.0175 (3) (location of incompatible wastes in relation to each other), where applicable.
- (4) Where incompatible wastes are stored or otherwise managed in containers, a description of the procedures used to ensure compliance with ss. NR 667.0175 (1) and (2) and 667.0017 (2) and (3).
- (5) Information on air emission control equipment as required by s. NR 670.315.

**NR 670.305 What tank information shall I keep at my facility?** If you use tanks to store or treat hazardous waste, keep the following information at your facility:

- (1) A written assessment that is reviewed and certified by an qualified professional engineer on the structural integrity and suitability for handling hazardous waste of each tank system, as required under ss. NR 667.0191 and 667.0192.
- (2) Dimensions and capacity of each tank.
- (3) Description of feed systems, safety cutoff, bypass systems and pressure controls (for example, vents).
- (4) A diagram of piping, instrumentation and process flow for each tank system.
- (5) A description of materials and equipment used to provide external corrosion protection, as required under s. NR 667.0191.
- (6) For new tank systems, a detailed description of how the tank system or systems will be installed in compliance with ss. NR 667.0192 and 667.0194.
- (7) Detailed plans and description of how the secondary containment system for each tank system is or will be designed, constructed and operated to meet the requirements of ss. NR 667.0195 and 667.0196.
- (9) Description of controls and practices to prevent spills and overflows, as required under s. NR 667.0198.

(10) For tank systems in which ignitable, reactive or incompatible wastes are to be stored or treated, a description of how operating procedures and tank system and facility design shall achieve compliance with the requirements of ss. NR 667.0202 and 667.0203.

(11) Information on air emission control equipment as required by s. NR 670.315.

**NR 670.310 What equipment information shall I keep at my facility?** If your facility has equipment to which ch. NR 664, subch. BB applies, keep the following information at your facility:

(1) For each piece of equipment to which ch. NR 664 subch. BB applies:

(a) Equipment identification number and hazardous waste management unit identification.

(b) Approximate locations within the facility (for example, identify the hazardous waste management unit on a facility plot plan).

(c) Type of equipment (for example, a pump or a pipeline valve).

(d) Percent by weight of total organics in the hazardous waste stream at the equipment.

(e) Hazardous waste state at the equipment (for example, gas, vapor or liquid).

(f) Method of compliance with the standard (for example, monthly leak detection and repair or equipped with dual mechanical seals).

(2) For facilities that cannot install a closed-vent system and control device to comply with ch. NR 664, subch. BB on the effective date that the facility becomes subject to the subch. BB provisions, an implementation schedule as specified in s. NR 664.1033 (1) (b).

(3) Documentation that demonstrates compliance with the equipment standards in ss. NR 6264.1052 and 664.1059. This documentation shall contain the records required under s. NR 664.1064.

(4) Documentation to demonstrate compliance with s. NR 664.1060 shall include the following information:

(a) A list of all information references and sources used in preparing the documentation.

(b) Records, including the dates, of each compliance test required by s. NR 664.1033 (10).

(c) A design analysis, specifications, drawings, schematics and piping and instrumentation diagrams based on the appropriate sections of “Course 415: Control of Gaseous Emissions”, incorporated by reference in s. NR 660.11, or other engineering texts acceptable to the department that present basic control device design information. The design analysis shall address the vent stream characteristics and control device operation parameters as specified in s. NR 664.1035 (2) (d) 3.

(d) A statement signed and dated by the owner or operator certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the hazardous waste management unit is operating at the highest load or capacity level reasonable expected to occur.

(e) A statement signed and dated by the owner or operator certifying that the control device is designed to operate at an efficiency of 95 weight percent or greater.

**NR 670.315 What air emissions control information shall I keep at my facility?** If you have air emission control equipment subject to subch. CC of ch. NR 664, keep the following information at your facility:

(1) Documentation for each floating roof cover installed on a tank subject to s. NR 664.1084 (4) (a) or (b) that includes information you prepared or the cover manufacturer or vendor provided describing the cover design, and your certification that the cover meets applicable design specifications listed in s. NR 664.1084 (5) (a) or (6) (a).

(2) Identification of each container area subject to the requirements of ch NR 664, subch. CC and your certification that the requirements of the subchapter are met.

(3) Documentation for each enclosure used to control air pollutant emissions from tanks or containers under requirements of s. NR 664.1084 (4) (e) or 664.1086 (5) (a) 2. Include records for the most recent set of calculations and measurements you performed to verify that the enclosure meets the criteria of a permanent total enclosure as specified in “Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure” under 40 CFR 52.741, Appendix B.

(5) Documentation for each closed vent system and control device installed under requirements of s. NR 664.1087 that includes design and performance information as specified in s. NR 670.024 (3) and (4).

(6) An emission monitoring plan for both Method 21 in 40 CFR part 60, Appendix A and control device monitoring methods. This plan shall include the following information: monitoring points, monitoring methods for control devices, monitoring frequency, procedures for documenting exceedences and procedures for mitigating non-compliance.

**NR 670.320 How do I modify my standardized license?** You may modify your standardized license by following the procedures found in subs. (1) to (4). **(1) TYPES OF CHANGES TO STANDARDIZED LICENSES.**

You may make routine changes, routine changes with prior department approval and significant changes. For the purposes of this section:

(a) “Routine changes” are any changes to the standardized license that qualify as a class 1 license modification (without prior department approval) under ch. NR 670, Appendix I.

(b) “Routine changes with prior department approval” are those changes to the standardized license that would qualify as a class 1 modification with prior department approval or a class 2, under ch. NR 670, Appendix I.

(c) “Significant changes” are any changes to the standardized license that that are any of the following:

1. Qualify as a class 3 license modification under ch. NR 670, Appendix I.
2. Are not explicitly identified in ch. NR 670, Appendix I.
3. Amend any terms or conditions in the supplemental portion of your standardized license.

**(2) PROCEDURES FOR ROUTINE CHANGES.** (a) You may make routine changes to the standardized permit without obtaining approval from the department. However, you shall first determine whether the routine change you intend to make amends the information you submitted under s. NR 670.275 with your notice of intent to operate under the standardized license.

(b) If the routine changes you make amend the information you submitted under s. NR 670.275 with your notice of intent to operate under the standardized license, then before you make the routine changes you shall:

1. Submit the revised information pursuant to s. NR 670.275 (1) to the department.

2. Provide notice of the changes to the facility mailing list and to state and local governments according to the procedures in s. NR 670.320 (3) (a).

**(3) PROCEDURES FOR ROUTINE CHANGES WITH PRIOR DEPARTMENT APPROVAL.**

(a) Routine changes to the standardized license with prior department approval may only be made with the prior written approval of the department.

(b) You shall also follow the procedures in sub. (2) (b) 1. and 2.

**(4) PROCEDURES FOR SIGNIFICANT CHANGES.**

(a) You shall first provide notice of and conduct a public meeting.

1. 'Public Meeting.' Hold a meeting with the public to solicit questions from the community and inform the community of your proposed modifications to your hazardous waste management activities. Post a sign-in sheet or otherwise provide a voluntary opportunity for people attending the meeting to provide their names and addresses.

2. 'Public Notice.' At least 30 days before you plan to hold the meeting, issue a public notice according to the requirements of s. NR 670.431 (4).

(b) After holding the public meeting, submit a modification request to the department that:

1. Describes the exact change or changes you are requesting and whether they are changes to information you provided under s. NR 670.275 or to terms and conditions in the supplemental portion of your standardized license.

2. Explains why the modification is needed.

3. Includes a summary of the public meeting under par. (a), along with the list of attendees and their addresses and copies of any written comments or materials they submitted at the meeting.

**Note:** A significant change that is also a facility expansion is subject to s. NR 670.007(1).

(c) After receiving your modification request, the department shall make a tentative determination within 120 days to approve or disapprove the request. The department may take a one time extension of 30 days to prepare the draft license modification decision. If the department anticipates that it will use the 30-day extension, the department will inform the license applicant during their initial 120-day review period.

(d) After the department makes the tentative determination, the department shall follow the procedures in ss. NR 670.505 and NR 670.507 to 670.510 for processing an initial request for coverage under the standardized license apply to making the final determination on the modification request.

SECTION 218. NR 670.405 (3) (a) is amended to read:

**NR 670.405 (3)** (a) If the department tentatively decides to modify or revoke and reissue a license under s. NR 670.041 or 670.042 (3), the department shall prepare a preliminary determination under s. NR

670.406 incorporating the proposed changes. The department may request additional information and, in the case of a modified license, may require the submission of an updated application. In the case of revoked and reissued licenses, other than under s. NR 670.041 (2)(c), the department shall require the submission of a new license application. In the case of revoked and reissued licenses under s. NR 670.041 (2)(c), the department and the licensee shall comply with the appropriate requirements in subch. J. of ch. NR 670, for standardized licenses.

SECTION 219. NR 670.415 (2) (intro.) is amended to read:

**NR 670.415 (2) (intro.)** The department shall publish a notice of the intent to issue an initial operating license. The department may not publish the notice of intent to issue an initial operating license until the department receives and accepts the following documentation:

SECTION 220. NR 670.431 (1), (2) and (3) are amended to read:

**NR 670.431 (1)** This section applies to all owners or operators submitting feasibility and plan of operation reports for initial operating licenses for hazardous waste management facilities. This section also applies to owners or operators submitting feasibility and plan of operation reports for reissuance of licenses for those facilities, where the submittal is proposing a significant change in facility operations. For the purposes of this section, a “significant change” is any change that would qualify as a class 3 license modification under s. NR 670.042. This section also applies to owners or operators submitting written notices of intent to be covered by a standardized license (see subch. J), including reissuance of a standardized license for units where the owner or operator proposes a significant change in facility operations, as defined in s. NR 670.320 (1) (c). This section does not apply to license applications submitted for the sole purpose of conducting long-term care activities or long-term care activities and corrective action at a facility.

**(2)** Prior to the submission of a feasibility and plan of operation report for a facility, or the submission of a written notice of intent to be covered by a standardized license, the applicant shall hold at least one meeting with the public in order to solicit questions from the community and inform the community of proposed hazardous waste management activities. The applicant shall post a sign-in sheet or otherwise provide a voluntary opportunity for attendees to provide their names and addresses.

**(3)** The applicant shall submit a summary of the meeting, along with the list of attendees and their addresses developed under sub. (2), and copies of any written comments or materials submitted at the meeting, to the department as a part of the feasibility and plan of operation report, according to s. NR 670.014 (2), or with the written notice of intent to be covered by a standardized license (see subch. J).

SECTION 221. NR 670.432 (1) is amended to read:

**NR 670.432 (1) APPLICABILITY.** This section applies to all owners or operators submitting feasibility and plan of operation reports for an operating license for a hazardous waste management facility. This



section does not apply to license modifications or to license applications submitted for the sole purpose of conducting long-term care activities or long-term care activities and corrective action at a facility. This section also does not apply to owners or operators submitting a written notice of intent to be covered by a standardized license (see subch. J) except for a significant change that is also a facility expansion.

SECTION 222. NR 670.504 is created to read:

**NR 670.504 Issuing draft standardized licenses. (1)** The department shall review the notice of intent and supporting information submitted by the facility owner or operator.

**(2)** The department shall determine whether the facility is or is not eligible to operate under a standardized license.

(a) If the facility is eligible for a standardized license, the department shall propose terms and conditions, if any, to include in a supplemental portion. If the department determines that these terms and conditions are necessary to protect human health and the environment and cannot be imposed, the department shall tentatively deny coverage under the standardized license.

(b) If the facility is not eligible for a standardized license, the department shall tentatively deny coverage under a standardized license. Cause for ineligibility may include the following:

1. Failure of owner or operator to submit all the information required under s. NR 670.275.
2. Information submitted that is required under s. NR 670.275 is determined to be inadequate.
3. Facility does not meet the eligibility requirements (activities are outside the scope of the standardized license).
4. The facility has demonstrated a history of significant non-compliance with applicable requirements.
5. License conditions cannot ensure protection of human health and the environment.

**(3)** The department shall prepare a draft license decision within 120 days after receiving the notice of intent and supporting documents from a facility owner or operator. The department's tentative determination under this section to deny or grant coverage under the standardized license, including any proposed site-specific conditions in a supplemental portion, constitutes a draft license decision. The department may take a one-time extension of 30 days to prepare the draft license decision. When the department intends to use the 30-day extension, it will inform the license applicant during the initial 120-day review period. Reasons for an extension may include completing review of submissions with the notice of Intent (for example, closure plans or waste analysis plans for facilities seeking to manage hazardous waste generated off-site).

**(4)** In preparing the draft license decision, the department shall:

(a) Consolidate issuance of an EPA permit and department licensing according to s. NR 670.404, if applicable.

(b) Prepare a fact sheet according to s. NR 670.408, except that the timeframes for the public comment period in s. NR 670.508 shall be followed instead of s. NR 670.410.

(c) Follow the public notice of license actions and public comment period according to ss. NR 670.410 (3) (a) 9. and 10 and 670.507 to 670.509.

**NR 670.505 Issuing final standardized licenses.** The department shall consider all comments received during the public comment period (see s. NR 670.508) in making a final license decision. In preparing a final license decision, the department shall also:

- (1) Provide opportunities for public comments and hearings according to s. NR 670.508.
- (2) If applicable, hold public hearings according to s. NR 670.412.

**NR 670.506 Eligibility for standardized licenses.** (1) Cases where the department determines that a facility is not eligible for the standardized license include the following:

- (a) The facility does not meet the criteria in s. NR 670.255.
- (b) The facility has a demonstrated history of significant non-compliance with regulations or license conditions.

(c) The facility has a demonstrated history of submitting incomplete or deficient license application information.

- (d) The facility has submitted incomplete or inadequate materials with the notice of intent.

(2) If the department determines that a facility is not eligible for the standardized license, the department will inform the facility owner or operator that they shall apply for an individual license.

(3) The department may require any facility that has a standardized license to apply for and obtain an individual license. Any interested person may petition the department to take action under this section. Cases where the department may require an individual license include, but are not limited to, the following:

- (a) The facility is not in compliance with the terms and conditions of the standardized license.
- (b) Circumstances have changed since the time the facility owner or operator applied for the standardized license, so that the facility's hazardous waste management practices are no longer appropriately controlled under the standardized license.

(4) The department may require any facility authorized by a standardized license to apply for an individual license only after it has notified the facility owner or operator in writing that an individual license application is required. The department shall include in this notice a brief statement of the reasons for its decision, a statement setting a deadline for the owner or operator to file the application and a statement that, on the effective date of the individual license, the facility's standardized license automatically terminates. The department may grant additional time upon request from the facility owner or operator.

(5) When the department issues an individual license to an owner or operator otherwise subject to a standardized license, the standardized license for their facility will automatically cease to apply on the effective date of the individual license.

**NR 670.507 Public notice requirements for standardized licenses.** (1) The department shall provide public notice of draft standardized license decisions and also provide an opportunity for the public to

submit comments and request a hearing on that decision. The department shall provide the public notice to the following:

(a) The applicant.

(b) Any other agency which has issued or is required to issue a RCRA permit for the same facility or activity (including EPA when the draft permit is prepared by the department).

(c) Federal and state agencies with jurisdiction over fish, shellfish and wildlife resources and over coastal zone management plans, the Advisory Council on Historic Preservation, State Historic Preservation Officers, including any affected States.

(d) To everyone on the facility mailing list developed according to the requirements in s. NR 670.410 (3) (a) 9.

(e) To any units of local government having jurisdiction over the area where the facility is proposed to be located and to each state agency having any authority under state law with respect to the construction or operation of the facility.

(2) The department shall issue the public notice according to the following methods:

(a) Publication in a daily or weekly major local newspaper of general circulation and broadcast over local radio stations.

(b) In a manner constituting legal notice to the public under State law.

(c) Any other method reasonably calculated to give actual notice of the draft license decision to the persons potentially affected by it, including press releases or any other forum or medium to elicit public participation.

(3) The department shall include the following information in the public notice:

(a) The name and telephone number of the contact person at the facility.

(b) The name and telephone number of the department contact office and a mailing address to which people may direct comments, information, opinions or inquiries.

(c) An address to which people may write to be put on the facility mailing list.

(d) The location where people may view and make copies of the draft standardized license and the notice of intent and supporting documents.

(e) A brief description of the facility and proposed operations, including the address or a map (for example, a sketched or copied street map) of the facility location on the front page of the notice.

(f) The date that the facility owner or operator submitted the notice of intent and supporting documents.

(4) At the same time that the department issues the public notice under this section, it shall place the draft standardized license (including both the uniform portion and the supplemental portion, if any), the notice of intent and supporting documents and the statement of basis or fact sheet in a location accessible to the public in the vicinity of the facility or at the department's office.

**NR 670.508 Public comments and requests for hearings on draft standardized licenses.** (1) The public notice issued by the department under s. NR 670.507 shall allow at least 45 days for people to

submit written comments on the draft license decision. This time is referred to as the public comment period. The department shall automatically extend the public comment period to the close of any public hearing under this section. The hearing officer may also extend the comment period by so stating at the hearing.

(2) During the public comment period, any interested person may submit written comments on the draft license and may request a public hearing. If someone wants to request a public hearing, they shall submit their request in writing to you. Their request shall state the nature of the issues they propose to raise during the hearing.

(3) The department shall hold a public hearing whenever it receives a written notice of opposition to a standardized license and a request for a hearing within the public comment period under sub. (1). The department may also hold a public hearing at its discretion, whenever, for instance, such a hearing might clarify one or more issues involved in the license decision.

(4) Whenever possible, the department shall schedule a hearing under this section at a location convenient to the nearest population center to the facility. The department shall give public notice of the hearing at least 30 days before the date set for the hearing. The department may give the public notice of the hearing at the same time it provides public notice of the draft license, and may combine the two notices.

(5) The department shall give public notice of the hearing according to the methods in s. NR 670.507 (1) and (2). The hearing shall be conducted according to the procedures in s. NR 670.412.

(6) In their written comments and during the public hearing, if held, interested parties may provide comments on the draft license decision. These comments may include, but are not limited to, the facility's eligibility for the standardized license, the tentative supplemental conditions the department proposed and the need for additional supplemental conditions.

**NR 670.509 Response to comments on standardized licenses.** (1) At the time the department issues a final standardized license, it shall also respond to comments received during the public comment period on the draft license. The department's response shall:

(a) Specify which additional conditions (for instance, those in the supplemental portion), if any, the department changed in the final license, and the reasons for the change.

(b) Briefly describe and respond to all significant comments on the facility's ability to meet the general requirements (for instance, those terms and conditions in the uniform portion) and on any additional conditions necessary to protect human health and the environment raised during the public comment period or during the hearing.

(c) Make the comments and responses accessible to the public.

(2) The department may request additional information from the facility owner or operator or inspect the facility if it needs additional information to adequately respond to significant comments or to make decisions about conditions it may need to add to the supplemental portion of the standardized license.

**NR 670.510 Public appeals of final standardized licenses.** An interested party may petition for administrative review of the department's final license decision, including a decision that the facility is

eligible for the standardized license, according to the procedures of s. 227.42, Stats. However, the terms and conditions of the uniform portion of the standardized license are not subject to administrative review under this provision.

SECTION 223. NR 670 Appendix I, F. 5. a. is amended to read:

<b>NR 670 Appendix I F. Containers:</b>	
5. Storage or treatment of different wastes in containers:	
Modifications	Class
a. That require addition of units or change in treatment process or management standards, if the wastes are restricted from land disposal and are to be treated to meet some or all of the applicable treatment standards. This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027 and 028)	<sup>1</sup> 1

SECTION 224. NR 670, Appendix I, L. 9. And O. are created to read:

**NR 670 Appendix I, L. Incinerators, Boilers and Industrial Furnaces:**

9. Changes to hazardous waste license provisions needed to support transition to 40 CFR part 63 (Subpart EEE—National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors), provided the procedures of s. NR 670.042 (11) are followed.

<sup>1</sup>1

NR 670, Appendix O, *Burden Reduction*:

- 1. Development of one contingency plan based on Integrated Contingency Plan Guidance pursuant to s. NR 664.0052 (2) <sup>1</sup>1
- 2. Changes to recordkeeping and reporting requirements pursuant to: ss. NR 664.0056 (9), 664.0343 (1) (b), 664.1061 (2) (a), (4), 664.1062 (1) (b), 664.0196 (6), 664.0100 (7) and 664.0113 (5) (e) 1
- 3. Changes to inspection frequency for tank systems pursuant to s. NR 664.0195 (2) 1
- 4. Changes to detection and compliance monitoring program pursuant to ss. NR 664.0098 (4), (7) (b) and (c), 664.0099 (6) and (7). 1

<sup>1</sup> Class 1 modifications requiring prior department approval.

SECTION 225. NR 670 Appendix II is amended to read:

**Appendix II  
Hazardous Waste Fee Table <sup>1</sup>**

	<b>Tanks</b>	<b>Waste Piles</b>	<b>Incinerators &amp; Boilers and Industrial Furnaces</b>	<b>Containers, Containment Buildings &amp; Miscellaneous Units</b>	<b>Landfills &amp; Surface Impoundments</b>
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**Document Review Fees<sup>2</sup>**

Review of Interim License Application (Part A)	\$800	\$800	\$800	\$800	\$1,600
Review of Initial Site Report					\$3,500
Review of Operating License Application (Part A and Feasibility and Plan of Operation Report)	\$6,400	\$6,400	\$19,500	\$4,000	\$100,000
Review of Closure Plan for Unlicensed Facilities	\$2,400	\$3,200	\$3,200	\$1,600	\$23,400
Review of Class 1 Modification <sup>3</sup>	\$400	\$400	\$400	\$400	\$800
Review of Class 2 Modification	\$1,600	\$2,400	\$3,200	\$1,600	\$4,000
Review of Class 3 Modification	\$6,400	\$6,400	\$19,500	\$4,000	\$100,000
Review of Corrective Action Plan <sup>3,4</sup>	\$1,600	\$1,600	\$1,600	\$1,600	\$7,800
Review of Remediation Variance Request	\$1,600	\$1,600	\$4,000	\$1,600	\$4,000
Review of Construction Quality Assurance (CQA) Documentation <sup>4, 5</sup>		\$1,200			\$4,000
Review of Special License for Boilers and Industrial Furnaces Application <sup>5,6</sup>			\$4,000		
Review of Research, Development and Demonstration License Application <sup>5,6</sup>	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000 <sup>6,7</sup>

**License Fees <sup>7,8</sup>**

Interim License <sup>8,2</sup>	\$6,400	\$9,600	\$12,500	\$6,400	\$80,000
Annual Renewal of Operating License <sup>9,10</sup>	\$3,200	\$4,800	\$6,400	\$3,200	\$40,000
Long Term Care License <sup>10,11</sup>					\$80,000

**Other Fees**

Construction Quality Assurance (CQA) Inspection		\$65/hour			\$65/hour
Manifest Fee	\$6 per Manifest; Facilities will be billed annually based on the number of manifests filed.				

Annual Hazardous Waste Transportation License <sup>9,10</sup>	\$400
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<sup>1</sup> All fees shall be submitted in a form and to the address specified by the department.

<sup>2</sup> The plan review fees specified in Appendix II cover the department's review from initial submittal through approval or denial of the report or plan. This fee provides the applicant with the option of withdrawing or supplementing their submittal to revise or complete it two times prior to it being deemed complete. The applicant shall pay the Document Review Fee specified in Appendix II when a plan which has been withdrawn after having been determined to be complete is resubmitted or when a plan or report that has twice been declared incomplete is resubmitted.

<sup>3</sup> Class 1 modification fees only apply to those modifications that require department review and approval.

<sup>3,4</sup> The applicant shall pay the plan review fee specified in Appendix II for each phase of corrective action. The phases are facility investigation, selection of alternatives, and remedial design and operation.

<sup>4,5</sup> This fee is only for the review of supporting documentation required by the department.

<sup>5,6</sup> Research, development and demonstration licenses are issued for up to one year; there is no additional fee for the renewals specified in NR 670.065(4).

<sup>6,7</sup> Research, development and demonstration licenses are available for surface impoundments but are not available for landfills.

<sup>7,8</sup> A facility shall have a separate operating license for each hazardous waste management activity it conducts.

<sup>9</sup> The interim license fee is a one-time payment to cover the interim license period until a final determination on the issuance of an operating license is made by the department. The Class 2 modification fee should accompany the interim license modification submittal stated in NR 670.072.

<sup>9,10</sup> The annual license fee is for the time period from October 1 to September 30 of the following year.

<sup>10,11</sup> This is a one-time fee to cover the entire 40-year long-term care period. All facilities subject to this requirement shall pay the one-time fee even if they previously obtained a long-term care license.

SECTION 226. NR 673.01 (1) (c) is amended to read:

**NR 673.01 (1) (c)** Thermostats and mercury-containing equipment as described in s. NR 673.04.

SECTION 227. NR 673.04 is amended to read:

**NR 673.04 Applicability — mercury ~~thermostats~~ -containing equipment.** (1) ~~THERMOSTATS~~ MERCURY-CONTAINING EQUIPMENT COVERED UNDER THIS CHAPTER. The requirements of this chapter apply to persons managing ~~thermostats~~ mercury-containing equipment, as described in s. NR 673.09, except those listed in sub. (2).

(2) ~~THERMOSTATS~~ MERCURY-CONTAINING EQUIPMENT NOT COVERED UNDER THIS CHAPTER. The requirements of this chapter do not apply to persons managing any of the following ~~thermostats~~ mercury-containing equipment:

(a) ~~Thermostats~~ Mercury-containing equipment that ~~are not yet wastes~~ is not yet a waste under ch. NR 661. Subsection (3) describes when ~~thermostats~~ mercury-containing equipment become ~~wastes~~ a waste.

(b) ~~Thermostats~~ Mercury-containing equipment that ~~are~~ is not hazardous waste. ~~A thermostat~~ Mercury-containing equipment is a hazardous waste if it exhibits one or more of the characteristics identified in subch. C of ch. NR 661 or is listed in subch. D of ch. NR 661.

(c) Equipment and devices from which the mercury-containing components have been removed.

(3) GENERATION OF WASTE ~~THERMOSTATS~~ MERCURY-CONTAINING EQUIPMENT. (a) ~~A used thermostat~~ Used mercury-containing equipment becomes a waste on the date it is discarded (~~e.g. for example,~~ sent for reclamation).

(b) ~~An unused thermostat~~ Unused mercury-containing equipment becomes a waste on the date the handler decides to discard it.

SECTION 228. NR 673.09 (1) is renumbered NR 673.09 (1r).

SECTION 229. NR 673.09 (1g) is created to read:

**NR 673.09 (1)** “Ampule” means an airtight vial made of glass, plastic, metal, or any combination of these materials.

SECTION 230. NR 673.09 (6) is amended to read:

**NR 673.09 (6)** “Large quantity handler of universal waste” means a universal waste handler (as defined in this section) who accumulates 5,000 kilograms (11,025 pounds) or more total of universal waste (batteries, pesticides, ~~thermostats~~ mercury-containing equipment or lamps, calculated collectively) at any time. This designation as a large quantity handler of universal waste is retained through the end of the calendar year in which 5,000 kilograms (11,025 pounds) or more total of universal waste is accumulated.

SECTION 231. NR 673.09 (6m) is created to read:

**NR 673.09 (6m)** “Mercury-containing equipment” means a device or part of a device (including thermostats, but excluding batteries and lamps) that contains elemental mercury integral to its function.

SECTION 232. NR 673.09 (9) and (11) (c) are amended to read:

**NR 673.09 (9)** “Small quantity handler of universal waste” means a universal waste handler (as defined in this section) who does not accumulate 5,000 kilograms (11,025 pounds) or more total of universal waste (batteries, pesticides, ~~thermostats~~ mercury-containing equipment or lamps, calculated collectively) at any time.

(11) (c) ~~Thermostats~~ Mercury-containing equipment as described in s. NR 673.04.

SECTION 233. NR 673.12 (1) (c) 2. and (3) (c) 3. are amended to read:



**NR 673.12 (1) (c) 2.** If the electrolyte or other solid waste is not hazardous, the handler may manage the waste in any way that is in compliance with chs. 287 and 289, Stats., chs. NR 500 to ~~549~~ 524 and applicable federal or local solid waste regulations.

**(3) (c) 3.** If the mercury, residues or other solid waste is not hazardous, the handler may manage the waste in any way that is in compliance with chs. 287 and 289, Stats., chs. NR 500 to ~~549~~ 524 and applicable federal or local solid waste regulations.

SECTION 234. NR 673.13 (3) (intro.), (a), and, (b) (intro.) are amended to read:

**NR 673.13 (3) UNIVERSAL WASTE ~~THERMOSTATS~~ MERCURY-CONTAINING EQUIPMENT.** (intro) A small quantity handler of universal waste shall manage universal waste ~~thermostats~~ mercury-containing equipment ~~in all of the following ways a way~~ that prevent releases of any universal waste or component of a universal waste to the environment, as follows:

(a) A small quantity handler of universal waste shall ~~contain~~ place in a container any universal waste ~~thermostat~~ mercury-containing equipment with non-contained elemental mercury or that shows evidence of leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions in a container. The container shall be closed, structurally sound, compatible with the contents of the ~~thermostat~~ and mercury-containing equipment, shall lack evidence of leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions, and shall be reasonably designed to prevent the escape of mercury into the environment by volatilization or any other means.

(b) (intro.) A small quantity handler of universal waste may remove mercury-containing ampules from universal waste ~~thermostats~~ mercury-containing equipment provided the handler does all of the following:

SECTION 235. NR 673.33 (3) (c) is repealed and recreated to read:

**NR 673.13 (3) (c)** A small quantity handler of universal waste mercury-containing equipment that does not contain an ampule may remove the open original housing holding the mercury from universal waste mercury-containing equipment provided the handler:

1. Immediately seals the original housing holding the mercury with an air-tight seal to prevent the release of any mercury to the environment.
2. Follows all requirements for removing ampules and managing removed ampules under par. (b).

SECTION 236. NR 673.13 (3) (d) is created to read:

**NR 673.13 (3) (d) 1.** A small quantity handler of universal waste who removes mercury-containing ampules from mercury-containing equipment or seals mercury from mercury-containing equipment in its original housing shall determine whether the following exhibit a characteristic of hazardous waste identified in subch. C of ch. NR 661:

- a. Mercury or clean-up residues resulting from spills or leaks.

b. Other solid waste generated as a result of the removal of mercury-containing ampules or housings (for example, the remaining mercury-containing device).

2. If the mercury, residues or other solid waste exhibits a characteristic of hazardous waste, it shall be managed in compliance with all applicable requirements of chs. NR 660 to 670. The handler is considered the generator of the mercury, residues or other waste and shall manage it subject to ch. NR 662.

3. If the mercury, residues or other solid waste is not hazardous, the handler may manage the waste in any way that is in compliance with chs. 287 and 289, Stats., chs. NR 500 to 549 and applicable federal solid waste regulations.

SECTION 237. NR 673.14 (4) is repealed and recreated to read:

**NR 673.14 (4)** (a) Universal waste mercury-containing equipment (for instance, each device), or a container in which the equipment is contained, shall be labeled or marked clearly with any of the following phrases: “Universal Waste—Mercury-Containing Equipment, “Waste Mercury-Containing Equipment’, or “Used Mercury-Containing Equipment.”

(b) A universal waste mercury-containing thermostat or container containing only universal waste mercury-containing thermostats may be labeled or marked clearly with any of the following phrases: “Universal Waste—Mercury Thermostats, “Waste Mercury Thermostats” or “Used Mercury Thermostats”.

SECTION 238. NR 673.18 (8) is amended to read:

**NR 673.18 (8)** If a small quantity handler of universal waste receives a shipment of non-hazardous, non-universal waste, the handler may manage the waste in any way that is in compliance with chs. 287 and 289, Stats., chs. NR 500 to ~~549~~ 524 and applicable federal or local solid waste regulations.

SECTION 239. NR 673.32 (2) (d) and (e) are amended to read:

**NR 673.32 (2)** (d) A list of all the types of universal waste managed by the handler (~~e.g. for example,~~ batteries, pesticides, ~~thermostats~~ mercury-containing equipment, lamps).

(e) A statement indicating that the handler is accumulating more than 5,000 kg (11,025 pounds) of universal waste at one time ~~and the types of universal waste (e.g., batteries, pesticides, thermostats and lamps) the handler is accumulating above this quantity.~~

SECTION 240. NR 673.33 (1) (c) 2. is amended to read:

**NR 673.33 (1)** (c) 2. If the electrolyte or other solid waste is not hazardous, the handler may manage the waste in any way that is in compliance with chs. 287 and 289, Stats., chs. NR 500 to ~~549~~ 524 and applicable federal or local solid waste regulations.

SECTION 241. NR 673.33 (3) (intro.), (a) and (b) (intro.) are amended to read:

**NR 673.33 (3) ~~UNIVERSAL WASTE THERMOSTATS~~ MERCURY-CONTAINING EQUIPMENT.** A large quantity handler of universal waste shall manage universal waste ~~thermostats~~ mercury-containing equipment in ~~all of the following ways~~ a way that prevent releases of any universal waste or component of a universal waste to the environment, as follows:

(a) A large quantity handler of universal waste shall ~~contain~~ place in a container any universal waste ~~thermostat~~ mercury-containing equipment with non-contained elemental mercury or that shows evidence of leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions ~~in a container.~~ The container shall be closed, structurally sound, compatible with the contents of the ~~thermostat device,~~ and shall lack evidence of leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions and shall be reasonably designed to prevent the escape of mercury into the environment by volatilization or any other means.

(b) A large quantity handler of universal waste may remove mercury-containing ampules from universal waste ~~thermostats~~ mercury-containing equipment provided the handler does all of the following:

SECTION 242. NR 673.33 (3) (c) is repealed and recreated to read:

**NR 673.33 (3) (c)** A large quantity handler of universal waste mercury-containing equipment that does not contain an ampule may remove the open original housing holding the mercury from universal waste mercury-containing equipment provided the handler:

1. Immediately seals the original housing holding the mercury with an air-tight seal to prevent the release of any mercury to the environment.
2. Follows all requirements for removing ampules and managing removed ampules under par. (b).

SECTION 243. NR 673.33 (3) (d) is created to read:

**NR 673.33 (3) (d) 1.** A large quantity handler of universal waste who removes mercury-containing ampules from mercury-containing equipment or seals mercury from mercury-containing equipment in its original housing shall determine whether the following exhibit a characteristic of hazardous waste identified in subch. C of ch. NR 661:

- a. Mercury or clean-up residues resulting from spills or leaks.
  - b. Other solid waste generated as a result of the removal of mercury-containing ampules or housings (the remaining mercury-containing device).
2. If the mercury, residues or other solid waste exhibits a characteristic of hazardous waste, it shall be managed in compliance with all applicable requirements of chs. NR 660 to 670. The handler is considered the generator of the mercury, residues or other waste and shall manage it subject to ch. NR 662.
  3. If the mercury, residues or other solid waste is not hazardous, the handler may manage the waste in any way that is in compliance with chs. 287 and 289, Stats., chs. NR 500 to 549 and applicable federal solid waste regulations.

SECTION 244. NR 673.34 (4) is repealed and recreated to read:

**NR 673.34 (4)** (a) Universal waste mercury-containing equipment (for instance, each device), or a container in which the equipment is contained, shall be labeled or marked clearly with any of the following phrases: “Universal Waste—Mercury-Containing Equipment”, “Waste Mercury-Containing Equipment”, or “Used Mercury-Containing Equipment”.

(b) A universal waste mercury-containing thermostat or container containing only universal waste mercury-containing thermostats may be labeled or marked clearly with any of the following phrases: “Universal Waste—Mercury Thermostats”, “Waste Mercury Thermostats” or, “Used Mercury Thermostats”.

SECTION 245. NR 673.38 (8) is amended to read:

**NR 673.38 (8)** If a large quantity handler of universal waste receives a shipment of non-hazardous, non-universal waste, the handler may manage the waste in any way that is in compliance with chs. 287 and 289, Stats., chs. NR 500 to ~~549~~ 524 and applicable federal or local solid waste regulations.

SECTION 246. NR 673.61(4) is amended to read:

**NR 673.61 (4)** If the owner or operator of a destination facility receives a shipment of non-hazardous, non-universal waste, the owner or operator may manage the waste in any way that is in compliance with chs. 287 and 289, Stats., chs. NR 500 to ~~549~~ 524 and applicable federal or local solid waste regulations.

SECTION 247. NR 679.10 (2) (a) 2. and (9) are amended to read:

**NR 679.10 (2)** (a) 2. ~~Except as provided in subd. 2. a. and b., used~~ Used oil containing greater than ~~or equal to~~ 1,000 ppm total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in subch. D of ch. NR 661. Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, by showing that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in ch. NR 661, Appendix VIII).

**(9) USED OIL CONTAINING PCBs.** Used oil containing PCBs (as defined at s. NR 157.02 and 40 CFR 761.3) at any concentration less than 50 ppm is subject to this chapter ~~and 40 CFR 761.3~~ unless, because of dilution, it is regulated under ch. NR 157 and 40 CFR part 761 as a used oil containing PCBs at 50 ppm or greater. PCB-containing used oil subject to this chapter may also be subject to ch. NR 157 and the prohibitions and requirements in 40 CFR part 761, including 40 CFR 761.20 (d) and (e). Used oil containing PCBs at concentrations of 50 ppm or greater is not subject to this chapter, but is regulated under ch. NR 157 and 40 CFR part 761. No person may avoid regulation under ch. NR 157 or 40 CFR part 761 by diluting used oil containing PCBs, unless otherwise specifically provided for in this chapter or 40 CFR part 761.

SECTION 248. 679.10 (2) (a) 2. Note is repealed.

SECTION 249. NR 679.44 (3) (intro.) is amended to read:

**NR 679.44 (3)** (intro.) ~~Except as provided in pars. (a) and (b), used~~ Used oil containing greater than ~~or equal to~~ 1,000 ppm total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in subch. D of ch. NR 661. The owner or operator may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, by showing that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in ch. NR 661, Appendix VIII).

SECTION 250. NR 679.44 (3) Note is repealed.

SECTION 251. NR 679.53 (3) (intro.) is amended to read:

**NR 679.53 (3)** (intro.) ~~Except as provided in pars. (a) and (b), used~~ Used oil containing greater than ~~or equal to~~ 1,000 ppm total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in subch. D of ch. NR 661. The owner or operator may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, by showing that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in ch. NR 661, Appendix VIII).

SECTION 252. NR 679.63 (3) (intro.) is amended to read:

**NR 679.63 (3)** (intro.) ~~Except as provided in pars. (a) and (b), used~~ Used oil containing greater than ~~or equal to~~ 1,000 ppm total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in subch. D of ch. NR 661. The owner or operator may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, by showing that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in ch. NR 661, Appendix VIII).

SECTION 253. **NR 679.63 (3)** Note is repealed.

SECTION 254. EFFECTIVE DATE. This rule shall take 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 255. BOARD ADOPTION. The foregoing rule was approved and adopted by the State of Wisconsin Natural Resources Board on \_\_\_\_\_.

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

STATE OF WISCONSIN

DEPARTMENT OF NATURAL RESOURCES

By \_\_\_\_\_  
Cathy Stepp, Secretary

(SEAL)

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